

Balcony Waterproofing and Fireproofing, London

Protecting Residential Apartments in a New Affordable Development

The Project

As part of the Wandsworth regeneration programme to increase the number of affordable homes, [Wates Residential](#) were awarded the contract to build a new, six-storey block of apartments on the Shuttleworth Road. The structure included 59 concrete balconies, all requiring waterproofing with a product with a minimum fire rating of A2-s1-d0, tested to [BS EN 13501-1](#).

Not only were Newton able to recommend a product that had already been used on a similar project this year, they were also able to recommend the expert services of Newton Specialist Contractor [Arti Structural Waterproofing](#).

The Solution

The minimum fire rating of A2-s1-d0 now precludes the polyurethane and polyurea products that were commonly used on balconies, so Newton recommended the cementitious and modified-polymer [Newton 103-S](#) membrane. As well as carrying the required fire rating, 103-S can resist extremely high positive and negative water pressure, forming a hard, durable coating with a degree of elasticity that makes it ideal for protecting concrete.

Arti also used [Newton 203-RM](#) to create smoothing fillets, and [Newton 912-RT](#) to reinforce the 103-S over the joints, details and changes in direction.

On site, Arti also needed to work flexibly, as the programme could not proceed without the waterproofing and fireproofing of the balcony upstands. However, due to the propping of the concrete formwork to the floors above, Arti had to execute their installation in two phases of efficient and detailed waterproofing.

The Result

Thanks to a meticulous eye for detail, as well as careful planning and thorough preparation of the concrete balconies, Arti were able to complete the waterproofing of all 59 balconies in two stages. This was managed as well as delivering the required A2-s1-d0 fire rating, and the installation was completed quickly without compromising the programme of the build.



The concrete was correctly prepared before installation



Newton 912-RT was used to reinforce the 103-S



"We are very pleased to have the opportunity to use Newton's unique products to provide a robust and quick solution for Wates Residential in order to meet the new building fire regulations at the same time as achieving the required waterproofing to the balcony structures.

It has also been a pleasure to work with a very professional construction management team throughout."

Lucian Ardeleanu, Managing Director
Arti Construction Ltd.

The Products

103-S

High adhesion liquid waterproofing membrane that is capable of resisting extremely high positive and negative water pressure. The membrane is ideal for the internal and external waterproofing of concrete and steel elements of water-retaining/water-resisting structures such as reservoirs, water tanks, below ground structures, podium decks, balconies and parking areas

Newton 103-S forms a hard, highly alkaline coating with a degree of elasticity which has greatly enhanced chemical resistance and so is particularly suited for protecting concrete.

203-RM

Single-component, rapid-setting and high strength repair mortar, used primarily for the durable repair of concrete. Setting in just 10 minutes at 20°C, Newton 203-RM is ideal for areas that cannot be taken out of service for long periods, or where the concrete is subjected to heavy wear such as roads, runways, bridges, decks, balconies, floors and footpaths.

Polymer-modified, and fibre-reinforced, Newton 203-RM is physically and chemically compatible with the host concrete, quickly exhibiting high adhesive and compressive strength.

912-RT

A spun-bond polypropylene reinforcement tape used with [Newton System 100](#) liquid waterproofing membranes and [Newton System 700](#) coatings to reinforce changes in direction, and over cracks, and static construction and day joints.



Formwork props prevented installation from occurring in one phase



Arti returned to finish the waterproofing on a second phase



The completed apartments on Shuttleworth Road, Wandsworth

Newton Specialist Basement Contractors

Newton recommends that our systems are installed by one of our nationwide network of Newton Specialist Basement Contractors (NSBCs). Trained by Newton, NSBCs offer a full guarantee on the design and installation, and can act as Waterproofing Design Specialists.



www.newtonwaterproofing.co.uk



tech@newtonwaterproofing.co.uk



+44 (0)1732 360 095