TECHNICAL DATA SHEET

TOP MIX THERMO

ADHESIVES • PLASTERS • THERMAL INSULATION

Adhesive and reinforcement base-coat plaster for insulation boards

Cement-based mixture for bonding and plastering of EPS thermal insulation boards

PURPOSE

TOP MIX THERMO is a cement adhesive and base-coat plaster on the base of grey cement, with added fine mineral filters, reinforced mono fibres and polymer additives. It is designed for bonding boards of expanded polystyrene on walls and ceilings, in performing inner and external insulation of buildings. The material is suitable for building new walls, as well as for renovation of old buildings.

Implementation of protective reinforcement base-coat with TOP MIX THERMO prevents the insulation boards from aging and from the influence of the weather. It ensures waterproofing and crack resistance of the finished layer and at the same time it protects the insulation layer from mechanical injuries. It creates an excellent basis for decorative finishing of the facades with fine plaster or paint.

TOP MIX THERMO is a **Class C2** product according to BDS EN 12004 - *Adhesives for tiles - Requirements, evaluation of conformity, classification and designation.*

PROPERTIES

❖ easy to apply
❖ enough open time (for work)
❖ cold resistant
❖ impact resistant
❖ vapour-permeable

PREPARATION OF THE BASE

TOP MIX THERMO has an excellent adhesion to different construction surfaces, such as bricks, concrete, plasters, cement and gypsum base-coats, etc. The base should be dry, well cleaned and strong. Application over oil (grease) stains, dust and other (contaminants) is not allowed. The old unstable plasters and other coatings must be removed. Bases with high absorption, such as aerated concrete or gypsum blocks, should be primed in advance with deeply penetrating primer TERAZID G-55.

CHARACTERISTICS AND TECHNICAL DATA

- Colour: grey;
- Base: cement;
- Density: 1450 kg/m³;
- Work temperature: +5°C to +30°C;
- Time for „maturing": 6-7 min;
- Time for bucket stay: about 5 hours;
- Open time for work: 20 min;
- Time for final bonding and subsequent operations: 7 days;
- Recommended thickness of the base coat layer: 4-5 mm;

INSTRUCTIONS FOR APPLICATION AND PROCESSING

For the complete dissolution of 25 kg TOP MIX THERMO, around 6,5 liters of water are required. Into a preliminary prepared container with water, the necessary amount of dry mixture is poured and with the help of a mechanical stirrer, it is stirred until it appears to be a homogenous mixture. Thus, the stirred mixture is left to stay for 6-7 minutes so that it gets "mature", after that it is stirred once again and it is ready for work.

Bonding: When working on smooth and plane surfaces, the prepared solution is applied resembling a comb with the help of notched mortar-board with edges size of 8-10 mm.

When the basis is rough, the solution is applied on the entire outer rim of the insulation panel under the form of a strip with a width of 4-5 cm and on a couple of places on the inner side of the panel under the form of „pillows".

Additional fixing of the insulation with anchors can start not earlier than 24 hours after bonding (when the temperature is not less than 20°).

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Plastering: After the boards are anchored, **TOP MIX THERMO** can be used as base-coat. The solution is prepared in the same way and is uniformly applied, after that the reinforcement fiberglass mesh is applied vertically. It is tightly pressed and smoothed with the help of a mortar-board. The recommended thickness of the base-coat layer is 4-5 mm.

CONSUMPTION

- **Bonding:** 5.0 – 5.5 kg/m² depending on the base
- **Plastering:** 3.5 – 4.0 kg/m²

TOOLS FOR WORK

- bucket
- electrical drill and stirrer
- trowel
- mortar-board
- lute

WEATHER CONDITIONS AT WORK

The minimum twenty-four-hour temperature of the air and the basis should not be less than +5°C, and the maximum – not higher than +30°C.

It is not recommended applying of **TOP MIX THERMO** at high level of air humidity, or when the forecast is for coming rain, or during a rain.

FORM OF DELIVERY

Dry mixture in paper packages of 25 kg.

NOTES

Characteristics and technical data of the product, pointed out into this Technical Data Sheet are defined at a standard temperature (20°C) and relative humidity (50%). In other weather conditions, the technological time for some of the processes, mentioned above, could be shorter or longer.

The information of the product is based on the practical experience of the manufacturer and the technical tests in specialized laboratories.

Do not mix with other building materials.

All hazards and precautionary statements about **TOP MIX THERMO** can be checked in the Safety Data Sheet of the product.

STORAGE

12 months into the originally sealed packages, in a dry and ventilated store. It is recommended to be stored on pallets.

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EN 13499
NB 1020
DoP № 20130709-79-D

TOP MIX THERMO

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Reaction to fire	A1
Bulk density	1450 kg/m³
Bond strength with concrete base	570 kPa
Bond strength with EPS slab	120 kPa
Compressive strength	17,7 N/mm2
Coefficient of capillary absorption of water - c	0.38 kg/m².h^{0,5}
Coefficient of water vapour transmission	2,9.10-4 g/m2.d.Pa
Class C2 according to BDS EN 12004	
Initial tensile bond strength	2.2 N/mm²
Tensile bond strength after water immersion	1.3 N/mm²
Tensile bond strength after heat treatment	1.9 N/mm²
Tensile bond strength after 25 freeze-thaw cycles	1.0 N/mm²

The manufacturer recommends checking the suitability of the product in the Technical Data Sheet. The same is responsible for the product quality, but not for the ways and conditions of its applying.

The information into the present Technical Data Sheet is reliable but only if the product is used under stated conditions. The responsibility of any other usage of the product, including its usage in a combination with any other product or a process, is borne by the user.