1) USE

The LSE chemical damp proof course is in accordance with the British Standard Code of Practice BS6576: 1985 and covered by British Board of Agrément Certificates No.s 88/2037 & 95/3157. The system is designed to combat dampness rising in the capillaries of brickwork or porous stonework in situations where:

A) There is no existing damp proof course.
B) An existing damp proof course is breaking down or otherwise ineffective.
C) The existing damp proof course is "bridged" by paths, solid floors, etc., and it is desirable to form a new damp proof course at a higher level.

The LSE damp proof course can also be injected into "dry" walls, as a precautionary measure, to guard against dampness rising in the future.

2) FUNCTION

The LSE system provides a damp proof course in walls chemically, at a pre-determined level, for the purposes of controlling existing rising dampness and future capillary rise above the level of the damp proof course.

3) METHOD AND APPLICATION

A) An aqueous based Siliconate fluid is injected which has the effect of reversing the meniscus in porous masonry, i.e. water can then no longer rise within the capillaries but is forced downwards, effectively creating a chemical damp proof course.

B) The process consists of drilling 10-16mm holes to a depth according to the thickness of the masonry, at pre-determined centres. Where walls are constructed of bricks, normally two holes are drilled into stretchers and one into headers. The holes may be drilled either horizontally or at an angle, the relevant factor being the point at which the holes terminate. Where specified, drilling may be carried out from both sides of the wall, but wall thicknesses of up to 450mm can be injected from one side only. Complementary vertical damp proof courses are injected, where necessary, to isolate treated walls from the effects of rising dampness in adjoining walls as, for example, in semi-detached or terraced properties with abutting walls.

C) The course to be injected is chosen so that the position of the horizontal damp proof course is at least 150mm above external ground level and, if there are suspended timber floors, should ideally be located below the timber joists and/or wall plates wherever possible. Where there are solid floors injection is carried out as close as possible to the solid floor surface, taking into consideration the external levels.

Cavity walls are normally injected from one side. Droppings within the cavity require removal.

Where we are injecting above high ground levels the walling beneath will continue to be subject to the lateral penetration of ground water. Please refer to our TANKING (below ground rendering) SPECIFICATION, TECHNICAL DATA LEAFLET No.5.

In solid or cavity walls of conventional construction in blockwork or stone the drilling and injection procedure is adjusted to accommodate variations in the density, porosity and structure as may be necessary. Also, in the case of thick walls to which access is available from one side only, staggered depth drilling and injection may be undertaken. However, in all cases the procedure chosen ensures a continuous unbroken band of impregnated material along the length of the wall.

D) The injection of the Siliconate solution is carried out under pressure (variable dependant upon the prevailing conditions). Nozzles fitted with pressure-tight seals are inserted into the drilled holes and injection is continued until saturation is achieved. Holes drilled into external wall surfaces will then be plugged with a cement and sand infill.

Please note that we reserve the right to alter our specification without prior notice and at our discretion, without lessening the design function, in the interests of progress and efficiency.

Our system has virtually no odour, no fire risk and there is NOT the potential health hazard so widely reported with spirit-based systems.

4) CLIENT'S RESPONSIBILITIES

A) Walls must be adequately bonded and stable.

B) Unrestricted access must be provided to one side of all walls scheduled for damp proof coursing, both sides where walls are in excess of 450mm thick. Unless otherwise stated our quotations do NOT include for the removal or subsequent replacement/refixing of skirtings or other obstructions to our proposed works, either internal or external. Such obstructions must be removed prior to our arrival on site.

C) Where party walls are involved the owner of the adjoining property must be informed as to the nature of the works to ensure that there are no objections. Our proposed damp proof coursing works should not cause disruption of any form within the adjoining property. However, removable items should be removed from the reverse side of party walls.

D) Any high ground levels must be lowered, wherever possible, to well below internal floor level prior to our arrival on site.

E) Existing solid floors that do not contain adequate damp proof membranes, or otherwise deteriorated floors should be replaced with new solid floors. The slab must be in place

Continued Overleaf
PRIOR to our works. An approved damp proof membrane must be incorporated, and dressed up to lap over our D.P.C. AFTER our works. The use of polythene membranes should be avoided, due to the difficulties of linking with a D.P.C. Two part epoxy membranes can be applied to the existing slab or finished screeding in certain situations and will be subject to our inspection.

F) An electricity supply (13 amp) should be available for our technicians to use, or in the case of building sites a 110V supply. If not we can supply a generator by prior arrangement, but extra charges may be incurred.

G) In order to obtain the full benefit of the damp proof course it is essential that ALL actual and potential sources of moisture ingress be rectified as soon as possible and that thereafter the property be regularly and properly maintained. Our damp proof course must not subsequently be bridged in any way by new paths, gardens, solid floors, etc. External renderings should be stopped short above the level of the damp proof course and terminated in a bell cast mould.

H) Fungal decay in timber is always related to high moisture content. Timbers bearing into damp walls must be re-supported on metal hangers or brick piers as necessary. Timbers adjacent to damp walls must be isolated with Fungicidal Joinery Lining, which we can supply upon request. We would be pleased to quote for any chemical treatment of timbers that may be necessary.

I) Walls that have been accumulating dampness for a number of years will not immediately dry out after the insertion of a damp proof course. The residual dampness present within the walling above the level of the damp proof course will take a considerable length of time to disperse. As a rule of thumb guide, in the British climate residual dampness disperses at an approximate rate of 25mm (1") thickness of wall per month, dependant upon temperature, humidity, rainfall, number of air changes and, of course, how damp the wall was prior to the insertion of our damp proof course; e.g. 230mm (9") wall = 9 to 12 months.

J) It is not the Company's responsibility to ensure that our recommendations are implemented.

5) REPLASTERING (NOT included in our Quotation for damp proof coursing.) PLEASE SEE OUR TECHNICAL DATA LEAFLET NO. 4

A) Rising dampness brings with it from the ground, salts (chlorides, nitrates etc.) that are hygroscopic; i.e. such salts have the ability of attracting and retaining airborne moisture, as does tables salts. Therfore it is essential that the salt-contaminated plaster be removed and replaced in strict accordance with the LSE SPECIALIST REPLASTERING SPECIFICATION, which is specially designed to prevent the migration of salts from the masonry into the new plaster. Ideally replastering should be delayed for a few weeks after damp proof coursing, to facilitate the initial drying processes.

B) ON NO ACCOUNT MUST MODERN LIGHTWEIGHT GYPSUM PLASTERS, e.g. "CARLITE" BE USED, not even for fixing setting beads, infilling adjacent to electrical sockets or wiring, making good, etc. The use of full metal angle beads is not recommended.

C) Failure to replaster, or the use of incorrect plasters, is likely to result in continued dampness problems.

SHOULD YOU REQUIRE ANY FURTHER INFORMATION PLEASE DO NOT HESITATE TO CONTACT US.