



Polyurethane Injection Leak Sealing in a Basement Tank, London

The Project

As part of this new-build development on Blackfriars Road in Southwark by a major UK residential developer, a large 2.5m x 1m fibreglass tank had been installed in the basement. However, during the concrete pour the tank had developed a large crack in the base, allowing a steady and high-volume flow of water into the tank.

NSBC Client
ASF Waterproofing Residential Developer

The Solution

The contractor called upon Newton's new range of high-quality injection resins, as well as specialist injection contractor [ASF Waterproofing](#) to remedy the situation.

ASF Waterproofing initially observed that the flow of water was too great to inject polyurethane directly around the crack, as the resin would have simply been washed away. Instead, to slow the water down, drive packers were inserted into the substrate around the tank to a depth of 2.5m, and injected with [Newton 320-FP](#) polyurethane sealing resin. This new resin reacts extremely quickly on contact with water, foaming to provide a rigid, high-strength seal that rapidly stems water ingress.

With the flow of water into the cracked tank effectively slowed and then brought to a complete stop by the 320-FP resin, ASF Waterproofing then injected around the crack itself. This was achieved by installing Sheet Pile Packers and injecting the substrate with another new injection resin, [Newton 322-SP](#) in order to fill any remaining voids and provide the final seal. This two-component resin can be applied in either wet or dry scenarios to form a flexible and high-strength seal that will not shrink whilst curing, and will not corrode or react over time.

The Result

In just one day on site, Newton and ASF Waterproofing identified the correct products required to stem the flow of water, then seal the crack completely. Newton's new range of injection resins are also applicable in all construction scenarios requiring leak sealing and/or structural repairs.



1. The cracked tank in the basement was allowing the ingress of large volumes of groundwater



2. ASF Waterproofing first drove packers down through the slab to a depth of 2.5m around the tank

Commercial Injection Resin Repair Basement Injection Waterproofing, London

"Newton's level of site support and their next-day deliveries into London using their own vans meant that we could get the necessary products, equipment and manpower to site quickly on this job, which was important to the client to get a quick solution."

As a contractor with years of experience using injection resins for remedial repairs and waterproofing, we know what we're doing - the new injection resin products from Newton are therefore spot on as they cover a good number of different capabilities, meaning they've got a product for almost any injection resin requirement."

*Shaun King, Director, ASF Waterproofing
Newton Specialist Contractor*

The Products

320-FP

A low-viscosity, single component, foaming polyurethane injection resin that reacts with water to form a rigid and hydrophobic seal against water ingress.

Thanks to the closed-cell, rigid foam that is created when the resin reacts with water, 320-FP is perfect for stemming water ingress at joints, cracks, voids and defects within concrete structures, as well as for sealing water leaks through steel piled walls.

322-SP

An extremely low-viscosity, two-component polyurethane injection resin that can be used either to create a flexible and resilient seal in both wet and dry structural cracks, or as the sealing resin within an injection hose waterbar to provide Type B structural waterproofing protection.

As this resin does not require water to create a seal, and thanks to its excellent adhesion to both concrete and metal, 322-SP is ideal for injecting into fine cracks, and for sealing wet and dry cracks in the walls and floors of concrete structures, tunnels and sewer pipes. The flexibility of the cured resin will also cater to potential movement within joints.



3. Being a single-component product Newton 320-FP is quick and easy to use on site



4. Once injected into the substrate, the 320-FP reacted quickly with the ground water to provide a seal



5. With the flow of water stemmed, ASF Waterproofing could now get inside the tank to inject Newton 322-SP



6. Job done - with both resins providing an effective seal against water, ASF and Newton could leave happy

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 offer full professional indemnity on design, and insurance backed guarantees on the installation.