CASE STUDY



New Build Basement Pulborough West Sussex

A waterproofing solution was required for a substantial new build basement in Pulborough, West Sussex.



THE CHALLENGE

Newton Specialist Waterproofing Contractor, Cast Contracting Ltd (CCL) were awarded the prestigious project by RW Armstrong to supply and install comprehensive structural waterproofing solutions internally and externally to the basement of a luxury house in West Sussex, to prevent the ingress of ground water into the concrete basement structure.



THE SOLUTION

CCL specified and installed Newton 403 Hydrobond membrane underneath the basement floor before applying Newton 109-LM Flexible Rubber Waterproofing membrane to the vertical retaining walls, linking onto the Newton 403 Hydrobond membrane, and terminating at dpc level.

The Newton 410 Geodrain drainage layer was installed directly in front of the Newton 109-LM to protect the membrane during backfilling operations and to promote the drainage of water away from the structure to the land drain. To conform with BS 8102:2009, a secondary type C waterproofing was installed in the form of the Newton 500 system.

Newton 503 Cavity Drain membrane was installed to all internal retaining walls and any water ingress was dealt with by installing the Newton base drain channels, with inspection ports located around the perimeter of the basement at the wall/floor junctions. The Newton 508

Cavity Drain membrane in association with the Newton 50 mm thick Fibran XPS 500 – C extruded polystyrene insulation, was installed to the entire basement floor area, to provide a continuous cavity drain system.

A sump chamber is located in the pool plant room. Due to the ground levels, any water that enters the chamber free drains to a collection point which negates the need for a sump pump. Provisions have been made to install pumps at a later date if required.

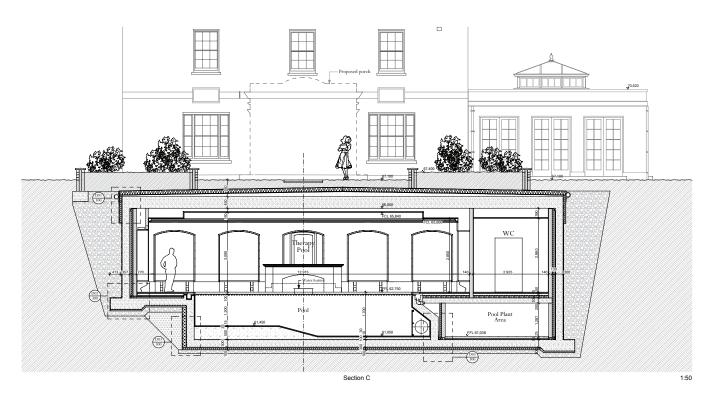
The versatility of the Newton 109-LM flexible rubber waterproofing membrane ensured that the external terrace area directly above the basement, was fully waterproofed.

Finally, the Newton 207 Deck Drain and Newton 209 Roof Barrier were installed above the external waterproofing to provide full protection prior to the installation of the landscaping works.





THE SOLUTION









Design: Adam Architecture **Main Contractor:** RW Armstrong

CLIENT TESTIMONIAL:

"RW Armstrong have worked with CCL on numerous projects in the past and have forged an open and positive approach to the completion of the waterproofing on these type of projects. Each phase of the waterproofing works has been planned and coordinated with CCL. Prior to the works, all detailing and product installation requirements were confirmed with my site team and any detailing issues resolved to ensure the continuity of the waterproofing systems.

This involved a consistent and proactive approach with the site team, demonstrating both construction and product technical understanding. I found CCL staff to be professional and diligent with a responsive approach to completing works in line with our programme."

David Searle, Site Manager, RW Armstrong

PRODUCTS SPECIFIED

Newton 403 Hydrobond

Newton 500 System

Newton 50 mm thick Fibran XPS 500 - C extruded polystyrene insulation

Newton 109 - LM

Newton 410 Geodrain

Newton 207 Deck Drain

Newton 209 Root Barrier