



Designation: C1798 – 16

Standard Specification for Returned Fresh Concrete for Use in a New Batch of Ready- Mixed Concrete¹

This standard is issued under the fixed designation C1798; 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

1.1 This specification covers returned fresh concrete for use in a new batch of ready-mixed concrete. Requirements for returned fresh concrete shall be either as hereinafter specified or as specified by the purchaser. In any case where the requirements of the purchaser differ from those in this specification, the purchaser's requirements shall govern. This specification does not cover the placement, consolidation, curing, or protection of the concrete after delivery to the purchaser.

1.2 This specification by itself shall not grant permission to the manufacturer to use returned fresh concrete in a new batch of concrete.

NOTE 1—The permission to use returned fresh concrete may be addressed in purchase documents, which may reference this specification.

1.3 Returned fresh concrete in a quantity of less than 450 kg [1000 lb] or 0.2 m³ [0.25 yd³] shall not be subject to this specification.

1.4 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 nonconformance with the standard.

1.5 The text of this standard references notes and footnotes, which provide explanatory information. These notes and footnotes shall not be considered as requirements of the standard.

1.6 *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 skin and tissue upon prolonged use.²)

¹ This specification is under the jurisdiction of ASTM Committee C09 on Concrete and Concrete Aggregates and is the direct responsibility of Subcommittee C09.40 on Ready-Mixed 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.

2. Referenced Documents

2.1 ASTM Standards:³

C94/C94M Specification for Ready-Mixed Concrete
C125 Terminology Relating to Concrete and Concrete Aggregates

C494/C494M Specification for Chemical Admixtures for Concrete

C1064/C1064M Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete

3. Terminology

3.1 *Definitions*—The terms used in this specification are defined in Terminology C125.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *admixture, hydration stabilizing, n*—set-retarding admixture, conforming to Specification C494/C494M Type B or D, that can predictably reduce the hydration rate of cement for applications requiring the management of time of setting of returned concrete, reducing the hydration rate of cement fines in water from concrete production, or for applications requiring extended delivery time of ready-mixed concrete.

3.2.2 *concrete, returned fresh, n*—fresh concrete not yet discharged from a ready-mixed concrete transportation unit when it is returned to the manufacturer.

4. Ordering Information

4.1 The new batch of concrete containing returned fresh concrete shall meet all requirements of the purchaser.

NOTE 2—The requirements of this specification are in addition to those of the purchaser and the specification of the new batch of concrete containing returned fresh concrete.

NOTE 3—If using Specification C94/C94M for concrete potentially incorporating returned fresh concrete, it is recommended the purchaser select Option A. In this option, the manufacturer has responsibility for making necessary adjustments to mixture proportions to ensure the new concrete batch containing returned fresh concrete will meet the requirements of the purchaser.

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.