Designation: ~~C1758/C1758M – 11~~ C1758/C1758M – 13

Standard Practice for Fabricating Test Specimens with Self-Consolidating Concrete[1]

This standard is issued under the fixed designation C1758/C1758M; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. ~~Scope~~ Scope*

1.1 This practice covers procedures for fabricating test specimens in the laboratory or field using a representative sample of fresh self-consolidating concrete (SCC). This practice is applicable to SCC with a nominal maximum aggregate size up to 25 mm [1 in.] and a slump flow of 500 mm [20 in.] or greater. If the slump flow is less than 500 mm [20 in.] follow the fabrication procedures described in the standard for which the test specimen is required.

~~NOTE 1—If the slump flow is less then 500 mm [20 in.] follow the fabrication procedures described in the standard for which the test specimen is required.~~

1.2 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be 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.

1.3 *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 prior to use*. (**Warning**—Fresh hydraulic cementitious mixtures are caustic and may cause chemical burns to exposed skin and tissue upon prolonged exposure.[2])

1.4 The text of this standard references notes and footnotes which provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the standard.

2. Referenced Documents

2.1 *ASTM Standards:*[3]

C125 Terminology Relating to Concrete and Concrete Aggregates

C172 Practice for Sampling Freshly Mixed Concrete

C192/C192M Practice for Making and Curing Concrete Test Specimens in the Laboratory

C1611/C1611M Test Method for Slump Flow of Self-Consolidating Concrete

3. Terminology

3.1 *Definitions:*

3.1.1 For definitions of terms used in this practice, refer to Terminology C125.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *test specimen, n*—self-consolidating concrete placed in a mold, measure, measuring bowl, or other container following this standard with the top surface struck off and finished following the standard for which the test specimen is required.

4. Significance and Use

4.1 Existing practices and test methods for fabricating fresh concrete test specimens are not suited to SCC. This practice provides requirements and procedures for fabricating test specimens with SCC having a slump flow of 500 mm [20 in.] or greater.

[1] This practice is under the jurisdiction of ASTM Committee C09 on Concrete and Concrete Aggregates and is the direct responsibility of Subcommittee C09.47 on Self-Consolidating Concrete.

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[2] See section on Safety Precautions, *Manual of Aggregate and Concrete Testing*,*Annual Book of ASTM Standards*, Vol. 04.02.

[3] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

***A Summary of Changes section appears at the end of this standard**