



# CE811 Pile Jacket Grout

## Underwater Epoxy Grout

**ITEM NUMBER** CE811

### DESCRIPTION

CE811 Pile Jacket Grout is a three-component, 100% solids, moisture-insensitive, high strength, high modulus, long working time, multi-purpose water-displacing epoxy grout designed to cure underwater. It provides a durable encapsulation repair for concrete, timber, and steel below water. It may be poured into forms or pumped.

### WHERE TO USE

Use for encapsulation repair and restoration for concrete, timber, and steel above and below water.

### ADVANTAGES

- Structurally restores integrity of concrete, steel, and timber
- Excellent corrosion protection
- High wet and dry strength
- Made in America
- Moisture Tolerant
- Solvent Free
- Convenient 2:1 mix ratio by volume for liquid; adjustable aggregate loading
- Pumpable

### MIXING RATIO

3 gal /11.4 L of mixed epoxy mixing with 100-150 Lb of aggregate yields approximately 1-1.5 cubic feet (28-42 liters).

### PACKAGING

1.0 Cu Ft

Component A – (2) Premeasured 55 lb bags

Component B – One Gallon Jug

Component C – (2) 55 lb. bag aggregate

### TECHNICAL DATA

|  |   |
|--|---|
| Shelf Life:                                    | 2 years year in original unopened container.            |
| Storage Conditions:                            | 40°F – 95°F (5°C – 35°C).                               |
| Condition material to:                         | 65°F – 85°F (18°C – 29°C) before using.                 |
| Liquid Mix Ratio                               | 2:1 by volume   |
| Viscosity                                      | 100-500 cps   |
| Gel Time (200 g mass)                          | 120 minutes   |
| Tack Free Time (73°F or 23°C)                  | 12 to 24 hours  |
| Tensile Strength (ASTM C307), 7-day cure       | Wet: 1,500 psi (10.3 MPa)<br>Dry: 2,500 psi (17.2 MPa)  |
| Bond Strength (ASTM C882), 7-day cure          | Wet: 1,800 psi (12.4 MPa)<br>Dry: 3,000 psi (20.7 MPa)  |
| Compressive Strength (ASTM C579), 7-day cure   | Wet: 6,000 psi (41.4 MPa)<br>Dry: 11,000 psi (75.9 MPa) |
| Tensile Bond Strength (ASTM C1583), 7-day cure | >250 psi (1.7 MPa)                                      |
| Thermal Compatibility (ASTM C884)              | Pass  |
| Linear Shrinkage (ASTM C531)                   | 0.01%   |
| Water Absorption (ASTM D570)                   | 0.3% (24 hr)  |



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## **APPLICATION**

**MIXING:** Mix only the amount of material that can be used within its pot life. Proportion each component carefully into a clean pail. Mix thoroughly for 3 minutes with a Jiffy mixer on low speed (400-600rpm). Scrape the sides and bottom of the container. To prepare an epoxy grout, slowly add aggregate. Mix only until all aggregate is wetted out.

**Placing:** Pour or pump.

**SURFACE PREPARATION:** Concrete shall have reached its design strength and be dimensionally stable prior to placement of CE811 Pile Jacket Grout. All surface contamination must be removed by mechanical means, creating a surface profile of exposed sound aggregate that will provide a strong bond surface for the CE811 Epoxy Grout. All metal surfaces to come in contact with grout should be sandblasted to white metal finish and wiped clean with solvent. Items not intended to bond to grout, such as leveling screws, wedges and bolts must be protected with wax, caulk, duct tape or similar.

**FORM PREPARATION:** Epoxy grouts require heavy duty forms. A sheet of 3/4" plywood and proper bracing should be used to hold the force of the weight of the grout (140 lbs/64kg per cu ft). Forms should be coated with a minimum of two coats of an industrial grade paste wax to facilitate removal of forms after cure. Forms should have 45° angle chamfer strips at all vertical comers and horizontal grout grade elevation in order to eliminate sharp comers. Caulk, putty, or similar sealant should be used to render the forms "watertight". Forms should be designed to allow for a hydraulic head to facilitate the placement of CE811 Pile Jacket Grout. Expansion joints shall be used every 4 feet spacing in each direction to minimize the potential for cracking in epoxy grout.

## **LIMITATIONS**

Minimum substrate temperature is 40°F (5°C). Do not thin. Solvents will prevent proper cure.

## **CLEAN UP**

Collect with absorbent material. Flush area with water. Dispose of in accordance with local, state and federal disposal regulations. Uncured material can be removed with acetone or other approved solvent. Cured material can only be removed mechanically.

## **HANDLING PRECAUTIONS**

Refer to the Safety Data Sheet for CE811 Pile Jacket Grout.

## **WARRANTY**

This product is, warranted and guaranteed to be of good quality. Manufacturer, as its sole and exclusive liability hereunder, will replace material if proved defective. This warranty and guarantee are expressly in lieu of all others, express or implied, including any implied warranty of merchantability or fitness for a particular purpose and may not be extended by representatives or any persons, written sales information, or drawing in any manner whatsoever. While the manufacturer recommends uses for the product based on tests believed reliable, no warranties, express or implied, or guarantee can be given as to particular methods of use or application, nor can performance be warranted, expressly or impliedly, or guaranteed under special conditions. Distributors, salespersons or company representatives are not authorized to extend or vary any warranties or guarantees beyond those outlined herein nor may the manufacturer's or seller's, limitation of liability be waived or altered in any manner whatsoever.