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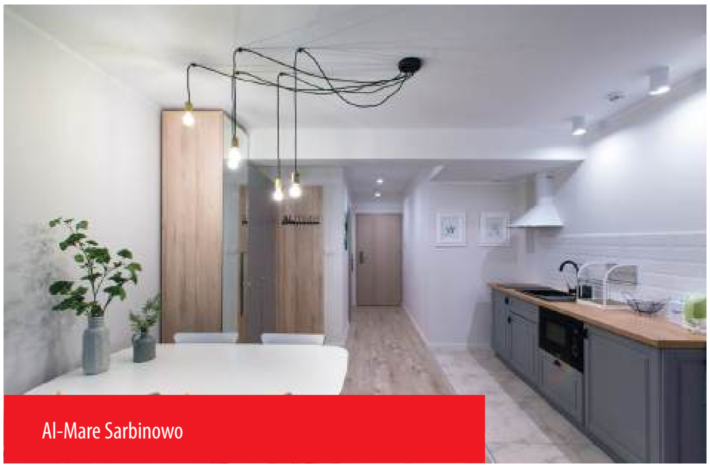
PRODUCT CATALOGUE 2023 FARBY KABE

KABE Swiss Group

Apartamenty Parkowe Świętochłowice

Miejski Dom Kultury Zgorzelec

Kościół NMP Wspomożenia Wiernych Skawa



Al-Mare Sarbinowo

Osiedle Franciszkańskie Południe Katowice

Słoneczne Zacisze Rzeszów

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II. INTERIOR PRODUCTS

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FACADE PRODUCTS

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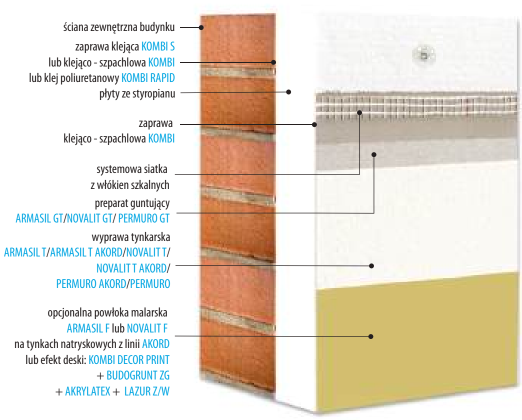
EPS-BASED

KABE THERM RENO

GWARANCJA NA SYSTEM I KOLOR 5 LAT

EWI (External Wall Insulation) system for providing thermal insulation and additional thermal insulation of previously EPS-insulated buildings with silicone, polysilicate and acrylic external render and wood/board effect, as well as renders for spray application from the AKORD line

SYSTEM CONSTRUCTION



MAIN ADVANTAGES

- Reduction of building heating costs
- Improved microclimate inside the building
- Wall protection against adverse weather conditions
- Protection against the growth of algae and fungi
- A wide range of types, colours and decorative effects of renders
- Opportunity to provide additional external wall insulation for buildings with existing EPS-based insulation

TECHNICAL DATA

Type of thermal insulation: EPS boards with the following code: EPS-EN 13163-T(2)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-)2-TR80
Thickness of thermal insulation: from 2 to 30 cm inclusively;
Thermal insulation fixing: bonding system with additional mechanical fixing or mechanical fixing with additional bonding;
Use of mechanical fixings: as specified in technical design;
Reinforcing mesh: system reinforcing fibreglass mesh;
Fire classification: non-fire spreading system (NRO);
Colours: natural white and colours according to KABE and NCS colour charts or a sample provided (for NOVALIT T and ARMASIL T renders only in colours that can be obtained by using inorganic pigments);
Textures: solid / scraped / mixed (ARMASIL T render only in solid texture);

Grain size: 1.5 mm; 2.0 mm; 2.5 mm; 3.0 mm (for PERMURO AKORD render only grain size of 1.5 mm and 2.0 mm); ARMASIL T AKORD and NOVALIT T AKORD only grain size of 1.5 mm
Adhesion:

- to concrete ≥ 0.25 MPa;
- to EPS ≥ 0.08 MPa;

Interlayer adhesion: ≥ 0.08 MPa:
Surface layer water absorption (after 24 hours): < 0.5 kg/m^2;
Impact resistance for the system with render:

- **PERMURO, NOVALIT T, NOVALIT T AKORD, ARMASIL T AKORD** cat. II
- **ARMASIL T, PERMURO AKORD, WOOD TEXTURE EFFECT** cat. III

AREAS OF APPLICATION

The **KABE THERM RENO** EWI system is the most popular system of thermal insulation for external walls and for providing additional thermal insulation to walls with an existing EPS-based system*. It is applied in single- and multi-family housing construction industry, public utility and industrial buildings, to the height of up to 25 m (for the buildings erected before 1 April 1995 to the height of eleventh story, inclusive) and in frame buildings. Because of its simple installation technology and low implementation costs, it is most frequently used for the thermal upgrade of buildings constructed using old energy-consuming technologies (non-compliant with applicable thermal insulation requirements). The system can be applied on walls made of small-sized masonry elements (such as e.g.: bricks, blocks, stone, etc.) or of concrete (poured on site or in the form of prefabricated slabs) or in the form of OSBs (wood-based oriented strand boards) according to PN 300 standard, with a density of not less than 780 kg/m^3 and bending strength not less than 16 MPa. The OSBs are fixed with the use of **KOMBI RAPID** polyurethane adhesive and mechanical fixings. The system can be used on new walls, as well as for renovation of the existing ones. It is also possible to use it on horizontal or inclined surfaces, that are not exposed to precipitation. The external system layer can be made using **PERMURO** and **PERMURO AKORD** acrylic renders, **NOVALIT T** and **NOVALIT T AKORD** polysilicate renders or **ARMASIL T** and **ARMASIL T AKORD** silicon renders, available in a wide range of colours and textures, as well as with the wood/board effect. After wetting the **ARMASIL T** silicone render, the effect of water molecules "being repelled" by silicone resin is observed on its surface. This effect protects façades against precipitation and reduces soiling deposition.

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**The KOMBI S adhesive or KOMBI** adhesive/base coat (required for thermal insulation of the existing thermal insulation systems) or **KOMBI RAPID** polyurethane adhesive (required when bonding to oriented strand boards (OSBs))	approx. 4.0 kg/m^2** approx. 1/6 pack/m^2
THERMAL INSULATION	**White or graphite EPS boards with the code EPS-EN 13163-T(2)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-)2-TR80** – cured EPS thermal insulation boards	1.0-1.10 m^2/m^2
	Mechanical fixings – pins for fixing thermal insulation to the substrate	Type, quantity and layout as per technical design
REINFORCING LAYER	**KOMBI** adhesive/base coat – for applying reinforcing layer	approx. 4.0 kg/m^2
	System fibreglass mesh: KABE 145, KABE 150 / KABE AVANT 150, KABE 160, KABE 165 / KABE AVANT 165 – anti-alkali impregnated mesh, completely immersed in **KOMBI** base coat	1.10 m^2/m^2 of thermal insulation
FINISH COAT	**Primer (dedicated for the same type of render): ARMASIL GT, NOVALIT GT, PERMURO GT** – a product that improves adhesion and limits the substrate water absorbency	approx. 0.20 l/m^2
	External coat of render: ARMASIL T, ARMASIL T AKORD, NOVALIT T, NOVALIT T AKORD, PERMURO, PERMURO AKORD – protective and decorative layer that protects the system against adverse weather conditions and mechanical damage; texture and colour of the render to be chosen	grain size 1.5 mm – 2.4-2.5*** kg/m^2 – solid grain size 1.5 mm – 2.3-2.5*** kg/m^2 – scraped grain size 2.0 mm – 3.0 kg/m^2 grain size 2.5 mm – 3.7 kg/m^2 grain size 3.0 mm – 4.5 kg/m^2
	The wood/board effect is made using the following set of products: – the **KOMBI DECOR PRINT mineral mortar, BUDOGRUNT ZG primer, AKRYLATEX undercoat, LAZUR Z/W** lazure paint – a protective and decorative layer that protects the system against external factors and gives an attractive texture and colour of the wood/board (**AKRYLATEX** and **LAZUR Z/W** paints), according to the Farby KABE wood/board effect chart	4.0-4.5 kg/m^2 0.2 l/m^2 0.14-0.20 l/m^2 0.1 l/m^2
OPTIONAL PAINT COAT ON RENDERS FOR SPRAY APPLICATION	**ARMASIL F, NOVALIT F** paint coating – protective and decorative layer protecting against adverse weather conditions and providing an attractive colour.	from 0.36 l/m^2 (when applied twice and depending on the render grain size)

* When installing additional thermal insulation to an insulation system with a render top coat, the total thickness of the existing and newly installed thermal insulation layer cannot exceed 30 cm. If the render is removed along with the reinforcing layer, the total thickness of thermal insulation cannot exceed 25 cm.
** If additional thermal insulation is added to the existing thermal insulation system, the average coverage of KOMBI adhesive/base coat is 4.50 kg/m^2.
*** Depending on the render type
Note: Due to the excessive heating of dark-coloured façades, it is not recommended to use colours featuring a low light reflection coefficient (Y < 20%).
The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

Technical data sheet, revised May 2023.
Most recent information is available at www.farbykabe.pl

National Technical Assessment No. ICiMB-KOT-2018/0050 edition 2

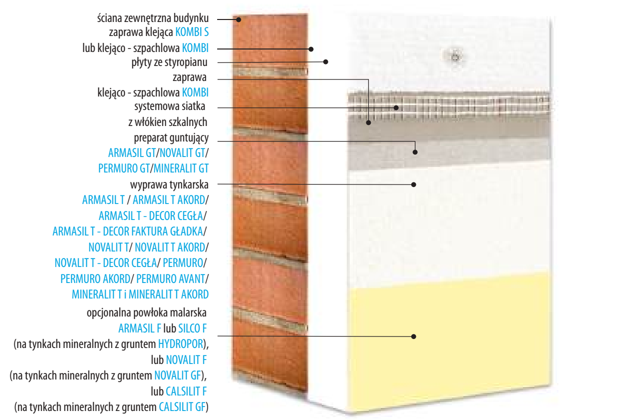
KABE Swiss Group

EPS-BASED

KABE THERM EPS

External wall insulation (EWI) system with silicone, polysilicate, acrylic and mineral external render and renders for spray application from the AKORD line

SYSTEM CONSTRUCTION



MAIN ADVANTAGES

- Reduction of building heating costs
- Improved microclimate inside the building
- Wall protection against adverse weather conditions
- Protection against the growth of algae and fungi
- A wide range of types, colours and decorative effects of renders
- Possibility of using AKORD line spray-applied renders

TECHNICAL DATA

Type of thermal insulation: EPS boards with the following code: EPS-EN 13163-T(2)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-)2-TR80

Thickness of thermal insulation: from 5 to 30 cm inclusively;

Thermal insulation fixing: adhesive bonded or partially adhesive bonded system with additional mechanical fixing or mechanical fixing with additional bonding;

Use of mechanical fixings: as specified in technical design;

Reinforcing mesh: system reinforcing fibreglass mesh;

Fire classification: non-fire spreading system (NRO);

Colours: natural white and colours according to KABE and NCS colour charts or a sample provided (for NOVALIT T and ARMASIL T renders only in colours that can be obtained by using inorganic pigments);

Textures: solid / scraped / mixed (ARMASIL T render only in solid texture);

Grain size: 1.5 mm; 2.0 mm; 2.5 mm; 3.0 mm (for PERMURO AKORD render only grain size of 1.5 mm and 2.0 mm); ARMASIL T AKORD and NOVALIT T AKORD and MINERALIT T AKORD only grain size of 1.5 mm

Adhesion:

- to concrete ≥ 0.25 MPa;
- to EPS ≥ 0.08 MPa;

Interlayer adhesion: ≥ 0.08 MPa:

Surface layer water absorption (after 24 hours): < 0.5 kg/m^2;

Impact resistance for the system with render:

- **ARMASIL T, ARMASIL T AKORD, ARMASIL T - DECOR BRICK, NOVALIT T, NOVALIT T AKORD, NOVALIT T - DECOR BRICK, PERMURO, PERMURO AVANT** cat. II
- **ARMASIL T - DECOR SMOOTH TEXTURE, PERMURO AKORD, MINERALIT T, MINERALIT T AKORD** cat. III

AREAS OF APPLICATION

The **KABE THERM RENO** EWI system is another EPS-based thermal insulation system for external walls*. It is applied in single- and multi-family housing construction industry, public utility and industrial buildings, to the height of up to 25 m (for the buildings erected before 1 April 1995 to the height of eleventh story, inclusive) and in frame buildings. Because of its simple installation technology and low implementation costs, it is most frequently used for the thermal upgrade of buildings constructed using old energy-consuming technologies (non-compliant with applicable thermal insulation requirements). The system can be used on walls made of fine masonry components (e.g., bricks, blocks, stone, etc.) or concrete (poured on site or in the form of prefabricated slabs). The system can be used on new walls, as well as for renovation of the existing ones. It is also possible to use it on horizontal or inclined surfaces, which ensure proper drainage of rainwater and snow without causing their retention. The external system layer can be made using **ARMASIL T**, **ARMASIL T AKORD**, **ARMASIL T - DECOR** SMOOTH TEXTURE, **ARMASIL T** - DECOR BRICK silicone renders, **NOVALIT T**, **NOVALIT T AKORD**, **NOVALIT T** - DECOR BRICK polysilicate renders, **PERMURO**, **PERMURO AKORD**, **PERMURO AVANT** acrylic renders, as well as **MINERALIT T** and **MINERALIT T AKORD** mineral renders, available in a wide range of colours and textures and in the wood/board effect. After wetting the **ARMASIL T** silicone render, the effect of water molecules "being repelled" by silicone resin is observed on its surface. This effect protects façades against precipitation and reduces soiling deposition.

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI S adhesive or KOMBI adhesive/base coat**	approx. 4.0 kg/m^2**
THERMAL INSULATION	**White or graphite EPS boards with the code EPS-EN 13163-T(2)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-)2-TR80** – cured EPS thermal insulation boards	1.0-1.10 m^2/m^2
	Mechanical fixings (optionally) – pins for fixing thermal insulation to the substrate	Type, quantity and layout as per technical design
REINFORCING LAYER	**KOMBI** adhesive/base coat – for applying reinforcing layer	approx. 4.0 kg/m^2
	System fibreglass mesh: KABE 145, KABE 160, – anti-alkali impregnated mesh, completely immersed in **KOMBI** base coat	1.10 m^2/m^2 of thermal insulation
FINISH COAT	**Primer (dedicated for the same type of render): ARMASIL GT, NOVALIT GT, PERMURO GT, MINERALIT GT**– a product that improves adhesion and limits the substrate water absorbency	approx. 0.20 l/m^2
	External coat of render: ARMASIL T, ARMASIL T AKORD, ARMASIL T - DECOR BRICK, ARMASIL T - DECOR SMOOTH TEXTURE, NOVALIT T, NOVALIT T AKORD, NOVALIT T - DECOR BRICK, PERMURO, PERMURO AKORD, PERMURO AVANT, MINERALIT T and MINERALIT T AKORD – protective and decorative layer that protects the system against adverse weather conditions and mechanical damage; texture and colour of the render to be chosen	grain size 1.5 mm – 2.3-2.5*** kg/m^2 grain size 2.0 mm – 3.0 kg/m^2 grain size 2.5 mm – 3.7 kg/m^2 grain size 3.0 mm – 4.5 kg/m^2
OPTIONAL PAINT COAT ON RENDERS FOR SPRAY APPLICATION	**ARMASIL F** or **SILCO F** paint coating (on mineral renders with **HYDROPOR** primer) or **NOVALIT F** (on mineral renders with **NOVALIT GF** primer) or **CALSILIT F** (on mineral renders with **CALSILIT GF** primer) – protective and decorative layer protecting against adverse weather conditions and providing an attractive colour.	from 0.36 l/m^2 (when applied twice and depending on the render grain size)

*** Depending on the render type

Note: Due to the excessive heating of dark-coloured façades, it is not recommended to use colours featuring a low light reflection coefficient (Y < 20%).
The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

FAÇADE PRODUCTS

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

EPS-BASED

KABE THERM AVANT

External wall insulation (EWI) system with silicone, silicate-silicone and acrylic external render and decorative coatings with a smooth texture

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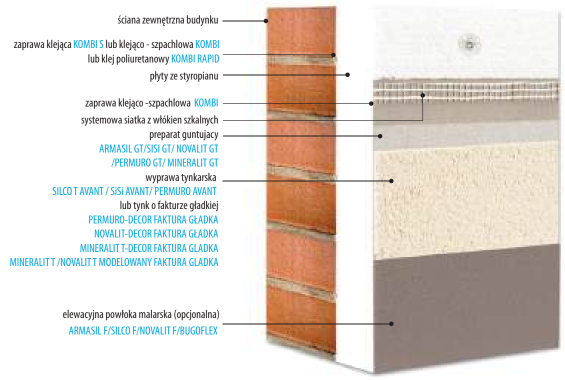
SYSTEM CONSTRUCTION



MAIN ADVANTAGES

- Reduction of building heating costs
- Improved microclimate inside the building
- Attractive decorative effects and high aesthetics of the façade
- Wall protection against adverse weather conditions
- Protection against the growth of algae and fungi
- Optional use of façade paints available in a wide range of colours

TECHNICAL DATA

Type of thermal insulation: EPS boards with the following code: EPS-EN 13163-T(1)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-)2-TR80
Thickness of thermal insulation: from 5 to 30 cm inclusively;
Thermal insulation fixing: entirely or partially adhesive-bonded system with additional mechanical fixing or mechanical fixing with additional bonding;
Use of mechanical fixings: as specified in technical design;
Reinforcing mesh: system reinforcing fibreglass mesh;
Fire classification: non-fire spreading system (NRO);
Colours: natural white and colours according to KABE and NCS colour charts or a sample provided;
Textures: solid;

Grain size: 1.5 mm; 2.0 mm;

Adhesion:	
• to concrete	≥ 0.25 MPa;
• to EPS	≥ 0.08 MPa;
Adhesion after surface layer ageing:	≥ 0.08 MPa:
Water absorption (after 24 hours):	< 0.5 kg/m²;
Impact resistance for the system with PERMURO AVANT acrylic render:	cat. II
• other systems	cat. III
Reaction to fire:	B-s1,d0

AREAS OF APPLICATION

The **KABE THERM AVANT** EWI system is an EPS-based thermal insulation system for external walls. It is applied in single- and multi-family housing construction industry, public utility and industrial buildings – in both the existing and new constructions – to the height of up to 25 m (for the buildings erected before 1 April 1995 to the height of eleventh story, inclusive). It is especially recommended for projects, where costs and a smooth decorative texture are important. The system can be used on walls made of masonry components (e.g., bricks, blocks, stone, etc.) or concrete (poured on site or in the form of prefabricated slabs). The system can be used on new walls, as well as for renovation of the existing ones. It is also possible to use it on horizontal or inclined surfaces, that are not exposed to precipitation. The external system layer can be made using **SILCO T AVANT** structural silicone render, **SiSi AVANT** structural silicate-silicone render or **PERMURO AVANT** acrylic render, available in a wide range of colours. In addition, it is possible to make a top coat with a smooth texture in the system with **PERMURO-DECOR SMOOTH TEXTURE**, **NOVALIT T-DECOR SMOOTH TEXTURE**, **MINERALIT T-DECOR SMOOTH TEXTURE** and **MINERALIT T / NOVALIT T MODELLED-DECOR SMOOTH TEXTURE**.

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI S adhesive or KOMBI adhesive/base coat or KOMBI RAPID polyurethane adhesive**	approx. 4.0 kg/m² approx. 1/6 pack/m²
THERMAL INSULATION	**White or graphite EPS boards with the code EPS-EN 13163-T(1)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-)2-TR80** – cured EPS thermal insulation boards	1.0-1.10 m²/m²
	Mechanical fixings – pins for fixing thermal insulation to the substrate	Type, quantity and layout as per technical design
REINFORCING LAYER	**KOMBI adhesive/base coat** – for applying reinforcing layer	approx. 4.0 kg/m²
	System fibreglass mesh: KABE 145, KABE 150 / KABE AVANT 150, KABE 160, KABE 165 / KABE AVANT 165 – anti-alkali impregnated mesh, completely immersed in **KOMBI** base coat	1.10 m²/m² of thermal insulation
FINISH COAT (RENDER OR DECORATIVE EFFECT)	**Primer** **ARMASIL GT, SISI GT, NOVALIT GT, PERMURO GT, MINERALIT GT** – a product that improves adhesion and limits the substrate water absorbency	approx. 0.20 l/m²
	External coat of render: SILCO T AVANT, SiSi AVANT, PERMURO AVANT – protective and decorative layer protecting against adverse weather conditions and mechanical damage; render colour to choose	grain size 1.5 mm – 2.4-2.5* kg/m² grain size 2.0 mm – 3.0 kg/m²
	External render with smooth texture: PERMURO-DECOR SMOOTH TEXTURE, NOVALIT T-DECOR SMOOTH TEXTURE, MINERALIT T-DECOR SMOOTH TEXTURE, MINERALIT T / NOVALIT T MODELLED-DECOR SMOOTH TEXTURE	from 4.3 to 4.5 kg/m²*
	Façade paint coating (optional): **ARMASIL F, SILCO F, NOVALIT F, BUGOFLEX** – a protective and decorative layer protecting against adverse weather conditions and giving an attractive colour	from 0.36 l/m² (when applied twice, depending on the thickness of the render grain)

* Depending on the render type
Note: Due to the excessive heating of dark-coloured façades, it is not recommended to use colours featuring a low light reflection coefficient (Y < 20%).
The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

KABE Swiss Group

EPS-BASED

KABE THERM MARMURIT / MOZAIKER

SYSTEM CONSTRUCTION

External wall insulation (EWI) system for buildings with mosaic external render and decorative renders imitating stone cladding

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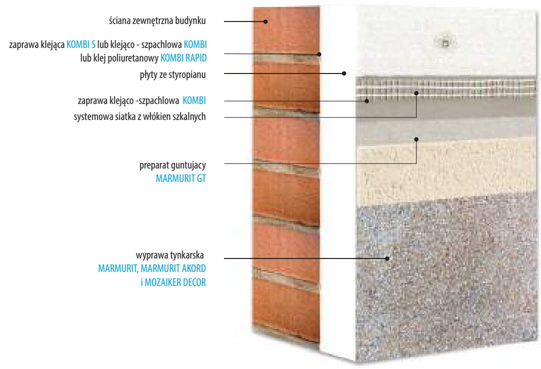


MAIN ADVANTAGES

- Reduction of building heating costs
- Improved microclimate inside the building
- Attractive decorative effects and high aesthetics of the façade
- Wall protection against adverse weather conditions
- Easy and quick application of spray renders
- A wide range of colour compositions

TECHNICAL DATA

Type of thermal insulation: EPS boards with the following code: EPS-EN 13163-T(2)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-)2-TR80
Thickness of thermal insulation: from 5 to 30 cm inclusively;
Thermal insulation fixing: entirely or partially adhesive-bonded system with additional mechanical fixing or mechanical fixing with additional bonding;
Use of mechanical fixings: as specified in technical design;
Reinforcing mesh: system reinforcing fibreglass mesh;
Fire classification: non-fire spreading system (NRO);
Render colours: according to the MARMURIT MOZAIKER AKORD, MOZAIKER DECOR colour charts;
Textures: solid;

Grain size: 0.8 mm (AKORD), 1.0 mm and 1.5 mm
Adhesion:

• to concrete	≥ 0.25 MPa;
• to EPS	≥ 0.08 MPa;
Adhesion after surface layer ageing:	≥ 0.08 MPa:
Water absorption (after 24 hours):	< 0.5 kg/m²;
Impact resistance for the system with the MOZAIKER DECOR	cat. II
• other systems	cat. III
Reaction to fire:	B-s1,d0

AREAS OF APPLICATION

KABE THERM MARMURIT / **MOZAIKER** EWI system is an EPS-based thermal insulation system for external walls. It is applied in single- and multi-family housing construction industry, public utility and industrial buildings – in both the existing and new constructions – to the height of up to 25 m (for the buildings erected before 1 April 1995 to the height of eleventh story, inclusive), with a top layer in the form of mosaic renders. The system can be applied on all common mineral substrates (such as concrete, cement render, cement-lime render, sandstone and on raw walls made of bricks, blocks, hollow bricks and other such ceramic or silicate materials), as well as on surfaces covered with a well-adhered coat of façade paint or thin-coat render. The external layer of the system can be made using **MARMURIT** and **MOZAIKER DECOR** structural mosaic renders applied manually and **MOZAIKER AKORD** spray-applied renders.

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI S adhesive or KOMBI adhesive/base coat** **or KOMBI RAPID polyurethane adhesive**	approx. 4.0 kg/m² approx. 1/6 pack/m²
THERMAL INSULATION	**White or graphite EPS boards with the code** **EPS-EN 13163-T(2)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-) 2-TR80** – cured EPS thermal insulation boards	1.0-1.10 m²/m²
	Mechanical fixings – pins for fixing thermal insulation to the substrate	Type, quantity and layout as per technical design
REINFORCING LAYER	**KOMBI adhesive/base coat** – for applying reinforcing layer	approx. 4.0 kg/m²
	System fibreglass mesh: KABE 145, KABE 150, KABE 160, KABE 165 – anti-alkali impregnated mesh, completely immersed in **KOMBI** base coat	1.10 m²/m² of thermal insulation
FINISH COAT	**Primer: MARMURIT GT,** – a product that improves adhesion and limits the substrate water absorbency	approx. 0.20 l/m²
	External coat of render: MARMURIT, MOZAIKER AKORD, MOZAIKER DECOR – protective and decorative layer protecting against adverse weather conditions and mechanical damage; render colour to choose	grain size 1.0 mm – 2.5 kg/m² grain size 1.5 mm – 4.0 kg/m² grain size 0.8 mm – 2.6 kg/m² (AKORD) grain size 0.8 mm – 1.9-3.8 kg/m² (DECOR depending on the colour)

* Depending on the render type

Note: Due to the excessive heating of dark-coloured façades, it is not recommended to use colours featuring a low light reflection coefficient (Y < 20%).
The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

FAÇADE PRODUCTS

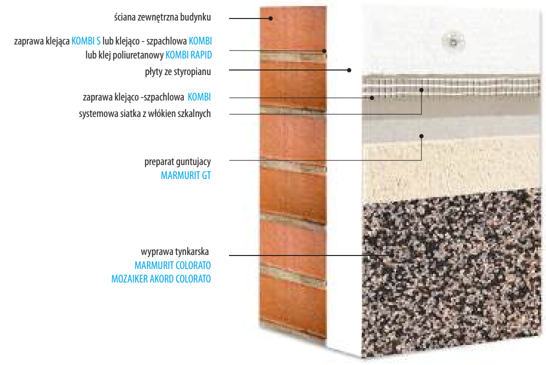
The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

EPS-BASED

KABE THERM MARMURIT COLORATO / MOZAIKER COLORATO

EWI system for buildings with mosaic external render

SYSTEM CONSTRUCTION



MAIN ADVANTAGES

- Reduction of building heating costs
- Improved microclimate inside the building
- Attractive decorative effects and high aesthetics of the façade, that imitates natural stone cladding
- Wall protection against adverse weather conditions
- Easy and quick application of spray renders
- A wide range of colour compositions

TECHNICAL DATA

Type of thermal insulation: EPS boards with the following code: EPS-EN 13163-T(2)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-)2-TR80
Thickness of thermal insulation: from 5 to 30 cm inclusively;
Thermal insulation fixing: bonding system with additional mechanical fixing or mechanical fixing with additional bonding;
Use of mechanical fixings: as specified in technical design;
Reinforcing mesh: system reinforcing fibreglass mesh;
Fire classification: non-fire spreading system (NRO);
Render colours: according to the MARMURIT COLORATO and MOZAIKER AKORD COLORATO colour charts;

Textures: solid;
Grain size: 0.8 mm (AKORD), 1.0 mm and 1.5 mm
Adhesion:

• to concrete	≥ 0.25 MPa;
• to EPS	≥ 0.08 MPa;
Adhesion after surface layer ageing:	≥ 0.08 MPa:
Water absorption (after 24 hours):	< 0.5 kg/m²;
Impact resistance for the system with the mosaic render	cat. III

AREAS OF APPLICATION

The **KABE THERM MARMURIT COLORATO** / **MOZAIKER COLORATO** EWI system is an EPS-based thermal insulation system for external walls with mosaic finish render. It is applied in single- and multi-family housing construction industry, public utility and industrial buildings – in both the existing and new constructions – to the height of up to 25 m (for the buildings erected before 1 April 1995 to the height of eleventh story, inclusive). The system can be used on walls made of fine masonry components (bricks, blocks, stone, etc.) or concrete (monolithic or prefabricated elements). It is also possible to use it on horizontal or inclined surfaces, that are not exposed to precipitation.
The external layer of the system can be made using **MARMURIT COLORATO** structural mosaic renders applied manually and the machine-applied **MOZAIKER AKORD COLORATO**.

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI S adhesive or KOMBI adhesive/base coat or KOMBI RAPID polyurethane adhesive**	approx. 4.0 kg/m² approx. 1/6 pack/m²
THERMAL INSULATION	**White or graphite EPS boards with the code EPS-EN 13163-T(2)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-) 2-TR80** – cured EPS thermal insulation boards	1.0-1.10 m²/m²
	Mechanical fixings – pins for fixing thermal insulation to the substrate	Type, quantity and layout as per technical design
REINFORCING LAYER	**KOMBI adhesive/base coat** – for applying reinforcing layer	approx. 4.0 kg/m²
	System fibreglass mesh: KABE 145, KABE 150, KABE 160, KABE 165 – anti-alkali impregnated mesh, completely immersed in **KOMBI** base coat	1.10 m²/m² of thermal insulation
FINISH COAT	**Primer: MARMURIT GT,** – a product that improves adhesion and limits the substrate water absorbency	approx. 0.20 l/m²
	External coat of render: MARMURIT COLORATO, MOZAIKER ACORD COLORATO – protective and decorative layer protecting against adverse weather conditions and mechanical damage; render colour to choose	grain size 1.0 mm – 2.5 kg/m² grain size 1.5 mm – 4.0 kg/m² grain size 0.8 mm – 2.6 kg/m² (AKORD)

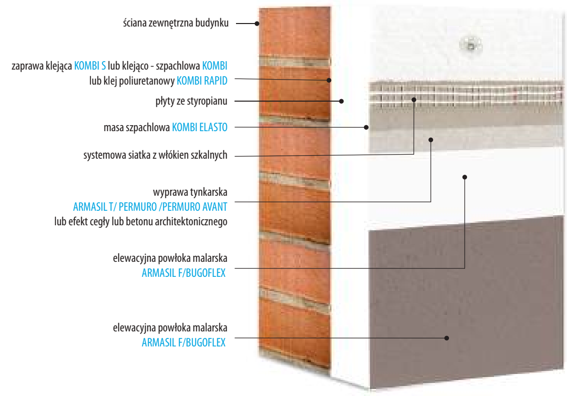
* Depending on the render type
Note: Due to the excessive heating of dark-coloured façades, it is not recommended to use colours featuring a low light reflection coefficient (Y < 20%).
The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

EPS-BASED

KABE THERM ELASTO

External wall insulation (EWI) system for buildings with increased impact resistance with silicone and acrylic external render and attractive decorative effects

SYSTEM CONSTRUCTION



MAIN ADVANTAGES

- Reduction of building heating costs
- Improved microclimate inside the building
- Increased impact resistance (class I)
- Attractive decorative effects and high aesthetics of the façade
- Wall protection against adverse weather conditions
- Protection against the growth of algae and fungi
- Optional use of façade paints available in a wide range of colours

TECHNICAL DATA

Type of thermal insulation: EPS boards with the following code: EPS-EN 13163-T(1)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-)2-TR80;
Thickness of thermal insulation: from 5 to 30 cm inclusively;
Thermal insulation fixing: entirely or partially adhesive-bonded system with additional mechanical fixing or mechanical fixing with additional bonding;
Use of mechanical fixings: as specified in technical design;
Reinforcing mesh: system reinforcing fibreglass mesh;
Fire classification: non-fire spreading system (NRO);
Colours: natural white and colours according to KABE and NCS colour charts or a sample provided (for ARMASIL T render only in colours that can be obtained using inorganic pigments);
Textures: solid / scraped / mixed (for PERMURO AVANT and ARMASIL T renders only solid texture);
Grain size: 1.5 mm; 2.0 mm; 2.5 mm; 3.0 mm (PERMURO AVANT render available only with 1.5 mm and 2.0 mm grains);

Adhesion:
- to concrete ≥ 0.25 MPa;
- to EPS ≥ 0.08 MPa;

Adhesion after ageing, surface layer: ≥ 0.08 MPa:
Water absorption (after 24 hours): < 0.5 kg/m^2;
Impact resistance for the system with silicone and acrylic render:
- single layer of KABE 165 or KABE 175 mesh (except for the PERMURO AVANT system) cat. I
- double mesh layer (except for the PERMURO system) cat. I
- single layer of PERMURO DECOR and ARMASIL T DECOR mesh cat. I
- single layer of KABE 145 mesh cat. II

AREAS OF APPLICATION

The **KABE THERM ELASTO** is an EPS-based system of external wall thermal insulation for buildings with high resistance to mechanical damage (impact resistance). It is applied in single- and multi-family housing construction industry, public utility and industrial buildings – in both the existing and new constructions – to the height of up to 25 m (for the buildings erected before 1 April 1995 to the height of eleventh story, inclusive). Especially recommended in places requiring increased impact resistance and attractive decorative effects. The system can be used on walls made of masonry components (bricks, blocks, stone, etc.) or concrete (poured on site or in the form of prefabricated slabs). It is also possible to use it on horizontal or inclined surfaces, that are not exposed to precipitation. The external system layer can be made using **ARMASIL T** structural silicone render or **PERMURO**, **PERMURO AVANT** acrylic renders, available in a wide range of colours and textures. In addition, in this system, it's possible to perform decorative effects of brick and architectural concrete.

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI S adhesive or KOMBI adhesive/base coat or KOMBI RAPID polyurethane adhesive**	approx. 4.0 kg/m^2 or approx. 1/6 pack/m^2
THERMAL INSULATION	**White or graphite EPS boards with the code EPS-EN 13163-T(1)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-)2-TR80** – cured EPS thermal insulation boards	1.0-1.10 m^2/m^2
	Mechanical fixings – pins for fixing thermal insulation to the substrate	Type, quantity and layout as per technical design
REINFORCING LAYER	**Dispersion, cementless KOMBI ELASTO base coat** – for applying reinforcing layer	approx. 4.0 kg/m^2
	System fibreglass mesh: KABE 145, KABE 150, KABE 160, KABE 165 – anti-alkali impregnated mesh, with the whole surface embedded in the KOMBI ELASTO coat	1.10 m^2/m^2 of thermal insulation
FINISH COAT (RENDER OR DECORATIVE EFFECT)	**External coat of render: ARMASIL T, PERMURO, PERMURO AVANT** – protective and decorative layer protecting against adverse weather conditions and mechanical damage; render texture and colour to choose	grain size 1.5 mm – 2.3-2.4* kg/m^2 grain size 2.0 mm – 3.0 kg/m^2 grain size 2.5 mm – 3.7 kg/m^2 grain size 3.0 mm – 4.5 kg/m^2
	Façade paint coating (optional): ARMASIL F, BUGOFLEX – protective and decorative layer protecting against adverse weather conditions and giving an attractive colour	from 0.36 l/m^2 (when applied twice)
	Brick effect: ARMASIL T-DECOR BRICK or PERMURO-DECOR BRICK – ARMASIL T or PERMURO modelled render – LAZUR Z/W lazure paint (optional ageing effect)	approx. 2.0 kg/m^2 approx. 0.10 l/m^2
	Architectural concrete effect: ARMASIL T-DECOR ARCHITECTURAL CONCRETE or PERMURO-DECOR ARCHITECTURAL CONCRETE – ARMASIL T or PERMURO modelled render – ARMASIL F or AKRYLATEX undercoat – LAZUR Z/W lazure paint	approx. 2.0 kg/m^2 approx. 0.13 l/m^2 approx. 0.10 l/m^2

Note: Due to the excessive heating of dark-coloured façades, it is not recommended to use colours featuring a low light reflection coefficient (Y < 20%).
The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".
Note: If mechanical fixings with discs embedded in EPS are used, all EPS caps should be installed in the hole (glued) using KOMBI RAPID polyurethane adhesive. Failure to follow this recommendation may result in local bulging in the places, where fixings and the unglued EPS caps are used.

* Depending on the render type and texture

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

BASED ON MINERAL WOOL

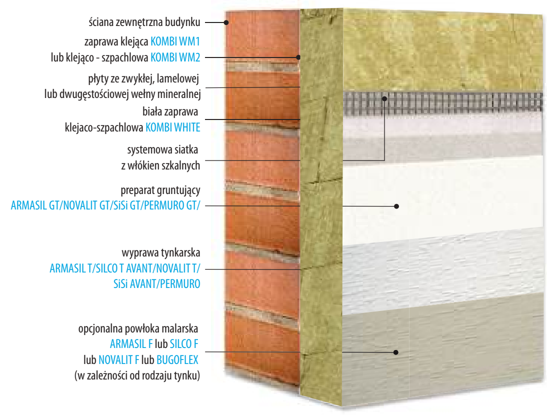
KABE THERM MW WHITE

GWARANCJA 5 LAT NA SYSTEM I KOLOR

ETA

External wall insulation (EWI) system with silicone, polysilicate, silicate-silicone, acrylic external render with optional paint coating

SYSTEM CONSTRUCTION



MAIN ADVANTAGES

- Fire reaction class: non-flammable;
- Free release of moisture;
- Prevents water vapour condensation inside the system;
- Very good soundproofing properties;
- Reduction of building heating costs
- Improved microclimate inside the building
- Wall protection against adverse weather conditions
- Protection against the growth of algae and fungi
- A wide range of types and colours of renders
- Plastic, easy-to-process white cement-based adhesive

TECHNICAL DATA

Type of thermal insulation layer: plain, lamella and dual-density mineral wool boards with codes according to ETA-22/0535
Thickness of the thermal insulation layer: lamella boards from 50 to 400 mm inclusive, plain and double-density boards from 50 to 300 mm inclusive;
Thermal insulation fixing: bonding system with additional mechanical fixing or mechanical fixing with additional bonding;
Mechanical fixings: as per technical design;
Reinforcing mesh: system reinforcing fibreglass mesh;
Reaction to fire: class A2-s1,d0 (non-flammable);
Colours: natural white and colours according to KABE and NCS colour charts or a sample provided (for NOVALIT T and ARMASIL T renders only in colours that can be obtained by using inorganic pigments);
Textures: solid / scraped / mixed (for ARMASIL T, SILCO T AVANT, SISI AVANT renders only solid texture);
Grain size: 1.0 mm (for ARMASIL T render only solid texture), 1.5 mm; 2.0 mm; 2.5 mm; 3.0 mm (SILCO T AVANT, SISI AVANT, PERMURO AVANT renders only with grain size 1.5 mm and 2.0 mm);

Adhesion:	
• to concrete	≥ 250 kPa;
• to lamella mineral wool	≥70 kPa
to plain and dual-density mineral wool	≥ 10 kPa;
Interlayer adhesion:	
• to lamella mineral wool	≥ 80 kPa
• to plain and dual-density mineral wool	≥ 10 kPa:
Surface layer water absorption (after 24 hours):	< 0.5 kg/m^2;
Impact resistance for the system with render SiSi AVANT on lamella boards and SILCO T AVANT on plain boards	cat. I
PERMURO, SISI AVANT and SILCO T AVANT, as well as NOVALIT T (all other systems):	cat. II
Water vapour permeability for top coat, S_d:	≤ 0.5 m

AREAS OF APPLICATION

The **KABE THERM MW WHITE** EWI system is a modern thermal insulation system for external walls based on mineral wool.* The system is used in single- and multi-family housing construction industry, public utility and industrial buildings, both on low and high buildings (over 25 m). The system can be used on new and renovated walls made of fine masonry components (e.g., bricks, blocks, stone, etc.) or concrete (poured on site or in the form of prefabricated slabs). It is also possible to use it on horizontal or inclined surfaces, that are not exposed to precipitation. The system external layer can be made using **ARMASIL T** silicone renders or **SILCO T AVANT**, **NOVALIT T** polysilicate renders, **SiSi AVANT** silicate-silicone renders and **PERMURO** acrylic renders, available in a wide range of colours and textures. The reinforcing system layer can be made using **KOMBI WHITE** white adhesive/base coat and system reinforcing mesh. Before applying the render, the reinforcing layer must be primed with an appropriate primer (dedicated for the selected render).

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI WM1 adhesive or KOMBI WM2 adhesive/base coat**	approx. 5.0-5.5 kg/m^2
THERMAL INSULATION	**Plain, lamella and dual-density mineral wool boards**	1.0-1.10 m^2/m^2
	Mechanical fixings – pins for fixing thermal insulation to the substrate	Type, quantity and layout as per technical design
REINFORCING LAYER	**KOMBI WHITE** white adhesive/base coat – for applying reinforcing layer	approx. 4.0-5.0 kg/m^2
	System fibreglass mesh: KABE 145, KABE 150 / KABE AVANT 150, KABE 160, KABE 165 / KABE AVANT 165 – anti-alkali impregnated mesh, completely immersed in **KOMBI WHITE** base coat	1.10 m^2/m^2 of thermal insulation
FINISH COAT	**Primer (dedicated for the same type of render): ARMASIL GT, NOVALIT GT, SiSi GT, PERMURO GT,** to reduce the absorbency of the substrate and increase the adhesion of the finish coat	average coverage approx. 0.2 l/m^2
	External coat of render: ARMASIL T, SILCO T AVANT, NOVALIT T, SiSi AVANT, PERMURO, – protective and decorative layer protecting against adverse weather conditions and mechanical damage; render texture and colour to choose	grain size 1.0 mm (only for **ARMASIL T** render – solid texture) – 1.8 kg/m^2 grain size 1.5 mm – 2.3-2.5 kg/m^2 – scraped grain size 2.0 mm – 3.0 kg/m^2 grain size 2.5 mm – 3.7 kg/m^2 grain size 3.0 mm – 4.5 kg/m^2
OPTIONAL PAINT COATING	**ARMASIL F** or **SILCO F** or **NOVALIT F** or **BUGOFLEX** paint coating – protective and decorative layer protecting against adverse weather conditions and providing an attractive colour.	from 0.36 l/m^2 (when applied twice and depending on the render grain size)

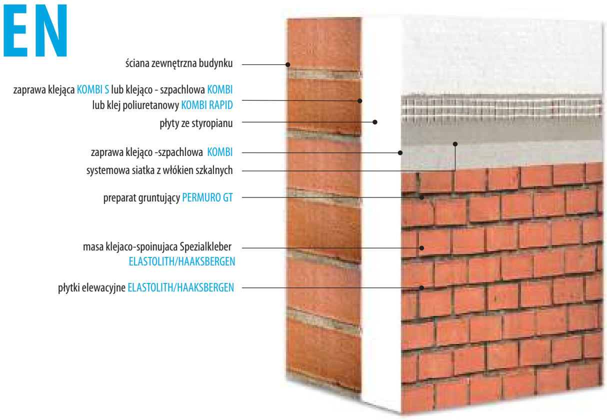
Depending on the render type
Note: Due to the excessive heating of dark-coloured façades, it is not recommended to use colours featuring a low light reflection coefficient (Y < 20%).
The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

EPS-BASED

KABE THERM EPS ELASTOLITH / HAAKSBERGEN

SYSTEM CONSTRUCTION



GWARANCJA 5 LAT NA SYSTEM I KOLOR

External wall insulation (EWI) system for buildings with external cladding in the form of prefabricated clinker imitating tiles

MAIN ADVANTAGES

- Reduction of building heating costs
- Improved microclimate inside the building
- Attractive decorative effects and high aesthetics of the façade
- Wall protection against adverse weather conditions
- Option to use various types of tiles

TECHNICAL DATA

Type of thermal insulation: EPS boards with the code at least: EPS-EN 13163-T(2)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-)2-TR80
Thickness of thermal insulation: from 2 to 30 cm inclusively;
Thermal insulation fixing: bonding system with additional mechanical fixing and mechanical fixing with additional bonding;
Use of mechanical fixings: optional (as per technical design);
Reinforcing mesh: system reinforcing fibreglass mesh;
Fire classification: non-fire spreading system (NRO);

Adhesion:	
• to concrete	≥ 0.25 MPa;
• to EPS	≥ 0.08 MPa;
Surface layer adhesion:	≥ 0.08 MPa:
Water absorption (after 24 hours):	< 0.5 kg/m^2;
Surface layer impact resistance:	cat. I
Diffusion resistance of the surface layer:	≤ 1.0 m

AREAS OF APPLICATION

The **KABE THERM EPS ELASTOLITH / HAAKSBERGEN** EWI system is a set of materials designed to provide thermal insulation of external walls based on EPS with a top coat in the form of flexible tiles imitating clinker cladding. It is applied in single- and multi-family housing construction industry, public utility and industrial buildings – in both the existing and new constructions – to the height of up to 25 m (for the buildings erected before 1 April 1995 to the height of eleventh story, inclusive). It is especially recommended for use in buildings, where high aesthetics and high resistance to external factors are required. The system can be used on walls made of fine masonry components (bricks, blocks, stone, etc.) or concrete (monolithic or prefabricated). It is also possible to use it on horizontal or inclined surfaces, that are not exposed to precipitation. The top layer of the system is a durable and aesthetic cladding made of flexible **ELASTOLITH / HAAKSBERGEN** façade tiles, imitating clinker cladding and available in a wide range of colours, shapes and textures.

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI S adhesive or KOMBI adhesive/base coat or KOMBI RAPID polyurethane adhesive** Bonding (adhesive) surface area min. 40% of the board area.	approx. 4.0 kg/m^2 approx. 1/4 pack/m²
THERMAL INSULATION	**White or graphite EPS boards with the code at least EPS-EN 13163-T(2)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-)2-TR80** – cured EPS thermal insulation boards	1.0-1.10 m^2/m^2
	Mechanical fixings with a metal pin (optional use) – pins for fixing thermal insulation to the substrate **Meeting the following requirements:** – disc diameter ≥ 60 mm – disc rigidity ≥ 0.3 kN/mm	Type, quantity and layout as per technical design
REINFORCING LAYER	**KOMBI adhesive/base coat** – for applying reinforcing layer	approx. 4.0 kg/m^2
	System fibreglass mesh: KABE 145, KABE 150 / KABE AVANT 150, KABE 160, KABE 165 / KABE AVANT 165 – anti-alkali impregnated mesh, completely immersed in **KOMBI** base coat	1.10 m^2/m^2 of thermal insulation
FINISH COAT	**Primer: PERMURO GT** to reduce the absorbency of the substrate and increase the adhesion of the finish layer	approx. 0.2 l/m^2
	Ready-to-use, coloured adhesive and grouting compound: Spezialkleber **ELASTOLITH / HAAKSBERGEN** – for simultaneous bonding of tiles to the substrate (bonding surface 100% of the tile area) and grouting	approx. 2.2-2.5 kg/m^2
	ELASTOLITH / HAAKSBERGEN façade tiles Prefabricated mineral tiles with an organic binder with the following dimensions: – length 210-1050 mm – width 30-480 mm – thickness 4-8 mm smooth or rough texture. Tiles can also be manufactured in other dimensions and shapes upon agreement between the manufacturer and the recipient.	one installation metre of cladding is sufficient to cover an area of 1 m^2, including a joint width of approx. 11-12 mm

The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

FAÇADE PRODUCTS

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

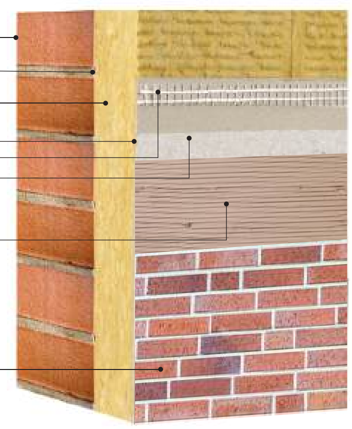
KABE Swiss Group

EPS-BASED

KABE THERM EPS IZOFLEX

External wall insulation (EWI) system for buildings with external cladding in the form of prefabricated façade tiles/cladding

SYSTEM CONSTRUCTION



MAIN ADVANTAGES

- Reduction of building heating costs
- Improved microclimate inside the building
- Attractive decorative effects and high aesthetics of the façade
- Wall protection against adverse weather conditions
- Option to use various types of tiles

TECHNICAL DATA

Type of thermal insulation: EPS boards with the code at least:
EPS-EN 13163-T(2)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-)2-TR80
Thickness of thermal insulation: from 2 to 30 cm inclusively;
Thermal insulation fixing: bonding system with additional mechanical fixing and mechanical fixing with additional bonding;
Use of mechanical fixings: optional (as per technical design);
Reinforcing mesh: system reinforcing fibreglass mesh;
Fire classification: non-fire spreading system (NRO);

Adhesion in laboratory conditions:	
• to concrete	≥ 0.25 MPa;
• to EPS	≥ 0.08 MPa;
Surface layer adhesion:	≥ 0.08 MPa:
Surface layer water absorption (after 24 hours):	≤ 0.5 kg/m²;
Surface layer impact resistance:	cat. I
Diffusion resistance of the surface layer:	≤ 1.0 m

AREAS OF APPLICATION

KABE THERM EPS EPS IZOFLEX EWI system is a set of materials designed to provide thermal insulation of external walls based on EPS with a top coat in the form of flexible tiles imitating clinker cladding or with embossing effect. It is applied in single- and multi-family housing construction industry, public utility and industrial buildings – in both the existing and new constructions – to the height of up to 25 m (for the buildings erected before 1 April 1995 to the height of eleventh story, inclusive). It is especially recommended for use in buildings, where high aesthetics and high resistance to external factors are required. The system can be used on walls made of fine masonry components (bricks, blocks, stone, etc.) or concrete (monolithic or prefabricated). It is also possible to use it on horizontal or inclined surfaces, that are not exposed to precipitation. The top layer of the system is a durable and aesthetic cladding made of prefabricated **IZOFLEX** façade tiles imitating clinker cladding or **IZOFLEX-LAMELL** tiles with embossing effect.

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI S adhesive or KOMBI adhesive/base coat** or **KOMBI RAPID polyurethane adhesive** Bonding (adhesive) surface area min. 40% of the board area.	approx. 4.0 kg/m² approx. 1/4 pack/m²
THERMAL INSULATION	**White or graphite EPS boards with the code at least EPS-EN 13163-T(2)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-)2-TR80** – cured EPS thermal insulation boards	1.0-1.10 m²/m²
	Mechanical fixings (used optionally) – pins for fixing thermal insulation to the substrate **Approved for use in ETICS on the basis of appropriate documents (ETA, KOT)**	Type, quantity and layout as per technical design
REINFORCING LAYER	**KOMBI adhesive/base coat** – for applying reinforcing layer	approx. 4.0 kg/m²
	System fibreglass mesh: KABE 145, KABE 150 / KABE AVANT 150, KABE 160, KABE 165 / KABE AVANT 165 – anti-alkali impregnated mesh, completely immersed in **KOMBI** base coat	1.10 m²/m² of thermal insulation
FINISH COAT	**Primer: PERMURO GT** or **IZOFLEX-GRUNT** to reduce the absorbency of the substrate and increase the adhesion of the finish layer	approx. 0.2 l/m²
	Ready-to-use, coloured adhesive and grouting compound **IZOFLEX-SK** – for simultaneous bonding of tiles to the substrate (bonding surface 100% of the tile area) and grouting	approx. 2.2-2.5 kg/m²
	Façade tiles/cladding: IZOFLEX and **IZOFLEX-LAMELL** Prefabricated mineral tiles/cladding with an organic binder, dimensions: – length 65-1150 mm – width 30-900 mm – thickness 3-6 mm smooth or rough texture. Tiles can also be manufactured in other dimensions and shapes upon agreement between the manufacturer and the recipient.	one installation metre of Izoflex tiles is sufficient to cover an area of 1 m², including a joint width of approx. 11-12 mm, while Izoflex-Lamell claddings are installed with butt joints

The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

FAÇADE PRODUCTS

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

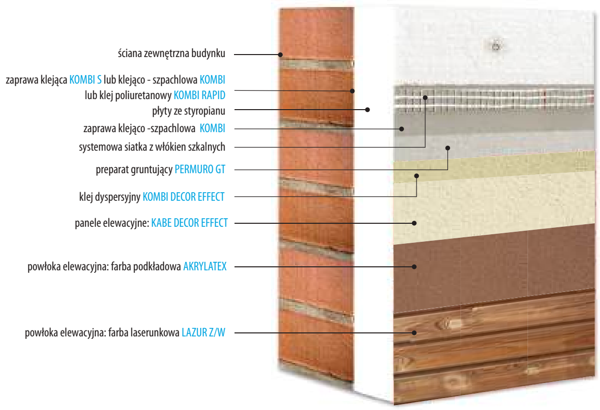
EPS-BASED

KABE THERM DECOR EFFECT

GWARANCJA 5 LAT NA SYSTEM I KOLOR

External wall insulation (EWI) system for buildings with external cladding in the form of ready-made façade panels according to the manufacturer's catalogue.

SYSTEM CONSTRUCTION



MAIN ADVANTAGES

- High aesthetics and decorative value of thermal insulation with various textures, e.g. board or embossing effect
- Effective wall protection against adverse weather conditions
- Easy and quick installation technology
- Reduction of building heating costs
- Improved microclimate inside the building
- Option to use various cladding patterns

TECHNICAL DATA

Type of thermal insulation: EPS boards with the following code: EPS-EN 13163-T(2)-L(2)-W(2)-S(5)-P(5) -BS75-DS(N)2-DS(70,-)2-TR80
Thickness of thermal insulation layer: from 2 to 30 cm inclusive;
Thermal insulation fixing: bonding system with additional mechanical fixing or mechanical fixing with additional bonding;
Mechanical fixings: as per technical design;
Reinforcing mesh: system reinforcing fibreglass mesh;
Fire classification: non-fire spreading system (NRO);

Adhesion:	
• to concrete	≥ 0.25 MPa;
• to EPS	≥ 0.08 MPa;
Surface layer adhesion:	≥ 0.08 MPa:
Water absorption (after 24 hours):	< 0.5 kg/m^2;
Surface layer impact resistance:	cat. I
Diffusion resistance of the surface layer:	≤ 1.0 m

AREAS OF APPLICATION

The **KABE THERM DECOR EFFECT** EWI system is a set of materials designed to provide thermal insulation of external walls based on EPS with a top coat in the form of flexible façade panels. It is applied in single- and multi-family housing construction industry, public utility and industrial buildings – in both the existing and new constructions – to the height of up to 25 m (for the buildings erected before 1 April 1995 to the height of eleventh story, inclusive). It is especially recommended for projects that require unique decorative effects and a fast pace of work. The system can be used on walls made of fine masonry components (bricks, blocks, stone, etc.) or concrete (monolithic or prefabricated). It is also possible to use it on horizontal or inclined surfaces, that are not exposed to precipitation. The top layer of the system is a structural cladding made of ready-made **KABE DECOR EFFECT** façade panels according to the manufacturer's catalogue (e.g. with a board, embossing effect, etc.) painted with **AKRYLATEX** undercoat and **LAZUR Z/W** lazure paint, available in a wide range of colours (as per Farby KABE colour chart).

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI S adhesive or KOMBI adhesive/base coat** or **KOMBI RAPID polyurethane adhesive** Bonding (adhesive) surface area min. 40% of the board area.	approx. 4.0 kg/m^2 approx. 1/4 pack/m²
THERMAL INSULATION	**White or graphite EPS boards with the code EPS-EN 13163-T(2)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-)2-TR80** – cured EPS thermal insulation boards	1.0-1.10 m^2/m^2
	Mechanical fixings – pins for fixing thermal insulation to the substrate **Meeting the following requirements:** – disc diameter ≥ 60 mm – disc rigidity ≥ 0.3 kN/mm	Type, quantity and layout as per technical design
REINFORCING LAYER	**KOMBI adhesive/base coat** – for applying reinforcing layer	approx. 4.0 kg/m^2
	System fibreglass mesh: KABE 145, KABE 150 / KABE AVANT 150, KABE 160, KABE 165 / KABE AVANT 165 – anti-alkali impregnated mesh, completely immersed in **KOMBI** base coat	1.10 m^2/m^2 of thermal insulation
STRUCTURAL LAYER	**Primer: PERMURO GT** to reduce the absorbency of the substrate and increase the adhesion of the finish layer	approx. 0.2 l/m^2
	KOMBI DECOR EFFECT dispersive adhesive – for simultaneous bonding of façade panels to the substrate (bonding surface 100% of the tile area) and grouting	approx. 2.5 kg/m^2
	KABE DECOR EFFECT façade panels (patterns according to manufacturer's catalogue) Flexible façade panels with an organic binder, with the following dimensions: – length up to 2000 mm – width up to 600 mm – thickness from 3 to 5 mm	one installation metre of cladding is sufficient to cover an area of 1 m^2
FINISH COAT	**Protective and decorative layer:** – **AKRYLATEX** undercoat 1x – **LAZUR Z/W** lazure paint 1x – optionally for products with ageing effect – **LAZUR Z/W** lazure paint 1x	approx. 0.1 – 0.12 l/m^2 approx. 0.08 – 0.10 l/m^2, single layer

The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

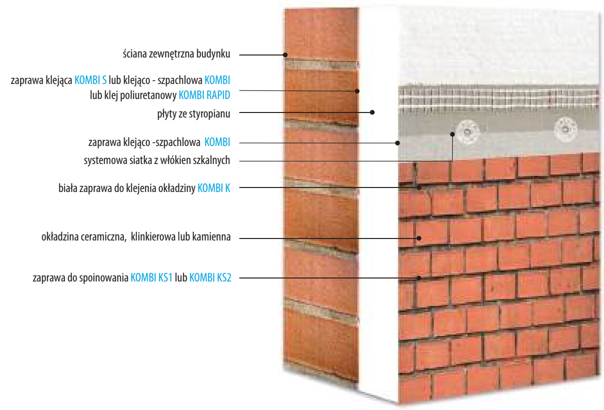
The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

EPS-BASED

KABE THERM CK

External wall insulation (EWI) system with external ceramic, clinker or stone cladding

SYSTEM CONSTRUCTION



MAIN ADVANTAGES

- Reduction of building heating costs
- Improved microclimate inside the building
- Attractive decorative effects and high aesthetics of the façade
- Wall protection against adverse weather conditions
- Option to use various types of cladding

TECHNICAL DATA

Type of thermal insulation: EPS boards with the following code:
EPS-EN 13163-T(2)-L(2)-W(2)-S(5)-P(5)-BS150-DS(N)2-DS(70,-)2-TR100
Thickness of thermal insulation: from 2 to 30 cm inclusively;
Thermal insulation fixing: bonding system with additional mechanical fixing or mechanical fixing with additional bonding;
Mechanical fixings: as per technical design;
Reinforcing mesh: system reinforcing fibreglass mesh;
Fire classification: non-fire spreading system (NRO);

Adhesion:	
• to concrete	≥ 0.25 MPa;
• to EPS	≥ 0.08 MPa;
Surface layer adhesion:	≥ 0.08 MPa:
Water absorption (after 24 hours):	< 0.5 kg/m²;
Surface layer impact resistance:	cat. I
Diffusion resistance of the surface layer:	≤ 5.7 m
Behaviour under dead weight:	
• Max. load that does not cause destruction	260 N
• Max. deflection	8.4 mm

AREAS OF APPLICATION

The **KABE THERM CK** EWI system is a set of materials designed to provide thermal insulation of external walls based on EPS with ceramic, clinker or stone cladding. It is applied in single- and multi-family housing construction industry, public utility and industrial buildings – in both the existing and new constructions – to the height of up to 25 m (for the buildings erected before 1 April 1995 to the height of eleventh story, inclusive). It is especially recommended for use in buildings, where high aesthetics and high resistance to external factors are required. The system can be used on walls made of fine masonry components (bricks, blocks, stone, etc.) or concrete (monolithic or prefabricated).

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI S adhesive or KOMBI adhesive/base coat** or **KOMBI RAPID polyurethane adhesive** Bonding (adhesive) surface area min. 60% of the board area.	approx. 6.0 kg/m² approx. 1/4 pack/m²
THERMAL INSULATION	**White or graphite EPS boards with the code EPS-EN 13163-T(2)-L(2)-W(2)-S(5)-P(5)-BS150-DS(N)2-DS(70,-)2-TR100** – cured EPS thermal insulation boards	1.0-1.10 m²/m²
	Mechanical fixings with metal pin (mandatory through reinforcing mesh) – pins for fixing thermal insulation to the substrate	Type, quantity and layout as per technical design
REINFORCING LAYER	**KOMBI adhesive/base coat** – for applying reinforcing layer	approx. 4.0 kg/m²
	System fibreglass mesh: KABE 145, KABE 150, KABE 160, KABE 165 – anti-alkali impregnated mesh, completely immersed in **KOMBI** base coat	1.10 m²/m² of thermal insulation
FINISH COAT	**White adhesive mortar for bonding the KOMBI K** cladding (bonding surface 100% of the tile surface)	2.8-8.4 kg/m²
	Ceramic tiles according to PN-EN 14411 standard dry pressed, water absorption up to 0.5%, surface weight not more than 20.5 kg/m², dimensions: length – not more than 600 mm, width – not more than 300 mm, thickness: 5-8 mm	depending on the tile size and the width of the joints
	Clinker tiles, obtained by cutting full U-type and category I clinker bricks according to PN-EN 771-1 standard, with water absorption up to 10%, surface weight not more than 40 kg/m², dimensions: length – not more than 240 mm, width – not more than 115 mm, thickness: 10-15 mm	depending on the tile size and the width of the joints
	Stone tiles according to PN-EN 1469 standard, with water absorption up to 13.5%, surface weight: not more than 40.0 kg/m², dimensions: length – not more than 600 mm, width – not more than 300 mm, thickness: 10-15 mm	depending on the tile size and the width of the joints
	Mortars for filling joints (used interchangeably): **KOMBI KS1** (for grouting) and **KOMBI KS2** (for sealing) – joints width 6-20 mm	3.0-5.0 kg/m² depending on the joint size and the cladding type used

The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

FAÇADE PRODUCTS

BASED ON MINERAL WOOL

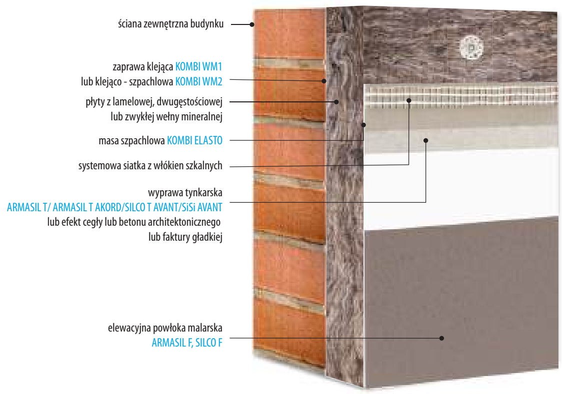
KABE THERM MW ELASTO

GWARANCJA 5 LAT NA SYSTEM I KOLOR

ETA

External wall insulation (EWI) system for buildings with increased impact resistance with silicone and silicate-silicone external render and attractive decorative effects

SYSTEM CONSTRUCTION



MAIN ADVANTAGES

- System classified as non-flammable
- Reduction of building heating costs
- Improved microclimate inside the building
- Increased impact resistance (class I)
- Attractive decorative effects and high aesthetics of the façade
- Wall protection against adverse weather conditions
- Protection against the growth of algae and fungi
- Optional use of façade paints available in a wide range of colours

TECHNICAL DATA

Type of thermal insulation: made of lamella, dual-density or plain mineral wool that meets the requirements of ETA-22/0426
Thickness of thermal insulation: from 5 to 30 cm inclusively;
Thermal insulation fixing: bonding system with additional mechanical fixing or mechanical fixing with additional bonding;
Use of mechanical fixings: as specified in technical design;
Reinforcing mesh: system reinforcing fibreglass mesh;
Render colours: natural white and colours according to KABE and NCS colour charts or a sample provided (for **ARMASIL T** and **ARMASIL T AKORD** renders only in colours that can be obtained by using inorganic pigments);
Textures: solid;

Grain size: 1.0 mm; 1.5 mm; 2.0 mm; 2.5 mm; 3.0 mm (SILCO T AVANT, SiSi AVANT renders only with grain sizes 1.5 mm and 2.0 mm, for ARMASIL T AKORD render only the grain size 1.5 mm);
Reaction to fire: class A2-s1, d0
Adhesion:

• to concrete	≥ 250 kPa;
• to mineral wool	≥ 80 kPa or destruction in wool;
Adhesion after ageing, surface layer:	≥ 80 kPa or destruction in wool;
Water absorption (after 24 hours):	< 0.5 kg/m^2;
Impact resistance:	cat. I
Water vapour permeability, top layer:	≤ 0.5 m

AREAS OF APPLICATION

The **KABE THERM MW ELASTO** EWI system is a thermal insulation system for external walls based on non-flammable mineral wool boards, that provides high fire protection and enhanced impact resistance (resistance to mechanical impacts). It is used in single- and multi-family housing, public utility and industrial buildings for newly erected and already existing buildings. Especially recommended for façades requiring high fire protection, increased impact resistance and attractive decorative effects. The system can be used on walls made of masonry components (bricks, blocks, stone, etc.) or concrete (poured on site or in the form of prefabricated slabs). It is also possible to use it on horizontal or inclined surfaces, that are not exposed to precipitation. The external system layer can be made by using **ARMASIL T, ARMASIL T AKORD, SILCO T AVANT** structural silicone renders or **SiSi AVANT** silicate-silicone renders, available in a wide range of colours and textures. In addition, for this system, it's possible to perform decorative effects of brick and architectural concrete, as well as smooth texture.

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI WM1 adhesive or KOMBI WM2 adhesive/base coat**	approx. 5.0 to 5.5 kg/m^2
THERMAL INSULATION	**Boards made of lamella, dual-density or plain mineral wool that meet the requirements of ETA-22/0426**	1.0-1.10 m^2/m^2
	Mechanical fixings meet the requirements of ETA-22/0426 – pins for fixing thermal insulation to the substrate	Type, quantity and layout as per technical design
REINFORCING LAYER	**KOMBI ELASTO dispersive, cement-free base coat** – for applying reinforcing layer	approx. 4.0 to 5.0 kg/m^2
	System fibreglass mesh: **KABE 145, KABE 150 / KABE AVANT 150, KABE 160, KABE 165 / KABE AVANT 165** – anti-alkali impregnated mesh, completely immersed in **KOMBI ELASTO** base coat	1.10 m^2/m^2 of thermal insulation
FINISH COAT (RENDER OR DECORATIVE EFFECT)	**External coat of render: ARMASIL T, ARMASIL T AKORD, SILCO T AVANT, SiSi AVANT** – protective and decorative layer protecting against adverse weather conditions and mechanical damage; render texture and colour to choose	grain size 1.0 mm – 1.8 kg/m^2 (only for ARMASIL T render with solid texture) 1.5 mm – 2.3-2.5* kg/m^2 grain size 2.0 mm – 3.0 kg/m^2 grain size 2.5 mm – 3.7 kg/m^2 grain size 3.0 mm – 4.5 kg/m^2
	Façade paint coating (optional): ARMASIL F, SILCO F – protective and decorative layer protecting against adverse weather conditions and giving an attractive colour	from 0.36 l/m^2 (when applied twice)
	Brick effect: ARMASIL T-DECOR BRICK – ARMASIL T modelled render – LAZUR Z/W lazure paint (optional ageing effect)	approx. 2.0 kg/m^2 approx. 0.10 l/m^2
	Architectural concrete effect: **ARMASIL T-DECOR ARCHITECTURAL CONCRETE** – ARMASIL T modelled render – ARMASIL F undercoat – LAZUR Z/W lazure paint	approx. 2.0 kg/m^2 approx. 0.13 l/m^2 approx. 0.10 l/m^2
	Smooth texture effect: ARMASIL T - DECOR – smooth texture (**ARMASIL T SP + ARMASIL T MODELLED**)	from 3.8 kg/m^2*

* Depending on the render type and texture

Note: Due to the excessive heating of dark-coloured façades, it is not recommended to use colours featuring a low light reflection coefficient (Y < 20%).
The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".
Note: If mechanical fixings with discs embedded in thermal insulation layer are used, all caps should be installed in the hole (glued) with KOMBI WM2 adhesive/base coat.
Failure to follow this recommendation may result in local bulging in the places, where fixings and the unglued caps are used.

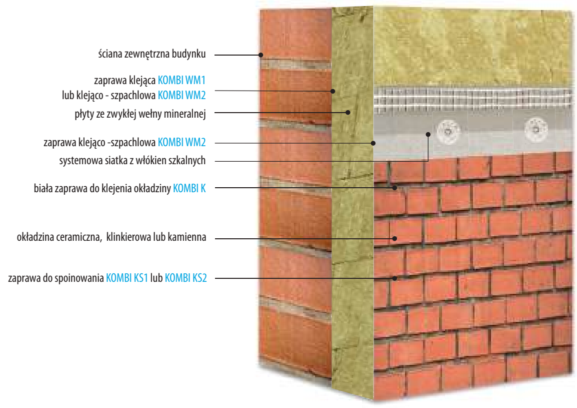
BASED ON MINERAL WOOL

KABE THERM MW CK

GWARANCJA 5 LAT NA SYSTEM I KOLOR

External wall insulation (EWI) system with external ceramic, clinker or stone cladding

SYSTEM CONSTRUCTION



MAIN ADVANTAGES

- Non-flammable system based on mineral wool
- Reduction of building heating costs
- Improved microclimate inside the building
- Attractive decorative effects and high aesthetics of the façade
- Wall protection against adverse weather conditions
- Option to use various types of cladding

TECHNICAL DATA

Type of thermal insulation: regular mineral wool boards with the following code: EN13162 T(5)-DS(70,90)- WS- WL(P)-TR7,5-MU1
Thickness of thermal insulation: from 5 to 25 cm inclusively;
Thermal insulation fixing: bonding system with additional mechanical fixing or mechanical fixing with additional bonding;
Mechanical fixings: as per technical design;
Reinforcing mesh: system reinforcing fibreglass mesh;
Fire classification: non-fire spreading system (NRO) made of non-flammable materials;
Adhesion:

- to concrete ≥ 0.25 MPa;
- to mineral wool ≥ 0.08 kPa or destruction in wool;

Surface layer adhesion:	≥ 0.08 MPa or destruction in wool
Water absorption (after 24 hours):	– for ceramic tiles ≤ 0.8 kg/m² – for clinker tiles ≤ 1.1 kg/m² – for stone tiles ≤ 1.7 kg/m²
Surface layer impact resistance:	cat. I
Diffusion resistance of the surface layer:	– for ceramic tiles ≤ 0.6 m – for clinker tiles ≤ 0.3 m – for stone tiles ≤ 0.4 m

Behaviour under dead weight:

- Max. load that does not cause destruction 148 N
- Max. deflection 141 mm

AREAS OF APPLICATION

The **KABE THERM MW CK** is a set of materials designed to provide thermal insulation of external walls based on mineral wool with ceramic, clinker or stone cladding. It is used in single- and multi-family housing, public utility and industrial, both on already existing buildings and newly erected ones, both high and low-height buildings. It is especially recommended for use in buildings, where high aesthetics and high resistance to external factors are required. The system can be used on walls made of fine masonry components (bricks, blocks, stone, etc.) or concrete (monolithic or prefabricated). The outer layer of the insulation system can be a decorative cladding made of ceramic, clinker or stone tiles.

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI WM1 adhesive or KOMBI WM2 adhesive/base coat** Bonding (adhesive) surface area min. 60% of the board area.	approx. 5.0 to 5.5 kg/m²
THERMAL INSULATION	**Regular mineral wool boards with a code of at least EN13162 T(5)-DS(70,90)- WS- WL(P)-TR7,5-MU1**	1.0-1.10 m²/m²
	Mechanical fixings with metal pin (mandatory through reinforcing mesh)	Type, quantity and layout as per technical design
REINFORCING LAYER	**KOMBI WM2 adhesive/base coat** – for applying reinforcing layer	approx. 5.0 kg/m²
	System fibreglass mesh: KABE 145, KABE 150, KABE 160, KABE 165 – anti-alkali impregnated mesh, completely immersed in **KOMBI WM2** base coat	1.10 m²/m² of thermal insulation
FINISH COAT	**White adhesive mortar for bonding the KOMBI K** cladding (bonding surface 100% of the tile surface)	2.8-8.4 kg/m²
	Ceramic tiles according to PN-EN 14411 standard dry pressed, water absorption up to 0.5%, surface weight not more than 20.5 kg/m², dimensions: length – not more than 600 mm, width – not more than 300 mm, thickness: 5-8 mm	depending on the tile size and the width of the joints
	Clinker tiles, obtained by cutting full U-type and category I clinker bricks according to PN-EN 771-1 standard, with water absorption up to 10%, surface weight not more than 40 kg/m², dimensions: length – not more than 240 mm, width – not more than 115 mm, thickness: 10-15 mm	depending on the tile size and the width of the joints
	Stone tiles according to PN-EN 1469 standard, with water absorption up to 13.5%, surface weight: not more than 40.0 kg/m², dimensions: length – not more than 600 mm, width – not more than 300 mm, thickness: 10-15 mm	depending on the tile size and the width of the joints
	Mortars for filling joints (used interchangeably): **KOMBI KS1** (for grouting) and **KOMBI KS2** (for sealing) – joints width 6-20 mm	3.0-5.0 kg/m² depending on the joint size and the cladding type used

The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

FAÇADE PRODUCTS

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

FAÇADE PRODUCTS

BASED ON MINERAL WOOL

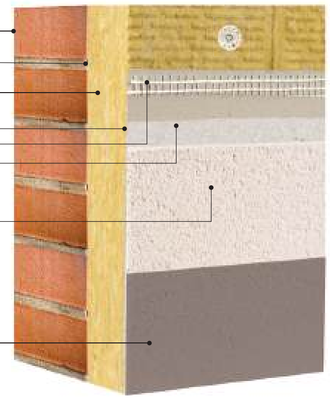
KABE THERM MW

GWARANCJA NA SYSTEM I KOLOR 5 LAT

ETA

External wall insulation (EWI) system with silicone, polysilicate, silicate-silicone, mosaic and mineral external render, including with board effect (with optional paint coating)

SYSTEM CONSTRUCTION



MAIN ADVANTAGES

- Non-flammable system components
- Reduction of building heating costs
- Improved microclimate inside the building
- High aesthetics of façade
- Free release of moisture
- Prevents water vapour condensation inside the system
- Slows down the process of façade soiling
- Ample opportunities to shape external render
- Very good soundproofing properties

TECHNICAL DATA

Type of thermal insulation: Façade, lamella or dual-density mineral wool boards with codes acc. to ETA 16/0079;
Thickness of thermal insulation: from 50 mm to 250 mm for façade, dual-density and lamella mineral wool boards;
Thermal insulation fixing: bonding system with additional mechanical fixing or mechanical fixing with additional bonding;
Use of mechanical fixings: as specified in technical design;
Reinforcing mesh: system reinforcing fibreglass mesh;
Reaction to fire: class A1 – system with mineral renders (**MINERALIT T**, **MINERALIT T AKORD**, **MINERALIT T** + **KOMBI FINISZ**), optionally coated with **NOVALIT F** paint, remaining systems: class – A2-s1,d0, system with mosaic renders: class B – s1,d0
Colours of mineral renders: white or base (intended for painting);

Silicone and polysilicate render colours: natural white, colours from the KABE and NCS colour charts or according to samples provided (possible to obtain using inorganic pigments);
Textures: solid, scraped/mixed (**ARMASIL T**, **SILCO T AVANT**, **SISI AVANT**, **MOZAIKER AKORD**, **MOZAIKER DECOR** renders: only solid texture);
Grain size: 1.5 mm; 2.0 mm; 2.5 mm; 3.0 mm (spray-applied renders: **ARMASIL T AKORD** and **NOVALIT T AKORD** and **MINERALIT T AKORD** – only with grain size of 1.5 mm, **SILCO T AVANT** silicone render and **SISI AVANT** silicate-silicone render – grain sizes 1.5 and 2.0 mm, while mineral renders: **MINERALIT T** excluding grain size 2.5 mm); mosaic renders: **MOZAIKER AKORD** and **MOZAIKER DECOR** with grain size of 0.8 mm
Surface absorption coefficient of external layer: < 0.5 kg/m^2;
Relative diffusion resistance of external layer: ≤ 1.0 m;
Impact resistance for the system: cat. II or cat. III (depending on the type of mineral wool and coat render)

AREAS OF APPLICATION

KABE THERM MW EWI system is used mainly on buildings that require high fire protection, vapour permeability and protection against the impact of aggressive weather conditions. It is used in single- and multi-family housing, public utility and industrial, both on already existing buildings and newly erected ones, both low and high buildings (over 25 m). The system can be made using façade mineral wool boards (with disturbed fibre arrangement), lamella wool (with arranged fibres) and dual-density mineral wool boards. The **KABE THERM MW** system can be used on walls made of masonry components (e.g., bricks, blocks, stone, etc.) or concrete (poured on site or in the form of prefabricated slabs). The system can be used on new walls, as well as for renovation of the existing ones. It is also possible to use it on horizontal or inclined surfaces, that are not exposed to precipitation. It is especially recommended for use on buildings with walls made of materials with a porous structure (such as aerated concrete, slag concrete, porous brick). Because of its very good soundproofing properties, it is also suitable for the thermal insulation of buildings located in the zones exposed to high noise levels. The external layer of **KABE THERM MW** system can be made with **ARMASIL T** and **SILCO T AVANT** silicone renders, **NOVALIT T** polysilicate render,**SISI AVANT** silicate-silicone render or **MINERALIT T** mineral render, **MOZAIKER AKORD** and **MOZAIKER DECOR** mosaic renders, available in a wide range of textures, colours and grain sizes and with board effect. After wetting the **ARMASIL T** silicone render, the effect of water molecules "being repelled" by silicone resin is observed on its surface. This effect protects façades against precipitation and reduces soiling deposition. It is also possible to make an optional paint coating with **ARMASIL F** or **SILCO F** silicone paint, **NOVALIT F** polysilicate paint and **CALSILIT F** silicate paint.

