Quick Facts Casting Guide

Experts recognize TCC as the Gold Standard in off-loading. TCC is supported by level I evidence, including numerous RCTs, meta-analyses' and many consensus documents.1, 8, 12, 15, 23-31

TCC-EZ is the most used off-loading casting system in the US. It is used to promote ulcer healing by reducing the excessive planter pressure, immobilizing the foot and ankle, reducing shear, stabilizes edema and protects the foot from trauma.

* 2011 ADA Consensus states: “Off-loading at the acute active stage of the Charcot foot is the most important management strategy and could arrest the progression of deformity. Ideally, the foot should be immobilized in an irremovable total contact cast (TCC).”25

How a TCC Works:

- Reduces shearing forces and stride
- Removes propulsive phase of gait and locks ankle
- Reduces pressure – catches weight on the calf

TCC decreases pressure in 1st met by 69% and decreases heel pressure by 45%32

Wound Types:

- Diabetic Foot Ulcers
  Located on the plantar, mid-foot or heel

- Post-Operative Care
  Including but not limited to Charcot reconstruction, delayed primary closure, post TAL

- Charcot Neuroarthropathy
  Acute or sub-acute
  (Recommended in ADA Guidelines)*

Indications:
- Non-Infected neuropathic foot ulcers without deeper structures
- Charcot Neuroarthropathy
- Post-operative care (Charcot reconstructing, delayed primary closure)
- Pre-ulcerative conditions

Contraindications:
- Ulcer has signs of infection
- Vascular status not adequate for healing
- Ulcers deeper than they are wide
- Non-compliance with visits
- Allergy to casting material
- Excessive leg or foot swelling and fragile skin
- Patient’s foot does not fit in boot
- Patient’s calf exceeds cast size limit
**Important Applications Tips:**

- Do not bind the toes with the stockinette or felt pad
- Ensure water temperature is 70-80°F (Colder water will negatively impact the activation process. Warmer water will cause the cast to harden faster, but if too warm will weaken the cast.)
- Ensure the foot is casted at 90° angle to the leg
- Always try to cast patient in prone position (it is easier to get the leg at a 90° and gives a tighter fit)
- If the patient must be casted in the seated position, have the leg as elevated as possible to drain fluid, and always have at least 2 people applying the cast to ensure 90° and a tight fit.
- For very heavy and active patients, apply an extra roll of fiberglass. Wrap the extra rolls around the mid-foot to lower calf with a 50% overlap to give extra support around the ankle.

**Re-application tips:**

- First cast change should be done after 2-3 days. After that, weekly changes are generally recommended.
- If there is excess swelling or drainage after the change, recast after 2-3 days
- Always examine the foot and leg for redness or signs of rubbing, and use extra padding as needed
- Make sure there are no signs of infection

**Patient Tips, First Casting:**

- Before the patient’s first visit, encourage them to [read the Patient Instruction Guide](http://www.TCCpatient.com) or visit the patient website, [TCCpatient.com](http://www.TCCpatient.com)
- Ensure the patient comes with loose pants that will slide over the cast
- While the cast is drying, read through the patient instructions (downloadable video also available on patient website)
- Make sure the patient knows to limit activity for the first 24 hours
- Give the patient a copy of the instructions and emergency removal sheet

**Recommended Cast Sock Sizing**

<table>
<thead>
<tr>
<th>CAST SIZE</th>
<th>Sock Size</th>
<th>CALF SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3''</td>
<td>3'' or 4''</td>
<td>11''</td>
</tr>
<tr>
<td>4''</td>
<td>4''</td>
<td>14''</td>
</tr>
</tbody>
</table>

**Activity Level and Weight Guidelines**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Active</th>
<th>Sedentary</th>
<th>Non-Ambulatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Weight</td>
<td>&lt;325 lbs</td>
<td>&lt;400 lbs</td>
<td>400+ lbs</td>
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</tbody>
</table>

**Boot Dimensions**

<table>
<thead>
<tr>
<th>MEASUREMENTS</th>
<th>Regular</th>
<th>Large†</th>
<th>Extra Large†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>11.40''</td>
<td>12.25''</td>
<td>13.75''</td>
</tr>
<tr>
<td>Width at Ankle</td>
<td>3.94''</td>
<td>4.11''</td>
<td>4.29''</td>
</tr>
<tr>
<td>Width at Toe</td>
<td>4.66''</td>
<td>4.76''</td>
<td>5.14''</td>
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</tbody>
</table>

**Approimate Shoe Size**

- Men’s: 6-10
- Women’s: 5-11.5

**Notes:**

- *Patients who wear wide shoes may need to be evaluated for a Large or Extra Large Boot.
- † Charcot Large and Extra Large boots designed for rocker bottom deformity are available.

**References:**