



DRYZONE®

High performance treatments for rising damp
No fuss, no mess, no stress

Pack of 18
Dryrods

Tests prove Dryrod and
Dryzone out perform
low-strength imitations
and are effective on all
types of wall even in
the most severe damp
conditions



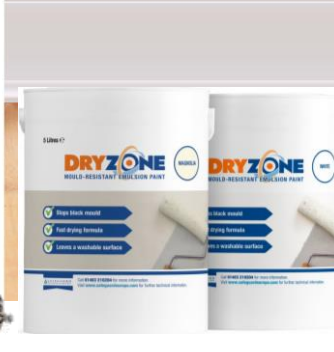
**Dryrod &
Dryzone DPC**



**Dryzone
Renovation Plaster**



**Dryzone Express
Replastering**



**Dryzone Mould-
Resistant Paint**

The Complete Rising Damp Renovation Range

Biokil Crown Ltd

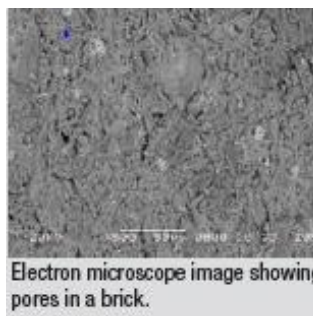
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What Is Rising Damp?

Rising damp occurs when groundwater rises up through walls, floors and masonry. Bricks and mortar can be very porous and contain many fine capillaries, through which water can rise. This can result in **visible damp patches**, **salt-contamination** and **crumbling plaster** on interior walls.

Most modern properties are built with a dampproof course, commonly referred to as a DPC. Some properties, however, were built with no damp-proof course, or the original has failed, meaning that rising damp can occur and it is necessary to make remedial repairs.



What are the Effects of Rising Damp?

Decorative Spoiling – Moisture and ground salts introduced by rising damp can cause wallpaper to peel, plaster to deteriorate, and paint to blister.



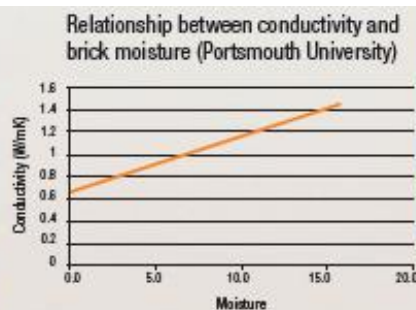
Health Effects – It has been widely documented that excessive dampness in buildings can have negative effects on the health of the building's occupants.



Erosion of the Building Fabric – Ground salts introduced into the wall by rising damp can attack and dissolve the binders in brick, stone, and mortar causing them to lose their strength and structural integrity. Crystallising salts can exert such forces that the mortar, brick, or stone microstructure is destroyed.



Increased Heat Loss – Dampness in porous building materials causes a reduction of insulation properties as air in the pores is replaced by more conductive water. For example, the thermal conductivity of a wet brick has been found to be approximately twice that of a dry brick.



Stop The Rising Damp:

Select Your Product Preference (Rods or Cream)



How Does The Dryzone System Work?

The Dryzone System is a range of products designed to eliminate rising damp and allow easy renovation of damaged interior walls. The Dryzone System offers a complete solution allowing the user to solve the problem of rising damp from start to finish, utilising the highest strength materials in the market.

Stop the Damp - with our Patented and BBA Approved Remedial Damp-Proof Courses

In order to stop the progress of rising damp through a wall, it is necessary to create a new damp-proof course. The most practical and effective way to do this is to make an existing mortar course into a waterproof barrier, using one of two BBA approved high strength damp-proofing products:



Dryrod Damp-Proofing Rods

These patented 12 mm diameter fibre rods carry a powerful water-repellent material. They are simply inserted into holes drilled at regular intervals along a mortar course. Once inserted, the rods diffuse their water-repellent material along the mortar course, curing to form a breathable barrier to rising damp.

