



### **Construction-Grade Grout**

### **DESCRIPTION**

FasTrac CG Grout construction-grade grout is a non-metallic, mineral aggregate based, non-shrink multi-purpose grout. The product is specifically developed as a high-strength, cost-effective, general-purpose grout for use across a broad range of construction projects. FasTrac CG Grout will not rust and contains no added chlorides or gypsum. FasTrac CG Grout provides a range of consistency from dry pack to fluid to meet many different application requirements. It is furnished pre-mixed and ready to use. FasTrac CG Grout may be extended for deep grouting with pea gravel for greater yield and increased economy. FasTrac CG Grout is freeze-thaw stable and may be used for interior or exterior applications, above- or below-grade.

## WHERE TO USE

FasTrac CG Grout is versatile and designed for structural grouting of:

- machine and column baseplate
- anchoring doweling,
- bearing pads

- precast wall panels
- bridge seats
- suitable for the transportation, industrial, commercial, and municipal markets

# **FEATURES/BENEFITS**

- Furnished premixed and ready to use (just add water).
- Excellent freeze-thaw characteristics (long-term stability).
- Conforms to ASTM C 827 and ASTM C 1090 positive expansion.
- May be mixed to dry pack, plastic, flowable, and fluid consistencies for high versatility.
- Provides a high strength, non-shrink grout for a broad range of general construction projects.

- Offers the strength and characteristics required for cost-effective, general purpose grouting.
- Cost reductions are realized when extended with pea gravel for deep grouting.
- Requires no separate bonding agent ... only presaturation of concrete with water prior to application.
- No site batching required for consistent results.
- No added chlorides or gypsum.

#### **YIELD**

Approx. 0.43 ft<sup>3</sup> per bag.

## **PACKAGING**

- 50 lb bag
- 2,000 lb bulk bag
- Bulk

# SHELF LIFE

12 mos. properly stored

#### **STORAGE**

Store and transport in clean, dry conditions

## **APPLICATION TEMPERATURE RANGE**

Grouting application shall be performed in accordance with American Concrete Institute (ACI) 351.1R: Grouting between Foundations and Bases for Support of Equipment and Machinery and other applicable ACI recommendations. Minimum application thickness is 1/2" (12.7 mm).

Do not apply to frost covered concrete. Protect from freezing by use of insulated or electric curing blanket, external heating, or other suitable method for up to three days after application. Follow cold temperature application procedure ACI 306, "Standard on cold weather concreting" if both the daily temperature falls below 40° F (23.9°C) and the air temperature does not rise above 50° F (23.9°C) for more than 12 hours in any 24 hour period for three consecutive days prior to insulation. Follow ACI 305 – "Standard on hot weather concreting" if conditions existing for rapid water loss which includes high air temperature, high winds, direct sun or low humidity.





## **HOW TO APPLY**

## Surface Preparation (See ICRI guidelines)

Prepare concrete substrate in accordance with ICRI Technical Guideline No 310.2-1997: Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays. Mechanically roughen or high pressure water-jet the existing concrete substrate to an ICRI concrete surface profile (CSP) of CSP-4 or higher. Remove all unsound concrete and provide a profiled, porous surface. The substrate must also be structurally sound, dust-free, and free of grease, oil, dirt, curing compounds, release agents, or any other surface or penetrated contaminants, coatings, or similar materials that will adversely affect the bond. Sanding or wire-brushing are not approved concrete surface preparation methods. Substrate must be brought to a fully saturated, surface dry (SSD) condition and free of standing water during the entire application of the grout. Abrasive blast the steel base-plates or any steel that will come in contact with the FasTrac CG Grout to a white metal finish.

Consistency (ASTM C827-95A)	Dry Pack	Plastic	Flowable	Fluid
Mix Ratio (per 50lb.)	5.0 pints	6.25 pints	6.75 pints	8.5 pints
Flow (per ASTM C230-90)	Not Applicable	100-120%	120-140%	Not Applicable
Flow (per ASTM C939)				40 Seconds <sup>1</sup>
Set Time (per C191-2, Initial)	4-6 hours	4-6 hours	5-7 hours	6-8 hours
Bond Strength at 28 Days (ASTM C882 Modified)		2300 psi	2500 psi	
Freeze-Thaw Resistance (ASTM C666, Procedure A, 300 Cycles)		100% Relative Dynamic Modulus	100% Relative Dynamic Modulus	
Compressive Strength, psi (per ASTM C109-13 Wet Cure)				
1 day	7,000	3,500	3,000	2,500
7 days	9,500	6,000	5,500	5,000
28 days	10,000	8,000	7,500	7,000

Footnote1 – ASTM C 1107 requires a flow cone time of less than 35 seconds for fluid consistency. \*All technical data is typical information and will vary due to testing methods, site conditions, temperature, curing, procedures, batching, and expected variations in naturally occurring raw materials. Statistical differences in test results should be anticipated. On-site testing results may not correlate to published laboratory results due to testing variations.

