

CASE STUDY

YELLOWSTONE FISHING BRIDGE

Timber Pile Rehabilitation





Contractor preparing deteriorated timber piles for the installation of Denso's SeaShield™ Series 500 Flber Glass Jacket System.



Close up of the pumpable SeaShield™ 550 Epoxy Grout within the fiber glass jacket.



Timber piles fully protected using the SeaShield™ Series 500 System from weathering and deterioration.

Project Data

Location	Yellowstone National Park, Wyoming
Project Type	Timber Pile Rehabilitation
Products Used	SeaShield™ Series 500 System & SeaShield SZ Underwater Epoxy
Contractor	Bergerson Construction

Overview

The Historic Fishing Bridge was built in 1937 in the heart of Yellowstone National Park, Wyoming. It was once an attraction for fi sherman from all over the country due to the abundance of cutthroat trout. It is now one of the featured attractions for hundreds of thousands of Yellowstone Park tourists on an annual basis. The structure is supported by 162 each 15" timber piles that, over the years, were beginning to see deterioration from water line to mud line. The SeaShield Series 500 System was selected as the system for complete encapsulation of all piles.

The project included the complete encapsulation of all 162 piles using 17" dia. SeaShield Fiber-Form jackets that yielded a minimum $\frac{1}{2}$ " annular space. The jackets were constructed 3/16" thick and to a special brown color to closely match the existing piles. The annulus was then pumped and filled with the SeaShield 550 Epoxy Grout. The epoxy grout kits consisted of 3 gallons of 2-part epoxy and 2.5 ea 50 lb. bags of Part C Aggregate yielding 1.2 cu ft per kit. The epoxy grout, due to its outstanding flow characteristics, was able to completely fill in all voids, cracks and checks in the piles. Finally, the tops of the Jackets were sealed off using a special brown color SeaShield SZ Underwater Epoxy.

All together the project included 1,440 LF of 17" dia. SeaShield Fiber-Form Jackets and 575 kits of the SeaShield 550 Epoxy Grout. Installation took place during the late summer of 2018 and was completed 2 weeks ahead of schedule. The contractor was very pleased with the ease of installation of both the Fiber-Form Jackets and the 550 Epoxy Grout.

The Series 500 System provides excellent compressive, flexural and tensile strength, as well as outstanding bond strength to the timber piles. The system also provides weathering protection, including outstanding abrasion and UV resistance. The system will provide many years of additional service life to the Historic Yellowstone Fishing Bridge.

Benefits

- Outstanding abrasion resistance
- Easy to install

High impact resistance

- UV resistant
- Long maintenance-free service life
- Non-corrosive

Date Published: 11/2018

Denso North America - Canada (Ontario) 90 Ironside Crescent, Unit 12 / Toronto, M1X 1M3 Tel: 416-291-3435 Fax: 416-291-0898 sales@densona-ca.com