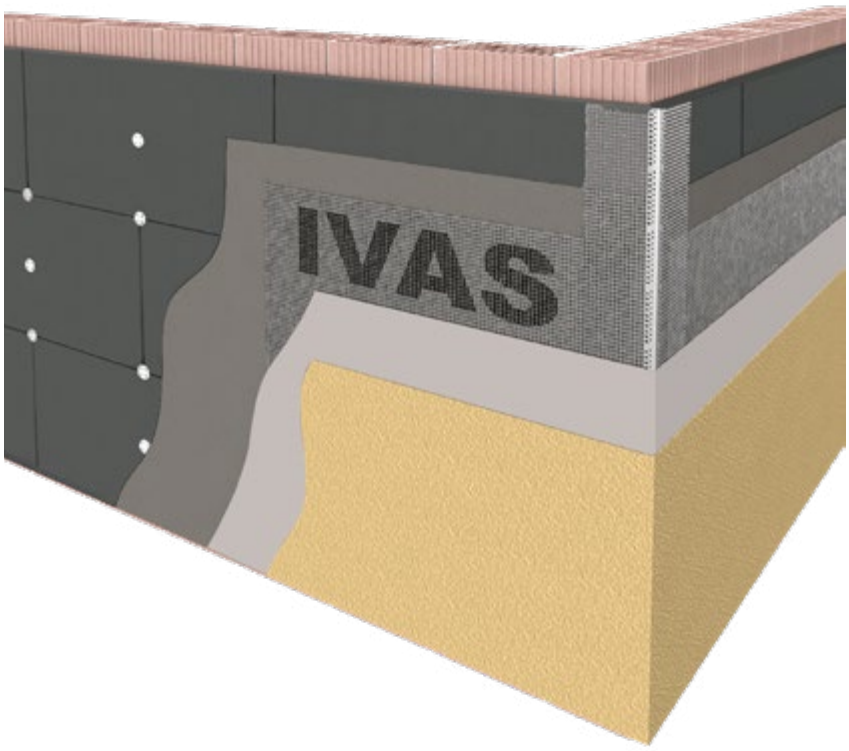
FORTE FLEX EPS 60J / 100J



Ideal solution for achieving facades resistant to impacts and mechanical shocks such as hail or other adverse weather conditions. It can be used in combination with other Termok8 systems for skirting buildings, portions exposed to accidental impact, those against the ground, as well as those requiring low water absorption. The combination of the elasticity of the Rasoflex skim coat and the strength of the Termok8 Forte Flex EPS system provides a resistance capable of preventing cracks from impacts of up to 60 and 100 Joules. The system complies with the highest certification standards, thanks to insulating materials that meet the Minimum Environmental Criteria. Fire classification of the thin reinforced plaster of the finishing: Euroclass A2 - s2 - d0. Impact resistance certificate.

COMPONENTS

ADHESIVE
Rasoflex
INSULATION
EPS Converto 31 - G Plus - λ 0,031 W/(m·K)
SKIM COAT
Rasoflex
MESH
Armatex C1 for 60J - Armatex C1 M for 100J
FINISHING COAT
Rivatone Plus G15 - Rivatone Plus TRV G15 - Rivatone Idrosiliconico Plus G15
ACCESSORIES
Depending on the type, structural configuration of the surfaces and the project

IVAS®

CORTEXA
Eccellenza nel Sistema a Cappotto

TECHNICAL SPECIFICATIONS
termok8® FORTE FLEX 60 / 100J

ISTITUTO GIORDANO
Qualità al Plurale

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 Forte Flex 60J 100J with European Technical Assessment. The ideal option to achieve high protection external surfaces with an impact resistance of 60 - 100 Joule (Test report 60J No. 425794 - 100j No. 425795 of the Giordano Institute). 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, sized to suit the thickness of the insulation to be protected, fixed by means of expansion anchors. For other starting options, please refer to the TermoK8 Technical Manual or contact the IVAS Technical Department.

INSULATING LAYER

The thermal insulation will consist of EPS Converto 31 - G Plus special unstressed panels made of sintered expanded polystyrene (EPS), the latter type with the addition of graphite, CE marked in accordance with UNI EN 13163:2017. The panels feature, on the external side, a unique 5 mm deep grooved pattern, so as to increase the surface area of the panel when skimming and to form continuous horizontal “V section beams”, designed to strengthen the system. 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 sealant after the application of the reinforced skim coat; it can then be finished with a topcoat. The panels are to be fastened to the surface of the façade by spreading Klebocem synthetic resin-based adhesive mortar in ribbons along the perimeter of the panel and in dabs in the centre with an adhesion surface ≥ 40% of the surface of the panel, ensuring that the insulation panel is perfectly flat. If the substrate is particularly flat, use a serrated spatula to apply the adhesive over the entire surface. The insulation panels are to be applied to the substrate in horizontal bands starting from the bottom and with the vertical joints staggered by at least 30 cm and perfectly aligned; the joints must not be visible. Fill any openings greater than 2 mm with some dry insulation of the same type or using TermoK8 Foam polyurethane sealant. At the openings, the joints between the panels must not be aligned with the stiles, lintels, or edges of the openings themselves. Therefore, the insulation panels must be cut in an "L" shape in order to surround and contain the stresses caused by the movement of different materials. At all edges, the heads of the insulation panels must be alternated in order to ensure the proper distribution of stresses.

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 at least 6 per square metre following a “T” pattern: one anchor is placed at the centre of each panel and another at each intersection of the joints. The anchors can be installed either “flush” or “recessed”; in the latter case, a cap made of suitable insulation material must be applied afterwards.

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Depending on the environmental conditions, position, orientation and shape of the building, condition of the substrate, and height of the building, it might be necessary to consider a reinforced anchoring system on all the insulated surfaces and especially in the perimeter areas of the building (area between a minimum of 1 metre and a maximum of 2 metres from the corner). 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). The movement joints of the building (expansion joints) must be considered and protected with suitable joint cover profiles; for their implementation, please refer to the TermoK8 Technical Manual or contact the IVAS Technical Department. 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

Coat the panels in situ by applying the Rasoflex leveling mortar with a trowel in a vertical direction (perpendicular to the grooves of the EPS) using a 5mm notched trowel held at an angle, ensuring a thickness of at least 4mm to fully impregnate the insulation's grooves. Once the layer is completely dry (at least one day), apply a second layer of Rasoflex, into which the alkali-resistant and anti-fraying fiberglass mesh fabric Armatex C1 - 60J or Armatex C1 - M 100J will be embedded while the mortar is still fresh. The mesh installation should be carried out from top to bottom, with an overlap of at least 10 cm in both directions, avoiding the formation of bubbles and folds, and 15 cm near the edges if protected with corner profiles without integrated mesh. The reinforced layer will be completed with an additional coat of leveling mortar once the previous two coats have fully dried. The fiberglass mesh must be covered with at least 1 mm of mortar and at least 0.5 mm in the overlapping areas of the mesh. The total thickness of the reinforced skim coat thus obtained must not be less than 8 mm, with the reinforcement mesh positioned in the outer third of the base plaster. Sealing must be carried out using the Sigil Pol overpaintable polyurethane sealant, applied over the previously installed elastic gaskets to accommodate shrinkage and expansion movements.

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 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.

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.