Technical Data Sheet date of issue: 06.04.2021

## **SOLTHERM BQB**

# Ready Mix Adhesive and Grout for SOLTHERM BQS elastic brick slips

### **PRODUCT DESCRIPTION:**

- 2in1 adhesive and grout in one product
- High flexibility and resistance to thermal stress
- High resistance to:
  - weather
  - UV radiation contains UV absorbers
  - algal and fungal growth
- Provides high adhesion of SOLTHERM BQS elastic brick slips to the surface
- Water vapour permeable
- Frost resistant and hydrophobic when set
- Easy and quick to work and apply

#### USF:

SOLTHERM BQB is a ready to use dispersion compound for fixing and grouting of SOLTHERM BQS elastic brick slips. The compound is suitable for exterior walls of existing and new buildings with or without EWI as well as for interiors.

Suitable surfaces for SOLTHERM BQS brick slips:

- base coat of External Wall Insulation Systems (EWI) with EPS boards or mineral wool batts,
- concrete,
- cement, cement-lime or gypsum plasters,
- plasterboard, cement board, fibre-cement board, cement particle board firmly fixed to the substrate
- mineral repair mortar, base coat/adhesive
- resurfacers, skim coats

### **SURFACE PREPARATION:**

### **Reinforced Base Coat**

The current EWI Instruction Manual IB/01 EPS (system with EPS boards) or IB/02 MW (system with mineral wool batts) must be followed when applying EWI and the reinforced base coat in particular.

### Mineral substrates, not insulated

The surface must be structurally sound, stable, even, clean of surface contaminants such as dust, grease, bitumen and other barrier materials that may affect adhesion. Remove old paint coats, loose, peeling or flaking plaster. Prime porous surface (particularly aerated concrete) with the primer SOLTHERM SP. Even out minor irregularities with a base coat for embedding reinforcing mesh such as SOLTHERM UB. Level major gaps and imperfections with the mortar SOLTHERM LRC and when set, smooth out the entire surface with the above base coat or joint compound.

For gypsum plaster, plasterboards, gypsum and polymer skim coats, prime the surface with the primer BOLIX Ultragrunt and when it has dried, apply SOLTHERM AP COLOUR.

Each surface to which flexible bricks will be attached must be first primed with the undercoat SOLTHERM AP COLOUR.

### **PRODUCT PREPARATION:**

A ready-made product. Prior to application, stir the full packaging thoroughly with a low-speed mixing drill until a uniform mixture. Do not over-mix as this may introduce and entrap air into the adhesive.

NOTICE! In the summer, it is possible to adjust consistency by thinning the adhesive/grout with a small amount of water - 150 ml/15 kg of the slurry. Thin each container with the same amount of water. Do not admix, except for water.

### **APPLICATION:**

Spread the ready mix adhesive and grout SOLTHERM BQB across the surface using a 4x4 notched trowel or putty knife. Finally, work perpendicular to the long edge of the attached flexible brick slips. Apply the product in one operation to a surface area to make sure it will not dry out before attaching the slip (the surface should not exceed 1 m2). Start tiling from the corner, work top down. For corners, simply bend the brick slips to fit. Priorly, sand any too sharp corners and remove dust. In colder temperatures, the slips should have higher temperature during bending to prevent formation of hairline cracks on them.

Second option is cutting the slips. Butt joint the cut tiles at corners and after initial drying of the adhesive and grout (min. 4h under optimal conditions i.e. +23°C and 50% relative air humidity) fill the interstice that has formed between edges of the fixed slips with the paste SOLTHERM BQS Mass in the colour of the facing, making sure that the joint is weathertight. Joints between brick slips should be undetectable from the distance of a few metres.

Individual brick slips can be cut to the desired size with scissors or cut from the back side with a wallpaper knife and break.

Brick slips should be installed in courses, working from the top down. This technique will help to prevent soiling of the slips laid below.

Install the brick on freshly applied adhesive and apply firm and even pressure to entire face of the elastic brick slip SOLTHERM BQS. Make sure that the compound is tight around the brick for a good hold. Use spacers in between slips to get a consistent gap and grout lines throughout your installation and make sure that the slip is properly aligned with the previously fixed slips. Check the consistency of the grout lines every few courses.

Lay the slips in a desired and previously planned pattern (staggered, offset) and make sure that the joint width is between 10÷12 mm. When the slips are laid and before the skin develops on the compound surface, go over the joints with a flat and damp (but not wet) paintbrush size matching the joint width to smooth and form them. The joints must be tightly filled to seal and prevent rainwater migration under the brick slips - make sure that the brick slip edges are embedded in the adhesive.

