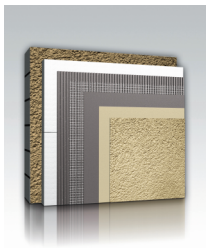
KREISEL

TECHNICAL DATA SHEET

TURBO-R

Thermal insulation system on existing insulation



Areas of application

The TURBO-R system is used to apply a second layer of insulation on an existing insulation system, when the existing insulation requires renovation or the wall needs improved thermal insulation. For new and modernized buildings. The system can also be used for insulating existing walls without prior thermal insulation.

Surface

All substrates must have adequate load-bearing capacity, solid and compact structure and be cleaned of dust, grease, lubricants, release agents, paint residues, etc. Unstable coatings and coatings with insufficient adhesion must be removed. Oily and lubricated surfaces should be washed with detergent, infected with mold, moss, algae should be covered with SEPTOBUD 1008 and then washed under high pressure or mechanically removed.
Old plasters Silicate blocks Autoclaved aerated concrete elements Concrete and concrete blocks Bricks and ceramic CMUs Concrete, reinforced concrete clean and possibly prime with GRUNTOLIT-SG 302 Prime with GRUNTOLIT-W 301 or EXPERT 6 Prime with GRUNTOLIT-SG 302 or EXPERT 5

Instructions

In insulation systems, use EPS polystyrene in accordance with EN 13163, with parameters not lower than: T(1)-L(2)-W(2)-S(2)-P(4)-DS(70,-)2-DS(N)2-TR100-SS20-GM1000. In thermal insulation systems, mechanical fixings with the following parameters are permitted: plate diameter of 60mm,plate stiffness (surface installation) ≥0.3kN/mm, plate stiffness (recessed installation) ≥0.6kN/mmFor thermal insulation systems, we recommend reinforcing meshes with a specific weight of >145g/m²and the following parameters: absolute tensile strength after ageing (N/mm): ≥20;relative residual strength after ageing

Properties

- Waterproof
- Frost-resistant
- Economical
- Resistant to biological overgrowth
- Eliminates thermal bridges in the wall

Application procedure

TURBO-R

Thermal insulation system on existing insulation

compared to as-delivered strength (%): ≥50.The total thickness of the thermal insulation should not exceed 300 mm. The insulation system may be applied on vertical and inclined surfaces, provided that efficient water drainage is ensured. When installing the insulation layer, mechanical fixings must pass through all layers of polystyrene to the load-bearing substrate and must be anchored to the depth specified in the thermal insulation technical design. In the case of insulation-on-insulation, mechanical fixings with a metal pin must be used.

General information

This product data sheet replaces all its previous versions.The information, included in this technical card, represents our current knowledge and practical experience. This is general information only which shall not obligate the manufacturer to take any responsibility either for workmanship or for the manner of use. For there may be differences and specific execution conditions.The product shall be applied in accordance with required technical knowledge and OHS rules.Avoid contact with skin and protect eyes. In case of contact with eyes, rinse them up with a large quantity of clean water and consult a doctor. It shall be recommended to use gloves, safety goggles and protective clothing.
All technical data listed in this product specification has been determined under laboratory conditions.
Acceptance of thermal insulation systems. The final acceptance of the insulation system should include checking the surface evenness and a visual inspection. The visual assessment of the external appearance of the render finishes should be carried out with the naked eye, under diffused light, from a distance of more than 3 m .We would like to point out that currently there are no official standards for the acceptance of thin-coat renders. Therefore, the guidelines provided by the Association for Thermal Insulation Systems – which brings together insulation system manufacturers and of which KREISEL is a member – should be followed. According to these guidelines, thin-coat textured and mosaic renders applied on insulation systems or on base coats should, in terms of tolerance control for surfaces and edges, be treated as category III renders. This should be specified in the construction contract. The permissible deviations from vertical for external edges of category III renders should not exceed: 2 mm per 1 m over the entire storey height – 10 mm over the entire building height – 30 mmThe permissible deviations from vertical for external render surfaces should not exceed:– over the entire building height – 30 mm.The use of the TURBO-R system must comply with the technical design prepared for the specific building.