

# NON-SHRINK GROUT

## 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.
- Powerline stanchions.
- Easy to use, just add water.
- Contains no chlorides, heavy metals or gypsum.
- Usable from flowable to trowelable 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.
- Excellent freeze-thaw resistance.
- Meets ASTM C-1107.
- Meets CRD C-621.

### SURFACE PREPARATION

#### **Concrete and Masonry**

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. Acid based cleaning solutions must be neutralized. Where applicable, provide air relief openings to avoid entrapment of air. All metal components that will be in contact with Non-Shrink Grout must be rust free, free of paints, oils and release agents. All concrete that will be in contact with Non-Shrink Grout must be thoroughly saturated with water but do not allow water to puddle. Any wood forms used should also 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 that promotes momentum. Pour the grout onto the incline so as to avoid segregation and air entrapment.

### MIXING

Non-Shrink Grout requires only the addition of water. No other additives should be used. 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 no more than 2 minutes. A good consistency for most concrete repairs requires 4-1/2 quarts of water per 50 pounds of Non-Shrink Grout. For a

flowable consistency up to 6 quarts of water per 50 pounds of Non-Shrink Grout may be used. A flowable consistency is recommended for anchoring bolts, posts or rails. Mix enough material to permit continuous placement. Install immediately after mixing. For smaller applications, hand mixing or drill mixing with a low speed, high torque drill (not to exceed 650 rpm) is recommended. For larger applications (and those at a lower flow), a mortar type mixer with rotating, rubber edged blades is recommended.

### APPLICATION

Non-Shrink Grout should be placed in accordance with standard grouting procedures and recommendations of ACI (American Concrete Institute). Place the mixed grout continuously by pumping, pouring, troweling, packing or vibrating. Tightly compact grout completely removing all air voids making sure to fill all of the space being grouted. Strike off exposed areas and after setting cut back or finish Non-Shrink Grout to final configuration. If the grout stiffens before placing, discard. Do not retemper. When anchoring bolts, posts or rails, crown Non-Shrink Grout slightly with a trowel or putty knife as it stiffens to aid water run off.

### 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

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## **PRECAUTIONS**

- Non-Shrink Grout should only be applied when the ambient and surface temperatures are 50 degrees F or above and will remain so for at least 48 hours.
- Do not retemper Non-Shrink Grout once it begins to set.
- Saturate (but do not allow to puddle) all areas that will be in contact with Non-Shrink Grout before applying.
- Grout should be placed in accordance with standard grouting procedures and recommendations of ACI (American Concrete Institute).

## **TECHNICAL DATA**

### **Approximate Initial Set Time (75 degrees F.)**

43 minutes when 4-1/2 quarts of water is mixed with 50 lb. Non Shrink Grout.

### **Approximate Final Set Time (75 degrees F.)**

3 hours and 55 minutes when 4-1/2 quarts of water is mixed with 50 lb. Non-Shrink Grout.

### **Compressive Strength**

1 day = 4,000 psi

7 days = 6,300 psi

28 days = 7,350 psi

### **Freeze-Thaw Resistance**

Excellent, superior to concrete.

### **Flexural Strength**

Resists vibration.

## **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](http://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](http://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.*

**03-01-08**

- Concrete Patching and Repair Products
- Masonry Waterproofing Products
- Acrylic Admixtures and Bonding Agents



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