

# **BKM HP-HZ**

WTA-tested horizontal barrier technical data sheet

Article-No.: P-001-111	200l Barrel
Article-No.: P-001-112	25l Canister
Article-No.: P-001-113	10l Canister

## **Product description**

HP-HZ is a solvent-free, water-dilutable concentrate for injection into mineral masonry for the purpose of creating a horizontal injection barrier against rising damp above backwater and pressurized water levels in mineral masonry.

HP-HZ is WTA certified and tested up to 95 % moisture penetration according to WTA Fact sheet 4-4-04 "Wall injection against capillary moisture".

#### Product advantages

- Hydrophobic
- Water-dilutable
- Low consumption
- Tested for moisture penetrations of up to 95%.
- Active principle: hydrophobic
- Active ingredient: alkali silicate siliconate

#### Specification

Density at 23°C :	approx. 1,3g/cm3
Viscosity :	aqueous-thin
Vapor pressure permeability :	>90%
pH-value :	approx. 14
Appearance :	colorless, clear
Injection pressure :	up to 5 bar
Processing temperature :	minimal +3°C,
	maximum +30°C

## **Product application**

#### Notes

HP-HZ is exclusively suitable for subsequent cross-sectional sealing (horizontal barrier) of porous building materials against capillary rising damp. In the case of dense building materials with low absorbency, the suitability must be checked beforehand.

#### **Preliminary work**

Remove damaged or salinated old plaster in the area of the injection zone. Clean the wall surfaces and scrape out soft joints. If necessary, dam the injection area beforehand with "BKM HS" (cove and barrier mortar). Fissured masonry, natural stone masonry as well as hollow bricks are to be filled with suspensions before injection. The dilution of the concentrate at a degree of moisture penetration (DFG) up to 95% is 1:2 (1 part HP-HZ : 2 parts clean tap water).

#### Horizontal barrier against rising damp

The WTA data sheet 4-4-04 "Masonry injection against capillary moisture" must be observed!

The installation height must be determined before starting work.

The type and functionality of the exterior wall waterproofing, the height of the surrounding soil and the planned flanking measures must be taken into account. Set a single row of drill holes at a distance of 12.5 cm up to approx. 5 cm before the end of the masonry. The drilling angle is 30-50° depending on the masonry thickness; at least one bearing joint must be drilled through. At corners, one hole is drilled into the masonry at an angle; from 60 cm wall thickness, two holes are required. If the horizontal barrier is not continuous, secure the blocked wall area at the side with a drill hole chain up to 20 cm above the top of the outside area to prevent moisture from unblocked areas from migrating over.

Suck out the borehole, set the packers and then inject HP-HZ under pressure (approx. 5 bar) into the masonry. For weakly absorbent building materials, a two-row drill hole arrangement is recommended. After injection, remove the injection packers and seal the drill holes with cement mortar.

#### Accompanying measures and drying time

The drying time of the masonry up to the equilibrium moisture depends on the moisture penetration as well as additional good ventilation of the entire room. Drying devices support the drying process. Damaged plasters and paints must be removed after injection and replaced with plasters from the BKM.MANNESMANN waterproofing system. Paint coats on the completely dried plaster surfaces are to be applied exclusively with the diffusion-open silicate paint "BKM Bio interior paint".

#### Consumption

The consumption depends on the porosity of the building material. When used in brickwork (mixing ratio 1:2), the consumption is approx. 3 liters of HP-HZ concentrate, or 9 liters of ready-touse mixture, per sqm of masonry cross-section. In case of lower material absorption, subsequent injections must be planned.

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## Comments

#### Delivery

200l Barrel	Article-No.: P-001-111
25l Canister	Article-No.: P-001-112
10l Canister	Article-No.: P-001-113

## Working tools

- Hammer drill
- Hammer drill 14mm with 4 cutting head
- Diaphragm or piston pump
- Injection packer

### Storage

12 months (cool, frost-free and dry,  $+5^{\circ}$ C to  $+25^{\circ}$ C in the original container).

#### Ecology, safety, disposal

Information on occupational safety, transport, ecology and disposal can be found in the respective current safety data sheet.

## Legal notice

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