



# MAXCLEAR® INJECTION

## INJECTION SYSTEM FOR WALLS AGAINST RISING DAMP



### DESCRIPTION

**MAXCLEAR® INJECTION** is a solvent-free liquid resin based on siloxanes which once diluted in water it is converted into a water-repellent microemulsion, to provide a highly effective horizontal barrier against rising damp in masonry.

### APPLICATION FIELDS

Damp-proof courses injected under gravity or under pressure, for any kind of masonry, both exterior or interior walls, affected by capillary moisture.

### ADVANTAGES

- Allows the substrate to breath, it does not seal the pores.
- Suitable for application in thick walls and high damp content.
- Excellent penetration power in damp substrates.
- It does not produce or release any salts. No aesthetic changes on the original surface.
- Concentrate product, excellent coverage and savings in storage and transport costs.
- Environmentally friendly. It is solvent-free, non-corrosive and non-toxic, improves the

working area conditions for operators and occupants.

- Only requires potable water for diluting.
- Easy to clean.

## APPLICATION INSTRUCTION

### Substrate preparation

Remove previous render or coatings at least 90 cm. above the highest point of the rising damp level. Eliminate all efflorescences, damaged masonry, loose particles and unsound mortar joint until a good substrate and patch with **MAXREST®** (Technical Bulletin n° 02). Large cavities and hollow brick masonry must be sealed also with **MAXREST®**.

### Drills preparation

Drill a horizontal line of boreholes placing intervals of 10-12 cm, depending on the substrate absorption. Holes are drilled in the mortar and in a downward direction at an angle of 30° to 45° for gravity injection or 15° to 30° for pressure injection. The higher wall thickness the lower angle required. Anyway it is strongly recommended, if it is possible, to cross with the drill at least one horizontal line of joint mortar, thus the better dispersion of **MAXCLEAR® INJECTION** is achieved. Drill

length must be approx. 5 cm shorter than wall thickness. Remove dust and traces inside the boreholes with air pressure before the injection.

For non-homogeneous substrates full of voids and cavities or extremely porous, a fine fluid mortar such as **MAXGROUT® INJECTION** (Technical Bulletin n° 151) should be injected previously as a filler and sealer. Insert a stick to open up the boreholes before the initial setting time of the mortar (approx. 30 minutes), in order to allow later **MAXCLEAR® INJECTION** penetration.

### Micro-emulsion preparation

Prepare a dilution **MAXCLEAR® INJECTION**: water with a ratio between 1:15 to 1:20. Pour **MAXCLEAR® INJECTION** into water. The microemulsion must be injected on the same day that is prepared.

### Gravity injection method

Insert suitable feeding recipient such as funnel-shaped feeders into the boreholes. Re-fill the feeders, wet on wet, until the complete saturation of the substrate.

### Pressure injection method

This is the most suitable method to achieve the better dispersion and ensure the total

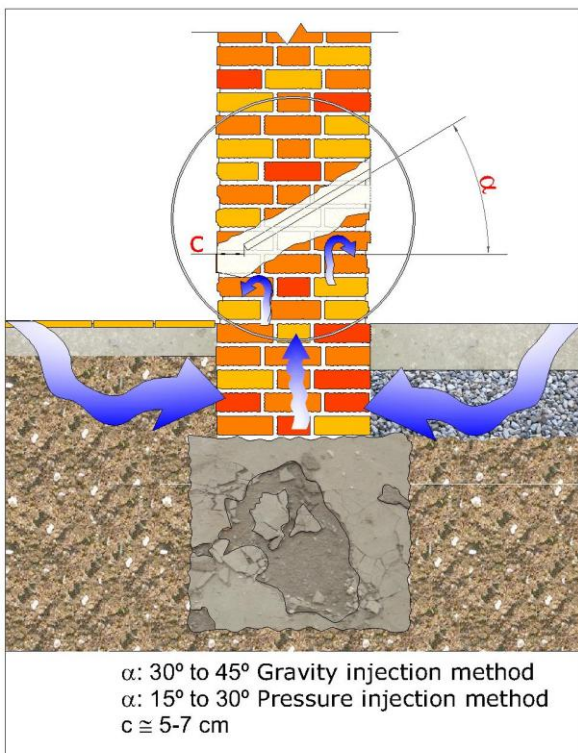


Figure 1. Section wall

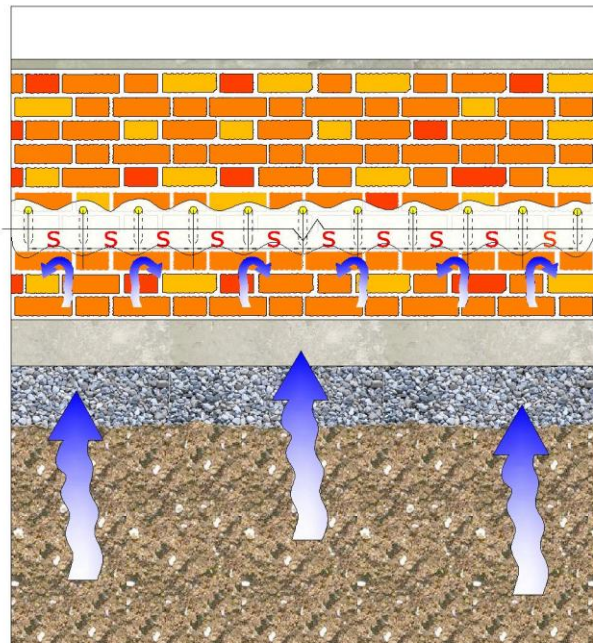


Figure 2. Front view

saturation of the substrate, and it will be used when the damp content in substrate exceeds 50%.

