

# F2413 -05

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## Standard Specification for Performance Requirements for Foot Protection

### Abstract

This specification covers the minimum design, performance, testing, and classification requirements, and prescribes fit, function, and performance criteria for footwear designed to be worn to provide protection against a variety of workplace hazards that can potentially result in injury. It is not the intention of this specification to serve as a detailed manufacturing or purchasing specification, but can be referenced in purchase contracts to ensure that minimum performance requirements are met. Footwear conforming to this specification shall meet the performance requirements for the following: impact resistance for the toe area of footwear; compression resistance for the toe area of footwear; metatarsal protection that reduces the chance of injury to the metatarsal bones at the top of the foot; conductive properties which reduce hazards that may result from static electricity buildup, and reduce the possibility of ignition of explosives and volatile chemicals; electric shock resistance; static dissipative (SD) properties to reduce hazards due to excessively low footwear resistance that may exist where SD footwear is required; puncture resistance of footwear bottoms; chain saw cut resistance; and dielectric insulation.

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### 1. Scope

1.1 This specification covers minimum requirements for the design, performance, testing, and classification of footwear designed to provide protection against a variety of workplace hazards that can potentially result in injury.

1.2 The objective of this specification is to prescribe fit, function, and performance criteria for footwear that is intended to be worn to reduce injuries.

1.3 This specification is not intended to serve as a detailed manufacturing or purchasing specification, but can be referenced in purchase contracts to ensure that minimum performance requirements are met.

1.4 Controlled laboratory tests used to determine compliance with the performance requirements of this specification shall not be deemed as establishing performance levels for all situations to which individuals may be exposed.

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

1.6 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 and health practices and determine the applicability of regulatory limitations prior to use.

## 2. Referenced Documents

### ASTM Standards

[B117](#) Practice for Operating Salt Spray (Fog) Apparatus

[F1116](#) Test Method for Determining Dielectric Strength of Dielectric Footwear

[F1117](#) Specification for Dielectric Footwear

[F1818](#) Specification for Foot Protection for Chainsaw Users

[F2412](#) Test Methods for Foot Protection

### Federal Standards

CFR1910.136 Personal Protective Equipment-Occupational Foot Protection

### Canadian Standards Association Standard

CAN/CSAZ195 Protective Footwear

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## Index Terms

chain saw protection; conductive footwear; dielectric; electric shock resistance (EH); foot protection; impact resistance; metatarsal protection; protective footwear; puncture resistance; safety footwear electrical hazard; static dissipative (ESD); ICS Number Code 13.340.50 (Leg and foot protection)

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