1969, which is incorporated by reference as specified in §1910.6, or shall be demonstrated by the employer to be equally effective.

[59 FR 16362, Apr. 6, 1994, as amended at 61 FR 9238, Mar. 7, 1996; 61 FR 19548, May 2, 1996]

§1910.136 Foot protection.

- (a) General requirements. The employer shall ensure that each affected employee uses protective footwear when working in areas where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole, and where such employee's feet are exposed to electrical hazards.
- (b) Criteria for protective footwear. (1) Protective footwear purchased after July 5, 1994 shall comply with ANSI Z41-1991, "American National Standard for Personal Protection—Protective Footwear," which is incorporated by reference as specified in §1910.6, or shall be demonstrated by the employer to be equally effective.
- (2) Protective footwear purchased before July 5, 1994 shall comply with the ANSI standard "USA Standard for Men's Safety-Toe Footwear," Z41.1–1967, which is incorporated by reference as specified in §1910.6, or shall be demonstrated by the employer to be equally effective.

[59 FR 16362, Apr. 6, 1994; 59 FR 33911, July 1, 1994, as amended at 61 FR 9238, Mar. 7, 1996; 61 FR 19548, May 2, 1996; 61 FR 21228, May 9, 1996]

§ 1910.137 Electrical protective equipment.

- (a) Design requirements. Insulating blankets, matting, covers, line hose, gloves, and sleeves made of rubber shall meet the following requirements:
- (1) Manufacture and marking. (i) Blankets, gloves, and sleeves shall be produced by a seamless process.
- (ii) Each item shall be clearly marked as follows:
- (A) Class 0 equipment shall be marked Class 0.
- (B) Class 1 equipment shall be marked Class 1.
- (C) Class 2 equipment shall be marked Class 2.
- (D) Class 3 equipment shall be marked Class 3.
- (E) Class 4 equipment shall be marked Class 4.

- (F) Non-ozone-resistant equipment other than matting shall be marked Type I.
- (G) Ozone-resistant equipment other than matting shall be marked Type II.
- (H) Other relevant markings, such as the manufacturer's identification and the size of the equipment, may also be provided.
- (iii) Markings shall be nonconducting and shall be applied in such a manner as not to impair the insulating qualities of the equipment.
- (iv) Markings on gloves shall be confined to the cuff portion of the glove.
- (2) Electrical requirements. (i) Equipment shall be capable of withstanding the a-c proof-test voltage specified in Table I-2 or the d-c proof-test voltage specified in Table I-3.
- (A) The proof test shall reliably indicate that the equipment can withstand the voltage involved.
- (B) The test voltage shall be applied continuously for 3 minutes for equipment other than matting and shall be applied continuously for 1 minute for matting.
- (C) Gloves shall also be capable of withstanding the a-c proof-test voltage specified in Table I-2 after a 16-hour water soak. (See the note following paragraph (a)(3)(ii)(B) of this section.)
- (ii) When the a-c proof test is used on gloves, the 60-hertz proof-test current may not exceed the values specified in Table I-2 at any time during the test period.
- (A) If the a-c proof test is made at a frequency other than 60 hertz, the permissible proof-test current shall be computed from the direct ratio of the frequencies.
- (B) For the test, gloves (right side out) shall be filled with tap water and immersed in water to a depth that is in accordance with Table I-4. Water shall be added to or removed from the glove, as necessary, so that the water level is the same inside and outside the glove.
- (C) After the 16-hour water soak specified in paragraph (a)(2)(i)(C) of this section, the 60-hertz proof-test current may exceed the values given in Table I-2 by not more than 2 milliamperes.
- (iii) Equipment that has been subjected to a minimum breakdown voltage test may not be used for electrical