CASE STUDY Waterproofing a Massive New Basement Lillie Square Phase 1, London





Waterproofing a Massive New Build Basement, Lillie Square, London

The Project

Located in Earls Court, <u>Lillie Square</u> is one of the top commercial and residential developments in London, transforming a 7.4 acre carpark into over 800 multi-million pound luxury residences. The new neighbourhood includes a luxury residents' clubhouse, a large proportion of which, including a swimming pool, spa, sauna, steam room, gym and function room, is below ground. The project therefore required robust waterproofing to protect this internal environment.

The Solution

CASE STUDY - RETAINING WALL WATERPROOFING

The long-term partnership between <u>Newton Waterproofing Systems</u> and experienced Specialist Contractor <u>Stonehouse Property Care</u> has seen both companies partner on a vast portfolio of properties across the UK, and Stonehouse brought this experience to the table at Lillie Square.

In order to provide the maximum level of protection, and having considered the best options at an early stage alongside main contractor <u>Sir Robert McAlpine</u>, Stonehouse combined two Types of waterproofing in order to achieve a completely dry 'Grade 3' internal environment as per the recommendations of BS 8102:2009.

The first of these products was the Type A, cementitious, liquid-applied waterproofing membrane <u>Newton 107F</u>, which was particularly suitable to this large-scale project due to the fact that it could be quickly spray-applied over large areas. The 107F was supported by the Type C <u>Newton CDM System</u> cavity drain waterproofing, installed throughout the basement area of the clubhouse, with four <u>Titan-Pro</u> sump chambers containing dual <u>NP400</u> pumps, as well as Newton <u>High Water Alarms</u>, <u>Inverters</u> and <u>Battery Back-Up</u> protection creating a truly failsafe system.

The Result

By working with Sir Robert McAlpine at the design stage it was possible to consider the lifetime performance of the structure as well as the cost in order to design and install thorough waterproofing protection. NSBC

Stonehouse Property Care

Main Contractor Sir Robert McAlpine



The development is one of the largest in London, stretching from Chelsea to Kensington



The large Newton cavity drain membrane installations were achieved using special Newton MultiPlugs

"Stonehouse Property Care have worked closely with Newton Waterproofing Systems for almost 20 years, and we wouldn't want to work with any other waterproofing supplier on such a large scale, luxury new build project as Lillie Square.

The quality of their waterproofing materials combined with their on-site installation and technical support means I can confidently specify, install and guarantee a fault-free waterproofing solution, and ultimately provide the best result for the client."

> Graham Stone, Managing Director Stonehouse Property Care Newton Specialist Basement Contractor

The Products

107F

Highly flexible and extremely advanced single-component membrane that can handle severe building movement and deformations.

CDM SYSTEM

The professionals' waterproofing system of choice, this internal and fully maintainable system is ideal for new build or refurbished basements, utilising floor and wall membranes, fixing plugs, sealing tapes, drainage channels, insulation boards, and sump and pump chambers.

TITAN-PRO

CASE STUDY - NEW BUILD BASEMENT

The unique packaged sump system designed specifically for use with System 500 and compatible with many Newton pumps.

NP400 PUMPS

Used with the Titan-Pro White, these high quality clean water pumps are ideally suited for removing groundwater from basements and cellars.

HIGH WATER LEVEL ALARM

Designed to detect high water levels within sump chambers, the batterypowered device is included with the Newton Titan-Pro pumping system.

INVERTERS AND BATTERY BACK-UPS

The Victron range of pure sine wave Inverters/Chargers provide advanced solutions to ensure that Newton pumping systems continue pumping during power interruption.

Newton Specialist Basement Contractors

Newton recommends that our structural waterproofing systems are installed by one of our Nationwide Network of Newton Specialist Basement Contractors (NSBC). Trained by Newton, NSBCs can offer full professional indemnity on design and insurance backed guarantees on the installation.





The System 500 membranes link between the floor and walls to provide complete protection



This clubhouse atrium artists' impression gives a sense of the scale of the above and below-ground areas



The below-ground resident's clubhouse also includes a luxury subterranean swimming pool



The finished Lillie Square development will be one of the most prestigious developments in London

© Newton Waterproofing Systems (a trading name of John Newton & Co. Ltd.) Newton House, 17-20 Sovereign Way, Tonbridge, Kent, TN9 1RH T: +44 (0)1732 360 095 W: www.newtonwaterproofing.co.uk E: tech@newtonwaterproofing.co.uk