



## Technical Data Sheet

# AQUAFIN®-IB2

Art.-No. 2 04200

## Water soluble siloxane horizontal damp barrier and impregnator

### Properties:

- Concentrate
- Low consumption
- Can be diluted with water with long term storage stability
- Hydrophobic
- Solvent free
- High depth of penetration
- Prevents capillary water absorption
- Tested in accordance with WTA (Association for Science and Technology) up to 95% degree of saturation



### Areas of application:

- For the production of horizontal moisture barriers according to the WTA (Association for Science and Technology) data sheet 4-4-04/D against rising damp in walls.
- As a surface impregnator for porous building materials e.g. brickwork, clinker, sand lime bricks, natural stone and mineral renders/plasters.

### Technical Data:

Basis:	Siloxane
Colour:	clear to yellowish
Specific gravity:	1.05 g/cm <sup>3</sup>
Application/ substrate temperature:	+5 °C to +30 °C
Storage undiluted:	12 months in original unopened containers.
Storage diluted with water:	with clean drinking water max. 2 months, with distilled water min. 12 months in closed containers.
Packaging:	1, 5, 10 and 25 litre containers

### Material consumption as a horizontal barrier:

Area of application	Mixing ratio	Material consumption concentrate/m <sup>2</sup> / wall cross section
95 % degree of saturation	1 : 12	1,2
60 % degree of saturation	1 : 16	0,9
< 50 % degree of saturation	< 1 : 20	0,7

### Material consumption as an impregnator:

Surface	Mixing ratio	Material consumption ml, concentrate /m <sup>2</sup>
Weakly porous clinker	1 : 8	approx. 20 - 30
Render	1 : 10	approx. 30 - 50
Strongly porous clinker	1 : 12	approx. 30 - 65

### Application – horizontal moisture barrier:

Dependent on the porosity of the building material and the degree of saturation dilute with drinking water.

### IMPORTANT ADVICE:

always add AQUAFIN-IB2 to the water!

Dispersion is very good in the injection zone irrespective of the degree of saturation. A functional barrier is also achieved even at high levels of saturation.

### Substrate and product preparation:

I. Injection by the low pressure method  
 Particularly suitable when the wall to be treated is considerably or completely saturated with water. The borehole arrangement is determined by the type and condition of the wall. The borehole diameter is determined by the method of application. As a rule

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borehole spacing is 10 – 12.5 cm from hole centre to hole centre. The boreholes are placed horizontally in the pointing mortar (only double row borehole arrangement) or at an angle of up to 45° C. The depth of the borehole should be 5 cm less than the thickness of the wall. With dense weakly porous brickwork chose a double row borehole arrangement. Here the vertical offset should be < 8 cm. With porous natural stone walling place the boreholes in the stone and with dense quarry stone walling place them in the joints. For walls thicker than 60 cm and on corners, boreholes should be drilled from both sides. Before saturating remove drilling dust. The application of AQUAFIN-1K to both sides of the wall around the borehole barrier prevents the AQUAFIN-IB2 from escaping. Insert injection packers. Walls with large voids, hollow blocks, cracks and open joints up to 5 mm should be repaired with ASOCRET-BM before carrying out the injection process. Subsequently inject AQUAFIN-IB2 (mixed to the relevant mixing ratio with drinking water) at a pressure of < 10 bar. Sustain the injection until the neighbouring joint is full and appears matt-satin with AQUAFIN-IB2 (mixed to the relevant mixing ratio with drinking water). After approx. 24 hours remove the packers and close off the holes with ASOCRET-BM.

## II. Injection without pressure equipment

Create 30 mm diameter boreholes at an angle of between 30° C and 45° C at a distance of 10 – 12.5 cm apart. The depth of the borehole should be approx. 5 cm less than the thickness of the wall. When arranging the bore angles ensure that a least one mortar joint (two joints in thicker walls) is included. It is recommended to place the boreholes on two levels. The spacing of the borehole centres is determined by the porosity of the wall. The closer together the boreholes are, the greater the success of the procedure. Electro-pneumatic drills that work with minimum vibration (e.g. Hilti) with appropriate drill bits are suitable. For walls thicker than 60 cm and on corners boreholes should be drilled from both sides. Before saturating remove drilling dust. Subsequently insert AQUAFIN-IB2 (mixed with

drinking water to the appropriate mixing ratio) into the boreholes. In practice it is convenient to inject from a storage vessel (hopper with pressure plugs). Saturation time should be a minimum of 24 hours. Afterwards seal the boreholes with ASOCRET-BM. For sealing open joints, cracks or voids use the same procedure as for the low pressure application method.

## III. Supporting measures

After implementation of the wall injection to combat rising damp, suitable additional supporting measures are necessary. This is essentially the refurbishment of renders with the THERMOPAL renovation render system, vertical waterproofing of the external areas in contact with the ground with AQUAFIN-2K/M or COMBIFLEX-EL as well as the incorporation of drainage to DIN 4095 and the elimination of structural defects.

## Product preparation – impregnation:

### Preparation:

Dilute the concentrate with clean drinking water in the ratio 1:8 to 1:12.

### IMPORTANT ADVICE:

Always add the AQUAFIN-IB2 to the water.

Brush or spray apply in one or more coats but always cover completely and consistently. With all building materials it is generally sufficient to saturate the area twice whereby the impregnating medium is applied wet over wet. The best impregnation is achieved on a dry to lightly damp, porous substrate.

### Surface preparation:

The dry to lightly damp substrate must be free from dirt, dust and other contamination. Construction defects must be eliminated before starting. It must be ensured that water and any dissolved substances cannot lie behind the hydrophobic zone. Where salts damaging to construction exist a quantitative salts analysis is required. Building materials to be treated must have open pores (prepare with e.g. ASO-Steinreiniger). White surfaces

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can lead to minor "yellowing". Protect adjacent areas such as e.g. windows, painted areas or those to be painted, as well as glass and planting from the effects of AQUAFIN-IB2.

## **Important advice:**

- Protect areas not to treated from the effects of AQUAFIN-IB2.
- Always add AQUAFIN-IB2 to water. Never add water into the concentrate as it can lead to premature gelling of the active component (inhomogeneity).
- AQUAFIN-IB2 solutions are not suitable for highly alkaline surfaces (e.g. concrete < 12 months old).
- Do not pour mixed material back into the product container.
- Use opened containers immediately.

Please observe a valid EU safety data sheet.

GISCODE: M-KH5