Masonry Restoration | 04 01 00

The following information shall be included in specifications prepared for use on all University of Cincinnati construction and renovation projects. This information is supplemental and not intended to be a complete specification.

GENERAL STANDARDS

General Criteria
General Considerations - Before any masonry restoration is attempted, several factors should be considered. Factors contributing to the deterioration should be determined and corrective action taken to prevent further damage or damage to the new work.

Restoration Scope - The extent of masonry restoration work is often very difficult to fully assess. The Associate should have tests done to determine the condition of the masonry and its components. Investigative field testing is the best way assess the project requirements so that the Contract Documents will permit competitive bidding and ensure predictable results. If appropriate, initial tests results should be made available to bidders to assist them in preparing bids. Brick should be tested to determine its physical properties and availability. Mortar samples should be tested in a laboratory to determine their composition.

Unit Costs - Even with well-documented conditions and a complete set of contract documents, it is standard procedure to establish unit prices for various portions of the work to account for unforeseen conditions.

PRODUCT STANDARDS

Product Manufacturers
(No standards for this section.)

Product Requirements
Repointing Brick - Old mortar shall be removed to a depth of 3/4" to ensure adequate bond. All loose mortar beyond that depth should be removed.

Pointing Mortar - The Contractor shall prepare batches of mortar of various mixes until a match is established. Mixing proportions should match existing if it can be determined. Do not use mortar that has a higher strength than the masonry. Proportions should be adjusted as necessary. In general, repointing mortar should be approximately one part white Portland cement, two parts lime, and six parts aggregate. Masons should maintain accurate records of mortar mix and methods. Each batch should be carefully formulated to ensure consistency from batch to batch. Masonry cement should not be used. Anti-freeze compounds, air entraining agents, and bonding agents are prohibited. Specify that repointing mortar be pre-hydrated prior to pointing.
**Product Accessories**
(No standards for this section.)

**Product Coordination**
(No standards for this section.)

--- EXECUTION STANDARDS ---

**Preparation & Coordination**

**Pre-Construction Conference** - Specify pre-construction conferences prior to commencing masonry restoration and cleaning work. Discuss proposed materials, methods, sequence schedule, project conditions, protection of adjacent surfaces, lawns, and project site, and other relevant items.

**Cleaning Evaluation** - Methods and materials used to clean existing masonry should be evaluated to reduce the possibility of damage to the masonry, adjacent surfaces and grounds, or disruption of the University operations. Cleaning should employ the least intrusive, mildest, and safest methods and materials that will accomplish the work.

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