

# Orthotics

Run Flex

TOG Collection • Dress • Casual • Sport • Specialty





# PRESCRIPTION ORTHOTICS

Our highly skilled laboratory technicians take special care in fabricating prescription orthotics which meet the highest level of standards. Each patient's orthotics are designed from your professional prescription specifications. They are built to meet the individual biomechanical and lifestyle needs of your patient.

# OUR PLASTIC

Our functional orthotics are manufactured using 100% memory thermoplastic in 1mm, 2mm, 3mm and 3.5mm control options. This material provides enough rigidity to support the foot while simultaneously offering the foot the right amount of flexibility to properly absorb ground reaction forces. We are so confident in the durability of our thermoplastic orthotics, that they are guaranteed for a lifetime against breakage.



Last updated 2009



Designed to provide support and comfort for your patient's feet while in formal shoes.



# **Dress**Flex

Shoe Selection: Slip-on or narrow cut dress shoes

Control Options: 2mm semi-flexible 3mm semi-rigid 3.5mm rigid

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- Patient Selection:
  Patients who require mild to moderate biomechanical control in their narrow dress shoes.
  Designed primarily for women.
- Standard Cover:3/4 Length A 1mm grey naugahyde topcover.Sulcus or Full Length A 1mm grey naugahyde<br/>topcover with a vinyl bottom cover.



	Shoe Selection:	High heeled shoes or dance shoes
e e e e e e e e e e e e e e e e e e e	Control Options:	2mm semi-flexible 3mm semi-rigid 3.5mm rigid
Fashion Flex	Patient Selection:	<ul> <li>Patients who require mild to moderate biomechanical control in their high heel or dance shoes.</li> </ul>
	Standard Cover:	Full Length – A 1mm black naugahyde topcover with a bottom vinyl sandwich.

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# Casual Orthotics

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Designed for patients who require comfort and support for work and on weekends.

Cupor		and support for work and on weekends.
SuperFlex	Shoe Selection:	A variety of shoes
	Control Options:	2mm semi-flexible 3mm semi-rigid 3.5mm rigid
The Ortholic Group	Patient Selection:	<ul><li>Those who require one pair of orthotics that can be worn in a variety of shoes.</li><li>Offers patients moderate to maximum biomechanical control.</li></ul>
	Standard Cover:	3/4 Length – A black 1mm naugahyde topcover. Sulcus or Full Length – A black 2mm starsuede topcover.
	Shoe Selection:	Young children's sport and casual shoes
e de la celaria	Control Options:	2mm semi-flexible 3mm semi-rigid
Kida B	Patient Selection:	<ul><li>Young children (under age 6 or less than 60lbs).</li><li>Moderate to maximum biomechanical control.</li></ul>
IdsFlex	Standard Cover:	3/4 Length – A black 1mm naugahyde topcover. Full Length – A black 2mm starsuede topcover.
	Special Features:	Deep heel cup to accommodate the larger fat pad found on the heel of young children.
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The Orthotic Group



# Casual Orthotics

# CushionFlex

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CushionFlex @

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Shoe Selection:	Casual lace up and walking shoes
Control Option:	1mm flexible
Patient Selection:	<ul> <li>Mild to moderate biomechanical control with superior shock absorption.</li> <li>For feet that can afford to sacrifice some correction for increased comfort and cushioning (<i>i.e. geriatric patients, arthritic patients</i>).</li> </ul>
Standard Cover:	Sulcus or Full Length – A blue 3mm starsuede topcover.
Special Features:	Soft poron arch fill, rubber non-slip heel cap.



