PC® AQUADRY GEL

Injection gel to stop rising damp.

Wissenschaftlich-Technische Arbeitsgemeinschaft für Bauwerkserhaltung und Denkmalpflege e.V.

NR 14-212-1

NR.: DE 622 X 855 E

1. Description

PC® Aquadry Gel is a very highly concentrated silane / siloxane impregnation gel, specially developed to stop rising damp in walls.

2. Applications

PC® Aquadry Gel is used as an injection gel, applied through pressure-less insertion, against rising damp in walls. **PC® Aquadry Gel** is also effective in making concrete surfaces water repellent.

With porous types of stone (e.g. concrete blocks, limestone,…) it will be necessary to drill the holes closer to each other and, maybe, inject them multiple times with **PC® Aquadry Gel** in order to obtain a fully waterproof screen.

3. Properties

- Application of **PC® Aquadry Gel** does not require any special equipment. A manually applicable cartridge pistol dispenser is sufficient for the pressure-less injection of the product in the drill holes.
- **PC® Aquadry Gel** has excellent penetration properties. Great penetration depths are reached because of the long contact time with the affected substrate, due to the paste-like character of **PC® Aquadry Gel**.
- In contrast to pressurized injection of liquid products, risking a loss of a significant amount of the product through hollow anomalies in the affected structure, the paste-like character of the **PC® Aquadry Gel** assures that the complete amount of inserted product is used to create a horizontal liquid barrier in the affected wall.
- An effective treatment against rising damp is already achieved after just 1 injection of the product in the drill holes, due to the very high percentage of active component.
- Although **PC® Aquadry Gel** is specially developed for the treatment of rising damp, it is also very suitable for making concrete surfaces water repellent. The possibility of easy overhead application of this product, for instance with a brush, has to be underlined. Due to the paste-like character, there is no risk of dripping.
- After drying, the **PC® Aquadry Gel** becomes transparent.
- Even with a high concentration of damp in the structure, a good result is still achieved.
- Although drilling the holes in the mortar joints is recommended, the product will also be effective should the holes be drilled in the brickwork.

4. Physical specifications

- Appearance: White gel.
- Active substance: 80%
- Density: 0,95 g/ml.

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- Viscosity: Paste / Gel.
- Odour: Barely perceptible.
- pH: 7.
- VOC content: 0 g/l.
- Shelf life: 12 months after production date in the original, unopened and undamaged packaging, stored in a dry place between +10 °C and +30 °C.
- Consumption per treatment:
  Taking into account a diameter of 12mm for the drill holes, a 12 cm distance between the drill holes and no loss of product.

Wall thickness (cm)	Drill depth (cm)	Consumption (ml/m)	Consumption (sausages/m)	Efficiency (m/sausage)	Efficiency (m/box)
9	7	71	0.12	8.3	99
14	12	122	0.20	5.0	60
19	17	173	0.29	3.4	40
29	27	275	0.46	2.1	25
40	37	377	0.63	1.5	18
50	47	478	0.80	1.2	14
60	56	570	0.95	1.0	12

- As the product is to be used as delivered, there is no chance in making errors regarding dilution.
- The product has to be protected against frost.

5. Processing

- Injections against rising damp are only effective if the drill holes are above ground / floor level.
- If an old horizontal damp-proof course (DPC) (e.g. hydrocarbon or synthetic material) is already present in the affected brickwork, the drilling pattern has to be applied, if possible, below this damp-proof course.
- Skirting-boards and affected plaster have to be removed to, at least, 50cm above the visible damaged area. If there is a possible damp bridge on the backside of the affected wall (e.g. A higher ground level, a porous finish or dirt accumulation in the cavity wall), necessary measures also need to be taken on this side in order to prevent bridging.
- The horizontal 12mm diameter drill holes are applied (preferably in the mortar joints) with a spacing of 10cm – 12cm. The drilling depth, hence the consumption of **PC® Aquadry Gel**, is dependent on the wall thickness (see chart in chapter 4). Inner corners have to be drilled in an angle, in order to assure a complete horizontal treatment.
- Before injecting the **PC® Aquadry Gel**, the drill holes have to be made dust-free using pressurized air.
- Using an injection needle, the drill holes are completely filled with **PC® Aquadry Gel**. For more information regarding the cartridge pistol dispenser and applicable injection needles, please contact your local Tradecc representative.
- After the gel has completely penetrated the affected structure, the drill holes can be sealed with a suitable waterproof repair mortar.
- Adjoining walls, that do not require treatment, have to separated from the affected wall by means of a vertical barrier of **PC® Aquadry Gel**. Vertical application of the **PC® Aquadry Gel** is the same as for the horizontal damp barrier.

- After application of the **PC® Aquadry Gel**, a horizontal barrier has been formed against rising damp. Damp, which had accumulated in the wall before the injection, will need time to dry out. On average, a drying time of 1 month per 2cm-2,5cm wall thickness will have to be taken into account. Drying time can be shortened by ensuring an optimal ventilation around the treated wall.
- When re-plastering the treated wall, a specific procedure has to be followed. Only damp permeable paints or materials can be used for the decorative finish. Walls that have been exposed to damp, often contain hygroscopic salts. It is highly recommended to apply an effective salt membrane before re-plastering. A specialised craftsmen has to be consulted for the finishing. For more information, please contact your local Tradecc representative.

6. Packaging

- 12 sausages of 600ml per cardboard box.

7. Cleaning

Non hardened product can be cleaned using warm water and a little bit of detergent.

8. Precautions and security measures

- Avoid all contact of **PC® Aquadry Gel** with the skin and eyes.
- Wear protective clothing, gloves and safety glasses.
- Avoid contact or mixing of the product with water or damp.
- More information on the Material Safety Data Sheet.

9. Certificates

- WTA: Nr. 14-212-1
- WTCB – CSTC: Nr. DE 622 X 855 E
    - Results: * 40% moisture content: Class A (Very efficient)
      * 60% moisture content: Class A (Very efficient)
      * 80% moisture content: Class A (Very efficient)