

Alchatek

CASE STUDY
MARINA SEAWALL & WALKWAY STABILIZATION

MARINA SEAWALL AND WALKWAY PALM BEACH GARDENS, FLORIDA

# Soverel Harbour Marina *Seawall and Walkway Stabilization*

*Underwater erosion and soil loss beneath a 2,700-linear-foot marina's seawall and walkway required a phased polyurethane injection repair while the site remained fully operational.*

MARINA LENGTH
2,700 *linear feet*

PRODUCT
AP Fill 720



## 01 What made this job *difficult.*

MARINA SEAWALL AND WALKWAY
PALM BEACH GARDENS, FLORIDA

Soverel Harbour Marina had significant underwater erosion and soil loss beneath its seawall and walkway. This repair project was initiated due to severe underwater erosion, verified by divers, which threatened nearby structures.

The team faced unique challenges, including working around luxury yachts without disruption, managing potential material travel in the water, and mitigating settlement issues in pavers.

KEY CONDITION

*Severe underwater erosion beneath the seawall and walkway, verified by divers, required stabilization without disrupting marina operations.*

THE CONSTRAINT

### Marina stayed open

YACHTS STAYED IN THEIR SLIPS

Crews had to work around luxury yachts without disrupting marina operations, contain any material that traveled into the water, and manage paver settlement along the walkway.

AT A GLANCE

| | | | |
|---|---|---|---|
| 830 gallons<br>AP FILL 720 USED IN TEST SECTION | 250 feet<br>INITIAL TEST SECTION LENGTH | 18 months<br>MONITORING PERIOD WITH NO REPORTED ISSUES | 1,000 feet<br>TOTAL FOOTAGE COMPLETED TO DATE |

# 02 What was specified, *and how it went in.*

AP FILL 720

To address these issues, the team proposed a phased injection approach using AP Fill 720 single-component polyurethane. This solution aimed to stabilize the soil, prevent further erosion, and maintain marina functionality while working around luxury yachts.

THE MATERIAL

## AP Fill 720

SINGLE-COMPONENT POLYURETHANE

Single-component polyurethane used in a phased injection approach to stabilize soil and prevent further erosion.

THE METHOD

01
### Install
Turbidity barriers to contain potential material release.

02
### Inject
One gallon of AP Fill 720 per vertical foot, every 3 feet along the joints of the seawall.

03
### Install
3-inch steel pressure control filters between seawall panels for future maintenance.

04
### Remove, replace, and compact
Remove and replace pavers as needed, then compact the soil and restore the pavers post-injection.



# 03 What the result was, *and what confirmed it.*

COMPLETED TO DATE

The project began with an initial 250-foot test section, which was completed successfully using 830 gallons of AP Fill 720. After 18 months of monitoring with no reported issues, the contractor received approval to treat the remaining sections of the marina. To date, 1,000 feet have been completed, with plans underway to complete the remaining section.

COMPLETED TO DATE
1,000feet

*Plans are underway to complete the remaining section.*

START THE CONVERSATION

## Send us the job.
## *We will send back an approach.*

Send us the soil report or the failure photos and Technical Services will return a written approach within two business days.

TECHNICAL SUPPORT

404 · 618 · 0438

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Alchatek

**Alchatek** manufactures polyurethane resins, chemical grouts, and injection equipment for infrastructure repair: leak sealing, soil stabilization, concrete lifting, and seawall repair. Headquarters in Tucker, Georgia, with a bonded warehouse in Reno, Nevada.

Information in this document is believed accurate at the date of publication. Product performance depends on site conditions and application; consult the current Technical Data Sheet, which is the controlling document.