

## 13 FOOT PROTECTION



Section 23 of the Construction Projects regulation (213/91) requires that all workers must wear protective footwear at all times when on a project. Protective footwear is a safety shoe or safety boot with the following features:

- A box toe that is adequate to protect the wearer's toes against injury due to impact and is capable of resisting at least 125 joules impact
- A sole or insole that is adequate to protect the wearer's feet against injury due to puncture and is capable of resisting a penetration load of 1.2 kilonewtons when tested with a Deutsche Industrie Norm standard pin.

When worn properly, a CSA-certified Grade 1 workboot meets the requirements of the regulation.

### Grade 1 Workboots

One of three CSA grades, Grade 1 offers the highest protection and is the only one allowed in construction. In a Grade 1 boot, a steel toe protects against falling objects while a steel insole prevents punctures to the bottom of the foot.

Grade 1 boots can be identified by the following markings (Figure 13-1):

- A green triangular patch containing the CSA logo on the outside of the boot
- A green label indicating Grade 1 protection on the inside of the boot



Figure 13-1: Grade 1 Safety Boot with CSA Label

Grade 1 boots are also available with metatarsal and dielectric protection. A white label with the Greek letter Omega in orange means that the boot protects against electric shock under dry conditions (Figure 13-2).

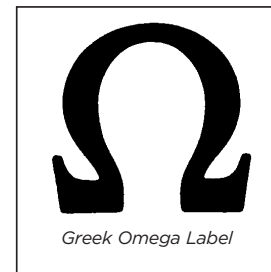


Figure 13-2: Indicates Electric Shock Resistance

### Selection and Fit

Grade 1 boots are available in various styles and sole materials for different types of work. For example, Grade 1 rubber boots may be better suited than leather boots for sewer and watermain or concrete work.

Boots should provide ample "toe room" (toes about 1/2 inch back from the front of steel box toe cap when standing with boots laced).

When fitting boots, allow for heavy work socks. If extra sock liners or special arch supports are to be worn in the boots, insert these when fitting boots.

### Care and Use

Lacing boots military style allows them to be removed faster. In an emergency, the surface lace points can be cut, quickly releasing the boot.

In winter, keep feet warm by wearing a pair of light socks covered by a pair of wool socks. Feet should be checked periodically for frostbite.

The majority of foot injuries in Ontario construction are ankle injuries. To help prevent these injuries, use high-cut (260 mm or 9 in) or medium-cut (150 mm or 6 in) CSA Grade 1 workboots. The higher cut helps support the ankle and provides protection from cuts or punctures to the ankle.

Clean your workboots regularly and check them for damage and wear and tear. Defective or worn out footwear will no longer protect your feet properly and must be replaced.