



Waterproofing a Failed Double Basement, Notting Hill Rectifying a Severely Leaking Concrete Structure in West London

The Project

Newton were approached by the desperate client at this large terraced property in Notting Hill, having had a second basement level excavated beneath the existing basement and the front and rear gardens. Unfortunately, bad waterproofing design and workmanship meant the basement had flooded immediately upon completion - the builder ceased trading and, following a legal case, the architect and structural engineer were found culpable.

We therefore recommended our experienced specialist contractor [Stonehouse](#) in order to assess the failure and propose a comprehensive solution.

The Solution

The experts at Stonehouse identified a litany of issues, from the weak, permeable structure to the lack of continuous waterproofing between levels, the inadequate pumping system, the blocked cavity drain system, and the non-existent external deck waterproofing and drainage, amongst others.

Once structural reinforcement had taken place, Stonehouse proceeded by:

- Reinforcing dry pack joints with [HydroSeal 313-WP](#) and [HydroSeal 103 2K](#)
- Sealing voids and structural weaknesses with [Newton Injection Resins](#)
- Preparing all internal surfaces before spraying HydroSeal 103 2K
- Adhering insulation beneath soffits, providing an integral vapour barrier
- Installing a full [Newton CDM System](#) with a dedicated [Titan-Pro](#) sump chamber, dual [NP750 pumps](#) and [Victron battery backup](#) protection
- Waterproofing both decks with Newton's liquid primers and membranes, overlaid and protected by a [NewSeal 408 DeckDrain](#) membrane

The Result

Stonehouse delivered an exceptional waterproofing design and installation for the client, who now has a watertight and guaranteed two-level basement beneath their home, that they can enjoy in full for the first time in many years.



Correct preparation of the substrate is always important



The CDM System forms a failsafe internal solution



"This was probably the most technically challenging project Stonehouse have ever undertaken. But with clients who wanted no future risk of water ingress, we were able to design and install a robust, durable solution utilising the full range of Newton waterproofing products to prevent water ingress from all conceivable directions.

As a result, the client can finally enjoy the vast space below their house with the reassurance of our long-term guarantee."

Graham Stone, Managing Director
Stonehouse

The Products

CDM SYSTEM

The most reliable waterproofing solution for below ground, combining our decades of experience with high quality, BBA certified [cavity drain membranes](#), bespoke sump and pump configurations, back-up systems, telemetry and ancillaries.

HYDROSEAL 103 2K

High performance cementitious membrane that can be spray applied with high adhesion and capable of resisting up to 10 bar of both positive and negative water pressure.

HYDROSEAL 313-WP

A fast-setting polymer compound that instantly stops running water or seepage through masonry or concrete structures.

NEWSEAL 408 DECKDRAIN

Double cusped, deck and flat roof drainage membrane, that provides a clear and clean drainage path for surface water.

NP750 PUMPS

High performance pump for ground water and clean water, available as both an automatic pump or in a manual version for use with Newton's advanced pump control systems.

TITAN-PRO

A unique sump system specifically designed to use with the Newton CDM System. Compatible with numerous Newton pumps, and comes fully built with pipework and pipe fittings.

VICTRON BATTERY BACKUP

Inverter/Charger units that provide peace of mind by ensuring continued pump power during power interruption/outages.



The completed rear deck with the new basement level beneath



The new lower basement provides a dry, safe space for the client



The completed wine cellar located beneath the rear deck

Newton Specialist Basement Contractors

Newton recommends that our systems are installed by one of our nationwide network of Newton Specialist Basement Contractors (NSBCs). Trained by Newton, NSBCs offer a full guarantee on the design and installation, and can act as Waterproofing Design Specialists.



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