

FLOOD MITIGATION

Newton Titan-Pro Chambers and NP 750 Pumps Installed to a Workshop Following Extensive Flooding

Project Details

Newton Specialist Basement Contractor (NSBC):
Guardian Preservation

The fall of water that is held up by Bradford Weir has historically powered many of the mills and factories of the town, including Weirside Mill which was used for woollen cloth manufacture during the 18th century. In the 1980s the site was developed for housing.

The River Avon at Bradford on Avon has always been liable to burst its banks, as the river rises quickly with heavy rainfall and usually it spills fairly harmlessly over the floodplain above Bradford. However on Christmas Eve 2013, Bradford on Avon was brought to a standstill, with the town bridge flooding, and by late January the Avon burst its banks for the tenth time in six weeks.

During this time the workshop of Weirside Mill badly flooded and at its worse the water levels rose to 2 metres, leaving all equipment and workbenches floating. In March, Newton Specialist Basement Contractor Guardian Preservation were called in to design a flood remediation system to help deal with the large amounts of water ingress during flooding.

Methodology

Once the flooding started, it took approximately 4 hours for the water to reach 2 meters within the workshop. The workshop is 20m x 8m, the total volume of ingressing water was 320,000 litres, which over 4 hours, meant 80,000 litres an hour. To deal with these huge amounts of water, Guardian installed two Titan-Pro chambers with twin NP 750s alongside two Battery Backup Systems.

To manage ingressing water, Guardian installed Newton Basedrain drainage channel flush with the top of the slab and drilled holes into the top, together with two trapped gullies which connected to the sump chambers. In the unlikely event that water came over the top of the channel water could still be brushed/pushed back into the system.

Result

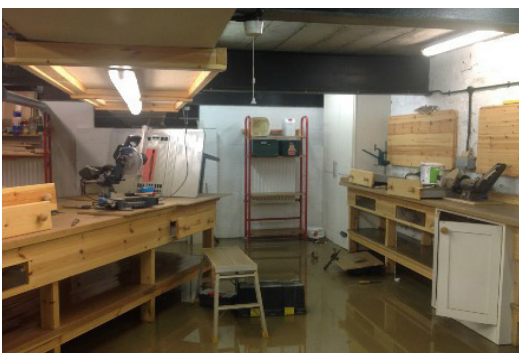
Despite the River Avon again bursting its banks on a number of occasions, the workshop has remained dry and it is fully protected by Newton products and Guardian's design and installation guarantee.

Testimonial

"Guardian Preservation produced a well thought out and thorough proposal to deal with the problem of our flooded workshop. The work was carried out efficiently and within schedule and budget"
- David Johnston OBE



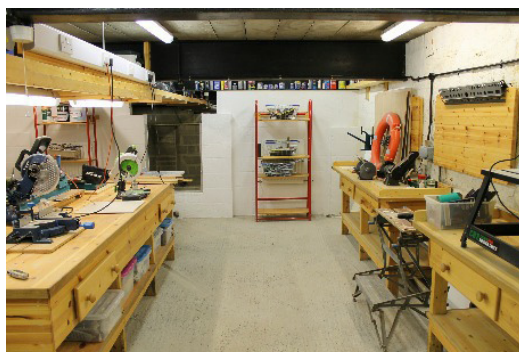
Extensive flooding in Bradford on Avon brought the town to a standstill (image courtesy of BBC.co.uk)



At its worst, water levels in the workshop rose to two metres



Application of Newton System 500, two Titan-Pro Chambers, pumps and battery backups



The workshop is now fully operational and protected against future flooding

Featured Products

NEWTON SYSTEM 500

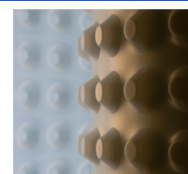
Maintainable Cavity Drain System Comprising Waterproof Membranes, Drainage, and Pumps

The professional's "waterproofing system of choice", Newton System 500 is an internally applied waterproofing system based upon Newton's extensive range of cavity drain membranes, drainage conduits and sophisticated pumping and control systems. It is a maintainable system, so complies with BS 8102 Code of Practice for Protection of Structures Against Water from the Ground.

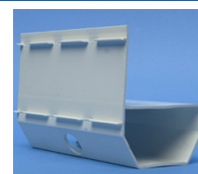
Newton recommends that our structural waterproofing systems are installed by one of our Nationwide Network of Newton Specialist Basement Contractors (NSBC)



Newton System 500



Waterproof Membranes



Drainage



Pumping System



Water Pumps

Cavity Drain Waterproofing

NEWTON TITAN-PRO WHITE

Submersible Sump Pump

The Newton Titan-Pro White is compatible with a large number of Newton NP and CP clean water pumps. The adjustable neck allows for the sump to be installed at a fixed height relative to the slab so that the connection in from the Newton drainage system and the pump discharge line are made above the concrete

- Fully built system includes all internal pipe and pipe fittings ready for 50mm or 63mm rising main
- One-way valve for each pump included
- Two quick release couplings per pump for easy installation and removal
- Newton PA50 High Water Level Alarm included

Newton Pumping



Newton Titan-Pro White

NEWTON NP 750

Ground and Clean Water Pump

The Newton NP 750 is a high performance ground and clean water pump suitable for rain water and ground water.

Benefits:

- Available as an automatic pump or a manual pump
- Can be used with Newton Power Converters of 3000w
- Gives continual pumping even when the power is out

Newton Pumping



Newton NP 750