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI WM1 adhesive or KOMBI WM2 adhesive/base coat** – for fixing insulation mineral wool boards to the substrate	approx. 5.0 kg/m^2 approx. 5.5 kg/m^2 when using lamella wool boards
THERMAL INSULATION	Façade, lamella and dual-density mineral wool boards	1.0-1.10 m^2/m^2 of thermal insulation
	Mechanical fixings – pins for fixing thermal insulation to the substrate	Type, quantity and layout as per technical design

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

Note: Due to the excessive heating of dark-coloured façades, it is not recommended to use colours featuring a low light reflection coefficient (Y < 20%).
The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

BASED ON MINERAL WOOL

Layer type	Name and description of the product	Average coverage
REINFORCING LAYER	**KOMBI WM2 adhesive/base coat** – for applying reinforcing layer	approx. 5.0 kg/m²
	System fibreglass mesh: KABE 145, KABE 150, KABE 160, KABE 165 – anti-alkali impregnated mesh, completely immersed in **KOMBI WM2** base coat	1.10 m²/m² of thermal insulation
FINISH COAT	**Primer (dedicated for the same type of render coat or mortar):** **ARMASIL GT, NOVALIT GT, SISI GT, PERMURO GT, MINERALIT GT, MARMURIT GT** – a product that improves adhesion and limits the substrate water absorbency	approx. 0.20 l/m²
	External coat of render or mortar **STANDARD version** **ARMASIL T**, **SILCO T AVANT**, **NOVALIT T**, **SISI AVANT**, **MINERALIT T**, **MOZAIKER DECOR** **AKORD version** **ARMASIL T AKORD**, **NOVALIT T AKORD**, **MINERALIT T AKORD**, **MOZAIKER AKORD** **DECOR version** **ARMASIL T** - DECOR (**ARMASIL T SP** + **ARMASIL T** MODELLED) – smooth texture **NOVALIT T** - DECOR (**NOVALIT T SP** + **NOVALIT T** MODELLED) – smooth texture **MINERALIT T** - DECOR (**MINERALIT T SP** + **KOMBI FINISZ**) – smooth texture **MINERALIT T / NOVALIT T** MODELLED - DECOR (**MINERALIT T SP** + **NOVALIT T** MODELLED) – smooth texture with marble effect – protective and decorative layer protecting against adverse weather conditions and mechanical damage; render texture and colour to choose **The wood/board effect is made using the following set of products:** – **KOMBI DECOR PRINT** mineral mortar, – **BUDOGRUNT ZG** primer, – **AKRYLATEX** undercoat, – **LAZUR Z/W** lazure paint – a protective and decorative layer that protects the system against external factors and gives an attractive wood/board texture and colour (**AKRYLATEX** and **LAZUR Z/W** paints) according to the Farby KABE wood/board effect chart	grain size 1.5 mm – 2.0-2.5* kg/m² grain size 2.0 mm – 3.0 kg/m² grain size 2.5 mm – 3.7 kg/m² grain size 3.0 mm – 4.5 kg/m² **MOZAIKER AKORD** mosaic renders – approx. 2.6 kg/m², **MOZAIKER DECOR** – 1.9-3.8 kg/m² depending on the colour In the case of smooth texture, the consumption depends on the type and thickness of render applied 4.0-4.5 kg/m² 0.2 l/m² 0.14-0.20 l/m² 0.1 l/m²
OPTIONAL PAINT COATING	**Primers: HYDROPOR**, **NOVALIT GF**, **CALSILIT GF**,	0.19-0.24 l/m², depending on the substrate absorbency and roughness
	Paint coating: **ARMASIL F**, **SILCO F**, **NOVALIT F**	from 0.36 l/m² (when applied twice, depending on the thickness of the render grain)

* Depending on the render type

Note: Due to the excessive heating of dark-coloured façades, it is not recommended to use colours featuring a low light reflection coefficient (Y < 20%).
The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

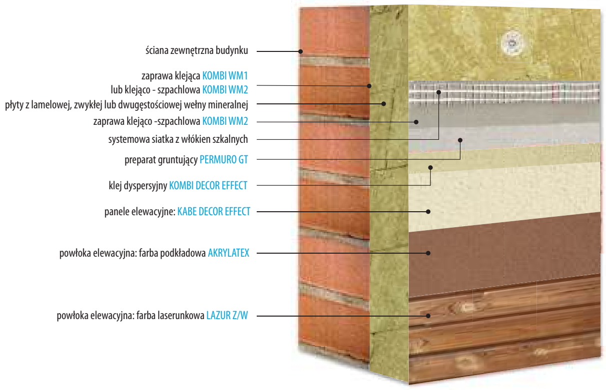
BASED ON MINERAL WOOL

KABE THERM MW DECOR EFFECT

GWARANCJA NA SYSTEM I KOLOR 5 LAT

External wall insulation (EWI) system for buildings with external cladding in the form of ready-made façade panels according to the manufacturer's catalogue

SYSTEM CONSTRUCTION



MAIN ADVANTAGES

- Approved façade fire protection
- High aesthetics and decorative value of thermal insulation with various textures, e.g. board or embossing effect
- Effective wall protection against adverse weather conditions
- Easy and quick installation technology
- Reduction of building heating costs
- Improved microclimate inside the building
- Option to use various cladding patterns

TECHNICAL DATA

Type of thermal insulation: boards made of lamella, plain or dual-density mineral wool (meeting the requirements of ICiMB-KOT-2022/0176 edition 1)
Thickness of thermal insulation: from 5 to 30 cm inclusively;
Thermal insulation fixing: bonding system with additional mechanical fixing or mechanical fixing with additional bonding (gluing);
Mechanical fixings with steel pin: as per technical design;
Reinforcing mesh: system reinforcing fibreglass mesh;
Reaction to fire: class A2-s1,d0;

Adhesion in laboratory conditions:	
• to concrete	≥ 0.25 MPa;
• to mineral wool	≥ 0.08 MPa or destruction in wool;
Surface layer adhesion:	≥ 0.08 MPa or destruction in wool;
Water absorption (after 24 hours):	< 0.5 kg/m^2;
Surface layer impact resistance:	cat. I
Diffusion resistance of the surface layer:	≤ 0.5 m

AREAS OF APPLICATION

The **KABE THERM MW DECOR EFFECT** EWI system is a set of materials designed to provide thermal insulation of external walls based on lamella, plain and dual-density mineral wool boards with a top coat in the form of flexible façade panels. It is used in single- and multi-family housing, public utility and industrial buildings for newly erected and already existing buildings. The system is especially recommended for buildings requiring high fire protection, high vapour permeability and special decorative effects. The system can be used on walls made of fine masonry components (bricks, blocks, stone, etc.) or concrete (monolithic or prefabricated). It is also possible to use it on horizontal or inclined surfaces, that are not exposed to precipitation. The top layer of the system is a structural cladding made of ready-made **KABE DECOR EFFECT** façade panels, according to the manufacturer's catalogue (e.g. with a board, embossing effect, etc.) painted with **AKRYLATEX** undercoat and **LAZUR Z/W** lazure paint, available in a wide range of colours (as per Farby KABE colour chart).

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI WM1 adhesive or KOMBI WM2 adhesive/base coat** Bonding (adhesive) surface area min. 40% of the bonding surface for boards made of plain or double-density mineral wool and 100% bonding surface for lamella mineral wool boards.	approx. 5.0 to 5.5 kg/m^2
THERMAL INSULATION	**Boards made of lamella, plain or dual-density mineral wool** (meeting the requirements of ICiMB-KOT-2022/0176 edition 1)	1.0-1.10 m^2/m^2
	Mechanical fixings with steel pins – pins for fixing thermal insulation to the substrate Meeting the following requirements: – disc diameter ≥ 60 mm – disc rigidity ≥ 0.5 kN/mm	Type, quantity and layout as per technical design
REINFORCING LAYER	**KOMBI WM2 adhesive/base coat** – for applying reinforcing layer	approx. 4.0 to 5.0 kg/m^2
	System fibreglass mesh: KABE 145, KABE 150 / KABE AVANT 150, KABE 160, KABE 165 / KABE AVANT 165 – anti-alkali impregnated mesh, completely immersed in **KOMBI WM2** base coat	1.10 m^2/m^2 of thermal insulation
STRUCTURAL LAYER	**Primer: PERMURO GT** to reduce the absorbency of the substrate and increase the adhesion of the finish layer	approx. 0.2 l/m^2
	KOMBI DECOR EFFECT dispersive adhesive – for simultaneous bonding of façade panels to the substrate (bonding surface 100% of the tile area) and grouting	approx. 2.5 kg/m^2
	KABE DECOR EFFECT façade panels (patterns according to manufacturer's catalogue) Flexible façade panels with an organic binder, with the following dimensions: – length up to 2000 mm – width up to 600 mm – thickness from 3 to 5 mm	one installation metre of cladding is sufficient to cover an area of 1 m^2
FINISH COAT	**Protective and decorative layer:** – **AKRYLATEX** undercoat 1x – **LAZUR Z/W** lazure paint 1x – optionally for products with ageing effect – **LAZUR Z/W** lazure paint 1x	approx. 0.1 – 0.12 l/m^2 approx. 0.08 – 0.10 l/m^2, single layer

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

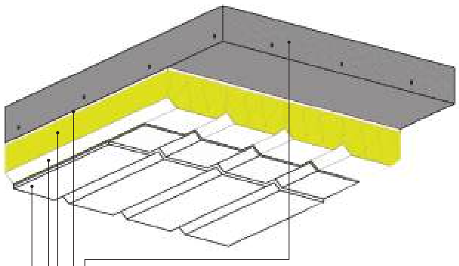
CEILING INSULATION SYSTEM

KABE THERM SG

GWARANCJA 5 LAT NA SYSTEM I KOLOR

Ceiling insulation system with external mineral render (with optional paint coating) or polysilicate paint coating

SYSTEM CONSTRUCTION



Ceiling over an unheated room
KOMBI WM1 mineral wool adhesive or KOMBI WM2 adhesive/base coat
Boards made of bevelled lamella mineral wool
MINERALIT GT primer (used on unprimed mineral wool boards)
MINERALIT T AKORD mineral render or NOVALIT F polysilicate paint coating or
MINERALIT T AKORD mineral render coated with NOVALIT F polysilicate paint

MAIN ADVANTAGES

- Non-flammable system components
- Reduction of building heating costs
- Improved microclimate inside the building
- High aesthetics of ceiling surface
- Free release of moisture
- Prevents water vapour condensation inside the system
- Mineral nature of render
- Good soundproofing properties

TECHNICAL DATA

Type of thermal insulation: bevelled lamella mineral wool boards (factory primed or unprimed);
Thickness of thermal insulation: from 4 to 20 cm;
Thermal insulation fixing: bonded (glued) system or bonded (glued) system with additional mechanical fixing;
Mechanical fixings: as per technical design;
Render colour: white;
Texture: solid;
Grain sizes: 1.0 mm, 1.5 mm;

Paint colours: white and colours from KABE and NCS colour charts or according to a sample provided (possible to obtain using inorganic pigments);
Adhesion:
- to concrete ≥ 0.25 MPa;
- to mineral wool ≥ 0.08 MPa;

Surface layer adhesion to mineral wool: ≥ 0.08 MPa;
Vapour permeability of the mineral surface layer: ≤ 0.60 m;
Reaction to fire: class A1;

AREAS OF APPLICATION

The **KABE THERM SG** system is intended for insulating ceilings in closed and open garages with heated rooms above them. It works well on surfaces that are not exposed to direct impact of weather conditions or mechanical damage in residential, public and industrial buildings, both in existing and newly erected buildings. The **KABE THERM SG** insulation system is used primarily for insulating ceilings requiring high fire protection. The thermal insulation material used in the system are non-flammable lamella mineral wool boards. The system is intended for use on all typical non-flammable mineral substrates (such as concrete, cement render, cement-lime render and ceilings made of hollow bricks and other such ceramic or concrete materials), at least class A2-s3,d0 according to PN-EN 13501-1+A1:2010 standard. The outer layer of the system is a spray-applied **MINERALIT T AKORD** mineral render (optionally coated with **NOVALIT F** polysilicate paint) or polysilicate **NOVALIT F** paint coating, available in a wide range of colours.

OPTION A – using primed and bevelled lamella mineral wool boards

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI WM1 adhesive or KOMBI WM2 adhesive/base coat** – for bonding insulation lamella mineral wool boards	approx. 5.5 kg/m^2
THERMAL INSULATION	**Boards made of factory-primed and bevelled lamella mineral wool**	1.0-1.10 m^2/m^2 of thermal insulation
FINISH COAT	**Mineral render (to choose from):** **MINERALIT T AKORD 1.0 MM** **MINERALIT T AKORD 1.5 MM** highly diffusive render, protecting the system against external factors and giving the façade an attractive texture **and/or NOVALIT F polysilicate coating** – protective and decorative layer protecting against adverse weather conditions and giving the surface an attractive colour	approx. 1.8-2.2 kg/m^2 approx. 2.0-2.4 kg/m^2 approx. 0.36 l/m^2

BASED ON MINERAL WOOL

OPTION B – when using factory-unprimed boards made of bevelled, lamella mineral wool

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI WM1 adhesive or KOMBI WM2 adhesive/base coat** **–** for bonding insulation mineral wool boards	approx. 5.5 kg/m²
THERMAL INSULATION	**Boards made of factory-bevelled unprimed and lamella mineral wool**	1.0-1.10 m²/m² of thermal insulation
PRIMING LAYER	**MINERALIT GT primer** – a product that improves adhesion and limits the substrate water absorbency	approx. 0.25 l/m²
FINISH COAT	**Mineral render (to choose from):** **MINERALIT T AKORD 1.0 MM** **MINERALIT T AKORD 1.5 MM** highly diffusive render, protecting the system against external factors and giving the façade an attractive texture **and/or NOVALIT F polysilicate coating** – protective and decorative layer protecting against adverse weather conditions and giving the surface an attractive colour	approx. 1.8-2.2 kg/m² approx. 2.0-2.4 kg/m² approx. 0.36 l/m²

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

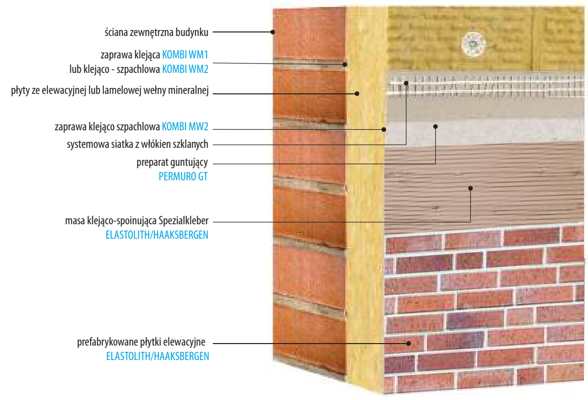
KABE Swiss Group

BASED ON MINERAL WOOL

KABE THERM MW ELASTOLITH / HAAKSBERGEN

External wall insulation (EWI) system for buildings with external cladding in the form of flexible tiles

SYSTEM CONSTRUCTION



MAIN ADVANTAGES

- Non-flammable system components
- Reduction of building heating costs
- Improved microclimate inside the building
- High aesthetics of façade
- Slows down the process of façade soiling
- Wide range of possibilities for shaping the façade appearance

TECHNICAL DATA

Type of thermal insulation: Plain or lamella mineral wool boards with codes according to ICiMB-KOT-2021/0144;
Thickness of thermal insulation: from 50 mm to 300 mm
Thermal insulation fixing: totally bonded system or bonded system with additional mechanical fixing or mechanical fixing with additional bonding;
Mechanical fixings: as per technical design;
Reinforcing mesh: system reinforcing fibreglass mesh;

Reaction to fire: class A2-s1,d0
Adhesion:

• to concrete	≥ 0.25 MPa;
• to mineral wool	≥ 0.08 MPa;
Surface layer adhesion:	≥ 0.08 MPa:
Surface layer water absorption (after 24 h):ICiMB-KOT-2021/0144	< 0.5 kg/m^2;
Relative diffusion resistance of the surface layer:	≤ 1.0 m;
System impact resistance:	cat. I

AREAS OF APPLICATION

KABE THERM MW ELASTOLITH / HAAKSBERGEN EWI system is used mainly on buildings that require high fire protection, vapour permeability and protection against the impact of aggressive weather conditions. It is used in single- and multi-family housing, public utility and industrial, both on already existing buildings and newly erected ones, both low and high buildings (over 25 m). The system can be made using plain mineral wool boards (with disturbed fibre arrangement) or lamella wool (with arranged fibres). The system can be used on walls made of masonry components (e.g., bricks, blocks, stone, etc.) or concrete (poured on site or in the form of prefabricated slabs). The system can be used on new walls, as well as for renovation of the existing ones. It is also possible to use it on horizontal or inclined surfaces, that are not exposed to precipitation. The top layer of the system is a durable and aesthetic cladding made of flexible **ELASTOLITH / HAAKSBERGEN** façade tiles, imitating clinker cladding and available in a wide range of colours, shapes and textures.

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI WM1 adhesive or KOMBI WM2 adhesive/base coat** – for fixing insulation mineral wool boards to the substrate (the bonding surface for lamella wool boards should be 100%, and for plain mineral wool boards at least 40%)	approx. 5.0 kg/m^2 approx. 5.5 kg/m^2 when using lamella wool boards
THERMAL INSULATION	Plain or lamella mineral wool boards	1.0-1.10 m^2/m^2 of thermal insulation
	Mechanical fixings – pins for fixing thermal insulation to the substrate	Type, quantity and layout as per technical design

FAÇADE PRODUCTS

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

Note: Due to the excessive heating of dark-coloured façades, it is not recommended to use colours featuring a low light reflection coefficient (Y < 20%).
The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

BASED ON MINERAL WOOL

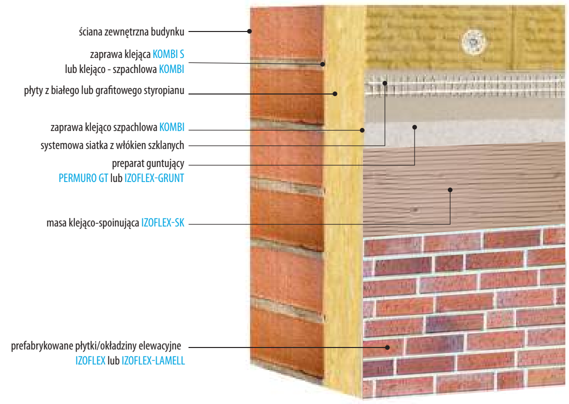
Layer type	Name and description of the product	Average coverage
REINFORCING LAYER	**KOMBI WM2 adhesive/base coat** – for applying reinforcing layer	approx. 5.0 kg/m^2
	System fibreglass mesh: KABE 145, KABE 150 / KABE AVANT 150, KABE 160, KABE 165 / KABE AVANT 165 – anti-alkali impregnated mesh, completely immersed in **KOMBI WM2** base coat	1.10 m^2/m^2 of thermal insulation
FINISH COAT	**Primer: PERMURO GT** – a product that improves adhesion and limits the substrate water absorbency	approx. 0.20 l/m^2
	Ready-to-use, coloured adhesive and grouting compound: Spezialkleber **ELASTOLITH / HAAKSBERGEN** – for simultaneous bonding of tiles to the substrate (bonding surface 100% of the tile area) and grouting	approx. 2.2-2.5 kg/m^2
	Façade tiles: ELASTOLITH / HAAKSBERGEN Prefabricated mineral tiles with an organic binder with the following dimensions: – length 210-1050 mm – width 30-480 mm – thickness 4-8 mm smooth or rough texture. Tiles can also be manufactured in other dimensions and shapes upon agreement between the manufacturer and the recipient.	one installation metre of tiles is sufficient to cover an area of 1 m^2, including a joint width of approx. 11-12 mm

BASED ON MINERAL WOOL

KABE THERM MW IZOFLEX

SYSTEM CONSTRUCTION

External wall insulation (EWI) system for buildings with external cladding in the form of prefabricated façade tiles/cladding



MAIN ADVANTAGES

- Non-flammable system components
- Reduction of building heating costs
- Improved microclimate inside the building
- High aesthetics of façade
- Slows down the process of façade soiling
- Wide range of possibilities for shaping the façade appearance

TECHNICAL DATA

Type of thermal insulation: Plain or lamella mineral wool boards with codes according to ICiMB-KOT-2023/0186;
Thickness of thermal insulation: from 50 mm to 300 mm
Thermal insulation fixing: totally bonded system or bonded system with additional mechanical fixing or mechanical fixing with additional bonding;
Mechanical fixings: as per technical design;
Reinforcing mesh: system reinforcing fibreglass mesh;
Reaction to fire: A2-s1,d0 (non-flammable);

Adhesion:	
• to concrete	≥ 0.25 MPa;
• to mineral wool	≥ 0.08 MPa or destruction in wool;
Surface layer adhesion:	≥ 0.08 MPa:
Surface layer water absorption (after 24 h): ICiMB-KOT-2021/0144	< 0.5 kg/m^2;
Relative diffusion resistance of the surface layer:	≤ 1.0 m;
System impact resistance:	cat. I

AREAS OF APPLICATION

KABE THERM MW IZOFLEX EWI system is used mainly on buildings that require high fire protection, vapour permeability and protection against the impact of aggressive weather conditions. It is used in single- and multi-family housing, public utility and industrial, both on already existing buildings and newly erected ones, both low and high buildings (over 25 m). The system can be made using plain mineral wool boards (with disturbed fibre arrangement) or lamella wool (with arranged fibres). The **KABE THERM MW IZOFLEX** system can be used on walls made of masonry components (e.g., bricks, blocks, stone, etc.) or concrete (poured on site or in the form of prefabricated slabs). The system can be used on new walls, as well as for renovation of the existing ones. It is also possible to use it on horizontal or inclined surfaces, that are not exposed to precipitation. The top layer of the system is a durable and aesthetic cladding made of flexible **IZOFLEX** façade tiles imitating clinker cladding or **IZOFLEX-LAMELL** cladding with embossing effect.

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI WM1 adhesive or KOMBI WM2 adhesive/base coat** – for fixing insulation mineral wool boards to the substrate (the bonding surface for lamella wool boards should be 100%, and for plain mineral wool boards at least 40%)	approx. 5.0 kg/m^2 approx. 5.5 kg/m^2 when using lamella wool boards
THERMAL INSULATION	Plain or lamella mineral wool boards	1.0-1.10 m^2/m^2 of thermal insulation
	Mechanical fixings with a steel pin, approved for use in ETICS on the basis of appropriate documents (ETA, KOT), provided that they meet the following requirements: – disc diameter ≥ 60 mm; – disc rigidity ≥ 0.50 kN/mm	Type, quantity and layout as per technical design

Note: Due to the excessive heating of dark-coloured façades, it is not recommended to use colours featuring a low light reflection coefficient (Y < 20%).
The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

BASED ON MINERAL WOOL

Layer type	Name and description of the product	Average coverage
REINFORCING LAYER	**KOMBI WM2 adhesive/base coat** – for applying reinforcing layer	approx. 5.0 kg/m²
	System fibreglass mesh: KABE 145, KABE 150 / KABE AVANT 150, KABE 160, KABE 165 / KABE AVANT 165 – anti-alkali impregnated mesh, completely immersed in **KOMBI WM2** base coat	1.10 m²/m² of thermal insulation
FINISH COAT	**Primer: PERMURO GT** or **IZOFLEX-GRUNT** – a product that improves adhesion and limits the substrate water absorbency	approx. 0.20 l/m²
	Ready-to-use, coloured adhesive and grouting compound **IZOFLEX-SK** – for simultaneous bonding of tiles to the substrate (bonding surface 100% of the tile area) and grouting	approx. 2.2-2.5 kg/m²
	Façade claddings/tiles: IZOFLEX or **IZOFLEX-LAMELL** Prefabricated mineral tiles/cladding on an organic binder with dimensions: – length 65-1150 mm – width 30-900 mm – thickness 3-6 mm smooth or rough texture. Tiles/claddings can also be manufactured in other dimensions and shapes upon agreement between the manufacturer and the recipient.	one installation metre of Izoflex tiles is sufficient to cover an area of 1 m², including a joint width of approx. 11-12 mm, while Izoflex-Lamell claddings are installed with butt joints

Note: Due to the excessive heating of dark-coloured façades, it is not recommended to use colours featuring a low light reflection coefficient (Y < 20%).
The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

KABE Swiss Group

SILICONE

ARMASIL T

Silicone render

MAIN ADVANTAGES

- Top resistance to adverse weather conditions
- Very low surface absorption
- Increased resistance to soiling
- Good vapour permeability
- Anti-fungal and algae protection (reduces the growth of algae and fungi)
- Good adhesion to both mineral and plastic-based coatings

AREAS OF APPLICATION

To be used as manually applied thin-coat renders for external use and finish coats for the following EPS-based insulation systems: **KABE THERM RENO** and **KABE THERM ELASTO***, based on mineral wool: **KABE THERM MW*** and **ARMASIL RSA** renovation anti-cracking system. For use on the façades of newly constructed and existing buildings, both on mineral substrates (e.g., concrete, cement render, cement-lime render) and on substrates covered with a well-bonded plastic-based paint coating. Particularly recommended for facilities requiring high resistance to soiling and in finishing systems used on walls made of materials with a porous structure (such as aerated concrete, slag concrete, porous brick). Suitable for buildings located close to roads and industrial areas. After wetting the silicone render, the effect of water molecules "being repelled" by silicone resin is observed on its surface. This effect protects façades against precipitation and reduces soiling deposition. The substrate should be primed with **ARMASIL GT** before applying the render.

TECHNICAL DATA

Base binder: silicone binder;
Pigments: inorganic coloured pigments, resistant to weather conditions;
Colours: natural white and colours from KABE colour chart and selected colours from the NCS colour chart (possible to obtain using inorganic pigments);
Textures: solid, modelled and smooth (texture made up of 2 renders: of solid texture with the thickness of 1.5 mm and modelled texture)
Grain size: 1.0 mm; 1.5 mm; 2.0 mm; 2.5 mm; 3.0 mm;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Vapour permeability: $S_d = 0.30$ m (cat. V2);
Water absorption: $w = 0.09$ kg/m^2·h$^{0.5}$ (cat. W3);
Packaging: Disposable plastic packaging holding 25 kg of the product.

Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

Average coverage (kg/m^2):

Texture	Grain size (mm)					
		1.0	1.5	2.0	2.5	3.0
SOLID		1.8	2.3	3.0	3.7	4.5
MODELLED	2.0	-	-	-	-	-
SMOOTH		4.3				

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, and free of biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with finish levelling and smoothing compound. Small unevenness can be smoothed right away with levelling and smoothing compound. Use the above products according to their technical data sheets. An absorbent substrate should be primed with an adequate product before applying levelling compounds or base coats. If the render is applied on new mineral substrates (e.g., concrete, cement render, cement-lime render) – a minimum 4-week curing period is required. Before using silicone render in **KABE THERM RENO**, **KABE THERM ELASTO** or **KABE THERM MW** EWI systems, all base coats should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Before applying the silicone render, the primed reinforcing layer has to be fully set. This can take 3-4 days in typical weather conditions.
PRIMING: The substrate should be primed with **ARMASIL GT** before applying the render. The curing period of the product applied to the substrate before applying the render is about 24 hours. Render can be applied when the primer is completely dry. To reduce the risk of the substrate colour showing through the top coat, it is recommended to use a primer with the same colour as the render.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. If stored for a long time and directly before application, the product should be thoroughly mixed (with a low-speed mixer fitted with a basket stirrer), until a smooth, homogeneous consistency is obtained. Further mixing is not recommended, as it may result in excessive aeration of the product. If required, add a small amount of drinking water (max. 0.25 l per 25 kg of the product). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: Using a stainless steel trowel, apply a thin, uniform layer of the product to the substrate. Then, use a plastic trowel to create a texture, rubbing the applied compound with circular motions. The modelled texture render should be applied using a stainless steel trowel (1-5 mm thick). To achieve the required texture, use a roller, trowel or sponge. A smooth top coat of the render should be carried out in two stages. First apply solid texture render according to the above instruction. Once the previous coat is dry, apply the modelled texture render. The modelled render should be rubbed with circular motions to achieve an even surface of the whole top coat.
DRYING: Typical drying time of the render applied to the substrate is approx. 24 h (at +20°C, 55% RH). Note: Drying time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened.
USEFUL HINTS: The final effect may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first smooth out the entire surface with **KOMBI** adhesive/base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. Tools should be cleaned with water immediately after work is completed. The render should be applied and dried on dry days at air temperatures from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the undried render against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM RENO**, **KABE THERM ELASTO** or **KABE THERM MW** system are used.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

European Technical Assessment: ETA - 16/0079, ETA - 17/0203
National Technical Assessment No. ICiMB-KOT-2018/0050 edition 2
If the product is used for other purpose than EWI system, the product meets the requirements of: PN-EN 15824

SILICONE

SILCO T AVANT

Silicone render

MAIN ADVANTAGES

- High resistance to adverse weather conditions
- Good vapour permeability
- Increased resistance to soiling
- Low surface absorption
- Anti-fungal and algae protection (reduces the growth of algae and fungi)
- Good adhesion to both mineral and plastic-based coatings

AREAS OF APPLICATION

To be used as manually applied thin-coat renders for external use and finish coats for the following EPS-based insulation system: **KABE THERM AVANT***. For use on the façades of newly constructed and existing buildings, both on mineral substrates (e.g., concrete, cement render, cement-lime render) and on substrates covered with a well-bonded plastic-based paint coating. Particularly recommended for facilities requiring high resistance to adverse weather conditions and in finishing systems used on walls made of materials with a porous structure (such as aerated concrete, slag concrete, porous brick). The substrate should be primed with **ARMASIL GT** before applying the render.

TECHNICAL DATA

Base binder: silicone binder and polymer binder;
Pigments: coloured pigments resistant to weather conditions;
Colours: natural white and colours from KABE colour chart and selected colours from the NCS colour chart;
Textures: solid,
Grain size: 1.5 mm; 2.0 mm;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Vapour permeability: S_d = 0.20 m (cat. V2);
Water absorption: cat. W2;
Packaging: Disposable plastic packaging holding 25 kg of the product.

Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

Average coverage (kg/m^2):

Texture	Grain size (mm)	
	1.5	2.0
SOLID	2.5	3.0

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, and free of biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with finish levelling and smoothing compound. Small unevenness can be smoothed right away with levelling and smoothing compound. Use the above products according to their technical data sheets. An absorbent substrate should be primed with an adequate product before applying levelling compounds or base coats. If the render is applied on new mineral substrates (e.g., concrete, cement render, cement-lime render) – a minimum 4-week curing period is required. Before using silicone render in **KABE THERM AVANT** or **KABE THERM MW** EWI systems, all base coats of EWI systems should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Before applying the silicone render, the primed reinforcing layer has to be fully set. This can take 3-4 days in typical weather conditions.
PRIMING: The substrate should be primed with **ARMASIL GT** or **SISI GT** (in **KABE THERM AVANT** system) before applying the render. The curing period of the product applied to the substrate before applying the render is about 24 hours. Render can be applied when the primer is completely dry. To reduce the risk of the substrate colour showing through the top coat, it is recommended to use a primer with the same colour as the render.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. If stored for a long time and directly before application, the product should be thoroughly mixed (with a low-speed mixer fitted with a basket stirrer), until a smooth, homogeneous consistency is obtained. Further mixing is not recommended, as it may result in excessive aeration of the product. If required, add a small amount of drinking water (max. 0.25 l per 25 kg of the product). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: Using a stainless steel trowel, apply a thin, uniform layer of the product to the substrate. Then, use a plastic trowel to create a texture, rubbing the applied compound with circular motions.
DRYING: Typical drying time of the render applied to the substrate is approx. 24 h (at +20°C, 55% RH). Note: Drying time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened.
USEFUL HINTS: The final effect may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first smooth out the entire surface with **KOMBI** adhesive/base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. Tools should be cleaned with water immediately after work is completed. The render should be applied and dried on dry days at air temperatures from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the undried render against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM AVANT** or **KABE THERM MW** system are used.

FAÇADE PRODUCTS

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

KABE Swiss Group

SILICONE

ARMASIL T AKORD

Silicone render for spray application

MAIN ADVANTAGES

- Top resistance to adverse weather conditions
- High vapour permeability;
- Highly efficient
- Very good adhesion to substrate
- Anti-fungal and algae protection (reduces the growth of algae and fungi)
- Quick and easy application

AREAS OF APPLICATION

It is used for spray (machine) application of thin-coat renders outside buildings, including **KABE THERM RENO**, **KABE THERM EPS*** EPS-based EWI systems and in **KABE THERM MW*** EWI system based on mineral wool. It is especially recommended for use on large surface areas, as well as on substrates with curved, irregular shapes. It ensures high coverage and quick application. Intended for use on mineral substrates (e.g., concrete, cement render, cement-lime render) and on substrates covered with a well-bonded plastic-based paint coating. The substrate should be primed with **ARMASIL GT** before applying the render.

TECHNICAL DATA

Base binder: silicone binder;
Pigments: inorganic coloured pigments, resistant to weather conditions;
Colours: natural white and colours according to KABE and NCS colour charts or a sample provided (possible to obtain using inorganic pigments);
Textures: solid;
Grain size: 1.5 mm;
Thinner: water;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Vapour permeability: $S_d = 0.05$ m (cat. V1);
Water absorption: $w = 0.08$ kg/m^2·h$^{0.5}$ (cat. W3);

Packaging: Disposable plastic packaging holding 20 kg of the product.
Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

Min. coverage (kg/m^2):

Texture	Grain size (mm)
	1.5
SOLID	2.4

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. For particularly uneven substrates (from 5 mm to 15 mm), first use levelling compounds, and then level out the wall surface with **KOMBI** adhesive/base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI** adhesive/base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG** before applying levelling compounds or base coats. Use the above levelling compounds and/or base coats according to their technical data sheets. Fresh concrete substrates, cement and cement-lime renders can only be plastered after min. 2-week curing period. The base coats of the EWI system should be performed in accordance with the technology of the External Thermal Insulation Composite Systems for buildings – ETICS.
PRIMING: The substrate should be primed with **ARMASIL GT** before applying the render. The curing period of the product applied to the substrate before applying the render is about 24 hours. We recommend using a preparation tinted to match the colour of the render.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. If stored for a long time and directly before application, the product should be thoroughly mixed (with a low-speed mixer fitted with a basket stirrer), until a smooth, homogeneous consistency is obtained. Further mixing is not recommended, as it may result in excessive aeration of the product. If required, add a small amount of drinking water (max. 0.1 l per 20 kg of render compound) to thin the product. Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: The render compound should be applied onto the substrate by using a pneumatic spraying device at a working pressure of 3-4 atmospheres and with a nozzle diameter of 5-6 mm. While spraying, the gun should be held perpendicularly to the substrate at a distance of 0.4-0.6 m.
DRYING: Typical drying time of the render applied to the substrate is approx. 24 h (at +20°C, 55% RH). Note: Drying time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened.
USEFUL HINTS: The final effect may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first smooth out the entire surface with **KOMBI** adhesive/base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. Tools should be cleaned with water immediately after work is completed. The render should be applied and dried on dry days at air temperatures from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the undried render against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM RENO**, **KABE THERM EPS** or **KABE THERM MW** system are used.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

European Technical Assessment: ETA-16/0079, ETA-14/0445
National Technical Assessment No. ICiMB-KOT-2018/0050 edition 2
If the product is used for other purpose than EWI system, the product meets the requirements of: PN-EN 15824

POLYSILICATE (LOW-ALKALINE)

NOVALIT T

Polysilicate render

MAIN ADVANTAGES

- Mineral nature,
- Low-alkaline (pH 8-9.5)
- Resistant to adverse weather conditions
- Increased resistance to soiling
- Very good vapour permeability
- Low surface absorption
- Anti-fungal and algae protection (reduces the growth of algae and fungi)
- For use on both mineral substrates and those covered with plastic-based coatings

AREAS OF APPLICATION

To be used as manually applied thin-coat renders for external use and finish coats for the following EPS-based insulation systems: **KABE THERM RENO**, **KABE THERM AVANT*** and **KABE THERM MW*** based on mineral wool with **NOVALIT RSA** renovation anti-cracking system. Intended for use on mineral substrates (e.g., concrete, cement render, cement-lime render) and on substrates covered with a well-bonded plastic-based paint coating. It is especially recommended in finishing systems for external walls made of materials of porous texture (such as e.g.: aerated concrete, slag concrete, porous brick) and on the walls of new buildings that have not been cured yet. The substrate should be primed with **NOVALIT GT** before applying the render.

TECHNICAL DATA

Base binder: specially modified potassium water glass;
Pigments: inorganic coloured pigments, resistant to weather conditions;
Colours: natural white and colours from KABE colour chart and selected colours from the NCS colour chart or according to a sample provided (possible to obtain using inorganic pigments);
Textures: solid, scraped/mixed, modelled and smooth (texture made up of 2 renders: of solid texture with the thickness of 1.5 mm and modelled texture);
Grain size: 1.0 mm; 1.5 mm; 2.0 mm; 2.5 mm; 3.0 mm;
Thinner: water;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Vapour permeability: $S_d = 0.07$ m (cat. V1);
Water absorption: $w = 0.18$ kg/m²·h$^{0.5}$ (cat. W2);
Packaging: Disposable plastic packaging holding 25 kg of the product.
Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

Average coverage (kg/m²):

Texture	Grain size (mm)					
	–	1.0	1.5	2.0	2.5	3.0
SOLID	–	1.8	2.5	3.0	3.7	4.5
SCRAPED/MIXED	–	–	2.5	3.0	3.7	4.5
MODELLED	2.0	–	–	–	–	–
SMOOTH	4.5	–	–	–	–	–

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, and free of biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with finish levelling and smoothing compound. Small unevenness can be smoothed right away with levelling and smoothing compound. Use the above products according to their technical data sheets. An absorbent substrate should be primed with an adequate product before applying levelling compounds or base coats. If the polysilicate render is applied on new mineral substrates (e.g., concrete, cement render, cement-lime render) – a minimum 2-week curing period is required. Before using a render in **KABE THERM RENO**, **KABE THERM AVANT** or **KABE THERM MW** EWI systems, all base coats should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Before applying the polysilicate render, the primed reinforcing layer has to be fully set. This can take 3-4 days in typical weather conditions.
PRIMING: The substrate should be primed with **NOVALIT GT** before applying the render. The curing period of the product applied to the substrate before applying the render is about 24 hours. To reduce the risk of the substrate colour showing through the top coat (especially when applying scraped or mixed texture render), it is recommended to use a primer with the same colour as the render.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. If stored for a long time and directly before application, the product should be thoroughly mixed (with a low-speed mixer fitted with a basket stirrer), until a smooth, homogeneous consistency is obtained. Further mixing is not recommended, as it may result in excessive aeration of the product. If required, add a small amount of drinking water (max. 0.25 l per 25 kg of the product). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: Using a stainless steel trowel, apply a thin, uniform layer of the product to the substrate. Then, use a plastic trowel to create a texture, rubbing the applied compound with circular motions (solid and mixed texture) or longitudinal motions in the vertical or horizontal direction (scraped texture). The modelled texture render should be applied using a stainless steel trowel (1-5 mm thick). To achieve the required texture, use a roller, trowel or sponge. A smooth top coat of the render should be carried out in two stages. First apply solid texture render according to the above instruction. Once the previous coat is dry, apply the modelled texture render. The modelled render should be rubbed with circular motions to achieve an even surface of the whole top coat.
DRYING: Typical setting (hardening) time of the render applied onto a substrate is approx. 24 h (at +20°C, 55% RH). Note: Setting time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened.
USEFUL HINTS: The final effect may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first level its entire surface with a base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. Tools should be cleaned with water immediately after work is completed. The render should be applied and set on dry days at temperatures from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the unset render against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM RENO**, **KABE THERM AVANT** or **KABE THERM MW** system are used.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl

European Technical Assessment: ETA - 16/0079, ETA - 17/0204
National Technical Assessment No. ICiMB-KOT-2018/0050 edition 2
If the product is used for other purpose than EWI system, the product meets the requirements of: PN-EN 15824

POLYSILICATE (LOW-ALKALINE)

NOVALIT T AKORD

Polysilicate render for spray application

MAIN ADVANTAGES

- Mineral nature
- Low-alkaline (pH 8-9.5)
- Resistant to adverse weather conditions
- Highly efficient
- Very good adhesion to substrate
- Anti-fungal and algae protection (reduces the growth of algae and fungi)
- Quick and easy application

AREAS OF APPLICATION

It is used for spray (machine) application of thin-coat renders outside buildings, including in **KABE THERM RENO*** EPS-based EWI system and **KABE THERM MW*** EWI system based on mineral wool. It is especially recommended for use on large surface areas, as well as on substrates with curved, irregular shapes. It ensures high coverage and quick application. Intended for use on mineral substrates (e.g., concrete, cement render, cement-lime render) and on substrates covered with a well-bonded plastic-based paint coating. The substrate should be primed with **NOVALIT GT**.

TECHNICAL DATA

Base binder: modified potassium water glass;
Pigments: inorganic coloured pigments, resistant to weather conditions;
Colours: natural white and colours according to KABE and NCS colour charts or a sample provided (possible to obtain using inorganic pigments);
Textures: solid;
Grain size: 1.5 mm;
Thinner: water;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Vapour permeability: S_d = 0.06 m (cat. V1);
Water absorption: w = 0.16 kg/m^2·h$^{0.5}$ (cat. W2);
Packaging: Disposable plastic packaging holding 20 kg of the product.

Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

Min. coverage (kg/m^2):

Texture	Grain size (mm)
	1.5
SOLID	2.4

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. For particularly uneven substrates (from 5 mm to 15 mm), first use levelling compounds, and then level out the wall surface with **KOMBI** adhesive/base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI** adhesive/base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG before applying levelling compounds or base coats.** Use the above levelling compounds and/or base coats according to their technical data sheets. Fresh concrete substrates, cement and cement-lime renders can only be plastered after min. 2-week curing period. The base coats of the EWI system should be performed in accordance with the technology of the External Thermal Insulation Composite Systems for buildings – ETICS.
PRIMING: The substrate should be primed with **NOVALIT GT** before applying the render. The curing period of the product applied to the substrate before applying the render is about 24 hours. We recommend using a preparation tinted to match the colour of the render.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. If stored for a long time and directly before application, the product should be thoroughly mixed (with a low-speed mixer fitted with a basket stirrer), until a smooth, homogeneous consistency is obtained. Further mixing is not recommended, as it may result in excessive aeration of the product. If required, add a small amount of drinking water (max. 0.1 l per 20 kg of render compound) to thin the product. Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: The render compound should be applied onto the substrate by using a pneumatic spraying device at a working pressure of 3-4 atmospheres and with a nozzle diameter of 5-6 mm. While spraying, the gun should be held perpendicularly to the substrate at a distance of 0.4-0.6 m.
DRYING: Typical setting (hardening) time of the render applied onto a substrate is approx. 24 hours (at +20°C, 55% RH). Note: Drying time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened.
USEFUL HINTS: The final effect may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first smooth out the entire surface with **KOMBI** adhesive/base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. Tools should be cleaned with water immediately after work is completed. The render should be applied and dried on dry days at air temperatures from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the undried render against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM RENO** or **KABE THERM MW** system are used.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

SILICATE

CALSILIT T

Silicate render

MAIN ADVANTAGES

- Mineral nature
- Resistant to adverse weather conditions and industrial contamination
- Increased resistance to soiling
- Exceptional vapour permeability
- Natural resistance to algae and fungal growth

AREAS OF APPLICATION

To be used as manually applied thin-coat renders for external use, including in EPS-based insulation systems. It can be used only on mineral substrates (such as: concrete, cement render, lime or cement-lime renders), on newly erected and existing building façades, including the renovation of historical buildings. Thanks to high vapour permeability, it allows for "free" evaporation of moisture present in the masonry. The substrate should be primed with **CALSILIT GT** before applying the render.

TECHNICAL DATA

Base binder: potassium water glass;
Pigments: inorganic coloured pigments, resistant to weather conditions;
Colours: natural white and colours from KABE colour chart and selected colours from the NCS colour chart (possible to obtain using inorganic pigments);
Textures: solid;
Grain size: 1.0 mm; 1.5 mm; 2.0 mm; 2.5 mm; 3.0 mm;
Temperature of application (air and substrate): from +8°C to +25°C;
Relative air humidity: ≤ 75%;
Vapour permeability: $S_d = 0.06$ m (cat. V1);
Water absorption: w = 0.49 kg/m²·h$^{0.5}$ (cat. W2);
Packaging: Disposable plastic packaging holding 25 kg of the product.
Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

Average coverage (kg/m^2):

Texture	Grain size (mm)				
	1.0	1.5	2.0	2.5	3.0
SOLID	1.8	2.3	3.0	3.7	4.5

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be mineral and sound/stable (without scratches and cracks), degreased, even and dry, and free of biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with finish levelling and smoothing compound. Small unevenness can be smoothed right away with levelling and smoothing compound. Use the above products according to their technical data sheets. An absorbent substrate should be primed with an adequate product before applying base coats and/or levelling compounds. If the render is applied on new mineral substrates (e.g., concrete, cement render, cement-lime render) – a minimum 2-week curing period is required. The base coats of the EWI system should be performed in accordance with the technology of the External Thermal Insulation Composite Systems for buildings – ETICS. Note: Directly before applying a silicate render, the surfaces made of materials susceptible to alkalis (i.e. wood, metal, glass or clinker brick) should be protected against splashing.
PRIMING: The substrate should be primed with **CALSILIT GT** before applying the render. The curing period of the product applied to the substrate before applying the render is about 24 hours. To reduce the risk of the substrate colour showing through the top coat texture, it is recommended to use a primer with the same colour as the render.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. If stored for a long time and directly before application, the product should be thoroughly mixed (with a low-speed mixer fitted with a basket stirrer), until a smooth, homogeneous consistency is obtained. Further mixing is not recommended, as it may result in excessive aeration of the product. If required, add a small amount of drinking water (max. 0.25 l per 25 kg of the product). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: Using a stainless steel trowel, apply a thin, uniform layer of the product to the substrate. Then, use a plastic trowel to create a texture, rubbing the applied compound with circular motions. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.
DRYING: Typical setting (hardening) time of the render applied to the substrate is approx. 72 hours (at +20°C, 55% RH). Note: Setting time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened and set.
USEFUL HINTS: The final effect may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first level and smooth its entire surface with a base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. Tools should be cleaned with water immediately after work is completed. The render should be applied and set on dry days at temperatures from +8°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the unset render against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Note: Low or high temperature, as well as high air humidity, may have a negative impact on the shade of the top coat. Both too high and too low temperature during render application and setting may lead to insufficient setting of the binder. As a result, further contact with water may cause washing out of the unset potassium water glass, which may lead to the formation of durable damp patches or discolouration.

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl
National Technical Assessment: AT-15-8732/2016
If the product is used for other purpose than EWI system, the product meets the requirements of the following standard: PN-EN 15824

SILICATE-SILICON

SiSi AVANT

Silicate-silicone render

MAIN ADVANTAGES

- Resistant to adverse weather conditions
- High impact resistance
- Anti-fungal and algae protection (reduces the growth of algae and fungi)
- Wide range of colours
- Contains silicone resin

AREAS OF APPLICATION

To be used as manually applied thin-coat renders for external use, including in **KABE THERM AVANT*** EPS-based EWI system and **KABE THERM MW** EWI system based on mineral wool. Intended for use on mineral substrates (e.g., concrete, cement render, cement-lime render) and on substrates covered with a well-bonded plastic-based paint coating. The substrate should be primed with **SiSi GT** before applying the product.

TECHNICAL DATA

Base binder: silicate-organic binder;
Pigments: organic and inorganic coloured pigments, resistant to weather conditions;
Colours: natural white and colours according to KABE and NCS colour charts or a sample provided;
Textures: solid;
Grain size: 1.5 mm; 2.0 mm;
Thinner: water;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: < 75%;
Vapour permeability: $S_d = 0.21$ m (cat. V2);
Water absorption: $w = 0.1$ kg/m^2·h$^{0.5}$ (cat. W2);

Packaging: Disposable plastic packaging holding 25 kg of the product.
Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

Average coverage (kg/m^2):

Texture	Grain size (mm)	
	1.5	2.0
SOLID	2.5	3.0

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. For particularly uneven substrates (from 5 mm to 15 mm), first use filling compounds and then smooth out the wall surface with **KOMBI** adhesive/base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI** adhesive/base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG** before applying levelling compounds or base coats. If the silicate-silicone render is applied on new mineral substrates (e.g., concrete, cement render, cement-lime render) – a minimum 4-week curing period is required. Before using the render in **KABE THERM AVANT** and/or **KABE THERM MW** EWI systems, all base coats of EWI systems should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Before applying the silicate-silicone render, the primed reinforcing layer has to be fully set. This can take 3-4 days in typical weather conditions.
PRIMING: The substrate should be primed with **SiSi GT** before applying the render. The curing period of the product applied to the substrate before applying the render is about 24 hours. To reduce the risk of the substrate colour showing through the top coat, it is recommended to use a primer with the same colour as the render.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. If stored for a long time and directly before application, the product should be thoroughly mixed (with a low-speed mixer fitted with a basket stirrer), until a smooth, homogeneous consistency is obtained. Further mixing is not recommended, as it may result in excessive aeration of the product. If required, add a small amount of drinking water (max. 0.25 l per 25 kg of the product). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: Using a stainless steel trowel, apply a thin, uniform layer of the product to the substrate. Then, use a plastic trowel to create a texture, rubbing the applied compound with circular motions.
DRYING: Typical drying time of the render applied to the substrate is approx. 6 h (at +20°C, 55% RH). Complete hardening of render after approx. 48 hours. Note: Drying time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened.
USEFUL HINTS: The final effect may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first smooth out the entire surface with **KOMBI** adhesive/base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. Tools should be cleaned with water immediately after work is completed. The render should be applied and dried on dry days at air temperatures from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the undried render against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM AVANT** and/or **KABE THERM MW** system are used.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

European Technical Assessment No. ETA 17/0204 and ETA-16/0079
If the product is used for other purpose than EWI system, the product meets the requirements of the following standard: PN-EN 15824

ACRYLIC

PERMURO

Acrylic render

MAIN ADVANTAGES

- Resistant to adverse weather conditions
- High impact resistance
- Anti-fungal and algae protection (reduces the growth of algae and fungi)
- Wide range of colours
- Wide selection of textures and grain sizes
- Easy to apply and create patterns

AREAS OF APPLICATION

To be used as manually applied thin-coat renders for external use. Intended for use on mineral substrates (e.g., concrete, cement render, cement-lime render) and on substrates covered with a well-bonded plastic-based paint coating. The **PERMURO** render is a component of EPS-based EWI systems: **KABE THERM RENO***, **KABE THERM ELASTO***,**KABE THERM AVANT***. The substrate should be primed with **PERMURO GT** before applying the render.

TECHNICAL DATA

Base binder: co-polymer binder;
Pigments: organic and inorganic coloured pigments, resistant to weather conditions;
Colours: natural white and colours according to KABE and NCS colour charts or a sample provided;
Textures: solid, scraped/mixed, modelled and smooth (texture made up of 2 renders: of solid texture with the thickness of 1.5 mm and modelled texture);
Grain size: 1.0 mm; 1.5 mm; 2.0 mm; 2.5 mm; 3.0 mm;
Thinner: water;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: < 75%;
Vapour permeability: $S_d = 0.33$ m (cat. V2);
Water absorption: $w = 0.09$ kg/m^2·h$^{0.5}$ (cat. W3);
Packaging: Disposable plastic packaging holding 25 kg of the product.
Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.

Shelf life: 24 months from the date of production printed on the packaging, with originally sealed packaging.

Average coverage (kg/m^2):

Texture	Grain size (mm)					
	–	1.0	1.5	2.0	2.5	3.0
SOLID	–	1.8	2.4	3.0	3.7	4.5
SCRAPED/MIXED	–	–	2.3	3.0	3.7	4.5
MODELLED	2.0	–	–	–	–	–
SMOOTH	4.4	–	–	–	–	–

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. For particularly uneven substrates (from 5 mm to 15 mm), first use levelling compounds, and then level out the wall surface with **KOMBI** adhesive/base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI** adhesive/base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG** before applying levelling compounds or base coats. If the acrylic render is applied on new mineral substrates (e.g., concrete, cement render, cement-lime render) – a minimum 4-week curing period is required.
Before using the render in **KABE THERM RENO**, **KABE THERM ELASTO** and **KABE THERM AVANT** EWI systems, all base coats should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Before applying the acrylic render, the primed reinforcing layer has to be fully set. This can take 3-4 days in typical weather conditions.
PRIMING: The substrate should be primed with **PERMURO GT** before applying the render. The curing period of the product applied to the substrate before applying the render is about 24 hours. To reduce the risk of the substrate colour showing through the top coat (especially when applying scraped or mixed texture render), it is recommended to use a primer with the same colour as the render.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. If stored for a long time and directly before application, the product should be thoroughly mixed (with a low-speed mixer fitted with a basket stirrer), until a smooth, homogeneous consistency is obtained. Further mixing is not recommended, as it may result in excessive aeration of the product. If required, add a small amount of drinking water (max. 0.25 l per 25 kg of the product). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: Using a stainless steel trowel, apply a thin, uniform layer of the product to the substrate. Then, use a plastic trowel to create a texture, rubbing the applied compound with circular motions (solid and mixed texture) or longitudinal motions in the vertical or horizontal direction (scraped texture). The modelled texture render should be applied onto a substrate using a stainless steel trowel (1-5 mm thick). To achieve the required texture, use a roller, trowel or sponge. A smooth top coat of the render should be carried out in 2 stages. First apply solid texture render according to the above instruction. Once the previous coat is set, apply the modelled texture render. The modelled render should be rubbed with circular motions to achieve an even surface of the whole top coat.
DRYING: Typical drying time of the render applied to the substrate is approx. 6 h (at +20°C, 55% RH). Complete hardening of render after approx. 48 hours. Note: Drying time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened.
USEFUL HINTS: The final effect may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first smooth out the entire surface with **KOMBI** adhesive/base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. Tools should be cleaned with water immediately after work is completed. The render should be applied and dried on dry days at air temperatures from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the undried render against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM RENO**, **KABE THERM ELASTO** or **KABE THERM AVANT** system are used.

European Technical Assessment: ETA 17/0203 and ETA 17/0204
National Technical Assessment No. ICiMB-KOT-2018/0050 edition 2
If the product is used for other purpose than EWI system, the product meets the requirements of the following standard: PN-EN 15824

ACRYLIC

PERMURO AVANT

Acrylic render

MAIN ADVANTAGES

- Resistant to adverse weather conditions
- High impact resistance
- Anti-fungal and algae protection (reduces the growth of algae and fungi)
- Wide range of colours

AREAS OF APPLICATION

To be used as manually applied thin-coat renders for external use. Intended for use on mineral substrates (e.g., concrete, cement render, cement-lime render) and on substrates covered with a well-bonded plastic-based paint coating. The **PERMURO AVANT** render is a component of **KABE THERM RENO***, **KABE THERM ELASTO*** and **KABE THERM AVANT*** EPS-based EWI systems.
The substrate should be primed with **PERMURO GT** before applying the render.

TECHNICAL DATA

Base binder: co-polymer binder;
Pigments: organic and inorganic coloured pigments, resistant to weather conditions;
Colours: natural white and colours according to KABE and NCS colour charts or a sample provided;
Textures: solid;
Grain size: 1.5 mm; 2.0 mm;
Thinner: water;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: < 75%;
Vapour permeability: S_d = 0.33 m (cat. V2);
Water absorption: w = 0.09 kg/m^2·h$^{0.5}$ (cat. W3);
Packaging: Disposable plastic packaging holding 25 kg of the product.

Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

Average coverage (kg/m^2):

Texture	Grain size (mm)	
	1.5	2.0
SOLID	2.4	3.0

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. For particularly uneven substrates (from 5 mm to 15 mm), first use levelling compounds, and then level out the wall surface with **KOMBI** adhesive/base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI** adhesive/base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG** before applying levelling compounds or base coats. If the acrylic render is applied on new mineral substrates (e.g., concrete, cement render, cement-lime render) – a minimum 4-week curing period is required. Before using the render in **KABE THERM RENO**, **KABE THERM ELASTO**, **KABE THERM AVANT** EWI systems, all base coats should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Before applying the acrylic render, the primed reinforcing layer has to be fully set. This can take 3-4 days in typical weather conditions.
PRIMING: The substrate should be primed with **PERMURO GT** before applying the render. The curing period of the product applied to the substrate before applying the render is about 24 hours. To reduce the risk of the substrate colour showing through the top coat (especially when applying scraped or mixed texture render), it is recommended to use a primer with the same colour as the render.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. If stored for a long time and directly before application, the product should be thoroughly mixed (with a low-speed mixer fitted with a basket stirrer), until a smooth, homogeneous consistency is obtained. Further mixing is not recommended, as it may result in excessive aeration of the product. If required, add a small amount of drinking water (max. 0.25 l per 25 kg of the product). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: Using a stainless steel trowel, apply a thin, uniform layer of the product to the substrate. Then, use a plastic trowel to create a texture, rubbing the applied compound with circular motions (solid texture).
DRYING: Typical drying time of the render applied to the substrate is approx. 6 h (at +20°C, 55% RH). Complete hardening of render after approx. 48 hours. Note: Drying time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened.
USEFUL HINTS: The final effect may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first smooth out the entire surface with **KOMBI** adhesive/base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. Tools should be cleaned with water immediately after work is completed. The render should be applied and dried on dry days at air temperatures from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the undried render against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM RENO** or **KABE THERM ELASTO** or **KABE THERM AVANT** system are used.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

European Technical Assessment: ETA 17/0203 and ETA 17/0204
National Technical Assessment No. ICiMB-KOT-2018/0050 edition 2
If the product is used for other purpose than EWI system, the product meets the requirements of: PN-EN 15824

ACRYLIC

PERMURO AKORD

Acrylic render for spray application

MAIN ADVANTAGES

- Resistant to adverse weather conditions
- Highly efficient
- Very good adhesion to substrate
- Anti-fungal and algae protection (reduces the growth of algae and fungi)
- Wide range of colours
- Quick and easy application

AREAS OF APPLICATION

It is used for spray (machine) application of thin-coat renders outside buildings, including in EPS-based EWI system: **KABE THERM RENO*** (excluding the 1.0 mm grain size). It is especially recommended for use on large surface areas, as well as on substrates with curved, irregular shapes. It ensures high coverage and quick application. Intended for use on mineral substrates (e.g., concrete, cement render, cement-lime render) and on substrates covered with a well-bonded plastic-based paint coating. The substrate should be primed with **PERMURO GT** before applying the render.

TECHNICAL DATA

Base binder: co-polymer binder;
Pigments: organic and inorganic coloured pigments, resistant to weather conditions;
Colours: natural white and colours according to KABE and NCS colour charts or a sample provided;
Textures: solid;
Grain size: 1.0 mm; 1.5 mm; 2.0 mm;
Thinner: water;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Vapour permeability: S_d = 0.06 m (cat. V1);
Water absorption: w = 0.10 kg/m^2·h$^{0.5}$ (cat. W3);
Packaging: Disposable plastic packaging holding 20 kg of the product.

Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 24 months from the date of production printed on the packaging, with originally sealed packaging.

Min. coverage (kg/m^2):

Texture	Grain size (mm)		
	1.0	1.5	2.0
SOLID	1.5	2.0	2.5

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. For particularly uneven substrates (from 5 mm to 15 mm), first use levelling compounds, and then level out the wall surface with **KOMBI** adhesive/base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI** adhesive/base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG before applying levelling compounds or base coats.** Use the above levelling compounds and/or base coats according to their technical data sheets. Fresh concrete substrates, cement and cement-lime renders can only be plastered after min. 4-week curing period. The base coats of the EWI system should be performed in accordance with the technology of the External Thermal Insulation Composite Systems for buildings (ETICS).
PRIMING: The substrate should be primed with **PERMURO GT** before applying the render. The curing period of the product applied to the substrate before applying the render is about 24 hours. We recommend using a preparation tinted to match the colour of the render.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. If stored for a long time and directly before application, the product should be thoroughly mixed (with a low-speed mixer fitted with a basket stirrer), until a smooth, homogeneous consistency is obtained. Further mixing is not recommended, as it may result in excessive aeration of the product. If required, add a small amount of drinking water (max. 0.1 l per 20 kg of the product). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: The render compound should be applied onto the substrate by using a pneumatic spraying device at a working pressure of 3-4 atmospheres and with a nozzle diameter of 4-6 mm. While spraying, the gun should be held perpendicularly to the substrate at a distance of 0.5-0.6 m.

Spraying parameters for the WAGNER PC15 device:

Manufacturer	Device	Thickness [mm]	Nozzle	Pressure [bar]	Filter [mesh]	Thinning [%]	Efficiency [kg/min]
WAGNER	Wagner PC15 + compressor	1.0	268 779		None	0	2.0
		1.5	0348 915 or 68 780				
		2.0	0268 780 or 0268 781				

DRYING: Typical drying time of the render applied to the substrate is approx. 6 h (at +20°C, 55% RH). Complete hardening of render after approx. 48 hours. Note: Drying time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened.
USEFUL HINTS: The final effect may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first smooth out the entire surface with **KOMBI** adhesive/base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. Tools should be cleaned with water immediately after work is completed. The render should be applied and dried on dry days at air temperatures from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the undried render against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM RENO** system are used.

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl
National Technical Assessment No. ICiMB-KOT-2018/0050 edition 2
If the product is used for other purpose than EWI system, the product meets the requirements of the following standard: PN-EN 15824

ACRYLIC

PERMURO
ROLL RENDER
Acrylic render
to be applied with a roller

MAIN ADVANTAGES

- Resistant to adverse weather conditions
- High impact resistance
- Effective masking of minor scratches and substrate irregularities
- Very good adhesion to substrate
- Anti-fungal and algae protection (reduces the growth of algae and fungi)
- Wide range of colours
- Easy to apply and create patterns

AREAS OF APPLICATION

To be used as manually applied thin-coat renders with a roller, outside and inside buildings. Intended for use on mineral substrates (e.g., concrete, cement render, cement-lime render) and on substrates covered with a well-bonded plastic-based paint coating. It allows you to create a layer that masks minor scratches and minor surface irregularities. The substrate should be primed with **PERMURO GT** before applying the render.

TECHNICAL DATA

Base binder: co-polymer binder;
Pigments: organic and inorganic coloured pigments, resistant to weather conditions;
Colours: natural white and colours according to KABE and NCS colour charts or a sample provided;
Texture: roller-shaped;
Average coverage: approx. 1.0 kg/m^2;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Vapour permeability: S_d = 0.55 m (cat. V2);
Water absorption: w = 0.49 kg/m^2·h$^{0.5}$ (cat. W2);
Packaging: Disposable plastic packaging holding 16 kg of the product.

Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 24 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates (from 5 mm to 15 mm), use filling compounds and then level out the wall surface with **KOMBI** adhesive/base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI** adhesive/base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG** / **BUDOGRUNT WG** before applying levelling compounds or base coats. Fresh concrete substrates, cement and cement-lime renders can only be plastered after min. a 4-week curing period, gypsum renders after 2 weeks, while drywall systems directly after grinding and dedusting.
PRIMING: The substrate should be primed with **PERMURO GT** before applying the render. The curing period of the product applied to the substrate before applying the render is about 24 hours. To reduce the risk of the substrate colour showing through the top coat, it is recommended to use a primer with the same colour as the render.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. If stored for a long time and directly before application, the product should be thoroughly mixed (with a low-speed mixer fitted with a basket stirrer), until a smooth, homogeneous consistency is obtained. Further mixing is not recommended, as it may result in excessive aeration of the product. If required, add a small amount of drinking water (max. 0.25 l per 16 kg of the product). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: Render may be applied on the substrate by means of a roller with various types of tips made of wire, sponge or bristle (depending on the assumed decorative effect). Apply one or two layers, as necessary.
DRYING: Typical drying time of the render applied to the substrate is approx. 6 h (at +20°C, 55% RH). Complete hardening of render after approx. 48 hours. Note: Drying time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened. After applying render, closed rooms should be ventilated until the specific smell disappears.
USEFUL HINTS: The final effect may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first smooth out the entire surface with **KOMBI** adhesive/base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. Tools should be cleaned with water immediately after work is completed. The render should be applied and dried on dry days at air temperatures from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the undried render against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds.

MINERAL

MINERALIT T

Refined mineral render

MAIN ADVANTAGES

- Non-flammable render
- Aesthetic and decorative texture
- Mineral nature
- High vapour permeability
- Natural resistance to algae and fungal growth
- Reinforced with microfibres

AREAS OF APPLICATION

Dry mineral render for manual application of thin-coat renders outside and inside buildings, as well as top coats in **KABE THERM AVANT** EPS-based and **KABE THERM MW*** EWI system based on mineral wool. It is especially recommended in finishing systems for external walls made of materials of porous texture (such as e.g.: aerated concrete, slag concrete, porous brick) and on the walls of new buildings that have not been cured yet. Intended for use on mineral substrates (such as concrete, cement plaster, cement-lime plaster). The substrate should be primed with **MINERALIT GT** before applying the mineral render.

TECHNICAL DATA

Base binder: mixture of hydraulic and polymer binders with the addition of modifiers, reinforced with cellulose microfibres;
Mixing ratio: approx. 5 l of water per 25 kg of mortar.
Colour: white or base colour for painting.
Texture: solid and scraped.
Grain size: 1.5 mm; 2.0 mm; 3.0 mm.
Temperature of application (air and substrate) from +5°C to +25°C.
Plaster/render type: GP (general purpose)
Compressive strength range: class CS IV
Adhesion to substrate: ≥ 1.6 N/mm²
Water absorption due to capillary action: class W2
Gross bulk dry density: approx· 1500 kg/m³
Water vapour permeability coefficient: μ ≤ 34.9

Reaction to fire: class A1.
Storage: Store in original sealed packaging, in dry rooms, on pallets, at temperatures from +5°C to +25°C. Shelf life is 12 months from the date of manufacturing provided on the packaging.
Packaging: Bags: 25 kg. Pallet: 1200 kg (48 bags).

Coverage chart:

Grain size [mm]	Average coverage [kg/m²]
1.5	2.5
2.0	3.0
3.0*	4.0

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, and free of biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with finish levelling and smoothing compound. Small unevenness can be smoothed right away with levelling and smoothing compound. Use the above products according to their technical data sheets. An absorbent substrate should be primed with an adequate product before applying levelling compounds or base coats. If the mineral render is applied on new mineral substrates (e.g., concrete, cement render, cement-lime render) – a minimum 2-week curing period is required. Before using the render in **KABE THERM AVANT** or **KABE THERM MW** EWI systems, all base coats should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Before applying the mineral render, the primed reinforcing layer has to be fully set. This can take 3-4 days in typical weather conditions.
Note: Prior to starting applying render, it is necessary to provide a protective film to protect all components that could be soiled.
PRIMING: The substrate should be primed with **MINERALIT GT** before applying the render/plaster. Typical setting time for the primer applied on a substrate is about 24 h under optimum weather conditions (temperature +20°C and relative humidity of 55%). Render/plaster can be applied when the primer is completely set.
PRODUCT PREPARATION: Pour the entire contents of the package into a container with a measured amount of clean, cool water (5 l per 25 kg of product) and mix thoroughly with a low-speed mixer/drill with a stirrer until a homogeneous, lump-free mixture is obtained. Then leave the prepared render/plaster for about 5 minutes to mature. Mix the render/plaster thoroughly immediately before use.
APPLICATION: Using a stainless steel trowel, apply a thin, uniform layer of the prepared compound onto the substrate. Then, use a plastic trowel to create a texture, rubbing the applied compound with circular motions (solid texture) or longitudinal motions in the vertical or horizontal direction (scraped texture). Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.
DRYING: The setting time (at drying temperature of +20°C and a relative humidity of 65%) for render/plaster applied onto a substrate is minimum 7 days. After this period of time, the render can be painted with **ARMASIL F** silicone paint, **NOVALIT F** polysilicate paint, **CALSILIT F** silicate paint (providing the above drying conditions are ensured and an appropriate primer is used for the paint). Note: Drying time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened. The render becomes fully mechanically resistant only after approximately 28 days.
USEFUL HINTS: In order to avoid texture differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. The render/plaster should be applied and set on dry days at air temperatures from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the unset render against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Tools should be cleaned with water immediately after work is completed.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

* only solid texture

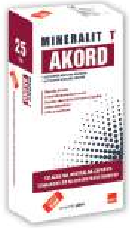
European Technical Assessment: ETA-16/0079, ETA 17/0204
National Technical Assessment: AT-15-8732/2016
If the product is used for other purpose than EWI system, the product meets the requirements of: PN-EN 998-1

KABE Swiss Group

MINERAL

MINERALIT T AKORD

Refined mineral render/
plaster for spray application



MAIN ADVANTAGES

- Non-flammable render
- Aesthetic, white and uniform texture
- Mineral nature
- High vapour permeability
- Natural resistance to algae and fungal growth
- High coverage
- Quick and easy application

AREAS OF APPLICATION

Dry mineral render/plaster for spray application of thin-coat renders outside and inside buildings, as well as finishing coats in EPS-based EWI system (with grain size 1.5 mm) and EWI system based on mineral wool **KABE THERM MW** (with grain size 1.5 mm), as well as ceiling thermal insulation system **KABE THERM SG** (with grain size 1.0 mm and 1.5 mm). It is especially recommended for use on large surface areas, as well as on substrates with curved or irregular shapes. It ensures high coverage and quick application. Intended for use on mineral substrates (such as concrete, cement plaster, cement-lime plaster). It is especially recommended in finishing systems for external walls made of materials of porous texture (such as e.g.: aerated concrete, slag concrete, porous brick) and on the walls of new buildings that have not been cured yet. The substrate should be primed with **MINERALIT GT** before applying the mineral render.

TECHNICAL DATA

Base binder: mixture of hydraulic binders with the addition of modifiers.
Mixing ratio: approx. 6 l of water per 25 kg of mortar.
Colour: white.
Texture: solid.
Grain size: 1.0 mm; 1.5 mm.
Temperature of application (air and substrate) from +5°C to +25°C.
Plaster/render type: GP (general purpose)
Compressive strength range: class CS IV
Adhesion to substrate: ≥ 1.6 N/mm²
Water absorption due to capillary action: class W2
Gross bulk dry density: approx. 1500 kg/m³

Water vapour permeability coefficient: $\mu \leq 34.9$
Reaction to fire: class A1.
Storage: Store in original sealed packaging, in dry rooms, on pallets, at temperatures from +5°C to +25°C. Shelf life is 12 months from the date of manufacturing provided on the packaging.
Packaging: Bags: 25 kg. Pallet: 1200 kg (48 bags).

Coverage chart:

Grain size [mm]	Average coverage [kg/m²]
1.0	1.8 - 2.2
1.5	2.0 - 2.4

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, and free of biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with finish levelling and smoothing compound. Small unevenness can be smoothed right away with levelling and smoothing compound. Use the above products according to their technical data sheets. An absorbent substrate should be primed with an adequate product before applying levelling compounds or base coats. If the mineral render is applied on new mineral substrates (e.g., concrete, cement render, cement-lime render) – a minimum 2-week curing period is required. Before using the product in **KABE THERM SM**, **KABE THERM SM RENO** and **KABE THERM MW** EWI systems, all base coats should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Before applying the mineral render, the primed reinforcing layer has to be fully set. This can take 3-4 days in typical weather conditions.
Note: Prior to starting machine spraying, it is necessary to provide a protective film to protect all components that could be damaged, including cables and system components.
PRIMING: The substrate should be primed with **MINERALIT GT** before applying the render/plaster. Typical setting time for the primer applied on a substrate is about 24 h under optimum weather conditions (temperature +20°C and relative humidity of 55%). Render/plaster can be applied when the primer is completely set.
When using factory unprimed mineral wool in "garage" systems, it is necessary to prime the surfaces with **MINERALIT GT** at least 1 day before applying the finish coat. The primer should be applied by following the instructions provided on the packaging. When using factory primed boards, the resulting surface is ready for render application.
RENDER PREPARATION: Mineral renders are provided in the form of dry powder mixtures ready to mix with water. Mixing should be carried out in accordance with the machine's user manual. It may be necessary to adjust render consistency to meet the machine requirements by adding a small amount of water. When applying the render to large surface area ceilings, it is necessary to divide it into smaller working areas to avoid any visible joints.
APPLICATION: Machine application can be carried out by using a plastering machine. During application hold the gun perpendicularly to the substrate at a distance ranging from 0.4 to 0.6 m. In ceiling thermal insulation systems the application of decorative layer onto a primed surface of bevelled lamella wool boards should be performed in two stages. At stage one, cover the working area holding the spraying lance at an angle slightly less than straight in one direction. At stage two, make another spray application, tilting it in opposite direction.
Note! Any work related to machine spraying of the finish coat should be carried out by a properly trained person. The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.
DRYING: The setting time (at drying temperature of +20°C and a relative humidity of 65%) for render/plaster applied onto a substrate is minimum 7 days. After this period of time, the render can be painted with **ARMASIL F** silicone paint, **NOVALIT F** polysilicate paint, **CALSILIT F** silicate paint (providing the above drying conditions are ensured and an appropriate primer is used for the paint). Note: Drying time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened. The render becomes fully mechanically resistant only after approximately 28 days.
USEFUL HINTS: In order to avoid texture differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. The render/plaster should be applied and set on dry days at air temperatures from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the unset render against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Tools should be cleaned with water immediately after work is completed.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

MOSAIC

MARMURIT

Mosaic render

MAIN ADVANTAGES

- High impact resistance
- Very high flexibility
- Easy to keep clean
- High decorative value
- Contains UV absorbers

AREAS OF APPLICATION

To be used as manually applied thin-coat renders for external and internal use, including in EPS-based EWI system: **KABE THERM MARMURIT / MOZAIKER***. It is especially recommended for the decorative finishing of walls in heavy traffic rooms (such as staircases, entrance halls, corridors and passageways), as well as architectural elements to be found on the façades of buildings (such as pedestals, pilasters, cornices). Intended for use on mineral substrates (e.g., concrete, cement, cement-lime render) and on substrates covered with a well-bonded plastic-based paint coating*. Before applying the render, the substrate has to be primed with **MARMURIT GT**, while absorbent substrates also with **BUDOGRUNT ZG / BUDOGRUNT WG**.

Note: Due to the product specificity, it is not recommended for applying on surfaces exposed to long-term and direct exposure to water and precipitation, such as on swimming pools, wading pools or uncovered fencing walls.

TECHNICAL DATA

Base binder: acrylic binder;
Colours: colour blends as per KABE collection;
Textures: solid;
Grain size: 1.0 mm and 1.5 mm;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Vapour permeability: $S_d = 0.61$ m (cat. V2)
Water absorption: $w = 0.05$ kg/m^2·h$^{0.5}$ (cat. W3)
Packaging: Disposable plastic packaging holding 15 kg of the product.

Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

Min. coverage (kg/m^2):

Texture	Grain size (mm)	
	1.0	1.5
SOLID	2.5	4.0

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates (from 5 mm to 15 mm), first use filling compounds, and then level out the wall surface with **KOMBI** or **KOMBI HYDRO STOP** adhesive/base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI** or **KOMBI HYDRO STOP** adhesive/base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG / BUDOGRUNT WG** before applying levelling compounds or base coats. Fresh concrete substrates, cement and cement-lime renders can only be plastered after min. a 4-week curing period, gypsum renders after 2 weeks, while drywall systems directly after grinding and dedusting. Before using the render in the **KABE THERM MARMURIT / MOZAIKER** EWI system, all base coats of EWI systems should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Before applying the mosaic render, the primed reinforcing layer has to be fully set. This can take 3-4 days in typical weather conditions.

PRIMING: On highly absorbent substrates, **BUDOGRUNT ZG** primer should be applied first (outdoors) or **BUDOGRUNT WG** (indoors). The substrate should be primed with coloured **MARMURIT GT** primer before applying the render. The curing period of the product applied to the substrate before applying the render is about 24 hours. To reduce the risk of the substrate colour showing through the top coat, it is recommended to use a primer coloured to match the colour blend of the mosaic render.

APPLICATION: Mosaic render should be applied on the substrate (from the bottom to the top) in the form of a thin levelled layer with a stainless steel trowel. Then, the product applied on the substrate should be gently smoothed out with a stainless steel trowel. The layer applied should be even and cover the substrate completely, without any hollows or bulges. Note: It is not allowed to rub the product applied on the substrate. If the applied layer of render is too thin, it may lead to formation of cracks on the surface, which has a negative impact on its aesthetics and durability.

DRYING: Typical drying time of the render applied to the substrate is approx. 24 h (at +20°C, 55% RH). Note: Drying time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened. After applying the render, the rooms should be ventilated for 2 weeks; only after this period can full use of these rooms be commenced.

