

Technical Bulletin # 1104E

## 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 Machine Bond protects expensive capital investments: Uniform transfer of static and dynamic loads to these monolithic vibration-damping foundation systems assures 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 (18' plus). In addition to excellent physical and mechanical properties, this 100% solids deep-pour grout provides a low exotherm and an extended placement time. 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	
COMPRESSIVE MODULUS OF ELASTICITY:	3.8 x 10 <sup>6</sup> psi	
LINEAR SHRINKAGE:		
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	
FLEXURAL MODULUS OF ELASTICITY:	2.0 x 10 <sup>6</sup> psi	
TENSILE STRENGTH:	3,065 psi	
TENSILE MODULUS OF ELASTICITY:	3.4 x 10 <sup>6</sup> psi	ASTM D638
SHEAR STRENGTH:	3,910 psi	ASTM D732
BOND STRENGTH:	2,520 psi	ASTM 0882
FIRE RESISTANCE:	Self Extinguishing	
SPECIFIC GRAVITY:	1.89	
HARDNESS, SHORE D:	93	ASTM D2240

## Product Information

UNIT COVERAGE:	1.7 ft <sup>3</sup> (48 L)
APPLICATION TEMPERATURE:	55°F (13°C) to 95°F (35°C)
PACKAGING per Unit:	Resin – 11.9 kg (26.2 lbs.), 10 L (2.64 gal) in a 5 gal can. Hardener– 6.5 kg (14.3 lbs.), 6.8 L (1.8 gal) in a Tray on Top of the Resin. Aggregate – Four (4) 60 lb. (27.2 kg) bags Shipping Weight: 284 lbs (126 kg)
CURE TIME (approximate):	60 hours @ 15°C (60°F) 45 hours @ 18°C (65°F) 45 hours @ 21°C (70°F) 35 hours @ 26°C (80°F)
POT LIFE:	3.5 hours @ 21°C (70°F)
SHELF LIFE:	1 year
CLEAN UP:	Water & PRT-59 or similar epoxy solvent

**Date** 08/2005

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