

Technical Information Sheet Article No. 0313

Masonry Injection

Silicone micro-emulsion concentrate

according to WTA Code of Practice "Masonry Work Injection". Hydrophobizing against rising masonry damp.

Range of use

To be used for hydrophobic impregnation against rising damp in masonry work, with or without the use of pressure. It is to be used above the standing water zone for high degrees of moisture penetration.

Property profile

Remmers Masonry Injection is an aqueous, silicone, micro-emulsion (concentrate) with a particle size in the nanometre range. This makes distribution into the finest pores and capillaries possible. As a water-based system, it is suitable for damp and porous building materials.

Directions

Remmers Masonry Injection is diluted before use with clean water (drinking/tap water). Stir the mixture thoroughly; an opaque, slightly cloudy solution results. The diluted masonry injection should be used the same day it is prepared. Normally, Remmers Masonry Injection is diluted 1 : 11. For masonry work that is less damp, dilution 1 : 14 is possible. For very damp masonry work, thin with less water (1:7).

Characteristic data of the product

Density:	0.99 g/cm ³
Viscosity:	DIN 53211
Nozzle 2:	approx. 85 sec. +/- 5
Nozzle 6:	approx. 5 sec. +/- 1
Flash point:	> 25°C
Colour:	yellowish to reddish brown

To achieve a completely functional moisture barrier, the entire injection zone in the body of the building must be impregnated with Remmers Masonry Injection.

a. Preliminary work:

Remove damp or damaged old render at least 80 cm above the injection zone. Clean wall surfaces (e.g. by micro-soft blasting) and scrape out soft joints approx. 2 cm deep.

Apply a basic silicification treatment consisting of Kiesol and Remmers Sulfatex Grout. Then close broken out and missing areas and open joints with Remmers Undercoat Render.

b. Borehole procedure:

Borehole distance 10-12 cm, borehole depth 5 cm to the end of the wall. Boreholes can be drilled horizontally or with a slope, in a single row or two rows, depending on the substrate and the procedure used.

1. Injection procedure (a low pressure procedure is preferably used):

To impregnate the masonry work in a low pressure procedure, insert drive-in packers, diameter 12 mm, with return valve. As an alternative, reusable metal injection packers, Art. No. 4201 with a light pressure valve, can be used. The masonry injection solution, diluted corresponding to the degree of porosity and moisture, is brought into the masonry work with suitable equipment through a pressure hose with a grab head, using pressure of 2-4 bar.

The quantity to be applied should be controlled over time. Depending on the absorption capacity of the masonry work, a guide value of 0.3-0.4 kg of the diluted solution per minute can be given. First of all, if the degree of moisture penetration is high (> 80 %), Remmers Masonry Injection is brought into with low pressure injection procedure.

After a waiting time of 3 or maximum 24 hours undiluted Kiesol is injected as an activator (approx. 1 kg per 10 cm wall thickness per metre).

2. Penetration procedure

To impregnate without pressure using the borehole method, the diameter of the boreholes is 3 cm as a rule. If the solution is applied in a funnel-suction procedure through feeders (filling device or Kiesol feeding cartridges), the borehole should correspond to the diameter of the feeding hose or angular nozzle, generally 20 to 25 mm. Impregnation takes approx. one day.

c. Supporting measures

- Treat vertical surfaces with one or two silicification treatments, approx. 30 cm above the row of boreholes.
- Treat for salts with Remmers Sulfatex Liquid and/or Remmers Salt Inhibitor or
- In dependence of the found load of the masonry and the requirements on the use the mentioned products have to be combined with plaster from the Remmers restoration render programme.
- In the floor connection area or upper edge of the ground, separate the render by a joint and waterproof the floor according to requirements. Use Remmers Universal Render for plinth areas.

Please pay attention to the technical data sheets of the several products.

Notes

When working, the temperature should be a minimum of 5 °C. Use the diluted concentrate within one day. When work has been concluded, ensure adequate ventilation and a sufficient temperature for drying, e.g. through a dehumidifier on a convection principle.

Tools and cleaning

- a) Drills made by Wendelhammer, e.g. SDS Plus or SDS Max.
- b) For pressureless impregnation, feeding device, Art. No. 4174
- c) For low pressure procedures: Surface sprayer with coupling (pressure hose with grab head) or injection pumps made by:
 - b + m Vertriebs GmbH, Ziegelmüllerstr. 6, 88094 Oberteuringen, Germany
 - Desoi GmbH, Gewerbestraße 16, 36148 Kalbach, Germany
 - Dittmann Oberflächentechnik, Germendorfer Allee 31, 16515 Oranienburg, Germany
- d) Metal injection packers Art. No. 4201 with light pressure valve or Remmers Plastic Injectors, Art. No. 4109 with large inserts, Art. No. 4104.

Packaging, application rate and storage

Packaging:
10 kg and 30 kg tin containers

Application rate:

0.15 - 0.20 kg concentrate per 10 cm wall thickness and per metre wall length depending on porosity and moisture content of the substrate. If the degree of moisture penetration is high, use additionally approx. 1 kg Kiesol per 10 cm wall thickness and per metre wall length.

Shelf-life:

At least 6 months in closed containers.

Safety, ecology, disposal

Further information concerning safety during transport, storage and handling as well as on disposal and ecology is found in the latest Safety Data Sheet.

The statements above are compiled from our field of production and according to the latest technological developments and application techniques.

Since application and working are beyond our control, no liability of the producer can be derived from the contents of this information sheet. Any statements made beyond the contents of this information must be confirmed in writing by the producer.

In all cases, our general conditions of sale are valid. With the publication of this Technical Information Sheet all previous editions are no longer valid.



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