

## ORTHOTIC DEVICE TYPES

### FUNCTIONAL

#### FM Functional

Rigid PRX Graphite™ for control. Good for plantar fasciitis and heel pain. Meta length top cover makes easy to switch between different shoe types.

#### FM Integrated

3/16" polypro shell with extrinsic heel post made from polypropylene. Very durable and controlling, but more bulky due to shell material thickness.

#### FM Support

Semi-rigid RX shell, standard sulcus length. Corex arch reinforcement for firmer support.

### ACCOMMODATIVE

#### Motion Soft

Semi-flexible RX shell with poron arch reinforcement. Standard full length neoprene top cover with 1/8" poron padding. Good for RA patients requiring a soft device with mild control.

#### Comfort Soft

Mid-durometer EVA shell. Comfortable and supportive device. Layers of EVA, Poron, and Neoprene create soft padding to ease discomfort.

### DRESS

#### Dress Elite

Semi-rigid RX shell. Narrow grind, 10mm heel cup for low volume shoe fit. Hole is filled with poron to provide cushioning. Good for dress flats with heels up to 1 inch. Sulcus length top covers for good toe box fit.

#### Dress High Heel

Semi-rigid RX shell. Narrow grind. No shell in heel, replaced with a 1/16" flexible korex heel seat. For women's high heel shoes. Suede bottom cover added to prevents squeaking.

### ATHLETIC

#### Glider

Semi-rigid shell for support and mild flexibility. 1/8" poron padding on the entire device provides good cushioning. Good for sports where tennis shoes are worn and also good for foot fatigue from being on your feet all day.

#### FM Sport

Semi-rigid PRX Graphite™ shell for support and mild flexibility. Athletic design. Breathable perforated Ucolite top cover. First ray cut out promotes motion in the first ray. Slim, low profile and highly durable.

#### FM Trainer

Rigid RX shell. Crepe runners wedge (3° varus extrinsic long post to sulcus). Good control for forefoot pronation. Made especially for runners to provide pronation control through gait cycle.

### DIABETIC

#### Diabetic Medium

High durometer thermocork shell. Pliable and yet firm support. Good for patients requiring in shell pockets such as charcot deformities and plantar ulcers.

#### Diabetic Soft

Mid-durometer EVA shell. Good for neuropathic patients requiring a soft device.

#### 3 Pair Diabetic

Semi-flexible shell for mild support. Designed for Medicare program.

\* All diabetic devices are standard full length plastazote/poron top covers with 1/16" EVA bottom covers.

### CHILDREN'S

#### UCBL

High medial and lateral flanges extending to the distal edge of the shell. 20mm deep heel cup for maximum control.

#### Whitman Roberts

High medial flange and lateral heel cup flange. 20mm deep heel cup. Good for pronation control. Less bulky than the UCBL device.

#### Gait Plates

Used to correct in-toe or out-toe gait. 20mm deep heel cup for control.

\* All children devices are standard no top covers.

### SPECIALTY DEVICES

#### DynaFlange

Engineered nylon shell with a DynaFlange heel attachment for dynamic energy return, reduced impact force, and postural efficiency. Poron padding and microsilver top cover for additional antimicrobial comfort.

#### Smart Basic

Rigid RX shell for firm support. Standard extrinsic rearfoot post and full length EVA top cover. Economic device, limited material options available.

#### PT Controller

Aggressive device designed for PTTD and flexible flat foot. 6° inverted heel in cast to provide varus control and subtalar support without adding motion to the device. Medial flanges to control midfoot. Pocket in shell available to accommodate prominent navicular. Lateral flange to the distal edge of the shell to prevent the foot supination. Slight lateral wedge to stabilize due to high varus correction.

\* All Devices are posted intrinsically in the forefoot to neutral unless otherwise requested.

\*Rearfoot is posted to vertical unless otherwise requested.

## SHELL MATERIAL

### PERFORMANCE RX™

#### Semi-Flex

Flexible shell similar to 2.0 subortholin. Best for accommodative devices.

#### Semi-Rigid

Medium control similar to 1/8" polypropylene.

#### Rigid

Rigid control. Similar to 3/16" polypropylene.

#### Ultra-Rigid + Carbon

Extremely rigid but still as thin as the most flexible device.

### PRX GRAPHITE™

#### Semi-Rigid

Rigidity between Performance RX™ semi-rigid and rigid. Good for heavier patients or bigger shoe sizes when some flexibility is needed.

#### Rigid

Standard shell of the Functional. Rigid control. Good for plantar fasciitis.

#### Ultra-Rigid

Extra firm control. Good for heavier patients.

\* The Performance RX™ and PRX Graphite™ are made by Forward Motion and are available at no extra cost. Much thinner than polypropylene for easier shoe fit.

