

CASE HISTORY

BBZ RESIN INJECTION SYSTEMS

Project: Mystic Marinelife Aquarium **Engineer:** Rhodes/Dahl
Mystic, CT

Owner: Sea Research Foundation **G.C.:** Turner Construction

Injection System: Duroseal Inject, Duro Soil **Completed:** May 1999

The first area requiring attention was the Alaskan Coastline. This area needed to be sealed to prevent leakage and/or ground water leeching into the tanks.

Duroseal Inject was chosen for sealing the cracks. Due to its low viscosity, **Duroseal Inject** is able to penetrate even the smallest of cracks. Thanks to its hydrophilic nature, **Duroseal Inject** will maintain a permanent seal.



The cracks were drilled into a 45° angle, bisecting the crack. The holes were placed on alternating sides for the length of the crack. Injection packers were placed. Using a one-component pump, **Duroseal Inject** was injected into the cracks effectively sealing the tanks.

The second area to be injected was the IFE Pool. Water was being lost from the pool. The area that was believed to be leaking had been covered by a decorative concrete cove. BBZ engineers recommended the following solution.

Holes were drilled through the cove directly into the keyway. Longer injection packers were installed and **Duro Soil** was injected into the joint. **Duro Soil** like **Duroseal Inject** swells when in contact with water. The difference was that **Duro Soil** only swells by 10%. No pressure was exerted against the cove and only the small holes drilled were left to be patched. The leak was stopped and the concrete cove maintained.

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