



# Structures

## Integritank® Product in Action

### Al Zeina, Raha Beach Development, Abu Dhabi



Client: ALDAR

Main Contractor: LAING O'ROURKE

Authorised Contractor: LAING O'ROURKE COMPOSITE SYSTEMS LLC

Al Zeina is the 'strategic gateway' to the Al Raha Beach Development where residents can enjoy a collection of gardens, courts and plazas. The mixed-use development contains luxury residential dwellings, a retail area, waterside restaurants, 500-metres of public beach and private boat moorings.



#### Seamless Solution Required

With extensive detailing throughout the site, including planters, water features and steps on the podium deck it was essential that the chosen system could easily accommodate the wide array of upstands and complex details to be encountered on the site. In addition, as these areas were directly over car parks and high value residential properties, a trusted and 100% effective system was required. **Integritank**, Stirling Lloyd's MMA resin based structural waterproofing membrane offered simple airless spray liquid application which would enable these areas to be quickly, effectively and seamlessly protected with no vulnerable seams. This, together with Integritank's worldwide reputation and Stirling Lloyd's unique on-site quality assurance scheme meant that the client could be confident that this system would provide complete protection.

#### The Chosen System

Consequently to protect this impressive development the Consultant Engineer, Pell Frischmann, specified the use of **Integritank** on the developments podium deck.

Subsequent to the outstanding performance on the podium deck, the **Integritank** system was also chosen to waterproof critical balconies and swimming pools which were located above living spaces.

Prior to the application of the waterproofing the substrate was prepared and tensile adhesion tests undertaken. These confirmed that the **Integritank** system would easily achieve the required bond strength to the substrate of 0.3MPa; with the tests finding bond strengths in excess of 1MPa.



Ref. PIA\_Inte018(1E).pdf  
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The substrate was then primed and the **Integritank** membrane spray applied in two coats of contrasting colours to aid on-site quality control; wet film thickness tests were carried out throughout application to verify that the required minimum thickness of 1mm per coat was being applied.



Each coat always cured in under an hour, aiding contract progression. Once the second coat of membrane had cured, the finished membrane was electrically tested to confirm its integrity and once a full inspection had taken place all areas were further tested to ensure any detailing was watertight.

### Luxury Protected

With the Al Zeina project showcasing the latest in luxury development, protecting the finished project from water ingress and corrosion in the areas highly aggressive climate will be of vital importance. By selecting Stirling Lloyd's **Integritank** membrane and the long term, effective protection it provides, both the client and the schemes residents can be confident that Al Zeina will remain a luxurious development, for a long time to come.