### POLYPROPYLENE

#### 1/8"

Medium control, most common. Material offers support with some flex.

#### 3/16"

Rigid Control. Offers about twice the rigidity as 1/8" poly.

### OTHER

#### Cork

Does not offer functional control. Good for offloading wounds on plantar surface of foot.

## COVERING

### TOP COVER MATERIALS

#### EVA

Soft foam that is not slick. Great for grip and forms to foot.

#### Vinyl

Marine grade with anti-fungi additives. Long lasting and thin.

#### Neoprene

Neoprene foam with nylon fabric. Good cushioning.

#### Perforated Ucolite

Perforated polyethylene foam. Breathable, soft and durable.

#### Leather

Garment leather made from cow hide. Good for dress devices. Not recommended for sweaty feet, high activity patients, or wet environments.

#### Diabetic

Plastazote/poron laminate. Standard on Diabetic devices.

#### 3mm MicroSilver

Foam similar to neoprene with a silver infused fabric. Anti-microbial.

### TOP COVER LENGTH

#### Shell Only

Meta length. Standard on Functional.

#### Sulcus

Extension ends behind toes. Standard on most Accommodative and all Dress devices.

#### Full Length

Extension to end of toes.

## PORON PADDING

### PORON

#### What is Poron?

Poron is a premium offloading and padding material. It offers rebound with grip and durability.

### THICKNESS OPTIONS

1/8"

1/16"

### PADDING LENGTH

#### Forefoot Only

Padding from the distal edge of the shell to the end of extension.

#### Shell Only

Padding on shell only.

#### Entire Device

Padding from the heels to end of extension.

# Custom Orthotic Lab Cheat Sheet: ORTHOTIC BUILD

## CAST & GRIND

### ARCH HEIGHT

**Low**

Arch is lowered by 6mm.

**Medium**

Arch is lowered by 4mm. This is the lab standard.

**High**

Arch is lowered by 2mm.

**No Arch Fill**

Total contact. Arch is made to each foot.

### ORTHOTIC WIDTH

**Narrow**

Medial width is 3mm more narrow than bisection of the first meta head. Medial shell is ground 5mm more narrow in the medial arch and 3mm along the lateral side.

**Normal**

Medial width is to the bisection of the first meta head and lateral to the edge of the foot.

**Wide/Athletic Cut**

Medial width is set between the bisection of the first meta head and medial edge of the foot.

### HEEL CUP

**Shallow (10mm)**

Low heel height for good shoe fit in narrow shoes. Dress device standard.

**Regular (12mm)**

Standard heel depth for most devices.

**Deep (16mm)**

Deeper heel cup for more rearfoot control.

**Other**

Specify how deep you would like. 25mm max for RX, and 20mm max for PRX Graphite™.

\* All arch heights and grind widths are determined based on cast measurements.

## FLANGES

**Medial**

The shell extends up the medial side of the foot to just below the navicular. Good for pronation control and support.

**Medial - Mild**

Shell extends to medial side of the foot approximately 1cm. Good control with less bulk.

**Lateral**

Designed to support entire lateral aspect of foot from supination.

**Lateral - Mild**

Extends from the heel cup to proximal of the 5th metabase.

**Lateral - Full Distal**

Extends from heel cup to the distal edge of the shell.

**Lateral - Heel Cup**

Extends from heel cup to the distal of rearfoot post.

## POSTING

### FOREFOOT

**Extrinsic**

Forefoot is posted with crepe on the plantar surface of the shell to the amount of degrees that the cast measures or the amount specified by the doctor.

**Intrinsic**

Casts are corrected to neutral or to an amount specified by the doctor.

### VARUS / VALGUS

**L or R Varus/Valgus**

Added to intrinsic or extrinsic forefoot or rear foot post to help with correction.

### REAR FOOT

**Extrinsic**

Material added to the heel for stability and control. Devices standard with arch reinforcement the heel will be made from the same material.

**Modified Intrinsic**

Flat grind on heel. No extrinsic heel. Good for dress shoes or cleats.

**No Post**

No extrinsic or flat grind.

**Kirby Skive**

The cast is modified by grinding into the heel, usually on the medial side. Recommended posting for PTTD and flexible flat feet. Good STJ control without adding rocking motion to the shell.

**Heel Lift**

Millimeters added to an extrinsic rear foot post to elevate the heel.

