



## Designation: F1117 – 03 (Reapproved 2019)

# Standard Specification for Dielectric Footwear<sup>1</sup>

This standard is issued under the fixed designation F1117; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

## 1. Scope

1.1 This specification covers acceptance testing of dielectric overfoot and overshoe footwear designed to provide additional isolation or insulation of workers if in accidental contact with energized electrical conductors, apparatus, or circuits.

1.2 Three styles of overshoe footwear are provided and are designated as rubbers, boots, and galoshes.

1.3 *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:*<sup>2</sup>

**F819** Terminology Relating to Electrical Protective Equipment for Workers

**F1116** Test Method for Determining Dielectric Strength of Dielectric Footwear

## 3. Terminology

3.1 *Definitions*—Definitions pertaining to electrical protective equipment may be found in Definitions **F819**.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *user*—as used in **4.3.1**, the entity employing the actual worker(s) utilizing the equipment; if no separate employer, then the individual.

## 4. Significance and Use

4.1 This specification covers the minimum electrical properties of dielectric footwear guaranteed by the manufacturer and the detailed procedures by which such properties are to be

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee **F18** on Electrical Protective Equipment for Workers and is the direct responsibility of Subcommittee **F18.15** on Worker Personal Equipment.

Current edition approved Sept. 1, 2019. Published September 2019. Originally approved in 1993. Last previous edition approved in 2013 as F1117 – 03(2013). DOI: 10.1520/F1117-03R19.

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

determined. The purchaser may, at his option, perform or have performed these tests in order to verify the guarantee. Claims for failure to meet the specification are subject to verification by the manufacturer.

4.2 Electrical contact injuries to workers may involve a current path through the feet of the worker. The footwear covered by this specification is dielectrically rated to provide additional isolation or insulation to the worker.

4.3 Work practices vary from user to user depending upon many factors. These may include, but are not limited to, operating system voltages, construction design, work procedures and techniques, weather conditions, etc. Therefore, except for the restrictions set forth in this specification because of design limitations, the use and maintenance of this equipment is beyond the scope of this specification.

4.3.1 It is common practice and the responsibility of the user of this type of protective equipment to prepare complete instructions and regulations to govern the correct and safe use of such equipment.

## 5. Classification

5.1 Styles of overshoe footwear covered under this specification shall be designated as follows:

5.1.1 *Rubbers*, designed to be worn over existing footwear and to cover only the foot of the worker.

5.1.2 *Boots*, designed to be worn over existing footwear and to cover the foot and lower leg of the worker to below the knee.

5.1.3 *Galoshes*, designed to be worn over existing footwear and to cover the foot and lower leg of the worker to below the knee and having fasteners to close the folded front flaps.

## 6. Ordering Information

6.1 Orders for footwear under this specification should include the following information:

6.1.1 Style,

6.1.2 Size, and

6.1.3 Color.

## 7. Manufacture and Marking

7.1 The construction shall be such that the footwear has a specified minimum dielectric strength when tested as specified in Test Method **F1116**.