d	S	port	The Orthotic Group
1	Sport-lex	orthotics	Built for your patients with the goal of enhancing their performance.
Shoe Selection:	Athletic shoes		
Control Options:	2mm semi-flexible 3mm semi-rigid 3.5mm rigid		Court Flex //
Patient Selection:	<ul> <li>Athletes and other active patients who require moderate to maximum biomechanical control.</li> <li>Designed to prevent sport related injuries by protecting against pressure and impact shock.</li> </ul>		
Standard Cover:	Sulcus and Full Length — A blue 3mm ETC™ topcover.	CourtFlex The Orthotic Group	
Shoe Selection:	Golf shoes		
Control Options:	2mm semi-flexible 3mm semi-rigid 3.5mm rigid		
Patient Selection:	Golfers who require comfort and support while walking the golf con	Shoe Selection:	Court shoes
Standard Cover:	Sulcus and Full Length – A green 3mm ETC™ topcover.	Control Options:	2mm semi-flexible 3mm semi-rigid 3.5mm rigid
	Const R	Patient Selection	• Specially engineered for the high performance court player.
Safe	EAGLE	Standard Cover:	Sulcus and Full Length – Black 2mm ETC™ topcover with a vinyl bottom cover.
Fac		Special Features	: Extrinsic rearfoot flexpost (Lunalite <sup>™</sup> post with 2mm Lunasoft <sup>™</sup> foam heel lift). Designed to take pressure off the Achilles Tendon, promote greater ankle dorsiflexion and to increase shock absorption.
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# Sport Orthotics



Runflex (3



	Shoe Selection:	Soccer shoes
	Control Options:	2mm semi-flexible 3mm semi-rigid 3.5mm rigid
	Patient Selection:	<ul> <li>Soccer players who require moderate to maximum biomechanical control.</li> <li>Designed to prevent sport related injuries by protecting against pressure and impact shock.</li> </ul>
	Standard Cover:	Sulcus and Full Length – A marbled black/white 2mm Lunasoft™ topcover with a vinyl sandwich.
	Shoe Selection:	Running shoes
	Control Options:	2mm semi-flexible 3mm semi-rigid 3.5mm rigid
	Patient Selection:	Specially engineered for the high performance runner.
April 9	Standard Cover:	Full Length – A blue 3mm ETC™ topcover with a vinyl bottom cover.
	Special Features:	Extrinsic rearfoot flexpost (Lunalite™ post with 3mm Lunasoft™ foam heel lift). Designed to take pressure off the Achilles Tendon, promote greater ankle dorsiflexion and to increase shock absorption.
Run	Flex	

Shoe Selection: Ski boots or skates

Control Options: 2mm semi-flexible 3mm semi-rigid

Patient Selection: • This sport enhancing orthotic has been specially designed for narrow cut ski boots or skates.

3.5mm rigid

• A photocopy or tracing of the insole should accompany the prescription order form to the lab to ensure a proper fit.

SkiFlex kateFlex

Standard Cover: SkateFlex – Full Length - A black 3mm Lunasoft™ topcover with a vinyl sandwich. SkiFlex – Full Length - A red 3mm Lunasoft™ topcover with a vinyl sandwich.

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# Specialty Orthotics

Shoe Selection:

**Control Options:** 

Patient Selection:

Standard Cover:

**Special Features:** 



Designed to provide comfort and support for patients with special requirements.

• Flexible flat feet that require maximum biomechanical correction.

3/4 Length – A 1mm black naugahyde topcover.

High, hard medial and lateral flanges and deep heel cups.

The Orthotic Group	
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Shoe Selection:	Sensible casual lace up walking shoes
Control Option:	Accommodative/flexible
Patient Selection:	<ul> <li>Diabetic patients with sensitive feet who require an accommodative device.</li> <li>Specifically designed to relieve high pressure areas and prevent the formation of ulcers on the diabetic foot.</li> </ul>
Standard Cover:	Sulcus or Full Length - 3mm beige Lunairmed™ laminated to 3mm blue quick memory foam.
Special Features:	<ul> <li>A foam based orthotic made with a combination of firm 58 durometer Lunalite<sup>™</sup> as the bottom layer, topped with a layer of soft compressible slow return 18 durometer Lunairmed<sup>™</sup>.</li> <li>The dual density topcover is designed to remain resilient, while dispersing pressures evenly.</li> <li>Special composition allows the orthotic to form to the contours of the foot during</li> </ul>
2	wear.

Children's running shoes

1mm semi-rigid 2mm rigid



Shoe Selection:

**Control Options:** 

Standard Cover:

**Special Features:** 

# Specialty Orthotics Chlidren's flexible running shoes



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Shoe Selection: Safety shoes and boots

2mm semi-flexible 3mm semi-rigid

3.5mm rigid

**Control Options:** 2mm semi-flexible 3mm semi-rigid 3.5mm rigid

Patient Selection: • Specially engineered for the patient who is on their feet all day in a rugged environment and wants the ultimate in comfort, shock absorption, stability, support and durability.

