

KABE 165 / KABE AVANT 165

(OPTIMA-NET 165)

System fibreglass mesh
for EW 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 EW systems made in accordance with the technology of ETICS. The mesh is the basic component of sets of materials needed to carry out EW 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 EW 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.