

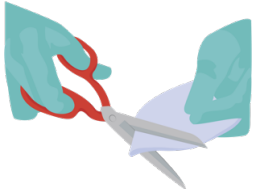

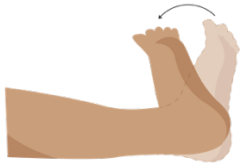

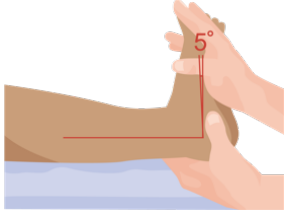
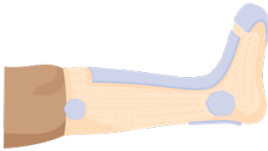
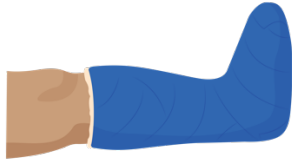











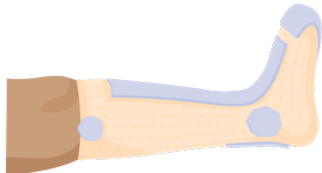

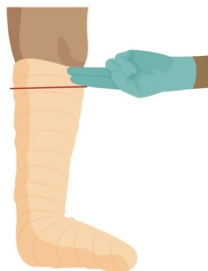
The following table shows the process of how to make a total contact cast (TCC) step by step. A total contact cast is a custom made, offloading product. This means each total contact cast is made for each individual person and their situation.

Overview		
Step	Instruction	Image
1. Prepare the area	Before getting started, make sure there is a comfortable and private treatment chair or bed for the person to sit in. Have all of the materials ready to use.	
2. Prepare materials and equipment	<ul style="list-style-type: none"> • Hand sanitiser • Rubber gloves • Felt • Paper • Marker pen • Plaster of Paris bandage • Cotton or rayon bandage • Cotton stockinette • Bowl of warm water • Rigid cast tape • EVA padding • Heat gun • Tape • Scissors • Cast shoe (if appropriate) • Suitable shoe or therapeutic footwear (for other foot) • Cast saw, cast scissors and cast separator (for removal). 	
3. Position the person	<p>Ask the person to:</p> <ul style="list-style-type: none"> • Sit in a chair or • Lie on their back if there is an appropriate chair or plinth to use • Slightly bend their knee in a consistent position. 	
4. Prepare wound area	<p>The person must have had their wound dressed by a health professional before TCC is applied. There must always be a thin dressing on the wound.</p> <p>To protect the wound area from the TCC materials, always add a pad over the thin wound dressing.</p> <p>The pad should be at least double the size of the wound.</p> <p>The edges of the must be trimmed to reduce thickness.</p>	
5. Prepare pads	<p>Pads are used under the TCC to protect areas from pressure.</p> <p>Pads should be made for:</p> <ul style="list-style-type: none"> • Bony areas of the lower leg and foot (front of leg, ankle bones, toes, head of outside leg bone) • Ankle tendon. 	







Step	Instruction	Image
6. Prepare plaster slabs	<ul style="list-style-type: none"> Plaster of Paris is used to make a total contact cast By folding six to eight layers of Plaster of Paris, you can make plaster slabs Plaster slabs are 15cm wide and are from the trimline (below the knee) to top of foot Plaster slabs will help to make the total contact cast outer shell. 	
7. Check ankle range of motion	<ul style="list-style-type: none"> Test person's dorsiflexion range with their knee straight Check the person can reach 5 degrees dorsiflexion. 	
8. Get assistance	<ul style="list-style-type: none"> An assistant can support the person's leg and help to check the angles of the cast while the cast is applied Work with your assistant to help maintain this position during the casting process. 	
9. Position the foot	<ul style="list-style-type: none"> Before starting and throughout the casting process, remember the selected position of the foot and ankle Use your assistant to help maintain this position during the casting process. 	
10. Fit inner layer <i>See separate table for full process</i>	<p>The internal layer is fitted to protect the leg, foot and toes. Check:</p> <ul style="list-style-type: none"> Cotton wool is not too thick between toes No wrinkles in stockinette. 	
11. Fit outer layer <i>See separate table for full process</i>	<p>Now that you have fit the internal layer, the next step is to fit a total contact cast outer shell. It is important that the bottom of the cast is level. Use plaster slabs to level bottom of cast before applying the rigid cast tape.</p>	
12. Fit cast shoe or rocker sole <i>See separate tables for full processes of each product</i>	<p>If a cast shoe will be used, fit it on the bottom of the outer layer of the total contact cast. Hold the cast shoe against the total contact cast to select the correct size. When discussing with the person you may decide together to have a rocker sole added to the person's total contact cast instead of a cast shoe.</p>	





