bridge SOLES

How to get the Most Out of Your Bridge Soles

In most cases, *Bridge Soles* are meant to be used more like an ankle brace than typical insoles. They are designed to offload and reduce strain on the foot and lower leg---bridging the gap from dysfunction to function---allowing rehab to be done on those areas to strengthen and realign them back to a natural, healthy state. If the feet are exercised and aligned correctly, in many cases *Bridge Soles* should not be regularly needed after 6-12 weeks, and can be kept in the closet until "life happens" and an area needs support and offloading.

Fitting: Bridge Soles can be worn in any type of shoe and are ideally meant to be worn <u>underneath</u> your full-length insoles. This will secure them in place and provide the most comfortable experience. Some stock insoles are lightly glued down and will need to be carefully pulled out first. Alternatively, Bridge Soles can be worn alone in the shoe with no insole over the top or placed on top of your insoles. Use glue dots to hold them in place if necessary. If shoes feel too tight while wearing, the shoes were most likely fit too tight, & could be contributing to the problem.

* For Forefoot/Neuromas/Metatarsalgia/Sesamoiditis, etc.: See <u>PRGear.CO/pages/forefoot-pain</u> for more detail & information

Step 1: Use Bridge Soles to Offload & Re-align

Most modern shoes are built with three features that put excess stress on the forefoot & metatarsal head area of the foot: 1) <u>Concave surface</u> <u>underfoot</u> causes middle met heads to sink, crowding bones & nerves 2)<u>Tapered toe boxes</u> crowd toes towards each other with similar effect 3) Even small <u>elevated heels</u> shift significant body weight to the forefoot



Eventually, most feet come to look like the shoes they wear, & the more shoeshaped your feet become, the more likely you are to have problems.

Step 2: REHAB recommendations to address the root cause: 1) Best results will be achieved when wearing appropriately cushioned shoes that at first feel like there is "way too much toe room" in the toes. 2) Wear Correct Toes (PRGear.CO) inside foot-shaped (not shoe-shaped) shoes---and without shoes on. Avoid shoes they don't comfortably fit in. Eventually, toes will re-align & spread, relieving pressure permanently. 3) Do 'toe extensor' stretches and YouTube 'Neuroma Exercises'.

*For Plantar Fascia, Arch, & Heel Discomfort:

For more detail on below, see PRGear.CO/Pages/Plantar Step 1: Offload the area with Bridge Soles when anticipating discomfort The soft, deep heel cup, cushy arch, and met pad are designed to help the Plantar Fascia relax at times the foot would typically be stressed. Various research¹ has shown that chronic Plantar Fascia problems are not the result of inflammation, but rather from poor blood flow & weakness causing tissue degeneration! This may be why research² has shown running barefoot treatment to help 95% of those dealing with PF. Additionally, nearly all daily wear shoes have elevated heels, support devices, and tapered toe boxes that have been shown to significantly reduce bloodflow³ & weaken the feet. One look at, or web search of the feet of people who don't wear modern footwear makes this obvious. Step 2: Real World Tested/Research Backed REHAB Recommendations: 1) Start the day with heat & vibration. See PRGear.CO/products/Meteor 2) Do top of foot toe extensor (toes down) stretches & massage often 3) Wear shoes with foot-shaped toe boxes & Correct Toes toe spacers 4) Strengthen the weak tissue by being barefoot whenever possible on carpet & grass (as long as low pain). Start with 30 seconds of barefoot running² & add 30 seconds every few days (as long as low pain during) 5) Single leg balancing & Heel Floats: Work up to balancing on the forefoot with the heel 1/2" to 1" off the ground. Engage the big toe! 6) Single leg heel-raises with 1" under the toes⁴ (PRGear.CO/products/fasciitis)

How to get the Most Out of Your Bridge Soles *For Achilles & Posterior Chain Issues:

