

TRITON WATERPROOFING RANGE LOOKING GOOD FOR 'BEAUTIFUL BASEMENTS'

A Leicester based company which specialises in waterproofing and the construction of high specification basements, as well as the upgrade of existing sub-structures, has made extensive use of products from the range of Triton Systems in creating a complex new extension to an old farmhouse in Northamptonshire for a private client.

Beautiful Basements Ltd. works right across the country on commercial projects as well as large residential developments, in this case helping create a number of luxurious spaces for the owners of the characterful country home where Eastco Homes was the main contractor. The additions include a cinema room, bar, games room, storeroom and plant facilities. There are also two stylish staircases linking to the ground floor and garden, while the T-shaped basement more than doubles the original footprint of the 150 year-old home with a new excavation cut into the rear garden.

Careful consideration of the water-proofing and damp-proofing detailing is always essential when constructing a basement, but in the case of the Northamptonshire project the situation was made even more challenging due to a very high water table and persistent bad weather during the work.

As an approved installer of the Triton Systems, Beautiful Basements employed half a dozen of the well-proven products to create a large-scale, fully waterproof sub-structure that offers a ten year guarantee along with insurance backed guarantee. The products include **TT Admix** incorporated into all of the waterproof concrete mix at the batching plant, **Tri-Cream** for the injected DPCs, three variants of the Platon drainage membranes, a pair of sump pumps and one of Triton's high level alarms.

The Operations Manager for Beautiful Basements, Mike Connelly, comments: "This was a technically difficult project due to the very high water table and the complexity of the sequencing for the work, which went on for close to eight months, though it has all been successfully completed now and handed over. As a specialist in basement construction we have been using Triton Systems for 12 years now and have a very good relationship with the company, where they will recommend us to interested parties as well as carrying out regular site visits to check on the installations for warranty purposes.



Triton P8 installed behind stud walling



Part of the soffit area using Triton TT Admix in the concrete



Further Triton P8 installed behind stud walling

Importantly for us, the products are very reliable and feature innovative technologies as well as being easy to use, while Triton Services provide very good customer service.“

“For the Northampton project we began by sinking a contiguous secant piled wall around the perimeter of the new basement behind the house, topped by a concrete ring beam and the ground floor slab, within which was a space for the light-well that now takes the main staircase. We then excavated the area of the light-well and lowered in a mini-digger to mine out the entire space down to a depth of over three metres – more than two metres into the water table, under continuous pumping. The walls received a sprayed concrete lining applied over steel mesh reinforcement, before we cast the basement floor slab which had to be 500mm thick to resist the very high hydrostatic pressure.”

In order to excavate a basement beneath the existing farmhouse, the contractor first constructed one metre deep ground beams beneath the main walls and then underpinned them to a depth of three metres. This allowed the excavation work to continue from the garden area through to the front elevation.

In addition the **Triton Tri-Cream** was employed to inject the old brickwork to prevent moisture ingress where a new sub-deck had to be built into the masonry. The very robust and versatile **Platon P8** membrane, which features a pronounced stud profile on the reverse, was fixed across the face of all the walls – as well as and **Platon P20** version being laid on top the basement floor slab – to create a free draining void. Any water captured through the Platon system is then directed to the two sump pumps: located in the main stairwell and the plant room.



Triton Tri-Cream Advanced DPC Injection System

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