Step	Instruction	Image
13. Check fit while standing	<p>Ask the person to stand in the total contact cast without the cast shoe.</p> <ul style="list-style-type: none"> • Look from the side – the total contact cast should be vertical or angled forward slightly • Look from the front – the total contact cast should be upright. <p>If the alignment when standing is wrong you will need to:</p> <ul style="list-style-type: none"> • Check the bottom of the total contact cast is flat and level. Use plaster slabs to make any changes • Check the size of the cast shoe correct. 	
14. Advise and fit footwear on other foot	<p>Fit the cast shoe on the bottom of the cast and adjust to fit.</p> <ul style="list-style-type: none"> • The cast should be one finger distance from the end and should not hang over the cast shoe. • The cast shoe should be firmly fastened. 	
15. Provide wheelchair	<p>The plaster in the cast can take up to 72 hours to properly set.</p> <p>Walking on the total contact cast before it has set can change its shape and damage the cast.</p> <p>Provide the person with a wheelchair to use until cast has set. If a wheelchair is not available, consider a walking aid or ask the person to walk as little as possible.</p>	

Fit inner layer		
Step	Instruction	Image
1. Prepare equipment	<ul style="list-style-type: none"> • Rubber gloves • Cotton or rayon bandage • Stockinette • Felt padding • Tape • Marker pen. 	
2. Place cotton bandage between toes	<p>Thin layer only, to absorb moisture between toes without spreading toes too much.</p>	
3. Apply stockinette	<ul style="list-style-type: none"> • Extend past the top trimline (at the knee). • Fold over at the toes (to top of foot) and tape in place. • Ensure there are not wrinkles in the stockinet. Wrinkles can cause more wounds. 	


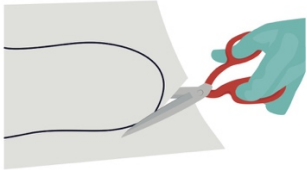



Step	Instruction	Image
4. Make cotton bandage pad	<ul style="list-style-type: none"> Use cotton or rayon bandage to fold back on itself 6 times This will form a cotton or rayon pad to use for the toes. 	
5. Fold cotton bandage pad over toes	<ul style="list-style-type: none"> Place cotton bandage pad over the end of the toes Tape in place Do not squash the toes. 	
6. Apply felt pad over toes	<ul style="list-style-type: none"> Place felt pad starting from behind the metatarsal heads (ball of the foot) over the front of the toes to the top of the foot covering the cotton bandage pad Should be one finger clearance between the end of the toes and pad. 	
7. Apply felt pads over other areas	<ul style="list-style-type: none"> Front of leg Inside ankle bone Outside ankle bone Head of outside leg bone Foot bone Achilles tendon. 	
8. Wrap cotton bandage around leg	<ul style="list-style-type: none"> Apply one layer of cotton bandage from below the knee to the toes Add two extra layers of the cotton bandage just below the knee. 	
9. Mark the trimline	<ul style="list-style-type: none"> Clearly measure two fingers below the head of the fibula Mark area with marker The padding should extend past this point. <p>You have now fitted the inner layer.</p>	

Fit outer layer		
Step	Instruction	Image
1. Prepare all equipment	<ul style="list-style-type: none"> Bowl Warm water Rigid cast tape Plaster bandage Prepared plaster slabs 	

