

# CASE STUDY

## HOUSES OF PARLIAMENT

### Basement Waterproofing



#### Combination Waterproofing Systems, Internal and External Protection

### Project Overview

Newton Waterproofing were delighted to return for this project at the prestigious Houses of Parliament in London, a landmark that has dominated London's skyline for over 150 years.

Working from detailed plans and drawings of the project, Newton Specialist Basement Contractor [MacLennanUK](#) specified a guaranteed waterproofing solution for the new-build basement. With the solution in place, MacLennanUK decided to bring the job to Newton, whose product range was perfectly suited to the project requirements.

Newton and MacLennanUK are both privileged to be the companies chosen to share in securing the future of the Palace of Westminster.

### Methodology

This complex project required the design and installation of an external waterproofing system, an internal cavity drain system, and a polyurea roofing system to ensure a high standard of waterproofing.

Externally, Newton's innovative 'Type A' [403 HydroBond](#) membrane was applied extensively to ensure the necessary waterproofing around the basement, whilst internally, [Newton 508](#) and [Newton 520](#) membranes were both applied from floor to ceiling as part of Newton's complete [System 500](#) cavity drainage solution.

With the finished structure in place, the waterproofing was finally completed by the application of both a polyurea coating and further drainage membrane to the roof deck of the basement.

### Result

The completely waterproof structure is fully compliant with BS 8102:2009, providing a durable waterproofing solution in this large new basement situated directly next to the River Thames. After utilising multiple Newton Systems to great effect, MacLennanUK also provided an insured-backed guarantee for the work undertaken, confident in the level of protection against water ingress.



The 1m x 20m rolls of 403 HydroBond are quick and easy to apply against the wall shuttering\*



The self-healing characteristics of 403 HydroBond allows penetrations through the membrane, whilst still maintaining a watertight seal around the structure\*

\* Product application photos are indicative of the work that was carried out

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### Testimonial

*"With such a long-standing and productive relationship between ourselves and Newton, they were the obvious choice to go to when we were planning this project of combined products and solutions. On top of that, it was a real privilege to work on a project concerned with maintaining a building that has such history and significance in the UK" - Ian MacLennan, MacLennanUK*

### Featured Products

#### NEWTON SYSTEM 500

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

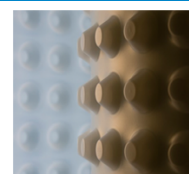
The professional's "waterproofing system of choice", Newton System 500 is an internally applied waterproofing system based upon Newton's extensive range of cavity drain membranes, drainage conduits and sophisticated pumping and control systems. It is a maintainable system, so complies with the BS 8102:2009 Code of Practice for The 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)

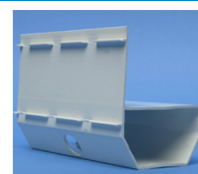
NSBCs have been trained by Newton and can offer full professional indemnity on design and insurance backed guarantees on the installation.



#### Newton System 500



Waterproof Membranes



Drainage



Pumping System



Water Pumps

Cavity Drain Waterproofing

#### NEWTON 403 HYDROBOND

Hydrophilic Fully Bonded Membrane for Raft and Wall Waterproofing

Newton 403 HydroBond is a very high performance composite sheet membrane that features a locking fleece to one side and a polymer hydrophilic coating to the other side. It is suitable for application under reinforced concrete rafts and pre-application to reinforced concrete retaining walls.

When placed below the new raft or against the wall shuttering, the poured concrete engages into the locking fleece so that the membrane is completely locked in and monolithic to the concrete. This ensures that if a leak did occur it cannot track to the construction joints. The hydrophilic coating seals small holes that may be accidentally formed during fixing of the reinforcing steel or the pouring or compaction of the concrete.

#### Newton System 400 External Waterproofing



Newton 403 HydroBond