



# The Thuasne Group 170 Years of Success

Based in Saint-Etienne, France, The Thuasne Group has been drawing on its know-how for more than 170 years to design, develop and manufacture medical devices enabling all patients and consumers to become active participants in their own health.

With the knowledge and knowhow of six generations of entrepreneurs, Thuasne offers concrete, simple and innovative health solutions that improve the quality of life for users in more than 85 countries.

### The Thuasne USA Family



Founded in 1984 Townsend Design is a leader in the orthopedic manufacturing industry highly regarded for its vast range of custom and off-the-shelf orthopedic braces. Acquired in 2011 by The Thuasne Group, Townsend Design (now Thuasne USA) has expanded its offerings to include solutions for spine, specialized knits and proprietary composite technologies. Thuasne USA employs nearly 300 people and is proudly located in Bakersfield, California.





Founded in 2005, Lantz Medical is the manufacturer and sole provider for the renowned, state of the art, Vector 1 Hand CPM and the Stat-A-Dyne Range of Motion Devices. Acquired in 2019 by The Thuasne Group, Lantz Medical is helping patients regain their range of motion through their work in the physical therapist's office and beyond. Located in Indianapolis, Indiana, Lantz Medical is supported by a team of professionals that spans the United States.



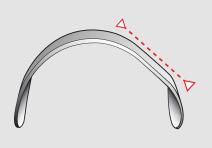
Since 1923, Knit-Rite, Inc. has been a leading designer and manufacturer of innovative textiles for medical and consumer markets; providing solutions that promote mobility, protection, and comfort. In 2000, the company acquired Therafirm, a nearly 60-year-old leader in manufacturing healthy, gradient compression products. Knit-Rite and Therafirm were acquired by The Thuasne Group and joined the Thuasne USA family in 2020. Knit-Rite and Therafirm products are made in the USA in facilities located in Kansas City, Kansas and Hamlet, North Carolina.



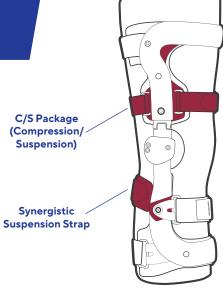
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# Thuasne USA Core Technologies





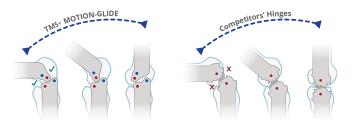


#### **Core Technologies for Knee Orthoses**

The Townsend Motion Hinge tracks with the anatomical roll-and-glide of the knee keeping the brace properly positioned throughout range of motion. The Synergistic Suspension Strap maintains intimacy of fit and brace positioning by deploying a non-elastic strap at the top of the calf muscle. Rotation Control addresses rotary instability by contouring the brace to fit the flatter medial side of the tibia.



Thuasne USA's unique manufacturing process ensures each device is elegant, minimalistic and lightweight without sacrificing strength or mechanical outcomes. Utilizing a diverse range of composite materials, each with complementary mechanical properties, Thuasne USA's design philosophy focuses on three principles to ensure optimal outcomes: the thoughtful selection and merging of materials for the best combination of properties; optimizing the geometry, size and length of fibers, and ensuring the optional ratio of fiber to matrix.



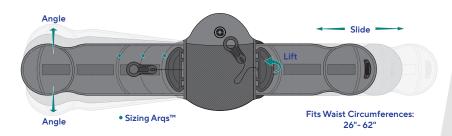


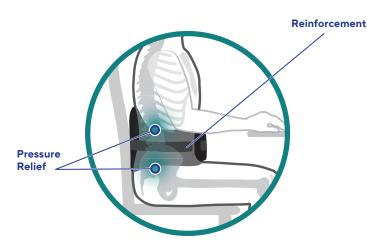
#### Rodin 4D 7-Axis Robot

Bringing cutting edge technology to Thuasne USA's manufacturing processes, the Rodin 4D 7-Axis Robot features multi-application functionality for carving, polishing, and grinding with an expanded capacity for milling a variety of materials. Fast, safe, and efficient, Rodin is helping Thuasne USA reduce its carbon footprint while standardizing the manufacturing process for greater uniformity from product to product.









Dual Zone Technology wings allow compression to be maintained comfortably even while seated.



#### **SLEEQ® Technology**

Acquired by The Thuasne Group in 2016, the SLEEQ® Universal family of LSO's and TLSO's revolutionized back bracing with its simple adjustment technology perfect for all patient body sizes and types. With adjustable dual wings, crescent Velcro connectors, corset style cinching methods and the ability to customize panel heights and support, the SLEEQ® range is a truly universal solution for a variety of indications and patient needs.









#### **Knits**

With a focus on textiles dating back to 1847, Thuasne's exclusive process for manufacturing ensures knitted braces are long lasting, easy to wear, effective and safe. Thuasne's knits target pain and swelling while encouraging blood circulation and healing, they are hypoallergenic and latex free.



# SLEEQ® Max Universal TLSO PDAC APPROVED LO464

#### PRODUCT#901600

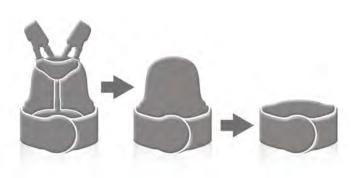
SLEEQ® Max is the result of extensive research, development and testing that combines the innovative SLEEQ® universal brace platform with the legendary superiority of Townsend's rigid brace designs. Our team of clinical experts has designed a post-op/post-injury universal TLSO that delivers maximum control with minimum effort for both the patient and clinician.

Recommended for: Moderate to severe sagittal and coronal transverse plane motion restriction / increased intracavitary pressure to reduce spine and disc loading / mechanical or discogenic thoracic lumbar and extremity pain / post-operative spinal stabilization / fusion / degenerative disc disease / post-injury to facilitate healing / spondylolysis / spinal stenosis / spondylolisthesis / spondylosis, laminectomy / discectomy / facet syndrome / spinal muscle weakness / arthritis / low back sprains, strains and prophylactic back support.

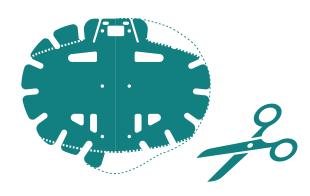
#### **Features**

- Patented InvisAdjust<sup>™</sup> universal sizing technology
- Rigid tri-planar control
- Steel sternal bar assembly
- Easy to apply & wear
- · Full-circumference shell design
- Steps down to LSO to accommodate patient recovery





**Steps Down To LSO** 



Anterior plate can be trimmed with scissors

#### Accessories

#### SLEEQ® Max EXT

PRODUCT# 901670

For use with SLEEQ® Max only. Panel accommodates 54"-62" waists



### SLEEQ® Max Short Sternal Bar

PRODUCT#901680

Replacement short bar that easily adapts the SLEEQ® Max TLSO to fit shorter patients





# SLEEQ® Flex Universal TLSO PDAC APPROVED LO456/LO457

PRODUCT#901400

**Recommended for:** Mild to moderate osteoporosis/compression fractures / postural issues and kyphosis / chronic or acute low/mid back pain / osteoarthritis / degenerative disc disease / bulging or herniated disc / low-mid back sprains and strains / lumbar and trunk muscle weakness.

#### **Features**

- Easy universal sizing technology fits waist sizes 26" 57"
- Semi-rigid comfort enhancing design
- Highest quality breathable materials
- Ventilated self-molding support panels
- Wings can be angled and optimized to fit all body types
- Available extension panel accommodates waist sizes 57" - 65"

### **Osteomed Acute Universal** Osteoporosis TLSO PDAC APPROVED L0456/L0457

PRODUCT#U5120199999999

**Recommended for:** Mild to moderate osteoporosis / compression fractures / postural issues and kyphosis / chronic or acute low to mid back pain / osteoarthritis / degenerative disc disease / bulging or herniated disc / low-mid back sprains and strains / lumbar and trunk muscle weakness / post-op thoracolumbar laminectomy, discectomy.

#### **Features**

- Universal sizing reduces inventory fit patients on first visit
- Easy adjustment of brace height, circumference and straps
- · Telescopic rigid aluminum upright for custom contouring
- · Simplified strapping system



Recommended for: Compression fractures / traumatic fractures / osteoporotic and metastatic fractures / dorso-lumbar osteoarthritis / immobilization after surgical stabilization of thoracolumbar fractures.

#### **Features**

- · Lightweight telescoping aluminum alloy frame
- Easy to use lever lock tightening closure
- Spring assisted pelvic band articulates or locks at 0° or 18°
- Sternal pad self-adjusts for comfortable control
- · Back pad positions horizontally or vertically

	Size	SM	MD Short	MD	LG Short	LG	XLShort	XL
(Fa)	Pelvis CIRCUM	23 ½ - 29 ½"	29 ½ - 35 ½"	29 ½ - 35 ½"	35 ½ - 41 ¼"	35 ½ - 41 ¼"	41 ¼ - 45 ¼"	41 ¼ - 45 ¼"
1	Pubic Symphisis To Sternum Height	12 1/4"	12 ½"	13 ¾"	13 ¾"	15"	15"	16 3/4"

# BOA® Duel TLSO PDAC APPROVED L0464

PRODUCT #51050-X

Recommended for: Sagittal, coronal, transverse plane motion restriction / increased intracavitary pressure to reduce spine and disc loading / mechanical or discogenic thoracic lumbar and extremity pain / post-operative spinal stabilization / fusion / degenerative disc disease / post-injury to facilitate healing / spondylolysis / spinal stenosis / spondylolisthesis / spondylosis laminectomy / discectomy / facet syndrome / spinal muscle weakness / arthritis / low back sprains, strains / prophylactic back support.

#### **Features**

- Full-circumferential rigid support for the thoracolumbar spine
- · Patentend Lacer Design Compression System
- · Simple pull straps for easy tightening and adjustment

	Size	SM	MD	LG	XL	2XL
*	Waist Measurement	25 - 30"	30 - 35"	35 - 42"	42 - 48"	48 - 57"





# $(((SLEEQ)))_{ADAPT}$

The SLEEQ <sup>®</sup>Adapt by Thuasne USA puts power in the hands of the clinician with an LSO that's designed to provide the greatest level of customization, while giving patients the comfort and support that fits their individual needs.

Recommended for: for low back support, sagittal plane motion restriction (and coronal plane motion restriction on 637), increased intracavity pressure to reduce spine and disc load, acute and/or chronic low back and lower extremity pain (sciatica), and recovery from post-operative spinal procedures or injury.

#### **Features**

- · Reinforced, customizable felt wing insert for greater support
- Wings can be angled to optimize fit for all body types
- Partner Program with your logo on every brace
- Dual Zone Technology



SLEEQ ADAPT
PDAC APPROVED L0639

PRODUCT #901905

Lumbar-sacral orthosis with sagittal-coronal control and enhanced anterior panel







# SLEEQ® ADAPT PDAC APPROVED L0637

PRODUCT#901700

Lumbar-sacral orthosis with sagittal-coronal control

# SLEEQ® ADAPT PDAC APPROVED L0631

PRODUCT#901900

#### Lumbar-sacral orthosis

### SLEEQ® ADAPT PDAC APPROVED L0627

PRODUCT #901800

Low-profile lumbar-sacral orthothsis



# (((SLEEQ))) & SLEEQ® Air

#### **SLEEQ® Universal Spine Brace**

SLEEQ® spinal compression braces are known for comfort, patient compliance, and ease of adjustability. The innovative universal sizing adjustment and unique Dual-Zone wing construction allows fast and accurate fitting, while maintaining compression and relief where it's needed most. Pressure relief areas at the ribs and hips reduce brace migration and allow patients to maintain effective compression - even while seated.

Recommended for: Chronic or acute low back pain / degenerative disc disease / bulging or herniated disc / low back sprains or strains / lumbar and trunk muscle weakness / post-op lumbar stabilization / fusion / laminectomy / discectomy / fracture management / prophylactic low back support / decompressive procedures / facet syndrome / spinal stenosis / spondylolisthesis / spondylolysis / spondylosis / radiculopathy / injections.

### **SLEEQ®** Features

- Patented InvisAdjust<sup>™</sup> universal sizing technology
- · Breathable open-cell foam padding
- Self-molding ventilated support panels
- Integrated/removable anterior panels
- Adult and pediatric applications fit 22" to 52" waists
- Same standard compression and support as SLEEQ®

### **SLEEQ®** Air

The best features of our time-tested SLEEQ® spinal braces in a thinner, lighter, more breathable design. Effective support never felt so good.

### **SLEEQ®** Air Features

- Pantented InvisAdjust™ universal sizing technology fits 26"-57" waists
- · Highest quality breathable materials
- Ventilated self-molding support panels
- Wings can be angled to optimize fit for all body types
- Dual Zone technology wing construction for maximum seated comfort

#### **Options**

 SLEEQ® Air EXT for use with SLEEQ Air only. Panel accommodates 52"-62" waists **AP** 



AP+



### SLEEQ® AP PDAC APPROVED L0627/L0642

PRODUCT # 901100

Low profile compression orthosis for lumbar pathologies

### SLEEQ® AP+ PDAC APPROVED L0631/L0648

PRODUCT#901200

Enhanced profile compression orthosis for low thoracic and lumbar pathologies

# SLEEQ® APL PDAC APPROVED L0637/L0650

PRODUCT#901300

Enhanced profile compression orthosis with lateral support panels for low thoracic and lumbar pathologies

#### **Accessories**



SLEEQ® EXT
PRODUCT # 901070

Extension panel for waist accommodates 57"-65" circumference



Set of two lateral panels fits all SLEEQ® model braces



**SLEEQ® Anterior Panel** *PRODUCT #901050* 

Replacement panel that can be us

Replacement panel that can be used on SLEEQ®, SLEEQ® Flex, & SLEEQ® Max

### SLEEQ Air® AP PDAC APPROVED L0627/L0642

PRODUCT # 901510



# SLEEQ Air® AP+ PDAC APPROVED L0631/L0648

PRODUCT#901530



### SLEEQ Air® APL PDAC APPROVED L0637/L0650

PRODUCT# 901550







for waist circumference 33 ½ - 49 ¼"

### LombaMum PDAC APPROVED A9270

PRODUCT#080501

Recommended for: Pregnancy related low back pain / pregnancy related pelvic pain / abdominal support / sacroiliac support / muscle strain / symphysis pubis pain.

