American National Standard

B101.1 Test Method for Measuring Wet SCOF of Common Hard-Surface Floor Materials

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Foreword

(This Foreword is not a part of American National Standard ANSI/NFSI B101.1-2009.)

This Standard, through four iterations by the National Floor Safety Institute (NFSI), was further developed by a subcommittee of the NFSI B101 Standards Committee, national in scope, functioning under the procedures of the American National Standards Institute with the NFSI as the ANSI Accredited Standards Developer. This Standard establishes a test method that specifies the procedures and devices used for both laboratory and field testing to measure the wet Static Coefficient of Friction (SCOF) of common hard-surface floor materials.

The B101.1 Standard was originally published as a test method by the NFSI in 2002 under the title NFSI 101-A and has served as the basis of materials testing and product certification under the NFSI’s product certification program. It was the intent of the NFSI to develop a voluntary test method whose purpose is to establish a uniform test method for measuring the wet SCOF of floor coverings, polishes, and walkway coatings.

The National Floor Safety Institute was founded in 1997 with the mission: “To aid in the prevention of slips, trips-and-falls through education, research, and standards development.” The development of the ANSI/NFSI B101.1-2009 Standard is a direct result of the mission of the NFSI answering a recognized need for a walkway measurement methodology.

It is intended that the procedures and performance requirements contained herein will be adopted by affected professionals and property owners as the measurement procedure for determining traction levels that facilitate remediation of walkway surfaces when warranted. Contained as a part of this Standard is an informative appendix that will serve to assist the user in developing a comprehensive floor safety assurance program.

Neither the B101 Standards Committee, nor the accredited Standards developer perceive that this Standard is perfect or in its ultimate form. It is recognized that new developments are to be expected, and that revisions of the Standard may be necessary as the combination of science and art progresses and further experience is gained. The Committee does believe, however, that the Standard in its present form provides performance requirements necessary in developing and implementing a comprehensive floor safety assurance program.

Suggestions for improvement of this Standard will be welcome. They should be sent to the National Floor Safety Institute, P.O. Box 92607, Southlake, TX 76092.
This Standard was processed and approved for submittal by the NFSI B101 Committee on Safety Requirements for Slip, Trip and Fall Prevention. Committee approval of the Standard does not necessarily imply that all Committee members voted for its approval. At the time it approved this Standard, the B101 Standards Committee had the following members:

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Section 1: Scope/Purpose/Application/Exception

1.1 Scope

This test method specifies the procedures and devices used for both laboratory and field testing to measure the wet static coefficient of friction (SCOF) of common hard-surface floor materials.

1.2 Purpose

This test method provides a measurement procedure setting forth traction ranges that facilitate remediation of walkway surfaces when warranted.

1.3 Application

This test method does not apply to carpeting of any type or mechanically polished tile such as polished porcelain, marble, etc., but does address the common hard-surfaced flooring materials such as ceramic tile, vinyl floor coverings, and wood laminates, as well as coatings, polishes, etc.

Note: This test method does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use. No express or implied representation or warranty is made regarding the accuracy or significance of any test results in terms of slip resistance.

1.4 Exceptions

This test method is not recommended for dry-surface testing and does not propose to be an accurate measurement method for determining dry-surface slip resistance. Dry-surface test data should not be compared to wet-surface data. No inferences should be implied or concluded regarding dry vs. wet SCOF test results or data.

Section 2: Reference to other Standards and Publications

ASTM D2240-05 Standard Test Method for Rubber Property—Durometer Hardness

Section 3: Definitions

3.1 Friction. Resistance to the relative motion of two solid objects in contact. This force is parallel to the plane of contact and is perpendicular to the normal force.

3.2 Grout Joint. The space between two (2) or more pieces of tile. This space may be filled or unfilled.

3.3 Grain. A characteristic of many natural materials such as wood that may exhibit directional bias as it relates to slip resistance.