

Orthotic prescription guideline

The best Orthotic treatment outcome is a combination of effective prescription from a foot care professional and superior craftsmanship at the lab.

Correction methods

Modified root: Forefoot balanced with neutral arch contour and corrected calcaneal bisection.
Correction ranges from 0 to 12 degrees.

Inverted: Rear foot inverted to a high degree of correction with low arch fill and a flat lateral border. The desired angle of correction is multiplied by 3 and posted with balanced forefoot.

Wedge type: Lateral aspect of heel is built up with an angled platform to the desired angle of correction. 2 mm of cuboid skive is accommodated in the shell to prevent slippage.

Calcaneal bisection correction

Calcaneal bisection angle inverted or everted with reference to vertical. For Inverted devices angle prescribed will be multiplied by 3.

Arch height and arch high point.

A medial arch expansion standard applied




Low arch : Maximum medial arch expansion results in a low arch height on orthotic.

High arch : Minimum medial arch expansion results in a high arched orthotic.

Other cast modifications

Lateral cast grind:	Lateral 5th ray area is elevated by grinding cast resulting in a higher lateral arch.
Cuboid notch:	Applied to the cuboid area to avoid slippage of foot.
Medial flare:	Accommodates medial bulge.
No plaster fill 2-4:	Minimum fill at metatarsal heads to form an intrinsic met-dome.
Plantar fascia:	Accommodation groove made on shell. The groove will decrease flexibility of shell.
Kirby skive:	A 15 degree flat grind on plantar medial heel of cast to form intrinsic medial wedge. Prescribed in 1 to 4 mm depth.
Styloid accommodation	Accommodative bulge /padding at styloid area.
Heel pitch:	A distal edge tilt applied to the orthotic to prevent rocking inside shoe. 4 mm default pitch is applied if not specified.

Shell options

Polypropylene:	Standard shell material available from 2mm to 6 mm in 0.1 mm steps. All polypropylene shells are CNC Machined .Grey in color.
EVA:	EVA is a Foam base material available in 3 different densities reflecting hardness. <ul style="list-style-type: none"> Red Eva -Low density (soft) Black Eva-Medium density Blue Eva- High density (Hard)
Carbon Reinforced	Silver dot carbon blanks inherit high strength and contour stability. 2.0 mm Flexible. 3.0mm Rigid.

Shell Grinding

- Standard shell grind : Distal end of shell below metatarsal heads and width from center of 1st metatarsal to lateral edge of 5th metatarsal.
- Narrow shell : Distal edge is ground to narrow center of 1st metatarsal to center of 5th metatarsal.
- First mtpj cut : A cut made to offload 1st mtpj to allow 1st ray plantar flexing.
- Low bulk grind : A clearance grind around heel of more than 45 degree angle with slight medial, lateral and heel plantar surfaces.
- Hook type shell : When shoe fit is a concern standard orthotic is cut to a hook style removing center of heel and lateral edge of orthotic from cuboid area to edge of 5th metatarsal.
- Dress style grind : The shell is ground with no heel cup and narrow at fore foot
- Lateral plantar grind : Lateral plantar surface of shell is ground thin to accommodate shallow footwear.
- Gait Plate on shell : An extension of shell at lateral or medial side of shell to allow in-toeing or out-toeing.
- Heel cup height : Standard heel cup height is 10 -14 mm according to size of foot. Specify required heel cup height.

Heel and forefoot posting.

- Heel post : An Eva addition to stabilize the heel inclination.
- Heel lift : Addition of extra height under heel post to achieve desired height of heel.
- Forefoot post : An eva addition on shell to invert/evert the forefoot post on shell.
- Heel aperture : Hole made at heel area to relieve pressure. Can fill with poron to give extra cushion.

Cushioning and Top covers

- Poron : Available in 1.5 mm or 3.0 mm used, as cushioning
- Cambrelle : Used as bottom cover for poron.
- Vinyl top : Black vinyl is standard top cover if not specified
- Luna soft : An Eva light weight top cover available in different colors.
- Vies top : A non-woven cover with moisture absorption and quick dry properties
- Neoprene : A porous rubbery material with nylon top. Has good stretch .