



Damp Proofing & Replastering Systems



TRI-GEL

A cost effective and guaranteed method of treating rising damp in brick, stone or block walls. Tri-Gel is a water based and water soluble thixotropic gel which diffuses naturally into damp substrates and reacts to form a water repellent silicone resin network. This network is permeable to water vapour which means the walls can “breathe” and dry out naturally. Injected using a cartridge gun or hand operated compression pump, Tri-Gel eliminates the need for electric pumps on site.

Properties:

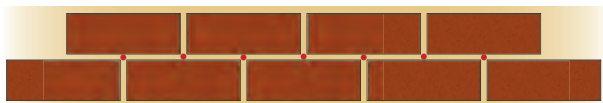
- BBA certified rising damp treatment
- Fast, clean application
- Ready to use, water based gel
- No need for electric pump on site
- Cartridge gun or compression pump application
- Guaranteed effective



Damp Proofing Systems:

Installation:

Tri-Gel is injected into 12mm diameter holes, drilled horizontally into the chosen mortar bed at 100 – 120mm centres or at the perp joint, mortar bed junction (brickwork). See below:



Holes should be drilled to within 20 – 40 mm of the far face of the wall being treated. Treatment can be carried out from one or both sides of the wall as appropriate and convenient. Cavity walls would normally be treated from both sides. The holes should be filled to within 10 – 20 mm of the front face of the wall and capped with a plug of sand and cement mortar incorporating Trimix 1 or with a DPC wall plug. Spillages should be washed away with water before they dry.

Usage Rates:

Wall Thickness	Litres/5m	Litres/10m
112mm (4½")	0.5	1.0
225mm (9")	1.0	2.0
340mm (13½")	1.5	3.0
460mm (18")	2.0	4.0



Specification:

In accordance with NBS Specifications 'C45 Damp Proof Course Renewal/Insertion 30 Chemical Injection DPC System' and 'C45 Damp Proof Course Renewal/Inspection 220 Chemical Injection DPC System'.



Availability:

Direct from Triton in 1 litre cartridges (separate nozzle and application gun required) or 5 litre tubs.

TRI-CREAM

A unique silicone emulsion cream for injection into brickwork etc. for the control of rising dampness. Tri-Cream can be used in all types of masonry without the use of high pressure equipment. The cream is delivered by hand pressure from a simple displacement pump and injector lance into a series of holes drilled into the mortar course. Migrating rapidly into the masonry pores, the injection cream reverts to a liquid phase and polysiloxanes are formed in situ.

Properties:

- Fast, clean installation
- No high pressure injection pump required
- Virtually odourless, low hazard
- Precise dosing
- No pump cleaning required between jobs

Installation:

Tri-Cream is injected into 12mm diameter holes drilled horizontally in the mortar bed at centres no greater than 120mm. The depth of hole is dependant upon wall thickness – refer to product data sheet. Each hole should be back filled fully with Tri-Cream to within 1cm of the surface. When treating cavity walls from one side, make certain that the holes in each leaf are filled.

Usage Rates:

Wall Thickness	Litres/5m	Litres/10m
112mm (4½")	0.5	1.0
225mm (9")	1.0	2.0
340mm (13½")	1.5	3.0
460mm (18")	2.0	4.0

Specification:

In accordance with NBS Specifications 'C45 Damp Proof Course Renewal/Insertion 30 Chemical Injection DPC System' and 'C45 Damp Proof Course Renewal/Inspection 220 Chemical Injection DPC System'.



Availability:

Direct from Triton in 5 litre tubs.

TRIJECT RAPID

A unique water based DPC system which uses novel surfactant technology to match the rapid penetration levels of solvent based systems. Designed to be injected into walls affected by rising damp, Triject Rapid forms a continuous barrier to the passage of rising moisture by forming a water repellent Silicone resin network within the capillaries of the substrate. The special formulation allows for faster injection into most substrates, even brick, when compared to traditional water based systems. The Silicone resin network is permeable to water vapour which means that the walls can “breathe” and dry out naturally.

Properties:

- Rapid injection
- Water based
- Enhanced spread within substrate
- Low odour
- Dilution stability
- Reduced risk of staining
- Non-flammable

Composition:

Triject Rapid is supplied in concentrate form. The active ingredient is Potassium Methyl Siliconate.

Installation:

One volume of Triject Rapid should be diluted with nine volumes of water. Each injection hole should be pressure injected with diluted Triject Rapid using pressures between 20 and 50 p.s.i (150 – 300 Kpa) until fluid is seen to reach the surface. See table for usage rates and further information.

Specification:

In accordance with NBS Specifications ‘C45 Damp Proof Course Renewal/Insertion 30 Chemical Injection DPC System’ and ‘C45 Damp Proof Course Renewal/Inspection 220 Chemical Injection DPC System’.



Availability:

Direct from Triton in 2.5 and 25 litre containers.

