

**SECTION 04 05 13
MASONRY MORTARING**

PART 1 - GENERAL

1.1 DESCRIPTION:

Section specifies mortar materials and mixes.

1.2 RELATED WORK:

- A. Mortar used in Section:
 - 1. Section 04 05 31, MASONRY TUCK POINTING.
- B. Mortar Color: Match existing masonry mortar.

1.3 TESTING LABORATORY-CONTRACTOR RETAINED

- A. Engage a commercial testing laboratory approved by VA COR to perform tests specified below.
- B. Submit information regarding testing laboratory's facilities and qualifications of technical personnel to VA COR.

1.4 TESTS

- A. Test mortar and materials specified.
- B. Certified test reports.
- C. Identify materials by type, brand name and manufacturer or by origin.
- D. Do not use materials until laboratory test reports are approved by VA COR.
- E. After tests have been made and materials approved, do not change without additional test and approval of VA COR.
- F. Testing:
 - 1. Test materials proposed for use for compliance with specifications in accordance with test methods contained in referenced specifications and as follows:
 - 2. Mortar:
 - a. Test for compressive strength and water retention; ASTM C270.
 - b. Mortar compressive strengths 28 days as follows:
 - Type N: Minimum 5170 kPa (750 psi) at 28 days.

1.5 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Certificates:
 - 1. Indicating that following items meet specifications:
 - a. Pointing Mortar
- C. Laboratory Test Reports:
 - 1. Mortar, each type.
- D. Manufacturer's Literature and Data:
 - 1. Cement, each kind.

1.6 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver masonry materials in original sealed containers marked with name of manufacturer and identification of contents.
- B. Store masonry materials under waterproof covers on planking clear of ground, and protect damage from handling, dirt, stain, water and wind.

1.7 APPLICABLE PUBLICATIONS

- A. Publications listed below form a part of specification to extent referenced. Publications are referenced in text by basic designation only.
- B. American Society for Testing and Materials (ASTM):
 - C40-04.....Organic Impurities in Fine Aggregates for
Concrete
 - C91-05.....Masonry Cement
 - C109-08.....Compressive Strength of Hydraulic Cement Mortars
(Using 2-in. or 50-MM Cube Specimens)
 - C144-04.....Aggregate for Masonry Mortar
 - C150-09.....Portland Cement
 - C207-06.....Hydrated Lime for Masonry Purposes
 - C270-10.....Mortar for Unit Masonry
 - C307-03(R2008).....Tensile Strength of Chemical - Resistant Mortar,
Grouts, and Monolithic Surfacing
 - C321-00(R2005).....Bond Strength of Chemical-Resistant Mortars
 - C348-08.....Flexural Strength of Hydraulic Cement Mortars
 - C595-10.....Blended Hydraulic Cement
 - C780-10.....Preconstruction and Construction Evaluation of
Mortars for Plain and Reinforced Unit Masonry
 - C979-10.....Pigments for Integrally Colored Concrete
 - C1329-05.....Mortar Cement

PART 2 - PRODUCTS**2.1 POINTING MORTAR**

- A. For Cast Stone or Precast Concrete: Proportion by volume; One part white Portland cement, two parts white sand, and 1/5 part hydrated lime.

PART 3 - EXECUTION**3.1 MIXING**

- A. Pointing Mortar:
 - 1. Mix dry ingredients with enough water to produce a damp mixture of workable consistency which will retain its shape when formed into a ball.
 - 2. Allow mortar to stand in dampened condition for one to 1-1/2 hours.

3. Add water to bring mortar to a workable consistency prior to application.

3.2 MORTAR USE LOCATION

- A. Use Type N mortar for tuck pointing work.
- B. Use pointing mortar for items specified.

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