

RC DRYGEL 80 HIGHLY EFFECTIVE READY TO USE CREAM EMULSION ON A SILANE/

POLYSILOXANE BASE FOR MASONRY INJECTION AGAINST RISING DAMP

CSTC REPORT: DE 622 X 910/EXT N Art. 210134

Your partner in restauration and renovation

Description

RC DRYGEL 80 is a solvent free ready-to-use cream emulsion for masonry injection against rising damp. RC DRYGEL 80 is a high quality, very effective product, which is the result of years of research and experience. RC DRYGEL 80 damp-proofing cream has been formulated with a high concentration of active ingredient over 80% silane, siloxane and prepolymere.

When injected into masonry, RC DRYGEL 80 cream reverts to a liquid phase it changes from the gel phase to a vapour phase. resulting in complete absorption of the product providing superior penetration and effective damp proof coursing.

Features

RC DRYGEL 80 has a number of advantages over conventional chemical injection damp-proofing systems for the contractor:

Concentrated formulation

RC DRYGEL 80 contains over 80% active ingredient. Large quantities of water or solvent are introduced into the wall, prolonging the drying-out process.

Low hazard

RC DRYGEL 80 is a solvent-free and odourless formulation. Many damp-proofing fluids used in pressure injection damp proofing systems are corrosive or flammable, and contain approximately 90% solvent. RC DRYGEL 80 is a solvent-free formulation eliminates the odour problems associated with some traditional damp-proofing treatments. **Quick and easy to apply**

RC DRYGEL 80 is installed using a simple applicator gun, no electric DPC pump required. RC DRYGEL 80 can be injected two to three times faster than ordinary liquid injection fluids.

Controllable and consistent consumption rates

The controlled installation technique ensures effective treatment and consistent consumption rates.

Spillage & mess virtually eliminated

Damp-proofing fluid can flow through cracks and fissures in the mortar, rather than spreading evenly through the mortar. This may cause damage to neighbouring properties.

Stable formulation

Its unique formulation on a pure cream emulsion base enables superior penetration of the ingredient within the building material.

Uses

RC DRYGEL 80 can be used to treat rising damp in almost all types of masonry walls:

- Solid brick walls.
- Cavity walls.

Random form stone and rubble infill walls, etc.

Preparation

Preparation

Internal plastering affected by hygroscopic salts is removed from the area to be treated to a height of 30 cm above the maximum level of the rising damp.

Drill Holes

Drill holes every 10 to12 cm centred along the mortar course of the wall using a 12mm drill-bit. The depth of the holes required for various wall thicknesses is shown in the table below. For all other wall thickness, the depth of the holes shall be within 40 mm of the opposite side.

Drill horizontally, directly into the mortar course, preferably at the base ends of the bricks of the course selected After the drilling operation, each individual hole needs to be thoroughly cleaned using a clean compressed dry air blower.



5 à 8 cm above ground level







To treat walls with RC DRYGEL 80, first remove skirting boards and damp render. Drill at 10 cm centres at a height of between 5 cm above the highest ground level, on either the inside or the outside surface of the wall. Drill holes at a height of approximately 1,5 meters in the vertical mortar course between the wet walls that are to be treated and the dry walls that do not need to be treated.

Full instructions for suggested utiling depths for common wall unchnesses.
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Wall thickness	Drill depth
9 cm	7 cm
14 cm	12 cm
19 cm	17 cm
29 cm	27 cm
40 cm	37 cm
50 cm	47 cm
60 cm	56 cm

Cavity walls:

Cavity walls may be treated from one side in a single operation or each side wall may be treated separately. When undertaking the treatment from one side, drill completely through the selected mortar course, allow the drill bit to pass across the cavity and then drill into the other wall of brickwork to be within 40mm of the opposite (rear) side. The viscosity of RC Drygel 80 is such that it is possible to treat each side wall from a single drilling operation. Always ensure that the cavity is clear before treatment. If each side wall is treated separately, treat each side wall as an individual solid brick wall.

Tools

Reynchemie has developed a gun for use with 600 ml sausages. Insert the nozzle of the Reynchemie gun into the full depth of the pre drilled hole. Squeeze the gun trigger and back-fill the hole to within one centimeter of the surface, make sure that the holes in each leaf are filled. Once the borehole has been filled, seal the boreholes with a cement mortar or a quick-setting cement.



Application Method



- 1. Press lever clasp release and pull pressure piston out to the maximum position.
- 2. Insert RC Drygel 80 sausage into the barrel of the gun.
- Cut or puncture the visible end of the sausage.