Coat with **MAXSEAL® FLEX** (Technical Bulletin n° 29) below the injection level and 20 cm above to avoid **MAXCLEAR® INJECTION** to coming out from cracks and pores.

Injection is carried out with a pump through suitable injection packers inserted into the holes, at a pressure of 3 - 20 bars, and allowing to elapse 5 – 10 minutes. The pressure will vary depending on the strength, porosity, saturation degree of the substrate. It is advisable to use a lower pressure but allowing a longer injection time.

In case of high damp content (> 80%) to speed up the activation of **MAXCLEAR® INJECTION**, it can be injected 1 or 2 days later **MAXCLEAR® INJECTION CAT**, thus a faster build-up of the water-repellent barrier is achieved. The same equipment can be used for this purpose.

The boreholes can be filled with **MAXGROUT® INJECTION** after 3-4 days.

For providing a mortar finish, 14 days after the injection, a macroporous mortar such as **THERMOSAN®** (Technical Bulletin n° 84), can be applied with its waterproof and decorative finish **THERMOSAN® -F** (Technical Bulletin n° 85), both suitable for masonry affected by rising damp.

### Cleaning

Use water to clean tools and equipment immediately after the injection works.

### CONSUMPTION

The consumption of **MAXCLEAR® INJECTION** will depend on damp content and porosity of the masonry. Approximately from 20 to 40 litres microemulsion **MAXCLEAR®**

**INJECTION** / water per square metre of cross-section is needed. For example, a 1 m. length of wall and 1 m. thickness and boreholes spaced 10 cm. would require from 2 to 4 litres of microemulsion per borehole (0,125 – 0,250 kg pure **MAXCLEAR® INJECTION** diluted with a ratio 1:15)

The consumption for **MAXCLEAR® INJECTION CAT** is the third part of microemulsion **MAXURETHANE® INJECTION** / water used.

### IMPORTANT INDICATIONS

- Do not mix different products in the injection pump before clean it thoroughly with water.
- Wash with water the surface of the masonry if **MAXCLEAR® INJECTION** comes out during the injection, in order to avoid lack of adhesion for next renders.
- Do not use dilution **MAXCLEAR® INJECTION** /water with more than one day prepared.

### SAFETY AND HEALTH

**MAXCLEAR® INJECTION** is a flammable product. All storage, transport and handling precautions for these kind of material must be observed. Wear protective clothes, gloves and glasses during the dilution and injection. Avoid contact with skin and eyes. In case of contact with eyes or skin wash thoroughly with water.

Safety Data Sheet for **MAXCLEAR® INJECTION** is available by request.

The final user must do disposal of the product and its empty container according to official regulations.

## TECHNICAL DATA

Appearance	Amber liquid
Density	0,95 g/cm <sup>3</sup>
Active resin content	100 %
Solvent content	0 %
Viscosity (Ford Cup nº 4)	15 sec.
Dilution ratio product / water	1/15 – 1/20
Flash point	25 °C
Toxicity	None
Corrosiveness	None
Packaging	5 and 25 l drums
Storage	12 months if stored in tightly closed original drums between 5 and 30°C

## GUARANTEE

The information contained in this leaflet is based on our experience and technical knowledge, obtained through laboratory testing and from bibliographic material. **DRIZORO<sup>®</sup>, S.A.** reserves the right to introduce changes without prior notice. Any use of this data beyond the purposes expressly specified in the leaflet will not be the Company's responsibility unless authorised by us. We shall not accept responsibility exceeding the value of the purchased product. The data shown on consumptions, measurement and yields are for guidance only and based on our experience. These data are subject to variation due to the specific atmospheric and jobsite conditions so reasonable variations from the data may be experienced. In order to know the real data, a test on the jobsite must be done, and it will be carried out under the client responsibility. We shall not accept responsibility exceeding the value of the purchased product. For any other doubt, consult our Technical Department. This version of bulletin replaces the previous one.



### **DRIZORO, S.A.**

C/ Primavera 50-52 Parque Industrial Las Monjas  
28850 TORREJON DE ARDOZ – MADRID (SPAIN)  
Tel. 91 676 66 76 - 91 677 61 75 Fax. 91 675 78 13  
e-mail: [info@drizoro.com](mailto:info@drizoro.com) Web site: [drizoro.com](http://drizoro.com)

