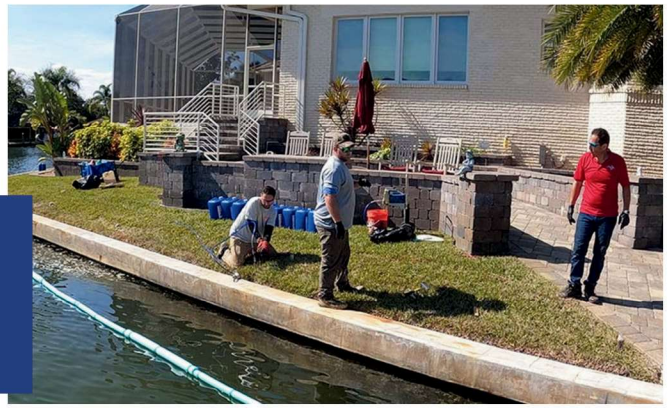
NCFI GEOTECHNICAL

Florida Seawall Repair by Slab Fix, LLC

Central Florida



Problem

Continuous tidal fluctuations, soil erosion, and relentlessly pounding waves cause seawalls to deteriorate and the soil to become weak and voids to form. This was the experience a homeowner was going through with their Central Florida coastal home, necessitating seawall repair.

Tidal fluctuation was causing soil erosion underneath and behind the seawall. The problem signs came in the form of cracking and sinkholes forming along the wall. It was at a boat tradeshow where the homeowner identified a cost-effective repair solution with Slab Fix, LLC out of Orlando, FL. The issue at hand was severe: water was seeping underneath the spillway, saturating the soil beneath, and continuously filling a nearby creek, which should have remained dry except during heavy rains.

Solution

Slab Fix approached the project by probing the soil along the entire 360ft, 6ft tall seawall to identify the weak soil zones. When a weak soil zone was found, Slab Fix would flag the location for treatment. After testing the soil density and identifying the void locations, Slab Fix was ready to repair the wall using the NCFI-120 (formerly Terra-Lok™ 24-120) polyurethane.

Using a 6ft injection rod, Slab Fix injected the NCFI-120 at every weak soil point location. The 6ft rods allowed them to inject the NCFI-120 at the base of the seawall, and, once the injections started, the installer would pull the rod to the surface to allow the polyurethane to permeate the entire zone from bottom to top.

Results

"The priority of the project was to stabilize the base of the seawall using the NCFI-120," stated Yasser Krayem, Owner of Slab Fix, LLC, "but with our injection approach we stabilized the weak soils, filled the voids, and sealed the joints in a single application. This will ensure the seawall is protected against future soil washout and extend its useful life for years."

The seawall repair project was completed in a single day. The results of the project were a stabilized seawall at every weak soil point, thousands in repair cost savings, reduced the project time by weeks, and the seawall is stabilized from future deterioration.

Scan this code to read the full case study

NCFI -120 CASE STUDY

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