USEFUL HINTS: The final effect may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first smooth out the entire surface with **KOMBI** or **KOMBI HYDRO STOP** adhesive/base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. Tools should be cleaned with water immediately after work is completed. The render should be applied and dried on dry days at air temperatures from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the undried render against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all **KABE THERM MARMURIT / MOZAIKER** system components are used.

European Technical Assessment ETA-18/0211
The product meets the requirements of PN-EN 15824 standard
The product holds the Hygienic Certificate of the Polish National Institute of Public Health (PZH)

MOSAIC

MARMURIT COLORATO

The system of composing mosaic render blends based on coloured, broken marble aggregate

MAIN ADVANTAGES

- Quick product preparation
- Wide range of blends
- High decorative value of multi-colour top coat
- High resistance to abrasion and impact resistance
- Possibility of creating own colour compositions
- Contains UV absorbers

AREAS OF APPLICATION

The **MARMURIT COLORATO** render is a two-component composition of binder based on acrylic resins and coloured aggregate with a grain size of 1.0 and 1.5 mm. The binder is supplied in a tightly closed container with thoroughly measured portions of aggregate in the colours conforming to the Manufacturer's catalogue. The render is formed by means of mixing selected aggregates with binder in appropriate portions according to the recipe provided. The **MARMURIT COLORATO** render is to be used as manually applied thin-coat render for external and internal use, including in **KABE THERM MARMURIT COLORATO / MOZAIKER COLORATO** EPS-based EWI systems. It is especially recommended for the decorative finishing of walls in heavy traffic rooms (such as staircases, entrance halls, corridors and passageways), as well as architectural elements to be found on the façades of buildings (i.e., pedestals, pilasters, cornices). The product can be applied in residential and public utility buildings, as well as educational, boarding and health service facilities. Intended for use on mineral substrates* (e.g., concrete, cement, cement-lime render) and on substrates covered with a well-bonded plastic-based paint coating. Before applying the render, the substrate has to be primed with **MARMURIT GT**, while absorbent substrates should be primed also with **BUDOGRUNT ZG** or **BUDOGRUNT WG**.

Note: Due to the product specificity, it is not recommended for applying on surfaces exposed to long-term and direct exposure to water and precipitation, such as on swimming pools, wading pools or uncovered fencing walls. Before composing a blend, check the numbers of the batches of aggregate (component B). Do not mix different batches of aggregate for the same surface (if necessary, mix them beforehand, make them uniform)!

TECHNICAL DATA

Base binder: acrylic binder;
Colours: colour blends per the **MARMURIT COLORATO** collection colour chart of Farby Kabe;
Textures: solid;
Grain size: 1.0 mm; 1.5 mm;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Vapour permeability: $S_d = 0.61$ m (cat. V2);
Water absorption: $w = 0.05$ kg/m²·h$^{0.5}$ (cat. W3)
Adhesion to concrete substrate: ≥ 0.3 [MPa]
Thermal conductivity $\lambda_{10\,dry}$: 0.76 [W/m x K]
Reaction to fire: class C with consumption < 3.5 kg/m²
class F with consumption ≥ 3.5 kg/m²

Packaging: Single-use plastic packaging of ready-to-use 15 kg product is obtained by mixing: component A – 4.12 kg of binder and component B – 8 bags of aggregate, 1.36 kg each.
Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 3 months from the date of the blend preparation (however not more than 18 months from the manufacturing date of component A – binder).

Min. coverage (kg/m²):

Texture	Grain size (mm)	
	1.0	1.5
SOLID	2.5	4.0

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, and free of biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates (from 5 mm to 15 mm), first use filling compounds and then level out the wall surface with **KOMBI** or **KOMBI HYDRO STOP** adhesive/base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI** or **KOMBI HYDRO STOP** adhesive/base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG** / **BUDOGRUNT WG** before applying levelling compounds or base coats. Fresh concrete substrates, cement and cement-lime renders can only be plastered after min. a 4-week curing period, gypsum renders after 2 weeks, while drywall systems directly after grinding and dedusting. Before using the render in the **KABE THERM MARMURIT COLORATO / MOZAIKER COLORATO** EWI system, all base coats of EWI systems should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Before applying the mosaic render, the primed reinforcing layer has to be fully set. This can take 3-4 days in typical weather conditions.

PRIMING: On highly absorbent substrates, **BUDOGRUNT ZG** primer should be applied first (outdoors) or **BUDOGRUNT WG** (indoors). The substrate should be primed with coloured **MARMURIT GT** primer before applying the render. The curing period of the product applied to the substrate before applying the render is about 24 hours. To reduce the risk of the substrate colour showing through the top coat, it is recommended to use a primer coloured to match the colour blend of the mosaic render.

PRODUCT PREPARATION: The packaging contains a ready-to-use product. Before application, the product should be thoroughly mixed with a low-speed mixer fitted with a basket stirrer, until a smooth, homogeneous consistency is obtained, from 30 to 60 seconds. Further mixing is not recommended, as it may result in permanent deterioration of the coat aesthetics.

APPLICATION: Mosaic render should be applied on the substrate (from the bottom to the top) in the form of a thin levelled layer with a stainless steel trowel. Then, the product applied on the substrate should be gently smoothed out with a stainless steel trowel. The layer applied should be even and cover the substrate completely, without any hollows or bulges. Note: It is not allowed to rub the product applied on the substrate. If the applied layer of render is too thin, it may lead to formation of cracks on the surface, which has a negative impact on its aesthetics and durability.

DRYING: Typical drying time of the render applied to the substrate is approx. 24 h (at +20°C, 55% RH). Note: Drying time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened. After applying the render, the rooms should be ventilated for 2 weeks; only after this period can full use of these rooms be commenced.

USEFUL HINTS: The final effect may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first smooth out the entire surface with **KOMBI** or **KOMBI HYDRO STOP** adhesive/base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. Tools should be cleaned with water immediately after work is completed. The render should be applied and dried on dry days at air temperatures from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the undried render against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all **KABE THERM MARMURIT COLORATO / MOZAIKER COLORATO** system components are used.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

MOSAIC

MOZAIKER AKORD COLORATO

The system of composing of mosaic spraying render based on coloured quartz aggregate

MAIN ADVANTAGES

- High decorative values of multi-colour render with glittering mica;
- Ready-to-use dyed quartz-based colour composition;
- A quick process for preparing a ready colour blend in the COLORATO system;
- Possibility of also creating own colour compositions;
- Quick and easy to apply using AKORD sprayer application method;
- High adhesion to the substrate;
- High resistance to abrasion and mechanical damage;
- Low surface absorption and good vapour permeability;
- High resistance to adverse weather conditions.

AREAS OF APPLICATION

The **MOZAIKER AKORD COLORATO** render is a two- or three-component binder composition based on acrylic resins and coloured quartz aggregate with a grain size ranging from 0.2 to 0.8 mm and an optional addition of mica (depending on the selected blend). The binder is supplied in a tightly closed container with thoroughly measured portions of aggregate in the colours conforming to the Manufacturer's catalogue. The render is formed by mixing selected aggregates and optional mica addition with binder in appropriate portions according to the recipe provided. The **MOZAIKER AKORD COLORATO** render is used for spray application of thin-coat renders inside and outside buildings, including in the **KABE THERM MARMURIT COLORATO / MOZAIKER COLORATO*** EPS-based EWI systems. It is especially recommended for the decorative finishing of walls in heavy traffic rooms (such as staircases, entrance halls, corridors and passageways), as well as walls and architectural elements to be found on the façades of buildings (i.e., pedestals, pilasters, cornices). Intended for use on mineral substrates (e.g., concrete, cement, cement-lime render) and on substrates covered with a well-bonded plastic-based paint coating. Before applying the render, the substrate has to be primed with **MARMURIT** GT product, dyed to match the mosaic blend colour, while absorbent substrates also with **BUDOGRUNT ZG** or **BUDOGRUNT WG** products. Note: Because of product specific properties, it is not recommended to apply it on substrates exposed to long-term and direct water contact. Note: Before composing the mixture, check the numbers of individual batches of aggregate / component B. Do not mix batches of aggregate with different numbers intended for the same surface (if necessary, mix/uniform them beforehand)!

TECHNICAL DATA

Base binder: acrylic binder;
Colours: colour blends per the **MOZAIKER AKORD COLORATO** collection colour chart of Farby Kabe;
Textures: solid;
Grain size: to 0.8 mm;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Min. coverage: 2.6 kg/m^2
Vapour permeability: cat. V2
Water absorption: cat. W3
Adhesion to concrete substrate: ≥ 0.3 [MPa]

Thermal conductivity $\lambda_{10\,dry}$: 0.76 [W/m x K]
Reaction to fire: class C
Packaging: Single-use plastic packaging of 13.74 kg ready-to-use product is obtained by mixing: component A – 4.68 kg of binder and component B containing 6 bags of aggregate, 1.51 kg each, and optional component C – mica (depending on the chosen colour blend).
Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 3 months from the date of the blend preparation (however not more than 18 months from the manufacturing date of component A – binder).

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, and free of biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates (from 5 mm to 15 mm), first use filling compounds and then level out the wall surface with **KOMBI** or **KOMBI HYDRO STOP** adhesive/base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI** or **KOMBI HYDRO STOP** adhesive/base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG** / **BUDOGRUNT WG** before applying levelling compounds or base coats. Fresh concrete substrates, cement and cement-lime renders can only be plastered after min. a 4-week curing period, gypsum renders after 2 weeks, while drywall systems directly after grinding and dedusting. Before using the render in the **KABE THERM MARMURIT COLORATO / MOZAIKER COLORATO** EWI system, all base coats of EWI systems should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Before applying the mosaic render, the primed reinforcing layer has to be fully set. This can take 3-4 days in typical weather conditions.

PRIMING: On highly absorbent substrates, **BUDOGRUNT ZG** primer should be applied first (outdoors) or **BUDOGRUNT WG** (indoors). Before applying the render, prime the substrate with **MARMURIT GT** primer, dyed to match the colour of the mosaic. The curing period of the product applied to the substrate before applying the render is about 24 hours.

PRODUCT PREPARATION: The packaging contains a ready-to-use product. Before application, the product should be thoroughly mixed with a low-speed mixer fitted with a basket stirrer, for 30 to 60 seconds, until a smooth, homogeneous consistency is obtained. Further mixing is not recommended, as it may result in permanent deterioration of the coat aesthetics.

APPLICATION: The mosaic render compound should be applied with a thin, uniform layer onto the substrate by using a pneumatic sprayer at a working pressure of 3-4 atmospheres and with a nozzle diameter of 5-6 mm. While spraying, the gun should be held perpendicularly to the substrate at a distance of 0.4-0.6 m. The layer applied should be even and cover the substrate completely, without any hollows or bulges. Note: If the applied layer of render is too thin, it may lead to formation of cracks on the surface, which has a negative impact on its aesthetics and durability.

DRYING: Typical drying time of the render applied to the substrate is approx. 24 h (at +20°C, 55% RH). Note: Drying time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened.

USEFUL HINTS: The final effect may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first smooth out the entire surface with **KOMBI** or **KOMBI HYDRO STOP** adhesive/base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same aggregate batch, using the "wet on wet" method. Tools should be cleaned with water immediately after work is completed. The render should be applied and dried on dry and windless days at air temperatures from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the undried render against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all **KABE THERM MARMURIT COLORATO / MOZAIKER COLORATO** system components are used.

MOSAIC

MOZAIKER AKORD

Mosaic render for spray application

MAIN ADVANTAGES

- High decorative values of multi-colour render with glittering mica;
- Ready-to-use dyed quartz-based colour composition;
- Quick and easy to apply using AKORD sprayer application method;
- High adhesion to the substrate;
- High resistance to abrasion and mechanical damage;
- Low surface absorption and good vapour permeability;
- High resistance to adverse weather conditions.

AREAS OF APPLICATION

The **MOZAIKER AKORD COLORATO** render is a binder composition based on acrylic resins and coloured quartz aggregate with a grain size ranging from 0.2 to 0.8 mm and an optional addition of mica (depending on the selected blend). The **MOZAIKER AKORD** render is used for spray application of thin-coat renders inside and outside buildings, including in the **KABE THERM MARMURIT / MOZAIKER** EPS-based EWI system, as well as in the **KABE THERM MW*** EWI system based on mineral wool. It is especially recommended for the decorative finishing of walls in heavy traffic rooms (such as staircases, entrance halls, corridors and passageways), as well as walls and architectural elements to be found on the façades of buildings (i.e., pedestals, pilasters, cornices). Intended for use on mineral substrates (e.g., concrete, cement, cement-lime render) and on substrates covered with a well-bonded plastic-based paint coating. Before applying the render, the substrate has to be primed with **MARMURIT GT** product, dyed to match the mosaic blend colour, while absorbent substrates also with **BUDOGRUNT ZG** or **BUDOGRUNT WG** products. Note: Because of product specific properties, it is not recommended to apply it on substrates exposed to long-term and direct water contact.

TECHNICAL DATA

Base binder: acrylic binder;
Colours: colour blends per the **MOZAIKER AKORD** collection colour chart of Farby Kabe;
Textures: solid;
Grain size: to 0.8 mm;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Min. coverage: 2.6 kg/m^2
Vapour permeability: cat. V2
Water absorption: cat. W3

Adhesion to concrete substrate: ≥ 0.3 [MPa]
Thermal conductivity $\lambda_{10\,dry}$: 0.76 [W/m x K]
Reaction to fire: class C
Packaging: Disposable plastic packaging containing 13.74 kg of the finished product and an optional addition (depending on the colour blend chosen).
Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, and free of biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates (from 5 mm to 15 mm), first use filling compounds and then level out the wall surface with **KOMBI** or **KOMBI HYDRO STOP** adhesive/base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI** or **KOMBI HYDRO STOP** adhesive/base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG** / **BUDOGRUNT WG** before applying levelling compounds or base coats. Fresh concrete substrates, cement and cement-lime renders can only be plastered after min. a 4-week curing period, gypsum renders after 2 weeks, while drywall systems directly after grinding and dedusting. Before using the render in **KABE THERM MARMURIT / MOZAIKER** and/or **KABE THERM MW** EWI systems, all base coats of EWI systems should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Before applying the mosaic render, the primed reinforcing layer has to be fully set. This can take 3-4 days in typical weather conditions.

PRIMING: On highly absorbent substrates, **BUDOGRUNT ZG** primer should be applied first (outdoors) or **BUDOGRUNT WG** (indoors). Before applying the render, prime the substrate with **MARMURIT GT** primer, dyed to match the colour of the mosaic. The curing period of the product applied to the substrate before applying the render is about 24 hours.

PRODUCT PREPARATION: The packaging contains a ready-to-use product. Before application, the product should be thoroughly mixed with a low-speed mixer fitted with a basket stirrer, for 30 to 60 seconds, until a smooth, homogeneous consistency is obtained. Further mixing is not recommended, as it may result in permanent deterioration of the coat aesthetics.

APPLICATION: The mosaic render compound should be applied with a thin, uniform layer onto the substrate by using a pneumatic sprayer at a working pressure of 3-4 atmospheres and with a nozzle diameter of 5-6 mm. While spraying, the gun should be held perpendicularly to the substrate at a distance of 0.4-0.6 m. The layer applied should be even and cover the substrate completely, without any hollows or bulges. Note: If the applied layer of render is too thin, it may lead to formation of cracks on the surface, which has a negative impact on its aesthetics and durability.

DRYING: Typical drying time of the render applied to the substrate is approx. 24 h (at +20°C, 55% RH). Note: Drying time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened.

USEFUL HINTS: The final effect may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first smooth out the entire surface with **KOMBI** or **KOMBI HYDRO STOP** adhesive/base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same aggregate batch, using the "wet on wet" method. Tools should be cleaned with water immediately after work is completed. The render should be applied and dried on dry and windless days at air temperatures from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the undried render against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all **KABE THERM MARMURIT / MOZAIKER** AND/OR **KABE THERM MW** system components are used.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

European Technical Assessment No. ETA-18/0211 and ETA-16/0079
The product meets the requirements of the following standard: PN-EN 15824

MOZAIKER DECOR

Mosaic render with mica flakes

MAIN ADVANTAGES

- High decorative value of multi-colour top coat with glittering mica
- High impact resistance
- Very high flexibility
- Easy to keep clean
- High adhesion to the substrate
- Low surface absorption and good vapour permeability
- High resistance to adverse weather conditions
- Contains UV absorbers

AREAS OF APPLICATION

To be used as manually applied thin-coat render for external and internal use, including in **KABE THERM MARMURIT / MOZAIKER** EPS-based EWI system and in the **KABE THERM MW** EWI system based on mineral wool. It is especially recommended for the decorative finishing of façade walls and in rooms with heavy traffic (such as staircases, entrance halls, corridors and passageways). Intended for use on mineral substrates (e.g., concrete, cement, cement-lime render) and on substrates covered with a well-bonded plastic-based paint coating. Before applying the render, the substrate has to be primed with **MARMURIT GT**, while absorbent substrates also with **BUDOGRUNT ZG** / **BUDOGRUNT WG**.
Note: Due to the product specificity, it is not recommended for applying on horizontal surfaces exposed to long-term and direct exposure to water and precipitation, such as on swimming pools, wading pools or uncovered fencing walls.

TECHNICAL DATA

Base binder: acrylic binder;
Colours: colour blends as per sample provided;
Textures: solid;
Grain size: approx. 0.8 mm;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Vapour permeability: cat. V2
Water absorption: cat. W3
Adhesion to concrete substrate: ≥ 0.30 MPa
Packaging: Disposable plastic packaging holding 15 kg of the product.
Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

Colour designation of Mozaiker Decor render	Min. render coverage when applied in two layers kg/m²
RUTYL	3.5
LAWA	3.0
ANTRACYT	3.0
KARBON	1.9
AGAT	2.7
TALK	2.2
BARYT	3.1
HALIT	3.5
BAZALT	2.4
KOBALT	3.1
TOR	3.3
BOKSYT	3.8
JASPIS ZIELONY	3.6
AMONIT	3.4
JURA	3.5
BURSZTYN	3.8
PERLIT	3.7
KRZEMIEŃ	3.8
VULCANO	2.4
GABRO	3.8

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates (from 5 mm to 15 mm), first use filling compounds and then level out the wall surface with **KOMBI** or **KOMBI HYDRO STOP** adhesive/base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI** or **KOMBI HYDRO STOP** adhesive/base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG** / **BUDOGRUNT WG** before applying levelling compounds or base coats. Fresh concrete substrates, cement and cement-lime renders can only be plastered after min. a 4-week curing period, gypsum renders after 2 weeks, while drywall systems directly after grinding and dedusting. Before using the render in the **KABE THERM MARMURIT / MOZAIKER** EWI system, all base coats of EWI systems should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Before applying the mosaic render, the primed reinforcing layer has to be fully set. This can take 3-4 days in typical weather conditions.
PRIMING: On highly absorbent substrates, **BUDOGRUNT ZG** primer should be applied first (outdoors) or **BUDOGRUNT WG** (indoors). The substrate should be primed with coloured **MARMURIT GT** primer before applying the render. The curing period of the product applied to the substrate before applying the render is about 24 hours. To reduce the risk of the substrate colour showing through the top coat, it is recommended to use a primer coloured to match the colour of the blend of the mosaic render.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. Before application, the product should be gently mixed with a low-speed mixer/drill fitted with a clean stainless steel stirrer, until a homogeneous consistency is obtained. The mixing time should not exceed 1 minute.
Note: Too long and too intensive mixing is not recommended, as it may result in grinding large mica flakes and permanent deterioration of the coat aesthetics.
APPLICATION: Mosaic render should be applied onto the substrate in a thin, uniform layer (from the bottom to the top) at a thickness of 2-3 mm, with a stainless steel trowel. After initial drying, the product applied to the substrate should be rubbed with a plastic trowel. Once dried, use a stainless steel trowel to smooth the applied render. The layer applied should be even and cover the substrate completely, without any hollows or bulges. Note: If the applied layer of render is too thin, it may lead to formation of cracks on the surface, which has a negative impact on its aesthetics and durability.
In order to reduce the risk of abrasions and increase the render resistance to weather conditions, we recommend applying the render in two thin layers. The second layer should be applied once the first layer is dry. After initial drying, the render applied to the substrate should be rubbed with a plastic trowel. Once dried, use a stainless steel trowel to smooth the applied render. The layer applied should be even and cover the substrate completely, without any hollows or bulges.
DRYING: Typical drying time of the render applied to the substrate is approx. 24 h (at +20°C, 55% RH). Note: Drying time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened. In order to increase render resistance to weather conditions, it is recommended to cover the completely dry render with **MARCHRON** impregnation agent.
USEFUL HINTS: The final effect may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first smooth out the entire surface with **KOMBI** or **KOMBI HYDRO STOP** adhesive/base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. The render contains mica flakes, which, due to their natural origin, may vary in size and shape. Tools should be cleaned with water immediately after work is completed. The render should be applied and dried on dry days at air temperatures from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the undried render against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl

European Technical Assessment No. ETA:18/0211
The product meets the requirements of the following standard: PN-EN 15824

KABE Swiss Group

LIGHT-WEIGHT MINERAL

KOMBI MTL

Light-weight mineral render

MAIN ADVANTAGES

- High adhesion to substrates with high water absorption and to porous substrates
- Easy to process
- Reduced substrate surface absorption
- Extended processing time
- Reinforced with microfibres
- Very good plasticity and processability

AREAS OF APPLICATION

Light-weight mineral render based on hydraulic binders and selected aggregates (including light aggregates), intended for manual or machine application of render base coats outside and inside buildings. It is especially recommended for applying on walls made of porous materials (such as aerated concrete) and absorbent ones (such as silicate brick) and intended for EWI systems, under thin-coat renders or paint coatings. It can be applied on all typical mineral substrates, such as, e.g., concrete, aerated concrete, expanded clay aggregate, ceramic brick and silicate brick, as well as porous ceramics. It features very good plasticity and processability, which makes it easy to shape.

TECHNICAL DATA

Base binder: hydraulic binders and modifying agents, includes cellulose fibres;
Grain size: up to 0.8 mm;
Colour: natural white;
Mixing ratio: 5.0-5.5 litres of water per 25 kg of mortar;
Usage: after adding an appropriate amount of water, it is possible to obtain around 19 litres of ready-to-use mortar from one packaging of the product;
After adding water, the product must be used within: not more than 2 hours;
Coverage: approx. 15 kg/m^2 per each 10 mm of the layer thickness;
Temperature of application (air and substrate): from +5°C to +25°C;
Render/plaster type according to PN-EN 998-1: LW (light);
Gross bulk dry density: ≤ 1300 kg/m^3;
Compressive strength range: cat. CS II;
Water absorption due to capillary action: cat. W0;

Adhesion: ≥ 0.5 N/mm^2;
Water vapour permeability coefficient: μ: ≤ 11;
Thermal conductivity coefficient:

- $\lambda_{dry,10}$ = 0.33 (W/m*K) for P=50%;
- $\lambda_{dry,10}$ = 0.49 (W/m*K) for P=90%;

Reaction to fire: class A1;
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: The product should be stored in original sealed packaging on pallets, in a dry room, and protected from moisture and frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, while observing the storage rules.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), not exposed to freezing, clean and dry, and free of biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. The substrate in the building basement zone should be protected against the capillary action or against moisture permeating from the outside of the building. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be carefully removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Any loose layers, not bound to the substrate (e.g., dust, loose render or flaked coatings), should be removed. If necessary (for example, on smooth, non-absorbent substrates), apply a cement key coat. Substrates with high absorbency should be abundantly sprayed with water before applying the mortar. In works related to the proper preparation of the substrate, the construction best practices apply.
PRIMING: Substrates with high absorbency should be primed with **BUDOGRUNT ZG/WG** or abundantly sprayed with water. Setting time for the primer applied on a substrate is about 3 hours under optimum weather conditions (temperature +20°C and relative humidity of 55%).
PRODUCT PREPARATION: Pour the entire contents of the package into a container with a measured amount of clean, cool water (5.0-5.5 l per 25 kg of product) and mix thoroughly with a low-speed mixer/drill with a stirrer until a homogeneous, lump-free mixture is obtained. Then leave the prepared render/plaster for about 5 minutes to mature. Mix the render/plaster thoroughly immediately before use. Depending on the temperature and air humidity, the ready-to-use product can be applied for about 2 hours.
APPLICATION: When applying manually, it is necessary to put mortar onto the wall with a steel trowel and smooth it with a darby. After initial setting, the applied product should be rubbed with a trowel padded with a sponge or felt. If large areas are concerned, it is recommended to use a plastering/rendering machine. The recommended thickness for applying a layer for ceilings – min. 10 mm, for walls – min. 8 mm, outside the building – min. 15 mm (12 mm – if thin-coat render is the finish coat). In the case of large surfaces, a layer exceeding 20 mm should be applied in two layers using the "wet on wet" method after the first layer has initially set. In places, where walls connect with other construction materials, and in places, in which installation cavities are present, it is necessary to embed a reinforcing fibreglass mesh with the basis weight of 145-175 g/m^2 into the render. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.
DRYING: Rendering/plastering mortar applied on the substrate (drying in +20°C, 65% RH) may be subject to further processing, assuming one day of drying per each 1 mm of the layer thickness. Note: Drying time may be longer due to low temperatures and high humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened.
USEFUL HINTS: In order to prepare the render, it is not allowed to add any foreign admixtures, and only clean water can be used for mixing. During the application and drying of the render, rainless weather should prevail, with an air temperature between +5°C and +25°C and the temperature of the substrate above +5°C. Drying time may be longer due to low temperatures and high humidity. Tools should be cleaned with water immediately after work is completed. Avoid applying the product on surfaces directly exposed to sunlight or during strong wind. In order to protect the undried render layer against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds. The set render cannot be mixed again after adding water or fresh render.

The product meets the requirements of: PN-EN 998-1 for lightweight (LW) rendering/plastering mortars

FOR EPS

KOMBI S

Mineral adhesive
for EPS

MAIN ADVANTAGES

- High resistance to shrinking cracks
- Optimum impact resistance
- Very good vapour permeability
- High adhesion to the substrate and EPS
- Easy to apply
- Economical in application
- Contains microfibres and reinforcing fibres
- For use with white and grey EPS**

AREAS OF APPLICATION

Mineral mortar for fixing insulating expanded polystyrene (EPS) boards to the substrate in the following EWI systems: **KABE THERM RENO**, **KABE THERM EPS, KABE THERM AVANT, KABE THERM MARMURIT / MOZAIKER, KABE THERM MARMURIT COLORATO / MOZAIKER COLORATO, KABE THERM ELASTO, KABE THERM EPS ELASTOLITH / HAAKSBERGEN, KABE THERM DECOR EFFECT, KABE THERM CK, KABE THERM WHITE***. To be applied on mineral substrates made of fine masonry components (bricks, blocks, stone, etc.) or concrete (monolithic or prefabricated products). The **KOMBI S** render can be used in the technology of external thermal insulation composite system – ETICS. Note: Reinforcing layer made of fibreglass should be performed by using **KOMBI** adhesive/base coat. If **KABE THERM RENO** system is installed with existing EWI system, we recommend using the **KOMBI** adhesive/base coat to fix the EPS boards.

TECHNICAL DATA

Base binder: hydraulic and polymer binders with modifiers added;
Bulk density: approx. 1.3 to 1.5 g/cm^3;
Mixing ratio: approx. 6.0 l of water per 25 kg of mortar;
After adding water, the product must be used within: approx. 2 hours;
Open drying time: ≥ 30 minutes;
Colour: light grey;
Coverage: approx. 4.0 kg/m^2;

Temperature of application (air and substrate): from +5°C to +25°C;
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: The product should be stored in original sealed packaging,
in a dry room protecting from moisture and frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate for fixing thermal insulation boards should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. The substrate must be protected against capillary moisture intake and precipitation water. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. If any substrate unevenness exceeds 1 cm, first use a levelling compound. Absorbent substrates should be primed with **BUDOGRUNT ZG** before applying a levelling compound. Before fixing EPS boards on unstable substrates, an adhesion test should be performed. The test involves fixing with their whole surface a few (8-10) EPS board samples (with 10 x 10 cm dimensions) in various places of the façade and then tearing them off after 3 days. The substrate load-bearing capacity is sufficient when tearing happens within the EPS layer. If the whole sample, including adhesive and substrate layer, is torn off, then it is necessary to remove the poorly bound layer from the substrate and prime it with **BUDOGRUNT ZG**. When the primer is dry, repeat the adhesion test. If the repeated test also gives a negative result, it is necessary to consider additional mechanical fixing or a special substrate preparation.
PRODUCT PREPARATION: Gradually pour the entire packaging contents into a container with a pre-measured amount of cool water (approx. 6.0 litres), stirring constantly (with a low-speed mixer/drill with a stirrer), until a homogeneous, lump-free mixture is obtained. After leaving it for 5 minutes and remixing, the mortar is ready to use. After adding water, mortar must be used up within approx. 2 hours (at an ambient temperature of +20°C).
FIXING EPS BOARDS: On even surfaces, EPS boards can be fixed using the layer-to-layer gluing method. To do this, put some adhesive coat on an EPS board and, using the trowel edge, spread it evenly all over to apply a thin coat. During this operation, the mortar should be pressed against the board surface with a trowel. Then apply an additional portion of mortar onto the board and spread it with a notched trowel edge (with a minimum tooth dimension of 10 x 10 mm). Once the mortar is applied, put the board immediately onto the wall in the target position and press firmly to flush it with neighbouring boards. Boards must be tightly fitted next to each other using the staggered method. Remove the excess of squeezed mortar, so as not to leave any remains on board edges. Properly applied mortar should cover the whole board surface, and its thickness after fixing should not exceed 1 cm. After allowing a sufficient time to set (at least 48 hours), the boards can be fixed by means of adequate mechanical fixings, as intended by the thermal insulation system design. In order to obtain an even surface of all the boards installed, the whole front surface of the EPS board should be sanded using a trowel covered with suitable coarse sandpaper.
When fixing EPS boards on uneven substrates, the adhesive coat should be applied on boards using the ribbon and dab method. The ribbon should be 3-6 cm wide, and should be applied onto the board perimeter. In addition, 3 to 6 dabs of mortar (approx. 10-15 cm in diameter) should be evenly placed on the central surface of the board. The ribbons applied on the board perimeter must be formed in a prism shape. To do so, spread it with a trowel positioned at a 45° angle towards the board surface. Once the mortar is applied, put the board immediately onto the wall in the target position and press firmly to flush it with neighbouring boards. Fit the boards tightly next to each other using the staggered method. Remove the excess of squeezed mortar, so as not to leave any remains on the board perimeter. Correctly applied mortar should cover min. 40% of board surface area, while the mortar thickness after fixing should not exceed 1 cm. After allowing a sufficient time to set (at least 48 hours), the boards can be fixed by means of adequate mechanical fixings, as intended by the thermal insulation system design. In order to obtain an even surface of all the boards installed, the whole front surface of the EPS board should be sanded using a trowel covered with suitable coarse sandpaper.
DRYING: It is assumed that the adhesive initial setting period is min. 3 days at air temperature of +20°C and relative air humidity of 65%. Note: Low temperature and high relative humidity essentially extend the adhesive drying time. To carry out the reinforcing layer, it is necessary to apply **KOMBI** adhesive/base coat.
USEFUL HINTS: The adhesive coat should be applied and dried on dry days at air temperatures from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of a given system are used: **KABE THERM RENO, KABE THERM EPS, KABE THERM AVANT, KABE THERM MARMURIT / MOZAIKER, KABE THERM MARMURIT COLORATO / MOZAIKER COLORATO, KABE THERM ELASTO, KABE THERM EPS ELASTOLITH / HAAKSBERGEN, KABE THERM DECOR EFFECT, KABE THERM CK, KABE THERM WHITE**.

** EPS boards used in the EWI system should meet the technical requirements specified in the National or European Technical Assessment for the specific system.

Technical data sheet, revised April 2023;
Most recent information is available at www.farbykabe.pl

European Technical Assessment: ETA-14/0445, ETA-17/0204, ETA-18/0211, ETA-17/0203, ETA-20/0027,
National Technical Assessment: ICiMB-KOT-2018/0050 edition 2, ICiMB-KOT-2018/0051 edition 1,
ICiMB-KOT-2021/0143 edition 1, ICiMB-KOT-2022/0156 edition 1, ICiMB-KOT-2018/0039 edition 1.

FOR EPS

KOMBI

Mineral
adhesive/base coat for EPS

MAIN ADVANTAGES

- High resistance to shrinking cracks
- Optimum impact resistance
- No run-off from a vertical surface
- High adhesion to the substrate and EPS
- Easy to apply
- Universal use (for fixing EPS boards and making a mesh-reinforced layers)
- Contains microfibres and reinforcing fibres
- For use with white and grey EPS**

AREAS OF APPLICATION

Mineral mortar for fixing insulating expanded polystyrene (EPS) boards to the substrate and creating a layer reinforced with fibreglass mesh in the following EWI systems: **KABE THERM RENO, KABE THERM EPS, KABE THERM AVANT, KABE THERM MARMURIT / MOZAIKER, KABE THERM MARMURIT COLORATO / MOZAIKER COLORATO, KABE THERM ELASTO, KABE THERM EPS ELASTOLITH / HAAKSBERGEN, KABE THERM DECOR EFFECT, KABE THERM CK, KABE THERM WHITE***. It can also be applied for levelling out (unevenness up to 5 mm) and smoothing mineral substrates before applying paints and thin-coat renders. To be applied on mineral substrates made of fine masonry components (bricks, blocks, stone, etc.) or concrete (monolithic or prefabricated products). The **KOMBI** render can be used in the technology of external thermal insulation composite system – ETICS.

TECHNICAL DATA

Base binder: hydraulic and polymer binders with modifiers added;
Bulk density: approx. 1.5 to 1.6 g/cm^3;
Mixing ratio: approx. 6.0 l of water per 25 kg of mortar;
After adding water, the product must be used within: approx. 2 hours;
Open drying time: ≥ 20 min.
Colour: light grey;
Consumption:

- as adhesive for EPS boards approx. 4.0 kg/m^2;
- for reinforcing layer approx. 4.0 kg/m^2.

Temperature of application (air and substrate): from +5°C to +25°C;
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: Product should be stored in original sealed packaging, in a dry room, protected from moisture and frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate for fixing thermal insulation boards should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. The substrate must be protected against capillary moisture intake and precipitation water. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. If any substrate unevenness exceeds 1 cm, first use a levelling compound. Absorbent substrates should be primed with **BUDOGRUNT ZG** before applying a levelling compound. Drying time for the product applied on the substrate in optimum weather conditions is approx. 3 hours (at +20°C and at a relative air humidity of 55%). The substrate for applying paints and thin-coat renders must be even, so for particularly uneven substrates (from 5 mm to 15 mm), first use levelling compounds, and then level out the wall surface with **KOMBI** adhesive/base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI** adhesive/base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG** before applying levelling compounds or base coats. Before fixing EPS boards on unstable substrates, an adhesion test should be performed. The test involves fixing a few (8-10) EPS board samples (with 10 x 10 cm dimensions) in various places of the façade and then tearing them off after 3 days. The substrate load-bearing capacity is sufficient when tearing happens within the EPS layer. If the whole sample, including adhesive and substrate layer, is torn off, then it is necessary to remove the poorly bound layer from the substrate and prime it with **BUDOGRUNT ZG**. When the primer is dry, repeat the adhesion test. If the repeated test also gives a negative result it is necessary to consider additional mechanical fixing or a special substrate preparation. Note: Before applying a thin layer of **KOMBI** render, prime the mineral substrate with **BUDOGRUNT ZG** diluted 1:1 with water and protect with meshes to prevent excessively rapid vaporizing of make-up water and burning the render.

PRODUCT PREPARATION: Gradually pour the entire packaging contents into a container with a pre-measured amount of cool water (approx. 6.0 litres), stirring constantly (with a low-speed mixer/drill with a stirrer), until a homogeneous, lump-free mixture is obtained. After leaving it for 5 minutes and remixing, the mortar is ready to use. After adding water, mortar must be used up within approx. 2 hours (at an ambient temperature of +20°C).

FIXING EPS BOARDS: On even surfaces, EPS boards can be fixed using the layer-to-layer gluing method. To do this, put some adhesive/base coat on an EPS board with a trowel and, using the edge, spread it evenly all over to apply a thin coat. During this operation, the mortar should be pressed against the board surface with a trowel. Then apply an additional portion of mortar onto the board and spread it with a notched trowel edge (with a minimum tooth dimension of 10 x 10 mm). Once the mortar is applied, put the board immediately onto the wall in the target position and press firmly to flush it with neighbouring boards. Boards must be tightly fitted next to each other using the staggered method. Remove the excess of squeezed mortar, so as not to leave any remains on board edges. Properly applied mortar should cover the whole board surface, and its thickness after fixing should not exceed 1 cm. After allowing a sufficient time to set (at least 48 hours), the boards can be fixed by means of adequate mechanical fixings, as intended by the thermal insulation system design. In order to obtain an even surface of all the boards installed, the whole front surface of the EPS board should be sanded using a trowel covered with suitable coarse sandpaper.

When fixing EPS boards on uneven substrates, the adhesive/base coat should be applied on boards using the ribbon and dab method. The ribbon should be 3-6 cm wide, and should be applied onto the board perimeter. In addition, 3 to 6 dabs of mortar (approx. 10-15 cm in diameter) should be evenly placed on the central surface of the board. The ribbons applied on the board perimeter must be formed in a prism shape. To do so, spread it with a trowel positioned at a 45° angle towards the board surface. Once the mortar is applied, put the board immediately onto the wall in the target position and press firmly to flush it with neighbouring boards. Fit the boards tightly next to each other using the staggered method. Remove the excess of squeezed mortar, so as not to leave any remains on the board perimeter. Correctly applied mortar should cover min. 40% of board surface area, while the mortar thickness after fixing should not exceed 1 cm. After allowing a sufficient time to set (at least 48 hours), the boards can be fixed by means of adequate mechanical fixings, as intended by the thermal insulation system design. In order to obtain an even surface of all the boards installed, the whole front surface of the EPS board should be sanded using a trowel covered with suitable coarse sandpaper.

APPLYING THE REINFORCED LAYER: First, the edges of window and door openings should be reinforced by fixing to their corners diagonally (i.e., at a 45° angle) fibreglass mesh (with the dimensions 25 x 30 cm) using the **KOMBI** adhesive/base coat. The reinforced layer can be applied on even, cleaned (previously sanded) surfaces of EPS boards, not earlier than 3 days from the date of board installation. Apply a continuous and even layer of the adhesive/base coat onto the substrate (with the thickness of approx. 3-4 mm), covering the whole width of the reinforcing mesh. Spread the coat layer with a notched trowel and immediately embed the fibreglass reinforcing mesh into it. The reinforcing mesh should be evenly stretched and completely immersed in the coat. After embedding the mesh, the entire layer surface should be carefully levelled, using an additional portion of render, if necessary. The neighbouring mesh stripes must be glued with an overlap of at least 10 cm. Any marks left after levelling should be sanded down with a sandpaper. The thickness of the coat reinforced with one mesh layer should range from 3 to 5 mm.

DRYING: The drying time for the reinforced layer is min. 3 days (drying at +20°C and at a relative air humidity of 65%). After this period, you can apply a primer and once its curing is completed, a render. Note: At low temperatures and high air humidity, the render drying time may be longer.

USEFUL HINTS: In order to avoid cracks and unevenness, it is necessary to complete a single application to any architectural element in one working cycle. The adhesive/base coat should be applied and dried on dry days at temperatures between +5°C and +25°C. Wash tools with water immediately after finishing work. Avoid working on surfaces directly exposed to sunlight, as well as in strong winds and at high air humidity. In order to protect the undried reinforced layer against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of a given system are used: **KABE THERM RENO, KABE THERM EPS, KABE THERM AVANT, KABE THERM MARMURIT / MOZAIKER, KABE THERM MARMURIT COLORATO / MOZAIKER COLORATO, KABE THERM ELASTO, KABE THERM EPS ELASTOLITH / HAAKSBERGEN, KABE THERM DECOR EFFECT, KABE THERM CK, KABE THERM WHITE.**

** EPS boards used in the EWI system should meet the technical requirements specified in the National or European Technical Assessment for the specific system.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

European Technical Assessment: ETA-14/0445, ETA-17/0204, ETA-18/0211, ETA-17/0203, ETA-20/0027,
National Technical Assessment: ICiMB-KOT-2018/0050 edition 2, ICiMB-KOT-2018/0051 edition 1,
ICiMB-KOT-2021/0143 edition 1, ICiMB-KOT-2022/0156 edition 1, ICiMB-KOT-2018/0039 edition 1.

FOR EPS

KOMBI WHITE

White mineral
adhesive/base coat

MAIN ADVANTAGES

- Plastic, easy-to-process white cement-based adhesive
- High resistance to shrinking cracks
- Optimum impact resistance
- No run-off from a vertical surface
- High adhesion to substrate and thermal insulation materials (mineral wool, EPS)
- Universal use (for fixing and making a mesh-reinforced layer)
- Contains microfibres and polypropylene fibres
- For use with white and grey EPS**

AREAS OF APPLICATION

White mineral adhesive intended for bonding EPS and mineral wool boards to the substrate and creating a layer reinforced with fibreglass mesh in **KABE THERM WHITE** EWI systems. It can be used on walls made of masonry components (bricks, blocks, stone, etc.) or concrete (poured on site or in the form of prefabricated slabs). The **KOMBI WHITE** adhesive/base coat can be used in the technology of external thermal insulation composite system – ETICS. Note: Before applying the render, the reinforced layer must be primed with an appropriate primer (for the specific render).

TECHNICAL DATA

Base binder: hydraulic binders with polymer and mineral modifiers added;
Bulk density: approx. 1.5 to 1.6 g/cm^3;
Mixing ratio: approx. 5.0 l of water per 25 kg of mortar;
After adding water, the product must be used within: approx. 2 hours;
Open drying time: ≥ 20 min.
Colour: white;
Consumption:

- as adhesive for EPS boards — approx. 4,0 kg/m^2;
- as adhesive for façade and dual-density mineral wool boards — approx. 5.0 kg/m^2;
- as adhesive for lamella mineral wool boards — approx. 5.5 kg/m^2;
- for making a reinforced coat on EPS boards — approx. 4.0 kg/m^2;
- for making a reinforced coat on mineral wool boards — approx. 5.0 kg/m^2;

Temperature of application (air and substrate): from +5°C to +25°C
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: Product should be stored in original sealed packaging, in a dry room, protected from moisture and frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate for fixing thermal insulation boards should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. The substrate must be protected against capillary moisture intake and precipitation water. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. If any substrate unevenness exceeds 1 cm, first use a levelling compound. Absorbent substrates should be primed with **BUDOGRUNT ZG** before applying a levelling compound. Drying time for the product applied on the substrate in optimum weather conditions is approx. 3 hours (at +20°C and at a relative air humidity of 55%). Before fixing thermal insulation boards on unstable substrates, an adhesion test should be performed. The test involves fixing a few (8-10) EPS board samples (with 10 x 10 cm dimensions) in various places of the façade and then tearing them off after 3 days. The substrate load-bearing capacity is sufficient when tearing happens within the EPS layer. If the whole sample, including adhesive and substrate layer, is torn off, then it is necessary to remove the poorly bound layer from the substrate and prime it with **BUDOGRUNT ZG**. When the primer is dry, repeat the adhesion test. If the repeated test also gives a negative result it is necessary to consider additional mechanical fixing or a special substrate preparation. Note: Before applying a thin layer of **KOMBI WHITE** render, prime the mineral substrate with **BUDOGRUNT ZG** diluted 1:1 with water and protect with meshes to prevent excessively rapid vaporizing of make-up water and burning the render.

PRODUCT PREPARATION: Gradually pour the entire packaging contents into a container with a pre-measured amount of cool water (approx. 5.0 litres), stirring constantly (with a low-speed mixer/drill with a stirrer), until a homogeneous, lump-free mixture is obtained. After leaving it for 5 minutes and remixing, the mortar is ready to use. After adding water, mortar must be used up within approx. 2 hours (at an ambient temperature of +20°C).

FIXING THERMAL INSULATION BOARDS: On even surfaces, thermal insulation boards can be fixed using the layer-to-layer gluing method. If mineral wool boards are used, the boards should be first smoothed out with **KOMBI WHITE** adhesive/base coat in the places of applying adhesive. To do this, apply some adhesive/base coat onto a board with a trowel and, using the edge, spread it evenly all over to apply a thin coat. During this operation, the mortar should be pressed against the board surface with a trowel. Then apply an additional portion of mortar onto the board and spread it with a notched trowel edge (with a minimum tooth dimension of 10 x 10 mm). Once the mortar is applied, put the board immediately onto the wall in the target position and press firmly to flush it with neighbouring boards. Boards must be tightly fitted next to each other using the staggered method. Remove the excess of squeezed mortar, so as not to leave any remains on board edges. Properly applied mortar should cover the whole board surface, and its thickness after fixing should not exceed 1 cm. After allowing a sufficient time to set (at least 48 hours), the boards can be fixed by means of adequate mechanical fixings, as intended by the thermal insulation system design. In order to obtain an even surface of all the boards installed, the whole front surface of the EPS board should be sanded using a trowel covered with suitable coarse sandpaper.

When fixing thermal insulation boards on uneven substrates, the adhesive/base coat should be applied on boards using the ribbon and dab method. If mineral wool boards are used, the boards should be first smoothed out with **KOMBI WHITE** adhesive/base coat in the places of applying adhesive. To properly fix the boards, the ribbon should be 3-6 cm wide, and should be applied onto the board perimeter. In addition, 3 to 6 dabs of mortar (approx. 10-15 cm in diameter) should be evenly placed on the remaining surface of the board. The ribbons applied on the board perimeter must be formed in a prism shape. To do so, spread it with a trowel positioned at a 45° angle towards the board surface. Once the mortar is applied, put the board immediately onto the wall in the target position and press firmly to flush it with neighbouring boards. Fit the boards tightly next to each other using the staggered method. Remove the excess of squeezed mortar, so as not to leave any remains on the board perimeter. Correctly applied mortar should cover min. 40% of board surface area, while the mortar thickness after fixing should not exceed 1 cm. After allowing a sufficient time to set (at least 48 hours), the boards can be fixed by means of adequate mechanical fixings, as intended by the thermal insulation system design. In order to obtain an even surface of all the boards installed, the whole front surface of the EPS board should be sanded using a trowel covered with suitable coarse sandpaper.

APPLYING THE REINFORCED LAYER: If mineral wool boards are used, the entire outer surface of the thermal insulation layer should be smoothed out with **KOMBI WHITE** adhesive/base coat before applying the reinforced layer. First, the edges of window and door openings should be reinforced by fixing to their corners diagonally (i.e., at a 45° angle) fibreglass mesh (with the dimensions 25 x 30 cm) using the **KOMBI WHITE** adhesive/base coat. The reinforced layer can be applied on even, cleaned (previously sanded) surfaces of EPS boards, not earlier than 3 days from the date of board installation. Apply a continuous and even layer of the adhesive/base coat onto the substrate (with the thickness of approx. 3-4 mm), covering the whole width of the reinforcing mesh. Spread the coat layer with a notched trowel and immediately embed the fibreglass reinforcing mesh into it. The reinforcing mesh should be evenly stretched and completely immersed in the coat. After embedding the mesh, the entire layer surface should be carefully smoothed by trowelling / felt trowelling, using an additional portion of render, if necessary. The neighbouring mesh stripes must be glued with an overlap of at least 10 cm. The thickness of the reinforced layer with one layer of mesh on EPS boards should be from 3 to 5 mm, and on mineral wool boards from 4 to 5 mm.

DRYING: The drying time for the reinforced layer is min. 3 days (drying at +20°C and at a relative air humidity of 65%). After this period, you can apply a primer and once its curing is completed, a render. Note: At low temperatures and high air humidity, the render drying time may be longer.

USEFUL HINTS: In order to avoid cracks and unevenness, it is necessary to complete a single application to any architectural element in one working cycle. The adhesive/base coat should be applied and dried on dry days at temperatures between +5°C and +25°C. Wash tools with water immediately after finishing work. Avoid working on surfaces directly exposed to sunlight, as well as in strong winds and at high air humidity. In order to protect the undried reinforced layer against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM WHITE** system are used.

** EPS boards used in the EWI system should meet the technical requirements specified in the European Technical Assessment No. ETA-20/0027.

KABE Swiss Group

FOR EPS AND MINERAL WOOL

KOMBI ELASTO

Dispersion, cement-free base coat for EPS and mineral wool

MAIN ADVANTAGES

- High resistance to mechanical damage (impact resistance)
- Very good flexibility and resistance to scratches
- No run-off from a vertical surface
- High adhesion to EPS and mineral wool
- Easy application
- No primer required under render
- Reinforced with microfibres

AREAS OF APPLICATION

Ready-to-use cement-free base coat for making a reinforcing layer with fibreglass mesh in **KABE THERM ELASTO** EPS-based EWI system and in the **KABE THERM MW ELASTO*** EWI system based on mineral wool. The dispersion base coat improves impact resistance and eliminates the necessity to prime the surface before applying Farby KABE renders. It can be used in the technology of external thermal insulation composite system (ETICS).

TECHNICAL DATA

Base binder: acrylic dispersion.
Colour: cream (there is a possibility of tint to match the colour of the grout in the BRICK DECOR system)
Consumption: for systems with one layer of reinforcing mesh approx. 4.0-5.0 kg/m²
Temperature of application (air and substrate): from +10°C to +25°C
Relative air humidity: ≤ 75%
Packaging: Disposable plastic packaging holding 25 kg of the product.
Shelf life and storage conditions: 12 months from the date of manufacture, store in a sealed packaging, in a cool room protected from freezing.

Impact resistance for EPS-based system:

- for system with single mesh layer and top coat — cat. I
  – PERMURO-BRICK DECOR
  – PERMURO-ARCHITECTURAL CONCRETE DECOR
  – ARMASIL T-BRICK DECOR
  – ARMASIL T-ARCHITECTURAL CONCRETE DECOR
- for system with single mesh layer (KABE 165 and KABE 175) with top coat — cat. I
  – PERMURO
  – ARMASIL T
- for system with double mesh layer and top coat — cat. I
  – PERMURO AVANT
  – ARMASIL T
- for system with single mesh layer (KABE 145) and top coat — cat. II
  – PERMURO
  – PERMURO AVANT
  – ARMASIL T

Impact resistance for the system with mineral wool: cat. I
(all types of finishing layer with 1 layer of reinforcing mesh: KABE 145)
Adhesion of the reinforcing layer to thermal insulation: ≥ 0.08 MPa

HOW TO USE

SUBSTRATE PREPARATION: The substrate for the reinforcing layer (fixed EPS or mineral wool boards) must be sound/stable, dedusted, even and dry, as well as free of anti-adhesive substances. The substrate must be protected against capillary moisture intake and precipitation water. Any loose layers, not bound to the substrate, should be removed. The base coats of the system should be performed in accordance with the technology of the External Thermal Insulation Composite Systems for buildings (ETICS).
PRODUCT PREPARATION: Stir thoroughly directly before application, if necessary dilute with water (using max. 0.2 l per 20 kg of the product).
APPLYING THE REINFORCED LAYER: In case of applying a reinforced layer on mineral wool boards, it is necessary to first smooth out the outer surface of these boards with **KOMBI ELASTO** base coat. Then, the edges of window and door openings should be reinforced by fixing to their corners diagonally (i.e., at a 45° angle) fibreglass mesh (with the dimensions 25 x 30 cm) using the **KOMBI ELASTO** base coat. The reinforced layer can be applied on even, cleaned (previously sanded) surfaces of EPS or mineral wool boards, not earlier than 3 days from the date of board installation. Apply a continuous and even layer of the base coat onto the substrate with a notched trowel with a notch size of 6-8 mm, covering the whole width of the reinforcing mesh. Then, immediately embed the fibreglass mesh into the applied layer. The reinforcing mesh should be evenly stretched and completely immersed in the coat. After embedding the mesh, the entire layer surface should be carefully levelled, using an additional portion of coat, if necessary. The neighbouring mesh stripes must be glued with an overlap of at least 10 cm. If it is necessary to additionally smooth out any unevenness of the reinforced layer, it should be smoothed as soon as possible with a thin layer of **KOMBI ELASTO** base coat. The thickness of the layer reinforced with one mesh layer in an EPS-based system is from 3 to 5 mm, while in an insulation system based on mineral wool it is from 4 to 6 mm.
DRYING: The drying time for the reinforced layer is min. 3 days (drying at +20°C and at a relative air humidity of 65%). Until the adhesive hardens, protect the layer against precipitation and moisture condensation. Note: Drying time may be longer, up to several days, due to low air temperatures and high humidity.
USEFUL HINTS: In order to avoid cracks and unevenness, it is necessary to complete a single application to any architectural element in one working cycle. The base coat should be applied and dried on dry days at temperatures between +10°C and +25°C. Wash tools with water immediately after finishing work. Avoid working on surfaces directly exposed to sunlight, as well as in strong winds and at high air humidity. In order to protect the undried reinforced layer against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. During the period of increased air humidity, i.e. early spring and late autumn, it is recommended to use **KOMBI** or **KOMBI WM2** mineral adhesive/base coat.
Do not use on surfaces not protected against capillary action and exposed to water and precipitation. Note: If mechanical fixings with discs embedded in EPS are used, all EPS caps should be installed in the hole (glued) with **KOMBI RAPID** polyurethane adhesive. Failure to follow this recommendation may result in local bulging in the places, where fixings and the unglued EPS caps are used. If mechanical fixings with discs embedded in mineral wool layer are used, all caps made of mineral wool should be installed in the hole (glued) with **KOMBI WM2** adhesive/base coat.

* The manufacturer provides a warranty if all **KABE THERM ELASTO** or **KABE THERM MW ELASTO** system components are used.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

FOR MINERAL WOOL

KOMBI WM1

Mineral adhesive
for mineral wool

MAIN ADVANTAGES

- High resistance to shrinking cracks
- Optimum impact resistance
- Very good vapour permeability
- High adhesion to substrate and mineral wool
- Easy to apply
- Economical in application
- Contains microfibres and reinforcing fibres

AREAS OF APPLICATION

Adhesive intended for bonding insulation boards made of mineral wool to the substrate in **KABE THERM MW**, **KABE THERM IN MW, KABE THERM MW ELASTO, KABE THERM MW CK, KABE THERM MW ELASTOLITH / HAAKSBERGEN, KABE THERM MW DECOR EFFECT*** and in **KABE THERM SG*** EWI systems. It can be used for gluing façade, lamella and dual-density mineral wool boards. To be applied on mineral substrates made of fine masonry components (bricks, blocks, stone, etc.) or concrete (monolithic or prefabricated products). The **KOMBI WM1** render can be used in the technology of external thermal insulation composite system – ETICS. Note: To carry out the reinforcing layer, it is necessary to apply the **KOMBI WM2** adhesive/base coat.

TECHNICAL DATA

Base binder: hydraulic and polymer binders with modifiers added;
Bulk density: approx. 1.5 g/cm^3;
Mixing ratio: approx. 6.0 l of water per 25 kg of mortar;
After adding water, the product must be used within: approx. 2 hours (at +20°C and 50% RH);
Open drying time: ≥ 20 minutes;
Colour: light grey;

Consumption: while installing façade and dual-density mineral wool boards: approx. 5.0 kg/m^2, while installing lamella mineral wool boards: approx. 5.5 kg/m^2.
Temperature of application (air and substrate): from +5°C to +25°C;
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: Product should be stored in original sealed packaging, in a dry room, protected from moisture and frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate before gluing thermal insulation boards should be sound/stable, degreased, clean and dry, free from biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. The substrate must be protected against capillary moisture intake and precipitation water. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. If any substrate unevenness exceeds 1 cm, first use a levelling compound. Absorbent substrates should be primed with **BUDOGRUNT ZG** before applying levelling compound / adhesive coat. Before fixing the thermal insulation boards on unstable substrates, an adhesion test should be performed. The test involves fixing a few (8-10) mineral wool samples (with 10 x 10 cm dimensions) in various places of the façade and then tearing them off after 3 days. The substrate load-bearing capacity is sufficient when tearing happens within the thermal insulation layer. If the whole sample, including adhesive and substrate layer, is torn off, then it is necessary to remove the poorly bound layer from the substrate and prime it with **BUDOGRUNT ZG**. When the primer is dry, repeat the adhesion test. If the repeated test also gives a negative result, it is necessary to consider additional mechanical fixing or a special substrate preparation.
PRODUCT PREPARATION: Gradually pour the entire packaging contents into a container with a pre-measured amount of clean, cool water (approx. 6.0 litres), stirring constantly (with a low-speed mixer/drill with a stirrer), until a homogeneous, lump-free mixture is obtained. After leaving it for 5 minutes and remixing, the mortar is ready to use. After adding water, the product must be used within: approx. 2 hours (at air temperature +20°C and air relative humidity of 50%).
FIXING OF FAÇADE AND DUAL-DENSITY MINERAL WOOL BOARDS: The prepared adhesive to be spread in the places, where the adhesive will be applied later on by means of the ribbon and dab method. The ribbon should be 3-6 cm wide, and should be applied onto the board perimeter. In addition, 3 to 6 dabs of mortar (approx. 10-15 cm in diameter) should be evenly placed on the central surface of the board. The ribbons applied on the board perimeter must be formed in a prism shape. To do so, spread it with a trowel positioned at a 45° angle towards the board surface. Once the mortar is applied, put the board immediately onto the wall in the target position and press firmly to flush it with neighbouring boards. Boards must be tightly fitted next to each other using the staggered method. Remove the excess of squeezed mortar, so as not to leave any remains on board edges. Correctly applied mortar should cover min. 40% of board surface area, while the mortar thickness after fixing should not exceed 1 cm. After allowing a sufficient time to set (at least 48 hours), the boards can be fixed by using adequate mechanical fixings, as intended by the thermal insulation system design.
FIXING OF LAMELLA MINERAL WOOL BOARDS: Using a stainless steel trowel, the prepared adhesive should be spread from the side it is applied on. Then, adhesive should be applied onto the prepared surface in a thin, even layer with a notched trowel (with notch dimensions of 12 x 12 mm). Once the mortar is applied, put the board immediately onto the wall in the target position and press firmly with a trowel. Properly applied mortar should cover the whole board surface, and its thickness after fixing should not exceed 1 cm. Mineral wool should be glued in layers from the bottom to the top, assuring the alternate board pattern. After allowing a sufficient time to set (at least 48 hours), the boards can be fixed by using adequate mechanical fixings, as intended by the thermal insulation system design.
DRYING: It is assumed that the adhesive initial setting period is min. 3 days at air temperature of +20°C and relative air humidity of 65%. After this period, you can start making a layer reinforced with fibreglass mesh. In order to even out any irregularities that may have occurred, the surface of the fixed boards can be sanded with a trowel covered with coarse sandpaper. Note: Low temperature and high relative humidity essentially extend the adhesive drying time. To carry out the reinforcing layer, it is necessary to apply the **KOMBI WM2** adhesive/base coat.
USEFUL HINTS: The adhesive should be applied and dried on dry days at temperatures from +5°C to +25°C. Wash tools with water immediately after finishing work. Avoid working on surfaces directly exposed to sunlight, as well as in strong winds and at high air humidity. In order to protect the undried thermal insulation layer against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM MW, KABE THERM IN MW, KABE THERM MW ELASTO, KABE THERM MW CK, KABE THERM MW ELASTOLITH / HAAKSBERGEN, KABE THERM MW DECOR EFFECT** or **KABE THERM SG** systems are used.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

KABE Swiss Group

FOR MINERAL WOOL

KOMBI WM2

Mineral
adhesive/base coat
for mineral wool

MAIN ADVANTAGES

- High resistance to shrinking cracks
- Optimum impact resistance
- Very good vapour permeability
- High adhesion to substrate and mineral wool
- Easy way to apply and smooth the surface
- Contains microfibres and reinforcing fibres

AREAS OF APPLICATION

Adhesive intended for preparation of layer reinforced with fibreglass mesh on mineral wool boards, as well as bonding mineral wool boards to the substrate in **KABE THERM MW, KABE THERM IN MW, KABE THERM MW ELASTO, KABE THERM MW CK, KABE THERM MW ELASTOLITH / HAAKSBERGEN, KABE THERM MW DECOR EFFECT*** and **KABE THERM SG*** EWI systems. To be applied on mineral substrates made of fine masonry components (bricks, blocks, stone, etc.) or concrete (monolithic or prefabricated products). The **KOMBI WM2** render can be used in the technology of external thermal insulation composite system – ETICS.

TECHNICAL DATA

Base binder: hydraulic and polymer binders with modifiers added;
Bulk density: approx. 1.5 g/cm^3;
Mixing ratio: approx. 6.0 l of water per 25 kg of mortar;
After adding water, the product must be used within: approx. 2 hours (at +20°C and 50% RH);
Open drying time: ≥ 25 minutes;
Colour: light grey;

Consumption: while installing façade and dual-density mineral wool boards: approx. 5.0 kg/m^2, while installing lamella mineral wool boards: approx. 5.5 kg/m^2, while installing reinforced layer: approx. 5.0 kg/m^2.
Temperature of application (air and substrate): from +5°C to +25°C;
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: Product should be stored in original sealed packaging, in a dry room, protected from moisture and frost. Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate before gluing thermal insulation boards should be sound/stable, degreased, clean and dry, and free from biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. The substrate must be protected against capillary moisture intake and precipitation water. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. If any substrate unevenness exceeds 1 cm, first use a levelling compound. Absorbent substrates should be primed with **BUDOGRUNT ZG** before applying levelling compound / adhesive coat. Before fixing the thermal insulation boards on unstable substrates, an adhesion test should be performed. The test involves fixing a few (8-10) mineral wool samples (with 10 x 10 cm dimensions) in various places of the façade and then tearing them off after 3 days. The substrate load-bearing capacity is sufficient when tearing happens within the thermal insulation layer. If the whole sample, including adhesive and substrate layer, is torn off, then it is necessary to remove the poorly bound layer from the substrate and prime it with **BUDOGRUNT ZG**. When the primer is dry, repeat the adhesion test. If the repeated test also gives a negative result it is necessary to consider additional mechanical fixing or a special substrate preparation. Before applying the **KOMBI WM2** base coat, to carry out the reinforced layer, the thermal insulation layer of the system must be made in accordance with the requirements for external thermal insulation composite system (ETICS). Note: Before applying a thin layer of **KOMBI WM2** render, prime the mineral substrate with **BUDOGRUNT ZG** diluted 1:1 with water and protect with meshes to prevent excessively rapid vaporizing of make-up water and burning the render.

PRODUCT PREPARATION: Gradually pour the entire packaging contents into a container with a pre-measured amount of clean, cool water (approx. 6.0 litres), stirring constantly (with a low-speed mixer/drill with a stirrer), until a homogeneous, lump-free mixture is obtained. After leaving it for 5 minutes and remixing, the mortar is ready to use. After adding water, the product must be used within: approx. 2 hours (at air temperature +20°C and air relative humidity of 50%).

FIXING OF FAÇADE AND DUAL-DENSITY MINERAL WOOL BOARDS: The prepared adhesive to be spread in the places, where the adhesive will be applied later on by means of the ribbon and dab method. The ribbon should be 3-6 cm wide, and should be applied onto the board perimeter. In addition, 3 to 6 dabs of mortar (approx. 10-15 cm in diameter) should be evenly placed on the central surface of the board. The ribbons applied on the board perimeter must be formed in a prism shape. To do so, spread it with a trowel positioned at a 45° angle towards the board surface. Once the mortar is applied, put the board immediately onto the wall in the target position and press firmly to flush it with neighbouring boards. Boards must be tightly fitted next to each other using the staggered method. Remove the excess of squeezed mortar, so as not to leave any remains on board edges. Correctly applied mortar should cover min. 40% of board surface area, while the mortar thickness after fixing should not exceed 1 cm. After allowing a sufficient time to set (at least 48 hours), the boards can be fixed by using adequate mechanical fixings, as intended by the thermal insulation system design.

FIXING OF LAMELLA MINERAL WOOL BOARDS: Using a stainless steel trowel, the prepared adhesive should be spread from the side it is applied on. Then, adhesive should be applied onto the prepared surface in a thin, even layer with a notched trowel (with notch dimensions of 12 x 12 mm). Once the mortar is applied, put the board immediately onto the wall in the target position and press firmly with a trowel. Properly applied mortar should cover the whole board surface, and its thickness after fixing should not exceed 1 cm. Mineral wool should be glued in layers from the bottom to the top, assuring the alternate board pattern. After allowing a sufficient time to set (at least 48 hours), the boards can be fixed by using adequate mechanical fixings, as intended by the thermal insulation system design.

APPLYING THE REINFORCED LAYER: First, the edges of window and door openings should be reinforced by fixing to their corners diagonally (i.e., at a 45° angle) fibreglass mesh (with the dimensions 25 x 30 cm) using the adhesive/base coat. The reinforced coat can be applied on even, cleaned (previously sanded, if required) surfaces of mineral wool boards, not earlier than 3 days from the date of board installation. To do this, apply the adhesive and base coat to the substrate in a thin, even layer to the width of the reinforcing mesh using a notched trowel (tooth size 10 x 10 mm). After applying the adhesive/base coat, immediately embed the fibreglass mesh into it, so that it is evenly stretched and completely embedded in the mortar. The neighbouring mesh stripes must be glued with an overlap of at least 10 cm. After embedding the mesh, the entire reinforced layer surface should be carefully levelled, using an additional portion of render, if necessary. Any marks left after levelling should be sanded down with a sandpaper. The thickness of the coat reinforced with one mesh layer should range from 4 to 5 mm.

DRYING: The coat applied to the substrate can be further processed, assuming one day of drying for each 1 mm of layer thickness (drying at a temperature of +20°C and a relative air humidity of 65%). Note: Setting time may be longer, even by up to a few days, due to low temperatures and high relative humidity. The newly applied layer should be protected against precipitation until it is fully hardened and set.

USEFUL HINTS: In order to avoid cracks and unevenness, it is necessary to complete a single application to any architectural element in one working cycle. The adhesive/base coat should be applied and dried on dry days at temperatures between +5°C and +25°C. Wash tools with water immediately after finishing work. Avoid working on surfaces directly exposed to sunlight, as well as in strong winds and at high air humidity. In order to protect the undried reinforced layer against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM MW, KABE THERM IN MW, KABE THERM MW ELASTO, KABE THERM MW CK, KABE THERM MW ELASTOLITH / HAAKSBERGEN, KABE THERM MW DECOR EFFECT** systems are used.

FAÇADE PRODUCTS

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

SILICONE

ARMASIL F

Silicone façade paint

MAIN ADVANTAGES

- Top resistance to adverse weather conditions
- Very good vapour permeability
- Increased resistance to soiling
- Anti-fungal and algae protection (reduces the growth of algae and fungi)
- Low surface absorption
- Very high coverage
- For use on both mineral substrates and plastic-based renders/plasters

AREAS OF APPLICATION

Matt paint intended for paint coatings on the external façade of buildings, including in EPS-based **KABE THERM RENO**, **KABE THERM EPS**, **KABE THERM ELASTO**, **KABE THERM AVANT** EWI systems and in **KABE THERM MW**, **KABE THERM IN MW** EWI systems based on mineral wool. It is especially recommended for the renovation painting of surfaces exposed to aggressive weather conditions and requiring high resistance to soiling. To be applied both on mineral substrates (such as concrete, traditional cement renders, cement-lime renders and thin-coat mineral renders) and substrates coated with a plastic-based render/plaster. It provides a coating with high vapour permeability and low surface absorption. After wetting the silicone coating, the effect of water molecules "being repelled" may be observed on its surface. This effect protects façades against precipitation and significantly reduces soiling deposition. An absorbent substrate should be primed with **HYDROPOR** before applying the paint.

TECHNICAL DATA

Base binder: silicone binder;
Pigments: resistant to UV radiation and atmospheric conditions inorganic coloured pigments;
The content of volatile organic compounds VOC: cat. A/c. The product contains less than 40 g/l VOC.
Density: approx. 1.50 g/cm^3;
Colours: natural white and colours from KABE colour chart and selected colours from the NCS colour chart (possible to obtain using inorganic pigments);
Gloss level: matt;
Thinner: water;
Average coverage: approx. 0.33 l/m^2 (with double painting on a smooth substrate);
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Relative diffusion resistance of the layer with a thickness of 150 µm S_d = 0.05 m (standard requirement $S_d \leq 2.0$ m);
Surface absorption coefficient: w = 0.08 kg/m^2 • h$^{0.5}$ (standard requirement: w ≤ 0.5 kg/m^2 • h$^{0.5}$).
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with **KOMBI FINISZ** levelling and smoothing compound. Small unevenness can be smoothed with **KOMBI FINISZ** levelling and smoothing compound. An absorbent substrate should be primed with an adequate product before applying base coats and/or levelling compounds. If the paint is applied on new mineral substrates (e.g., concrete, lime render, cement render, cement-lime render) – a minimum 2-week curing period is required. Before using the paint in the **KABE THERM AKORD**, **KABE THERM SM** and **KABE THERM SM RENO**, **KABE THERM ELASTO**, **KABE THERM AVANT** and **KABE THERM MW** EWI system, all layers of the system should be made in accordance with the technology for external thermal insulation composite system (ETICS). Silicone paint can be applied to thin-coat render only after min. 7 days of curing (at +20°C and 65% RH).
PRIMING: An absorbent substrate should be primed with **HYDROPOR** before applying the paint. The curing period of the product applied to the substrate before applying the paint is about 12 hours. Note: Substrates with low wettability (such as plastic-based renders or dispersion paint coatings) should not be primed and should be only washed with water and the **CLEANFORCE** product.
PAINT PREPARATION: The packaging contains a ready-to-use product. If necessary, add a small amount of water (by adding to the first painting max. 10% of volume and to the second one max. 5%). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: The paint should be applied on the substrate in two layers with a paint brush, roller or by spraying (including also "airless" method). The second paint layer should be applied only after the first one dries completely, i.e. after 3-4 hours. It is recommended to use a special paint roller for façade paints made of woven polyamide with a bristle length of min. 18 mm. Use mechanical spraying only in windless weather.

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Nozzle	Pressure [bar]	Filter [mesh]	Thinning [%]	Coverage [l/min]
WAGNER	ProSpray 3.21	0552-519	200	60	10-20	1.25
TITAN	Titan 450e	661-519	200	60	10	1.25
GRACO	UltraMax II 795	PAA621	200	60	5	3.6

DRYING: Typical drying time for one layer of paint applied onto a substrate is approx. 3 hours (at air temperature +20°C, 55% RH). Note: At low temperatures and high air humidity, the paint drying time will be longer. Protect the fresh paint coating against precipitation and condensation until it dries completely.
USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and drying should take place on dry days at temperatures between +5°C and +25°C. Tools should be cleaned with water immediately after finishing work. Application during direct exposure to sunlight, in strong winds or high air humidity is not recommended. In order to protect the completely undried paint coating against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.
ADDITIONAL OPTIONS: If paint is applied on substrates with cracks with a width of up to 0.3 mm (e.g., small shrinking cracks of the render coat), it is recommended to use paint reinforced with microfibres for the first painting (an option available on request). In order to increase the resistance of the paint coat to the growth of algae and fungi (especially while renovating EWI systems and while painting façades in shaded places with increased humidity and with a high concentration of plants), it is recommended to apply a special protective substance along with the paint (additional service).

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl

The product meets the requirements of: PN-C-81913:1998
National Technical Assessment No. ICiMB-KOT-2018/0050 edition 2 and ICiMB-KOT-2018/0035 edition 1
National Technical Assessment No. AT-15-8732/2016
European Technical Assessment No. ETA-16/0079/2016, ETA 17/0203 and ETA 17/0204

KABE Swiss Group

SILICONE

SILCO F

Silicone façade paint

MAIN ADVANTAGES

- High resistance to adverse weather conditions
- Low surface absorption
- Increased resistance to substrate alkalinity
- Protected against the growth of algae and fungi
- Wide range of colours
- Very high coverage
- For use on both mineral substrates and plastic-based renders/plasters

AREAS OF APPLICATION

Matt paint intended for performing decorative-protective paint coatings on the external façades. It is especially recommended for painting mineral thin-coat renders exposed to aggressive weather conditions. To be applied both on mineral substrates (such as concrete, traditional cement renders, cement-lime renders and thin-coat mineral renders) and substrates coated with a plastic-based render/plaster. It provides a coating with good vapour permeability and low surface absorption. An absorbent substrate should be primed with **HYDROPOR** before applying the paint.

TECHNICAL DATA

Base binder: silicone and acrylic binder;
Pigments: resistant to UV radiation and atmospheric conditions inorganic coloured pigments;
The content of volatile organic compounds VOC: cat. A/c. The product contains less than 40 g/l VOC.
Density: approx. 1.50 g/cm^3;
Colours: natural white and colours from KABE colour chart and selected colours from the NCS colour chart
Gloss level: matt;
Thinner: water;
Average coverage: approx. 0.33 l/m^2 (with double painting on a smooth substrate);
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;

Relative diffusion resistance of the layer with a thickness of 150 µm Sd = 0.50 m (standard requirement: Sd ≤ 2.0 m);
Surface absorption coefficient: w = 0.08 kg/m^2 • h0.5 (standard requirement: w ≤ 0.5 kg/m^2 • h0.5).
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with **KOMBI FINISZ** levelling and smoothing compound. Small unevenness can be smoothed with **KOMBI FINISZ** levelling and smoothing compound. An absorbent substrate should be primed with an adequate product before applying base coats and/or levelling compounds. If paint is applied on new mineral substrates, a minimum 2-week curing period is required. Before using the paint in the **KABE THERM EPS**, **KABE THERM AVANT** or **KABE THERM MW** EWI systems, all layers should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Silicone paint can be applied to thin-coat render only after min. 7 days of curing (at +20°C and 65% RH).
PRIMING: An absorbent substrate should be primed with **HYDROPOR** before applying the paint. The curing period of the product applied to the substrate before applying the paint is about 12 hours. Note: Substrates with low wettability (such as plastic-based renders or dispersion paint coatings) should not be primed and should be only washed with water and the **CLEANFORCE** product.
PAINT PREPARATION: The packaging contains a ready-to-use product. If necessary, add a small amount of water (by adding to the first painting max. 10% of volume and to the second one max. 5%). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: The paint should be applied on the substrate in two layers with a paint brush, roller or by spraying (including also "airless" method). The second paint layer should be applied only after the first one dries completely, i.e. after 3-4 hours. It is recommended to use a special paint roller for façade paints made of woven polyamide with a bristle length of min. 18 mm. Use mechanical spraying only in windless weather.

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Nozzle	Pressure [bar]	Filter [mesh]	Thinning [%]	Coverage [l/min]
WAGNER	ProSpray 3.21	0552-519	200	60	10-20	1.25
TITAN	Titan 450e	661-519	200	60	10	1.25
GRACO	UltraMax II 795	PAA621	200	60	5	3.6

DRYING: Typical drying time for one layer of paint applied onto a substrate is approx. 3 hours (at air temperature +20°C, 55% RH). Note: At low temperatures and high air humidity, the paint drying time will be longer. Protect the fresh paint coating against precipitation and condensation until it dries completely.
USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and drying should take place on dry days at temperatures between +5°C and +25°C. Tools should be cleaned with water immediately after finishing work. Application during direct exposure to sunlight, in strong winds or high air humidity is not recommended. In order to protect the completely undried paint coating against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.
ADDITIONAL OPTIONS: If paint is applied on substrates with cracks with a width of up to 0.3 mm (e.g., small shrinking cracks of the render coat), it is recommended to use paint reinforced with microfibres for the first painting (an option available on request). In order to increase the resistance of the paint coat to the growth of algae and fungi (especially while renovating EWI systems and while painting façades in shaded places with increased humidity and with a high concentration of plants), it is recommended to apply a special protective substance along with the paint (additional service).

FAÇADE PRODUCTS

The product meets the requirements of: PN-C-81913:1998
European Technical Assessment No. ETA-16/0079/2016, ETA 14/0445, ETA-17/0204

POLYSILICATE (LOW-ALKALINE)

NOVALIT F

Polysilicate façade paint

MAIN ADVANTAGES

- Mineral nature
- Low-alkaline (pH 8-9.5)
- Resistance to adverse weather conditions
- Increased resistance to changes of weather conditions during application and setting
- Anti-fungal and algae protection (reduces the growth of algae and fungi)
- Increased resistance to soiling
- Micro-porous texture, which assures high vapour permeability
- Low surface absorption
- For use on both mineral substrates and plastic-based renders/plasters

AREAS OF APPLICATION

Mineral topcoat paint based on specially modified potassium water glass intended for paint coatings on the external façade of buildings, including in EPS-based **KABE THERM RENO**, **KABE THERM EPS**, **KABE THERM AVANT** EWI systems and in **KABE THERM MW**, **KABE THERM IN MW** and **KABE THERM SG** EWI systems based on mineral wool. It is especially recommended for primary and renovation painting of mineral substrates (such as traditional lime renders, cement-lime renders and cement renders, as well as thin-coat mineral renders, silicate renders, polysilicate renders) and for the renovation painting of substrates with plastic-based paint coatings when mineral paint coating is required. The polysilicate paint shows a significantly reduced alkalinity (at the level of acrylic products), thanks to which the impact of weather conditions on the quality of created paint coating has been significantly reduced. Absorbent mineral substrates should be primed with **NOVALIT GF** before applying the paint.

