

SECTION 04 05 03

MASONRY MORTAR AND GROUT

1 PART 1 GENERAL

1.1 SUMMARY

- A. Section includes mortar and grout for masonry.

1.2 SUBMITTALS

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

1.3 QUALITY ASSURANCE

- A. Perform Work in accordance with MSJC Code (ACI 530/ASCE, 5/TMS 402) and MSJC Specification (ACI 530.1/ASCE, 6/TMS 602).

1.4 ENVIRONMENTAL REQUIREMENTS

- A. Hot and Cold Weather Requirements: MSJC Specification.

2 PART 2 PRODUCTS

2.1 MORTAR AND MASONRY GROUT

- A. Manufacturers:
 - 1. Blue Circle Cement
 - 2. Citadel Cement
 - 3. CTS Cement Manufacturing Co.
 - 4. Lehigh Portland Cement
 - 5. Medusa Cement Co.

2.2 COMPONENTS

- 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, fine and coarse.
- F. Water: Clean and potable.
- G. Bonding Agent: Latex type.

2.3 MIXES

A. Mortar Mixes:

1. Mortar for Structural Masonry: ASTM C270, Type M using the Performance Specification.
2. Mortar for Non-Structural Masonry: ASTM C270, Type S using the Performance Specification.
3. Pointing Mortar: ASTM C270, Type N, using the Performance Specification.

B. Mortar Mixing:

1. Thoroughly mix mortar ingredients in accordance with ASTM C270 in quantities needed for immediate use.
2. Add mortar color and admixtures.
3. Do not use anti-freeze compounds to lower the freezing point of mortar.

C. Grout Mixes:

1. Bond Beams: 2500 psi strength at 28 days; 8 inches slump; mixed in accordance with ASTM C476 Fine grout.

D. Grout Mixing:

1. Thoroughly mix mortar ingredients in quantities needed for immediate use in accordance with ASTM C476.
2. Do not use anti-freeze compounds to lower the freezing point of grout.

3 PART 3 EXECUTION

3.1 PREPARATION

- A. Apply bonding agent to existing concrete surfaces.

3.2 INSTALLATION

- A. Install mortar and grout in accordance with MSJC Specification.

3.3 FIELD QUALITY CONTROL

- A. Test mortar and grout in accordance with Section 01 00 00.
- B. Testing of Mortar Mix: In accordance with ASTM C780.
- C. Testing of Grout Mix: In accordance with ASTM C1019.

3.4 SCHEDULES

- A. Exterior Concrete Masonry Wall: Concrete masonry with Type N mortar with Type N pointing mortar.
- B. Interior Bearing Walls: Concrete masonry units with Type M mortar.

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