

Designation: C1732 - 14

StandardPractice for Installation of Concrete Floor Tiles¹

This standard is issued under the fixed designation C1732; 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 practice covers the installation of concrete floor tile (CFT) units for application as exterior and interior flooring. Units described by this practice shall be manufactured to meet the requirements of Specification C1731. This practice is limited to the installation of CFT units.
- 1.2 This practice covers aspects of installation relating to performance in service.
- 1.3 *Units*—The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered 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 prior to use.

2. Referenced Documents

2.1 ASTM Standards:²

C270 Specification for Mortar for Unit Masonry

C920 Specification for Elastomeric Joint Sealants

C979 Specification for Pigments for Integrally Colored Concrete

C1232 Terminology of Masonry

C1325 Specification for Non-Asbestos Fiber-Mat Reinforced Cementitious Backer Units

C1384 Specification for Admixtures for Masonry Mortars

C1714/C1714M Specification for Preblended Dry Mortar Mix for Unit Masonry

C1731 Specification for Concrete Floor Tile

2.2 ANSI Standard:

ANSI A108/A118 American National Standards for the Installation of Ceramic Tile³

2.3 International Concrete Repair Institute Standard:

ICRI Guideline No 310.2-1997 Selecting and Specifying Concrete Surface Preparation for Sealers, Coating, and Polymer Overlays⁴

2.4 The Masonry Society Standard:

TMS 602-13/ACI 530.1-13/ASCE 6-13 Specification for Masonry Structures⁵

3. Terminology

- 3.1 Definitions:
- 3.1.1 *birdcage mixer attachment, n*—mixer attachment with open paddles designed to prevent air entrainment.
- 3.1.2 cementitious backer board, n—a fiber-reinforced cement-based substrate sheet for CFT installation.
- 3.1.3 concrete floor tile (CFT), n—a manufactured masonry unit that is a blend of cementitious material, aggregates, pigments, chemical admixtures, and water formed into the appropriate shape and cured in order to be applied by way of masonry mortar to an approved substrate.
- 3.1.4 *membrane*, *n*—a coating applied to the substrate as a liquid or sheet and used to protect the CFT installation from water intrusion, substrate cracks, thermal expansion/contraction, cement shrinkage, and subfloor deflection.
- 3.1.4.1 *Discussion*—Membranes include but are not limited to anti-fracture, cleavage, crack isolation, uncoupling, and waterproofing membranes.
- 3.1.5 *retemper*, *v*—to add water to mortar or grout to replace water lost to evaporation.
- 3.1.6 *sealer*, *n*—water- or petroleum-based material applied as a liquid to provide protection from water, stains, and contaminants.
- 3.1.7 *setting bed, n*—the mortar subsurface to which CFT units are adhered.

¹ This test method is under the jurisdiction of ASTM Committee C15 on Manufactured Masonry Units and is the direct responsibility of Subcommittee C15.05 on Masonry Assemblies.

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² 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.

³ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, http://www.ansi.org.

⁴ Available from International Concrete Repair Institute 10600 West Higgins Road, Suite 607 Rosemont, IL 60018, http://www.icri.org.

⁵ Available from The Masonry Society 105 South Sunset Street, Suite Q, Longmont, CO USA 80501-6172, http://www.masonrysociety.org.