

Universal Adhesive for EPS Termo Organika TO-KU

- for affixing EPS and producing the reinforcing layer
- reinforced with scattered polypropylene fibres
- very good adhesiveness
- high durability
- resistant to weather conditions (frost- and water-resistant)
- very good working properties
- easy to apply
- for inside and outside use

Application

TO-KU universal adhesive for EPS is part of the Termo Organika® thermal insulation system, for affixing EPS to mineral base surfaces, e.g. reinforced concrete prefabricates, concrete, ceramic, Lightweight Expanded Clay Aggregate (LECA), and aerated concrete elements, natural stone, cement, lime and cement/lime plasters, and similar surfaces, and for embedding the reinforcing mesh. It can be applied in thermal insulation systems of both new and renovated buildings.

Preparation of the Surface

Every surface must be compact, smooth, load-bearing, dry, clean and without any film (grease, dust, etc.) which would reduce adhesiveness. Remove old "loose" plaster, peeling paints and other dirt. Minor uneven spots and cavities may be repaired with TO-KS or TO-KU adhesive. Repairs of the surface should be complete at least 1 day before the EPS boards are affixed; the thicker the mortar layer the longer the time needed for the EPS to be affixed (following the rule of: about 1 day for each 1 mm of mortar thickness).

Absorbent surfaces (e.g. aerated concrete) should be treated with TO-GU universal primer, and smooth and/or non-absorbent surfaces (e.g. concrete, reinforced concrete) with TO-GS contact primer.

Instructions for Use

Pour the bag content into a vessel with the recommended quantity of water and mix for 3-5 min-

utes with a low-speed electrical mixer until smooth paste-like consistency is achieved. Put aside the adhesive for approx. 2-3 minutes and mix again. The mortar is suitable for mixing in concrete mixers. In such a case, the mixing duration should be extended to approx. 10 minutes. The consistency of the material can be adjusted by adding water, but in a quantity which does not exceed the upper limit.

Prepare portions of the mortar which will be used within approx. 2 hours. Stir the mortar which has thickened in the meantime without adding water.

Affixing the EPS

If the surface is smooth, apply a thin film of TO-KU universal adhesive on the EPS board and spread evenly with a toothed trowel with 10-12 mm teeth. Otherwise, spread the mortar circumferentially at a distance of approx. 5 cm from the board edges, and additionally apply between 3 to 6 splashes evenly onto its surface. As a result, the mortar should be covering at least 60% of the board. Then, affix the EPS board onto the wall, pressing it gently, and adjust it so that it fits tightly to the neighbouring boards. The subsequent rows should be off-set in relation to the previous ones so that the board joints are in a staggered arrangement. Affix the boards beginning with the baseboard at the bottom of the external wall. The studding, if any, grinding of the boards and affixing the reinforcing mesh no earlier than two days after the affixing of the EPS. The mechanical connectors must be appropriately chosen to match the surface type and in compliance with the thermal insulation technical design.

Embedding the Mesh

Grind and smoothen any irregularities of the surface and points of contact, install the expansion profiles, and corner boards, and strengthen the corners around the doors and windows (affixing strips of the mesh at an angle of 45° to the vertical lines of the openings), etc.

Starting from the top of the wall, apply TO-KU universal adhesive to the affixed boards with a toothed trowel, spreading it evenly on the surface

with a layer of approx. 3 mm and embed the mesh in it with approx. 10 cm overlaps. The mesh should be tightened and covered completely with a layer of adhesive of approx. 1 mm. After the reinforced layer has dried completely (at least 3 days), the surface may be treated with **TO-GU** universal primer, **TO-GS** contact primer or **TO-GP** polysilicate primer, depending on the type of plaster.

Do not use rusted or dirty tools. Rinse off fresh smudges with water. After it hardens, the mortar can only be removed mechanically.

The adhesive may not be mixed with cement, lime, sand, other adhesives, mortars and chemical additives. It is not allowed to add more water than the specified range.

During the work, the temperature of the surface and the environment should be between +5°C and +30°C.

Safety of Use

The product contains cement and, after mixing with water, it creates an alkaline reaction. Do not inhale the dusts and avoid being splashed with the mortar. In case of contact of the product with eyes or skin, rinse them with plenty of water and consult a doctor, wash the skin with water and soap. Keep away from children.

During work, wear protective clothing and eye protectors.

Note

In addition to the above recommendations, follow good building practice and work-safety rules. The

manufacturer warrants the quality of the product but has no influence on the manner, place and conditions of its storage and application. Building work should be done by professionally qualified contractors.

Technical Data

- Adhesiveness to surface:
≥ 0.25 MPa
- Adhesiveness to EPS:
≥ 0.08 MPa
- Layer thickness:
3 ÷ 6 mm
- Temperature of application and of the surface:
+5°C ÷ +30°C
- Estimated consumption of dry mix:
 - affixing of EPS: approx. 4.0-5.0 kg/m²
 - embedding of mesh: approx. 4.0 – 4.5 kg/m²
- Quantity of water:
as per packaging.
- To be used:
within up to 2 hours.
- Drying time:
approx. 48 hours (at a temperature of +20°C and relative humidity of 60%). Low temperature and high humidity make the above durations longer up by several times.
- Storage:
12 months from date of manufacture, in original, sealed bags, stored on pallets in dry conditions.