FLORIDA DEPARTMENT OF TRANSPORTATION
State Materials Office
5007 NE 39th Avenue
Gainesville, Florida 32609

July 1, 2020

Florida Method of Test
For
Specific Gravity and Absorption of Fine Aggregate

Designation: FM 1-T 084

FM 1-T 084 is identical to AASHTO T 84 except for the following provisions:

1. Replace all occurrences of “R 90” with “FM 1-R 090”.

2. Replace all occurrences of “T 85” with “FM 1-T 085”.

3. Replace all occurrences of “R 76” with “FM 1-R 076”.

4. Add the following at the end of Section 4.1:

   “The oven-dried method shall be used for aggregates intended for bituminous asphalt mixes.”

5. Eliminate all references in Section 5.2 to the Le Chatelier flask and the fruit jar fitted with a pycnometer top as acceptable apparatus for this method.

6. Replace “approximately 1 kg” with “1.5 kg ± 0.15 kg in Section 7.1”.

7. Replace Section 7.1.1 with the following:

   “Dry it in a suitable pan or vessel to constant weight at a temperature of 110±5°C (230±9°F), then allow it to cool to comfortable handling temperature. Sieve the material to remove the portion retained on the 4.75 mm (#4) sieve. If the fine aggregate contains more than 10 percent of the material retained on the 4.75mm (#4) sieve, separate the material coarser than the 4.75mm (#4) sieve, and test the coarser material according to FM 1-T 085. Saturate by the addition of at least 6 percent moisture to the fine aggregate and permit to soak for 15 to 19 h in a suitable pan. Excess water should not be added if decantation after the soak period causes loss of material finer than the 0.075 mm (No. 200) sieve.”

8. Replace the first sentence of Section 7.2 with the following:

   “Spread the sample on a flat nonabsorbent surface exposed to a gently moving current of warm air and stir frequently to secure homogeneous drying.”

9. Add the following at the end of Section 7.2.1:

   “Slumps slightly may be considered when 25 percent of the circumference slumps.”

10. Delete **Note 2**.

11. Change “500.0±10 g” in the first sentence of Section 8.2 to “500.0±0.1g”.

    Also add the following before the last sentence of 8.2:

    “Dry all excess water from the sides of the pycnometer.”

12. **Note 3** needs to only allow paper towels to be used in dispersing the foam created by the eliminating of the air in the specimen. Isopropyl alcohol may not be used for eliminating entrapped air from the specimen.

13. Delete 8.2.2, 8.3, 8.3.1, 9.1.1 and 10.1.1.

14. Replace the last sentence of **Note 5** as follows:

    “This sample must be obtained immediately after placing the fine aggregate in the pycnometer and must weigh 500.0±0.1 g.”

15. Add the following after Section 10.1:

    “The calculation of average specific gravity values when the sample is tested in separate size fraction given in FM 1-T 085, section 9.2 can be applied to this test method.”

16. Add the following after Section 12.1:

    “The calculation of average absorption values when the sample is tested in separate size fraction given in FM 1-T 085, section 9.4 can be applied to this test method.”

17. Replace first sentence in section 12.1 with:

    ”Report Specific Gravity results to nearest 0.001 and absorption to nearest 0.1 percent.”