

# Clinical Orthotic Prescription Manual

Materials • Modifications • Posting •  
Corrections



*Driving the orthotic revolution™*

# SHELL MODIFICATIONS

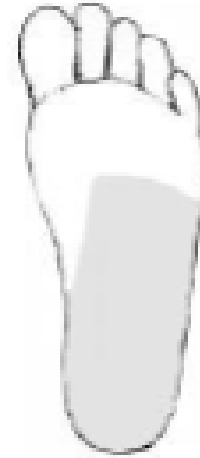


# Heel Cup Height

Shell Depth Description	Typical Usage	Lab Standard
Flat	Minimal-no heel cup. Ideal for high heel dress shoes	n/a
Shallow	Default option for dress orthotics.	< 12mm
Standard	Default option and most common	12-14mm
Deep	Increases control and accommodation	16-18mm
Extra Deep	Maximum depth and support	~20mm
Custom	Custom options- enter desired value in mm	Clinic discretion

# 1<sup>st</sup> Ray Cutout

- Used to increase plantar flexion of the first met shaft/mobility off the 1<sup>st</sup> ray and 1<sup>st</sup> MPJ
- Medial wedge cut out of the orthosis
- Indications:
  - Sesamoiditis
  - Plantarflexed 1<sup>st</sup> ray
  - 1<sup>st</sup> met head pain
  - Hallux Valgus (Bunions)
  - Functional Hallux Limitus (FHL)

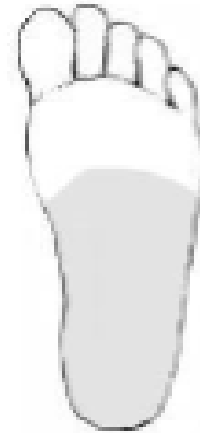


# 1<sup>st</sup> Met Cutout

<45° cutout of medial/distal end of shell  
under 1<sup>st</sup> MPJ

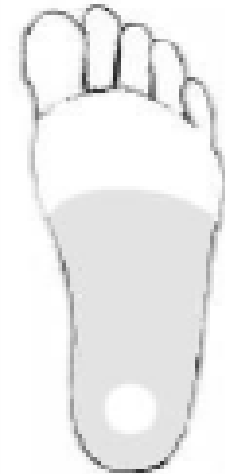
## Indications:

- Hallux Valgus (Bunions)
- FHL
- 1<sup>st</sup> met head pain



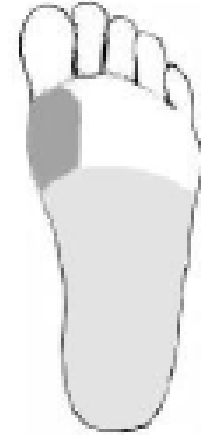
# Heel Hole

- **Standard 1" and 1.25" hole centrally located in heel cup – filled with poron plug**
- **Indications:**
  - **Heel spurs**
  - **Apply extra relief**
  - **Localized Plantar Fasciitis pain**
  - **Calcaneal relief due to weight and pressure**



# Rigid Morton's Extension

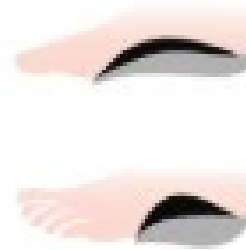
- An extension under the 1<sup>st</sup> MPJ to either immobilize the hallux
  - Rigid-extension ONLY out of a polypropylene shell
- Indications:
  - Hallux limitus/rigidus



# Medial/Lateral Flanges

## Shell vs Soft vs Cork

- A medial flange (shell) is an extension of the arch of the shell which projects upward with the apex at the area of the navicular tuberosity
- A lateral flange (shell) is an extension of the lateral shell which projects upwards on the lateral foot
- The purpose of the flange is to provide a more direct force at the medial or lateral-plantar aspect of the foot in order to offer more control
- For some patients, fitting a device with a flange in their shoes can become a problem due to the added bulk of the device in which case a soft flange may be applicable (made as an extension of topcover material)
- A third option is an additional piece of cork going vertically on the medial or lateral side using firm cork



# Gait Plates

- These are for adducted or abducted gait patterns in very young children as well as in adults if necessary
- Gait plates limit in-toeing or out-toeing gait caused by rotational deformities of the hip/lower limb
- Consist of both medial and lateral flanges and a deep heel cup as well as the gait plate (to induce in-toeing or out-toeing)

<u>Gait Pattern</u>	<u>Shell Extension</u>
Out-toed gait	Lateral extension
In-toed gait	Medial extension