### **LIMITATIONS AND RECOMMENDATIONS:**

- Make sure that the surface is even and well prepared.
- Prior to adhesive application, allow fresh cement and lime-cement plasters to cure for minimum 3-4 weeks and gypsum plasters for minimum 2 weeks.
- Do not apply to areas subject to prolonged water exposure (and to vertical surfaces in particular), accumulated snow and to areas not damp-proofed against capillary action.
- Before the decorative effect is created, cover or mask all adjacent on which the panels are not to be installed.
- Plan the surface area taking into consideration weather conditions, surface type and workforce.
- If a brick slip is placed incorrectly, lift it back up, collect the adhesive mortar, apply fresh SOLTHERM BQB adhesive/grout compound on the surface and fix a new brick slip. Any damaged brick slips must be disposed of.

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- During application operation and for 3 days after completion, protect the surface from direct sunlight exposure, precipitation, wind and temperatures below +5°C. Use scaffolding meshes.
- Care should be taken to avoid brick slips soiling with the material.
  Clean off any soiling immediately or replace the soiled brick slip.
- As you progress through a project lift random brick slips occasionally (right after they have been installed) to check the SOLTHERM BQB coverage.
- Low temperature, increased humidity and improper air circulation extend the provided drying time of the adhesive.
- Tile each separate wall surface with brick slips from the same batch. Unless, colour and texture variances are acceptable or even desired. You can also obtain colour variation effect by mixing brick slips from different production batches prior to installation.
- During application and afterwards, ventilate the room, until the characteristic odour disappears.
- Make sure that skinning of the adhesive&grout has not started before installing the facing product, as this may affect and impair the adhesion and lead to bond failure and delamination/debonding of the brick slips. If the skin develops, remove the adhesive and apply fresh material.
- Do not back butter the brick slips, the compound should be applied directly to the surface.
- Clean tools and hands with running water immediately after use. After drying difficulties with cleaning may be experienced.

### **PRECAUTIONS:**

Protect eyes and skin. In case of eye contact, flush eyes with plenty of water and seek medical advice.

### **TOOLS:**

- Agitator or slow-speed drill (400÷500 rpm) with attachment.
- 4x4 mm toothed trowel or spatula
- Putty knife
- Paintbrush (size to match the joint width)
- Scissors / wallpaper knife
- Builder's square
- Pencil
- Tape measure
- Spirit level / string line / laser

### **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 setting:

from +5°C to +25°C

Relative humidity at application and setting:

up to 80%

Density:

approx. 1.75 g/cm<sup>3</sup>

Thermal resistance after drying of the adhesive:

From -35°C to +100°C

Colour:

4 colours as in the SOLTHERM BQS reference card: WHITE, DARK,

NATURAL, GREY

other colours made to order based on the customer's sample or reference card



#### Adhesive thickness:

1.5÷2.5 mm

Coefficient of heat conductivity \(\lambda\):

≥ 0.70 W/(m\*K)

Vapour transmission rate according to PN-EN 1062:-1 (system composed of the adhesive/grout SOLTHERM BQB and the brick slip SOLTHERM BQS):

 $\leq$ 50 g/(m<sup>2</sup>d)

Category V2 (15-150 g/(m<sup>2</sup>d)

Water permeability as per PN-EN 1062-1 (system composed of the adhesive/grout SOLTHERM BQB and the brick slip SOLTHERM BQS):

 $0.29 \text{ kg/(m}^2\text{h}^{0.5})$ 

W2 category  $(0.1-0.5 \text{ kg/(m}^2\text{h}^{0.5}))$ 

Drying and setting time after brick slip installation:

at least 4h (applies to grouting and filling interstices in corners) at least 3 days (under slips)

Packaging:

buckets: 15 kg

No. of containers per pallet and net weight:

15 litre buckets: 44 / ca. 660 kg

Shelf life:

12 months from the date of production provided on the packaging

### **APPROXIMATE COVERAGE:**

Average coverage when applied to even surface is approx. 2.4 kg/m<sup>2</sup>

Coverage will vary with the surface levelling and thickness of the adhesive. To determine precise coverage perform a test patch on the substrate.

### **STORAGE:**

Store in intact containers in temp. between  $+5^{\circ}\text{C}$  and  $+25^{\circ}\text{C}$ . Protect from direct sunlight and frost. Store away from the reach of children.

### **COMPOSITION:**

Quartz sand, polymer resins, mineral fillers, iron oxide based pigments, biocides and modifiers.

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