
Standard Method of Test for Filling Capacity of Self- Consolidating Concrete Using the Caisson Test

AASHTO Designation: T 349-13 (2021)¹

Technically Revised: 2013

Reviewed but Not Updated: 2021

Editorially Revised: 2021

Technical Subcommittee: 3b, Fresh Concrete



**American Association of State Highway and Transportation Officials
555 12th Street NW, Suite 1000
Washington, DC 20004**

Standard Method of Test for

Filling Capacity of Self-Consolidating Concrete Using the Caisson Test

AASHTO Designation: T 349-13 (2021)¹



Technically Revised: 2013

Reviewed but Not Updated: 2021

Editorially Revised: 2021

Technical Subcommittee: 3b, Fresh Concrete

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 nonconformance 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 Vol. 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.
- 1.6. Technically Revised: 2016 Reviewed but Not Updated: 2020
- 1.7. *The quality of the results produced by this standard are dependent on the competence of the personnel performing the procedure and the capability, calibration, and maintenance of the equipment used. Agencies that meet the criteria of R 18 are generally considered capable of competent and objective testing/sampling/inspection/etc. Users of this standard are cautioned that compliance with R 18 alone does not completely assure reliable results. Reliable results depend on many factors; following the suggestions of R 18 or some similar acceptable guideline provides a means of evaluating and controlling some of those factors.*
-

2. REFERENCED DOCUMENTS

- 2.1. AASHTO Standards: