

C-Brace®: Three-Stage Casting Technique

Before casting your C-Brace patient, please read the checklist thoroughly and complete all steps. The Acknowledgement of Checklist Completion must be signed and submitted to Ottobock with the completed C-Brace order form and a negative impression. If the checklist is not completed and sent in with the C-Brace order form and a negative impression, the cast will not be accepted.

Plaster of Paris Bandage or Fiberglass must be used. All measurements must be recorded in millimeters. This technique is the only approved and accepted form for creating a negative impression to fabricate a C-Brace.

Resources

1. **Casting Demonstration** (Videos 1, 2, and 3 of the C-Brace Refresher Course):
https://academy.ottobockus.com/presentations/c-brace_refresher/presentation_html5.html

Video 1: Details the required materials and equipment, use of the Foot Casting Aid for AFO, proper measurement and order form completion, as well as measurement of the effective heel height of the shoe.

Video 2: Demonstrates the KAFO casting technique.

Video 3: Shows the importance of the three-stage casting procedure.

2. **Review three-stage casting fiberglass technique video:**
<https://www.youtube.com/watch?v=qloxsTx7ehw&feature=youtu.be>
3. **Order Form:** <https://professionals.ottobockus.com/Orthotics/Custom-Orthotics/KAFO-KO--Knee-Ankle-Foot-Orthosis-Knee-Orthosis/C-Brace/c/4036>
4. **Video Conference:** FaceTime or WebEx with an Ottobock Orthotist (broadband internet and scheduling required).

Required Materials/Equipment

- Plaster bandage or fiberglass
- Casting consumables
- Indelible pencil
- Three-stage casting checklist (Page 2)
- 743A9 Foot casting aid or similar
- Measuring instruments
- Patient information and C-Brace order form

Ship to: Great Lakes Building
3820 West Great Lakes Drive
Salt Lake City, UT 84120

Acknowledgement of Checklist Completion: By signing this form, I, the certified orthotist, have read and completed all steps outlined in the C-Brace Three-Stage Casting Technique Checklist. I acknowledge the completed checklist must be sent to Ottobock along with the completed C-Brace order form and a negative impression. If any of the steps outlined in the C-Brace Three-Stage Casting Checklist were not followed or completed, I acknowledge any remakes of the C-Brace DTO will be at my expense.

Printed Name: _____

Signature: _____

Date: _____

C-Brace®: Three-Stage Casting Checklist

Review this checklist before start of casting and perform the checklist before the patient leaves.

General:

- 743A9 Foot casting aid or similar was used.
- Casting assistant was present and corrected to optimal knee alignment.

Impression Quality:

- Impression taken in anatomic neutral position and alignment. If not, note fixed deformity on the C-Brace order form.
- Forefoot and hindfoot are aligned.
- Subtalar joint is in the neutral position.
- Forefoot ab/adduction is neutral.
- Ankle position accommodates the effective heel height and/or contracture/leg length discrepancy.
- If genu-recurvatum is present, was it reduced to neutral?
- If knee valgus/varus is present, was it reduced to maximum correction?
- Medial supracondylar compression is in line-of-progression of the knee.
- No hip abduction in cast.

Measurements:

- C-Brace order form used.
- All measurements are recorded.
 - Recommended trim lines and cast heights:
 - Medial cast height to the perineum, trim line 35mm inferior to perineum.
 - Lateral cast height to proximal edge of trochanter, trim line to apex or distal edge of trochanter.
 - Posterior cast height to gluteal fold, trim line to gluteal fold or up to 12mm inferior.
 - Anterior cast height along inguinal ligament but below ASIS, trim line 12mm inferior to ASIS or to allow for comfortable sitting.
- All measurements in millimeters.
- Effective heel height of shoe measured and recorded.

Shipping the cast:

- Good quality box is being used.
- Cast is completely set and dry. Plaster casts are required to be set overnight before shipping.
- Cast opening closed with plaster splint.
- C-Brace order form and checklist completed and enclosed.
- Online training should be completed, if not already done.
- Consider possible participation in the C-Brace clinical study registry.

Final check:

- Casting quality evaluated prior to shipping and patient is re-casted if any alignment, height, or quality concerns are noted.
- Ottobock fabrication services may request a new impression, if there are alignment or quality concerns.