

# SOLTHERM KL

## Bedding and Pointing Mortar for Clinker and Stone

### PRODUCT DESCRIPTION:

- frost and water resistant
- water vapour permeable
- easy to prepare, work and apply
- suitable for 10-15 mm bed joints
- trass cement based

### USE:

Soltherm KL is a bedding and pointing mortar for interior and exterior applications suitable for providing deep recessed joints or for one-step bedding and pointing (in one go) of:

- masonry walls, façades,
- arches, archways, vaulting,
- fences,
- chimneys (insulated from heat),
- elements of landscape architecture,

made of clinker, stone elements non-sensitive to moisture and discolouration, ceramic bricks, concrete and silicate blocks or elements. It can also be used for pointing of clinker or stone exterior wall facing and hand moulded tiles up to 3 cm thick.

### SURFACE PREPARATION:

The surface must be structurally sound, stable, even, clean of surface contaminants that may affect adhesion such as dust, grease, bitumen and other barrier materials. Clean any dirt and remove any friable or loose material. The elements to be bedded should not be damp. A horizontal barrier (DPC) should be installed to prevent moisture rising from the ground into the interior spaces by capillary action.

### PRODUCT PREPARATION:

Measure the clean water (for bedding: 3.5 ÷ 4.0 litres, for pointing: 2.5÷3.0 litres - wet soil consistency) into a suitable vessel/bucket and add the mortar while mixing using a low-speed mixing drill until a homogeneous consistency is achieved. Allow it to stand for 5 minutes then mix again. The mixture is ready to use. Add the same amount of tap water for each packaging. Do not admix, except for water.

### APPLICATION:

#### For bedding and pointing in one go

Spread the material over the substrate or wall and on the side of the neighbouring blocks using a brick trowel. Place blocks in courses and press gently to position them. Remove excess mortar. Wait until the mortar layer will lose plasticity and smooth with a pointing trowel, a jointer or other suitable tool.

#### For deep recessed joints

Place plastic spacing battens 1.5-2.0 cm wide and of the thickness to match the depth of the recessed joint (10 - 15 mm) on the edges of each the brick/stone course. Spread the material between the batts and on the side of the neighbouring brick. Place the bricks in courses and press gently to position them. Remove the batten, after initial setting of the mortar. After pressing the bricks, the vertical joints between them should be recessed 2-3 cm from the wall face. The joints can be filled with the same mortar or a special mortar for pointing.

#### Semi-dry pointing of tiles

Prepare the mixture to have semi-dry consistency. Work it into the joints between tiles. Push it in and compact firmly into the joints making sure that the joints are fully filled. Smooth out with a pointing trowel - first vertical, then horizontal joints. Start from the top of the wall and

work down. Brush out excess mortar using a dry soft brush - do not wet the wall nor the joints with water.

### LIMITATIONS AND RECOMMENDATIONS:

- Plan the surface area to be bedded taking into consideration weather conditions, surface type and workforce.
- Blocks or units to be bedded cannot be damp or frozen. Their moisture content should not exceed 6%.
- Protect from direct sunlight exposure, precipitation and wind during application operation and drying.
- To obtain optimal appearance, ensure that material from the same batch is used in the same area.
- During bedding, follow the instructions provided by the manufacturer of masonry elements.
- Low temperature, increased humidity and improper air circulation extend the drying and setting time of the mortar.
- 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.
- Protect the fresh masonry wall/landscape element from precipitation and dirt until mortar is set and the temperatures below +8°C for 7 days after installation. Provide setting and curing conditions enabling adequate evaporation of moisture.
- When bedding clinker brick fences, do not pour concrete over the posts as it may lead to salt efflorescence.
- Finished joints should be flush with the wall face or slightly concave so as to prevent water, ice or snow from sitting in the joints.

### 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.

### TOOLS:

- Agitator or slow-speed drill (400÷500 rpm) with a hoop paddle.
- Stainless steel scraper and trowel
- Rubber mallet
- Bucket
- Pointing trowel, jointer or a rubber edge spatula

### TECHNICAL DATA:

The following technical data are for the temperature of +23 (±2)°C and relative air humidity of 50 (±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 curing:  
up to 80%

Bulk density:  
approx. 1.65 g/cm<sup>3</sup>

Density of hardened mortar:  
ca. 1.8 g/cm<sup>3</sup>

Colour:  
sand, grey, dark grey, brown, pewter, sand-yellow, white, dark brown, anthracite

Grain size:  
≥ 1.4 mm

Optimum coat thickness:  
10÷15 mm

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## Bedding and Pointing Mortar for Clinker and Stone

**Working life:**

≥ 1.5h

**Permissible water absorption of the masonry elements:**

3 ÷ 8 %

**Reaction to fire:**

class A1

**Shear strength according to EN 998:-2:**

≤ 0,15 MPa

**Compressive strength according to EN 998:-2**

≤ 15 MPa (class 10)

**Chloride content:**

< 0.07%

**Vapour permeability coefficient  $\mu$  according to EN 998:-2**

15/35 (table value)

**Coefficient of heat conductivity  $\mu$  according to EN 998:-2**

≥ 0.83 W/(m\*K)

**Water absorption according to EN 998:-2**

≥ 0.05 kg/(m<sup>2</sup>\*h<sup>0.5</sup>)

**Durability (freeze/thaw) according to PN-88/B-06250:**

Class F200

**Packaging:**

25 kg bags

**No. of containers per pallet and weight:**

48 / ca. 1200 kg

**Shelf life:**

12 months from the date of production provided on the packaging

**APPROXIMATE COVERAGE:**

For a 12 cm thick masonry wall made of full brick 25 x 12 x 6,5 cm depending on joint width:

Joint width:	Nominal coverage:
10 mm	Approx. 37 kg/m <sup>2</sup> of wall surface
12 mm	Approx. 45 kg/m <sup>2</sup> of wall surface
15 mm	Approx. 55 kg/m <sup>2</sup> of wall surface

To determine precise coverage, perform a patch test on the surface.

**STORAGE:**

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

**COMPOSITION:**

Trass cement (except for SOLTHERM KL WHITE), hydraulic binders, mineral fillers, modifiers and pigments.

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