



**THUASNE**



**BMI**

BERRETTA MEDICAL INC.

*The exclusive Canadian distributor  
for Thuasne USA*

# 2019 Knee Bracing Catalog



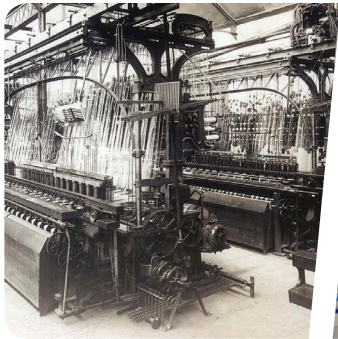
## THUASNE USA

### Premium Quality Orthopedic Bracing Solutions

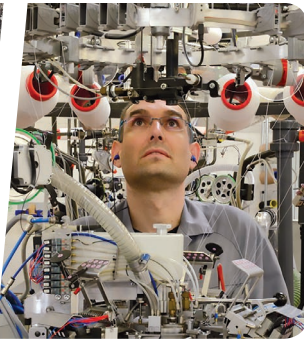
Thuasne USA maintains the belief that greater mobility means more freedom. As one of the most respected orthopedic device manufacturers, we specialize in giving patients the ability to experience a more active quality of life.

In the highly competitive orthopedic bracing industry, Thuasne USA is uniquely positioned to offer a comprehensive line of innovative, high quality products – direct from the manufacturer.

Thuasne USA was formed in 2011 when French company Thuasne acquired Townsend Design, a prominent knee bracing manufacturer, to become the USA headquarters for the international Thuasne Group.



1911



2018



1984



2018

#### FIRM FOUNDATIONS

Founded in France in 1847, The Thuasne Group is one of Europe’s oldest, largest and most respected orthopedic manufacturers, globally recognized as a creator, manufacturer and distributor of wearable medical devices. Thuasne envisions the strategic intersection of medicine, materials and digital technologies coming together for the benefit of the patient. Thuasne has over 2,200 employees and 26 subsidiary companies world-wide.

#### INNOVATION AND GROWTH

Townsend Design was founded in 1984 in Bakersfield, California by Jeff Townsend with the vision to change the knee brace market. Townsend grew to become a leader in the orthopedic manufacturing industry and continues to have its primary fabrication facilities in the USA. Townsend is highly regarded for its vast range of ligament and OA knee braces, specialty lower extremity braces including composite AFOs and KAFOs, as well as spinal braces and rehabilitative devices. Since being acquired in 2011, Thuasne’s USA subsidiary has grown to over 250 employees.



#### WINGS FOR YOUR HEALTH

Thuasne provides “Wings for your health” by elevating each person’s active involvement in their own health and medical care.



## **Knee Catalog**

- 5. Osteoarthritis**
- 23. Ligament**
- 31. Post-Operative**
- 33. Immobilizers**
- 35. Soft Goods**
- 43. Index**

# *Knee*



## A decision-making tool to prescribe knee orthoses in daily practice for patients with osteoarthritis

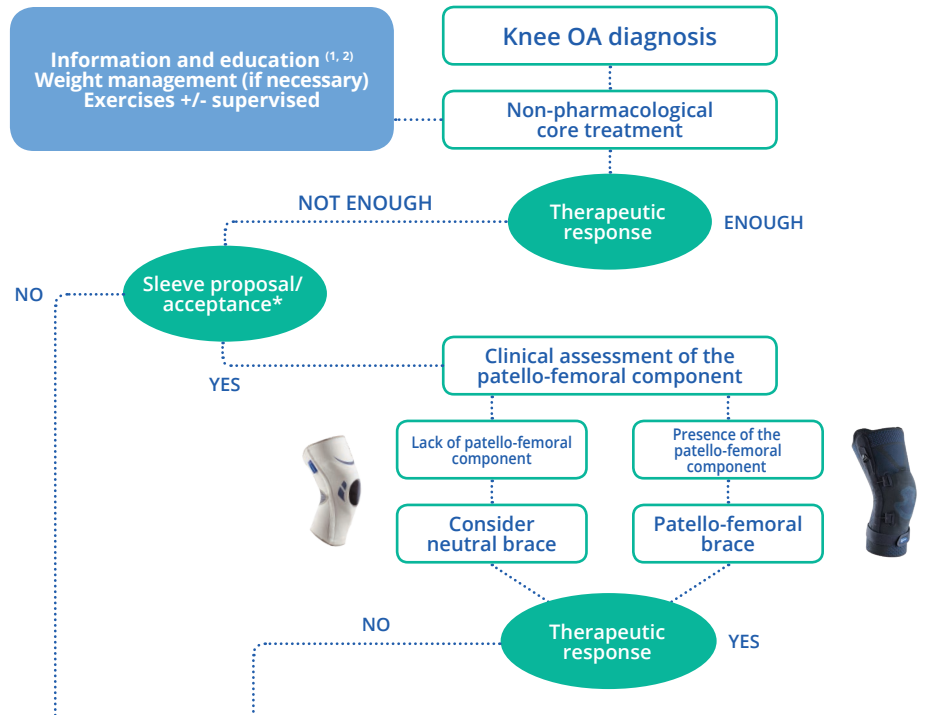
E. Coudeyre et al. Ann Phys Rehabil Med. 2018 Mar ; 61(2): 92-98.

### Objective:

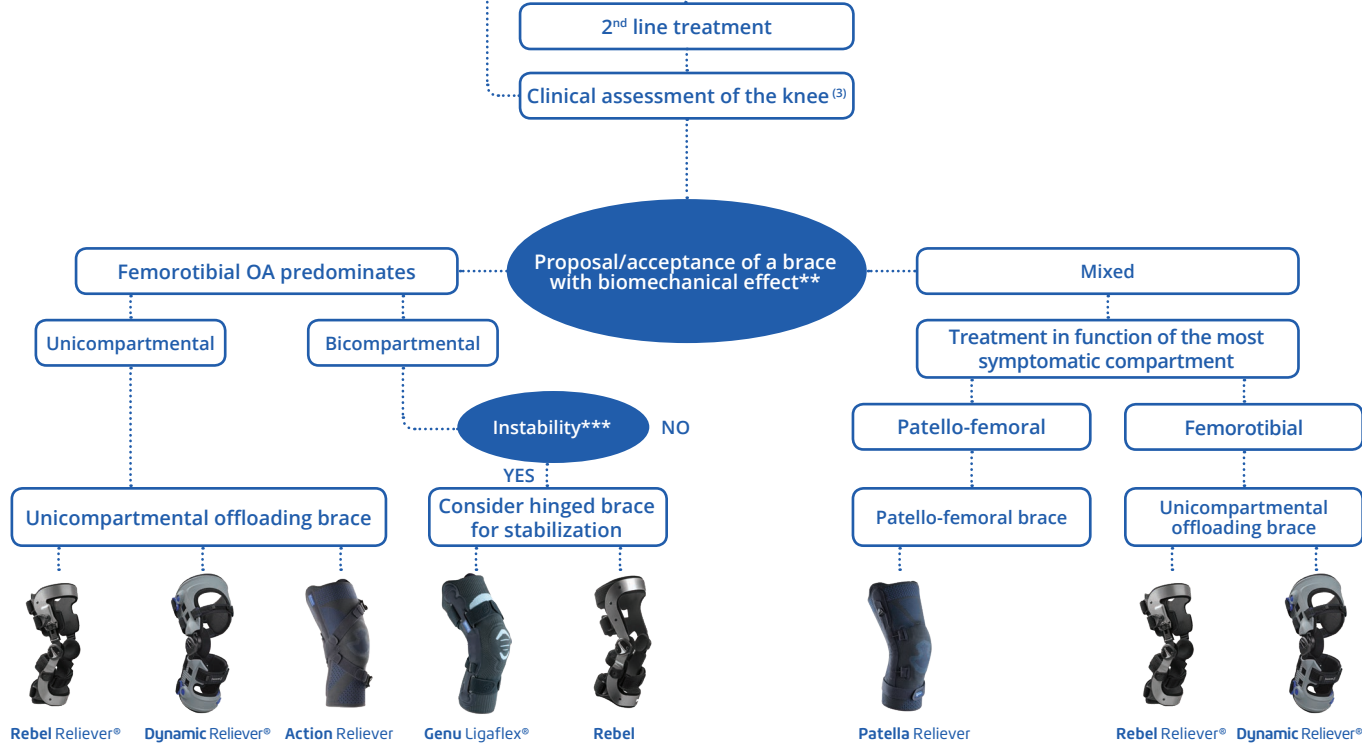
Develop a decision-making tool to facilitate the prescription of knee orthoses for patients with OA in daily practice

- \* Need educational phase for the brace to improve the acceptance (key element for the success / failure of this treatment)
- \*\* Clinical assessment of the knee includes the following items:
  - Topography of the pain and/or the OA
  - Troubles of the femorotibial (varus or valgus) and/or patello-femoral static
  - Reduction of the distortion
  - Femorotibial or patello-femoral instability
- \*\*\* Self assessment by the patient (knee buckling / giving way)

### Primary Care



### Secondary Care



## Rebel Reliever

PDAC APPROVED L1845/L1852

Patients diagnosed with mild to moderate medial or lateral OA, as well as patients who have OA in combination with ligament instability.