- Most effective rising damp treatment available with 80%+ active materials.
- Delivers the correct dose every time
- No spillages or mess to clean up

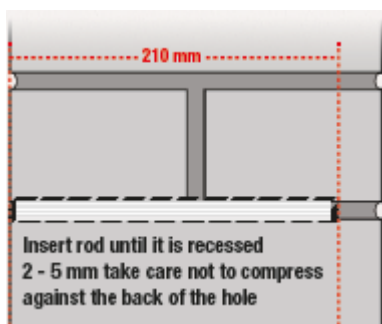
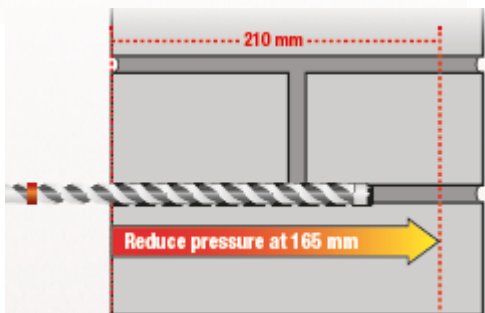
Dryzone Damp-Proofing Cream

This is a patented high-strength silicone based cream that is injected into holes drilled at regular intervals along a mortar course. Once injected, the cream diffuses along the mortar course before curing to form a breathable water-repellent resin – preventing dampness from rising up the wall.

- The original damp-proofing cream - most highly accredited treatment with 60%+ active materials.
- High performance formula
- No specialist tools required



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Preparation:

Set your SDS drill to rotary hammer.

Select a 12 mm drill bit in excess of 210 mm in length. A Dryzone drill bit is recommended for enhanced debris removal.

Mark drill bit 210 mm from the tip.

Drilling:

A row of holes should be drilled at 120 mm intervals along the lowest accessible mortar course.

Drill holes the full 210 mm ensuring you reduce your drilling pressure once you are approximately 165 mm into the wall. Reducing pressure ensures a cleaner hole and prevents damage to the far side of the wall.

Where mortar is fully saturated:

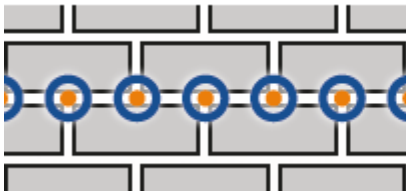
Re-drill the holes twice to remove any excess debris. If excess debris continues to obstruct full rod insertion the **Dryzone System Hole Clearing Tool** can be used to ensure the hole is completely clear.

Damp-proofing rod insertion:

Wearing suitable gloves remove the rods one by one from the packet, inserting a single rod into each hole. Ensure the rods are recessed approximately 5 mm from the brick face while trying not to force the rod into the hole. When installing internally performance will not be affected if the rods protrude where mortar has been eroded. Holes will be covered during redecoration.

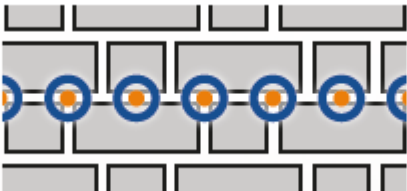


Recommended drilling patterns



Stretcher Bond

In stretcher bond construction the mortar joints fall at approximately 12 cm intervals and can be used to quickly locate your drilling points.



Flemish Bond

In Flemish bond construction the vertical mortar joints either side of the smaller bricks and the mid point of the larger bricks lie at approximately 12 cm intervals and can be used to locate your drilling points.

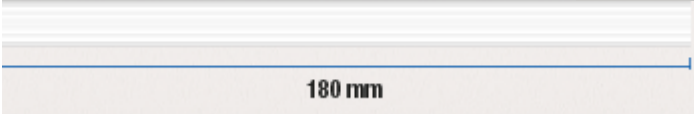
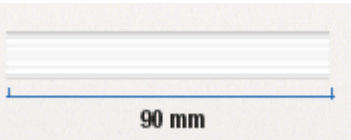


Irregular Stone

In irregular stone construction drilling points must be measured and care must be taken to make sure the line of rods follow an unbroken line through the mortar at 12 cm intervals.

Cutting & combining Dryrods for walls thicker or thinner than 9" Rod

If the wall is thinner than 9" (230 mm) then cut the rods down 10 mm shorter than the length of the hole. If the wall is thicker than 9" cut a second rod 10 mm less than the excess left after inserting one rod.



