

CERTIFICATION Notice

An Urgent Bulletin from CSA Group

Occupational Health & Safety Products No. 114

Effective Date: June 1, 2019

Date: May 24, 2018

Apply Before December 1, 2018

Announcing: Publication of ASTM F2413-17 Standard Specification for Performance Requirements for Protective (Safety) Toe Cap Footwear

Class No: 7231 81, OCCUPATIONAL HEALTH AND SAFETY PRODUCTS - Footwear Certified to US Standards
7232 81, OCCUPATIONAL HEALTH AND SAFETY PRODUCTS - Protective Soles - Component Acceptance - Certified to US Standards

Who is affected?

Manufacturers of protective footwear and protective soles.

What do you do?

1. CSA Group Service Delivery staff will contact you to address compliance with each revision as applicable to the product designs covered in your affected Certification Reports. In addition to updates to your Certificate(s) of Compliance & Report(s), testing may be required to comply with these revisions.
2. Please respond within thirty (30) days of receiving CSA Group's "Application for CSA Certification Services" and "Quotation" communication. You must respond no later than December 1, 2018 in order to guarantee the update to your certification is completed by June 1, 2019. If testing is needed, we will inform you of the samples required.

Approvals:

CSA is pleased to announce the publication of ASTM F2413-17, Standard Specification for Performance Requirements for Protective (Safety) Toe Cap Footwear.

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. Current edition approved Nov. 1, 2017. Published December 2017.

Major Revisions:

See attachment 1

Background and Rationale:

See attachment 2

For questions specific to your file or products contact your CSA Group technical staff associate.

Go to <http://www.csagroup.org/services/testing-and-certification/product-listing/> and enter your Master Contract # and the class numbers associated with this Notice to determine which of your products are affected.

For technical questions on this Certification Notice

Contact Sally Guo
by phone 416-747-2348, fax 416-747-4149
or e-mail sally.guo@csagroup.org

The standard edition or amendments announced in this Notice may be used for certification as of the date of issue of this Notice. The "Effective date" in this Notice is the date on which the current requirements, applicable to Certified products listed in the affected class numbers, expire and the standard edition or amendments announced in this Notice become the only requirements that may be used for certification.

In the event that currently certified products do not comply with the latest requirements outlined in this Notice after the "effective date", the certification of such models may be discontinued.



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ATTACHMENT 1

Major Revisions

Clause(s)	Changes
ASTM F2413-17 Standard Specification for Performance Requirements for Protective (Safety) Toe Cap Footwear	
1 Scope	Added Clause 1.8, 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.
3.1 Definitions	<ul style="list-style-type: none"> • 3.1.1 footbed (removable) was modified for clarity. • 3.1.12 soling material was modified to clarify that the bottom surface of the soling material is exposed to wear. • The definition of Socklining (non-removable) was removed.
5. Performance Requirements for Foot Protection 5.1 Impact (I) and Compression (C) Resistant Footwear	<ul style="list-style-type: none"> • The title of 5.1 Impact (I) and Compression (C) Resistant Footwear and Clause 5.1.1 added "(C) Resistant Footwear".
	<ul style="list-style-type: none"> • Clause 5.1.2: <ul style="list-style-type: none"> - Clause 5.1.2 added the requirement that the toecaps shall be free from corrosion, sharp edge, burrs and defects that may affect safety performance. - Clause 5.1.2 added toe cap flange construction requirement. If a flange is present the width of the flange, when measured from the inside edge, shall be no greater than 0.394 in. (10 mm).
	<ul style="list-style-type: none"> • Added a new clause 5.1.4.2 Care and Use
5. Performance Requirements for Foot Protection 5.2 Compression Resistant Footwear (C)	<ul style="list-style-type: none"> • Clause 5.2 was modified to reflect the changes of Clause 5.1. Clause 5.2.1 to 5.2.3 of "ASTM F2413-11" were combined with 5.1 of ASTM F2413-17.
5. Performance Requirements for Foot Protection 5.3 Metatarsal Protective Footwear (Mt)	<ul style="list-style-type: none"> • Added Clause 5.3.3.4 Care and use.
5. Performance Requirements for Foot Protection 5.4 Conductive Protective Footwear (Cd)	Added Clause 5.4.6 Care and use.
5. Performance Requirements for Foot Protection 5.5 Electric Hazard Resistant Footwear (EH)	<ul style="list-style-type: none"> • Clause 5.5.2 was modified to clarify that Electric hazard footwear shall be constructed and manufactured so that the footwear outsole provides a supplemental form of protection to the wearer from hazardous step potential(the difference in electrical potential between the feet) while standing on the ground. • Added Clause 5.5.5 Care and use.

