

Clinical Orthotic Prescription Manual

Materials • Modifications • Posting •
Corrections



Driving the orthotic revolution™

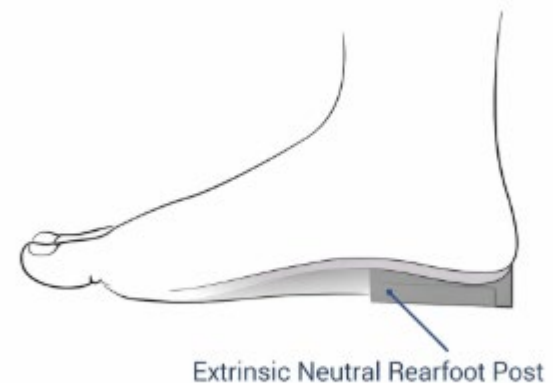
EXTRINSIC POSTING & INTRINSIC CORRECTIONS



Driving the orthotic revolution™

Neutral Posting

- Extrinsically added
- Hard EVA material added to the plantar side of the orthotic in the rearfoot
- Aids in neutral stabilization of orthotic & calcaneus
- **Indications:**
 - Unstable rearfoot
 - Mild to moderate flexible pronation
 - Tight achilles



Heel Lift

- **Hard EVA post bilaterally alongside with additional White EVA**
- **Adds a lift to one orthotic or bilaterally**
- **Maximum height of lift *recommended*: 10mm (1.0cm)**
- **Suggested to start with $\frac{1}{2}$ the value of the discrepancy (ex. 10mm LLD = 5mm lift)**
- **Indications:**
 - Leg Length Discrepancy (LLD)
 - Achilles Tendonitis



Varus/Valgus Posting



- Orthotics are routinely extrinsically posted to accommodate the varus or valgus rearfoot dispositions
- **Varus** posting helps with a **pronated** foot or eversion of the calcaneus
- **Valgus** posting helps with a **supinated** foot or inversion of the calcaneus
- Ultimate goal is to maintain a neutral gait cycle by controlling the hind foot

General Guidelines

Deformity	Typical Correction Range
Mild	2-3°
Moderate	4-6°
Severe (flexible)	6-8°
Rigid	Better to accommodate than correct



Medial & Lateral Wedge

<u>Feature</u>	<u>Description</u>
Definition	Continuation of a varus or valgus post that extends from the rearfoot to the end of the shell
Foot Segments Affected	Hindfoot, midfoot, and forefoot
Primary Function	Assists in controlling full pronation or supination throughout stance
Medial Full-Shell Wedge	Used to reduce excessive pronation 
Lateral Full-Shell Wedge	Used to reduce excessive supination 
Clinical Benefit	Provides continuous control rather than segment-specific correction
Best Use Case	When motion persists beyond heel strike into midstance and propulsion

Avoid or reconsider when:

- Deformity is isolated to rearfoot or forefoot only
- Patient is very sensitive to bulk or shoe fit
- Mild cases where posting alone is sufficient
- Rigid deformities that do not respond to ground reaction forces changes

Medial & Lateral Forefoot Post

- Forefoot pronation or supination can be further controlled with a forefoot post
- Forefoot posting is added extrinsically on the plantar aspect of the shell to position the orthotic in a varus (medial) or valgus (lateral) direction to effectively distribute ground-reactive forces
- Forefoot posting influences forefoot loading during midstance and propulsion

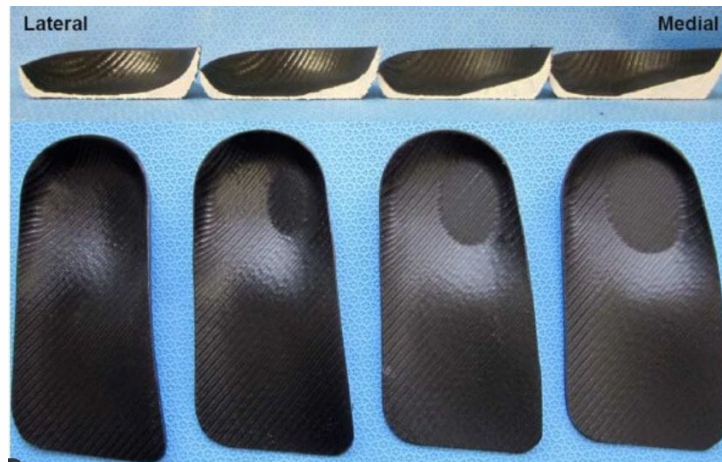
Cast Dressing/Plaster Fill

*Cast fill traditionally refers to **the amount of plaster added to the positive cast** to modify the plantar contour prior to fabrication

Feature	Minimum Cast Fill/Aggressive	Maximum Cast Fill/Passive
Definition	Minimal plaster added to the positive cast	Significant plaster added to the positive cast
Plantar Contour	Closely follows/increases foot anatomy	Softened plantar contour
Arch Height	Higher/more defined	Lower/more accommodative
Corrective Influence	Higher	Reduced
Primary Purpose	Maximize control and contact	Increase comfort and pressure relief
Best Suited For	Flexible, pronated feet	Rigid, cavus or sensitive feet
Common Patient Types	Athletic, younger patients	Geriatric, diabetic, neuropathic
Clinical Trade-off	Less forgiving	Less controlling

Heel Skives

- Cast modification at the plantar heel either medially or laterally placed
- Provides subtle correction without added bulk
- Used to adjust localized ground reaction force
- Influences rearfoot motion at heel strike



Heel Skives vs Extrinsic Posts

Rearfoot Posting

- Applied to plantar side of orthotic shell
- Provides broad rearfoot control
- Influences calcaneal motion through early stance
- Used when overall rearfoot motion or alignment needs correction

Heel Skives

- Cast modification at the plantar heel
- Alters localized ground reaction force
- Influences heel strike
- Used for subtle adjustment or refinement



Intrinsic Corrections

- **Intrinsic correction refers to correction built into the orthotic shell itself, achieved during cast modification or scan modelling, rather than added externally**

Rearfoot

Varus: built into medial heel->used for excessive pronation

Valgus: built into lateral heel -> used for excessive supination

Forefoot

Varus: built into medial forefoot->used for forefoot varus/late pronation

Valgus: built into lateral forefoot -> used for forefoot valgus/excessive supination

*** All orthotics are intrinsically corrected to neutral unless otherwise requested ***