

**ITEM 560.8080NN11 – REHABILITATE BRICK FACING (VARIOUS LOCATIONS)**

**DESCRIPTION**

Remove loose and/or damaged brick; clean the anchor dovetail slots, in-place brick and concrete surfaces; install anchors; furnish brick, and mortar the brick in place to reconstruct the damaged area to blend in with the surrounding brick wall where indicated on the plans. The precise location of the work will be determined by the Engineer in the field.

**MATERIALS**

- A. Brick - new, uniform in quality and Manufacturer certified to meet ASTM C216, Grade SW. The type (FBS, FBX or FBA) depends on the brick previously used.

Submit samples that match the existing brick facing for color range, size, texture and pattern for the Engineer's approval prior to use.

- B. Anchors - stainless steel, dovetail anchors meeting ASTM A240 (previously A167).

- C. Masonry Mortar, Type S .....  
§705-21

**CONSTRUCTION DETAILS**

Remove all loose and damaged brick, including all mortar bedding and backing material, as indicated on the plans or ordered by the Engineer, in a manner so as to not damage dovetail slots or brick facing to remain in place. Repair or replace all damage areas resulting from removal operations, at no additional cost, to the satisfaction of the Engineer.

Clean the surfaces of dovetail slots, and in-place bricks and concrete of all substances which will interfere with bonding. The cleaning methods will be subject to approval by the Engineer.

Follow the cleaning operations with compressed air jetting or vacuum cleaning to ensure removal of all loose particles. Remove all materials and debris resulting from surface preparation prior to proceeding with the rehabilitation work.

To determine if bricks need wetting prior to use, perform the following test in the presence of the Engineer:

- 1. With a wax pencil, draw a 25 mm circle (use a quarter as a guide) on a face which will be in contact with mortar.
- 2. With a medicine dropper, rapidly place 20 drops of water inside the circle.
- 3. Note the time required for the water to be absorbed.
- 4. If the time exceeds 1½ minutes from the first drop of water, no wetting is needed.
- 5. If the time is less than 1½ minutes, wetting is required.

## **ITEM 560.8080NN11 – REHABILITATE BRICK FACING (VARIOUS LOCATIONS)**

If wetting is deemed necessary by the Engineer, immerse the bricks in water for a few hours and use the next day when they are surface dry. Hand dipping of brick in water prior to use will not be allowed.

Strict adherence to all the provisions of 705-21 will be enforced, including the use of a mechanical mixer, and the other components of that specification.

Install each new brick in mortar so as to form a full bed, with end and side joints in one operation in a neat, true to line and grade manner. Secure the brick facing to the wall with stainless steel, crimped anchors placed in dovetail anchor slots at a maximum vertical spacing of 300 mm, or as approved by the Engineer. Completely fill the space between the brick facing and the wall with mortar, and finish the joints with a pointing tool that recreates the original joint shape. Avoid recessed joints that hold water.

Protect uncompleted work with waterproof coverings at the close of each day, when work ceases for any reason, and at any other time damage is likely. Use weighted, secure coverings that overhang the work by 600 mm or more on all sides, as approved by the Engineer.

Protect the completed masonry from drying and keep damp for a period of at least 3 days.

After completion of brick laying or other adjacent work likely to soil the masonry, thoroughly clean the masonry wall from joint to joint (construction joint to construction or expansion joint), or as determined by the Engineer. First, brush the dry wall with stiff fiber bristles to remove all loose contaminants likely to stain the wall. Then, thoroughly wet the wall and apply a masonry cleaner approved by the Engineer. Rewash and rinse the wall with clean water after application of the cleaner to remove all dirt, dust, mortar and stains. Always start the cleaning operation at the top and proceed downward.

Install the brick facing only when the ambient and all brick temperatures are 5o C or more. If these temperatures are expected to be less than 5o C, use heating or insulating procedures, approved by the Engineer, for at least the first 24 hours after installation. If the ambient air temperature exceeds 32°C, spread the mortar bed less than 1½ meters ahead, and set the bricks within 1 minute.

### **METHOD OF MEASUREMENT**

The Engineer will measure the work as the number of square meters of rehabilitated brick facing.

### **BASIS OF PAYMENT**

Include the cost of furnishing all labor, materials and equipment necessary to complete the work in the unit bid price per square meter for rehabilitating the brick facing.

1/18/08

**ITEM 560.8080NN11 – REHABILITATE BRICK FACING (VARIOUS LOCATIONS)**

Progress payments will be made, at the unit bid price, for 75% of the quantity placed as approved by the Engineer. The balance will be paid after cleaning the brick facing.

*Payment will be made under:*

<b>Item No.</b>	<b>Item</b>	<b>Pay Unit</b>
560.8080NN11	REHABILITATE BRICK FACING (VARIOUS LOCATIONS)	Square Meter

**NOTE:** nn denotes serialized pay item.