Clause(s)	Changes
5. Performance Requirements for Foot Protection 5.6 Static Dissipative Footwear (SD):	<ul style="list-style-type: none"> Clause 5.6.2.1 was changed to divide the SD footwear into three different levels: SD 100, SD 35, SD 10.
5. Performance Requirements for Foot Protection 5.7 Puncture Resistant Footwear (PR):	Re-number Clause 5.7.9 of ASTM F2413-11 as Clause 5.7.3 in ASTM F2413-17
6. Labelling and Identification	Added 6.1.5.6, 6.1.5.7 and 6.1.5.8 for SD 100, SD 35 and SD 10 labels.
ASTM F2412-18 Standard Test Methods for Foot Protection	
3 Terminology	Added new terminologies: Footbed, Modified terminologies: product group
5. Protective Toe Impact Resistance (I)	<p>5.2 Apparatus</p> <ul style="list-style-type: none"> Added a new Figure 1(a) to clarify the apparatus. Clause 5.2.1 was modified to clarify that the mechanism of the impact tester shall catch the striker after the initial impact so that the test specimen is struck only once. <p>5.3 Sampling</p> <ul style="list-style-type: none"> Clause 5.3.1 Added a statement that If footwear is manufactured with a removable sockliner (footbed) the test is to be performed with the sockliner in place. Added a new requirement that all testing must be performed at standard conditions of 22°C (± 2°C) and 50 % RH (± 5 %). <p>5.4 Modeling clay and verification</p> <ul style="list-style-type: none"> Clause 5.4 added "with the edge of the clay cylinder aligned with the back edge of the toe cap" to clarify how the modeling clay shall be positioned prior to the impact test. 5.4.1 Clause 5.4.1 added a new requirement that Modeling clay for the test forms shall be stored in a sealed container at room temperature <p>Clause 5.4.1 added a condition for the test frequency of the modeling clay. It stated that if the color or consistency of modeling clay changes, the test frequency of the modeling clay shall be no less than once every month or sooner.</p> <ul style="list-style-type: none"> Clause 5.4.7 changed to compressing modeling clay time from 10s to 10±1s.

Clause(s)	Changes
6. Protective Toe Compression Resistance (C)	<ul style="list-style-type: none"> - 6.2 Apparatus Clause 6.2.1.1 and 6.2.1.3 changed the force capacity range requirement to the apparatus. The force capacity range was change from “up to 44482 N (10000lbf)” to “up to 22241 N (5000lbf). - 6.3 Sampling Clause 6.3.1 <ul style="list-style-type: none"> - Added a statement “If footwear is manufactured with a removable sockliner (footbed) the test is to be performed with the sockliner in place. - Added a new requirement that All testing must be performed at standard conditions of 22°C (± 2°C) and 50 % RH (± 5 %). 6.4 Modeling clay and verification <ul style="list-style-type: none"> - Clause 6.4 changed “Prior to compression testing, modeling clay, kept at room temperature” to “Prior to compression testing, modeling clay, kept at standard conditions “. - Clause 6.4.1 <ul style="list-style-type: none"> • Clause 6.4.1 added a new requirement that Modeling clay for the test forms shall be stored in a sealed container at standard conditions. • Clause 6.4.1 Changed the clay modeling test frequency from “not less than 6 months” to “test frequency shall be no less than once every month. Or sooner, if the color or consistency changes
7. Metatarsal Impact Resistance (Mt)	<ul style="list-style-type: none"> 7.2 Apparatus: <ul style="list-style-type: none"> - Clause 7.2.1 added Fig. 6(a) for clarification. - Clause 7.2.1.1 and Fig. 6 were changed to reflect the tolerance of the striking bar diameter. The diameter was change from 25.4±0.5 mm to 25.4±0.8 mm. 7.3 Sampling <ul style="list-style-type: none"> - Clause 7.3.1 added a statement “If footwear is manufactured with a removable sockliner (footbed) the test is to be performed with the sockliner in place”. - Clause 7.3.1 added a new requirement that All testing must be performed at standard conditions of 22°C (± 2°C) and 50 % RH (± 5 %).
8. Conductive Protective Footwear (Cd)	<ul style="list-style-type: none"> - 8.2 Apparatus: Clause 8.2.1.6 added “based on visual inspection as needed” to clarify the conductive metal spheres should be replaced with new conductive metal spheres based on visual inspection as needed. - 8.3 Sampling <ul style="list-style-type: none"> - Clause 8.3.1 added a statement “If footwear is manufactured with a removable sockliner (footbed) the test is to be performed with the sockliner in place”. - Clause 8.3.2 changed the specimens shall be conditioned for 24 hours at 21.1±1.1 °C and 50±2% to the standard conditions of 22°C (± 2°C) and 50 % RH (± 5 %).

