

ULTRACURE™

Damp proof-injection cream

SPECIAL PROPERTIES

- fast, clean installation
- no high-pressure injection pump required
- virtually odourless, low hazard
- precise dosing
- no pump cleaning required between jobs
- Approved by the British Board of Agrément

Ultracure™ is a unique silicone emulsion cream for injection into brickwork etc. for the control of rising dampness. **Ultracure™** can be used in all types of masonry without the use of high pressure equipment. The cream is delivered by hand pressure only from a simple displacement pump and injector lance into a series of holes drilled into the mortar course. From here it migrates rapidly into the masonry pores where the injection cream reverts to a liquid phase and polysiloxanes are formed in situ. During the curing period a low molecular-weight silane vapour is also produced giving excellent migration through the wall. Curing of the DPC starts immediately with the final cure taking 2 - 6 weeks depending on wall thickness.

Extensive field experience with this technology demonstrates that **Ultracure™** will perform as well as any conventional liquid injection system against rising damp.

Ultracure™ installation instructions

In all cases the damp proof course should, as far as is possible, be installed in accordance with the British Standard 'Code of Practice for Installation of Chemical Damp Proof Courses' BS 6576:2005. In particular, the inserted DPC should be below the level of timber floors unless prevented by structural considerations (in which case other measures may be required to isolate joists etc. from damp walls below the DPC). **Ultracure™** cream is designed to control rising damp but walls can remain damp after DPC installation where they are severely contaminated with hygroscopic salts. Special measures may be required to provide longterm control of dampness in such walls (consult the Wykamol Technical Department).

1.0 Preparation

Check and overhaul rainwater goods to ensure they are in good order and clean, repair or install drains to carry away surface water. If internal floors are below external ground level form trenches along the external face of the walls to at least 150 mm below the proposed DPC level (where foundation depth allows). If this approach is not feasible the DPC must be placed 150 mm above external ground level



and the internal walls tanked below the DPC to prevent lateral migration of moisture/salts (see Wykamol Re-Plastering specifications).

Remove skirtings, fixings and render/plaster to expose the line of the proposed DPC (mortar bed). Internal plaster which may be contaminated with hygroscopic salts should be 'cut-back' a minimum of 1 m above the DPC line or 300 mm above the highest signs of dampness/salts. Check flooring timbers for signs of fungal decay and recommend repair/replacement as appropriate. Ensure wall cavities are cleared of debris.

2.0 Drilling and Injection

Walls vary in thickness and type of construction so it is essential these factors are taken in to account before deciding on an appropriate drilling pattern. Older properties may consist of several different styles of construction and the specification of drilling and injection should be varied accordingly.

DPC height should always be at least 150 mm above external ground level. In the case of solid floors, insert the DPC as close to floor level as possible.

Vertical DPCs should be provided to connect horizontal DPCs where ground levels change and to isolate untreated wall areas (adjoining properties, garden walls etc.). In most cases solid brick walls may be drilled/injected from one side only (in accordance with the guidelines in the Table overleaf).

For cavity walls each leaf may be dealt with as a separate 115 mm thick wall (see below). Alternatively, if preferred, drill through the selected mortar course, across the cavity, then drill the outer leaf of brickwork to a depth of 90 - 100 mm and inject in one continuous process (the physical properties of Ultracure™ ensure the cream remains in contact with the surrounding mortar even when the mortar bed is drilled through in this way). Always ensure that the cavity is clear before treatment.

In random stone and rubble infill walls, as far as practically possible, follow the mortar course at the appropriate level. However, if the stone

is of a porous type, it may be possible to vary the drilling location (mortar/stone) as long as the mortar bed perpend is treated. In walls of greater than 350 mm thickness it is recommended that drilling is undertaken from both sides at a corresponding height. In the case of drill holes becoming blocked these should be re-drilled just prior to injection or a new hole drilled nearby to ensure that an adequate volume of **Ultracure™** is introduced.

