



## River Thames Boathouse, London

### Complete Waterproofing Solution for High Flood Risk Property

#### The Project

Newton Waterproofing Systems were contacted by the client to provide a solution for a delightful boat house on the River Thames. The property originally had a wet dock, but this had been back filled and capped with a concrete floor. The client wished to use the ground floor as a bedroom, but during recent flooding the water level had reached 500mm internally.

#### The Solution

Newton Specialist Basement Contractor, [Stonehouse](#), were brought onto the project. Stonehouse expertly installed [Newton System 500](#) to pump away the water. [Newton 508 Mesh](#) was chosen for the walls, with [Newton 520 eco](#) to the floor and [Newton Basedrain](#) to drain away the water caught by the membrane. Two [Newton Titan-Pro](#) pump systems were used and supported by a battery back-up system.

Rather than holding water pressure back, therefore, it was accepted that the river would penetrate the structure and would be pumped out. The system is designed so that ingressing water is depressurised by the Basedrain and then moved around the Basedrain ring to the two Titan sump chambers. The chambers both have 40mm discharge lines exiting the structure. Both pump systems had non-return valves so if the river rose over the level of the pipe, the pumps would still be effective.

#### The Result

The full waterproofing system was installed in little over a week. The major test came when the River Thames rose against the property to a depth of over one metre! The Newton System 500 waterproofing system coped with the water ingress as designed. At the height of the flooding all three pumps in each sump chamber were operational. The system proved to be fully successful.



The Boathouse is situated on the River Thames.



A Grade 3 habitable space was required for the client.





"Our client can now happily eat his breakfast in bed watching the boats float past his window, in the confidence that his property is dry and secure."

Graham Stone, Managing Director, Stonehouse Property Care

## The Products

### CDM SYSTEM

The most reliable waterproofing solution for any space below ground, the Newton CDM System combines decades of experience with the highest quality, BBA certified membranes from Newton System 500, bespoke sump and pump configurations, back-up systems, telemetry and ancillaries.

### 508

BBA certified, high quality cavity drain membranes as part of the CDM System, manufactured from 100% recycled HDPE.

### 520 ECO FLOOR

BBA certified, 100% recycled 20mm Cavity Drain Membrane for basement floors. 520 eco is typically specified where there is a high risk of severe water penetration.

### MULTIPLUGS & ANCILLARIES

A selection of specialist ancillary products that are critically important for the correct installation of the Newton CDM System, including plugs, tapes and seals.

### BASEDRAIN

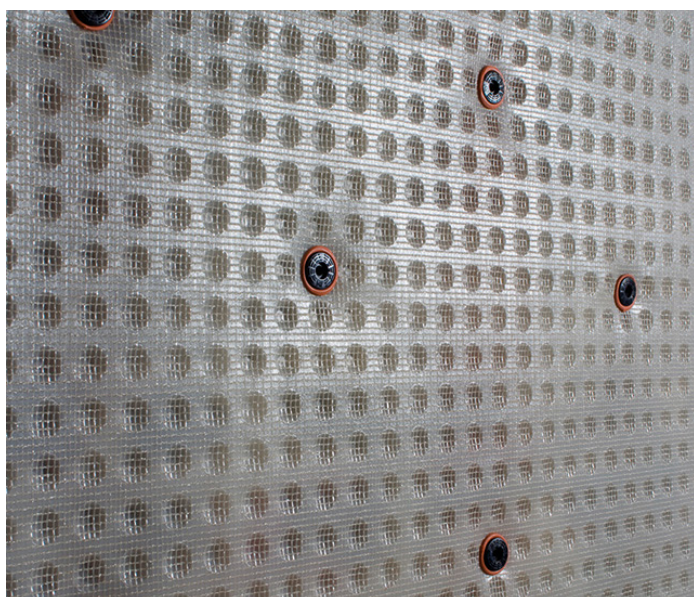
A range of products that receive and drain water from the cavity drain membranes and direct it to the point of discharge.

### TITAN-PRO PUMP

The Titan-Pro packaged sump system is designed specifically to be used with Newton System 500.



Newton 520 eco Floor is typically used in buildings with high flood risk.



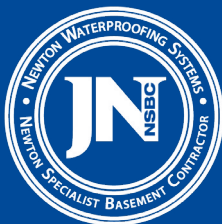
Newton 508 Mesh membrane was applied to the walls.



Two Newton Titan-Pro packaged sump and pump systems were used.

## 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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