

# Governors Island Seawall Rehabilitation

New York, NY, USA (2014)

**PRODUCTS USED:**

**Krytol Internal Membrane™ (KIM®) Krytol® Leak Repair System**

**OWNER/DEVELOPER:**

New York City Economic Development Corp.

**CONTRACTOR:**

Skanska USA

**DISTRIBUTOR:**

Dry Concrete L.L.C.

## BACKGROUND

For over 120 years, a seawall of 3.5 km (2.2 mi) has encompassed Governors Island, protecting it, keeping the land together, and standing strong against the force of the surrounding sea. Over time, this impenetrable barrier started to wear down. To rehabilitate the wall, the New York City Economic Development Corp. (NYCEDC) had a team get to work on it as soon as possible in 2013.

Before starting, they determined that the revetment would have to be a sloped stone abutment that could handle the heavy waves of the sea and remain easily maintainable. It wouldn't be their sole focus, however. They would also need to give some attention to the north side of the island. The original seawall there needed further support and repairs to ensure that it could handle the constant bombardment of salt water.

Sustaining and even extending the service life of the seawall in this way meant protecting the structure's new and existing concrete from water infiltration and ensuring it would be resilient to weathering (including significant freeze-thaw cycles) year-round. To do that, the seawall rehabilitation team needed a durable solution.

## SOLUTION

The NYCEDC decided that this durable solution would include Kryton's waterproofing admixture, KIM. As a result, they had the rehabilitation team pour more than 1,530 m<sup>3</sup> (2,000 yd<sup>3</sup>) of KIM-treated concrete for the new and old sections of the seawall. That allowed them to eliminate the use of an external membrane installation and any of the coatings that go with it as KIM is meant to go directly into the concrete mix to permanently waterproof the material. The rest of the old seawall was treated with Kryton's Krytol Leak Repair System. That way, the rehabilitation team could refurbish it with a whole system designed to repair cracks and create durable, waterproof structures. With both KIM and the leak repair system installed, the Governors Island seawall was set to stand the test of time, and as of writing, it remains that way, with Kryton's solutions still working as originally specified.