#### **Features**

- One-size-fits-all modular design to accommodate different sizes and phases of pregnancy
- Easy to apply
- Provides variable lumbar support that corrects the posture of pregnant women
- Adjustable stays support the curvature of the lumbar spine
- Adjustable support straps gently lift and relieve pressure off the bladder
- Soft and comfortable inner liner to prevent skin irritation
- Safe support without vascular or abdominal compression

REPLACEMENT PAD SET PRODUCT# T492851



# BOA® SI PDAC APPROVED L0621

PRODUCT # 51024-X

Recommended for: Sacroiliac joint pain / instability / arthritis / sprains and strains / pelvic girdle and symphysis pubis dysfunction / SI and symphysis pubis issues related to post-partum / fracture management / sciatica.

#### **Features**

- Patented Lacer Design Compression System
- Simple pull straps for tightening and adjustment
- Ultra-low-profile design

	Size	SM	MD	LG
*	Waist Measurement	25 - 35"	35 - 45"	45 - 55"





Push button height adjustment



Quick-Snap fitting disk - No velcro

Eclipse® Universal Cervical Collar PDAC APPROVED - L0172 (STANDARD)

AND L0174 (EXTENDED THORACIC)

PRODUCT # STD: 910010 EXT: 910020 STD W/PADS: 910011 EXT W/PADS: 910021

Recommended for: Cervical strains and sprains / spinal stenosis / cervical spondylosis / post-op stabilization / decompressive procedures / cervical trauma / whiplash / fracture management / cervical disc disease / radiculopathy.

#### **Features**

- · Universal sizing
- Effortless chin height adjustment for easy fitting and maximum compliance
- Fifteen height settings for precise positioning
- Quick-Snap fitting disks ensure proper patient application – no velcro closures
- Anatomically molded, structurally reinforced frame for superior strength and fit
- Moisture wicking, cloth lined, open cell foam liner for comfort and breathability
- Large tracheal opening for airway access
- MRI, CT, and X-ray friendly

#### **Options**

 Wide back panel for neck circumference greater than 19"





### **AeroSling II**

### **Universal Shoulder Orthosis**

**RECOMMENDED L-CODE L3960** 

PART# 54-006

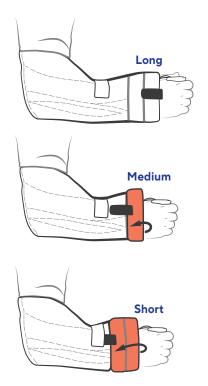
AeroSling II is the perfect universal solution for post-op / post-injury shoulder immobilization and positioning. The lightweight aluminum frame adapts to all body types and provides multiplanar adjustability for 30° and 90° abduction and rotational positioning. The patient experience is enhanced by premium breathable materials, a one-handed buckle design that makes donning easy, and as healing progresses, the brace steps down to a simplified sling.

Recommended for: Post-injury or post-surgical shoulder immobilization / rotator cuff injuries and repairs / joint reconstruction, glenohumeral dislocations / subluxation / muscle, ligament, and tendon repair / capsule repairs / shoulder instabilities / Bankart lesions / SLAP lesions.

#### **Features**

- · Universal sizing reduces inventory
- 90° abduction bracket and 30° abduction bolster options standard with every sling
- Adjustability for specific post-op / post-injury rotation positioning
- Lightweight malleable frame easily adjusts to all body types
- · Premium breathable materials
- · One-handed buckle design provides easy donning
- · Hand-grip keeps arm from migrating distally
- · Adjusts for use on left or right shoulder

#### Adjustable length cuff







90° Abduction

Step down capability





# Townsend Shoulder Sling (A) PDAC APPROVED L3670

PRODUCT #54-00X

Recommended for: Immobilization for rotator cuff repairs / capsular shifts / glenohumeral dislocations / Bankhart repairs / subluxation / soft tissue repairs / strains.

#### **Features**

- · Breathable fabric sling
- · 30° abduction pillow
- · Adjustable padded strap
- Exercise ball
- Two sizes based on arm length
- Universal left or right arm

Size	S/M	L/XL
Arm Measurement	< 14"	> 14"

### Immo Classic (C) PDAC APPROVED L3660

PRODUCT #244501

Recommended for: The immobilization of the elbow following injury / acute epicondylitis or epitrochleitis (tennis elbow) / immobilization following fracture of the scapula / analgesic immobilization of the shoulder, arm and forearm.

#### **Features**

- · Provides immobilization of the elbow
- Adjustable protective foam pads allow for optimal shoulder and neck comfort
- Additional adjustable strap and abdominal strap for patient comfort and ease of use

	Size	1	2	3	4
*	Waist Measurement	19 ¾ - 28"	28¼ - 37"	37 ½ - 46"	46 ½ - 55"

### Elite Shoulder Sling (B)

**PDAC APPROVED L3670** 

PRODUCT #54-00X

Recommended for: Immobilization for rotator cuff repairs / capsular shifts / glenohumeral dislocations / Bankhart repairs / subluxation / soft tissue repairs and strains.

#### **Features**

- Breathable mesh 30° abduction pillow and shoulder sling
- · Quick-release buckles
- · Dual reinforced elbow section
- · Adjustable mesh neck padding
- Exercise ball
- Two sizes based on arm length
- Universal left or right arm

Size	S/M	L/XL
Arm Measurement	< 14"	> 14"

### Clavicular Straps Figure 8 (D) PDAC APPROVED L3650

PRODUCT #245002

**Recommended for:** The treatment of collarbone fractures, with or without displacement.

#### **Features**

- Trimmable straps accommodate patient's size
- Articulating buckles provide anatomical and custom fit for each patient
- Dorsal foam anchoring pad provides optimal comfort
- · Universal left or right

#### Measurement

Underarm width greater than 13 ½"



# Functional Elbow PDAC APPROVED L3760

Hand-built by Thuasne USA, the Functional Elbow brace is raising the industry standard for protection and suspension with a brace engineered to provide ultimate protection for the unique anatomy of the elbow.

Recommended for: Functional prophylactic use, chronic elbow injuries, mild to moderate soft tissue injuries, the treatment of stable fractures, or for postoperative use.

#### **Features**

- Universal left/right
- · Moldable metal cuffs

Moldable Forearm Cuff

- Anti-migration/anti-microbial pads
- Adjustable range-of-motion (ROM)
- · Reversable strapping pattern
- · Removeable medial condylar suspension wedge

Size SM MD LG XL

Elbow CIRCUM 9 ¾ - 11 ¼" 11 ¼ - 12 ¾" 12 ¾ - 14 ¼" +14 ¼"







# Epi-Med PRODUCT #T48001

Recommended for: Medial epicondylitis (golfer's elbow), lateral epicondylitis (tennis elbow) or tendinopathy (inflammation of the tendon attachments) in the elbow.

#### **Features**

- · Comfortable arm band that provides dual targeted pressure on inflamed tendons
- Easy adjustment with Velcro fastening tabs

Size	XS	SM	MD	LG	XL	
Arm easurement	8 ¾ - 9 "	9 ½ - 9 ¾"	101/4 - 10 3/4"	11 – 11 ¾"	121/4 - 13 1/2"	



# Silistab Epi PDAC APPROVED L4466

PRODUCT #230502

Recommended for: Insertion epicondylitis (tennis elbow) and epitrochleitis (functional treatment) to prevent against future occurrences and give active support for sports activities and manual work situations.

#### **Features**

Size

• Dimpled silicone elbow pad inserts massage during motion

5

- Provides support and compression
- Removable strap allows for additional compression
- Anatomically shaped elastic knit for optimal elbow crease comfort
- Patented pull tabs for easy application and removal

3

Arm 7 1/2 - 8 3/4" 8 3/4 - 9 3/4" 9 3/4 - 111/4" 121/4 - 13 1/2" 13 1/2 - 14 1/2" Measurement

2

6



### ROM Post-Op (A) RECOMMENDED L-CODE L3760

**Recommended for:** Elbow injuries requiring short term stabilization / post-surgical fixation and/or range of motion control.

#### **Features**

- · Easy adjust ROM hinges
- Aluminum bars can be contoured to patient's anatomy
- Locks at 90°
- · Available with single or dual uprights
  - > Dual upright universal left or right
  - > Single upright is available in left and right models
- Available in 15" 16" lengths

### Custom Elbow Brace (C)

#### **RECOMMENDED L-CODE L3720**

PRODUCT #55-X-549-016

Recommended for: Hyperextension injuries / chronic elbow instabilities requiring rigid stabilization / most often used by high performance athletes.

#### **Features**

- Carbon graphite shell
- · Low profile hinges
- Extension stops: 0°, 15°, 30°, 45°, or 90°
- Flexion stops: 90°, 110°, and 120°
- · Non-elastic straps

#### **Options**

- · Shell length
- · Colors or fabric inlay
- · Extension bar and hand grip

#### **Ordering**

• Custom from a cast or digital arm scan

### ROM LBO (B)

#### **RECOMMENDED L-CODE L3760**

**Recommended for:** Elbow injuries requiring short term stabilization / post-surgical fixation and/or range of motion control.

#### **Features**

- · Tool-free adjustment
- · Aluminum bars can be contoured to patient's anatomy
- Easy adjust ROM hinges
- Drop lock with fixation at 90°
- Breeze pads
- · Available with single or dual uprights
  - > Dual upright universal left or right
  - > Single upright is available in left and right models
- Adjustable length 14 ½" 17"

### ROM Post-Op Low Profile (D) RECOMMENDED L-CODE L3760

PRODUCT #5X-544-01-942-944

Recommended for: Post-operative elbow or arm surgery / collateral ligament sprains / Ulnar nerve injuries / stabilize fractures / radial fractures / lateral/medial epicondylitis.

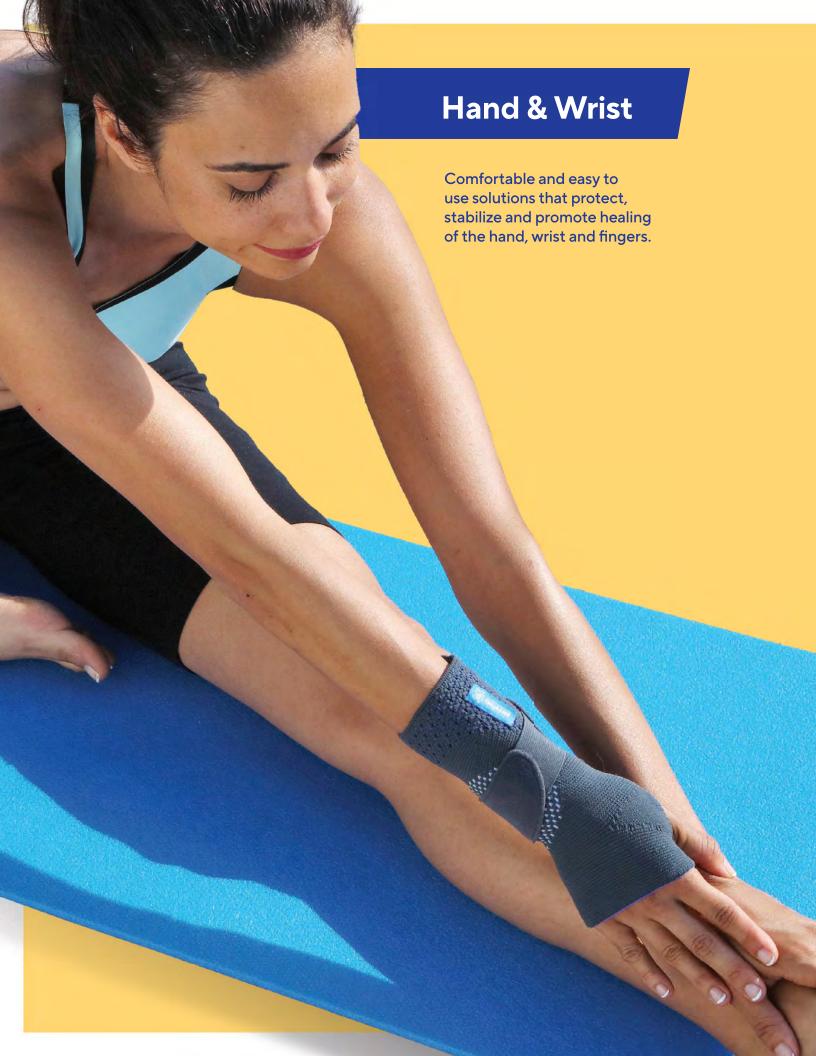
#### **Features**

- Dual ROM hinges with extension and flexion stops
- · Semi-Rigid adjustable cuffs
- · Unique design for easy application

#### **Options**

· Optional hand extension bar







# Ligaflex Action PDAC APPROVED A4467

PRODUCT # 243602

**Recommended for:** General weakness / postoperative conditions / post-traumatic conditions / sprained wrist / wrist tendinitis / weakend or torn TFCC ligaments / wrist instability.

#### **Features**

- Anatomically designed with Thuasne's exclusive knit technology
- Silicone insert for comfortable protection of the ulnar condyle
- Smooth non-abrasive seams
- Adjustable pressure with removable, elastic form fitting straps
- Removable palmar splint for more active movement

Siz	e 1	2	3	4	5	6
Wrise CIRCUM	t 1 5½-6"	6-61/2"	6 ½ - 6 ¾"	6 3/4 - 7"	7 - 7 ½"	7 ½ – 8"



### Ligaflex Pro (A) PDAC APPROVED L3908

PRODUCT #243302

Recommended for: Light to moderate sprains / ligament or tendon related injury/trauma / osteo-neural injuries / wrist tendinitis / Carpal Tunnel Syndrome / Carpal Tunnel without surgery / postoperative immobilization.

