

ANSI/NFSI B101.0-2012

American National Standard B101.0 Walkway Surface Auditing Procedure for the Measurement of Walkway Slip Resistance

Secretariat



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Foreword (This Foreword is not a part of American National Standard NFSI B101.0- 2012)

Each year millions of Americans seek emergency room treatment for an accidental fall making it one of the leading causes of emergency room visits in America. Fall related injuries affect a wide range of people particularly the elderly. According to the National Safety Council (NSC), falls are the leading cause of accidental death for people over the age of 85. Slips and falls are also a leading cause of primarily guest as well as employee injuries for various exposures including the retail, foodservice, healthcare, and hospitality industries, costing an estimated \$60 billion each year.¹

This standard, through prior iterations by the National Floor Safety Institute (NFSI), was further developed by a subcommittee of the NFSI B101 Main 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 procedure for auditing walkway slip resistance by measuring coefficient of friction of common hard-surface floor materials.

The B101.0 standard was originally developed by the NFSI under the title Walkway Surface Auditing Guideline for the Measurement of Walkway Slip Resistance. It was the intent of the NFSI to develop a voluntary method whose purpose is to establish a standard guideline for auditing floor coverings, polishes, and walkway coatings.

The NFSI 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 B101.0-21012 Standard Walkway Auditing Procedure is a direct result of the mission of the NFSI answering a recognized need for a walkway auditing methodology.

It is intended that the procedures and performance requirements contained herein will be adopted by affected professionals and property owners as the procedure for obtaining measurements for determining traction levels of walkway surfaces.

Neither the B101 Main 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 science progresses and further experience is gained. However, this standard procedure in its present form provides the methodology and performance requirements necessary for the performance of walkway audits and development and implementation of a comprehensive floor safety assurance program to insure adequate walkway slip resistance.

Suggestions for improvement of this standard should be sent to the Accredited Standards Developer: National Floor Safety Institute, P.O. Box 92607, Southlake, TX 76092.

¹"Accident Facts" 2006 edition, (c) National Safety Council, Itasca, IL "Health & Safety-Injury Facts" 2008, pp.74 (c) National Safety Council, Itasca, IL.

This standard was processed and approved for submittal by the NFSI B101 Main Standards Committee on Safety Requirements for Slip, Trip and Fall Prevention. Approval of the standard does not necessarily imply that all committee members voted for its approval. At the time it approved this standard procedure, the B101 Main Standards Committee had the following members:

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Secretary

Assistant Secretary

Howard Harris, M.D.

Russell J. Kendzior

Jim E. Lapping, MS, PE, CSP

Organization Represented

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American Slip Meter

Atlas Safety & Security Design Inc.

Centers for Disease Control (CDC)

Consolidated Floor Safety

GT Grandstands, Inc.

Heavyweight Solutions

Institute of Inspection, Cleaning and Restoration (IICRC)

ISSA-The Worldwide Cleaning Industry Association

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Ludlow Composites Corporation

Maximum Floor Safety

Murray State University

National Floor Safety Institute (NFSI)

Nu-Safe Floors

Procter & Gamble

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Safety System America

SGS-U.S. Testing Company, Inc.

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Section 1: Scope/Purpose/Application

1.1 Scope

This standard provides the technical procedures for walkway auditing and measuring the coefficient of friction (tribometry) of walkway surfaces in both public and private facilities.

1.2 Purpose

The purpose of this standard is to provide specific methods and procedures for the performance of a walkway audit, which may, by its performance, reduce or prevent injuries and fatalities from slips and falls.

1.3 Application

This standard sets forth the requirements in the process of walkway surface auditing using a three (3) risk class approach to structure a detailed and systematic procedure resulting in an auditor's report suggestive of warranted interventions.

Section 2: Reference to Other Standards and Publications

2.1 ANSI/ASSE Z490.1 Criteria for Accepted Practices in Safety, Health and Environmental Training.

2.2 Certain slip measurement related terms have already been addressed in the ASTM F 1646-05 Standard Terminology Relating to Safety and Traction for Footwear. The reader is directed to this standard for definitions not found in Section 3 of this document.

2.3 Certain slip measurement related terms have already been addressed in ASTM C 1028-06 Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method. The reader is directed to this standard for definitions not found in Section 3 of this document.

2.4 ANSI/ASSE A1264.2-2006 Provision of Slip Resistance on Walking/Working Surfaces.

2.5 ANSI/NFSI B101.1-(most current version) Test Method for Measuring Wet SCOF of Common Hard-Surface Floor Materials.

Section 3: Definitions

3.1 Neolite® Foot - A laboratory grade material used by tribometers of many types; historically recognized to simulate synthetic exterior shoe sole surfaces for use as the tribometer's test foot material for coefficient of friction testing.