## **Placement**

Mix only small quantities of FasTrac CG Grout by hand until lump-free. Mechanically mix with a high torque, low speed drill (400-600 rpm) and paddle or paddle-type mortar mixer. Mix for a minimum of three minutes or until uniform and lump-free. Use the minimum water required to produce desired placement consistency. Do not mix more than can be placed in 15 minutes. Do not re-temper. Use only clean, potable water.

## **Aggregate Extension**

When grouting large areas, extend FasTrac CG Grout with washed, dried, well-graded, non-reactive, dense pea gravel. For thicknesses 2" – 4" (50.8 – 101.6 mm), add up to 25% 3/8" (9.5 mm) pea gravel. For medium-flow mixes, 4" (50.8 mm) and over, add up to 50% 3/8" (9.5 mm) pea gravel. The addition of pea gravel is based on percentage of the weight of the dry grout. The use of aggregate to extend the FasTrac CG Grout will reduce flow and pumping characteristics. A well graded aggregate conforming to table 2 of ASTM C33, Size Number 8 will help to minimize loss of flow and pumping characteristics.





## **Forming**

Standard hard wood, exterior grade wood or metal forming may be used. The forms should be coated with form release agent for easy removal. The form edges should be caulked and sealed to a liquid-tight condition. Forms must be designed to provide a hydraulic head. Forming must also ensure adequate venting to avoid air entrapment. Do not make close fitting forms; allow 1/2" (12.7 mm) clearance and 1" (25.4 mm) for head. The forms should be placed between 2 – 6" (50.8 – 152.4 mm) away from the perimeter of the machine base to allow for air to escape and to provide for a grout shoulder around the base plate.

FasTrac CG Grout is easily placed by pouring or pumping and compaction can be accomplished by rodding or tapping. Place grout on one side, flowing to opposite and adjacent sides, to avoid entrapment of air. Grout head and excess grout may be removed after initial set. Remove the forms after the grout has sufficiently hardened (4 to 10 hours depending on temperature) to avoid damaging and trim edges to desired profile.

### Pumping

FasTrac CG Grout when mixed to a flowable to fluid consistency without the addition of aggregate can be pumped using a suitable grout/mortar pump. Pumps types that have successfully pumped CG Grout are rotor–stator and positive displacement type pumps. Consult pump manufacturer for details on specific pumping instructions for their particular equipment. If FasTrac CG Grout has been extended with aggregate, ensure that the pump type is designed to handle the size and characteristics of the coarse aggregate. Ensure that the pump is equipped designed to process coarse aggregate. Mortar or standard-type grout pumps should not be used to pump FasTrac CG Grout that has been extended with aggregate, since these types of pumps are not designed to process aggregates.

## Curing

Cure immediately after finishing. Use a curing compound that complies with ASTM C 309. In extreme heat, keep the patches covered and damp.

### Clean Up

Clean tools and equipment with clean water immediately after use. Cured material must be removed mechanically.

#### **Health and Safety**

Make certain the most current versions of product data sheet and SDS are being used

### **Risks**

Product contains portland cement and sand (crystalline silica); it can cause skin and eye irritation. Ingestion or inhalation of dust may cause tract irritation. This contains free respirable quartz, which has been listed as a suspected human carcinogen by NTP and IARC. Repeated or prolonged overexposure to free respirable quartz may cause silicosis or other serious and delayed lung injury.

### **Precautions**

KEEP OUT OF THE REACH OF CHILDREN. Prevent contact with skin and eyes. Prevent inhalation of dust. DO NOT take internally. Use only with adequate ventilation. Use impervious gloves, eye protection and if the TLV is exceeded or is used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable federal, state and local regulations.

#### First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes, and seek medical attention. In case of skin contact, wash affected areas with soap and water. If the irritation persists, seek medical attention. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If the discomfort persists, breathing difficulty occurs, or if swallowed seek medical attention. Refer to Safety Data Sheet (SDS) for further information.

### **Proposition 65**

This product contains material listed by California as known to cause cancer, birth defects, or other reproductive harm.

### **VOC Content**

0 lbs/gal or 0 g/L

## **Limited Warranty Notice**

Every reasonable effort is made to apply exacting standards both in the manufacture of "FasTrac CG Grout" product and in the





information, which we issue concerning these products and their use. We warrant our products to be good quality and will replace or, at our election, refund the purchase price of any products proved defective. Satisfactory results depend not only on quality products, but also upon many factors beyond our control. Therefore, except for such replacement or refund, Western Material and Design, LLC makes no warranty or guarantee, express or implied, including warranties of fitness for a particular purpose or merchantability, respecting its products, and Western Material and Design, LLC shall have no other liability with respect thereto. Any claim regarding product defect must be received in writing within one year from the date of shipment. No claim will be considered without such written notice or after the specified time interval. User shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith. Any authorized change in the printed recommendations concerning the use of our products must bear the signature of the Western Material and Design, LLC technical manager.