TECHNICAL DATA

Base binder: special modified potassium water glass;
Pigments: resistant to UV radiation and atmospheric conditions inorganic coloured pigments;
The content of volatile organic compounds VOC: cat. A/c. The product contains less than 40 g/l VOC;
Density: approx. 1.50 g/cm^3;
Colours: natural white and colours from KABE colour chart and selected colours from the NCS colour chart or according to a sample provided (possible to obtain using inorganic pigments);
Gloss level: matt;
Thinner: water;
Average coverage: approx. 0.33 l/m^2 (with double painting on a smooth substrate);
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Relative diffusion resistance for the layer with a thickness of 150 µm: S_d = 0.04 m (standard requirement: $S_d \leq 2.0$ m);
Surface absorption coefficient: w = 0.05 kg/m^2 • h$^{0.5}$ (standard requirement: w ≤ 0.5 kg/m^2 • h$^{0.5}$).
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with **KOMBI FINISZ** levelling and smoothing compound. Small unevenness can be smoothed right away with **KOMBI FINISZ** levelling and smoothing compound. An absorbent substrate should be primed with an adequate product before applying base coats and/or levelling compounds. If the paint is applied on new mineral substrates (e.g., concrete, lime render, cement render, cement-lime render) – a minimum 2-week curing period is required. Before using the paint in the **KABE THERM AKORD**, **KABE THERM SM** and **KABE THERM SM RENO**, **KABE THERM AVANT** and **KABE THERM MW** EWI system, all layers of the system should be made in accordance with the technology for external thermal insulation composite system (ETICS). Polysilicate paint can be applied to thin-coat render only after min. 7 days of curing (at +20°C and 65% RH)

PRIMING: A mineral substrate should be primed with **NOVALIT GF** before applying the paint. The curing period of the product applied to the substrate before applying the paint is about 12 hours. Note: Substrates with low wettability (such as plastic-based renders or dispersion paint coatings) should not be primed and should be only washed with water and the **CLEANFORCE** product.

PAINT PREPARATION: The packaging contains a ready-to-use product. If necessary, add a small amount of water (by adding to the first painting max. 10% of volume and to the second one max. 5% of water). Quantity of added water may vary depending on the substrate type, drying conditions and application method.

APPLICATION: The paint should be applied on the substrate in two layers with a brush, roller or by spraying (including also "airless" method). The second paint layer should be applied only after the first one dries completely, i.e. after min. 24 hours. Use mechanical spraying only in windless weather. It is recommended to use a special paint roller for façade paints made of woven polyamide with a bristle length of min. 18 mm.

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Nozzle	Pressure [bar]	Filter [mesh]	Thinning [%]	Coverage [l/min]
WAGNER	ProSpray 3.21	0552-519	200	60	10-20	1.25
TITAN	Titan 450e	661-519	200	60	10	1.25
GRACO	UltraMax II 795	PAA621	170	60	5	3.6

DRYING: Typical setting time for one layer of paint applied onto a substrate is approx. 3 hours (at air temperature +20°C, 55% RH). Complete setting (hardening) of paint coating takes place after min. 24 hours. Note: At low temperatures and high air humidity, the paint drying time will be longer. Protect the fresh paint coating against precipitation and condensation until it dries completely.

USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and drying should take place on dry days at temperatures between +5°C and +25°C. Tools should be cleaned with water immediately after finishing work. Application during direct exposure to sunlight, in strong winds or high air humidity is not recommended. In order to protect the completely undried paint coating against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.

ADDITIONAL OPTIONS: In order to increase the resistance of the paint coat to the growth of algae and fungi (especially while renovating EWI systems and while painting façades in shaded places with increased humidity and with a high concentration of plants), it is recommended to apply a special protective substance along with the paint (additional service). If paint is applied on substrates with cracks with a width of up to 0.3 mm (e.g., small shrinking cracks of the render coat), it is recommended to use paint reinforced with microfibres (**NOVALIT PLAN**) for the first painting.

The product meets the requirements of the following standard: PN-C-81913:1998
National Technical Assessment National Technical Assessment: ICiMB-KOT-2021/0132 edition 1, AT-15-8732/2016
National Technical Assessment No. ICiMB-KOT-2018/0050 edition 2 ICiMB-KOT-2018/0035 edition 1
European Technical Assessment No. ETA-16/0079/2016 and ETA 17/0204

KABE Swiss Group

POLYSILICATE (LOW-ALKALINE)

NOVALIT PLAN

Polysilicate paint
for cracked substrates

MAIN ADVANTAGES

- Effective bridging and sealing of small scratches and cracks
- Mineral nature
- Low-alkaline (pH 8-9.5)
- Resistance to changes of weather conditions during application and setting
- Micro-porous texture, which assures high vapour permeability
- Low surface absorption
- Anti-fungal and algae protection (reduces the growth of algae and fungi)
- For use on both mineral substrates and plastic-based renders/plasters

AREAS OF APPLICATION

A mineral paint produced based on innovative, low-alkaline polysilicate technology. It is used to create a base coat for **NOVALIT F** topcoat on difficult (heterogeneous or cracked) substrates, outdoors. It is intended for use on both mineral substrates (such as concrete, lime render, cement-lime render, cement render) and on substrates covered with well-bonded plastic-based renders/plasters. It creates a mineral coating, permanently connected with the substrate, which fills in the micro-cracks and evens non-uniform substrates. Due to the content of special micro-fibres, it efficiently bridges scratches and cracks of the substrate up to 0.3 mm wide. Mineral substrates should be primed with **NOVALIT GF** before applying the paint.

TECHNICAL DATA

Base binder: special modified potassium water glass;
Pigments: resistant to UV radiation and atmospheric conditions inorganic coloured pigments;
The content of volatile organic compounds VOC: cat. A/c. The product contains less than 40 g/l VOC;
Consistency: thixotropic;
Colours: natural white and colours from KABE colour chart and selected colours from the NCS colour chart or according to a sample provided (possible to obtain using inorganic pigments);
Gloss level: matt;
Average coverage: approx. 0.25 l/m^2;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Relative diffusion resistance for the layer with a thickness of 150 µm: S_d = 0.04 m (standard requirement: $S_d \leq 2.0$ m);
Surface absorption coefficient: w = 0.05 kg/m^2 • h$^{0.5}$ (standard requirement: w ≤ 0.5 kg/m^2 • h$^{0.5}$).
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: The substrate should be clean, degreased, dry and sound/stable, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with **KOMBI FINISZ** levelling and smoothing compound. Small unevenness can be smoothed right away with **KOMBI FINISZ** levelling and smoothing compound. An absorbent substrate should be primed with an adequate product before applying base coats and/or levelling compounds. If the paint is applied on new mineral substrates (e.g., concrete, lime render, cement render, cement-lime render) – a minimum 2-week curing period is required.
PRIMING: A mineral substrate should be primed with **NOVALIT GF** before applying the paint. The curing period of the product applied to the substrate before applying the paint is about 12 hours. Note: Substrates with low wettability (such as plastic-based renders or dispersion paint coatings) should not be primed and should be only washed with water and the **CLEANFORCE** product.
PAINT PREPARATION: The packaging contains a ready-to-use product – do not dilute.
APPLICATION: The paint should be applied on the substrate with a paint brush or roller until the expected layer thickness is obtained. It is recommended to use a special paint roller for façade paints made of woven polyamide with a bristle length of min. 18 mm.
DRYING: Typical setting (hardening) time of the paint applied onto a substrate (at +20°C, 55% RH) is about 24-48 hours. Note: At low temperatures and high air humidity, the paint drying time will be longer. Protect the fresh paint coating against precipitation and condensation until it dries completely.
USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and setting should take place on dry days at temperatures between +5°C and +25°C. Tools should be cleaned with water immediately after finishing work. Application during direct exposure to sunlight, in strong winds or high air humidity is not recommended. In order to protect the completely unset paint coating against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

LAZURE

NOVALIT L

Polysilicate
lazure paint

MAIN ADVANTAGES

- High decorative value of lazure coating
- Mineral nature
- Low-alkaline (pH 8-9.5)
- Increased resistance to adverse weather conditions
- Resistance to changes of weather conditions during application and setting
- Increased resistance to soiling
- Micro-porous texture, which assures high vapour permeability
- Low surface absorption
- For use on both mineral substrates and plastic-based renders/plasters
- Anti-fungal and algae protection (reduces the growth of algae and fungi)

AREAS OF APPLICATION

A mineral lazure paint intended for applying decorative, lazure (not fully covering) paint coatings outside buildings. It is especially recommended for emphasizing the attractive substrate texture and colour merging of the whole façade. It can be applied on mineral substrates (e.g., traditional lime renders, lime-cement renders and cement renders, as well as thin-coat mineral renders, silicate renders, polysilicate renders) and also substrates covered with plastic-based renders/plasters. The **NOVALIT L** lazure paint is produced based on specially modified potassium water glass in accordance with innovative, low-alkaline polysilicate technology. Absorbent mineral substrates should be primed with **NOVALIT GF** before applying the paint.

TECHNICAL DATA

Base binder: special modified potassium water glass;
Pigments: resistant to UV radiation and atmospheric conditions inorganic coloured pigments;
The content of volatile organic compounds VOC: cat. A/c. The product contains less than 40 g/l VOC;
Density: approx. 1.20 g/cm^3;
Colours: colours from KABE colour chart and selected colours from the NCS colour chart or according to a sample provided (possible to obtain using inorganic pigments);
Thinner: water;
Average coverage: approx. 0.15 l/m^2;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Relative diffusion resistance of the layer with a thickness of 150 µm: S_d = 0.04 m (standard requirement: $S_d \le 2.0$ m);
Surface absorption coefficient: w = 0.05 kg/m^2 • h$^{0.5}$ (standard requirement: w ≤ 0.5 kg/m^2 • h$^{0.5}$).
Packaging: Disposable plastic packaging containing 5 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, dry and clean, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with **KOMBI FINISZ** levelling and smoothing compound. Small unevenness can be smoothed with **KOMBI FINISZ** levelling and smoothing compound. An absorbent substrate should be primed with an adequate product before applying base coats and/or levelling compounds. If the paint is applied on new mineral substrates (e.g., concrete, lime render, cement render, cement-lime render) – a minimum 2-week curing period is required.
PRIMING: A mineral substrate should be primed with **NOVALIT GF** before applying the paint. The curing period of the product applied to the substrate before applying the paint is about 12 hours. Note: Substrates with low wettability (such as plastic-based renders or dispersion paint coatings) should not be primed and should be only washed with water and the **CLEANFORCE** product.
PAINT PREPARATION: The packaging contains a ready-to-use product. If necessary, add a small amount of clean water (by adding to the first painting max. 10% of volume and to the second one max. 5%). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: The paint should be applied on the substrate in 1-2 layers with a brush, roller, sponge or by spraying. It is recommended to use a special paint roller for façade paints made of woven polyamide with a bristle length of min. 18 mm. If necessary, the subsequent paint coatings may differ in colour, coverage (amount of filler) and application technique. The fresh paint coating is easy to process by using the aforementioned tools, while the final effect depends only on the skills and imagination of the worker. Note: In order to assure the best decorative effect, it is recommended to apply lazure paint on the coating made by using one **NOVALIT F** paint layer – option B.

Recommended application methods	Colourless NOVALIT GF primer	NOVALIT F façade paint	NOVALIT T render coloured in the mass	NOVALIT L lazure paint
A	1 layer	–	–	1 or 2 layers
B	1 layer	1 layer	–	1 or 2 layers
C	–	–	1 layer	1 or 2 layers

DRYING: The setting (hardening) time of the paint applied onto a substrate is approx. 24 hours (at +20°C, 55% RH). Note: At low temperatures and high air humidity, the paint setting time will be longer. Protect the fresh paint coating against precipitation and condensation until it dries completely.
USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and setting should take place on dry days at temperatures above +5°C. Tools should be cleaned with water immediately after finishing work. Application during direct exposure to sunlight, in strong winds or high air humidity is not recommended. In order to protect the completely unset paint coating against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.
ADDITIONAL OPTIONS: In order to increase the resistance of the paint coat to the growth of algae and fungi (especially while renovating EWI systems and while painting façades in shaded places with increased humidity and with a high concentration of plants), it is recommended to apply a special protective agent along with the paint (additional service).

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl

The product meets the requirements of the following standard: ZN-IV/7/2005

KABE Swiss Group

SILICATE

CALSILIT F

Silicate paint with an addition of hydrophobising substances

MAIN ADVANTAGES

- Mineral nature
- Resistance to adverse weather conditions
- Exceptional vapour permeability
- Increased resistance to soiling
- Effective damp-proofing
- Very high coverage
- Natural resistance to algae and fungal growth

AREAS OF APPLICATION

A high-quality topcoat paint based on potassium water glass intended for applying paint coatings outside buildings, including in **KABE THERM EPS** EPS-based EWI system and in **KABE THERM MW** EWI-system based on mineral wool. The product is intended for use only on mineral substrates (such as: concrete, traditional lime, cement-lime and cement renders, as well as thin-coat mineral, silicate renders). It is especially recommended for primary painting of mineral substrates and for use at damp places on contemporary and historical buildings. It creates a fully mineral, vapour permeable coating, allowing for free evaporation of moisture from walls and, at the same time, due to the application of hydrophobising substances, it efficiently protects the façade against precipitation.
A substrate should be primed with **CALSILIT GF** before applying the paint. Note: Due to the product specificity, it is not recommended to use it on gypsum substrates (i.e., stucco).

TECHNICAL DATA

Base binder: potassium water glass;
Pigments: resistant to UV radiation and atmospheric conditions inorganic coloured pigments;
The content of volatile organic compounds VOC: cat. A/c. The product contains less than 40 g/l VOC;
Density: approx. 1.53 g/cm^3;
Colours: white and colours from KABE colour chart and selected colours from the NCS colour chart (possible to obtain using inorganic pigments);
Gloss level: matt;
Thinner: water;
Average coverage: approx. 0.33 l/m^2 (with double painting on a smooth substrate);
Temperature of application (air and substrate): from +8°C to +25°C;
Relative air humidity: ≤ 75%;
Relative diffusion resistance of the layer with a thickness of 150 µm: S_d = 0.02 m (standard requirement: $S_d \leq 2.0$ m);
Surface absorption coefficient: w = 0.07 $kg/m^2 \cdot h^{0.5}$ (standard requirement: w ≤ 0.5 $kg/m^2 \cdot h^{0.5}$).
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be mineral, sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with **KOMBI FINISZ** levelling and smoothing compound. Small unevenness can be smoothed right away with **KOMBI FINISZ** levelling and smoothing compound. An absorbent substrate should be primed with an adequate product before applying base coats and/or levelling compounds. If the paint is applied on new mineral substrates (e.g., concrete, lime render, cement render, cement-lime render) – a minimum 2-week curing period is required. Before using the paint in the **KABE THERM SM** and **KABE THERM SM RENO,** as well as **KABE THERM MW** EWI systems, all layers should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). The silicate paint can be applied to thin-coat mineral render only after min. 7 days of curing (at +20°C and 65% RH). Note: Directly before applying the paint, the surfaces made of materials susceptible to alkalis (i.e. wood, metal, glass or clinker brick) should be protected against splashing.
PRIMING: A substrate should be primed with **CALSILIT GF** before applying the paint. The curing period of the product applied to the substrate before applying the paint is about 24 hours.
PAINT PREPARATION: The packaging contains a ready-to-use product. If necessary, to dilute the paint, add a small amount of **CALSILIT GF** or water (by adding to the first painting max. 10% of volume and to the second one max. 5%). Quantity of added water or product may vary depending on the substrate type, drying conditions and application method.
APPLICATION: The paint should be applied on the substrate in two layers with a brush, roller or by spraying (including also "airless" method). The second paint layer should be applied only after the first one dries and sets completely, i.e. after min. 24 hours. It is recommended to use a special paint roller for façade paints made of woven polyamide with a bristle length of min. 18 mm. Use mechanical spraying only in windless weather. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Nozzle	Pressure [bar]	Filter [mesh]	Thinning [%]	Coverage [l/min]
WAGNER	ProSpray 3.21	0552-519	200	60	10-20	1.25
TITAN	Titan 450e	661-519	200	60	10	1.25
GRACO	UltraMax II 795	PAA621	200	60	5	3.6

DRYING: Typical setting time for one layer of paint applied onto a substrate is approx. 3 hours (at air temperature +20°C, 55% RH). Complete setting (hardening) of paint coating takes place after min. 24 hours. Note: At low temperatures and high air humidity, the paint drying time will be longer. Protect the fresh paint coating against precipitation and condensation until it sets completely.
USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and setting should take place on dry days at temperatures between +8°C and +25°C. Tools should be cleaned with water immediately after finishing work. Application during direct exposure to sunlight, in strong winds or high air humidity is not recommended. In order to protect the completely unset paint coating against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds. Note: Low or high temperature, as well as high air humidity, may have a negative impact on the shade of the paint coat. Both too high and too low temperature during paint application and drying may lead to insufficient setting of the binder. As a result, further contact with water may cause washing out of the unset potassium water glass, which may lead to the formation of durable damp patches or discolouration.
ADDITIONAL OPTIONS: If paint is applied on substrates with cracks with a width of up to 0.3 mm (e.g., small shrinking cracks of the render coat), it is recommended to use paint reinforced with microfibres for the first painting (an option available on request).

The product meets the requirements of the following standard: PN-C-81913:1998
National Technical Assessment No. AT-15-8732/2016
European Technical Assessment No. ETA-16/0079/2016

ACRYLIC

BUGOFLEX

Dispersion, acrylic
façade paint

MAIN ADVANTAGES

- Resistance to adverse weather conditions
- Low surface absorption
- Increased resistance to substrate alkalinity
- Wide range of colours
- Very high coverage
- For use on both mineral substrates and plastic-based renders/plasters

AREAS OF APPLICATION

A matt topcoat paint intended for applying paint coatings outside buildings, including in the **KABE THERM AVANT** and **KABE THERM ELASTO** EPS-based EWI systems. It is used to paint on any mineral substrate (such as concrete, cement render and cement-lime render) and on substrates covered with well-set plastic-based renders/plastics. It creates a hydrophobic and flexible coating of high resistance to weather conditions (such as precipitation, solar radiation, extreme temperatures and erosion), as well as soiling process. Because of the high level of coverage, **BUGOFLEX** paint is perfect for primary, as well as renovation painting. An absorbent mineral substrate should be primed with **BUDOGRUNT ZG** before applying the paint. Note: If a renovation paint coating is applied onto old acrylic renders, it is recommended to apply **NOVALIT F** polysilicate paint due to low surface tension while drying.

TECHNICAL DATA

Base binder: co-polymer binder;
Pigments: resistant to UV radiation and atmospheric conditions, inorganic and organic coloured pigments;
The content of volatile organic compounds VOC: cat. A/c. The product contains less than 40 g/l VOC;
Density: approx. 1.50 g/cm^3;
Colours: white and colours according to KABE and NCS colour charts or a sample provided;
Gloss level: matt;
Thinner: water;
Average coverage: approx. 0.25 l/m^2 (with double painting on a smooth substrate);
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Relative diffusion resistance for the layer with a thickness of 150 µm: S_d = 0.54 m (standard requirement: $S_d \leq 2.0$ m);
Surface absorption coefficient: w = 0.03 kg/m^2 • h$^{0.5}$
(standard requirement: w ≤ 0.5 kg/m^2 • h$^{0.5}$).
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost.
Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates (from 5 mm to 15 mm), first use levelling compounds, and then level out the wall surface with **KOMBI FINISZ** base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI FINISZ** base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG** before applying levelling compounds or base coats. If the paint is applied on new mineral substrates (i.e. concrete, cement render and cement-lime render) – a minimum 4-week curing period is required. Before using the paint in the **KABE THERM AVANT** and **KABE THERM ELASTO** EWI systems, all layers should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). An acrylic paint can be applied to thin-coat acrylic render only after 48 hours of curing (at +20°C and 65% relative humidity).
PRIMING: Absorbent or dusty (strongly chalking) substrates should be primed with **BUDOGRUNT ZG** before applying the paint. The curing period of the product applied to the substrate before applying the paint is about 24 hours. Note: Substrates with low wettability (such as plastic-based renders or dispersion paint coatings) should not be primed and should be only washed with water and the **CLEANFORCE** product.
PAINT PREPARATION: The packaging contains a ready-to-use product. If necessary, add a small amount of water (by adding to the first painting max. 10% of volume and to the second one max. 5%). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: The paint should be applied on the substrate in two layers with a brush, roller or by spraying (including also “airless” method). The second paint layer should be applied only after the first one dries completely, i.e. after min. 3-4 hours. It is recommended to use a special paint roller for façade paints made of woven polyamide with a bristle length of min. 18 mm. Use mechanical spraying only in windless weather. Note: Because of the special filling (filler granulation), it is recommended to perform tests before the application of mechanical spraying (optimum selection of the nozzle diameter).

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Nozzle	Pressure [bar]	Filter [mesh]	Thinning [%]	Coverage [l/min]
GRACO	UltraMax II 795	PAA621	170	60	5	3.6

DRYING: Typical drying time for one layer of paint applied onto a substrate is approx. 3 hours (at air temperature +20°C, 55% RH). Note: At low temperatures and high air humidity, the paint drying time will be longer. Protect the fresh paint coating against precipitation and condensation until it dries completely.
USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and drying should take place on dry days at temperatures between +5°C and +25°C. Tools should be cleaned with water immediately after finishing work. Application during direct exposure to sunlight, in strong winds or high air humidity is not recommended. In order to protect the completely undried paint coating against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.
ADDITIONAL OPTIONS: If paint is applied on substrates with cracks with a width of up to 0.3 mm (e.g., small shrinking cracks of the render coat), it is recommended to use paint reinforced with microfibres for the first painting (an option available on request). In order to increase the resistance of the paint coat to the growth of algae and fungi (especially while renovating EWI systems and while painting façades in shaded places with increased humidity and with a high concentration of plants), it is recommended to apply a special protective agent along with the paint (additional service).

KABE Swiss Group

ACRYLIC

AKRYLATEX

Dispersion, acrylic paint for painting concrete structures and pedestals

MAIN ADVANTAGES

- Resistance to adverse weather conditions
- Delayed concrete and reinforced concrete corrosion process
- Damp-proofing
- Increased resistance to substrate alkalinity
- Wide range of colours
- For use on both mineral substrates and plastic-based renders/plasters

AREAS OF APPLICATION

A dispersion topcoat paint intended for applying paint coatings outside buildings, including in **KABE THERM ELASTO** and **KABE THERM RENO** EPS-based EWI systems. It is especially recommended for primary and renovation painting of all concrete and reinforced concrete substrates, such as flyovers, industrial halls, office buildings, warehouses, cooling towers, chimneys, asbestos and cement boards, cement and fibre boards, cement roof tiles, concrete fencing, as well as cornices and pedestal parts of the buildings. It creates a flexible and tight coating of high resistance to adverse weather conditions (such as precipitation, temperature changes, solar radiation), as well as to soiling process. As it does not absorb water, it stabilizes the moisture content in the external concrete layer. Due to the very low permeability of carbon dioxide (CO_2), it effectively inhibits the process of concrete and reinforced concrete carbonization. It is used to paint on any mineral substrate, acrylic renders and on substrates covered with well-set plastic-based renders/plasters. Absorbent substrates should be primed with **BUDOGRUNT ZG** before applying the paint.
Note: If a renovation paint coating is applied onto old acrylic renders, it is recommended to apply **NOVALIT F** polysilicate paint due to low surface tension while drying.

TECHNICAL DATA

Base binder: co-polymer binder;
Pigments: resistant to UV radiation and atmospheric conditions, inorganic and organic coloured pigments;
The content of volatile organic compounds VOC: cat. A/c. The product contains less than 40 g/l VOC;
Density: approx. 1.45 g/cm^3;
Colours: white and colours according to KABE and NCS colour charts or a sample provided;
Gloss level: matt;
Thinner: water;
Average coverage: approx. 0.22 l/m^2 (with double painting on a smooth substrate);
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;

Relative diffusion resistance of the layer with a thickness of 150 µm: $S_d = 0.9$ m (standard requirement: $S_d \leq 2.0$ m);
Relative CO_2 diffusion resistance: $S_d = 63.5$ m;
Surface absorption coefficient: $w = 0.006$ kg/m^2 • h$^{0.5}$
(standard requirement: $w \leq 0.5$ kg/m^2 • h$^{0.5}$).
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost.
Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates (from 5 mm to 15 mm), first use levelling compounds, and then level out the wall surface with **KOMBI HYDRO STOP** or **KOMBI FINISZ** base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI HYDRO STOP** or **KOMBI FINISZ** adhesive/base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG** before applying levelling compounds or base coats. If the paint is applied on new mineral substrates (i.e. concrete, cement render and cement-lime render) – a minimum 4-week curing period is required. Before using the acrylic paint in the **KABE THERM AVANT** and **KABE THERM ELASTO** EWI systems, all base coats should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). The acrylic paint can be applied onto thin-coat acrylic render only after min. 48 hours of curing, while the mineral render after min. 7 days of curing (at +20°C and 65% RH).
PRIMING: A substrate should be primed with **BUDOGRUNT ZG** before applying the paint. The curing period of the product applied to the substrate before applying the paint is about 24 hours. Note: Substrates with low wettability (such as plastic-based renders or dispersion paint coatings) should not be primed and should be only washed with water and the **CLEANFORCE** product.
PAINT PREPARATION: The packaging contains a ready-to-use product. If necessary, add a small amount of water (by adding to the first painting max. 10% of volume and to the second one max. 5%). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: The paint should be applied on the substrate in two layers with a brush, roller or by spraying (including also "airless" method). The second paint layer should be applied only after the first one dries completely, i.e. after min. 3-4 hours. It is recommended to use a special paint roller for façade paints made of woven polyamide with a bristle length of min. 18 mm. Use mechanical spraying only in windless weather.

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Nozzle	Pressure [bar]	Filter [mesh]	Thinning [%]	Coverage [l/min]
WAGNER	ProSpray 3.21	0552-519	200	60	5	1.25
TITAN	Titan 450e	661-519	200	60	10	1.25
GRACO	UltraMax II 795	PAA621	170	60	5	3.6
	StMax II 495	PAA519	190	60	10	2.3
		PAA621				

DRYING: Typical drying time for one layer of paint applied onto a substrate is approx. 3 hours (at air temperature +20°C, 55% RH). Note: At low temperatures and high air humidity, the paint drying time will be longer. Protect the fresh paint coating against precipitation and condensation until it dries completely.
USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and drying should take place on dry days at temperatures between +5°C and +25°C. Tools should be cleaned with water immediately after finishing work. Application during direct exposure to sunlight, in strong winds or high air humidity is not recommended. In order to protect the completely undried paint coating against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.
ADDITIONAL OPTIONS: If paint is applied on substrates with cracks with a width of up to 0.3 mm (e.g., small shrinking cracks of the render coat), it is recommended to use paint reinforced with microfibres for the first painting (an option available on request). In order to increase the resistance of the paint coat to the growth of algae and fungi (while renovating EWI systems and while painting façades in shaded places with increased humidity and with a high concentration of plants) it is recommended to apply a special protective agent along with the paint (additional service).

TO BE USED UNDER SILICON PRODUCTS

ARMASIL GT

Primer for silicone renders

MAIN ADVANTAGES

- Improves the render coat adhesion
- Reduces and equalises substrate water absorption
- Ensures high vapour permeability
- Facilitates render application and texture modelling
- Reduces the effect of substrate showing if it is coloured to the render colour
- Features a very good adhesion to both mineral substrates and plastic-based paint coatings
- Reduces the possibility of algae and fungi growth

AREAS OF APPLICATION

A coloured preparation based on acrylic dispersion with the addition of silicone hydrophobising agents intended for proper preparation of the substrate for **ARMASIL T** and **ARMASIL T AKORD** silicone renders. It is used for priming all typical construction substrates outside buildings and reinforced layers in **KABE THERM RENO***, **KABE THERM AVANT*** and **KABE THERM MW*** EWI systems, as well as in the **ARMASIL RSA** renovation anti-cracking system. Intended for use on mineral substrates (e.g., concrete, cement, cement-lime render), as well as on substrates covered with a well-bonded plastic-based paint coating.

TECHNICAL DATA

Base binder: acrylic and silicone binder;
Pigments: inorganic colour pigments;
The content of volatile organic compounds VOC: cat. A/g. The product contains less than 30 g/l VOC;
Density: approx. 1.30 g/cm^3;
Colour: white or tinted to match the colour of the render;
Contents of solids: approx. 44%;
Average coverage: approx. 0.20 l/m^2 (depending on the substrate absorbency);

Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%.
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with finish levelling and smoothing compound. Small unevenness can be smoothed right away using a levelling and smoothing compound. Use the above products according to their technical data sheets. An absorbent substrate should be primed with an adequate product before applying levelling compounds or base coats. If the product is applied on new mineral substrates (i.e. concrete, cement render and cement-lime render) – a minimum 2-week curing period is required.
Before using the product in **KABE THERM RENO**, **KABE THERM AKORD**, **KABE THERM ELASTO** or **KABE THERM MW** EWI systems, all base coats should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Before applying the product, the reinforcing layer has to be fully dried. This can take 3-4 days in typical weather conditions.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. It cannot be diluted.
APPLICATION: The product should be applied on the substrate with a paint brush or roller.
DRYING: The curing period of the product applied to the substrate before applying the render is about 24 hours. Protect the freshly applied coat against precipitation and condensation until it dries completely.
USEFUL HINTS: During the application and drying of the product, rainless weather should prevail, with an air temperature above +5°C. Drying time may be longer due to low temperatures and high relative humidity. If this is the case, it is necessary to wait until the primer dries out completely before applying the render. Tools should be cleaned with water immediately after work is completed. Avoid applying the product on surfaces directly exposed to sunlight or during strong wind. In order to protect the undried product layer against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

* If the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM RENO**, **KABE THERM AVANT** or **KABE THERM MW** systems are used.

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl

European Technical Assessment: ETA-16/0079 and ETA 17/0204
National Technical Assessment No. ICiMB-KOT-2018/0050 edition 2
If the product is used for other purpose than EWI system, it meets the requirements of the PN-C-81906:2003 standard

KABE Swiss Group

TO BE USED UNDER SILICON PRODUCTS

HYDROPOR

Priming and impregnating product for mineral substrates and under silicone façade paints

MAIN ADVANTAGES

- Improves paint coating adhesion
- Reduces and equalises substrate water absorption
- Protects from stains and efflorescences
- Creates a micro-porous coat, allowing for free wall "breathing"
- Has very high penetrating and substrate strengthening properties
- Reduces dustiness
- Does not change the substrate colour
- Features a very good adhesion to both mineral substrates and plastic-based paint coatings

AREAS OF APPLICATION

A modern, colourless product based on small-particle, water-dilutable acrylic and silicone resins. Intended for impregnating all mineral construction substrates outside buildings and for proper preparation of substrates under **ARMASIL F** silicone façade paint. Suitable for hydrophobic impregnation of concrete substrates, lime renders, cement-lime renders and cement renders, cement and fibre boards, walls made of clinker bricks, face bricks, silicate bricks, linings made of sandstone and mineral paint coatings. It can be also applied to prime mineral substrates (e.g., concrete, traditional lime renders, lime-cement renders and cement renders, as well as thin-coat mineral renders), as well as substrates covered with plastic-based paint coating. Note: The product should not be applied on the floor surfaces or for protecting substrates from ground moisture, surface waters or water under pressure.

TECHNICAL DATA

Base binder: acrylic and silicone binder;
The content of volatile organic compounds VOC: cat. A/h. The product contains less than 30 g/l VOC;
Density: approx. 1.05 g/cm^3;
Contents of solids: approx. 10%;
Colour: colourless;
Average coverage: approx. 0.18-0.20 l/m^2 (depending on the substrate absorbency);
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%.
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with **KOMBI FINISZ** levelling and smoothing compound. Small unevenness can be smoothed right away with **KOMBI FINISZ** levelling and smoothing compound. An absorbent substrate should be primed with an adequate product before applying base coats and/or levelling compounds. If the product is applied on new mineral substrates (e.g., concrete, lime render, cement render, cement-lime render) – a minimum 2-week curing period is required.
PRODUCT PREPARATION: Stir thoroughly immediately before use. If necessary, dilute with a small amount of water (by adding to the first painting max. 5% by vol.).
APPLICATION: The product should be applied on the substrate with a brush, roller or by spraying. Very absorbent substrates should be impregnated twice by means of a "wet on wet" method.
DRYING: The curing period of a single layer of the product applied to the substrate before applying the paint is about 12 hours. Protect the freshly applied coat against precipitation and condensation until it dries completely. Note: Full hydrophobic properties are obtained after 7 days.
USEFUL HINTS: During the application and drying of the product, rainless weather should prevail, with an air temperature above +5°C. Drying time may be longer due to low temperatures and high relative humidity. If this is the case, it is necessary to wait until the primer dries out completely before applying a paint. Tools should be cleaned with water immediately after work is completed. Avoid applying the product on surfaces directly exposed to sunlight or during strong wind.

FAÇADE PRODUCTS

TO BE USED UNDER POLYSILICATE (LOW-ALKALINE) PRODUCTS

NOVALIT GT

Primer for polysilicate renders

MAIN ADVANTAGES

- Improves the render coat adhesion
- Reduces and equalises substrate water absorption
- Ensures high vapour permeability
- Reduces the effect of substrate showing if it is coloured to the render colour
- Facilitates render application and texture modelling
- Features a very good adhesion to both mineral substrates and plastic-based paint coatings
- Reduces the possibility of algae and fungi growth

AREAS OF APPLICATION

A coloured product based on low-alkaline polysilicates and a copolymer binder intended for proper preparation of the substrate for **NOVALIT T** and **NOVALIT T AKORD** polysilicate renders. It is used for priming all typical construction substrates outside buildings and reinforced layers in **KABE THERM RENO***, **KABE THERM AVANT*** and **KABE THERM MW*** EWI systems, as well as in the **NOVALIT RSA** renovation anti-cracking system. Intended for use on mineral substrates (e.g., concrete, lime render, cement-lime render and cement render), as well as on substrates covered with a well-bonded plastic-based paint coating.

TECHNICAL DATA

Base binder: special modified potassium water glass and co-polymer binder;
Pigments: inorganic colour pigments;
The content of volatile organic compounds VOC: cat. A/h. The product contains less than 30 g/l VOC;
Density: approx. 1.3 g/cm^3;
Content of solids: min. 44%;
Colour: white or tinted to match the colour of the render;
Average coverage: approx. 0.20 l/m^2 (depending on the substrate absorbency);

Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%.
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with finish levelling and smoothing compound. Small unevenness can be smoothed right away using a levelling and smoothing compound. Use the above products according to their technical data sheets. An absorbent substrate should be primed with an adequate product before applying levelling compounds or base coats. If the product is applied on new mineral substrates (i.e. concrete, cement-lime render and cement render) – a minimum 2-week curing period is required. Before using the product in the **KABE THERM RENO**, **KABE THERM AKORD**, **KABE THERM AVANT** or **KABE THERM MW** EWI systems, all base coats should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Before applying the product, the reinforcing layer has to be fully dried. This can take 3-4 days in typical weather conditions.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. It cannot be diluted.
APPLICATION: The product should be applied on the substrate with a paint brush or roller.
DRYING: The curing period of the product applied to the substrate before applying the render is about 24 hours. Protect the freshly applied coat against precipitation and condensation until it sets completely.
USEFUL HINTS: During the application and setting of the product, rainless weather should prevail, with an air temperature above +5°C. Setting time may be longer due to low temperatures and high relative humidity. If this is the case, it is necessary to wait until the primer sets and hardens completely before applying a render. Tools should be cleaned with water immediately after work is completed. Avoid applying the product on surfaces directly exposed to sunlight or during strong wind. In order to protect the unset product layer against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

* If the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM RENO**, **KABE THERM AVANT** or **KABE THERM MW** systems are used.

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl

European Technical Assessment: ETA-16/0079 and ETA 17/0204
National Technical Assessment No. ICiMB-KOT-2018/0050 edition 2 and AT-15-9417/2014
If the product is used for other purpose than EWI system, it meets the requirements of: PN-C-81906:2003

KABE Swiss Group

TO BE USED UNDER POLYSILICATE (LOW-ALKALINE) PRODUCTS

NOVALIT GF

Priming/impregnating product for polysilicate façade paints

MAIN ADVANTAGES

- Improves paint coating adhesion
- Reduces and equalises substrate water absorption
- Ensures high vapour permeability
- Protects from stains and efflorescences
- Reduces dustiness
- Does not change the substrate colour
- Features a very high adhesion to both mineral substrates and those covered with plastic-based coatings or renders

AREAS OF APPLICATION

A high-quality product based on a small-particle acrylic dispersion with the addition of silicone hydrophobising agents. Intended for the proper preparation of substrates under **NOVALIT F**, **NOVALIT PLAN** and **NOVALIT L** polysilicate façade paints, as well as hydrophobic impregnation of all typical, absorbent construction substrates outside buildings. It can be used to prime mineral substrates (e.g., concrete, traditional lime renders, lime-cement renders and cement renders, as well as thin-coat mineral renders, silicate renders, polysilicate renders) and also substrates covered with well-boded plastic-based paint coating. It is especially recommended for the impregnation of absorbent and weathered concrete substrates, cement screeds, cement renders, cement-lime renders and lime renders, cement and fibre boards and raw surfaces made of bricks, blocks, concrete blocks and other ceramic or silicate materials of that type.

TECHNICAL DATA

Base binder: silicone-acrylic binder;
The content of volatile organic compounds VOC: cat. A/h. The product contains less than 30 g/l VOC;
Density: approx. 1.05 g/cm^3;
Contents of solids: approx. 10%;
Colour: milk-white, colourless after drying;
Average coverage: approx. 0.11-0.20 l/m^2 (depending on the substrate absorbency);

Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%.
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with **KOMBI FINISZ** levelling and smoothing compound. Small unevenness can be smoothed right away with **KOMBI FINISZ** levelling and smoothing compound. An absorbent substrate should be primed with an adequate product before applying base coats and/or levelling compounds. If the product is applied on new mineral substrates (e.g., concrete, lime render, cement render, cement-lime render) – a minimum 2-week curing period is required.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. If necessary, it can be diluted by adding a small amount of water (by adding to the first layer max. 5% by vol.).
APPLICATION: The product should be applied on the substrate with a brush, roller or by spraying. Very absorbent substrates should be impregnated twice by means of a "wet on wet" method.
DRYING: The curing period of the product applied to the substrate before applying the paint is about 12 hours. Protect the freshly applied coat against precipitation and condensation until it dries completely. Note: Full hydrophobic properties are obtained after 7 days.
USEFUL HINTS: During the application and drying of the product, rainless weather should prevail, with an air temperature above +5°C. Drying time may be longer due to low temperatures and high relative humidity. If this is the case, it is necessary to wait until the primer dries out completely before applying a paint. Tools should be cleaned with water immediately after work is completed. Avoid applying the product on surfaces directly exposed to sunlight or during strong wind. In order to protect the undried product layer against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

The product meets the requirements of the following standard: PN-C-81906:2003

TO BE USED UNDER SILICATE PRODUCTS

CALSILIT GT

Primer for silicate renders

MAIN ADVANTAGES

- Mineral nature
- Improves the render coat adhesion
- Reduces and equalises substrate water absorption
- Ensures high vapour permeability
- Reduces the effect of substrate showing if it is coloured to the render colour
- Binds and strengthens the substrate
- Facilitates render application and texture modelling

AREAS OF APPLICATION

Coloured product based on potassium water glass, intended for proper preparation of substrates for **CALSILIT T** and **HISTORICA KMS** silicate renders. To be applied for priming only mineral substrates (such as concrete, lime render, lime-cement render and cement render) outside buildings, including in the **KABE THERM SM** and **KABE THERM SM RENO** EPS-based EWI systems. Note: Do not apply on substrates covered with plastic-based paint coatings or renders.

TECHNICAL DATA

Base binder: potassium water glass;
Pigments: inorganic colour pigments;
The content of volatile organic compounds VOC: cat. A/g. The product contains less than 30 g/l VOC;
Density: approx. 1.40 g/cm^3;
Colour: white or tinted to match the colour of the render;
Average coverage: approx. 0.23 l/m^2 (depending on the substrate absorbency);

Temperature of application (air and substrate): from +8°C to +25°C;
Relative air humidity: ≤ 75%.
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be mineral and sound/stable (without scratches and cracks), degreased, even and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with finish levelling and smoothing compound. Small unevenness can be smoothed right away using a levelling and smoothing compound. Use the above products according to their technical data sheets. An absorbent substrate should be primed with an adequate product before applying base coats and/or levelling compounds. If the product is applied on new mineral substrates (i.e. concrete, cement-lime render and cement render) – a minimum 2-week curing period is required. Before using the product in **KABE THERM SM** and **KABE THERM SM RENO** EWI systems, all base coats should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Note: Directly before applying the product, the elements made of materials susceptible to alkalis (i.e. wood, metal, glass or clinker brick) should be protected against splashing.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. It cannot be diluted.
APPLICATION: The product should be applied on the substrate with a paint brush or roller. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.
DRYING: The curing period of the product applied to the substrate before applying the render is about 24 hours. Protect the freshly applied coat against precipitation and condensation until it sets completely.
USEFUL HINTS: Product application and setting should take place on dry days at temperatures over +8°C. Tools should be cleaned with water immediately after finishing work. Avoid applying the product on surfaces directly exposed to sunlight or during strong wind. In order to protect the unset product layer against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl

The product meets the requirements of the following standard: PN-C-81906:2003
National Technical Assessment No. AT-15-8732/2016

KABE Swiss Group

TO BE USED UNDER SILICATE PRODUCTS

CALSILIT GF

Silicate priming
and strengthening product
for mineral substrates
and under silicate façade paints

MAIN ADVANTAGES

- Mineral nature
- Improves paint coating adhesion
- Reduces and equalises substrate water absorption
- Ensures high vapour permeability
- Binds and strengthens the substrate
- Has very good penetrating properties
- Reduces dustiness
- Does not change the substrate colour

AREAS OF APPLICATION

Product based on potassium water glass intended for strengthening all mineral construction substrates outside and inside of buildings and for proper preparation of the substrate under **CALSILIT F** and **HISTORICA FKZ** silicate façade paints. It is used for surface reinforcement of absorbent and weathered concrete substrates, cement screeds, lime renders, cement-lime renders and cement renders, cement and fibre boards and raw surfaces made of bricks, blocks, hollow blocks and other ceramic or silicate materials of that type. The product is intended for priming only mineral substrates (such as concrete, traditional lime renders, cement-lime renders and cement renders, as well as thin-coat mineral and silicate renders). Note: Do not apply the product on substrates covered with plastic-based paint coatings and renders, as well as on gypsum substrates.

TECHNICAL DATA

Base binder: potassium water glass;
The content of volatile organic compounds VOC: cat. A/h. The product contains less than 40 g/l VOC;
Density: approx. 1.05 g/cm^3;
Content of solids: min. 7%;
Colour: transparent;
Average coverage: approx. 0.20 l/m^2 (depending on the substrate absorbency);

Temperature of application (air and substrate): from +8°C to +25°C;
Relative air humidity: ≤ 75%.
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be mineral and sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent, while existing plastic-based coatings should be removed. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with **KOMBI FINISZ** levelling and smoothing compound. Small unevenness can be smoothed right away with **KOMBI FINISZ** levelling and smoothing compound. An absorbent substrate should be primed with an adequate product before applying base coats and/or levelling compounds. If the product is applied on new mineral substrates (e.g., concrete, lime render, cement render, cement-lime render) – a minimum 2-week curing period is required. Note: Directly before applying the product, the elements made of materials susceptible to alkalis (i.e. wood, metal, glass or clinker brick) should be protected against splashing.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. It cannot be diluted.
APPLICATION: The product should be applied on the substrate with a brush, roller or by spraying. On absorbent substrates, the product should be applied in two layers using "wet on wet" method. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.
DRYING: The curing and hardening period of the product applied to the substrate before applying the paint is about 24 hours. Protect the freshly applied coat against precipitation and condensation until it dries completely. Closed rooms should be ventilated after priming.
USEFUL HINTS: During the application and setting of the product, rainless weather should prevail, with an air temperature above +8°C. Setting time may be longer due to low temperatures and high relative humidity. If this is the case, it is necessary to wait until the primer sets and hardens completely before applying a paint. Tools should be cleaned with water immediately after work is completed. Avoid applying the product on surfaces directly exposed to sunlight or during strong wind. In order to protect the unset product layer against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

TO BE USED UNDER SILICATE-SILICONE PRODUCTS

SiSi GT

Primer
under silicate-
silicone products
and silicone renders

MAIN ADVANTAGES

- Improves the render coat adhesion
- Reduces and equalises substrate water absorption
- Reduces the effect of substrate showing if it is coloured to the render colour
- Facilitates render application and texture modelling
- Features a very good adhesion to both mineral substrates and plastic-based paint coatings
- Reduces the possibility of algae and fungi growth

AREAS OF APPLICATION

Coloured product intended for proper preparation of the substrate for **SiSi AVANT** silicate-silicone and **SILCO T AVANT** silicone renders. For priming of all typical construction substrates outside buildings, including reinforcing coat in the **KABE THERM AVANT*** and **KABE THERM MW** EWI systems. Intended for use both on mineral substrates (e.g., concrete, cement, cement-lime render), as well as on substrates covered with a well-bonded plastic-based paint coating. On new mineral substrates, a 2-week curing period is required before applying the product.

TECHNICAL DATA

Base binder: co-polymer binder;
Pigments: organic and inorganic colour pigments;
The content of volatile organic compounds VOC: cat. A/g. The product contains less than 30 g/l VOC;
Colour: white or tinted to match the colour of the render;
Average coverage: approx. 0.20 l/m^2 (depending on the substrate absorbency);
Density: 1.35 g/cm^3;
Contents of solids: approx. 60%;

Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates (from 5 mm to 15 mm), first use levelling compounds, and then level out the wall surface with **KOMBI** adhesive/base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI** adhesive/base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG** (outdoors) / **BUDOGRUNT WG** (indoors) before applying levelling compounds or base coats. If the product is applied on new mineral substrates (i.e. concrete, cement render and cement-lime render) – a minimum 2-week curing period is required. Before using the product in the **KABE THERM AVANT** or **KABE THERM MW** EWI systems, all base coats should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Before applying the product, the reinforcing layer has to be fully dried. This can take 3-4 days in typical weather conditions.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. It cannot be diluted.
APPLICATION: The product should be applied on the substrate with a paint brush or roller.
DRYING: The curing period of the product applied to the substrate before applying the render is about 24 hours. Protect the freshly applied coat against precipitation and condensation until it dries completely. Closed rooms should be ventilated after priming.
USEFUL HINTS: During the application and drying of the product, rainless weather should prevail, with an air temperature above +5°C. Drying time may be longer due to low temperatures and high relative humidity. If this is the case, it is necessary to wait until the primer dries out completely before applying the render. Tools should be cleaned with water immediately after work is completed. Avoid applying the product on surfaces directly exposed to sunlight or during strong wind. In order to protect the undried product layer against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM AVANT** or **KABE THERM MW** systems are used.

KABE Swiss Group

TO BE USED UNDER ACRYLIC PRODUCTS

PERMURO GT

Primer for acrylic renders

MAIN ADVANTAGES

- Improves the render coat adhesion
- Reduces and equalises substrate water absorption
- Reduces the effect of substrate showing if it is coloured to the render colour
- Facilitates render application and texture modelling
- Features a very good adhesion to both mineral substrates and plastic-based paint coatings
- Reduces the possibility of algae and fungi growth

AREAS OF APPLICATION

A coloured product based on acrylic dispersion and mineral fillers intended for the proper preparation of substrates for **PERMURO** acrylic renders (i.e. for **PERMURO**, **PERMURO AVANT**, **PERMURO AKORD**, **PERMURO ROLL RENDER** and **PERMURO W**). For priming of all typical construction substrates outside and inside buildings, including reinforcing layer in **KABE THERM RENO***, **KABE THERM AVANT*** EWI systems. Intended for use both on mineral substrates (e.g., concrete, cement, cement-lime render), as well as on substrates covered with a well-bonded plastic-based paint coating. On new mineral substrates, a 2-week curing period is required before applying the product.

TECHNICAL DATA

Base binder: co-polymer binder;
Pigments: organic and inorganic colour pigments;
The content of volatile organic compounds VOC: cat. A/g. The product contains less than 30 g/l VOC;
Colour: white or tinted to match the colour of the render;
Average coverage: approx. 0.20 l/m^2 (depending on the substrate absorbency);
Density: 1.35 g/cm^3;
Contents of solids: approx. 60%;

Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates (from 5 mm to 15 mm), first use levelling compounds, and then level out the wall surface with **KOMBI** adhesive/base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI** adhesive/base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG** (outdoors) / **BUDOGRUNT WG** (indoors) before applying levelling compounds or base coats. If the product is applied on new mineral substrates (i.e. concrete, cement render and cement-lime render) – a minimum 2-week curing period is required. Before using the product in **KABE THERM RENO** and **KABE THERM AKORD**, **KABE THERM ELASTO**, **KABE THERM AVANT** EWI systems, all base coats should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Before applying the product, the reinforcing layer has to be fully dried. This can take 3-4 days in typical weather conditions.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. It cannot be diluted.
APPLICATION: The product should be applied on the substrate with a paint brush or roller.
DRYING: The curing period of the product applied to the substrate before applying the render is about 24 hours. Protect the freshly applied coat against precipitation and condensation until it dries completely. Closed rooms should be ventilated after priming.
USEFUL HINTS: During the application and drying of the product, rainless weather should prevail, with an air temperature above +5°C. Drying time may be longer due to low temperatures and high relative humidity. If this is the case, it is necessary to wait until the primer dries out completely before applying the render. Tools should be cleaned with water immediately after work is completed. Avoid applying the product on surfaces directly exposed to sunlight or during strong wind. In order to protect the undried product layer against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM RENO** and **KABE THERM AVANT** systems are used.

TO BE USED UNDER ACRYLIC PRODUCTS

MARMURIT GT

Primer for mosaic renders

MAIN ADVANTAGES

- Improves the render coat adhesion
- Reduces and equalises substrate water absorption
- Reduces the effect of substrate showing if it is coloured to the render colour
- Facilitates render application and texture modelling
- Features a very good adhesion to both mineral substrates and plastic-based paint coatings

AREAS OF APPLICATION

Coloured product based on an acrylic dispersion and mineral fillers intended for proper preparation of substrates for **MARMURIT**, **MARMURIT COLORATO** and **MARMURIT AKORD** mosaic renders. For priming of all typical construction substrates outside and inside buildings, including in EWI systems: **KABE THERM MARMURIT COLORATO / MOZAIKER COLORATO*** and **KABE THERM MARMURIT / MOZAIKER***. For use on mineral substrates (e.g., concrete, cement, cement-lime render) and on substrates covered with a well-bonded plastic-based paint coating. Note: An absorbent substrate requires priming with **BUDOGRUNT ZG** (outside) or **BUDOGRUNT WG** (inside) before applying the product.

TECHNICAL DATA

Base binder: co-polymer binder;
Pigments: organic and inorganic colour pigments;
The content of volatile organic compounds VOC: cat. A/g. The product contains less than 30 g/l VOC;
Colour: white or tinted to match the colour of the render;
Average coverage: approx. 0.20 l/m^2 (depending on the substrate absorbency);
Density: approx. 1.4 g/cm^3;
Contents of solids: approx. 55%;

Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%.
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates (from 5 mm to 15 mm), first use filling compounds, and then level out the wall surface with **KOMBI** or **KOMBI HYDRO STOP** adhesive/base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI** or **KOMBI HYDRO STOP** adhesive/base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG** (outdoors) / **BUDOGRUNT WG** (indoors) before applying levelling compounds or base coats. If the product is applied on new mineral substrates (i.e. concrete, cement render and cement-lime render) – a minimum 2-week curing period is required.
PRIMING: Absorbent substrates should be primed first with **BUDOGRUNT ZG** (outside) or **BUDOGRUNT WG** (inside).
PRODUCT PREPARATION: The packaging contains a ready-to-use product. It cannot be diluted.
APPLICATION: The product should be applied on the substrate with a paint brush or roller.
DRYING: The curing period of the product applied to the substrate before applying the render is about 24 hours. Protect the freshly applied coat against precipitation and condensation until it dries completely. Closed rooms should be ventilated after priming.
USEFUL HINTS: During the application and drying of the product, rainless weather should prevail, with an air temperature above +5°C. Drying time may be longer due to low temperatures and high relative humidity. If this is the case, it is necessary to wait until the primer dries out completely before applying the render. Tools should be cleaned with water immediately after work is completed. Avoid applying the product on surfaces directly exposed to sunlight or during strong wind. In order to protect the undried product layer against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM MARMURIT / MOZAIKER** or **KABE THERM MARMURIT COLORATO / MOZAIKER COLORATO** system are used.

European Technical Assessment No. ETA 18/0211
National Technical Assessment No. ICiMB-KOT-2018/0051 edition 1
The product meets the requirements of PN-C-81906:2003 standard

KABE Swiss Group

TO BE USED UNDER ACRYLIC PRODUCTS

BUDOGRUNT ZG

Universal primer recommended
for acrylic façade paints

MAIN ADVANTAGES

- Improves paint coating adhesion
- Reduces and equalises substrate water absorption
- Excellent penetrating properties
- Strengthens the substrate surface
- Reduces dustiness

AREAS OF APPLICATION

A universal product based on water-dilutable acrylic dispersions, intended for proper preparation of the substrate before application of paint coatings, mineral renders and ceramic claddings. It is used for priming all typical absorbent construction substrates present outside buildings, including in the **KABE THERM RENO*** EWI system. It is especially recommended for substrate priming before applying **BUGOFLEX** and **AKRYLATEX** acrylic façade paints, as well as **MARMURIT**, **MARMURIT COLORATO** and **MOZAIKER AKORD**, **MOZAIKER AKORD COLORATO** mosaic renders. To be applied on mineral substrates (such as concrete, aerated concrete, cement render and cement-lime render). Note: The product should not be used for priming substrates with low wettability (such as dispersion paint coatings and plastic-based renders).

TECHNICAL DATA

Base binder: co-polymer binder;
The content of volatile organic compounds VOC: cat. A/h. The product contains less than 30 g/l VOC;
Colour: milk-white, colourless after drying;
Average coverage: approx. 0.20 l/m^2 (depending on the substrate absorbency);
Density: approx. 1.05 g/cm^3;
Content of solids: min. 10%;

Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates (from 5 mm to 15 mm), first use levelling compounds, and then smooth out the whole surface with **KOMBI FINISZ** or **KOMBI HYDRO STOP** base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI FINISZ** or **KOMBI HYDRO STOP** base coat. An absorbent substrate should be primed with **BUDOGRUNT ZG** before applying levelling compounds or base coats. If the product is applied on new mineral substrates (i.e. concrete, cement render and cement-lime render) – a minimum 2-week curing period is required.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. It cannot be diluted.
APPLICATION: The product should be applied on the substrate in one or two layers (depending on the substrate water absorbency) with a brush, roller or by spraying, using the "wet on wet" method. Use mechanical spraying only in windless weather. Note: The applied product should completely penetrate the substrate, but, at the same time, should not create a tight coating on its surface (film) or stains.
DRYING: The curing period of the product applied to the substrate before applying the paint is about 24 hours. Protect the fresh coating against precipitation and condensation until it dries completely.
USEFUL HINTS: Product application and drying should take place on dry days at temperatures over +5°C. Tools should be cleaned with water immediately after completing work. Avoid applying the product on surfaces directly exposed to sunlight or during strong wind.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM RENO** system are used

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

National Technical Assessment No. ICiMB-KOT-2018/0050 edition 2
The product meets the requirements of the following standard: PN-C-81906:2003;
It holds the Hygienic Certificate of the Polish National Institute of Public Health (PZH)

TO BE USED UNDER ACRYLIC PRODUCTS

KABE SPIN

Special base paint
for poor-adhesion
substrates

MAIN ADVANTAGES

- Ensures high adhesion to difficult and smooth substrates
- Allows for applying one finish paint on various substrates
- Reduces the corrosion of steel components
- Water-dilutable
- One-layer application
- Easy and safe to apply
- For indoor and outdoor use

AREAS OF APPLICATION

Special paint for performing base coat on all substrates with poor adhesion outside and inside buildings. It is especially recommended for increasing adhesion of Farby KABE dispersion paints prior to application on extremely smooth and differentiated substrates. To be applied on substrates made of: wood, wood-based materials, galvanised metals (except metals that undergo passivation), steel (including zinc-plated), plastics and PVC.

TECHNICAL DATA

Base binder: co-polymer binder;
Pigments: titanium white;
The content of volatile organic compounds VOC: cat. A/g. The product contains less than 30 g/l VOC;
Density: 1.35-1.40 g/cm^3;
pH: 7.0-7.5;
Content of solids: 59%;
Colour: white;
Thinner: water;
Average coverage: approx. 0.10-0.15 l/m^2. The real consumption per surface area depends on many factors, such as water absorption, roughness and application method;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 80%;
Packaging: Disposable plastic packaging containing 1 litre of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable, degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth the substrate should be cleaned mechanically, washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., dust, dirt, rust, loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Unevenness or holes present in the substrate should be filled in with filling compounds applicable for the given type of substrate, taking into account the relevant curing period before paint application. If it is applied onto an old paint coating, it is recommended to perform the adhesion test first. If the product is applied on fresh mineral substrates (such as concrete, cement render and cement-lime render), a 4-week curing period is required.
PRODUCT PREPARATION: Stir thoroughly immediately before use. If required to dilute it, add a small amount of water (max. to 10% of volume).
APPLICATION: The paint should be applied on the substrate in a uniform and thick layer with a brush, roller or by spraying (including the "airless" method). The coating made should cover the substrate completely and its thickness should be approx. 70 µm if wet or 40 µm if dry. Use mechanical spraying only in windless weather.
DRYING: The curing period of one paint layer applied on the substrate (from +5°C to +25°C, below 80% RH) prior to topcoat paint application is about 24 hours. After painting, closed rooms should be ventilated until the specific smell disappears.
USEFUL HINTS: While working and directly after completion, the painted surface should be protected against too quick drying and precipitation until it dries completely. As far as untypical substrates are concerned, prior tests are recommended. Tools should be cleaned with water immediately after use.

The product meets the requirements of the following standard: PN-C-81906:2003

KABE Swiss Group

TO BE USED UNDER MINERAL PRODUCTS

MINERALIT GT

Primer for mineral renders

MAIN ADVANTAGES

- Improves the render coat adhesion
- Reduces and equalises substrate water absorption
- Reduces the effect of substrate showing through
- Facilitates render application and texture modelling

AREAS OF APPLICATION

Coloured product based on an acrylic dispersion and mineral fillers intended for proper preparation of substrates for **MINERALIT T** and **MINERALIT T AKORD** mineral thin-coat renders. It is used for priming reinforcing coat in EPS-based EWI systems: **KABE THERM SM** and **KABE THERM SM RENO** *, **KABE THERM AVANT*** and in EWI systems based on mineral wool: **KABE THERM MW***, **KABE THERM IN MW***, as well as for priming lamella mineral wool in the **KABE THERM SG** EWI system. Intended for use on mineral substrates (e.g., concrete, lime render, cement-lime render and cement render), as well as on substrates covered with a well-bonded plastic-based paint coating.

TECHNICAL DATA

Base binder: co-polymer binder;
Pigments: titanium white;
The content of volatile organic compounds VOC: cat. A/g. The product contains less than 30 g/l VOC;
Colour: white;
Average coverage: approx. 0.20 l/m^2 (depending on the substrate absorbency);
Density: approx. 1.55 g/cm^3;
Contents of solids: approx. 60%;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%.
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Note: The product must be kept out of the reach of children.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with finish levelling and smoothing compound. Small unevenness can be smoothed right away using a levelling and smoothing compound. Use the above products according to their technical data sheets. An absorbent substrate should be primed with an adequate product before applying levelling compounds or base coats. If the product is applied on new mineral substrates (i.e. concrete, cement-lime render and cement render) – a minimum 2-week curing period is required. Before using the product in **KABE THERM SM** and **KABE THERM SM RENO, KABE THERM AVANT** or **KABE THERM MW** EWI systems, all base coats should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). Before applying the product, the reinforcing layer has to be fully dried. This can take 3-4 days in typical weather conditions.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. If necessary, the product can be diluted by adding a small amount of water (adding max. 10% by vol.). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: The product should be applied on the substrate with a paint brush or roller. In the case of the garage system, a machine application is used with the **MINERALIT T AKORD** mineral spraying render.
DRYING: The curing period of the product applied to the substrate before applying the render is about 24 hours. Protect the freshly applied coat against precipitation and condensation until it dries completely.
USEFUL HINTS: During the application and drying of the product, rainless weather should prevail, with an air temperature and the structure above +5°C. Drying time may be longer due to low temperatures and high relative humidity. If this is the case, it is necessary to wait until the primer dries out completely before applying the render. Avoid applying the product on surfaces directly exposed to sunlight or during strong wind. In order to protect the undried product layer against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds. Tools should be cleaned with water immediately after work is completed.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM SM** and **KABE THERM SM RENO, KABE THERM AVANT** or **KABE THERM MW** and **KABE THERM IN MW** systems are used.

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FOR EPS

DECOVERN

Water-dilutable varnish with mica

MAIN ADVANTAGES

- Highly decorative coating with shiny mica
- Resistance to adverse weather conditions
- Easy and safe to apply
- Possibility of using both on façades and inside buildings

AREAS OF APPLICATION

A water-dilutable, colourless surface varnish based on acrylic dispersion with an addition of small mica flakes. It is intended for providing decorative effect to finished paint coatings and top coats to be found outside and inside buildings. It creates a matt coating with the shiny silver mica, which allows for achieving the impression of traditional, pre-war top coats. To be applied on mineral substrates (such as traditional lime renders, cement-lime renders), as well as all types of thin-coat renders and paint coatings.

TECHNICAL DATA

Base binder: acrylic binder;
The content of volatile organic compounds VOC: cat. A/e. The product contains less than 130 g/l VOC;
Density: approx. 1.0 g/cm^3;
Gloss level: matt;
Colour: colourless with the addition of small mica flakes;
Coverage: approx. 0.2 l/m^2;
Thinner: water;

Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%.
Packaging: Disposable plastic packaging containing 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Note: The product must be kept out of the reach of children.
Shelf life: 6 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, dry and clean, and free of contamination and efflorescence. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. If the varnish is applied on new mineral substrates (e.g., lime render, cement-lime render) – a minimum 4-week curing period is required.
PRIMING: Prior to varnish application, all absorbent substrates should be primed with **BUDOGRUNT ZG** (on façades) or **BUDOGRUNT WG** (in interiors). The curing period of the product applied to the substrate is about 24 hours. Note: Substrates with low wettability (such as plastic-based renders or dispersion paint coatings) should not be primed and should be only washed with a jet of dispersed water with **CLEANFORCE** added.
VARNISH PREPARATION: The packaging contains a ready-to-use product. Directly before use, the product should be slightly mixed, so as not damage the gentle mica flakes. If necessary, the varnish can be diluted by adding a small amount of clean water (by adding to the first and second painting max. 10% by vol.). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: Varnish should be applied on the substrate in 1-2 layers (depending on the assumed decorative effect) by using a paint brush with synthetic bristles. The second layer should be applied after the first one dries. Tools should be cleaned with water immediately after work is completed.
DRYING: Drying time of one varnish layer applied on the substrate is approx. 3-4 hours (depending on the type of substrate and ambient temperature). It dries completely after min. 24 hours. Note: Drying time may be longer due to low temperatures and high relative humidity. Protect the fresh varnish coating against precipitation and condensation until it dries completely.
USEFUL HINTS: The varnish should be applied and set on dry days at air temperatures above +5°C. Avoid applying in direct sunlight or during strong winds. In order to protect the completely undried paint coating against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.

KABE Swiss Group

FOR EPS

SILIKON B

Siloxane
impregnation product

MAIN ADVANTAGES

- Effectively protects the substrate from humidity and aggressive substances contained in the air
- Protects from stains and efflorescences
- Does not reduce the substrate vapour permeability
- Provides high resistance to soiling
- Shows very high penetrating and strengthening properties
- Does not change the substrate colour
- Does not create a coating – it may also be applied on historical buildings

AREAS OF APPLICATION

A colourless, siloxane product for hydrophobic impregnation of all construction substrates with a various level of absorptivity to be found outside and inside buildings. Produced based on small-particle silicone resins ensuring deep penetration and reinforcement of the substrate structure. Intended for impregnation of concrete substrates, lime renders, cement-lime renders and cement renders, cement and fibre boards, walls made of clinker bricks, face bricks, silicate bricks, claddings made of sandstone and mineral paint coatings. Protects the façade against the formation of stains and efflorescences (such as pigment washing out, salt efflorescences) and against algae and fungi growth. Provides high vapour permeability and low surface absorption, as well as high resistance to soiling. Note: The product should not be applied on the floor surfaces or for protecting substrates from ground moisture, surface waters or water under pressure. Do not use in contact with materials susceptible to solvents (such as EPS or bitumens).

TECHNICAL DATA

Base binder: silicone binder;
The content of volatile organic compounds VOC: cat. A/h. The product contains less than 750 g/l VOC;
Density: approx. 0.8 g/cm^3;
Contents of solids: approx. 6%;
Content of organic solvents: approx. 94%;
Colour: colourless;
Average coverage: approx. 0.28-0.52 kg/m^2 (depending on the substrate absorbency);

Temperature of application (air and substrate): from +5°C to +25°C.
Relative air humidity: ≤ 75%.
Packaging: Disposable plastic packaging containing 0.75 kg and 9 kg of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Note: The product contains flammable solvents. Store away from open fire.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g. loose renders or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with finish levelling and smoothing compound. Small unevenness can be smoothed right away with levelling and smoothing compound. Use the above products according to their technical data sheets. An absorbent substrate should be primed with an adequate product before applying base coats and/or levelling compounds. If the product is applied on new mineral substrates (e.g., concrete, lime render, cement render, cement-lime render) – a minimum 2-week curing period is required.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. It cannot be diluted.
APPLICATION: The product should be applied on the substrate with a brush or roller, trying to evenly and thickly cover the whole target surface intended for impregnation. On absorbent substrates, the product should be applied in two layers using "wet on wet" method. Use mechanical spraying only in windless weather.
DRYING: Typical drying time for one layer of product applied onto a substrate is approx. 24 hours (at air temperature +20°C, 55% RH). Protect the freshly applied coat against precipitation and condensation until it dries completely. Note: Full hydrophobic properties are obtained after 7 days.
USEFUL HINTS: During the application and drying of the product, rainless weather should prevail, with an air temperature above +5°C. Drying time may be longer due to low temperatures and high relative humidity. Tools should be cleaned with an appropriate solvent immediately after work is completed. Avoid applying the product on surfaces directly exposed to sunlight or during strong wind.

CLEANFORCE

Universal concentrate
for washing and cleaning

MAIN ADVANTAGES

- Effectively removes dirt and degreases surface
- For outdoor and indoor use
- For use in pressure washers and for manual surface washing
- Highly effective agent in the form of concentrate
- Safe to use water-based biodegradable product

AREAS OF APPLICATION

A product for washing and degreasing of all construction substrates (with the exception of glass) to be found on façades and walls, ceilings and floors inside buildings. It can be used in housing, public utility, educational premises and food industry plants (without a direct contact with food). It is especially recommended for use on substrates before their further renovation with Farby KABE paints or renders. It effectively removes organic soling, such as nicotine and greasy stains, as well as alkaline remnants. It is applied in pressure washers and in other professional washing devices (i.e. sweepers, vacuum cleaners) and for the manual cleaning and washing of surfaces. It is intended for use on mineral substrates and for substrates covered with well-set and bound plastic-based renders/plasters.

TECHNICAL DATA

Appearance: blue liquid
Form: liquid
Concentrate pH: approx. 12-13
Dilution: clean (potable) water;
Density: approx. 1.0 g/dm^3;

Average coverage: approx. 0.08-0.15 l/m^2, depending on absorptivity and roughness of the substrate, method of application and the degree of dilution of the concentrate.
Shelf life: 18 months from the date of production printed on the product packaging.
Storage conditions: store in sealed packaging, in a cool room, but protected from frost.

HOW TO USE

SUBSTRATE PREPARATION: The substrate should be sound/stable and dry. Note: All substrates susceptible to alkalis should be suitably protected before the product is applied. Do not use the product on glass. In case of fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any layers not bonded to the substrate (e.g., loose render or flaked coatings) should be removed.
PRODUCT DILUTION: In normal applications, the concentrate should be diluted with water in the ratio ranging from 1:4 to 1:200 depending on the soiling level. If used in sweepers or industrial vacuum cleaners, the addition of 1-2% concentrate should be used. Remember to perform a washing test prior to each use in order to introduce possible corrections concerning the product concentration.
TEMPERATURE OF APPLICATION (air and substrate): from +5°C to +25°C. Avoid working at high air humidity.
APPLICATION: Surfaces to be cleaned should be sprayed with a previously diluted product, left for a while (from 10 to 15 minutes) to allow the product to work (or possibly support the washing process mechanically by brushing or wiping), finally, the whole surface should be washed with clean water. The subsequent finishing coats may be applied when the washed surface dries completely.
USEFUL HINTS: When using pressure washers with containers, the product has to be poured into the tank and its dosing should be adjusted in accordance with the device user manual, but in the way, which allows for achieving an appropriate concentration. Note: It is recommended to carry out tests on concealed parts of the surface
Surfactants and supporting substances contained in the **CLEANFORCE** cleaning agent are subject to biodegradation in 96% within 14 days.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

BUDOGRUNT SC

Bonding bridge

MAIN ADVANTAGES

- Improves adhesion to substrates with low absorbency
- Shows a high water resistance
- Easy to apply

AREAS OF APPLICATION

A special agent with a quartz filler for making a bonding layer on substrates with very low absorbency for adhesives, adhesive/base coats, mineral and acrylic renders used outside and inside buildings. The product strengthens the adhesion of the bonded layers and makes a waterproof coating. For use on substrates such as: terracotta, ceramics, sealed concrete, old epoxy substrates, glass and metal.

TECHNICAL DATA

Base binder: acrylic binder;
Colour: milk-white;
Average coverage: approx. 0.4-0.6 kg/m2;
Bulk density: approx. 1.32 g/cm3;
Content of solids: min. 10%;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%

Packaging: Disposable plastic packaging holding 10 kg of the product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected against humidity and frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 24 months from the date of production (it is recommended to use it within 12 months) printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with ALGIZID. Any loose layers, not bound to the substrate (e.g., dust, dirt or flaked paint coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and CLEANFORCE cleaning agent.
PRODUCT PREPARATION: Mix the product thoroughly directly before application. In the case of outdoor use in high humidity (EWI systems) and for terracotta and ceramics, 10% Portland cement should be added. The product mixed with cement has to be used within 30 minutes.
APPLICATION: The product should be applied on the substrate in one or two layers with a brush or roller, using the "wet on wet" method.
DRYING: about 12 hours before re-application of the product (at air temperature +20°C and relative humidity 60%). Protect the fresh coating against precipitation and condensation until it dries completely. The completely dry coating can be loaded after 24 hours.
USEFUL HINTS: Product application and drying should take place on dry days at temperatures over +5°C. Tools should be cleaned with water immediately after completing work. Avoid applying the product on surfaces directly exposed to sunlight or during strong wind.

ALGIZID

Product for removing algae and fungi

MAIN ADVANTAGES

- Effectively removes most algae, fungi and lichens
- Safe to apply
- Easy to apply

AREAS OF APPLICATION

A fungicidal and algaecidal product used for the preservation and protection of construction products, except for wood, for example: stone surfaces, building façades, including insulation systems, cement renders, cement-lime renders, concrete, limestone, stones, etc. Especially recommended for disinfecting and cleaning substrates before applying a new paint coating or render. The product is intended for general purpose use indoors and outdoors.
NOTE: If the product is applied on substrates other than the above-listed, it is recommended to perform tests on an invisible substrate surface.

TECHNICAL DATA

Product form: liquid (aqueous solution);
Active agents of biocidal product: -alkyl (C_{12-16}) -dimethylbenzylammoniumchloride (ADBAC / BKC (C_{12-16})) - 0.480 g / 100 g -2-octyl-2H-isothiazol-3-one (OIT) - 0.049 g / 100 g.
The product has a biocidal effect against algae and fungi in the amount of at least 150 g/m²;
Bulk density: approx. 1.00 g/cm³;
Average coverage: 0.15-0.20 l/m² (depending on the intensity of microbiological contamination);
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%;

Packaging: Disposable plastic packaging containing 1 and 5 litres of product.
Storage: The product should be stored in a well-ventilated room, in its sealed packaging, kept vertically, at a temperature of +5°C to +25°C. Do not allow freezing or excessive heating – this may worsen the application properties of the product.
The product must be kept out of the reach of children. Opened packaging should be tightly closed and used up as quickly as possible.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: If intensive growth of algae and/or fungi occurs on the façade, the substrate should be cleaned mechanically (e.g., with a coarse bristle brush) and then the whole surface should be washed with a pressure washer.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. Do not dilute the product before use. Before use, it is necessary to familiarise with the information provided on the product label.
APPLICATION: The product should be applied on the contaminated substrate abundantly, until complete damping, e.g., with a paint brush, brush, roller or sponge and left for at least 6 to 12 hours. Then, remove mechanically any remaining contaminants (e.g., using water under pressure). If necessary (in case of strong contamination), the disinfecting procedure should be repeated once the surface is dry. Further work (such as painting, rendering) can be carried out only after the surface has completely dried after the last application of the biocidal product. If there is no adequate ventilation in the room, appropriate respiratory protection (masks) should be worn.
DRYING: Typical curing time for one layer of product applied onto a substrate is approx. 12 hours (at air temperature +20°C, 65% RH). After this period of time, it is possible to start further renovation work. Note: At low temperatures and high relative humidity, the product drying time may be longer.
USEFUL HINTS: If intensive growth of algae and fungi is observed, it is necessary to perform technical assessment of the building in order to determine the scope of work necessary to effectively remove the microbiological contamination. The product shows irritating properties and is harmful to both human health and the environment. It is necessary to wear protective clothing (safety goggles, rubber gloves, respiratory mask) while carrying out the work. Do not apply the agent near plants, bushes. Do not dispose of to water reservoirs. Active substances are biologically decomposed below the threshold of harmfulness for microorganisms.
Do not dispose of to sewerage, soil and surface waters.

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl

The permit of the Minister of Health for the marketing of a biocidal product No. 0510/2004

KABE SPRINT

Product for accelerating render and paint setting

MAIN ADVANTAGES

- Accelerates the binding process of renders and paints;
- Enables rendering and painting at temperatures > 0°C
- Enables rendering and painting in increased air humidity (up to approx. 80%)
- Accelerates the evaporation of water
- Easy to apply
- Does not change the functional properties of renders and paints
- Does not change the colour of the render / finishing coating

AREAS OF APPLICATION

KABE SPRINT is an easy-to-use, ready-made additive that accelerates the setting and drying process of acrylic, silicate-silicone, polysilicate and silicone renders, as well as acrylic, polysilicate and silicone façade paints from the range of Farby KABE. It is particularly recommended for use when carrying out façade works at low temperatures (from +1°C to +10°C) and increased air humidity (up to approx. 80%). The product works by quickly evaporating water from the applied material, thus significantly reducing the time of the first setting stage of dispersion products. Thanks to this, the second stage, which involves setting the binder and drying, can start much earlier, and the applied material becomes resistant to sudden cooling or precipitation earlier (after about 6-8 hours). The speed of product action depends on the ambient temperature and humidity. The product is applied into render/paint packaging immediately before use on the façade. The use of the product does not reduce the strength and does not deteriorate the functional properties of the render or paint coating. **KABE SPRINT** is not classified as a construction product.

TECHNICAL DATA

• **SISI AVANT**	Silicate-silicone render
• **PERMURO**	Acrylic render
• **NOVALIT T**	Polysilicate render
• **NOVALIT T**	Silicone render
• **BUGOFLEX**	Dispersion, acrylic façade paint
• **NOVALIT F**	Polysilicate façade paint
• **NOVALIT F**	Silicone façade paint

Form: colourless liquid with the smell of ether;
Density: approx. 0.88 g/cm^3;
Dosage: maximum 1% by weight of render or paint,

• per 25 kg of render	250 ml (whole bottle content) of the product
• per 10 litre of paint	150 ml (3/5 of bottle content) of the product;

Temperature of application (air and substrate): from +1°C to +10°C;
Relative air humidity: ≤ 80%.
Packaging: Disposable plastic packaging containing 0.25 litre of product.
Storage: The product should be stored in its sealed packaging, in dry conditions, at a temperature of +5°C to +25°C. Protect against overheating.
Shelf life: 24 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: The substrate cannot be frosted and must meet the requirements for proper preparation of the substrate for thin-coat render or façade paint.
PRODUCT PREPARATION: The **KABE SPRINT** product is ready to use. The product should be added to render or paint immediately before use. It is recommended to follow the dosage guidelines: for a 25 kg package of render – add 250 ml (entire bottle) of the product, for a 10 litre package of paint – add 150 ml (3/5 of the bottle). After thorough manual or mechanical mixing, you can start applying the material.
USEFUL HINTS: Recommended working temperature from +1°C to +10°C, relative air humidity below 80%. Freshly applied material becomes resistant to precipitation after approximately 6-8 hours, depending on the ambient temperature and humidity. Tools should be cleaned with clean water immediately after use. For indoor use, ensure good ventilation of the rooms. Irritating to eyes and skin. Keep out of the reach of children. Avoid contact with eyes. Rinse contaminated eyes immediately with plenty of water and seek medical advice. Wear appropriate protective clothing, appropriate protective gloves and goggles or face protection. If swallowed, seek medical advice immediately – show the packaging or label. Follow the Safety Data Sheet. Note: There must be no frost immediately after application – the application and the first stage of the setting process must take place at temperatures above zero degrees Celsius! When the relative air humidity exceeds 80%, the use of the agent may completely stop the bonding of plasters and paints.

