

Hiking Boot Selection

There are many brands of hiking boots available on the market today, we have put together this guide to help you select Boots that actually fit and work for you ... not the shop assistant. In selecting a pair do not be guided by price, as many cheaper boots can be more specific to your foot structure.

Hiking Boot Uppers

Materials impact a boot's weight, breathability, durability and water resistance.

Full-grain leather: Full-grain leather offers excellent durability and abrasion resistance and very good water resistance. It's most commonly used in backpacking boots built for extended trips, heavy loads and rugged terrain. It is not as light or breathable as nylon/split-grain leather combinations. Ample break-in time is needed before starting an extended trip.

Split-grain leather: Split-grain leather is usually paired with nylon or nylon mesh to offer lightweight, breathable comfort. Split-grain leather "splits away" the rougher inner part of the cowhide from the smooth exterior. The benefit is lower cost, however, the downside is less resistance to water and abrasion (though many feature waterproof liners).

Nubuck leather: Nubuck leather is full-grain leather that has been buffed to resemble suede. It is very durable and resists water and abrasion. It's also fairly flexible, yet it too requires ample time to break in before an extended hike.

Synthetics: Polyester, nylon and so-called "synthetic leather" are all commonly found in modern boots. They are lighter than leather, break in more quickly, dry faster and usually cost less. Downside: They may show wear sooner due to more stitching on the outside of the boot.

Waterproof: Boots and shoes billed as "waterproof" feature uppers constructed with waterproof/breathable membranes (such as Gore-Tex® or eVent®) to keep feet dry in wet conditions. Downside: The reduced breathability created by a membrane (compared to the ventilating mesh used on some non-waterproof shoes) may encourage feet to sweat on summer days.

Hiking Boot Midsoles

The midsole, which provides cushioning, buffers feet from shock and largely determines a boot's stiffness. Stiff boots might not sound like a good thing, but for long hikes on rocky, uneven terrain they can mean greater comfort and stability. A stiff boot won't allow your foot to wear out by wrapping around every rock or tree root you step on.

The most common midsole materials are EVA (ethylene vinyl acetate) and polyurethane.

EVA is a bit cushier, lighter and less expensive. Midsoles use varying densities of EVA to provide firmer support where needed (e.g., around the forefoot).

Polyurethane is generally firmer and more durable, so it's usually found in extended backpacking and mountaineering boots.

Hiking Boot Support Components

Shanks: These 3–5mm thick inserts are sandwiched between a boot's midsole and outsole to add load-bearing stiffness to the midsole. They vary in length; some cover the entire length of the midsole, while others only cover half.

Plates: These thin, semiflexible inserts are positioned between the midsole and the outsole, and below the shank (if included). They protect feet from getting bruised by roots or uneven rocks.

Hiking Boot Outsoles

Rubber is used on all hiking boot outsoles. Additives such as carbon are sometimes added to backpacking or mountaineering boots to boost hardness. Hard outsoles increase durability but can feel slick if you go off trail.

Other outsole considerations:

Lug pattern: Lugs are traction-giving bumps on the outsole. Deeper, thicker lugs are used on backpacking and mountaineering boots to improve grip. ***Widely spaced lugs offer good traction and shed mud more easily.***

Heel brake: This refers to the clearly defined heel zone that is distinct from the forefoot and arch. It reduces your chance of sliding during steep descents.

Hiking Boot Rands

Found on some waterproof/breathable boots, a rand is the wide rubber wrap encircling the boot (or sometimes just the toe area) where the upper meets the midsole. It offers extra defense against water penetration on wet, mucky trails. It also protects boot leather from rocks and abrasion.

Hiking Boot Fit Tips

Know your size. It's best to have your foot measured on a Brannock device at the shop. You can also measure your foot length (in inches or centimeters) and use the online sizing charts found on many boot page websites to find your boot size.

Try on boots at the end of the day. Your feet normally swell a bit during the day's activities and will be at their largest then. This helps you avoid buying boots that are too small. On the Kokoda Track for example your feet tend to expand by a half size due to the heat of the tropics, this must be taken into account when buying boots.

If you wear orthotics, bring them along. They impact the fit of a boot.

Wear appropriate socks. Familiar socks can help you more quickly assess the fit and feel of new footwear. However, try to make sure the thickness of the socks matches what you intend to wear on the track. We recommend [Our Spirit socks](#) as they have been developed and tried and trusted on the Kokoda Track over 20 years.

