

Quick Reference Guide

Plaster Modification - 3 stage approach

- Prepare by fixing the positive on a pipe vice, strengthen the landmarks, arrange flat and flat-round surfoam blades.
- TSWB sockets require global reduction to enable total surface weight bearing utilizing hydro-static pressure.
- Identify and mark reference points for circumferential measurements in intervals as shown in fig.2.1. Follow the recommendation in 2nd Stage to prepare the reduction chart.

1st Stage

Length reduction

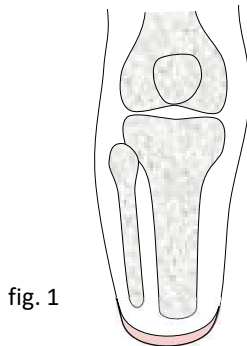


fig. 1

- Length reduction from the distal end depends on liner material as explained in the below table. Maintain the distal contour while reducing.

Caleo Liner with Passive Vacuum & DVS		Uneo Liner with Active & Passive Vacuum	
Residual limb with less distal soft tissue padding	Residual limb with adequate distal soft tissue padding	Residual limb with less distal soft tissue padding	Residual limb with adequate distal soft tissue padding
No reduction	3 mm. (no reduction for DVS application)	5 mm.	8 mm. (10mm.reduction for distally hanging tissues)

2nd Stage

Circumferential reduction

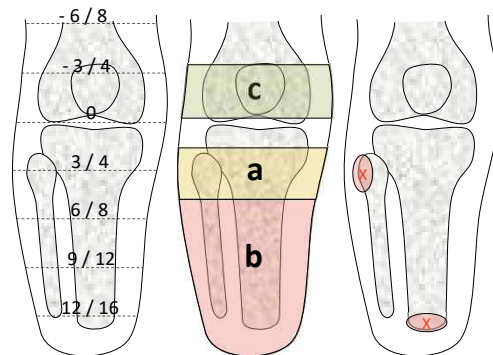


fig. 2.1

fig. 2.2

fig. 2.3

record measurements in 3 or 4cm. intervals depending on residual limb length

- 3 - 5% global circumferential reduction is required depending on residual limb type as shown in below table. The reduction intensity need to be dampened in ascending order (more reduction distally and gradually less proximally).
- While shaping the positive- ensure uniform plaster reduction and unchanged residual limb shape. To do so, hold the surfoam blade diagonally and stroke with equal intensity all over in reverse direction. Concentrate on local contours (concavity or convexity) and maintain them. In case of Caleo liner, do not reduce from head of fibula and antero-distal corner of tibia (ref. fig 2.3).

Level refer fig 2.2	Cylindrical Shape		Conical Shape		Objectives
	Firm tissues	Soft tissues	Firm tissues	Soft tissues	
c. femoral condyle	Extend the same surfoam blade stroke intensity proximally from the MPT on both medial and lateral sides. Alternatively, follow reduction % that of section-a.				condylar M-L stability
at MPT	2.5 %				weight bearing
a. fibula head section	3 %	3 %	4 %	3 %	
b. below fibula head section	4 %	3 %	5 %	4 %	

* Optimize the reductions further after conducting the flow test during trial fitting.

3rd Stage

Trimlines

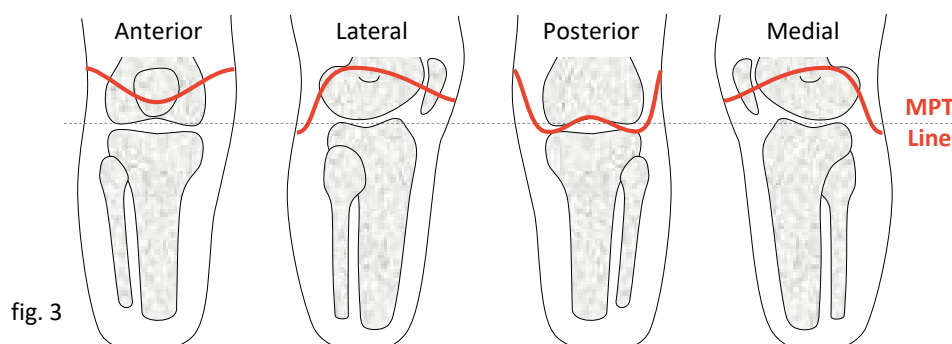


fig. 3

Anterior:

- Distal 1/3rd of patella
- 3.5 cm. proximal to MPT Line

Lateral:

- Femoral condyle support
- 6.5 cm. proximal to MPT Line

Posterior:

- 6mm. below MPT line at hamstring tendons on both sides.
- 6mm. above MPT line at the middle

Medial:

- Femoral condyle support
- 6.5 cm. proximal to MPT Line

* Optimize the trimlines further during trial fitting. The trimlines should not protrude out of the sleeve when the knee is flexed and at the same time should not restrict 90° flexion.