



# CE818 HP

## HIGH FLOW, HIGH EARLY STRENGTH EPOXY GROUT

### DESCRIPTION

CE818 EPOXY GROUT is a three-component, 100% solids, high performance epoxy machine grout. It is characterized by high early and ultimate strength, high effective bearing area, low exotherm, negligible shrinkage and creep, fast cure and excellent flowability.

### USE

CE818 EPOXY GROUT is ideal for high stress applications in industries such as wind turbine, gas transmission, refining, chemical processing, pulp and paper, steel rail, marine and other heavy industrial equipment machine base plate grouting applications. New equipment installations or quick re-grouting applications subject to chemical attack and extreme vibration are ideal for CE818 EPOXY GROUT. CE818 can also be used as an anchoring adhesive in large annular space applications.

### TECHNICAL DATA

LABORATORY TESTS	RESULTS	
	WORKING TIME	INITIAL CURE TIME
CURING TEMPERATURE	50° F	48 HOURS
	60° F	36 HOURS
	70° F	24 HOURS
	80° F	12 HOURS
	90° F	6 HOURS
	100° F	4 HOURS
COMPRESSIVE STRENGTH (ASTM C579) @75° F	8-HOUR CURE	12,000 PSI
	16-HOUR CURE	14,000 PSI
	1-DAY CURE	14,500 PSI
	2-DAY CURE	15,500 PSI
	3-DAY CURE	16,500 PSI
	7-DAY CURE	17,000 PSI
TENSILE STRENGTH (ASTM C307)	2,500 PSI	
FLEXURAL STRENGTH (ASTM C580)	6,500 PSI	
MODULUS OF ELASTICITY (ASTM C580)	2,100,000 PSI	
SHEAR BOND STRENGTH (ASTM C882)	3,500 PSI	
LINEAR SHRINKAGE ON CURE (ASTM C531)	NEGLIGIBLE	
COEFFICIENT OF THERMAL EXPANSION (ASTM C531)	16 x 10 <sup>-6</sup> in/in/°F	
SHORE D HARDNESS (ASTM D2240)	90	
WATER ABSORPTION (ASTM C431)	NEGLIGIBLE	
FIRE RESISTANCE (ASTM D635)	SELF EXTINGUISHING	

**Note:** The data presented above is representative of specimens cast and cured in controlled laboratory conditions.

**Field cast specimens:** Variations in mixing, material temperature, curing conditions and quality of specimens will affect test results. Field cast specimens should be made in 2" brass cube molds. Cylinder molds should not be used. Material, mixing, and curing temperatures as well as cube weights should be recorded. Specimens should be free of defects and should be tested per ASTM C579B Load Rate II (0.2-0.25"/minute).

### PACKAGING

1.50 cu. ft. kit: 2.5-gal Part A, 0.5-gal Part B, three 55 lb. bags aggregate Part C

Shelf Life: 2 years in original unopened containers

Storage Conditions: Store at 40° F – 95° F (4.4° C – 35° C). Condition material to 65° F – 95° F (18° C – 35° C) before using.

### LIMITATIONS

Typical grouting depth is half inch to 3 inches. For pour depths greater than 3 inches contact CCM technical support regarding the use of Aggregate Extender. Minimum application temperature 50°F. Do not thin. Solvents will prevent proper cure.

### SURFACE PREPARATION

Concrete shall have reached its design strength and be dimensionally stable prior to placement of CE818 EPOXY 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 CE818 EPOXY GROUT. All metal surfaces to come in contact with grout should



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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:** Forms should be coated with minimum of two coats of industrial grade paste wax to facilitate removal of forms after cure. Forms should have 45° angle chamfer strips at all vertical corners and horizontal grout grade elevation in order to eliminate sharp corners. Caulk or similar sealant should be used to render the forms “watertight”. Foundation bolts, shims and jacking bolts should be wrapped with 1/8” layer of weather stripping. Expansion joints shall be used every 4-foot spacing in each direction to minimize the potential for cracking in EPOXY GROUT. **MACHINERY MUST BE IN FINAL ALIGNMENT POSITION PRIOR TO POURING CE818 EPOXY GROUT.**

### **MIXING**

All components should be conditioned to between 65° F (18° C) and 95° F (35° C) for at least 12 hours before use. Pour Part B into the Part A container and mix thoroughly for 3 minutes with a low speed drill at 200-300 rpm. Keep the mixer completely submerged to prevent air entrainment. Remove material completely from around the sides and bottom of the container with a spatula to ensure a complete and uniform mix. Pour mixed liquids into mortar mixer. Introduce first bag of component C-aggregate prior to starting mixer. Start mixer and slowly add the remaining two bags of aggregate. **Mix at low speed and mix only until all aggregate is wetted out. DO NOT OVER MIX.**

### **APPLICATION**

Always pour CE818 EPOXY GROUT from the lowest side of the area to be grouted which will force air to escape through the opposite side. Continue to pour slowly until the entire area is filled and the grout over pour area is filled to a level approximately 1/2 inch (12 mm) above the bottom of the bedplate.

**Temperature Considerations:** At the completion of the curing cycle the temperature shall be lowered slowly, no more than 40°F (4.4°C) in 48 hours to avoid the possibility of damage due to sudden contraction.

### **CLEANUP**

Ventilate area. Confine spill. Collect with absorbent material, flush area with water. Dispose of in accordance with current applicable local, state and federal regulations. Uncured material can be removed with approved solvent. Cured material can only be removed mechanically.

### **LIMITED WARRANTY**

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