SECTION 04 05 16

MASONRY GROUT

Display hidden notes to specifier. (Don't know how? [Click Here](http://www.arcat.com/sd/display_hidden_notes.shtml))

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\*\* NOTE TO SPECIFIER \*\* Amerimix; masonry mortar, masonry cement, grouts and additives.  
This section is based on the products of Amerimix, which is located at:  
375 Northridge Rd.  
Atlanta, GA 30350  
Toll Free Tel: 800-334-0784  
Tel: 770-804-3363  
Email: [request info (Joey.peters@oldcastle.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=Amerimix&coid=45663&rep=&fax=&message=RE:%20Spec%20Question%20(04070amx):%20%20&mf=)  
Web: [www.amerimix.com](http://www.amerimix.com)   
 [ [Click Here](http://www.arcat.com/arcatcos/cos45/arc45663.html) ] for additional information.  
Amerimix Companies manufactures high quality mortar mixes, grouts, stucco mixes and cements. Our experienced sales, customer service and technical support teams are available to help you select the right Amerimix Companies product for any commercial or residential application. Amerimix Companies products are preblended for consistency in every bag, in every batch and from job to job.

1. GENERAL
   1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Grout for filling cores in masonry specified in other sections.
  1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 04 20 00 - Unit Masonry.
    2. Section 04 21 29 - Terra Cotta Masonry.
    3. Section 04 22 23.29 - Split-Face Concrete Unit Masonry.
    4. Section 04 40 00 - Stone Assemblies.
  1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. ASTM C 33 - Standard Specification for Concrete Aggregates
    2. ASTM C 143 - Standard Test Method for Slump of Hydraulic Cement Concrete.
    3. ASTM C 150 - Standard Specification for Portland cement.
    4. ASTM C 404 - Standard Specification for Aggregate for Masonry Grout.
    5. ASTM C 476 - Standard Specification for Grout for Masonry.
    6. ASTM International (ASTM):
       1. ASTM C 595 - Standard Specification for Blended Hydraulic Cement.
       2. ASTM C 618 - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Concrete.
       3. ASTM C 989 - Standard Specification for Ground Granulated Blast-Furnace Slag for Use in Concrete and Mortars.
       4. ASTM C 1019 - Standard Method of Sampling and Testing Grout.
       5. ASTM C 1093 - Standard Plastic for Accreditation of Testing Agencies for Unit Masonry.
       6. ASTM C 1157 - Standard Performance for Hydraulic Cement.
       7. ASTM C 1314 - Standard Test Method for Compressive Strength of Masonry Prisms.
       8. ASTM E 329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection.
    7. ACI (American Concrete Institute - ACI 530.1 - Specification for Masonry Structures
    8. IMIAC (International Masonry Industry All-Weather Council) - Recommended Practices and Guide Specifications for Cold Weather Masonry Construction.
    9. IMIAC (International Masonry Industry All-Weather Council) - Recommended Practices and Guide Specifications for Hot Weather Masonry Construction.
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. Product Data: Manufacturer's data sheets on each product to be used, including:
        1. Mixing and preparation instructions and recommendations.
        2. Storage and handling requirements and recommendations.
        3. Installation methods.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + 1. LEED Submittals:
       1. Product Certificates for Credit MR 5: For products and materials required to comply with requirements for regional materials, certificates indicating location of material manufacturer and point of extraction, harvest, or recovery for each raw material. Include statement indicating distance to Project, cost for each regional material, and fraction by weight that is considered regional.
    2. Test Reports:
       1. Submit certified test reports showing that the cementitious components of the grout mix comply with the specified requirements.
       2. Submit certified test report showing that the grout complies with the specified requirements.
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Firm specializing in manufacture of masonry materials with minimum 10 years' experience.
     2. Installer Qualifications: Minimum 2 year experience installing similar products.
     3. Quality Assurance Testing: Test Reports prepared by a qualified independent laboratory indicating compliance with the following performance requirements.
        1. Testing Standard: Grout samples tested in accordance with ASTM C 1019.

