

Ankle-Foot Orthoses (AFO's)



'Melbourne's most experienced Paediatric Orthotists'







Ankle Foot Orthoses (AFO's)

AFOs are used for a variety of purposes, including:

- assisting stability
- the prevention of deformity
- helping control walking patterns
- protecting recent surgery

AFO's are custom-made to each individual's requirements.

How are AFO's made?

We are confident that we can fit most people with a comfortable and functional AFO. We have refined our techniques over many years. Here is a basic description of how AFO's are made.

The first step is to take a plaster cast of the leg and foot. A plaster bandage is wrapped around the leg and moulded into the correct position. The casting procedure only takes a few minutes.







'Melbourne's most experienced Paediatric Orthotists'











A model of the leg and foot is made from the cast, carefully sculpted, and prepared for moulding.

Molten plastic is vacuum formed over the cast and allowed to cool. The plastic is cut off the cast, and finished using specialist equipment. The design, fabrication and finishing process takes approximately 8-12 hours for each individual AFO.

Orthokids AFO's are designed, developed, manufactured and tested in Surrey Hills, Melbourne.

Some local Orthotic providers outsource product manufacturing to other countries. We believe this may result in a substandard product for your child.

Wear Time

The amount of time that AFO's need to be used over a 24 hour period will vary from person to person depending on their condition, age, activity level and the goals of the orthotic therapy. Some AFOs are used full-time day and night, whilst others may only be required for specific activities. The amount of time using AFO's will be determined by your prescribing doctor or therapist.

'Melbourne's most experienced Paediatric Orthotists'





Putting an AFO on

An AFO is designed to hold the foot and ankle in a certain position, which may not be the same as the resting position of the limb. Most AFO's are designed to hold the ankle at ~ 90 degrees.

- 1. Place a sock on the leg this will make the AFO more comfortable for your child. Long socks which fold over the top of the AFO are ideal. We have AFO socks available for purchase at our clinics.
- 2. Position or stretch the foot and ankle into the correct position ~ \(\frac{1}{90^\circ} \) prior to putting the AFO on. This technique is much easier than just trying to force the AFO on.





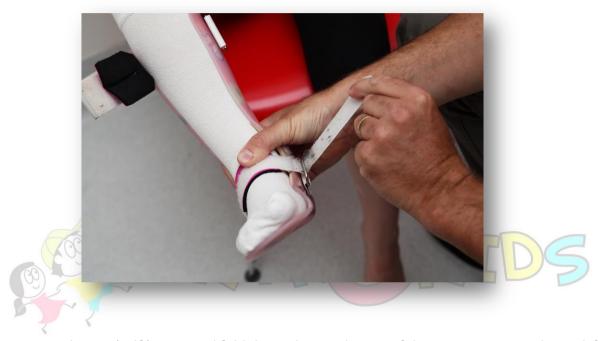
'Melbourne's most experienced Paediatric Orthotists'







3. The heel must be positioned right down inside the AFO and the ankle strap secured **firmly**. If not, the heel will lift inside the AFO and may rub. It is normal for redness to appear over the top of the foot from the ankle strap.



4. Secure the top (calf) strap and fold the sock over the top of the AFO to prevent the sock from slipping down Bracing and Orthotic Specialists



'Melbourne's most experienced Paediatric Orthotists'







Checking for problems

The fit of any AFO should be intimate with the skin but not so tight as to cause discomfort or pressure areas.

Feet, ankles and legs should be checked regularly to ensure that no blisters or sores are forming. Pink areas that disappear within an hour on fleshy parts of the limb are OK, however uncomfortable red spots on bony areas must be checked by your Orthotist. It is relatively easy for the Orthotist to make adjustments for growth or any uncomfortable spots on the AFO.

AFO Socks

Always wear socks with AFO's. A long cotton pair that can be rolled over the top edge of the AFO's are recommended. In hotter weather it may be necessary to change the socks during the day. Socks should be wrinkle free and have a smooth texture to prevent any undue pressure.

We have Australian Made AFO socks available for purchase from Surrey Hills or North Melbourne. We can also mail them out on request.



'Melbourne's most experienced Paediatric Orthotists'







Wearing Shoes with AFO's

At Orthokids we recommend that shoes are used with AFOs in most circumstances. Shoes provide safety from slipping and durability for the AFO. We recognise, however, that shoes are hard to fit over AFOs, especially if the foot is wide or short.

