

1608**Cement Mortar Blocks- Mn/DOT Method**

Prepare mortar using one part high early Portland Cement conforming to AASHTO M 85, Type III and two parts by weight of clean, uniformly graded, concrete fine aggregate conforming to AASHTO M 6. Add sufficient water to produce a flow of 100 ± 5 when tested in accordance with the procedure for determination of consistency of cement described in section 9 of AASHTO T 106, Test for Compressive Strength of Hydraulic Cement Mortars (using 50 mm (**2 inch**) cube specimens). After curing one day in moist air and six days in water at $23^\circ \pm 1.7^\circ\text{C}$ (**$74^\circ \pm 3^\circ\text{F}$**), the blocks shall be cut into 25.4 by 50.8 by 76.2 mm (**1 x 2 x 3 inch**) test blocks using a diamond saw blade. Discard the 25.4 mm (**1 inch**) strips in contact with the vertical sides of the mold.

Immerse the mortar blocks in lime-saturated water for not less than two days prior to use. To prepare specimens, remove from lime water and scrub the faces with a stiff bristle brush holding the block under running water. Blot the washed blocks with absorbent lint-free cloth or blotting paper. Allow the blocks to air-dry for one hour before assembling and filling. Assemble the blocks 12.7 ± 0.25 mm (**1 inch \pm 0.1 inch**) apart enclosing a reservoir of 50.8 by 50.8 by 12.7 mm (**2 x 2 x ½ inch**).