### FEATURES

- Rigid aircraft aluminum frame
- Patented adjustable Loadshifters
- Townsend Motion TM5+ Hinges
- Extension stop kit
- Exclusive Synergistic Suspension Strap
- Rotation control tibial shell contour
- Powdercoat finish

### OPTIONS

- Tibial shell length 6", 7" or 8"
- Compression/Suspension anti-migration package
- Anti-migration strap padding
- PCL strap
- Flexion stop kit
- A variety of colors

### ORDERING

- Standard OTS sizes S to XXL (tibia shell available in XS)
- "Customized" from 3 leg measurements
- Custom from a cast or digital leg scan

### CUSTOMIZED FABRICATION FROM THREE MEASUREMENTS

Rebel Reliever braces ordered from three measurements accommodate patients with disproportional leg sizing. Standard braces made from only one leg measurement may not accommodate patients who have disproportional legs.



**Get it-Fit it Guarantee**  
When ordering for 3 leg measurements

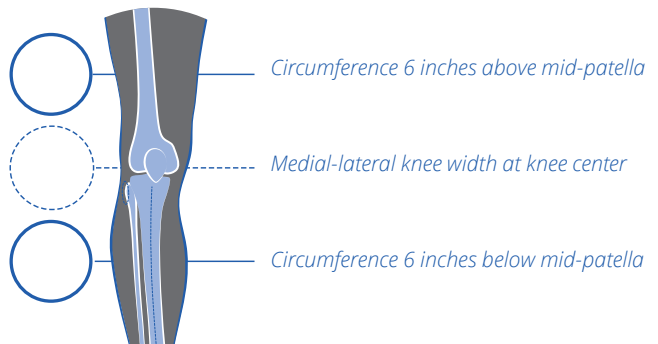
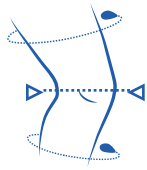
**Get it-Fit it Guarantee**

### FIT GUARANTEE

When manufactured from three leg measurements, we guarantee the brace will fit with minimal or no adjustment

For available colors see page 49.

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



Large range of ordering options

## ADJUSTABLE CORRECTION FOR OA BRACES: LOADSHIFTER

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.

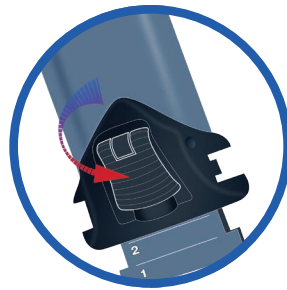
Increasing corrective pressure at the top of the leg amplifies the three-point counterforce at the knee and distal end of the brace — improving leg alignment and reducing compressive load on the damaged side of the knee.



Lift



Slide



Lock



# Knee

## Improved function and strength

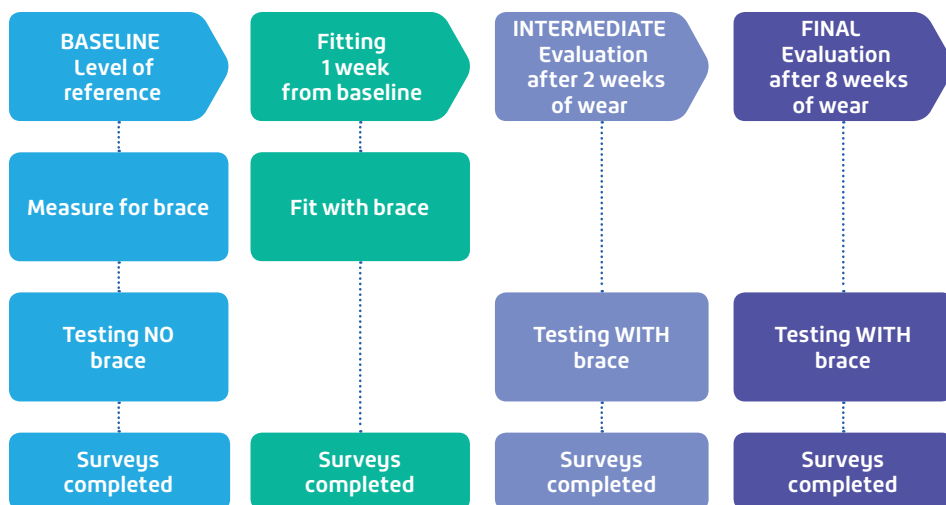
### USING AN OFF-LOADING ORTHOSIS ON THE OSTEOARTHRITIC KNEE

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.

## Objective

Evaluate, when using Rebel Reliever® brace, the change of the biomechanics of the knee, its clinical effect and its effect on the function

## Study design



## Tests



## Surveys completed



- Knee injury and OA Outcome Score (KOOS)
- Activity Balance Confidence Scale (ABC)

## Population

n = 15

Mean age (years) 55 (39 - 70)

Gender 12 men/3 women

Mean BMI (kg/m<sup>2</sup>) 25 (24 - 49)

Kellgren-Laurence grade (%) Grade II 20 %

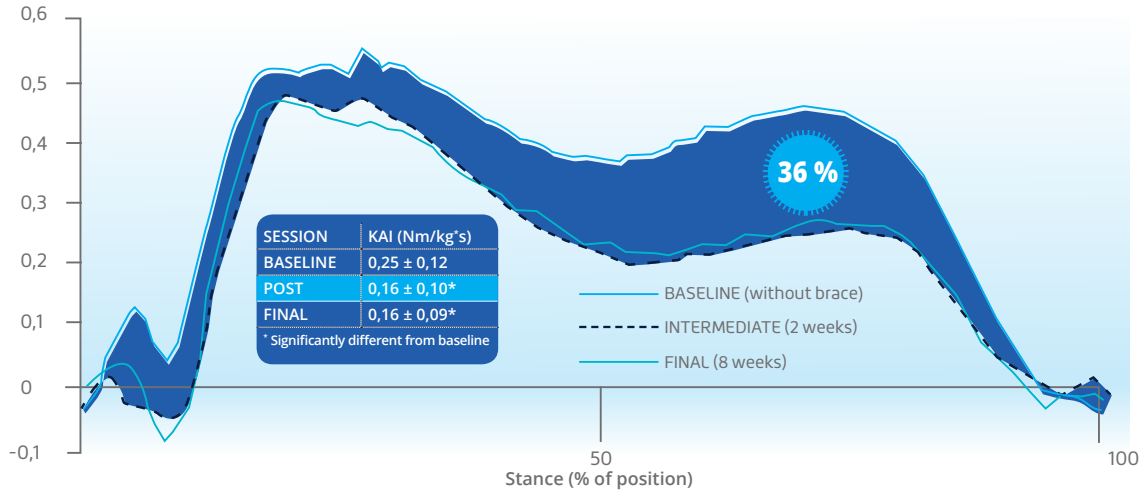
Grade III 67 %

Grade IV 13 %



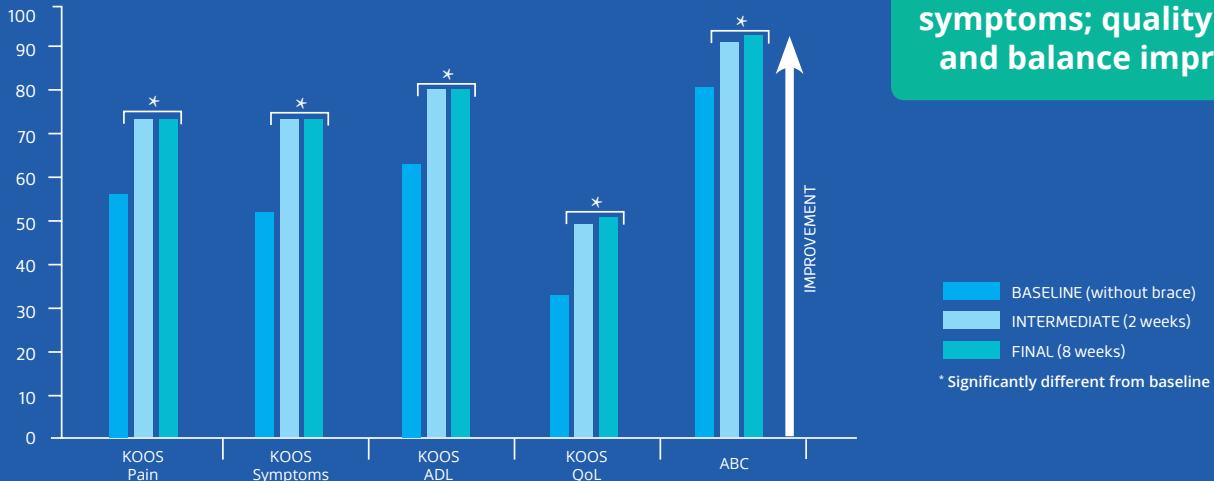
## Moment of adduction of the knee (Nm/kg)