Patient Selection: • Patients under the age of 8 that have excessive adduction or abduction of the foot during active gait.

3/4 Length – A 1mm black naugahyde topcover.

to induce out toe. In toe is selected to induce in toe.

To induce out toe, the plastic shell is shaped so the plastic is distal to the 4th and 5th metatarsal heads and proximal to the 1st, 2nd and 3rd metatarsal heads. To induce in toe, the plastic shell is shaped so the plastic is distal to the 1st, 2nd, 3rd metatarsal heads and proximal to the 4th and 5th metatarsal heads. Out toe is selected

Standard Cover: Sulcus and Full Length – A black 2mm ETC<sup>™</sup> topcover.

Special Features: 2mm forefoot sandwich, full heel cushion.





All TOG orthotics come with a topcover specifically selected to enhance performance and prolong the life of the orthotic.

Naugahyde: A thin vinyl like topcover, designed to take up minimal space in the shoe.
 *1mm thick black standard on:* SuperFlex (3/4 Length), FashionFlex (Full Length with a vinyl sandwich) and KidsFlex (3/4 Length), UCBL, gaitplate.
 *1mm thick grey standard on:* DressFlex (3/4 Length, Sulcus Length and Full Length) with a vinyl bottom cover.

2) Starsuede: A comfortable suede like cloth that is injected with a fungicide and backed with quick return foam for shock absorption.
 2mm thick black is standard on: SuperFlex (Sulcus and Full Length) and KidsFlex (Full Length).
 3mm thick blue is standard on: CushionFlex (Sulcus and Full Length).

3) ETC<sup>™</sup>: A cushioned topcover designed for maximum shock absorption. This cover is composed of a thin ETC<sup>™</sup> low friction top backed with durable quick memory foam and injected with a fresh scent, as well as a fungicide. The properties of this cover allow for reduced heat and moisture within the shoe.
2mm thick black standard on: CourtFlex, SafetyFlex (Full Length).
3mm thick blue standard on: SportFlex (Sulcus and Full Length) and RunFlex (Full Length) with a vinyl bottom cover.
3mm thick green standard on: EagleFlex (Sulcus and Full Length).

4) Lunasoft™: A durable topcover ideal for sport activities. This material is a closed cell foam that is hypo-allergenic, non-carcinogenic, skin friendly and washable (with mild soap and water).
 3mm thick red standard on: SkiFlex (Sulcus and Full Length) with a vinyl bottom cover.
 3mm thick black standard on: SkateFlex (Sulcus and Full Length) with a vinyl bottom cover.

5) Lunairmed<sup>™</sup>: An extra soft topcover, suitable for patients with sensitive feet. Specifically designed to conform to the foot and provide surface relief for those suffering with diabetes or rheumatism. This material is hypo-allergenic, non-carcinogenic, skin friendly and washable (with mild soap and water).

3mm thick standard on: DiabeticFlex (Sulcus Length and Full Length) with a vinyl bottom cover.



#### Other Topcover Options

Suede Leather: Available at an additional \$10 charge. This topcover is durable and 1.5mm thick.

**Neoprene**: This cover is 4mm thick and offers excellent shock absorption. A perfect selection for orthotics that are worn in shoes exposed to wet environments.

#### PERSONALIZED TOPCOVERS

Our personalized topcover program is a complimentary service for all of our TOG partners. This provides an excellent tool for marketing the orthotic component of your business. Your patient's orthotics are available to order with your own clinic name and logo printed on the topcover. It is like having your business card in your patient's shoes!



Our technicians are highly skilled to ensure that each addition and modification made to the orthotic is constructed exactly to your specifications. All of our additions are included at *no extra charge at the time of initial order.* 

#### **Metatarsal Pad:**

A 6mm thick domed shape poron pad designed to lift and spread the metatarsals, recreating the transverse arch.