Here are some guidelines that have proved useful for AFO shoes:

- 1. Find an appropriate style of shoe that has the largest amount of room in the forefoot (front) area. The most appropriate are not necessarily the most expensive. 'Skater style' shoes are usually the easiest to get over AFOs as they open up right down to the base of the toes. Runners/casuals that are deep around the forefoot are usually also very suitable for AFOs.
- 2. It is often easier to look for shoes that fit the AFO on its own, and then fit the AFO and shoe to your child. Take the AFO with you so you can concentrate on fitting the brace into the shoe.
- 3. Use a fairly aggressive push to get the brace down into the end of the shoe. If the brace is slipping into the shoe easily, with no significant effort, the shoe is probably too large. Try to find the smallest shoe that can accommodate the AFO. This extra bit of work usually means the shoe will be only slightly larger (longer) than normal.
- 4. Make sure the shoe has a standard heel height to it, i.e. about 5mm higher at the heel than the sole. Avoid higher heel shoes as they tip the angle of the AFO too far forward. We make AFOs with a standard heel height in mind. If you are unsure, go for a lower heel rather than a higher one.
- 5. Remember, new shoes often have a padded insole that is glued or placed in the bottom of the shoe that can be removed after purchase, making more room in the shoe.
- 6. It is important to remember that the AFO and the shoe together are helping to control the position of your child's foot, knee and hip in walking. In many cases, however, where the AFO is not used in walking, the shoe is really just a foot covering and any style may be used, as it will not change the function of the AFO.

'Melbourne's most experienced Paediatric Orthotists'





Extra Depth AFO Shoes

If you are having difficulty finding shoes to fit your child, we have Extra Depth AFO Shoes specifically designed for wear with AFO's. If you are eligible for SWEP funding, we may be able to apply for funding for these specialty shoes. Have a chat with your Orthotist about footwear options at Orthokids.



First Time Wearers

AFO's generally take some getting used to and therefore you should gradually build up the time they are worn, unless they are prescribed after surgery in which case they are to be worn to the Doctor's instructions.

Begin slowly, for example:

Day 1: 1 hour,

Day 2: increase to 2 hour,

Day 3: increase to 3 hours, and so on

Experienced users of AFOs will probably be able to swap over to a new set without much adjustment time.

'Melbourne's most experienced Paediatric Orthotists'







Reviews and Replacement

As your child grows, the AFO(s) will require adjusting and eventually need to be replaced. If your child suddenly starts having problems with discomfort, callousing or pressure areas, then you should contact Orthokids immediately. Depending on a child's growth rate, AFO's should last approximately 9-18 months. It is important to examine your child's skin regularly. If the skin is sore or irritated remove the AFO(s) and contact Orthokids.

The length of the AFO also determines how much time is left before a new AFO is needed. For AFOs with a footplate that comes past the toes, a new AFO will be needed soon after the toes reach the end of the AFO. It is generally not uncomfortable if the toes have grown a little way over the edge of the AFO. If the AFO only reaches halfway up the calf, it needs a replacement.

Funding

If your child has a permanent or long term disability, Government Funding may cover the cost of AFO's.

The State-wide Equipment Program (SWEP) is a State Government funded organisation which oversees a number of different 'assistive technology' programs.

To be eligible for funding towards your Orthotic Treatment, you must:

- have a diagnosis of a permanent/long term disability 11th otic Specialists
- be a Victorian Resident
- live in the community

Important Points to Remember about funding:

Your application must be approved before your brace / orthosis is fitted.

SWEP Funding is not retrospective. i.e. SWEP will not reimburse patients for any orthoses already fitted and paid for. The approval process is under SWEP's control and may take between 3-6 months. Keep this in mind as your child grows out of their AFO's.

A new application (prescription form completed by Orthokids) must be submitted every time new orthoses are required.

'Melbourne's most experienced Paediatric Orthotists'







Keeping AFOs clean

To prevent any irritating skin problems it is important to keep AFO's clean. AFO's should be cleaned regularly with a cloth and warm soapy water or anti-bacterial wipes, while carefully trying not to wet the straps. Simply use a towel to rub them dry.

If you have any queries or problems, please call our office immediately.



Children's Bracing and Orthotic Specialists

'Melbourne's most experienced Paediatric Orthotists'



