# WOMENS SKI BOOTS

# **WOMEN'S SKI BOOTS**

The single most important piece of ski equipment to own are ski boots. Why???? Cause your feet control your skis and what your skis do. Boots transmit both weight and energy to your skis. Your feet cause your skis to tip on edge and your weight pressures the tip of the ski and that's how you turn. In order for this to happen, you need to have a properly fitted boot. If your ski boot is too loose, there's a delayed reaction as your foot struggles to move the boot. The result? A sloppy, out-of-control turn. On the flip side, if your boot is too tight, your foot will hurt. Sore feet make for a miserable day of skiing. Also, tight-fitting boots can restrict blood flow, leading to cold and numb feet, which is also miserable. And if the boot is too high and tight around your calf muscle, the issues mentioned above will occur as well as a loss of muscle control. Convinced yet?

If you struggle with making clean, carved turns down the slopes, or feel like your ski tips wander during a turn. Or your feet sore after a day of skiing—or even just a run, the solution may be right at your feet.

#### Why Women Should Buy Women's Ski Boots....

Women's ski boots are designed for women. The same reasons women don't buy men's shoes hold true for ski boots. The major differences between men's and women's ski boots are in the cuff height, heel and ankle fit and in the liners. Besides our feet just being shaped differently then men so are our calves. Men have longer lower leg bones so their calf muscle will generally be above the cuff of a ski boot. But we women have shorter lower leg bones so our calf muscles will likely have to fit inside the cuff of a ski boot. So generally the plastic cuff on women's ski boots will be shorter than the comparable boot for a man and they may have wider cuffs.

Women also tend to have narrower heels and ankles then men so women's boots will tend to taper in closer around the heel and may have additional padding in the ankle area to provide a better fit. Liners are also often made with warmer and thicker materials to help combat cold. YEA!

Another huge difference between men's and women's boots is the flex of the boot. Women's boots generally have a softer flex so we can initiate turns easier. The stance of the boots is also typically different having a higher ramp angle. What do I mean by stance and ramp angle??? Technically it's the "angle of the boot board". Non-technically it means the bottom of the boot

isn't perfectly flat and is ramped up slightly. Think of it like a wedge shoe.



Why do we

women need this? Because our center of gravity is closer to our tail bone and below our waist whereas men's is closer to their belly buttons and above their waists. By having more ramp angle, it helps we women get our body weight forward. So between the softer flex and the different boot design women who ski a women's ski boot can get their center of gravity closer to the tips of their skis making it easier to start each turn. We'll cover more about ramp angle when we talk about making adjustments to your boots.

## Ready to buy some boots? Here are some tips.....

- -<u>Find the right ski shop with a large selection</u>. Go to a ski boot shop that has good selection of women's ski boots and try on several pairs. Don't buy online without trying on what you are going to buy first. Try to find ski shops that have knowledgeable bootfitters. Avoid the big box stores. Your best bet are ski stores in ski towns. Research online for bootfitter recommendations. Jeanie Thoren in Vail specializes in only women's equipment and is located right off chair 8.
- -<u>Wear one pair of socks</u>. The thinner the sock the better foot's feel inside the boot. If your feet get cold often, try boot heaters.
- -<u>Find the right flex</u>. The flex of a boot varies between different models and manufacturers. Find the right balance of flex for your ability: Too stiff and you won't be able to effectively turn the ski. Too soft and you'll overpower it. This is where talking to a good bootfitter is important in selecting what is best for you.
- -<u>Don't undersell yourself</u>. We women tend to downplay our ability level. Talk honestly about how and where you ski to your bootfitter.
- -<u>Try on in the afternoon or evening</u>. Feet swell during the day.
- -Buy boots that fit snugly (but not too tight) in the shop. Slight pressure on your longest toes when the boot is buckled up is usually an indication that the boot will be the right size after some use. Remember the ski shop is a warm environment. Once you get outside, you foot changes.
- -Found a boot you like? Don't buy it just yet. Keep them on for at least 15 minutes and walk around so you will feel what it is like when the boots are at work. Bending your knees so that your shins push against the Ski Boot tongue will tell you about the stiffness of the boots you're wearing. The Skiing Boot is soft if it flexes easily. However, if you cannot flex it forward, it can be an indicator that it is too stiff for your weight or skill. After wearing the Ski Boots for a while, check if you feel pain in some vulnerable points such as your ankle bones, shins, as well as toes. -Found two boots you like? Wear the left Ski Boot of the first pair and the right Ski Boot of the second pair. After keeping them on for a while, do the same for the right Ski Boot of the first pair and left Skiing Boot of the second pair. Then decide which pair gives more comfort to you.

#### How to try on Boot (by Evo.com)

- 1. Unbuckle the boot completely.
- 2. Most boots have a loop on the tongue to help you pull it up and forward. It's usually easiest to keep the boot flat on the ground and step into it as you stand up. Grab the tongue loop, point your toe straight into the boot, and in one deliberate motion pull the

tongue up and out as you stand and step into the boot. With very stiff performance boots, it sometimes helps to grasp the medial (inside) cuff by the buckle straps with one hand and the tongue loop with the other and pull the two sides apart as you slide your foot in – this will spread the stiff plastic in the instep area and give you more room to slide your foot in.

