



## **CWC 604 MACHINE BOND – TECHNICAL BULLETIN #1104I** **A DEEP-POUR EPOXY GROUT**

Revised: 05/2018

### **MATERIAL DESCRIPTION**

CWC 604 Machine Bond is a three-component, 100% solids epoxy resin grout formulated for the installation of heavy machinery, pumps, compressors, engines/prime drivers and other production / processing equipment. CWC 604 Machine Bond is designed to provide permanent vertical support where maintaining precision alignment is critical. CWC 604 Machine Bond also aids in the uniform transfer of static and dynamic loads to the concrete foundation and pad.

CWC 604 protects expensive capital investments by providing uniform transfer of static and dynamic loads into monolithic, vibration-damping foundation systems, thereby assuring permanent, maintenance-free alignment of all types of rotary and reciprocating machinery.

CWC 604 Machine Bond is formulated with specialty epoxy resins and a select blend of aggregates to provide the best balance of chemical and physical properties. Low exotherm, easy flow and self-leveling characteristics facilitate efficient placement for a top-quality grouting job - from start to finish.

### **USE & BENEFITS**

CWC 604 Machine Bond provides faster, more convenient machinery installations - and keeps machinery on-line to:

- extend mean running time between scheduled shutdowns
- protect capital investments
- reduce overall maintenance costs.

CWC 604 Machine Bond resists chemical attack and effectively damps static and dynamic stresses exerted on the monolithic foundation systems of rotary and reciprocating machinery.

This flowable, self-leveling grout can be used for deep monolithic pours in excess of 18 in. (460 mm). In addition to excellent physical and mechanical properties, this 100% solids deep-pour grout provides a low exotherm and an extended placement time, as well as easy clean-up with water.

NOTE: The 604 aggregate contains barium sulfate, a naturally occurring mineral. Depending on where in the vein it is mined, its color can vary from white to a dark brown color. Therefore, 604 aggregate can vary in color from white to brown. The lighter or darker color is only aesthetic in nature and will not affect the performance of the grout.

### **APPLICATION INSTRUCTIONS**

For Surface Preparation, Forming, Mixing and Placing, Proper Tools, Supplies and Accessories, and Safety Precautions - refer to instructions provided with material. Store the epoxy and aggregate in a dry location at 55°F to 95°F. Condition the foundation and equipment to 75°F to 90°F prior to mixing and pouring See Technical Bulletin #1105 for detailed information on installing CWC 604.

### PHYSICAL PROPERTIES

COMPRESSIVE STRENGTH	16,100 psi (111 MPa)	ASTM C579 MOD
COMPRESSIVE MODULUS OF ELASTICITY	3.8 x 10 <sup>6</sup> psi (26.2 GPa)	ASTM C579
LINEAR SHRINKAGE	0.008 %	ASTM C531
COEFFICIENT OF LINEAR THERMAL EXPANSION	16 x 10 <sup>-6</sup> in/in/°F (28.8 x 10 <sup>-6</sup> mm/mm/°C)	ASTM D696
FLEXURAL STRENGTH	7,880 psi (54.3 MPa)	
FLEXURAL MODULUS OF ELASTICITY	2.0 x 10 <sup>6</sup> psi (13.8 GPa)	
TENSILE STRENGTH	3,065 psi (21.1 MPa)	
TENSILE MODULUS OF ELASTICITY	3.4 x 10 <sup>6</sup> psi (23.4 GPa)	ASTM D638
SHEAR STRENGTH	3,910 psi (27 MPa)	ASTM D732
BOND STRENGTH	2,520 psi (17.4 MPa)	ASTM 0882
FIRE RESISTANCE	Self Extinguishing	
SPECIFIC GRAVITY	1.89	
HARDNESS, SHORE D:	93	ASTM D2240

### PRODUCT INFORMATION

UNIT COVERAGE	2.0 ft <sup>3</sup> (0.057 m <sup>3</sup> )
APPLICATION TEMPERATURE	55°F (13°C) to 95°F (35°C)
PACKAGING PER UNIT	Resin – 26.2 lbs (11.9 kg), 2.64 gal (10 L) in a 5 gal can. Hardener – 14.3 lbs (6.5 kg), 1.8 gal (6.8 L) in a Tray on Top of the Resin. Aggregate – Four (4) 60 lbs (27.2 kg) bags Shipping Weight: 284 lbs (129 kg)
CURE TIME (APPROXIMATE)	60 hours @ 60°F (15°C) 45 hours @ 65°F (18°C) 45 hours @ 70°F (21°C) 35 hours @ 80°F (26°C)
POT LIFE	3.5 hours @ 70°F (21°C)
SHELF LIFE	1 year
CLEAN UP	Water & PRT-59 or similar epoxy solvent

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