
Standard Method of Test for

Coating and Stripping of Bitumen-Aggregate Mixtures

AASHTO Designation: T 182-84 (2002)

ASTM Designation: D 1664-80



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1. SCOPE

- 1.1. This method describes coating and static immersion procedures for determining the retention of a bituminous film on an aggregate surface in the presence of water. It is applicable to cutback, emulsified, and semi-solid asphalts and tars.
- 1.2. The values stated in SI units are to be regarded as the standard.

2. REFERENCED DOCUMENTS

- 2.1. *AASHTO Standards:*
- M 92, Wire-Cloth Sieves for Testing Purposes
 - T 85, Specific Gravity and Absorption of Coarse Aggregate
- 2.2. *ASTM Proceedings*, Vol. 64, 1964.

3. SUMMARY OF METHOD

- 3.1. The selected and prepared aggregate is coated with the bitumen at a specified temperature appropriate to the grade of bitumen used. In the case of cutback asphalt and tar, the bitumen-coated aggregate is subjected to a curing period of 60°C (140°F). In the case of emulsified asphalt, the aggregate is coated with bitumen and subjected to a curing period at 135°C (275°F). After coating, in the case of semi-solid asphalt and tar (Grades RT-10, RT-11, and RT-12), or after curing in the case of cutback asphalt, emulsified asphalt, and tar (Grades RT-1 through RT-9, RTCB-5, and RTCB-6), the coated aggregate is immersed in distilled water for 16 to 18 hours. At the end of the soaking period, and with the bitumen-aggregate mixture under water, the total area of the aggregate on which the bituminous film is retained is estimated visually as above or below 95 percent (Note 1).

Note 1—The 95-percent level was selected because it has been determined, by cooperative test, that only at this and at the five-percent retained coating levels can a reasonable degree of reproducibility be obtained when rating the same sample by visual estimation.

4. SIGNIFICANCE AND USE

- 4.1. This method should not be used as a measure of field performance because such a correlation has not been established.