

ATECH PLUS

Waterproofing Solutions

UFLOOR DPC

Silane-Siloxane DPC Injection System

Description

Ufloor DPC is a low viscosity silane-siloxane injection system for replacement DPC, Which prevents rising damp by capillary attraction in masonry, brickwork and stonework structures. Ufloor DPC penetrates deeply into porous substrates to allow for a bonded hydrophobic lining to the pores. This treatment significantly reduces absorption of the water and waterborne salts. The solution does not produce any discoloration of the substrate and has excellent resistance to weathering.

Characteristics

- Provides an invisible water repellent surface.
- Allows the wall to breath.
- Reduces efflorescence and surface salts.
- Solvent based will not dilute
- Acts as a replacement DPC

General Data

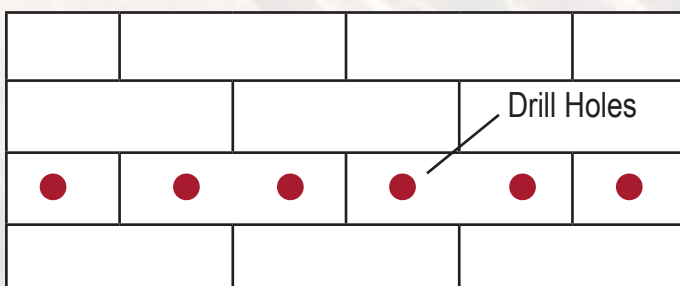
Appearance	Clear Liquid
Viscosity	6 - 10cps
Solids	6% Active
Flash Point	65°C
Shelf Life	Up to 1 year if stored in unopened containers
Dry Time	
Tack Free	60 minutes
Hard Dry	180 minutes
Application Temperature	5°C – 35°C

Choosing the DPC level

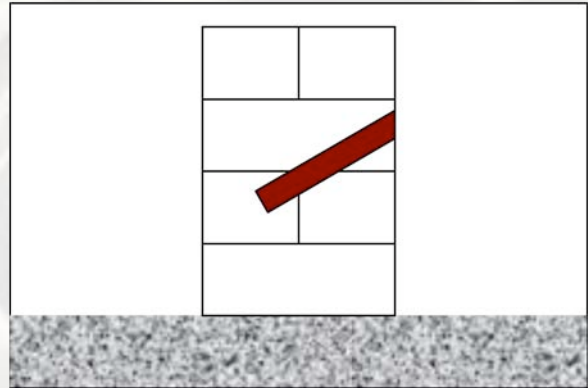
The horizontal damp-proof courses should be chosen so it compiles, as far as is predicable, with the recommendations in BS Code of Practice 102:1973 or the equivalent in other countries (Protection of Buildings against Water from the Ground). In the case of suspended timber floors not independently supported on steeper walls with an effective damp-proof course, position the damp-proof course below the timber joints or wall plate and above the exterior ground level.

Complementary vertical damp-proof courses are necessary to isolate treated walls from the effects of rising damp in adjoining walls, as for example, in semi-detached, terraced houses and basements

Drilling Pattern



Drilling Angle



In above ground structures without basements position the DPC approx. 150mm (6 in.) above the outside ground level but below the internal floor level. To prevent ground moisture from penetrating the wall below the DPC level, Alternatively the soil can be excavated so that the external surface can be treated. This should be carried out if there is ground water pressure. After the surface has been treated, apply Ufloor DPC Injection System from the inside just above the basement floor level.

Selection of drilling point

Once the DPC level has been determined, choose the starting point for the drilling operation. This will vary according to thickness of walls and the type of building materials. Normally the holes are drilled at a 30o angle so as to penetrate the centre of the wall so as to become the damp-proof course.

In 225 mm (9 in.) and 340 mm (13½ in.) thick brick walls, start the drilling one mortar bed joint higher than the chosen DPC level at an angle of approx.30°.