#### **Features**

- Anatomical, conformable splint that supports the palm of the hand
- Lightweight and breathable micro-aerated 3D fabric
- · Easy-to-use Quick Lacing System
- · Universal left or right



# Dynastab Dual (C) RECOMMENDED L-CODE L3908

PRODUCT #704002

Recommended for: Mild sprains of the wrist (functional treatment) / tendinitis and tendon disorders of the wrist / inflammatory phases of rheumatic diseases.

#### **Features**

- Anatomical palmer stay provides wrist support
- Antibacterial-treated 3D knit for effective moisture-wicking
- · Additional strap for extra stabilization
- · Universal left or right

	Size	0	1	2	3
(B)(9)	Wrist CIRCUM	3½-4¾"	5 - 61/4"	6 ½ - 7 ¾"	7 3/4 - 9"

# Ligaflex Classic Open (E) PDAC APPROVED L3908

PRODUCT #243702

Recommended for: Light to moderate sprains / ligament or tendon related injury/trauma / osteo-neural injuries / wrist tendinitis / Carpal Tunnel Syndrome / Carpal Tunnel without surgery / postoperative immobilization.

#### **Features**

- Fully opens to accommodate swelling and allows for easy application and removal
- Conformable and X-ray friendly, radio-transparent stay in the palm region
- Available in left or right

	Size	0	1	2
(B) (S)	Wrist CIRCUM	3 ½ - 4 ¾"	5 - 6 3/4"	6 ¾ - 9"

# Ligaflex Pro+ (B) PDAC APPROVED L3807/L3809

PRODUCT #243402

Recommended for: Wrist sprains/thumb sprains/scaphoid fractures/tendinitis and tendon disorders of the wrist/thumb tendon disorders/inflammatory phases of rheumatic diseases/chronic post-traumatic or post-operative irritations/arthritis/wrist osteoarthritis.

#### **Features**

- Anatomical, conformable splint that supports the palm of the hand
- · Lightweight and breathable micro- aerated 3D fabric
- Thumb spica for additional support
- Easy-to-use Quick Lacing System
- · Available in left or right

Size	1	2	3	4
Wrist CIRCUM	5 - 6"	6 - 7"	7 - 7 3/4"	8 - 9"

# Ligaflex Rhizo (D) PDAC APPROVED L3923/L3924

PRODUCT #709002

Recommended for: Light to moderate sprains / ligament and tendon related trauma / rhiartrosis / osteo-neural injuries / immobilization of the thumb.

#### **Features**

- · Patented wire thumb frame for immobilization of the thumb joint
- Opening at the thumb column to prevent pressure on sensitive anatomy
- · Antibacterial-treated 3D knit for effective moisture-wicking
- · Particularly suitable for basal thumb arthritis
- · Available in left or right



### Ligaflex Manu (F) RECOMMENDED L-CODE L3807

PRODUCT #243002

Recommended for: Mild sprains of the wrist (functional treatment) / following carpal tunnel interventions / tendinitis and tendon pathologies of the wrist / painful sequelae of injuries / mild sprains of the thumb / resumption of activities after Pouteau Colles distal radius fractures.

#### **Features**

- Conformable and X-ray friendly, radio-transparent stays in the palm and thumb region
- Lightweight and comfortable antibacterial-treated 3D knit for effective moisture-wicking
- · 2 in 1 strapping for auto adjustment and support
- Available in left or right

	Size	0	1	2	3	4
(B) (9)	Wrist CIRCUM	4 - 5"	5 - 6"	6 - 7"	7 - 7 3/4"	8 - 9"

26



Ligaflex® Boxer PDAC APPROVED L3807/L3809		
PRODUCT #243102		
Recommended for: Non-displaced 4th and 5th metacarpal fracture, postoperative 4th and 5th metacarpal support / use following strict plaster cast immobilization.	THUASM	
Features		
<ul> <li>3D inner breathable fabric for day-to-day comfortable wear</li> <li>Finger fabric separator to protect the immobilized finger</li> <li>Two shapeable rigid stays for a strict immobilization from the wrist to the finger</li> <li>Palmar and dorsal stays for optimum immobilization</li> <li>Full opening for easier application &amp; positioning</li> <li>Convenient buckle loop tightening system</li> <li>Machine washable</li> </ul>		
Size 1 2 3 4		
Wrist CIRCUM 5-5¾" 6-6¾" 7-7¾" 8-9"		







# Ligaflex® Finger RECOMMENDED L-CODE L3923/L3924

PRODUCT#423202

**Recommended for:** Long finger injuries such as sprains / dislocations / fractures (functional treatment or post-surgical support).

#### **Features**

- Four straps, two fixed and two removable, for optimized support and fit
- Wrist strap with anatomical shape to improve comfort during wear
- Curved stay covers and protects the finger while four straps stabilize the brace
- Rigidity for strict immobilization from the wrist up to the finger
- Adaptability to fit the patient's wrist, hand, and finger angulation
- Two stay positions: palmar or dorsal for optimum immobilization
- Machine washable

Size	1	2	3	4
Tip of Injured Finger	< 5"	5 - 61/4"	61/4 - 71/2"	7 ½ - 8 ¾"



### Rebel Reliever®

### PDAC APPROVED L1845 FOR THREE-MEASUREMENTS PDAC APPROVED L1852 OFF-THE-SHELF

Clinically proven to reduce pain and instability while improving walking capacity, muscle function and quality of life. The Rebel Reliever's patented LoadShifter mechanism and tool-less SnapLock technology gives patients power over their OA with the ability to increase corrective pressure for greater pain relief when they need it the most.

Recommended for: Moderate to severe medial or lateral osteoarthritis / as well as patients who have OA in combination with ligament instability.

#### **Features**

- · Rigid aircraft grade aluminum frame
- · Patented adjustable Dual Loadshifters
- Townsend's patented TM5+ hinge
- Exclusive Synergistic Suspension Strap
- · Rotation control tibial shell contour

#### **Options**

- Tibial shell length 6", 7" or 8"
- · Compression/Suspension anti-migration package
- · Anti-migration strap padding
- PCL strap
- Flexion stop kit (Extension stop kit included)
- Powdercoat finish in a variety of colors (see page 79)

#### **Ordering Methods**

- OTS sizing
- · Custom fit from three-measurements
- Custom from a cast or digital leg scan (see page 81)



	Size	SM	MD	LG	XL	2XL
CIRCU	IM 6" Knee	15 ½ - 18 ½"	18 ½ – 21"	21 - 23 ½"	23 ½ - 25"	25 - 28"
M-LV	Vidth	3 ½ - 4"	4 - 4 1/2"	4 ½ - 5"	5 - 5 ½"	5 ½ - 6"
CIRCU Below I	M 6" Knee	12 1/4 - 13 3/4"	13 ¼ - 15"	14 ¼ - 15 ¾"	15 – 17"	17 – 19"

### Adjustable Correction for OA Braces: LoadShifter





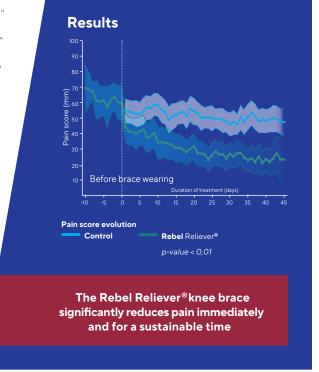


### Lift

### Slide

Lock

The patented LoadShifter mechanism and tool-less SnapLock are innovative features incorporated into the femoral section of Townsend's Rebel Reliever®, Premier Reliever and Reliever Air rigid OA knee braces. By releasing the SnapLock, the fitter can utilize the LoadShifter to adjust the angle of the thigh shell. Increasing corrective pressure at the top of the leg amplifies the three-point counterforce at the knee and distal end of the brace – improving leg alignment and reducing compressive load on the damaged side of the knee.



Improvements in Function and Strength with Decompressive Bracing of the Osteoarthritic Knee. E. Lamberg et al. Journal of Prosthetics and Orthotics. 28(4):173–179, Oct 2016.

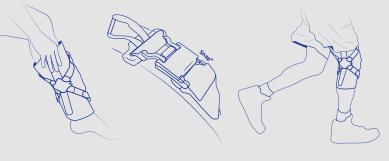


# Action Reliever PDAC APPROVED L1843/L1851

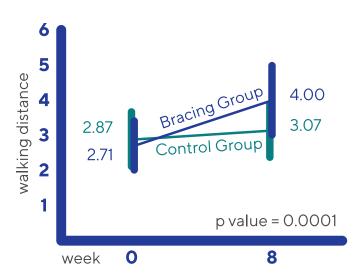
Relieve pain and inflammation while increasing mobility and improving quality of life. The Action Reliever uses compression and a patented three-point strapping system to create a comfortable and easy to use brace with an ultra-low-profile look and fit.

Recommended for: Mild to moderate medial or lateral osteoarthritis / simple application for active patients looking for a slim and comfortable OA bracing solution.

### Magnetic buckles for an easy apply and go.



Slide Snap Go



#### **Features**

- Inflammation-reducing compression and alignment-enhancing stabilization.
- Three-point strapping system relieves pain and increases mobility.
- Ultra-low-profile fit disappears under clothing
- Super slim magnetic buckles for an easy self-connect.

#### **Options**

- Medial or lateral OA
- · Right or left leg

#### **Pain Reduction**

By wearing the brace, the pain on exertion was reduced and the pain-free distance extended.

Dr M. Benning, CTR, Version 1; 31-03-2017. Prospective randomized comparative study to demonstrate the medical benefits and ease of use during practical application of: Thuasne Action Reliever.

Size	1	2	3	4	5	6	7	8
CIRCUM 5 ½" Above Knee	15 - 16 1/4"	16 1/4 - 17 3/4"	17 ¾ – 19"	19 - 20 ½"	20 - 21 ½"	21 - 22 ½"	22 - 24"	24 - 26 ½"
CIRCUM 4 3/4" Below Knee	11 – 12 1⁄4"	12 1/4 - 13 3/4"	13 ¾ - 15"	15 – 16 ½"	16 ½ - 17 ½"	17 ½ - 18 ½"	18 ½ - 20"	20 - 21 1/4"



# Reliever, Reliever Air, & Reliever Air Lite PDAC APPROVED BASE CODE L1846

Recommended for: Moderate to severe medial or lateral osteoarthritis and/or combination OA and ligament instability. Ideal for patients requiring soft tissue containment and maximum off loading.

#### **Features**

- Custom wet lamination carbon graphite shells
- Greater shell-to-skin contact for maximum control
- Townsend's patented TM5+ hinge
- Patented LoadShifter
- Exclusive Synergistic Suspension Strap
- Anti-rotation tibial shell bolster (Reliever Air)

#### **Options**

- · Virtually any shell length or trimline
- Anti-migration strap padding
- Hinge material aluminum or stainless
- Full figure model for soft tissue containment
  Flexion stop kit (Extension stop kit included)
- riexion stop kit (Extension stop kit included)
- A variety of colors or fabric inlay (see page 79)

#### **Ordering Method**

• Custom from a cast or digital leg scan (see page 81)



PDAC APPROVED BASE CODE L1846 FOR DUAL HINGE PDAC APPROVED BASE CODE L1844 FOR SINGLE HINGE

The Premier Reliever features a lightweight, low-profile custom carbon fiber design that provides comfortable unloading and pain relief through our patented LoadShifter technology.

The PR1 is a single upright custom carbon fiber brace that features an adjustable force buttress allowing for the ability to optimize counter force pressure. This model is ideal for lateral OA (no medial hinge).

Recommended for: Moderate to severe medial or lateral unicompartment osteoarthritis. The double upright model is recommended for combination OA and ligament instability. The single hinge PR1 is ideal for lateral OA.

#### **Features**

- · Custom molded solid core carbon graphite shells
- Townsend's patented TM5+ hinge
- Exclusive Synergistic Suspension Strap
- · Rotation control tibial shell contour

#### **Options**

- 7" or 8" upper and lower
- · Anti-migration strap padding
- · Stainless Steel TM5+ with no LoadShifter
- Compression/Suspension anti-migration package in the double upright model
- Flexion stop kit (extension stop kit included)
- High gloss paint or powdercoat finish (see page 80)

#### **Ordering Method**

• Custom from a cast or digital leg scan (see page 81)







### RelieverOne

#### PDAC APPROVED L1843/L1851

Recommended for: Mild to moderate medial osteoarthritis.

#### **Features**

- · Aircraft aluminum frame
- Townsend Motion Hinge opposite affected compartment
- Adjustable paddle for comfortable distribution of corrective force
- Exclusive Synergistic Suspension Strap
- · Anti-migration strap padding
- · Rotation control tibial shell contouring

#### **Options**

- Shell length (7" or 8" upper or lower)
- Flexion stop kit (extension stop kit included)

#### **Ordering Method**

- OTS sizing
- · Custom fit from three-measurements
- Custom from a cast or digital leg scan (see page 81)



### **UniReliever**

#### PDAC APPROVED L1843/L1851

Recommended for: Mild to moderate lateral osteoarthritis.

#### **Features**

- · Aircraft aluminum frame
- Townsend Motion Hinge beside the affected compartment
- Adjustable force buttress
- Exclusive Synergistic Suspension Strap
- Anti-migration strap padding
- · Rotation control tibial shell contouring

#### **Options**

- Shell length (7" or 8" upper or lower)
- Flexion stop kit (extension stop kit included)

#### **Ordering Method**

- OTS sizing
- · Custom fit from three-measurements
- Custom from a cast or digital leg scan (see page 81)

	Size	XS	SM	MD	LG	XL	2XL
	CIRCUM 6" Above Knee	12 ½ - 15 ½"	15 ½ - 18 ½"	18 ½ – 21"	21 - 23 ½"	23 ½ - 25"	25 - 28"
44	M-L Width	3 - 3 ½"	3 ½ - 4"	4 - 4 1/2"	4 ½ - 5"	5 - 5 ½"	5 ½ - 6"
	CIRCUM 6" Below Knee	11 - 12 ½"	12 1/4 - 13 3/4"	13 ¼ - 15"	14 ¼ - 15 ¾"	15 – 17"	17 – 19"

### **Active Reliever**

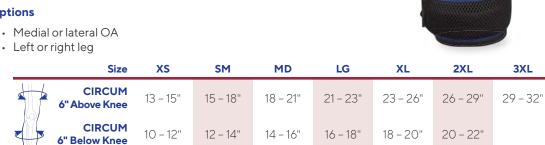
### **RECOMMENDED L-CODE L1851**

Recommended for: Unicompartment osteoarthritis / articular cartilage defect repair / meniscal cartilage repair or osteochondral defect repair.

