

HydroBloc® Diffusion 715

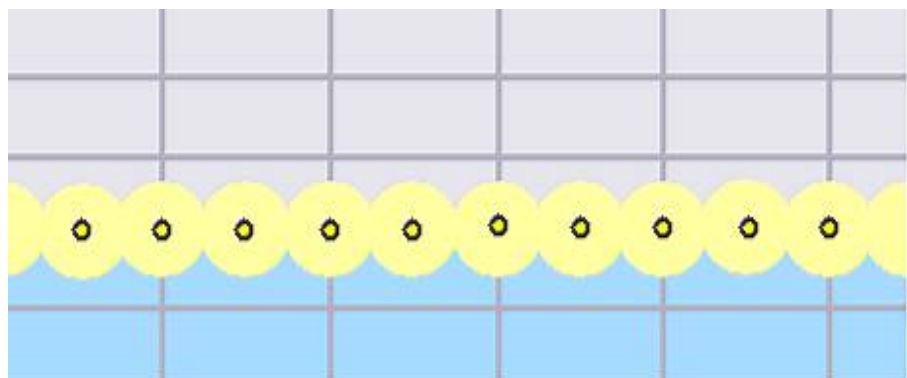
A paste of pure silane - for permanently dry walls

HydroBloc® Diffusion 715 is a cream-like hydrophobic agent consisting of highly concentrated reactive silanes. The product is introduced into building materials via holes or joints without pressure and spreads uniformly and in a controlled manner in the substrate. It diffuses through the typically high energy of wetting into the finest pores and capillaries, displaces moisture, reacts on the silicate surfaces to form polysiloxanes and is chemically bound to the building material (and thus practically insoluble).

I Properties

HydroBloc® Diffusion 715 is a product specially designed for sealing mineral wall building materials against capillary water transport. It interrupts the water transport by deactivating (hydrophobing) the pore walls. Water can no longer wet hydrophobised pores with HydroBloc® Diffusion 715, capillary suction is interrupted, the transport of moisture is stopped and the building material dries out.

HydroBloc® Diffusion 715 is particularly environmentally friendly, it contains no solvents and does not introduce additional water into the building material. The application is safe and reliable even in case of strong moisture penetration.



Principle of a typical horizontal barrier, with holes in a row and idealized barrier layer from the filling material

I Product data

Aspect	Creamy soft paste
Composition	Alkyl silanes and additives
Colour	Light, milky
Active ingredient content	≥ 99 %
Density	~ 0,9 kg/l
Flash Point	≥ 100° C
Best before date	12 months, stored cool and frost-free

I Application

HydroBloc®Diffusion 715 is installed without pressure, preferably via holes. The necessary drill holes are arranged in one or more rows, depending on the structural situation, the building material and the moisture penetration.

The prepared boreholes are filled and sealed from cartridges or with a hand pump from a storage can with HydroBloc®Diffusion 715. The product then diffuses into the natural pore structure of the building material around the boreholes, capillary pores become hydrophobic and the water transport is interrupted.

- **Supporting measures**

Remove existing layers of plaster up to approx. 80 cm above the visually recognisable moisture horizon*. Remove loose and friable joint mortar in the masonry (scrape out). Close all open joints and gaps with Silex® repair and filling mortar.

*Note: It is advisable to replace the plaster only after the damp walls have dried!

- **Boreholes**

The quantity and distribution of the filling material required for a continuous (horizontal!) barrier layer depends on the volume and absorption behaviour of the pores of the building material and the moisture penetration. The shape, number and arrangement of the injection holes therefore depend on the individual structural situation. Important influences are mainly the type of building material and the degree of moisture penetration. An important aspect is also the careful preparation of the boreholes.

Parameters

Drill hole depth	Wall thickness minus 20 mm
Angle of the bores	Approx. 40 - 50° diagonally downwards ⁽¹⁾
Distance - single row	60 - 120 mm
Distance - double row	each 80 mm ⁽²⁾ -2nd row approx. 40 mm horizontal

⁽¹⁾ - with quarry stone masonry, horizontally into the joints, if necessary

⁽²⁾ - and laterally shifted by 50%



Cleaning the boreholes

Rock flour produced when drilling in damp building materials clogs the pore walls of the boreholes, hinders migration and must be removed. *Blow out and suck off is not enough!* We recommend to use cylindrical wire brushes matching the diameter.

- **Injection**

The filling of the boreholes with the silane paste should be homogeneous. For this purpose, the filling material is introduced from cartridges with the nozzle extension or - when working from a bucket and with a hand pump - with the injection lance from the end of the borehole, while simultaneously pulling out the filling tool.

Seal

The filled holes must then be sealed to prevent losses of the injection cream through evaporation. For boreholes with D 13mm we supply a suitable protective cap (article # 082). This makes them more accessible for a desired re-injection

After final completion of the work, before applying plaster or paint, the boreholes can be permanently sealed with "SealFix®Expansionsmörtel 930".

I Consumption

Borehole with D = 13 mm, distance 120 mm, corresponding to 8.3 holes per meter	Filling quantity for 8,3 boreholes	Range 16 L bucket
Wall thickness: 10 cm Borehole depth 8 cm	88 ml	181 m
Wall thickness: 11,5 cm Borehole depth 9,5 cm	105 ml	152 m
Wall thickness: 24 cm Borehole depth 22 cm	242 ml	66 m
Wall thickness: 36 cm Borehole depth 34 cm	374 ml	42 m
Wall thickness: 42 cm Borehole depth 40 cm	440 ml	36 m
Filling quantity for 1 meter borehole	133 ml	

These values are only indicative. The consumption is directly dependent on the pore volume of the building material.

I Delivered products, accessories and auxiliaries

HydroBloc®Diffusion 715

In cartridges of plastic, 310 ml ,in a carton with 12 cartridges
In a PE bucket, 16 litres

Diffusion-Set AM-001

Set AM-001, consisting of: Hand pump and trolley with holding strap for 16 liter bucket, with lance and injection hose

Trolley AM-002

Trolley with holding strap for 16 liter bucket

Manual pump HydroBloc®AM-003

Manual pump for 16 liter bucket delivers 30 cm³ per stroke
including 0.5 m lance and 1.5 m injection hose

Diffusion - Lanze AM-004

Injection lance 0.5 m long, incl. hose connection

HydroBloc®Schlauch AM-005

Injection hose 1.5 m long

Jekto®Gun-074 for cartridges a 310 ml

Plastic extension nozzle for cartridges no. 017

flexible, length 45 cm, can easily be shortened

Borehole protection cap no. 082 for boreholes with 13 mm Ø

Silex®961 repair and filling mortar

Repair compound and mortar for defective joints
Paper sacks a. 25 kg

SealFix®Expansionsmörtel 930

For sealing injection holes, etc.
Paper bags at. 25 kg

These technical information describe the present-day state of knowledge these product. They should only inform about the possibilities of application and could not release the applicator of his commitment to check the possibility to use the product for the required application. Information for processing can be found in processing instructions of our product. Information about safe handling can be found in our current safety data sheet.

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