Patients averaged 36% reduction of force through the knee with every step



## Survey results

Reduced pain and symptoms; quality of life and balance improved



## Conclusion

Reduced forces on the knee joint

Reduced pain

Reduced symptoms

Improved balance confidence

Improved muscle function

Improved walking capacity

Improved ADL participation

Improved quality of life

## Efficiency and safety of the Rebel Reliever®

### IN PATIENTS WITH KNEE OSTEOARTHRITIS

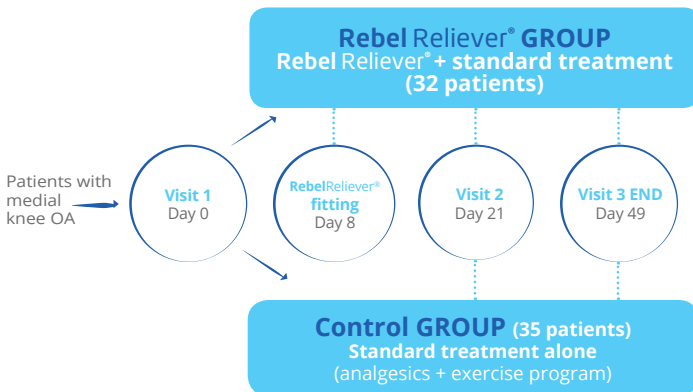
Effect of unloading brace treatment on pain and function in patients with symptomatic knee osteoarthritis: the ROTOR randomized clinical trial. Thoumie P. et al, Scientific Report (2018) 8:10519.

## Objective

Evaluate the efficacy of the Rebel Reliever® knee brace in combination with standard treatment after a 6-week treatment period, in patients with symptomatic medial knee osteoarthritis

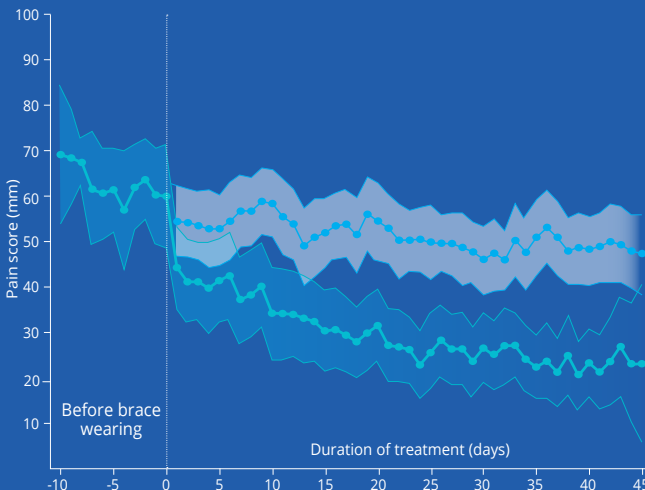


## Study Design



Population		RebelReliever® (n = 32)	Control (n = 35)
Mean age (years)		64,8 ± 11,7	66,6 ± 7,2
Female (%)		75	57,1
Mean BMI (kg/m2)		29,2 ± 4,4	28,1 ± 5,1
Mean OA Duration (years)		8,4 ± 6,8	8,9 ± 7,4
Kellgren-Laurence Grade (%)	Grade II	31,2	20,0
	Grade III	46,9	62,9
	Grade IV	21,9	17,1

## Results



The Rebel Reliever® knee brace significantly reduces pain immediately and for a sustainable time

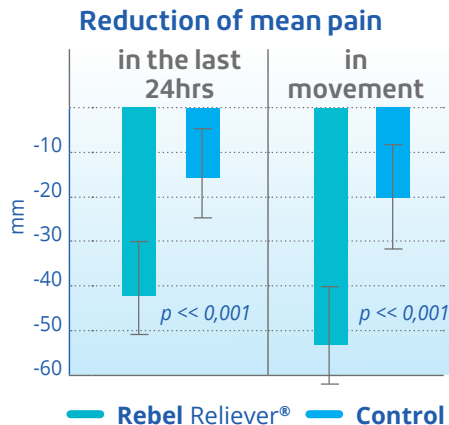
### Pain score evolution

— Control

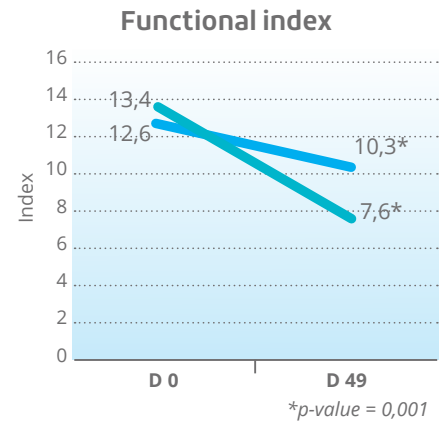
— Rebel Reliever®

*p-value < 0,01*

## Rebel Reliever® knee brace improves function



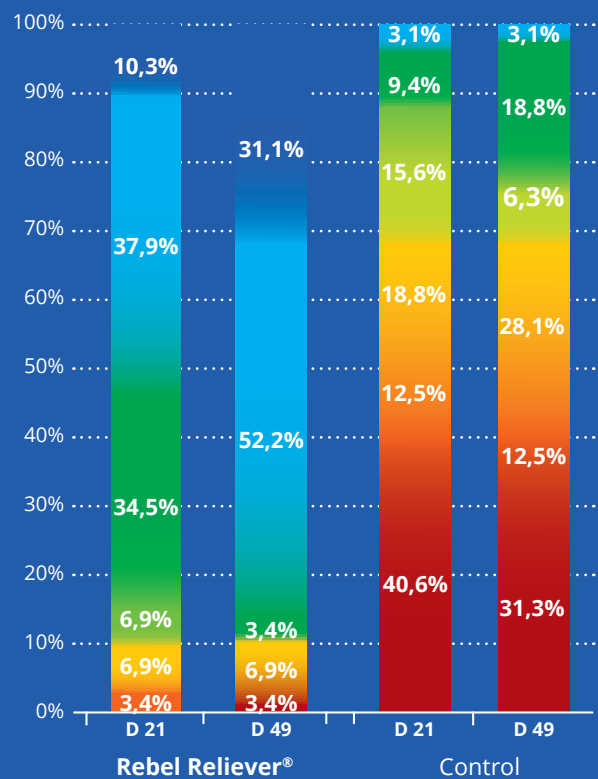
**Rebel Reliever® brace also reduces pain when in movement**



## Patient clinical global impression of change

**More than 80% of patients feel a definite and considerable improvement of their condition with Rebel Reliever® brace by the end of the trial**

- A great deal better and a considerable improvement that has made all the difference
- Better and a definite improvement that has made a real and worthwhile difference
- Moderately better, and a slight but noticeable change
- Somewhat better, but the change has not made any real difference
- A little better, but no noticeable change
- Almost the same, hardly any change at all
- No change (or condition has gotten worse)



## Conclusion

Superiority of Rebel Reliever® knee brace plus standard treatment vs standard treatment alone was demonstrated. Combining Rebel Reliever® knee brace with standard treatment procures a significant advantage to patients and constitutes a powerful non-pharmacological therapeutic strategy to handle knee osteoarthritis.

# Knee





## Action Reliever

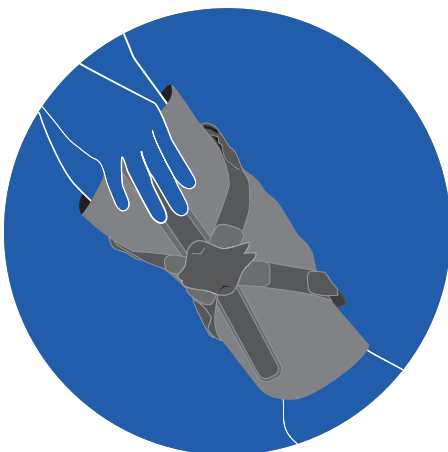
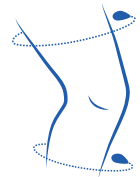
RECOMMENDED CODE L1851

- Action Reliever comfortably applies inflammation-reducing compression and alignment-enhancing stabilization.
- Combining compression with a proprietary three-point strapping system produces a surprising, yet comfortable, corrective force that relieves pain and increases mobility.
- Ultra low-profile under clothing: No one will know the patient is wearing a brace!
- Super slim magnetized buckles self-connect. Fitting an OA brace has never been easier.