#### **Features**

- · Breathable spacer fabric sleeve with posterior expandable Lycra panel
- Townsend's patented TM5+ hinge
- · Corrective force strap applies maximum counterforce at midstance phase of gait
- · Patient friendly quick release buckles
- · Anterior opening thigh section for easy-on and easy-off

### **Options**



### **Dynamic Reliever**

### PDAC APPROVED L1843/L1851

Recommended for: Mild to moderate medial OA and patients who are looking for a semi-rigid knee brace.

### **Features**

- · Self-contouring nylon shells for an intimate, comfortable fit that optimizes delivery of corrective forces and prevents brace migration
- Correcting Dosing Dial increases correction 0-20°
- Exclusive Townsend Motion Hinge tracks with the roll-and-glide translation of the knee
- Automatically telescopes inward as knee extends to deliver maximum correction at mid-stance phase of gait
- · Premium soft adjustable straps
- Speed Klips<sup>™</sup> for easy-on and easy-off
- · Tool-less adjustable tibial shell bolster prevents brace rotation as correction is applied

### **Ordering Methods**

- OTS sizing
- Custom fit from three-measurements
- · Individual shells for assembly in clinic
- · Start kit with 12 shell (6 upper 6 lower)
- · Custom from a cast or digital leg scan (see page 81)

Size	1	2	3
CIRCUM 6" Above Knee	14 – 18"	18 - 24"	23 ½ - 28"
CIRCUM 6" Below Knee	11 – 14"	14 – 17"	17 – 19"













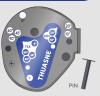


Pull-on Sleeve Style

### Hinge Adjustment







Remove hinge cover to set extension/flexion stops.

	Size	XS	SM	MD	LG	XL	2XL	3XL
	CIRCUM 6" Above Knee	13 - 15 ½"	15 ¼ - 18 ½"	18 ½ - 21"	21 - 23 ½"	23 ½ - 26 ½"	26 ½ - 29 ½"	29 ½ - 32"
202	Knee CIRCUM	12 - 13"	13 - 14"	14 - 15"	15 - 17"	17 - 19"	19 - 21	21 - 23"
	CIRCUM 6" Below Knee	10 - 12"	12 - 14"	14 - 16	16 - 18"	18 - 20"	20 - 22"	22 - 24"



**Open Wrap Style** 

### GenuStart & GenuStart ROM PDAC APPROVED L1820 - ROM L1832/L1833

Comfortable, versatile and easy to use, the GenuStart line of knee braces offers a variety of fit and treatment options designed for a superior patient experience. Available in two lengths, wrap or sleeve styles and two hinge options, the GenuStart is a powerful new solution featuring trusted Townsend hinge technology.

Recommended for: Functional treatment of the knee before or after surgery, rehabilitation following mild to moderate sprains of the cruciate and/or collateral ligaments, knee ligament injuries or ruptures and instability of the knee joint.

### **Features**

- Easy to fit, adjust and adapt with sleeve or wrap styling, available in short and long lengths.
- Townsend's patented TM5+ or TM5 hinge options replicate the natural movement of the knee.
- Alternating strap pattern prevents rotation and improves suspension.
- Open patella buttress for increased stability and support.
- Anatomically shaped medial/lateral aluminum stays for superior support.

### **Ordering Methods**

OTS sizing



### EXOGUARD PDAC APPROVED L1846

**Recommended for:** Active patients returning to sports after ligament injury or reconstructive surgery or prophylactic use.

Combining the most advanced composite technology with Townsend's tradition of perfect fit and function, EXOGUARD provides the ultimate protection for athletes.

#### **Features**

- Townsend's patented TM5+ hinge
- Extremely durable yet lightweight structure
- Synergistic Suspension Strap
- Unique tibial shell design and vacuum lamination process for superior rotary control
- Superior durability in lateral impact testing

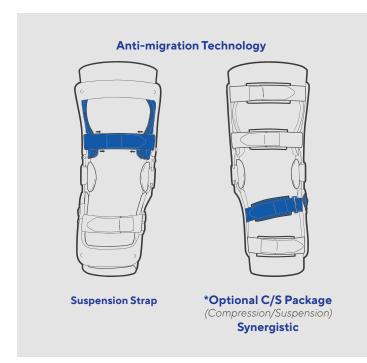
### **Options**

- Available with light weight, aircraft grade aluminum or high strength, stainless-steel hinge
- Flexion stop kit (extension stop kit included)
- HD lamination option designed for high impact sports

### **Ordering Method**

• Custom from a cast or digital leg scan (see page 81)





### **Rebel Series Braces**

### PDAC APPROVED L1845 FOR THREE-MEASUREMENTS PDAC APPROVED L1852 OFF-THE-SHELF

The ultimate solution for recovery and protection, the Rebel Series line of knee braces combines high-grade aluminum with Townsend/ Thuasne USA's trusted core technologies. Featuring the patented TM5+ hinge, shell options ranging in strength and size, suspension technology, rotation control and a three-measurement custom fit, the Rebel Series is the perfect choice for a variety patients and activity levels.

Recommended for: Ligament injuries and/or reconstructive knee surgery.

### **Features**

- · Rigid aircraft grade aluminum frame
- Townsend's patented TM5+ hinges
- Exclusive Synergistic Suspension Strap
- · Rotation control tibial shell contour

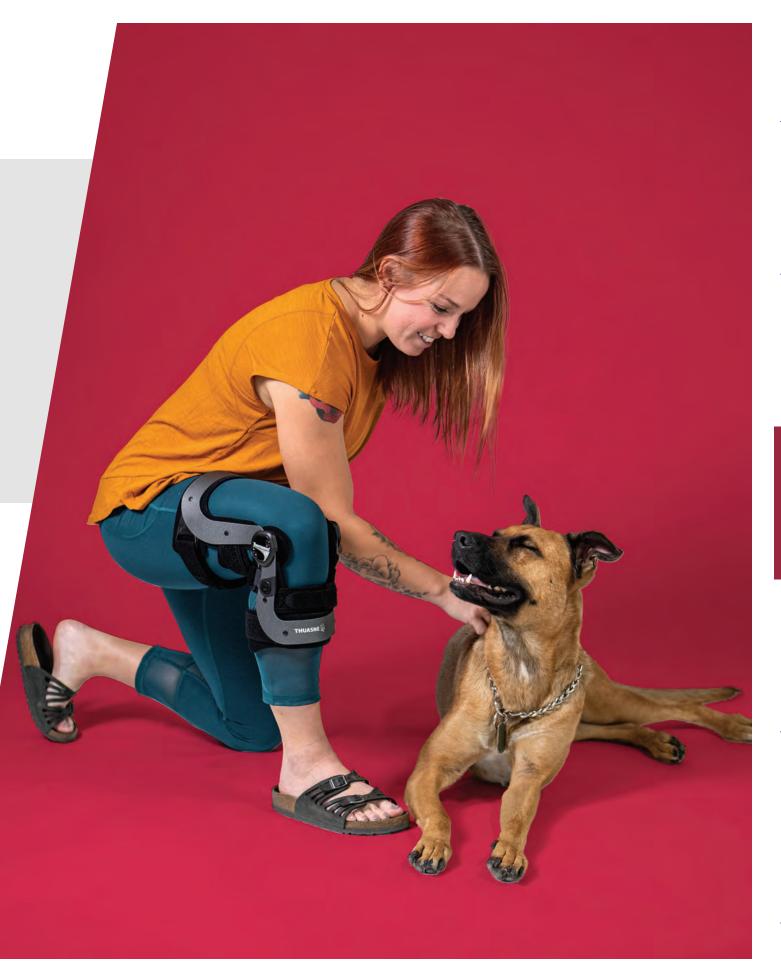
#### **Options**

- · Available in three different frames
  - > Rebel Lite (lowest weight, less rigid) 13" only
  - > Rebel (ideal for most patients)
  - > Rebel Pro (heavy users and contact sports)
- Anti-migration strap padding
- ACL or combined instabilities
- 6", 7", or 8" lower; 7" or 8" upper
- Compression/Suspension anti-migration package\*
- Flexion stop kit (extension stop kit included)
- Powdercoat finish in a variety of colors (see page 79)

### **Ordering Methods**

- OTS sizing
- Custom fit from three-measurements
- Custom from a cast or digital leg scan (see page 81)

Size	XS	SM	MD	LG	XL	2XL	3XL	_*
CIRCUM 6' Above Knee	17) 1/2 16 1/2"	15 ½ – 18 ½"	18 ½ – 21"	21 – 23 ½"	23 ½ - 25"	25 – 28"	28 - 31"	Rebel Pr
M-L Width	3 - 3 ½"	3 ½ - 4"	4 - 4 1/2"	4 ½ - 5"	5 - 5 ½"	5 ½ - 6"	6 - 6 1/2"	0 14"
CIRCUM 6' Below Knee	11 = 12 1/2"	12 1/4 - 13 3/4"	13 ¼ - 15"	14 1/4 - 15 3/4"	15 – 17"	17 – 19"	19 – 21"	only









**Air Townsend** 









### **Air Townsend & Air Lite**

PDAC APPROVED CODE L1846

Recommended for: Patients who desire or require maximum control after experiencing a ligament injury and/or reconstructive knee surgery.

#### **Features**

- Greater shell-to-skin contact for maximum control
- · Custom wet lamination carbon graphite shells
- Townsend's patented TM5+ Hinge
- Exclusive Synergistic Suspension Strap
- · Anti-rotation tibial shell bolster available in the Air Townsend

### **Options**

- Custom shell lengths
- · Anti-migration strap padding
- Aluminum or stainless hinge material
- Special trim lines and full figure models
- Flexion stop kit (extension stop kit included)
- A variety of colors or fabric inlay (see page 79)

### **Ordering Method**

• Custom from a cast or digital leg scan (see page 81)

### Accessories available for use with a variety of knee braces



C/S Wrap
PDAC Recommended L2397
One Size Fits All

- Improves brace suspension
- Reduces migration
- Limits rotation
- Prevents chafing or irritation



The Spooner

PDAC Recommended L2800/L2795
One Size Fits All

- Controls patella instabilities
- Ensures proper brace alignment
- Soft universal J-shaped patella buttress
- Easily retrofits to most Thuasne USA rigid knee braces



Neoprene Under Sleeve PDAC Recommended L2397

Sizing: XS, S, M, L, XL, 2XL

- · Eliminates chafing
- Reduces chance of skin irritation
- Improves tissue containment
- Increases comfort



Under Sleeve (18 & 22")

PDAC Recommended L2397 Sizing: XS, S, M, L, XL, 2XL

- · Cotton material
- Eliminates chafing
- Reduces chance of skin irritation
- Improves tissue containment and compression
- Increases comfort





- · Custom molded solid core carbon graphite shells
- Townsend's patented TM5+ Hinge
- Exclusive Synergistic Suspension Strap
- · Rotation control tibial shell contour

### **Options**

- ACL or combined instabilities
- Anti-migration strap padding
- 13, 14, 15- and 16-inch shell length
- · Hinge material aluminum or stainless
- · Compression/Suspension anti-migration package
- Flexion stop kit (extension stop kit included)
- High gloss paint or powdercoat finish (see page 79)

### **Ordering Method**

• Custom from a cast or digital leg scan (see page 81)



### **Sports Cover** Sizing: SM/MD, LG/XL

- · Padding protects frame and hinge during activities
- Suitable for team or contact sports
- · Keeps hinges clear of dirt and debris
- Polyester material ensures a snug fit over brace







### RebelLock

PDAC APPROVED L1845/L1852

**Recommended for:** Severe instabilities requiring a locking orthosis.

### **Features**

- Exclusive Synergistic Suspension Strap
- · Anti-migration strap padding
- Anti-rotation tibial shell
- Compression/Suspension Package

### **Options**

- 14, 15- and 16-inch shell length
- Locking position can be set at 0° or 5°
- Flexion stops at 30°, 60°, or 90°
- · Extension Assist
- Powdercoat finish in a variety of colors (see page 79)

### **Ordering Method**

- Custom fit from three-measurements
- Custom from a cast or digital leg scan (see page 81)

	Size	XS	SM	MD	LG	XL
	CIRCUM 6" Above Knee	12 ½ - 15 ½"	15 ½ - 18 ½"	18 ½ – 21"	21 - 23 ½"	23 ½ - 25"
1	M-L Width	3 - 3 ½"	3 ½ - 4"	4 - 4 1/2"	4 ½ - 5"	5 - 5 ½"
	CIRCUM 6" Below Knee	11 – 12 ½"	12 1/4 - 13 3/4"	13 ¼ - 15"	14 1/4 - 15 3/4"	15 – 17"







### **Motocross Series**

**RECOMMENDED L-CODE L1846** 

Recommended for: Motocross riders who have experienced ligament injuries and/or reconstructive knee surgery or prophylactic use.

- · Custom wet lamination carbon graphite shells
- Townsend's patented TM5+ hinge
- Exclusive Synergistic Suspension Strap available in the Motocross Air
- · Second shell pad with no patella guard
- · Anti-migration strap padding

- Shell length (Motocross Air)
- Hinge material aluminum or stainless (Motocross Air)
- Flexion stop kit (Extension stop kit included)
- A variety of colors or fabric inlay (Motocross Air) (see page 79)

### **Ordering Method**

• Custom from a cast or digital leg scan (see page 81)

### **BOLD**

### PDAC APPROVED L1845/L1852

Recommended for: Ligament injuries and/or reconstructive knee surgery.

