CASE STUDY

LIGHTWELL RESTORATION - BRENTWOOD, ESSEX





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OVERVIEW

Delta Registered Installers, Renderseal Ltd were employed to provide a maintainable waterproofing solution to a problematic lightwell. The scope of the project was to facilitate a solution for water penetration and salt contamination without disturbing the existing garden patio or adding any additional pressure to the interior of the property.

Any below ground structure will require a robust waterproofing design. The same scenario applies to lightwells.

In this project scenario, the basement lightwell walls are earth retaining and are subject to lateral penetration from ground water subject to weather conditions and water table levels. The existing render finish, on inspection was very sandy in colour and failed to form a barrier/resistance to hold back any moisture/water.

An earth retaining wall is a structure designed and constructed to resist the lateral pressure of soil, when there is a desired change in ground elevation that exceeds the angle of repose of the soil.

Whether you are building a new home or doing a renovation, you can add plenty of light-filled luxury by simply including an architectural void or lightwell.

Voids and lightwells are large open interior spaces that contribute to natural light entering a property from outside.

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SYSTEM COMPONENTS

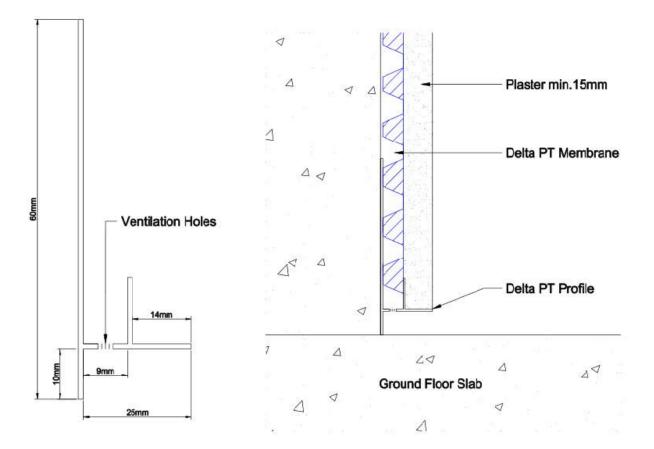
- • Delta PT Membrane
- Delta PT Plugs with Grommets
- ·Delta Fleece Tape
- • Delta PT Profile



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TECHNICAL DRAWINGS

Delta PT Profile



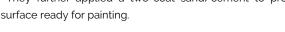
METHODOLOGY

After surveying the condition of the lightwell and adjoining property, Renderseal Ltd proposed a solution to modify the lightwell to mitigate any future problems without significantly affecting the structure or surroundings.

Delta's PT membrane offers a fast and effective method for repairing and upgrading lightwells, whilst at the same time retaining the existing aesthetics of properties, making this approach particularly suited to repairs. Delta's PT Membrane is a HDPE membrane which works as an impermeable damp proofing base for plaster or shotcrete (as a water control and drainage membrane).

Due to the "air gap" technology, Delta PT creates an effective barrier to the transmission of moisture, humidity, water vapour and salts, whilst assisting drainage by directing any water ingress to suitable drainage points.

Once the Delta PT was installed, Renderseal incorporated vertical expansion joints to prevent the render from cracking, whilst installing a horizontal stainless-steel stop bead base. They further applied a two-coat sand/cement to provide a



CASE STUDY RESULTS

Renderseal Ltd were praised for the quality and speed of their refurbishment/installation, which was completed in just 5 days and within budget.

The owners of the property were delighted with the result and knowledge that their lightwell will remain fully protected against the long-term threat of water and salt ingress.