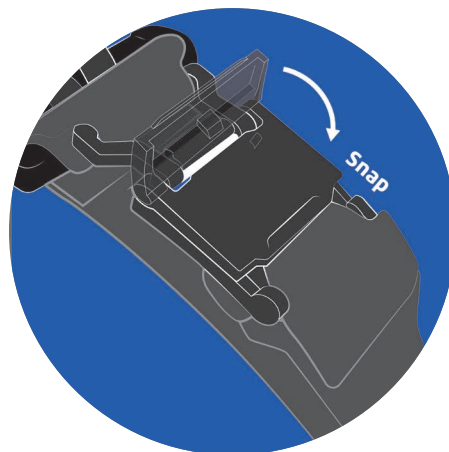
### IDEALLY DESIGNED FOR THESE PATIENTS...

- Less active older patients who could benefit from a brace that is comfortable and easy to put on
- Active patients whose lifestyle might require a low-profile solution, that is ideal to wear under clothing

Size	6" Below Circumference	6" Above Circumference
1	11 – 12 ¼"	15 – 16 ¼"
2	12 ¼ – 13 ¾"	16 ¼ – 17 ¾"
3	13 ¾ – 15"	17 ¾ – 19"
4	15 – 16 ½"	19 – 20 ½"
5	16 ½ – 17 ½"	20 – 21 ½"
6	17 ½ – 18 ½"	21 – 22 ½"
7	18 ½ – 20"	22 – 24"
8	20 – 21 ¼"	24 – 26 ½"



**Slide**



**Snap**



**GO**

## Dynamic Reliever

PDAC APPROVED L1843/L1851

Patients with mild to moderate medial OA who are more compatible with a less rigid knee brace that offers compression and comfortable leg alignment support. The semi-malleable shells conform to normal size or disproportional size legs.

### SELF-CONTOURING NYLON SHELLS

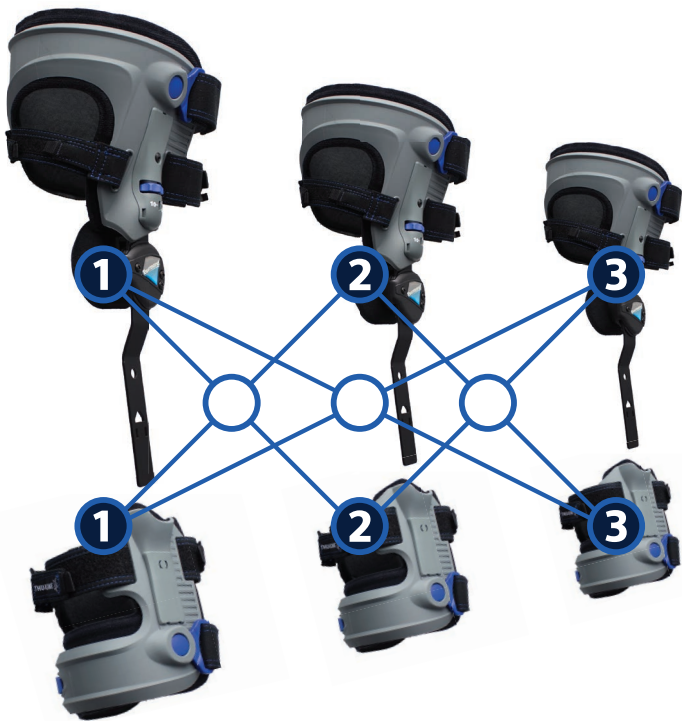
- Ensures an intimate, comfortable fit
- Optimizes delivery of corrective forces
- Prevents brace migration

### NEW CORRECTION DOSING DIAL

- Simple thumb wheel
- Increase correction 0-20°

### DYNAMIC TELESCOPIC HINGE

- Exclusive Townsend Motion Hinge tracks with the roll-and-glide translation of the knee
- Automatically telescopes inward as knee extends
- Delivers maximum correction at mid-stance phase of gait



*Note: The Dynamic Reliever is the perfect medial OA brace for disproportioned legs. Customers can order and stock thigh and calf cuffs and assemble the brace in their own facility using different size components.*



### PREMIUM SOFT ADJUSTABLE STRAPS

- No bulky strap padding required
- Strap length is adjustable from either end

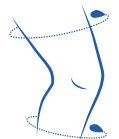
### SPEED KLIPS™ CONNECT STRAPS TO SHELL

- Easy for patients to put on and take off the brace

### ADJUSTABLE TIBIA SHELL BOLSTER

- Fitter makes one-time adjustment to tool-less movable bolster
- Prevents the brace from rotating on the leg as correction is applied

Size	Thigh Circumference 6" Above Mid Patella	Calf Circumference 6" Below Mid Patella
1	14 – 18"	11 – 14"
2	18 – 24"	14 – 17"
3	23 ½ – 28"	17 – 19"



# Knee



*Premium Straps with Speed Klips™*



*Adjustable Anti-Rotation  
Tibial Bolster*



*New Dosing Dial*



# *Knee*





## Active Reliever

RECOMMENDED CODE L1851

Unicompartment osteoarthritis, articular cartilage defect repair, meniscal cartilage repair or osteochondral defect repair.

### FEATURES

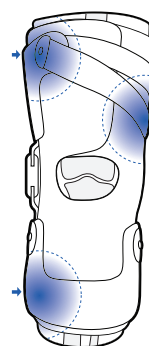
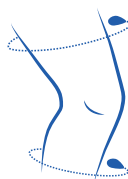
- Breathable spacer fabric sleeve with posterior expandable Lycra panel
- Anatomically correct roll-and-glide Townsend Motion Hinge with adjustable ROM stops
- Semi-rigid, self-contouring nylon superstructure sewn into the sleeve
- Bendable bar for customization of the fit and counterforce
- Corrective Force Strap applies maximum counterforce at midstance phase of gait
- Patient friendly quick release buckles
- Anterior opening thigh section for easy donning and doffing

### OPTIONS

- Medial or lateral OA
- Left or right hinge position

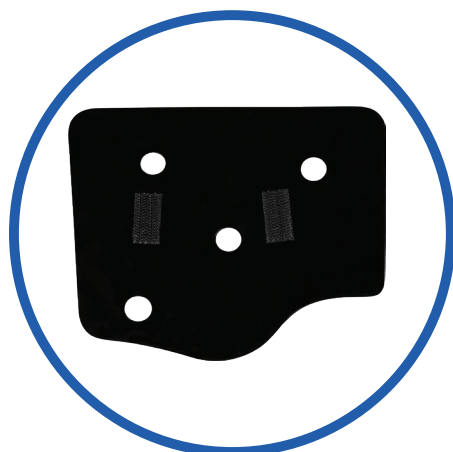


Size	6" Above Mid Patella	6" Below Mid Patella
XS	13 – 15"	10 – 12"
SM	15 – 18"	12 – 14"
MD	18 – 21"	14 – 16"
LG	21 – 23"	16 – 18"
XL	23 – 26"	18 – 20"
XXL	26 – 29"	20 – 22"
XXXL	29 – 32"	



Corrective Force Strap

Adjustable corrective force technology to increase/decrease correction for comfortable distribution of corrective force pressure



Interior thigh panel can be removed and trimmed for custom fitting



Ergonomically designed quick release buckles make it easier for the patient to apply and remove the brace



Adaptable patella buttress pad

## RelieverOne & UniReliever

PDAC APPROVED L1843/L1851

Patients diagnosed with mild to moderate medial or lateral OA.

### FEATURES

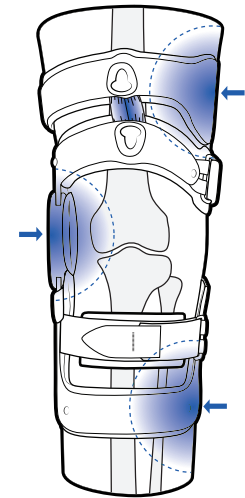
- Aircraft aluminum frame
- **RelieverOne:** Townsend Motion Hinge opposite affected compartment
- **UniReliever:** Townsend Motion Hinge beside the affected compartment
- Extension stop kit
- Adjustable correction
- Exclusive Synergistic Suspension Strap
- Anti-migration strap padding
- Rotation control tibial shell contouring

### OPTIONS

- Medial or lateral OA models
- Shell length
- Flexion stop kit
- Optional colors



Best For Medial OA

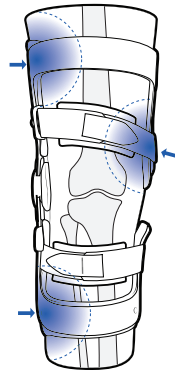


### RelieverOne

The RelieverOne is a single upright aircraft aluminum brace that is light weight and low profile. This brace features an adjustable paddle for comfortable distribution of corrective force.

