Technical Data Sheet updated on: 10.02.2017

# **SOLTHERM MA**

# **Adhesive for Mineral Wool**

#### **PRODUCT DESCRIPTION:**

- good adhesion to mineral surface and mineral wool
- easy to work and trowel,
- for mineral wool and lamella panels

#### **USE:**

SOLTHERM MA is an adhesive designed to bond mineral wool façade panels with horizontally-oriented fibres and lamellas with vertically-oriented fibres to typical mineral surfaces such as concrete, masonry walls, cement and lime-cement plasters, etc. in the ETICS systems. It is also suitable for bonding MW lamella ceiling boards with bevelled edges on one surface in the SOLTHERM Ceiling Therm - Guard System. Not suitable as a base coat.

#### SUBSTRATE PREPARATION:

The surface must be structurally sound, even, surface contaminants that may affect adhesion such as dust, grease, bitumen and other barrier materials. Remove any friable surfaces such as peeling or flaking paint or plaster, loose or crumbling material from the existing wall. Prime absorptive surface (particularly aerated concrete) with the primer SOLTHERM SP. Prime smooth surfaces with SOLTHERM CS. Level larger gaps and irregularities with the mortar SOLTHERM LRC. Prior to installation of insulation boards to weak, porous substrates or of unknown condition, carry out an adhesion test. To test, attach a few samples of EPS boards (size 50x100x100 mm) to exterior wall in various spots and pull them off by hand after minimum 3 days. The substrate is sufficiently sound if the failure is in the polystyrene. Otherwise, sand, remove friable or crumbling material or prime to prepare the surface and do the adhesion test again.

Prior to insulation of large-panel buildings, it is recommended to assess the fastening of the outer textured layer in the sandwich panel structures.

## **PRODUCT PREPARATION:**

Measure the clean water (4.8  $\div$  5.3 litre) into a suitable vessel/bucket and slowly add the adhesive while mixing using a low-speed drill until a homogeneous consistency is achieved. After 5 minutes and another stirring, the mixture is ready to use. Do not admix except water.

#### **APPLICATION:**

Attaching of mineral wool panels with horizontally-oriented fibres: Immediately prior to application of the adhesive to the panel, spread a thin coat of the adhesive over its surface. Apply the adhesive "wet on wet" to the insulation board in strips and dabs i.e. 30-60 mm wide strips.around the perimeter of the board with at least 3 additional dabs of adhesive (for 500x1000 mm panels) distributed uniformly over the remaining surface. As soon as the adhesive is applied, place the board on the wall and press firmly with a trowel until it is flush with the previously installed board surface. After pressing to the surface, the well-applied adhesive should cover at least 40% of the surface, and the coat thickness should not exceed 10 mm.

Attaching of mineral wool panels using the notched trowel method

For even and smooth surfaces, insulation boards can be attached using the notched trowel method. Immediately prior to application of the adhesive to the panel, spread a thin coat of the adhesive over the panel surface. Then, apply the adhesive "wet on wet" using a notched trowel (10-12 mm notch size). As soon as the adhesive is applied, place the board on the wall and press firmly with a trowel until it is flush with the previously installed board surface.

Apply MW insulation panels in a running bond pattern. If necessary, sand the insulation panels with coarse sandpaper after minimum 48h from installation and fix with mechanical fixings (alternatively according to the insulation design).

## **LIMITATIONS AND RECOMMENDATIONS:**

- Not suitable for areas not damp-proofed against capillary action.
- Before application, protect or mask surfaces such as windows, doors, window sills, etc.
- Allow fresh cement and lime-cement renders to cure for minimum 28 days.
- Plan the surface area to be insulated taking into consideration weather conditions, surface type and workforce.
- Prior to insulation application identify all installations on the building façade or around it to prevent their damaging during mechanical fixing of the insulation (drilling).
- Protect from direct sunlight exposure, precipitation and wind during application operation and drying. Use scaffolding meshes.
- Avoid extremely thin layer of adhesive as you may experience difficulty with levelling minor surface irregularities.
- Low temperature, increased humidity and improper air circulation extend the drying and setting time of the adhesive.
- Clean tools and hands with running water immediately after use. After drying difficulties with cleaning may be experienced. Wipe new splashes off soiled surfaces with damp cloth. Once hardened, the material can only be removed mechanically.

#### **PRECAUTIONS:**

Due to alkyd reaction of the product, avoid contact with skin and eyes. In case of eye contact, flush eyes with plenty of water and seek medical advice.

#### **TOOLS:**

- Agitator or low-speed mixing drill (400÷500 rpm) with hoop paddle.
- Stainless steel scraper and trowel
- Bucket

#### **TECHNICAL DATA:**

The following technical data are for the temperature of  $+23 (\pm 2)^{\circ}$ C and relative air humidity of 50 ( $\pm 5$ )%. Under other conditions the technical data may vary.

Ambient and surface temperature at application and curing:

from +5°C to +25°C

Relative humidity at application

and curing:

up to 80%

**Bulk density:** 

approx. 1.78 g/cm $^{3}$  (±10%)

**Colour:** 

grey

Workability:

≤1 h

Drying and setting time of the adhesive after board installation:

min. 48 h

Packaging:

25 kg bags

No. of containers per pallet and net weight:

48 / approx. 1200 kg

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## Shelf life:

12 months from the date of production provided on the packaging

## **ESTIMATED COVERAGE OF THE ADHESIVE:**

Ribbon and dab method	≥ 5.0 kg/m²
Notched trowel method	≥ 5.0 kg/m <sup>2</sup>

The coverage will vary with the surface levelling and condition as well as the percentage of the insulation board face covering with the adhesive. To determine precise coverage, perform a test patch on the surface.

Usage is typical usage and may vary between installers. Coverage rates quoted for products will not be guaranteed under any circumstances. The rates quoted are based on site experience but may vary due to site conditions, operator skills etc. No claim will be allowed relating to coverage of materials.

#### **STORAGE:**

Store in intact containers in temp. between +5°C and +25°C. Protect from damp. Store away from the reach of children.

#### **COMPOSITION:**

Dry mixture of hydraulic binders, polymers, fine mineral fillers and modifiers.

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