**Pronation Skive**

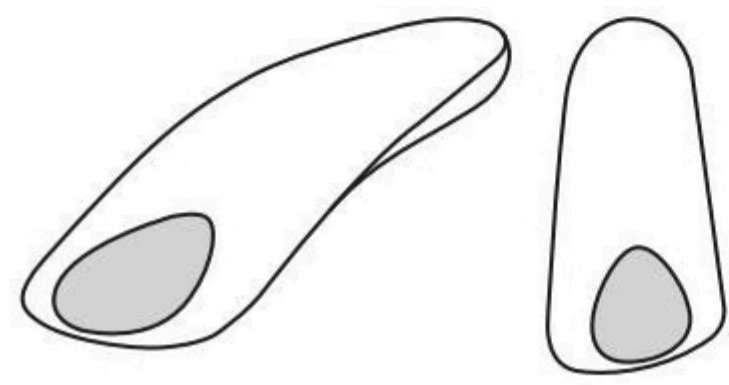
The extrinsic heel is ground on the medial side to allow pronation.

\* The standard for all Forward Motion devices is intrinsic forefoot post to neutral. Children devices are no post.

# Custom Orthotic Lab Cheat Sheet: ACCOMMODATIONS

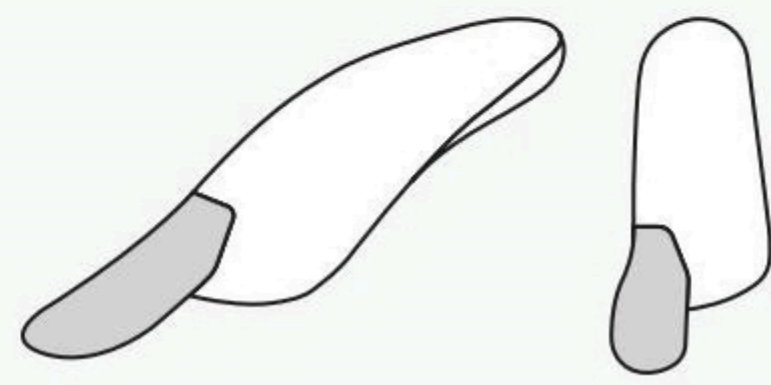
## ACCOMMODATIONS

### MET PAD



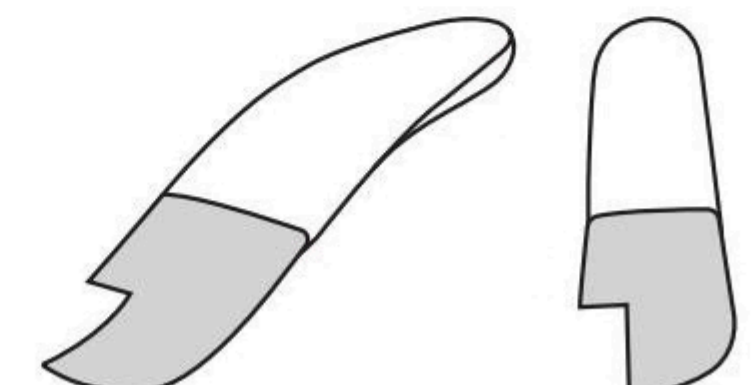
Made of poron - designed to be placed proximal of meta heads to offload peak pressure at ball of foot. Thicknesses: 3/16", 1/16", 1/18"

### MORTON'S EXTENSION



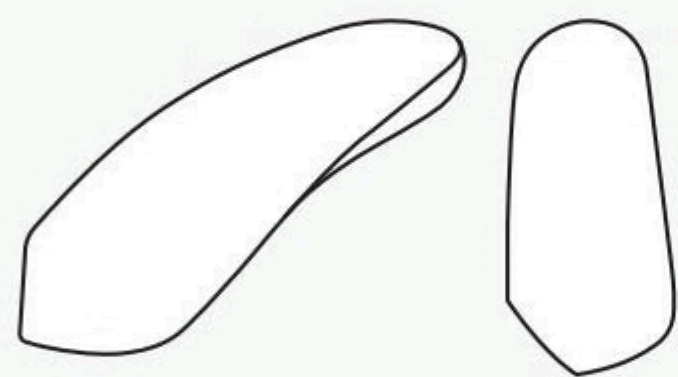
3mm cork build-up from distal end of shell to sulcus - only under 1st met to raise ground up to an unflexible 1st ray.

### REVERSE MORTON'S



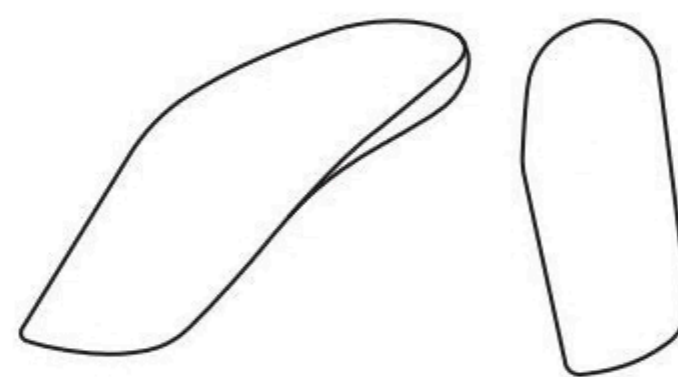
3mm cork build-up from distal end of shell under meta heads 2-5 to better help 1st ray to drop.

