
Standard Method of Test for

**Filling Capacity of Self-
Consolidating Concrete
Using the Caisson Test**

AASHTO Designation: TP 94-11



**American Association of State Highway and Transportation Officials
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1. SCOPE

- 1.1. This test method covers the determination of filling capacity of self-consolidating concrete (SCC).
- 1.2. The test method is limited to SCC having a nominal maximum size coarse aggregate up to 1 in. (25 mm). This test method can also be used for SCC containing smaller aggregate nominal maximum size.
- 1.3. The values stated in either inch-pounds or SI units are to be regarded separately as standard. Within the text, the SI units are shown in parentheses. The values stated in each system are not exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.
- 1.4. *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations to use.*
Warning—Fresh hydraulic cementitious mixtures are caustic and may cause chemical burns to skin and tissue upon prolonged exposure (Note 1).
Note 1—The safety precautions given in the *Manual of Aggregate and Concrete Testing*, located in the related section of Volume 04.02 of the *Annual Book of ASTM Standards*, are recommended.
- 1.5. The text of these standard reference notes provides explanatory material. These notes (excluding those in tables and figures) shall not be considered as requirements of the standard.

2. REFERENCED DOCUMENTS

- 2.1. *AASHTO Standards:*
- R 39, Making and Curing Concrete Test Specimens in the Laboratory
 - T 141, Sampling Freshly Mixed Concrete
- 2.2. *ASTM Standards:*
- C 125, Standard Terminology Relating to Concrete and Concrete Aggregates
 - C 1621/C 1621M, Standard Test Method for Passing Ability of Self-Consolidating Concrete by J-Ring
- 2.3. *American Concrete Institute Standard:*
- ACI 237R, Self-Consolidating Concrete