Best For Lateral OA

### ORDERING



### UniReliever

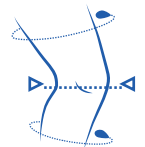
- Custom assembled from 3 leg measurements for disproportional legs
- Custom from a cast or digital leg scan
- Standard OTS sizes XS to XXL (RelieverOne thigh shell available in XXXL)
- Powdercoat finish: Reliever One (gloss black or silver), UniReliever (matte black)

### ADJUSTABLE CORRECTIVE FORCE TECHNOLOGY

- Increase/decrease correction
- Even distribution of corrective force pressure
- Adjustable force buttress

For available colors see page 49.

Size	6" Above	M-L Width	6" Below
XS	12 1/2 – 15 1/2"	3 – 3 1/2"	11 – 12 1/2"
SM	15 1/2 – 18 1/2"	3 1/2 – 4"	12 1/4 – 13 3/4"
MD	18 1/2 – 21"	4 – 4 1/2"	13 1/4 – 15"
LG	21 – 23 1/2"	4 1/2 – 5"	14 1/4 – 15 3/4"
XL	23 1/2 – 25"	5 – 5 1/2"	15 – 17"
XXL	25 – 28"	5 1/2 – 6"	17 – 19"
XXXL	28 – 31"	< 6"	



The UniReliever is a single upright rigid aircraft aluminum brace that utilizes an adjustable force buttress. This is an ideal solution for lateral OA patients (hinge is positioned adjacent to the affected compartment).

Thusne USA is the ONLY manufacturer that provides "customized assembly" of OTS braces. Simply provide our fabrication team with 3 leg measurements and we build the brace to perfectly fit disproportional legs (no extra charge).



## Reliever, Reliever Air & Reliever Air Lite

PDAC APPROVED BASE CODE L1846

Patients who have moderate to severe medial or lateral unicompartement osteoarthritis and/or combination OA and ligament instability. Ideal for patients requiring soft tissue containment and maximum unloading.

### FEATURES

- Custom molded laminated carbon graphite shells
- Townsend Motion TM5+ Hinges
- Extension stop kit
- Patented Loadshifter
- Exclusive Synergistic Suspension Strap
- Anti-rotation tibia shell bolster (Reliever Air)

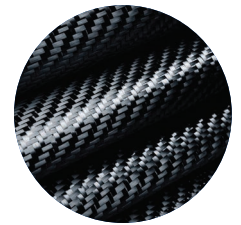
### OPTIONS

- Virtually any shell length
- Anti-migration strap padding
- Hinge material — aluminum or stainless
- Full figure model for soft tissue containment
- Flexion stop kit
- A variety of colors or fabric inlay

### ORDERING

- Order from a cast or digital leg scan

*For available colors see page 49.*



*Carbon Fiber*

*The Reliever Air is a traditional full shell design that provides maximum unloading, soft tissue containment and support for ligament instabilities.*



# Knee



The Lite model features an adjustable anterior tibia strap and modified trim lines that reduce the weight of the brace.



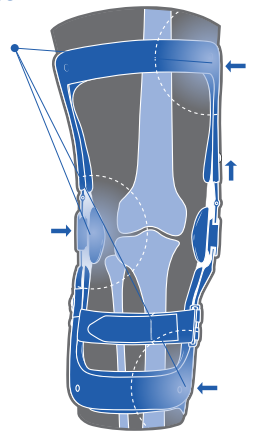
The Reliever is Townsend's original OA brace for severe conditions and select patients.



## Lateral Extension

KAFO with leg extension and heel cup for rotary control or to eliminate potential brace migration

## Corrective Force Technology



*Knee*



## Premier Reliever & PR1

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

Patients who have moderate to severe medial or lateral unicompartement 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 Motion TM5+ Hinges
- Extension stop kit
- Exclusive Synergistic Suspension Strap
- Rotation control tibial shell contour
- High gloss paint or powdercoat finish

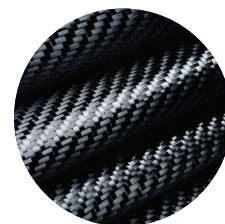
### OPTIONS

- 14, 15 and 16 inch shell length
- Anti-migration strap padding
- Stainless Steel TM5+ with no loadshifter
- Compression/Suspension anti-migration package (double upright model)
- Flexion stop kit
- A variety of colors

### ORDERING

- Custom from a cast or digital leg scan

For available colors see page 49.

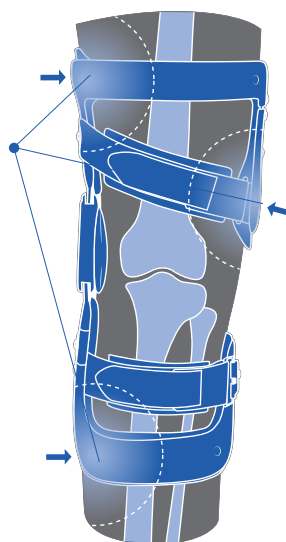


Carbon Fiber

The Premier Reliever features a lightweight, low profile design that provides comfortable unloading and pain relief.



Corrective Force Technology



### Single Hinge Model

The PR1 features an Adjustable Force Buttress that allows the patient to optimize counter force pressure. The buttress also improves brace suspension.

The PR1 is a single upright model that is ideal for lateral OA (no medial hinge) and medial OA patients who prefer an ultra lightweight brace.

### Lateral Extension

KAFO with leg extension and heel cup for rotary control or to eliminate potential brace migration

## Rebel Series Braces

PDAC APPROVED L1845/L1852

Patients who have experienced ligament injuries and/or reconstructive knee surgery.

### FEATURES

- Rigid aircraft aluminum frame
- Townsend Motion TM5+ Hinges
- Extension stop kit
- Exclusive Synergistic Suspension Strap
- Rotation control tibial shell contour
- Powdercoat finish

### OPTIONS

- Rebel Lite (lowest weight, less rigid)
- Rebel (ideal for most patients)
- Rebel Pro (heavy users and contact sports)
- Anti-migration strap padding
- ACL or combined instabilities
- 13, 14, 15 and 16 inch length
- Compression/Suspension anti-migration package
- Flexion stop kit
- A variety of colors
- Standard OTS sizes XS to XXL (XXXL available on Rebel Pro only)
- "Custom assembled" from 3 leg measurements
- Custom from a cast or digital leg scan

### OPTIONAL SHELL CONFIGURATIONS

The Rebel is available in a variety of custom shell configurations.

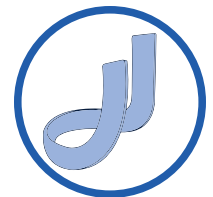
For available colors see page 49.

Size	6" Above	M-L Knee Width	6" Below
XS	12 1/2 – 15 1/2"	3 – 3 1/2"	11 – 12 1/2"
SM	15 1/2 – 18 1/2"	3 1/2 – 4"	12 1/4 – 13 3/4"
MD	18 1/2 – 21"	4 – 4 1/2"	13 1/4 – 15"
LG	21 – 23 1/2"	4 1/2 – 5"	14 1/4 – 15 3/4"
XL	23 1/2 – 25"	5 – 5 1/2"	15 – 17"
XXL	25 – 28"	5 1/2 – 6"	17 – 19"
XXXL*	28 – 31"	6 – 6 1/2"	19 – 21"

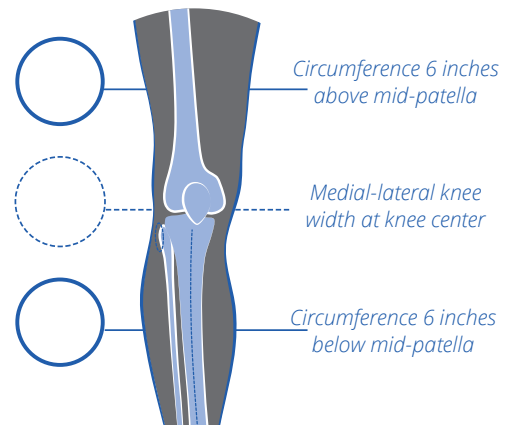
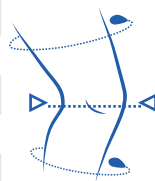


**Get it-Fit it Guarantee**

When manufactured from three leg measurements, we guarantee the brace will fit with minimal or no adjustment to the frame.



Optional posterior tibia shell (7 inch model only)



Thuasne USA is the ONLY manufacturer that provides "customized assembly" of OTS braces. Simply provide our fabrication team with three leg measurements and we build the brace to perfectly fit disproportional legs (no extra charge).

\*XXXL available on Rebel Pro only.



# *Knee*



## Premier Series

PDAC APPROVED BASE CODE L1846

Patients who have experienced ligament injuries and/or reconstructive knee surgery.