- 3. Make sure to center the tongue on top of your foot and check that it's positioned inside the leading edges of the liner. Don't make an assessment about the fit yet, as the boot isn't buckled and your foot isn't settled.
- 4. Don't be alarmed if your boot feels tight and your toes brush the end of the boot when you first put it on. At this point, your foot hasn't warmed up the liner foam or started to push excess air out. Also, your foot isn't in the "ski position" yet, because you haven't buckled the boot.
- 5. Start by buckling the top two buckles lightly to seat the tongue on the instep of the foot. After fastening the Velcro power strap, flex the boot forward (hard) a few times with bottom buckles still unbuckled. This will pull your toes away from the front of the boot and push your heel deep in the heel pocket. Bang your heel on the ground if you need to to get your heel back in the heel pocket. Now fasten all the buckles snugly, but don't over-tighten them to the point of discomfort. Keep in mind that your boots, at this point, are the tightest they will ever be.
- 6. Now that you're buckled up, spend some time standing with your feet parallel in a ski stance while simulating ski motions. Flex the boot forward by driving your knee over your toe. The upper cuff should hinge at the ankle. If you are only able to hinge at the hips and can't move the upper cuff forward with your lower leg, the boot may be too stiff for you. Remember too that your living room is probably around 70 degrees F. and the boot will get stiffer when it's cold. While flexing the boot, roll the boots side to side as if rolling the skis from edge to edge. If possible, do this in front of an audience another skier can often tell if you're flexing the boot properly or if the boot is overpowering you.
- 7. Make sure you feel no single pressure points or other painful spots. If you feel them now already, you will definitely feel them when they come under the added pressure of actual Skiing. Make sure you feel an evenly distributed snug fit all around your foot not only at the soles of your feet but also on top. The same goes for the upper Ski Boot. Make sure your ankles and calves are connecting well to your Ski Boot but not too tight. Make sure your muscles in your calves are not restricted in their movements.

#### You bought some boots...now what? Customizing!

# **Footbeds**

The stock footbeds that come with your ski boots generally don't offer much arch support and probably don't match the shape of your foot either. Proper footbeds are essential for an effective fit. A supported foot is stable, strong, balanced and relaxed, while an unsupported one is weak, unbalanced and easily fatigued. Much of the discomfort skiers experience is a result of an unsupported foot trying to stay balanced and working too hard to steer the ski through the turn

A good aftermarket and fairly inexpensive footbed is made by Superfeet and you can get them at most ski or high end runners shops. These generally run around \$50 a pair. For even better performance and comfort, consider having a custom footbed made by a trained bootfitter. These easily run over \$200. They may seem like a big expense after purchasing a pair of ski boots, but insoles put you in a neutral position, alleviating alignment problems that can affect your skiing. They're also better for your knees and back. Custom footbeds are molded to your foot by taking an impression of it, then placing the heated footbed in the mold with your foot on top.

Another reason to consider new footbeds is to help compensate for the "Q" angle that women have which causes a lot of us to be knock-kneed or to pronate. This is because our pelvis's are wider which causes our femur bones to approach the knee at a wider angle than a man's. This causes our ski's to not be flat on the snow and more on our inside edges, which increases our probability of knee injuries.

#### **Canting**

Canting your boot can also help those who are knock-kneed, bowlegged or have other funky leg alignment issues to get your skis flat on the snow. Canting refers to the left or right angle of your boot and most boots have built in canting adjustments on their sides for minor adjustments. What canting does it to put you in a neutral stance. Think of it as putting a matchbook under a tippy table. Canting can also be done either by installing wedges under the bindings when the ski is mounted or planing the sole of the boot. Since this is not something that can be accurately done at home, canting should be left to a qualified bootfitter with the right equipment. But canting is kind of like needing glasses. You either need them or you don't. If you suspect you have a canting issue, stand on a soft surface like deep carpet or a foam rubber pillow. Look straight ahead and try to assume a balanced and even stance with your feet comfortably apart. Without moving your lower body, peek down at your feet. If one or both feet tend to tip to the inside or outside as you try to stand in a neutral and balanced position, you likely need canting. If you wear off the inside or outside edges of your shoes, that can be another clue. So visit with a bootfitter to get an accurate stance assessment and whether or not you need canting.

#### Heel Lifts

While women's ski boots do typically have an increased ramp angle in them to help us get more forward in our skis, heel lifts can help even more. Another reason we women have difficulty getting forward is that we don't bend at the ankles and knees as far forward as a man and we have less ankle strength. To compensate for this we bend at our waist to try to get enough weight forward to control the tips of our skis. This problem becomes worse on steeper slopes. Heel Lifts..... (and a forward binding position on the skis) help tip the pelvis forward and establish a natural stance of greater stability. The center of gravity is moved slightly forward. Since the heel is higher, a greater amount of forward torque can be generated by the woman with less forced ankle and knee flex. Installing a heel lift is something you can do at home. Pull the liner out of your ski boot and using carpet tape, tape the heel lift on the inside of your boot

shell as far back in the heel pocket as it will fit. Make sure you have a good fit in the heel pocket and trim the heel lift if you need to get it to fit as perfectly as possible.

