# SEM-K

### Stone replacement material adhesive



Fast-setting natural stone adhesive for bonding natural stone and especially for the insertion of facings

C2 FT S1 acc. EN 12004

- Color is adapted to the natural stone
- with early, rapid crystalline water binding
- recipe with original tubag trass
- can be walked on and grouted after approx. 3 hours



#### **APPLICATIONS**

- for setting replacement pieces made of natural stone, cast stone and ceramic in thin and medium beds
- for attaching crossings and stone additions
- Suitable for use as a contact layer, thin-bed and medium-bed mortar, setting and fixing mortar
- In wall and floor areas
- for interior and external use

#### **PROPERTIES**

- highly flexible
- malleable and stress-dispersing
- for light and supple processing for effortless work
- adhesive joints in matching colors
- non-discolouring even on light-coloured natural stone
- rapid hardening
- good adhesion
- rapid hardening and yet long adhesive working time and correctable
- frost-resistant and water-resistant after hardening
- minera
- Colors: white, special colors on request

#### COMPOSITION

- white cement in accordance with DIN EN 197-1
- Quick-drying cement
- trass in accordance with DIN 51043
- finely fractionated silica sand
- additives for improving bonding to the subsurface
- additives for regulating and improving workability and product properties

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SUBSTRATE	
Properties/tests	The substrate must be dry, firm, load-bearing, dimensionally stable, clean and free of adhesion-reducing contamination.
Pretreatment	<ul> <li>Carefully remove adhesion-reducing layers and contamination, e.g. sinter layers, binding agent accumulations, loose paint coatings, adhesive residue or dust.</li> <li>The substrate is to be cleaned beforehand. No residue from cleaning agents must stick on the substrate.</li> <li>If natural stone parts are connected using stainless steel anchors (e.g. V2A, V4A), the bonding adhesive can create a force-fit bond between the stone surfaces.</li> <li>Cut off damaged stones down to the sound core (e.g. dovetail profiles).</li> <li>The suitability of the product is to be checked before application.</li> <li>The contact surfaces should be pre-wetted and primed with a slurry of tubag SEM-K. Bonding is carried out fresh in fresh.</li> <li>Depending on the application or for time-critical work, a suitable primer may be required.</li> </ul>

PROCESSING		
Temperature	■ Can be processed in case of air, material and substrate temperatures between +5°C and +30°C. Do not apply in case of direct sunshine or strong winds.	
Mixing / Preparation / Processing	<ul> <li>Observe specified amount of water. Use a clean stirring container and clean tap water for stirring.</li> <li>Mix the material homogeneously and lump-free using a suitable agitator, leave to mature for 3 minutes and then stir again, adding more water if necessary, and adjust the consistency to suit the application.</li> <li>Do not mix with other products and/or other substances.</li> </ul>	
Processing	<ul> <li>Apply the scratch coat to the substrate with the smooth side of the notched trowel. Then comb on the mortar and push the tiles/coverings into the applied mortar bed under pressure and position them.</li> <li>Only apply as much mortar as can be covered during the open time. After the skin has started to form on the surface of the combed adhesive bed, no more coverings may be laid.</li> </ul>	
Processing / Working time	<ul> <li>Process the mixed mortar within approx. 40 minutes.</li> <li>Timings relate to +23°C and 50% relative humidity.</li> <li>Low temperatures prolong the processing time, high temperatures shorten it.</li> <li>Mortar that has already started to harden must never be thinned down with additional water, remixed or applied.</li> </ul>	
Cleaning the tools	■ Clean all tools and equipment with water immediately after use.	
Notes	<ul> <li>When laying coverings outdoors or on floor surfaces with high traffic loads as well as for large formats (≥ 60 cm edge length, ≥ 0.25 m² base area), the buttering-floating method should be used. By applying the adhesive to the substrate and additionally to the back of the covering, an almost void-free installation is ensured.</li> <li>For laying and fixing tiles and slabs, please observe the instructions in DIN 18157 as well as the recognised rules of technology.</li> </ul>	

#### **PACKAGING**

■ 12,5 kg/bucket

#### **STORAGE**

- Store dry and as per instructions.
- can be stored in sealed original container/bag for at least 6 months from manufacturing date

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#### QUANTITY REQUIRED / YIELD

■ Consumption:

approx. 2.4 kg/m<sup>2</sup> with 6 mm toothing approx. 3.1 kg/m<sup>2</sup> with 8 mm toothing approx. 3.5 kg/m<sup>2</sup> for 10 mm toothing approx. 1 – 2 kg/m<sup>2</sup> as contact layer

■ The quantity used depends on the nature of the substrate and the profiling on the back of the covering and may vary in practice.

TECHNICAL DATA	
Water requirement	approx. 3.0 l per 12,5 kg/bucket
Maturation time	approx. 3 minutes
Adhesive open time	approx. 20 minutes
Processing time	approx. 40 minutes
Adhesive bed thickness	2 - 20 mm
Walkability	after approx. 3 hours
Groutability wall	after approx. 3 hours
Groutability floor	after approx. 3 hours
Resilience	after approx. 1 day

All data are average values which have been obtained under laboratory conditions in accordance with relevant test standards and application trials at +23°C and 50% relative humidity. Deviations are possible under practical conditions.

#### SAFETY AND DISPOSAL INSTRUCTIONS

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- This product produces an alkaline reaction when it comes into contact with moisture/water. Therefore ensure that skin and eyes are protected. If it should come into contact with the skin or eyes, rinse them thoroughly with water. See a doctor immediately if it comes into contact with the eyes.
- Follow further instructions in the safety data sheet.

#### GISCODE

■ ZP1 (products containing cement, low-chromate)

#### Disposal

- Completely empty and recycle the packaging.
- Dispose of the material in accordance with the official regulations.
- Dispose of hardened product in accordance with the local regulations. Do not allow to enter the sewer system. Dispose of the hardened product in the same way as concrete waste and slurries. Waste code according to the Ordinance on the European Waste Catalogue depending on the origin: 17 01 01 (concrete) or 10 13 14 (concretewaste and concrete slurries).

#### **GENERAL INFORMATION**

This information sheet provides only general recommendations. Should you have any queries relating to a specific application, please contact our technical sales advisor or call our hotline: +49 541 601-601. All of the details given are based on our current knowledge and experience and on the assumption that the materials are professionally applied and used for their normal purpose. All of the details are non-binding and do not release users from their duty to undertake their own tests to ensure suitability for the intended application. Due to the effects of different weather, processing and construction site conditions, no guarantee can be given for the general validity of all details. We reserve the right to make changes as a result of further development of the product and applications engineering. The general rules for construction engineering, the valid standards and guidelines, and the technical working guidelines must be observed. The publication of this technical data sheet renders all previous editions of this data sheet void. Please obtain the latest information from our website.