



Designation: **F1304–08 (Reapproved 2013) F1304 – 18**

Standard Test Method for Deflection of Resilient Floor Tile¹

This standard is issued under the fixed designation F1304; 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 test method is used to determine the deflection of relatively rigid resilient floor tile such as vinyl composition ~~tile~~ tile and resilient flooring with a rigid polymeric core.

1.2 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.

1.3 *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~~ safety, health, and health ~~environmental~~ environmental practices and determine the applicability of regulatory limitations prior to use.*

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*²

E691 Practice for Conducting an Interlaboratory Study to Determine the Precision of a Test Method

F141 Terminology Relating to Resilient Floor Coverings

2.2 *ANSI Standards:*

ANSI/ASQC Z1.4 Sampling Procedures and Tables for Inspection by Attributes³

3. Significance and Use

3.1 This test method measures a ~~physical property~~ properties associated with resilient floor tile's ability to conform to an uneven subfloor without breaking or cracking.

4. Apparatus

4.1 *Deflection Frame*, as shown in Fig. 1.

4.2 *Tensile Test Apparatus*, capable of holding the deflection frame and having a movement of at least 2.5 in. (64 mm) at a rate of 4 in. (100 mm)/min at a load of 10 lb (4.54 kg).

4.3 *Measuring Device*, for measuring the deflection of the specimen at break or pull out from between the support bars to a tolerance of 0.05 in. (1.3 mm).

4.4 *Cutting Device*, for cutting the samples to 2 by 9 in. (50 by 229 mm).

5. Sampling

5.1 For sampling, refer to ANSI/ASQC Z1.4—most recent version.

5.2 Specimens for test shall be $2 \pm \frac{1}{32}$ by $9 \pm \frac{1}{32}$ in. (50 ± 0.8 by 229 ± 0.8 mm).

¹ This test method is under the jurisdiction of ASTM Committee F06 on Resilient Floor Coverings and is the direct responsibility of Subcommittee F06.20 on Test Methods - Products Construction/Materials.

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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>.