

PROJECT:

Bridge deck waterproofing at the Mohammed Bin Rashid City District One, Dubai, UAE

Project Information	
Client	: Meydan Sobha LLC FZ
Location	: Mohammed Bin Rashid City, Dubai, U.A.E.
Contractor	: Wade Adams
Consultant	: AE7
Products	: Corroprime EP SF Corroprufe 65 Corromortar FC Corrocoat PUA HF
Area	: 1400 m ²
Area of application	: Bridge Deck Waterproofing
Year of application	: 2017



Project Description:

Mohammad Bin Rashid City is a new mix-use prime development in the vicinity of the Business Bay, Burj Khalifa and Downtown Dubai planned to be finished by 2020. Within the Mohammad Bin Rashid City, the developer Meydan Sobha LLC FZ is developing 40 million square feet of freehold land into an exclusive destination of luxury villas, together with the needed infrastructure.

For waterproofing of 103 meters long and 13.5 meters wide bridge, that is in close vicinity of the lagoons water, Corrotech Construction Chemicals offered to consultant its polyurea waterproofing solution **Corrocoat PUA HF**. Polyurea waterproofing provides seamless waterproofing protection which is a significant advantage over traditional waterproofing systems, in addition to protecting the entire structure.

The system offered was applied as follows:

- 1) The entire area of the original concrete structure of 103 m long and 13.5 m wide bridge was grinded and vacuumed as a part of the surface preparation. All irregularities in the substrate were repaired by using **Corromortar FC** and **Corromortar ESc** repair mortars. Expansion joints were prepared with **Corroseal PS749**.
- 2) Repaired and prepared surface of the bridge was primed with **Corroprime EP SF**.
- 3) **Corrocoat PUA HF** was sprayed up to a thickness of 3 mm. The final layer of polyurea was broadcasted with anti-slip aggregate to create mechanical key.
- 4) **Corroprufe 65** tack coat was applied as a final layer of the system to a thickness of 1 mm, over which 150°C hot asphalt was poured.

