

**North Carolina Department of Labor
Occupational Safety and Health Division**

Raleigh, NC

Field Information System

Standards Notice 70B

Subject: Revised ASTM standards for Foot Protection

A. Standards.

1. 29 CFR 1910.136 – Foot Protection. (b) Criteria for protective footwear. (1)
Protective footwear must comply with any of the following consensus standards:
 - (i) ASTM F-2412-2005, "Standard Test Methods for Foot Protection," and ASTM F-2413-2005, "Standard Specification for Performance Requirements for Protective Footwear," which are incorporated by reference in § 1910.6;
 - (ii) ANSI Z41-1999, "American National Standard for Personal Protection -- Protective Footwear," which is incorporated by reference in § 1910.6; or
 - (iii) ANSI Z41-1991, "American National Standard for Personal Protection -- Protective Footwear," which is incorporated by reference in § 1910.6.
2. 29 CFR 1926.96 – Occupational Foot Protection. Safety toe footwear for employees shall meet the requirements and specifications in American National Standards for Men's Safety-Toe Footwear, Z41.1-1967.
3. ANSI Z41.1 – Protective Footwear.
4. ASTM F2412-05 – Standard Test Methods for Foot Protection.
5. ASTM F2412-11 – Standard Test Methods for Foot Protection.
6. ASTM F2413-05 – Standard Specification for Performance Requirements for Foot Protection.
7. ASTM F2413-11 – Standard Specification for Performance Requirements for Protective (Safety) Toe Cap Footwear.

B. Discussion.

The current federal and NCDOL OSH Division standards for foot protection require employers to assure that employees are wearing safety footwear which is designed to meet the American National Standard ANSI Z41.1 – 1967 (for construction) or ANSI Z41.1 - 1991 or 1999 or ASTM F2412 - 05 and ASTM F2413 – 05 (for general industry) . In 2005, the ASTM International Standards, F 2412 & F2413, replaced the former ANSI Z41 standard which was withdrawn.

In an ASTM press release issued in 2005, ASTM stated in part:

“The new ASTM standards contain minimal changes from the withdrawn ANSI Z41-1999 standard with regard to test methodology. The major performance characteristics that have changed from the old ANSI standard to the new ASTM standard are the removal of those for Type II Static Dissipative and Class 30 for impact and compression requirements. Therefore, the majority of existing industry inventory of product and product-information that is labeled or advertised as in compliance with the ANSI Z41-1999 standard should be compliant with the new ASTM standards.

Since the ANSI Z41-1999 standard has been formally withdrawn, all new footwear, not including those already in inventory, found in compliance with the new protective footwear standards ASTM F 2412-05 and ASTM F 2413-05 may be labeled as such. References to the old ANSI Z41-1999 may be replaced with labeling indicating that the footwear is compliant with the new ASTM standards for new product.”

In 2011, ASTM issued updated versions of both ASTM 2412 and ASTM 2413. These standards now supersede the 2005 ASTM standards. The OSH Division received questions regarding whether safety footwear labeled as compliant with ASTM F2413-11 (which references the test methods found in ASTM F2412-11) meets the requirements of the current OSH Division Standards.

C. **Interpretation.**

Because ANSI Z41.1 no longer exists and new safety footwear is being tested and designed to comply with the 2011 ASTM standards, the OSH Division will consider safety footwear which is labeled as meeting the requirements of the 2011 ASTM standards as equivalent to the ANSI Z41.1 standards and the ASTM 2005 standards.

D. **Effective Date.**

Standards Notice 70A is canceled. This standards notice is effective on the date of signature. It will remain in effect until revised or canceled by the director.

Signed on Original
Susan Haritos
Health Standards Officer

Signed on Original
Allen McNeely
Director

4/19/13
Date of Signature