

WYKAMIT PI

SOLVENT BASED HIGH-PRESSURE CHEMICAL DAMP PROOF COURSE SYSTEM

Wykamit PI is an organic solvent-based Silicone Resin solution designed for the creation of chemical damp-proof courses in walls above ground level. Amorphous substrates such as solid chalk, (unfired) clay etc. may not be suitable for chemical damp proofing treatments. Some walls filled with earth are similarly unsuitable.

All treatments should be in accordance with BS 6576: 1985 (Code of Practice for the installation of chemical damp-proof courses). In particular, the inserted DPC should be below the level of a timber floor unless prevented by structural considerations. Such floors should be inspected due to the risk of fungal decay.

Note:

Wykamit PI is designed to control capillary moisture movement only. Walls heavily impregnated with microscopic salts or suffering from the effects of penetrating or condensation dampness may require further measures* (see 'reinstatement') to create a dry internal environment.

SITE WORK

Preparatory Works

Check and overhaul rainwater goods and soakways to ensure that they are in good order and clean, repair or install drains to carry away surface water.

If the internal floor level is at or below external ground level, form trenches along the external face of the walls to at least 150mm (6") below the proposed DPC level.

Do not excavate below footing level or affect the structural stability of the wall. If this approach is not possible the DPC can be installed as normal but the internal walls will need 'tanking' (see our Re-plastering Specification Data Sheets).

Carry out any repairs or re-pointing and leave to cure (a minimum of 4-6 weeks) before installing the DPC.

Remove skirtings, fixings and plaster to expose the line of the proposed DPC. Plaster which may be affected by hygroscopic salts should be removed to not less than 300mm (12") above the last visible signs of dampness or 1m above the proposed line of the DPC, whichever is the higher. Check the removed skirtings and, if required, put sound items to one side for reinstatement. Inspect other associated joinery and flooring timbers and if fungal decay is located take the appropriate remedial measures (see Wykamol Data Sheets).

Ensure wall cavities are clear of debris. Remove external render to expose the line of the proposed DPC. If it is suspected that the render is contaminated by hygroscopic salts and/or is physically unsound, it should be removed to an appropriate height (see above).

In the case of semi-detached/terraced houses etc. inform occupants of adjoining properties before treatments commence. The drilling of party walls in particular may cause disturbance to decorations and/or ornaments. Also, **Wykamit PI** may give off volatile vapours and it is essential that no fires or any other naked flames are present during and for up to two days after injection. Full ventilation must be provided during this time to both the treated and adjoining areas.

Cavity fill materials such as urea formaldehyde, polystyrene and mineral wool are not normally affected by Wykamit PI but may retain the solvent odour. Cavity walls filled with polystyrene must not be treated. Wykamit PI may also damage existing bitumen DPCs and certain types of floor tiles, adhesives and polystyrene laid as a floor insulant.

Installation – General

Select the course to be treated. This should be at least 150mm (6") above external ground level. Where suspended timbers are present, the DPC should be formed below joist/wall plate level wherever possible. In the case of solid floors, the DPC should be inserted as close to the floor as possible and where necessary, linked to the floor damp proof membrane by the

application of a suitable water-proof compound (see Re-Plastering Specification Sheet).

Vertical DPCs should be installed to connect staggered DPC levels and to isolate untreated wall areas, e.g. adjoining properties, fireplace and not treated due to lack of access and abutting garden walls. The vertical DPC should extend to at least 1m above DPC level.

If very high levels of hygroscopic ground salts (chlorides, nitrates) are present in the property, the Wykamol Technical Department should be consulted regarding suitable methods of treatment and reinstatement.

The spillage of **Wykamit PI** may present a contact hazard to unprotected persons. Soak up immediately or rinse away with strong detergent (as appropriate). Do not allow **Wykamit PI** to come into contact with glass.

All treatments should be in accordance with BS6567 : 1985 Code of Practice for the installation of chemical damp-proof courses. Special precautions should be taken to isolate structural flooring timbers which will remain below the level of the injected DPC.

INSTALLATION – PRESSURE INJECTION

Brickwork: Drill the selected course at spacings 120-150mm apart (2 per stretcher, 1 per header) to an average depth of 75mm. The diameter of the holes should be between 10-15mm dependent on the injector rods used.

