



Tanking a Cellar

New-Build House, Chelmsford

The Project

At the point that Newton Specialist Contractor [A.P. Gooch](#) were called in to look at a large new-build residence in Chelmsford, Essex, the basement had already been constructed out of 'waterproof' concrete with admixtures included. However, with the structure leaking in multiple locations, Newton recommended A.P. Gooch to redesign the waterproofing approach for this high-end residential build.

The Solution

A.P. Gooch recognised that the [Newton CDM](#) internal cavity drainage membrane system, classified as 'Type C' waterproofing by BS 8102:2009, would be the safest and most effective solution. As the most failsafe form of basement waterproofing, the system was designed to capture and manage the water that was still coming through the structure, resolving the problem once and for all.

A.P. Gooch began by installing [Newton 508](#) to the walls as the first form of defence. This was followed by a floor build-up consisting of [Newton Basedrain](#) to channel captured water, [Newton Fibran XPS 500-C](#) thermal insulation board and spacer, and more Newton 508 membrane. Finally, the system delivers captured water to a [Newton Titan Pro](#) sump chamber, designed specifically for use with the Newton CDM System, and equipped with dual [Newton CP400](#) pumps to ensure that there will always be a safe means of removing captured water from the building.

The Result

Not only were the homeowners left with a dry and safe basement space in which to create their dream games room, bar and cinema, but the [British Standard](#)-compliant waterproofing system will effectively protect the room for years to come.



The original concrete structure was leaking.



Installation of the failsafe Newton CDM System.



"I contacted A.P. Gooch to carry out the work, but also asked them to help my company learn and develop. It has now been 6 months and Anthony has been answering at least 5 questions a week from me via texts and phone calls.

A.P. Gooch bent over backwards to help me on this project. I feel very lucky to have someone with such a wealth of experience as one of my trusted contractors."

Adam Clark, Owner, Atlantis Project Management & Construction

The Products

508

A high quality Newton System 500 cavity drain waterproofing membrane, manufactured from high density polyethylene and suitable for use internally to the retaining walls of below ground structures.

BASEDRAIN

A core set of components used within the Newton 500 system that receives ingressing water and directs it to a safe discharge point.

FIBRAN XPS 500-C

Closed-cell, thermal insulation board produced exclusively for Newton as a 50mm spacer adjacent to drainage channels within the CDM System.

TITAN PRO

A packaged sump system designed specifically for use with the Newton CDM System, with a unique shape to allow a choice of connections, an adjustable neck, and suitable for single or twin-pump installations.

CP400 PUMPS

High quality clean water pump ideally suited for removing groundwater from basements and cellars.

HIGH WATER ALARM

Designed to detect high water levels within Newton sump chambers, giving both visual and audible indication of the alarm condition.



The system was installed rapidly and efficiently.



The waterproofing was for the basement of this new build residence.



The completed dry and habitable cinema & games room.

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.



www.newtonwaterproofing.co.uk



tech@newtonwaterproofing.co.uk



+44 (0)1732 360 095