MARCHRON

Water-dilutable
acrylic varnish

MAIN ADVANTAGES

- Restores shine and the transparency of mosaic renders
- Protects against the effects of adverse weather conditions and reduces the "writing" effect (finish) on dark renders
- Protects the paint coating from damage and dirt and also makes it easy to keep clean
- For indoor and outdoor use
- Easy and safe to apply
- Contains UV absorbers

AREAS OF APPLICATION

Transparent varnish for protection, renovation and improvement of the appearance of thin-coat renders and structural paint coatings, used both outside and inside buildings. It is also possible to use varnish in a version tinted to match the colour of the render to refresh the colour. Note: Tinted varnish, after applying several layers, partially changes (uniforms) the colour of the render.

TECHNICAL DATA

Base binder: acrylic binder;
The content of volatile organic compounds VOC: cat. A/e. The product contains less than 130 g/l VOC.
Density: approx. 1.0 g/cm^3;
Gloss level: semi-matt;
Colour: it is possible to tint the varnish to match a specific mosaic render colour by using organic and inorganic coloured pigments.
Consumption: approx. 0.11 l/m^2 with one layer;

Temperature of application (air and substrate): from +5°C to +20°C;
Relative air humidity: ≤ 75%;
Packaging: Disposable plastic packaging containing 5 litres of product.
Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 24 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable, degreased, even, and free of biological contamination and chemical efflorescence. In case of algae and fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., dust, dirt), should be removed. Old substrate should be washed with dispersed water jet with **CLEANFORCE** cleaning agent. Note: Before applying the varnish, mosaic render should be moistened with water.
APPLICATION: The packaging contains a ready-to-use product. The coloured product should be gently mixed directly before use. Varnish should be applied on the substrate in a few even and thin layers with a paint roller in favourable weather conditions. It is not possible to apply varnish on directly sunlit or heated surfaces. Another layer should be applied after the first one dries.
DRYING: Drying time of one varnish layer applied on the substrate is approx. 3 hours at +20°C, 55% RH. Drying time may be longer due to low temperatures and high relative humidity.
USEFUL HINTS: To avoid colour differences, a single batch of product should be applied to the entire surface of a separate architectural element in one work cycle, in a thin, uniform coating, using the "wet on wet" method. Note: Because of the lazure nature of the product, it is necessary to avoid applying a coating at different thicknesses. Tools should be cleaned with water immediately after work is finished. To be applied and dried on dry days with temperatures (air and substrate) between +5°C and +20°C, relative humidity below 75%. In order to protect the undried layer against severe weather conditions, it is recommended to use appropriate protective meshes.

KABE Swiss Group

KOMBI RAPID

EPS board adhesive

MAIN ADVANTAGES

- High thermal insulation (λ = 0.0348 W/m*K), no risk of thermal bridges
- Low volume increase and high dimensional stability
- High adhesion and impact resistance
- Short setting time
- Easy to apply and process

AREAS OF APPLICATION

External thermal insulation composite system (ETICS) using the seamless method and bonding expanded styrofoam (EPS) or extruded styrofoam (XPS) boards to mineral substrates (e.g., concrete, ceramics). To be used in **KABE THERM RENO**, **KABE THERM SM** and **KABE THERM SM RENO**, **KABE THERM ELASTO**, **KABE THERM AVANT**, **KABE THERM MARMURIT / MOZAIKER**, **KABE THERM MARMURIT COLORATO / MOZAIKER COLORATO** and **KABE THERM CK** EWI systems, where thermal insulation boards are simultaneously mechanically fixed to the substrate (as per technical design). Thermal insulation of foundations, walls and basements (installing EPS boards, EPS boards to mineral and bitumen substrates). Filling joints between EPS boards, gaps resulting from cutting boards. Vertical expansion joints in walls. Sealing joints, e.g., at window sills, window sill tiles, balcony tiles, cellar or basement windows.

TECHNICAL DATA

Open time: up to 10 minutes*
Correcting the position of installed EPS board: up to 10 minutes
Glue hardening time (at 50% RH and 23°C): 2 hours**
Thermal resistance after hardening: from +40°C to +90°C
Coverage: up to 8 m²* (wall insulation) and up to 12 m²* (foundations, cellars, basements)
Adhesion to concrete: ≥ 0.3 MPa
Adhesion to EPS: ≥ 0.1 MPa (tear in body)

Ambient and substrate temperature and adhesive hardening: from +1°C to +30°C (recommended from +10°C to +25°C)
Tin container temperature: from +5°C to +25°C (optimum +20°C)
Application conditions outside buildings: dry weather, avoid working at direct sunlight and strong wind
Container size: metal container with 750 ml of adhesive
Shelf life: 18 months from the date of production provided on the container bottom.
Storage: in a closed packaging in vertical position, in a dry, cool place, at a temperature ranging from +5°C to +25°C.

HOW TO USE

SUBSTRATE PREPARATION: The substrate has to be sound (no cracks or crevices), clean, degreased, free from dust and even. Allowable wall deviation should not exceed -4 mm and +2 mm (take the measure with a straightedge at a length of 2 m, at an accuracy of 1 mm). In case of higher deviations, apply a levelling coat. Clean foundations and walls mechanically, removing dirt, algae and fungi, then wash with water and disinfect with **ALGIZID**. The substrate must be protected against capillary moisture intake and precipitation water. Pay special attention to avoid hoarfrost on glued surfaces. Insulation boards (other than cut) can contain anti-adhesion agents. Perform an adhesion test. If necessary, grind the back side of the boards. To enhance adhesion, accelerate hardening and improve structure, the substrate should be first moistened with water by using a sprayer.
ADHESIVE PREPARATION: Stir the adhesive in the container thoroughly directly before using. Screw the container onto the gun. Dispose the initial portion of adhesive (about 30 cm) until pressure in the gun is equalised, direct it to the side (not to be used). Start gluing the boards always from the bottom, supporting the bottom row on the start stripe or foundation heel. Remove any dirt with special cleaning wipes or PU foam cleaner. Note: The cleaner can react with the EPS board resulting in its damage. Hardened adhesive can be removed only by mechanical means. Places, where the adhesive is exposed to UV radiation,
should be protected within 10 days from adhesive application. Use silicone or acrylic render to protect against UV radiation.
BONDING BOARDS WHILE PERFORMING EXTERNAL WALL INSULATION: Apply the adhesive on boards along their circumference at a distance of 2 cm from the board edge and with a band shaped in letter "M" or "W". Within maximum 10 minutes from adhesive application, put the boards on the substrate and press by using a straightedge. Boards' position can be corrected within 10 minutes from application. Mechanical fixing by installing pins can be started 3 hours from gluing. The adhesive joint obtains full mechanical strength after 24 hours from gluing boards. Note: Setting time may be longer at lower temperatures and low air humidity.
BONDING BOARDS WHILE PERFORMING THERMAL INSULATION OF FOUNDATIONS, CELLAR WALLS AND OTHER UNDERGROUND BUILDING SECTIONS: Apply the adhesive on one side onto the substrate in vertical stripes spaced 20-30 cm apart. In case of boards 150-160 cm wide, apply at least 5 stripes. Put the boards on the substrate after about 10 minutes from applying adhesive and press firmly. Fill the remaining gaps and joints between boards with adhesive.
USEFUL HINTS: While performing thermal insulation of underground building sections, the adhesive can be used only in the so-called light damp proofing systems – perform an adhesion test. Do not use it in the case of permanent exposure to water, e.g., submerging caused by high level of ground water level – heavy damp proofing or waterproofing systems. Do not use to glue PE, PP, PTFE, silicone surfaces, covered with
anti-friction, lubricating agents (membranes with PE film). Do not use in substrates waterproofed with bitumen solvent-based products – there is a risk of damage to the boards (read the product manual thoroughly
and check if the manufacturer allows for gluing EPS boards). Boards can be glued once the waterproofing coats are fully dried – refer to the product manual. Do not use during precipitation, strong wind or when exposed to strong sunlight.

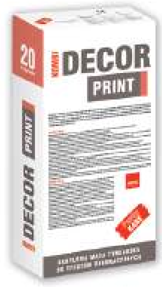
* open time and consumption depend, to great extent, on ambient temperature, air and substrate humidity, container temperature, application method, layer cross-section, substrate wetting, etc.
** hardening time depends on weather conditions.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

FOR WOOD IMITATION EFFECTS

KOMBI DECOR PRINT

Mineral mortar for decorative effects



MAIN ADVANTAGES

- High decorative qualities of the render imitating the wood/board effect
- A clear structure of the impressed mould
- Easy to apply and impress the mould
- After applying finishing coatings, it is resistant to external conditions
- Possibility of using both on façades and inside buildings
- Contains cellulose fibres

AREAS OF APPLICATION

Dry, mineral render intended for performing decorative effect of the wood/board structure, outside and inside buildings, including in the **KABE THERM RENO*** EWI system. It makes it possible to obtain an attractive top coat texture by impressing the silicone mould. For use on mineral substrates and substrates covered with a well-bonded plastic-based coating. NOTE: Protective and decorative properties are obtained after repainting with **AKRYLATEX** / **PROLATEX** base paint and **LAZUR Z/W** lazure paint.

TECHNICAL DATA

Base binder: hydraulic binders.
Colour: white.
Mixing ratio with water: approx. 5.0 l for 25 kg of dry mortar.
Temperature of application (air and substrate): from +5°C to +25°C. Avoid working on surfaces exposed to direct sunlight, in strong winds or at a high air humidity.
Relative air humidity: < 75%;
Approximate consumption: about 4,5 to 5.0 kg/m²
Render type according to PN-EN 998-1: GP (general purpose).
Compressive strength range: cat. CS IV
Adhesion to substrate: ≥ 1.0 N/mm², FP:A
Water absorption: cat. W2

Durability after freeze-thaw cycles:
– no mass loss of samples
– decrease in bending strength < 6%
– decrease in compressive strength < 4%
Water vapour permeability coefficient: μ: approx. 29.8
Reaction to fire: class A1
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: store in sealed packaging, in a cool room, but protected from moisture and frost. Keep out of the reach of children. If necessary, seek medical advice and show the container or label.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

Substrate requirements: sound/stable, degreased, even and dry, and free of biological contamination and chemical efflorescence. Fresh mineral substrates should be cured for min. 4 weeks. Places of algae/fungi growth: clean mechanically, and then wash with water and disinfect with **ALGIZID**. Any layers not bonded to the substrate (e.g., loose render or flaked coatings) should be removed. Uneven areas or holes in substrate: small, up to 5 mm – smooth out the whole surface with **KOMBI** base coat; larger – fill with filling mortar before smoothing out. Curing time min. 4 days.
Before using the **KOMBI DECOR PRINT** render in the **KABE THERM RENO** EWI system, all base coats should be applied in accordance with the requirements for external thermal insulation composite system (ETICS).
Priming: with **PERMURO GT** primer 24 hours before applying a render. Note: In the case of application on very absorbent substrates, such as gypsum plasters, it is necessary to prime with **BUDOGRUNT WG** first, and then after min. 2 hours with **PERMURO GT** primer.
Product preparation: Gradually pour the entire packaging contents into a container with a pre-measured amount of cool water (approx. 5 litres per 25 kg of mortar), stirring constantly (with a low-speed mixer/drill), until a homogeneous, lump-free mixture is obtained. After leaving it for 5 minutes and remixing, the mortar is ready to use. After adding water, the product must be used within approx. 2 hours (at air temperature +20°C and RH 55%).
Application onto the substrate: uniform layer, with thickness of about 4 mm, using a steel trowel held at an angle, then treat with a notched trowel (notch size 10-12 mm) at an angle, uniform the layer thickness and smooth.
Structure impression: impress evenly a silicone mould in the applied layer, pressing with a wallpaper roller. Note: Before each impression, the silicone mould should be coated with **KABE DP2** anti-adhesion agent.
Drying: about 3 days (at a temperature of +20°C and relative humidity 55%). Until the render hardens, protect the layer against precipitation and moisture condensation. Note: At low temperatures and high relative humidity the render drying time may be significantly longer. After pre-setting, the impressed mass is easily processed by grinding or scraping.
Decorative protective coating: After the render has dried in some places (e.g., at joints) sand the surface with sandpaper. On the dried and dedusted surface apply the **BUDOGRUNT ZG/WG** primer, one layer of **AKRYLATEX** base paint (on the façade) or **PROLATEX** (in interiors), and once it is dry (after about 3 hours), apply one or more layers of the LAZUR Z/W lazure paint (depending on the expected decorative effect).
Useful hints: a single batch of product should be used on separate architectural elements in a single work cycle, using the "wet on wet" method. While working and directly after completion, the plastered surface should be protected against too intense drying and precipitation. As far as untypical substrates are concerned, a prior test is recommended. Tools should be cleaned with water immediately after use.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all **KABE THERM RENO** system components are used.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl

National Technical Assessment No. ICiMB-KOT-2018/0050 edition 1
The product meets the requirements of the following standard: PN-EN 998-1 for general purpose mortars (GP).

FOR WOOD IMITATION EFFECTS

KABE DP2

Anti-adhesive product
for silicone moulds

MAIN ADVANTAGES

- Reduces adhesion of mortar to the silicone mould
- Facilitates obtaining a clear wood structure
- Easy to apply
- Safe to apply

AREAS OF APPLICATION

The product is designed for making the wood/board effect (WOOD DECOR) by using a silicone mould. It is used on a silicone mould to prevent it from sticking to **KOMBI DECOR PRINT** mineral decorative mortar while impressing the wood/board structure. The product is intended for use by trained workers.

TECHNICAL DATA

Base: isobutyric acid monoester;
Density: approx. 0.95 kg/dm^3;
Temperature of application: from +5°C to +25°C;
Approximate consumption: approx. 0.1 l/m^2 of wood/board effect;
Packaging: Disposable plastic packaging containing 5 litres of product;
Storage: The product should be stored in a cool, dry, well-ventilated room. Avoid direct sunlight, heat sources and strong oxidising agents. Keep out of the reach of children. If necessary, seek medical advice and show the container or label.
Shelf life: up to 24 months from the date of production.

HOW TO USE

Apply the anti-adhesive agent evenly on the silicone mould using a brush, without forming puddles. During modelling the wood structure, control the quality of the impressed texture and repeat periodically the application of the anti-adhesive agent on the silicone mould. Applying too small amount of the product on silicone mould may cause mortar sticking to mould, resulting in lower quality of the impressed texture. NOTE! Work should be carried out at a temperature of +5°C to +25°C. The rooms should be well ventilated during works (if necessary, use a dust collector). Do not pour leftovers into the sewage system. Avoid inhaling the vapours. Avoid contact with eyes and skin. Do not eat or smoke while working with the mixture. After finishing work with the product wash your hands. In case of skin contact, wash dirt with soap and water. In case of contact with the eyes, rinse them with water for 10-15 minutes and seek medical advice, showing the label or safety data sheet.

The information contained in the technical sheet, in particular the recommendations regarding the method and conditions of application, as well as the scope of application and use of our products, have been developed based on our professional experience. This technical data sheet specifies the scope of use of the material and the recommended method of carrying out works, but it cannot replace the professional knowledge of the worker. The manufacturer guarantees the quality of the product, whereas they have no control over the conditions and the method of its use. Considering that conditions, in which products are used, may change, in case of doubt, it is recommended to carry out own site tests. We are not liable for the above-mentioned information or any verbal recommendation related thereto, except in cases of gross negligence or wilful misconduct. This technical data sheet replaces all previous versions applicable to this product.

KABE 145
(AKE 145/R117 A101)
System fibreglass mesh
for EWI systems

MAIN ADVANTAGES

- Top quality supported by numerous studies and long-term experience
- High flexibility and mechanical resistance
- Rigid gauze weave
- Good surface weight
- Anti-alkali impregnated
- Coloured in white with logotype of Farby KABE

AREAS OF APPLICATION

It is used for applying reinforcing coat in EWI systems made in accordance with the technology of ETICS. The mesh is the basic component of sets of materials needed to carry out EWI systems based on EPS, including: KABE THERM RENO, **KABE THERM EPS**, KABE THERM SM and KABE THERM SM **RENO**, **KABE THERM ELASTO**, **KABE THERM AVANT**, **KABE THERM** MARMURIT / **MOZAIKER**, **KABE THERM** MARMURIT **COLORATO** / **MOZAIKER COLORATO**, **KABE THERM CK**; and based on mineral wool: KABE THERM MW and **KABE THERM IN MW**. The product has been tested in the EWI system pursuant to guidelines contained in ETAG 004 and ZUAT-15/V.03/2010. Note: The reinforcing mesh made of fibreglass has to be completely immersed in **KOMBI**, **KOMBI WM2** adhesive/base coat or **KOMBI ELASTO** base coat.

TECHNICAL DATA

Mesh size: 4.0 mm x 4.5 mm (± 0.5);
Surface mass: 145 g/m² (-0/+10%);
Weave type: gauze;
Roll length: 55 running metres;
Roll width: 1.1 m (±1%);
Colour: white with a red imprint of Farby KABE;
Tensile strength as delivered: ≥ 35 N/mm
Tensile strength after storing in alkaline solution: ≥ 20 N/mm;
Relative strength, strength as delivered compared to the strength after storage in an alkaline solution: ≥ 50%;
Elongation as delivered: ≤ 5.0%
Elongation after storing in alkaline solution: ≤ 3.0%
Coverage: not less than 1.10 m² for each 1 m² of thermally insulated façade surface;
Storage: in undamaged originally sealed packagings protected against self-unwinding of rolls. Protect against direct exposure to sunlight, organic solvents and their vapours. The product should be stored in rolls in vertical position.

HOW TO USE

SUBSTRATE PREPARATION: Before applying the fibreglass mesh to carry out a reinforcing coat, it is necessary to glue and anchor the thermal insulation layer of the system in accordance with external thermal insulation composite system (ETICS) technology. In order to obtain an even surface of all the boards installed, the whole front surface of the EPS board should be sanded using a trowel covered with suitable coarse sandpaper or the so-called "grater" in order to eliminate any surface unevenness. First, the edges of window and door openings should be reinforced by fixing to their corners diagonally (i.e., at a 45° angle) fibreglass mesh (with the dimensions 25 x 30 cm) using **KOMBI** or **KOMBI WM2** adhesive/base coat (for EWI systems based on mineral wool). It is necessary to assemble corner profiles, throat profiles, window profiles, expansion profiles (if required), set the windowsills and other protective and finishing boards. The reinforced layer can be applied on even, cleaned (previously sanded) surfaces of EPS or mineral wool boards, not earlier than 3 days from the date of board installation. The surface of boards should be even and dedusted. EPS boards exposed to UV radiation for a longer period of time should be wiped in order to remove the weathered and yellowish layer. Note: All unevenness should be eliminated, while discontinuities of thermal insulation (gaps, etc.) should be filled in. After grinding, it is necessary to dedust the surface (preferably by mechanical means), as the remaining particles may make up an anti-adhesive layer (which deteriorates the subsequent thermal insulations adhesion).
APPLYING THE REINFORCED LAYER: To carry out a reinforced layer, apply a continuous and even layer of the adhesive/base coat onto the substrate (with the thickness of approx. 3-4 mm) covering the width a bit larger than the width of the reinforcing mesh. Then, spread the render layer with a notched trowel (notch size 10-12 mm) and immediately embed the fibreglass reinforcing mesh into it – vertical bands from the top to the bottom. The reinforcing mesh should be evenly stretched and completely immersed in the base coat to a depth of 1/3 of the layer thickness. After embedding the mesh, the layer should be carefully levelled until the entire surface is covered, using – when necessary – an additional portion of the render with the "wet on wet" method. The neighbouring mesh stripes must be glued with an overlap of at least 10 cm on the wall surface, while in the corners at least 20 cm. The thickness of the reinforced mesh heat insulation in the base coat should amount to min. 1 mm, while the total thickness of the reinforcing layer with one mesh layer should amount from 3 to 5 mm. The width of the reinforcing mesh is to be selected in such a way, so that it is possible to glue the window and door jambs on their whole depth. In zones especially exposed to mechanical impact, such as garage walls, pedestal zones, it is necessary to apply two layers of reinforcing mesh. By immersing particular layers of the reinforcing mesh with a shift of vertical overlaps or by applying one vertical layer and one horizontal layer. Any marks left after levelling should be sanded down with a sandpaper. In the places of mesh intersection, e.g., within the area of scaffolding anchors, it is necessary to provide an additional reinforcement – embed an extra mesh band. Use a sharp knife to trim the mesh. Note: It is absolutely not allowed to leave, even locally, the mesh without covering it with adhesive/base coat or perform the reinforcement of a base coat on the suspended mesh without prior application of adhesive/base coat on the substrate.
DRYING: The drying time for the reinforced layer is min. 3 days (drying at +20°C and at a relative air humidity of 65%). After this period, you can apply a primer and once its curing is completed, a render. Note: At low temperatures and high air humidity, the render drying time may be longer.
USEFUL HINTS: The reinforcing layer on the thermal insulation surface should be carried out not later than after 30 days from gluing. Any longer exposure of thermal insulation to weather conditions can compromise proper base coat adhesion. In order to avoid cracks and unevenness, it is necessary to complete a single application to any architectural element in one working cycle. The adhesive/base coat should be applied and dried on dry days at temperatures between +5°C and +25°C. Wash tools with water immediately after finishing work. Avoid working on surfaces directly exposed to sunlight, as well as in strong winds and at high air humidity. In order to protect the undried reinforced layer against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. While embedding the mesh in the adhesive/base coat, it is necessary to pay attention to the fact that no empty spaces were formed under the mesh. While using corner protective profiles, the mesh should be put through the profile at least from one side. Prior to render application, check if the mesh is not damaged or if the adhesive/base coat is not missing.

European Technical Assessment: ETA-16/0079, ETA 17/0203 and ETA 17/0204, ETA-18/0211, ETA-14/0445
National Technical Assessment No. AT-15-8732/2016
National Technical Assessment No. ICiMB-KOT-2018/0050 edition 2, ICiMB-KOT-2018/0051 edition 1, ICiMB-KOT-2018/0035 edition 1, ICiMB-KOT-2018/0039 edition 1

KABE Swiss Group

KABE 150 / KABE AVANT 150

(OPTIMA-NET 150)

System fibreglass mesh
for EWI systems

MAIN ADVANTAGES

- Top quality supported by numerous studies and long-term experience
- High flexibility and mechanical resistance
- Rigid gauze weave
- Good surface weight
- Anti-alkali impregnated
- Coloured in white with logotype of Farby KABE

AREAS OF APPLICATION

It is used for applying reinforcing coat in EWI systems made in accordance with the technology of ETICS. The mesh is the basic component of sets of materials needed to carry out EWI systems based on EPS, including: **KABE THERM RENO**, **KABE THERM SM** and **KABE THERM SM RENO**, **KABE THERM ELASTO**, **KABE THERM AVANT**, **KABE THERM MARMURIT** / **MOZAIKER**, **KABE THERM MARMURIT COLORATO / MOZAIKER COLORATO**, **KABE THERM CK**; and based on mineral wool: **KABE THERM MW**, **KABE THERM IN MW**. The product has been tested in the EWI system pursuant to guidelines contained in ETAG 004 and ZUAT-15/V.03/2010. Note: The reinforcing mesh made of fibreglass has to be completely immersed in **KOMBI**, **KOMBI WM2** adhesive/base coat or **KOMBI ELASTO** base coat.

TECHNICAL DATA

Mesh size: 4.0 mm x 4.5 mm (±0.5)
Surface mass: 150 g/m^2 (-3%, +5%);
Weave type: gauze;
Roll length: 55 running metres;
Roll width: 1.1 m (±1%);
Colour: white with a red imprint of Farby KABE;
Tensile strength as delivered: ≥ 35 N/mm
Tensile strength after storing in alkaline solution: ≥ 20 N/mm
Relative strength, strength as delivered compared to the strength after storage in an alkaline solution: ≥ 50%
Elongation as delivered: ≤ 5.0%
Elongation after storing in alkaline solution: ≤ 3.0%
Coverage: not less than 1.10 m^2 for each 1 m^2 of thermally insulated façade surface;
Storage: in undamaged originally sealed packagings protected against self-unwinding of rolls. Protect against direct exposure to sunlight, organic solvents and their vapours. The product should be stored in rolls in vertical position.

HOW TO USE

SUBSTRATE PREPARATION: Before applying the fibreglass mesh to carry out a reinforcing coat, it is necessary to glue and anchor the thermal insulation layer of the system in accordance with external thermal insulation composite system (ETICS) technology. In order to obtain an even surface of all the boards installed, the whole front surface of the EPS board should be sanded using a trowel covered with suitable coarse sandpaper or the so-called "grater" in order to eliminate any surface unevenness. First, the edges of window and door openings should be reinforced by fixing to their corners diagonally (i.e., at a 45° angle) fibreglass mesh (with the dimensions 25 x 30 cm) using the **KOMBI** or **KOMBI WM2** adhesive/base coat. It is necessary to assemble corner profiles, throat profiles, window profiles, expansion profiles (if required), set the windowsills and other protective and finishing boards. The reinforced layer can be applied on even, cleaned (previously sanded) surfaces of EPS or mineral wool boards, not earlier than 3 days from the date of board installation. The surface of boards should be even and dedusted. EPS boards exposed to UV radiation for a longer period of time should be wiped in order to remove the weathered and yellowish layer. Note: All unevenness should be eliminated, while discontinuities of thermal insulation (gaps, etc.) should be filled in. After grinding, it is necessary to dedust the surface (preferably by mechanical means), as the remaining particles may make up an anti-adhesive layer (which deteriorates the subsequent thermal insulations adhesion).
APPLYING THE REINFORCED LAYER: To carry out a reinforced layer, apply a continuous and even layer of the adhesive/base coat onto the substrate (with the thickness of approx. 3-4 mm) covering the width a bit larger than the width of the reinforcing mesh. Then, spread the render layer with a notched trowel (notch size 10-12 mm) and immediately embed the fibreglass reinforcing mesh into it – vertical bands from the top to the bottom. The reinforcing mesh should be evenly stretched and completely immersed in the base coat to a depth of 1/3 of the layer thickness. After embedding the mesh, the layer should be carefully levelled until the entire surface is covered, using – when necessary – an additional portion of the render with the "wet on wet" method. The neighbouring mesh stripes must be glued with an overlap of at least 10 cm on the wall surface, while in the corners at least 20 cm. The thickness of the reinforced mesh heat insulation in the base coat should amount to min. 1 mm, while the total thickness of the reinforcing layer with one mesh layer should amount from 3 to 5 mm. The width of the reinforcing mesh is to be selected in such a way, so that it is possible to glue the window and door jambs on their whole depth. In zones especially exposed to mechanical impact, such as garage walls, pedestal zones, it is necessary to apply two layers of reinforcing mesh. By immersing particular layers of the reinforcing mesh with a shift of vertical overlaps or by applying one vertical layer and one horizontal layer. Any marks left after levelling should be sanded down with a sandpaper. In the places of mesh intersection, e.g., within the area of scaffolding anchors, it is necessary to provide an additional reinforcement – embed an extra mesh band. Use a sharp knife to trim the mesh. Note: It is absolutely not allowed to leave, even locally, the mesh without covering it with adhesive/base coat or perform the reinforcement of a base coat on the suspended mesh without prior application of adhesive/base coat on the substrate.
DRYING: The drying time for the reinforced layer is min. 3 days (drying at +20°C and at a relative air humidity of 65%). After this period, you can apply a primer and once its curing is completed, a render. Note: At low temperatures and high air humidity, the render drying time may be longer.
USEFUL HINTS: The reinforcing layer on the thermal insulation surface should be carried out not later than after 30 days from gluing. Any longer exposure of thermal insulation to weather conditions can compromise proper base coat adhesion. In order to avoid cracks and unevenness, it is necessary to complete a single application to any architectural element in one working cycle. The adhesive/base coat should be applied and dried on dry days at temperatures between +5°C and +25°C. Wash tools with water immediately after finishing work. Avoid working on surfaces directly exposed to sunlight, as well as in strong winds and at high air humidity. In order to protect the undried reinforced layer against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. While embedding the mesh in the adhesive/base coat, it is necessary to pay attention to the fact that no empty spaces were formed under the mesh. While using corner protective profiles, the mesh should be put through the profile at least from one side. Prior to render application, check if the mesh is not damaged or if the adhesive/base coat is not missing.

European Technical Assessment: ETA-16/0079, ETA 17/0203 and ETA 17/0204, ETA-18/0211
National Technical Assessment No. AT-15-8732/2016, National Technical Assessment No. ICiMB-KOT-2018/0050 edition 2
ICiMB-KOT-2018/0051 edition 1, ICiMB-KOT-2018/0035 edition 1, ICiMB-KOT-2018/0039 edition 1

KABE 160

(AKE 170/R 131 A101)

System fibreglass mesh
for EWI systems

MAIN ADVANTAGES

- Top quality supported by numerous studies and long-term experience
- High flexibility and mechanical resistance
- Rigid gauze weave
- Good surface weight
- Anti-alkali impregnated
- Coloured in white with logotype of Farby KABE

AREAS OF APPLICATION

It is used for applying reinforcing coat in EWI systems made in accordance with the technology of ETICS. The mesh is the basic component of sets of materials needed to carry out EWI systems based on EPS, including: **KABE THERM RENO**, **KABE THERM SM** and **KABE THERM SM RENO**, **KABE THERM ELASTO**, **KABE THERM AVANT**, **KABE THERM MARMURIT** / **MOZAIKER**, **KABE THERM MARMURIT COLORATO** / **MOZAIKER COLORATO**, **KABE THERM CK**, **KABE THERM EPS**; and based on mineral wool: **KABE THERM MW**, **KABE THERM IN MW**. The product has been tested in the EWI system pursuant to guidelines contained in ETAG 004 and ZUAT-15/V.03/2010. Note: The reinforcing mesh made of fibreglass has to be completely immersed in **KOMBI**, **KOMBI WM2** adhesive/base coat or **KOMBI ELASTO** base coat.

TECHNICAL DATA

Mesh size: 3.5 mm x 3.8 mm (±0.5)
Surface mass: 168 g/m^2 (±5%)
Weave type: gauze;
Roll length: 55 running metres;
Roll width: 1.1 m (±1%);
Colour: white with a red imprint of Farby KABE;
Tensile strength as delivered: ≥ 35 N/mm
Tensile strength after storing in alkaline solution: ≥ 20 N/mm
Relative strength, strength as delivered compared to the strength after storage in an alkaline solution: ≥ 50%
Elongation as delivered: ≤ 4.5%
Elongation after storing in alkaline solution: ≤ 3.0%
Coverage: not less than 1.10 m^2 for each 1 m^2 of thermally insulated façade surface;
Storage: in undamaged originally sealed packagings protected against self-unwinding of rolls. Protect against direct exposure to sunlight, organic solvents and their vapours. The product should be stored in rolls in vertical position.

HOW TO USE

SUBSTRATE PREPARATION: Before applying the fibreglass mesh to carry out a reinforcing coat, it is necessary to glue and anchor the thermal insulation layer of the system in accordance with external thermal insulation composite system (ETICS) technology. In order to obtain an even surface of all the boards installed, the whole front surface of the EPS board should be sanded using a trowel covered with suitable coarse sandpaper or the so-called "grater" in order to eliminate any surface unevenness. First, the edges of window and door openings should be reinforced by fixing to their corners diagonally (i.e., at a 45° angle) fibreglass mesh (with the dimensions 25 x 30 cm) using the **KOMBI** or **KOMBI WM2** adhesive/base coat. It is necessary to assemble corner profiles, throat profiles, window profiles, expansion profiles (if required), set the windowsills and other protective and finishing boards. The reinforced layer can be applied on even, cleaned (previously sanded) surfaces of EPS or mineral wool boards, not earlier than 3 days from the date of board installation. The surface of boards should be even and dedusted. EPS boards exposed to UV radiation for a longer period of time should be wiped in order to remove the weathered and yellowish layer. Note: All unevenness should be eliminated, while discontinuities of thermal insulation (gaps, etc.) should be filled in. After grinding, it is necessary to dedust the surface (preferably by mechanical means), as the remaining particles may make up an anti-adhesive layer (which deteriorates the subsequent thermal insulations adhesion).
APPLYING THE REINFORCED LAYER: To carry out a reinforced layer, apply a continuous and even layer of the adhesive/base coat onto the substrate (with the thickness of approx. 3-4 mm) covering the width a bit larger than the width of the reinforcing mesh. Then, spread the render layer with a notched trowel (notch size 10-12 mm) and immediately embed the fibreglass reinforcing mesh into it – vertical bands from the top to the bottom. The reinforcing mesh should be evenly stretched and completely immersed in the base coat to a depth of 1/3 of the layer thickness. After embedding the mesh, the layer should be carefully levelled until the entire surface is covered, using – when necessary – an additional portion of the render with the "wet on wet" method. The neighbouring mesh stripes must be glued with an overlap of at least 10 cm on the wall surface, while in the corners at least 20 cm. The thickness of the reinforced mesh heat insulation in the base coat should amount to min. 1 mm, while the total thickness of the reinforcing layer with one mesh layer should amount from 3 to 5 mm. The width of the reinforcing mesh is to be selected in such a way, so that it is possible to glue the window and door jambs on their whole depth. In zones especially exposed to mechanical impact, such as garage walls, pedestal zones, it is necessary to apply two layers of reinforcing mesh. By immersing particular layers of the reinforcing mesh with a shift of vertical overlaps or by applying one vertical layer and one horizontal layer. Any marks left after levelling should be sanded down with a sandpaper. In the places of mesh intersection, e.g., within the area of scaffolding anchors, it is necessary to provide an additional reinforcement – embed an extra mesh band. Use a sharp knife to trim the mesh. Note: It is absolutely not allowed to leave, even locally, the mesh without covering it with adhesive/base coat or perform the reinforcement of a base coat on the suspended mesh without prior application of adhesive/base coat on the substrate.
DRYING: The drying time for the reinforced layer is min. 3 days (drying at +20°C and at a relative air humidity of 65%). After this period, you can apply a primer and once its curing is completed, a render. Note: At low temperatures and high air humidity, the render drying time may be longer.
USEFUL HINTS: The reinforcing layer on the thermal insulation surface should be carried out not later than after 30 days from gluing. Any longer exposure of thermal insulation to weather conditions can compromise proper base coat adhesion. In order to avoid cracks and unevenness, it is necessary to complete a single application to any architectural element in one working cycle. The adhesive/base coat should be applied and dried on dry days at temperatures between +5°C and +25°C. Wash tools with water immediately after finishing work. Avoid working on surfaces directly exposed to sunlight, as well as in strong winds and at high air humidity. In order to protect the undried reinforced layer against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. While embedding the mesh in the adhesive/base coat, it is necessary to pay attention to the fact that no empty spaces were formed under the mesh. While using corner protective profiles, the mesh should be put through the profile at least from one side. Prior to render application, check if the mesh is not damaged or if the adhesive/base coat is not missing.

European Technical Assessment No. ETA/0079, ETA-17/0203, ETA-17/0204, ETA-18/0211 and ETA-14/0445
National Technical Assessment No. AT-15-8732/2016, National Technical Assessment No. ICiMB-KOT-2018/0050 edition 2
ICiMB-KOT-2018/0051 edition 1, ICiMB-KOT-2018/0035 edition 1 and ICiMB-KOT-2018/0039 edition 1

KABE 165 / KABE AVANT 165

(OPTIMA-NET 165)

System fibreglass mesh
for EWI systems

MAIN ADVANTAGES

- Top quality supported by numerous studies and long-term experience
- High flexibility and mechanical resistance
- Rigid gauze weave
- Good surface weight
- Anti-alkali impregnated
- Coloured in white with logotype of Farby KABE

AREAS OF APPLICATION

It is used for applying reinforcing coat in EWI systems made in accordance with the technology of ETICS. The mesh is the basic component of sets of materials needed to carry out EWI systems based on EPS, including: **KABE THERM RENO**, **KABE THERM SM** and **KABE THERM SM RENO**, **KABE THERM ELASTO**, **KABE THERM AVANT**, **KABE THERM MARMURIT** / **MOZAIKER**, **KABE THERM MARMURIT COLORATO** / **MOZAIKER COLORATO**, **KABE THERM CK**, **KABE THERM EPS**; and based on mineral wool: **KABE THERM MW**, **KABE THERM IN MW**. The product has been tested in the EWI system pursuant to guidelines contained in ETAG 004 and ZUAT-15/V.03/2010. Note: The reinforcing mesh made of fibreglass has to be completely immersed in **KOMBI**, **KOMBI WM2** adhesive/base coat or **KOMBI ELASTO** base coat.

TECHNICAL DATA

Mesh size: 3.6 mm x 4.0 mm (±0.5)
Surface mass: 165 g/m² (±5%)
Weave type: gauze;
Roll length: 55 running metres;
Roll width: 1.1 m (±1%);
Colour: white with a red imprint of Farby KABE;
Tensile strength as delivered: ≥ 35 N/mm
Tensile strength after storing in alkaline solution: ≥ 20 N/mm

Relative strength, strength as delivered compared to the strength after storage in an alkaline solution: ≥ 50%
Elongation as delivered: ≤ 4.5%
Elongation after storing in alkaline solution: ≤ 3.0%
Coverage: not less than 1.10 m² for each 1 m² of thermally insulated façade surface;
Storage: in undamaged originally sealed packagings protected against self-unwinding of rolls. Protect against direct exposure to sunlight, organic solvents and their vapours. The product should be stored in rolls in vertical position.

HOW TO USE

SUBSTRATE PREPARATION: Before applying the fibreglass mesh to carry out a reinforcing coat, it is necessary to glue and anchor the thermal insulation layer of the system in accordance with external thermal insulation composite system (ETICS) technology. In order to obtain an even surface of all the boards installed, the whole front surface of the EPS board should be sanded using a trowel covered with suitable coarse sandpaper or the so-called "grater" in order to eliminate any surface unevenness. First, the edges of window and door openings should be reinforced by fixing to their corners diagonally (i.e., at a 45° angle) fibreglass mesh (with the dimensions 25 x 30 cm) using the **KOMBI** or **KOMBI WM2** adhesive/base coat. It is necessary to assemble corner profiles, throat profiles, window profiles, expansion profiles (if required), set the windowsills and other protective and finishing boards. The reinforced layer can be applied on even, cleaned (previously sanded) surfaces of EPS or mineral wool boards, not earlier than 3 days from the date of board installation. The surface of boards should be even and dedusted. EPS boards exposed to UV radiation for a longer period of time should be wiped in order to remove the weathered and yellowish layer. Note: All unevenness should be eliminated, while discontinuities of thermal insulation (gaps, etc.) should be filled in. After grinding, it is necessary to dedust the surface (preferably by mechanical means), as the remaining particles may make up an anti-adhesive layer (which deteriorates the subsequent thermal insulations adhesion).

APPLYING THE REINFORCED LAYER: To carry out a reinforced layer, apply a continuous and even layer of the adhesive/base coat onto the substrate (with the thickness of approx. 3-4 mm) covering the width a bit larger than the width of the reinforcing mesh. Then, spread the render layer with a notched trowel (notch size 10-12 mm) and immediately embed the fibreglass reinforcing mesh into it – vertical bands from the top to the bottom. The reinforcing mesh should be evenly stretched and completely immersed in the base coat to a depth of 1/3 of the layer thickness. After embedding the mesh, the layer should be carefully levelled until the entire surface is covered, using – when necessary – an additional portion of the render with the "wet on wet" method. The neighbouring mesh stripes must be glued with an overlap of at least 10 cm on the wall surface, while in the corners at least 20 cm. The thickness of the reinforced mesh heat insulation in the base coat should amount to min. 1 mm, while the total thickness of the reinforcing layer with one mesh layer should amount from 3 to 5 mm. The width of the reinforcing mesh is to be selected in such a way, so that it is possible to glue the window and door jambs on their whole depth. In zones especially exposed to mechanical impact, such as garage walls, pedestal zones, it is necessary to apply two layers of reinforcing mesh. By immersing particular layers of the reinforcing mesh with a shift of vertical overlaps or by applying one vertical layer and one horizontal layer. Any marks left after levelling should be sanded down with a sandpaper. In the places of mesh intersection, e.g., within the area of scaffolding anchors, it is necessary to provide an additional reinforcement – embed an extra mesh band. Use a sharp knife to trim the mesh. Note: It is absolutely not allowed to leave, even locally, the mesh without covering it with adhesive/base coat or perform the reinforcement of a base coat on the suspended mesh without prior application of adhesive/base coat on the substrate.

DRYING: The drying time for the reinforced layer is min. 3 days (drying at +20°C and at a relative air humidity of 65%). After this period, you can apply a primer and once its curing is completed, a render. Note: At low temperatures and high air humidity, the render drying time may be longer.

USEFUL HINTS: The reinforcing layer on the thermal insulation surface should be carried out not later than after 30 days from gluing. Any longer exposure of thermal insulation to weather conditions can compromise proper base coat adhesion. In order to avoid cracks and unevenness, it is necessary to complete a single application to any architectural element in one working cycle. The adhesive/base coat should be applied and dried on dry days at temperatures between +5°C and +25°C. Wash tools with water immediately after finishing work. Avoid working on surfaces directly exposed to sunlight, as well as in strong winds and at high air humidity. In order to protect the undried reinforced layer against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. While embedding the mesh in the adhesive/base coat, it is necessary to pay attention to the fact that no empty spaces were formed under the mesh. While using corner protective profiles, the mesh should be put through the profile at least from one side. Prior to render application, check if the mesh is not damaged or if the adhesive/base coat is not missing.

European Technical Assessment: ETA-16/0079, ETA 17/0203 and ETA 17/0204, ETA-18/0211
National Technical Assessment No. AT-15-8732/2016 National Technical Assessment No. ICiMB-KOT-2018/0050 edition 2, ICiMB-KOT-2018/0051 edition 1, ICiMB-KOT-2018/0035 edition 1, ICiMB-KOT-2018/0039 edition 1, ICiMB-KOT-2018/0039 edition 1

KABE DECOR EFFECT

Dispersion, cementless panel for use on façades and inside buildings

MAIN ADVANTAGES

- High resistance to mechanical damage
- Very high flexibility
- Exceptional decorative qualities, e.g., wood/board effect
- High adhesion
- Easy application
- High façade aesthetics

AREAS OF APPLICATION

Decorative panels for cladding imitating the effect of a board inside and outside buildings, including in the EWI systems. Fixed to the substrate with **KOMBI DECOR EFFECT** dispersion adhesive. The panels can be glued butt-jointed or leaving a joint of max. width. up to 4 mm. Intended for use on all even mineral substrates, such as cement, cement-lime, gypsum render and plasterboards.

TECHNICAL DATA

Base binder: acrylic dispersion;
Colour: cream;
Consumption: Cardboard packaging – 25 pieces / 8 m^2;
Temperature of application (air and substrate): from +5 °C to +25 °C;
Dimensions: max. dim. length 2000 mm; width 600 mm and thickness from 3 to 5 mm;
Relative air humidity: ≤ 75%;
Packaging: Disposable cardboard packaging – 25 pcs. ;
Shelf life and storage conditions: 12 months from the date of manufacture, store in a sealed packaging, in a cool room protected from freezing.

HOW TO USE

SUBSTRATE REQUIREMENTS: sound/stable (without scratches and cracks), degreased, even and dry, and free from anti-adhesive substances. The newly made reinforced layer must be properly cured for a period of min. 4 days, depending on the layer thickness and curing conditions. The substrate must be protected against capillary moisture intake and precipitation water.
BASE COATS OF THE EWI SYSTEM: to be performed in accordance with the technology of the External Thermal Insulation Composite Systems for buildings – ETICS.
PLACES OF ALGAE/FUNGI GROWTH: clean mechanically, and then wash with water and disinfect with **ALGIZID**. Any layers not bonded to the substrate (e.g., loose render or flaked coatings) should be removed.
UNEVEN AREAS OR HOLES IN SUBSTRATE: small, up to 5 mm – smooth out the whole surface with **KOMBI** base coat; larger – fill with filling mortar before smoothing out. Curing time min. 4 days. Old or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent.
PRIMING: heterogeneous or very absorbent substrates should be primed with **BUDOGRUNT ZG/WG** primer. All surfaces, to which the panels are attached, must be primed with **PERMURO GT** 24 hours before gluing.
PANEL PREPARATION: before gluing, the panels should be stored for at least one day in a warm room with a temperature of at least 15°C. Then unpack and carefully unfold them on a flat surface, so that they can take a straight shape. 24 hours later the panels are ready for installation.
FIXING: apply the adhesive to the substrate in an even layer using a notched stainless steel trowel with teeth ranging from 4 to 6 mm. Select the size of the trowel teeth depending on the evenness of the substrate. The surface covered with adhesive should be adapted to the possibility of arranging the panels, so that its open time is not exceeded. Attach the panels along their entire length and press them to the surface with a rubber wallpaper roller, so that the adhesive fills the gaps between the individual panels. Note: The bonding area of flexible façade panels must be 100%. The dispersion adhesive can also be used to fill joints between tightly bonded cladding. Any excess of adhesive from the joint and fresh adhesive soiling can be removed with a moist sponge.
DRYING: the drying period of the adhesive under normal conditions (drying at a temperature of +20°C and relative air humidity of 55%) is at least 48 hours. Air humidity above 75% and low temperatures extend the drying period, even up to several days. Until it hardens, the bonded cladding should be protected against precipitation and frost. Note: Direct impact of atmospheric precipitation on fresh or not completely dry dispersion adhesive results in washing it away.
PAINTING: after the adhesive dries, the panels should be painted with **AKRYLATEX** base paint (outdoors) or **AKRYLATEX W** (indoors) and **LAZUR Z/W** lazure paint in a chosen colour. After consecutive paint layers are applied, the panel surface should be wiped with a moist sponge to make the wood texture more visible. The second painting can be carried out only after the first layer of paint has completely dried, i.e. after approx. 4 hours (when drying at a temperature of +20°C and relative air humidity of 55%). If used outdoors, it is recommended to wait approximately 12 hours. Note: At low temperatures and high air humidity, the paint drying time will be longer. While wiping, rinse the sponge in clean water and wring it out to remove excess lazure paint, otherwise you will not achieve an even wiping effect and a clear wood grain pattern over the entire surface. Note: The end result of coating with lazure paints depends largely on the tools used, application conditions, as well as the technique and skills of the worker. Before applying on the wall, a paint test is recommended. Protect the fresh coating against precipitation and condensation until it dries completely.
USEFUL HINTS: an equal distance between the panels can be achieved using self-adhesive guide-spacer strips or tile crosses.

* The manufacturer provides a warranty if all **KABE THERM DECOR EFFECT** system components are used.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

KABE DECOR EFFECT

Prefabricated decorative panel – embossing effect

MAIN ADVANTAGES

- High aesthetics and unique decorative values of panels with embossing effect
- High impact resistance
- Easy assembly and adjustment of individual components
- Very high flexibility of panels
- Specially profiled edge for making connections along the longer side of the panels
- Additionally decorates and complements plaster coatings in ETICS insulation systems and on uninsulated substrates

AREAS OF APPLICATION

Decorative panels for cladding imitating the embossing effect inside and outside buildings, including in the EWI systems, both based on EPS and mineral wool. Fixed to the substrate with **KOMBI DECOR EFFECT** dispersion adhesive. The panels can be butt-jointed. For use on all even mineral substrates, such as cement, cement-lime, gypsum render and plasterboards, cement-fibre and gypsum-fibre boards. It is recommended to connect the panels along the longer edge. When making crosswise / short edge joints, the joint can remain visible. Do not use on surfaces exposed to direct and long-term exposure to precipitation, e.g., horizontal surfaces. Note: The cardboard contains rolled panels, which must be heated to a temperature of min. +10°C.

TECHNICAL DATA

Base binder: composition of acrylic copolymers and silicone resins;
Embossing size: Option A (narrow) – 11 mm x 11 mm; Option B (wide) – 20 mm x 21 mm;
Reinforcement: fibreglass mesh 160 g/m^2;
Panel standard dimensions: 200 cm x 33 cm. Thickness: 3-5 mm.
Packaging: cardboard boxes with dimensions 40x40x35 cm containing 8 panels sufficient to cover 5.28 m^2. The pallet holds 24 cardboard boxes, i.e., 192 panels, which is enough to cover the area of 126.72 m^2.
Application conditions: air temperature from +5°C to +25°C and relative humidity below 75%. Avoid working in strong wind, sunlight and high air humidity;
Storage: transport and store the product in dry conditions in original, undamaged packaging at temperatures from +5°C to +25°C. Protect against frost and direct exposure to sunlight.
Shelf life: 36 months from the date of production printed on the packaging.

INSTALLATION TOOLS

Bricklayer's string, spirit level, notched trowel with 4 mm teeth, special grooved trowel (with a grooved pattern), rubber wallpaper roller, sponge, carpet knife with a trapezoidal blade, carpenter's square, brush, paint roller for dispersion/latex paints with a bristle length of 10-12 mm, sandpaper with grain size 100, wooden block with a width of one embossing.

HOW TO USE

SUBSTRATE REQUIREMENTS: sound/stable (without scratches and cracks), degreased, even and dry, and free from anti-adhesive substances. The newly made reinforced layer must be properly cured for a period of min. 4 days, depending on the layer thickness and curing conditions. The substrate must be protected against capillary moisture intake and precipitation water. The base coats of the EWI system should be performed in accordance with the technology of the External Thermal Insulation Composite Systems for buildings – ETICS.
PLACES OF ALGAE/FUNGI GROWTH: clean mechanically, and then wash with water and disinfect with **ALGIZID**. Any layers not bonded to the substrate (e.g., loose render or flaked coatings) should be removed.
UNEVEN AREAS OR HOLES IN SUBSTRATE: small, up to 5 mm – smooth out the whole surface with **KOMBI** base coat; larger – fill with filling mortar before smoothing out. Curing time min. 4 days. Old or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Note: Special attention should be paid to the proper preparation of an even surface, because any imperfections in the surface may have an adverse effect on the aesthetics and appearance of the cladding.
PRIMING: heterogeneous or very absorbent substrates should be primed with **BUDOGRUNT ZG** (outdoors) or **BUDOGRUNT WG** (indoors). All surfaces, to which the panels are attached, must be primed with **PERMURO GT** 24 hours before gluing.
PANEL PREPARATION: the panel temperature should be above 10°C when unrolling. If it is stored at a lower temperature and unrolled without heating to 10°C, it may crack. After unpacking the box, unfold the individual panels and leave them to straighten freely on a table of a size that ensures complete support of the stacked panels. Leave the panel to fully straighten.
FIXING: apply the dispersion adhesive to the substrate in an even layer using a notched stainless steel trowel with 4 mm teeth. The surface covered with adhesive should correspond to the dimensions of one panel. It is not recommended to apply the adhesive to a larger surface due to the process of drying / superficial setting of the dispersion adhesive. The open time of the applied adhesive depends largely on the weather conditions; at higher temperatures and lower humidity it will be significantly shorter. Place the panel on the substrate with a distance of approx. 0.5 cm from the edge of the previously fixed panel, and then move it using a special grooved trowel to squeeze a bit of adhesive onto the edges. Remove any adhesive that flows from between the edges of the panels with a damp sponge. Do not allow adhesive to stain the panels. Fresh adhesive stains should be removed immediately with a damp sponge. Press the fixed panel along its entire length with a special grooved trowel. Do not press the fixed panels to the surface with your fingers, as this may create visible recesses that reduce the cladding aesthetics. The joints of the panels should be thoroughly filled with adhesive, then remove excess adhesive and remove any fresh dirt with a spatula or brush, and then wash the surface thoroughly with a damp sponge. Always rinse tools in clean water while working. The joints of the panels can be gently sanded with a wooden block wrapped in 100-grit sandpaper. Use a carpet knife with a trapezoidal blade and a carpenter's square to cut the panels.
DRYING: the drying period of the dispersion adhesive under normal conditions (drying at a temperature of +20°C and relative air humidity below 55%) is at least 48 hours. Air humidity above 75% and low temperatures extend the drying period, even up to several days (Autumn, early Spring). Until it fully hardens, the bonded cladding should be protected against precipitation and frost. Note: Direct impact of atmospheric precipitation on fresh or not completely dry dispersion adhesive results in washing it away.
PAINTING: after the adhesive dries, the panels installed on the façade should be painted at least 2 times (without priming) with **SILCO F** silicone paint or **AKRYLATEX** acrylic paint. For panels installed inside the building, use **PROFILATEX** ceramic paint or **PROLATEX** latex paint or **AKRYLATEX W** in a colour of your choice. Apply the paint carefully, spreading it with a brush or a roller with short bristles along the pattern, avoiding excess paint remaining in the recesses. The second painting can be carried out only after the first layer of paint has completely dried, i.e. after approx. 4 hours (when drying at a temperature of +20°C and relative air humidity of 55%). Note: At low temperatures and high air humidity, the paint drying time will be longer. In case of outdoor use, it is recommended to wait approximately 12 hours. Protect the newly applied coating against precipitation and moisture condensation until it is completely dry. Before applying on the wall, a paint test is recommended.
SAFETY GUIDELINES: during installation work, avoid contact of the products with the skin and protect your eyes. In case of contact with eyes, rinse thoroughly with clean water and seek medical advice. It is recommended to wear gloves, glasses and protective clothing.
USEFUL HINTS: Before fixing panels with a grooved effect, carefully measure the surface (using a string, a regular or laser level) and mark the places, where you will fix the panels. Places for making transverse connections should also be planned and measured to avoid accumulating them in one line and/or at different distances and to prevent excessive waste. The best visual effect can be achieved by using a staggered connection system. It is recommended (if possible) that the original (uncut) edges of the panels meet in transverse joints.

The manufacturer provides a warranty if all **KABE THERM DECOR EFFECT** or **KABE THERM MW DECOR EFFECT** system components are used.

This technical data sheet should be considered together with the Panel Installation Instructions for **KABE DECOR EFFECT** – RIBBED EFFECT, available at www.farbykabe.pl.

KABE Swiss Group

KOMBI DECOR EFFECT

Dispersion adhesive
for façade panels

MAIN ADVANTAGES

- Very good adhesive properties
- High initial tack
- No run-off from a vertical surface
- High adhesion to the substrate and the panels
- Easy application
- Reinforced with microfibres

AREAS OF APPLICATION

Ready-to-use dispersion compound for fixing **KABE DECOR EFFECT** decorative façade panels inside and outside buildings and in **KABE THERM DECOR EFFECT*** EWI system. The dispersion adhesive ensures high viscosity and adhesion of the installed panels, which facilitates and speeds up the finishing work. The panels can be installed edge-to-edge or with a joint of max. width up to 4 mm. It can also be used on all even mineral substrates, including, e.g., cement renders, cement-lime renders, gypsum renders and plasterboards.

TECHNICAL DATA

Base binder: acrylic dispersion.
Colour: cream
Bulk density: approx. 1.75 kg/dm^3;
Open time: approx. 15 min, depending on application conditions and type and absorbency of substrate;
Average coverage: approx. 2.5 kg/m² when fixing KABE DECOR EFFECT panels on even substrates and applying the adhesive with notched trowel with 4 mm teeth
Temperature of application (air and substrate): from +5°C to +25°C
Relative air humidity: ≤ 75%
Packaging: Disposable plastic packaging holding 20 kg of the product.
Shelf life and storage conditions: 12 months from the date of manufacture, store in a sealed packaging, in a cool room protected from freezing.

HOW TO USE

SUBSTRATE PREPARATION: The substrate must be sound/stable, free from any dust and anti-adhesive substances, level and dry. The substrate must be protected against capillary moisture intake and precipitation water. Any loose layers, not bound to the substrate, should be removed. The base coats of the insulation system should be performed in accordance with the technology of the External Thermal Insulation Composite Systems for buildings (ETICS). A newly-made reinforced layer must be cured for at least 4 days, depending on the layer thickness and curing conditions. Places of algae/fungi growth: clean mechanically, and then wash with water and disinfect with **ALGIZID**. If there are any salt efflorescence patches (white discolouration), the substrate should be cleaned mechanically and primed with a deep-penetrating product. In case of uneven areas or holes in substrate (up to 5 mm) – smooth out the whole surface with **KOMBI** base coat, however, if the surface defects are larger – fill with filling mortar before smoothing out. New mineral substrates, including, e.g., cement renders and cement-lime renders, should be cured for at least 4 weeks. Old or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent.
SUBSTRATE PRIMING: Heterogeneous or very absorbent substrates should be first primed with **BUDOGRUNT ZG/WG**. All surfaces, on which we apply the **KOMBI DECOR EFFECT** adhesive, have to be primed with **PERMURO GT** 24 hours prior to panel fixing.
PANEL PREPARATION: Before installation, the panels should be stored in a warm room at min. 15ºC for at least one day. Then unpack and carefully unfold them on a flat surface, so that they can take a straight shape. 24 hours later the panels are ready for installation. The above activities and periods are solely illustrative and highly conditional on the ambient conditions and temperature in the construction site. The above recommendations should be followed, in particular, in early spring and late autumn.
ADHESIVE PREPARATION: Mix the adhesive thoroughly directly before application. In order to obtain the appropriate working consistency, a small amount of water may be added (no more than 0.2 l of water per 20 kg of adhesive).
PANEL INSTALLATION: Apply the adhesive onto the substrate in an even layer using a notched stainless steel trowel with teeth width from 4 to 6 mm (choose the size of the trowel teeth depending on the evenness of the substrate), on the surface of 2-3 façade panels. Next, place the panel on the substrate and press manually along the whole length. Then slide to the appropriate location and press with a rubber roller (e.g., a wallpaper one). After fixing the next panel, move it to the previous one, so that the entire contact surface is tightly filled with adhesive, which will prevent water from penetrating and degrading the substrate. Remove excess adhesive. Fill any joint gaps with the adhesive and smooth with a brush. Remove any adhesive stains with a damp sponge before they dry. Note: Do not apply the adhesive to excessively large surface, especially at high temperatures and low air humidity, because the adhesive dries on the surface. If a film appears on the applied adhesive top (you cannot feel any stickiness when you touch it), the adhesive layer should be removed and a new one applied. The bonding area of the façade panels must be 100%. The panels must not be installed by means of adhesive patches.
DRYING: The drying period of the adhesive under normal conditions is min. 48 hours (drying at +20°C and at a relative air humidity of 55%). Drying time may be longer, up to several days, due to low air temperatures and high humidity. A newly-installed panel surface should be protected against precipitation and condensation for at least 48 hours – until the adhesive has completely hardened in the joints. Note: Direct impact of atmospheric precipitation on fresh or not completely dried dispersion adhesive results in washing it away.
PAINTING: After the adhesive dries, the panels should be painted with **AKRYLATEX** base paint (outdoors) or **AKRYLATEX W** (indoors) and **LAZUR Z/W** lazure paint in a chosen colour. After consecutive paint layers are applied, the panel surface should be wiped with a moist sponge to make the wood texture more visible. Consecutive application can be made after the previous layer has dried completely, meaning after approx. 4 hours (when drying at a temperature of +20°C and relative air humidity of 55%). If used outdoors, it is recommended to wait approximately 12 hours. Note: At low temperatures and high air humidity, the paint drying time will be longer. While wiping, systematically rinse the sponge in clean water and wring it out to remove excess lazure paint, otherwise you will not achieve an even wiping effect and a clear wood grain pattern over the entire surface. The end result of coating with lazure paints depends largely on the tools used, application conditions, as well as the technique and skills of the worker. Before applying on the wall, a paint test is recommended.
USEFUL HINTS: Before starting gluing, carefully mark the base line (vertical and/or horizontal) and plan the arrangement of individual panels on the wall, especially around the edges of window and door openings. The joints of shorter panel sides should not be aligned. The base coat should be applied and dried on dry days at temperatures between +10°C and +25°C. Wash tools with water immediately after finishing work. Avoid working on surfaces directly exposed to sunlight, as well as in strong winds and at high air humidity. In order to protect the undried reinforced layer against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. A uniform distance between the façade panels can be achieved using self-adhesive guide-spacer strips or tile crosses.

* The manufacturer provides a warranty if all **KABE THERM DECOR EFFECT** system components are used.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

ANTI-CRACKING SYSTEMS FOR RENOVATION OF BUILDING FAÇADES

ARMASIL RSA

Renovation silicone anti-cracking system

MAIN ADVANTAGES

- Comprehensive system for renovation of cracked walls and façades
- Very good vapour permeability
- Very low surface absorption
- High resistance to soiling
- Good adhesion to both mineral and plastic-based coatings
- Wide range of colours
- Easy method of renovation

AREAS OF APPLICATION

The **ARMASIL RSA** system is a complex set of products for renovation of cracked external walls of buildings. It contains materials based on high-quality silicone resins, manufactured using proven Swiss technology. The system can be applied in residential buildings (single- and multi-family), public utility and industrial buildings, as well as for the renovation of historic buildings. It provides an efficient joining of cracks and scratches, protects against their further development and allows for aesthetic and decorative finishing of façades. It creates a flexible system of layers with high water vapour permeability and low surface water absorption. It protects from the impact of adverse atmospheric conditions (such as rainfalls, frost, temperature deviations, sun and wind) and ensures high resistance to soiling. It can be applied on all common mineral substrates (such as concrete, lime render, cement-lime render, cement render, sandstone and on raw walls made of bricks, blocks, hollow bricks and other ceramic or silicate materials), as well as on surfaces covered with a plastic-based render/plaster. Depending on the nature and width of scratches, the system is available in 3 options, which allows for easy selection of the right solution for the specific object.

- **Option 1** **hairline and net cracks (crack width up to 0.3 mm);**
- **Option 2** **shrinking and joint cracks (crack width from 0.3 to 5 mm);**
- **Option 3** **dynamic cracks (crack width over 5 mm);**

Note: The system is intended for single use on the construction object. Renovation anti-cracking systems do not eliminate the reasons for cracks and scratches and only improve the façade aesthetics and protect against their harmful impact on the building.

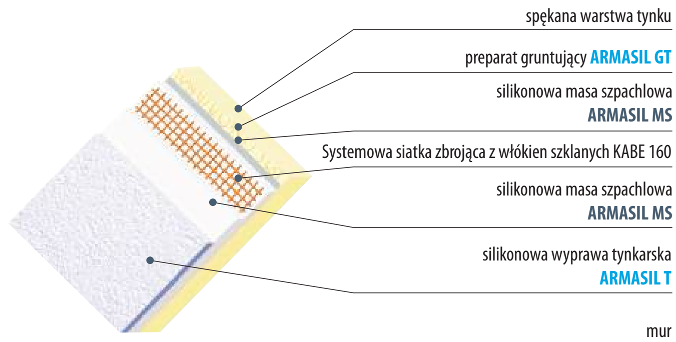
TECHNICAL DATA

Base binder: silicone binder;
Pigments: inorganic coloured pigments, resistant to weather conditions;
Relative diffusion resistance: $S_d = 0.18$ m (standard requirement: $S_d \leq 2.0$ m);
Surface absorption coefficient: $w = 0.18$ kg/m^2 • h$^{0.5}$ (standard requirement: $w \leq 0.5$ kg/m^2 • h$^{0.5}$);
Colours: natural white and colours from Farby KABE colour chart and selected colours from the NCS colour chart or according to provided sample (possible to obtain using inorganic pigments);

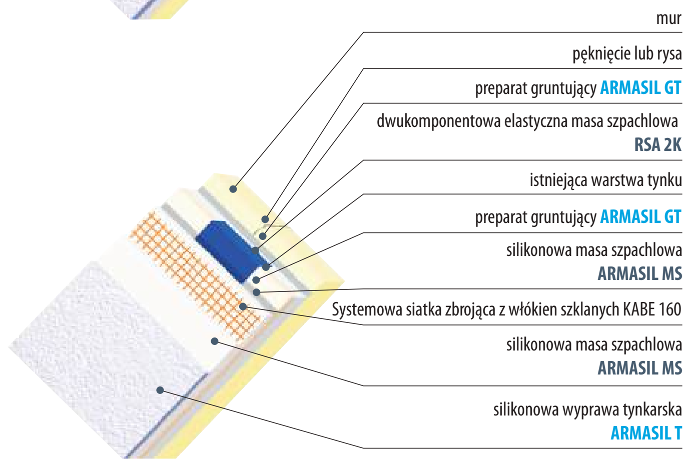
Textures: solid;
Grain size: 1.5 mm; 2.0 mm; 2.5 mm; 3.0 mm
Temperature of application (air and substrate): from +5°C to +25°C.
Relative air humidity: ≤ 75%.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

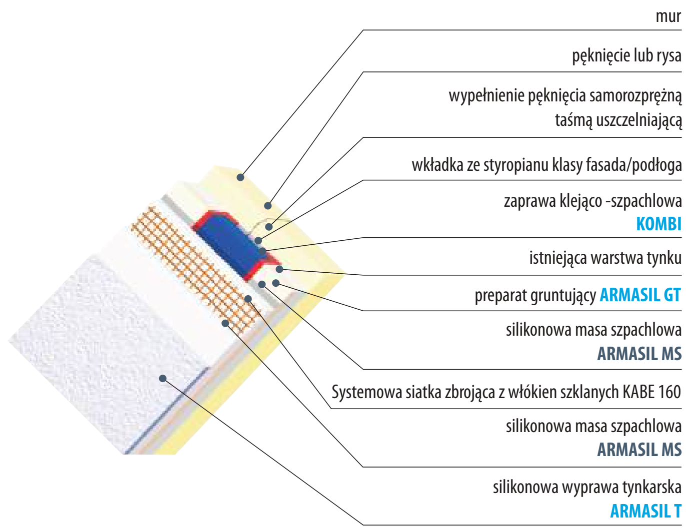
SYSTEM CONSTRUCTION:



OPTION 1:



OPTION 2:



OPTION 3:

Option	Type and width of cracks	Characteristics of cracks
1	Hairline and net cracks (crack width up to 0.3 mm)	– Surface cracks – Thin cracks in the top render layer
2	Shrinking and joint cracks (crack width from 0.3 to 5 mm)	– Net cracks – Cracks that permeate all render layers
3	Dynamic cracks (crack width over 5 mm)	– Ceiling cracks – Cracks in the window lintels – Cracks caused by compression stress, tensile stress and as a result of lack of expansion – Cracks which run in the wall vertical and horizontal joint – Cracks formed as a result of movement of construction substrate, its setting or settling

Note: Due to the excessive heating of dark-coloured façades, it is not recommended to use colours featuring a low light reflection coefficient (Y < 20%).

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

ANTI-CRACKING SYSTEMS FOR RENOVATION OF BUILDING FAÇADES

NOVALIT RSA

Renovation polysilicate
anti-cracking system

MAIN ADVANTAGES

- Comprehensive system for renovation of cracked walls and façades
- Very good vapour permeability
- Mineral nature
- Low surface absorption
- Wide selection of available textures
- Wide range of colours
- Easy method of renovation

AREAS OF APPLICATION

The **NOVALIT RSA** system is a complex set of products for renovation of cracked external walls of buildings. It contains materials based on specially modified potassium water glass produced in accordance with innovative, low-alkaline polysilicate technology. It can be applied in residential buildings (single- and multi-family), public utility and industrial premises as well as for the renovation of historic buildings. It provides an efficient joining of cracks and scratches, protects against their further development and allows for aesthetic and decorative finishing of façades. It creates a system of layers, permanently connected with the substrate, with high vapour permeability and low surface water absorption, which protects the building against the impact of adverse atmospheric conditions (such as precipitation, frost, temperature deviations, sunlight and wind). It can be applied on all common mineral substrates (such as concrete, lime render, cement-lime render, cement render, sandstone and on raw walls made of bricks, blocks, hollow bricks and other ceramic or silicate materials).
Depending on the nature and width of scratches, the system is available in 3 options, which allows for easy selection of the right solution for the specific object.

- **Option 1** **hairline and net cracks (crack width up to 0.3 mm);**
- **Option 2** **shrinking and joint cracks (crack width from 0.3 to 5 mm);**
- **Option 3** **dynamic cracks (crack width over 5 mm);**

Note: The system is intended for single use on the construction object. Renovation anti-cracking systems do not eliminate the reasons for cracks and scratches and only improve the façade aesthetics and protect against their harmful impact on the building.

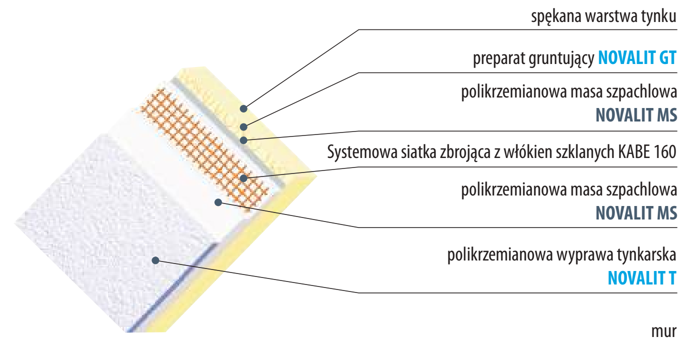
TECHNICAL DATA

Base binder: specially modified potassium water glass;
Pigments: inorganic coloured pigments, resistant to weather conditions;
Relative diffusion resistance: $S_d = 0.08$ m (standard requirement: $S_d \leq 2.0$ m);
Surface absorption coefficient: $w = 0.21$ kg/m^2 • h$^{0.5}$ (standard requirement: $w \leq 0.5$ kg/m^2 • h$^{0.5}$).
Colours: natural white and colours from Farby KABE colour chart and selected colours from the NCS colour chart or according to provided sample (possible to obtain using inorganic pigments);

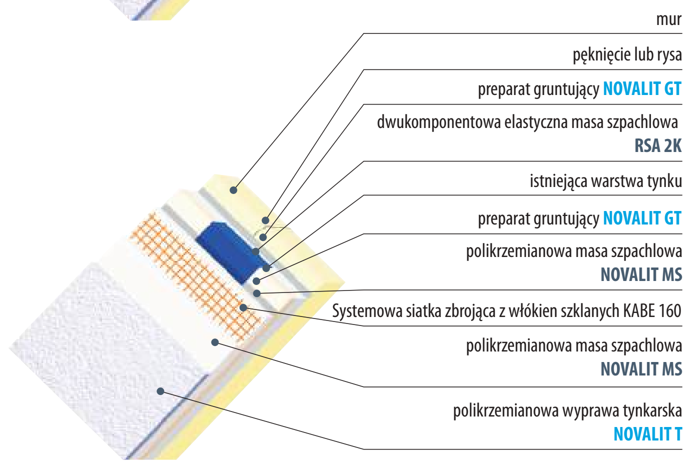
Textures: solid, scraped/mixed;
Grain size: 1.5 mm; 2.0 mm; 2.5 mm; 3.0 mm;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%.

SYSTEM CONSTRUCTION:

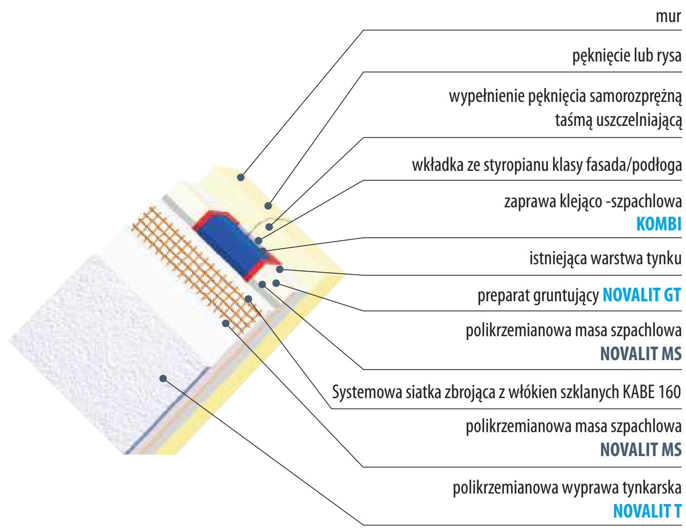
OPTION 1:



OPTION 2:



OPTION 3:



Option	Type and width of cracks	Characteristics of cracks
1	Hairline and net cracks (crack width up to 0.3 mm)	– Surface cracks – Thin cracks in the top render layer
2	Shrinking and joint cracks (crack width from 0.3 to 5 mm)	– Net cracks – Cracks that permeate all render layers
3	Dynamic cracks (crack width over 5 mm)	– Ceiling cracks – Cracks in the window lintels – Cracks caused by compression stress, tensile stress and as a result of lack of expansion – Cracks which run in the wall vertical and horizontal joint – Cracks formed as a result of movement of construction substrate, its setting or settling

Note: Due to the excessive heating of dark-coloured façades, it is not recommended to use colours featuring a low light reflection coefficient (Y < 20%).

Notes

supreme.

supreme.

LINE COLLECTION OF INTERIOR PAINTS

supreme. Diamond collection - Swiss quality.

DISPERSION-SILICATE

AQUATEX

Mineral nature paint

Anti-reflex

MAIN ADVANTAGES

- Exceptional vapour permeability
- Refined, deep matt appearance of the coating
- Top wet scrubbing resistance
- Excellent coverage
- No priming required
- Meets the requirements for building certification according to LEED/BREEAM
- For mineral and painted substrates
- Especially recommended for "wet" rooms and for the first painting of mineral surfaces

AREAS OF APPLICATION

Dispersion silicate paint to be used for interior applications as a protective and decorative coating. Based on innovative Swiss technology, combining silicate and dispersive binding agents. The paint reduces light reflections that create the impression of uneven substrate. One of its features is that it does not change the retention properties of the substrate (walls naturally absorb and release moisture), thanks to which the moisture content in the "wet" rooms (such as kitchens, bathrooms, laundries, rooms in the basement of the building) is reduced. Especially recommended for painting ceilings and upper areas of walls in such rooms. The **AQUATEX** paint can also be used for painting walls and ceilings in "dry" rooms (such as living rooms, bedrooms, conference rooms or offices). It can be used for primary and renovation painting of mineral substrates (e.g., concrete, lime renders, cement-lime renders, cement renders, gypsum renders and plasterboards) and on substrates covered with well set and bound plastic-based renders/plasters. Newly applied mineral substrates (such as cement and cement-lime renders) do not require whitening or priming and can be painted even 14 days after their application.

TECHNICAL DATA

Base binder: copolymer binder and potassium water glass;
Pigments: inorganic colour pigments;
The content of volatile organic compounds VOC: cat. A/a. The product contains less than 30 g/l VOC;
Density: approx. 1.60 g/cm^3;
Colours: white and selected colours from KABE colour chart and pastel colours according to a sample provided;
Gloss level: deep matt;
Thinner: water;
Average coverage: approx. 0.22 l/m^2 (with double painting on a smooth substrate);
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: $\leq$ 80%;
Relative diffusion resistance of a 140 µm thick coat: S_d = 0.02 m;
Surface absorption coefficient, w: 0.058 kg/m^2 • h$^{0.5}$;
Resistance to wet scrubbing: class I paint (according to PN-EN 13300 standard) and class I paint (according to PN-C-81914: 2002).
Packaging: Disposable plastic packaging containing 3, 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Keep out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of fungi growth, the substrate should be cleaned mechanically and then disinfected with fungicidal agent for interiors. Discolourations, nicotine stains and efflorescences caused by water stains should be painted first with **MILAMAT** stain blocker. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. The remnants of adhesive or lime paints should be thoroughly removed and the substrate should be washed with water. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use **KOMBI FINISZ** filling compound, and then smooth out the whole surface with **PROFINISZ** smoothing compound. Small unevenness can be smoothed right away with **PROFINISZ** smoothing compound. Absorbent substrates should be primed with **BUDOGRUNT WG** prior to applying smoothing compounds and/or renders. Fresh cement renders and cement-lime renders can be painted after 2 weeks of curing period, gypsum renders after one week, while the so-called "drywall construction" can be painted directly after polishing and removing dust.
Note: Directly before applying the paint, the surfaces made of materials susceptible to alkalis (i.e. wood, metal, glass or clinker brick) should be protected against splashing. The **PROFINISZ** finishing compound may be applied only in rooms, where relative air humidity does not exceed 70%.
PAINT PREPARATION: If necessary, the paint can be diluted with potable water, by adding 20-30% by volume to the first painting and 5-15% to the second (when determining the amount of water, the type of substrate, drying conditions and application technique should be taken into account).
Note: Mixing **AQUATEX** with other paints may affect its technical performance.
APPLICATION: The paint should be applied on the substrate in two layers with a brush, roller or by spraying (including also "airless" method). It is recommended to use a fleece paint roller with a bristle length of 18 mm. The second coat can be applied only after the first one is completely dry.

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Nozzle	Pressure [bar]	Filter [mesh]	Thinning [%]	Coverage [l/min]
WAGNER	ProSpray 3.21	0552-517	200	60	20-30	1.25
TITAN	Titan 450e	661-517	200	60	10	1.25
GRACO	St Max 495	PAA517	200	60	10	2.3

DRYING: The drying time of one layer of paint applied to the surface (at air temperature +20°C and 55% relative air humidity) is approx. 3 hours. Note: Drying time may be longer due to low temperatures and high relative humidity. After painting, closed rooms should be ventilated until the specific smell disappears. The coating obtains its full mechanical and functional properties after 4 weeks.
USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and setting should take place at temperatures over +5°C. Tools should be cleaned with water immediately after finishing work. Note: A slightly alkaline liquid mixture – wear protective gloves, eye and face protection. If necessary, seek medical advice and show the container or label. Low temperature, as well as high humidity may have a negative impact on the shade of the paint coat.

