



Designation: F 695 – 96

Standard Practice for Evaluation of Test Data Obtained for Measurement of Slip Resistance of Footwear Sole, Heel, or Related Materials¹

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1. Scope

1.1 This practice covers the evaluation of slip resistance of smooth footwear sole, heel, or related materials on smooth walkway surfaces in the laboratory and in the field.

1.2 *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. Procedure

2.1 Test one sample each of several representative floor panels in accordance with any test method under the jurisdiction of ASTM Committee F-13.

2.2 Select floor samples on the basis of expected end use of the footwear being investigated.

2.3 For the purpose of comparison and ranking, select one footwear sole or heel material known to have good slip-resistant qualities.

2.4 Test the selected material (2.3) on all floor samples in accordance with the appropriate standard test method. Dry, wet, smooth, or rough floor samples shall be tested only when permitted by the appropriate test method.

2.5 Test, as prescribed in 2.4, any material intended for use as footwear sole or heel material.

2.6 Make all measurements in 2.4 and 2.5 on the same day, in the same room, with the same machine, using the same machine operator.

2.7 Record the average value required by the appropriate test method of each footwear sole or heel material on each floor material.

2.8 Tabulate the average values in columns for flooring materials and rows for footwear sole or heel materials.

2.9 Starting with the number “1”, assign a rank value in each column for each average value, with the number “1” showing the highest average slip resistance and the number “2” showing the next highest average slip resistance, etc.

2.10 Tabulate the rank numbers in columns for flooring materials and rows for footwear sole or heel materials (see Table 1).

2.11 Average the rank numbers for each footwear sole or heel material on each floor surface.

2.12 The lowest total rank value has the best overall slip resistance. The rank value for each floor material will indicate inconsistencies with the overall ranking. A low ranking value does not necessarily indicate a poor slip-resistant footwear material. A check of the average test values may show a high slip resistance for all materials tested for the particular floor panel.

3. Keywords

3.1 shoe heel; shoe soling; static coefficient of friction

¹ This practice is under the jurisdiction of ASTM Committee F13 on Safety and Traction for Footwear and is the direct responsibility of Subcommittee F13.50 on Traction.

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F 695

TABLE 1 Ranking Flooring Materials and Footwear Samples

	Floor Material A	Floor Material B	Floor Material C	Total Rank Value
Footwear sample with known good slip resistance	1	2	1	4
Footwear Sample X	3	1	2	6
Footwear Sample Y	2	4	3	9
Footwear Sample Z	4	3	4	11

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