For Use: An excellent addition for treating forefoot/transverse arch problems such as: dropped metatarsals, metatarsalgia, hallux valgus, interdigital neuroma, interdigital bursitis, hammer toes, excessive callousing and a reduced transverse arch.



*Lab Recommendations:* We recommend that metatarsal pads be used bilaterally. The size of the metatarsal pad is determined by our technicians. This addition is usually placed centrally at the distal edge of the orthotic shell, but can be placed slightly more distal.

Metatarsal Pad Options: Distal Placement Low Profile: 3mm thick

Contraindication(s): Rigid or immobile forefoot; tarsal coalitions.

#### **Full Heel Cushion:**

A 3mm foam pad covering the entire heel cup area.



For Use: Specifically designed for patients with plantar fasciitis, a non-centrally located heel spur, loss of fat pad or those who require additional rearfoot shock absorption.

*Lab Recommendations:* Should only be used bilaterally, to avoid creating a limb length difference. This modification should only be placed in shoes that will accommodate extra bulk in the rearfoot. The full heel cushion should not be used in conjunction with a heel spur pad.

Contraindication(s): Shallow heel counter in shoe.

a heel spur pad.

#### Heel Spur Pad:

A horseshoe shaped 3mm poron pad, placed around the periphery of the heel cup area. Designed to lift the calcaneus off the orthotic and relieve pressure at the site of a centrally located spur.

For Use: Specifically used for treating patients with centrally located heel spurs.

*Lab Recommendations:* A heel spur pad should only be used for radiographically confirmed centrally located heel spurs. The heel spur pad should always be used bilaterally to avoid creating a limb length difference. The heel spur pad should not be used in conjunction with a full heel cushion.

For Use: Designed to accommodate heel spurs in dress shoes where a spur pad may cause fitting problems.

Contraindication(s): A non-centrally located heel spur; shallow heel counter in shoe.

#### Hole in Heel:



Hole in Heel Option: Foam Disk: A 3mm thick foam disk placed in hole in heel

A 1 1/4" hole cut through the orthotic shell under the calcaneus.

**Contraindication(s):** A non-centrally located heel spur; shallow heel counter in shoe when used with a full heel cushion or heel spur pad or extrinsic rearfoot post.

Lab Recommendations: Works optimally in conjunction with an extrinsic rearfoot post and either a full heel cushion or

**Reverse Morton's** 



A 3mm foam pad placed under the 2-5 metatarsal-phalangeal joints to the sulcus. This is designed to take pressure off the 1st metatarsal-phalangeal joint and slightly dorsiflex the 1st.

For Use: Designed for patients with a plantarflexed first ray, hallux limitis, sesamoiditis, and severe forefoot valgus deformity.

*Lab Recommendations:* Only available with a sulcus or full length orthotic. Reverse Morton's Extension should usually be used in conjunction with a metatarsal pad.

Contraindication(s): Forefoot Varus; footwear with a narrow toe box.

#### Morton's Extension:



A 3mm foam pad placed under the 1st metatarsal-phalangeal joint, from the distal end of the shell to the distal phalangeal joint. Designed to raise and slightly immobilize the great toe.

For Use: Designed for patients with a dorsiflexed first ray, turf toe, hallux rigidus or patients with a short 1st metatarsal (short 1st metatarsals are very rare and are not to be confused with long 2nd metatarsals).

*Lab Recommendations:* Only available with a full length orthotic. Morton's Extension should usually be used in conjunction with a metatarsal pad.

Contraindication(s): Footwear with a narrow toe box.

**1st Metatarsal Cut-Out:** A cutout to the orthotic shell under the 1st metatarsal-phalangeal joint at the distal-medial aspect of the orthotic shell. This is designed to slightly plantarflex the 1st ray and pronate the forefoot.



**For Use:** Most commonly used with functional hallux limitus and supinators. A 1st metatarsal cut-out drops the first metatarsal down (into plantarflexion) and forces the forefoot into pronation, achieving a better toe-off and conversely a better heel strike.

*Lab Recommendations:* Under no circumstances should a 1st metatarsal cut out be used on a patient with a pathological 1st toe, as this modification will act to aggravate any 1st toe pathology.

