CASE STUDY

Transforming the Royal College of Music, London

Waterproofing Five Levels of the World Famous Musical Conservatoire

The Project

London's Royal College of Music is one of the world's greatest musical conservatoires for gifted musicians. Opened in 1883 by the future King Edward VII, the College recently underwent major renovations, incorporating advanced acoustic, air handling and climate control measures to allow even the most delicate and valuable instruments from the College museum to be played.

As part of the project, Newton Specialist Contractor MacLennan designed and installed a waterproofing system that would deliver a completely dry environment in the vast basements that would become auditoriums, a library, an atrium, and music rooms., all with specific and bespoke requirements.

The Solution

MacLennan have previously dealt with some of the largest waterproofing projects in London, so were more than capable of providing a solution across 5 different basement and sub-basement levels on this project.

To start, Newton 104 crystalline waterproofing was applied to the structure to protect against the capillary movement of water. Movement joints between the new and existing structure were also protected with Newton 106 FlexProof.

In order to provide a guaranteed solution however, a full Newton CDM System with various bespoke details was then installed throughout the internal spaces in order to safely capture and manage any ingressing water.

All levels were also linked together with Newton's maintainable Basedrain drainage system, and no less than five of Newton's Titan-Pro sump chambers with dual NP400 pumps were installed to remove the captured water.

The Result

The work was scheduled to allow students to access the building during the work. The waterproofing was completed within budget, on time, and backed by MacLennan's full installation guarantee and PI cover on the design.

The project involved new and existing structures.

Basedrain ensures that the system is maintainable.

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"This is yet another extremely large and prestigious project on which MacLennan have partnered with Newton Waterproofing Systems to deliver a guaranteed solution.

As always, the Newton team are great to work with, as they are with every project we carry out together.

Great products, great systems and great service as always."

Ian MacLennan, Managing Director
MacLennan

The cavity drain system can be completely guaranteed.

The Products

104

Applied to the surface of concrete, Newton 104 provides in-depth protection against the movement of moisture through the capillaries and hairline cracks.

106 FLEXPROOF

Highly advanced, single-component material that forms a membrane that is rainproof in minutes and capable of handling severe building movements and deformations.

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.

BASEDRAIN

A range of products that receive and drain water from the cavity drain membranes and direct it to the point of discharge, whether that is a sump chamber or natural drainage.

TITAN-PRO

A unique packaged sump system that has been specifically designed to be used within the Newton CDM System. Compatible with numerous Newton pumps, and comes fully built with all necessary internal pipework and pipe fittings.

NP400 PUMPS

A high head and high to medium performance pump available in both automatic and manual versions. A reliable unit suitable for continual pumping of both rain and ground water.

One of the magnificent concert halls at the Royal College of Music.

The College was opened in 1883 by the Prince of Wales.

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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