



Range of Motion (ROM) Knee Brace

Product Overview

ROM knee braces are used to restrict motion at the knee joint. This will prevent any further harm. A ROM brace may be used to protect the knee before or after surgery or to assist with muscle weakness. A brace will have a ROM joint for either side of the knee. The dial for the joints needs to be set by an orthotist or trained clinician.

Best Practice for a ROM Knee Brace

It is recommended that the ROM brace should be pre-fitted for the patient before their surgery. ROM braces are designed for short-term post-operative care. The brace must be fitted by a medical professional and is designed for single patient use.

Once the ROM brace has been set up, four clips are attached to the strap on the brace. While the brace is off the user must maintain knee position as it has been set with the knee brace on. When putting the brace on, ensure the ROM dials are on either side of the knee joint. This allows the joint to bend when the knee bends.

It is best for the brace to be worn directly against skin; however, the brace can be worn with tight clothing such as leggings if desired. Avoid looser fitting clothes as these can lead to the incorrect fitting of the brace, as well as skin sores.

Indications

- ACL, PCL, MCL, LCL injuries
- Tibial plateau fractures
- Osteochondral repairs
- Meniscal repairs
- Patella tendon repairs
- Condylar fractures
- HTOs (High Tibial Osteotomy)
- Acute Sprains/strains of the knee

Contraindications

- Unstable fractures
- Fractures of the proximal femur or distal tibia or fibular.

Patient Fitting Guide

1: Applying Comfort Pads

Remove the foam comfort pads from between the aluminium bars. Secure the larger foam pad around the thigh and the smaller pad around the tibia. **If the brace has AIR ROM pads, secure each individual pad under one strap of the brace, with the larger circumference pads around the patient's thigh.** Once the pads have been secured, excess foam should be trimmed with scissors to ensure a streamlined fit and neat appearance. Always cut from the end of the pad that does not have the sewn Velcro hook that secures the pad around the leg.



2: Positioning the Hinge/Bar Assembly

The straps have been pre-inserted and should not be taken out of the assemblies. For larger patients, you may need to loosen the straps slightly to allow you to properly position the bars against the sides of the leg. Lift the patient's leg and slide the brace straps under the posterior aspect of the thigh and calf. Attach the aluminium bars to the side of the foam so the hinges are aligned with the knee centre.



3: Tightening the Straps

The recommended order for strap tightening is to position the two straps closest to the knee first to help keep the hinges properly positioned, followed by those furthest away. Pull each strap tight through the ring (3a) then pull back in the other direction (3b) and secure the Velcro. You may cut any excess strap material to give the brace a neater appearance if desired.



Hinge Settings

ROM Knee Braces have a simple quick dial hinge, enabling clinicians to control flexion and extension in small increments. As rehabilitation progresses, the setting can be quickly modified with the brace on the patient's leg. A drop lock can be manually engaged and disengaged by the patient. The hinges should be pre-set to the desired flexion and extension setting before the brace is initially applied to the leg.

1: Set the Lock

Ensure the lock is set at 0 degrees, this must be the case for the lock to engage. To change the flexion or extension setting follow the below guidelines.



2: Flexion Stops

Rotate the hinge cover so the opening allows access to the locking arm that controls the flexion setting. Pull the locking arm straight out from the notched setting, bend the brace to the desired position, then rotate the cover and arm to the new flexion setting. Push the locking arm into the desired notch.



3: Extension Stops

Rotate the hinge cover so the opening allows access to the locking arm that controls the extension setting. Pull the locking arm straight out from the notched setting, bend or extend the brace to the desired position, then rotate the cover and arm to the new extension setting. Push the locking arm into the notch.



4: Locking the Hinge Cover

Return the hinge cover to a natural position with the opening at the top of the hinge between the flexion and extension settings. You will note the raised bump in the hinge. Therapists may use an Allen head screw and Allen wrench to lock the hinge cover in this neutral position and prevent the user from being able to move the cover to change the range-of-motion settings.



Range of Motion (ROM) Walker Patient FAQ's

What is a Range of Motion (ROM) Knee Brace?

The ROM brace protects the knee with the use of a metal joint on each side of the knee. The brace is secured with Velcro straps, that go over the foam bands.

What is the ROM brace for?

The ROM brace will limit your movements to protect your knee during rehabilitation. The brace also supports the sides of the knee. The brace can be set to keep your knee straight or slightly bent – depending on your specific needs. You should not adjust the joints yourself.

When should I wear my ROM knee brace?

You should wear your ROM brace all the time unless told otherwise by your therapist. However, the brace should be removed daily for cleaning and hygiene purposes.

How do I clean the ROM knee brace?

- Carefully remove the foam bands from the sides of the brace. Wash the bands by hand in warm and soapy water at 40 degrees Celsius.
- Wash the bands one at a time to avoid confusion on where they are placed.
- Fasten the Velcro straps on the remainder of the brace before washing.
- To protect the material, the brace is air dry only. **Do not tumble dry or use direct heat.**

Can the ROM knee brace be adjusted?

Yes, the brace can be altered to change the fixed position of the knee and allow a different range of movement. Adjustments and alterations will be carried out by your therapist. There will be no alterations at the beginning of your treatment as your knee needs to stay in a fixed position.

At times, swelling of the knee may reduce when you are using the brace. This may cause the original fit of the brace to become loose. In this case, the brace should be tightened. Start by tightening the back straps. Pull these through the side tab and secure the Velcro when the fit is secure. The excess strap should then be pulled through the clip attachment, further securing the brace. Only tighten the brace if you have been shown how to do so by your therapist.

What should I do if I am having problems with the brace?

If you have any problems, for example: a skin rash, skin breakdown, loss of sensation in the knee, swelling, or discomfort you should ask for advice from your therapist.