\*\* NOTE TO SPECIFIER \*\* Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
       1. Finish areas designated by Architect.
       2. Do not proceed with remaining work until workmanship is approved by Architect.
       3. Refinish mock-up area as required to produce acceptable work.
  1. PRE-INSTALLATION MEETINGS
     1. Pre-Installation Meeting: At least three weeks prior to commencing work conduct a meeting at the project site to discuss contract requirements and job conditions; require the attendance of masonry installer, installers of related materials; notify Architect in advance of meeting.
  2. DELIVERY, STORAGE, AND HANDLING
     1. Delivery: Grout mix delivered to project site in sealed bags. Identify each bag with material name and type.
     2. Storage and Protection: Grout to be stored off the ground, under cover and shall be kept dry.
     3. Handling: Handle materials to avoid damage.
  3. PROJECT CONDITIONS
     1. Maintain environmental conditions and protect work during and after installation to comply with referenced standards and manufacturer's published recommendations.
        1. Do not pour into frozen masonry units. Remove and replace damaged masonry units caused by frost or freezing conditions.
     2. Proceed with work after all surfaces and conditions comply with requirements indicated in referenced masonry installation standard and manufacturer's published instructions.
  4. SEQUENCING
     1. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: Amerimix, which is located at: 375 Northridge Rd.; Atlanta, GA 30350; Toll Free Tel: 800-334-0784; Tel: 770-804-3363; Email: [request info (Joey.peters@oldcastle.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=Amerimix&coid=45663&rep=&fax=&message=RE:%20Spec%20Question%20(04070amx):%20%20&mf=); Web: [www.amerimix.com](http://www.amerimix.com)

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
    2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
  1. APPLICATIONS/SCOPE
     1. Grout shall comply with ASTM C476 Standard Specification for Grout for Masonry with a slump ranging from 8 to 11 inches (203 to 279 mm).

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + 1. Refer to Masonry Grout Schedule and Notes on the Drawings.

\*\* NOTE TO SPECIFIER \*\* Insert description of application for course and fine grout mixes. Delete if not required.

* + 1. Application: Use coarse grout for \_\_\_\_\_\_.
    2. Application: Use fine grout for \_\_\_\_\_\_.
  1. GROUT

\*\* NOTE TO SPECIFIER \*\* Delete grout type not required.

* + 1. Product: AMX 600 FG - Preblended Core Fill Fine Grout as manufactured by Amerimix Companies:
       1. Factory blend of cementitious materials and dried aggregates, formulated for superior flow to fill masonry voids and bond together adjacent masonry units and steel reinforcement in the masonry units as specified by ACI 530.
       2. Compressive Strength: Refer to schedule on the drawings.
       3. Designed to achieve 8 to 11 inches (203 to 279 mm) slump.
    2. Product:AMX 600 CG - Preblended Core Fill Coarse Grout as manufactured by Amerimix Companies:
       1. Factory blend of cementitious materials and dried aggregates, formulated for superior flow to fill masonry voids and bond together adjacent masonry units and steel reinforcement in the masonry units as specified by ACI 530.
       2. Compressive Strength: Refer to schedule on the drawings.
       3. Designed to achieve 8 to 11 inches (203 to 279 mm) slump.
  1. ACCESSORY MATERlALS
     1. Water: Clean and free from deleterious acids, alkalies, and organic matter.

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until substrates have been properly prepared.
      2. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
   2. PREPARATION
      1. Clean surfaces thoroughly prior to installation.
      2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
   3. INSTALLATION
      1. Examine surfaces to receive masonry work and conditions.
      2. Mixing: Maximum as recommended by manufacturer
      3. Re-Tempering:
         1. Re-temper grout by adding additional mixing water only to replace water lost due to evaporation.
         2. Discard standard grout 1.5 hours after mixing.
      4. Installation of grout shall be specified under the following Sections and in accordance with ACI 530.1:
         1. Section 04 20 00 - Unit Masonry.
         2. Section 04 21 29 - Terra Cotta Masonry.
         3. Section 04 22 23.29 - Split-Face Concrete Unit Masonry.
         4. Section 04 40 00 - Stone Assemblies.
      5. Protection: Cover the top of the unfinished work to protect it from weather conditions and to prevent accumulation of water within the core of the masonry units.
   4. FIELD QUALITY CONTROL

\*\* NOTE TO SPECIFIER \*\* Delete one of the two following paragraphs.

* + 1. Owner will arrange and pay for field testing.
    2. Contractor shall arrange and pay for field testing by an acceptable testing agency.
    3. Testing:
       1. Testing frequency is determined by the Architect based upon total construction time of masonry with no less than two tests per each level of masonry constructions, floor to roof.
       2. Testing Laboratory is to be independent of the Owner, Architect, Manufacturer, and Contractor, in addition to meeting the requirements of ASTM E 329 and must be an approved laboratory competent to perform cement testing. All testing must be performed in strict accordance with the applicable ASTM standards.
       3. Test results must be distributed within 24 hours of completion; copies must be submitted to the Architect, Contractor, Installer and the grout manufacturer if applicable.
    4. Grout Testing:
       1. Testing shall be done in accordance with the requirements of ASTM C1019
       2. One test sample is the equivalent to three (3) test specimens. Strength test shall be the average of the specimens tested at the age specified.
       3. Measure and record slump and temperature in accordance with the requirements of ASTM C143
       4. Specimens shall be tested at 7 and 28 days.
       5. Compression strength shall be considered satisfactory if the average of the three (3) specimens is equal to or greater than the specified strength.
  1. PROTECTION
     1. Protect installed products until completion of project.
     2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION