



TECHNICAL DATA SHEET

AQUEOUS DPC INJECTION FLUID

USE

For use in injecting a chemical damp proof course in masonry.

PROPERTIES

Cost effective
Water-based
Non-flammable
Spillage may cause staining

DESCRIPTION

AQUEOUS DPC is supplied as a concentrate of Potassium methyl silicate which when diluted with water forms a water repellent damp-proof course. It is formulated for low-pressure injection into mortar beds.

Rising dampness is the result of water ingress by ground water via the base of a wall. The water rises up through the masonry which acts rather like a 'wick'. The major paths through which the water rises are the mortar beds and it is therefore essential that the mortar beds are fully treated with AQUEOUS DPC even if the primary site for injection is, for example, the brick.

METHOD

Remove porous or damaged external plinths and cut any external rendering back to above the height of the proposed line for the insertion of the damp-proof course. Lower external ground levels where possible to internal floor level or below. Ensure that any plants, paths and glass are protected from spillage of the dpc fluid. Any spillage must be wiped up immediately.

Remove any timber skirting. If sound they may be saved and reused following appropriate treatment with a wood preserver. Remove all plasterwork up to a height of at least 1 metre or to 300mm above the last evidence of dampness/salt contamination (whichever is the higher). Remove all timber fixing grounds in the damp areas and up to a height at least that of the line of re-plastering. Rake out all mortar beds to a depth of 10-15mm ready for re-plastering and brush any loose dust from the surface of the wall to ensure a good key for the new plasterwork.

Drilling

Select the line for the injection of the damp-proof course. This must be not less than 150mm above external ground level. Internally it should be as close as possible to internal floor levels for solid floors. Where timber suspended floor are encountered the insertion should be below the joists/wall plates if possible. Where ground levels change or walls abut the main area for treatment the dpc line should be changed appropriately and vertical dpc's installed as appropriate. Where external ground levels are higher than internal floor levels these should be lowered. Alternatively the use of a tanking system may be employed, the tanking overlapping the injected dpc.

Mixing

Ensure injection pump is thoroughly cleaned out prior to use. Always ensure Ultra-Flow 2000 is added to the water. Dilute 1 part AQUEOUS DPC with 11.5 parts deionised water by volume. 2 litres of concentrate makes 25 litres of ready to use product when mixed with water as above.

Treating Rising Damp in Brickwork: Drill two 10-14mm holes directly into mortar beds or at an angle down through the brick to terminate in a mortar bed. The spacing should not exceed 170mm between holes.

For walls of 115mm drill from 1 side only For walls of 225mm drill from each side or drill from one side about 75mm, inject and then drill a further 100mm and inject again.

For walls in excess of 225mm drill in a stepped manner as above but preferably from both sides
For cavity walls treat each leaf as a separate wall.

Where walls are considered to be very damp then it may be prudent to drill two rows of holes.
Holes may be angled downwards if deemed necessary.

Injection pressure should not exceed 50psi. This pressure should be varied to suit site conditions. Inject until the fluid saturates the mortar beds.

Direct Mortar Bed Drilling: A similar procedure should be followed as above with reference to the wall thickness. However, use lower pressures between 5 – 50psi. Ensure dpc fluid seeps into the whole of the mortar bed.

Stone walls: Follow the procedures for injection into the mortar, as it is likely that much of the stone is very dense. The pattern of holes may need to be varied to accommodate variation in wall structure and the components. E.g. Courses above and below the stones may have to be injected to give good saturation. Rubble filled walls will need additional fluid injected into the centre to saturate the rubble.

Finishing Plug the external dpc holes with a strong cement/sand mortar or plastic plugs. Where external render has been cut short finish in a bell-mouth casting and bituminise the base area between the bell-mouth and the ground. Internally, leave walls as long as possible before re-plastering.

CONTENTS

Potassium methyl siliconate and water

COVERAGE

This depends on the type and thickness of the masonry being injected however a useful 'rule of thumb' is 2.5 litres of fluid to 1 metre of 230mm (9 inch) thick wall.

SAFETY

Read the product label for full safety data.

Alkaline - avoid contact with skin, handle wearing protective clothing, gloves and eye protection (Wash skin with soap and water immediately flush eyes with cold water, seek medical help).

PACKAGING

Packed in 2 litre containers.

STORAGE

Tolerant to a wide range of temperatures, unharmed by freezing.

GENERAL

Spillages should be washed immediately with copious amounts of clean water to prevent whitish staining. Dried stains should be cleaned with diluted white vinegar.

Following re-plastering all decorations should be regarded as 'temporary' for 9-12 months. It is strongly recommended that for this period a non-vinyl based emulsion paint is used. Vinyl based and woodchip type wallpapers should not be used. During and following this period a good air circulation should be maintained around all damp-proofed re-plastered walls.