2.1 Drill hole size, depth and location

Drill 12 mm diameter holes horizontally in the mortar bed at centres no greater than 120mm. The depth of hole required for various sizes of wall is shown in the table below. For walls of intermediate thickness the depth of holes should be pro rata. Where the masonry is irregular, ensure the horizontal drilling pattern targets the base of all perpend of the course selected.

Drill hole depth required for walls of various thickness:

Wall thickness	115 mm	230 mm	345 mm	460 mm
	(4.5")	(9")	(13.5")	(18")
Depth of hole	100 mm	210 mm	320 mm	430 mm

2.2 Ultracure™ injection

Fill the applicator unit with the **Ultracure™** cream (approx fill capacity 5.0 litres) and use the hand-pump to establish a positive pressure of approximately 1 bar (15 lb/in²). Insert the lance of the **Ultracure™** application gun into the full depth of the pre-drilled hole. Squeeze the gun trigger and back fill each hole fully with Ultracure™ to within one centimetre of the surface. When treating cavity walls from one side make certain that the holes in each leaf are filled.

Application rate*:

Wall thickness	115 mm	230 mm	345 mm	460 mm
Ultracure™ per 10m	0.9 lt	1.9 lt	2.9 lt	3.9 lt

* certain types of construction may result in higher retentions, e.g. up to twice the above figures in rubble filled walls. Some allowance should also be made for wastage (ca. 10%)

3.0 Finishing works

3.1 On external faces of walls drill holes can be re-pointed using a matched mortar or plugged with plastic caps of a suitable size and colour. On internal faces holes can be left open and plaster stopped short of the DPC (see below and Wykamol Replastering Specification Data Sheets).

3.2 Replastering

The removal and replacement of internal salt contaminated plaster is an important part of effective damp proofing works (salts left by rising damp are hygroscopic and can cause future staining independently of structural dampness). It is essential, therefore, to follow specific guidelines drawn-up for dealing with the particular challenges posed by damp/salt-affected surfaces. Please refer to our various Replastering

Specifications (e.g. Wykamol Renovating Plaster). It is advisable to leave walls injected with **Ultracure™** cream to dry for as long as possible, and for at least 14 days, before removing excess salts and commencing re-plastering.

Safety and the Environment

Ultracure™ is not classified as hazardous so is a very low-risk product from a handling point of view. Being a concentrated formulation **Ultracure™** is supplied in convenient packs which minimise waste. No

volatile organic compounds are used in the manufacture of **Ultracure™** so that hazards and smells associated with evaporating solvents are avoided.

Accidental spillage

Spilt material should be wiped up immediately and the wipes disposed of appropriately. Contaminated surfaces should be washed immediately with warm soapy water. If **Ultracure™** cream penetrates non-target surfaces (e.g. a patio slab) it will normally dry to a clear finish. However, if staining arises consult the Wykamol Technical Department for further advice. Handling **Ultracure™** is not classified as hazardous according to current labelling guidelines ('CHIP 3'). However, silicone resin formulations may cause mild irritation. Wear lightweight impervious gloves when handling. Wash splashes from skin and eyes immediately. Wash hands and exposed skin before meals and after use. Keep in original container, tightly closed, in a safe place.

Our full Health and Safety data sheet is available on request

Packaging/Storage

Ultracure™ is packed in 3.0 litre plastic pails, 1000ml and 380ml disposable cartridges. Other pack sizes may be available to order.

Store in cool, frost-free conditions (temporary exposure to slight frost in transit should not affect usage and stability). Use within 12 months.

Technical Support

The Wykamol Group are committed to excellence in product design and manufacture and the information provided in this data sheet is intended to guide professional contractors and specifiers in the appropriate use of **Ultracure™** cream to ensure a successful DPC installation. If any further advice is required please consult our Technical Department.



Agrément Certificate No 02/3961

Issue Date : January 2009



Wykamol Group

Unit 3 Boran Court, Network 65 Business Park, Hapton, Burnley. BB11 5TH

t: +44 (0)845 400 6666 f: +44 (0)845 400 3333

www.wykamol.com e: sales@wykamol.com