Rod depth required in various wall thicknesses

	Wall Thickness	
	4½" (115 mm)	9" (230 mm)
Depth of Hole Required	95 mm	210 mm
Rod Length	90 mm	180 mm

Number of rods required for a 10 m stretch of wall

Wall Length	Wall Thickness	
	4½" (115 mm)	9" (230 mm)
10 m	42 rods	84 rods



Installation of Dryzone Cream: The Drilling Program



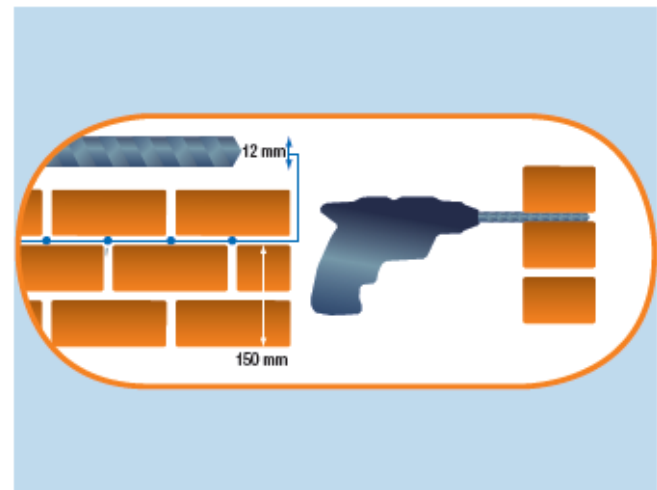
1. Drill hole size, depth and location

For treatment to be fully effective the correct volume of Dryzone must be introduced. The system requires 12 mm diameter holes to be drilled at horizontal centres no greater than 120 mm. The depth of hole required for various thicknesses of wall is shown in the table below. For all other walls the depth of hole should be to within 40 mm of the opposite face. In all cases the most effective target site is to drill horizontally, directly into the mortar course, preferably at the base of all perpend of the course selected (see diagram).

Depth of 12 mm drill hole required for Dryzone in various thicknesses of wall:

Depth of 12 mm drill hole required for Dryzone in various thicknesses of wall

Wall thickness	4½" (115 mm)	9" (230 mm)	13½" (345 mm)	18" (460 mm)
Depth of hole required	95 mm	210 mm	325 mm	440 mm
Hole centres	120mm	120mm	120mm	120mm



Usage chart for Dryzone (600ml cartridges)

Wall thickness	4½" (115 mm)	9" (230 mm)	13½" (345 mm)	18" (460 mm)
Length of wall				
10 m	1.5	3.3	5.1	6.9
20 m	3.0	6.6	10.2	13.8
30 m	4.5	9.9	15.3	20.7

Note: different site conditions may cause slight variations.
Allow an extra 10% when estimating.

2. Preparation

As necessary remove skirting boards and/or render/plaster to identify and expose the appropriate mortar course to be targeted for treatment. Measure the thickness of each wall to be treated. Set the depth gauge of the drill or apply tape to the drill bit in order to identify the correct drilling depth accordingly.

3. Solid brick walls

In virtually all cases solid brick walls may be drilled/treated from one side only in a single operation. Drill the selected mortar course at the prescribed centres to the appropriate depth in accordance with 1.1.

4. Cavity walls

Cavity walls may be drilled/treated from one side in a single operation or if preferred each leaf may be treated separately. When undertaking treatment from one side drill completely through the selected mortar course, allowing the drill bit to pass across the cavity and then drill the other leaf of brickwork to a depth of 100 mm. The viscosity of Dryzone is such that it is possible to treat each leaf from a single drilling operation. Always ensure that the cavity is clear before treatment.

5. Random stone and rubble infill walls

As far as practically possible follow the mortar course at the appropriate selected level. If the stone is of a porous type, e.g. sandstone, then there is no reason why this should not be drilled. The variable thickness of stone walls and the possibility of rubble infill dropping and blocking injection holes causes difficulties for any system. Should these difficulties occur it may be necessary to drill to 50% of the wall thickness from both sides at a corresponding height.

Alternatively drill additional holes adjacent to obstructed holes to ensure that an adequate volume of Dryzone is introduced.




