



Case Study

OCTOBER 2010

Triton supplied:

TT Waterstop, TT Swellseal Mastic,
TT Vapour Membrane, Platon Membranes



SUBTERRANEAN SANCTUARY FOR HISTORIC PROPERTY

As part of a major refurbishment to a historic property, a new build basement has been created to achieve a grade 3 environment in accordance with BS 8102 2009. The new space will house a recording studio, along with a gymnasium and swimming pool.

The new basement extends under the garden, and this section will be covered with a waterproof green roof system (also supplied by Triton) which will be landscaped to reinstate the garden's former appearance.

As an optimum method of waterproofing, a combination of three systems, (Types A, B and C as defined by BS 8102 2009) were specified by architects Rundell Associates after discussions with Triton's technical team. The components for all three systems were supplied by Triton, an important benefit for the main contractor, 800 Group, as it avoided any split responsibility issues. All aspects of this prestigious waterproofing project were overseen by the Triton technical team as required.



The new basement extends beneath the garden to the far end of the property

Concrete Structure

Waterproofing to all concrete kicker/construction joints and their interfaces within the newly built structure was achieved by using Triton's TT Waterstop (hydrophilic strips), which were embedded in Triton's TT Swellseal Mastic. This allowed the structure to offer the statutory primary resistance to ground water ingress.

Liquid applied waterproofing system

The concrete walls were subsequently overcoated internally with two coats of Triton's liquid applied TT Vapour Membrane to enhance the watertightness of the substrate and, as importantly, to act as an anti-lime coating prior to the installation of a Platon cavity drained membrane system. Free lime produced by fresh concrete can cause blockages under and behind cavity drained membrane systems when it solidifies, which can often lead to the failure of drainage and pumps within this type of system.

The walls and floor of the swimming pool were also independently waterproofed with Triton's TT Vapour Membrane before rendering and tiling. Triton's TT Vapour Membrane is a high performance, liquid applied membrane. It is specifically designed for waterproofing a wide range of vertical and horizontal surfaces. It is a water-based, single component coating that cannot be punctured as it bonds fully with the substrate. It can be painted, plastered or screeded and is easily repaired if required by locally over-coating.

Internally applied Platon cavity drained membrane system (Type C BS 8102 2009)

A Type C, BBA approved, Platon cavity drained membrane system was then installed to the walls and dressed in to a preformed gulley of approximately 130mm x 130mm within the new floor slab. The gulley was designed to accept the Triton Aquachannel drainage conduit which was laid to a fall to divert any water away to suitable discharge points.

Cavity drain membranes work on the principle of allowing any water that may ingress the structure to enter the air gap that they create, and divert it to a suitable drainage/discharge point via the Triton Aquachannel system. The deep studded Platon P20 membrane is loose laid on floors and sealed by waterproof Butyl tapes. Because of its high drainage capacity it can be recommended for application to most floor slabs.

Platon wall membranes are fixed to walls using special plugs and sealing materials. Once the membrane has been fitted, the wall surfaces can be dry lined or plastered directly (if using Platon Plasterbase/Platon Plastermesh). Membranes on floors can be screeded or tiled or a floating timber floor system can be installed. The membranes are compatible with underfloor heating systems. Platon cavity drained membrane systems are maintainable and equally suitable for existing as well as new build projects.

www.rundellassociates.com
www.800group.net

Triton Chemical Manufacturing Co. Ltd.
Unit 5, Lyndean Industrial Estate, Abbey Wood, London SE2 9SG

Tel: 020 8310 3929
Fax: 020 8312 0349
Email: info@triton-chemicals.com

www.triton-chemicals.com



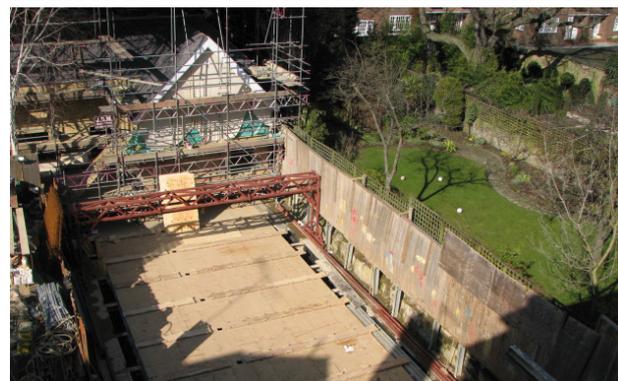
Cavity drain membranes were installed on the concrete walls after the application of two coats of TT Vapour Membrane



Checking the fall of the Triton Aquachannel, installed around the perimeter walls, to divert any water from behind the membrane system to the discharge points



The concrete walls and floor of the swimming pool were waterproofed with TT Vapour Membrane before tiling



the new basement extends into the garden and will be covered with a green roof