



The Pearl-Qatar - Watertank Repair

Doha, Qatar
2010

BACKGROUND

The Pearl-Qatar is a multi-billion US dollar phased mixed-use development on an artificial island that covers nearly four million square metres. When the project is complete it will be home to 41,000 residents and feature every amenity, including schools, retail, restaurants, entertainment, marinas and three five-star hotels.

When completed The Pearl will be the first land in Qatar available for freehold ownership by foreign nationals. Residents can select luxury apartments, townhomes, penthouses and villas in this Riviera style living community.

In three of the luxury towers of the Viva Bahriya district adequate waterproofing was not used and during construction several leaks in the tower's watertanks appeared.

SOLUTION

Local Kryton distributor, Unicon was brought on-board to repair the leaking watertanks at buildings 7B, 10 and 12A. Unicon recommended the Krystol Crack Repair System be used throughout the project. Using integral crystalline waterproofing technology, Kryton's system transforms cracked and leaking concrete into a permanent, water-resistant barrier. Kryton's Krystol line of products are safe for potable water and certified to NSF/ANSI std. 61.

First the cracks and joints needed to be chiseled to form an appropriate size groove. The Krystol Crack Repair System consists of three products applied to the groove in three easy steps. First a rapid-setting product called Krystol Plug is installed. Krystol Plug sets in just one minute and stops any flowing water. Next the active crystalline technology is installed in the form of the product Krystol T1. This product is what provides the permanent waterproofing. Finally, the third step is to cap-off and finish the repair with a strong, waterproof, non-shrink grout called Bari-Cote. Stand alone repairs are finished with a fourth step by applying Krystol T1 as a brushed slurry over and around the repair. In the case of The Pearl-Qatar water tanks, the entire concrete surface of the tank received two coats of Krystol T1 as a brush applied slurry.

In total 10 leaking watertanks were repaired by Unicon.



Leaking watertanks were repaired with the Krystol Crack Repair System



The Pearl-Qatar is a multi-billion dollar project.



Kryton's Krystol line of products are safe for potable water and are certified to NSF/ANSI std. 61.

DEVELOPER

United Development Company (UDC)

ARCHITECT (MASTER PLAN)

Callison

DISTRIBUTOR

Unicon Limited

PRODUCTS & TECHNICAL SPECIFICATIONS

Learn More at www.kryton.com

Krystol® Crack Repair System

Concrete Knowledge

Kryton is recognized and acknowledged as the specialist in taking the risk out of concrete waterproofing globally. Attendees visiting The Big 5 will learn about Kryton's Krystol Internal Membrane-Extended Set (KIM-ES) which has been optimized for hot climate challenges and mass concreting. At the Canadian Pavilion, Kryton will display its KIM-ES, which is a modification of Kryton's KIM, the world's first integral crystalline waterproofing admixture for concrete that turns an entire concrete mass into a waterproof barrier. The company's KIM admixture eliminates the need for membranes and is well suited for use in water containment. The new technology provides excellent resistance to harmful caustic effects of contact with sewage, wastewater and waterborne chemicals such as sulphates, chlorides and acids. Kryton's products are safe for contact with potable water and certified by NSF to NSF/ANSI Standard 61 Drinking Water System Components – Health Effects. Being cognizant of unique regional needs has won Kryton major projects such as the water tanks at the Atlantis Hotel, the repair of water tanks at the Pearl-Qatar, the construction of watertight water tanks at the Al-Falak building



Kryton products waterproofed below grade water storage tanks at the Atlantis Hotel, Dubai

in Saudi Arabia and the construction of the drinking water tank at the Emirates Airline call center in Dubai. Uniquely, Kryton provides a complete system that is proven to take the risk out of concrete waterproofing. Kryton offers admixture solutions, surface-applied treatments, repair and maintenance products, joint waterproofing protection and water repellent sealer. ■