DISPERSION

PROFILATEX

Ceramic paint with
high resistance to soiling

MAIN ADVANTAGES

- Top resistance to soiling and scrubbing.*
- Resistance to wet scrubbing according to PN-EN 13300 standard – class 1 (coating thickness loss of 1 μm at 200 strokes of a standard brush)
- High resistance to washing off with water-dilutable detergents and disinfecting agents (with the exclusion of organic solvents)
- Meets the requirements for building certification according to LEED/BREEAM
- Friendly to humans and the environment
- For mineral and painted substrates
- Proven antimicrobial properties**

AREAS OF APPLICATION

A high-quality ceramic topcoat paint for the application of protective and decorative paint coatings inside buildings, both in "dry" and "wet" rooms. Particularly recommended for painting walls and ceilings with high aesthetic and functional requirements in rooms with high traffic, such as passageways, halls, corridors, offices, kitchens, bathrooms and laundries. It can be used in housing, public utility, healthcare facilities, nursing homes and food industry plants (without a direct contact with food). Intended for painting mineral substrates (such as cement, cement-lime, lime and gypsum renders, as well as plasterboards), as well as those covered with a coating, plastic-based render/plaster and substrates covered with fibreglass and paper wallpapers. For use both for primary and renovation painting on substrates with uniform or variable structure and colour. Absorbent substrates should be primed with **BUDOGRUNT WG** or **AQUALIT** base coat before applying the paint. The paint is also available in a hygienic version upon special order, which allows for the creation of a coating that protects against microorganisms, especially in hospitals, in treatment and operating rooms, as well as in medical and dental offices.

TECHNICAL DATA

Base binder: synthetic binder;
Pigments: titanium white and coloured pigments;
The content of volatile organic compounds VOC***: cat. A/a. The product contains less than 30 g/l VOC. For white, uncoloured product, the VOC content in the product is 0 g/l.
Density: approx. 1.45 g/cm^3;
Colours: white and colours according to KABE and NCS colour charts or a sample provided;
Gloss level: matt;
Thinner: water;
Average coverage: approx. 0.18 l/m^2 (with double painting on a smooth substrate);

Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 80%;
Resistance to wet scrubbing: class I paint (according to PN-EN 13300) and class I (according to PN-C-81914: 2002).
Packaging: Disposable plastic packaging containing 3 litres, 5 litres and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Keep out of the reach of children.
Shelf life: 18 months from the date of production printed on the product packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with fungicidal agent for interiors. Discolourations, nicotine stains and efflorescences caused by water stains should be painted first with **MILAMAT** stain blocker. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. The remnants of adhesive or lime paints should be thoroughly removed and the substrate should be washed with water. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use **KOMBI FINISZ** filling compound, and then smooth out the whole surface with **PROFINISZ** smoothing compound. Small unevenness can be smoothed right away with **PROFINISZ** smoothing compound. Absorbent substrates should be primed with **BUDOGRUNT WG** prior to applying smoothing compounds and/or renders. Fresh cement renders and cement-lime renders can be painted after 3-4 weeks of curing period, gypsum renders after 2 weeks, while the so-called "drywall construction" can be painted directly after polishing and removing dust. Note: The **PROFINISZ** finishing compound may be applied only in rooms, where relative air humidity does not exceed 70%.
PRIMING: Absorbent or dusty (strongly chalking) substrates should be primed with **BUDOGRUNT WG** before applying the paint. Prime gypsum or heterogeneous substrates with **AQUALIT** primer. Drying time for the product applied on a substrate or primer is about 4 hours under optimum weather conditions (temperature +20°C and relative humidity of 55%). When product or base applied on the substrate is completely dry, **PROFILATEX** paint may be applied. Note: Substrates with low wettability (such as plastic-based renders or dispersion paint coatings) should not be primed and should be only washed with water and the **CLEANFORCE** product. Before proceeding to painting plastic-based substrates, a trial painting is recommended.
PAINT PREPARATION: If necessary, the paint can be diluted with a small amount of potable water, by adding 10% by volume to the first painting and 5% to the second (when determining the amount of water, the type of substrate, drying conditions and application technique should be taken into account). Note: Mixing **PROFILATEX** with other paints may affect its technical performance.
APPLICATION: The paint should be applied on the substrate in two layers with a brush, paint roller (recommended) made of fleece with a bristle length of 18 mm or by spraying (including also "airless" method). The second coat can be applied only after the first one is completely dry.

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Nozzle	Pressure [bar]	Filter [mesh]	Thinning [%]	Coverage [l/min]
GRACO	St Max 495	PAA517	180	60	5	2.3

DRYING: Typical drying time for one layer of paint applied onto a substrate is approx. 4 hours (at air temperature +20°C, 55% RH). After painting, closed rooms should be ventilated until the specific smell disappears. The coating obtains its full mechanical properties after 4 weeks. Note: At low temperatures and high air humidity, the paint drying time will be longer. The coating obtains its full mechanical and functional properties after 4 weeks.
USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and drying should take place at temperatures over +5°C. Tools should be cleaned with water immediately after finishing work. If surfaces of disadvantageous lighting are painted, it is recommended to apply **AQUATEX** or **OPTILATEX** or **TOP WHITE ANTI-REFLEX** deep matt paint.
ADDITIONAL OPTIONS: If the paint is applied on substrates with cracks with a width of up to 0.3 mm (e.g., shrinking cracks of the mineral render coat), it is recommended to use paint reinforced with microfibres for the first painting (an option available on request). In order to increase the resistance of the paint coating to mould growth, it is recommended to apply a special protective agent to the paint (additional service).

* The coating acquires full mechanical and functional properties after 28 days. Remove any dirt with a soft sponge and water with CLEANFORCE within no longer than 60 minutes. Removing stains and "difficult" dirt from rough and uneven surfaces may be difficult. Resistance to soiling tested using: ketchup, sunflower oil, coffee, tea, wine, soot, dirty shoes, colour pencils, wax crayons and poster paints. Note: If coffee or tea stains occur, clean them immediately.
** Applies to the PROFILATEX paint coating in the hygienic version;
*** VOC – volatile organic compounds

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

DISPERSION

PROLATEX

Latex paint for walls
and ceilings

MAIN ADVANTAGES

- Top-quality coating
- Top resistance to washing and scrubbing
- Eco-friendly (free from VOCs*), friendly to humans and the environment
- Resistant to moisture
- Easy to apply
- Very good coverage and high usage capability
- Wide range of colours
- For mineral and painted substrates
- Meets the requirements for building certification according to LEED/BREEAM

AREAS OF APPLICATION

A high-quality latex topcoat paint for the application of protective and decorative paint coatings inside buildings, both in "dry" and "wet" rooms. It can be used in housing, public utility, healthcare facilities and food industry plants (without a direct contact with food). Intended for painting mineral substrates (such as concrete, cement, cement-lime, lime and gypsum renders, as well as plasterboards), as well as those covered with a coating, plastic-based render/plaster and covered with fibreglass wallpapers. For use both for primary and renovation painting on substrates with uniform or variable structure and colour. Absorbent substrates should be primed with **BUDOGRUNT WG** or **AQUALIT** base coat before applying the paint.

TECHNICAL DATA

Base binder: synthetic binder;
Pigments: titanium white and coloured pigments;
The content of volatile organic compounds VOC: cat. A/a. The product contains less than 30 g/l VOC. For white, uncoloured product, the VOC content in the product is 0 g/l.
Density: approx. 1.45 g/cm^3;
Colours: white and colours according to KABE and NCS colour charts or a sample provided;
Gloss level: matt and semi-matt;
Thinner: water;
Average coverage: approx. 0.22 l/m^2 (with double painting on a smooth substrate);
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 80%;
Resistance to wet scrubbing: class I paint (according to PN-EN 13300) and class I (according to PN-C-81914: 2002).
Packaging: Disposable plastic packaging containing 3, 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Keep out of the reach of children.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with fungicidal agent for interiors. Discolourations, nicotine stains and efflorescences caused by water stains should be painted first with **MILAMAT** stain blocker. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. The remnants of adhesive or lime paints should be thoroughly removed and the substrate should be washed with water. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use **KOMBI FINISZ** filling compound, and then smooth out the whole surface with **PROFINISZ** smoothing compound. Small unevenness can be smoothed right away with **PROFINISZ** smoothing compound. Absorbent substrates should be primed with **BUDOGRUNT WG** prior to applying smoothing compounds and/or renders. Fresh cement renders and cement-lime renders can be painted after 3-4 weeks of curing period, gypsum renders after 2 weeks, while the so-called "drywall construction" can be painted directly after polishing and removing dust.
Note: The **PROFINISZ** finishing compound may be applied only in rooms, where relative air humidity does not exceed 70%.
PRIMING: Absorbent or dusty (strongly chalking) substrates should be primed with **BUDOGRUNT WG** before applying the paint. Prime gypsum or heterogeneous substrates with **AQUALIT** primer. Drying time for the product applied on a substrate or primer is about 3 hours under optimum weather conditions (temperature +20°C and relative humidity of 55%). When product or base applied on the substrate is completely dry, **PROLATEX** paint may be applied.
Note: Substrates with low wettability (such as plastic-based renders or dispersion paint coatings) should not be primed and should be only washed with water and the **CLEANFORCE** product. Before proceeding to painting plastic-based substrates, a trial painting is recommended.
PAINT PREPARATION: If necessary, the paint can be diluted with a small amount of potable water, by adding 10% by volume to the first painting and 5% to the second (when determining the amount of water, the type of substrate, drying conditions and application technique should be taken into account).
Note: Mixing **PROLATEX** with other paints may affect its technical performance.
APPLICATION: The paint should be applied on the substrate in two layers with a brush, roller or by spraying (including also "airless" method). It is recommended to use a fleece roller with a bristle length of 18 mm. The second coat can be applied only after the first one is completely dry.

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Nozzle	Pressure [bar]	Filter [mesh]	Thinning [%]	Coverage [l/min]
WAGNER	ProSpray 3.21	0552-517	200	60	5	1.25
TITAN	Titan 450e	661-517	200	60	10	1.25
GRACO	St Max 495	PAA517	180	60	5	2.3

DRYING: Typical drying time for one layer of paint applied onto a substrate is approx. 3 hours (at air temperature +20°C, 55% RH). After painting, closed rooms should be ventilated until the specific smell disappears.
Note: At low temperatures and high air humidity, the paint drying time will be longer. The coating obtains its full mechanical and functional properties after 4 weeks.
USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and drying should take place at temperatures over +5°C. Tools should be cleaned with water immediately after finishing work. If surfaces of disadvantageous lighting are painted, it is recommended to apply **AQUATEX** or **OPTILATEX** or **TOP WHITE ANTI-REFLEX** deep matt paint.
ADDITIONAL OPTIONS: If the paint is applied on substrates with cracks with a width of up to 0.3 mm (e.g., shrinking cracks of the mineral render coat), it is recommended to use paint reinforced with microfibres for the first painting (an option available on request). In order to increase the resistance of the paint coating to mould growth, it is recommended to apply a special protective agent to the paint (additional service).

* VOC – volatile organic compounds

Technical data sheet, revised April 2023.
Most recent information is available at www.farbykabe.pl

The product meets the requirements of the following standard: PN-C-81914:2002
The product holds the Hygienic Certificate of the Polish National Institute of Public Health (PZH)

DISPERSION

TOP WHITE ANTI-REFLEX

Anti-reflex

Paint for walls and ceilings

MAIN ADVANTAGES

- Deep matt
- Super white
- Very high coverage
- Anti-reflex
- Non-dripping consistency
- Perfect effect
- For mineral and painted substrates

AREAS OF APPLICATION

A modern dispersion topcoat paint for carrying out aesthetic super white paint coatings inside buildings. Intended for painting walls and ceilings in "dry" rooms (such as: living room, bedroom, hall, offices and conference rooms). The paint reduces light reflections that create the impression of uneven substrate. It can be used for decorative and protective painting of surfaces inside residential, office and public buildings, including school and educational facilities (schools, kindergartens) and health care facilities (hospitals), production plants, including food industry (without direct contact with food). It creates an aesthetic, smooth coating, providing high finishing standard and pleasant matt optics. It features high resistance to yellowing and washing off or scrubbing. It can be used for primary and renovation painting of mineral substrates (e.g., concrete, cement renders, cement-lime renders, lime and gypsum renders and plasterboards) and on substrates covered with well-set plastic-based renders/plasters. Absorbent or chalking substrates must be primed with **AQUALIT** primer prior to paint application.

TECHNICAL DATA

Base binder: co-polymer binder;
Pigments: titanium white
The content of volatile organic compounds VOC: cat. A/a. The product contains less than 30 g/l VOC;
Density: approx. 1.50 g/cm^3;
Colour: super white
Gloss level: deep matt;
Thinner: water;
Average coverage: approx. 0.25 l/m^2 (with double painting on a smooth substrate);
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 80%;
Resistance to wet scrubbing: class II paint (according to PN-EN 13300) and class I paint (according to PN-C-81914: 2002).
Packaging: Disposable plastic packaging containing 3 litres, 5 litres and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected against frost. Keep out of the reach of children.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of fungi growth, the substrate should be cleaned mechanically and then disinfected with fungicidal agent for interiors. Discolourations, nicotine stains and efflorescences caused by water stains should be painted first with **MILAMAT** stain blocker. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. The remnants of adhesive or lime paints should be thoroughly removed and the substrate should be washed with water. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use **KOMBI FINISZ** filling compound, and then smooth out the whole surface with **PROFINISZ** smoothing compound. Small unevenness can be smoothed right away with **PROFINISZ** smoothing compound. Absorbent substrates should be primed with **BUDOGRUNT WG** prior to applying smoothing compounds and/or renders. Fresh cement renders and cement-lime renders can be painted after 3-4 weeks of curing period, gypsum renders after 2 weeks, while the so-called "drywall construction" can be painted directly after polishing and removing dust.
PRIMING: Absorbent or dusty (strongly chalking) substrates should be primed with **AQUALIT** before applying the paint. Drying time for the primer applied on a substrate is about 3 hours under optimum weather conditions (temperature +20°C and relative humidity of 55%). When the primer applied on the substrate is completely dry, **TOP WHITE ANTI-REFLEX** paint may be applied. Note: Substrates with low wettability (such as plastic-based renders or dispersion paint coatings) should not be primed and should be only washed with water and the **CLEANFORCE** product.
PAINT PREPARATION: If necessary, the paint can be diluted with a small amount of potable water, by adding 5% by volume to the first painting and to the second painting (when determining the amount of water, the type of substrate, drying conditions and application technique should be taken into account).
APPLICATION: The paint should be applied on the substrate in two layers with a brush, roller or by spraying (including also "airless" method). It is recommended to use a fleece paint roller with a bristle length of 18 mm. The second coat can be applied only after the first one is completely dry.

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Nozzle	Pressure [bar]	Filter [mesh]	Thinning [%]	Coverage [l/min]
WAGNER	ProSpray 3.21	0552-517	200	60	5-15	1.25
TITAN	Titan 450e	661-517	200	60	10	1.25
GRACO	St Max 495	PAA517	180	60	10	2.3

DRYING: Typical drying time for one layer of paint applied onto a substrate is approx. 3 hours (at air temperature +20°C, 55% RH). After painting, closed rooms should be ventilated until the specific smell disappears. Note: At low temperatures and high air humidity, the paint drying time will be longer. The coating obtains its full mechanical and functional properties after 4 weeks.
USEFUL HINTS: In order to avoid colour differences it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch.
Paint application and drying should take place at temperatures over +5°C. Tools should be cleaned with water immediately after finishing work.
ADDITIONAL OPTIONS: If the paint is applied on substrates with cracks with a width of up to 0.3 mm (e.g., small shrinking cracks of the mineral render), it is recommended to use paint reinforced with microfibres for the first painting (an option available on request). In order to increase the resistance of the paint coating to mould growth, it is recommended to apply a special protective agent to the paint (additional service).

DISPERSION

PERFEKTA

Acrylic paint for walls and ceilings

MAIN ADVANTAGES

- High coverage
- High resistance to washing and scrubbing
- For mineral and painted substrates
- Pleasant application
- Wide range of colours

AREAS OF APPLICATION

The dispersion topcoat paint for interiors is intended for carrying out paint coatings providing pleasant matt optics. Especially recommended for primary and renovating painting of walls and ceilings in "dry" rooms (such as: living rooms, bedrooms, halls, offices and conference rooms). It may be used both for painting substrates of uniform and changeable texture and colour. It can be used for painting typical mineral substrates (e.g., concrete, cement renders, cement-lime renders, lime and gypsum renders and plasterboards) and on substrates covered with well-set plastic-based renders/plasters. Absorbent substrates should be primed with **BUDOGRUNT WG** or **AQUALIT** base coat before applying the paint.

TECHNICAL DATA

Base binder: co-polymer binder;
Pigments: titanium white and coloured pigments;
The content of volatile organic compounds VOC: cat. A/a. The product contains less than 30 g/l VOC;
Density: approx. 1.50 g/cm^3;
Colours: white and colours according to Farby KABE and NCS colour charts or a sample provided;
Gloss level: matt;
Thinner: water;
Average coverage: approx. 0.25 l/m^2 (with double painting on a smooth substrate);

Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 80%
Resistance to wet scrubbing: class II paint (according to PN-EN 13300) and class I paint (according to PN-C-81914: 2002).
Packaging: Disposable plastic packaging containing 3, 5, 10 and 15 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Keep out of the reach of children.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of fungi growth, the substrate should be cleaned mechanically and then disinfected with fungicidal agent for interiors. Discolourations, nicotine stains and efflorescences caused by water stains should be painted first with **MILAMAT** stain blocker. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. The remnants of adhesive or lime paints should be thoroughly removed and the substrate should be washed with water. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with **PROFINISZ** smoothing compound. Small unevenness can be smoothed right away with **PROFINISZ** smoothing compound. Use the above renders and smoothing compounds according to their technical data sheets. Absorbent substrates should be primed with **BUDOGRUNT WG** prior to applying filling and smoothing compounds. Fresh cement renders and cement-lime renders can be painted after 3-4 weeks of curing period, gypsum renders after 2 weeks, while the so-called "drywall construction" can be painted directly after polishing and removing dust.

PRIMING: Absorbent or dusty (strongly chalking) substrates should be primed with **BUDOGRUNT WG** before applying the paint. Prime gypsum or heterogeneous substrates with **AQUALIT** primer. Drying time for the product applied on a substrate or primer is about 3 hours under optimum weather conditions (temperature +20°C and relative humidity of 55%). When product or base applied on the substrate is completely dry, **PERFEKTA** paint may be applied.

Note: Substrates with low wettability (such as plastic-based renders or dispersion paint coatings) should not be primed and should be only washed with water and the **CLEANFORCE** product.

PAINT PREPARATION: If necessary, the paint can be diluted with a small amount of potable water, by adding 10% by volume to the first painting and 5% to the second (when determining the amount of water, the type of substrate, drying conditions and application technique should be taken into account).

APPLICATION: The paint should be applied on the substrate in two layers with a brush, roller or by spraying (including also "airless" method). It is recommended to use a fleece paint roller with a bristle length of 18 mm. The second coat can be applied only after the first one is completely dry.

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Nozzle	Pressure [bar]	Filter [mesh]	Thinning [%]	Efficiency [kg/min]
WAGNER	ProSpray 3.21	0552-517	200	60	5-15	1.25
TITAN	Titan 450e	661-517	200	60	10	1.25
GRACO	St Max 495	PAA517	180	60	10	2.3

DRYING: Typical drying time for one layer of paint applied onto a substrate is approx. 3 hours (at air temperature +20°C, 55% RH). After applying the paint, closed rooms should be ventilated until the specific smell disappears.
Note: At low temperatures and high air humidity, the paint drying time will be longer. The coating obtains its full mechanical and functional properties after 4 weeks.

USEFUL HINTS: In order to avoid colour differences it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and drying should take place at temperatures over +5°C. Tools should be cleaned with water immediately after finishing work.
If surfaces of disadvantageous lighting are painted, it is recommended to apply **AQUATEX** or **OPTILATEX** or **TOP WHITE ANTI-REFLEX** deep matt paint.

ADDITIONAL OPTIONS: If the paint is applied on substrates with cracks with a width of up to 0.3 mm (e.g., small shrinking cracks of the mineral render), it is recommended to use paint reinforced with microfibres for the first painting (an option available on request). In order to increase the resistance of the paint coating to mould growth, it is recommended to apply a special protective agent to the paint (additional service).

The product meets the requirements of the following standard: PN-C-81914:2002
The product holds the Hygienic Certificate of the Polish National Institute of Public Health (PZH)

INTERIOR PRODUCTS

Paints
Primers
Finishing compounds
Renders/plasters

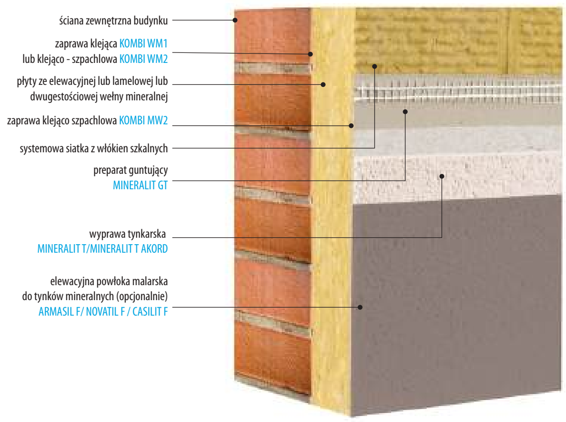
BASED ON MINERAL WOOL

KABE THERM IN MW

GWARANCJA 5 LAT NA SYSTEM I KOLOR

An internal wall insulation system with mineral outer render (with optional painting coat)

SYSTEM CONSTRUCTION



MAIN ADVANTAGES

- Non-flammable system components
- Reduction of building heating costs
- Improved microclimate inside the building
- High aesthetics of top coat
- Free release of moisture
- Prevents water vapour condensation inside the system
- Slows down the process of soiling

TECHNICAL DATA

Type of thermal insulation: Plain, lamella or dual-density mineral wool boards with codes acc. to ETA 16/0079;
Thickness of thermal insulation: from 80 mm to 250 mm for dual-density mineral wool and from 50 mm to 250 mm for plain and lamella mineral wool boards;
Thermal insulation fixing: bonding system (adhesive);
Reinforcing mesh: system reinforcing fibreglass mesh;
Reaction to fire: class A1 – system with mineral plasters (**MINERALIT T**, **MINERALIT T AKORD**), optionally coated with **NOVALIT F** paint, remaining system class – A2-s1,d0
Colours of mineral renders: white or base (intended for painting);
Silicone, polysilicate and silicate paint colours: natural white, colours from the KABE and NCS colour charts or according to samples provided (possible to obtain using inorganic pigments);

Textures: solid, scraped/mixed;
Grain size: 1.5 mm; 2.0 mm; 3.0 mm (spray applied renders **MINERALIT T AKORD** – only grain size 1.5 mm),
Relative diffusion resistance of external layer: ≤ 0.3 m;
System impact resistance: cat. II or cat. III (depending on the type of mineral wool and coat render)
Adhesive adhesion to the substrate: ≥ 0.25 MPa;
Surface layer adhesion to mineral wool boards: ≥ 0.08 MPa;

AREAS OF APPLICATION

The **KABE THERM IN MW** thermal insulation system is used primarily in buildings requiring high fire protection and vapour permeability, as well as protection against mechanical damage. It is used in single- and multi-family housing, public utility and industrial buildings, in newly erected and already existing buildings. The system can be made by using plain, façade mineral wool boards (with disturbed fibre arrangement), lamella wool (with arranged fibres) and dual-density mineral wool boards. The **KABE THERM IN MW** system can be used on walls made of masonry components (bricks, blocks, stone, etc.) or concrete (poured on site or in the form of prefabricated elements). It is especially recommended for use on buildings with walls made of materials with a porous structure (such as aerated concrete, slag concrete, porous brick). The outer layer of the **KABE THERM IN MW** system can be provided by the **MINERALIT T** mineral render, available in a wide range of textures and grain sizes. The top layer can be painted with **ARMASIL F** silicone paints, **NOVATIL F** polysilicate paints or **CALSILIT F** silicate paints.

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	**KOMBI WM1 adhesive or KOMBI WM2 adhesive/base coat** – for fixing insulation mineral wool boards to the substrate	approx. 5.0 kg/m^2 approx. 5.5 kg/m^2 when using lamella wool boards
THERMAL INSULATION	Plain, lamella and dual-density mineral wool boards	1.0-1.10 m^2/m^2 of thermal insulation

The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

KABE Swiss Group

BASED ON MINERAL WOOL

Layer type	Name and description of the product	Average coverage
REINFORCING LAYER	**KOMBI WM2 adhesive/base coat** – for applying reinforcing layer	approx. 5.0 kg/m^2
	System fibreglass mesh: KABE 145, KABE 150, KABE 160, KABE 165 – anti-alkali impregnated mesh, completely immersed in **KOMBI WM2** base coat	1.10 m^2/m^2 of thermal insulation
FINISH COAT	**MINERALIT GT primer** – a product that improves adhesion and limits the substrate water absorbency	approx. 0.20 l/m^2
	External coat of render: **MINERALIT T** or **MINERALIT T AKORD**	grain size 1.5 mm – 2.5 kg/m^2 grain size 2.0 mm – 3.0 kg/m^2 grain size 3.0 mm – 4.0 kg/m^2 For spray applied render (AKORD) grain size 1.5 mm – 2.0-4.0 kg/m^2
	Optional paint coating: **ARMASIL F, NOVALIT F, CALSILIT F** – protective and decorative layer	from 0.36 l/m^2 (when applied twice)

The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".

INTERIOR PRODUCTS

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

INTERIOR PRODUCTS

PRODUCT INTENDED USE TABLE

Product name	AQUATEX	PROFILATEX	PROLATEX		OPTILATEX	TOP WHITE ANTI-REFLEX	OPTIMA	PERFEKTA	PRIMA	Paints for specific purposes		
										LAZUR Z/W	AKORD PRINT	MILAMAT
TYPE OF PAINT	dispersion-silicate	latex	latex		latex	acrylic	acrylic	acrylic	acrylic	acrylic	acrylic structural	alkyd
GLOSS LEVEL ACCORDING TO PN-EN 13300:2002 STANDARD	deep matt	matt (satin matt)	matt	semi-matt	deep matt	deep matt	deep matt	matt	deep matt	semi-matt	–	matt
COLOURS												
WHITE	✓	✓	✓	✓	✓	–	✓	✓	✓	–	✓	✓
SUPER WHITE	–	–	–	–	–	✓	–	–	–	–	–	–
PASTEL	✓	✓	✓	✓	✓	–	✓	✓	–	–	✓	–
INTENSIVE (VERSION BASE B)	–	–	✓	✓	✓	–	✓	✓	–	–	✓	–
VERY INTENSIVE (VERSION BASE A C)	–	–	✓	✓	–	–	–	–	–	–	✓	–
LAZURE PAINT	–	–	–	–	–	–	–	–	–	✓	–	–

✓ available

Product name	AQUATEX	PROFILATEX	PROLATEX		OPTILATEX	TOP WHITE ANTI-REFLEX	OPTIMA	PERFEKTA	PRIMA	Paints for specific purposes		
										LAZUR Z/W	AKORD PRINT	MILAMAT
QUANTITATIVE COVERAGE ACCORDING TO PN-EN-13300:2002 AT AN EFFICIENCY OF 7,5 m²/l	Cl. 2	Cl. 2	Cl. 2	Cl. 2	Cl. 2	Cl. 2	Cl. 2	Cl. 2	Cl. 3	–	–	Cl. 2
RESISTANCE TO WET SCRUBBING ACCORDING TO PN-EN-13300:2002 STANDARD	Cl. 1	Cl. 1	Cl. 1	Cl. 1	Cl. 2	Cl. 2	Cl. 2	Cl. 2	Cl. 5	Cl. 2	–	Cl. 2
COVERAGE WHEN APPLIED ONCE ONTO A SMOOTH SUBSTRATE	approx. 9 m²	approx. 11 m²	approx. 9 m²	approx. 9 m²	approx. 9 m²	approx. 8 m²	approx. 8 m²	approx. 8 m²	approx. 8 m²	approx. 10 m²	approx. 2-3 m²	approx. 10 m²
CONTENT OF VOLATILE ORGANIC COMPOUNDS (VOCS) (MAX. PERMISSIBLE CONTENT 30 g/litre) FOR WHITE OR TRANSPARENT PRODUCT	2.4 ±10% g/litre (VOC)	0.0 g/litre (VOC)	0.0 g/litre (VOC)	0.0 g/litre (VOC)	0.0 g/litre (VOC)	11.0 ±10% g/litre (VOC)	12.9 ±10% g/litre (VOC)	9.3 ±10% g/litre (VOC)	8.0 ±10% g/litre (VOC)	9.7 ±10% g/litre (VOC)	8.0 ±10% g/litre (VOC)	1.7 ±10% g/litre (VOC)
AREAS OF APPLICATION, INTERIORS												
RESIDENTIAL, DRY	■■	■■	■■	■■	■■	■■	■■	■■	■	■■	■■	■■
RESIDENTIAL, WET (WITH PERIODICALLY INCREASED HUMIDITY, E.G., KITCHEN, BATHROOM, LAUNDRY ROOM)	■■[2]	■■[1]	■■[1]	■■[1]						■	■	■
PUBLIC UTILITY	■■	■■[3]	■■[3]	■■[3]	■■[3]	■■[3]	■	■		■	■■	■
HEALTHCARE FACILITIES AND FOOD INDUSTRY	■■	■■	■■[3]	■■[3]	■■[3]	■■[3]	■	■		■		■
UTILITY, INDUSTRIAL	■■	■■	■■	■■	■■	■■	■■	■■	■■	■■		■■
SUBSTRATE												
VERY ABSORBENT, E.G., RENDERS AND GYPSUM SMOOTHING COMPOUNDS	■■	■	■	■	■■	■■	■	■	■	■■	■■	■■
ABSORBENT – E.G., CEMENT AND CEMENT-LIME RENDERS	■■[4]	■■	■■	■■	■■	■■	■■	■■	■■	■■	■■	■■
NON-ABSORBENT, E.G., ORGANIC RENDERS, DISPERSION COATINGS	■■	■■	■■	■■	■■	■■	■■	■■	■■	■■	■■	■■
COVERED WITH FIBREGLASS WALLPAPERS		■■	■■	■■						■■		■■
TYPE OF SURFACE TO BE PAINTED												
WITH DISADVANTAGEOUS LIGHTING	■■	■	■	■	■■	■■	■	■	■	■	■■	■
"DADO" TYPE IN CORRIDORS AND HALLWAYS		■■	■■	■■							■■[5]	
COVERED WITH NICOTINE STAINS, SOOT OR DRIED DIRTY WATER STAINS												■■

■■ ESPECIALLY RECOMMENDED

■ INTENDED USE

1 on surfaces exposed to direct water, such as walls

2 on surfaces not exposed to direct water, such as ceilings and upper parts of walls

3 holds the Hygienic Certificate of the Polish National Institute of Public Health (PZH) with an extended scope of use for public utility rooms, health care facilities and food industry plants (without direct contact with food)

4 new mineral renders can be painted 14 days after their application

5 additionally protected with MARCHRON varnish

It is possible to protect all paints against fungal growth (additional service).

In the event of minor scratches in the substrate, up to 0.3 mm wide, it is possible to additionally reinforce the paints intended for the first layer (additional service).

Detailed information on product intended uses, their application method and technical parameters is available in product Technical Data Sheets and at **www.farbykabe.pl**.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

KABE Swiss Group

DISPERSION

AKRYLATEX W

Latex paint for walls and ceilings

MAIN ADVANTAGES

- Top resistance to washing and wet scrubbing
- Easy to keep clean
- Effective damp-proofing
- Very good coverage and high usage capability
- Wide range of colours
- For use on both mineral substrates and plastic-based renders/plasters

AREAS OF APPLICATION

A dispersion topcoat paint to be used for protective and decorative paint coatings inside buildings, both in "dry" and "wet" rooms. Especially recommended for painting walls in rooms with high traffic (such as corridors, staircases) and in wet rooms (such as kitchens, bathrooms and laundry rooms). It can be used in housing, public utility, healthcare facilities and food industry plants (without a direct contact with food). It creates a flexible coating with high tightness and resistance to wet scrubbing, as well as the adverse effects of water and the soiling process. It is used to paint on any mineral substrate, acrylic renders and on substrates covered with well-set plastic-based renders, including surfaces covered with fibreglass wallpapers. Absorbent substrates should be primed with **BUDOGRUNT WG** or **AQUALIT** undercoat before applying the paint.

TECHNICAL DATA

Base binder: co-polymer binder;
Pigments: titanium white, as well as inorganic and organic coloured pigments;
The content of volatile organic compounds VOC: cat. A/a. The product contains less than 30 g/l VOC;
Density: approx. 1.45 g/cm^3;
Colours: white and colours according to KABE and NCS colour charts or a sample provided;
Gloss level: matt;
Thinner: water;
Average coverage: approx. 0.22 l/m^2 (with double painting on a smooth substrate);
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 80%;
Resistance to wet scrubbing: class I paint (according to PN-EN 13300 standard) and class I paint (according to PN-C-81914 standard);
Relative diffusion resistance of the layer with a thickness of 150 µm: $S_d = 0.9$ m (standard requirement: $S_d \leq 2.0$ m);
Surface absorption coefficient: w = 0.006 kg/m^2 • h$^{0.5}$ (standard requirement: w ≤ 0.5 kg/m^2 • h$^{0.5}$).
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Keep out of the reach of children.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with fungicidal agent for interiors. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates (from 5 mm to 15 mm), first use levelling compounds, and then smooth out the wall surface with **PROFINISZ** base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **PROFINISZ** base coat. An absorbent substrate should be primed with **BUDOGRUNT WG** before applying levelling compounds or base coats. If the paint is applied on new mineral substrates (i.e. concrete, cement render and cement-lime render) – a minimum 4 weeks of curing are required, for gypsum renders a minimum of 2 weeks, while drywall systems can be coated directly after grinding and dedusting.
PRIMING: A substrate should be primed with **BUDOGRUNT WG** before applying the paint. Prime gypsum or heterogeneous substrates with **AQUALIT** primer. The curing period of the product or primer applied to the substrate before applying the paint is about 4 hours. Note: Substrates with low wettability (such as plastic-based renders or dispersion paint coatings) should not be primed and should be only washed with water and the **CLEANFORCE** product.
PAINT PREPARATION: If necessary, the paint can be diluted by adding a small amount of potable water (by adding to the first painting max. 10% of volume and to the second one max. 5%). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: The paint should be applied on the substrate in two layers with a brush, roller or by spraying (including also "airless" method). The second paint layer should be applied only after the first one dries completely, i.e. after min. 3-4 hours. It is recommended to use a special fleece paint roller with a bristle length of min. 18 mm.

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Nozzle	Pressure [bar]	Filter [mesh]	Thinning [%]	Coverage [l/min]
WAGNER	ProSpray 3.21	0552-519	200	60	5	1.25
TITAN	Titan 450e	661-519	200	60	10	1.25
GRACO	UltraMax II 795	PAA621	170	60	5	3.6
	StMax II 495	PAA519 PAA621	190	60	10	2.3

DRYING: Typical drying time for one layer of paint applied onto a substrate is approx. 3 hours (at air temperature +20°C, 55% RH). After painting, closed rooms should be ventilated until the specific smell disappears. The coating obtains its full mechanical properties after 4 weeks. Note: At low temperatures and high air humidity, the paint drying time will be longer. Protect the newly applied paint from drying too quickly. The coating obtains its full mechanical and functional properties after 4 weeks.
USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and drying should take place at temperatures over +5°C. Tools should be cleaned with water immediately after finishing work. If surfaces of disadvantageous lighting are painted, it is recommended to apply **AQUATEX** or **OPTILATEX** deep matt paint or **TOP WHITE ANTI-REFLEX**.
ADDITIONAL OPTIONS: If the paint is applied on substrates with cracks with a width of up to 0.3 mm (e.g., small shrinking cracks of the mineral render), it is recommended to use paint reinforced with microfibres for the first painting (an option available on request). In order to increase the resistance of the paint coating to mould growth, it is recommended to apply a special protective agent to the paint (additional service).

DISPERSION

OPTILATEX

Latex paint for walls
and ceilings

MAIN ADVANTAGES

- Refined, deep matt appearance of the coating
- Eco-friendly (free from VOCs*), friendly to humans and the environment
- Resistant to washing and scrubbing
- Very high coverage
- Pleasant application
- Perfect effect
- For mineral and painted substrates
- Meets the requirements for building certification according to LEED/BREEAM

AREAS OF APPLICATION

A modern latex topcoat paint for carrying out protective and decorative paint coatings inside buildings. It is intended for painting walls and ceilings in "dry" residential rooms, public utility rooms, including healthcare facilities, educational and nursing facilities, as well as in service and production plants, including food industry (without direct contact with food). It may be used both for painting substrates of uniform and changeable texture and colour. It creates an aesthetic, smooth coating, providing high finishing standard and pleasant deep matt optics. It features high resistance to yellowing and washing off or scrubbing. It can be used for primary and renovation painting of mineral substrates (e.g., concrete, cement renders, cement-lime renders, lime and gypsum renders and plasterboards) and on substrates covered with well-set plastic-based renders/plasters. Absorbent or chalking substrates should be primed with **BUDOGRUNT WG** or **AQUALIT** base coat before applying the paint.

TECHNICAL DATA

Base binder: synthetic binder;
Pigments: titanium white and coloured pigments;
The content of volatile organic compounds VOC: cat. A/a. The product contains less than 30 g/l VOC. For white, uncoloured product, the VOC content in the product is 0 g/l.
Density: approx. 1.40 g/cm^3;
Colours: white and colours according to Farby KABE and NCS colour charts or a sample provided;
Gloss level: deep matt;
Thinner: water;
Average coverage: approx. 0.22 l/m^2 (with double painting on a smooth substrate);
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 80%;
Resistance to wet scrubbing: class II paint (according to PN-EN 13300) and class I paint (according to PN-C-81914: 2002).
Packaging: Disposable plastic packaging containing 2.5, 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Keep out of the reach of children.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of fungi growth, the substrate should be cleaned mechanically and then disinfected with fungicidal agent for interiors. Discolourations, nicotine stains and efflorescences caused by water stains should be painted first with **MILAMAT** stain blocker. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. The remnants of adhesive or lime paints should be thoroughly removed and the substrate should be washed with water. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use **KOMBI FINISZ** filling compound, and then smooth out the whole surface with **PROFINISZ** smoothing compound. Small unevenness can be smoothed right away with **PROFINISZ** smoothing compound. Absorbent substrates should be primed with **BUDOGRUNT WG** prior to applying smoothing compounds and/or renders. Fresh cement renders and cement-lime renders can be painted after 3-4 weeks of curing period, gypsum renders after 2 weeks, while the so-called "drywall construction" can be painted directly after polishing and removing dust.
PRIMING: Absorbent or dusty (strongly chalking) substrates should be primed with **BUDOGRUNT WG** before applying the paint. Prime gypsum or heterogeneous substrates with **AQUALIT** primer. Drying time for the product applied on a substrate or primer is about 3 hours under optimum weather conditions (temperature +20°C and relative humidity of 55%). When product or base applied on the substrate is completely dry, **OPTILATEX** paint may be applied.
Note: Substrates with low wettability (such as plastic-based renders or dispersion paint coatings) should not be primed and should be only washed with water and the **CLEANFORCE** product.
PAINT PREPARATION: If necessary, the paint can be diluted with a small amount of potable water, by adding 10% by volume to the first painting and 5% to the second (when determining the amount of water, the type of substrate, drying conditions and application technique should be taken into account).
APPLICATION: The paint should be applied on the substrate in two layers with a brush, roller or by spraying (including also "airless" method). It is recommended to use a fleece paint roller with a bristle length of 18 mm. The second coat can be applied only after the first one is completely dry.

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Nozzle	Pressure [bar]	Filter [mesh]	Thinning [%]	Coverage [l/min]
WAGNER	ProSpray 3.21	0552-517	200	60	5-15	1.25
TITAN	Titan 450e	661-517	200	60	10	1.25
GRACO	St Max 495	PAA517	180	60	10	2.3

DRYING: Typical drying time for one layer of paint applied onto a substrate is approx. 3 hours (at air temperature +20°C, 55% RH). After painting, closed rooms should be ventilated until the specific smell disappears.
Note: At low temperatures and high air humidity, the paint drying time will be longer. The coating obtains its full mechanical and functional properties after 4 weeks.
USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and drying should take place at temperatures over +5°C. Tools should be cleaned with water immediately after finishing work.
ADDITIONAL OPTIONS: If the paint is applied on substrates with cracks with a width of up to 0.3 mm (e.g., small shrinking cracks of the mineral render), it is recommended to use paint reinforced with microfibres for the first painting (an option available on request). In order to increase the resistance of the paint coating to mould growth, it is recommended to apply a special protective agent to the paint (additional service).

Technical data sheet, revised April 2023.
Most recent information is available at www.farbykabe.pl
The product meets the requirements of the following standard: PN-C-81914:2002
The product holds the Hygienic Certificate of the Polish National Institute of Public Health (PZH)

KABE Swiss Group

DISPERSION

OPTIMA

Acrylic paint for walls and ceilings

MAIN ADVANTAGES

- Resistant to washing and scrubbing
- Deep matt
- Very high coverage
- Pleasant application
- For mineral and painted substrates

AREAS OF APPLICATION

A modern dispersion topcoat paint for carrying out decorative paint coatings inside buildings. Intended for painting walls and ceilings in "dry" rooms (such as: living room, bedroom, hall, offices and conference rooms). It may be used both for painting substrates of uniform and changeable texture and colour. It creates an aesthetic, smooth coating, providing high finishing standard and pleasant matt optics. It features high resistance to yellowing and washing off or scrubbing. It can be used for primary and renovation painting of mineral substrates (e.g., concrete, cement renders, cement-lime renders, lime and gypsum renders and plasterboards) and on substrates covered with well-set plastic-based renders/plasters. Absorbent or chalking substrates should be primed with **BUDOGRUNT WG** or **AQUALIT** base coat before applying the paint.

TECHNICAL DATA

Base binder: co-polymer binder;
Pigments: titanium white and coloured pigments;
The content of volatile organic compounds VOC: cat. A/a. The product contains less than 30 g/l VOC;
Density: approx. 1.50 g/cm^3;
Colours: white and colours according to Farby KABE and NCS colour charts or a sample provided;
Gloss level: deep matt;
Thinner: water;
Average coverage: approx. 0.25 l/m^2 (with double painting on a smooth substrate);

Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 80%;
Resistance to wet scrubbing: class II paint (according to PN-EN 13300) and class I paint (according to PN-C-81914: 2002).
Packaging: Disposable plastic packaging containing 2.5, 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Keep out of the reach of children.
Shelf life: 18 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of fungi growth, the substrate should be cleaned mechanically and then disinfected with fungicidal agent for interiors. Discolourations, nicotine stains and efflorescences caused by water stains should be painted first with **MILAMAT** stain blocker. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. The remnants of adhesive or lime paints should be thoroughly removed and the substrate should be washed with water. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use **KOMBI FINISZ** filling compound, and then smooth out the whole surface with **PROFINISZ** smoothing compound. Small unevenness can be smoothed right away with **PROFINISZ** smoothing compound. Absorbent substrates should be primed with **BUDOGRUNT WG** prior to applying smoothing compounds and/or renders. Fresh cement renders and cement-lime renders can be painted after 3-4 weeks of curing period, gypsum renders after 2 weeks, while the so-called "drywall construction" can be painted directly after polishing and removing dust.
PRIMING: Absorbent or dusty (strongly chalking) substrates should be primed with **BUDOGRUNT WG** before applying the paint. Prime gypsum or heterogeneous substrates with **AQUALIT** primer. Drying time for the product applied on a substrate or primer is about 3 hours under optimum weather conditions (temperature +20°C and relative humidity of 55%). When product or base applied on the substrate is completely dry, **OPTIMA** paint may be applied. Note: Substrates with low wettability (such as plastic-based renders or dispersion paint coatings) should not be primed and should be only washed with water and the **CLEANFORCE** product.
PAINT PREPARATION: If necessary, the paint can be diluted with a small amount of potable water, by adding 10% by volume to the first painting and 5% to the second (when determining the amount of water, the type of substrate, drying conditions and application technique should be taken into account).
APPLICATION: The paint should be applied on the substrate in two layers with a brush, roller or by spraying (including also "airless" method). It is recommended to use a fleece paint roller with a bristle length of 18 mm. The second coat can be applied only after the first one is completely dry.

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Nozzle	Pressure [bar]	Filter [mesh]	Thinning [%]	Coverage [l/min]
WAGNER	ProSpray 3.21	0552-517	200	60	5-15	1.25
TITAN	Titan 450e	661-517	200	60	10	1.25
GRACO	St Max 495	PAA517	180	60	10	2.3

DRYING: Typical drying time for one layer of paint applied onto a substrate is approx. 3 hours (at air temperature +20°C, 55% RH). After painting, closed rooms should be ventilated until the specific smell disappears. Note: At low temperatures and high air humidity, the paint drying time will be longer. The coating obtains its full mechanical and functional properties after 4 weeks.
USEFUL HINTS: In order to avoid colour differences it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and drying should take place at temperatures over +5°C. Tools should be cleaned with water immediately after finishing work.
ADDITIONAL OPTIONS: If the paint is applied on substrates with cracks with a width of up to 0.3 mm (e.g., small shrinking cracks of the mineral render), it is recommended to use paint reinforced with microfibres for the first painting (an option available on request). In order to increase the resistance of the paint coating to mould growth, it is recommended to apply a special protective agent to the paint (additional service).

DISPERSION

PRIMA

Budget-friendly
white acrylic paint

MAIN ADVANTAGES

- High substrate coverage
- Resistant to washing
- For mineral and painted substrates
- Favourable price/quality ratio
- For hydrodynamic spraying and manual application

AREAS OF APPLICATION

A dispersion topcoat paint for white, aesthetic coatings in the interiors of buildings. Especially recommended for painting walls and ceilings in "dry" residential, utility, warehouse and industrial rooms. It can be used for the initial painting of mineral substrates (such as: concrete, cement renders, cement-lime, lime and gypsum renders, and plasterboards), as well as on substrates covered with well-set and bound plastic-based renders/plasters. Absorbent or chalking substrates must be primed with **BUDOGRUNT WG** before applying the paint.

TECHNICAL DATA

Base binder: co-polymer binder;
Pigments: titanium white;
The content of volatile organic compounds (VOC): cat. A/a. The product contains less than 30 g/l VOC.
Density: approx. 1.50 g/cm^3;
Colour: white;
Gloss level: deep matt;
Thinner: water;
Average coverage: approx. 0.25 l/m^2 (with double painting on a smooth substrate);
Temperature of application (air and substrate): from +5°C to +25°C;

Relative air humidity: ≤ 80%;
Resistance to wet scrubbing: class V paint (according to PN-EN 13300) and class II paint (according to PN-C-81914: 2002).
Packaging: Disposable plastic packaging containing 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Keep out of the reach of children.
Shelf life: 12 months from the date of production printed on the product packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of fungi growth, the substrate should be cleaned mechanically and then disinfected with fungicidal agent for interiors. Discolourations, nicotine stains and efflorescences caused by water stains should be painted first with **MILAMAT** stain blocker. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. The remnants of adhesive or lime paints should be thoroughly removed and the substrate should be washed with water. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with **PROFINISZ** smoothing compound. Small unevenness can be smoothed right away with **PROFINISZ** smoothing compound. Absorbent substrates should be primed with **BUDOGRUNT WG** prior to applying smoothing compounds and/or renders. Fresh cement renders and cement-lime renders can be painted after 3-4 weeks of curing period, gypsum renders after 2 weeks, while the so-called "drywall construction" can be painted directly after polishing and removing dust.
PRIMING: Absorbent or dusty (strongly chalking) substrates should be primed with **BUDOGRUNT WG** before applying the paint. Drying time for the product applied on a substrate is about 3 hours under optimum weather conditions (temperature +20°C and relative humidity of 55%). The paint can be applied when the product applied on the substrate is completely dry.
Note: Substrates with low wettability (such as plastic-based renders or dispersion paint coatings) should not be primed and should be only washed with water and the **CLEANFORCE** product.
PAINT PREPARATION: If necessary, the paint can be diluted by adding a small amount of **BUDOGRUNT WG** primer, adding to the first painting 10% by volume.
APPLICATION: The paint should be applied on the substrate in two layers with a brush, roller or by spraying (including also "airless" method). It is recommended to use a fleece roller with a bristle length of 18 mm. The second coat can be applied only after the first one is completely dry.

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Nozzle	Working pressure [bar]	Filter [mesh]	Thinning [%]	Coverage [l/min]
GRACO	St Max 395	PAA517	180	60	0	1.25

DRYING: Typical drying time for one layer of paint applied onto a substrate is approx. 3 hours (at air temperature +20°C, 55% RH). After painting, closed rooms should be ventilated until the specific smell disappears.
Note: At low temperatures and high air humidity, the paint drying time will be longer. The coating obtains its full mechanical and functional properties after 4 weeks.
USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. Paint application and drying should take place at temperatures over +5°C. Tools should be cleaned with water immediately after finishing work.

Technical data sheet, revised April 2023.
Most recent information is available at www.farbykabe.pl

The product meets the requirements of the following standard: PN-C-81914:2002
The product holds the Hygienic Certificate of the Polish National Institute of Public Health (PZH)

LAZURE

LAZUR Z/W

Lazure paint for performing special decorative effects

MAIN ADVANTAGES

- Unlimited possibilities for interior decoration
- Lazure effect
- Applied as a finish coat combined with covering paints and renders
- Translucent
- For outdoor and indoor use.

AREAS OF APPLICATION

A modern, water-based acrylic dispersion paint intended for carrying decorative, lazure (not fully covering) paint coatings inside and outside buildings, including in KABE THERM EWI systems. It is used to provide the wood/board effect, architectural concrete effect and aged brick effect. Especially recommended for emphasizing the decorative surface texture. It allows for unlimited possibilities of shaping individual decorations adjusted to specific interior in terms of colour scheme and style. It allows for making coatings with various paint effects, inspired by the decorator's imagination and skills. It can be used for carrying out decorative finish coats in public utility facilities (such as hotels, shops, restaurants, offices and conference rooms), as well as in elegant residential rooms (such as living rooms). It is especially recommended for painting rough surfaces with attractive texture (such as thin-coat renders of modelled or smooth texture). To be applied both on mineral substrates (such as traditional cement renders, cement-lime renders and thin-coat mineral renders) and substrates coated with a well-bonded plastic-based render/plaster. Before the application of lazure paint, the substrate should be painted once with **PROLATEX** or **AKRYLATEX W** (indoors) or **AKRYLATEX** and **ARMASIL F** (outdoors).

TECHNICAL DATA

Base binder: co-polymer binder;
Pigments: organic and inorganic coloured pigments;
The content of volatile organic compounds VOC: cat. A/c. The product contains less than 130 g/l VOC;
Density: approx. 1.10 g/cm^3;
Colours: from KABE collection;
Gloss level: matt;
Average coverage: approx. 0.10 l/m^2 (depending on the effect assumed);

Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 80%;
pH: approx. 9;
Packaging: Disposable plastic packaging containing 1 and 2.5 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Keep out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of fungi growth, the substrate should be cleaned mechanically and then disinfected with fungicidal agent for interiors. Discolourations, nicotine stains and efflorescences caused by water stains should be painted first with **MILAMAT** stain blocker. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. The remnants of adhesive or lime paints should be thoroughly removed and the substrate should be washed with water. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use **KOMBI FINISZ** filling compound, and then smooth out the whole surface with **PROFINISZ** smoothing compound. Small unevenness can be smoothed right away with **PROFINISZ** smoothing compound. Absorbent substrates should be primed with **BUDOGRUNT WG** prior to applying smoothing compounds and/or renders. Fresh cement renders and cement-lime renders can be painted after 3-4 weeks of curing period, gypsum renders after 2 weeks, while the so-called "drywall construction" can be painted directly after polishing and removing dust.
PRIMING: Before the application, the substrate should be painted once with **PROLATEX** or **AKRYLATEX W** or **AKRYLATEX** or **ARMASIL F** (white colour is most often applied). Drying time for the paint applied on a substrate is about 3 hours under optimum weather conditions (temperature +20°C and relative humidity of 55%). The lazure paint can be applied when the undercoat applied on the substrate is completely dry.
PAINT PREPARATION: The packaging contains a ready-to-use product. If necessary, the paint can be diluted by adding a small amount of clean water (adding 5% by vol.). Quantity of added water may vary depending on the substrate type, drying conditions and application method. Mix the paint thoroughly immediately before use.
APPLICATION: Depending on the assumed decorative effect, paint may be applied on the substrate in one or two layers with the use of various painting tools (such as brush, roller, sponge, pad, cloth, paint glove or by means of spraying). Another layer of paint should be applied after the first one dries. As necessary, the subsequent paint coatings may differ in colour and application technique. The fresh lazure paint coating is easy to process and the final effect depends only on the skills and imagination of the worker.
DRYING: Typical drying time for one layer of paint applied onto a substrate is approx. 3 hours (at air temperature +20°C, 55% RH). Note: At low temperatures and high air humidity, the coating setting time will be longer. After painting, closed rooms should be ventilated until the specific smell disappears. The coating obtains its full mechanical and functional properties after 4 weeks.
USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and drying should take place at temperatures over +5°C. Tools should be cleaned with water immediately after finishing work.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

European Technical Assessment: ETA 17/0203
The product meets the requirements of the following standard: ZN-III/9/2005
The product holds the Hygienic Certificate of the Polish National Institute of Public Health (PZH)
National Technical Assessment No. ICiMB-KOT-2018/0050 edition 2

INSULATING

MILAMAT

Stain blocking paint for walls and ceilings

MAIN ADVANTAGES

- Efficiently blocks even the most persistent stains and dirt
- High resistance to washing and scrubbing
- For mineral and painted substrates

AREAS OF APPLICATION

A modern renovation paint for performing base and surface paint coatings inside buildings. It is intended for painting very dirty surfaces of walls and ceilings covered with hard to remove nicotine, soot and dry stains left after water patches. It can be used for painting of all mineral substrates (such as cement renders, cement-lime renders, lime and gypsum renders and plasterboards) and those covered with well-set plastic-based renders/plasters. Absorbent or chalking substrates should be primed with **BUDOGRUNT WG** or **AQUALIT** base coat before applying the paint.

TECHNICAL DATA

Base binder: specially modified alkyd binder;
Pigments: titanium white;
The content of volatile organic compounds VOC: cat. A/a. The product contains less than 30 g/l VOC;
Density: approx. 1.30 g/cm^3;
Thinner: water;
Colour: white;
Gloss level: matt;
Average coverage: approx. 0.20 l/m^2 (with double painting on a smooth substrate);
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 80%;
Resistance to wet scrubbing: class II paint (according to PN-EN 13300 standard) and class I paint (according to PN-C-81914:2002 standard).
Packaging: Disposable plastic packaging containing 1 litre of product.
Storage: The product should be stored in sealed packaging, in a cool room, but protected against direct sunlight and frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: The substrate should be sound/stable (without cracks and scratches), degreased and dry. In case of fungi growth, the substrate should be cleaned mechanically and then disinfected with fungicidal agent for interiors. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. The remnants of adhesive or lime paints should be thoroughly removed and the substrate should be washed with water. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use **KOMBI FINISZ** filling compound, and then smooth out the whole surface with **PROFINISZ** smoothing compound.

PRIMING: Absorbent or dusty (strongly chalking) substrates should be primed with **BUDOGRUNT WG**. Prime gypsum or heterogeneous substrates with **AQUALIT** primer. Drying time for the product applied on a substrate or primer is about 3 hours under optimum weather conditions (temperature +20°C and relative humidity of 55%). Note: Substrates with low wettability (such as plastic-based renders or dispersion paint coatings) should not be primed and should be only washed with water and the **CLEANFORCE** product.

APPLICATION: The packaging contains a ready-to-use product. Do not dilute when used to block stains. Mix the product thoroughly directly before application. The paint should be applied on the substrate in 1 or 2 layers (depending on the level of soiling) with a brush, roller or by spraying (including also "airless" method). It is recommended to use a fleece paint roller with a bristle length of 18 mm. The second layer should be applied only after the first one dries completely, i.e. after min. 3-4 hours. Then, the whole surface should be painted with **MILAMAT** paint or other paint for interiors from KABE range. If the whole surface is painted with **MILAMAT**, it can be diluted by adding a small amount of water (adding max. 10% by vol.).

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Nozzle	Pressure [bar]	Filter [mesh]	Thinning [%]	Coverage [l/min]
GRACO	St Max II 495	PAA517	170	60	5	2.3

DRYING: Typical drying time for one layer of paint applied onto a substrate is approx. 3 hours (at air temperature +20°C, 55% RH). The total drying time is 4-6 hours, depending on the paint consistency and substrate water absorbency. Note: At low temperatures and high air humidity, the paint drying time will be longer. After painting, closed rooms should be ventilated until the specific smell disappears. The coating obtains its full mechanical and functional properties after 4 weeks.

USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and drying should take place at temperatures over +5°C. Tools should be cleaned with water immediately after finishing work.

Technical data sheet, revised April 2023.
Most recent information is available at www.farbykabe.pl

The product meets the requirements of the following standard: PN-C-81914:2002
The product holds the Hygienic Certificate of the Polish National Institute of Public Health (PZH)

KABE Swiss Group

STRUCTURAL

AKORD PRINT

Structural paint for spraying

MAIN ADVANTAGES

- Decorative and multicoloured effect of 3D spatial structure
- High resistance to mechanical damage
- Wide range of colours
- Quick and easy application by spraying
- Masks slight unevenness of the substrate
- Possibility of additional protection with transparent varnish

AREAS OF APPLICATION

It is used for machine (spraying) application of structural paint coatings inside buildings in residential and public utility buildings. Creates a durable coating with attractive spatial appearance, high impact resistance and texture imitating the look of a sprayed wallpaper or "dots". Intended for use on mineral substrates (e.g., concrete, cement render, cement-lime render) and on substrates covered with a well-bonded plastic-based paint coating. Before applying the structural paint, the substrate requires repainting with **AQUATEX** or **PERFEKTA** paint.

TECHNICAL DATA

Base binder: co-polymer binder;
cat. A/a. The permissible maximum VOC content is 30 g/l.
The product contains less than 30 g/l VOC.
Pigments: organic and inorganic colour pigments;
Colours: natural white and colours according to KABE and NCS colour charts or a sample provided;
Thinner: water;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: < 75%;
Average coverage: approx. 0.3-0,6 l/m^2 (depending on the thickness and number of layers applied).
Packaging: Disposable plastic packaging containing 10 litres of product.
Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of fungi growth the substrate should be cleaned mechanically and then washed with water and disinfected with fungicidal agent for interiors. Old mineral substrates should be washed away with a dispersed stream of water. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. For particularly uneven substrates (from 5 mm to 15 mm), first use levelling compounds and then smooth out the wall surface with **PROFINISZ** base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **PROFINISZ** base coat. An absorbent substrate should be primed with **BUDOGRUNT WG** before applying levelling compounds or base coats. If the structural paint is applied on new mineral substrates (e.g., concrete, cement render, cement-lime render) – a minimum 4 weeks of curing are required, for gypsum renders a minimum of 2 weeks, while drywall systems can be directly coated after grinding and dedusting.
UNDERCOAT LAYER PREPARATION: Before applying the structural paint, the substrate requires coating with **AQUATEX** or **PERFEKTA** paint. In the case of very absorbent substrates, such as gypsum plasters, prior to applying **PERFEKTA** paint, **AQUALIT** primer should be used. The curing period of the paint applied to the substrate is about 14 hours. It is recommended to make the undercoat layer in a colour different from the colour of the structural paint.
PAINT PREPARATION: The packaging contains a ready-to-use product. If stored for a long time and directly before application, the paint should be thoroughly mixed (with a low-speed mixer fitted with a basket stirrer), until a smooth, homogeneous consistency is obtained. Further mixing is not recommended, as it may result in excessive aeration of the paint. If required, to dilute the paint, add a small amount of drinking water (max. 0.1 litre per 10 litres of paint). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: By using a spraying machine at a working pressure of 3-4 atmospheres and a nozzle with a diameter of 2-6 mm, depending on the decorative effect. While spraying, the gun should be held perpendicularly to the substrate at a distance of 0.4-0.6 m.
DRYING: The drying time for the structural paint applied onto a substrate is approx. 6 hours (at +20°C, 55% RH). Complete hardening of render after approx. 48 hours. Surfaces exposed to wiping and mechanical damage, and requiring resistance to washing and scrubbing, e.g. dado in the corridors and stairwells, should be additionally protected with the **MARCHRON** varnish. Note: Drying time may be longer, up to several days, due to low temperatures and high relative humidity. After painting, closed rooms should be ventilated until the specific smell disappears. The coating obtains its full mechanical and functional properties after 4 weeks.
USEFUL HINTS: The final effect of the coating may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first smooth out the entire surface with **PROFINISZ** base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. Tools should be cleaned with water immediately after work is completed. Avoid working in draught and high humidity.

TO BE USED UNDER DISPERSION PAINTS

AQUALIT

Filled-in primer (for dispersion interior paints)

MAIN ADVANTAGES

- Reduces substrate water absorbency
- Improves paint coating adhesion
- Strengthens the substrate surface
- Intended for all typical mineral substrates (especially on non-uniform substrates)
- Unifies colour scheme of the substrate
- Easy to apply

AREAS OF APPLICATION

The **AQUALIT** primer is a filled-in product based on dispersion and silicate binder for the proper preparation of a substrate for finish paint coatings applied inside buildings. It is especially recommended for "difficult" substrates of differentiated absorption and colour scheme (such as patched plasterboards). It is intended for substrate priming before applying dispersion paints: **PROFILATEX**, **PROLATEX**, **OPTILATEX**, **TOP WHITE ANTI-REFLEX**, **OPTIMA**, **PERFEKTA**, **MILAMAT**. To be applied on all typical, absorbent mineral substrates (such as plasterboards, gypsum finishing compounds, levelling compounds, as well as gypsum renders, lime renders, cement renders and cement-lime renders). Note: The primer should not be used for priming substrates with low wettability (such as dispersion paint coatings and plastic-based renders).

TECHNICAL DATA

Base binder: acrylic binder and potassium water glass;
The content of volatile organic compounds VOC: cat. A/g. The product contains less than 30 g/l VOC;
Density: approx. 1.3 g/cm^3;
pH: 10.5-11.0;
Colour: white;
Average coverage: approx. 0.10 l/m^2 (depending on the substrate absorbency and roughness);
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 80%.
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost. Keep out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of fungi growth, the substrate should be cleaned mechanically and then disinfected with fungicidal agent for interiors. Discolourations, nicotine stains and efflorescences caused by water stains should be painted first with **MILAMAT** stain blocker. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use **KOMBI FINISZ** filling compound, and then smooth out the whole surface with **PROFINISZ** smoothing compound. Small unevenness can be smoothed right away with **PROFINISZ** smoothing compound. Absorbent substrates should be primed with **BUDOGRUNT WG** prior to applying smoothing compounds and/or renders. If the product is applied on new mineral substrates (e.g., cement render and cement-lime render) – a minimum 2-week curing period should be maintained.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. It cannot be diluted.
APPLICATION: The product should be applied on the substrate in one layer with a brush, paint roller or by spraying (including also "airless" method).

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Nozzle	Pressure [bar]	Filter [mesh]	Thinning [%]	Coverage [l/min]
WAGNER	ProSpray 3.21	0552-517	200	60	0	1.25
TITAN	Titan 450e	661-517	200	60	0	1.25
GRACO	St Max 495	PAA517	200	60	0	2.3

DRYING: Typical drying time for the primer applied onto a substrate is approx. 3 hours (at air temperature +20°C, 55% RH). Closed rooms should be ventilated after priming.
USEFUL HINTS: Primer application and drying should take place at temperatures over +5°C. Tools should be cleaned with water immediately after finishing work.

Technical data sheet, revised April 2023.
Most recent information is available at www.farbykabe.pl

The product meets the requirements of the following standard: PN-C-81906:2003
The product holds the Hygienic Certificate of the Polish National Institute of Public Health (PZH)

TO BE USED UNDER DISPERSION PAINTS

BUDOGRUNT WG

General purpose primer

MAIN ADVANTAGES

- Reduces and equalises substrate water absorption
- Shows penetrating properties
- Strengthens the substrate surface
- Reduces dustiness
- Improves finish coating adhesion
- For mineral substrates

AREAS OF APPLICATION

A general purpose product based on water-dilutable acrylic dispersions, intended for the proper preparation of the substrate under dispersion paints, finishing compounds, mosaic renders, mineral renders, mineral adhesives and adhesive floor coverings and floorings. It is used for priming all typical absorbent construction substrates to be found inside buildings. It is especially recommended for substrate priming before applying dispersion paints: **PROFILATEX, PROLATEX, AKRYLATEX W, OPTILATEX, TOP WHITE ANTI-REFLEX, OPTIMA, PERFEKTA, PRIMA, MILAMAT**, ready-to-use **PROFINISZ** and **PROFINISZ AKORD** finishing compounds and **MARMURIT, MARMURIT COLORATO, MOZAIKER AKORD COLORATO, MOZAIKER DECOR** mosaic renders. To be applied on mineral substrates (such as concrete, aerated concrete, cement and anhydrite screed, cement render, cement-lime render, gypsum render, plasterboards, cement-fibre boards, as well as boards used for partition walls). Note: The product should not be used for priming substrates with low wettability (such as plastic-based renders and paint coatings).

TECHNICAL DATA

Base binder: co-polymer binder;
The content of volatile organic compounds VOC: cat. A/h. The product contains less than 30 g/l VOC;
Density: approx. 1.00 g/cm^3;
Colour: milk-white, colourless after drying;
Average coverage: approx. 0.20 l/m^2 (depending on the substrate type and absorbency);
Temperature of application (air and substrate): from +5°C to +25°C;

Relative air humidity: ≤ 80%.
Packaging: Disposable plastic packaging containing 5 and 10 litres of product.
Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Keep out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. Substrates with fungal growth should be mechanically cleaned and then disinfected with a chlorine-free fungicidal agent for interiors. Discolourations, nicotine stains and efflorescences caused by water stains should be painted first with **MILAMAT** stain blocker. Any loose layers, not bound to the substrate (e.g., loose renders or flaked paint coatings), as well as lime and glue paint coatings should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use **KOMBI FINISZ** filling compound, and then smooth out the whole surface with **PROFINISZ** smoothing compound. Small unevenness can be smoothed right away with **PROFINISZ** smoothing compound. Absorbent substrates should be primed with **BUDOGRUNT WG** prior to applying smoothing compounds and/or renders. If the product is applied on new mineral substrates (e.g., concrete, lime render, cement render and cement-lime render) – a minimum 2-week curing period should be maintained.
APPLICATION: The product should be applied on the substrate in one or two layers with a brush, roller or by spraying, using the "wet on wet" method. Note: The applied product should completely penetrate the substrate, but, at the same time, should not create a tight coating on its surface (film) or stains.
DRYING: Typical drying time for the product applied onto a substrate is approx. 3 hours (at air temperature +20°C, 55% RH). Closed rooms should be ventilated after priming.
USEFUL HINTS: Product application and drying should take place at temperatures over +5°C. Tools should be cleaned with water immediately after finishing work.

UNDER DISPERSION PAINTS, RENDERING COMPOUNDS AND FIBREGLASS WALLPAPERS

BUDOGRUNT GP

Deeply penetrating preparation

MAIN ADVANTAGES

- Reduces and equalises substrate water absorption
- Shows penetrating properties
- Strengthens the substrate surface
- Reduces dustiness
- Improves finish coating adhesion
- For mineral substrates

AREAS OF APPLICATION

A deeply penetrating preparation based on small-particle acrylic dispersions intended for the proper preparation of absorbent and relatively weak substrates before filling, painting, plastering/rendering, fixing ceramic tiles, wallpapering or fixing thermal insulation boards. Particularly recommended for gypsum, anhydrite and aerated concrete substrates, as well as non-impregnated plasterboards found inside the building. Note: The product causes a yellowish colour of the substrate to ensure better control of the work. The product should not be used for priming substrates with low wettability (such as plastic-based renders and paint coatings).

TECHNICAL DATA

Base binder: co-polymer binder;
The content of volatile organic compounds VOC: cat. A/h. The product contains less than 30 g/l VOC;
Density: approx. 1.00 g/cm^3;
Colour: yellowish;
Average coverage: from 0.1 to 0.5 l/m^2 (depending on the substrate type and absorbency and the application method);
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 80%.
Packaging: Disposable plastic packaging containing 5 litres of product.
Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Keep out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. Substrates with fungal growth should be mechanically cleaned and then disinfected with a chlorine-free fungicidal agent for interiors. Discolourations, nicotine stains and efflorescences caused by water stains should be painted with **MILAMAT** stain blocker. Any loose layers, not bound to the substrate (e.g., loose renders or flaked paint coatings), as well as lime and glue paint coatings should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use **KOMBI FINISZ** filling compound, and then smooth out the whole surface with **PROFINISZ** smoothing compound. Small unevenness can be smoothed right away with **PROFINISZ** smoothing compound. Absorbent substrates should be primed with **BUDOGRUNT WG** prior to applying smoothing compounds and/or renders. If the product is applied on new mineral substrates (e.g., concrete, lime render, cement render and cement-lime render) – a minimum 2-week curing period should be maintained.
APPLICATION: Before applying the product, shake the contents of the package several times. The product should be applied on the substrate in 1-2 layers with a brush or a roller, using the "wet on wet" method.
Note: The applied product should completely penetrate the substrate, but, at the same time, should not create a tight coating on its surface (film) or stains.
DRYING: Typical drying time for the product applied onto a substrate is approx. 2 hours (at air temperature +20°C, 55% RH). Closed rooms should be ventilated after priming.
USEFUL HINTS: Product application and drying should take place at temperatures over +5°C. Tools should be cleaned with water immediately after finishing work.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

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DISPERSION

PROFINISZ

Ready-to-use finishing compound

MAIN ADVANTAGES

- Quick and easy application using a trowel and a putty roller
- Smooth, decorative surface
- Natural white*
- Ready for immediate use
- Easy to apply and mechanical processing

AREAS OF APPLICATION

A ready-to-use finishing compound for manually smoothing the surface of walls and ceilings inside buildings in "dry" rooms (where the relative humidity does not exceed 70%). Especially recommended for final and finishing levelling and smoothing of surfaces before painting. Thanks to its white colour and smooth surface, it allows to reduce the number of paint coatings needed to achieve a full decorative effect. The product has a form of easy-to-apply modelling compound, which, after hardening, may be easily processed mechanically by sanding. Intended for use on all typical mineral substrates, such as concrete, cement, cement-lime, lime and gypsum renders and plasterboards. Note: Do not use directly on construction plaster, it is recommended to apply an intermediate layer of gypsum putty.

TECHNICAL DATA

Base binder: organic binder;
Colour: natural white shades;
Maximum thickness of one layer: up to 3 mm;
Average coverage: approx. 1.8 kg/m^2 per each 1 mm of the layer thickness – depends on substrate roughness;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 70%.
Adhesion to concrete substrate: ≥ 0.3 MPa;

Reaction to fire: class A1.
Packaging: Disposable plastic packaging containing 7 kg and 17 kg of product.
Storage: The product should be stored in sealed packaging, in a cool room, but protected from frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12-month shelf life from the date of production (production date and batch number are printed on the packaging).

HOW TO USE

SUBSTRATE PREPARATION: Substrate must be sound/stable (without scratches and cracks), degreased, dry, and free of biological contamination and chemical efflorescence. In case of fungi growth the substrate should be cleaned mechanically and then washed with water and disinfected with fungicidal agent for interiors. Any loose layers, not bound to the substrate, e.g., dust, loose render or flaked coatings, should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Fill any gaps, irregularities and cracks in compliance with good building practice. Substrates covered with a well-bonded dispersion paint coating should be sanded with sandpaper and dedusted before applying finishing compound. If the compound is applied on new mineral substrates (such as cement-lime renders, cement and concrete substrates), a minimum 3-4-week curing period should be maintained.
PRIMING: Absorbent substrates should be primed with **BUDOGRUNT WG** before applying the finishing compound.
PRODUCT PREPARATION: Mix the product thoroughly immediately before use. Prime the surface of plasterboards with **BUDOGRUNT WG** or a deeply penetrating primer. When applying with a roller, dilute the compound with a small amount of water, using 170 ml per 17 kg package or 50 ml per 7 kg package.
APPLICATION: Apply a thin, uniform layer of the finishing compound on the substrate with the thickness from 1 mm to 3 mm, using a stainless steel trowel or a putty roller. If greater unevenness is present, the finishing compound should be applied in a few layers once the previous layer hardens. After the surface dries, it may be ground with a trowel covered with a mesh or sandpaper.
DRYING: The layer of finishing compound with the thickness of 3 mm, applied on the substrate, may be further processed after min. 12 hours (drying at +20°C and 55% relative air humidity), depending on the substrate absorbency and air circulation in the room. Note: At low temperatures and high air humidity, the finishing compound drying time will be longer.
USEFUL HINTS: The finishing compound should be applied and dried at air and substrate temperatures between +5°C and +25°C. Wash the tools with water immediately after finishing work. Note: The difference in shade of the finishing compound is caused by the natural shade of the filler and does not affect the product quality. When used as intended, the product does not pose a threat to health or the environment.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

* the product contains natural fillers, therefore the colour of the product may vary (from white to cream) depending on the colour of the raw material in the bed.

Technical data sheet, revised April 2023.
Most recent information is available at www.farbykabe.pl

The product meets the requirements of the following standard: PN-EN 15824
The product holds the Hygienic Certificate of the Polish National Institute of Public Health (PZH)

DISPERSION

PROFINISZ AKORD

Ready-to-use finishing compound for machine spray and roller application

MAIN ADVANTAGES

- Quick and easy application
- Smooth, decorative surface
- Natural white*
- Ready for immediate use
- Easy to apply and mechanical processing

AREAS OF APPLICATION

A ready-to-use finishing compound for machine or roller application on wall and ceiling surfaces inside buildings. Especially recommended for final and finishing smoothing of surfaces before painting. Thanks to its white colour and smooth surface, it allows to reduce the number of paint coatings needed to achieve a full decorative effect. The product has a form of easy-to-apply modelling compound, which, after hardening, may be easily processed mechanically by sanding. Intended for use on all typical mineral substrates, such as concrete, cement, cement-lime, lime and gypsum renders and plasterboards. Note: The product should not be used in rooms, where a constant relative humidity exceeds 70%. Note: Do not use directly on construction plaster, it is recommended to apply an intermediate layer of gypsum putty.

TECHNICAL DATA

Base binder: organic binder;
Colour: natural white shades;
Maximum thickness of one layer: up to 3 mm;
Average coverage: approx. 1.8 kg/m^2 per each 1 mm of the layer thickness;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 70%.

Reaction to fire: cat. A1;
Adhesion to substrate: ≥ 0.3 MPa;
Packaging: Disposable plastic packaging holding 28 kg of the product.
Storage: The product should be stored in sealed packaging, in a cool room, but protected from frost.
Shelf life: 12-month shelf life from the date of production (production date and batch number are printed on the packaging).

HOW TO USE

SUBSTRATE PREPARATION: Substrate must be sound/stable (without scratches and cracks), degreased, dry, and free of biological contamination and chemical efflorescence. In case of fungi growth the substrate should be cleaned mechanically and then washed with water and disinfected with fungicidal agent for interiors. Any loose layers, not bound to the substrate, e.g., dust, loose render or flaked coatings, should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Fill any gaps, irregularities and cracks in compliance with good building practice. Substrates covered with a well-bonded dispersion paint coating should be sanded with sandpaper and dedusted before applying finishing compound. If the compound is applied on new mineral substrates (such as cement-lime renders, cement and concrete substrates), a minimum 2-week curing period should be maintained.
PRIMING: Absorbent substrates should be primed with **BUDOGRUNT WG** before applying the finishing compound.
PRODUCT PREPARATION: If machine spraying is used, do not dilute the compound, but if applied with a roller, you can add a small amount of clean water (adding max. 250 ml per 28 kg) depending on the type of substrate and drying conditions. Mix the product thoroughly directly before application.
APPLICATION: Apply a thin, uniform layer of the finishing compound on the substrate with the thickness from 1 mm to 3 mm, using a spraying machine (can be applied with worm machines). In order to do it, both special tools intended for applying finishing compounds (e.g., T-MAX by GRACO), as well as appropriately powerful machines for applying paints may be used (including Mark V, and recommended MARK VII by GRACO). While spraying, the gun should be held perpendicularly towards the substrate at a distance of approx. 1.0 m. When applying with a roller, use special rollers dedicated to applying finishing compounds (putties). Apply the compound to the substrate and spread it to form an even layer, then smooth it out with a blade. Sand the remaining stripes on the edges with sandpaper after drying.

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Filter [mesh]	Working pressure [bar]	Nozzle
GRACO	T-Max 506	18	50	651
GRACO	Mark V	None	230	531
WAGNER	HC 940 E SSP	None	230	0.025 inch
SPEEFLO	SPEEFLO PT 6900 XLT DI	None	230	0.025 inch

If greater unevenness is present, the finishing compound should be applied in a few layers once the previous layer hardens. After the surface dries, it may be ground with a trowel covered with a mesh or sandpaper.
DRYING: The layer of finishing compound with a thickness of 3 mm applied on the substrate can be subject to further processing after approx. 12 hours (drying at +20°C, 55% RH). Substrate water absorbency and air circulation in the room significantly affect the drying time of finishing compound.
USEFUL HINTS: The finishing compound should be applied and dried at air and substrate temperatures between +5°C and +25°C. Wash the tools with water immediately after finishing work.

* the product contains natural fillers, therefore the colour of the product may vary (from white to cream) depending on the colour of the raw material in the bed.

INTERIOR PRODUCTS

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

ACRYLIC

PERMURO W

Acrylic render/plaster for interiors

MAIN ADVANTAGES

- Clear, uniform and decorative structure
- High resistance to mechanical damage
- Wide range of colours
- Can be machine applied (sprayed)

AREAS OF APPLICATION

To be used as manually or machine applied (sprayed) thin-coat renders in interiors. Intended for use on mineral substrates (e.g., concrete, cement render, cement-lime render) and on substrates covered with a well-bonded plastic-based paint coating. The substrate should be primed with **PERMURO GT** before applying the render.

