

# KABE 165

## (OPTIMA-NET 165 (170))

Reinforcing fibreglass mesh  
for EWI systems



### MAIN ADVANTAGES

- Top quality supported by numerous research and long-term experience
- High flexibility and impact resistance
- Rigid gauze weave
- Good surface grain size
- Anti-alkali impregnated
- Coloured in white with logotype of KABE

### AREAS OF APPLICATIONS

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 perform 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 systems based on mineral wool such as: **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:** Reinforcing mesh made of fibreglass has to be completely immersed in **KOMBI** base coat (with the use of EPS) or **KOMBI WM2** (in case of mineral wool).

### TECHNICAL SPECIFICATION

**Mesh size:** 3.6 mm x 4.0 mm  
**Surface mass:** 165 g/m<sup>2</sup> (-3%, +5%);  
**Weave type:** gauze;  
**Roll length:** ≥ 50 running metres;  
**Roll width:** 1.0 m (± 1%);  
**Colour:** White with a red imprint of KABE;

**Resistance to rupture after opening:** ≥ 35 N/mm;  
**Elongation along warp and weft at breaking strength in relation to delivery condition:** ≥ 4.0%  
**Coverage:** not less than 1.10 m<sup>2</sup> for each 1 m<sup>2</sup> of thermally insulated facade surface;  
**Storage:** in undamaged originally sealed packagings protected against self-unwinding of rolls. Protect from direct insolation, organic solvents and their fumes. The product to be stored in rolls in vertical position.

### APPLICATION METHOD

**SUBSTRATE PREPARATION:** Before applying the glass fibre mesh to performance a reinforcing coat, it is necessary to glue and anchor the system thermal insulation in accordance with external thermal insulation composite system (ETICS) technology. In order to provide an even surface of boards installed, the whole face surface of the EPS should be ground with a thick sand paper or the so-called 'grater' in order to eliminate any surface unevenness. First the edges of window and door openings should be reinforced by means of fixing to their corners diagonally running (i.e., at an angle of 45°) fibreglass mesh (with the dimensions of 25 x 30 cm) with the use of **KOMBI** or **KOMBI WM2** base coat (in the case of insulation 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 reinforcing coat must be applied on even, clean and previously sanded surfaces of EPS and mineral wool boards, not earlier than 3 days from the date of board installation. The surface of boards to be even and dedusted. EPS boards which were exposed for a longer period of time to UV radiation should be wiped in order to remove the weathered and yellowish layer. **Note:** All unevennesses to be eliminated and discontinuities of thermal insulation (gaps, etc.) 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).

**REINFORCING COAT APPLICATION:** Apply a continuous and even layer of the base coat onto the substrate (with a thickness of approx. 3÷4 mm) for the width slightly greater than the width of the reinforcing mesh band. Then, spread the base coat layer applied with a toothed edge of the trowel with a size of 10÷12 mm and immediately dip a reinforcing glass fibre 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. If necessary, in order to make the surface more even, an additional thin layer of base coat can be applied. 'Wet on wet' method to be used. The neighbouring mesh stripes must overlap not less than 10 cm on the wall surface while in the corners not less than 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 coat with one mesh layer on the EPS should amount from 3 to 5 mm. The width of reinforcing mesh to be selected in such a way so that it was possible to glue the window and door jambs on their whole depth. In the zones which are 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 folds or by applying one vertical layer and one horizontal layer. Any trowel marks should be sanded down with a sandpaper. In the places of the mesh intersection, e.g. within the area of scaffolding anchors, it is necessary to provide an additional reinforcement — set an extra mesh band. While mesh trimming, it is necessary to use a sharp knife. **Note:** It is not allowed to leave, even locally, the mesh without covering it with base coat or perform the reinforcement of a base coat layer on the suspended mesh without prior application of base coat on the substrate.

**DRYING:** The drying time for the reinforcing coat is min. 3 days (+20°C, 65% RH). After this period of time, you can apply a primer and after its curing is completed, a render. **Note:** Drying time may be longer due to low temperatures and high relative humidity.

**USEFUL HINTS:** The reinforcing coat on the surface of thermal insulation to be performed not later than after 30 days from adhering it. Any longer contact of thermal insulation with atmospheric conditions can compromise threat for 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 base coat should be applied on dry days at temperatures between 5-25°C. All tools must be cleaned with water after finishing work. Avoid working on surfaces exposed to direct sunlight, in strong winds or at a high air humidity. To protect the still wet reinforcing coat against inclement weather conditions, scaffolding should be covered with some protective netting or tarpaulins. While setting the mesh in the 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 from one side. Before render application, check if the mesh is not damaged or if base coat layer is not missing.