



## Cambridge House Luxury Hotel, Piccadilly Multi-Level Basement Waterproofing Beneath Listed Structures

### The Project

Newton is proud to contribute to the transformation of the unique, Grade I listed Cambridge House in Piccadilly as it undergoes conversion into one of London's grandest hotels. The 18,000m<sup>2</sup> scheme includes six adjacent Grade II listed residences, whilst a four-level basement will accommodate a spa as well as the back-of-house and servicing areas.

In order to deliver a reliable, watertight solution for this £165m project, Newton worked closely with architects [PDP London](#) and leading enabling works contractor [Deconstruct UK](#) throughout the design and installation.

### The Solution

There are three main buildings where extensive excavations are taking place, requiring different waterproofing solutions to cater for the new-build basement areas and existing elements - all up to 4 storeys below ground.

Buildings 1 and 3 are both benefiting from full [Newton CDM System](#) cavity drain membrane waterproofing, which will capture, depressurise and remove any ingressing ground water via a series of [Trojan-Pro](#) pump chambers.

Building 2 utilises numerous products across new/existing structures, including [403 HydroBond](#), installed by NSBC [Maclennan Waterproofing](#), and [315 Polymer-Waterbar](#) to the new concrete attenuation tank, which will also be coated internally with the [103-S](#) liquid membrane.

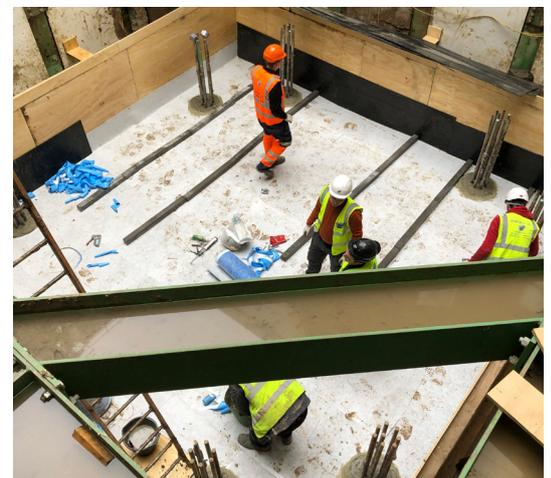
The same two products were also used alongside the flexible [107F](#) liquid membrane and [106 FlexProof](#) for construction joint waterproofing in areas where the existing brick structure interfaces with a new concrete slab. Finally, [Titan-Pro](#) pump chambers are being installed to remove the water.

### The Result

As of June 2021, the waterproofing installation is underway and on-track on all three buildings, with Newton's site services team delivering an exceptional quality assurance and training service on the installation of our products.



403 HydroBond applied to the new attenuation tank



Installing HydroBond prior to a concrete slab install





Newton's site support team visiting the site at Building 3 of Cambridge House

KEY PLAN - 1:500@A1





A view from the excavation of the new 4-storey basement beneath Building 1 at Cambridge House



Examining the application of Newton 403 HydroBond to the new concrete attenuation tank in Building 2



"Newton Waterproofing worked with Deconstruct to provide waterproofing design and solutions at Cambridge House. The project encompassed forming new deep Basement excavations, Grade 1 and Grade 2 listed structures requiring significant interventions and a Grade 3 level of waterproof protection.

Newton have been involved from the outset and have provided a first class service to ensure we provide a robust solution to this prestigious project."

Mark Makinson, Project Director - Deconstruct UK Ltd.

## The Products

### CDM SYSTEM

Newton CDM System combines decades of experience with the highest quality, BBA certified membranes, bespoke pump configurations, back-up systems, telemetry and ancillaries.

### 103-S

High adhesion, cementitious membrane capable of resisting extremely high positive and negative water pressure.

### 106 FLEXPROOF

Advanced, single-component polymer membrane with extreme flexibility and high adhesion for sealing construction joints.

### 107F

BDA Agrément certified cementitious membrane that is tough and flexible to accommodate movement in the substrate.

### 315 POLYMER-WATERBAR

BDA Agrément certified, hydrophilic waterbar that swells in contact with water to seal concrete construction joints.

### 403 HYDROBOND

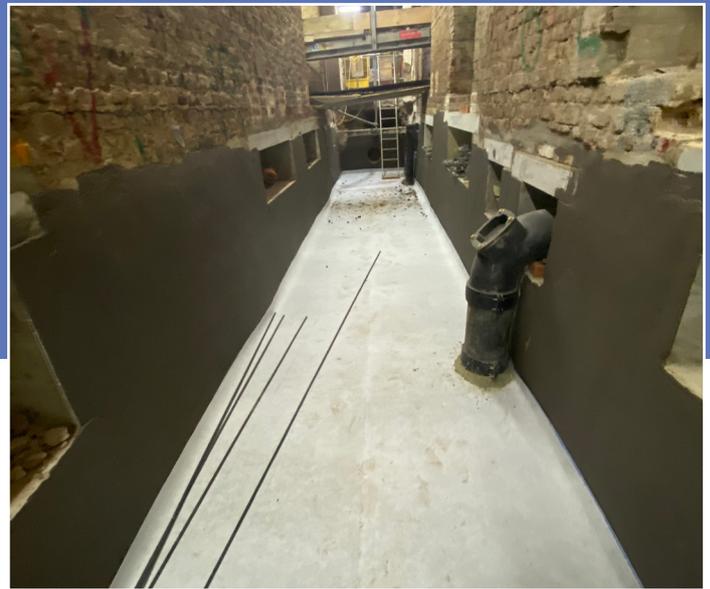
BDA Agrément certified, self-healing sheet membrane that provides a complete waterproof envelope around a structure.

### TITAN-PRO

Specialist packaged pump system with multiple configurations to provide compatibility with multiple pumps and scenarios.

### TROJAN-PRO

Modular pumping system available in large sump sizes, suitable as sewage stations or to hold and remove ground/surface water.



403 HydroBond and 107F used in conjunction in Building 2



There are several areas where new-build meets existing structures



An artists impression of the magnificent ballroom at the new hotel

## 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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