

CONSTRUCTION GROUT

Economical, high strength, portland cement based construction grout.

HOW IT WORKS

CONSTRUCTION GROUT is a non-metallic, shrinkage controlled grout which incorporates special aggregates, admixtures and portland cement and is designed to minimize shrinkage and maximize strength.

APPLICATIONS

- ◆ Use to grout voids in poured-in-place concrete and tilt-up and precast concrete panels, beams and columns.
- ◆ Use to anchor heavy equipment, bolts and dowel bars.
- ◆ Use to fill voids around steel window and door frames.

ADVANTAGES

- ◆ Non-corrosive; does not contain chlorides. Will not attack steel reinforcement.
- ◆ Shrinkage controlled.
- ◆ Non-metallic.
- ◆ Can be used in dry pack, plastic or flowable consistencies.
- ◆ Easily pumped.
- ◆ Complies with ASTM C1107 Grade C Combination Pre-Hardening and Post-Hardening Volume-Adjusting (Non-Shrink) Grout.
- ◆ Complies with CRD-C621.

▲ PRECAUTIONS ▲

- ◆ Do not mix more grout than can be placed in 15 minutes or less.
- ◆ Do not retemper mixed grout to restore workability.
- ◆ Do not add excessive amounts of water.
- ◆ Do not apply to frozen substrates or at temperatures below 40° F (4° C).
- ◆ Avoid vibrating wet grout, which can cause segregation and bleeding.
- ◆ Do not place CONSTRUCTION GROUT in lifts greater than 4 inches (100 mm) unless the product is extended with 50% by weight pea gravel to dissipate the heat of hydration.
- ◆ For best results, a minimum of 1 inch (25 mm) vertical clearance should be allowed under base plates when placing grout.

- ◆ Do not add plasticizers, accelerators, retarders, or additional cement.

USE INSTRUCTIONS

- ◆ Request current product literature, labels and safety data sheets from manufacturer and read thoroughly before product use.
- ◆ Site environmental conditions, substrate conditions and construction have a major effect on product selection, application methods, procedures and rates, appearance and performance. Product literature provides general information applicable to some conditions. However, an adequate site test application by the purchaser or installer in advance of field scale use is mandatory (irrespective of any other verbal or written representations) to verify that product and quantities purchased can be satisfactorily applied and will achieve desired appearance and performance under intended use conditions.
- ◆ Remove all unsound concrete, grease, oil, dirt, laitance and other foreign contamination from the surface to be grouted.
- ◆ Before placing grout, thoroughly saturate concrete bonding area with water for 24 hours. Remove excess water and allow concrete bonding surface to dry slightly before grout is placed.
- ◆ In formed applications, seal all wood surfaces with PRE-FORM polyurethane wood sealer and use Nox-Crete BIO-NOX form release agent to minimize water absorption and to ensure a positive release.
- ◆ Pre-wet mixing containers and drain excess water prior to mixing initial batch.
- ◆ Add the appropriate amount of clean mixing water (see technical data) to mixer and slowly add grout while continuously mixing. Mix for 3-5 minutes or until a uniform consistency is achieved.
- ◆ Promptly place grout in a manner to avoid entrapment of air voids. Rodding the grout lightly will help to consolidate grout and remove air voids.
- ◆ To pump CONSTRUCTION GROUT, use a grout pump specifically designed for this purpose.
- ◆ If application thickness exceeds 4 inches (100 mm), extend grout with up to 50% by weight (25 lbs. maximum per bag of grout) of clean, saturated surface dry (SSD), 3/8 inch (10 mm) pea gravel. Do not add additional water when extending with pea gravel.



- ◆ Cure grout with wet burlap or ASTM C309 approved curing compound.
- ◆ Suitable application temperatures (air, material and substrate) range between 40° F (4° C) and 90° F (32° C).
- ◆ Follow recommendations from ACI-305 for hot weather concreting and ACI-306 for cold weather concreting.

WATER REQUIREMENT

Consistency	Grout	Mixing Water
Plastic	50 lb. (22.7 kg)	3.0 qt. (2.8 L)
Flowable	50 lb. (22.7 kg)	3.2 qt. (3.1 L)
Fluid	50 lb. (22.7 kg)	5.0 qt. (4.7 L)

Note: Jobsite conditions may affect actual quantities of water needed. Above mixing water recommendations are intended only as a guide.

MIXED YIELD

Without 50% pea gravel	0.45 CF (12.7 L)
With 50% pea gravel	0.56 CF (15.9 L)

TECHNICAL DATA

Test Method		Parameter	Grout Consistency		
ASTM C109	CRD C227	Compressive Strength	Plastic	Flowable	Fluid
		3 Days	3,500 psi (24.1MPa)	3,300 psi (22.8MPa)	3,000 psi (20.7MPa)
		7 Days	6,500 psi (44.8MPa)	6,200 psi (42.7MPa)	5,500 psi (37.9MPa)
		28 Days	9,000 psi (62.1MPa)	7,000 psi (48.3MPa)	6,500 psi (44.8MPa)
C1090 C1107	C600	Hardened Shrinkage 1, 3, 14, 28 Days	None	None	None

Complies with CRD-C621.

PACKAGING

Packaged in 50 lb (22.7 kg) plastic-lined, moisture resistant bags.

SHELF LIFE

Shelf life is two years. Use before the "USE BY" date stated on product packaging.

HANDLING/STORAGE

Read Safety Data Sheet (SDS) prior to using. Contains portland cement and silica sand. Use proper safety equipment (gloves, goggles or glasses and dust masks). Store in a cool, dry area.

AVAILABILITY & TECHNICAL SERVICES

In addition to corporate offices in Omaha, Nebraska, NOX-CRETE INC. maintains regional offices and distribution centers in principal markets throughout the world. For source or technical information, call 800-669-2738 or 402-341-2080.

LIMITED WARRANTY

NOTICE-READ CAREFULLY

CONDITIONS OF SALE

NOX-CRETE offers this product for sale subject to, and Buyer and all users are deemed to have accepted, the following conditions of sale and limited warranty which may only be varied by written agreement of a duly authorized corporate officer of NOX-CRETE. No other representative of or for NOX-CRETE is authorized to grant any warranty or to waive limitation of liability set forth below.

WARRANTY LIMITATION

NOX-CRETE warrants this product to be free of manufacturing defects. If the product when purchased was defective and was within use period indicated on container or carton, when used, NOX-CRETE will replace the defective product with new product without charge to the purchaser.

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