TRIJECT 2

An organic solvent DPC liquid designed for injection into walls affected by rising damp. Following injection into pre-drilled holes in either bricks or mortar joints, Triject 2 reacts with water already present to form a permanent water repellent coating within the capillaries of the masonry.

Properties:

- Organic solvent DPC system
- BBA certified product
- Supplied ready to use
- Highly effective

Composition:

Triject 2 is supplied ready to use and contains 4.0% w/w active silicone resin. The resin is dissolved in a hydrocarbon solvent of the white spirit type.

Installation:

Each injection hole should be pressure injected using a pressure of around 100 p.s.i (700 Kpa) until fluid is seen to reach the wall surface. See table for usage rates and further information.

Specification:

In accordance with NBS Specifications ‘C45 Damp Proof Course Renewal/Insertion 30 Chemical Injection DPC System’ and ‘C45 Damp Proof Course Renewal/Inspection 220 Chemical Injection DPC System’.



Availability:

Direct from Triton in 25 litre containers.



TRIJECT 3

A water based DPC system designed to be injected into walls affected by rising damp. After injection into either the bricks or the mortar joints, Triject 3 reacts with Carbon Dioxide to form a permanent water repellent coating within the capillaries of the masonry.

Properties:

- Water based system
- BBA certified product
- Non flammable, odourless

Composition:

Triject 3 is supplied in concentrate form. The active ingredient is Potassium Methyl Silicate.

Installation:

One volume of Triject 3 should be diluted with six volumes of water to give 5% concentration. Each injection hole should be pressure injected using a pressure of 20 to 50 p.s.i (150 – 300 Kpa) until fluid is seen to reach the wall surface. See table for usage rates and further information.

Specification:

In accordance with NBS Specifications 'C45 Damp Proof Course Renewal/Insertion 30 Chemical Injection DPC System' and 'C45 Damp Proof Course Renewal/Inspection 220 Chemical Injection DPC System'.



Availability:

Direct from Triton in 3.6 and 25 litre containers.

Usage Rates for Triject Rapid, Triject 2 and Triject 3

Wall Thickness	Consumption litre/linear metre
112mm (4½")	0.5
225mm (9")	1.0
340mm (13½")	1.5
460mm (18")	2.0

Note:

Allow 10-15% increase in consumption for constructions such as random stone walls or rubble in-fill where fluid loss may occur.

Installation of all Triton's chemical damp proof courses should, wherever possible, follow the guidelines laid down in BS6576:2005 "Code of Practice for diagnosis of rising damp in walls of buildings and installation of chemical damp-proof courses" and the BWPDA Code of Practice: "The Installation of Remedial Damp-Proof Courses in Masonry Walls".

TRITON RENOVATING PLASTER

Triton Renovating Plaster is a lightweight, cementitious plaster which has been developed to control dampness passing through plastered walls of old properties.

Properties:

- For plastering most traditional background materials during renovations
- Particularly suitable following the installation of a new damp proof course

Composition:

Triton Renovating Plaster is designed to have similar properties to a 1:1:6 cement:lime:sand plastering mortar but with Perlite lightweight aggregate replacing the sand. Man-made fibres are incorporated into the mix to control shrinkage and improve flexural strength.

Installation:

Once the old plaster has been removed and the DPC installed, Triton Renovating Plaster is applied before the finishing coat to hold back residual moisture and salts. To be used in accordance with recommendations in BS 5492. Triton Renovating Plaster is compatible with most building materials. The waterproofing additive and lime content minimises efflorescence and rusting of metal lathing and conduits, at the same time controlling pattern staining and mould growth.

Availability:

Direct from Triton in 25kg packs.



TRITON INJECTION MORTAR (T.I.M)

A one component injection mortar designed to stop rising damp in brickwork, blockwork, random rubble filled walls and all types of masonry. T.I.M should be injected into pre-drilled holes using a hand caulking gun.

Properties:

- Prevents rising damp in walls
- Especially suitable for thick or random rubble filled walls
- Odourless
- Gives off no toxic vapours

Composition:

Triton Injection Mortar is based on Ordinary Portland Cement, selected fine quartz aggregates and active waterproofing chemicals. It activates due to a chemical reaction between moisture in the structures and waterproofing chemicals in the mortar which forms a crystalline growth that blocks the capillaries, pores and fine cracks in the mortar joints.

Preparation/Installation:

Holes should be drilled using 19 – 22 mm drill bits at overall spacings of 110mm and at an angle of depression of about 30°, finishing in a mortar bed at the level of the proposed DPC. In solid walls up to 460mm thick drilling from one side to the thickness of the wall (and at the 30° angle) should result in a hole terminating 50mm or so from the far side. It may occasionally be advantageous to drill from both sides ie random stonework with rubble infill or thick walls. Drilling should stop just over half way through the wall, the holes being at staggered centres of 110mm. Prior to application, all holes should be flushed out with water to remove any dust. T.I.M should always be injected into damp holes.

