

# **PRO GROUT 100**



Premium Cement Based Non-Shrink Grout

> 03 61 00 Cement Grouting



**03 50 00**Concrete Repair



# **DESCRIPTION:**

PRO GROUT 100 is a premium non-shrink, non-ferrous grout that is easily mixed for grouting at any consistency; dry-pack, plastic, or pourable. It contains no iron particles chlorides or gypsum, and will not corrode, shrink, rust or ravel even under consistently moist conditions. When mixed according to instructions, it produces a high compressive strength due to a technology that reduces the water/cement ratio.

### **PRODUCT FEATURES:**

- Pourable, Pumpable and Dry-Pack Consistency
- Non Shrink
- Non-Metallic Non Corrosive
- Interior / Exterior Applications
- · No heating or two component mixing needed
- · Holds several DOT specifications

# **SPECIFICATIONS:**

- ASTM C-1107, standard specification for packaged dry, hydraulic cement grout (non-shrink).
- CRD -C 621-89, specification for non-shrink grout
- CRD C 614, method of test for time of setting of grout mixtures
- ASTM C-109, standard test for compressive strength of hydraulic cement mortars
- ASTM C-266, (CRD-C 222), standard test for time of setting of hydraulic cement by Gillmore Needle
- ASTM C-232 (CRD-C 79), standard method of test for bleeding of concrete
- ASTM C-827-82, standard test method for early volume change of cementitious mixtures
- · ASTM C-942, test method for compressive strength of grouts for replaced aggregate concrete

# **SUBSTRATE PREPARATION:**

First remove all dirt, oil, grease or contaminants from surfaces to be grouted. Then remove all loose material. Metals which will come in contact with grout must be de-rusted, or freed of paints, oils and greases. To avoid entrapment of air, provide air relief openings where required. Prior to placement of grout, thoroughly soak or dampen all concrete areas to be grouted. Then remove excess water from voids and holes.

#### **MIXING AND APPLICATION:**

PRO GROUT 100 is a one step, ready to use mixture. Just add water, nothing more. For uniform mix, use paddle or drum type mechanical mortar mixers. Do not mix for more than 5 minutes. Place grout immediately after mixing. The temperature of the grout, the environment, and the configuration of the area to be grouted can each or in combination affect the time during which grout can be successfully worked. To be safe, complete grouting within 40 minutes of initial mixing.

FORMING MACHINERY BASES AND COLUMN BASE PLATES: Follow standard forming procedures, which permit complete and proper placement of fluid grout, including use of head forms. All support elements should be anchored to prevent movement. Do not remove supports until grout has sufficiently hardened. Wood surfaces, which absorb moisture, should be pre-treated with forming oils. When grouting edges of concrete which are less than 1" thick, cut edges back to form a uniform butt edge.

# **PLACEMENT**

Follow the standard grouting procedure and recommendations of ICRI for the placement and curing to concrete. Use chains, rods, or tamping devices to compact grout, taking care to remove all air voids. For optimum results, air temperature should be near 72° F. Pour grout quickly and continuously, striking off exposed areas. Finished PRO GROUT 100 should be cured for 72 hours before base plate application.

# PACKAGING:

50 lb. bags

3000 lb. "Super-Sacks"

### COLOR:

Light Grey

# SHELF LIFE:

Bags -12 Months - Rotate your stock Sacks - 6 Months - Must Store Indoors

# WATER REQUIREMENTS:

Desired Mix Water / 50 lbs. Bag

Dry Pack 5 pints
Flowable 8.1 pints
Fluid 9 pints

# **APPROZIMATE YIELD:**

50 lb. Unit Yields: 0.43 ft.3

Extended with 25 lbs. of washed 3/8 inch pea gravel yields: 0.59 ft.<sup>3</sup>

# APPLICATION TEMPERATURE

35° - 95°F

# **EXPANSION (ASTM C-1090):**

 1 day
  $\geq 0, \leq 0.3$  

 3 days
  $\geq 0, \leq 0.3$  

 14 days
  $\geq 0, \leq 0.3$  

 28 days
  $\geq 0, \leq 0.3$ 

### Flexural Strength (ASTM C-293)

Plastic (28 Day): 1400 psi (9.7 MPa) Flowable (28 Day): 1200 psi (8.3 MPa) Fluid (28 Day): 1000 psi (6.9 MPa)

# Tensile Strength (ASTM C-496)

Plastic (28 Day): 600 psi (4.1 MPa) Flowable (28 Day): 575 psi (4.0 MPa) Fluid (28 Day): 500 psi (3.4 MPa)

# **PRO GROUT 100**

### **APPLICATIONS DEEPER THAN 3" (EXTENSION)**

Mix for a total of five minutes ensuring uniform consistency. For placements greater in depth than 3 inches, up to 25 lbs. of washed 3/8 inch pea gravel must be added to each 50 lbs. bag of grout. The approximate working time is 30 minutes. This will vary depending on substrate conditions.

#### **CURING:**

Exposed grout surfaces must be cured. CGM recommends using a curing compound, cure & seal or a wet cure for 3 days. Maintain the temperature of the grout and contact area at 45°F to 90°F for a minimum of 24 hours.

# **APPLICATION NOTES:**

- 1. It is the responsibility of the contractor to review the complete technical datasheets of CGM products referenced above as more detailed information may be required. The information provided above acts only as a general guideline and may vary based on jobsite conditions.
- 2. Apply PRO GROUT 100 immediately after mixing.
- 3. Not for use in moving cracks.
- 4. Not for use as a surface applied material or coating.
- 5. Maintain minimum application widths and depths.

# Compressive Strength (ASTM C 109) Plastic Consistency

1 Day	4500 psi	(31.0 MPa)
3 Days	6100 psi	(42.1 MPa)
7 Days	10250 psi	(70.7 MPa)
28 days	11100 psi	(76.6 MPa)

# Flowable Consistency

1 Day	4200 psi	(29.0 MPa)
3 Days	5200 psi	(35.9 MPa)
7 Days	9175 psi	(63.3 MPa)
28 days	10125 psi	(69.9 MPa)

### Fluid Consistency

1 Day	4000 psi	(27.6 MPa)
3 Days	5100 psi	(35.2 MPa)
7 Days	7400 psi	(51.1 MPa)
28 days	8500 psi	(58.7 MPa)

# Eligible LEED credits: 3

Regional Materials (MR 5.1 & 5.2) 2 Points

Low Emitting Materials (EQ 4.1) 1 Point

# STORAGE:

Store in cool dry place. Tightly seal package and do not expose to sun.

# FLAMMABILITY: (ASTM E-84)

Flame Spread: -0-Fuel Contribution: -0-Smoke Development: -0-

#### **VOLITALE ORGANIC COMPOUNDS**

0 g/l

#### **CLEAN UP:**

Clean tools with water immediately after use or by mechanical means once dry.

# **HEALTH AND SAFETY:**

Always refer to the Safety Data Sheet (SDS) prior to using this product for full Health, Safety and Handling guidelines. SDS sheets are available by calling 215.638.4400 or you can visit www.cgmbuildingproducts.com

For Professional Use Only

**KEEP OUT OF REACH OF CHILDREN** 



Founded, Based and MADE IN THE U.S.A.