Contraindication(s): Osteoarthritis in the first metatarsal, forefoot varus.

#### **Reinforced Arch:**

A 3/8" (10mm) poron arch fill laminated to the plantar surface of the orthotic. This is designed to add rigidity to the orthotic.

For Use: Used most commonly when a patient is more than 280 lbs and needs more biomechanical support than our most rigid (3.5mm) orthotic can offer.

*Lab Recommendations:* A reinforced arch should be done bilaterally, and should not be used for patients less than 240 lbs. Should only ever be used with shoes that can accommodate a bulkier device.

Contraindication(s): Narrow or tight fitting footwear; cavus/rigid feet.

#### Heel Raise:

An extrinsic heel lift added to the underside of the orthotic. The lift is manufactured using extra firm posting material.

For Use: A unilateral lift is used for patients who have an anatomical leg length discrepancy. A small heel lift can also



*Lab Recommendations:* For an anatomical leg length discrepancy, please indicate which leg requires a lift. The maximum lift height is 10mm, although most shoes will not accommodate that high a measurement. Always extrinsically post the non-lifted orthotic unless space is an issue. First time heel lift users should never be corrected more than 50% of their total leg length discrepancy.

When used bilaterally for limited ankle dorsi-flexion (i.e. Equinis) or Achilles tendonitis a 3mm lift is recommended.

Contraindication(s): Functional leg length discrepancy; older patients who have never worn a heel lift.

be used bilaterally to treat patients with limited ankle dorsi flexion (i.e. Equinis) or Achilles tendonitis.

**Rearfoot Extrinsic Posts:** Extra firm posting material added to the plantar surface of the orthotic heel to further stabilize and invert the foot.

For Use: Used for moderate to severe over pronators, unstable feet, and people who weigh more than 240lbs.

Lab Recommendations: Rearfoot extrinsic posts add bulk to an orthotic and should always be used with shoes that can accommodate a slightly bulkier device.



#### **Options:**

Neutral: To add stability particularly for patients with rigid/cavus feet. Varus: To correct for moderate to severe over pronators.

Contraindication(s): Tight fitting footwear.

Vinyl Sandwich:

A 1mm vinyl cover placed under the forefoot of sulcus or full length orthotics.

For Use: To add rigidity to suclus or full length topcovers.

Lab Recommendations: Specifically to be used for running or court shoes where reinforcement is required.

Contraindication(s): Footwear with a narrow toe box.

Hard Medial Flange:	Medial border of the orthotic is extended upward to provide additional containment around the medial longitudinal arch (MLA).
	For Use: For severely pronated, pes planus, everted foot types, genu valgum; stabilizes the subtalar and midtarsal joints.
	Lab Recommendations: Suggested to be used in conjunction with an extrinsic rearfoot post in wider fitting shoes.
	Contraindication(s): Dress or narrow fitting shoes.
Hard Lateral Flange:	Lateral border of the orthotic is extended vertically upward to provide additional containment around the lateral longitudinal arch (LLA).
	For Use: For severely supinated, pes cavus, inverted foot types, genu varum; to increase stability and help prevent inversion sprains.
	Lab Recommendations: Suggested in conjunction with an extrinsic rearfoot post in wider fitting shoes.
	Contraindication(s): Dress or narrow fitting shoes.
Medial Rearfoot Skive:	Contraindication(s): Dress or narrow fitting shoes. An intrinsic grind at 15° into the medial aspect of the positive cast to a depth of 2mm, 4mm or 6mm.
Medial Rearfoot Skive:	
Medial Rearfoot Skive:	An intrinsic grind at 15° into the medial aspect of the positive cast to a depth of 2mm, 4mm or 6mm.
Medial Rearfoot Skive:	An intrinsic grind at 15° into the medial aspect of the positive cast to a depth of 2mm, 4mm or 6mm. For Use: To intrinsically correct for excessive over pronation.
Medial Rearfoot Skive:	An intrinsic grind at 15° into the medial aspect of the positive cast to a depth of 2mm, 4mm or 6mm. <b>For Use:</b> To intrinsically correct for excessive over pronation. <i>Lab Recommendations:</i> Must be used in conjunction with an extrinsic rearfoot post and a deep heel cup.
	An intrinsic grind at 15° into the medial aspect of the positive cast to a depth of 2mm, 4mm or 6mm. <b>For Use:</b> To intrinsically correct for excessive over pronation. <i>Lab Recommendations:</i> Must be used in conjunction with an extrinsic rearfoot post and a deep heel cup. <b>Contraindication(s):</b> Dress or narrow fitting shoes.
	An intrinsic grind at 15° into the medial aspect of the positive cast to a depth of 2mm, 4mm or 6mm. <b>For Use:</b> To intrinsically correct for excessive over pronation. <b>Lab Recommendations:</b> Must be used in conjunction with an extrinsic rearfoot post and a deep heel cup. <b>Contraindication(s):</b> Dress or narrow fitting shoes. An intrinsic grind at 15° into the lateral aspect of the positive cast to a depth of 2mm, 4mm or 6mm.