Step	Instruction	Image
2. Add plaster slab	<ul style="list-style-type: none"> • Add plaster slab from the top trim-line, along the back of the leg, under the foot and over the toes • Be careful not to put pressure on toes and ensure ankle position is correct. • Rub in well 	
3. Add layers of plaster to sole	<ul style="list-style-type: none"> • Apply plaster slabs to the sole to build up the arch • Apply prepared slabs under the foot to create a rocker sole to unload the area 	
4. Wet and apply plaster of Paris bandage	<ul style="list-style-type: none"> • Start to apply plaster at the feet and work up towards trim line • Check how tight plaster is applied (Do not apply too tightly as this may cause tight rings in the plaster.) • Make sure the foot and ankle are always in the correct position 	
5. Mould plaster around foot and ankle	<ul style="list-style-type: none"> • Apply slight pressure on areas of the foot that can tolerate it, and away from any wounds or bony areas • Be careful not to apply too much pressure to a small area. 	
6. Fold stockinette at knee	<ul style="list-style-type: none"> • Make sure there are no edges • Run hands along plaster in a smoothing process • Fold stockinet back over the top of the cast near the trimline 	
7. Apply rigid cast tape	<ul style="list-style-type: none"> • At least two layers of cast tape are required • Apply at the calf section • Wrap the cast tape 1cm below the padded trimline. • Make sure the cast tape is not touching the skin. • Spray with water to help cast tape set quicker • Smooth the cast tape out with hands 	
8. If no cast tape is available	<ul style="list-style-type: none"> • Add 3-4 layers of plaster bandage in the same process as done for the cast tape. • This will make the cast heavier and slower to dry. 	
9. Allow to set	<ul style="list-style-type: none"> • Once the cast tape or extra layer of plaster bandage sets, you have now fitted the outer layer. 	

Fit cast shoe		
Step	Instruction	Image
1. Select cast shoe size	<p>If the person has selected a cast shoe will be used, you will fit it on the bottom of the outer layer of the total contact cast.</p> <p>Hold the cast shoe against the total contact cast to select the correct size.</p>	
2. Fit cast shoe	<p>Fit the cast shoe on the bottom of the cast and adjust to fit.</p> <ul style="list-style-type: none"> • The cast should be one finger distance from the end and should not hang over the cast shoe. • The cast shoe should be firmly fastened. 	
3. Check fit of cast shoe	<p>Ask the person to stand in the total contact cast without the cast shoe.</p> <ul style="list-style-type: none"> • Look from the side – the total contact cast should be vertical or angled forward slightly • Look from the front – the total contact cast should be upright. <p>If the alignment when standing is wrong you will need to:</p> <ul style="list-style-type: none"> • Check the bottom of the total contact cast is flat and level. Use plaster slabs to make any changes 	
4. Ask the person to walk	<p>The person should test that the total contact cast shoe feels comfortable to walk with.</p> <p>While the person is walking, watch to check the fit is appropriate and does not slide.</p>	
5. Continue fitting	<ul style="list-style-type: none"> • Check fit while standing • Advise and fit footwear on other foot • Provide wheelchair. 	

Fit rocker sole		
Step	Instruction	Image
1. Prepare materials and equipment	<ul style="list-style-type: none"> • Rubber gloves • Fibreglass casting tape • Paper • Marker pen • EVA padding • Heat gun • Scissors • Therapeutic footwear or suitable shoes • Wheelchair 	

<p>2. Measure, trace and cut paper outline of total contact cast</p>	<ul style="list-style-type: none"> • Ask the person to stand on paper with the total contact cast • Use pencil to trace around the total contact cast onto the paper • Cut out paper to measured size. 	
<p>3. Skive the edges of the EVA</p>	<ul style="list-style-type: none"> • Use the paper outline to cut out EVA to size of total contact cast • Cut and smooth the edges of the EVA. 	
<p>4. Heat the EVA in over until soft and moulded</p>	<ul style="list-style-type: none"> • Put on gloves • Place EVA on a work bench or area not affected by heat • Turn on heat gun and start to heat the EVA until soft and able to mould. 	
<p>5. Place EVA on bottom of cast</p>	<ul style="list-style-type: none"> • Hold the EVA against the person's foot • Hold in place to shape of total contact cast and allow to mould • Wait for the EVA to cool while holding it in place against the total contact cast. 	
<p>6. Wrap fibreglass casting tape to secure EVA</p>	<ul style="list-style-type: none"> • Use casting tape to attach EVA to bottom of the total contact cast • Make sure the EVA is firmly in place and attached as the sole of the total contact cast. 	
<p>7. Continue fitting</p>	<ul style="list-style-type: none"> • Check fit while standing • Advise and fit footwear on other foot • Provide wheelchair. 	