### 1ST RAY CUT OUT



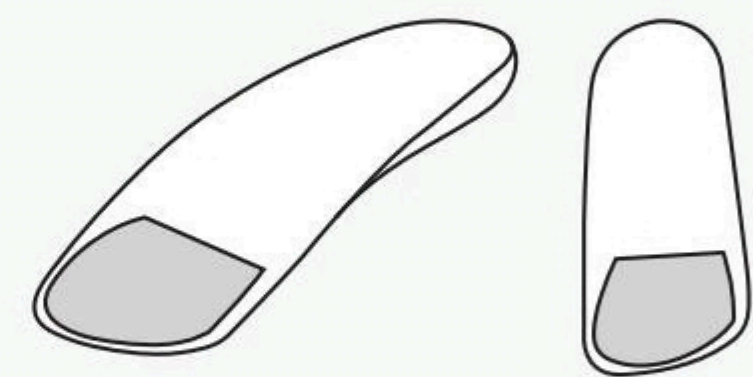
1" x 1" top medial corner of shell removed in order to allow 1st ray to drop.

### 1ST RAY CUNEIFORM



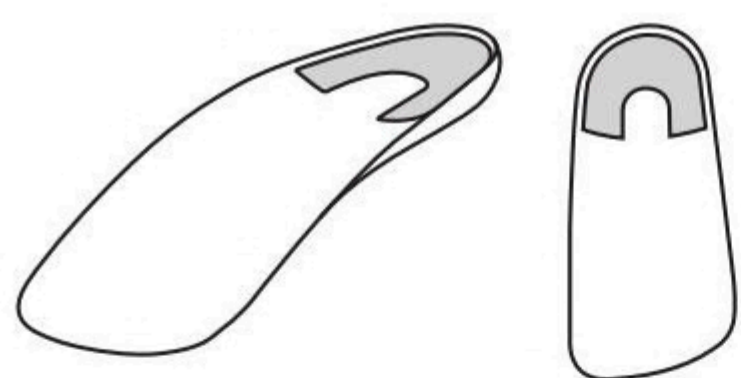
Same as 1st ray cut out but further proximal up the shell in order to allow further drop/flexion of 1st ray.

### MET BAR



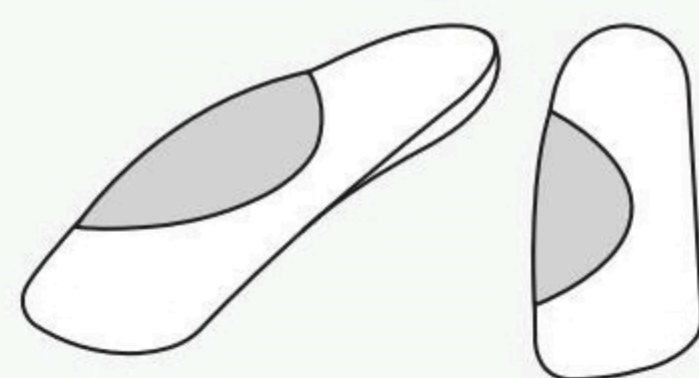
Same as met pads but with a larger medial-to-lateral surface area to more aggressively offload meta heads 1-5.

### HORSESHOE PAD



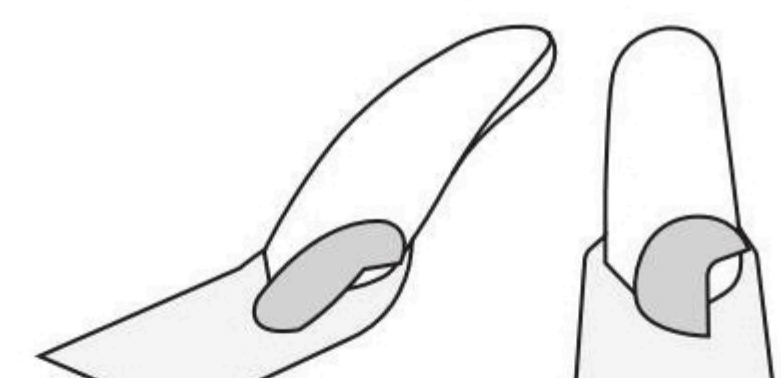
3mm poron added to heel region of shell. However, the central part of the pad is removed to allow accommodation for peak heel pressure.

