

**CG-86™**  
Construction-Grade Grout

**DESCRIPTION**

CG-86 construction-grade grout is a non-gaseous, non-shrink economical grout. It was specifically developed as a high strength, cost-effective, general-purpose grout for use across a broad range of large and small construction projects. CG-86 will not rust and contains no added chlorides or gypsum. It is furnished pre-mixed and ready to use. CG-86 may be extended for deep grouting with pea gravel for greater yield and increased economy. CG-86 is freeze-thaw stable and may be used interiorly or exteriorly, above- or below-grade.

**USES**

CG-86 is versatile and designed for base-plate grouting, anchoring, precast wall panels, and bridge seats. CG-86 is suitable for transportation, industrial, commercial, and municipal applications.

**SPECIFICATIONS**

ASTM C 1107 Grade A, B, C  
Corps of Engineers Spec. CRD-C-621

**PACKAGING**

50 lb. (22.7 kg) Poly-lined Bags

**YIELD**

0.43 ft.<sup>3</sup> (0.012 m<sup>3</sup>) per bag.

**LEED INFORMATION**

May help contribute to LEED credits:

- IEQ Credit 4.1: Low-Emitting Materials – Adhesives and Sealants
- MR Credit 2: Construction Waste Management
- MR Credit 4: Recycled Content
- MR Credit 5: Regional Materials

**FEATURES/BENEFITS**

- Furnished premixed and ready to use ... just add water.
- Excellent freeze-thaw characteristics ... long-term stability.
- Provides a high strength, non-shrink grout for a broad range of general construction projects.
- Offers the strength and characteristics required for cost-effective, general purpose grouting.
- Cost reductions are realized when extended with pea gravel for deep grouting.
- Requires no separate bonding agent.
- No site batching required for consistent results.
- Chloride- and gypsum-free.

**TECHNICAL DATA\***

Consistency (ASTM C 827-95A)	Plastic	Flowable
Mix Ratio (per 50 lb.)	6.25 pints	6.75 pints
Flow (ASTM C 230-90)	100%	120%
Set Time (per C191-92, Initial)	4-6 hours	5-7 hours
Bond Strength at 28 Days (ASTM C 882 Modified)	2300 psi (15.8 MPa)	2500 psi (17.2 MPa)
Freeze-Thaw Resistance (ASTM C 666, Procedure A, 300 Cycles)	100.7% Relative Dynamic Modulus	100.7% Relative Dynamic Modulus
Compressive Strength (ASTM C 109-93)		
@ 1 day	3500 (24.1 MPa)	3000 (20.7 MPa)
@ 3 days	4500 (31 MPa)	4000 (27.6 MPa)
@ 7 days	6000 (41.3 MPa)	5500 (37.9 MPa)
@ 28 days	7500 (51.7 MPa)	7000 (48.3 MPa)

\*All technical data is typical information, but will vary due to testing methods, conditions, procedures, batching variations, and raw material variances.

**CONTINUED ON REVERSE SIDE...**

## APPLICATION

Grouting application shall be performed in accordance with American Concrete Institute (ACI) 351.1R: Grouting between Foundations and Bases for Support of Equipment and Machinery and other applicable ACI recommendations.

**Surface Preparation ...** All grout contact surfaces must be free of oil, grease, scale, penetrating sealers, or all other types of contaminants that will interfere with the bond. Mechanically roughen or high pressure water-jet the existing concrete substrate. Surface must be rough and profiled, but generally level. Grouting area must be saturated with water 12-24 hours prior to grouting. Remove all excess water before placing grout.

**Pouring ...** Method of forming must provide for rapid, continuous grout placement. Ensure form is well sealed and an appropriate form release agent has been applied for that type of form.

**Placement ...** CG-86 is easily placed by pouring or pumping and compaction can be accomplished by rodding or tapping. Place grout on one side, flowing to opposite and adjacent sides, to avoid entrapment of air. When necessary, provide vent holes. Grout "head" and excess grout may be removed after initial set.

**Curing ...** Immediately following application, cure CG-86 using a suitable curing compound from W. R. MEADOWS or in accordance with ACI 308. W. R. MEADOWS recommends the 2200-WHITE series or 1130-CLEAR series. When conditions exist for rapid early water loss, the use of EVAPRE™, an evaporation retarder from W. R. MEADOWS, is also recommended.

**Venting ...** Forming also must ensure adequate venting to avoid air entrapment. Do not make close fitting forms; allow 1/2" (12.7 mm) clearance and 1" (25.4 mm) for "head."

**Mixing ...** Small quantities of CG-86 may be hand mixed in a concrete mixing pan until lump-free. For large quantities and continuous pours, use a mortar mixer with rubber-tipped blades. Mix for a minimum of three minutes or until uniform and lump-free. Use minimum water required to produce desired placement consistency. Do not mix more than can be placed in 15 minutes. Do not re-temper. Use only clean, potable water.

Set time and strength development are dependent on temperature; therefore, follow ACI methods during hot or cold weather grouting.

ACI 305 - "Standard on hot weather concreting"  
ACI 306 - "Standard on cold weather concreting"

Cost reductions are realized when grouting large areas by adding washed, dried, and graded pea gravel. For thicknesses 2" to 4", add up to 25% 3/8" pea gravel. For medium-flow mixes, 4" and over, add up to 50% 3/8" pea gravel, plastic mix. Addition of pea gravel is based on percentage of the weight of the dry grout.

## PRECAUTIONS

Do not use as a repair mortar. (Please contact W. R. MEADOWS for specific repair mortar recommendations.) Grouting should be done using established concreting procedures according to ACI recommendations. Read and follow application information, precautions and Material Safety Data Sheet information.

**For most current data sheet, further LEED information, and MSDS, visit [www.wrmeadows.com](http://www.wrmeadows.com).**



## LIMITED WARRANTY

"W. R. MEADOWS, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order." Read complete warranty. Copy furnished upon request.

## Disclaimer

The information contained herein is included for illustrative purposes only, and to the best of our knowledge, is accurate and reliable. W. R. MEADOWS, INC. cannot however under any circumstances make any guarantee of results or assume any obligation or liability in connection with the use of this information. As W. R. MEADOWS, INC. has no control over the use to which others may put its product, it is recommended that the products be tested to determine if suitable for specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, application and proper installation of each product. Specifier and user shall determine the suitability of products for specific application and assume all responsibilities in connection therewith.