### FEATURES

- Custom molded solid core carbon graphite shells
- Townsend Motion TM5+ Hinges
- Extension stop kit
- Exclusive Synergistic Suspension Strap
- Rotation control tibial shell contour
- High gloss paint or powdercoat finish

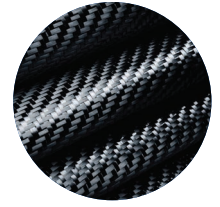
### OPTIONS

- 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
- A variety of colors

### ORDERING

- Custom from a cast or digital leg scan

*For available colors see page 49.*



Carbon Fiber

No Migration



# Knee



## Lateral Extension

*KAFO with leg extension and heel cup for rotary control or to eliminate potential brace migration*

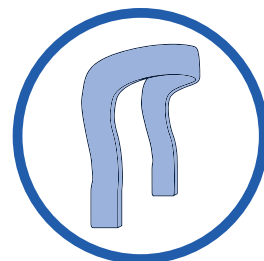


## Optional Extension Assistance

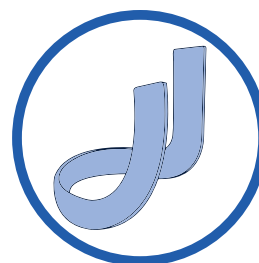
*Mechanism uses strong latex bands slipped over two posts – one proximal and one distal to the knee center. There is no limitation of leg flexion.*

## OPTIONAL SHELL CONFIGURATIONS

The Premier is available in a variety of custom shell configurations.



*Standard Thigh Shell*



*Posterior Tibia Shell*



*Double Band Tibia*

# Knee



## BOLD

### PDAC APPROVED L1845/L1852

Patients who have experienced ligament injuries and/or reconstructive knee surgery.

#### FEATURES

- Lightweight brushed aluminum frame with black polymer cuffs
- Townsend Motion TM5+ Hinges
- Exclusive Synergistic Suspension Strap
- 14 Inch length
- Extension stop kit
- Anti-migration strap padding

#### OPTIONS

- Flexion stop kit

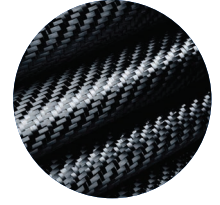
Size	7" Above Knee	Primary Measurement*	7" Below Knee
SM	15 1/2 – 18 1/2"	3 1/2 – 4"	12 1/4 – 13 3/4"
MD	18 1/2 – 21"	4 – 4 1/2"	13 1/4 – 15"
LG	21 – 23 1/2"	4 1/2 – 5"	14 1/4 – 15 3/4"
XL	23 1/2 – 25"	5 – 5 1/2"	15 – 17"



\*Due to the rigidity of the frame, there is limited adjustability of the M-L at the knee



*The Air Lite features an adjustable anterior tibia strap and narrower carbon shells to reduce the weight and profile of the brace.*



**Carbon Fiber**

*The Air Townsend is a traditional full shell design that provides maximum control and protection for ligament instabilities.*



## Air Townsend & Air Lite

PDAC APPROVED CODE L1846

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

### FEATURES

- Custom molded laminated carbon graphite shells
- Townsend Motion TM5+ Hinges
- Extension stop kit
- Exclusive Synergistic Suspension Strap
- Anti-rotation tibia shell bolster (Air Townsend)

### OPTIONS

- Non-standard length shells
- Anti-migration strap padding
- Hinge material — aluminum or stainless
- Special trim lines for skiers, rodeo riders, hockey goalies, and full figure model for soft tissue containment
- Flexion stop kit
- A variety of colors or fabric inlay

### ORDERING

- Custom from a cast or digital leg scan

*For available colors see page 49.*



### Lateral Extension

*KAFO with leg extension and heel cup for rotary control or to eliminate potential brace migration.*



### Optional Extension Assistance

*Mechanism uses strong latex bands slipped over two posts – one proximal and one distal to the knee center. There is no limitation in flexion.*

# Knee



## Pediatric Air Townsend & Air Lite

PDAC APPROVED L1846

Children who require maximum control after experiencing a ligament injury and/or reconstructive knee surgery.

### FEATURES

- Custom molded laminated carbon graphite shells
- Townsend Motion TM5+ Hinges
- Extension stop kit
- Exclusive Synergistic Suspension Strap
- Anti-rotation tibia shell bolster (Air Townsend)

### OPTIONS

- ACL or combined instabilities
- Anti-migration strap padding
- Minimum shell length of 12 inches
- Hinge material — aluminum or stainless
- Flexion stop kit
- A variety of colors or fabric inlay

### ORDERING

- Custom from a cast or digital leg scan

*For available colors see page 49.*



## RebelLock

PDAC APPROVED CODE L1845/L1852

For patients with severe instabilities who require a locking orthosis.

### FEATURES

- Exclusive Synergistic Suspension Strap
- Anti-migration strap padding
- Anti-rotation tibia 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°
- A variety of colors
- Extension Assist

### ORDERING

- OTS from leg measurements in sizes XS to XL or with customized assembly for disproportional legs

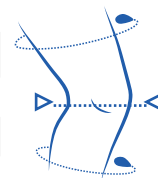
For available colors see page 49.



Locking Knee Joint

Thuasne USA's RebelLock is available as an OTS or custom locking brace. It is a rigid aluminum brace with drop lock hinges.

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



## Motocross Series

RECOMMENDED BASE CODE L1846

Motocross riders who have experienced ligament injuries and/or reconstructive knee surgery, or to help prevent knee injuries.

### FEATURES

- Custom molded laminated carbon graphite shells
- Townsend Motion TM5+ Hinges
- Extension stop kit
- Exclusive Synergistic Suspension Strap (Motocross Air)
- Second shell pad with no patella guard
- Anti-migration strap padding

### OPTIONS

- Shell length (Motocross Air)
- Hinge material — aluminum or stainless (Motocross Air)
- Flexion stop kit
- A variety of colors or fabric inlay (Motocross Air)

### ORDERING

- Custom from a cast or digital leg scan

For available colors see page 49.



The Motocross Air combines Townsend's hinge motion, suspension, and rotation technology with a patella guard.

The Web is a genuine custom version of the OTS Motocross Brace developed by EVS. The 16" shell and patella guard offer maximum ligament and impact protection.



### Traditional ROM Hinge

Braces available with Traditional ROM Hinges:

- AIR ROM Short
- AIR ROM Long
- ROM 4
- ROM 6

*AIR ROM LONG /  
Traditional ROM Series*



### ROMX Hinge

Braces available with ROMX Hinges:

- ROMX-SS (Suspension System)
- ROMX-BP (Breeze Pads)
- ROMX-FP (Full Pads)
- ROMX-AP (Air Pads)



*ROMX-SS / ROMX Series*

## ROMX and ROM Series

RECOMMENDED CODE L1832/L1833

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 stops
- Drop lock mechanism

### OPTIONS

- ROMX extendable from 18" to 23"
- ROM 4 & Air Short are 17" in length
- ROM 6 & Air Long are 23" in length
- Shell pads (Full, Air, or Breeze)
- Straps with hook-and-loop or buckle closures
- ROMX-SS and ROMX-BP feature suspension optimizing (anti-migration) technology

### ORDERING

- OTS, variety of models and lengths
- Universal size, no measurements required
- Full shell pads available for thigh circumference over 30 inches

## ROM-R

RECOMMENDED CODE L1832/L1833

### CUSTOMIZABLE STABILIZATION

The ROM-R is routinely prescribed 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 22"
- Easy to adjust
- 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
- 2000 cycle straps with hook-and-loop tabs

### OPTIONS

- Full Shell pads available



# Knee



ROM-R



Semi-Malleable Paddles



Tool-Free Length Adjustment



Adjustable ROM-R droplock hinges



# Knee



## SafeLimb

(Residual Limb Protector)

### RECOMMENDED CODE L5450

The SafeLimb is designed for transtibial amputation immediately after surgery. The goal of the SafeLimb is to protect the residual limb in case of a fall.

### INCREASED COMPLIANCE

The open structure is breathable and lightweight to increase compliance (key issue with this type of device).

### PROTECTION OF THE RESIDUAL LIMB

The distal end of the SafeLimb includes a high-density foam insert to offer optimal protection of the residual limb in case of a fall.

