

Shin Cover Fitting and Use FAQs

Bridger Bionics LLC

Last Updated: July 3, 2024

1. Why should I get a Bridger Bionics Shin Cover?

Bridger Bionics shin covers, unlike any prosthetic cover on the market, are load bearing. They are designed to be worn for a variety of action sports and activities that require a tight fit between a boot and your prosthesis.

All other commercially available shin covers are purely cosmetic. Ours are both aesthetically pleasing AND functional for everything from walking around in rain boots to pushing the limits on skis, roller blades, and much more.

Bridger Bionics was founded by an amputee and an engineer in Bozeman Montana in 2023 to provide affordable, high performance systems that make action sports accessible to all prosthetic users.

2. Will the Shin Cover fit my prosthesis?

Most lower limb prostheses fit our covers. However, to receive a cover, you will need to undergo a fitting process to make sure that your setup is compatible.

Here are the basic requirements for a prosthesis to fit:

1. Your pylon must have a cylindrical, fixed length pylon connecting the knee joint (AK) or socket (BK) to the foot. This pylon must be between 50 and 235 mm long, and must not have any overly large protruding components.
2. Your socket or knee joint and foot system must have no parts that protrude down or up close to the pylon.

Here are some common cases that don't currently work with our shin covers:

1. Running blades: these prostheses bend, making it impossible to snugly fit a load bearing cover.
2. Telescoping or shock absorbing pylons: these expand and contract, making a snug fit difficult.
3. Extremely long pylons: some AK amputees have pylons that are too long for our manufacturing process. Our 3D printer can only make parts that are 235mm tall or less.
4. Extremely short pylons: these are difficult to cover and short covers can provide poor performance in boots.

We are always working to improve the compatibility of our covers! If you have a suggestion, please let us know [HERE!](#)

3. How does the fitting process work?

Our shin covers are custom made for each person's unique prosthesis. This requires everyone to go through a fitting process to first ensure our product can interface with your prosthesis, and then get the key dimensions needed to customize your cover.

The fitting process involves three steps:

1. First, we'll ask for a few pictures of your prosthesis. Based on these, we'll let you know if our covers can work with your setup.
2. Next we'll ship you a fit kit you can use to get accurate measurements of your prosthesis.
3. Once you ship back the fit kit, we'll get to work on a custom shin cover for your measurements. We will ship the cover once we receive your Fit Kit.

This process usually takes about 2 weeks. Here's what you'll pay:

1. \$25 for the fit kit once we verify your prosthesis is compatible with our covers.
2. \$175 to order the cover once the fitting is complete.

If you're interested in purchasing one of our covers, you can start the process on our website [HERE](#).

4. Does the Shin Cover have a warranty?

Yes! Our products come with a lifetime warranty that covers any structural damage due to design flaws, fatigue from normal use, and crashes during normal use. Our warranty does not cover structural damage from non-recommended use, loss, damage that occurred while the device was not in use, or cosmetic damage from boot liners and the elements.

Our products are designed to wear over time as they are used, and we recommend that you decorate your cover if you'd like to give it a cosmetic facelift!

If you have a warranty claim that fits into the covered categories, please reach out [HERE](#). We can only provide warranty replacements with the same dimensions as your original shin cover.

5. What can I use my shin cover for?

Any sport or activity that requires using a boot! The cover is intended to securely connect the inner part of a boot with your prosthesis. You can use it to walk around in rain boots or to participate in your favorite action sport.

Here are some popular activities you might use your Bridger Bionics Shin Cover for.

1. Alpine skiing
2. Cross country skiing

3. Telemark skiing
4. Waterskiing
5. Roller blading
6. Ice skating and hockey
7. So many more

If you are unsure whether our product would be suitable for an activity you're interested in, email us!

6. What happens if I switch to a new prosthesis? Can I still use my Shin Cover?

It depends. Any change to your prosthesis that alters the length of your pylon will require you to get a new shin cover. In addition, adding bulky pylon components could compromise the fit of the shin cover. If you have a high-top cover, changes to the shape of your socket or knee joint mechanism might compromise the fit. In general switching to a new foot will not compromise the fit unless you need to adjust your pylon length.

Your cover might still fit if the length of your pylon remains the same and the size of your socket or knee joint and pylon components do not increase significantly. The best test is to try attaching your old cover to your new prosthesis. If it doesn't fit, you'll have to get a new one.

To make sure your new prosthetic fits an old shin cover, bring your cover with you to your next prosthetist visit and work with your prosthetist to accommodate your cover.

7. Can I decorate and personalize my Shin Cover?

Yes! We encourage you to paint and draw on your cover to make it your own! However, be careful to think about how any paint or ink you use might rub off onto the inside of boots and pants. Permanent markers and acrylic paints have a good chance of standing the test of time.

If you end up decorating your cover, send us a picture so we can share with the Bridger Bionics community!

8. Could my Shin Cover damage my prosthesis?

Not if used correctly! The shin cover is designed to interface only with the pyramid receivers at the top and bottom of your pylon and is only designed to sustain loads of 1kN or less.

Be careful to ensure that your cover is positioned correctly so it only contacts the load bearing surfaces of the pyramid receivers. If your cover is touching a point in the middle of the pylon, or any other part of your prosthesis, it could damage these parts. Be extra careful of carbon fiber parts like sockets and leaf springs. These could fracture if unintentionally loaded.

Also be careful of excessive forces. In general any activity that puts enough force through the cover to bruise or break a flesh and blood leg is unsafe for both your prosthetic and your shin cover. Action sports with the potential of crashing, like alpine skiing, could be dangerous for you and your prosthesis.

If you have any doubts that your device is safe for use on your prosthesis, please contact us or your prosthetist immediately. Do not attempt to use a shin cover that fits poorly.

9. How should I store and handle my Shin Cover?

Our shin covers are waterproof and robust to extreme conditions. Feel free to use them in water, cold conditions as low as -20 degrees fahrenheit, and heat up to 120 degrees fahrenheit.

Store our shin covers in a soft bag to allow them to dry out naturally and to protect them from accidental cosmetic damage.

10. Can I heat mold my Shin Cover?

Yes! If you want to slightly increase the precision of your cover's fit with your prosthetic, heat the inner load bearing surfaces thoroughly with a hair dryer and press the cover firmly against your prosthesis. Tighten with the strap to apply even more force.

The capacity for shape adaptation is limited with heat molding, but a millimeter can make a big difference.

11. What if my new Shin Cover doesn't fit my prosthesis?

We make each Shin Cover precisely around the dimensions you provided during the fitting process. It's possible that these dimensions we're a bit off. This is why it's incredibly important to follow the fitting instructions exactly and get help if you're even a bit unsure how to get the measurements and take the photos.

To troubleshoot, move around your cover on your prosthesis to find which parts aren't fitting correctly. You can correct small fit issues by heat molding or by shaving off small amounts of material with a razer blade. A small gap between the two halves of the device is normal.

If the length is very wrong or if an unexpected part of your knee joint, socket, pylon, or foot is interfering with the cover, please reach out to us with pictures of the problem and we'll work with you.

Most fit problems arise from an error during the measurement process, so you'll likely have to buy another cover. However, design mistakes on our end are covered under warranty.

12. Do you have a question not discussed here?

Please contact us [HERE](#) and we'll do our best to help! No question is silly!