Step 1: Use Bridge Soles to Offload the Affected Area Much like other insoles with a heel lift, Bridge Soles should be worn to offload the Achillles while or when anticipating discomfort. Heavy loading exercises should be done to lengthen & strengthen the Achilles. What makes Bridge Soles superior to traditional heel lifts? Bridge Soles are PU insoles with a soft, deep heel cup, soft arch, & met pad that aim to reduce both instability and the landing response of the foot & lower leg that may be responsible for Achilles discomfort. 1) Research has shown that PU insoles were associated with significant reductions in Achilles load...likely due to reduced "landing response".6 2) Many medical professionals also believe that stability from a deep heel cup is preferable to a traditional heel lift as the heel cup reduces sliding side to side & associated instability strain on the posterior chain. 3) Scientific literature questions the idea that heel lifts alone reduce loading on the Achilles7, & newer research indicates that wearing a raised heel actually *increases* load on the Achilles compared to zero drop/barefoot position⁸. Gaining forefoot stability may be more beneficial. Furthermore, a 2015 study showed that PU insoles improved symptoms for Achilles tendinopathy, and that expensive custom orthotics were not more effective than over the counter insoles⁹. 5) Many medical professionals also believe that wearing shoes with elevated heels consistently is actually a main cause of Achilles problems by shortening & weakening the area over time, which seems obvious. For casual activity, going barefoot and/or avoiding shoes with even slight heel elevation as much as possible (to tolerance) is recommended---to slowly lengthen & strengthen the posterior chain. Step 2: Real World Tested/Research Backed REHAB Recommendations: Avoid treadmill & sand as they increase wobble/instability strain¹⁰ Loosen laces significantly to reduce instability strain on the Achilles 3) Avoid forefoot striking as this increases Achilles loads dramatically¹¹ 4) Bent Knee Calf Raises (if low pain), as <u>Soleus control</u> reduces Achilles strain 5) Correct Toes worn in-shoe provide ankle stability that reduces strain 6) Research-backed vibration therapy: PRGear.CO/products/meteor 7) Eccentric Heel Drop therapy with 20+ lbs in a backpack is the most research¹² backed (Google "Achilles Gold Standard Eccentric Exercises") 8) Electromagnetic Therapy (PEMF) is showing real promise for Achilles

*For Adapting to more natural OR less cushioned footwear: Why BridgeSoles? More natural and lower drop footwear aim to take pressure off the joints and instead place it on the foot and lower leg muscles, which are much more adaptable. While most rather easily adapt from traditional shoes to more natural footwear, a small percentage of people experience excessively sore calves, arches, or other transition difficulty (typically only with high impact activity). How do they work? The Triple Adapt support zones relax the "landing response" of the foot and lower leg that experts hypothesize is the main cause of adaptation difficulty. Contrary to popular belief, lower leg soreness is rarely caused by less drop (heel lift) alone, but is more affected by the body bracing for impact (something called muscle tuning or landing response) due to a change in the total amount of support or surface underfoot. This is the reason experts believe some struggle with transitioning to running in more natural footwear at first, but have no problem walking around in them. It is similar to how track distance runners still get sore calves and feet when wearing noncushioned spikes for the first time in a season, despite most distance track spikes traditionally featuring a similar amount of heel elevation as typical running shoes. (i.e. Adding heel lift alone is unlikely to help much) Note: It is generally fairly easy to adapt to zero drop shoes when the total cushion/support level of the shoe is similar to what the person is already used to. Trying less cushion should be done after adapting. Why use more natural shoes? 73% of U.S. adults report foot pain annually^(2010, APMA), yet in populations of people who go barefoot or wear primitive sandals, the incidence of chronic foot pain is less than 3%5. Nearly all modern shoes feature tapered toe boxes that bend the big toe inwards & out of its natural position ---- & also elevated heels (with most dropping 10-12mm or more from the heel down to the forefoot) that deform feet out of their natural position. In this position, the arch cannot naturally support itself & arch support becomes needed :(For an adaption program visit: PRGear.CO/pages/naturalfootwear *ALL scientific reference #'s on this sheet are detailed at www.PRGear.CO/Pages/Research