

SILPRO

SILPROGROUT UWR™

Underwater Repair
Non-Shrink
Non-Metallic
High Strength
No added epoxy

SILPRO, LLC / 2 NEW ENGLAND WAY / AYER, MA 01432-1514 / 800-343-1501 / 978-772-4444 / FAX 978-772-7456 / WWW.SILPRO.COM

SilproGroutUWR™ is a high performance, high-strength, non-shrinking, non-metallic, cement-based, non-segregating, grout for use underwater. The specialty formulation creates an anti-washout grout to complete your repair. **SilproGrout UWR™** is specifically formulated to repair deteriorated wood and concrete columns and piles. In conjunction with a fiberglass **CRF COLUMN REPAIR FORM™**, repairs to deteriorated piles and columns can be performed in place without removing the pile or column. **SilproGroutUWR™** can be mixed by drill, mortar mixer, or pump.

USE SILPROGROUT UWR™ FOR

- Repair of deteriorated wood piles
- Repair of deteriorated concrete columns
- Underwater concrete voids
- Underwater dowling
- Seawall repairs

ADVANTAGES

- High Strength
- Cures in water
- Pumpable
- Non-Shrink
- Non-Metallic
- Non-Corrosive
- Can be extended
- Just add water
- Superior bond

TEST DATA

Set Time

Initial Set 4.5 hours
Final Set 9 hours

Splitting Tensile Strength ASTM C496

670 psi 28 Days

Yield of 50lb bag ASTM C138

.45 lb ft³

Density ASTM C138

130 lbs ft³
2084 kg m³

Compressive Strength ASTM C109

1700 psi 1 day
4700 psi 3 days
6800 psi 7 days
7700 psi 28 days

Flexural Strength ASTM C348

1484 psi 28 days

TEST DATA, (CONT.)

Bond Strength ASTM C882M

3188 psi 28 days
Hardened to plastic grout

Modulus of Elasticity ASTM C469 (X10⁶ psi)

3.7 psi 29 days

Bleeding ASTM C232-C940

No bleeding

Length Change ASTM C157

Wet Cured, Positive Expansion <0.15%
Dry Cured, Shrinkage <0.15%

ASTM C666 Freeze/thaw test - Pass

SURFACE PREPARATION

All bond-inhibiting materials must be removed. For concrete, wood, and steel use high-pressure water-blasting or mechanical means to remove any loose or friable material to achieve a structurally sound surface.

APPLY A TEST

When appropriate have any structural element inspected by an engineer to determine suitability for the repair. Where feasible perform a test to confirm the suitability of the application, and that the final appearance and function will be as the owner, architect, and contractor expect, install a test area at the maximum designed thickness anticipated on the project and subject it to anticipated service conditions before proceeding with the job.

MIXING

4.5 Quarts of water per 50 lb bag

Mix the **SilproGroutUWR™** without aggregate for application from 3/4" to 2". Mix the amount of **SilproGrout UWR™** that can be placed in 15-20 minutes. Add the required water to the mixer, then slowly add the **SilproGroutUWR™** into the operating mixer. Mix for 2-3 minutes and until lump free.

For applications that do not require a **CRF COLUMN REPAIR FORM™** and are 2 inches to a maximum of 8 inches in thickness extend with 20 lb to 35 lb of clean washed 1/4" to 1/2" pea stone for each 50 lbs of grout. For applications exceeding 8" contact **SILPRO**. Aggregate must be added once the grout has been mixed to a lump free consistency.

For Customer Service, Call Silpro at 1-800-343-1501

APPLICATION

SilproGroutUWR™ can be applied into the repair area by bucket, pump, or tremie. When pumping grout, a port can be installed at the bottom and subsequent sections of the Form allowing the grout to easily displace the water as it is pumped. Check for leaks at the bottom of the **CRF COLUMN REPAIR FORM™** and at seams during the application.

CURING

Keep the temperature of the grout above 35F for a minimum of 48 hours.

COVERAGE

Yield per bag ASTM C-185: .45 ft³

SHELF LIFE

2 Years

PACKAGING

50 lb bag

LIMITATIONS

- For temperatures higher than 90°F (32°C), consult with SILPRO's technical service department

GUARANTEE

Please call **SILPRO**, LLC for copy of guarantee.

CAUTION!

SILPRO offers products that may contain cement, latex, epoxy, and other chemicals. Please review the Safety Data Sheet before the use of this product.

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