HOW TO CAST CUSTOM SHOES

One of the most important aspects of making custom molded shoes is the cast. Here are some guidelines to help ensure that a good cast is taken and that the shoes fit properly.

1. Seat the patient in a regular chair, with the feet flat on the ground and the lower leg perpendicular (at 90 degrees) to the floor.

2. For patients with rigid deformities you may want to cast them in the position of function. Make special note of the rigid deformity on the prescription form. Typically all casts will be corrected to balance the lower leg to 90 degrees unless otherwise noted.

3. Place a 1” foam cushion under the feet. You are trying to create a semi-weight bearing cast to ensure that you capture: (i) The full width of the metatarsals, (ii) The full length of the extended foot and toes and (iii) The contours of the dorsum of the foot at the heel and arch. If the patient is going to wear a brace, AFO, compression stocking or bandage - cast them with it on.

4. When using plaster the Bi-valve (or “Clam Shell”) technique is the preferred method. This helps ensure that there is little distortion of the foot and it is easy to mark any areas of concern inside the cast. If using the plaster “Wrap” technique be especially aware of maintaining the proper metatarsal width.

5. When pulling on or using the STS casting stockings make sure that the toes remain fully extended otherwise the shoe will come back too short. Be especially careful if using fiberglass wraps.
6. Plaster wraps and stockings must be wrapped loosely, and the toes and mets must not be restricted. Bring the cast to at least 1” above the height of the shoe being made.

7. Explain to patient what you are try to achieve so that they don't change or move during the casting, and they maintain the 90 degree angle.

8. Check the final cast and see that (i) The cast stands on its own, (ii) The lower leg is vertical (unless there is a rigid deformity) and (iii) Any areas of concern are marked clearly.

9. After the casting is complete take a full weight bearing tracing of the patient’s feet. If the patient already has a comfortable pair of custom molded shoes trace the insoles.

   If you have any questions during the procedure please do not hesitate to call us. A good cast and prescription will help ensure well fitting and comfortable custom shoes.