### **Features**

- · Lightweight brushed aluminum frame with black polymer cuffs
- Townsend's patented TM5+ hinge
- Exclusive Synergistic Suspension Strap
- 14 Inch length
- Anti-migration strap padding

### **Options**

• Flexion stop kit (extension stop kit included)

	Size	SM	MD	LG	XL
	CIRCUM 7" Above Knee	15 ½ – 18 ½"	18 ½ – 21"	21 - 23 ½"	23 ½ - 25"
1	M-L Width	3 ½ - 4"	4 - 4 ½"	4 ½ - 5"	5 - 5 ½"
	CIRCUM 7" Below Knee	12 1⁄4 - 13 3⁄4"	13 ¼ - 15"	14 ¼ - 15 ¾"	15 – 17"



### **ROM-R**

### PDAC APPROVED CODE L1832/L1833

Recommended for: Patients who require post-operative fixation and/or range of motion control for post-injury stabilization.

#### **Features**

- ROM hinges with drop locks and tool-free adjustable flexion and extension settings
- Sturdy aluminum struts with extendable ends that telescope from 19" to 26" in ½" increments
- Comfortable and light weight
- Malleable paddles with individual cool pads can be contoured to the leg to achieve an intimate fit, increase stabilization and improve brace suspension
- · Universal size, no measurement required
- · Easy to adjust

### **Options**

• Full Shell pads available





Length adjustment





**Full Pads Now Available** 





ROMX Hinge



### **ROMX**

### RECOMMENDED L-CODE L1832/L1833

**Recommended for:** Patients who require post-operative fixation and/or range of motion control for post-injury stabilization.

#### **Features**

- Rigid aluminum bars
- · Hinges with adjustable extension & flexion limitations
- · Drop lock mechanism
- · Strap lock mechanism for the length adjustment
- Universal left or right

### **Options**

- ROMX extendable from 18" to 23"
- Shell pads (Full, Air, or Breeze)
- Straps with Velcro or buckle closures





Tool-Free Length Adjustments

### SafeLimb RECOMMENDED L-CODE L5450

Providing comfort and security during post-surgical care, SafeLimb offers supportive protection of the residual limb in case of patient falls.

Recommended for: Post-operative Below Knee Amputation (BKA) patients. Offers limb protection after transtibial amputation. Prevention of knee flexion contracture following transtibial amputation.

#### **Features**

- Unique design, materials and adaptability enhances fit, suspension and patient compliance
- High density distal foam pad provides protection to the residual limb
- Length and contour of the medial/lateral bars can be adjusted to fit patient
- Anterior opening and anterior straps for ease of application
- Unique "SupraPatellar Strap" prevents migration
- · Lightweight and breathable structure

Size	SM	MD	LG	XL	2XL
CIRCUM 6" Mid Patella	14 - 18 3/4"	18 3/4 - 20 3/4"	20 ¾ - 24 ¾"	24 ¾ - 29 ½"	29 - 34"







**Thuasne Knit technology**Comfort, compression and breathability

# Genu Ligaflex® PDAC APPROVED L1820

PRODUCT #237503 (PULL-ON) AND #237505 (ANTERIOR CLOSURE)

Recommended for: Resumption of non-contact sports and regular daily activities after mild or moderate knee injuries.

### **Features**

- Anterior wrap closure model: ultra easy to fit with speed clips
- Medical grade compression
- Hyper-flexible knitted areas in the popliteal crease and proximal edge
- Semi-rounded straps for improved comfort
- Townsend's patented TM5 Hinge technology
- Dual tab calf strap improves suspension
- · Integrated anti-slip silicone in the thigh section
- Aluminum uprights provide lateral stability
- Double adjustable Velcro tabs help optimize placement of uprights

### Genu Ligaflex Pull-On

Size	1	2	3	3+	4	4+
Knee CIRCUM	12 ½ - 13 ¾"	13 ¾ - 14 ½"	14 ½ - 16 ¼"	16 ½ - 17 ¾"	18 – 19 ¼"	19 1/4 - 20 3/4"

### **Genu Ligaflex Anterior Closure**

	Size	1	2	3	3+	4	4+	5	5+	6	6+
	CIRCUM 5" Above Knee										
***	CIRCUM 5 ½" Below Knee	11 ¾ – 13 ½"	13 - 14 ½"	14 ½ –16"	14 ½ - 16"	16 - 17 ½"	16 – 17 ½"	17 ½ –19"	17 ½ – 19"	19 - 20 3/4"	19 - 20 3/4"





# Genu Dynastab® PDAC APPROVED L1810

#### PRODUCT #237005

- Dual hinge design provides stability
- Semi-rigid strapping gives extra support and prevents migration
- Patented pull tabs for easy application and removal
- Universal left or right

 Size	1	2	3	4	5	0
Knee CIRCUM	12 ½ – 13 ¾"	13 ¾ - 15"	15 – 16 ½"	16 ½ – 18"	18 – 19 ½"	19 ½ – 21"



# Genu Ligaflex® ROM PDAC APPROVED L1832/L1833

PRODUCT #238604 (PULL-ON) AND #238605 (ANTERIOR CLOSURE)

Recommended for: Mild to moderate ligament injuries and instabilities / early stage OA / meniscus injuries and post-operative meniscal repairs.

#### **Features**

- Available in pull-on and anterior closure models in 12" and 16" lengths.
- · Medical grade compression
- Easy to use Velcro tabs
- Low profile tension buckles
- TM5+ Hinge that replicates the natural movement of the knee
- Patented integrated anti-slip silicon knitting
- Tool-less hinge with easy to apply flexion and extension stops to restrict range of motion
- Contoured aluminum uprights to improve fit and comfort
- Universal left or right

Size	1	2	3	4	5	6
Knee CIRCUM	12 ½ - 13 ¾"	13 ¾ - 15"	15 - 16 ½"	16 ½ – 18"	18 – 19 ½"	19 ½ – 21"





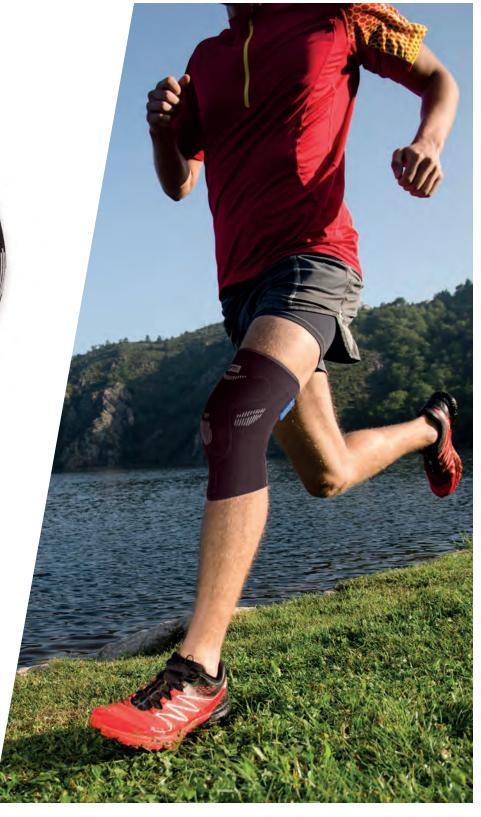
# Genu PRO ACTIVE PDAC APPROVED L1810/L1812

PRODUCT#U31001

Recommended for: Maintenance, compression and support of the knee after mild or moderate knee strains or sprains.

### **Features**

- Patented silicone patellar insert
- Medical grade compression
- Double upright hinges
- Lateral silicone bands
- Soft knit over the popliteal crease
- · Anatomical cut at the calf
- Universal left or right



	Size	1	2	3	4	5	6	6+	7	7+
	CIRCUM 5 ½" Above Knee	13 ¾ - 15 ¼"	15 - 16 1/4"	16 ¼ - 17 ¼"	17 1/4 - 18 1/2"	18 ½ – 20"	20 - 21 ¾"	21 ¾ - 23 ¼"	23 ¼ - 25 ¼"	25 ¼ - 27 ¼"
**	CIRCUM 5" Below Knee	9 3/4 - 11"	11 - 12 1/4"	12 1/4 - 13 1/2 "	13 ½ – 14 ½"	14 ½ - 16 ¼"	16 1/4 - 17 3/4"	17 – 18 ½"	17 3/4 - 19 1/4"	18 ½ – 20"





### Patella Reliever (A) PDAC APPROVED L1810/L1812

PRODUCT #234801

Recommended for: Patello-femoral pain syndrome / lateral patellar subluxation / lateral patellar dislocations / patello-femoral arthritis / lateral patellar compression syndrome

- Medical grade compression
- · Crescent shaped patella insert with lateral tracking system
- Distal strap for improved suspension
- · Patented integrated antislip silicone knitting in the upper thigh
- · Available in left and right

# Silistab Genu (B) PDAC APPROVED A4467

PRODUCT#234005

Recommended for: Maintenance, compression and support of the knee after mild or moderate knee strains or sprains

- Medical grade compression
- Patented silicone patella insert provides kneecap support and protects the patella tendon
- Breathable cotton fabric integrated posteriorly
- · Flexible lateral stays give additional reinforcement
- Anatomically shaped elastic knit for optimal thigh, calf, and popliteal comfort
- Lateral silicone anti-slip system for better hold
- Universal left or right







# Ligastrap Genu (C) PDAC APPROVED A4466

PRODUCT #217002

**Recommended for:** Maintenance, compression and support of the knee after mild or moderate knee strains or sprains

- Medical grade compression
- Numbered figure eight strapping delivers extra stabilization
- Anatomically shaped elastic knit for optimal thigh, calf, and popliteal comfort
- Patented pull tabs for easy application and removal
- · Universal left or right

# Genuextrem (D) PDAC APPROVED A4467

PRODUCT #232101

**Recommended for:** Maintenance, compression and support of the knee after mild or moderate knee strains or sprains.

- Medical grade compression
- Flexible lateral stays for additional reinforcement
- Anatomically shaped elastic knit for optimal thigh, calf, and popliteal comfort
- Lateral silicone anti-slip system for better hold
- Patented pull tabs for easy application and removal
- · Universal left or right

### **Patella Reliever**

Size	1	2	3	4	5	6
Knee CIRCUM	12 ¼ - 13 ½"	13 ½ - 14 ½"	14 ½ - 15 ¾"	15 ¾ - 17"	17 – 18"	18 – 19 ¼"

### Ligastrap Genu

Size	1	2	3	4	5	6
Knee CIRCUM	12 ½ - 13 ¾"	13 ¾ - 15"	15 – 16 ½"	16 ½ - 18"	18 – 19 ½"	19 ½ - 21"

### Silistab Genu

Size	1	2	3	4	5	6
Knee CIRCUM	12 ½ – 13 ¾"	13 ¾ - 15"	15 – 16 ½"	16 ½ – 18"	18 – 19 ½"	19 ½ – 21"

### Genuextrem

Size	1	2	3	4	5	6
Knee CIRCUM	12 ½ - 13 ¾"	13 ¾ - 15"	15 – 16 ½"	16 ½ - 18"	18 – 19 ½"	19 ½ – 21"



# SpryStep® PDAC APPROVED L1951

The SpryStep® is an elegant, durable and effective ankle foot orthotic made with a precise selection and layup of diverse composite materials. The posterior spiral strut is uniquely positioned to amplify energy return and fit easily into most shoes.

Recommended for: Excessive plantarflexion during swing phase (secondary to weak dorsiflexors) / Weakness of the pretibial muscles ≤3 / Plantar flexor strength 4 / Mild knee instability during stance phase / Mild Knee hyperextension

#### **Features**

- Lightweight, durable composite construction engineered with unique laminated characteristics to prevent delamination and breakage
- Material diversity offers strategic flexibility and stiffness to enhance performance and patient comfort
- Proprietary posterior lateral position of the strut increases patient compliance and amplifies energy return
- Trimmable forefoot ensures a perfect fit
- Fits easily into most shoes
- Custom version available based on size, pathology, or activity level

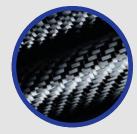
### **Ordering**

- Available in left or right
- Custom version available (see page 68)

Size	XS	SM	MD	LG	XL
Foot Length	8 ½ - 9 5/8"	9 1/8 - 10 1/4"	9	10 1/4 - 11 3/8"	11 3/8 – 12"
Height	11 ¾"	12 %"	13 %"	14 1/8"	15"



### SpryStep® Family Features



### Proprietary composite technology

Remarkable strength and beautiful cosmetic characteristics.



### **Posterior Lateral Strut**

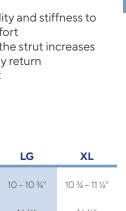
The spiral strut is uniquely positioned behind the malleoli to amplify energy return and fit easily into most shoes.



### Customizable

The forefoot can be easily trimmed for a perfect fit.