Size	Thigh Circumference 6" Above Mid Patella
SM	14 – 18 ¾"
MD	18 ¾ – 20 ¾"
LG	20 ¾ – 24 ¾"
XL	24 ¾ – 29 ½"
XXL	29 – 34"



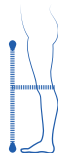
## Knee Immobilizer

PDAC APPROVED L1830

PRODUCT #155001

- Provides comfortable full extension knee immobilization
- Expandable circumference accommodates leg size

Size	Inside Leg Measurement
1	19 ¾ – 23 ½"
2	23 ½ – 27 ½"
3	27 ½ – 31 ½"
4	> 31 ½"



## Ligaflex Immo Junior

PDAC APPROVED L1830

Product #2610001004

- Provides comfortable knee immobilization at 0 degrees
- X-ray friendly, radio-transparent conformable rigid stays

Single Size
Height < 11 ¾ – 13 ¾"





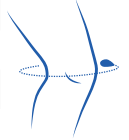
### Genuxtrem

PDAC APPROVED A4466

Product #232101

- Provides support and compression
- 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
- Patented pull tabs for easy application and removal
- Medical grade compression

Size	Knee Circumference
1	12 1/2 – 13 3/4"
2	13 3/4 – 15"
3	15 – 16 1/2"
4	16 1/2 – 18"
5	18 – 19 1/2"
6	19 1/2 – 21"



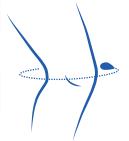
### Ligastrap Genu

PDAC APPROVED A4466

PRODUCT #217002

- Provides support and 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
- Medical grade compression

Size	Knee Circumference
1	12 1/2 – 13 3/4"
2	13 3/4 – 15"
3	15 – 16 1/2"
4	16 1/2 – 18"
5	18 – 19 1/2"
6	19 1/2 – 21"



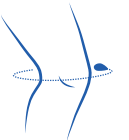
### Silistab Genu

PDAC APPROVED A4466

PRODUCT #234005

- Provides support and 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
- Medical grade compression

Size	Knee Circumference
1	12 1/4 – 13 1/2"
2	13 1/2 – 14 1/2"
3	14 1/2 – 15 3/4"
4	15 3/4 – 17"
5	17 – 18"
6	18 – 19 1/4"





Patented Patellar Insert



3D Knitting

## Genu PRO ACTIVE

PDAC APPROVED L1810/L1812

Product #U31001

For maintenance, compression and support of the knee after mild or moderate knee strains or sprains.

### MAXIMUM EFFICACY

- Patented silicone patellar insert
- Medical grade compression reinforces proprioception
- Double upright hinges provide additional stability

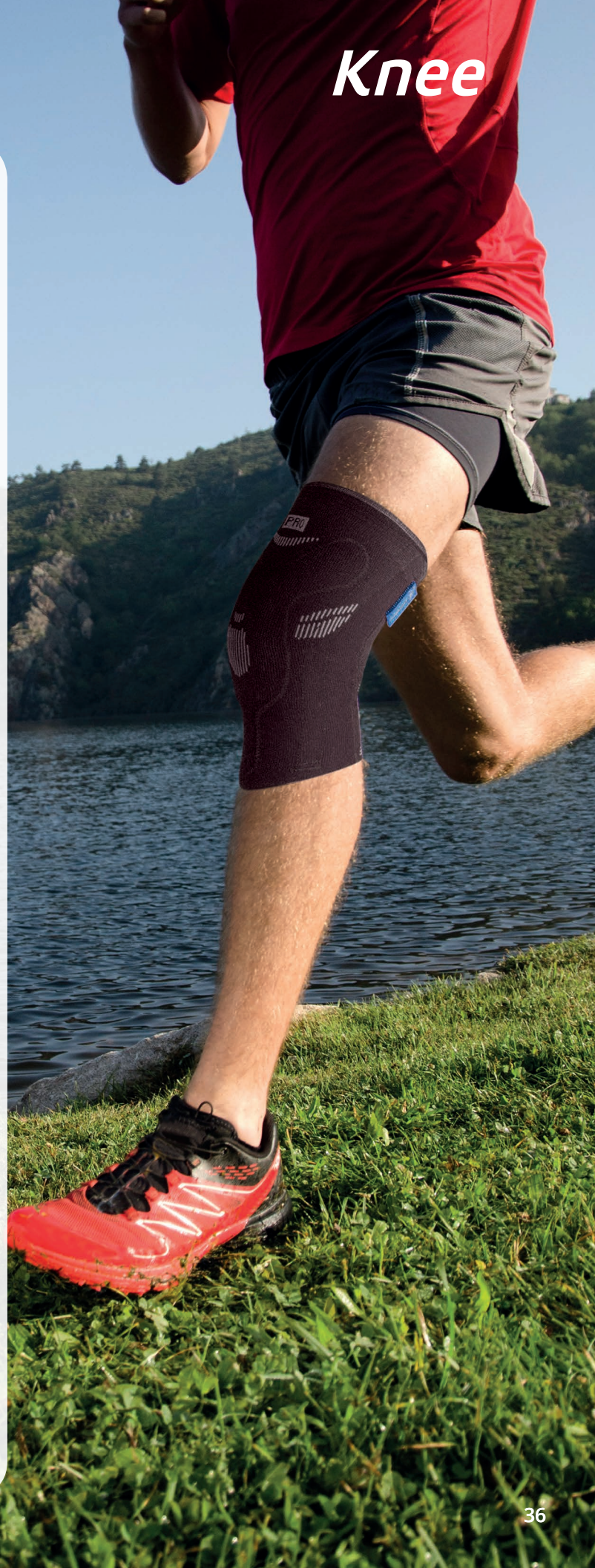
### OPTIMUM COMFORT

- Soft knit over the popliteal crease
- Anatomical cut at the calf
- Low-profile design

### EXCELLENT SUSPENSION

- 3D knitting perfectly adapting to morphology
- Lateral silicone bands

Size	Thigh Circumference 5 1/2" Above Knee	Calf Circumference 5" Below Knee
1	13 3/4 – 15 1/4"	9 3/4 – 11"
2	15 – 16 1/4"	11 – 12 1/4"
3	16 1/4 – 17 1/4"	12 1/4 – 13 1/2"
4	17 1/4 – 18 1/2"	13 1/2 – 14 1/2"
5	18 1/2 – 20"	14 1/2 – 16 1/4"
6	20 – 21 3/4"	16 1/4 – 17 3/4"
6+	21 3/4 – 23 1/4"	17 – 18 1/2"
7	23 1/4 – 25 1/4"	17 3/4 – 19 1/4"
7+	25 1/4 – 27 1/4"	18 1/2 – 20"



# Knee



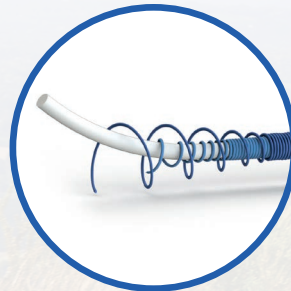
### Adjustable Counterforce

An integrated pulley system enables customizable correction.



### Soft tracking guide

Easily and exactly position the soft, smooth EVA foam patella insert.



### The DNA

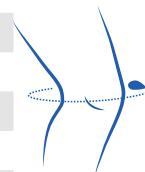
A precisely knitted compression sleeve, incorporating anti-migration silicon threads. The breathable fabric is cooler and more comfortable than neoprene or similar materials.

## Patella Reliever

PDAC APPROVED L1810/L1812

- Patello-femoral pain syndrome
- Lateral patellar subluxation
- Lateral patellar dislocations
- Patello-femoral arthritis
- Lateral patellar compression syndrome

Size	Knee Circumference
1	12 1/2 – 13 3/4"
2	13 3/4 – 15"
3	15 – 16 1/2"
4	16 1/2 – 18"
5	18 – 19 1/2"
6	19 1/2 – 21"





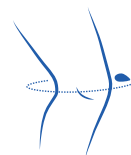
## Genu Dynastab

PDAC APPROVED L1810

Product #237005

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

Size	Knee Circumference
1	12 1/2 – 13 3/4"
2	13 3/4 – 15"
3	15 – 16 1/2"
4	16 1/2 – 18"
5	18 – 19 1/2"
6	19 1/2 – 21"



## Genu Ligaflex®

PDAC APPROVED L1820

Product #237503 (Closed) and #237505 (Open)

For resumption of non-contact sports and activities of daily living after mild or moderate knee injuries.