Spend some time in the boots. Take a stroll through the store. Walk up and down stairs. Find an inclined surface and walk on it. If you detect an odd bump or seam, or a little pinching in the forefoot, the boot's not right.

When shopping online, consider a brand you have worn before. Most boot companies tend to use a consistent foot model over time, so the fit is likely to be similar.

Consider aftermarket insoles (a.k.a. footbeds). Insoles come in models that can enhance comfort, support or fit—or all three.

Types of Insoles

Comfort Insoles

People who experience foot pain and tired feet from standing or walking on hard surfaces for extended periods may find relief from shock-absorbing insoles designed for comfort.

These can be flat or shaped and feature gel or foam in their construction. Insole choices include full length, $\frac{3}{4}$ length or arch or heel inserts.

Tired, achy feet may also be the result of insufficient foot support inside a shoe. If a “comfort” insole does not provide relief, or even aggravates the problem, it is an indication that the foot wants firmer support, not more cushioning. Try a “support” style insole instead.

Support (or “Sport”) Insoles

These feature a harder material for structural support and stability. Comfort is derived from the increased stability rather than direct cushioning.

Supportive insoles are best for the following conditions:

Structural misalignment, which can manifest not only as foot pain, but discomfort in the ankles, knees hip, back, neck or head.

Plantar fasciitis: Medical professionals routinely recommend the use of a supportive insole as part of the treatment protocol for this painful condition resulting from tears in the plantar fascia—a band of connective tissue which connects the heel to the forefoot.

Supination or over-pronation: Support insoles moderate a tendency for the feet to either supinate (roll out) or over-pronate (excessive rolling in) when walking or running.

Though not customized to an individual foot, support insoles come in different models and profiles to suit most foot shapes or footwear types.

Insole Volume

Insoles can change footwear volume, which is the internal space of the shoe.

High-volume insoles best suit high-volume shoes such as hiking boots, ski boots or running shoes.

Low-volume insoles are needed for low-volume shoes such as a casual or cycling shoes, in-line skate boots or ski skate boots. (Note: The thickness of your socks will also have a big influence on footwear fit.)

Common Footwear Fit Problems

If you have any of the following common fit problems, insoles may help. Insoles vary in heel and arch dimensions; a footwear specialist can assess your feet to see which type works best.

Heel slippage: A shoe that fits well in the mid- and forefoot but allows heel slippage or lift may be improved with a supportive, mid- to high-volume insole. This reduces excess volume in the rear of the shoe and stabilizes the heel of the foot, minimizing the heel slip that can cause hot spots and blisters.

Foot elongation: For those with significant foot elongation in one or both feet when measured standing as compared to sitting, a supportive insole can help. This reduces foot elongation when weight bearing, creating a better fit and lessening the need to size up when buying footwear.

Low or collapsed arches: People who have low or collapsed arches often ask for “arch support” insoles. What is really needed, though, is “foot support” which helps stimulate the arch muscles to be engaged and active. A supportive insole stabilizes the heel and distributes pressure across the base of the foot, instead of concentrating pressure into the arch area. Direct arch support is actually uncomfortable for many people since it inhibits the normal flexing of the foot.

Insole Fit Tips

Once you’ve narrowed the options to a few models, it is time to test them out. An REI footwear specialist can guide you through this process.

First, stand on the insole outside the shoe. Lift up your other foot so you are balancing on the foot that is on the insole. Check how stable you feel, how much pressure you feel and whether the tissue of your heel is cupped and supported nicely in the insole.

Then, try the insole inside your shoe (don’t forget to remove the stock insole first). Now you are assessing the fit as well as the feel and support. Be sure you feel stable in the shoe and that the insole takes up the right amount of volume: not too little or too much.

Insole Care Tips

Aftermarket insoles generally last about 12 months for daily or regular use. This may be extended to several years if you have a pair in footwear that sees only occasional or seasonal use. Care tips:

Air them out: Sweaty or wet feet? Remove insoles regularly to allow moisture trapped between the insole and shoe to dry out.

Wash them: If needed, wash insoles by hand with a mild detergent or sports detergent and air dry before re-inserting.

Inspect them: Periodically remove and inspect insoles for signs of deterioration and replace as needed.