

# TOE THE LINE OF SAFETY

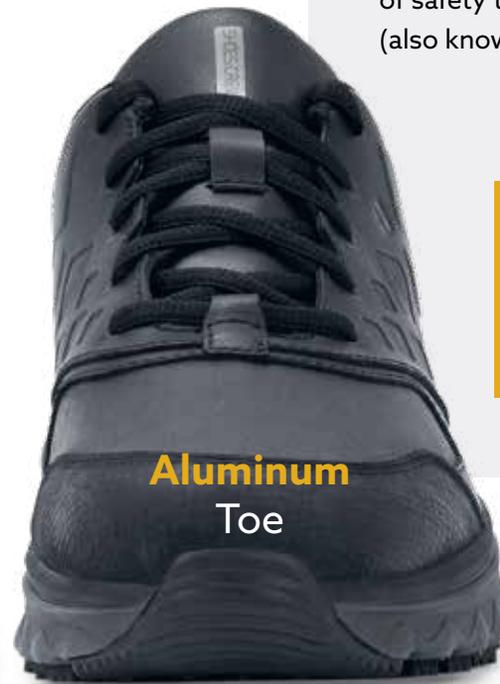
## Safety Toe Footwear Types



**Steel**  
Toe



**Composite**  
Toe



**Aluminum**  
Toe

**The safety toe work shoe is a mandatory form of PPE** (Personal Protective Equipment) for workers in the industrial sector—in varied environments from warehouses to construction to manufacturing and processing. Reinforced with a protective toe cap, safety toe footwear is designed to defend those who work with heavy objects and machinery against impact or compression injuries.

Though “steel toe boot” is often used as a generic term for all hard-toed safety boots, there are now several types of safety toe options that offer similar impact protection from falling and rolling objects. Today, the three main types of safety toe shoes available are steel, aluminum (also known as alloy) and composite.

**Ready to get up close  
and personal with safety  
toe footwear?**

Let's go toe to toe to toe.

# Steel Toe



**Ever since the Industrial Revolution, workers have relied upon the efficiency of the steel toe boot for dependable impact protection.** No longer the only game in town, it's still the preferred safety toe type for those who work with large saws and blades and other sharp objects—in construction and food processing, for example.

- Pros:**
- Offers strong impact protection for high-hazard environments
  - Toe cap is generally less bulky than a composite toe
  - Best choice for puncture protection

- Cons:**
- Toe cap is usually heavier than other safety toe types, but overall weight depends on footwear construction
  - Minimal thermal insulation—less comfortable for extreme hot or cold environments
  - Can conduct electricity, which may be an issue working around machinery
  - May set off metal detectors



PROVIDENCE



VOYAGER II



PLASMA

# Aluminum Toe



**Just as durable and reliable as steel in most work environments,** aluminum or alloy toe safety shoes have the advantage of sporting a lightweight and roomy toe cap, which offers a sleeker design and can make them more comfortable to wear during long shifts.

- Pros:**
- 30-50% more lightweight and thinner than steel<sup>1</sup>
  - Impact resistance and protection are comparable to steel
  - Roomier toe cap area provides added comfort

- Cons:**
- Generally less compression-resistant than steel toe
  - Minimal thermal insulation—less comfortable for extreme hot or cold environments
  - May set off metal detectors



BRIDGETOWN



PISTON MID



AXE

# Composite Toe



The composite safety toe is composed of a number of materials, most often non-metallic, including Kevlar, fiberglass or carbon fiber, but its lightweight construction is still strong enough to meet most workplace safety standards.

**Composite toe has more advantages—it won't set off metal detectors and works well in environments with extreme temperatures.**

- Pros:**
- Good thermal insulation — best choice for extreme hot or cold environments
  - Ultra-lightweight toe cap
  - Minimal electrical conductivity
- Cons:**
- Thicker, more bulbous toe cap for increased impact resistance
  - Protection may lessen after subsequent impacts; may need to be replaced more often
  - Difficult for wearer to tell if an impact compromises future toe protection



REDROCK 6"



BULLFROG PRO III



BRONCO III

# Safety Toe Certification and ASTM Compliance



Always make sure your safety toe shoes or work boots meet ASTM F-2413 standards bearing a class 75 rating—protecting against an impact of up to 75 pounds or a compression load of up to 2,500 pounds<sup>ii</sup>.

True certified safety toe boots and safety shoes, tested and approved by an independent laboratory, will be marked with the certification label stitched onto the footwear itself (usually on the tongue).

We hope this information is a step in the right direction as you choose the safety boots that are right for you. Stay safe!

## SOURCES/FURTHER READING

<https://mybootprint.com/aluminum-toe-vs-steel-toe/>

<https://www.safetyshoestoday.com/us/construction/toe-cap/safety-footwear-toe-cap-materials>

<https://ohsonline.com/articles/2018/04/01/a-guide-to-safety-footwear-regulations.aspx>

<https://comfortingfootwear.com/how-to-choose-safety-shoes-with-the-right-type-of-protective-toe-cap/>

<https://www.coastalboot.com/blogs/news/114204355-composite-toe-vs-steel-toe-boots>

<sup>i</sup><https://www.coastalboot.com/blogs/news/114204355-composite-toe-vs-steel-toe-boots>

<sup>ii</sup><https://ohsonline.com/articles/2018/04/01/a-guide-to-safety-footwear-regulations.aspx>

For more information, visit  
[www.shoesforcrews.com/worksafety](http://www.shoesforcrews.com/worksafety)

