

06/2020

The ideal option for installing the Termok8 system on external surfaces where chemical bonding would not guarantee the impermeability of the system; ideal for renovating exterior walls in particularly deteriorated condition, without the need for laborious and costly preparation work. Wind resistance certificate

TERMOK8® MECCANICO COMPONENTS

ADHESIVE

Klebocem

PROFILES

Horizontal profile inox: OR/LT Vertical profile inox: VR/LT

Horizontal profile PVC: OR/LT Vertical profile PVC: VR/LT

INSULATION

EPS Meccanico - λ 0,035 W/(m·K)EPS G Meccanico - λ 0,031 W/(m·K)EPS Meccanico R - λ 0,035 W/(m·K)EPS G Meccanico R - λ 0,031 W/(m·K)

SKIM COAT

Klebocem

MESH

Armatex C1

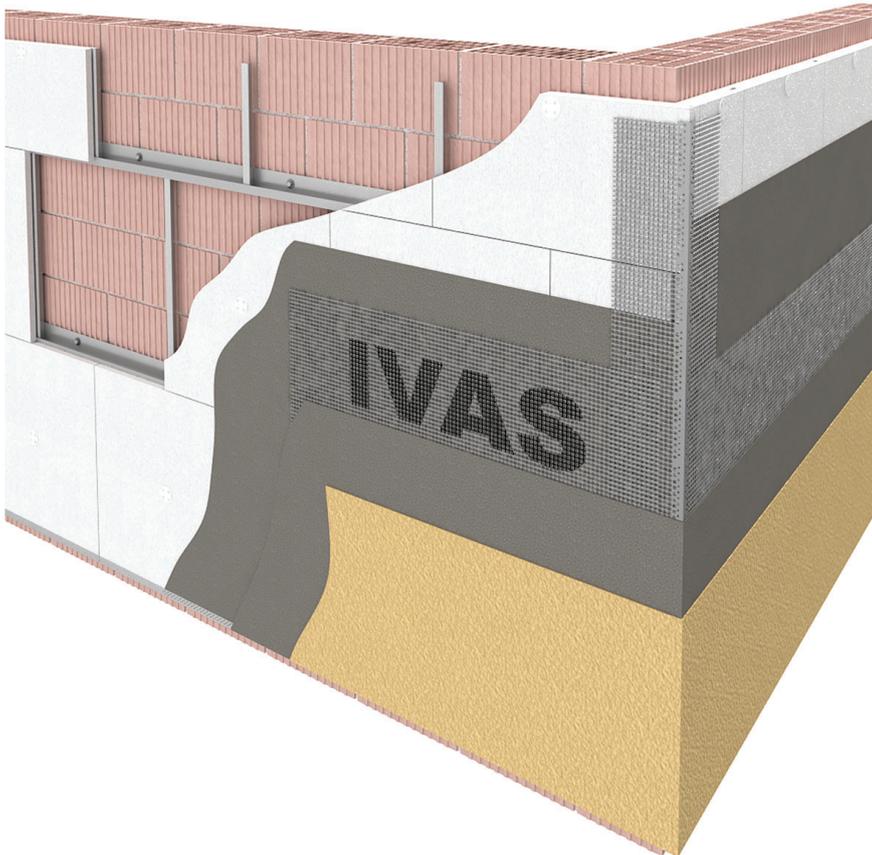
FINISHING COAT

Rivatone Plus - Rivatone Idrosiliconico Plus - Rivatone

Plus TRV- Rivatone Plus Reflect

ACCESSORIES

Depending on the type, structural configuration of the surfaces and the project



In collaboration with



SPECIFICATIONS

After any specific and appropriate preparation of the substrate, to be evaluated on a case-by-case basis according to the condition and type of surface, all external surfaces of the façade are to be clad on site using the Termok8 MECCANICO process, with BBA Certificate of Conformity no. 11/4841 issued on 04/06/2018. During the entire application, drying, and hardening phase, the ambient, substrate, and material temperatures must be between +5°C and +35°C, and wind or direct sunlight can change the application characteristics. In such cases, it is necessary to take additional precautions such as shading with meshes.

STARTING ZONES / BUILDING PLINTH AREA

If the operation allows it, the setting-out and retention of the insulation system is to be achieved by mechanical application of an aluminium alloy section (base profile) along the ground floor perimeter of the building, to suit the thickness of the insulation to be protected, fixed by means of expansion anchors.