In walls less than 120mm thick, rather than drill holes, the mortar bed should be raked out at the desired level to between one third and one half its depth. After flushing with water, T.I.M should be applied into the joint by trowel.

Mix T.I.M at the ratio of two to three parts water by five parts powder by volume. Add the water to the powder. Mix thoroughly until a smooth cream is achieved, using a mechanical whisk if possible. Do not mix more mortar than can be used in 20 minutes.

Using a hand caulking gun, insert the nozzle into the holes to the full depth and backfill slowly, stopping approximately 50mm from the top of each hole. Top up to this level if necessary. Holes should then be plugged with 3:1 washed sharp sand:cement using Trimix 1 Render Additive.

Replastering:

Replastering using a salt retardant render additive such as Trimix 1 is essential if hygroscopic salts and residual moisture are to be successfully held back.

Specification:

In accordance with NBS Specifications 'C45 Damp Proof Course Renewal/Insertion 30 Chemical Injection DPC System' and 'C45 Damp Proof Course Renewal/Inspection 220 Chemical Injection DPC System'.



Availability:

Direct from Triton in 25kg lined paper sacks.

Usage Rates for Triton Injection Mortar:

Wall Thickness	Consumption kg/linear metre
112mm (4½")	0.6 kg
225mm (9")	1.1 kg
340mm (13½")	1.8 kg
460mm (18")	2.4 kg

Note:

Allow 10-15% increase in consumption for constructions such as random stone walls or rubble in-fill where mortar loss may occur.

HEALTH AND SAFETY

Please refer to www.triton-chemicals.com or contact our technical department on 020 8310 3929 for copies of Health and Safety and COSHH information for all our products.

DISCLAIMER

The information contained in this leaflet is given in good faith and is based upon knowledge and experience of the materials used. However, since the application of the products is beyond the control of Triton Chemical Manufacturing Company, the Company cannot accept responsibility for any loss or damage resulting from the use of the products outside the scope of the intended use and precautions set out in this leaflet and accompanying Material Safety Data Sheets.

Associated Products:

TRIMIX 1

A water and salt resistant additive for cement mortars which is designed to improve the workability of the mix and, after curing, imparts water repellency and salt resistance. Trimix 1 also reduces the amount of water required to provide a workable mix and hence produces a more dense render. Trimix 1 is suitable for use with mortars and renders for internal and external use but is particularly recommended for use in internal cement rendering (replastering) of walls which have received a damp proof course.

Properties:

- BBA certified product
- Improves workability of mix
- Delivers water and salt resistance to mix
- Suitable for internal and external use

Composition:

Trimix 1 is an alkali metal soap of aliphatic fatty acids dissolved in water. The concentrate is mildly alkaline (about pH9).

Installation:

One litre of Trimix 1 should be diluted with 25 litres of water. The diluted Trimix should then be used as gauging water without further dilution. In replastering internal walls affected by rising damp, the recommended specification is that Trimix 1 should be added to the first (10mm) coat of cement mortar only. This should be followed by a second coat without the addition of Trimix 1 which should be applied after the first coat has set but before it has dried. The finishing coat should be a porous lightweight plaster skim applied after the cement render coats are fully cured.

Specification:

In accordance with NBS Specification 'J10 Cementitious Mortar Tanking/Damp Proofing 120 Cement: Sand Mortar with Proprietary Waterproof Admixture'



Availability:

Direct from Triton in 5 and 25 litre containers.

TRI-REND

A waterproofing, salt inhibiting and plasticizing additive for sand and cement renders and mortars. Tri-Rend improves workability to the mix and, after curing, imparts water repellency and salt resistance. Tri-Rend is recommended for use in mortars used for internal cement rendering (replastering) of walls affected by rising dampness.

Properties:

- Improves workability of mix
- Suitable for internal use
- Delivers water and salt resistance to mix

Composition:

Tri-Rend is an alkali metal soap of aliphatic fatty acids dissolved in water. The concentrate is alkaline (about pH11).

Installation:

One litre of Tri-Rend should be diluted with water to make 40 litres. The diluted Tri-Rend should then be used as gauging water without further dilution. In replastering internal walls affected by rising damp, the recommended specification is for Tri-Rend to be added to the first (10mm) coat of cement mortar only. This should be followed by a second coat without the addition of Tri-Rend which should be applied after the first coat has set but before it has dried. The finishing coat should be a porous lightweight plaster skim applied after the cement render coats are fully cured.

Specification:

In accordance with NBS Specification 'J10 Cementitious Mortar Tanking/Damp Proofing 120 Cement: Sand Mortar with Proprietary Waterproof Admixture'



Availability:

Direct from Triton in 25 litre containers.

Also available from Triton

Structural Waterproofing Systems, Protective Coatings, Structural Repair, Timber Preservation and Repair, Green Roof Systems, Condensation Control.



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