



Designation: F 536 – 98

Standard Test Method for Size of Resilient Floor Tile by Dial Gage Method¹

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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 size (length and width) of resilient floor tile.

1.2 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are provided for information only.

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

2.1 The size of resilient floor tile is an important consideration because the installed flooring will have an objectionable appearance if the tiles have nonuniform dimensions. Open seams or corners, or both, that do not match will be evident if floor tiles are not of uniform size.

3. Apparatus

3.1 *Dial Gages*, two.

3.2 *Index Strip*, horizontal, mounted on a flat bedplate.

3.3 *Reference Gage*, for establishing the zero settings of the dial gages.

4. Hazards

4.1 Care must be taken to seat the tile properly against the base index strip.

4.2 The zero setting of the dial-indicator gages should be checked prior to and frequently during use.

4.3 All foreign matter or loose particles must be removed from the edge of the tile and from the angle between the bedplate and the index strip prior to size measurements.

5. Test Specimens

5.1 Unless otherwise specified, two tiles shall constitute the specimens.

6. Preparation of Apparatus

6.1 *Dial Gages*—Mount the dial-indicator gages in parallel in guide slots at the top of the bedplate with the stems extending downward. Locate two gages 3.0 ± 0.125 in. (76 ± 3 mm) on each side of the centerline (see Fig. 1). Vertically position the gages by means of the two slotted guides in the bedplate at the above locations. Ensure that the slotted guides are of sufficient length and width to permit movement of the gages to accommodate both 9 by 9-in. and 12 by 12-in. size tile. The dial is graduated to read 0.001 in. (0.02 mm) and has a stem travel of approximately 1 in. (25 mm). The contact foot of the dial-gage stem shall be flat, 0.25 ± 0.01 in. (6.4 ± 0.2 mm) in diameter and exert a total force on the specimen of 3.0 ± 0.1 ozf (0.83 ± 0.003 N).

6.2 *Index Strip*—Mount an index strip in a horizontal position on the lower part of the bedplate 11.875 ± 0.125 in. (297 ± 3 mm) from the contact feet of the dial gages when they are fully extended and at a right angle to their stems. The surface of the vertical edge of the index strip and the surface of the contact feet of the gages shall be parallel to within 0.0005 in. (0.01 mm). From the centerline of the bedplate, measure out 4.5 in. (119 mm) and 6.0 in. (153 mm) in both directions on the index strip and mark. These are placement marks for 9 and 12-in. (228 and 305-mm) tiles, respectively.

6.3 *Reference Gage*—A reference gage as depicted in Fig. 2, or equivalent, for use in standardizing the dial-gage indicator at zero for distances of 9.000 ± 0.001 in. (228.60 ± 0.02 mm), or 12.000 ± 0.001 in. (304.80 ± 0.02 mm), designated in Fig. 1 and Fig. 2, as *B* and *C*, respectively. (The *A* distance is set at a nominal 6 in. for convenience.)

7. Conditioning

7.1 Condition the test specimens for at least 4 h at $23 \pm 1^\circ\text{C}$ ($73.4 \pm 1.8^\circ\text{F}$) and $50 \pm 5\%$ relative humidity and test in the same environment.

8. Procedure

8.1 *Zero Setting of Dial-Gage Indicators*—Set each of the two dial indicators at zero by utilizing the reference-gage length corresponding to the distance to be measured. After selecting the appropriate reference length, retract the stems of the dial gages and place the reference gage on the surface of the

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