SECTION 04100

MORTAR AND MASONRY GROUT

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract including General and Supplementary Conditions and Division 1 specification sections, apply to work of this section.

1.2 SECTION INCLUDES

A. Mortar and grout for masonry.

1.3 SUBMITTALS

A. Samples: Submit two samples of mortar, illustrating mortar color and color range.

1.4 QUALITY ASSURANCE

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

1.5 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

2.1 MATERIALS

- A. Portland Cement: ASTM C150, Type I gray color.
- B. Mortar Aggregate: ASTM C144, standard masonry type.
- C. Hydrated Lime: ASTM C207, Type S.
- D. Mortar Color: Mineral oxide pigment color as selected.
- E. Grout Aggregate: ASTM C404.
- F. Water: Clean and potable.
- G. Bonding Agent: Epoxy type.
- H. Prism Strength: 1500 psi.

2.2 MORTAR MIXES

- A. Mortar for Load Bearing Walls and Partitions: ASTM C270, Type M using the Property Method.
- B. Mortar for Brick Veneer Walls: ASTM C270, Type S using the Property Method.
- C. Mortar for Reinforced Masonry: ASTM C270, Type S using the Property Method.

2.3 MORTAR MIXING

- A. Thoroughly mix mortar ingredients in quantities needed for immediate use in accordance with ASTM C270 C780.
- 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. Mortar preparation shall be per admixture manufacturer's standard recommendations.

2.4 GROUT MIXES

A. Bond Beams, Engineered Masonry: 3,000 psi strength at 28 days; 8-10 inches slump; premixed type in accordance with ASTM C94.

2.5 GROUT MIXING

- A. Mix grout in accordance with ASTM C94.
- B. Do not use anti-freeze compounds to lower the freezing point of grout.

2.6 MIX TESTS

- A. Testing of Mortar Mix: In accordance with ASTM C780.
- B. Testing of Grout Mix: In accordance with ASTM C1019.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install mortar in accordance with ASTM C780
- Work grout into masonry cores and cavities to eliminate voids. Do not displace reinforcement.

3.2 SCHEDULES

- A. Exterior Face Brick Wall: Type S mortar, matching color of existing mortar.
- B. Concrete Masonry Walls: Type S mortar.

...END OF SECTION 04100