

# DoubleTree by Hilton

Al Barsha, Dubai, United Arab Emirates (2014)

## BACKGROUND

From the Burj Khalifa to the Mall of the Emirates, each structure defining Dubai's skyline is remarkable. The DoubleTree by Hilton Hotel & Residences – Al Barsha is no exception. The features for this hotel are consistent with the Hilton brand world-wide – everything is top of the line. The hotel boasts 181 modern rooms, 13 suites, 41 studios, and 124 one and two bedroom apartments.

As is the case with all of the structures in Dubai, the concrete foundations will be exposed to hydrostatic water pressure. The Hotel & Residence has three below grade car parks with 7-8 m (23-26 ft) of hydrostatic water pressure that needed to be accounted for. The project was originally specified with two layers of torch-applied SBS (styrene-butadiene-styrene) membrane. However, these membrane systems are subject to risks, such as improper installation, punctures, and failure under hydrostatic water pressure conditions. The DoubleTree by Hilton needed a better option.

## SOLUTION

Al Ajmi Engineering had previously worked with Kryton's Krystol product line on a number of projects in the region. In those projects, Krystol technology was able to successfully provide many benefits, such as: time savings, proven performance, and an unmatched 25-year warranty. This made it an easy choice to use Kryton's Krystol Internal Membrane™ (KIM®) admixture for the three floors of below grade car park, which included the raft slab, retaining wall, and water tank. KIM is also the only PRAH (Permeability Reducing Admixture for Hydrostatic conditions) available on the market, which will reduce the risk of damage from the hydrostatic water pressure.

As of writing, the Double Tree by Hilton is leak free and experiencing dry conditions in all below-grade areas of the structure.

### OWNER:

Mr. Mohamed Juma Humaidan Al Falasi

### ENGINEER:

Al Ajmi Engineering Consultants

### CONTRACTOR:

M/S Delta Emirates Contractors

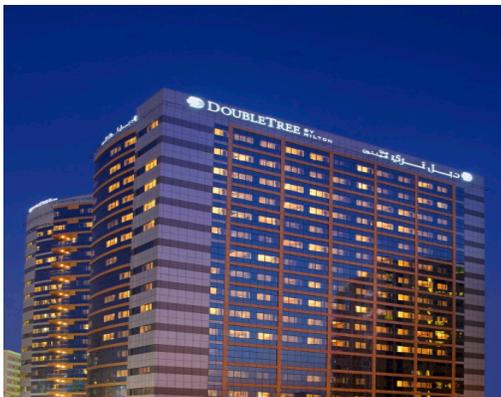
### READY-MIX:

Q-Mix

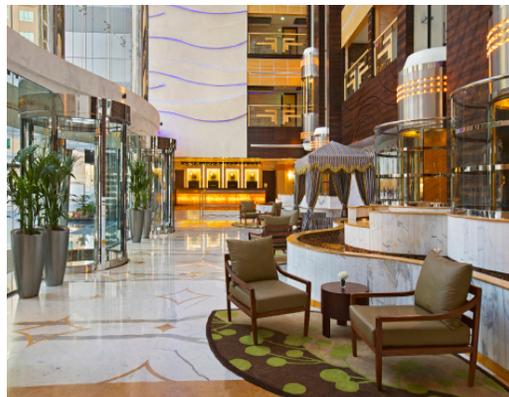
### PRODUCTS:

Learn more at [kryton.com](http://kryton.com)

Krystol Internal Membrane™ (KIM®)



*KIM was used to waterproof the three below grade floors of car park.*



*KIM's ability to withstand hydrostatic water pressure makes it the most durable option where water pressure is an issue.*

### Kryton International Inc.

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