

Division 4 MASONRY

- A. 04 21 50, Masonry repointing:
1. All work shall be performed in accordance with the following:
 - a. Secretary of the Interior's "Standards for Rehabilitation".
 - b. "Repointing Mortar Joints in Historic Brick Buildings" (Preservation Brief #2) by Robert C. Mack, published by the Technical Preservation Services Division of the National Park Service.
 - c. Match existing joints.
 2. Samples: Provide samples of the following for approval by Owner and Architect prior to commencement of the work:
 - a. Provide mortar samples (reviewed for both color and tooling match) for walls.
 3. Joint preparation methods: Only hand tools, used in conjunction with the pneumatic tool specified herein, may be used to remove deteriorated and/or inappropriate mortar and masonry units. Other power chisels, power saws and air-abrasive equipment shall be strictly forbidden. The permitted pneumatic tool shall be the Barre Short Stroke Pneumatic Carving Tool, (Type R or D), with a Splitter or Cape Chisel, as manufactured by the Trow and Holden Co., Inc., 45 So. Main St., Barre, VT 05641.
 4. Joint preparation: Only repoint joints which exhibit erosion and/or failure of lime-rich mortar. Do not indiscriminately remove mortar from joints. Remove all cement rich mortar where it has been used in previous repointing. Rake out mortar from joints to a depth of 2-1/2 times the width but not less than 1/2" nor less than required to expose sound, unweathered mortar. Leave clean joints with bond surfaces of masonry exposed and reveals with square backs. Sandblasting, wet aggregate blasting and high-pressure water washing will not be allowed. Rinse masonry surfaces with clean water to remove dust and mortar particles.
 5. Pointing: At time of pointing, provide damp joint surfaces free of standing water. Apply and compact first layer of mortar to areas where existing mortar was removed to depths greater than adjacent areas. After making depths uniform, apply pointing mortar in thin layers, compacting each in turn as it becomes thumbprint hard. Do not compact final layer. Tool completed joint as reviewed with Architect. Allow to cure for 72 hours before removing excess mortar and foreign matter from masonry by using a stiff nylon or bristle (not steel) brush and clean water, spray applied at low pressure.
 6. All masonry repointing shall be performed when the ambient temperature is a minimum of 40°F and is expected to remain so for the duration of the 72 hour curing process.
- B. 04 51 00, Masonry Cleaning:
1. Areas identified on the drawings as needing cleaning shall be cleaned in accordance with the following:
 - a. Light hand brushing with water.
 - b. If necessary, use light pressure washing.
 2. All new work and repointed work shall be cleaned in accordance with the following:
 - a. Cleaner shall be a general purpose, concentrated, acidic based cleaner, PROSOCO 600 Detergent, or approved equivalent, in accordance with Division 1, Item 12, with the following characteristics:
 - i. Form: clear liquid with slight amber color.
 - ii. pH: 0.1 @ 1 to 9 Dilution.
 - iii. Specific Gravity: 1.130.
 - iv. Freeze Point: less than -22 degrees Fahrenheit (less than -30 degrees Celsius).
 - v. Weight: 9.4 lb/gal (1.126 kg/L).
 - b. Clean in accordance with manufacturer's instructions and recommendations, product data, and container label instructions. Mix materials in strict accordance with manufacturer's instructions; do not dilute unless permitted by manufacturer.