#### Extra Foam Padding Under Topcover:



An additional layer of foam added to the topcover. The foam layer runs the entire distance from the heel of the orthotic to the distal end of the topcover.

For Use: For patients who require additional shock absorption and/or cushioning.

Lab Recommendations: Should only be used for sulcus and full length orthotics.

Contraindication(s): Dress or narrow fitting shoes with low heel counters.

**Options:** 1/16" Black foam 1/8" Blue foam

#### **Extrinsic Forefoot Posts:**



: Extra firm posting material added to distal portion of the plantar surface of the orthotic to further stabilize, invert or evert the forefoot.

For Use: Non-weight bearing forefoot varus or valgus deformity; wholefoot pronators.

*Lab Recommendations:* An extrinsic forefoot varus post is strongly recommended for severe non-weight bearing forefoot varus or valgus deformity. Where space is permitted, sulcus length is highly recommended.

Contraindication(s): Tight fitting shoes; forefoot sulcus post can only be ordered on a sulcus or full length orthotic.

#### Options:

Varus or Valgus Sulcus (option 3/4 post length orthotic)

#### Forefoot Pad to Sulcus:

A soft 3mm foam pad placed at the distal portion of orthotic to the sulcus.

For Use: Used for patients that require extra cushioning under the metatarsals; loss of fat pad under metatarsals.

Lab Recommendations: Should be used in conjunction with a metatarsal pad.

Contraindication(s): Footwear with a narrow toe box.

#### Sub-Metatarsal Accommodation:

For Use: To accommodate plantar warts, corns, severe callouses and dropped metatarsals.

A 3mm foam pad placed at the distal portion of orthotic which extends to the sulcus and is cut away under

the specified metatarsal head(s). This accommodation will offload the specified metatarsal(s) and balance

*Lab Recommendations:* When used in conjunction with metatarsal pads optimum results are achieved. To optimally place a sub-metatarsal accommodation, it is strongly advised to indicate the location on the plaster, slipper sock or foam cast with either lipstick or ink. The orthotic must be a sulcus or a full length orthotic.

Contraindication(s): Footwear with a tight fitting toe box.

**Options:** Left/1 2 3 4 5 Right/1 2 3 4 5

the forefoot.

Neuroma Pad: 1-2, 2-3, 3-4, 4-5



**Deep Heel Cup:** 

For Use: Specifically used to alleviate symptoms of interdigital neuroma, intermetatarsal bursitis.

A teardrop shaped pad placed at an interdigital space to spread the specified metatarsals.

*Lab Recommendations:* Metatarsal pads generally do an excellent job of relieving interdigital symptoms while also correcting the transverse arch. Only after metatarsal pads have been tried without success, do we recommend the usage of neuroma pads.

Contraindication(s): Can not be used with a 3/4 length orthotic.

A 16mm deep heel cup doubling the depth of our standard 8mm heel cup depth.

For Use: Offers greater stability for severe over pronators. Assists in gathering fatty tissue under the calcaneus.

Lab Recommendations: The deep heel cup is automatically used on our KidsFlex, UCBL and medial and lateral rearfoot skives. General practice suggests that the standard deep heel cup orthotic is sufficient in assisting to prevent over pronation at the calcaneus.

Contraindication(s): Shallow heel counters, tight fitting shoes.



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