Injection

Insert the delivery tube of RC Drygel 80 application gun into the full depth of the pre-drilled hole. Squeeze the gun trigger and back fill each hole fully with RC Drygel 80 to within 1 cm of the surface. When treating cavity walls from one side fill the holes completely in each side wall.





Consumption

How many sausages will you need?							
	Wall-length	5 m	10 m	15 m	20 m	25 m	30 m
Thickness of wall	Depth of hole						
9 cm	7 cm	0,7	1,3	2,0	2,6	3,3	4,0
14 cm	12 cm	1,2	2,3	3,5	4,7	5,8	7,0
19 cm	17 cm	1,6	3,2	4,8	6,4	8,0	9,6
29 cm	27 cm	2,5	5,1	7,6	10,2	12,7	15,3
40 cm	37 cm	3,5	7,0	10,5	13,9	17,4	20,9
50 cm	47 cm	4,4	8,9	13,3	17,7	22,1	26,6
60 cm	56 cm	5.3	10.6	15.8	21.1	26.4	31.7

Technical Data

Active ingredient	80-%	
Base	Silane, siloxane en prepolymere	
Solvents	Solvent free	
Density	± 0.915 kg/l	
Consistency	Creamy	
pH value	8	
Flash point	none	
Color	White	

Potential initial efficiency of the product "RC DRYGEL 80" Report CSTC : n° DE 622 X 910/EXT N

Initial efficiency (*) of the product "RC DRYGEL 80"	Humidity of the test pieces under application (% relative to the capillary saturation after 24 hours)			
	40%	60%	80%	
Reduction of the capillary absorption	76%	65%	60%	
Migration through the material	69%	63%	67%	
Class (since 2013)	Class A +	Class A +	Class A +	
(*) every a volume. The corresponding elements are determined based on the volume in the table below				

(*) average values. The corresponding classes are determined based on the values in the table below.

New classification				
Class	Efficiency	Migration	Remark	
A+	≥ 60%	≥ 25%	Highest efficient product	
A	≥ 40% and < 60%		Very efficient product	
В	≥ 20% and < 40%		Efficient product	
С	< 20%	< 25%	Does not suffice the conditions	

Effective test

Below a comparison test between a treated stone with RC DRYGEL 80 and untreated. After several hours, you can already see a clear difference of rising damp.







Injected with RC DRYGEL 80

The product is sublimated into the capillaries of silicate building material, it changes from the gel phase to a vapour phase. The active ingredient thus spreads out evenly throughout the capillary system of the building material, whether wet or dry, and forms a waterproof damp-proof course at the foot of the wall to prevent rising damp by capillarity.

Underneath, you will find a test that compares the characteristics of permeation of the product RC DRYGEL 80 and those of other 'injection creams', distributed by other manufacturers. The highly active components of RC Drygel 80 spread throughout the entire thickness of the wall and transform immediately into a highly effective hydrofuge resin. The polymerization takes about 3 weeks, this is the time it takes to make the spreading optimal, throughout the finest capillaries which generally transport and absorb most of the water.

Due to the evaporization of the active components (transition from gel into vapor), RC Drygel 80 optimally spreads all through the injected wall. As a consequence, the materials that aren't placed directly in contact with the product, are also hydrofuged. This allows one to treat amongst others hallowed bricks but also cellular concrete or walls that present cavities, bursts or breaches.





1,2,3 : Cream 1 4,5,6 : Cream 2 7,8,9: RC DRYGEL 80 0: Not injected

Warning

Before starting to work, check the wall to be treated for any undesirable salts such as nitrates, sulphates, chlorides, etc. Effective salt treatment can then be carried out following the rising damp treatment. Injecting the product to prevent rising damp stops the salts from travelling further, but will not prevent damage by any salts already present. Excessive sulphate and carbonate bloom can cause peeling of top coats. Hygroscopic salts such as chlorides and, especially, nitrates typically draw moisture from the air so that the surface of the masonry remains damp, even after rising damp is effectively treated. If salts are found, the walls can be given a radical treatment with our RC Sulfastop following the method described in the instructions for use supplied with the product.

Cleaning

Clean tools and equipment while the material is fresh with water and soap

Safetv

Information concerning safety during transport storage and handling is found in the latest Safety Data Sheet. Shelf-life

At least 1 year in closed original packaging. Storage : between +5°C and +25°C.

Remark

After treatment a solid brick wall previously affected by rising damp should normally dry out in 6 to 12 months. Dry time is normally 1 month for 2 cm wall thickness

Packaging



Legal Notes

The information, and, in particular, the recommendations relating to the application and end-use of Reynchemie products, are given in good faith based on Reynchemie current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Reynchemie recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Reynchemie reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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