### ARCH PAD



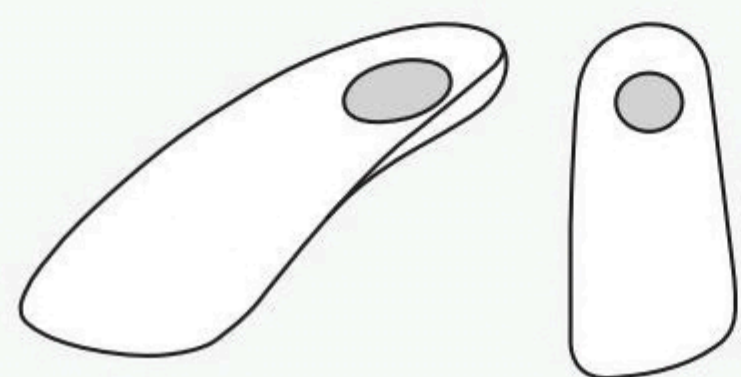
3mm poron pad added to top of shell in order to raise/pad the arch of the shell.

### DANCER PAD



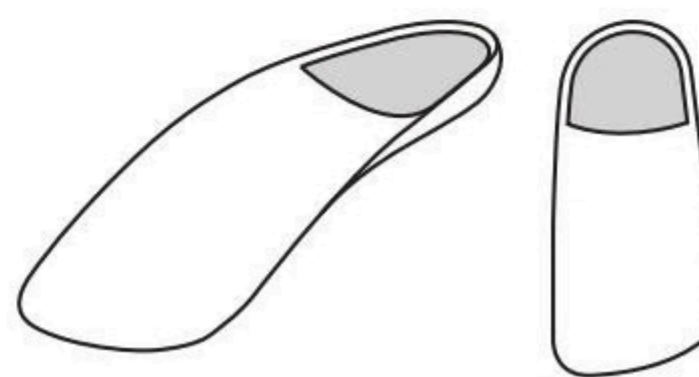
Forefoot pad used to off-load the ball of the foot. Increases weight bearing to lesser metatarsal heads while decreasing load bearing to the sesamoids and big toe joint.

### HOLE IN HEEL



1" diameter hole cut out of the shell and back filled with 3mm poron to relieve peak heel pressure.

### HEEL CUSHION



3mm poron added to the heel area of the shell.

### HEEL SPUR ACCOMM.

Pocket in shell under heel or hole cut out of shell under heel to allow relief of pressure to painful areas caused by bone spurs.

### ARCH REINFORCEMENT

Material added under the shell to reinforce the firmness of the arch within the shell.

#### Corex

Firm with rubber-like rebound.

#### Poron

Same as cork but not as durable but lighter weight.

#### Crepe

Same as EVA but about twice as dense

#### EVA

Light weight fill that will conform to the shoe

### AMPUTEE SPONGE FILL

1" thick plastizote added to distal end of top cover to fill amputation. Helps keep foot in place within a shoe & designed to improve gait.

### METATARSAL

Extra 2mm material added to distal end of shell to sulcus region with a cutout, or relief, for the specific problem meta head(s).