TECHNICAL DATA

Base binder: co-polymer binder;
Pigments: organic and inorganic colour pigments;
Colours: natural white and colours according to KABE and NCS colour charts or a sample provided;
Textures: solid;
Grain size: 1.5 mm;
Thinner: water;
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: < 75%;
Packaging: Disposable plastic packaging holding 25 kg of the product.

Storage: Product should be stored in original sealed packaging, in a cool room, but protected from frost. Opened packaging should be tightly closed and used as quickly as possible.
Shelf life: 24 months from the date of production printed on the packaging, with originally sealed packaging.

Texture	Grain size (mm)	Average material consumption per 1 m^2
Solid	1.5	2.7

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of fungi growth the substrate should be cleaned mechanically and then washed with water and disinfected with fungicidal agent for interiors. Old mineral substrates should be washed away with a dispersed stream of water. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. For particularly uneven substrates (from 5 mm to 15 mm), first use levelling compounds, and then level out the wall surface with **KOMBI** adhesive/base coat. Minor unevenness (up to 5 mm) can be levelled out and smoothed straight away with **KOMBI** adhesive/base coat. An absorbent substrate should be primed with **BUDOGRUNT WG** before applying levelling compounds or base coats. If the acrylic render is applied on new mineral substrates (e.g., concrete, cement render, cement-lime render) – a minimum 4 weeks of curing are required, for gypsum renders a minimum of 2 weeks, while drywall systems can be directly coated after grinding and dedusting.
PRIMING: The substrate should be primed with **PERMURO GT** before applying the render. The curing period of the product applied to the substrate before applying the render is about 24 hours. To reduce the risk of the substrate colour showing through the top coat, it is recommended to use a primer with the same colour as the render.
PRODUCT PREPARATION: The packaging contains a ready-to-use product. If stored for a long time and directly before application, the product should be thoroughly mixed (with a low-speed mixer fitted with a basket stirrer), until a smooth, homogeneous consistency is obtained. Further mixing is not recommended, as it may result in excessive aeration of the product. If required, add a small amount of drinking water (max. 0.25 l per 25 kg of the product). Quantity of added water may vary depending on the substrate type, drying conditions and application method.
APPLICATION: Using a stainless steel trowel, apply a thin, uniform layer of the product to the substrate. Then, use a plastic trowel to create a texture, rubbing the applied compound with circular motions (solid texture). Machine spraying using a sprayer with a working pressure of 3-4 atmospheres and a nozzle diameter of 6 mm. While spraying, the gun should be held perpendicularly to the substrate at a distance of 0.4-0.6 m.
DRYING: Typical drying time of the render applied to the substrate is approx. 6 h (at +20°C, 55% RH). Complete hardening of render after approx. 48 hours. Note: Drying time may be longer, up to several days, due to low temperatures and high relative humidity. After plastering, closed rooms should be ventilated until the specific smell disappears.
USEFUL HINTS: The final effect may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first smooth out the entire surface with **KOMBI** adhesive/base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. Tools should be cleaned with water immediately after work is completed. Avoid working in draught and high humidity.

PRODUCTS FOR REPAIR AND RENOVATION OF HISTORICAL BUILDINGS

Interior paints and finishing compounds
Paints and finishing compounds for facades
Mineral mortars
Damp proofing

HISTORICA

SILICATE

HISTORICA FKW

Silicate paint for interiors

MAIN ADVANTAGES

- The product is classified as mineral
- High substrate coverage
- Exceptional vapour permeability
- High adhesion to the substrate
- Good resistance to wet scrubbing
- Natural resistance to fungal and mould growth
- For use on mineral substrates

AREAS OF APPLICATION

Solvent-free and water-dilutable paint based on potassium water glass for protective and decorative paint coatings inside buildings, especially in the renovation of historical buildings and in ecological constructions. The product is completely free of preservatives and softeners. It features very good coverage, resistance to wet scrubbing and high vapour permeability. It is used for primary and renovation painting of mineral substrates (such as concrete, lime renders, lime-cement renders, cement renders). However, new mineral substrates do not require whitening or priming and can be coated with paint just 14 days after their application. The amount of organic substances contained in the paint is below 5%, in accordance with DIN 18 363.

TECHNICAL DATA

Base binder: potassium water glass.
Pigments: titanium white and coloured pigments;
The content of volatile organic compounds (VOC): cat. A/a. The product contains less than 30 g/l VOC.
Density: approx. 1.65 g/cm^3;
Colours: natural white and pastel colours from Farby KABE colour chart or according to a sample provided (possible to obtain using inorganic pigments);
Gloss level: deep matt;
Thinner: water;
Average coverage: approx. 0.22 l/m^2 (on a smooth substrate, with two layers, consumption depends on the properties of the substrate, as well as the method of application).
Temperature of application (air and substrate): from +8°C to +25°C;
Relative air humidity: below 80%.
Resistance to wet scrubbing: class II (according to PN-EN 13300 standard);
Vapour permeability: S_d = 0.02 m (class V1);
Water absorption: w = 0.12 kg/m^2 • h$^{0.5}$ – (class W2);
Packaging: Disposable plastic packaging containing 10 and 5 litres of product;
Storage: store in sealed packaging, in a cool room. Keep out of the reach of children.
Shelf life: 12 months from the date of production.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), mineral, degreased, even and dry, and free of biological contamination and chemical efflorescence. Fresh mineral substrates should be cured for min. 2 weeks. The remnants of adhesive and lime paints should be thoroughly removed, while the substrate should be dedusted and washed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Stains and dried water stains should be pre-treated with **MILAMAT** stain blocker. Places of mould/fungi growth: clean mechanically, and then wash with water and disinfect with **ALGIZID**. Any layers not bonded to the substrate (e.g., loose render or flaked coatings) should be removed. Surface irregularities and defects: small, up to 5 mm – smooth out the entire surface with **KOMBI FINISZ G5** render; before smoothing, fill larger gaps with **KOMBI FINISZ G12** render or **MINERALIT RESTAURO W12** lime render/plaster. New mineral substrates should be cured depending on the thickness of the applied layer, assuming one drying day per each 1 mm of layer thickness.
PAINT PREPARATION: Stir thoroughly immediately before use. If necessary, the paint can be diluted with a small amount of potable water, by adding approx. 10% by volume to the first painting and 5% by vol. to the second. When determining the amount of water, the type of substrate, drying conditions and application technique should be taken into account. Note: Directly before applying the paint, the surfaces made of materials susceptible to alkalis (i.e. wood, metal, glass or clinker brick) should be protected against splashing.
APPLICATION: The paint should be applied on the substrate in two layers with a brush, roller or by spraying (including also "airless" method). It is recommended to use a fleece paint roller with a bristle length of 18 mm. The second coat can be applied only after the first one is completely dry. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If necessary, seek medical advice and show the container or label.
DRYING: Drying time of one paint layer applied on a substrate is approx. 3 hours (at +20°C, 55% RH). Closed rooms should be ventilated until the specific smell disappears. Note: At low temperatures and high air humidity, the setting time will be longer.
USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and setting should take place at temperatures over +8°C. Tools should be cleaned with water immediately after finishing work. Note: Low temperature and high humidity may have a negative impact on the shade of the paint coat.
ADDITIONAL OPTIONS: If the paint is applied on substrates with cracks with a width of up to 0.3 mm (e.g., shrinking cracks of the mineral render coat), it is recommended to use paint reinforced with microfibres for the first painting (an option available on request).

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl

The product meets the requirements of the following standard: PN-C-81914:2002
The product holds the Hygienic Certificate of the Polish National Institute of Public Health (PZH)

LIME

HISTORICA FWW

Lime paint for interiors

MAIN ADVANTAGES

- High vapour permeability
- Mineral composition
- Reduces coat tensions
- Contains microfibres and linseed oil
- Eco-friendly
- Natural barrier against the development of mould and fungi

AREAS OF APPLICATION

A paint based on high-quality dispersed lime, intended for painting and renovation of interiors. Especially recommended for painting renders with a high lime content. It can be used to renovate old, absorbent mineral coatings. Because of its mineral composition, it is mainly used in restoration work and in ecological construction. Thanks to its high alkalinity, it creates a natural barrier against the growth of mould and fungi.

TECHNICAL DATA

Composition: dispersed lime, mineral additives, modifiers, contains microfibres and linseed oil;
Colour: white;
Gloss level: deep matt;
pH: 12
Bulk density: approx. 1.4 g/cm^3
Temperature of application (air and substrate): from +8°C to +25°C;
Average coverage: approx. 0.2 l/m^2 (on a smooth surface in two layers).
Consumption depends on the properties of the substrate, as well as the method of application.

Relative air humidity: below 80%.
Storage: store in sealed packaging, in a cool room, but protected from frost. Keep out of the reach of children.
Shelf life: 12-month shelf life from the date of production (production date and batch number are printed on the packaging).
Packaging: Disposable plastic packaging containing 10 litres of product

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), mineral, degreased, even and dry, and free of biological contamination and chemical efflorescence. Fresh mineral substrates should be cured for min. 2 weeks. The remnants of adhesive and lime paints should be thoroughly removed, while the substrate should be dedusted and washed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Places of mould/fungi growth: clean mechanically, and then wash with water and disinfect with fungicidal agent for interiors. Any layers not bonded to the substrate (e.g., loose render or flaked coatings) should be removed. Surface irregularities and defects: small, up to 5 mm – smooth out the entire surface with **KOMBI FINISZ G5** render; before smoothing, fill larger gaps with **KOMBI FINISZ G12** render or **MINERALIT RESTAURO W12** lime render/plaster. New mineral substrates should be cured depending on the thickness of the applied layer, assuming one drying day per each 1 mm of layer thickness.
PAINT PREPARATION: Stir thoroughly immediately before use. If necessary, the paint can be diluted with a small amount of potable water, by adding approx. 10% by volume to the first painting and 5% by vol. to the second. When determining the amount of water, the type of substrate, drying conditions and application technique should be taken into account. Note: Directly before applying the paint, the surfaces made of materials susceptible to alkalis (i.e. wood, metal, glass or clinker brick) should be protected against splashing.
APPLICATION: The paint should be applied on the substrate in two layers with a brush, roller or by spraying (including also "airless" method). It is recommended to use a fleece paint roller with a bristle length of 18 mm. The second coat can be applied only after the first one is completely dry. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. If the product comes into contact with eyes, rinse them immediately with plenty of water. If necessary, seek medical advice and show the container or label.
DRYING: Drying time of one paint layer applied on a substrate is approx. 3 hours (at +20°C, 55% RH). Closed rooms should be ventilated until the specific smell disappears. Note: At low temperatures and high air humidity, the setting time will be longer.
USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and setting should take place at temperatures over +8°C. Tools should be cleaned with water immediately after finishing work. Note: Low temperature and high humidity may have a negative impact on the shade of the paint coat.

LIME

HISTORICA WMS

Lime-based finishing compound

MAIN ADVANTAGES

- High vapour permeability
- Mineral composition
- Reduces coat tensions
- Contains microfibres
- Eco-friendly

AREAS OF APPLICATION

A ready-to-use lime finishing compound based on high-quality dispersed lime. Intended for levelling and unifying rough mineral substrates, for closing cracks and smoothing coarse substrates inside buildings on lime, clay, lime-cement and other mineral renders. The lime-based finishing compound, due to its mineral composition, is used mainly in restoration work and eco-friendly construction projects. Thanks to its high alkalinity, it provides a natural protection against fungi and mould. Along with **MINERALIT RESTAURO W** renders, it makes up a complete line of lime-based finishing products.

TECHNICAL DATA

Composition: dispersed lime, mineral additives, cellulose thickeners, modifiers, microfibres;
Colour: beige;
Average coverage: approx. 1.8 kg/m^2 per each 1 mm of the layer thickness
Temperature of application (air and substrate): from +5°C to +25°C
Maximum thickness of one layer: up to 3 mm
Adhesion to concrete substrate: ≥ 0.3 MPa
Resistance to cracking: no cracks within the zone up to 50 mm from the thin wedge end
Packaging: disposable plastic packaging containing 17 kg and 7 kg of product.
Storage: store in sealed packaging, in a cool room, but protected from frost. Keep out of the reach of children.
Shelf life: 12-month shelf life from the date of production (production date and batch number are printed on the packaging).

HOW TO USE

SUBSTRATE PREPARATION: The substrate should be sound/stable (without scratches and cracks), mineral, clean, dry, free from contamination reducing the compound adhesion, i.e. dust, oil, grease, remnants of old paint and varnish coatings, and free from the influence of aggressive chemical and biological agents. In case of absorbent substrates, prior to applying the finishing compound, the surface should be primed with a deeply penetrating preparation or **BUDOGRUNT WG** primer diluted 1:1 with water. In case of surfaces with fungi, remove any fungal growth by mechanical means before applying the compound, and then disinfect with fungicidal agent for interiors. Fresh lime renders, lime-cement renders and cement-based concrete substrates can be smoothed out with the compound after 3-4 weeks. Note: Directly before applying the compound, the surfaces made of materials susceptible to alkalis (e.g., wood, glass, metal or clinker brick) should be protected against splashing.
APPLICATION: Stir the product thoroughly with a low-speed mixer immediately before use. Apply a thin, uniform layer of the finishing compound on the substrate with the thickness from 1 mm to 3 mm, using a stainless steel trowel. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If necessary, seek medical advice and show the container or label.
DRYING: The finishing compound with a thickness of up to 3 mm, while drying at the temperature of +20°C and relative air humidity of 65%, can be further processed after approx. 24 hours. Note: Low air and wall temperatures and high relative air humidity extend the drying time, resulting in a risk of non-aesthetic stains.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl

The product meets the requirements of the following standard: ZN-KT/8:2016
The product holds the Hygienic Certificate of the Polish National Institute of Public Health (PZH)

REVERSIBLE

DEKOFIX

Reversible paint for interiors

MAIN ADVANTAGES

- Fully mineral
- Low-alkaline
- High substrate coverage
- Exceptional vapour permeability
- For use on mineral substrates
- Fully eco-friendly

AREAS OF APPLICATION

A fully natural and eco-friendly topcoat for protective and decorative paint coatings in dry rooms inside buildings, used especially for the renovation of historical buildings and in ecological construction projects. The product is solvent-free and water-dilutable, completely free of synthetic dispersions. It features very good coverage and high vapour permeability. It can be used for primary and renovation painting of mineral substrates (e.g., concrete, cement renders, cement-lime renders, cement renders, gypsum renders and plasterboards). Creates reversible water-removable coatings.

TECHNICAL DATA

Base binder: cellulose adhesive.
Pigments: titanium white and coloured pigments;
The content of volatile organic compounds (VOC): cat. A/a. The product contains 0 g/l VOC.
Density: approx. 1.65 g/cm^3;
Colours: natural white and pastel colours from Farby KABE colour chart or according to a sample provided (possible to obtain using inorganic pigments);
Gloss level: deep matt;
Thinner: water;

Average coverage: approx. 0.15-0.20 kg/m^2 on a smooth surface in two layers. Consumption depends on the properties of the substrate, as well as the method of application.
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: below 80%. Avoid working in draught and at high air humidity;
Resistance to wet scrubbing: class V (according to PN-EN 13300 standard);
Vapour permeability: S_d = 0.007 m (class 1);
Packaging: disposable plastic packaging containing 20 kg of product;
Storage: store in sealed packaging, in a cool room, but protected from frost. Keep out of the reach of children.
Shelf life: 18 months from the date of production.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), mineral, degreased, even and dry, and free of biological contamination and chemical efflorescence. Fresh mineral substrates should be cured for min. 2 weeks. The remnants of adhesive and lime paints should be thoroughly removed, while the substrate should be dedusted and washed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Places of mould/fungi growth: clean mechanically, and then wash with water and disinfect with fungicidal agent for interiors. Any layers not bonded to the substrate (e.g., loose render or flaked coatings) should be removed. Surface irregularities and defects: small, up to 5 mm – smooth out the entire surface with **KOMBI FINISZ G5** render; before smoothing, fill larger gaps with **KOMBI FINISZ G12** render or **MINERALIT RESTAURO W12** lime render/plaster. New mineral substrates should be cured depending on the thickness of the applied layer, assuming one drying day per each 1 mm of layer thickness.
PAINT PREPARATION: Stir thoroughly immediately before use. If necessary, the paint can be diluted with a small amount of potable water, by adding approx. 10% by volume to the first painting and 5% by vol. to the second. When determining the amount of water, the type of substrate, drying conditions and application technique should be taken into account.
APPLICATION: The paint should be applied on the substrate in two layers with a brush, roller or by spraying (including also "airless" method). It is recommended to use a fleece paint roller with a bristle length of 18 mm. The second coat can be applied only after the first one is completely dry. If necessary, seek medical advice and show the container or label.
DRYING: Drying time of one paint layer applied on a substrate is approx. 6 hours – dust dry (at an air temperature of +20°C, 50% RH). The total drying (hardening) and further processing time of the coating is possible after 12 hours. Closed rooms should be ventilated until the specific smell disappears. Note: At low temperatures and high air humidity, the setting time will be longer.
USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and setting should take place at temperatures over +5°C. Tools should be cleaned with water immediately after finishing work. Note: Low temperature and high humidity may have a negative impact on the shade of the paint coat.

SILICATE

HISTORICA FKZ

Silicate exterior paint

MAIN ADVANTAGES

- The product is classified as mineral
- High substrate coverage
- Exceptional vapour permeability
- High adhesion to the substrate
- Natural resistance to algae and fungal growth
- For use on mineral substrates

AREAS OF APPLICATION

High-quality topcoat based on potassium water glass intended for painting exteriors of buildings. It is especially recommended for primary and renovation painting of mineral substrates and for use at damp places on historical buildings. Intended for use only on mineral substrates (such as: concrete, traditional lime, cement-lime and cement renders, as well as thin-coat mineral, silicate renders). It creates a completely mineral, highly vapour permeable coating ($S_d < 0.01$ m), allowing for free evaporation of moisture from walls and, at the same time, due to the application of hydrophobising substances, it efficiently protects the façade against precipitation. Because of its high alkalinity, it is naturally resistant to algae and fungal growth. The amount of organic substances contained in the paint is below 5%, in accordance with DIN 18 363.

TECHNICAL DATA

Base binder: potassium water glass.
Pigments: inorganic coloured pigments, resistant to weather conditions;
The content of volatile organic compounds (VOC): cat. A/c. The product contains less than 40 g/l VOC.
Density: approx. 1.65 g/cm^3;
Colours: natural white and pastel colours from Farby KABE colour chart or according to a sample provided (possible to obtain using inorganic pigments);
Gloss level: matt;
Thinner: water;
Average coverage: approx. 0.33 l/m^2 (on a smooth surface in two layers). The consumption depends on the properties of the substrate, as well as the method of application.
Temperature of application (air and substrate): from +8°C to +25°C;
Relative air humidity: ≤ 75%.
Vapour permeability: $S_d \leq 0.01$ m (cat. V1);
Water absorption: w = 0.11 kg/m^2 • h$^{0.5}$ (cat. W2), while in hydrophobised version: w = 0.09 kg/m^2 • h$^{0.5}$ – (cat. W3)
Coating resistance to wet scrubbing after 200 cycles: 12.2 µm (class 2 according to PN-EN 13300);
Packaging: Disposable plastic packaging containing 10 and 5 litres of product;
Storage: The product should be stored in sealed packaging, in a cool room. Keep out of the reach of children.
Shelf life: 12 months from the date of production.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), mineral, degreased, even and dry, and free of biological contamination and chemical efflorescence. Fresh mineral substrates should be cured for min. 2 weeks. The remnants of lime paints should be thoroughly removed, while the substrate should be dedusted and washed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Places of mould/fungi growth: clean mechanically, and then wash with water and disinfect with **ALGIZID**. Any layers not bonded to the substrate (e.g., loose render or flaked coatings) should be removed. Surface irregularities and defects: small, up to 5 mm – smooth out the entire surface with **KOMBI FINISZ G5** render; before smoothing, fill larger gaps with **KOMBI FINISZ G12** render or **MINERALIT RESTAURO W12** lime render/plaster. New mineral substrates should be cured depending on the thickness of the applied layer, assuming one drying day per each 1 mm of layer thickness.
PRIMING: A substrate should be primed with **CALSILIT GF** before applying the paint. Setting time for the primer applied on a substrate is about 24 hours under optimum weather conditions (temperature +20°C and relative humidity of 55%). The paint can be applied when the product applied on the substrate is completely set.
PAINT PREPARATION: Stir thoroughly immediately before use. If necessary, the paint can be diluted with a small amount of potable water, by adding approx. 10% by volume to the first painting and 5% by vol. to the second. When determining the amount of water, the type of substrate, drying conditions and application technique should be taken into account. Note: Directly before applying the paint, the surfaces made of materials susceptible to alkalis (i.e. wood, metal, glass or clinker brick) should be protected against splashing.
APPLICATION: The paint should be applied on the substrate in two layers with a brush, roller or by spraying (including also "airless" method). The second paint layer should be applied only after the first one dries and sets completely, i.e. after min. 24 hours. It is recommended to use a special paint roller for façade paints made of woven polyamide with a bristle length of min. 18 mm. Use mechanical spraying only in windless weather. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If necessary, seek medical advice and show the container or label.
DRYING: Drying time of one paint layer applied on a substrate is approx. 12 hours – dust dry (at an air temperature of +20°C, 55% RH). Complete setting (hardening) and further processing of the paint coating are possible after 24 hours. Note: At low temperatures and high air humidity, the setting time will be longer. Protect the fresh paint coating against precipitation and condensation until it sets completely.
USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and setting should take place at temperatures over +8°C. Tools should be cleaned with water immediately after finishing work. In order to protect the completely unset paint coating against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds. Note: Low or high temperature, as well as high air humidity, may have a negative impact on the shade of the paint coat. Both too high and too low temperature during paint application and drying may lead to insufficient setting of the binder. As a result, further contact with water may cause washing out of the unset potassium water glass, which may lead to the formation of durable damp patches or discolouration.
ADDITIONAL OPTIONS: If the paint is applied on substrates with cracks with a width of up to 0.3 mm (e.g., shrinking cracks of the mineral render coat), it is recommended to use paint reinforced with microfibres for the first painting (an option available on request).

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl

The product meets the requirements of the following standard: PN-C-81913: 1998

SILICATE

HISTORICA KMS

Silicate filling-sealing compound

MAIN ADVANTAGES

- Aesthetic decorative texture
- The product is classified as mineral
- Exceptional vapour permeability
- High adhesion to the substrate
- Natural resistance to algae and fungal growth
- For use on mineral substrates outside and inside buildings

AREAS OF APPLICATION

A ready-to-use, silicate filling and sealing compound for manual application of mineral decorative and renovation layers, inside and outside buildings. Intended for sealing micro-cracks (from shrinking) on mineral substrates and unifying the surface texture. Thanks to its mineral character and very high vapour permeability, the product is perfect for the renovation of historic buildings, while also providing a decorative effect and unifying the appearance of the substrate. The product is intended only for mineral substrates, such as lime, lime-cement, clay and cement renders.

TECHNICAL DATA

Base binder: potassium water glass;
Pigments: inorganic coloured pigments, resistant to weather conditions;
Colours: natural white and pastel colours from Farby KABE colour chart or according to a sample provided (possible to obtain using inorganic pigments);
Grain size: up to 0.5 mm;
Temperature of application (air and substrate): from +8°C to +25°C;
Relative air humidity: ≤ 75%;
Average coverage: approx. 0.5 kg/m² on an even and smooth surface. Note: Product consumption largely depends on the application technique and the thickness of the applied layer.

Adhesion to concrete substrate: ≥ 0.3 MPa;
Vapour permeability: $S_d = 0.027$ m (cat. V1);
Water absorption: $w = 0.49$ kg/m² • $h^{0.5}$ (cat. W2);
Thermal conductivity coefficient: $\lambda_{dry,10} = 0.76$ W/(m*K);
Reaction to fire: class C at consumption < 3.5 kg/m²;
Packaging: Disposable plastic packaging containing 16 and 7 kg of product;
Storage: The product should be stored in sealed packaging, in a cool room, but protected from frost. Keep out of the reach of children. **Shelf life:** 12 months from the date of production.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), mineral, degreased, even and dry, and free of biological contamination and chemical efflorescence. Fresh mineral substrates should be cured for min. 2 weeks. The remnants of adhesive and lime paints should be thoroughly removed, while the substrate should be dedusted and washed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Places of mould/fungi growth: clean mechanically, and then wash with water and disinfect with **ALGIZID**. Any layers not bonded to the substrate (e.g., loose render or flaked coatings) should be removed. Surface irregularities and defects: small, up to 5 mm – smooth out the entire surface with **KOMBI FINISZ G5** render; before smoothing, fill larger gaps with **KOMBI FINISZ G12** render or **MINERALIT RESTAURO W12** lime render/plaster. New mineral substrates should be cured depending on the thickness of the applied layer, assuming one drying day per each 1 mm of layer thickness.
PRIMING: Before applying the compound, the substrate should be primed with **CALSILIT GT** tinted to match the colour of the render. Setting time for the primer applied on a substrate is about 24 hours under optimum weather conditions (temperature +20°C and relative humidity of 55%). The compound can be applied when the product applied on the substrate is completely set.
PRODUCT PREPARATION: Stir thoroughly immediately before use;. In justified cases, the compound can be diluted with a small amount of potable water (using max. 0.20 l per 16 kg of the compound). Quantity of added water may vary depending on the substrate type, drying conditions and application method. Note: Directly before applying the compound, the surfaces made of materials susceptible to alkalis (i.e. wood, metal, glass or clinker brick) should be protected against splashing.
APPLICATION OF COMPOUND ON THE SUBSTRATE: Depending on the expected decorative effect, apply the compound on the substrate in a thin, even layer with a paint brush, rectangular brush (block paintbrush), roller or stainless steel trowel. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If necessary, seek medical advice and show the container or label.
DRYING: The drying time for one layer of product applied onto a substrate is approx. 24 hours (at air temperature +20°C, 55% RH). Note: Setting time may be longer, up to several days, due to low temperatures and high relative humidity. Until the render hardens, protect the layer against precipitation and moisture condensation.
USEFUL HINTS: The final effect of the layer may depend on the substrate type. Therefore, for heterogeneous substrates, it is recommended to first level and smooth its entire surface with a base coat. In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch, using the "wet on wet" method. Tools should be cleaned with water immediately after work is completed. The compound should be applied and set on dry days at temperatures from +8°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the unset layer against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Note: Low or high temperature, as well as high air humidity may have a negative impact on the shade of the compound. Both too high and too low temperature during compound application and setting may lead to insufficient setting of the binder. As a result, further contact with water may cause washing out of the unset potassium water glass, which may lead to the formation of durable damp patches or discolouration.

FOR RENOVATION (FOR EFFLORESCENT WALLS)

MINERALIT RESTAURO TB

Renovation cement key coat

MAIN ADVANTAGES

- For renovation of efflorescent and damp walls
- High adhesion to all typical construction substrates and difficult substrates
- Reduced drying time
- Easy to process

AREAS OF APPLICATION

It is used for manual application of bonding layer, while renovating efflorescent walls with **MINERALIT RESTAURO** products. It is intended for strengthening and/or reducing substrate water absorbency on walls subject to renovation inside and outside buildings. It features short setting time and high adhesion to difficult substrates. It is especially recommended for renovation of historical buildings, but it may also be applied as a cement key coat for traditional multi-layer renders/plasters.

TECHNICAL DATA

Base binder: a mix of hydraulic binders;
Aggregate thickness: ≤ 4 mm;
Bulk density: approx. 1.49 g/cm^3;
Mixing ratio: approx. 5.0-5.5 l of water per 25 kg of mortar;
After adding water, the product must be used within: approx. 0.5 hour;
Open drying time: 15 minutes;
Colour: light grey;
Coverage: approx. 5.0 kg/m^2;
Usage: one 25 kg bag is sufficient to obtain 18 litres of ready-to-use mortar after adding the required amount of water;
Mortar type according to PN-EN 998-1: GP (general purpose)
Compressive strength range: cat. CS IV;
Water absorption: cat. $W_{c}0$;
Adhesion: ≥ 0.2 N/mm^2 – FP: B or C;
Water vapour permeability coefficient: μ: ≤ 12;
Thermal conductivity coefficient: λ ≤ 0.47 W/m*K for P=50%, λ ≤ 0.54 W/m*K for P=90%;
Reaction to fire: class A1;
Temperature of application (air and substrate): from +5°C to +25°C;
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: Product should be stored in original sealed packaging, in a dry room, protected from moisture and frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging observing the storage conditions. It is recommended to use the product within 6 months.

HOW TO USE

SUBSTRATE PREPARATION: The substrate should be sound/stable (without cracks and scratches), degreased and dry. Present old or damaged render should be completely removed within 80 cm from the moisture border or saline efflorescence. The wall should be thoroughly cleaned with a wire brush. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), or substances reducing adhesion, should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Corroded and efflorescent joints should be removed to the depth of at least 2 cm. The removed render with efflorescence should be immediately disposed of. Very absorbent substrates before applying key coat should be moisturised with water.
RENDER PREPARATION: Gradually pour the contents of the package into a container with a pre-measured amount of clean, cool water (5.0-5.5 l per 25 kg of product) mixing it constantly with a low-speed mixer/drill with a stirrer until a homogeneous, lump-free mixture is obtained. Then leave the prepared render/plaster for about 5 minutes to mature. Mix the render/plaster once more immediately before use. Depending on the temperature and air humidity, the ready-to-use product can be applied for about 0.5 hours. Note: Both too long and too intensive mixing may lead to excessive aeration of the mortar and, consequently, lowering its strength parameters.
APPLICATION: Prepared mortar should be applied onto the substrate at a thickness of grain size with a steel trowel. The key coat should cover not more than 50% of the substrate surface, and then it should be left for setting.
Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.
DRYING: The applied key coat (while drying at the temperature of +20°C and relative air humidity of 65%) can be further processed after approx. 12 hours. Note: Setting time may be longer, up to several days, due to low temperatures and high relative humidity. The newly applied key coat should be protected against precipitation until it is fully hardened and set.
USEFUL HINTS: The key coat should be applied and set on dry days at air temperatures from +5°C to +25°C and substrate temperature above +5°C. Avoid applying in direct sunlight or during strong winds. In order to protect the unset key coat against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Tools should be cleaned with water immediately after work is completed.

The product meets the requirements of the following standard: PN EN 998-1 for general purpose mortars (GP)
The product holds a WTA certificate

KABE Swiss Group

FOR RENOVATION (FOR EFFLORESCENT WALLS)

MINERALIT RESTAURO TW

Renovation filling render/plaster mortar

MAIN ADVANTAGES

- For renovation of efflorescent and damp walls
- Very high ability to absorb harmful salts
- Extended processing time
- Very high porosity
- High adhesion to difficult substrates
- High vapour permeability
- For manual and machine processing

AREAS OF APPLICATION

It is used for manual or machine application of renovation mortar top coat on walls with salt efflorescence inside and outside buildings (above the ground level). It is used as a layer, which absorbs dissolved salts, while applying three-layer (TB + TW + TU) renovation top coats with **MINERALIT RESTAURO** products. It creates a coat of high pore volume, due to which it can absorb large amounts of salt generated in wet walls. It features a short setting time and a high level of adhesion to hard substrates, it is not especially sensitive to differentiated levels of wall absorptivity (e.g., in the event of wide joints in walls made of stone). It is especially recommended for renovation of historic buildings. To be used on walls made of stone and bricks with high and average salinity levels.

TECHNICAL DATA

Base binder: a mix of hydraulic binders;
Bulk density: approx. 1.2 g/cm^3;
Mixing ratio: approx. 5-6 l of water per 25 kg of mortar;
After adding water, the product must be used within: approx. 1 hour;
Open drying time: ≥ 30 minutes;
Colour: light grey;
Coverage: approx. 1.1 kg/m^2 per each 1 mm of the layer thickness;
Usage: one 25 kg bag is sufficient to obtain 23 litres of ready-to-use mortar after adding the required amount of water
Temperature of application (air and substrate): from +5°C to +25°C;
Mortar type according to PN-EN 998-1: LW (light)

Compressive strength range: cat. CS II;
Water absorption: cat. W_c0;
Water vapour permeability coefficient: $\mu \leq 9$;
Adhesion: ≥ 0.2 N/mm^2 – FP: A, B or C;
Thermal conductivity coefficient: $\lambda \leq 0.34$ W/m*K for P=50%, $\lambda \leq 0.38$ W/m*K for P=90%;
Reaction to fire: class A1;
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: Product should be stored in original sealed packaging, in a dry room, protected from moisture and frost. Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging observing the storage conditions. It is recommended to use the product within 6 months.

HOW TO USE

SUBSTRATE PREPARATION: The substrate should be sound/stable (without cracks and scratches), degreased and dry. Existing old or damaged render should be completely removed within min. 80 cm from the moisture border or saline efflorescence. The wall should be thoroughly cleaned with a wire brush. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), or substances reducing adhesion, should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. If required by the substrate, apply the **MINERALIT RESTAURO TB** cement key coat, covering not more than 50% of its surface. Corroded and efflorescent joints should be removed to the depth of at least 2 cm. The removed render with efflorescence should be immediately disposed of. The substrate before the application of renovating mortars should be protected from further salinity by means of applicable mechanical and/or chemical insulation. Very absorbent substrates before applying the mortar should be moisturised with water.
RENDER PREPARATION: Gradually pour the contents of the package into a container with a pre-measured amount of clean, cool water (5-6 l per 25 kg of product) mixing it constantly with a low-speed mixer/drill with a stirrer until a homogeneous, lump-free mixture is obtained. Leave the prepared render/plaster for about 5 minutes to mature. Mix the render/plaster once more immediately before use. Depending on the temperature and air humidity, the ready-to-use product can be applied for about 1 hour. Note: Both too long and too intensive mixing may lead to excessive aeration of the mortar and, consequently, lowering its strength parameters.
APPLICATION: When applying manually, it is necessary to put mortar onto the wall with a steel trowel and smooth it with a darby. After initial setting, the applied product should be rubbed with a trowel padded with a sponge or felt. If the general purpose **MINERALIT RESTAURO TU** renovating mortar is supposed to be applied as the next layer, the surface of the render should only be smoothed with a plaster patch. If large areas are concerned, it is recommended to use a plastering/rendering machine. The recommended thickness of one product layer ranges from 15 to 30 mm. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.
DRYING: Mortar applied on the substrate can be further processed, assuming one day of drying per each 1 mm of the mortar thickness. (drying at the air temperature of +20°C and air humidity of 65%). Note: At low temperatures and high air humidity, the mortar setting time will be longer. The newly applied mortar should be protected against precipitation and condensation until it is fully hardened and set.
USEFUL HINTS: The renovation mortar should be applied and set on dry days at air temperatures from +5°C to +25°C and substrate temperature above +5°C. Avoid applying in direct sunlight or during strong winds. In order to protect the unset mortar against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Tools should be cleaned with water immediately after work is completed.

The product meets the requirements of the following standard: PN EN 998-1 for lightweight (LW) rendering/plastering mortars.
The product holds a WTA certificate

FOR RENOVATION (FOR EFFLORESCENT WALLS)

MINERALIT RESTAURO TU

Renovation universal render/
plaster mortar

MAIN ADVANTAGES

- For renovation of efflorescent and damp walls
- High ability to absorb harmful salts
- Hydrophobic and frost-resistant
- White with a fine-grained texture
- Extended processing time
- Very high porosity
- Consistency easy to model and apply
- High adhesion to the substrate
- For manual and machine processing

AREAS OF APPLICATION

It is used for manual or machine application of renovation mortar top coat on walls with salt efflorescence inside and outside buildings (above the ground level). It is applied as the top coat of 2-layer (TB + TU) or 3-layer (TB + TW + TU) **MINERALIT RESTAURO** renovation render products. It creates a coat of high pore volume, due to which it can absorb large amounts of harmful salt generated in wet walls. It features high adhesion to a substrate, and it can be applied in the form of a thick layer and, which is important in renovation, the thickness may be very differentiated on the wall surface. It is especially recommended for renovation of historic buildings, to be used on walls with high and medium salinity.

TECHNICAL DATA

Base binder: a mix of hydraulic binders;
Bulk density: approx. 1.25 g/cm^3;
Mixing ratio: approx. 5.0-5.5 l of water per 25 kg of mortar;
After adding water, the product must be used within max. 1.5 hours;
Open drying time: ≥ 45 minutes;
Colour: white;
Coverage: approx. 1.1 kg/m^2 per each 1 mm of the layer thickness;
Usage: one 25 kg bag is sufficient to obtain 23 litres of ready-to-use mortar after adding the required amount of water;
Temperature of application (air and substrate): from +5°C to +25°C;
Render type according to PN-EN 998-1: R (renovation);
Compressive strength range: cat. CS II;
Water penetration: < 5 mm;
Water absorption after 24 h: > 0.3 kg/m^2;
Adhesion: ≥ 0.2 N/mm^2 – FP: A, B or C;
Thermal conductivity coefficient: λ ≤ 0.33 W/m*K for P=50%, λ ≤ 0.37 W/m*K for P=90%;
Reaction to fire: class A1;
Water vapour permeability coefficient: μ ≤ 9;
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: Product should be stored in original sealed packaging, in a dry room, protected from moisture and frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging observing the storage conditions. It is recommended to use the product within 6 months.

HOW TO USE

SUBSTRATE PREPARATION: The substrate should be sound/stable (without cracks and scratches), degreased and dry. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), or substances reducing adhesion, should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. If required by the substrate, apply the **MINERALIT RESTAURO TB** cement key coat, covering not more than 50% of its surface. Corroded and efflorescent joints should be removed to the depth of at least 2 cm. The substrate before the application of renovating mortars should be protected from further salinity by means of applicable mechanical and/or chemical insulation

RENDER PREPARATION: Gradually pour the contents of the package into a container with a pre-measured amount of clean, cool water (5.0-5.5 l per 25 kg of product) mixing it constantly with a low-speed mixer/drill with a stirrer until a homogeneous, lump-free mixture is obtained. Leave the prepared render/plaster for about 5 minutes to mature. Mix the render/plaster thoroughly immediately before use. Depending on the temperature and air humidity, the ready-to-use product can be applied for about 1.5 hours. Note: Both too long and too intensive mixing may lead to excessive aeration of the mortar and, consequently, lowering its strength parameters.

APPLICATION: When applying manually, it is necessary to put mortar onto the wall with a steel trowel and smooth it with a darby. After initial setting, the applied product should be rubbed with a trowel padded with a sponge or felt. If large areas are concerned, it is recommended to use a plastering/rendering machine. The recommended thickness of one product layer ranges from 15 to 25 mm. As a top coat for painting, it is possible to use **MINERALIT T** mineral thin-coat render or **KOMBI FINISZ** mineral smoothing compound or to paint directly on the **MINERALIT RESTAURO TU** render. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.

DRYING: The render coat applied to the substrate can be further processed, assuming one day of drying for each 1 mm of layer thickness (drying at a temperature of +20°C and a relative air humidity of 65%). Note: At low temperatures and high air humidity, the mortar setting time will be longer. The newly applied mortar should be protected against precipitation and condensation until it is fully hardened and set.

USEFUL HINTS: The renovation mortar should be applied and set on dry days at air temperatures from +5°C to +25°C and substrate temperature above +5°C. Avoid applying in direct sunlight or during strong winds. In order to protect the unset mortar against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Tools should be cleaned with water immediately after work is completed. Note: When applying a paint coating on a renovation render, the surface should be painted twice with **CALSILIT F** silicate paint or **NOVALIT F** polysilicate paint. Painting can be started only after the top coat surface sets (hardens) completely and after applicable primer is used. Special attention should be paid to adequate drying conditions of the render.

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl

The product meets the requirements of the following standard: PN EN 998-1 for renovation (R) rendering/plastering mortars.
The product holds a WTA certificate

LIME

MINERALIT RESTAURO W8

Lime renovation render/plaster

MAIN ADVANTAGES

- High resistance to weather conditions
- Slow binding reaction without cracks or shrinkage
- Traditional (historical) composition
- Mineral nature
- Very high vapour permeability
- Reduced surface absorption
- Natural ability to adjust air humidity
- Protects against the growth of algae and fungi
- For manual and machine processing
- Contains microfibres

AREAS OF APPLICATION

Dry, mineral render/plaster mortar based on highly hydraulic lime, intended for manual or machine application of traditional lime mortars outside and inside of contemporary and historical buildings. Very carefully selected raw materials and recipe make the top coat look like old, traditional lime mortars, while meeting all the requirements set for the currently used mortars. It can be applied both as single- or multilayer coats on all typical mineral substrates (such as concrete, lime render, lime-cement, cement and gypsum render).

TECHNICAL DATA

Base binder: hydrated lime;
Dry density of hardened mortar: approx. 1420 kg/m^3
Grain size: up to 0.8 mm;
Mixing ratio: approx. 5.0 l of water per 25 kg of mortar;
After adding water, the product must be used within: not more than 2 hours;
Open time: approx. 60 minutes (depending on substrate water absorbency);
Colour: natural white;
Average coverage: approx. 1.7 kg/m^2 per each 1 mm of the layer thickness;
Temperature of application (air and substrate): from +5°C to +25°C;
Render type according to PN-EN 998-1: GP (general purpose);

Adhesion: ≥ 0.1 N/mm^2; FP:B;
Water absorption: cat. W$_c$0
Thermal conductivity coefficient: $\lambda \leq 0.39$ W/m*K for P=50%, $\lambda \leq 0.44$ W/m*K for P=90%;
Compressive strength: cat. CS II (from 1.5 to 5.0 N/mm^2);
Water vapour permeability coefficient: $\mu \leq 13$.
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: The product should be stored in original sealed packaging, in a dry room protecting from moisture and frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate must be sound/stable (without scratches and cracks), not frozen, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. The substrate in the building basement zone should be protected against the capillary action or against moisture permeating from the outside of the building. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be carefully removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. If large unevenness is present, it is recommended to smooth the substrate by applying levelling compound. Substrates do not require priming before applying **MINERALIT RESTAURO W**. In special conditions, walls made of absorbent materials should be wetted with plenty of water before applying a mortar.
RENDER PREPARATION: Gradually pour the contents of the package into a container with a pre-measured amount of clean, cool water (5.0 l per 25 kg of product) mixing it thoroughly with a low-speed mixer/drill with a stirrer until a homogeneous, lump-free mixture is obtained. Leave the prepared render/plaster for about 5 minutes to mature. Mix the render/plaster thoroughly immediately before use. Depending on the temperature and air humidity, the ready-to-use product can be applied for about 2 hours. Note: Both too long and too intensive mixing may lead to excessive aeration of the mortar and, consequently, lowering its strength parameters.
APPLICATION: When applying manually, it is necessary to put mortar onto the wall with a steel trowel and smooth it with a darby. After initial setting, the applied product should be rubbed with a trowel padded with a sponge or felt. If large areas are concerned, it is recommended to use a plastering/rendering machine. The recommended thickness for applying a layer for ceilings – min. 10 mm, for walls – min. 10 mm, outside the building – min. 15 mm (12 mm – if thin-coat render is the finish coat). Mortar can be applied locally for a thickness of max. 30 mm in one layer. If large areas are concerned, a layer thicker than 20 mm should be applied twice using the "wet on wet" method. In places, where walls connect with other construction materials, and in places, in which installation cavities are present, it is necessary to embed a reinforcing fibreglass mesh with the basis weight of 145-175 g/m^2 into the render. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.
DRYING: The render coat applied to the substrate can be further processed, assuming one day of drying for each 1 mm of layer thickness (drying at a temperature of +20°C and a relative air humidity of 65%). Note: Setting time may be longer, even by up to a few days, due to low temperatures and high relative humidity. The newly applied mortar should be protected against precipitation and condensation until it is fully hardened and set.
USEFUL HINTS: The renovation mortar should be applied and set on dry days at air temperatures from +5°C to +25°C and substrate temperature above +5°C. Avoid applying in direct sunlight or during strong winds. In order to protect the unset mortar against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Tools should be cleaned with water immediately after work is completed. Note: When applying a paint coating on a renovation render, the surface should be painted twice with **CALSILIT F** silicate paint or **NOVALIT F** polysilicate paint. Painting can be started only after the top coat surface sets (hardens) completely and after applicable primer is used. Special attention should be paid to adequate drying conditions of the render.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

The product meets the requirements of the following standard: PN EN 998-1 for general purpose mortars (GP).
The product holds the Hygienic Certificate of the Polish National Institute of Public Health (PZH)

LIME

MINERALIT RESTAURO W12

Lime renovation render/plaster

MAIN ADVANTAGES

- High resistance to weather conditions
- Slow binding reaction without cracks or shrinkage
- Traditional (historical) composition
- Mineral nature
- Very high vapour permeability
- Reduced surface absorption
- Natural ability to adjust air humidity
- Protects against the growth of algae and fungi
- For manual and machine processing
- Contains microfibres

AREAS OF APPLICATION

Dry, mineral render/plaster mortar based on highly hydraulic lime, intended for manual or machine application of traditional lime mortars outside and inside of contemporary and historical buildings. Very carefully selected raw materials and recipe make the top coat look like old, traditional lime mortars, while meeting all the requirements set for the currently used mortars. It can be applied both as single- or multilayer coats on all typical mineral substrates (such as concrete, lime render, lime-cement, cement and gypsum render).

TECHNICAL DATA

Base binder: hydrated lime;
Dry density of hardened mortar: approx. 1420 kg/m^2
Grain size: up to 1.2 mm;
Mixing ratio: approx. 5.5 l of water per 25 kg of mortar;
After adding water, the product must be used within: not more than 2 hours;
Open time: approx. 60 minutes (depending on substrate water absorbency);
Colour: natural white;
Average coverage: approx. 1.7 kg/m^2 per each 1 mm of the layer thickness;
Temperature of application (air and substrate): from +5°C to +25°C;
Mortar type according to PN-EN 998-1: GP (general purpose);

Adhesion: ≥ 0.1 N/mm^2; FP: B;
Water absorption: cat. W_c0
Thermal conductivity coefficient: λ ≤ 0.39 W/m*K for P=50%, λ ≤ 0.44 W/m*K for P=90%;
Compressive strength range: cat CS II (from 1.5 to 5.0 N/mm^2);
Water vapour permeability coefficient: μ ≤ 13.
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: The product should be stored in original sealed packaging, in a dry room protecting from moisture and frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate must be sound/stable (without scratches and cracks), not frozen, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. The substrate in the building basement zone should be protected against the capillary action or against moisture permeating from the outside of the building. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be carefully removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. If large unevenness is present, it is recommended to smooth the substrate by applying levelling compound. Substrates do not require priming before applying **MINERALIT RESTAURO W**. In special conditions, walls made of absorbent materials should be wetted with plenty of water before applying a mortar.
RENDER PREPARATION: Gradually pour the contents of the package into a container with a pre-measured amount of clean, cool water (5.5 l per 25 kg of product) mixing it thoroughly with a low-speed mixer/drill with a stirrer until a homogeneous, lump-free mixture is obtained. Leave the prepared render/plaster for about 5 minutes to mature. Mix the render/plaster thoroughly immediately before use. Depending on the temperature and air humidity, the ready-to-use product can be applied for about 2 hours. Note: Both too long and too intensive mixing may lead to excessive aeration of the mortar and, consequently, lowering its strength parameters.
APPLICATION: When applying manually, it is necessary to put mortar onto the wall with a steel trowel and smooth it with a darby. After initial setting, the applied product should be rubbed with a trowel padded with a sponge or felt. If large areas are concerned, it is recommended to use a plastering/rendering machine. The recommended thickness for applying a layer for ceilings – min. 10 mm, for walls – min. 10 mm, outside the building – min. 15 mm (12 mm – if thin-coat render is the finish coat). Mortar can be applied locally for a thickness of max. 30 mm in one layer. If large areas are concerned, a layer thicker than 20 mm should be applied twice using the "wet on wet" method. In places, where walls connect with other construction materials, and in places, in which installation cavities are present, it is necessary to embed a reinforcing fibreglass mesh with the basis weight of 145-175 g/m^2 into the render. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.
DRYING: The render coat applied to the substrate can be further processed, assuming one day of drying for each 1 mm of layer thickness (drying at a temperature of +20°C and a relative air humidity of 65%). Note: Setting time may be longer, even by up to a few days, due to low temperatures and high relative humidity. The newly applied mortar should be protected against precipitation and condensation until it is fully hardened and set.
USEFUL HINTS: The renovation mortar should be applied and set on dry days at air temperatures from +5°C to +25°C and substrate temperature above +5°C. Avoid applying in direct sunlight or during strong winds. In order to protect the unset mortar against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Tools should be cleaned with water immediately after work is completed. Note: When applying a paint coating on a renovation render, the surface should be painted twice with **CALSILIT F** silicate paint or **NOVALIT F** polysilicate paint. Painting can be started only after the top coat surface sets (hardens) completely and after applicable primer is used. Special attention should be paid to adequate drying conditions of the render.

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl

The product meets the requirements of the following standard: PN EN 998-1 for general purpose mortars (GP).
The product holds the Hygienic Certificate of the Polish National Institute of Public Health (PZH)

FOR SANDING / SCRAPING

MINERALIT RESTAURO MTC

Mineral render for sanding/scraping

MAIN ADVANTAGES

- Historical and clear decorative texture of the scraper
- Naturally white colour
- High vapour permeability
- Hydrophobic render
- Natural resistance to algae and fungal growth
- High resistance to external weather conditions
- Available in different grain sizes and with the addition of mica
- Possibility of colouring in the mass

AREAS OF APPLICATION

A dry, mineral mortar for manual or machine application of thick-layer top coats with a scraper texture (with various grain sizes), for use inside and outside buildings, especially suitable for historic buildings. Especially recommended for rendering walls made of mineral materials that do not require insulation and for layered walls. Contains specially selected aggregates, high-quality mineral binders and special additives to improve top coat adhesion and extend the processing time. A proven alternative to the following system: undercoat render + thin-coat structural render with final painting, also used in new constructions referring to traditional finishing techniques.

TECHNICAL DATA

Base binder: mixture of hydraulic binders with the addition of modifiers;
Mixing ratio: approx. 4.5-5.5 l of water per 25 kg of mortar
Colour: natural white with the option of tinting in selected colours
Texture: scraped/sanded
Grain size: 2.0 mm; 3.0 mm and 5.0 mm
Temperature of application (air and substrate): from +5°C to +25°C
Plaster/render type: GP (general purpose)
Compressive strength range: cat. CS II
Adhesion to substrate: > 0.2 N/mm^2; FP: A,B;
Water absorption due to capillary action: cat. W_c2
Water vapour permeability coefficient, μ: < 9
Thermal conductivity coefficient, $\lambda_{dry,10}$: ≤ 0.80 W/(m·K) for P=50% and ≤ 0.87 W/(m·K) for P=90%
Reaction to fire: class A1
Storage: Store in original sealed packaging, in dry rooms, on pallets, at temperatures from +5°C to +25°C. Shelf life is 12 months from the date of manufacturing provided on the packaging. It is recommended to use the product within 6 months.

Packaging: Bags: 25 kg, Pallet: 1200 kg (48 bags).
Coverage table: One 25 kg bag of mortar is sufficient to obtain 17 litres of ready-to-use mortar.
The coverage of 1 bag at a layer thickness of 10 mm is approx. 1.7 m^2 of rendered surface.

Grain size	Optimal layer thickness (after structuring)
2.0 mm	25 mm
3.0 mm	25 mm
5.0 mm	30 mm

Note: Make sure that the minimum top coat thickness is not less than fourfold thickness of the grain size.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), not exposed to freezing, clean and dry, and free of biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. The substrate in the building basement zone should be protected against the capillary action or against moisture permeating from the outside of the building. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be carefully removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Any loose layers, not bound to the substrate (e.g., dust, loose render or flaked coatings), should be removed. If necessary (for example, on smooth, non-absorbent substrates), apply a cement key coat. Substrates with high absorbency should be abundantly sprayed with water before applying the mortar. In works related to the proper preparation of the substrate, the construction best practices apply.
PRIMING: Highly absorbent substrates should be primed with **BUDOGRUNT ZG/WG**, while less absorbent substrates should be abundantly sprayed with water. Setting time for the primer applied on a substrate is about 3 hours under optimum weather conditions (temperature +20°C and relative humidity of 55%).
PRODUCT PREPARATION: Pour the entire contents of the package into a container with a measured amount of clean, cool water (4.5-5.5 l per 25 kg of product) and mix thoroughly with a low-speed mixer/drill with a stirrer until a homogeneous, lump-free mixture is obtained. Then leave the prepared render/plaster for about 5 minutes to mature. Mix the render/plaster thoroughly immediately before use. Depending on the temperature and air humidity, the ready-to-use product can be applied for about 2 hours. A render coloured in mass requires careful dosing of water and similar climatic conditions and uniform absorbency of the substrate during application due to the risk of discolouration appearing in the hardened render. Note: Both too long and too intensive mixing may lead to excessive aeration of the mortar and, consequently, lowering its strength parameters.
APPLICATION: When applying manually, it is necessary to put mortar onto the wall with a steel trowel and smooth it with a darby. After initial setting, when the top coat is already hard (depending on the conditions from 2 hours to 5 hours), the top layer should be scraped with a spiked trowel, trying to collect only its outer layer. After this procedure, remove gently any remaining loose aggregate residues with a brush. Avoid exerting excessive pressure on the structuring tool, as well as excessive scratching in one place, so that the render surface is even. If large areas are concerned, it is recommended to use a plastering/rendering machine. The render can be applied to a thickness of approx. 30 mm in one layer. In the case of large surfaces, a layer exceeding 25 mm should be applied in two layers using the "wet on wet" method after the first layer has initially set. In places, where walls connect with other construction materials, and in places, in which installation cavities are present, it is necessary to embed a reinforcing fibreglass mesh with the basis weight of 145-175 g/m^2 into the render. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.
DRYING: Rendering/plastering mortar applied on the substrate (drying in +20°C, 65% RH) may be subject to further processing after 4 to 48 hours, depending on the drying conditions, layer thickness and substrate absorbency. Note: Drying time may be longer due to low temperatures and high humidity. The newly applied render should be protected against rapid drying, frost, precipitation and condensation until it is fully hardened.
USEFUL HINTS: In order to prepare the render, it is not allowed to add any foreign admixtures, and only clean water can be used for mixing. During application and initial curing (for at least 7 days) the weather should be rainless with an air temperature above +5°C for white, while for coloured render +10°C, and must not exceed +25°C. Drying time may be longer due to low temperatures and high relative humidity. Tools should be cleaned with water immediately after work is completed. Avoid applying the product on surfaces directly exposed to sunlight or during strong wind. In order to protect the undried render layer against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds. The set render cannot be mixed again after adding water or fresh render.

LEVELLING COMPOUNDS

KOMBI FINISZ G5

Mineral levelling compound

MAIN ADVANTAGES

- Aesthetic, white and fine-grain texture
- High resistance to shrinking cracks
- Easy material application and processing
- Hydrophobic and vapour permeable layer
- Wide range of application
- Reinforced with microfibres

AREAS OF APPLICATION

It is used for thin-coat smoothing and levelling of walls and ceilings both inside and outside buildings, including in the **KABE THERM AVANT** EWI system based on EPS and **KABE THERM MW** based on mineral wool – to make a smooth texture: **MINERALIT T** - DECOR SMOOTH TEXTURE. It can be used as a finish coat or as a base coat for finishing renders and paint coats. Thanks to its white colour, it allows to reduce the number of paint coatings needed to achieve a full decorative effect. The product, after mixing with water, is an easy-to-apply compound of plastic consistency, which, after hardening, creates an aesthetic finish coat. The material after proper finishing allows for achieving the "felt" texture. The mortar is intended for application on cured mineral substrates (such as lime, cement-lime, cement renders, brick walls and concrete substrates).

TECHNICAL DATA

Base binder: hydraulic binders and modifying agents, includes polypropylene fibres;
Dry density of hardened mortar: approx. 1360 kg/m^3;
Grain size: up to 0.5 mm;
Mixing ratio: approx. 7 l of water per 25 kg of mortar;
After adding water, the product must be used within: approx. 2 hours;
Maximum thickness of one layer: 5 mm;
Colour: white;
Coverage: approx. 1.5 kg/m^2 per each 1 mm of the layer thickness;
Temperature of application (air and substrate): from +5°C to +30°C;
Render type according to PN-EN 998-1: GP (general purpose)
Compressive strength range: cat. CS IV;
Adhesion: ≥ 0.3 N/mm^2; FP: B;
Water absorption: cat. W_c1;
Water vapour permeability coefficient: μ: ≤ 12;
Thermal conductivity coefficient: $\lambda_{dry,10}$ = 0.93 (W/m*K) for P=50%;
Reaction to fire: class A1;
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: The product should be stored in original sealed packaging on pallets, in a dry room, and protected from moisture and frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate, e.g., dust, loose render or flaked coatings, should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. If there is any large unevenness to the substrate, first use a levelling compound. If mortar is applied on newly made mineral substrates (such as lime, cement-lime, cement renders and concrete substrates), the mortar can be applied after an initial setting. In works related to the proper preparation of the substrate, the construction best practices apply.
PRIMING: Mineral substrates should be primed with **CALSILIT GF** prior to applying a levelling compound. The setting time for the product applied to the substrate under optimum weather conditions is approximately 24 hours. Levelling compound can be applied when the primer is completely set.
PRODUCT PREPARATION: Gradually pour the contents of the package into a container with a pre-measured amount of clean, cool water (7 l per 25 kg of product) and mix it thoroughly with a low-speed mixer/drill with a stirrer until a homogeneous, lump-free mixture is obtained. Leave the prepared mortar for about 10 minutes to mature. Mix the mortar once more immediately before use. Depending on the temperature and air humidity, the ready-to-use product can be applied for about 2 hours. Note: Both too long and too intensive mixing may lead to excessive aeration of the mortar and, consequently, lowering its strength parameters.
APPLICATION: Apply the prepared mortar to the substrate in an even layer with a thickness of 1 to 5 mm, using a stainless steel trowel. To achieve the intended effect, it is possible to apply the mortar in several layers. The finish coat should be smoothed with a wet sponge or felt. Time of processing depends on substrate water absorbency, thickness of applied layer and drying conditions. The final layer can be additionally smoothed with a sandpaper by grinding the whole surface. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.
DRYING: Applied levelling compound can be further processed after about 24 hours. Next layer can be applied only after the previous one initially sets and hardens, i.e. after min. 24 hours. Before painting, the render layer requires curing – assuming one day of drying per every 1 mm of layer thickness (drying at +20°C and relative humidity 65%). Note: At low temperatures and high air humidity, the mortar setting time will be longer. Protect the fresh mortar layer against precipitation until it is fully hardened and set.
USEFUL HINTS: Application and setting of the levelling compound should be performed on dry days and with air and substrate temperature ranging from +5°C to +30°C. Avoid applying in direct sunlight or during strong winds. In order to protect the unset levelling compound against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Tools should be cleaned with water immediately after work is completed.

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl

European Technical Assessment: ETA 17/0203 and ETA 17/0204
The product meets the requirements of the following standard: PN-EN 998-1 for general purpose mortars (GP).
The product holds the Hygienic Certificate of the Polish National Institute of Public Health (PZH)

LEVELLING COMPOUNDS

KOMBI FINISZ G8

Mineral levelling compound

MAIN ADVANTAGES

- Aesthetic, white and medium-grain texture
- High resistance to shrinking cracks
- Easy material application and processing
- Hydrophobic and vapour permeable layer
- Wide range of application
- Reinforced with microfibres

AREAS OF APPLICATION

It is used for thin-coat smoothing and unifying of walls and ceilings both inside and outside buildings, including in the **KABE THERM AVANT** EWI system based on EPS and **KABE THERM MW** based on mineral wool – to make a smooth texture: **MINERALIT T** - DECOR SMOOTH TEXTURE. It can be used as a finish coat or as a base coat for finishing renders and paint coats. Thanks to its white colour, it allows to reduce the number of paint coatings needed to achieve a full decorative effect. The product, after mixing with water, is an easy-to-apply compound of plastic consistency, which, after hardening, creates an aesthetic finish coat. The material after proper finishing allows for achieving the "felt" texture. The mortar is intended for application on cured mineral substrates (such as lime, cement-lime, cement renders, brick walls and concrete substrates).

TECHNICAL DATA

Base binder: hydraulic binders and modifying agents, includes polypropylene fibres;
Dry density of hardened mortar: approx. 1360 kg/m^3;
Grain size: up to 0.8 mm;
Mixing ratio: approx. 6 l of water per 25 kg of mortar;
After adding water, the product must be used within: approx. 2 hours;
Maximum thickness of one layer: 5 mm;
Colour: white;
Coverage: approx. 1.5 kg/m^2 per each 1 mm of the layer thickness;
Temperature of application (air and substrate): from +5°C to +30°C;
Render type according to PN-EN 998-1: GP (general purpose)
Compressive strength range: cat. CS IV;

Adhesion: ≥ 0.3 N/mm^2; FP: B;
Water absorption: cat. W_c1;
Water vapour permeability coefficient: μ: ≤ 12;
Thermal conductivity coefficient: $\lambda_{dry,10}$ = 0.93 (W/m*K) for P=50%;
Reaction to fire: class A1;
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: The product should be stored in original sealed packaging on pallets, in a dry room, and protected from moisture and frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate, e.g., dust, loose render or flaked coatings, should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. If there is any large unevenness to the substrate, first use a levelling compound. If mortar is applied on newly made mineral substrates (such as lime, cement-lime, cement renders and concrete substrates), the mortar can be applied after an initial setting. In works related to the proper preparation of the substrate, the construction best practices apply.
PRIMING: Mineral substrates should be primed with **CALSILIT GF** prior to applying a render compound. The setting time for the product applied to the substrate under optimum weather conditions is approximately 24 hours. Levelling compound can be applied when the primer is completely set.
PRODUCT PREPARATION: Gradually pour the contents of the package into a container with a pre-measured amount of clean, cool water (6 l per 25 kg of product) and mix it thoroughly with a low-speed mixer/drill with a stirrer until a homogeneous, lump-free mixture is obtained. Leave the prepared render/plaster for about 10 minutes to mature. Mix the render/plaster once more immediately before use. Depending on the temperature and air humidity, the ready-to-use product can be applied for about 2 hours. Note: Both too long and too intensive mixing may lead to excessive aeration of the mortar and, consequently, lowering its strength parameters.
APPLICATION: Apply the prepared mortar to the substrate in an even layer with a thickness of 1 to 5 mm, using a stainless steel trowel. To achieve the intended effect, it is possible to apply the mortar in several layers. The finish coat should be smoothed with a wet sponge or felt. Time of processing depends on substrate water absorbency, thickness of applied layer and drying conditions. The final layer can be additionally smoothed with a sandpaper by grinding the whole surface. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.
DRYING: Applied levelling compound can be further processed after about 24 hours. Next layer can be applied only after the previous one initially sets and hardens, i.e. after min. 24 hours. Before painting, the render layer requires curing – assuming one day of drying per every 1 mm of layer thickness (drying at +20°C and relative humidity 65%). Note: At low temperatures and high air humidity, the mortar setting time will be longer. Protect the fresh mortar layer against precipitation until it is fully hardened and set.
USEFUL HINTS: Application and setting of the levelling compound should be performed on dry days and with air and substrate temperature ranging from +5°C to +30°C. Avoid applying in direct sunlight or during strong winds. In order to protect the unset levelling compound against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Tools should be cleaned with water immediately after work is completed.

European Technical Assessment: ETA 17/0203 and ETA 17/0204
The product meets the requirements of the following standard: PN-EN 998-1 for general purpose mortars (GP).
The product holds the Hygienic Certificate of the Polish National Institute of Public Health (PZH)

LEVELLING COMPOUNDS

KOMBI FINISZ G12

Mineral levelling compound

MAIN ADVANTAGES

- Aesthetic, white and coarse-grain texture
- High resistance to shrinking cracks
- Easy material application and processing
- Hydrophobic and vapour permeable layer
- Wide range of application
- Reinforced with microfibres

AREAS OF APPLICATION

It is used for thin-coat smoothing and levelling of walls and ceilings both inside and outside buildings, including in the **KABE THERM AVANT** EWI system based on EPS and **KABE THERM MW** based on mineral wool – to make a smooth texture: **MINERALIT T** - DECOR SMOOTH TEXTURE. It can be used as a finish coat or as a base coat for finishing renders and paint coats. Thanks to its white colour, it allows to reduce the number of paint coatings needed to achieve a full decorative effect. The product, after mixing with water, is an easy-to-apply compound of plastic consistency, which, after hardening, creates an aesthetic finish coat. The material after proper finishing allows for achieving the "felt" texture. The mortar is intended for application on cured mineral substrates (such as lime, cement-lime, cement renders, brick walls and concrete substrates).

TECHNICAL DATA

Base binder: hydraulic binders and modifying agents, includes polypropylene fibres;
Dry density of hardened mortar: approx. 1360 kg/m^3;
Grain size: up to 1.2 mm;
Mixing ratio: approx. 5.5 l of water per 25 kg of mortar;
After adding water, the product must be used within: approx. 2 hours;
Maximum thickness of one layer: 6 mm;
Colour: white;
Coverage: approx. 1.7 kg/m^2 per each 1 mm of the layer thickness;
Temperature of application (air and substrate): from +5°C to +30°C;
Mortar type according to PN-EN 998-1: GP (general purpose)
Compressive strength range: cat. CS IV;

Adhesion: ≥ 0.3 N/mm^2; FP: B;
Water absorption: cat. W_c1;
Water vapour permeability coefficient: μ: ≤ 12;
Thermal conductivity coefficient: $\lambda_{dry,10}$ = 0.93 (W/m*K) for P=50%;
Reaction to fire: class A1;
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: The product should be stored in original sealed packaging on pallets, in a dry room, and protected from moisture and frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), degreased, even and dry, as well as free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate, e.g., dust, loose render or flaked coatings, should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. If there is any large unevenness to the substrate, first use a levelling compound. If mortar is applied on newly made mineral substrates (such as lime, cement-lime, cement renders and concrete substrates), the mortar can be applied after an initial setting. In works related to the proper preparation of the substrate, the construction best practices apply.
PRIMING: Mineral substrates should be primed with **CALSILIT GF** prior to applying a render compound. The setting time for the product applied to the substrate under optimum weather conditions is approximately 24 hours. Levelling compound can be applied when the primer is completely set.
PRODUCT PREPARATION: Gradually pour the contents of the package into a container with a pre-measured amount of clean, cool water (5.5 l per 25 kg of product) and mix it thoroughly with a low-speed mixer/drill with a stirrer until a homogeneous, lump-free mixture is obtained. Leave the prepared render/plaster for about 10 minutes to mature. Mix the render/plaster once more immediately before use. Depending on the temperature and air humidity, the ready-to-use product can be applied for about 2 hours. Note: Both too long and too intensive mixing may lead to excessive aeration of the mortar and, consequently, lowering its strength parameters.
APPLICATION: Apply the prepared mortar to the substrate in an even layer with a thickness of 1 to 5 mm, using a stainless steel trowel. To achieve the intended effect, it is possible to apply the mortar in several layers. The finish coat should be smoothed with a wet sponge or felt. Time of processing depends on substrate water absorbency, thickness of applied layer and drying conditions. The final layer can be additionally smoothed with a sandpaper by grinding the whole surface. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.
DRYING: Applied levelling compound can be further processed after about 24 hours. Next layer can be applied only after the previous one initially sets and hardens, i.e. after min. 24 hours. Before painting, the render layer requires curing – assuming one day of drying per every 1 mm of layer thickness (drying at +20°C and relative humidity 65%). Note: At low temperatures and high air humidity, the mortar setting time will be longer. Protect the fresh mortar layer against precipitation until it is fully hardened and set.
USEFUL HINTS: Application and setting of the levelling compound should be performed on dry days and with air and substrate temperature ranging from +5°C to +30°C. Avoid applying in direct sunlight or during strong winds. In order to protect the unset levelling compound against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Tools should be cleaned with water immediately after work is completed.

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl

European Technical Assessment: ETA 17/0203 and ETA 17/0204
The product meets the requirements of the following standard: PN-EN 998-1 for general purpose mortars (GP).
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MOULDING

KOMBI STONE

A coarse-grain moulding mortar for making drawn façade mouldings

MAIN ADVANTAGES

- Quick setting
- Hydrophobic
- Easy to apply and process
- Reinforced with microfibres – limited shrinkage and tensions during drying

AREAS OF APPLICATION

A coarse-grain, quick-setting mortar for making mouldings, cornices, rustication and bossages on the façade. The mortar is intended for interior and exterior applications. Note: The **KOMBI STONE** mortar is not suitable for use in moulding work on EWI systems. For these types of application EPS profiles should be used. **KOMBI STONE** does not include components that induce chloride corrosion.

TECHNICAL DATA

Composition: mix of cements, mineral fillers and modifiers.
Temperature of application (air and substrate): from +5°C to +30°C
Colour: beige.
Grain size: up to 1.2 mm
After adding water, the product must be used within: approx. 20 minutes.
Setting time: approx. 2 hours (at air temperature 20°C, relative air humidity 65%)
Note: Do not reuse dried mortar by adding water or mixing with fresh mortar.
Mixing ratio: approx. 5.0 l of water per 25 kg of dry mortar
Gross dry density: approx. 1570 kg/m³;
Compressive strength range: CS IV;
Adhesion to substrate: ≥ 0.3 N/mm²;
Water absorption due to capillary action during 24 h: ≤ 0.9 kg/m²;
Water vapour permeability coefficient, μ: ≤ 34
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: The product should be stored in original sealed packaging, in dry rooms, on pallets, at a temperature ranging from +5°C to +25°C. Protect against moisture.
Shelf life: up to 6 months from the date of production provided on the packaging.

HOW TO USE

SUBSTRATE PREPARATION: Check the substrate condition – it should be sound, stable, even, dry and free of biological or chemical efflorescence. In case of algae and/or fungal growth apply the **ALGIZID** agent. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Any loose layers, not bound to the substrate, e.g., dust, loose render or flaked coatings, should be removed. If there is any large unevenness to the substrate, first use a levelling compound. Absorbent substrates should be primed with **BUDOGRUNT ZG/WG** before applying the mortar. Setting time for the primer applied on a substrate is about 3 hours under optimum weather conditions (temperature +20°C and relative humidity of 55%).
MORTAR PREPARATION AND APPLICATION: Pour the contents of the bag into a container with a measured amount of clean and cold water: approx. 5.0 l per 25 kg of mortar, and thoroughly mix (with a low-speed mixer/drill fitted with a basket stirrer) until homogeneous, lump-free mixture is obtained. Note: Both too long and too intensive mixing may lead to excessive aeration of the mortar and, consequently, lowering its strength parameters. Once the mixing is completed, apply a contact layer, then, depending on profile thickness, apply one or a few layers and form it with a mould. Allow the layer to harden sufficiently before applying another layer. Once the last layer is hardened, trowel it "coarse" to remove any material from the mould.
When using significantly thick and long moulds, it is recommended to make the profile stronger by using a reinforcement.
USEFUL HINTS: Application should be performed on dry days and with air and substrate temperature ranging from +5°C to +30°C. Avoid applying in direct sunlight or during strong winds. In order to protect the mortar against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Tools should be cleaned with warm water immediately after work is completed. The manufacturer is not responsible for using the product contrary to its intended use or the instructions provided on the packaging. The exposed parts of the profile on the upper side should be shaped, so that the slope of the surface facilitates water drainage. The prepared profile requires curing before painting, assuming one day of drying for each 1 mm of profile thickness (drying at a temperature of +20°C and relative air humidity of 65%). The profiles should be covered with a highly diffusive paint coating, using **CALSILIT F**, **NOVALIT F** or **ARMASIL F** paint.

MOULDING

KOMBI TABLE

A quick-setting moulding mortar for making drawn mouldings on a moulding table

MAIN ADVANTAGES

- Quick setting
- Hydrophobic
- Easy to apply and process
- Reinforced with microfibres – limited shrinkage and tensions during drying

AREAS OF APPLICATION

KOMBI TABLE is a quick-setting mortar used to make single-layer drawn profiles on a moulding table or by applying thin coats on existing profiles. The mortar is suitable for interior and exterior applications.

TECHNICAL DATA

Composition: mix of cements, mineral fillers and modifiers;
Temperature of application (air and substrate): from +5°C to +30°C;
Colour: beige;
Grain size: up to 0.5 mm;
After adding water, the product must be used within: approx. 20 minutes;
Setting time: approx. 2 hours (at air temperature 20°C, relative air humidity 65%);
Note: Do not reuse dried mortar by adding water or mixing with fresh mortar.
Mixing ratio: approx. 5.5 l of water per 25 kg of dry mortar;
Gross dry density: approx. 1550 kg/m³;
Compressive strength range: cat. CS IV;
Adhesion to substrate: ≥ 0.2 N/mm²;
Water absorption due to capillary action: cat. W_c0;
Water vapour permeability coefficient: µ ≤ 13
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: The product should be stored in original sealed packaging, in dry rooms, on pallets, at a temperature ranging from +5°C to +25°C. Protect against moisture.
Shelf life: up to 6 months from the date of production provided on the packaging.

HOW TO USE

SUBSTRATE PREPARATION: The moulding table should be covered with appropriate anti-adhesion agents (e.g., anti-adhesive oil). The substrate, where the profile is to be installed, should be sound, stable, even, dry and free from biological or chemical efflorescence. In case of algae and/or fungal growth apply the **ALGIZID** agent. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Any loose layers, not bound to the substrate, e.g., dust, loose render or flaked coatings, should be removed. If there is any large unevenness to the substrate, first use a levelling compound. Absorbent substrates should be primed with **BUDOGRUNT ZG/WG** before applying the mortar. Setting time for the product applied on a substrate is about 3 hours under optimum weather conditions (temperature +20°C and relative humidity of 55%).
MORTAR PREPARATION AND APPLICATION: Pour the contents of the bag into a container with a measured amount of clean and cold water: approx. 5.5 l per 25 kg of mortar, and thoroughly mix (with a low-speed mixer/drill fitted with a basket stirrer) until homogeneous, lump-free mixture is obtained. Note: Both too long and too intensive mixing may lead to excessive aeration of the mortar and, consequently, lowering its strength parameters. After a few profile drawing operations, a profile is obtained. To obtain a closed surface, apply (draw) mortar with the thinner consistency onto the profile. Use reinforcing mesh inside the profile to make it stronger. Note: Do not use rigid reinforcements (construction steel). Depending on its moulding, the profile can be removed after 2-3 hours. Do not forget to remove anti-adhesion agents from the back side of the profile and make the surface sufficiently coarse. Maximum length for a single profile: 100 cm. Once the profiles are set and dried, they can be installed on the wall.
USEFUL HINTS: Store the profiles on wooden gratings to allow for even drying from all sides. Avoid drying in full sunlight or when exposed to heating system or frost and wind. The drying time of profiles may vary depending on humidity and temperature. The exposed parts of the profile on the upper side should be shaped, so that the slope of the surface facilitates water drainage. The prepared profile requires curing before painting, assuming one day of drying for each 1 mm of profile thickness (drying at a temperature of +20°C and relative air humidity of 65%). Profiles should be covered with a highly diffusive paint coating, using **CALSILIT F**, **NOVALIT F** or **ARMASIL F** paint.

KABE Swiss Group

MOULDING

KOMBI STUCCO

A mortar for mouldings

MAIN ADVANTAGES

- Quick setting
- Hydrophobic
- Easy to apply and process
- Reinforced with microfibres – limited shrinkage and tensions during drying

AREAS OF APPLICATION

KOMBI STUCCO is a quick-setting mortar for making small size casts/mouldings. The quick-setting properties make it possible to remove casts from moulds already after 1.5-2.0 hours. The mortar can be used both inside and outside buildings. Note: The **KOMBI STUCCO** mortars should not be used to make parts featuring significant difference in thickness. The mortar is not suitable for use in moulding work on EWI systems. In such applications, EPS profiles should be used. **KOMBI STUCCO** does not include components that induce chloride corrosion. Note: We recommend strengthening the cross-section with reinforcing bars in case of large-size castings or with large changes in thickness.

TECHNICAL DATA

Composition: mix of cements, mineral fillers and modifiers;
Temperature of application (air and substrate): from +5°C to +30°C;
Colour: white;
Grain size: up to 0.8 mm;
After adding water, the product must be used within: approx. 10-15 minutes;
Setting time: approx. 1.5-2 hours (at air temperature 20°C, relative air humidity 65%);
Note: Do not reuse dried mortar by adding water or mixing with fresh mortar.
Mixing ratio: approx. 8.0 l of water per 25 kg of dry mortar;
Gross dry density: approx. 1450 kg/m³;

Compressive strength range: cat. CS IV;
Adhesion to substrate: ≥ 0.2 N/mm²;
Water absorption due to capillary action: cat. $W_c 0$;
Water vapour permeability coefficient: μ ≤ 20
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: The product should be stored in original sealed packaging, in dry rooms, on pallets, at a temperature ranging from +5°C to +25°C. Protect against moisture.
Shelf life: up to 6 months from the date of production provided on the packaging.

HOW TO USE

SUBSTRATE PREPARATION: Check the condition of the substrate, the casts are to be installed on – it should be sound, stable, even, dry and free of biological or chemical efflorescence. In case of algae and/or fungal growth apply the **ALGIZID** agent. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Any loose layers, not bound to the substrate, e.g., dust, loose render or flaked coatings, should be removed. If there is any large unevenness to the substrate, first use a levelling compound. Absorbent substrates should be primed with **BUDOGRUNT ZG/WG** before applying the mortar. Setting time for the product applied on a substrate is about 3 hours under optimum weather conditions (temperature +20°C and relative humidity of 55%).

