

What You Need to Know About Cleats

Different sports require different cleats.

BY BEN PEARL, DPM

At first glance, the differences between soccer and football cleats are not as obvious as the differences between the sports themselves. On closer examination, however, there are important differences in form and function that affect performance and the risk of injury. In general, soccer cleats are designed to have optimal touch with the ball. They generally have a thinner midsole than football cleats. This lower center of gravity makes it easier to stay balanced and maintain contact with the ball with lightning-fast foot movements.

A Cut Above or Below

Football cleats are designed to have durability and protection. The leather or synthetic leather is thicker. Soccer cleats often use softer leather, e.g., kangaroo leather, to provide better touch on the ball. Soccer cleats have little or no midsole. This can cause more strain on the plantar fascia. Football cleats have a midsole. Midsoles may be bigger for positions that are in the trenches, like those of linemen.

Soccer cleats have a lower cut below the ankle. Comparatively, football cleats have a higher cut above the ankle to provide more stability. Soccer cleats have less weight than football cleats. In football, skill positions like wide receivers

and defensive backs generally use cleats that are low cut below the ankle. Tight ends, quarterbacks, and running backs often use cleats that are at the ankle level to give them more protection. Linemen use cleats that are cut above the ankle

to provide the most protection. Players who have had previous ankle sprains may prefer the high-top cleats.

Fit, Wear and Touch

Soccer cleats are fit to the toes but should allow some wiggle room and not put too much pressure on the toes. Football cleats should have a little more room in the toe box area. Some soccer cleats have no laces, some players prefer the no lace cleats because they feel more control of the ball and a cleaner strike (Figure 1). A variation is asymmetric lacing to have a better strike touch on the ball (Figure 1a). Cleats typically have a stress point just behind the stud that is behind the ball of the foot. This can result in cracking of the outer sole (Figure 2).



Figure 1: Laceless soccer cleat

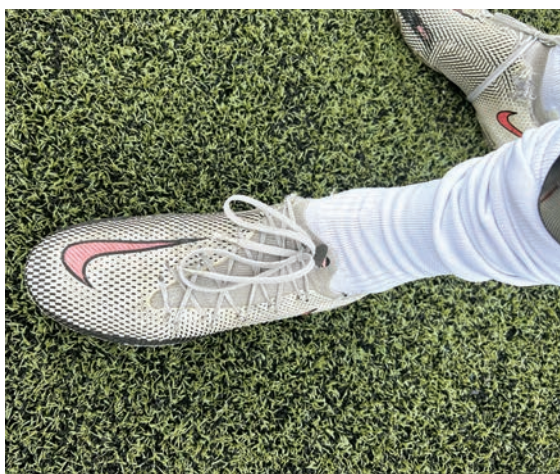


Figure 1a: Asymmetric lacing

Cleat Design and Traction

Molded cleats perform better on quick cuts and have better traction than low stud turf cleats. There are usually 12 studs on the sole of the cleat. Because molded cleats allow you to cut harder, there can be more pain in the subtalar and ankle joints after competition. Post-game stiffness and pain in the joints is more common in older adults. Low profile orthotics can help alleviate some of the pressure. Turf cleats are generally more comfortable.

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Cleats (from page 99)

Turf cleats have a wider array of lower studs (Figure 3). Indoor turf cleats have the lowest profile. Unlike soccer cleats, football cleats have an extra stud on the front of the sole just under the toe (Figures 4, 4a). As you drive off the toes in a sprint, it is one more way of gaining traction. They don't allow them in soccer to prevent injury. Strikers sometimes have the final two cleats a little more forward to help with shooting. Combination of blades and conical studs are also more frequently found on striker cleats.

Removable cleats in soccer and football are regulated to grass fields and are generally only worn by pro and elite soccer and football players. The cleats tend to be more tapered and longer, with metal tips allowing better traction on the field. Players can customize the cleat lengths and settings according to their own preference and the field conditions. The longer the cleats, the more traction



Figure 2 : Typical stress point on sole plate behind ball of foot

there is to dig into the grass, particularly if the match is played in muddy or rainy conditions. A heavier weight player may have more challenges with a grass field that is in poor condition. Former Bills kicker Scott Norwood has said that he had more trouble kicking on the beat-up natural grass field in the Cleveland Brown's stadium than the lighter Brown's kicker. In competition, where even a few inches can make a difference between making or missing a Super Bowl kick or World Cup goal, the synchrony of technique and equipment is critical.

Injuries

Turf toe is a common condition that occurs more on artificial turf surfaces because of the abili-



Figure 4: Front toe stud on football cleat side view



Figure 4a: Front toe stud on football cleat on sole plate



Figure 3: Turf cleat sole with larger array of studs

ty to cut harder during play. Common solutions include orthotics, carbon plates, and turf toe splints. Using a molded cleat on grass with a clay base instead of dirt can lead to a cleat catching and causing knee injuries in the ACL and meniscus as well as foot and ankle sprains. For injuries like plantar fasciitis, orthotics or over-the-counter arch supports must have a low profile to fit into a cleat with limited space. Contusions in toes and nails are common with soccer cleats because of the thin leather used. Research on cleats does not seem to be as innovative as its counterpart in the running shoe industry. Innovation could make cleats more comfortable, enhance performance, and lower injury risk. **PM**



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