# Custom Orthotic Lab Cheat Sheet: BRACES

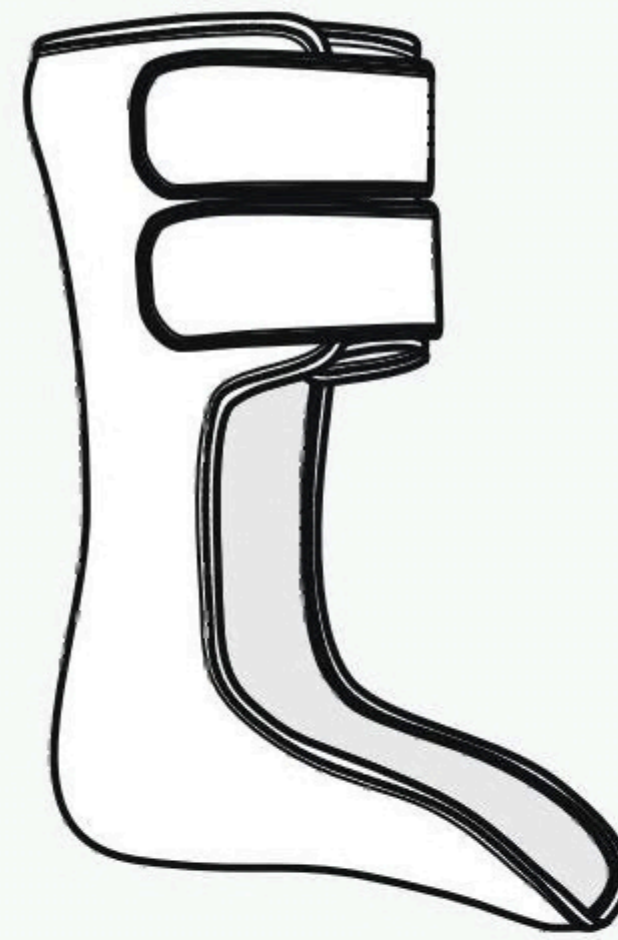
## STANDARD BRACES

### GAUNTLET



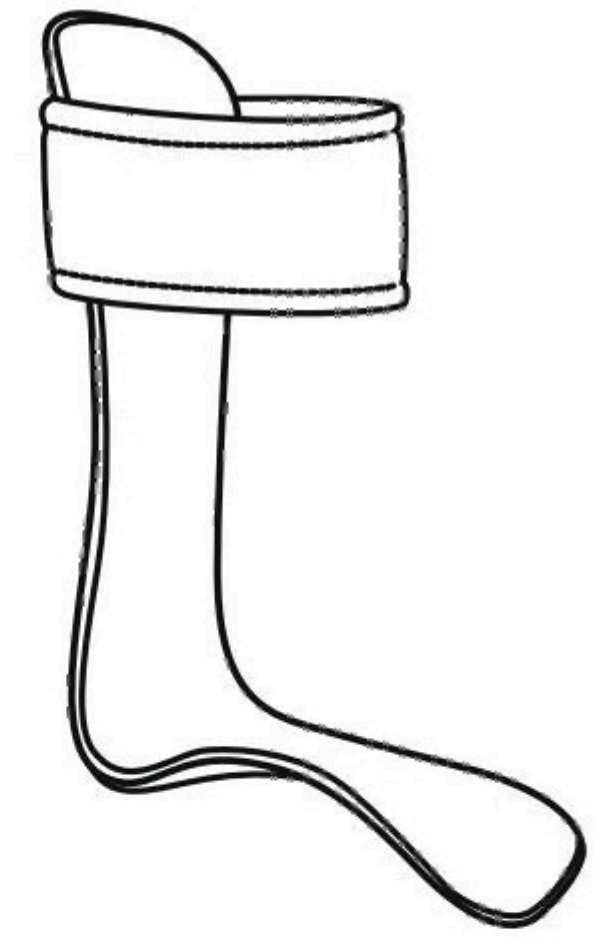
- Helps Limit Movement in the Mid-Foot
- Alternative to Surgery for Sever PTTD
- Best Option for Instability of Subtalar Joint

### BALANCE BRACE



- Designed to Reduce Fall Risk
- Increases Balance & Postural Stability
- Reduces Postural Sway

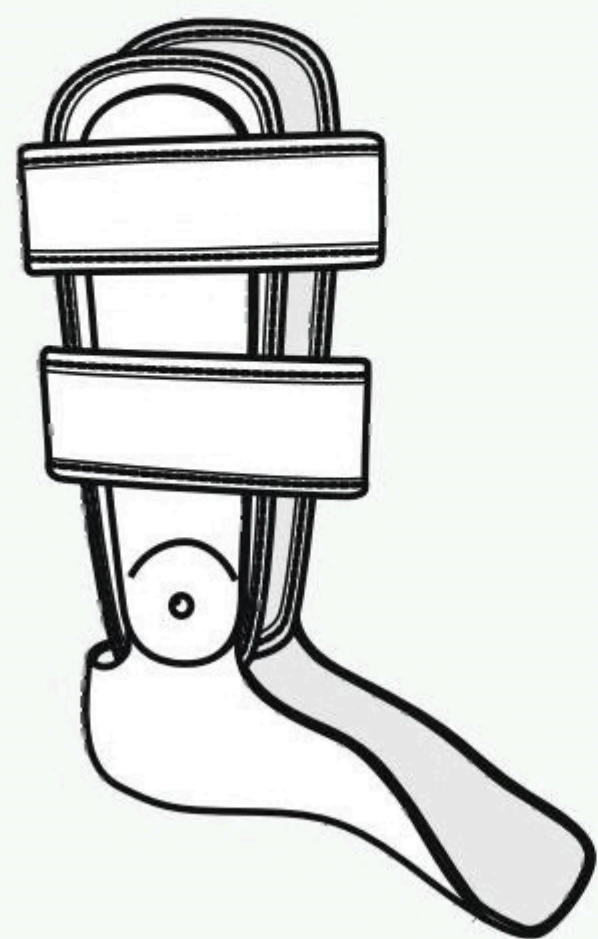
### FOOT DROP BRACE



- Stabilizes Foot and Ankle
- Low Profile to Fit in Most Shoes
- Helps Reduce Catching of the Toe During Swing Phase of Gait

