Designation: F3445 – 21

Standard Specification for Performance Requirements when Evaluating Slip Resistance of Protective (Safety) Footwear using ASTM F2913 Whole Shoe Test Method[1]

This standard is issued under the fixed designation F3445; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This specification covers minimum slip resistance requirements for the performance of protective (safety) footwear and is intended to help reduce potential injuries. Controlled laboratory tests used to determine compliance with this performance specification shall not be deemed as establishing performance levels for all situations to which individuals may be exposed to.

1.2 The cited Test Method F2913 allows for testing of alternative flooring or contaminates, or both. It is suggested that testing those alternatives be considered should specific workplace hazards exist.

1.3 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

1.4 *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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

F1646 Terminology Relating to Walkway Safety and Footwear

F2413 Specification for Performance Requirements for Protective (Safety) Toe Cap Footwear

F2892 Specification for Performance Requirements for Soft Toe Protective Footwear (Non-Safety / Non-Protective Toe)

F2913 Test Method for Measuring the Coefficient of Friction for Evaluation of Slip Performance of Footwear and Test Surfaces/Flooring Using a Whole Shoe Tester

3. Terminology

3.1 For general definitions of terms, refer to Test Method F2913 along with Terminology F1646.

3.2 *Definitions:*

3.2.1 *protective footwear, n*—footwear that is designed, constructed, and tested in accordance with noted ASTM standards to protect the wearer from a potential hazard or hazards.

4. Classification

4.1 Protective footwear manufactured to meet a minimum slip performance requirement for a specific hazard or hazards. This standard is intended to be a standalone performance specification for all protective footwear including those noted within Specifications F2413 and F2892.

5. Materials and Manufacture

5.1 US Men's size 9, US Women's size 8, regular or medium width finished footwear. If medium or regular footwear is not produced, testing must be performed on the available width.

5.2 Whole Shoe Slip Tester in compliance with the requirements of Test Method F2913.

5.3 Quarry tile per Test Method F2913 section marked "Calibration and Standardization—Test Surfaces (Floorings) and Lubricants."

5.4 Distilled or deionized water per Test Method F2913 section marked "Calibration and Standardization—Test Surfaces (Floorings) and Lubricants."

[1] This specification is under the jurisdiction of ASTM Committee F13 on Pedestrian/Walkway Safety and Footwear and is the direct responsibility of Subcommittee F13.30 on Footwear.

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[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.