

NON-SHRINK GROUT

3F

A NON-SHRINK, HIGH STRENGTH, NON-METALLIC CEMENTITIOUS GROUTING COMPOUND WHICH MAY BE Poured OR Troweled

NON-SHRINK GROUT is a non-shrink, high strength, non-metallic cementitious grouting compound specially formulated to maintain its strengths at various consistencies, from flowable to trowelable. Non-Shrink Grout may be used to grout machinery and structural supports which require non-shrink performance combined with high strength. Its non-bleeding and non-segregating characteristics at fluid consistencies make it an ideal anchoring cement.

USES and ADVANTAGES

- Structural columns.
- Machinery bases.
- Bearing plates.
- Anchoring bolts, posts and railings.
- Easy to use...just add water.
- Contains no chlorides, heavy metals or gypsum.
- Excellent workability at fluid, flowable and plastic consistencies.
- Non-shrink, non-bleeding and non-segregating.
- May be used for interior and exterior applications.
- Excellent flexural strength and vibration resistance.
- Watertight, resists salt, many chemicals and oils.
- Pumpable and flowable.
- Meets ASTM C-1107.
- Meets CRD C-621.

PREPARATION

Concrete surface to which material will be applied must be sound and clean. Remove all dirt, dust, spalling or loose concrete, oil, grease, wax, mildew, efflorescence, curing compounds, form release agents, paint or any other

foreign material which might effect the bond. **SEE WARNING ON BACK PAGE REGARDING PAINT REMOVAL.** All oil and grease must be scrubbed with a degreasing compound, rinsed thoroughly then allowed to dry. After cleaning oil or grease spots, sprinkle a little water on the cleaned surface to check for residual contamination. Oil or grease is still present if the water forms small globules. If the water is quickly absorbed, the surface is clean. Rusted or corroded steel rods or metal must be cleaned by wire brush or sand blasted making sure all rust is removed. Then apply a slurry coat of Non-Shrink Grout by brush to all cleaned and rust free steel.

All concrete that will come in contact with Non-Shrink Grout must be thoroughly saturated with water but do not allow any water to puddle. Any wood forms used should be surface saturated before placing Non-Shrink Grout, with seams caulked to prevent leakage.

Regardless of the grouting method, bolt equipment and plates solidly on shims and ensure precise leveling before grouting. Grout bolt holes and other orifices before grouting base plates to foundation. Construct all forms to allow continuous placement of the grout and fill the entire space. Forms should be greater than 1" from the sides of the plates and 1" to 2" higher than the bottom of the same. Also ensure at least 1" of clearance under base plates and equipment. To induce grout movement, construct a 45 degree chute incline or head box that promotes momentum. Pour the grout onto the incline so as to avoid segregation and air entrapment. Allow at least 4" clearance at the end of the head box.

MIXING

Using a clean container or mortar mixer, add Non-Shrink Grout (at a uniform rate) to clean water and mix to a smooth, lump free consistency for approximately 2-3 minutes. For smaller applications, a low speed, high torque drill (not to exceed 650 rpm) is recommended for mixing. For larger applications, a mortar type mixer with rotating, rubber edged blades is recommended.

Approximate Water Usage/50# Bag:

Fluid: 5 quarts water

Flowable: 4.6 quarts water

Plastic: 4.0 quarts water

Check flow to determine if water requirements must be altered.

APPLICATION

Place the mixed grout by pouring, troweling, packing or vibrating. Tightly compact grout completely removing all air voids making sure to fill all of the space being grouted. After setting, cut back or finish the grout to the final configuration. Non-Shrink Grout will maintain a fluid consistency for at least 20 minutes when used between the temperatures of 45 and 90 degrees F. **If the grout stiffens before placing, discard...do not retemper!**

CURING

Damp curing is recommended. Allow to cure for 24 hours before applying weight or stress.

COVERAGE

One 50 lb. bag of Non-Shrink Grout will yield approximately .45 cubic feet.



60 REAR NEWHALL STREET

PHONE: 978-453-8881

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TECHNICAL DATA

Approximate Initial Set Time (CRD C 614)

Fluid: 5 hours and 53 minutes
Flowable: 4 hours and 37 minutes
Plastic: 2 hours and 15 minutes

Approximate Final Set Time (CRD C 614)

Fluid: 6 hours and 58 minutes
Flowable: 5 hours and 47 minutes
Plastic: 3 hours and 45 minutes

Compressive Strength (CRD C 227):

Day	Fluid		Flowable		Plastic	
	psi	MPa	psi	MPa	psi	MPa
1	3100	21.4	4300	29.7	4750	32.8
3	5550	38.3	6325	43.6	7300	50.3
7	6550	45.2	7475	51.6	8700	60.0
28	7750	53.5	8900	61.4	9700	66.9

Expansion (CRD C 621):

Day	Fluid	Flowable	Plastic
3	+0.00%	+0.03%	+0.01%
14	+0.01%	+0.03%	+0.01%
28	+0.01%	+0.03%	+0.00%

PRECAUTIONS

- Do not use this product if presaturation of foundation concrete is not possible.
- Do not use this product for grouting prestressed and/or post-tensioned cables, rods or anchorages stressed over 80,000 psi(552MPa).
- In cold weather, warm mixing water will aid in placement.
- Do not place grout over frost or frozen surfaces.
- Placed grout must be protected from freezing until it has reached 4,000 psi compressive strength.
- Store grout at temperatures above 50 degrees F before use.
- Recommended optimum temperature of foundation, plates and mixed grout as well as ambient temperature is between 45 and 90 degrees F..

WARNING!

Do not take internally. Contains Portland cement and Silica sand. May be irritating to the eyes and nose. Prolonged inhalation may cause lung injury. Avoid eye contact or prolonged contact with skin. Wash hands thoroughly with water after handling. In case of eye contact, flush with plenty of water for at least fifteen minutes. If irritation persists, consult a physician immediately. Dust masks, eye protection and gloves are recommended when using this product. Read Material Safety Data Sheet (MSDS) before using this product which may be obtained from your retailer or by calling 978-453-8881.

24 Hour Emergency Medical/Spill Information (Chemtrec): 800-424-9300

KEEP OUT OF THE REACH OF CHILDREN!

WARNING! If you scrape, sand or remove old paint, you may release lead dust or fumes. **LEAD IS TOXIC. EXPOSURE TO LEAD DUST OR FUMES CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE.**

Before you start, find out how to protect yourself and your family by contacting the USEPA National Lead Information Hotline at 1-800-424-LEAD or log onto www.epa.gov/lead. Wear a properly fitted respirator and prevent skin contact to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Follow these instructions to control exposure to other hazardous substances that may be released during surface preparation.

For technical assistance call
978-453-8881

www.umaco.com

LIMITED WARRANTY

The manufacturer guarantees its products to be free of defects and the extent of its liability is limited to the purchase price of the materials only, if proved to be defective.

Improper mixing, incorrect application or other factors beyond the control of the manufacturer or its dealers may produce unsatisfactory results and cannot be held to be the manufacturers or its dealers responsibility. There are no other guarantees either expressed or implied.

03-01-05

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- Masonry Waterproofing Products
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