

CASE STUDY

FLOOD PROTECTION

Boathouse, The River Thames

Newton System 500 provides a complete waterproofing solution for a boathouse situated on the River Thames

Project Details

Newton Waterproofing Systems contacted 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 a recent flood the water level had reached 500mm internally.

Methodology

Newton System 500 provided the ideal solution, as it works by redirecting the water, rather than trying to hold water back – which would be impossible under such pressurised conditions. Newton 508 Mesh was chosen for the walls, Newton 520 to the floor with a Newton Basedrain ring around the perimeter. Two Newton Titan Plus pump systems were used, which included 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 each had 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.

Result

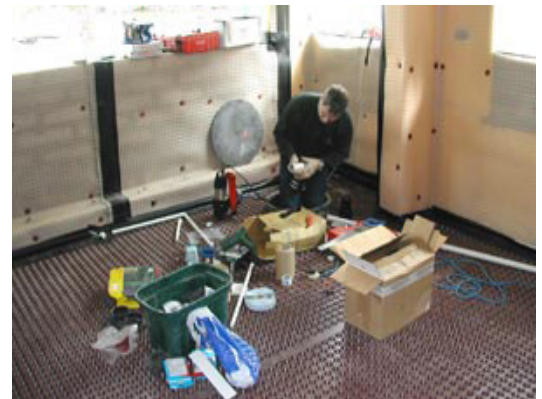
The full waterproofing system was installed in little over a week. The major test came when the River Thames rose against the property to a depth of over one metre! The Newton System 500 waterproofing system coped with the water ingress as designed. At the height of the flooding all three pumps in each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

Testimonial

"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"



Flood waters reach to a depth of a metre against the property during the floods.



Newton sump and pump system being installed in the boathouse



Newton System 500 ensures the boat house is dry and free from damp problems

Featured Products

NEWTON SYSTEM 500

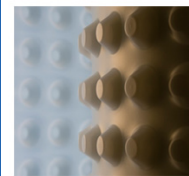
Maintainable Cavity Drain System Comprising Waterproof Membranes, Drainage, and Pumps

The professional's "waterproofing system of choice", Newton System 500 is an internally applied waterproofing system based upon our range of cavity drain membranes, drainage conduits and sophisticated pumping and control systems.

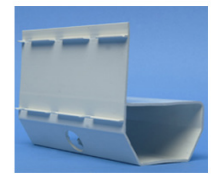
Unlike conventional 'tanking', Newton System 500 is not attempting the almost impossible and trying to hold water back, but places designed maintainable depressurisation voids at known weaknesses in the structure so that ingressing water is simply captured and diverted out of the property.

Newton recommends that our structural waterproofing systems are installed by one of our Nationwide Network of Newton Specialist Basement Contractors who have been trained by Newton and can offer full professional indemnity on design and insured backed guarantee on the installation.

Newton System 500



Waterproof Membranes



Drainage



Pumping System



Water Pumps

Cavity Drain Waterproofing