What’s unique about casting for DAFOs?

We believe that the intimate contact of a thin, flexible, contoured brace, wrapping around the entire foot, provides more evenly distributed pressure for comfortable realignment than a typical rigid AFO. Creating a cast that accurately captures the desired alignment, shape, and volume of your patient’s foot is the key to a well-fitting DAFO. Here are a few useful tips to ensure a successful outcome for your patient.

### Determining position

When capturing your patient’s best position of function, the goal is to come as close to the ideal position as possible. If their range of motion or foot and ankle structure prevents them from reaching that goal, accommodations will need to be made. Always prioritize heel alignment. If the heel slips out of vertical when the forefoot is brought to level, use a shim to support the forefoot. After the best foot position has been established, capture the ankle angle for the finished brace in your cast.

### Tools needed:

- ✔ Cotton stockinette
- ✔ Fiberglass casting tape
- ✔ Container of water
- ✔ Hook-blade knife and extra blades
- ✔ Channel buffer strip
- ✔ Medical scissors
- ✔ Electrical tape
- ✔ Medical gloves
- ✔ Casting pillow (optional)

Our casting supplies order form is available online at cascadedafo.com/order-forms/supplies or contact Customer Service: 800.848.7332 | customerservice@dafo.com

### 1 Rehearsal

Before you get out your casting tape, take a few minutes to rehearse with your patient. Practice correcting the foot and ankle to their best position of function. This rehearsal lets both you and your patient know what to expect during the actual casting process.

### 2 Getting the wrap just right

When you begin casting, wrap the tape snugly around the midfoot and ease the tension as you wrap toward the toes, being careful not to squeeze them together. Swoop the tape back to the midfoot and wrap snugly, high around the ankle and low around the heel, to avoid gaps. As you wrap up the leg, wrap a little looser to accurately capture the shape and volume.

**Note:** Soft cast casting tape cannot be used for DAFO production. When filled with plaster, the foot shape distorts too much to create an optimal fit.

### 3 Defining the contours

As the tape begins to cure, use your fingers to push in and around all the key landmarks like the malleoli, met-heads, navicular, etc. To capture the plantar surface contours, consider using a casting pillow under your patient’s foot. You can easily make your own with open-cell foam and cotton stockinette. We have instructions in the Cascade Library on cascadedafo.com.
4 Finishing touches

Once you’ve removed the cast from the foot, tape it closed with the edges matched up. Place the cast in open air for another 2+ hours to allow full cure.

5 Evaluate the cast

Check your cast carefully to ensure it meets the following criteria:

- Smooth, even wrap with little distortion
- Good definition of key landmarks and plantar surface contours
- Ankle, hindfoot, and forefoot alignment at or close to desired alignment of finished brace
- Complete coverage from toes to above finished brace height
- No distortion due to removing the cast before it has hardened

If your finished cast is not what you had planned, it’s best to re-cast right away, while your patient is still in your office. It will only take a few minutes, and will ensure that the new cast captures the desired alignment, shape, and volume of your patient’s foot, ankle, and lower leg.

Take our course

For detailed casting techniques, take our free ABC-approved online course – Casting and Scanning for DAFOs – on the Cascade Institute and earn 1.5 CEUs. Through videos and interactive slides, you’ll see:

- Detailed videos of the casting process
- Casting with footplates for wheelchair-bound or very young patients
- Casting adult patients
- Tips for working with and casting kids
- Digital scanning techniques

Find out more and access our free courses on the Education page of cascadedafo.com.