



**Manufacturers of
Professional Grade Cement &
Construction Products Since 1967**

GT-001—REV.3

PRO GROUT 90

NON SHRINK GROUT

DESCRIPTION:

CGM PRO GROUT 90 is a general purpose, non-shrink, and 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.

BENEFITS:

- One-step, ready to use. Just add water
- High density, increases bond to metal, wood and other materials.
- Will not rust, bleed or harm materials it contacts.
- Requires no special treatment on open ends, or edges. No capping or cutbacks.
- Clean finish. May be coated, trowel finished, or painted.
- Density increases wear-ability and permeability; withstands heat and thermal shock.
- Water tight, resists freeze/thaw, water conditions and salt penetration.
- Resists a variety of oils and chemicals.
- Contains no, intentionally added, free lime.
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APPLICATION RECOMMENDATIONS

PRO GROUT 90 is recommended for grouting the following:

- Heavy equipment and machinery bases
- Structural columns
- Pump and equipment bases
- Power line stanchions
- Pre-cast tee joints
- Re-pointing mortar joints
- Structural cracks
- Bearing plates
- Rail posts, seating bolts
- Post tensioned cables
- Patching

YIELD:

CGM PRO GROUT 90 is packaged in 50 lb bags to yield 0.43 cubic foot of grout when mixed to a plastic consistency. When mixed to a pourable consistency as per directions, one sack will yield approximately 0.45 cu. ft. of grout – 57.5 sacks=1 cu. yd.

SPECIFICATIONS and REFERENCES:

PRO GROUT 90 meets or exceeds the following specifications:

- CRD –C 621-89, U.S. Army Corp of Engineers, specification for non-shrink grout
 - ASTM C-109-01, standard test for compressive strength of hydraulic cement mortars.
 - ASTM C-226-01 standard test for time of setting of hydraulic cement by Gillmore Needle.
 - ASTM C-827-01a, standard test method for change in height at early ages of cylindrical specimens of cementitious mixtures.
 - ASTM C-939-97 standard test method for flow of grout for pre-placed-aggregate concrete (flow cone method)
 - ASTM C1090-01 standard test method for measuring changes in height of cylindrical specimens from hydraulic cement grouts.
 - ASTM C-125-00 standard terminology relating to concrete and concrete aggregates
 - ASTM C-157-99 standard test method for length change of hardened hydraulic cement, mortars, and concrete.
 - ASTM C-1107-01 standard specification for performance, packaged, dry, hydraulic cement grouts (non-shrink)
 - ASTM C-138/C-138m-01a standard test method for density (unit weight), yield, and air content (gravimetric) of concrete.
 - ASTM C-185-01 standard test method for air content of hydraulic cement mortar
 - ASTM C-305-99 standard practice for mechanical mixing of hydraulic cement pastes and mortars of plastic consistency.
 - ASTM C-1437-01 standard test method for flow of hydraulic cement mortars.
 - ASTM C-942 standard test method for compressive strength of grouts for pre-placed aggregate concrete in the laboratory
- Test reports are available upon request.*

MIXING AND PROPORTIONS:

PRO GROUT 90 is a one step, ready to use mixture. Just add potable 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. Do not mix more grout than can be placed within the allotted work time.

The temperature of the grout, the atmosphere, and the configuration of the area to be grouted can each or in combination affect the time during which grout must be de-rusted or freed of paints, oils, and greases.

SURFACE 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.

FORMING:

For 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 pretreated with forming oils. When grouting edges of concrete which are less than 1” thick, cut edges back to form a uniform butt.

PLACEMENT:

Follow the standard grouting procedure and recommendations of ACI 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 90 should be cured for 72 hours for base plate application.

SHELF LIFE:

When stored in original, un-opened container, one year. Rotate your stock.

LIMITATIONS:

Set Times

CRD-C-614	Initial Set	Final Set
Minimum Flow	3 hrs. 25 min.	5hrs. 14 min.
Moderate Flow	3 hrs. 49 min.	6 hrs. 28 min.
High Fluidity	4 hrs. 52 min.	7hrs. 55 min.

Mix consistency	Minimum flow (Plastic)	Moderate Flow (Pourable)	High Fluidity (Pumpable)
Per 50 lb. Bag	7.25 pints	7.75 pints	8.75 pints
Water demand	Per 50 lbs.	Per 50 lbs.	Per 50 lbs.

Mix consistency	Minimum flow (Plastic)	Moderate Flow (Pourable)	High Fluidity (Pumpable)
Per 50 lb. Bag	7.25 pints	7.75 pints	8.75 pints
Water demand	Per 50 lbs.	Per 50 lbs.	Per 50 lbs.

COMPRESSIVE STRENGTH (psi) CRD-C-227

1 Day	5220	4650	3855
3 Day	5645	5625	5165
7 Day	6380	6605	5965
28 Day	7775	7805	6950

These are conservative data and individual applications will most likely yield higher strengths.

GENERAL INFORMATION:

Please contact CGM, Inc. at any of the following numbers for customer service or technical assistance:

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WARRANTY:

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