

## **APPENDIX 8**

### **Historic Masonry - Specifications**

#### **Brick:**

Brick should be a red, smooth brick compatible with existing red, smooth, pressed Brick unless otherwise specified or supplied by the RCMP.

#### **Mortar:**

Mortar is an essential element of a masonry wall and contributes to its appearance. At Depot it is as important to take a consistent approach to mortar as it is for the masonry material itself, particularly where selective repair of existing masonry is undertaken. New mortar must be compatible with existing in colour, texture and strength.

#### **Mortar Strength:**

Mortar must not be stronger than the masonry units, a consideration for all masonry buildings, but especially important for heritage buildings where the masonry units may not have the same strength as contemporary units. For both new and existing mortar a type N mortar strength is recommended for all visible above-ground brick and masonry. Experience suggests that a mortar mix of one part Type N pre-mix, ½ part hydrated lime and 4 parts sand has resulted in a mortar of compatible appearance. The type of sand and its proportion contributes greatly to the appearance of the mortar.

#### **Cutting out mortar joints:**

In order to minimize damage to masonry units and to minimize the production of harmful dust, hand tools, rotary chisel mortar rakes or small size low-speed rotary saws should be used to remove mortar for the purposes of re-pointing. The use of large size grinders is prohibited.

#### **Attachments:**

Attachments, such as signage, to any brick or stone facades to be done in areas that are repairable such as the mortar joint with compatible anchors that can be removed in the future.

#### **Mock-ups:**

When requested by Departmental Representative, Mock-ups or Demonstration Panels must be produced in advance of any brick and stone mortar repair or re-pointing. The contractor is to demonstrate how mortar is to be removed without damaging masonry units and to illustrate a sample of pointing-in mortar work to ensure that it is compatible in colour, texture and form with existing mortar.

1. Construct 4 separate Mock-ups 1.5m x 1.5 m to demonstrate repair procedure of each type of masonry material specified (2 for existing brick, 2 for existing stone; one each for demonstrating methods and quality of workmanship expected in removal of mortar from joints and the other for demonstrating quality of materials, colour, and workmanship expected for pointing in mortar joints).

Mock-up areas must be located in inconspicuous yet readily accessible places as selected by

owner's representative. Sample panels are to include cleaning.

2. Construct mock-up under supervision of Consultant and Departmental Representative to demonstrate that a full understanding of specified procedures, techniques and formulations are achieved before final work commences.

3. Construct mock-up where directed.

4. Allow 24 hours for inspection of mock-up by Consultant and Departmental Representative before proceeding with masonry repointing and repair work.

5. When accepted, mock-up will demonstrate minimum standard for the work. Mock-up may remain as part of finished work if it is accepted.