

3,000 psi COARSE GROUT (Portland : Coarse Sand : Gravel)

1. PRODUCT NAME

SPEC MIX® 3,000 psi Coarse Grout

2. MANUFACTURER



Quikrete Chicago

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3. PRODUCT DESCRIPTION

General

Grout is a high slump concrete used to fill voids in the masonry assemblage and bind together the masonry units, mortar, and existing reinforcement into a single composite assemblage. It is a fluid mixture of cementitious materials and aggregate with high water content for ease of placement.

Basic Use

- Coarse Grout may be used where the grout spaces in the brick masonry are 1 1/2 inches or more in width horizontally and of the block the minimum cell dimensions are 1 1/2 x 3 inches.
- Although approved aggregates for grout (sand and pea gravel) are limited to a maximum size of 3/8 inch, if the grout space is wide (8 inches or more horizontally between the brick wythes) a coarse grout using 1/2 inch aggregate may be used. This larger size aggregate takes up more volume. A concrete pump is generally required

to place grout with 3/4 inch aggregate. See also Section 2404 (f).

- The actual grout space or grout cell dimensions must be larger than the sum of the following items: (1) The required minimum dimensions of total clear areas in Table No. 24-G; (2) The width of any mortar projections within the space; and (3) The horizontal projections of the diameters of the horizontal reinforcing bars within a cross section of the grout space or cell.
- The minimum dimensions of the total clear areas shall be made up of one or more open areas with at least one area being 1/2 inch or greater in width.

Composition and Materials

- Type I Portland Cement (ASTM C 150) "Standard Specification for Portland Cement"
- Coarse Aggregate (ASTM C 404), "Standard Specification for Aggregates for Masonry Grout"
- Gravel (ASTM C 404), "Standard Specification for Aggregates for Masonry Grout"

4. INSTALLATION

Mixing

- Grout shall be mixed and placed so that all spaces designated to be grouted shall be filled with grout and the grout shall be confined to those specific spaces.
- Grout materials and water content shall be controlled to provide adequate fluidity for placement, without segregation of the constituents, and shall be mixed thoroughly.

Field Sampling & Testing

- When testing grout follow ASTM C 1019 "Standard Test Method for Sampling

and Testing Grout".

- Cylinder or cube samples of grout are not allowed.
- During construction, grout is placed within or between absorptive masonry units. Excess water must be removed from grout specimens in order to provide compressive strength test results more indicative of the grout strength in the wall. In this test method, molds are made from masonry units having the same absorption and moisture content characteristics as those being used in the construction.
- Cover packaged material at all times.

5. LEED INFORMATION

Applicable Credits:

- MR Credit 4.1
- MR Credit 4.2
- MR Credit 5.1
- MR Credit 5.2
- Pre Consumer Recycled Content 4.3%
- Local Harvest Content..... 77%
- Production Location
 - City..... Elburn
 - State..... Illinois
 - Zip.....60119
- 100% harvested w/in 500 miles

TABLE NO. 24-G GROUTING LIMITATIONS

MINIMUM DIMENSIONS OF THE TOTAL CLEAR AREA WITHIN GROUT SPACES AND CELL			
Grout Type	Grout Pour Max. Height (Feet)	Multi- Wythe Masonry	Hollow- Unit Masonry
Coarse	1	1 1/2	1 1/2 x 3
Coarse	5	2	2 1/2 x 3
Coarse	8	2	3 x 3
Coarse	12	2 1/2	3 x 3
Coarse	24	3	3 x 4

3,000 psi COARSE GROUT (Portland : Coarse Sand : Gravel)**6. TECHNICAL DATA****Applicable Standards**

- ASTM C 138, "Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete"
- ASTM C 157, "Standard Test Method for Length Change of Hardened Hydraulic-Cement Mortar and Concrete"
- ASTM C 173, "Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method"
- ASTM C 476, "Standard Specification For Grout For Masonry"
- ASTM C 567, "Standard Test Method for Determining Density of Structural Lightweight Concrete"
- ACI 530 "Building Code Requirements for Masonry Structures"
- ACI 530.1 "Specification for Masonry Structure"

7. PHYSICAL PERFORMANCE**Minimum Compressive Strength (ASTM C 476)**

28 Day 3,072 psi
Slump 10.5 in.

Air Content (ASTM C 173)

2%

Oven Dry Density (ASTM 567)

Oven Dry 136.8 lbs/cu.ft.

Equilibrium Density (ASTM 567)

143.3 lbs/cu.ft.

Unit Weight (ASTM C 138)(Wet)

147.4 lbs/cu.ft.

Length Change (ASTM C 157)

- 0.008% @ 7 Days
- 0.027% @ 28 Days

ACI 530**-Grout References:**

- Part 1 (General)
- 28-day 2,000 psi minimum requirement
- or ASTM C 476
- See PCI Grout Data Sheet

8. TECHNICAL SERVICES

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9. SAFETY/HEALTH

-Refer to M.S.D.S. for safety/health info.

10. WARRANTY

SPEC MIX, Inc warrants this product to be of merchantable quality when used or applied in accordance with the instructions hereon. This product is not warranted as suitable for any purpose or use other than the general purpose for which it is intended. Liability under this warranty is LIMITED to the replacement of the product (as purchased) if found to be defective, or at the shipping companies' option, to refund the purchase price. All claims under this warranty must be written and submitted to SPEC MIX, Inc.