#### Heat Molding Your Boots At Home

This is a simple way to help your boots mold to the shape of your feet. Doing this can make your boots fit better and be more comfortable. Take a tube sock and fill it with 3-4 pounds of white dry rice and tie off the end of the sock. Spread the sock out on a counter and form it into a large, long sausage shape. Put the sock in the microwave and based on the ovens wattage output set for the following times: 700W - 7 min / 1000 - 1100W 5 min / 1200 - 1250W 4 min. Put a semi thick sock on your feet. Take the sock out of the microwave by its knotted end carefully because it will be very hot. Quickly stuff it into your ski boot making sure it goes all the way to the toe area. Hold it by the knot and place it into your liner. You will need to work the rice sock into your liner by hitting the boot into the floor multiple times first on its heel and then on its toe. Keep on tapping it into the floor going back and forth between the heel and toe until the rice sock has settled deeper into the liner. Set a timer for 5 - 7 minutes and let the boot stand with the rice sock inside the liner. Remove the sock and put the boot on being sure you kicked your heel back into the heel pocket and buckle it down. Stand with your toe on a 1 inch high block (a book or piece of wood) and flex forward. Walk around a few times in the boot too. Do this and leave the boot on for 15 minutes or until the boot has cooled off. You are now done. Remove your foot and get ready to do the next boot in the same way.

## **Bootfitters**

While there are a lot things you can do at home to customize your ski boot fit, it's sometimes best to seek out a professional bootfitter who can perform extensive modifications to your boots. They are equipped with the proper tools and knowledge to help you achieve the best possible fit. Custom footbeds stabilize and balance the foot and are designed to fit your foot perfectly, while modifying the shell with heat or grinding allows it to take the shape of your foot and eliminates "hot spots" or pressure points.

#### When to Buy New Ski Boots

Ski boot life expectancy varies. If you ski regularly and you're hard on your boots, you may need to replace them every few seasons. Don't wait too long; boot liners eventually tend to "pack out" which can compromise fit and performance.

# **BOOT WARMERS**

#### <u>Disposable Boot Warmers</u>

If you're familiar with hand warmers, then disposable boot warmers will be very familiar to you. Disposable boot warmers are little packages that will heat up when opened and exposed to air. Boot warmers are available in two types, the most common is sized smaller than the hand warmer version and also has an adhesive backing so that you can stick it to the bottom of your sock towards the front of your boot. The second type is shaped like a footbed. This style is

more comfortable. Both are options if you only get cold feet on rare occasions. But they may affect the way your boots fit.

#### **Boot Heaters**

These nifty little gadgets are battery-powered heaters that can be installed in any ski boot. There are two brands of boot heaters on the market, one made by Thermic and another made by Hotronics. Both models work equally well and each comes with a set of rechargeable batteries that you clip on your boots. A wire then runs down inside of your boots between the shell and the liner to the warming disk that goes into the front of your ski boots inside the liner under your foot. You will need to make a small incision in the bottom of your liner to insert the wire, which isn't a big deal at all.

The batteries will have multiple settings that will allow you to easily control the amount of heat you want your warmers to emit. The batteries will last all day, and may last up to 2 days between charges depending on the setting you choose.

An additional great feature of boot heaters is that they can be easily transferred from one pair of boots to another. If you get new ski boots you can just take your boot heaters off of your old pair and set them up on your new pair. Or if you want to attach them to a pair of regular outdoor boots, you can do that as well. Boot heaters typically run around \$240.

#### **Boot Gloves**

Boot gloves provide a thermal protection layer of insulating neoprene for your ski boots to keep your feet warm. The company claims that it provides up to +20° F more in temps on your feet.



Runs \$30 to \$40.

#### **Heat Tape**

This is something inexpensive and that you can do at home to help make your boots retain heat. You can tape the bottom of your footbeds and the toes of your liners with high heat tape that you can purchase at most home improvement stores.



# **BOOT DRYERS**

One reason why some people get cold feet is that they do not properly dry their liners after each day of skiing. Drying your liners can be accomplished a couple of ways:

- Remove your liners from the shells after skiing each day and set them near a heating vent or other place with good air flow. DO NOT set them by the fire, as this will melt the liner.
- Purchase a set of boot warmer/dryers. These are small heaters that you plug into the wall or a lighter outlet in your car and place inside your ski boots at the end of the day. They will lightly heat the inside of the liners and help to evaporate the moisture that is trapped inside.
- Air powered boot dryers are the deluxe way to deal with moist boot liner problems. This device is similar to a hair dryer as it circulates warm, dry air with a fan. This process pulls out all the moisture and makes your liners usable for skiing again. Some of these also double as glove dryers to solve the same moisture issues with your gloves.

Don't leave your boots in the car or garage if you can help it. It takes a while for them to warm up so bring them inside to keep warm.

Also when traveling, if you can't bring all you ski equipment with you, bring your boots. They are the most custom fitted piece of equipment that you likely have in your ski arsenal.