Technical Data Sheet



Thermal Screed

Product Description

It is a screed material that allows the surface to breathe and provides heat, sound and fire insulation thanks to the natural lightweight aggregates with a porous structure in its cement-based mixture. **Area Of Use:**

This screed material is specifically engineered for use on interior floors, open rooftops, and terraces, where it provides reliable thermal, acoustic, and fire insulation. Its advanced formulation ensures durable performance across diverse environmental conditions, enhancing both structural comfort and safety.

Properties

- Provides thermal insulation flat roofs.
- Supports energy cost savings by optimizing heating and cooling expenditures.
- Its lightweight composition minimizes additional structural load, making it suitable for both new constructions and renovation projects.
- Its single-layer application eliminates the need for additional labor, streamlining installation and reducing on-site costs.
- Since no intermediate layers are formed during application, the material prevents the development of thermal bridging or heat pockets, ensuring consistent insulation performance across the surface.
- As an inorganic-based material, it does not contain harmful chemicals that pose risks to human health or the environment.
- Acts as a fire barrier, enhancing the building's passive fire protection by limiting flame spread and heat transmission
- The material is vapor-permeable, allowing the surface to breathe and helping regulate moisture levels within the structure.
- Enhances the overall value of buildings by improving their thermal performance, safety standards, and long-term durability.
- Provides effective sound insulation between floors in buildings, enhancing acoustic comfort and reducing noise transmission across levels.

TECHNICAL PROPERTIES

Appearance/Color Matt / Gray or White

Consistency: It contains specially graded expanded fillers, along with polymer

and fiber-reinforced proprietary cement, ensuring enhanced

mechanical performance and dimensional stability.

Method of application Screed machine - steel trowel

Mixing ratio: 25 kg Powder + 16-17 ltr fresh water

Ready for any application on in: 3-7 days (23°C)
Pot life after mixing: 120 Min. (23°C)

Application temperature: $+5^{\circ}$ to $+30^{\circ}$ [C] $/ +41^{\circ}$ to $+86^{\circ}$ [F]

Dry bulk density $600 \pm 50 \text{ kg/m}^3$

Consumption: 1 cm (6-7,5 kg)/m² powder

Fire reaction category: A1

Compressive strength $\geq 5 \text{ N/mm}^2$ Bond strength $\geq 0,5 \text{ N/mm}^2$ Thermal conductivity0,09 W/mkTest Drying:28 days (23°C)

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Application procedure surface preparation

Prior to application, the surface must be thoroughly cleaned of dust, oil, paint residues, and other contaminants. Any loose particles should be removed using mechanical methods until a stable substrate is reached. On highly porous surfaces, or in hot and windy conditions, the substrate should be saturated with water to prevent premature drying; however, no free-standing water should remain on the surface at the time of application. To define the thickness of the thermal screed, guide battens should be fixed at appropriate intervals to form application bays.

Mixing

The appropriate amount of water should be measured and poured into a clean mixing container. Thermal screed is then gradually added while mixing. Using a low-speed mechanical mixer, blend the components for 3–5 minutes until a homogeneous mixture is achieved. Allow the mixture to rest briefly, then re-mix for 20–30 seconds. The material is now ready for application.

Application

The prepared thermal screed mortar is applied between the guide battens using a trowel or plaster pump, then leveled with a straightedge. Once the material has undergone initial setting, the battens are removed and the resulting gaps are filled with thermal screed. If the product begins to set due to application delays, it can be re-mixed for a few minutes to restore its workable consistency.

PRECEDING COAT:

Concentrated Sealer

Important Remarks:

- **Thermal SCreed** is appropriate for application in +5 °C +30 °C temperature conditions. If the temperature does not fit the specified values, wait until it does.
- The material should be prepared in an amount that it can be used and consumed in 20 minutes.
- Before the application of the last layer on the material, wait at least a week.
- The application surface should definitely be kept wet for 7 days.
- Do not apply on surfaces which are frozen, melting or under the risk of rain and frost in 24 hours.

Shelf life & Storage:

12 months from date of production if stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +30°C. Safety:

For information and precautions on the safe handling, transportation storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

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