### SpryStep® Flex PDAC APPROVED L1951

Recommended for: Footdrop / fatigueable footdrop / footslap / proprioception / circumduction / vaulting / high knee gait / hip hiking / contralateral trunk lean

### Features

- Enhanced spiral curve of the strut and proprietary material blend offers greater flexibility and durability, perfect for high impact activities
- Proprietary posterior lateral position of the strut increases patient compliance and amplifies energy return
- Trimmable forefoot ensures a perfect fit
- Fits easily into most shoes

### **Ordering**

- Available in left or right
- · Custom version available (see page 68)

Size	XS	SM	MD	LG	XL
Foot Length	8 ½ – 9 %"	9 % - 10 ¼"	9 % – 10 %"	10 ¼ – 11 %"	11 % – 12"
Height	11 ¾"	12 %"	13 %"	14 1/8"	15"

### SpryStep® Max

Recommended for: Excessive dorsiflexion during stance phase (due to weak plantar flexors) / mild, moderate or pronounced knee instability during stance phase / excessive knee flexion during stance phase (secondary to weak plantar flexors) / quadricep weakness

#### **Features**

- Midfoot lateral strut strategically positioned to achieve the desired stabilization and gait assist
- Anterior shell with 3D shaped pad featuring a recessed tibial crest relief zone
- Lightweight, durable composite construction engineered with unique laminated characteristics to prevent delamination and breakage
- Material diversity offers strategic flexibility and stiffness to enhance performance and patient comfort
- Proprietary posterior lateral position of the strut increases patient compliance and amplifies energy return
- Trimmable forefoot ensures a perfect fit

### **Ordering**

· Available in left or right

Size	XS	SM	MD	LG	XL
Foot Length	7 3/4 - 8 1/2"	8 1/4 - 9"	9 – 10"	10 - 10 3/4"	10 ¾ - 11 ½"
Height	13 1/4"	14 ½"	15 ½"	16 ½"	16 ½"

### SpryStep® Pediatric

Recommended for: Footdrop / Idiopathic toe walking / mild knee hyperextension / mild foot and ankle tri-planar instability

#### **Features**

- Trimmable on the toe, medial side of the footplate and the calf cuff
- Built with increased flexibility for dynamic kids
- Lightweight, durable composite construction engineered with unique laminated characteristics to prevent delamination and breakage
- Proprietary posterior lateral position of the strut increases patient compliance and amplifies energy return
- Fits easily into most shoes

### **Ordering**

· Available in left or right

Size	XS	SM	MD	LG	XL
Foot Length (Min¹-Max)	3 3/4 - 5 3/4"	4 1/4 - 6 1/4"	5 - 7"	5 ½ - 7 ½"	6 - 18"
Height (Min²-Max)	6 1/4 - 7"	7 ½ - 8 ¼"	8 3/4- 9 1/2""	9 3/4 - 10 1/2"	11 – 11 ¾"

Calf cuff depth =  $2\frac{1}{2}$ " (the width of the calf cuff can be trimmed up to  $1\frac{1}{2}$ " on each side)

- 1. This indicates the shortest the footplate can be trimmed with scissors
- 2. This indicates the lowest the calf cuff can be trimmed with scissors



# SpryStep® Carbon Footplate

Turf Toe is the third highest injury that causes college athletes to miss playing time. The SpryStep® Carbon Footplate has been designed to alleviate foot pain and instability. Among nonathletes, there are multiple additional clinical applications for acute or chronic foot conditions.

Recommended for: Greater toe plantar plate injury (turf toe) / metatarsal fractures / Lis Franc injury / forefoot, midfoot Pain

#### **Features**

- · Integrated toe ramp enhances natural gait
- Rigid carbon core provides great energy return
- Trimmable composite materials all around the footplate for easy customization
- · Fits comfortably in most footwear

#### Ordering

- · Available in left and right
- · Footplates sold individually, one per order

Size	SM	MD	LG	XL	2XL
Men US Shoe Size	6 - 8 ½	7 – 10	9 – 12	11 – 14	13 – 16
Women US Shoe Size Height	5 - 10	8 – 12	11 - 15 ½	-	-













**Positional Toe Guard** 

The XLR8 Walker is a full shell pneumatic walking boot that provides a precise anatomical fit and protection for the toe and foot while allowing the patient to walk naturally and comfortably.

Recommended for: Ligament and tendon related trauma or injuries / severe sprains / stable fracture of the foot and front of foot / pre/post-

#### **Features**

- Full shell structure for optimal immobilization
- Pneumatic bladder with built-in air pump
- · Comfortable padded insole
- · Easy to inflate and deflate
- Shock absorbing outer sole rocker allows smooth and natural gait

### **Options**

- Heel wedges
- · Indoor sanitary outer sole cover
- Mid-calf or full-calf models available
- · Universal left or right

Size	XS	SM	MD	LG	XL
Men US Shoe Size	2 - 4	4 - 7	7 – 10	10 - 13	13 – 16
Women US Shoe Size Height	3 ½ - 5	5 - 8	8 – 11	11 – 15	15+







# EZG8 (Easy Gait) Series PDAC APPROVED L4360/L4361

NON-PNEUMATIC L4386/L4387

**Recommended for:** Grade 1, 2 and 3 ankle sprains and stable or stable fixed fractures of the foot or ankle.

### **Features**

- Offered in
  - > Fixed ankle
  - > Fixed ankle w/air bootie
  - > ROM hinge
- · Aluminum uprights
- · Comfortable padded insole
- · Shock absorbing outer sole rocker allows natural gait
- Foam bootie available with or without air bladder

### **Options**

- Full height or mid-calf uprights
- ROM hinges (EZG8 ROM Walker)
- · Standard or pneumatic (air bladder) bootie
- · Heel wedges
- · Indoor sanitary outer sole cover
- Universal left or right

Size	XS	SM	MD	LG	XL
Men US Shoe Size	2 - 4	4-7	7 – 10	10 - 13	13 – 16
Women US Shoe Size Height	3 ½ - 5	5 - 8	8 – 11	11 – 15	15+

### **Townsend PediWalker**

### **PDAC APPROVED L4387**

**Recommended for:** Grade 1, 2 and 3 ankle sprains and stable or stable fixed fractures of the foot or ankle

#### **Features**

- Durable alternative to casting for children
- Lightweight, conformable plastic uprights with metal reinforcement bridge
- Simple integrated strapping for easy application
- Reinforced composite rocker bottom facilitates natural gait
- Low profile and non-slip tread
- Extra sturdy for active children
- · Universal left or right

Size	SM	MD	LG
Children Size	5 - 8	8 – 13	13 – 3



# Malleo Dynastab BOA® PDAC APPROVED L1902

PRODUCT #235102

The lightweight, low-profile brace for active patients in need of ankle stability. Featuring The BOA® fit system for quick fitting and adjustment, the Malleo Dynastab BOA® is a slim and reliable solution that fits easily into most shoes.

Recommended for: Mild, moderate or severe sprains of the lateral ligaments / lower tibiofibular sprain / resumption of sports.

#### **Features**

- · Fast, easy and reliable BOA® fit system, with a lifetime guarantee
- · Wide opening for easy-on and easy-off
- · Resistant and comfortable lightweight metal reinforcements
- Figure 8 strapping system provides additional lateral reinforcement
- · Lightweight and comfortable antibacterial-treated 3D knit for effective moisture-wicking
- Slim, low-profile design allows the brace to be worn in most types of shoes
- · Universal left or right

Size	0	1	2	3
Ankle CIRCUM	6 3/4 - 7 1/2"	7 ½ - 8 ¾"	8 3/4 - 10 1/4"	10 1/4 - 113/4"

### Malleo Dynastab PDAC APPROVED L1902

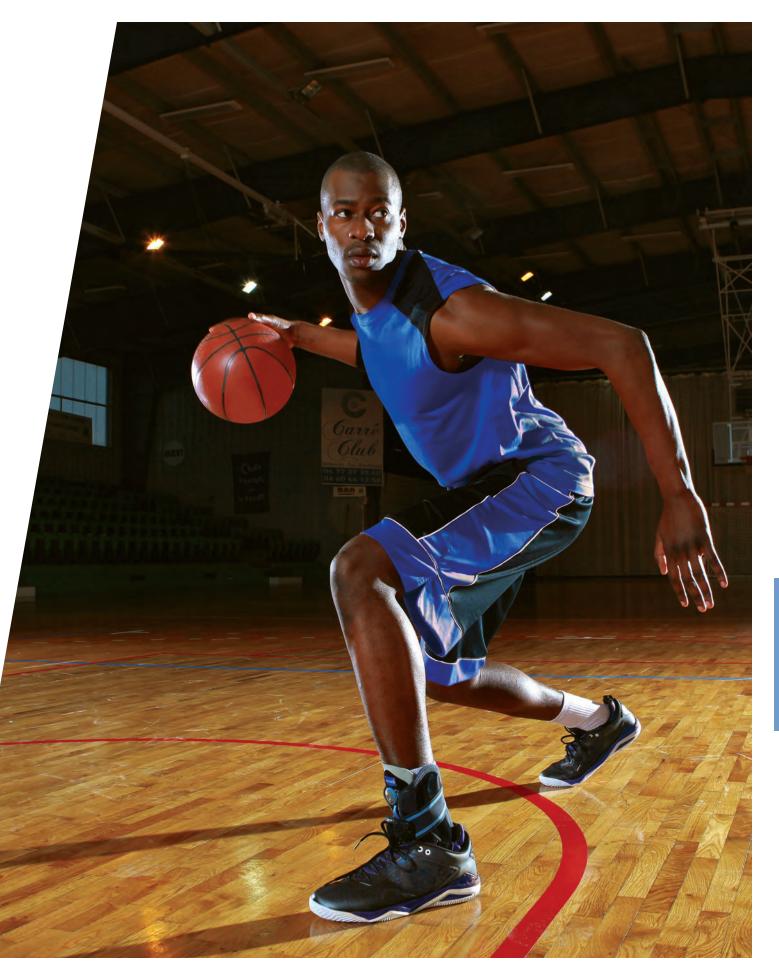
PRODUCT #235002

Recommended for: Mild, moderate or severe sprains of the lateral ligaments / lower tibiofibular sprain / resumption of sports.

### **Features**

- · Precise lace-up tightening system
- Same features and benefits as Malleo Dynastab BOA®
- · Universal left or right

	Size	1	2	3
	Ankle CIRCUM	7 ½ - 8 ¾"	8 3/4 - 10 1/4"	10 1/4 - 113/4"





### Ligacast Air+ PDAC APPROVED L4350

PRODUCT #233401

Recommended for: Moderate to severe sprains (functional or post-surgery treatment) and malleolar fractures (functional treatment in physical therapy phase).

#### **Features**

- · Rigid side shells for firm support
- Inflatable inserts reinforce protection and reduce swelling
- Adjustable heel and Velcro straps for easy application
- Inflator bulb for air pressure customization after brace is fit

### **Ordering**

• OTS universal sizing

### Ligacast Anatomic PDAC APPROVED L4350

PRODUCT #231501

Recommended for: Moderate or severe sprains, malleolar fractures (functional treatment in physical therapy phase)

#### **Features**

- · Rigid side shells for firm support
- Asymmetrical malleoli prominence and flexible edges for anatomical fit
- Honeycomb interior for enhanced patient comfort

### **Ordering**

Size	0	1	
Patient Height	< 5′ 3"	> 5′ 3"	

### **Ligacast Junior**

### **RECOMMENDED L-CODE L4350**

PRODUCT #2600001004

Recommended for: Moderate or severe sprains and malleolar fractures (functional treatment in physical therapy phase).

### **Features**

- Rigid side shells for firm support
- Height adjustable heel strap to accommodate a child's anatomy
- · Comfortable foam inserts

### **Ordering**

### **Patient Height**

Height < 4 ½ ft

### **Premier Ankle Brace**

RECOMMENDED L-CODE L1970

**Recommended for:** Instability / inversion and eversion issues / chronic angle instabilities and some forms of arthritis / posterior tibial tendon dysfunction.

#### **Features**

- Anterior or posterior tibial containment shell
- Thermo-plastic or carbon footplate
- Hinges integrate seamlessly into the brace structure
- Easy to install inserts restrict inversion and eversion motion
- Multiple shell configuration available

### **Ordering**

• Custom from a cast or digital leg scan (see page 81)







Thermo Plastic-PTS (Posterior Tibial Shell)



**Premier-ATS** 

**Premier-PTS** (Posterior Tibial Shell)



**Premier-PTS/TJ**(Posterior Tibial Shell & Tamarack Joints)



**Optional Dorsi Assist Bands** 



## NOX Splint (A) RECOMMENDED L-CODE L4396

Recommended for: Plantar fasciitis / Achilles tendonitis / tight heel cords

#### **Features**

- · Hinge design allows for customized stretch
- · Adjustable tension strap
- · Position indicator window
- Soft padding (strategic interior air bladder)
- · Wider metatarsal region
- · Non-skid sole
- Universal left or right

### **Options**

· Optional accessory strap

### **Ordering**

Size	SM/MD	LG/XL
Men US Shoe Size	5 - 9	9 ½ - 14
Women US Shoe Size Height	6 - 10	10 ½ - 15

### Night Splint (B) RECOMMENDED L-CODE L4396

Recommended for: Plantar fasciitis / Achilles tendonitis / tight heel cords.

#### **Features**

- · Lightweight with adjustable tension
- · Washable open cell foam liner
- Comfortable strap pads to protect against discomfort on bony anatomy
- · Easy to use, convenient center release buckles
- Non-slip outer sole
- · Universal left or right

### **Ordering**

Size	SM	MD	LG
Men US Shoe Size	3 ½ - 7	7 – 10	10 ½ - 13
Women US Shoe Size Height	4 - 7 ½	8 - 10 1/2	10 ½ - 15

# Silistab Achillo (C) PDAC APPROVED A4467

PRODUCT #235502

Recommended for: Achilles tendon injuries including enthesitis / tendonitis / tenosynovitis / bursitis and Haglund's disease / achillodynia following Achilles tendon surgery.

#### **Features**

- · Medical grade compression
- Soft silicone heel inserts (pair) available in 3 heights
- Dimpled Achilles silicone posterior insert for tendon protection and massage
- Elastic knit for optimal malleoli comfort
- · Patented pull tabs for easy application and removal
- Universal left or right

#### **Ordering**

Size	1	2	3	4	5
Ankle CIRCUM	7 ½ - 8 ¼"	8 1/4 - 9"	9 - 9 3/4"	9 3/4 - 10 3/4"	10 3/4 - 113/4"

### Malleoaction (D)

PRODUCT #236102

Recommended for: Mild to moderate sprains / oedema and proprioception

### **Features**

- Provides support and medical grade compression
- · Anatomically shaped elastic knit for optimal malleoli comfort
- Patented pull tabs for easy application and removal
- · Universal left or right

### **Ordering**

Size	1	2	3	4	5
Ankle CIRCUM	7 ½ - 8 ¼"	8 1/4 - 9"	9 - 9 3/4"	9 ¾ - 10 ¾"	10 ¾ - 11¾"



# Malleo Go (E) PDAC APPROVED A4467

PRODUCT #T300202

Recommended for: Post-traumatic / postoperative and chronic inflammation / sprains / joint effusions / oedema linked to arthritis and joint disease / moderate joint instability.