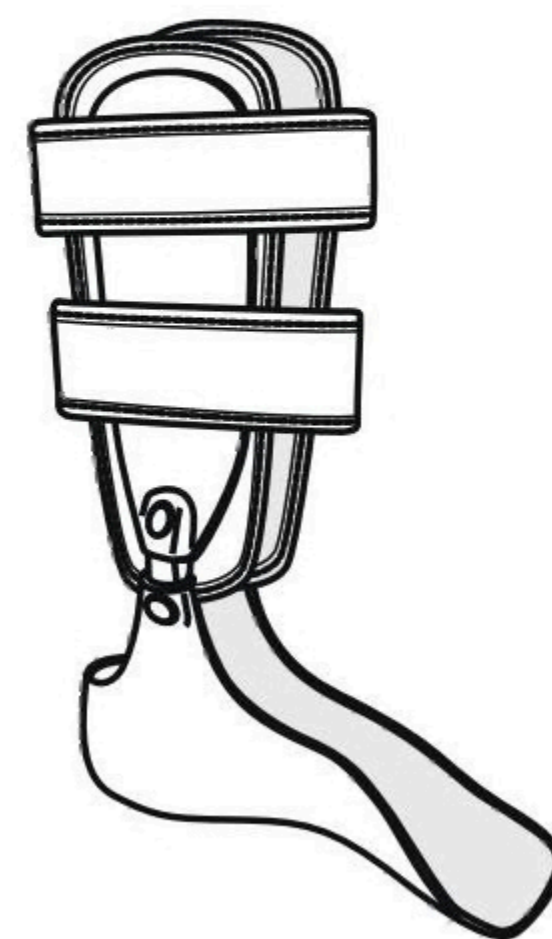
## CONTROLLERS

### CONTROLLER



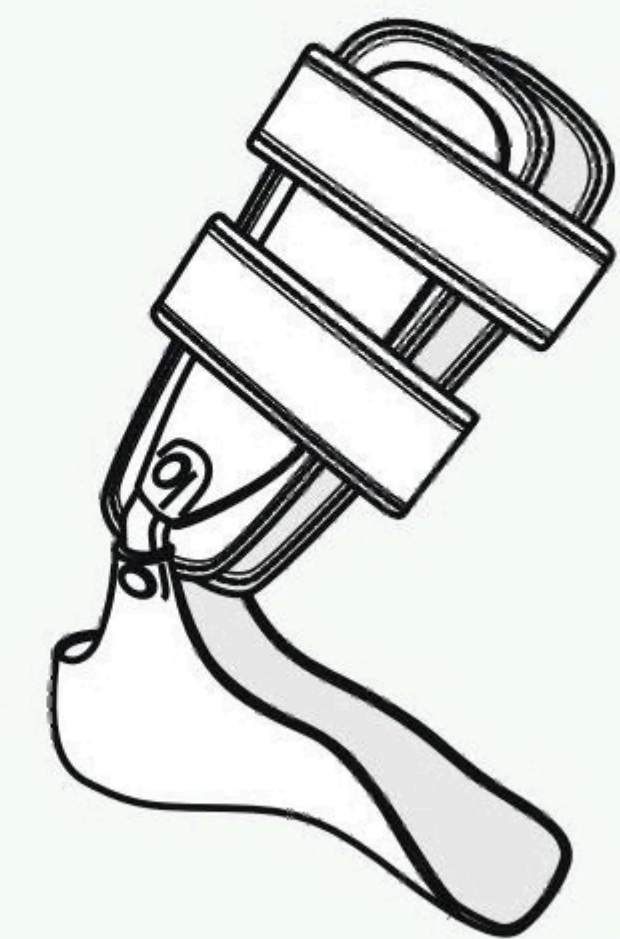
- Designed to Improve Gait
- All Pieces Custom Built
- For Patients Who Need to Maintain Activity

### TAMARACK CONTROLLER



- Designed to “Spring” Foot into Neutral During Swing-Phase of Gait
- Helps Patients Maintain an Active Lifestyle

