

# Soltherm SA

## Standard Adhesive

### USE:

Adhesive for fixing EPS boards to typical mineral substrates. It is suitable for continuous insulation system for exterior walls (ETICS).

NOTICE: To apply glass fibre reinforced base coat over EPS insulation boards, use the universal base coat SOLTHERM UB.

### SURFACE PREPARATION:

The surface must be sound, even, dry clean of substances which can cause separation (such as dust, grease, oil stains, bitumen) free of cracks as well as biological growth and chemical deposits. Remove any friable parts such as peeling or flaking paint or plaster, laitance or debris from the existing wall.

Sand any smooth concrete surfaces with coarse sandpaper, remove dust and prime with SOLTHERM T.

Gaps and imperfections between 5 and -15 mm level with SOLTHERM LRC repair mortar. Prime porous surface with the primer SOLTHERM T.

If applied under optimal ambient and weather conditions (i.e. at +20°C and 60% relative humidity), the drying time of SOLTHERM SP or SOLTHERM T, is min. 4-6h.

### PRODUCT PREPARATION:

Measure the water (4.80 ÷ 5.30 litre) into a suitable vessel/bucket and slowly add the adhesive while mixing using an agitator or a low-speed drill and Jiffy mixer until a homogeneous consistency is achieved. After 5 minutes and another stirring, the mixture is ready to use. Depending on the temperature and humidity, the mortar is workable for 1 h. Preparation and application operations as well as drying require ambient and surface temperature from 5°C to +25°C. Protect from direct sunlight, rainfall and strong wind during application.

### PRODUCT DESCRIPTION:

Apply the adhesive on insulation board in strips and dabs—apply 3-6 cm wide strips parallel with the long and short dimensions of the board 3 cm from the edges to avoid coming out of the adhesive. Cover the remaining surface with 8-10 regular dabs of adhesive (8-10 cm in diameter). The adhesive should cover at least 40% of the surface, and the coat thickness should not exceed 10 mm. Apply 8-10 dabs in the centre of boards with dimensions 100 x 50 cm. As soon as the adhesive is applied, place the board on the wall and press firmly with a trowel. Apply insulation boards in a running bond pattern. Once the adhesive is set and bonded (min. 48 h) fix the installed boards with mechanical fixings as designed in the technical design (not less than 4szt./m<sup>2</sup>). Then, sand the face of the board with coarse abrasive paper.

### LIMITATIONS:

■ Fresh mineral substrates (such as concrete, cement and lime-cement renders) should be allowed to cure for 3-4 weeks until dry, prior to commencing preparation operations and adhesive application.

■ If the EPS boards are attached to porous mineral surfaces, prime it with the silicone primer SOLTHERM T prior to EPS application.

■ Prime only dry surfaces after the setting and curing time, recommended for the substrate, has finished.

■ Before application, organise labour (take into consideration number of installers, their skills, equipment, surface condition and weather conditions) to operate most effectively, ensuring that the planned wall area can be completed in one operation.

■ Adhesive preparation, application and setting should take place in rainless weather and temperature between +5°C to +25°C.

■ Apply the adhesive at surface temperature between +3°C to +25°C.

■ Fresh coatings must be protected against rain and temperature below +5°C and above +25°C until they are set.

■ During the application of thermal insulation, it is recommended to protect the scaffolding with mesh against unfavourable weather conditions.

■ Low temperature, increased humidity and improper air circulation extend the drying time.

■ Expansion joints should be extended through to the surface of the ETICS system with full system expansion beads.

■ Clean tools and hands with running water immediately after use. After drying, difficulties with cleaning may be experienced. Wipe new mortar splashes off soiled surfaces with damp cloth.

■ SOLTHERM SA adhesive for EPS boards is a component of the SOLTHERM P and SOLTHERM HD thermal insulation systems. Its full and guaranteed performance is obtained when used with other components from the system compliant with the application method described in the ETICS Instruction Manual no. IB/01/2001.

■ To apply glass fibre reinforced base coat in these systems, use the universal base coat SOLTHERM UB.

### PRECAUTIONS:

Due to alkyl 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.

### RECOMMENDATIONS:

To apply the product correctly refer to the ETICS Instruction Manual no. IB/01/2001 - 'Exterior Thermal Insulation'.

### TOOLS:

- Bucket
- Agitator or low-speed drill (400+500 rpm) with jiffy mixer
- Stainless steel scraper and trowel
- Hammer drill
- Brick hammer
- Coarse hand sander

### TECHNICAL PARAMETERS

Application properties of the adhesive:

- Application temperature: from +5°C to +25°C
- Surface temperature: from +5°C to +25°C
- Mixing ratio: 4.8÷-5.3l of water for 25 kg of mortar
- Open time: approx. 1.0 h
- Slump: < 0.12 mm
- Adhesion:
  - adhesion to concrete, > 0.3 MPa
  - adhesion to insulation board: > 0.1 MPa (failure in the polystyrene foam)

Technical parameters and product properties:

- Consistency: dry powder
- Colour: grey
- Bulk density: approx. 1.45 kg/dm<sup>3</sup>

/all technical data provided for the temperature of +20°C and 60% relative humidity/

### COVERAGE:

Adhesive coverage to attach insulation boards to properly prepared substrate in ETICS is approx. 4.0 kg/m<sup>2</sup>. To determine precise coverage, perform a test patch on the substrate.

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:

Protect intact original containers from damp during transportation and storage. Shelf life up to 12 months from the date of production provided on the packaging. Store away from the reach of children.

### COMPOSITION:

The Adhesive SOLTHERM SA is a dry mixture of hydraulic binders, polymers, fine mineral fillers and modifiers.