

Colorado Procedure – Laboratory 4102-13

Standard Method of Test for

Specific Gravity and Absorption of Fine Aggregate

(This procedure modifies AASHTO T 84-08. AASHTO T84 and CP-L 4102 shall be used together)

1. SCOPE

- 1.1 This method covers the determination of the specific gravity and absorption of fine aggregate.
- 1.2 This test method is identical to AASHTO T84. *Specific Gravity and Absorption of Fine Aggregate*, with the following exceptions:

7. PREPARATION OF TEST SPECIMEN

Delete Subsection 7.2.1 and replace with the following:

- 7.2.1 *Cone Test for Surface Moisture*—Hold the mold firmly on a smooth non-absorbent surface with the large diameter down. Place a portion of the partially dried fine aggregate loosely in the mold by filling until overflow occurs and heaping additional material above the top of the mold by holding it with the cupped fingers of the hand holding the mold. Lightly tamp the fine aggregate into the mold with 25 light drops of the tamper. Each drop should start about 5 mm (0.2 in.) above the top surface of the fine aggregate. Permit the tamper to fall freely under gravitational attraction on each drop. Adjust the starting height to the new surface elevation after each drop and distribute the drops over the surface. Remove loose sand from the base and lift the mold vertically. If surface moisture is still present, the fine aggregate will retain the molded shape. When the fine aggregate slumps slightly, it indicates that it has reached a surface-dry condition. "Slumps slightly" is defined as when the face slumps at least 25% and no more than 50% after the cone has been vertically lifted.

The following two pictures illustrate the ideal slumping at SSD:



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