### **Features**

- Support and medical grade compression
- · Elastic knit for optimal malleoli comfort
- · Silicone inserts for malleoli protection
- · Available left and right

### **Ordering**

Size	XS	SM	MD	LG	XL	2XL
Ankle CIRCUM	6 3/4 - 7 1/2"	7 ½ - 8 ¼"	8 1/4 - 9"	9 - 9 3/4"	9 3/4 - 10 3/4"	10 3/4 - 11 3/4"

# Ligastrap Malleo (F) PDAC APPROVED A4467

PRODUCT #218003

Recommended for: Moderate sprains of the lateral ligament (functional treatment) / resumption of occupational activities and sports after moderate to serious sprains / chronic hyperlaxity

### **Features**

- Figure 8 strapping for lateral stabilization and support
- · Removable reinforcement strap
- Anti-slip system to prevent migration
- · Patented pull tabs for easy application and removal
- · Low profile for maximum comfort
- Universal left or right

### Ordering

Size	1	2	3	4	5
Ankle CIRCUM	7 ½ - 8 ¼"	8 1/4 - 9"	9 - 9 3/4"	9 ¾ - 10 ¾"	10 3/4 - 113/4"



**Custom Specialty Orthoses** 

From the elegant yet durable range of SpryStep AFOs, to custom knee braces and specialty KAFOs, Thuasne USA offers effective custom solutions for the most complex patients.





# SpryStep® Custom RECOMMENDED L-CODE L1950/L1940/ L1945

A durable, effective and elegant custom AFO that meets the individual needs of a diverse patient population. Customizable from calf to toe, the SpryStep® Custom's posterior lateral strut is strategically positioned to amplify energy return and fit comfortably into most shoes.

Recommended for: Fatigueable footdrop / footslap / footdrop / excessive plantarflexion during swing phase / weakness of the pretibial muscles  $\leq 3$  / plantar flexor strength 4 / mild knee instability during stance phase / knee hyperextension / circumduction / vaulting / high knee gait / hip hiking/contralateral trunk lean

#### **Features**

- · Available in three models to treat a variety of patient indications
- Lightweight, durable composite construction engineered with unique laminated characteristics to prevent delamination and breakage
- Material diversity offers strategic flexibility and stiffness to enhance performance and patient comfort
- Proprietary posterior lateral position of the strut increases patient compliance and energy return for activity re-engagement
- Superior cosmetic finish

### **Sizing**

· Custom from a cast (see page 81)

# Options Contoured Footplate All versions available with molded arch and with molded arch and Criginal) Options Pre Tibial Shell Optional pre-tibial shell (Flex and Original)

molded inner boot or contoured footplate

with no inner boot



# SpryStep® Vector PDAC APPROVED L1950

The Custom Spiral AFO is an elegant, durable, patient friendly custom composite AFO. All four models feature our signature posterior lateral spiral strut that offers biomechanical and fitting advantages. Each model also includes a molded inner boot.

Recommended for: Plantar flexor strength 0 or 1/mild, moderate, or pronounced knee instability during stance phase / mild, moderate, or pronounced quad weakness / plantarflexion contracture / high tone / inconsistent oedema / non-correctable triplanar instability.

#### **Features**

- Malleable heat formable thermoplastic molded inner boot and calf cuff
- Lightweight, durable composite construction engineered with unique laminated characteristics to prevent delamination and breakage
- Device stiffness tuned for each individual patient
- Minimalistic trimlines using material only where force systems dictate, avoiding bony prominences
- · Open heel design for greater comfort
- Material diversity offers strategic flexibility and stiffness to enhance performance and patient comfort

### **Sizing**

• Custom from a cast (see page 81)



**Pre-Tibial Shell & Varus Correction** 

### **Available Models**



**Posterior Shell** 



**Pre-Tibial Shell** 



**Posterior Shell & Varus Correction** 

70



# SpryStep® Vector KAFO CUSTOM FABRICATED ORTHOSIS

### **RECOMMENDED L-CODE L2036**

Durable, versatile and lightweight, the SpryStep® Vector KAFO combines the power of modern composite manufacturing with trusted Townsend hinge motion. Featuring four shell configurations, a variety of joint options and two molded inner boot styles, the SpryStep® Vector KAFO is the comprehensive solution giving patients the confidence they need to lead active lives.

**Recommended for:** patients with varying neurological lower limb deficits including:

- Polio
- · Post-polio
- Multiple sclerosis
- Incomplete spinal cord injury
- Paralysis

- · Cerebral vascular accident
- Traumatic brain injuries
- Complications post-surgery
- Trauma affecting lower limb function

### **Knee alignment concerns**

- Genu varum
- Genu valgum

Genu recurvatum



Molded inner boot comes as standard to ensure optimal triplanar control



Optional coronal plane extension for increased knee control

### **Brace Configurations**









Anterior

Posterior

Hyperextension Resist

Flexion Resist

# Apply force patterns effectively with the brace configuration that's right for your patient

### **Joint Options**



**5 Bar Knee Component** 

Option 1: Free Motion

**Option 2:** Locking with manual triggers

**Option 3:** Locking with integrated cable and Twist Release



Single Pivot Knee Component

**Option 1:** Locking with manual triggers

**Option 2:** Locking with integrated cable and Twist Release



Twist Release Mechanism

Acts as a simple release lever that can also be use to provide free motion to a locked joint



**Extension Assist** 

Extension assist bands available on all joint configurations



## **Premier KAFO**

RECOMMENDED L-CODE L2036
RECOMMENDED L-CODE L2005 WITH STANCE
CONTROL

Recommended for: Partial paralysis of the leg muscles / weakness in the quadriceps / Polio / MS / incomplete spinal cord injury / femoral nerve damage / genu recurvatum / failed total knee surgeries / other lower extremity pathologies.

#### **Features**

- · Custom molded solid core carbon graphite shells
- · Rotation control tibial shell contour
- Becker's Stance Control and locking knee joints
- Townsend's Integrated Twist Release Mechanism
- · Thermoplastic footplate
- Hidden cables in carbon shell
- Variety of colors and finishes

#### **Ordering**

• Custom from a cast or digital leg scan (see page 81)

# Hybrid Carbon KAFO RECOMMENDED L-CODE L2036

Recommended for: Partial paralysis of the leg muscles / weakness in the quadriceps / Polio / MS / incomplete spinal cord injury / femoral nerve damage / genu recurvatum / other lower extremity pathologies.

#### **Features**

- Carbon graphite and thermoplastic composition
- · Range of hinges from Townsend and Becker
- · Custom made from a cast or digital scan
- Multiple trimlines and shell configurations
- Fully adjustable by qualified O&P practitioners

#### Ordering

• Custom from a cast or digital leg scan (see page 81)

# **Full Shell KAFO**

RECOMMENDED L-CODE L2036
RECOMMENDED L-CODE L2005 WITH STANCE
CONTROL

Recommended for: Partial paralysis of the leg muscles / weakness in the quadriceps / Polio / MS / incomplete spinal cord injury / femoral nerve damage / genu recurvatum / failed total knee surgeries / other lower extremity pathologies.

#### **Features**

- · Carbon graphite shells with thermoplastic footplate
- · Range of hinges
- Hand-modified from a positive model
- · Custom made from a cast or digital scan

#### **Ordering**

• Custom from a cast or digital leg scan (see page 82)

# Dynamic KAFO RECOMMENDED L-CODE L2036

Recommended for: Experiencing genu recurvatum / isolated quad weakness or flexion weakness / knee instabilities with foot drop / mild to moderate foot and ankle weakness without tone or contractions

#### **Features**

- · Multiple free knee and locking knee hinge options available (see page 80 for details)
- The spiral strut is uniquely positioned behind the malleoli to amplify energy return and fit more easily into most shoes
- Composite shell avoids bony prominences (open heel, metatarsal head)
- · Available with our elegant and ingenious twist release trigger lock with integrated cables for variable terrain patients
- Ultra-light (lightest KAFO option)
- · Ideal for asymmetric gait patients

#### **Options**

- OA treatment when ordered with LoadShifter mechanism
- Locking capabilities with Townsend and Becker options

#### **Ordering**

• Custom from a cast (see page 81)

#### **Available Models**



**Locking Knee** 



Free Knee With **Molded Inner Boot** 



Locking knee and molded inner boot model







В





D

# Custom Carbon Locking (A)

**RECOMMENDED L-CODE L1846** 

Recommended for: Severe instabilities that require a locking orthosis.

#### **Features**

- · Full shell provides maximum control
- Premier style provides open configuration
- Manual release trigger locks
- · Cable release trigger locks
- Choice of three Becker Orthopedic locking knee joints (see page 102)

#### **Ordering**

Custom from a cast or digital leg scan (see page 81)

# Premier AFO (C) RECOMMENDED L-CODE L1970

Recommended for: Instability / inversion and eversion issues / chronic ankle instabilities and some forms of arthritis / posterior tibial tendon dysfunction

#### **Features**

- Low profile, carbon graphite shell
- · Rigid and durable solid core construction
- Fixate or limit inversion/eversion of standard joints
- · Custom sizing from cast or scan

#### **Options**

- · Posterior and anterior shell configurations
- · Carbon or thermoplastic footplates
- · Townsend or Becker Orthopedic joints
- · Variety of colors and finishes

#### **Ordering**

• Custom from a cast or digital leg scan (see page 81)

# Custom Carbon Polio Style Knee Braces (B) RECOMMENDED L-CODE L1846

Recommended for: Post-polio patients or for patients who require hyperextension (genu recurvatum) control.

#### **Features**

- Anterior thigh, posterior calf construction
- · Significant loading forces to help suspend the brace
- Exclusive Synergistic Suspension Strap
- Townsend Original or 5 Bar knee joints
- · Optional extension assist bands

#### **Ordering**

• Custom from a cast or digital leg scan (see page 81)

# FullShell BK Specialty Knee Orthosis (D) RECOMMENDED L-CODE L1846

The Full Shell BK Brace is the custom solution designed to control knee instabilities for below knee amputees.

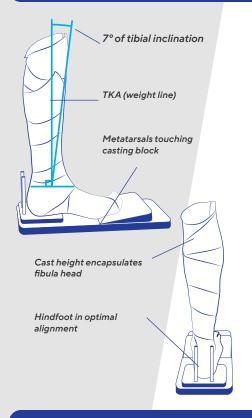
Recommended for: Mild to moderate ACL and MCL ligament injuries / meniscal cartilage injuries / ligament laxity of the knee / knee instabilities in the coronal plane / genu recurvatum / and quadricep weakness.

#### **Features**

- · Accommodates any size BK socket
- 5 bar locking joints can be coupled with Twist Release, Free Motion, Lever Release or no free motion
- Townsend Original Hinge
- · Optional Extension Assist
- Becker locking knee joint options
- · Becker external lock release options

Special casting instructions for the Full Shell BK Brace can be found on page 81

# **Casting Guidelines**



### **AFO Casting Guidelines**

#### 1. Medium

Fiberglass (recommended brands are C-Form from ST&G, Delta Conformable BSN, Delta Lite BSN and Össur Techform)

#### 2. Recommended technique

- Dry casting (with fiberglass)
- · Use of a casting platform

#### 3. Position

- · Sitting in a chair
- Using casting platform to replicate heel height and toe ramp (or another system allowing to replicate heel height and toe ramp)
- Metatarsals touching the casting platform
- Optimal sagittal alignment: correlates with heel height of the shoe (+/- 5° of the functional alignment)
- Optimal coronal alignment: to represent biomechanical goals (+/- 3° of functional alignment)
- Tibial inclination of 7°

#### 4. Cast length

• MPT height and capture all toe lengths.

#### 5. Cut strip

Anterior on the dorsum of the foot to transition laterally

#### 6. Markings on the cast

- Fibula head, metatarsal heads, base of 5th metatarsal, navicular, medial and lateral malleoli, tibial crest, tibial tubercle
- If applicable mark: deformity, scar tissue, and any other area of concern
- Reference hash-marks on top of cutting strip.
- · Add name of patient and clinic on cast.

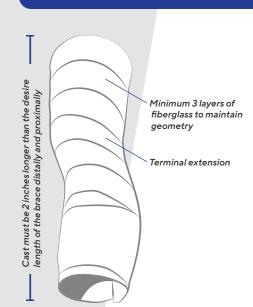
#### 7. Rigidity/Thickness

A minimum of 3 layers of fiberglass throughout the cast from proximal to distal end

#### 8. Tips

- Wait at least an hour before putting it in a box for shipping
- · Must remove stockinette
- Use staples to seal the cast
- Stuff the cast to maintain its structure during shipping
- · No webroll or compresso grip

### **KO Casting Guidelines**



#### 1. Medium

Fiberglass (any brand)

#### 2. Recommended technique

Traditional technique

#### 3. Position

- · Non-weightbearing
- · Sitting on the edge of a chair
- Terminal extension
- Foot in dorsiflexion: should naturally give a proper toe out

#### 4. Cast length

Cast must be 2" longer on the femur and the tibia than the desired length of the brace.

#### 5. Cut strip

Posterior

#### 6. Markings on the cast

- Fibula head, patella, medial & lateral condyle (+ if applicable: deformity, scar tissue, and any other area of concern).
- Reference hash-marks on top of cutting strip.
- Add name of patient and clinic on cast.

#### 7. Rigidity/Thickness

A minimum of 3 layers of fiberglass throughout the cast from proximal to distal end

Tips

- Wait at least an hour before putting it in a box for shipping
- Must remove stockinette
- Use staples to seal the cast
- Stuff the cast to maintain its structure during shipping
- · No webroll or compresso grip

#### **KAFO Casting Guidelines**

#### 1. Medium

Fiberglass (recommended brands are C-Form from ST&G, Delta Conformable BSN, Delta Lite BSN and Össur Techform)

#### 2. Recommended technique =

- · 2 stages dry casting (with fiberglass)
- Use of a casting platform

#### 3. Position -

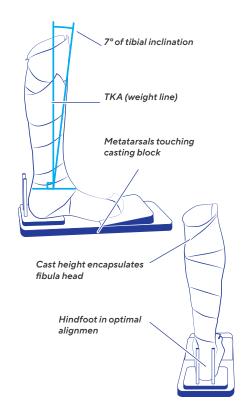
#### **AFO**

- · Sitting in a chair
- Using casting platform to replicate heel height and toe ramp (or another system allowing to replicate heel height and toe ramp)
- Metatarsals touching the casting platform
- Optimal sagittal alignment: correlates with heel height of the shoe (+/- 5° of the functional alignment)
- Optimal coronal alignment: to represent biomechanical goals (+/- 3° of functional alignment)
- Tibial inclination of 7°
- Leave the top 3" of the AFO section unsprayed. It will allow the two section to bond when you start the KO casting. Allow it to cure and then start the KO section casting process.

