Florida Method of Test for Water Retention by Concrete Curing Materials

Designation: FM 1-T 155

FM 1 T-155 is identical to AASHTO T-155 except for the following provisions:

1. Delete Section 4.7 and replace with:

   *Curing Cabinet* maintained at a temperature of 37.8 ± 1.1°C (100 ± 2°F). The curing cabinet shall be of a design that allows movement of conditioned air such that the solvent from the curing compound will be readily evaporated and eliminated from the system. Air circulation shall be equivalent for all specimens.

2. Delete Section 6.1 and replace with:

   The temperature of the room and of all materials when used in this test shall be 23 ± 2°C (73 ± 4°F) unless otherwise specified, and the room humidity shall be a minimum of 50 percent.

3. Delete the first sentence in section 7.1 and replace with:

   A set of two or more test specimens shall be made in order to constitute a test of a given curing material.

4. Delete section 8.1 and replace with:

   *Proportioning* – Determine the sand of the mortar by adding dry sand to a cement paste having a water-cement ratio of 0.40 by weight to produce a flow of 35 ± 5 in 10 drops of the flow table, following the procedures described in T-71. Discard the mix used to determine the proportion of sand to cement.

   **NOTE 5** – This mix is discarded because it is thought that the age and the mixing history of the mortar where the curing compound is applied, measured from the first addition of water, affects the final results and must be controlled.

5. Delete section 9.1 and replace with:

   Place a layer of mortar in a mold to a depth of approximately 25-mm (1-in.) and tamp 50 times with the tamper. Place a second layer of mortar, sufficient in amount to slightly overfill the mold and tamp in a similar manner. Using the 25-mm (1-in.) wide edge of the tamper, fill the indentations made by the tamping and level the surface by pressing down firmly, 18 to 20 times, moving along the long dimension of
the mold. Strike off the specimen level with the top of the mold using a wood float. Make one pass in the direction of the long axis of the specimen using a sawing motion of the float. Should one pass of the float fail to create a dense test surface, free of voids, the float may be used as a light drag in not more than two passes along the long axis of the specimen to obtain the desired finish. Keep the 75-mm (3-in.) face of the float firmly in contact with the mortar and edges of the mold so that the float creates a uniformly dense surface free of voids and cracks.

6. Delete section 11.1.1 and replace with:

Calculate the mass of the curing compound to be applied (MA) to the nearest 0.1 g based on the specified application rate. If no rate is specified, apply the curing compound at the rate of 0.2 L/m² (gal/200 ft²).

7. Delete the last sentence in NOTE 10.

8. Delete the first sentence in section 14.4 and replace with:

In a set of two or more specimens, if the difference in moisture loss between the specimen having the greatest loss and that with the least loss exceeds 0.15 kg/m², the test shall be repeated and the average taken as that of all specimens in the original and repeat tests.