

ITEM 09560.2001 M - CONCRETE BLOCK MASONRY

DESCRIPTION. Under this work, the Contractor shall furnish and place concrete block masonry where indicated in the plans, or where directed by the Engineer.

MATERIALS.

Materials shall meet the requirements specified in the following subsections of Section 700-Materials:

Portland Cement - Type 1 or Type 2	701-01
Masonry Cement	701-02
Fine Aggregates	703-01
Coarse Aggregates	703-02
Mortar Sand	703-03
Caulking Compound for Structures	705-06
Premoulded Resilient Joint Filler	705-07
Mortar for Concrete Masonry	705-21
Bar Reinforcement, Grade 420	709-01
Wire Fabric for Concrete Reinforcement	709-02
Epoxy Coated Bar Reinforcement, Grade 420	709-04
Galvanized Coating and Repair Methods	719-01

Concrete Block Masonry

Concrete block masonry units shall be new, sound, durable, true to size, free from laminations and cracks, and of uniform quality and shall comply with the requirements of ASTM Designation C 90, Type I for normal weight concrete masonry units.

Basis of Acceptance: Masonry units will be considered for acceptance based on the manufacturer's written certification of compliance with the requirements of this specification.

Horizontal Joint Reinforcement

Horizontal joint reinforcement shall be galvanized and shall conform to the requirements of Section 709-02. Size and type shall be as shown in the contract plans.

CONSTRUCTION DETAILS.

General: Masonry shall not be constructed when the ambient temperature is 5 C or below, or when the masonry units exhibit frost, except by written permission of the engineer and subject to any conditions he may require.

Masonry units shall not be dropped upon or slid over existing masonry, nor shall hammering or turning of masonry units on the existing masonry be allowed. Masonry units shall be carefully set without jarring masonry already laid, and they shall be handled in a manner so as not to cause disfigurement.

Protection and Handling: Upon delivery to the site, the masonry units shall be neatly piled off the ground, on pallets or other approved implements, and protected from moisture by wrapping them with 0.10mm polyethylene. Masonry units which become wet shall be permitted to dry for at least seven days before being laid in the wall.

Laying: The concrete block masonry shall be laid up, in the pattern shown on the plans, by skilled masons and in first-class manner. The masonry shall be laid true to line and grade in level horizontal beds and be properly

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anchored. Each masonry unit shall be laid in a full mortar bed and in a manner to form a full end joint in one operation. The space between the masonry and the adjacent concrete shall be filled with mortar and rodded until the mortar rises to the top of the masonry unit as each unit is placed.

Joints: Joints in the exposed face shall be struck with a concave jointer unless otherwise specified. The joints shall be 10mm wide and the concave jointing shall be 2.5mm deep at the center.

Protection Against Damage: Projections and angles exposed to damage shall be boxed or otherwise protected to prevent damage. All units damaged during the progress of the work shall be replaced with new units at the Contractor's expense.

Cleaning of Exposed Faces of Mortar and Drippings: Exposed faces of the block concrete masonry units shall be cleaned free of excess mortar and drippings, as the work progresses to prevent excessive rubbing during final cleaning operations.

Expansion and Contraction Joints: Expansion and contraction joints shall be constructed as shown on the plans. The surfaces of the joints shall be plumb, true to line and smooth to the caulking compound.

Final Cleaning: After the completion of adjacent work likely to soil the masonry, the concrete block masonry shall be thoroughly cleaned, removing all dirt, dust, mortar, etc. The concrete masonry shall be brushed, while dry, with stiff fiber brushes.

Caulking: When the concrete block masonry has received the final cleaning, all expansion and contraction joints shall be filled at least 25 mm deep with caulking compound.

All surfaces to receive the caulking compound shall be clean, free of loose materials, dirt, dust, frost, moisture, oils, laitance or curing compounds, and shall be primed with clear lacquer, shellac or the manufacturer's recommended primer after the surfaces have been cleaned. A bond breaker shall be used as a release material at the back of the caulking compound. The bond breaker may be polyethylene, aluminum strips, specially treated bond inhibiting pressure sensitive tape or any approved equal. The caulking compound shall be tooled with a concave joint finishing tool to provide a neat smoothly finished joint of uniform width. Where solvents are required on the jointing tool, they shall be as recommended by the manufacturer of the caulking compound.

METHOD OF MEASUREMENT. Concrete block masonry will be measured as the number of square meter of block installed, including joints within the masonry, measured on the plane of the centerline of the masonry wall incorporated in the work.

BASIS OF PAYMENT. The unit price bid per square meter shall include the cost of furnishing all labor, materials (including horizontal joint reinforcement, premoulded resilient joint material, caulking compound, preparation of sidewalls with mortar, and wall anchors) and equipment necessary to complete the work. Vertical reinforcement is paid under a separate item.