CASE STUDY New Build Basement & Swimming Pool Pulborough, West Sussex





New Build Basement Pulborough, West Sussex

The Project

A waterproofing solution was required for a substantial new build basement in Pulborough, West Sussex. Newton Specialist Waterproofing Contractor <u>Cast Contracting Ltd (CCL</u>) were awarded this prestigious project by <u>ADAM Architecture</u> and main contractor <u>RW Armstrong</u>, with the task of supplying and install comprehensive internal and external structural waterproofing solutions in order to prevent the ingress of ground water into the concrete basement structure.

The Solution

CASE STUDY - RETAINING WALL WATERPROOFING

CCL specified and installed the self healing, hydrophilic <u>Newton 403</u> <u>HydroBond</u> membrane beneath the basement slab before applying the seamless rubber waterproofing membrane <u>Newton 109-LM</u> to the external surface of the walls as well as the terrace area above, linking to the Newton 403 HydroBond membrane and terminating at DPC level.

The <u>Newton 410 GeoDrain</u> drainage layer was then installed directly in front of the Newton 109-LM in order to protect the membrane during backfilling and to promote the drainage of water away from the structure and towards the installed land drain.

<u>Newton 503</u> and <u>508</u> cavity drain membranes were also installed to the internal walls and floor respectively, in association with the 50mm closed-cell insulation board <u>Newton Fibran XPS 500-C</u>. Perimeter <u>Basedrain</u> channels, and a suitably located <u>Titan Pro-White</u> sump chamber completed the cavity drainage system in order to fully ensure that any ingressing water was quickly collected and discharged.

Finally, <u>Newton 408 DeckDrain</u> and <u>409 Root Barrier</u> were installed above the terrace to provide full protection prior to the final landscaping works.

The Result

By combining both Type A and Type C waterproofing, CCL installed combination waterproofing that conforms with the recommendations of BS 8102:2009 in order to effectively protect this luxury basement.

NSBC	Cast Contracting Ltd
Design	Adam Architecture
Main Contractor	RW Armstrong



Newton 403 HydroBond and 109-LM combined to provide continuous external waterproofing protection



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"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 have 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 continuity of the waterproofing systems.

This involved a consistent and proactive approach to 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 program."

David Searle, Site Manager, RW Armstrong

The Products

109-LM

CASE STUDY - NEW BUILD BASEMENT

Flexible, single-component cold-applied, seamless rubber waterproofing membrane for the external waterproofing of basements, foundation walls, decks, and flat roofs.

403 HYDROBOND

Extremely high performance composite sheet membrane featuring a locking fleece to one side an polymer hydrophilic coating to the other.

408 DECKDRAIN

Double cuspated deck and flat roof drainage membrane that provides two layers of drainage, eliminating the risk of trapped water.

409 ROOTBARRIER

Impermeable high density polyethylene (HDPE) membrane providing robust root protection to the primary waterproofing membrane.

410 GEODRAIN

Two-core drainage sheet that provides outstanding drainage and protection to the outside faces of below-ground basement structures.

SYSTEM 500

The professionals' waterproofing system of choice, this internal and fully maintainable system is ideal for new build or refurbished basements.

FIBRAN XPS 500-C

50mm deep, closed-cell thermal insulation board made from rigid extruded polystyrene and designed for use with Newton System 500.

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.



Newton 409 RootBarrier was installed as a final line of protection beneath the above-ground landscaping



The below-ground swimming pool also required complete waterproofing with Newton products



A blockwork lining wall was constructed internally inside the full System 500 cavity drainage membrane



The extensive basement area was a large-scale extension to an existing property