Liverpool Canal Dock Link Is Successfully Waterproofed

Waterproofing and waterstops keep water where it should be in transportation infrastructure.

Project	Liverpool Canal Dock Link
Client	British Waterways/Liverpool City Council
Main Contractor	Balfour Beatty Construction Ltd
Structural Consulting Engineer	Arup Partners Liverpool
GCP Solutions	PROCOR® waterproofing, Serviband™ flexible joint system, Servitite™ AT 200/SERVISEAL® AT 240 waterstops

Project

Showcasing the city

In preparation for its year as the designated European Capital of Culture city, Liverpool embarked on a £17 million transportation infrastructure improvement that included construction of a new canal dock link.

The project reconnected the Leeds & Liverpool Canal to Liverpool's South Docks via Stanley Dock, allowing boats to travel past the world-famous Three Graces and into the Albert Dock. The canal project will be a major feature of the city, consisting of a waterway that includes two new locks, two new bridges, and three tunnels, which will allow access for visiting canal boats, water taxis, and boats for hire.

"The canal project will be a major feature of the city. "

Seeking a high-performance waterproof solution

The transportation infrastructure design required a system that would offer a waterstop system with water excluding and water retaining properties. This would keep water within the canal and ensure that water could not penetrate the concrete tunnel.

For the roof decks area, a high-performance waterproofing system suitable for efficient application over large areas was required. Additionally, a compatible joint system was also specified.

"The transportation infrastructure design required a system that would offer a waterstop system with water excluding and water retaining properties."

Meeting strict waterproofing standards

GCP provided an innovative waterproofing solution comprised of Servitite™ AT 200/SERVISEAL®AT 240. This high security PVC waterstop system with coextruded hydrophilic bulbs provides a unique combination of active and passive protection for joints in concrete. Developed for critical water retaining and water excluding structures, the AT system was installed in the tunnels to prevent water migration. Its hydrophilic properties, combined with its ability to act as a continuously active seal, made it a highly reliable solution for the strict requirements of the transportation infrastructure.

For waterproofing of roof decks, both PROCOR®Deck System 2 and Serviband™ were applied. PROCOR® Deck System, a liquid applied system, overcame the issue of application over a large area, as it can be either spray or trowel applied. When used in conjunction with Serviband™, which protects movement joints in concrete from water pressure, the PROCOR®Deck System provides continuous waterproofing.

"Its hydrophilic properties, combined with its ability to act as a continuously active seal, made it a highly reliable solution for the strict requirements of the transportation infrastructure."

Last Updated: 2019-09-02
gcpat.com/about/project-profiles/liverpool-canal-dock-link-successfully-waterproofed