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Standard Test Method for Measuring Thickness of Resilient Floor Covering With Foam Layer¹

This standard is issued under the fixed designation F387; 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.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This test method covers the determination of the thickness of resilient non-textile floor coverings containing a foam layer as part of the construction.

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- 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 and health practices and determine the applicability of regulatory limitations prior to use.

2. Significance and Use

- 2.1The overall thickness or ealiper of resilient flooring is a basic physical property. However, conventional means of measuring the thickness, such as a hand micrometer or regular dial micrometer, are not applicable for foam-layer products due to the error from compressing the foam. This test method minimizes this type of measuring error and still retains the convenience and speed of measurement.
- 2.2Measurement of the product thickness may be required for quality control purposes or to ensure compliance with applicable specifications. Referenced Documents
 - 2.1 ASTM Standards:²
 - E691 Practice for Conducting an Interlaboratory Study to Determine the Precision of a Test Method
 - E177 Practice for Use of the Terms Precision and Bias in ASTM Test Methods

3. Apparatus

- 3.1The apparatus shall consist of a comparator stand having a flat anvil base at least 6 in. (15 cm) square, equipped with a thickness gage graduated to 0.001 in. (0.02 mm). The gage shall be equipped with a flat presser foot 0.250 ± 0.01 in. (6.35 ± 0.5 mm) in diameter. The foot shall exert a force of 1 ± 0.1 ozf (0.28 ± 0.03 N) maximum.
- 3.1.1The contact surfaces of the anvil and thickness gage presser foot shall be parallel within 0.0001 in. (0.003 mm). Significance and Use
- 3.1 The overall thickness or caliper of resilient flooring is a basic physical property. However, conventional means of measuring the thickness, such as a hand micrometer or regular dial micrometer, are not applicable for foam-layer products due to the error from compressing the foam. This test method minimizes this type of measuring error and still retains the convenience and speed of measurement.
- 3.2 Measurement of the product thickness may be required for quality control purposes or to ensure compliance with applicable specifications.

4. Test Specimen

4.1The specimen shall be approximately 2 by 4 in. (50 by 100 mm). Apparatus

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.