

Refurbishing a Flooded Shop Basement, Chelsea Bespoke Waterproofing for a High-End Commercial Space in London

The Project

Newton Specialist Contractor <u>Garratt's Damp and Timber</u> provided their waterproofing expertise as part of the refurbishment of this high-end commercial property in the prestigious London Borough of Chelsea, as the basement area was experiencing high volumes of water ingress.

By performing a flood simulation Garratt's identified that water was entering via defects in the shop front and pavement light wells, travelling along a concealed steel joist and entering the centre of the basement.

The Solution

Externally, Garratt's recommended the shop front be removed, and worked with main contractor <u>CJS</u> and the Newton technical team to design a bespoke metal bund system to resolve the defects and prevent further water ingress.

The prepared concrete and steel was then treated with <u>HydroSeal 903</u> <u>Primer</u> and waterproofed with three coats of Newton's flexible cementitious waterproofing membrane <u>HydroSeal 107 Elastic 2K.</u>

Internally, Garratt's recommended and installed the failsafe Newton CDM
System to provide a comprehensive cavity drain waterproofing solution. This included the BBA certified CDM 508 and CDM 520 eco Floor membranes, and a dedicated Titan-Pro sump chamber for removing water from the basement.

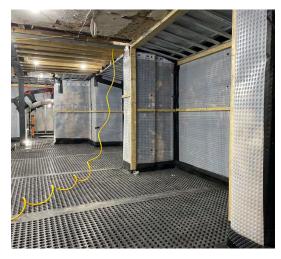
The chamber houses dual <u>CP250 pumps</u>, managed by a <u>Control Panel-Pro</u> pump control unit and supported by <u>Victron battery backup</u> protection for complete peace of mind even in the event of a power outage.

The Result

By working in close cooperation with Newton Waterproofing and the main contractor, Garratt's delivered a bespoke waterproofing solution that is both sympathetic to the original shop front (which was consequently restored) and also delivers a completely dry, Grade 3 internal environment as per BS 8102.



Garratt's installed a comprehensive CDM System



The system extended up to the pavement light soffits





"Garratt's were engaged to design and install a system to stop high volumes of water penetration through the pavement lights and walls on this tricky project. Replacing the pavement light was out of the question due to the busy street, and water was also penetrating the shop front and migrating along steels to a point that was impossible to waterproof.

Through close collaboration with the experts at Newton, we implemented a full system to withstand any future flooding."

Jack Garratt CSSW CSRT, Consultant Surveyor Garratt's Damp and Timber



CDM SYSTEM

The most reliable waterproofing solution for below ground, combining our decades of experience with high quality, BBA certified <u>cavity drain membranes</u>, bespoke sump and pump configurations, back-up systems, telemetry and ancillaries.

HYDROSEAL 107 ELASTIC 2K

Cementitious flexible membrane for the waterproofing and protection of concrete and masonry. Can be spray applied, and its flexibility can accommodate movement in cracks.

HYDROSFAL 903 PRIMER

Primer for Newton cementitious membranes that is quick to apply and cure, and increases adhesion of the waterproofing.

CP250 PUMPS

High quality, 250 Watt clean water pumps, available in automatic and manual versions, ideal for removing water from basements.

CONTROL PANEL-PRO

Class-leading pump control panel, designed to provide the ultimate in pump operation and diagnostics. Has an option to be pre-fitted with a Dialer for enhanced alarm capabilities.

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.

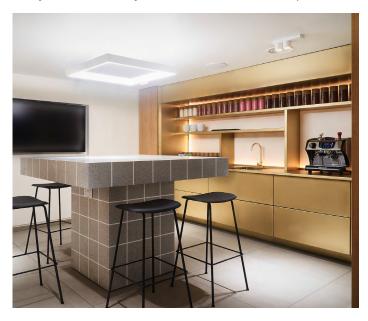
Newton Specialist Basement Contractors

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.





The system delivered a dry Grade 3 internal environment as per BS 8102



Now fitted out, the basement is part of a high-end commercial unit



The completed wine cellar located beneath the rear deck



