

CUSTOM BRACES

Casting & Shipping

Casting & Shipping Custom AFOs



Allied OSI Labs Accepts the Following:

- Plaster casts
- STS casting sock
 - Ankle length for the Richie Brace® Standard, Restricted Hinge and the Dynamic Assist
 - Mid-leg length for the Richie Gauntlet and California AFO
 - Bermuda length for the Solid AFO

NOTE: Cast for the Richie AeroSpring Bracing System® using the same method you cast for a custom orthotic.

Helpful Tips from your Allied OSI Client Service Team: **Avoid Damaged Casts**

Unfortunately, **casts may get damaged before reaching the lab.** When our team receives casts that have flaws, the final AFO may not be as accurate as needed for desired patient outcomes. Our team will evaluate your cast and contact you if they do not meet our lab standards. **Below are some helpful tips to achieve maximum success with the Richie Brace®.**

1. **Call your client service team to request a Richie Brace® Treatment Guide to assist in your patient's diagnosis and to receive brace recommendations and modification tips.**
2. Use the correct casting sock to get the height required for each Richie Brace®. For Richie Gauntlets and California AFOs, the casts need to be 2" higher than brace height (i.e. 7" brace needs to have a 9" cast).
3. Make sure markings are on medial and lateral malleoli of the cast (required).
4. Write the patient's name on bottom of the cast.
5. Let the casts cure for 24 hours; do not let the casts dry inside the packing box.
6. Rubberband the cast around the lower leg area and stuff cast with packing material.
7. Choose a box that will properly accommodate the size of the cast (not too big).
8. Add packing material around the cast; do not ship without packing material in the box.
9. Enclose the Richie Brace® order form in the box.
10. Attach an Allied shipping label to the box and ship.

*See reverse side for a Richie Brace®
step-by-step casting guide!*

Casting Overview

The Richie Brace® requires a negative impression cast utilizing either plaster splints or an STS casting stock. Neutral suspension technique is recommended while plantarflexing the First Ray. Complete casting guide and video available at www.alliedosilabs.com

PLASTER CASTING

Foot held 90° dorsiflexed.

Mark foot with felt-tip pen.

- Medial and lateral malleoli required.
- 1st & 5th MTP joints.
- All bone prominences that need accommodations.

Apply plaster strip #1.

Form a slipper cast with splint #2.

Complete with splint #3 and lay over the tip of the toes.

Use neutral-suspension casting technique.

Lock midtarsal joint and plantarflex the first metatarsal.

Remove cast following proper guidelines.

STS CASTING SOCK

Lay cutting strip down. Lay down cutting channel.

Place plastic bag over foot and leg. Apply STS sock following instructions carefully.

Mold sock. Lock midtarsal joint and plantarflex the first metatarsal.

Achieving Maximal Success with the Richie Brace®

Patient Evaluation - 4 Major Components

- Gait Analysis: knee stability, weakness in quads or ankle extensors, equinus or lack of heel strike, foot alignment at heel strike, as well as mid-stance and toe off
- Range of Motion: ankle joint dorsiflexion, subtalar joint motion, spasticity, or contracture
- Deformity: check if fixed or flexibility / reducible; check if result of muscle weakness or tightness

Impression Casting - 4 Major Components

- Ankle sock or plaster splints can be used for:
 - Standard Richie Brace®
 - Restricted Hinge Richie Brace®
 - Dynamic Assist Richie Brace®
- Mid-length must be used for:
 - Richie Gauntlets®
 - California AFO
 - Any Richie Brace® where there is severe abnormality in lower leg girth (wide or thin) or structural abnormality, such as extreme tibial varum (over 10°); also requested when prescribing Richie Restricted Hinge Brace® when dropfoot and equinus are present
- Bermuda sock must be used for:
 - Richie Solid AFO

Neutral-suspension casting technique must be used. This preserves the shape of the plantar surface of the foot; especially the heel and arch contours as well as the metatarsal weight-bearing parabola.

Positioning of the Foot During Casting

- Knee flexed 20° - 40°
 - Subtalar joint positioned in neutral
 - Midtarsal joint “locked” or fully pronated
 - 1st Ray plantarflexed to end range (i.e., remove all forefoot supinatus deformity)
- NOTE: Pronating the midtarsal joint while plantarflexing the 1st Ray maximally everts the forefoot on the rearfoot; a vital requirement to achieve maximum foot stability with Richie Brace® products