INSULATING LAYER

The thermal insulation will consist of EPS MECCANICO or EPS G MECCANICO panels made of sintered expanded polystyrene (EPS), the latter type with the addition of graphite, CE marked in accordance with UNI EN 13163:2017, ETICS certified in compliance with ETAG 004:2013 guidelines and standard UNI EN 13499:2005, with thickness depending on design calculation. A 2 cm deep, 2 mm thick groove is cut into each slab on all four sides. Insulation panels must be applied at the connection point between vertical elements (entrances, reception area, common rooms, etc.) with which the insulation panel would come into contact, and at the connection point of horizontal structures such as gutters or cantilevered

stringcourses, by inserting an elastic separating element to compensate for the expansion and contraction, e.g. Self-expanding Sealant Tape (BG1). This joint, in which the tape is inserted, will then be sealed with Sigil Pol elastic polyurethane sealant after the application of the reinforced skim coat; it can then be finished with a topcoat. The panels are to be fastened in a staggered manner to the surface of the façade by securing PVC or aluminium OR/LT horizontal profiles (depending on the calculation of the wind load) to the substrate with SDK-U mechanical screw anchors and then inserting PVC or aluminium VR/LT vertical profiles (depending on the calculation of the wind load) between the slabs. If the surfaces are not perfectly flat, we recommend using specific spacers to compensate for gaps in the façade. Moreover, the slabs will be installed by applying a dab of synthetic resin-based Klebocem adhesive mortar at the centre of the slab.

A version of the slabs containing recycled materials can be ordered too (EPS MECCANICO R e EPS G MECCANICO R).

MECHANICAL FIXING

About 48 hours after gluing the panels and, in any case, after the adhesive has dried, secure them with suitable percussion anchors or screw anchors depending on the type of substrate and the type of building, with EAD Certification 330196-01-0604, using one anchor per slab, placed at the centre of each panel. The length of the anchor must be sized according to the thickness of the insulation panel, the layering of the wall, and the depth of the anchor (see the anchor's technical data sheet). Before skimming the insulation panels, it is essential to fit corner guards on all the corners to

protect the whole system and any other profile fittings by spreading adhesive on the panels (galvanised or painted iron profiles are not acceptable).

Diagonal reinforcement meshes (20x40 cm) must be applied to all corners of doors and windows; it must be applied in the base plaster before the application of the reinforced skim coat and secured so that the edges of the strips lie directly on the corner at an angle of about 45°. Particular care is recommended when installing the insulation layer so as to minimise as far as possible any sanding of surfaces to correct minor irregularities.

BASE PLASTER

Use a spatula to coat the panels on site with Klebocem skimming mortar, in which the sized, anti-alkaline, unravel-proof Armatex C1 glass fibre mesh is to be embedded while the mortar is still fresh. The mesh will be laid from top to bottom with an overlap of at least 10 cm in both directions, avoiding the formation of blisters and creases, and an overlap of 15 cm near corners if they are protected by corner profiles with no mesh embedded. The reinforced layer is to be completed with another skim coat once the first layer of mortar is completely dry. The glass fibre mesh must be covered with at least a 1mm layer of mortar and at least a 0.5 mm layer in the overlapping area of the mesh. The overall thickness of the resulting reinforced skim coat should not be less than 3 mm. The reinforcement mesh will be located in the centre of the base plaster. Seal with suitable overpaintable polyurethane sealant (Sigil Pol) to cover resilient packing previously fitted to compensate for expansion and contraction of the system.

FINISHING PLASTER

Depending on the needs of the worksite, the working season, the colour chosen, and the particle size used, application of a coat of Fondo K Plus, a non film-forming fixative based on special acrylic resins and polysiloxanes dispersed in water, with extremely fine particles, specific for external thermal insulation systems, to be used on well-cured skim coats to ensure the best possible coverage of the subsequent topcoat. When the reinforced layer has completely cured, use a trowel to apply, and then smooth, a single continuous layer of a granular coating (in the particle size available) with broad spectrum action against the darkening caused by algae and fungi Rivatone Plus, based on acrylic resins, Rivatone Plus TRV, based on acrylic-siloxane resins, or Rivatone Idrosiliconico Plus, based on siloxane resins, which are specifically formulated for external thermal insulation systems (see the specifications on the technical data sheet). The continuous coating layer produces an algae-, fungi-, and mould-resistant film, using an innovative formulation based on broad-spectrum additives, effective even under the most critical weather and environmental conditions, certified by the Fraunhofer-Institut für Bauphysik in Munich. A finish colour with a light reflection index greater than 20% is recommended. In the case of dark colours, i.e. those colours with a light reflection index lower than this value, it is necessary to use a coating formulated with reflective pigments (Total Solar Reflectance) Rivatone Plus Reflect. Depending on the size of the backgrounds to be handled and the workforce available, horizontal and vertical gaps may be provided, in order not to highlight defects resulting from interrupting and resuming application. During application, the ambient temperature must be between +5°C and +35°C with relative humidity below 80%.

ACCESSORIES

Any other functional and/or decorative components depend on the complexity of the design.

N.B. Drafting of the Specification requires particular attention to the condition of the substrate and resolution of the various "critical issues" of the building, so it must be customised for each individual project.