

CONSTRUCTION GROUT

General construction, natural aggregate, nonshrink grout

DESCRIPTION:

CONSTRUCTION GROUT is a non-catalyzed, multi-purpose construction grout containing mineral aggregate. This portland cement-based product is designed to meet all of the performance requirements of the Corps of Engineers Specification CRD-C 621-89 at a flowable or plastic consistency.

RECOMMENDED FOR:

- Normal loads for columns and baseplates
- Anchoring bolts, reinforcing bars and roadway dowels
- Bedding grout for precast panels
- Repairing of cavities resulting from ineffective concrete consolidation
- Caulking concrete pipe
- Backfilling, underpinning foundations and pressure grouting of slabs needing alignment
- General construction applications
- Dry pack applications

FEATURES/BENEFITS:

- Free of inorganic accelerators, including chlorides or other salts detrimental to reinforcing steel.
- Color similar to concrete after curing.
- Can be extended with clean, well-graded coarse aggregate to fill large voids without additional mix water.
- Hardens free of bleeding when placed at a plastic or flowable consistency and when ambient temperatures are 50 °F (10 °C) and above.

PACKAGING/ESTIMATING:

CONSTRUCTION GROUT is packaged in 50 lb (22.7 kg) moisture-resistant bags.

One 50 lb (22.7 kg) bag of CONSTRUCTION GROUT mixed with 1.15 gal (4.35 L) of water (Flowable Mix) provides approximately 0.45 ft³ (0.013 m³) of mixed grout.

PERFORMANCE DATA:

Typical Mixed Grout Data (Flowable Mix)

Approximate Water: 1.15 gal (4.35 L)
Flow: 5 drops (ASTM C230) 126% to 145%

At a constant percent of water, consistency will vary with temperature. Final set takes place in approximately 8 hours at a flowable consistency, 70 °F (21 °C).

Compressive Strength

	Flowable ¹		Consistency Plastic ²		Stiff ³	
	psi	MPa	psi	MPa	psi	MPa
3 day	5,000	34.5	6,000	41.4	8,000	55.2
7 day	6,000	41.3	7,000	48.3	9,500	65.5
28 day	7,000	48.0	8,500	58.6	10,000	69.0
Initial Set @ 70 °F			6 hours			
Final Set @ 70 °F			8 hours			

¹ 140% flow on flow table, ASTM C 230, 5 drops in 3 seconds.

² 100% flow on flow table, ASTM C 230, 5 drops in 3 seconds.

³ 40% flow on flow table, ASTM C 230, 5 drops in 3 seconds

APPLICATION:

Consult the CONSTRUCTION GROUT product bag for details on the installation of CONSTRUCTION GROUT.

Master Builders recommends that the user request the services of the local representative for a pre-job conference to plan the installation.

CURING:

Cure all exposed grout shoulders by wet curing for 24 hours and by applying a Master Builders recommended curing compound, such as MASTERKURE®.

LIMITATIONS:

- Master Builders CONSTRUCTION GROUT is designed to be used in the 50 °F to 90 °F (10 ° to 32 °C) temperature range. Use cold and hot weather concreting practices (ACI 305 and ACI 306) when grouting within 10 °F (6 °C) of the minimum and maximum stated temperature range.
- For best results a minimum of 1 in. (25 mm) vertical clearance should be allowed under baseplates when placing CONSTRUCTION GROUT.
- Do not use CONSTRUCTION GROUT where it will come in contact with steel designed for stresses above 80,000 psi (552 MPa). Use MASTERFLOW® 816 cable grout for those applications.
- Do not add plasticizers, accelerators or retarders.
- The surface to be grouted should be clean, strong and rough to permit proper bond.
- Do not place CONSTRUCTION GROUT in any environment which will have a sustained temperature of 300 °F (149 °C) or higher.
- Do not place CONSTRUCTION GROUT in any lifts greater than 6 in. (152 mm) unless the product is extended with aggregate to dissipate the heat of hydration. To extend CONSTRUCTION GROUT, use 12 lb (5.4 kg) of clean, well graded aggregate per 50 lb (22.7 kg) bag.
- Where precision alignment and severe service such as heavy loading, rolling and/or impact resistance are required, use metallic-reinforced, non-catalyzed EMBECO® 885 grout. If the amount of impact resistance needed is not great enough to require metallic-reinforcement, use natural-aggregate, MASTERFLOW® 928 grout.

RELATED BULLETINS:

Material Safety Data Sheet - CONSTRUCTION GROUT

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