

# CWC 604 MACHINE BOND

## Three Component, 100% Solids

### Low Exotherm, Deep Pour

### Epoxy Resin Grout

Bulletin Technical #. 1104B

#### PRODUCT DESCRIPTION

CWC 604 Machine Bond is a three-component, 100% solids, epoxy resin grout specifically formulated for grouting heavy machinery, engines and production equipment. It is designed to resist vibration, chemical attack, high torque loads and the various stresses associated with such installations.

- Features:**
- Excellent physical properties
  - Flowable, self leveling
  - Low exotherm
  - Deeper monolithic pours (18"+)
  - Extended placement time
  - Easy water clean-up

#### Basic

- Uses:**
- Heavy machinery
  - Compressors and engines
  - Production equipment
  - Auxiliary equipment

#### Installation

**Method:** Pour in place, self-leveling.

#### Packaging and Yield:

A unit of CWC 604 Machine Bond consists of three components: Two liquids (Part A resin, Part B - hardener) and an aggregate (Part C). Parts A and B are packaged in a two-component five gallon pail and Part C is packaged in four 60 pound bags.

Yield.....2 cubic feet (0.057 cubic meters)

Shipping weight.....265 pounds (120 kilograms)

Freight Classification.....Acid Proof Cement

#### TECHNICAL DATA

Compressive strength..... 16,100 psi

Compressive Modulus  
of Elasticity ..... 3.8 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)

Flexural strength ..... 7,880 psi

Flexural Modulus  
of Elasticity ..... 2.0 x 10<sup>6</sup> psi

Bond strength ..... 2,520 psi  
(ASTM C882)

Shear strength ..... 3,910 psi  
(ASTM D732)

Coefficient of Linear  
Thermal Expansion ..... 16.0 x 10<sup>-6</sup> in/in°F  
(ASTM D696).....28.8 x 10<sup>-6</sup> mm/mm/°C

Hardness, Shore D ..... 93  
(ASTM C2240)

Specific Gravity ..... 1.89

Pot life ..... 3.5 hours @ 75°F

Samples cured and tested at 75°F, 14 days.

**Storage Conditions:** Store dry at 55°F - 95°F, condition to 75°F - 90°F prior to applying.

Shelf life: 1 year

**HOW TO USE CWC 604 MACHINE BOND**  
THREE COMPONENT, 100% SOLIDS, LOW EXOTHERM,  
DEEP POUR EPOXY RESIN GROUT

## **SURFACE PREPARATION**

All surfaces to be bonded must be dry, sound and free from any contamination of foreign matter. Concrete surfaces should be prepared by mechanical abrasion such as chipping, bush hammering, sand blasting or similar methods. A rough surface will aid adhesion. Sandblasting is recommended in preparing metal surfaces.

## **FORMING**

CWC 604 Machine Bond is a "flowing" grout and must be retained within forms until cured. Forms must be of adequate strength, properly braced and sealed watertight against leakage. Forms must be coated with a suitable release agent, such as paste wax, to permit their removal after the grout has cured.

Forms should allow for hydraulic head as needed to facilitate the filling of the grout bed area.

## **PROPER TOOLS, SUPPLIES AND ACCESSORIES**

All material and equipment for mixing, placing and clean-up should be on hand before any mixing is started. The use of a simple checklist is recommended for use by personnel involved in a CWC 604 Machine Bond installation. This list should include: rubber gloves, safety glasses, particle masks, protective clothing, electric or air drill and paddle attachment, concrete or mortar mixer and cleaning solvent. For a detailed material checklist consult our brochure "CWC 604 Machine Bond Epoxy Resin Grout; Specifications for Installation".

## **MIXING AND PLACING**

Strict adherence to instructions printed on the container is essential. Resin and curing agent must be thoroughly mixed prior to adding the aggregate. Consult our brochure "CWC 604 Machine Bond Epoxy Resin Grout; Specifications for Installation" for detailed instructions.

All surface preparation and forming must be done before mixing procedures are started.

## **TEMPERATURE FACTORS AFFECTING GROUTING**

The temperature of all components of CWC 604 Machine Bond, Parts A, B, and C, should be 75°F - 90°F (23.8°C - 32.2°C) before mixing to produce a readily self-leveling grout with good flowability. Mixing grout materials when their temperatures are below or at the low end of the indicated ranges adversely affects proper mixing and inhibits the flowability of the grout. Mixing grout materials when their temperatures are above or at the high end of the indicated ranges hastens the cure of the grout thus reducing the "working time". The grout materials should be stored at a temperature within the ranges indicated. Work area and substrate temperatures should also be within the recommended temperature range.

## **SAFETY PRECAUTIONS**

Caution: Eye and skin irritant (evidenced by itching, redness). Potential skin sensitizer. Avoid contact with eyes. Avoid prolonged or repeated skin contact. Do not take internally. Wash thoroughly after handling.

First Aid: Eyes - flush with water for 15 minutes. get immediate medical attention. Skin - remove contaminated clothing and excess contaminant, wash skin with soap and water. Inhalation - remove to fresh air. Ingestion - get immediate medical attention.

See Material Safety Data Sheet for more complete information.