#### KO

- · Non-weightbearing
- · Sitting on the edge of a chair
- · Terminal extension
- Coronal and sagittal alignment must be within +/- 5 degrees of the intended brace position

#### Part 1: AFO Section



#### 4. Cast length -

AFO: mid-calf and captures all toes.

**KO:** 2" taller than the desired length of the brace (proximally)

#### 5. Cut strip -

Anterior on the dorsum of the foot to transition laterally

#### 6. Markings on the cast -

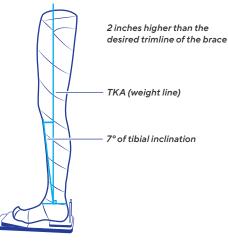
#### AFO section - Outside of the cast

- Fibula head, metatarsal heads, base of 5th metatarsal, navicular, medial and lateral malleoli, tibial crest, tibial tubercle
- If applicable mark: deformity, scar tissue, and any other area of concern
- Reference hash-marks on top of cutting strip.
- Add name of patient and clinic on cast.

### KO section - outside of cast

- Patella, medial & lateral condyle
- If applicable mark: deformity, scar tissue, and any other area of concern

#### Part 2: KO Section



#### 7. Rigidity/Thickness =

A minimum of 3 layers of fiberglass throughout the cast from proximal to distal end

#### 8. Tips

- Wait at least an hour before putting it in a box for shipping
- Must remove stockinette
- Use staples to seal the cast
- Stuff the cast to maintain its structure during shipping
- No webroll or compresso grip





KO, AFO, & KAFO

Casting Instructions

More Info >



#### **Custom Paint Finishes**

Add your personal touch to any Premier Series or Rebel Series knee brace with Thuasne's custom paint finishes. Have a color in mind you don't see below? Let us know and we'll source the paint of your dreams!

Custom paint finishes are non-refundable and price varies between finish and brace. To order, note the color code on the order form. For questions or special requests call 800.432.3466 and ask for Jon Lamas.







Green GD200

Navy Blue

# **Aluminum Braces** Powdercoat Colors

#### **Matte Finish**



# Premier Series Braces Paint Colors



# Premier Series Braces Textured Powdercoat Colors





Pink gd100

# ) Townsend Joints

#### **Free Motion Knee Joints**

- 1. Aluminum or Stainless TM5+
- 2. Aluminum TM6

1.

- 3. Loadshifter OTS
- 4. 5 Bar Free Knee
- 5. Townsend Original

### **Locking Knee Joints**

- 6. Single Pivot With Manual Or Cable Release
- 7. 5 Bar Trigger Locks With Manual Or Cable Release









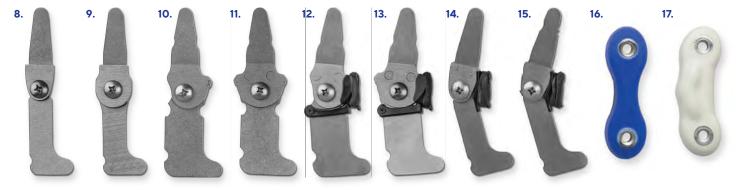






#### **Ankle Joints**

- 8. Free Motion
- 9. Heavy Duty Free Motion
- 10. Single Adjustable\*
- 11. Double Adjustable
- 13. Double Adjustable With Assist
- 14. Dorsi Assist
- **12. Single Adjustable with Assist\*\*** 15. Dorsi Assist With 90° Stop
- 16. Proteor Straight
- 17. Proteor Dorsi Assist



\*Available in anterior stop or posterior stop \*\*Available only in anterior stop

# **Becker Joints** (Available In Stock)

#### **Knee Joints (For Carbon Braces)**

- 18. Automatic Angled Lever Lock 1017-A
- 19. Modular Ratchet Lock 1018-A
- 20. Modular Ring Lock 1402-B
- 21. Adjustable Lever Spring Lock

### Stance Control (For Carbon Braces)

- 22. Becker FullStride
- 23. Becker Safety Stride



#### **Ankle Joints (For Carbon Braces)**

- 24. Dorsi-Flexion Assist 3225-A
- 25. Standard Action 3025-A
- 26. Double Action Ankle SLM-2825-A















# Ordering, Warranty, & Returns

### **Custom Fabrication Schedule**

Product Description	Days	Special Conditions
Air Townsend	3	
Air Townsend Specialty	5	special bars mounted ex- ternally, add 2 days (fab will communicate with CS)
Below Knee Orthosis	4	
Custom Elbow	4	
Custom Triggerlock	6	
Custom Trigger w/Lateral Ext	8	
EXOGUARD	5	
Full Shell KAFO	10	
Full Shell KAFO Stance Control	10	
Full Shell OA	3	
Full Shell OA Specialty	8	special bars mounted ex- ternally, add 2 days (fab will communicate with CS)
Polio	5	
Polio w Lateral Extension	8	
Premier OA	3	Custom Paint add 2 days,
Premier Reliever 1.0	3	Custom Paint add 2 days,
Premier	3	Custom Paint add 2 days,
AFO	5	Custom Paint add 2 days,
Hybrid KAFO	10	
KAFO	7	Custom Paint add 2 days,
KAFO Stance Control	7	Custom Paint add 2 days,
Premier Ankle	5	Custom Paint add 2 days,
Premier OA Specialty	5	Custom Paint add 2 days,
Premier OA w Lateral Ex	6	Custom Paint add 2 days,
Premier with Lateral Extension	6	Custom Paint add 2 days,
Premier Specialty	5	Custom Paint add 2 days,
Premier Polio	5	Custom Paint add 2 days,
Premier Polio w Lateral Extension	7	Custom Paint add 2 days,
Premier Triggerlock	5	Custom Paint add 2 days,
Premier Trigger w/Lateral Ext	7	Custom Paint add 2 days,
Custom SpryStep® Original	10	Extensive mods add 1 day
Custom SpryStep® Plus	10	Extensive mods add 1 day
Custom SpryStep® Flex	10	Extensive mods add 1 day
SpryStep® Vector	12	Extensive mods add 1 day
Dynamic KAFO	10	Extensive mods add 2 days

Any additional thermo plastic addition, i.e., clam shell, SMO, any pretibial/post-tibial shell, add one additional day

## **Ordering OTS Products**

Fabrication Schedule: Orders for individual braces or small quantities of standard size items that are received and processed prior to 1:00 PM (PST) routinely ship the same day. Larger quantity orders of braces with a non-standard powdercoat or custom paint finish routinely ship the next business day.

Orders: Call 1 (800) 432-3466, fax 1 (800) 798-2722, or email OTS orders to eorders@thuasneusa.com.

#### **Instructions for Ordering Custom Products**

Please submit completed order form and cast or digital leg scan to escan@thuasneusa.com. For current order forms and casting instructions visit ThuasneUSA.com.

# **Warranty Information**

Product integrity, durability and fabrication quality are backed by service warranties. Our warranty policies are intended, for a defined period of time, to resolve issues related to material or fabrication defects, and ensure the product fits and functions properly. Warranty coverage is based on normal use and conditions. During and after the defined warranty period, Thuasne USA's objective is to offer services that achieve customer satisfaction.

#### **Custom Carbon Graphite Knee**

Lifetime repair or replacement of a brace that has a shell or hinge failure. Replacement of parts including straps, chafes, hinges, hinge covers and padding that have material defects, breakage or unusual wear within the first six months from the date of purchase. Free remolding or product replacement related to fitting issues that occur within six months of the date of purchase.

#### **Custom, Customized & Pre-Sized Aluminum Knee Braces**

Repair or replacement of a brace that has any failure or compromise to the metal frame or hinges for one year from the date of purchase. Replacement of parts including straps, chafes, hinges, hinge covers and padding that have material defects, breakage or unusual wear within the first six months from the date of purchase. Free remolding or product replacement related to fitting issues within six months of the date of purchase for a custom brace, and 30 days for a customized or pre-sized brace.

#### **Custom Premier Ankle Brace**

Repair or replacement of a brace that has any failure or compromise to the shell, foot plate or hinges for one year from the date of purchase. Replacement of parts including straps, chafes, hinges, hinge plates and padding that have material defects, breakage or unusual wear within the first six months from the date of purchase. Free remolding or product replacement related to initial fitting issues within 30 days of the date of purchase.

#### **Custom Premier Series KAFO & AFO**

Repair or replacement of a brace that has any failure or compromise to the graphite shells, foot plate or hinges for one year from the date of purchase. Replacement of parts including straps, chafes, hinges, hinge plates and padding that have material defects, breakage or unusual wear within the first six months from the date of purchase. Free remolding or product replacement related to initial fitting issues within 30 days of the date of purchase

### OTS & Custom SpryStep® AFOs

Repair or replacement of AFO that has any failure or compromise to the structure of the device for one year from the date of purchase. Replacement of parts including straps, chafes, and interface padding that have material defects, breakage, or unusual wear within the first six months from the date of purchase.

#### **ROM Series Post-Op Braces & Shoulder Slings**

These rehabilitative products are designed for use by one patient for a short duration not to exceed 90 days. Replacement will be provided for material defects, fabrication errors or unnatural wear under normal use for 90 days from the date the product is dispensed.

#### **Sport Series & TS ROM (Hinged Soft Shell Braces)**

Replacement of the product or compromised components will be provided for material defects, fabrication errors or unnatural wear to the hinges, straps or sleeve within the first six months for Sport Series and TSROM braces and within one year for SoftForce braces.

#### EZG8 & XLR8

Walking boots are designed for short-term use (no more than 60-90 days) by a single user. Any boot with a material defect or unnatural wear to the boot shell, uprights, foam bootie or straps under normal use and conditions will generally be replaced at no charge for 90 days from the date the product is dispensed.

(NOTE: Additional charges may apply if the customer requests modifications to the original structure, configuration or joints, or if the customer fails to initially provide a quality cast and/or accurate measurements).

# **Returns, Exchanges & Credits**

Any product being returned to Thuasne USA for possible credit must be submitted with a Product Return Form and RMA #. The RMA # and return form can be requested by calling 800.432.3466. The product and completed return form can be shipped at the customer's expense to: Thuasne USA, 4615 Shepard Street, Bakersfield, CA 93313, within 60 days from the date of purchase to be eligible for replacement or credit. After 60 days, the product is not eligible for credit.

Thuasne USA has no direct involvement in patient selection, brace fitting, insurance denials, patient education and/or patient compliance. Based on the circumstances for the return, Thuasne USA will determine if full or partial credit will be granted, and/or if a restocking fee will be charged.

#### Fair Business Practices

Customers are responsible for providing Thuasne USA with fair opportunity to resolve a problem by fixing, remaking or replacing a product. If Thuasne USA is not provided this opportunity, or if the product is being returned for reasons that Thuasne USA doesn't control, it is less likely Thuasne USA will issue a credit. Circumstances that reduce or eliminate eligibility for credit include but are not limited to: Patient refused brace or never

returned to pick it up; insurance denial; patient moved; patient died; patient decided to use a different product; patient decided to use a different provider; patient was dissatisfied with the look of the brace; or obvious misuse of the product by the patient.

# Formal Review Of Returned Product & Product Return Form

When a product is returned, it is inspected and the Product Return Form is reviewed. Thuasne USA reserves the right to issue full credit, no credit or charge a portion of the cost of fabricating and shipping a brace. Partial charges are generally based on a percentage of the original invoice.

Non-warranty returns will only be accepted on unopened products sealed in their original packaging within 60 days from date of purchase and may be subject to a 20% restocking fee.

- 1. Custom Brace Returns: Because custom braces have been made for an individual user, a returned custom brace has no resale value to Thuasne USA. As a result, credits are routinely only issued if the customer can demonstrate that Thuasne USA bears some or all responsibility for the return (i.e. a fabrication or processing error, missed deadline, poor fit, etc.).
- 2. Customized Brace Returns: Aluminum knee braces made from three measurements generally fall under the same return policies as custom braces. Because "customized" braces are made from different sized components and include custom adjustments, these braces cannot be routinely returned to inventory and therefore have no resale value to Thuasne USA. As a result, there is a \$75 fee to disassemble and discard components. Full credit may only be issued if the customer can demonstrate that Thuasne USA bears some or all of the responsibility for the return (i.e. a fabrication or processing error, missed deadline, poor fit, etc.).
- 3. Pre-Sized Product Returns: To be eligible for full credit, OTS knee braces must be returned in unused, pristine condition unless the product return is due to a manufacturing or material defect. For an individual off-the-shelf product, there is routinely no restocking fee if the product can be returned to inventory and resold. Restocking fees apply if a customer is liquidating inventory and attempting to return multiple products at the same time. Restocking fees are routinely based on a percentage of the original purchase price of the product.

#### Resolution

- 1. Repair or Replacement: If a product fails to perform under normal use and conditions, Thuasne USA will repair or replace the brace according to our published warranties. Repair charges apply to products not covered under warranty or if the product is damaged by misuse or neglect.
- 2. Exchanges Of Pre-Sized Products: Thuasne USA may grant requests for standard size off-the-shelf product exchanges based on a customer's need to replace the brace in a different size or model. The customer is generally responsible for shipping charges, so long as the exchanged brace being returned has not been worn or damaged. Outdated models that cannot be resold are not eligible to be exchanged.
- 3. Credits: Thuasne USA does not issue refund checks to customers. Any approved credit is posted to the customer's account and can be applied to outstanding invoices or future purchases.

