



## Technical Data Sheet

# AQUAFIN®-i380

Art.-No 2 04610

## Silane based injection cream for sequentially applied horizontal damp-proof barriers

### Properties:

- ready to use
- solvent free
- hydrophobic
- highly penetrative
- prevents capillary water transportation
- very high active ingredient content
- simple and effective application
- low consumption
- pressureless injection
- free from labelling
- WTA approved and certified system – up to 95 % moisture saturation



### Areas of application:

For producing retrospectively applied horizontal barriers in accordance with the WTA work sheet "Injections in masonry against capillary moisture", against rising damp up to 95 % moisture saturation in masonry work constructed from e.g. brick, clinker, lime-sand blocks, natural stone including joints. Injection is carried out using a hand applied spray gun without pressure (< 10 bar).

### Technical Data:

Basis:	Silan
Consistency:	creamy
Colour:	white, transparent after drying
Specific gravity:	approx. 0.9 g/cm <sup>3</sup>
Active ingredient content:	approx. 80 % by weight
Substrate / application temperatur:	+5 °C to +30 °C
Packaging:	600 ml sausage × 12 / box and 5 l packs
Storage:	frost-free, 9 months in the original unopened container.

### Consumption:

Borehole diameter: 12 mm				
Borehole depth = Masonry wall thickness - 2 cm				
Borehole spacing 12.5 cm (horizontal spacing)				
Wall thickness	Borehole depth	Filling quantity per borehole	Consumption per running metre	spreading rate per 600 ml
11.5 cm	approx. 9.5 cm	approx. 11 ml	approx. 88 ml	approx. 7.0 m
24.0 cm	approx. 22.0 cm	approx. 25 ml	approx. 200 ml	approx. 3.0 m
36.0 cm	approx. 34.0 cm	approx. 38 ml	approx. 304 ml	approx. 2.0 m
42.0 cm	approx. 40.0 cm	approx. 45 ml	approx. 360 ml	approx. 1.7 m

Allow for greater material consumption with angled drilling, masonry work with cavities, injection under pressure and shorter distances between holes.

### Substrate preparation:

Remove old damaged render, paints or coatings from the substrate up to a height of 80 cm above the neighbouring area of damage either visibly or through examination. Rake out crumbly pointing to a depth of 2 cm deep and mechanically clean the area. To replace masonry joints we recommend THERMOPAL-GP11. Where using low pressure equipment, we recommend blocking the injection area with AQUAFIN-1K.

### Product application:

Penetration is also very good when the injection zone is saturated. Even with high levels of moisture penetration, a functional barrier is achieved.

### Pressureless injection:

The distance between bore holes as well as their positioning (single or double row) depends on the absorption of the masonry work. The closer the bore holes are together, the greater the degree of success.

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Electro-pneumatic drills, which operate without vibration as much as possible, are recommended for drilling with an appropriate drill bit. Where wall thicknesses are over 60 cm, we recommend injecting AQUAFIN-i380 from both sides or under pressure.

As a rule drill bore holes of minimum diameter 12 mm placed approx. 10–12.5 cm apart at an angle between 0° and 45°. The depth of the hole should be 2 cm less than the thickness of the wall. When determining the drilling angle, ensure that at least one horizontal mortar joint is included, with at least two for thicker walls. With substrates of low or no absorbency, it is recommended to set out the bore holes on two levels within the joints. In this way the height offset will be < 8 cm. Before injection, thoroughly remove drilling dust, in order to ensure the greatest possible uptake of the active ingredient into the masonry work. Injection is carried out using a suitable cartridge hand press with appropriate fixture.

Slowly and evenly extrude through the spray pipe to completely fill the holes bored, with AQUAFIN-i380. The holes can be subsequently closed off with ASOCRET-BM or an alternative suitable cementitious mortar.

## **Pressure injection:**

When injecting under pressure, the depth of the bore hole is to be about 5 cm less than the thickness of the masonry work. The bore holes are positioned in the same manner as for injection without pressure and supplied with suitable injection packers. Masonry work with large voids, hollow blocks, cracks or open joints are to be grouted with ASOCRET-BM before commencing injection work. Once the bore hole mortar has dried, inject AQUAFIN-i380 also under pressure (< 10 bar). Maintain the injection until neighbouring joints are filled to a matt sheen. After injection works, remove the packers and seal the holes with ASOCRET-BM or another suitable cement-based mortar.

Information on suitable injection equipment, packer systems or ancillaries can be obtained from HTG HIGH TECH Germany GmbH, Berlin.

## **Accompanying measures:**

Once the retrospective horizontal damp proof barrier has been incorporated against rising damp in masonry work, suitable additional accompanying measures are necessary. To these belong, essentially, plaster renovation with the THERMOPAL restoration plaster system or waterproofing of external areas in contact with the ground using AQUAFIN-2K/M, AQUAFIN-RS300 or COMBIFLEX-EL and, where necessary, the laying of drainage to DIN 4095 as well as the elimination of possible structural technical issues.

## **Advice:**

- Protect areas not being treated during the application of AQUAFIN-i380.
- The material is not suitable for producing hydrophobic performance on alkaline surfaces such as concrete elements etc.

**Please observe a valid EU Health & Safety Data Sheet (MSDS).**