

DIVISION 4 – MASONRY

SECTION 04100

MORTAR FOR NEW MASONRY WORK

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1, Specifications Sections, apply to this Section.
- B. Related Sections include the following:
 - 1. Section 01001 - Basic Requirements
 - 2. Section 04300 - Unit Masonry System
 - 3. Section 07180 - Water Repellents

1.02 SECTION INCLUDES

- A. Mortar for new masonry and cast stone work only and shall include the following:
 - 1. New Brick walls, concrete masonry walls, and other brick structures or paving.

1.03 SUBMITTALS

- A. Samples: Submit two samples of mortar, illustrating mortar color and color range.
- B. Color: Color is to be selected by Architect from full range of available colors from manufacturer.

1.04 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 530 and ACI 530.1.

1.05 ENVIRONMENTAL REQUIREMENTS

- A. Cold Weather Requirements: IMIAC - Recommended Practices and Guide Specifications for Cold Weather Masonry Construction.
- B. Hot Weather Requirements: IMIAC - Recommended Practices and Guide Specifications for Hot Weather Masonry Construction.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Portland Cement: ASTM C150, Type I. Type III may be used for cold-weather construction.
- B. Mortar Aggregate: ASTM C144, standard masonry type.
- C. Hydrated Lime: ASTM C207, Type S.
- D. Mortar Color: Color is to be selected by the Architect.

- E. Water: Clean and potable.
- F. Bonding Agent: Latex type.
- G. Do not use Calcium chloride in mortar.

2.02 MORTAR MIXES

- A. Ready Mixed Mortar: ASTM C1142, Type RM.
- B. Mortar for Non-load Bearing Walls and Partitions: ASTM C270, Type M using the Property Method.
- C. Mortar for Reinforced Masonry: ASTM C270, Type M using the Property Method.
- D. Mortar for New Exterior, above grade loadbearing and nonloadbearing walls; for interior loadbearing walls; and for other applications where another type is not indicated: ASTM C270, Type N using the Property Method.

2.03 MORTAR MIXING

- A. Thoroughly mix mortar ingredients in quantities needed for immediate use in accordance with ASTM C270.
- B. Add mortar color in accordance with manufacturer's instructions.
- C. Do not use anti-freeze compounds to lower the freezing point of mortar.
- D. Combine and thoroughly mix cementitious, water and aggregates in a mechanical batch mixer; comply with referenced ASTM standards for mixing time and water content.

2.04 MIX TESTS

- A. Test mortar in accordance with Section 01001.
- B. Testing of Mortar Mix: In accordance with ASTM C780.

PART 3 EXECUTION

3.01 EXAMINATION AND PREPARATION

- A. If required, apply bonding agent to existing concrete surfaces.

3.02 INSTALLATION

- A. Install mortar in accordance with premix mortar manufacturer's instructions.
- B. Use Mortar netting to be placed at locations around weep holes at the base of the brick veneer walls to prevent unwanted mortar build-up at weeps.

END OF SECTION - 04100