



Designation: F387-93 Designation: F 387 – 02 (Reapproved 2008)

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

This standard is issued under the fixed designation F 387; 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 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 as opposed to a micrometer caliper or other similar device.

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.

1.2 This standard does not purport to address all of the safety ~~problems, 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

2.1 This test method is designed to measure the vertical distance between the backing surface and an unembossed or flat area on the wear surface. This distance or thickness is an essential parameter for product classification.

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2.2 Measurement of the product thickness may be required for quality control purposes or to ensure compliance with applicable specifications.

3. Apparatus

3.1 The apparatus shall consist of a comparator stand having a flat anvil base at least 6 in. (15 cm) square, equipped with a dial micrometer thickness gage graduated to 0.001 in. (0.02 mm) and mm. The gage shall be equipped with a flat presser foot 0.250 \pm 0.01 in. (6.35 \pm 0.5 mm) in diameter. The foot shall exert a total force of 1 \pm 0.1 ozf (0.28 \pm 0.03 N) at all points within the measuring range. The force shall be obtained by means of a weight. The maximum.

3.1.1 The contact surfaces of the anvil and thickness gage presser foot shall be parallel within 0.0001 in. (0.003 mm).

4. Test Specimen

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

5. Calibration

5.1 Calibrate the gage shall be verified by means of gage blocks or shim stock of known thickness appropriate to the thickness of the material being measured.

6. Conditioning

6.1 Condition the specimens at least 24 h at 73.473 \pm 3.6°F (23 \pm 2°C) and 50 \pm 5 % relative humidity. Test at humidity

⁺This test method is under the jurisdiction of ASTM Committee F-6 on Resilient Floor Coverings and is the direct responsibility of Subcommittee F06.20 on Specialty Resilient Flooring for Human Fatigue and Injury Reduction.

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