

## PROJECT > Alcatraz Island

Shotcrete MS - Fiber Reinforced  
San Francisco, CA



### PROJECT DESCRIPTION:

Infamously known as “The Rock,” Alcatraz Island is a national historic landmark located off the coast of San Francisco. After years of exposure to the elements, Alcatraz Island’s cliffs were in need of structural and aesthetic rehabilitation.

Boulderscape, a premier design architect that specializes in shotcrete application, used 3,000 lb bulk bags of QUIKRETE® Shotcrete

MS-Fiber Reinforced and QUIKRETE® Shotcrete MS to successfully repair and stabilize a failing slope on the 22-acre island. The project was completed in just six weeks to avoid disruptions to regular tour operations while considering the habitat and migration patterns of local sea birds.

Boulderscape could not start the project until the indigenous birds migrated from the island in November and had to be done before the birds returned in February, which meant delivery and placement of material had to be expedited. In one weekend, 257 bulk bags (16 truckloads) of QUIKRETE® Shotcrete MS-Fiber Reinforced and QUIKRETE® Shotcrete MS were delivered to Alcatraz Island. The challenging logistics required the materials to be off-loaded at night by crane, one-by-one, before finally being transported to the job site on trailers pulled by four-wheel all-terrain vehicles. Nozzlemen were hoisted more than 60 feet high in lifts to spray apply the shotcrete before sculptors repelled down the cliff to shape the material. The end result was a structurally sound slope that matched the surrounding natural environment.

QUIKRETE® Shotcrete MS-Fiber Reinforced is a single component Micro Silica enhanced repair material that achieves more than 9,000 PSI at 28 days, and features very low rebound and permeability characteristics.

### GENERAL CONTRACTOR:

T.L. Peterson Inc.

### SHOTCRETE CONTRACTOR:

Boulderscape Inc.

### PROJECT START DATE:

November 2012

### PROJECT COMPLETION DATE:

February 2013

### QUIKRETE® PRODUCTS USED:

- 3,000 lb Shotcrete MS-Fiber Reinforced : 131 bulk bags
- 3,000 lb Shotcrete MS: 126 bulk bags