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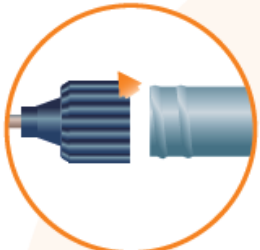
Installation of Dryzone Cream: The Injection process and making good




1. Dryzone cartridge preparation




Press lever clasp release and pull pressure piston out to maximum position.



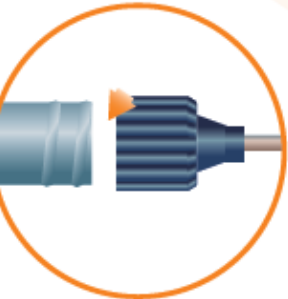
Unscrew and remove delivery tube end of the Dryzone application gun.



Insert Dryzone cartridge into the barrel of the gun.



Cut or puncture the visible end of cartridge in the barrel.



Replace delivery tube end of application gun.

2. Dryzone injection.

Insert delivery tube of Dryzone application gun into the full depth of the predrilled hole. Squeeze the gun trigger and back fill each hole fully with Dryzone to within one centimetre of the surface. When treating cavity walls from one side make certain that the holes in each leaf are filled. Dispose of used cartridges in a plastic bag in accordance with local waste disposal regulations.

3. Making good.

All drilled holes should either be plugged or pointed over.

4. Replastering (More Information Under Replaster Section)

In common with all remedial damp proof course systems the correct treatment of internal plaster contaminated by groundwater salts is an essential requirement. Replastering can be carried out by re-rendering or by using the Dryzone System.

• Re-rendering

For re-rendering a sand/cement mix incorporating Rendermix 3 in 1 salt retardant and waterproofing additive is advised. The recommended replastering specification for render is outlined in the Biokil Crown Rendermix 3 in 1 Technical Data Sheet and the Biokil Crown Replastering Specification.

• Dryzone System

The Dryzone System offers an equally effective alternative method, that offers time and cost savings. By priming the contaminated masonry with a coat of Dryshield Cream, plasterboard or insulation board can be installed directly using the salt and damp resistant Drygrip Adhesive. Salt crystal growth is greatly weakened by the cream and the wall can still dry out. The plasterboard can be dry jointed or given a plaster skim to finish. Full details are available in the "Dryzone System Application Guidelines."

General information.

1. Accidental spillage.

In the event of any accidental spillage of Dryzone, the spilt material should be wiped up immediately and the wipes placed in a plastic bag and disposed of appropriately. Contaminated surfaces should be washed immediately with warm soapy water.

2. Health and Safety.

Wear nitrile or similar gloves. Avoid contact with skin. Wear suitable eye protection. Full health and safety data sheet is available upon request.

3. BS 6576.

In all cases the new damp proof course should, as far as practically possible, be installed in accordance with the British Standard Code of Practice for the "Code of practice for diagnosis of rising damp in walls of buildings and installation of chemical damp-proof courses" BS 6576.

4. Caution.

Dryzone can sometimes spread through wet plaster. Dryzone has not been designed for surface application and should not be used for this purpose. Some white surface stain may occur around the injection site. Should this occur it will brush off when dry.



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Dryzone Renovation Plasters

Dryzone Damp-Resistant Plaster is a modern formulation of breathable damp and salt resistant plaster that can be applied with traditional plastering techniques. Unlike the sand and cement renders that are often used, Dryzone Renovation Plasters are non-destructive to the underlying masonry, do not require gauging and present a warm surface.

For older buildings, **Dryzone Hi-Lime Renovation Plaster** is also available. The plaster blend which contains a high proportion of natural hydraulic lime and calcite is highly breathable, quick drying and suitable for heritage applications.