Single skin (115mm) walls are drilled from one side (avoid percussion drills). Solid walls (230mm or more) should, where possible, be treated from both sides. If access is restricted injection can be carried out from one side. The first brick is treated normally. A hole is then drilled through into the next brick and injection undertaken using the time taken for successful treatment of the first brick as a guideline (see illustrations). Walls of greater thickness may be similarly treated in an incremental manner.

Treatment may be carried out into the mortar course if required using a similar drilling pattern (maximum 100mm spacings). The course selected should allow reasonable pressure retention during injection and a lower pressure and longer injection times used to achieve good continuity of treatment (see 'Injection' below). A combination of mortar joints and brickwork can be treated by using the brick drilling pattern above but drilling at an angle (ca. 45°) to end in a mortar joint at the level of the proposed DPC (in such cases, for walls of greater than 340mm depth, special drilling patterns may be required – consult the Technical Department for further advice).

Stonework: Treatment of solid stonework should be carried out in a similar manner to 'Brickwork' with adjustments being made to the drilling pattern to take account of the construction.

Rubble Infill Walls: Both solid external skins should be treated in a similar manner to 'Brickwork'. One set of drill holes can then be drilled through into the centre of the wall and the rubble infill treated.

Injection: Injection is carried out by inserting injector rods into the pre-drilled holes and forming a seal. In brick/stone **Wykamit PI** is injected at an approximate pressure of 500-700 kPa (70-100 lbs/in) until a continuous band of treatment is visible on the face of the wall. If treatment is being carried out into the mortar joints the pressure should be reduced to approximately 200-350 kPa (30-50 lbs/in).

REINSTATEMENT

Re-Plastering: Ideally, re-plastering should be deferred as long as possible to encourage drying but a minimum of 14 days between treatments and re-plastering should be allowed. Re-plastering work must be carried out in accordance with the Wykamol Re-Plastering Specification (see separate Data Sheets). All replaced skirtings etc. should be either pre-treated or treated on site with a suitable preservative, e.g. Microtech Dual Purpose 7X, Wykabor 10.

Drying Time/Redecoration: After the insertion of a DPC, the residual water in the wall must evaporate before normal dry conditions are achieved. The time will vary according to the amount of water present and the thickness of the wall but one month per 25mm (1") thickness of wall is quoted as a guideline. (Assuming normal heating is used during winter months).

Redecoration should be regarded as being temporary until the wall has dried out. A single application of Lectros breathable paint is recommended. Do not apply heavier finishes or paper until the wall has dried.

External Works: Where appropriate, external renders should be applied in accordance with BS 5262: 1991 and terminate in a bell mouth just above the DPC level. External drill holes should be filled with a suitably coloured sand/cement mix or brick plugs.

Appearance	Colourless liquid (white-spirit odour)
Flammability	Flash point (label closed cup) 40°C
Pack Sizes	25 litre containers
Coverage	3-4 litres per meter run of 225mm solid brickwork (or pro-rata)
Curing	Usually within 2-7 days of installation, very low temperatures which slow down solvent evaporation will extend curing times
Shelf Life/Storage	Up to 2 years in original, tightly sealed containers. Store frost-free away from direct sunlight and other sources of heat or ignition. Part used containers should be decanted into smaller, dry containers to avoid air curing in-can.
Cleaning	Pumps and other equipment should be washed thoroughly before and after use with white spirit. Dispose of all washings safely.
Safety	Classified as 'harmful' (aspiration hazard) under the UK CHIP regulations, flammable*.

* Instructions for the safe use of **Wykamit PI** are given on the product label. More detailed information on safety is available in the **Wykamit PI** Material Safety Data Sheet.

Technical Information

The information contained in this data sheet is for professional preservation specialists and is compiled accordingly.

Further information and advice is freely available from the Wykamol Technical Department. For general guidance consult the HSE Guidance Note 'Remedial Timber Treatment in Buildings' (HSE Books, ISBN 0-11-885987-0)

The Company warrants this product to be of merchantable quality and fit to the purpose designed, providing that any instructions relating to use, handling and storage are duly observed. All transactions subject to our standard conditions of sale, copies available on request.



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