

# GUIDE SPEC

## SECTION 04 05 03

### *Masonry Mortaring and Grouting*

#### SECTION 04 05 03 - MASONRY MORTARING AND GROUTING

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section includes mortar for masonry.
- B. Related Sections – 04 01 00 Maintenance of Masonry.

##### 1.2 SUBMITTALS

- A. Samples: Submit two samples of mortar (in addition to the required mock-up), comparable in size to the mortar joint, illustrating mortar color and color range.

##### 1.3 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 530 Building Code Requirements for Masonry Structures and ACI 530.1 Specification for Masonry Structures.
- B. Perform Work in accordance with State, Municipality of [City Name], and [County Name] Department of Public Work's standards.
- C. Reference: 04 01 00 Maintenance of Masonry, Part I General, Section 105 Quality Assurance for further information.
- D. Maintain one copy of each document on site.

##### 1.4 ENVIRONMENTAL REQUIREMENTS

- A. Cold Weather Requirements: In accordance with ACI 530.1 when ambient temperature or temperature of masonry units is less than **40 degrees F (4 degrees C)**.
- B. Hot Weather Requirements: In accordance with ACI 530.1 when ambient temperature is greater than **100 degrees F (38 degrees C)** or ambient temperature is greater than **90 degrees F (32 degrees C)** with wind velocity greater than **8 mph (13 km/h)**.

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#### **PART 2 PRODUCTS**

##### **2.1 MORTAR**

- A. Manufacturers:
1. US Heritage Group, Inc. Model – Heritage Pre-Blended Lime putty Mortar.
  2. Substitutions: Permitted – Approved equal or better.

##### **2.2 COMPONENTS**

- A. Mortar Aggregate: ASTM C144, **to match existing historic mortar as per lab analysis results.**
- B. Hydraulic Lime.
- C. Mortar Color: Color to match existing mortar color as per lab analysis results.
- D. Grout Aggregate: ASTM C404, reference mortar lab analysis report.
- E. Water: Clean and potable.
- F. Calcium chloride is not permitted.

##### **2.3 MIXES**

- A. Mortar Mixes:
1. Mortar for Face Brick Masonry: US Heritage Group, Inc., Heritage Pre-Blended Lime Putty Mortar, 1 part hydraulic lime and 2.5 parts clean, sharp sand (to match historic mortar (as per lab analysis) in color, aggregate, appearance, and composition). **[Need final lab results.]**
  2. Mortar for Indiana Limestone Masonry: US Heritage Group, Inc., Heritage Pre-Blended Lime Putty Mortar, 1 part hydraulic lime and 2 parts clean, sharp sand (to match historic mortar (as per lab analysis) in color, aggregate, appearance, and composition). **[Need final lab results.]**
  3. Substitutions: Approved equal or better.
- B. Mortar Mixing:
1. Thoroughly mix mortar ingredients in accordance with ASTM C270 in quantities needed for immediate use... or Pre-blended US Heritage Group mortar will arrive on site in sealed pre-mixed containers.

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2. Water component to be added as per manufacturer's recommendations and instructions.
3. Re-temper as per manufacturer's recommendations only.
4. Mixing of individual mortar ingredients on site will not be permitted.

#### **PART 3 EXECUTION**

##### **3.1 INSTALLATION**

- A. Install mortar in accordance with Section 04 01 00 and the attached US Heritage Group Installation Guidelines and Procedures for Lime Putty and Hydraulic Lime Mortars for Repointing Applications.

##### **3.2 FIELD QUALITY CONTROL**

- A. Testing Frequency: One set of specified tests for every 5,000sf (465 sq m) of completed wall area.
- B. Testing of Mortar Mix: In accordance with ASTM C780.

END OF SECTION