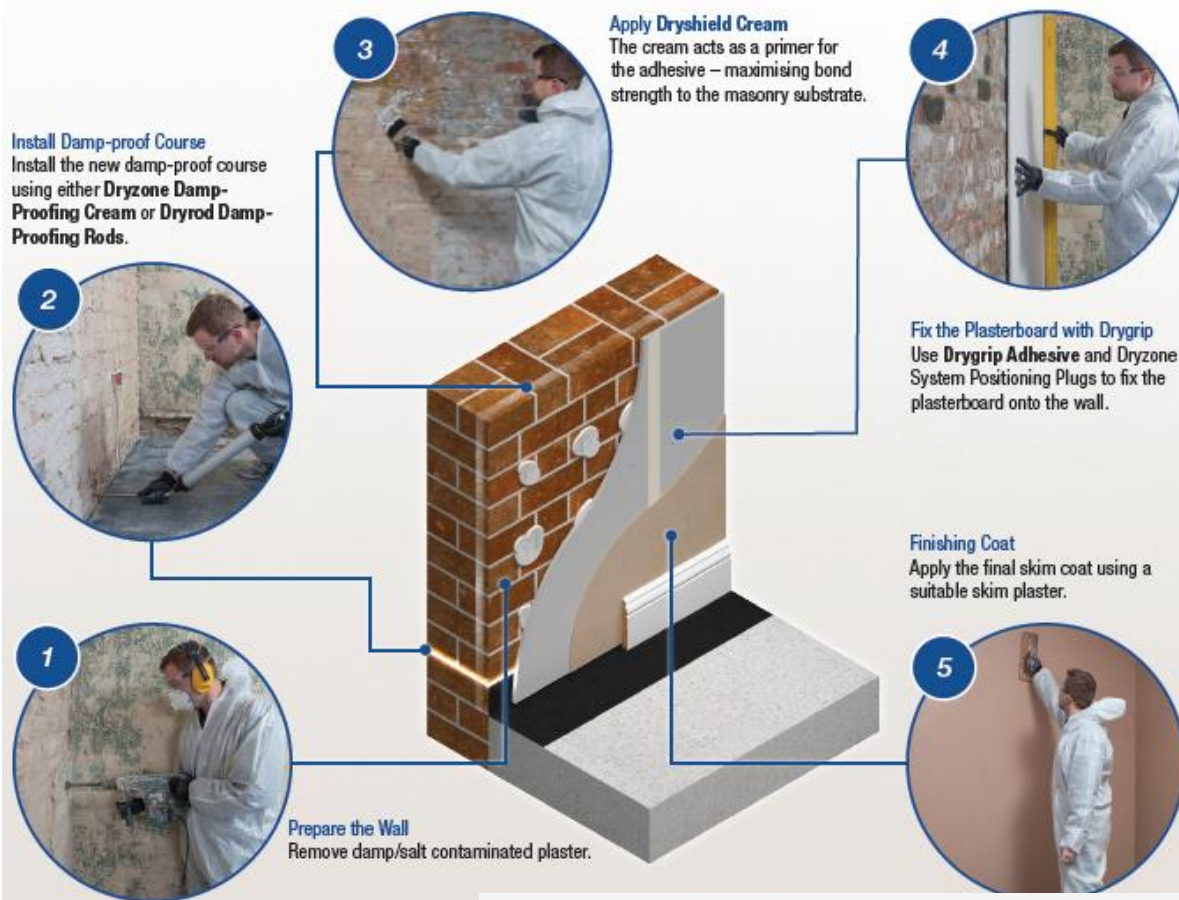
Replaster (continued)

Dryzone Express Replastering System

This specification utilises plasterboard, which is adhered to the wall using **Drygrip Adhesive** in conjunction with **Dryshield Cream** which inhibits salt growth. This system provides the speed and convenience advantages of a traditional dot and dab plasterboard application and also provides a salt and damp-proof interior wall surface.

It is possible to complete the replastering process from start to finish within 24 hours, making this specification ideal for situations where occupants wish to re-occupy the room as soon as possible.

The system is quicker and consequently less expensive to install per m2 than traditional "wet" plaster systems.



Finish the Job

For extra peace of mind, it is recommended to use **Dryzone Mould-Resistant Emulsion Paint**; an excellent, premium quality, low odour mould-resistant coating guaranteed to protect against unsightly and unhygienic black mould for at least 5 years, even when there is persistent condensation.



FAST • CLEAN • EFFECTIVE



High Performance treatments for
rising damp
No fuss , No Mess , No Stress

Technical Advice & Guarantees

Call Jim on 07792 472270 for details of guarantees
available on damp proofing installations or should you have
any further queries

Precautions

Read instructions and health and safety data sheet
(available upon request) before use.



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Certificate 97/3363



Certificate PB 5.1/08-358/1



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