

When workers think of personal protective equipment (PPE) it often is focused on hard hats, safety glasses, or gloves. However, leg and foot protection is equally important and should not be missed.

Workers can be exposed to leg or foot injuries from tasks, activities, or areas involving the following:

- Falling or rolling objects
- Exposure to hot substances or electrical hazards
- Walking on slippery or wet surfaces or surfaces with sharp objects such as nails
- Pouring, washing with, or spraying chemicals
- Lifting or working with heavy objects such as barrels



Workers lifting a generator while wearing steel-toed work boots.

OSHA Standard 1910.136(a) *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, or when the use of protective footwear will protect the affected employee from an electrical hazard, such as a static-discharge or electric-shock hazard, that remains after the employer takes other necessary protective measures.*

- Basic steel toe or hard toe work boots should be considered when performing common workplace activities such as lifting heavy objects. Steel or hard toe shoes must meet specific standards for protection.



A cut away of this steel toe boot shows the interior steel shell designed to protect the toes of the worker.



*Example of steel toe versus composite toe. (*1)*

- When selecting new PPE, look for footwear stamped with ASTM F-2412 and ASTM F-2413. The ASTM standards replace the previous ANSI Z41 standard.

- In addition to toe protection, using some tools such as jack hammers, or performing work with extremely heavy materials, using gantry cranes, or other devices may require the addition of metatarsal protection. **Metatarsal guards protect the bones on the top of the feet.**



*Over-the-boot toe and metatarsal covers. These types of covers provide great protection to the tops of the feet. (*2)*



*Demonstration of protection provided by the metatarsal guard in this image. (*3)*



*Integrated metatarsal protection in this boot provides protection not only to the toes but also the tops of the feet. (*4)*

OSHA Standard 1910.132(h)(2) *The employer is not required to pay for non-specialty safety-toe protective footwear (including steel-toe shoes or steel-toe boots) and non-specialty prescription safety eyewear, provided that the employer permits such items to be worn off the job-site.*

- Consider using foot protection designed for muddy, water soaked, or wet environments such as waterproof rubber boots or boot covers and chest waders.
- Boot covers or chemical resistant rubber boots should be worn when working with wet concrete or cement and similar chemicals.



*Steel toe rubber boots. (*5)*



*Worker using steel toe rubber boots while working on chemical spill clean-up. (*7)*



*Rubber boot covers. (*6)*



Oil and Slip Resistant Work boots.



Remember these tips to improve foot protection for workers:

- Steel toe or hard toe work boots are useful when performing common workplace activities such as lifting heavy objects.
- When selecting new PPE, look for footwear stamped with ASTM F-2412 and ASTM F-2413.
- Using some tools such as jack hammers may require the addition of metatarsal protection.
- Foot protection designed for muddy, water soaked, or wet environments such as waterproof rubber boots is important to consider.
- Boot covers or chemical resistant rubber boots should be worn when working with wet concrete or cement and similar chemical-containing materials.
- Be sure to check that your boots are labeled “slip and oil resistant” when walking on slippery or wet surfaces.

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