For walls constructed of materials other than brick or thicker in depth than 340 mm (13½ in.) vary the angle of drilling and the height above the selected DPC to ensure the DPC mortar bed joint is penetrated as near to the centre as possible. Walls that are only half a brick in thickness 115 mm (4½ in.) are to be drilled with extreme care

Drilling specification

Drilling is normally made from one side only. Drilling should stop 50 mm (2 in.) from the other side of the wall. Under certain circumstances it may be advantageous to drill from both sides e.g. in random stonework with rubble infill.

Where the weakness of a structure will not allow drilling at 112 mm (4½ in.) centres, one side can be drilled at 225 mm (9 in.) centres, injected then filled with mortar and allowed to set before the same process is carried out from the other side of the wall. In walls greater than 600 mm (24 in.) in depth, TAM International should be referred to for a specification. The size of the drilled holes should be 13 mm or 16mm in diameter.

In one-sided drilling, drill the holes at 112 mm (4½ in.) intervals. When drilling from both sides, holes should be 225 mm (8 in.) apart on each side but staggered so that the wall is actually penetrated every 112 mm.

A TECH PLUS

Waterproofing Solutions

Application Techniques

There are 3 main ways of installation

1. Gravity feeding is very common and is carried out using angular cartridges. The holes are drilled and a cartridge is inserted into the hole and the Ufloor DPC is filled to the top of the cartridges. These are left to slowly diffuse into the substraigh and are topped up as required until the substraigh is saturated.
2. Low-pressure injection is carried out using a hand sprayer specially modified for use. The Ufloor DPC is forced into the hole and is pressurised into the substraigh until it is saturated.
3. High-pressure injection enables multiple holes to be treated at once. Utilising a manifold system several holes can be injected at once.

Consumption

Guide only	
225mm (9')	0.40 litre per hole
340mm (13.5')	0.60 litre per hole
450mm (18')	0.85 litre per hole

The above is based on average porosity increase by 30% for more porous and decrease by 20% for less porous

Packaging

Ufloor DPC comes in 20 litre and 200 litre drums



Atech Solutions Pty Ltd

Unit 10, 632-642 Clayton Road, Clayton South 3169 Australia
PO Box 3215 Mentone East VIC 3194 Australia
Tel: +61 9017 6794 Fax: +61 3 8640 0837
www.atechproducts.com.au

Field Support

Field support where provided, does not constitute supervisory responsibility. Suggestions made by ATECH either verbally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they and not ATECH are responsible for carrying out procedures appropriate to a specific application.

Customer Responsibility

The technical information and application advice given in this publication is based on the best information available at time of print. As the information herein is of a general nature, no assumption can be made as to the products suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by Commonwealth or State Legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use.

Safety Precautions

Polyurethane products may cause allergic reactions through skin contact, goggles, protective gloves and overalls must be worn. Ensure that there is adequate ventilation and avoid breathing the vapour.

Exclusion Clause

1. The information contained in this data sheet is based on many years experience and is correct to the best of our knowledge. ATECH will be under no liability whatsoever whether in:
 - a) Contract or tort (including, without limitation, negligence)
 - b) Breach of statute
 - c) Any other legal or equitable obligation other than the quality of the product at the time of despatch.
2. Any queries about specification use or application should be directed to our technical service department immediately.
3. This exclusion clause does not operate to exclude any warranty that by law may not be excluded.

ATECH PLUS

Waterproofing Solutions

UFLOOR Injection Packers



Plastic Packers can be supplied with either a hook on connector or a grease nipple connection.

Both types incorporate a non return valve.



A typical application using Plastic Packers.

Drill Bit Required	16mm
Ring Spanner	19mm

Push on connectors are available separately
Hook on connectors are available separately

Drill Bits.

When drilling large numbers of holes or drilling into hard substrates, drill bits tend to blunt, it is the onus of the operator to ensure that the drill bit is serviceable and able to drill the required hole size.



Atech Solutions Pty Ltd

Unit 10, 632-642 Clayton Road, Clayton South 3169 Australia
PO Box 3215 Mentone East VIC 3194 Australia
Tel: +61 9017 6794 Fax: +61 3 8640 0837
www.atechproducts.com.au