Clause(s)	Changes
9. Electric Hazard Resistant Footwear (EH)	<p>9.2 Apparatus</p> <ul style="list-style-type: none"> - Clause 9.2.2.1 changed the outer electrode platform from “a fine screen metal mesh” to “ a perforated steel plate or metal mesh”. - Clause 9.2.2.2 was modified to include a conductive material (for example, metal chain, wire, rod) as part of the inner electrode. <p>9.3 Sampling</p> <ul style="list-style-type: none"> - Clause 9.3.1 added a statement “If footwear is manufactured with a removable sockliner (footbed) the test is to be performed with the sockliner in place”. - Clause 9.3.2 changed the conditioning and testing condition from 21.1±1.1 °C and 50±2% to the standard conditions of 22°C (± 2°C) and 50 % RH (± 5 %).
10. Static Dissipative Footwear (SD)	<p>10.2 Summary of Method: Clause 10.2.1 added that footwear must be the correct fit for the test subject, that is, same size as the test subject normally wears.</p> <p>10.3 Apparatus Added Clause 10.3.1.4 A conducting rod or clip to be held in hand by human test subject.</p> <p>10.4 Sampling</p> <ul style="list-style-type: none"> - Clause 10.3.1 added a statement “If footwear is manufactured with a removable sockliner (footbed) the test is to be performed with the sockliner in place”. - Clause 10.3.2 changed the conditioning and testing condition from 21.1±1.1 °C and 50±2% to the standard conditions of 22°C (± 2°C) and 50 % RH (± 5 %). <p>10.5 Test Procedure</p> <ul style="list-style-type: none"> - Clause 10.5.1 was changed from “Human test subject mounts stainless steel ground plate in stocking feet” to “Human test subject mounts a stainless steel ground plate wearing clean 100 % cotton socks”. It added a requirement to the socks. - Clause 10.5.1.1 was modified to clarify If greater than 100 000 Ω, the test subject is not suitable to perform the test.
11. Puncture Resistant Footwear (PR)	<p>11.2 Apparatus</p> <ul style="list-style-type: none"> - Clause 11.2.2.2 changed the requirement to the test pin from “confirm steel pin point is within tolerance prior to testing” to “unless required to be done earlier, the steel pin shall be replaced or recalibrated after performing 200 tests”. <p>11.3 Sampling: Clause 11.3.1 added a new requirement “Specimens shall be conditioned in a controlled atmosphere for 24 h and testing performed at standard conditions of 22°C (± 2°C) and 50 % RH (± 5 %)”.</p> <p>11.4 Specimen Mounting: Clause 11.4.1 added a tightening force requirement to clamp the specimen. It required to clamp specimen onto apparatus having a movable platform and tighten using a force of 2.8 Nm (25 in. lb) to prevent movement in any direction.</p> <p>11.5 Test Procedure:</p> <ul style="list-style-type: none"> • Clause 11.5.1 added a clarification on the pass/fail criteria "that is, no clear visual evidence of the test pin passing through the test specimen". • Clause 11.5.1.1 of ASTM F2412-11 was removed (instructions to evaluate at a 90° angle to the test pin) and replaced by Note 4 "To aid in the visual assessment, lights, color coating of the pin tip, and or magnification of the test site may be considered".

ATTACHMENT 2

Background and Rationale

At this time, CSA's Certification service for static dissipative footwear will be offered under CSA's Witnessed Manufacturer's Testing for Certification Program (WMTC), Testing at Manufacturer's Premises for Certification (TMPC), Supervised Manufacturer's Testing Program for Certification (SMTC) and Category Program for Certification (CPC).