

FASTRAC NS GROUT

High Performance, Non-shrink Cement Grout

DESCRIPTION

FasTrac NS GROUT is a high performance, non-shrink, cement grout that meets or exceeds all requirements of the Corps of Engineers CRD C-621 and ASTM C-1107. It is designed for a wide range of consistencies from damp pack to high fluidity, meeting the most demanding job conditions.

USE & BENEFITS

FasTrac NS GROUT is recommended for grouting of anchor bolts, baseplates, structural steel and pre-cast columns, dowels, etc. which require non-shrink, high tolerance, high strength performance. It is flowable for easy placement, adheres well to concrete or steel, and exhibits good impact and vibration characteristics.

DESIGN CONSIDERATIONS

Pre-washed graded 3/8" pea gravel may be used in applications thicker than 2". In depths from 2" to 5", add 25% of the 3/8" pea gravel by weight. For depths 5" and deeper, add 50% 3/8" pea gravel by wt. When grouting in hot weather, provide shade around the area to be grouted. Use cool mixing water and protect the grout from the sun for up to 48 hours.

When grouting in cold weather, raise the temperature of the area to be grouted. Preheat the mixing water and cover the grout to retain warmth. DO NOT place at temperatures below 40°F or if the temperature is expected to fall below 40°F within the next 24-hour period.

FasTrac NS GROUT should be kept in a shaded, dry area. At no time should the packaged material be exposed to moisture.

APPLICATION INSTRUCTIONS

Remove all dirt, oil or loose foreign material from any steel surface to come in contact with grout. Concrete surfaces must be sound and roughened to insure proper bonding. Concrete surfaces should be saturated for a minimum of 4 hours but preferably for 24 hours prior to placing the grout. Remove all excess water from the foundation prior to placing FasTrac NS GROUT.

Build the forms at least 1" higher than the bottom of the item being grouted.

A portable mortar mixer should be used when mixing the grout. Start with the minimum water requirements. ADD WATER TO MIXER FIRST, then slowly add powder. Add additional water as required for desired consistency. Water requirements per 50 lb. bag are:

Plastic	Flowable	Fluid
6.80 to 7.00 pints water	7 to 8 pints water	8.00 to 9.25 pints water
0.85 to 0.88 gal.	0.88 to 0.94 gal	1.00 to 1.19 gal.
7.05 to 7.30 lbs.	7.30 to 7.80 lbs.	8.33 to 9.50 lbs.
3.18 to 3.29 liters	3.29 to 3.79 liters	3.79 to 4.40 liters

APPLICATION TEMPERATURE RANGE

40° F to 90° F (Hot weather placement procedures recommended above 90° F; Cold weather placement procedures recommended below 50° F)

CAUTION: DO NOT OVER WATER. Adding more water than recommended can cause bleeding, separation and a reduction of ultimate strength. DO NOT re-temper or add additional cement, sand or admixtures without first contacting Western Material & Design.

The grout should be placed continuously by pouring from one side to the other to avoid air entrapment. Cover with clean wet rags and keep moist until final set.

Physical Properties

	(psi)	Plastic	Flowable	Fluid	
COMPRESSIVE STRENGTH:	3 days	5,900	5,400	4,800	ASTM C-109
	7 days	8,900	7,700	6,200	
	28 days	11,500	8,400	7,700	
STATIC MODULUS OF ELASTICITY:	3 days	2.64 x 106 psi			ASTM C-469
	7 days	2.79 x 106 psi			
	28 days	3.00 x 106 psi			
COEFFICIENT OF THERMAL EXPANSION:	4.76 x 10 ⁻⁶ in/in °F				ASTM C-531
FLEXURAL STRENGTH:	3 days 1,055 psi				ASTM C-78

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	7 days 1,230 psi 28 days 1,430 psi	
SPLITTING TENSILE STRENGTH:	3 days 550 psi 7 days 680 psi 28 days 750 psi	ASTM D-496
STRENGTH OF ANCHORS:	Tensile Strength Shear Strength	
1-1/4" dia. bolt in a 2-1/2" dia. hole with 9" embedment	53,200 lbs.	24,300 lbs.
1/2" dia. bolt in a 1-1/8" dia. hole with 4" embedment	7,100 lbs.	2,000 lbs.
		ASTM E-488

Product Information

UNIT PACKAGING:	Individual Bags - Super Sack
UNIT WEIGHT:	22.7 kg (50 lbs.) Bags; 1,361 kg (3,000 lb) Super Sack
UNIT YIELD:	Plastic – Approx. 0.43 ft. ³ Flowable – Approx. 0.44 ft. ³ Fluid – Approx. 3 0.45 ft. ³
APPLICATION TEMPERATURE:	45°F Minimum - 90°F Maximum
SET TIME (approximate):	Plastic - Initial: Plastic - 3.5 hrs / Flowable - 4 hrs / Fluid - 3.6 hrs
SHELF LIFE:	1 year in dry, shaded storage
CLEAN UP:	Water

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



FASTRAC NS GROUT

Every reasonable effort is made to apply exacting standards both in the manufacture of "FasTrac NS 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.