ANSI NFSI B101.0 Walkway Auditing Standard

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Slip and Fall Standards, Codes & Regulations

how they affect you, your clients... and your bottom line!
Appearance is Everything... Right?

But what about safety?
You Just Have to Start Looking at Things From a New Perspective
How do you answer this objection...

It is so shiny so it must really be slippery!
How do you answer this accusation...

We have had several customers slip and fall; this shiny floor you installed is slippery, therefore you are being named in the suit as well!
Industry Standards
Standards Organizations

- International - (ISO, ANSI, DIN)
- National - (ANSI, ASTM)
- Independent - (UL, NFSI)
International Standards

- International Standards Organization (ISO)
  - No Standard related to slips and falls

- European Union (EU)
  - developing numerous methods from various European nations

- Deutsches Institut für Normung e.V. (DIN; in English, the German Institute for Standardization)
  - DIN 51130 is related to slips and falls
National Standards

- American Society for Testing and Materials (ASTM)
  - 4 industry specific Committees to address product slip resistance
  - D-21 - Floor Polishes - standard D-2047
  - C-21 - Ceramic tile - standard C-1028 withdrawn 02/2014
  - F-13 - Traction and Footwear - standard F-1637, F-2508 Tribometer Testing
  - F-06 - Resilient Floor Coverings - no standard
National Standards

- American National Standards Institute (ANSI)
  - ANSI/ASSE A1264
  - ANSI/NFSI B101
  - ANSI/TCNA A137.1

- Is the ISO member body for the USA
ASTM D-2047

- Dry (leather) SCOF Test Method
- Applies to Polish-coated flooring surfaces only
- Derived from UL-410
- SCOF Values of 0.5> are defined as having “adequate Slip Resistance”
- James Machine Test Only
ASTM C-1028 ceramic tile (withdrawn)

- Wet/Dry (Neolite) SCOF Test Method
- Applies to Ceramic tile and “Like Surfaces”
- Does not establish any SCOF values
- Horizontal Pull Meter
ASTM F-13 Footwear & Traction

- F-1637-"Practice for Safe Walking Surfaces" (Condensed version of A1264)
- F-1677-96 (English XL) Withdrawn in 2006
- F-1679-96 (Brungraber MK II) Withdrawn in 2006
- F-2508-2011 "Standard Practice for Validation and Calibration of Walkway Tribometers using Reference Surfaces"
ASTM F-06 Resilient Flooring

☐ No Slip resistance standards
ANSI/ASSE A1264.2-2013

- Applies only to workplaces and not the general public
- Suggests that floors meet a minimum dry SCOF of 0.5
- Addresses 4-areas
  - Floor Surface Characteristics
  - Footwear Traction Properties
  - Environmental Factors (Contaminants)
  - Human Factors (gait, Human Activity)
ANSI/TCNA A137.1-2012

☐ Wet DCOF test that applies to ceramic tile

☐ Per the scope and purpose this standard applies as a Quality Control standard for **uninstalled tile**

☐ Does not apply to installed tile in the field

☐ Not applicable for testing polished concrete or other surfaces
Your Floors Look Like a Million Bucks ...
To the next victim of a slip-and-fall
ANSI/NFSI B101.1-2009
Test Method for Measuring Wet SCOF of Common Hard-Surface Floor Materials

ANSI/NFSI B101.3-2012
Test Method for Measuring Wet DCOF of Common Hard-Surface Floor Materials

ANSI/NFSI B101.0-2012
Walkway Surface Auditing Procedure for the Measurement of Walkway Slip Resistance
ANSI/NFSI B101.1-2009
ANSI/NFSI B101.3-2012

- Applies to ALL hard surface walkway surfaces (first ever uniform test method)
- Can be used in both the laboratory and the field
- Defines 3-wet COF Ranges or “Traction Levels”
  - High-Traction (0.60+ SCOF - 0.42+ DCOF)
  - Moderate Traction (0.40-0.60 SCOF – 0.30-0.42 DCOF)
  - Low Traction (<0.40 SCOF - <0.30 DCOF)
ANSI/NFSI B101.0-2012

- Applies to ALL hard surface walkway surfaces (first ever uniform test method)
- Defines procedures for walkway auditing
- Defines walkway surfaces into three risk classes
  - Risk Class A: Mostly dry
  - Risk Class B: Mostly dry but sometimes wet
  - Risk Class C: Mostly wet
Federal Regulations

- Occupational Safety and Health Administration (OSHA)
- Americans with Disabilities Act (ADA)
  - rely upon and reference ANSI and ASTM standards
OSHA Regulations

- Department of labor CFR 1910.22 describes keeping floors “clean, orderly and in a sanitary condition”
- Currently does not require that walkways met any specific COF value
- Currently does not specify any test method, standard, or test instrument
- Proposed new rule calls for walkways to be inspected by a “qualified person”
- OSHA seeking to incorporate language consistent with ANSI standards
ADA

- ADA (ADAAG) appendix required that walkways maintain a COF of 0.6 and 0.8 for ramps but did not specify the test method, standard, testing instrument, or condition (wet vs. dry).

- Incorrectly referenced OSHA as having a 0.5 COF requirement which was withdrawn via a bulletin announcement in 2005.
Building Codes

☐ International Code Council (ICC) “The Building Code”, Does not specify COF values but does reference ANSI A137.1-2008 which specifies ASTM C1028 (withdrawn) testing of uninstalled ceramic tile, however, it has no slip resistance standards.

☐ Some local codes call for walkways to be slip resistant, however, they do not specify how to test (i.e. Los Angles, California).
Look For The NFSI Label
How Standards Compliance Testing Benefits Your Company

1. Creates An Evidentiary Trail of Due Diligence and Reasonable Care

2. Establishes the creation and use of a well organized floor safety program which may prevent slip and fall accidents.

3. Provides a definite and responsible evidentiary trail which will defend against claims of improper installation and irresponsibility.