### DORSI-ASSIST TAMARACK

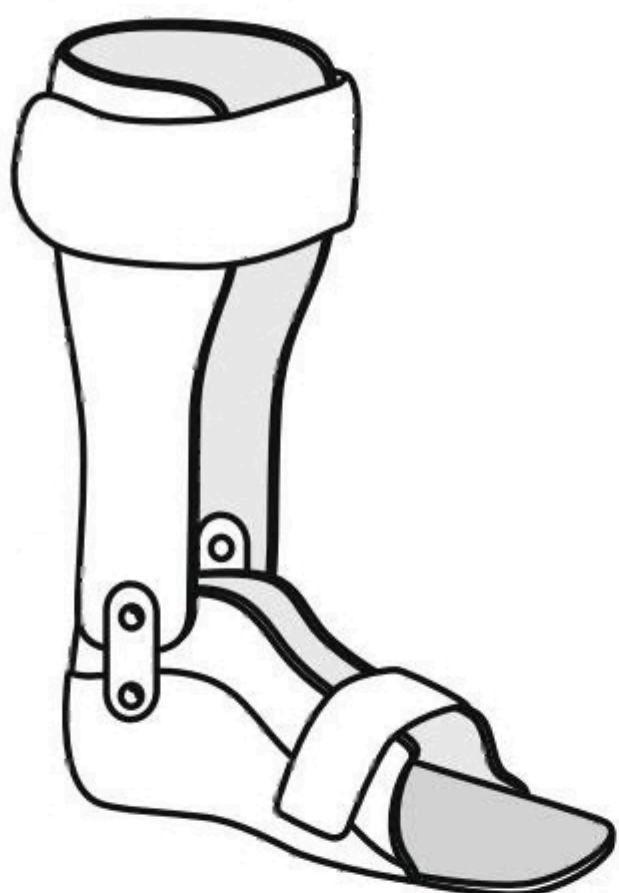


- Designed to “Spring” Foot into Dorsi-Flexed Position During Swing-Phase of Gait

## SPECIALTY

### FLEXION LIMITER

Also Available in Children's Sizes



- Best to Limit Plantar Flexion
- Limit Toe-Walking
- For Patients Who Require Tall Posterior Control for Hyper-Extension of the Knee

### SMO

Also Available in Children's Sizes



- Total Contact Support for Foot & Ankle
- More Support than a Foot Orthotic but Lower Profile than a Standard AFO

### CROW WALKER



- Rigid Support
- Improves Wound Off-Loading
- Helps Patient Treat Wounded Foot with Extra Care
- Improves Mobility

## PREFABRICATED DEVICES

### HEAT MOLDABLE SHELLS

These orthotics are designed to give doctors the ability to create a custom orthotic device in the office. They can be molded directly to the patient's foot using a heat gun and a molding pillow. By using specially engineered materials these orthotics are thin, strong, and very low profile. Each shell can be heated and readjusted repeatedly guaranteeing a perfect fit.

- |  |  |  |
|--|--|--|
| <p><b>720</b><br/>Rigid shell. High arch and slight met raise. Primarily for wide feet.</p>      | <p><b>722-M</b><br/>Rigid shell. Medium arch and slight met raise. Slim profile for dress shoes.</p> | <p><b>726</b><br/>Semi-rigid shell. Medium arch. Heel posted 3° varus.</p> |
| <p><b>722</b><br/>Rigid shell. High arch and slight met raise. Slim profile for dress shoes.</p> | <p><b>724</b><br/>Semi-rigid shell. Medium arch and 12mm heel cup. Best for wide athletic feet.</p>  | <p><b>729</b><br/>Rigid shell. Low arch and 8mm heel cup.</p>              |

### SUMMIT PRO SERIES

#### Summit Pro

Semi-rigid shell. MicroSilver top cover. 1/8" High-rebound EVA padding. Posted Extrinsicly 3° varus. 12mm heel cup for support. Hole in heel filled with poron. Also available in 3/4 length and non-posted style.

#### Summit Pro Premium

Marine-grade vinyl top cover. Increased durability. Decreased friction.

#### Summit Pro Open

Peel & stick backing. MicroSilver top cover. Easy to add modifications. For hands-on doctors.

#### Summit Pro XP

3/16" padding added. MicroSilver top cover. Doesn't flatten over time. Also available as non-posted.

### ACCOMMODATIVE

#### Cloud Walker

For long days on your feet. High rebound material. Soft and won't flatten out over time.

#### Diabetic Insole

Bi-laminate top cover. Compliant with Medicare shoe program.

#### Ultra

EVA shell, nylon top cover. High Medial flange for better arch and pronation support. Comfortable and compliant.

#### Ultra MP

EVA shell, nylon top cover. Met pad accommodation. High Medial flange for better arch and pronation support. Comfortable and compliant.

### MISCELLANEOUS

#### Slim Power

Semi-rigid shell. MicroSilver top cover. High-rebound neoprene. Full length bottom cover. Additional heel cushion.

#### Kiddie Tek UCBL

Offers excellent control of the pediatric foot. Can be adjusted with a heat gun.

## ACCESSORIES

### PEEL & STICK ACCESSORIES

#### Posting Wedges

3° & 5° peel and stick posting wedges.

#### Posting Strips

3° & 5° peel and stick posting strips.

#### Heel Lift

1/4" peel and stick heel lift strip.

#### Soft Top Cover

1/8" peel and stick fabric covered poron.

#### Arch Pad

Peel and stick arch shaped poron pad.

### HEAT MOLDING PACKAGE

#### Heat Molding Pillow

For heat molding orthotics. Made from 2" molding foam. Pushes against the arch to create a cast of the foot.

#### Hot Top Cover

Protects the foot while molding an orthotic. Reflective material inside directs heat away from the foot.