

# INDUSTRIAL CASE STUDY



## HOTEL FOUNDATION WATERPROOF LINING



### SITUATION

Large-scale construction projects are no easy feat - construction projects below sea level present even more challenges. The Republic of Malta is an archipelago located in the Mediterranean Sea. As a popular tourist destination, hotel and infrastructure construction is ever present and has increased dramatically in recent years. One such property developer is constructing a new hotel just 70 meters from the sea and with foundations 6 meters below sea level. Water ingress poses a costly problem for construction as heavy moisture and salt contaminate the concrete structure. Many areas would need to be repaired or replaced before construction is even complete. To avoid additional cost and construction delays, the developer wanted a new solution for this hotel project.



### SOLUTION

After consulting with architects and engineers and testing various products, LINE-X XS-101 was chosen to seal the concrete foundation against saltwater damage. LINE-X XS-101 EU is a spray-on polyurea coating that is an ideal waterproofing system for concrete surfaces. Able to be sprayed over cracks and expansion joints, XS-101 EU forms a mechanical bond with a concrete surface and can stretch up to 400% of its original size – ensuring a solid watertight seal. The concrete perimeter walls and floors were cleaned, removed of any debris and primed with a specialized primer that promotes adhesion to the LINE-X coating. Once cured, all primed areas were sprayed with LINE-X XS-101 to form a seamless, watertight and corrosion resistant barrier.



### RESULTS

After the LINE-X application, a second layer on concrete was applied over the LINE-X membrane. This prevented damp and salt patches leeching into the final layer of concrete. Prior to the LINE-X application, pumps ran continuously to expel seawater from the site. Seawater influx continued even after construction was well underway. There wasn't an efficient, reliable method of keeping water away. To date, no seawater has permeated the LINE-X coating or halted construction. Engineers onsite are so pleased with the coating's performance that they believe this method could be replicated on other projects on the island.

**PROJECT OVERVIEW:** Waterproofing Hotel Foundations

**PRODUCTS USED:** LINE-X XS-101 EU

**CASE STUDY PROVIDED BY:** LINE-X Malta



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