

Palm Islands, Palm Jumeirah

Dubai, United Arab Emirates (2002)

BACKGROUND

The Palm Islands are the three largest man-made islands in the world.

Each of the islands (Palm Jumeirah, Palm Jebel Ali, and Palm Deira) were built in the shape of a date palm tree consisting of a trunk, a crown with fronds, and surrounded by a crescent island that acts as a breakwater. The islands support luxury hotels, freehold residential villas, unique water homes, shoreline apartments, marinas, water theme parks, restaurants, shopping malls, sports facilities, health spas, cinemas and various diving sites. The Palm Jumeirah (the smallest of the three) will primarily be a retreat and residential area.

The trunk section of the Jumeirah includes a concrete canal that is 2 km (1.24 mile) long. The canal is the main transportation link to the island. Once constructed, the trunk will be forever submerged into the sea surrounding the island. Protecting steel reinforcements within the concrete from salt water attack is crucial to ensuring the long-term durability of the structure - especially considering the difficulty and cost of potential repairs and maintenance

SOLUTION

The contractor, N SCC-SBF, chose the Krystol Concrete Waterproofing System because of its ability to become a permanent part of the concrete matrix. Unlike traditional waterproofing membranes, Krystol waterproofing technology grows stronger from the day it is applied and does not deteriorate over time.

Unlike old-fashion membranes, Krystol actually transforms the concrete into a water-resistant barrier. Krystol uses advanced integral crystalline waterproofing technology to provide a powerful, guaranteed defense against water damage. Krystol chemicals are absorbed into the structure through the natural wicking action of concrete. When combined with water, Krystol reacts to form millions of needle-like crystals. The crystals work inside the concrete to self-seal cracks and fill the spaces between concrete particles, permanently blocking the movement of water in all directions.

Krystolized concrete will prevent the penetration of damaging waterborne contaminants, chloride-ions, salts & sulphates that would corrode reinforcing steel and compromise the life of the canal. Krystol will continue to protect against potential water damage, because the crystallization process is activated whenever moisture is present, integrally waterproofing for the life of the concrete.



OWNER:

Al Nakheel Properties

CONSULTANT:

Parsons De-leuw-cather

CONTRACTOR:

NSSC-SBF

DISTRIBUTOR:

Giant Star Trading LLC

PRODUCTS:

Learn more at kryton.com
Krystol T1®/T2®

Kryton International Inc.



Hall 1, Stand F11

Kryton International Inc. provides the most effective concrete waterproofing systems in the world. With over 40 years of experience, 50 distributors worldwide, and more than 10,000 successful waterproofing projects, Kryton is recognised and acknowledged as the leader in taking the risk out of concrete waterproofing globally.

Whether you are an engineer, architect, property developer or general contractor, Kryton helps indus-

try professionals solve the most difficult concrete waterproofing challenges by providing innovative, time-tested solutions, backed by service and support that are second to none. Kryton products provide cost- and labour-savings that help you stay on budget and on schedule for the most innovative designs.

Using proven Krystol technology, Kryton protects concrete permanently. Its revolutionary self-sealing technology and comprehensive support system transforms concrete into an ever-vigilant, waterproof barrier. In the short

term, you will shave weeks off construction schedules, cut waterproofing costs by up to 40% and maximise your building footprint. In the long term, you will avoid leaks, discoloration and costly callbacks. All of which explains how Kryton can offer an industry-leading 25-year warranty, as well as how 40-year-old Kryton projects are as dry today as when they were first built.

Kryton products are proven in the harshest of environments from the Palm Islands and Atlantis Hotel in Dubai to the Marina Bay Sands and Marina

Coastal Expressway in Singapore. Kryton provides a permanent waterproofing solution.

Kryton offers admixture solutions, surface-applied treatments, repair and maintenance products, joint waterproofing protection and water repellent sealer.

With a reputation for excellence, and systems in some of the most iconic global projects, Kryton is the world's leading concrete waterproofing solutions provider. To learn about Kryton products, visit kryton.com.