Note to User:

This section contains macros to aid the editing process. By default Microsoft Word disables macros for virus security reasons. When you open a file that has macros, the yellow message bar appears with a shield icon and the enable content button. To enable these macros, click the Enable Content button.

Security Warning Message Bar for macros

SECTION 04 05 16

MASONRY GROUT

*(To View Hidden Text, Type* ***CTRL-H****)*

PART 1 – GENERAL

\*\* **NOTE TO SPECIFIER** \*\* Delete any products below not relevant to this project.

# SECTION INCLUDES

#### Grout for filling cores in masonry specified in other sections.

# RELATED SECTIONS

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

#### Section 04 20 00 - Unit Masonry

# REFERENCES

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

* + 1. [ASTM](http://www.ASTM.org) [C 14](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+14) 3/C 143M - Standard Test Method for Slump of Hydraulic Cement Concrete.
    2. [ASTM](http://www.ASTM.org) [C 150](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+150) - Standard Specification for Portland Cement.
    3. [ASTM](http://www.ASTM.org) [C 404](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+404) - Standard Specification for Aggregate for Masonry Grout.
    4. [ASTM](http://www.ASTM.org) [C 476](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+476) - Standard Specification for Grout for Masonry.
    5. [ASTM](http://www.ASTM.org) [C 595](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+595) - Standard Specification for Blended Hydraulic Cement.
    6. [ASTM](http://www.ASTM.org) [C 618](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+618) - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Concrete.
    7. [ASTM](http://www.ASTM.org) [C 1019](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+1019) - Standard Method of Sampling and Testing Grout.
    8. [ASTM](http://www.ASTM.org) [C 1157](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+1157) - Standard Performance for Hydraulic Cement.
    9. [NCMA](http://www.NCMA.org) [TR-88](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.NCMA.org+TR-88) - Hot & Cold Weather Masonry Construction Manual.
  1. **SUBMITTALS**
     1. Submit under provisions of Section [01300](http://www.arcat.com/divs/sec/sec01300.cfm)0.
     2. [ [Product Data](http://www.arcat.com/arcatcos/cos35/arc35025.cfm) ]: 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.
     3. 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.
  2. **DELIVERY, STORAGE, AND HANDLING**
     1. Deliver grout mix to site in sealed bags. Identify each bag with material name and type.

1. **PRODUCTS**
   1. **MANUFACTURERS**
      1. Acceptable Manufacturer: greencoreUSA®, Inc., which is located at: 8725 Hwy 78 West, FL-78; Moore Haven, FL 33471, Phone: 727.251.9837, Fax: 727.202.1145, Web: [www.greencore-usa.com](http://www.greencore-usa.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 [01600](http://www.arcat.com/divs/sec/sec01600.cfm)0.
  1. APPLICATIONS
     1. Use coarse grout for \_\_\_\_\_\_\_\_\_.
     2. Use fine grout for \_\_\_\_\_\_\_\_\_.
  2. GROUT
     1. Grout: Comply with [ASTM](http://www.ASTM.org) [C 47](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+47) 6, with minimum compressive strength of 2,000 psi (13.8 MPa), when tested in accordance with [ASTM](http://www.ASTM.org) [C 1019](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+1019) at slump of 8 to 10 inches (200 to 250 mm) as measured by [ASTM](http://www.ASTM.org) [C 143](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+143) .
     2. Grout Mix: Factory blended hydraulic cement based product containing aggregate and Portland cement, blended cement, or a mixture of Portland cement and fly ash proportioned to produce grout complying with [ASTM](http://www.ASTM.org) [C 476](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+476) for the specified type of grout; Quikrete packaged Coarse Core Fill Grout and Fine Core Fill Grout.
        1. Portland Cement or Blended Cement: [ASTM](http://www.ASTM.org) [C 150](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+150) Types I, IA, II, IIA, III or IIIA.
        2. Portland Cement or Blended Cement: [ASTM](http://www.ASTM.org) [C 595](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+595) Types IS, IS(MS), IS-A, IS-A(MS), IP, or IP-A.
        3. Portland Cement or Blended Cement: [ASTM](http://www.ASTM.org) [C 1157](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+1157) Types GU, HE, MS, or HS.
        4. Fly Ash: [ASTM](http://www.ASTM.org) [C 618](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+618) .
        5. Aggregate: [ASTM](http://www.ASTM.org) [C 404](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+404) .
        6. Coarse Grout: Adjust aggregate proportions to provide evenly graded mix which will be easily pumped, with coarse aggregate content no greater than maximum specified in the proportion specifications of [ASTM](http://www.ASTM.org) [C 476](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+476) .
     3. Water: Clean and free from deleterious acids, alkalies, and organic matter.
  3. MIXING
     1. Mixing Procedure: Add factory pre-blended dry materials to water in mortar mixer and mix for at least 5 minutes.
     2. Retempering: Do not retemper grout; discard grout that cannot be easily pumped or poured.
     3. Cold Weather: Follow National Concrete Masonry Association recommendations for cold weather construction.

1. EXECUTION
   1. INSTALLATION
      1. See Section [042000](http://www.arcat.com/divs/sec/sec04810.cfm).
   2. FIELD QUALITY CONTROL
      1. Owner will arrange for field testing.
      2. Contractor shall arrange and pay for field testing by an acceptable testing agency.
      3. Field Testing: In accordance with [ASTM](http://www.ASTM.org) [C 1019](http://www.google.com/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&q=site%3Awww.ASTM.org+C+1019) .

END OF SECTION