MORTAR PREPARATION AND APPLICATION: Pour the contents of the bag into a container with a measured amount of clean and cold water: approx. 8.0 l per 25 kg of mortar, and thoroughly mix (with a low-speed mixer/drill fitted with a basket stirrer) until homogeneous, lump-free mixture is obtained, and immediately pour into the mould. Note: Both too long and too intensive mixing may lead to excessive aeration of the mortar and, consequently, lowering its strength parameters. Add water to such an amount of material to be used within 5-10 minutes. Remove immediately any excess material and dirt. It is recommended, if possible, to concentrate the mortar in the mould by vibrating it. By vibrating and slightly knocking the mould around, it is possible to remove any air bubbles from the compound.

After about 1.5-2 hours, remove the cast from the mould to allow it to dry evenly. To allow for drying from all sides, the casts should be stored on wooden grates.

USEFUL HINTS: Do not accelerate the drying process by exposure to sunlight or wind. It is recommended to provide additional mechanical fixing of the profiles to the substrate. Tools should be cleaned with warm water immediately after work is completed. The manufacturer is not responsible for using the product contrary to its intended use or the instructions provided on the packaging.

The prepared cast requires curing before painting, assuming one day of drying for each 1 mm of cast thickness (drying at a temperature of +20°C and relative air humidity of 65%). Casts should be covered with a highly diffusive paint coating, using **CALSILIT F**, **NOVALIT F** or **ARMASIL F** paint.

HORIZONTAL INSULATIONS

MICROSILEX RESTAURO

Product concentrate for horizontal injections

MAIN ADVANTAGES

- Solvent-free silicone microemulsion concentrate
- Proven high efficiency, even for walls with a high humidity level (up to 95%)
- Economical application – product in the form of a concentrate
- Easy preparation for application by diluting with drinking water
- Long usability period for the application of diluted microemulsion – 24 hours

AREAS OF APPLICATION

MICROSILEX RESTAURO, after properly diluting with water, is used as a hydrophobisation agent for walls, in order to protect them against capillary action and water absorption and also to dry damp walls. Introduction of silicone microemulsion into the wall can be carried out by using two methods: either gravitational or by pumping it under pressure to thoroughly saturate the treatment zone. The pressure injection should always be used for walls with a high moisture level.

TECHNICAL DATA

TECHNICAL DATA (the data show recommended values and are not intended for the preparation of a specification):
AVERAGE COVERAGE: approx. 0.8-2.0 l of concentrate/m^2 of wall cross-section (depending on the substrate type and substrate moisture level). The figure provided is an approximate value. The exact coverage should be specified for a particular substrate.

General typical properties	Value
APPEARANCE	Transparent
COLOUR	Yellowish to brown
SILANE/SILOXANE CONTENT	Approx. 100%
DENSITY IN 25°C	0.96-1.00 g/cm^3

General typical properties	Value
FLASH POINT	25°C

STORAGE: Up to 24 months from the date of production in tight and sealed packagings in dry rooms at a temperature from +5°C to +25°C. Do not allow the product to get wet during storage. Protect the product from acids and alcohols. The product should be stored only in original attested packagings. It is not recommended to store the substance in the form of a water solution. Shelf life for each product batch is provided on the label. Storing the product beyond its shelf life does not mean that the product is not suitable for use any longer. However, checking the properties for the specific use of the product is essential in these circumstances, to ensure its appropriate quality.

HOW TO USE

Substrate preparation: In case of uniform (homogeneous) walls in terms of materials, it is necessary to make openings spaced every 8-12 cm. The depth of drilled holes should be approx. 5 cm shorter than the wall thickness. Drilling points should be selected in such a way, so that the opening goes through at least one wall horizontal joint. In each case, before the introduction of the prepared substance into the opening, it should be dedusted with compressed air. For walls with porous structure or non-uniform ones, before injecting the **MICROSILEX RESTAURO,** it is necessary to apply a vertical insulation by using **KOMBI HYDRO STOP** hydro-insulation base coat, to be reinforced with a fibre glass mesh with an area density of min. 145 g/m^2. If the thickness of hydro-insulation exceeds 3 mm, it is necessary to apply **KOMBI HYDRO STOP** base coat in two layers.
PRODUCT PREPARATION: In the process of diluting the product, it is recommended to add the **MICROSILEX RESTAURO** product to water, and then to stir it briefly. Injections should include the solution of **MICROSILEX RESTAURO** with potable water, mixed in ratio 1:7 to 1:14 (by volume or weight), depending on the degree of moisture of the wall and building conditions. Note: Prepare the amount of product that will be used within the same working day.
PRODUCT INTRODUCTION: Previously prepared solution of **MICROSILEX RESTAURO** should be introduced into the wall through the drilled openings to be provided on the ground level (outdoors) or on the floor level (indoors). The distances between the drilled openings can be differentiated and depend on the construction material absorptivity. In case of high moisture content in the wall, it is recommended to perform a pressure injection. During the injection, packers are introduced into the drilled openings, through which microemulsion is pumped under pressure (0.5-5 bars are recommended). The inclination of openings in this option is lower. Note: It is absolutely necessary to familiarise with the product material safety data sheet before use. The condition for proper functioning of damp proofing is adequate saturation of wall within the injection zone. The condition is met by providing a sufficiently long injection time (for pressure injection, min. 5-10 minutes).
SAFETY GUIDELINES: Comprehensive instructions are available in the product safety data sheet.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

HORIZONTAL INSULATION

MINERALIT RESTAURO MWSK

Micro-mortar for filling gaps and caverns

MAIN ADVANTAGES

- No shrinkage
- High compressive strength
- Very good flow and cavern penetration
- No sedimentation

AREAS OF APPLICATION

A mineral injection mortar with very fine grain and high strength for filling holes, scratches and voids (i.e. caverns) in walls. The product after mixing with water creates a liquid and easily pumpable mixture with a rapid increase in strength and high final strength. The material is designed for use in masonry injections.

TECHNICAL DATA

Base binder: Portland cement, modifiers
Mixing ratio: approx. 6.8 l per 20 kg bag
Efficiency: from one package of the product, after adding the appropriate amount of water, we can obtain approximately 14.5 litres of ready-to-use product
Temperature of application (air and substrate): from +5°C to +25°C
Shelf life: 12 months from the date of production printed on the packaging.
Protect against moisture
Bending strength of hardened mortar after 7 days of maturing – 4.8 [N/mm^2]
Bending strength of hardened mortar after 28 days of maturing – 7.8 [N/mm^2]
Compressive strength of hardened mortar after 7 days of maturing – 23.3 [N/mm^2]
Compressive strength of hardened mortar after 28 days of maturing – 33.6 [N/mm^2]
Water absorption coefficient caused by capillary action of hardened mortar after 24 h – 0.15 [kg/m^2]
Modulus of elasticity, E – 10.0 [GPa]
Packaging: Disposable paper packaging containing 20 kg of product
Storage: The product should be stored in original sealed packaging, in dry rooms, on pallets, at a temperature ranging from +5°C to +25°C

HOW TO USE

Pour about 6.8 litres of clean cold water into a clean mortar container, mix thoroughly and for a long time (approx. 3-4 minutes). Note: Too small amount of water results in insufficient liquidity. Both too long and too intensive mixing may lead to excessive aeration of the mortar and, consequently, lowering its strength parameters. When filling voids without pressure, pour the material through a funnel. When injecting under pressure, suitable injection equipment should be used. At the earliest, 7 days after the mortar has been introduced, the injection holes should be re-bored with a drill with a diameter about 2 to 4 mm larger and a hydrophobic diaphragm against capillary moisture should be made using **MICROSILEX RESTAURO**. If it is not possible to meet the timing provided, it can be immediately soaked with the preparation, in which case a second row of holes should be drilled approx. 5 cm higher.

VERTICAL INSULATIONS

MINERALIT IZOTYNK

Mineral, waterproof render/plaster with high vapour permeability

MAIN ADVANTAGES

- Effective protection against dampness in walls
- For renovation of damp walls
- Creates a waterproof layer with high vapour permeability
- Protects against water penetration
- High adhesion to difficult and damp substrates
- Easy to apply
- For indoor and outdoor use
- Contains microfibres and polypropylene fibres

AREAS OF APPLICATION

Mineral mortar for rendering/plastering to protect against moisture, both outside and inside buildings. It creates a waterproof and, at the same time, vapour-permeable layer, that provides effective protection against water and moisture and makes it possible to dry damp walls. It is intended for renovating damp walls and renovating buildings with walls and floors made of clay. It is used to protect walls in buildings at risk of flooding, to insulate basements and foundations, as well as concrete fences, to insulate walls in direct contact with the ground and groundwater, to insulate waterproof wells, hydrotechnical structures and water reservoirs, to protect external and foundation walls against moisture (particularly recommended for historic buildings), plinths and walls in rooms exposed to moisture, such as bathrooms, showers and swimming pools. It is also used for plastering the façades of lightweight buildings and for re-plastering/rendering walls that emit unpleasant odours, are wet and mouldy. Creates a waterproof layer, depending on the number and thickness of layers: light, medium or heavy. It can be applied on all common mineral substrates (such as concrete, cement render, cement-lime render, lime render and on raw walls made of bricks, blocks, hollow bricks and other ceramic or stone materials).

TECHNICAL DATA

Base binder: hydraulic binders with the addition of modifiers;
Mixing ratio: 4.5 l of water per 25 kg of dry mortar;
Open drying time: approx. 30 minutes;
Temperature of application (air and substrate): from +5°C to +25°C;
Max. number of layers: 3;
Each layer thickness: 10 mm;
Min. time between applying subsequent layers: 8 hours;
Approximate consumption: 12 kg/m²/10 mm;
Mortar type according to PN-EN 998-1: GP (general purpose);
Compressive strength range: cat. CS III;
Adhesion to substrate: ≥ 0.3 N/mm² – FP: A (after priming with **BUDOGRUNT ZG** / **BUDOGRUNT WG** and/or spraying with water);

Water absorption: cat. W_c1;
Durability after freeze-thaw cycles: no weight loss of samples;
- decrease in bending strength 9%,
- decrease in compressive strength 0%;

Water vapour permeability coefficient: $\mu \leq 15$
Thermal conductivity coefficient: $\lambda_{dry,10}$ = 0.93W/(m*K) (tabular value)
Waterproofness: according to PN-EN 14891:2012 item A.7; soaking does not occur;
Reaction to fire: class A1;
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: Store in a tightly closed original packaging in a dry place at a temperature from +5°C to +25°C. Note: The product must be kept out of the reach of children.
Shelf life: 18 months from the date of production printed on the packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable, mineral, degreased, clean, and free from bituminous and oily soiling. The mortar cannot be used on substrates covered with plastic-based render/plaster. For surfaces covered with algae or fungi growth, before applying the mortar, the growth should be removed mechanically with a brush, spatula or high-pressure washer, and then disinfected with **ALGIZID**. If there are layers that are poorly bonded to the substrate (e.g., detached plasters/renders), these layers should be removed first. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Absorbent substrates absolutely must be primed with **BUDOGRUNT ZG** / **BUDOGRUNT WG** or sprayed with water.

PRODUCT PREPARATION: Gradually pour the entire packaging contents into a container with a pre-measured amount of clean, cool water (approx. 4.5 litres), stirring constantly until a homogeneous, lump-free mixture is obtained. Mixing can be done manually or with a machine. Mixing time is approximately 3-5 minutes until the consistency of cream is obtained. If the mixture is not to be used immediately, the mixing machine should be stopped and the plaster/render mortar should be mixed again before being used again. The prepared mortar should be used within 1 hour, with re-mixing after about 30 minutes.

Note: Both too long and too intensive mixing may lead to excessive aeration of the mortar and, consequently, lowering its strength parameters. It is prohibited to add other materials to prepare the plaster/render compound. The material is very dusty when mixed.

APPLICATION: Apply the prepared mortar to the substrate manually, with a stainless steel trowel in maximum 3 layers, each 10 mm thick. If several layers are applied, the middle layer should be smoothed "coarse" using a notched trowel. When applying more than one layer, if water "drops" are visible on the already applied layer, wipe the surface before applying another layer. For damp walls, the layer thickness should be 10 mm, while for very damp walls, 30 mm. After applying the last layer and initial setting, the render can be smoothed using a sponge or felt trowel. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.

DRYING: It is assumed that the setting and hardening time of the render is 1 day for each 1 mm of render thickness. After this period, the surface can be covered with renders and paints with high vapour permeability. Note: If, after applying render, the air temperature is high, while air humidity is low and/or the rendered surface is exposed to direct sunlight or wind, the wall should be moistened with water for at least 7 days.

USEFUL HINTS: At low temperatures and high relative humidity the mortar drying time may be longer. In order to provide proper sealing, it is necessary to complete a single application to any architectural element in one working cycle. The mortar should be applied and dried on dry days at temperatures from +5°C to +25°C. Wash tools with water immediately after finishing work. Avoid working on surfaces directly exposed to sunlight, as well as in strong winds and at high air humidity. In order to protect the undried reinforcing layer against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds.

VERTICAL INSULATIONS

KOMBI HYDRO STOP

Mineral levelling compound with waterproofing properties

MAIN ADVANTAGES

- Effective protection against precipitation and groundwater
- Effective protection against moisture occurring in rooms with increased air humidity
- Creates a light, medium or heavy waterproof layer
- Protects against moisture penetration and capillary action
- Features high resistance to shrinking cracks
- High vapour permeability
- Optimum impact resistance
- High adhesion to the substrate and EPS
- Easy way to apply and smooth the surface
- For indoor and outdoor use
- Contains microfibres

AREAS OF APPLICATION

A mortar intended for sealing construction substrates, both outside and inside buildings. Designed to protect external walls, foundation walls, plinths and walls in rooms with increased humidity, such as basements, bathrooms and showers, against moisture. Creates a light, medium or heavy waterproof layer. Especially recommended for making a base layer (reinforced layer) for thin-coat renders, finishing paint coatings, as well as ceramic and stone cladding. It can be applied on all common mineral substrates (such as concrete, cement floor, cement render, cement-lime and gypsum render and on raw walls made of bricks, blocks, hollow bricks and other ceramic or silicate materials) and on substrates covered with extruded or expanded polystyrene boards (recommended with reduced water absorption).

TECHNICAL DATA

Base binder: hydraulic and polymer binders with modifiers added;
Bulk dry density: 1.5 kg/dm^3;
Mixing ratio: approx. 6.0-6.5 l of water per 25 kg of dry mortar;
After adding water, the product must be used within: 1.0-1.5 hours;
Open drying time: approx. 20 minutes;
Temperature of application (air and substrate): from +5°C to +25°C;
Average coverage: approx. 1.5 kg/m^2 per each 1 mm of the layer thickness;
Adhesion to concrete: min. 0.3 MPa;
Waterproofness: 150 kPa for 7 days
Vapour permeability: cat. V2
Water absorption: cat. W3

Adhesion to EPS:

- in a dry state ≥ 0.08 MPa,
- 2 days of immersion in water and 2 days of drying ≥ 0.03 MPa,
- 2 days of immersion in water and 7 days of drying ≥ 0.08 MPa.

Thermal resistance after setting: from -20°C to +60°C.
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: The product should be stored in original sealed packaging, in a dry and well ventilated room. Protect against moisture and frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable, degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth the substrate should be cleaned mechanically, washed with water and disinfected with **ALGIZID**. The substrate should be protected against capillary moisture intake and precipitation water. Any loose layers, not bound to the substrate, such as dust, dirt, loose render or flaked coatings, should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. In a situation, where the surface unevenness is up to 5 mm, the wall should be pre-smoothed with levelling compound, in case of larger unevenness a filling mortar should be used. If the product is applied on fresh mineral substrates (such as concrete, cement render and cement-lime render), a 4-week curing period is required. Absorbent and chalking substrates should be primed with **BUDOGRUNT ZG/WG** before applying the mortar.

PRODUCT PREPARATION: Gradually pour the entire packaging contents into a container with a pre-measured amount of clean, cool water (approx. 6.0 to 6.5 litres), stirring constantly (with a low-speed mixer/drill with a stirrer), until a homogeneous, lump-free mixture is obtained. Leave the mixed compound for about 10 minutes and mix thoroughly again. During work, it is recommended to periodically mix the mortar approximately every 30 minutes. Depending on the temperature and air humidity, the product prepared in the above-described way can be applied within approx. 1.0 hour. Note: Both too long and too intensive mixing may lead to excessive aeration of the mortar and, consequently, lowering its strength parameters.

APPLICATION: Apply the prepared levelling compound to the substrate in an even layer (with a thickness of 3 to 5 mm), using a stainless steel trowel. It is recommended to embed a fibreglass mesh for EWI systems into the layer applied in this way. The reinforcing mesh should be evenly stretched and completely immersed in the coat. After embedding the mesh, the entire layer surface should be carefully levelled, using an additional portion of render, if necessary. The next layer can be applied, while the previous one is still wet. The neighbouring mesh stripes must be glued with an overlap of at least 10 cm. Any marks left after levelling should be sanded down with a sandpaper. Sealing tape should be embedded in places, where there are connections with vertical elements. The thickness of a single layer should be min. 1.5 mm, while the total thickness of the entire layer cannot exceed 5 mm.

DRYING: The drying time for the waterproofing layer is min. 5 days (drying at temperatures from +5°C to +25°C and at a relative air humidity of 60-75%). After this period, you can start making the finishing layer. If the layer dries too quickly, spray it with water.

USEFUL HINTS: At low temperatures and high relative humidity the mortar drying time may be longer. In order to provide proper sealing, it is necessary to complete a single application to any architectural element in one working cycle. The mortar should be applied and dried on dry days at temperatures between +5°C and +25°C. Wash tools with water immediately after finishing work. Avoid working on surfaces directly exposed to sunlight, as well as in strong winds and at high air humidity. In order to protect the undried reinforcing layer against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.

ORTHOSILICIC ACID-BASED HYDROPHILIC STRENGTHENING AGENT

MINERALIT CONSOLID 100

Hydrophilic strengthening agent

MAIN ADVANTAGES

- Strengthens the substrate mineral structure
- Optimum depth of penetration into weak substrate with a smaller amount of silicate binder precipitated
- Uniform level of resistance of the whole strengthening layer
- Does not reduce the substrate vapour permeability
- High resistance of binder formed to ageing processes caused by weather conditions and UV radiation
- Possibility of application of subsequent materials with mineral nature
- Mild course of reactions without the disadvantageous tensions
- Neutral catalyst
- Easy and safe use (one-component product without toxicological hazards)

AREAS OF APPLICATION

The product based on ethyl esters of orthosilicic acid intended for strengthening (consolidation) of disintegrated mineral building substrates outside and inside buildings. It is especially recommended for surface reinforcement of narrow porous construction materials deteriorated by ageing processes caused by weather conditions. The strengthening function of the product involves formation of silica in the construction material structure, which makes a strengthening binder for it. The process of silica formation is connected with hydrolytic polycondensation of ethyl esters of orthosilicic acid with water contained in the construction material capillaries and/or with water vapour present in the air. The process described takes place under the influence of a neutral catalyst included in the product. The product is characterized by a very good ability to penetrate narrow porous capillaries of building materials (such as natural stones, terracotta, brick and renders). Note: Prior to use in strengthening stones that contain swelling loamy minerals, it is necessary to perform initial test.

TECHNICAL DATA

Base binder: ethyl esters of orthosilicic acid with standard level of polycondensation;
Diluent: does not dilute;
Colour: colourless liquid;
Average coverage: it is always necessary to determine it during initial laboratory tests, as the coverage may range from 0.4 kg/m^2 to even 16 kg/m^2, depending on the properties of construction material.
Temperature of application (air and substrate): from +10°C to +20°C. At temperatures above 20°C product may evaporate too quickly, which might not allow for achieving applicable saturation depth. The procedure should not be performed at a temperature below +10°C.

Packaging: Disposable plastic packaging holding 4 kg of the product.
Storage: The product should be stored in sealed packaging, in a cool room, but protected against direct sunlight and frost. Protect against moisture!
Note: Highly flammable product. Product storage should take place while providing special conditions for storage of flammable materials. The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: In order to properly soak the whole deteriorated layer of construction material, the surface planned for the procedure has to be dry, absorbent and clean. If the surface is covered with a thick layer of dirt, then it is recommended to perform gentle cleaning (e.g., by means of washing with dispersed water jet or application of gentle cleaning paste). In the event of very high disintegration of construction material, it may be beneficial to perform initial strengthening, which would allow for cleaning the surface before the proper strengthening procedure. Directly before the procedure, the surface should be protected against excessive heating by solar radiation. Note: The elements not intended for strengthening (such as windows, roofings, metal fixings, etc.) should be protected with polyethylene film. Additionally, if, during restoration work, it is planned to make castings from silicone rubber, the strengthened surfaces should be protected against adhesion by wetting them with soap solution or suitable detergents.

APPLICATION: The saturation technique should be selected depending on the object type. Saturation can be performed by pouring, spraying, application with a brush, by immersion or using the continuous flow method. It is good to immerse smaller components, such as sculptures and other architectural details that can be disassembled, in the impregnation bath, tightly covered, in order to restrict the reaction of the product with air humidity. The saturation procedure should be performed in a way ensuring that the whole disintegrated layer is impregnated and strengthened. If the saturation depth is too low, it is possible that the strengthened layer will separate from the disintegrated layer that has not been strengthened. Avoid creating an outer layer that is stronger than the substrate. In order to provide an adequate saturation depth, the procedure should be repeated using the "wet on wet" method, until the construction material stops absorbing the product. The saturated surface should be protected from precipitation within 3-4 days after impregnation. If supersaturation is observed, then, once the saturation of the building material is completed, it is recommended to wash it with white spirit or acetone. This will allow to avoid changing the shade of the surface. Note: All work with hydrophilic consolidating agents should be performed wearing goggles, rubber gloves, protective clothing, and head protection. Nose and mouth masks should be worn during spraying. While working with hydrophilic consolidating agents, it is necessary to remain extremely careful, the same way as while dealing with flammable solvents. Observe general occupational safety rules and other instructions provided on the label.

DRYING: Because of the fact that the speed of hydrolytic polycondensation depends highly on humidity and temperature, it is necessary to allow to cure the saturated construction material in the following conditions:

- at relative humidity of 50% and temperature of 20°C until complete strengthening is obtained, the material has to be cured for the period of 4 weeks.
- at relative humidity of 75% and temperature of 20°C until complete strengthening is obtained, the material has to be cured for the period of 3 weeks.

USEFUL HINTS: According to the best restoration practice, in order to prevent mistakes in application, it is necessary to perform chemical and physical tests on the construction material to be protected before the consolidation procedure. The following properties have to be determined:

- saturation, porosity;
- chemical composition of the construction material;
- disintegrated layer depth;
- product consumption to saturate 1 m^2 of surface;
- colour of construction material after the end of consolidation.

The product received a positive opinion of the Institute of Conservation and Restoration of Cultural Property of Nicolaus Copernicus University in Toruń

ORTHOSILICIC ACID-BASED HYDROPHILIC STRENGTHENING AGENT

MINERALIT CONSOLID 500

Hydrophilic strengthening agent

MAIN ADVANTAGES

- Strengthens the substrate mineral structure
- Optimum depth of penetration into weak substrate with a larger amount of silicate binder precipitated
- Uniform level of resistance of the whole strengthening layer
- Does not reduce the substrate vapour permeability
- High resistance of binder formed to ageing processes caused by weather conditions and UV radiation
- Mild course of reactions without the disadvantageous tensions
- Neutral catalyst
- Easy and safe use (one-component product without toxicological hazards)

AREAS OF APPLICATION

The product based on ethyl esters of orthosilicic acid intended for strengthening (consolidation) of disintegrated mineral building substrates outside and inside buildings. It is especially recommended for surface reinforcement of wide porous construction materials deteriorated by ageing processes caused by weather conditions. The strengthening function of the product involves formation of silica in the construction material structure, which makes a strengthening binder for it. The process of silica formation is connected with hydrolytic polycondensation of ethyl esters of orthosilicic acid with water contained in the construction material capillaries and/or with water vapour present in the air. The process described takes place under the influence of a neutral catalyst included in the product. The product is characterized by a very good ability to penetrate wide porous capillaries of building materials (such as natural stones, terracotta, brick and renders). Note: Prior to use in strengthening stones that contain swelling loamy minerals, it is necessary to perform initial test.

TECHNICAL DATA

Base binder: ethyl esters of orthosilicic acid with standard level of polycondensation;
Diluent: does not dilute;
Colour: colourless liquid;
Average coverage: it is always necessary to determine it during initial laboratory tests, as the coverage may range from 0.4 kg/m² to even 16 kg/m², depending on the properties of construction material.
Temperature of application (air and substrate): from +10°C to +20°C. At temperatures above 20°C product may evaporate too quickly, which might not allow for achieving applicable saturation depth. The procedure should not be performed at a temperature below +10°C.

Packaging: Disposable plastic packaging holding 4 kg of the product.
Storage: The product should be stored in sealed packaging, in a cool room, but protected against direct sunlight and frost. Protect against moisture!
Note: Highly flammable product. Product storage should take place while providing special conditions for storage of flammable materials. The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: In order to properly soak the whole deteriorated layer of construction material, the surface planned for the procedure has to be dry, absorbent and clean. If the surface is covered with a thick layer of dirt, then it is recommended to perform gentle cleaning (e.g., by means of washing with dispersed water jet or application of gentle cleaning paste). In the event of very high disintegration of construction material, it may be beneficial to perform initial strengthening, which would allow for cleaning the surface before the proper strengthening procedure. Directly before the procedure, the surface should be protected against excessive heating by solar radiation. Note: The elements not intended for strengthening (such as windows, roofings, metal fixings, etc.) should be protected with polyethylene film. Additionally, if, during restoration work, it is planned to make castings from silicone rubber, the strengthened surfaces should be protected against adhesion by wetting them with soap solution or suitable detergents.

APPLICATION: The saturation technique should be selected depending on the object type. Saturation can be performed by pouring, spraying, application with a brush, by immersion or using the continuous flow method. It is good to immerse smaller components, such as sculptures and other architectural details that can be disassembled, in the impregnation bath, tightly covered, in order to restrict the reaction of the product with air humidity. The saturation procedure should be performed in a way ensuring that the whole disintegrated layer is impregnated and strengthened. If the saturation depth is too low, it is possible that the strengthened layer will separate from the disintegrated layer that has not been strengthened. Avoid creating an outer layer that is stronger than the substrate. In order to provide an adequate saturation depth, the procedure should be repeated using the "wet on wet" method, until the construction material stops absorbing the product. The saturated surface should be protected from precipitation within 3-4 days after impregnation. If supersaturation is observed, then, once the saturation of the building material is completed, it is recommended to wash it with white spirit or acetone. This will allow to avoid changing the shade of the surface. Note: All work with hydrophilic consolidating agents should be performed wearing goggles, rubber gloves, protective clothing, and head protection. Nose and mouth masks should be worn during spraying. While working with hydrophilic consolidating agents, it is necessary to remain extremely careful, the same way as while dealing with flammable solvents. Observe general occupational safety rules and other instructions provided on the label.

DRYING: Because of the fact that the speed of hydrolytic polycondensation depends highly on humidity and temperature, it is necessary to allow to cure the saturated construction material in the following conditions:

- at relative humidity of 50% and temperature of 20°C until complete strengthening is obtained, the material has to be cured for the period of 4 weeks.
- at relative humidity of 75% and temperature of 20°C until complete strengthening is obtained, the material has to be cured for the period of 3 weeks.

USEFUL HINTS: According to the best restoration practice, in order to prevent mistakes in application, it is necessary to perform chemical and physical tests on the construction material to be protected before the consolidation procedure. The following properties have to be determined:

- saturation, porosity;
- chemical composition of the construction material;
- disintegrated layer depth;
- product consumption to saturate 1 m² of surface;
- colour of construction material after the end of consolidation.

BASE COATS AND FILLERS FOR ANTI-CRACKING SYSTEMS

ARMASIL MS

Silicone base coat

MAIN ADVANTAGES

- Effective joining of scratches and cracks
- Stabilisation of cracked and scratched substrates
- Very good vapour permeability
- High flexibility of the reinforcing coat
- High resistance to changes of weather conditions during application and setting
- For use on both mineral substrates and plastic-based renders/plasters
- Easy to apply

AREAS OF APPLICATION

A ready-to-use base coat based on silicone and acrylic adhesives intended for renovation of cracked external walls of buildings. Designed for manual application of flexible coat reinforced with KABE 160 system fibreglass reinforcing mesh in **ARMASIL RSA** silicone anti-cracking system. It plays the role of a platform joining the top façade coat with the **ARMASIL T** silicone thin-coat render. It can also be used for renovation of historical buildings. Can be applied on mineral substrates (such as traditional lime renders, cement-lime renders, cement renders), as well as on substrates covered with plastic-based renders/plasters.

Note: The product is intended for single use on the construction object. Damaged façades should always be covered completely with **ARMASIL MS** base coat.

TECHNICAL DATA

Base binder: silicone-acrylic binder;
Layer thickness: min. 2-3 mm;
Consistency: in the form of a paste, a ready-to-use product;
Average coverage: approx. 3.5-6.5 kg/m^2 (depending on the substrate structure);
Temperature of application (air and substrate): from +5°C to +25°C;
Relative air humidity: ≤ 75%.
Packaging: Disposable plastic packaging holding 25 kg of the product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION:

- **Option 1 of ARMASIL RSA system and all other (general requirements)** – façade surface strengthening with flexible reinforcing layer

The substrate should be sound/stable, degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate, e.g., dust, loose render or flaked coatings, should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. If there is any large unevenness to the substrate use a levelling compound. If the base coat is applied on new mineral substrates (e.g., concrete, cement-lime and cement render) – a minimum 2-week curing period is required.
Note: For old substrates with questionable adhesion, and especially for old dispersion coatings, it is recommended to perform an adhesion test first.

- **Option 2 of ARMASIL RSA** system – crack/scratch bridging with the use of a two-component **RSA 2K** crack filler

Make two cuts in the substrate on both sides of the scratch with an angle grinder, spaced 6-12 cm from each other to the depth of 8-12 mm. Then remove the render between the cuts. Thoroughly dust off the gap made in the render. Apply prepared **RSA 2K** crack filler in the gap to the level of top render coat with a stainless steel trowel.
Note: If the **RSA 2K** crack filler is applied on new mineral substrates (e.g., concrete, cement and cement-lime render) – a minimum 4-week curing period is required.

- **Option 3 of ARMASIL RSA** system – crack/scratch bridging using an EPS insert/board

Remove a strip of render 20-25 cm wide, from the wall surface (to the depth of 2-3 cm). The work should be carried out by following the description for option 2. Cut the EPS board with an adequate thickness, so that it corresponds with the width of the bridge made. Then, apply **KOMBI** adhesive/base coat onto the EPS board in bands with the width of 3-6 cm around the external board edges. Once the mortar is applied, put the board immediately onto the wall in the target groove and press firmly to flush it with the existing render. Any gaps between the render and the board should be filled with **KOMBI** base coat. Once the **KOMBI** base coat sets, the whole face surface of EPS should be ground with a trowel covered with coarse sand paper.

PRIMING: Absorbent substrates should be primed with **ARMASIL GT** before applying base coat. The curing period of the product applied to the substrate before applying the base coat is about 24 hours.

APPLICATION: The packaging contains a ready-to-use product – do not dilute. Apply the prepared base coat to the substrate in a continuous and even layer (with a thickness of 3 to 4 mm), using a stainless steel trowel. Then, immediately embed the fibreglass mesh into the applied layer. The embedded reinforcing mesh should be evenly stretched and completely immersed in the base coat. After embedding the mesh, the entire layer surface should be carefully levelled, using an additional portion of coat, if necessary. The neighbouring mesh stripes must be glued with an overlap of at least 10 cm. Any marks left after levelling should be sanded down with a sandpaper. The thickness of the coat reinforced with one mesh layer should be min. 2-3 mm.

DRYING: The drying period for the applied base coat is from 5 to 10 days (depending on the drying conditions).
Note: Drying time may be longer due to low temperatures and high relative humidity. **ARMASIL T** silicone render can be applied directly on dried layer of base coat (without repeated priming).

USEFUL HINTS: The base coat should be applied and dried on dry days at air and substrate temperatures between +5°C and +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the unset base coat against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Tools should be cleaned with water immediately after work is completed.

BASE COATS AND FILLERS FOR ANTI-CRACKING SYSTEMS

NOVALIT MS

Polysilicate base coat

MAIN ADVANTAGES

- Effective joining of scratches and cracks
- Stabilisation of cracked and scratched substrates
- Mineral nature
- Low-alkaline (pH 8-9.5)
- High resistance to changes of weather conditions during application and setting;
- Micro-porous texture, which assures high vapour permeability
- Low surface absorption
- For use on both mineral substrates and plastic-based renders/plasters
- Easy application

AREAS OF APPLICATION

Ready-to-use base coat based on specially modified potassium water glass, manufactured according to innovative polysilicate technology, intended for renovation of stabilised cracks and scratches on external building walls. Designed for manual application of the coat reinforced with KABE 160 system fibreglass reinforcing mesh in **NOVALIT RSA** polysilicate anti-cracking system. It plays the role of a platform joining the top façade coat with the **NOVALIT T** polysilicate thin-coat render. It can also be used for renovation of historical buildings. Can be applied on mineral substrates (such as traditional lime renders, cement-lime renders, cement renders), as well as on substrates covered with plastic-based renders/plasters. Note: The product is intended for single use on the construction object. Damaged façades should always be covered completely with **NOVALIT MS** base coat.

TECHNICAL DATA

Base binder: specially modified potassium water glass;
Layer thickness: min. 3 mm;
Consistency: in the form of a paste, a ready-to-use product;
Average coverage: approx. 4-6 kg/m^2 (depending on the substrate structure);
Temperature of application (air and substrate): from +5°C to +25°C;

Relative air humidity: ≤ 75%;
Packaging: Disposable plastic packaging holding 25 kg of the product.
Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION:

- **Option 1 of NOVALIT RSA system and all other (general requirements)** – façade surface strengthening with reinforcing coat

The substrate should be sound/stable, degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate, e.g., dust, loose render or flaked coatings, should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. If there is any large unevenness to the substrate use a levelling compound. If the base coat is applied on new mineral substrates (e.g., concrete, cement-lime and cement render) – a minimum 2-week curing period is required. Note: For old substrates with questionable adhesion, and especially for old dispersion coatings, it is recommended to perform an adhesion test first.

- **Option 2 of NOVALIT RSA** system – crack/scratch bridging with the use of a two-component **RSA 2K** crack filler

Make two cuts in the substrate on both sides of the scratch with an angle grinder spaced 6-12 cm from each other to the depth of 8-12 mm. Then remove the render between the cuts. Thoroughly dust off the gap made in the render. Apply prepared **RSA 2K** crack filler in the gap to the level of top render coat with a stainless steel trowel. Note: If the **RSA 2K** crack filler is applied on new mineral substrates (e.g., concrete, cement and cement-lime render) – a minimum 4-week curing period is required.

- **Option 3 of NOVALIT RSA** system – crack/scratch bridging using an EPS insert/board

Remove a strip of render 20-25 cm wide, from the wall surface (to the depth of 2-3 cm). The work should be carried out by following the description for option 2. Cut the EPS board with an adequate thickness, so that it corresponds with the width of the bridge made. Then, apply **KOMBI** adhesive/base coat onto the EPS board in bands with the width of 3-6 cm around the external board edges. Once the mortar is applied, put the board immediately onto the wall in the target groove and press firmly to flush it with the existing render. Any gaps between the render and the board should be filled with **KOMBI** base coat. Once the **KOMBI** base coat sets, the whole face surface of EPS should be ground with a trowel covered with coarse sand paper.

PRIMING: Absorbent substrates should be primed with **NOVALIT GT** before applying the base coat. The curing period of the product applied to the substrate before applying the base coat is about 24 hours.

APPLICATION: The packaging contains a ready-to-use product. Apply the prepared base coat to the substrate in a continuous and even layer (with a thickness of 3 to 4 mm), using a stainless steel trowel. Then, immediately embed the fibreglass mesh into the applied layer. The embedded reinforcing mesh should be evenly stretched and completely immersed in the base coat. After embedding the mesh, the entire layer surface should be carefully levelled, using an additional portion of coat, if necessary. The neighbouring mesh stripes must be glued with an overlap of at least 10 cm. Any marks left after levelling should be sanded down with a sandpaper. The thickness of the coat reinforced with one mesh layer should be min. 3 mm.

DRYING: The setting period for the applied base coat is from 5 to 10 days (depending on the drying conditions). Note: The setting time may be longer due to low temperatures and high relative humidity. **NOVALIT T** polysilicate render can be applied directly on a set and dried layer of base coat (without repeated priming).

USEFUL HINTS: Application and setting of the base coat should be performed on dry days and with air and substrate temperature ranging from +5°C to +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the unset base coat against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Tools should be cleaned with water immediately after work is completed.

BASE COATS AND FILLERS FOR ANTI-CRACKING SYSTEMS

RSA 2K

Two-component flexible crack filler

MAIN ADVANTAGES

- Effective bridging of scratches and cracks
- For use on both mineral substrates and plastic-based renders/plasters
- High product flexibility (elastomer)
- Easy application

AREAS OF APPLICATION

Two-component flexible crack filler based on hydraulic binders and acrylic resins, intended for bridging stabilised façade cracks and for patching open cracks in external walls of buildings. Designed for manual performance of flexible bridges in **NOVALIT RSA** and **ARMASIL RSA** anti-cracking systems. It can also be used for renovation of historical buildings. Can be applied on mineral substrates (such as traditional lime renders, cement-lime renders, cement renders), as well as on substrates covered with plastic-based renders/plasters. Note: The product is intended for single use on the construction object.

TECHNICAL DATA

Base binder:

• component A	hydraulic binder,
component B	acrylic binder;

Density:

• component A	approx. 2.8 kg/dm^3,
component B	approx. 1.0 kg/dm^3;

Mixing ratio for components:

• component A	2 parts by weight,
component B	1 part by weight;

Open time for application (after mixing): approx. 2 hours;

Average coverage: approx. 0.7-1.1 kg/running metre of filled crack;
Temperature of application (air and substrate): from +5°C to +25°C;
Packaging:
Disposable plastic packaging containing:

• component A	4 kg of product,
• component B	2 kg of product;

Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production provided on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: The substrate must be sound/stable, degreased, clean and dry. Any loose layers, not bound to the substrate (e.g., dust, loose render or flaked paint coatings), should be removed or brushed and reinforced with an adequate primer. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. In order to suitably prepare the crack/scratch bridging by means of a two-component **RSA 2K** filler (option 2 of **RSA** systems), it is necessary to make two parallel cuts with an angular grinder on both sides of the crack spaced 6-12 cm from each other, to the depth of 8-12 mm. Then remove the render between the cuts. Thoroughly dust off the gap/bridge. Note: If the base coat is applied on new mineral substrates (e.g., concrete, cement-lime and cement render) – a minimum 4-week curing period is required.
PRIMING: Open surface of crack/scratch should be primed with **GRUNT NOVALIT GT** or **GRUNT ARMASIL GT** before the application of crack filler. The curing period of the product applied to the substrate before applying the base coat is about 24 hours. The crack filler can be applied when the primer is completely dry.
PRODUCT PREPARATION: Pour adequate amount of component A into a container with component B while mixing vigorously (with a mixer/drill with a basket stirrer) until a homogeneous, lump-free mixture is obtained. While mixing, pay special attention not to form lumps. After leaving it for 5 minutes and remixing, the filler is ready to use. Open time for application (after mixing) of the prepared filler is approx. 2 hours. Note: It is necessary to strictly observe mixing ratios for both components! If they are not observed, product properties will change and so it will not function properly as part of the renovation anti-cracking system.
APPLICATION: The prepared crack filler should be applied with a stainless steel trowel to the top level of the render coat.
DRYING: Setting time for the crack filler applied on a substrate is about 24 hours under normal weather conditions (temperature +20°C and relative humidity of 65%). While after 48 hours, it is possible to apply the subsequent layers of anti-cracking system supplied by Farby KABE. Note: The setting time may be longer due to low temperatures and high relative humidity. The **NOVALIT MS** and **ARMASIL MS** base coats can applied directly on a set and dried layer of crack filler.
USEFUL HINTS: Application and setting of the flexible crack filler should be performed on dry days and with air and substrate temperature ranging from +5°C to+ +25°C. Avoid applying in direct sunlight or during strong winds. In order to protect the unset base coat against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Tools should be cleaned with water immediately after work is completed.

PRODUCTS FOR GLUING AND GROUTING CERAMIC, CLIKER AND STONE TLES

Adhesives for outdoor and indoor use
Adhesives for interiors
Grout joints

KOMBI FLEX

Flexible, deformable adhesive for tiles type C2 S1 T

MAIN ADVANTAGES

- Flexible adhesive
- For outdoor and indoor use
- Very good working properties
- General purpose
- High resistance to tensions
- Contains microfibres and polypropylene fibres

AREAS OF APPLICATION

Flexible, deformable adhesive, intended for fixing ceramic tiles, terracotta, clinker and stoneware tiles (including large formats) with high and low water absorption. Suitable for deformable substrates (oriented strand boards – OSBs and chipboards) and non-deformable substrates, such as concrete, screed and cement render, cement-lime render and plasterboards, so it is a product with a very wide range of applications. For indoor and outdoor use on vertical and horizontal surfaces, also with underfloor heating. Thanks to its operating parameters, it allows for fixing tiles from above, which makes the adhesive a convenient and easy-to-use product.

TECHNICAL DATA

Product form: dry mineral mixture, modified with synthetic polymers.
Mixing ratio: 6.0-6.5 l of water per 25 kg of dry mortar
Ready to apply time: 3 hours
Open time: 20 minutes
Correction time: 10 minutes
Bulk dry density: 1.40 kg/m^3;
Temperature of air and substrate: from +5°C to +25°C
Time of full load and grouting: after 48 hours
Min. and max. layer thickness: from 2 to 10 mm
Reaction to fire: class A1

Adhesive with improved parameters, type C2, and reduced T run-off.
Adhesion:

• initial	≥ 1.0 N/mm^2
• after thermal ageing	≥ 1.0 N/mm^2
• after immersing in water	≥ 1.0 N/mm^2
• after freeze-thaw cycles	≥ 1.0 N/mm^2

Transverse deformation: class S1 ≥ 2.5 and S1 < 5 mm
Run-off: ≤ 0.5 mm

HOW TO USE

SUBSTRATE PREPARATION: The substrate should be even, uniform and dry, free from dirt that reduces the adhesion of the adhesive, i.e. dust, lime, oil, grease, remnants of old paint and varnish coatings, and free from the effects of aggressive chemical and biological agents. To ensure proper adhesion, the surface should always be primed with **BUDOGRUNT ZG** (outdoors) or **BUDOGRUNT WG** (indoors) before applying the adhesive. For surfaces covered with fungi, before applying the adhesive, the efflorescence should be mechanically removed with a brush, spatula or high-pressure washer, and then disinfected with **ALGIZID**.
When fixing tiles to deformable surfaces and ceramic tiles, it is recommended to use the BUDOGRUNT SC adhesive bridge.
The adhesive can only be used on properly cured substrates:

• cement and cement-lime renders:	after min. 28 days,
• cement screeds:	after min. 28 days,
• concrete:	after more than 3 months,

Substrate humidity: ≤ 4%
PRODUCT PREPARATION: Pour approximately 6.0-6.5 litres of water per 25 kg of dry mortar into a container and pour the contents of the bag while stirring. Mix using a low-speed mixer until a uniform consistency is obtained. **Leave for about 5 minutes. Stir again before use, checking consistency.** You can adjust the consistency by adding water or adhesive and mixing again. Adhesive prepared this way can be applied for up to 3 hours. During work, it is recommended to stir the adhesive periodically, but further addition of water is strictly prohibited!
FIXING THE TILES: Start by applying a layer of adhesive with the flat side of the trowel to the substrate, and then scraping off the excess with the comb side. The size of the notches on the trowel should be selected depending on the size of the tiles. The amount of adhesive applied to the tiles should be selected, so that the contact area with the adhesive after pressing covers at least 70% of the surface. For tiles fixed outdoors, the bonding surface should be complete. Depending on the temperature and relative humidity of the air, the grout can be applied not earlier than 48 hours after laying the tiles. Unused, hardening grout cannot be remixed with water and should be disposed of as waste.
APPROXIMATE COVERAGE OF DRY MORTAR: 1,4 kg/1 m^2/1 mm, at a layer thickness of 2-10 mm
USEFUL HINTS: Laying tiles should be performed at a temperature of +5°C to +25°C
STORAGE: The product should be stored in original sealed packaging, in dry rooms, on pallets, at a temperature ranging from +5°C to +25°C. Shelf life is 12 months.
PACKAGING:

• Bags:	25 kg
• Pallet:	1200 kg in 25 kg bags (48 pcs).

Note: The information provided on the product packaging is based on our knowledge, laboratory tests and previous applications. For specific applications, they should be carefully verified. The information and recommendations provided on the packaging do not replace professional and reliable preparation of the designer and worker. There may be justified differences depending on the method of performing the work, the type of tiles and substrate, as well as weather conditions. If in doubt, do not hesitate to seek advice from our technical advisers.

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl
The product complies with the following standard: PN-EN 12004+A1:2012E

KOMBI GRES

Flexible, deformable adhesive for tiles type C2 S1 T

MAIN ADVANTAGES

- For outdoor and indoor use
- For stoneware and ceramic tiles with low water absorption
- Very good working properties
- High resistance to tensions
- Contains microfibres

AREAS OF APPLICATION

Adhesive intended for gluing stoneware and ceramic tiles (including large-format ones) with low water absorption. Suitable for deformable substrates (oriented strand boards – OSBs and chipboards) and non-deformable substrates, such as concrete, screed and cement render, cement-lime render and plasterboards, making it a product with a very wide range of applications. For indoor and outdoor use on vertical and horizontal surfaces, also with underfloor heating. Thanks to its operating parameters, it allows for fixing tiles from above, which makes the adhesive a convenient and easy-to-use product.

TECHNICAL DATA

Product form: dry mineral mixture, modified with synthetic polymers.
Mixing ratio: 6.0-6.5 l of water per 25 kg of dry mortar
Ready to apply time: 3 hours
Open time: 20 minutes
Correction time: 10 minutes
Bulk dry density: 1.40 kg/m^3
Temperature of air and substrate: from +5°C to +25°C
Time of full load and grouting: after 48 hours
Min. and max. layer thickness: from 2 to 10 mm
Reaction to fire: class A1

Adhesive with improved parameters, type C2, and reduced T run-off
Adhesion:

- initial ≥ 1.0 N/mm^2
- after thermal ageing ≥ 1.0 N/mm^2
- after immersing in water ≥ 1.0 N/mm^2
- after freeze-thaw cycles ≥ 1.0 N/mm^2

Transverse deformation: class S1 ≥ 2.5 and S1 < 5 mm
Run-off: ≤ 0.5 mm

HOW TO USE

SUBSTRATE PREPARATION: The substrate should be even, uniform and dry, free from dirt that reduces the adhesion of the adhesive, i.e. dust, lime, oil, grease, remnants of old paint and varnish coatings, and free from the effects of aggressive chemical and biological agents. To ensure proper adhesion, the surface should always be primed with **BUDOGRUNT ZG** (outdoors) or **BUDOGRUNT WG** (indoors) before applying the adhesive. When fixing tiles to deformable surfaces and ceramic tiles, it is recommended to use the **BUDOGRUNT SC** adhesive bridge. For surfaces covered with fungi, before applying the adhesive, the efflorescence should be mechanically removed with a brush, spatula or high-pressure washer, and then disinfected with **ALGIZID**.
The adhesive can only be used on properly cured substrates:

- cement and cement-lime renders: after min. 28 days,
- cement screeds: after min. 28 days,
- concrete: after more than 3 months,

Substrate humidity: ≤ 4%.
PRODUCT PREPARATION: Pour approximately 6.0-6.5 litres of water per 25 kg of dry mortar into a container and pour the contents of the bag while stirring. Mix using a low-speed mixer until a uniform consistency is obtained. **Leave for about 5 minutes. Stir again before use, checking consistency.** You can adjust the consistency by adding water or adhesive and mixing again. Adhesive prepared this way can be applied for up to 3 hours. During work, it is recommended to stir the adhesive periodically, but further addition of water is strictly prohibited!
FIXING THE TILES: Start by applying a layer of adhesive with the flat side of the trowel to the substrate, and then scraping off the excess with the comb side. The size of the notches on the trowel should be selected depending on the size of the tiles. The amount of adhesive applied to the tiles should be selected, so that the contact area with the adhesive after pressing covers at least 70% of the surface. For tiles fixed outdoors, the bonding surface should be complete. Depending on the temperature and relative humidity of the air, the grout can be applied not earlier than 48 hours after laying the tiles. Unused, hardening grout cannot be remixed with water and should be disposed of as waste.
APPROXIMATE COVERAGE OF DRY MORTAR: 1.4 kg/1 m^2/1 mm, at a layer thickness of 2-10 mm
USEFUL HINTS: Laying tiles should be performed at a temperature of +5°C to +25°C.
STORAGE: The product should be stored in original sealed packaging, in dry rooms, on pallets, at a temperature ranging from +5°C to +25°C. Shelf life is 12 months.
PACKAGING:

- Bags 25 kg
- Pallet 1200 kg in 25 kg bags (48 pcs).

Note: The information provided on the product packaging is based on our knowledge, laboratory tests and previous applications. For specific applications, they should be carefully verified. The information and recommendations provided on the packaging do not replace professional and reliable preparation of the designer and worker. There may be justified differences depending on the method of performing the work, the type of tiles and substrate, as well as weather conditions. If in doubt, do not hesitate to seek advice from our technical advisers.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

KOMBI K

White, mineral adhesive for stone, clinker and ceramic tiles – C2S1T

MAIN ADVANTAGES

- Contains white cement, that does not discolour the used cladding
- For indoor and outdoor use
- Reduced run-off
- Reinforced with microfibres
- Contains polypropylene fibres

AREAS OF APPLICATION

Flexible, deformable, white adhesive designed for fixing ceramic, clinker and stone tiles. Especially recommended for laying natural stone tiles, as well as natural stone and light-coloured ceramic cladding. It is also a component of the thermal insulation system with Kabe Therm CK cladding. Thanks to the use of white cement, it does not discolour the cladding. When used outside the thermal insulation system, it can be used on both deformable substrates (OSBs, chipboards) and non-deformable substrates, such as: concrete, screed, cement render, cement-lime render and plasterboards. For indoor and outdoor use on vertical and horizontal surfaces, also with underfloor heating.

TECHNICAL DATA

Composition: dry mixture of white cement binder, aggregates and polymer modifying additives, reinforced with cellulose and polypropylene fibres;
Colour: natural white;
Grain size: up to 0.5 mm
Temperature of application (air and substrate): from +5°C to +25°C
Mixing ratio: approx. 6.0 l of water per 25 kg of dry mortar
After adding water, the product must be used within: about 3 hours.

Open time: 20 minutes.
Correction time: 10 minutes.
Min. and max. layer thickness: 2-10 mm
Time of full load and grouting: after 48 h
Approximate coverage: approx.1.4 kg/1 m²/1 mm. Unevenness of the substrate increases the consumption of adhesive

HOW TO USE

Substrate preparation:
The substrate should be even, uniform and dry, free from dirt that reduces the adhesion of the adhesive, i.e. dust, lime, oil, grease, remnants of old paint and varnish coatings, and free from the effects of aggressive chemical and biological agents. To ensure proper adhesion, the surface should always be primed with **BUDOGRUNT ZG** (outdoors) or **BUDOGRUNT WG** (indoors) before applying the adhesive. For surfaces covered with fungi, before applying the adhesive, the efflorescence should be mechanically removed with a brush, spatula or high-pressure washer, and then disinfected with **ALGIZID**. When fixing tiles to deformable surfaces and ceramic tiles, it is recommended to matt the surfaces and use an adhesive bridge. **BUDOGRUNT SC** can only be applied on properly cured substrates:

- cement-lime renders: after min. 28 days
- cement screeds: after min. 28 days
- concrete: after min. 28 days

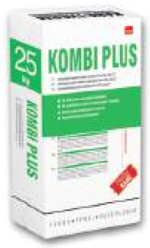
Substrate humidity: ≤ 4%. When laying tiles on surfaces exposed to water, use: **KOMBI HYDRO STOP** – base coat with waterproofing properties. Fixing cladding in the **KABE THERM CK** EWI system should be started after min. 48 hours after applying the reinforcing layer. In order to eliminate the possibility of leaving gaps under the tiles, it is recommended to apply the adhesive to the substrate – with a notched trowel or with the smooth side of the trowel on the underside of the tile. This method guarantees that the tile base is fully filled with adhesive after pressing.
Grouting: Grouting should be started after the mortar has completely dried, 48 hours after fixing the tiles.
The cladding fixed to the substrate should be protected against precipitation and moisture condensation for at least 3 days.
Product preparation: Pour the contents of the bag into a container with a measured amount of clean and cold water and thoroughly mix (with a low-speed mixer/drill fitted with a basket stirrer) until a homogeneous, lump-free mixture is obtained. After mixing, leave the mortar for about 5 minutes to mature and then mix it again briefly. Depending on the temperature and air humidity, the ready-to-use mortar can be applied for about 3 hours.
Fixing the tiles: Start by applying a layer of adhesive with the flat side of the trowel to the substrate, and then scraping off the excess with the back side. The size of the notches on the trowel should be selected depending on the size of the tiles. The amount of adhesive applied to the tiles should be selected, so that the contact area with the adhesive after pressing covers at least 70 % of the surface. For tiles fixed outdoors, the bonding surface should be complete. Depending on the temperature and relative humidity of the air, the adhesive can be used to grout not earlier than 48 hours after laying the tiles. Unused, hardening grout cannot be remixed with water and should be disposed of as waste.
Useful hints: Do not soak tiles before fixing. Laying tiles should be performed at a temperature of +5°C to +25°C.
Storage: The product should be stored in original sealed packaging, in dry rooms, on pallets, at a temperature ranging from +5°C to +25°C. Protect against moisture. Shelf life: up to 12 months from the date of production provided on the packaging.
Packaging: Bags: 25 kg, Pallet: 1200 kg in 25 kg bags (48 pcs).
Occupational health and safety tips: The product contains cement, when mixed with water it has an alkaline pH. Information on hazards and conditions of safe use is provided on the safety data sheet and on the packaging.

Technical data sheet, revised March 2023.
Most recent information is available at www.farbykabe.pl

The product complies with the following standard: PN-EN 12004+A1:2012E
National Technical Assessment No. ICiMB-KOT-2018/0039 edition 1

KOMBI PLUS

General purpose adhesive for tiles type C1



MAIN ADVANTAGES

- For indoor use
- For fixing ceramic tiles and terracotta
- Very good working properties
- Contains microfibres

AREAS OF APPLICATION

General purpose adhesive intended for installing ceramic tiles and terracotta. Suitable for non-deformable substrates, such as concrete, screed, cement render and cement-lime render. It can be used inside buildings on vertical and horizontal surfaces. Thanks to its working parameters, this product is comfortable and easy to use.

TECHNICAL DATA

Product form: dry mineral mixture, modified with synthetic polymers.
Mixing ratio: 5.75-6.25 l of water per 25 kg of dry mortar
Ready to apply time: from 2.5 to 3 hours
Open time: 20 minutes
Correction time: 10 minutes
Bulk dry density: 1.40 kg/m^3
Temperature of air and substrate: from +5°C to +25°C
Time of full load and grouting: after 48 hours
Min. and max. layer thickness: from 2 to 10 mm

Reaction to fire: class A1
Open time: adhesion
Adhesion:

• initial	≥ 0.5 N/mm^2
• after thermal ageing	≥ 0.5 N/mm^2
• after immersing in water	≥ 0.5 N/mm^2
• after freeze-thaw cycles	≥ 0.5 N/mm^2

Open time:

• adhesion	≥ 0.5 N/mm^2, after time not shorter than 20 min.

HOW TO USE

SUBSTRATE PREPARATION: The substrate should be even, uniform and dry, free from dirt that reduces the adhesion of the adhesive, i.e. dust, lime, oil, grease, remnants of old paint and varnish coatings, and free from the effects of aggressive chemical and biological agents. To ensure proper adhesion, the surface should always be primed with **BUDOGRUNT WG** (indoors) before applying the adhesive. When fixing tiles to deformable surfaces and ceramic tiles, it is recommended to use the **BUDOGRUNT SC** adhesive bridge. For surfaces covered with fungi, before applying the adhesive, the efflorescence should be mechanically removed with a brush, spatula or high-pressure washer, and then disinfected with **ALGIZID**.
The adhesive can only be used on properly cured substrates:

• cement and cement-lime renders:	after min. 28 days,
• cement screeds:	after min. 28 days,
• concrete:	after more than 3 months,

Substrate humidity: ≤ 4%.
PRODUCT PREPARATION: Pour approximately 5.75-6.25 litres of water per 25 kg of dry mortar into a container and pour the contents of the bag while stirring. Mix using a low-speed mixer until a uniform consistency is obtained. **Leave for about 10 minutes. Stir again before use, checking consistency.** You can adjust the consistency by adding water or adhesive and mixing again. Adhesive prepared this way can be applied for up to 3 hours. During work, it is recommended to stir the adhesive periodically, but further addition of water is strictly prohibited!
FIXING THE TILES: Start by applying a layer of adhesive with the flat side of the trowel to the substrate, and then scraping off the excess with the comb side. The size of the notches on the trowel should be selected depending on the size of the tiles. The amount of adhesive applied to the tiles should be selected, so that the contact area with the adhesive after pressing covers at least 70% of the surface. Depending on the temperature and relative humidity of the air, the grout can be applied not earlier than 48 hours after laying the tiles. Unused, hardening grout cannot be remixed with water and should be disposed of as waste.
APPROXIMATE COVERAGE OF DRY MORTAR: 1,4 kg/1 m^2/1mm, at a layer thickness of 2-6 mm
USEFUL HINTS: Laying tiles should be performed at a temperature of +5°C to +25°C.
STORAGE: The product should be stored in original sealed packaging, in dry rooms, on pallets, at a temperature ranging from +5°C to +25°C. Shelf life is 12 months.
PACKAGING:

• Bags:	25 kg
• Pallet:	1200 kg in 25 kg bags (48 pcs).

Note: The information provided on the product packaging is based on our knowledge, laboratory tests and previous applications. For specific applications, they should be carefully verified. The information and recommendations provided on the packaging do not replace professional and reliable preparation of the designer and worker. There may be justified differences depending on the method of performing the work, the type of tiles and substrate, as well as weather conditions. If in doubt, do not hesitate to seek advice from our technical advisers.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

KOMBI KS1

Joint mortar with a trass for grouting façade bricks, clinker bricks and clinker tiles

MAIN ADVANTAGES

- Mineral mortar with trass that minimises the risk of efflorescence.
- By using a trass, it ensures high vapour permeability of the wall, reduces mortar shrinkage during setting and strongly thickens the mortar structure, limiting capillary transport of mixing water.
- It is hydrophobic and resistant to adverse atmospheric conditions after setting.
- High compressive strength >15 N/mm^2.
- Available in several colours according to the colour chart.

AREAS OF APPLICATION

Factory tinted, dry mixture for grouting hand-formed clinker façade tiles, as well as for ceramic façade tiles and stone cladding in the **KABE THERM CK** EWI system. The required joint width ranges from 6 to 20 mm. The **KOMBI KS1** joint mortar is a product based on selected aggregates, high-quality cements, volcanic tuff (trass) and additives, ready to use after adding an appropriate amount of mixing water. The product is a component of an EPS-based EWI system, made in the technology of the external thermal insulation composite system (ETICS).

TECHNICAL DATA

Composition: dry mixture of white cement binder, aggregates and polymer modifying additives, reinforced with cellulose and polypropylene fibres;
Average consumption: approx. 6 kg/1 m^2, depending on the size of the tiles. Consumption should be checked under specific conditions, as it depends on the depth and width of the joint.
Mixing ratio: 3.0-3.5 litres of water per 25 kg of mortar
Time of use: approx. 1.0 hour
Joint width/depth: 6-20 mm
Colours: according to the Farby KABE joint colour chart;
Grain size: up to 0.5mm
Temperature of application (air and substrate): from +5°C to +25°C. Note: Temperature lower or higher than optimum may adversely affect the properties of the product.
Efficiency: one 25 kg bag of mortar is sufficient to obtain 16 litres of ready-to-use mortar.
Packaging: 25 kg bags, reinforced paper bags, with a double polyurethane film liner. 48 bags per pallet.
Storage: 12 months – recommended use within 6 months.

Storage conditions: Protect against moisture and store in a dry place on pallets in original packaging. Opened packages should be tightly closed.
Fire spread rating: NRO (non-fire spreading system)
Reinforcing layer water absorption after 24 hours: < 0.5 [kg/m^2]
Surface layer water absorption after 24 hours: < 0.5 [kg/m^2]
Surface layer impact resistance: cat. I
Diffusion resistance of the surface layer: $S_d \leq 5.7$ [m]
Frost resistance of the top layer: no damage
Top layer adhesion to EPS:
– in laboratory conditions: ≥ 0.08 [MPa]
– after 2 days of immersion in water and 2 hours of drying: ≥ 0.08 [MPa]
– after ageing: ≥ 0.08 [MPa]
– after cycles of frost resistance: ≥ 0.08 [MPa]
Maximum load: 260 N
Maximum deflection: 8.4 mm

HOW TO USE

Substrate: The substrate should be clean, free from dust and anti-adhesive oil. Remove all loose, unbound parts and remnants of adhesive. Grouting can be started after approx. 14 days after fixing the tiles or claddings. Before grouting, the substrate should be slightly moistened with water using a sprinkler to increase adhesion.
Product preparation: Mix the contents of the entire 25 kg package with approx. 3.0-3.5 l of water (to maintain a uniform shade of colour, always dose the same amount of water). Mix thoroughly the **KOMBI KS1** mortar using a slow-speed mixer or a concrete mixer until a homogeneous compound with a moist consistency (so-called "wet soil") is obtained. After mixing, wait 5 minutes and mix again. A properly prepared mortar, when squeezed in the hand and opened, forms a compact lump and leaves no wet trace. The prepared portion of the mortar should be used within one hour. Note: It is forbidden to add water to the previously prepared mortar during works, because it may change the colour.
Grouting: The **KOMBI KS1** mortar is applied with a grouting kit from top to bottom. The mortar should be applied using the "wet on wet" method, at the same time compacting the mortar structure by pressing a stainless steel "joint" trowel or using other tools. The width and depth of the joint should range from 6 mm to 20 mm. It is recommended to make a full (flush) or concave (semicircular) joint. With a joint depth of less than 10 mm chipping may occur. All kinds of dirt should be removed only with a dry, soft brush. Note: The use of water for cleaning fresh mortar is unacceptable!
Drying: Fresh mortar should be protected against adverse weather conditions (frost, gusty winds, direct sunlight and rain) for approx. 7 days. For this purpose, the jointed surfaces should be covered with a tarpaulin, foil or mats. Adequate ventilation should be provided around the jointed surface. Optimum processing conditions: air, substrate, as well as product temperature should be within 5°C-25°C. Note: Temperature lower or higher than optimum may adversely affect the properties of the product. The setting and drying time may be longer due to low temperatures and high relative humidity. After the joints are completely set and dry, it is recommended to use the **SILIKON B** siloxane impregnation over the entire surface of the wall (joints and tiles/bricks).
Useful hints: The mortar is mass-coloured and available in colours according to the Farby KABE colour chart. Because of the repeatability of colour, bags from the same production batch should be used (batch number and mortar colour on the print on the side of the bag). Apart from clean water, no other substances may be added. Before starting grouting, bricks should be cleaned of production residues and dust. (this is especially important for hand-formed tiles and with a rustic appearance). Loose particles present on the surface of the tiles will reduce the bond and strength. Tiles cannot be wet or frozen.
Safety hints: It is a dusty product in dry conditions, after adding water or with moisture its pH is strongly alkaline. Therefore, it is necessary to protect eyes and skin. Wear standard skin, eye and respiratory protection. If the mortar comes into contact with skin, wash the contact area thoroughly with plenty of water. In case of eye contact with mortar, rinse the eye thoroughly with water and seek immediate medical advice.

KOMBI KS2

Joint mortar with a trass for grouting clinker tiles and façade tiles

MAIN ADVANTAGES

- Mineral mortar with trass that minimises the risk of efflorescence.
- Universal application, joint depth and width from 6 to 20 mm.
- By using a trass, it ensures high vapour permeability, reduces mortar shrinkage and strongly thickens the mortar structure, limiting capillary transport of mixing water.
- It is frost-resistant, hydrophobic and resistant to adverse weather conditions after setting.
- Applied in semi-dry consistency.
- High compressive strength >15 N/mm^2.
- Available in several colours according to the colour chart

AREAS OF APPLICATION

Factory tinted, dry mixture for grouting ceramic façade tiles, clinker façade tiles, gres and stone cladding in the **KABE THERM CK** EWI system. Intended for use in the range of 6-20 mm (joint depth and width). **KOMBI KS2** mortar is a product based on selected aggregates, high-quality cements, volcanic tuff (trass) and additives, ready to use after adding an appropriate amount of mixing water. The product is a component of an EPS-based EWI system, made in the technology of the external thermal insulation composite system (ETICS).

TECHNICAL DATA

Mixing ratio: 2.5-3.0 litres of water per 25 kg of mortar
Use time: approx. 1.0 hour
Joint width/depth: 6-20 mm
Colours: according to the Farby KABE clinker joint colour chart
Temperature of application (air and substrate): 5°C-25°C. Note: Temperature lower or higher than optimum may adversely affect the properties of the product.
Efficiency: one 25 kg bag of mortar is sufficient to obtain 17.5 litres of ready-to-use mortar.
Average coverage: For façade and clinker tiles, the approximate consumption can be assumed to be about 3 kg/1 m^2 with a joint depth of 10 mm and a joint width of 10 mm.
Packaging: 25 kg bags, reinforced paper bags, with a double polyurethane film liner. 48 bags per pallet.
Storage: 12 months – recommended use within 6 months.
Storage conditions: Protect against moisture and store in a dry place on pallets in original packaging. Opened packages should be tightly closed.
Fire spread rating: NRO (non-fire spreading system)

Reinforcing layer water absorption after 24 hours: < 0.5 [kg/m^2]
Surface layer water absorption after 24 hours: < 0.5 [kg/m^2]
Surface layer impact resistance: cat.I
Diffusion resistance of the surface layer: $S_d \leq 5.7$ [m]
Frost resistance of the top layer: no damage
Top layer adhesion to EPS:
– in laboratory conditions: ≥ 0.08 [MPa]
– after 2 days of immersion in water and 2 hours of drying: ≥ 0.08 [MPa]
– after ageing: ≥ 0.08 [MPa]
– after cycles of frost resistance: ≥ 0.08 [MPa]
Maximum load: 260 N
Maximum deflection: 8.4 mm

HOW TO USE

Substrate: The substrate should be clean, free from dust and anti-adhesive oil. Remove all loose, unbound parts and remnants of mortar. After fixing the ceramic tiles, thoroughly clean the joints from any adhesive mortar residues. In special conditions (high temperature, high absorbency of tiles), in order to increase the adhesion of the joint, the "joint grid" can be slightly moistened with water before grouting.
Product preparation: Mix the contents of the entire 25 kg package with approx. 2.5-3.0 l of water (to maintain a uniform shade of colour, always dose the same amount of water). Mix thoroughly the mortar using a slow-speed mixer until a homogeneous compound with a semi-dry consistency (so-called "wet soil") is obtained. After mixing, wait 5 minutes and mix again. A properly prepared mortar, when squeezed in the hand and opened, forms a compact lump and leaves no wet trace. The prepared portion of the mortar should be used within one hour. Note: It is forbidden to add water to the previously prepared mortar during works, because it may change the colour.
Grouting: The **KOMBI KS2** mortar is applied with a grouting kit. The mortar should be applied using the "wet on wet" method, at the same time compacting the mortar structure by pressing a stainless steel "joint" trowel or using other tools. The width and depth of the joint should range from 6 mm to 20 mm. With a joint depth of less than 6 mm, chipping may occur. All kinds of dirt should be removed only with a dry, soft brush. Note: The use of water for cleaning fresh mortar is unacceptable!
After the mortar has initially set, wash the tile surface with a slightly damp sponge, diagonally to the joint grid. Special attention should be paid to ensure that, when cleaning, the surface of the fresh joint is not damaged or the fresh joint is not wetted with excessive amount of water. During the work, general rules of construction practice must be followed.
Drying: Fresh mortar should be protected against adverse weather conditions (frost, gusty winds, direct sunlight and rain) for approx. 7 days. For this purpose, the jointed surfaces should be covered with a tarpaulin, foil or mats. Adequate ventilation should be provided around the jointed surface. It should be assumed, that the drying period of the joint is 1 day (24 hours) for each 1 mm of thickness. After the joints are completely set and dry, it is recommended to use the **SILIKON B** siloxane impregnation over the entire surface of the wall (joints and tiles/bricks).
Useful hints: Optimum processing conditions: air, substrate, as well as product temperature should be within 15°C-25°C.
Note: Temperature lower or higher than optimum may adversely affect the properties of the product.
The mortar is mass-coloured and available in colours according to the Farby KABE colour chart. Because of the repeatability of colour, bags from the same production batch should be used (batch number and mortar colour on the print on the side of the bag). Apart from clean water, no other substances may be added.
Safety hints: It is a dusty product in dry conditions, after adding water or with moisture its pH is strongly alkaline. Therefore, it is necessary to protect eyes and skin. Wear standard skin, eye and respiratory protection. If the mortar comes into contact with skin, wash the contact area thoroughly with plenty of water. In case of eye contact with mortar, rinse the eye thoroughly with water and seek immediate medical advice.

The information included in this document does not cover all the aspects of the product/system use. Therefore, the information should be verified each time due to the possibility of justified differences depending on the method of carrying out work, the type of substrate and other external conditions.

FOR WOOD IMITATION EFFECTS

KABE DP

Silicone mould for the board effect

MAIN ADVANTAGES

- unique board pattern, specially designed for Farby KABE;
- a clear, deep pattern, emphasising the aesthetic value of the board decorative effect;
- increased thickness and durability of silicone moulds;
- various patterns and sizes of silicone moulds in grey and red colour;
- additional indication of the direction of the reflected mould.

AREAS OF APPLICATION

A mould in the form of a flexible silicone matrix, reusable. Designed for imprinting board patterns in the KABE DECOR PRINT mineral mortar, used inside and outside buildings, including the **KABE THERM RENO** EPS-based insulation system and the **KABE THERM MW** system based on mineral wool. The mould has a direction marking of the reflected matrix in the form of an imprinted arrow in the upper left corner of the negative, which facilitates and speeds up orientation when rotating the mould. There are 2 different patterns of silicone mould available in grey and red (for easier identification). The red mould has a denser grain pattern than the grey one. When using the silicone mould, use a KABE DP2 anti-adhesive agent.

TECHNICAL DATA

Type of binder: silicone binder;
Reinforcing fabric: fibreglass mesh 145 g/m^2;
Mould colours: grey and red,
Mould type and dimensions:
KABE DP (SZ) – silicone mould (grey) to provide a board effect, dimensions: 19 x 200 cm;
KABE DP (CZ) – silicone mould (red) to provide a board effect, dimensions: 20 x 200 cm;
Anti-adhesive agent: KABE DP2;
Temperature of application (air and substrate): from +5°C to +25°C;

Relative air humidity: ≤ 75%;
Packaging: Cardboard packaging with product identification label.
Storage: in original packaging in dry rooms, at temperatures from +10°C to max. +25°C.
Silicone moulds should not be exposed to direct sunlight, high temperature, moisture or frost.
The packaging must not be crushed or deformed. The most important thing when storing moulds is to avoid contact with solvent and oil vapours!
Shelf life: 12 months from the date of production printed on the packaging, provided that the storage conditions are observed.

HOW TO USE

Substrate preparation: substrate should be sound/stable, degreased, even, dry and free of biological contamination and chemical efflorescence. Fresh mineral substrates should be cured for min. 4 weeks. Places of algae/fungi growth: clean mechanically, and then wash with water and disinfect with ALGIZID. Any layers not bonded to the substrate (e.g., loose render or flaked coatings) should be removed. Uneven areas or holes in substrate: small, up to 5 mm – smooth out the whole surface with **KOMBI** base coat; larger – fill with filling mortar before smoothing out. Curing time min. 4 days. Before applying the **KOMBI DECOR PRINT** render in the EWI system, all base coats should be applied in accordance with the requirements for external thermal insulation composite system (ETICS).
Priming: Before applying the **KOMBI DECOR PRINT** compound, the substrate should be primed with **PERMURO GT** 24 hours before applying the render. Note: In the case of application on very absorbent substrates, such as gypsum plasters, it is necessary to prime with **BUDOGRUNT WG** first, and then after min. 2 hours with **PERMURO GT** primer.
Product preparation: Gradually pour the entire packaging contents into a container with a pre-measured amount of cool water (approx. 5 litres per 25 kg of mortar), stirring constantly (with a low-speed mixer/drill), until a homogeneous, lump-free mixture is obtained. After leaving it for 5 minutes and remixing, the mortar is ready to use. After adding water, the product must be used within approx. 2 hours (at air temperature +20°C and RH 55%).
Note: Excessive amount of mixing water may cause bubbles to form on the mortar layer.
Compound application: Apply the prepared **KOMBI DECOR PRINT** compound in a uniform layer, with thickness of about 4 mm using a steel trowel held at an angle, then spread with a notched trowel (notch size 10-12 mm) at an angle, uniform the thickness of the layer, smooth it out and wait until the initial setting of the mass takes place and a skin is formed.
Impressing a board pattern: Impress evenly the **KABE DP** silicone mould in the applied layer, pressing with a wallpaper roller. Before each impression, the **KABE DP** silicone mould should be coated with **KABE DP2** anti-adhesion agent. The **KABE DP** silicone moulds should be covered (lubricated) only with **KABE DP2** anti-adhesive agent, immediately before impressing the mould. Using other anti-adhesive agents than **KABE DP2** may damage silicone, accelerating its degradation. It is recommended to irregularly rotate the silicone moulds ("right-left") during subsequent impressions, in order to limit the visible and repeatable pattern of the board and, if necessary, manually correct the resulting texture using available tools.
Drying: under recommended conditions of use: min. 7 days, while in laboratory conditions (i.e., at +20°C and 55% relative air humidity): approx. 3 days. Until the render hardens, protect the layer against precipitation and moisture condensation. Note: At low temperatures and high relative humidity the render drying time may be significantly longer. While working and directly after completion, the plastered surface should be protected against too intense drying and precipitation. After pre-setting, the impressed mass is easily processed by grinding or scraping.
Painting: After the render with impressed board pattern has dried in some places (e.g., at joints) sand the surface with sandpaper. On the dried and dedusted surface apply the **BUDOGRUNT ZG/WG** primer, one layer of **AKRYLATEX** base paint (on the façade) or **PROLATEX** (in interiors), and once it is dry (after about 3 hours), apply one or more layers of the **LAZUR Z/W** lazure paint (depending on the expected decorative effect). NOTE: A single batch of product should be used on separate architectural elements in a single work cycle, using the "wet on wet" method. The final effect of the **LAZUR Z/W** lazure paint depends largely on the roughness of the substrate, the thickness of the lazure coating and the skills and experience of the worker, therefore, we always recommend performing a preliminary test on a specific substrate. Tools should be cleaned with water immediately after use.
Useful hints: After completing the work, silicone moulds should be washed with clean water without detergents (remains of **KOMBI DECOR PRINT** mortar and **KABE DP2** anti-adhesive agent should be removed from the silicone mould). After washing and cleaning, silicone moulds should be left unfolded until dry. Silicone moulds are best stored unfolded in a place that provides air access and exchange. Do not store moulds in uncleaned condition. Do not store or soak the silicone mould in the **KABE DP2** anti-adhesive agent.

Technical data sheet, revised May 2023.
Most recent information is available at www.farbykabe.pl

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FARBY KABE company is a Swiss manufacturer of high-quality interior paints for walls and ceilings, facade paints, powder paints, thin-layer renders and adhesives, which are part of EWI systems of buildings. The history of the company in Switzerland dates back to the 1920s, in Poland it started operating in 1995. In the following years, the company built and established its position as a leading producer on the Polish market, cooperating with distribution partners as well as with contractors, investors, architects and designers. Farby KABE is also a significant supplier of high-quality products for the conservation market. The company's products are used in many construction facilities, including in: housing construction, public utility facilities, industrial facilities and historic buildings. The production is based on high-quality raw materials, based on innovative Swiss technology and proven recipes. The wide range of Farby KABE brand products allows for the appropriate selection of the product for a specific application and obtaining permanent protection against adverse conditions with great freedom in shaping the architectural image of buildings. The products are available in a wide range of textures and colours, among others, according to the colour chart Wzornik K, FARBwerk and NCS, so you can freely implement the individual requirements of each project and Investor. The list of reference objects includes many prestigious objects: Karłowicz Philharmonic in Szczecin, Pacific Office Building in Warsaw, Neptun Gdansk Office Center, Warminska mall in Olsztyn, Silver Tower Center in Wrocław and monuments: Palace Museum in Wilanow, Oginski Palace in Siedlce, Townhouses in Kazimierz Dolny and in Cracow, Jasna Góra Basilica in Czestochowa, Branicki Palace in Bialystok and many others. The mission of Farby KABE has been for years: „Providing modern decorative and protective products so that they always enjoy the full recognition and trust of our customers - reliably fulfilling their task for many years..."

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