### COMFORT AND CONTROL

- Hyper-flexible knitted areas
  - Popliteal space
  - Patella
  - Thigh
- Semi-rounded straps for easy application
- Pre-contoured uprights provide anatomical fit

### SUSPENSION

- TM5 Hinge replicates the natural roll and glide motion of the knee
- Aggressive dual tab calf strap improves suspension
- Integrated anti-slip silicone located inside
- Dual tab strapping system allows for a precise fit
- Flexible knitting improves mobility and ease of application

### SUPPORT

- Aluminum uprights provide lateral stability
- Double adjustable hook-and-loop tabs optimize placement of uprights



Anterior opening short version (12")

Size	Knee Circumference	Closed
1	12 1/2 – 13 3/4"	
2	13 3/4 – 14 1/2"	
3	14 1/2 – 16 1/4"	
4	16 1/2 – 17 3/4"	
5	18 – 19 1/4"	
6	19 1/4 – 20 3/4"	

Size	Calf (5 1/2" below knee center)	Thigh (5" above knee center)	Open
T1	11 3/4 – 13 1/2"	14 3/4 – 17 1/4"	
T2	13 – 14 1/2"	16 – 18 1/4"	
T3	14 1/2 – 16"	17 1/4 – 19 3/4"	
T3+	14 1/2 – 16"	19 – 21 1/4"	
T4	16 – 17 1/2"	19 – 21 1/4"	
T4+	16 – 17 1/2"	20 1/2 – 22 3/4"	
T5	17 1/2 – 19"	20 1/2 – 22 3/4"	
T5+	17 1/2 – 19"	22 – 24 1/2"	
T6	19 – 20 3/4"	22 – 24 1/2"	
T6+	19 – 20 3/4"	23 1/2 – 26"	

If calf and thigh size do not match, we recommend you select the larger size.

"+" Indicates anterior opening version only



Pull-on short version (12")





## Sport Series

PDAC APPROVED L1820

Patients who have experienced mild ligament injuries and/or reconstructive knee surgery.

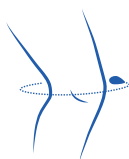
### FEATURES

- Compression sleeve
- Anterior closure only
- Rigid aluminum bars
- Reinforced nylon hinge pockets (no exposed metal)
- Condylar pads
- OTS, S-4X (4X only offered in neoprene)
- Townsend Motion Hinges

### OPTIONS

- Two hinge options (TM5 or non-adjustable 5 degree extension stop)
- Latex-free neoprene sleeve material or fiber-cool spacer fabric sleeve material
- 12 Inch (2 strap) and 16 inch (4 strap) models
- Extension stop kit
- Flexion stop kit

Size	Knee Circumference
SM	13 – 14"
MD	14 – 15"
LG	15 – 17"
XL	17 – 19"
2X	19 – 21"
3X	21 – 22"
4X	22 – 23"



# *Knee*





## Genu Ligaflex® ROM

PDAC APPROVED L1832/L1833

Product #238604

For patients with mild to moderate ligament injuries and instabilities, early stage OA, meniscus injuries and post-operative meniscal repairs. Available in pull-on and anterior closure models in 12" and 16" lengths.

### EASY TO USE

- Anterior opening for easy application
- Easy to use hook-and-loop tabs
- Low profile tension buckles

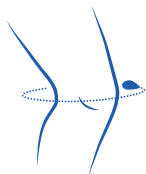
### SUSPENSION

- TM5+ Hinge that replicates the natural movement of the knee
- Exclusive Synergistic Suspension Strap
- Patented integrated anti-slip silicon knitting

### CONTROL

- Tool-less hinge with easy to apply flexion and extension stops to restrict range of motion
- Contoured aluminum uprights to improve fit and control
- Medical grade compression

Size	Knee Circumference
1	12 1/2 – 13 3/4"
2	13 3/4 – 15"
3	15 – 16 1/2"
4	16 1/2 – 18"
5	18 – 19 1/2"
6	19 1/2 – 21"



## TS ROM 1200/1600

PDAC APPROVED L1832/L1833

Patients who have experienced mild ligament injuries and/or reconstructive knee surgery.

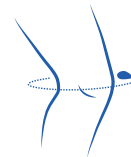
### FEATURES

- Compression sleeve
- Anterior closure
- Rigid aluminum bars
- Reinforced nylon hinge pockets (no exposed metal)
- Condylar pads
- OTS, S-4X (4X only offered in neoprene)
- Townsend ROM control hinges
- Extension stop kit
- Flexion stop kit included

### OPTIONS

- Latex-free neoprene sleeve material or fiber-cool spacer fabric sleeve material
- 12 Inch (2 strap) and 16 inch (4 strap) models

Size	Knee Circumference
SM	13 – 14"
MD	14 – 15"
LG	15 – 17"
XL	17 – 19"
2X	19 – 21"
3X	21 – 22"
4X	22 – 23"



## Instructions for Ordering CUSTOM braces

### CUSTOM PREMIER SERIES KNEE BRACES

**Models:** Premier, Premier Reliever, PR1, Premier Trigger Lock and Premier Polio.

**Required:** Completed order form (current forms can be downloaded — [ThuasneUSA.com](http://ThuasneUSA.com)).

**Submit:** Cast or digital leg scan. **Fabrication Schedule:** 2-3 business days for ligament and OA models; 5-7 business days for specialty braces including single upright KAFOs; rush service is available for an additional charge; custom paint finish increases production time.

### CUSTOM FULL SHELL SERIES KNEE BRACES

**Models:** Air Townsend, Air Lite, Reliever Air, Reliever Air Lite, Reliever, Motocross Air, and Motocross Web.

**Required:** Completed order form (current forms can be downloaded — [ThuasneUSA.com](http://ThuasneUSA.com)).

**Submit:** Cast or digital leg scan.

**Fabrication Schedule:** 1-2 business days for ligament and OA models; 5-7 business days for specialty braces including single upright KAFOs; rush service is available for an additional charge.

### CUSTOM ALUMINUM SERIES KNEE BRACES

**Models:** Rebel, Rebel Pro, Rebel Lite, Rebel Lock, Rebel Reliever, RelieverOne and UniReliever.

**Required:** Completed order form (current forms can be downloaded — [ThuasneUSA.com](http://ThuasneUSA.com)).

**Submit:** Cast or digital leg scan.

**Fabrication Schedule:** 2-3 business days; rush service is available for an additional charge; custom paint finish increases production time.

## Instructions for Ordering OTS braces

### INSTRUCTIONS FOR ORDERING OTS PRODUCTS

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

**Orders:** For your convenience, you can phone (800.432.3466), fax (800.798.2722) or E-mail your OTS orders ([eorders@ThuasneUSA.com](mailto:eorders@ThuasneUSA.com)).

### POST-OPERATIVE ROM KNEE BRACES

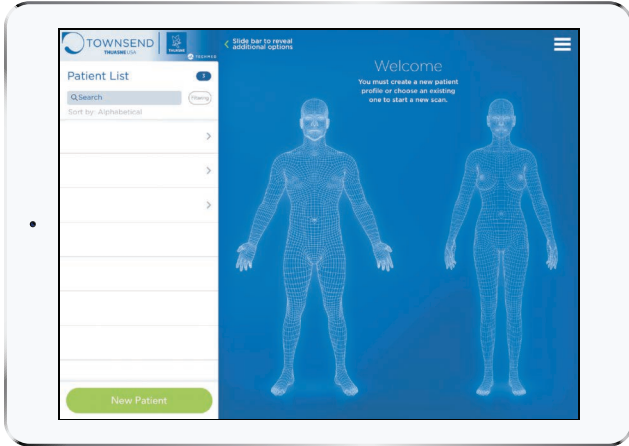
**Models:** ROM-L, ROM-R, ROMX-SS, ROMX-BP, ROMX-FP, ROMX-AP, ROM6, ROM6-L, ROM4, Air ROM Long, and Air ROM Short.

**Measurements:** ROM Knee Braces are universal size and leg; no measurements required. Bigger full shell pads available for thigh circumference over 30 inches.

### PRE-SIZED & CUSTOMIZED ALUMINUM SHELL LIGAMENT & OA KNEE BRACES

**Models:** Rebel, Rebel Pro, Rebel Lite, BOLD, Rebel Reliever, RelieverOne, UniReliever and Rebel Lock.

**Measurements:** To order standard size braces, take thigh circumference six inches above knee center. To order "customized" braces, take thigh and calf circumferences six inches above and below knee center, and use a caliper to take a knee M-L width with the leg at full extension.



## Thuasne 3D Scan

Thuasne now offers Thuasne3D Scan (available free on the Apple Store). Thuasne3D Scan operates on an iPad and works in conjunction with a foot scanning platform designed and manufactured by Thuasne USA. The adjustable platform facilitates scanning for custom KAFOs, AFOs and KOs. To purchase a scanning platform, speak with your Thuasne USA representative.



**Thuasne3D Scan App  
Available For Download**



## Digital Leg Scans

Thuasne USA has a carver that allows us to accept digital AOP files for KOs, and OP3 files for KAFOs and AFOs. If you have a scanning device, please call us for instructions on how to submit a digital file by email to [Escan@ThuasneUSA.com](mailto:Escan@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 AND 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.



## KO Casting

### MEDIUM

- Fiberglass (any brand)

### RECOMMENDED TECHNIQUE

- Traditional technique

### POSITION

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

### CAST LENGTH

- Cast must be 2" longer at the proximal and distal ends than the desired length of the brace

### CUT STRIP

- Posterior

### MARKINGS ON THE CAST

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

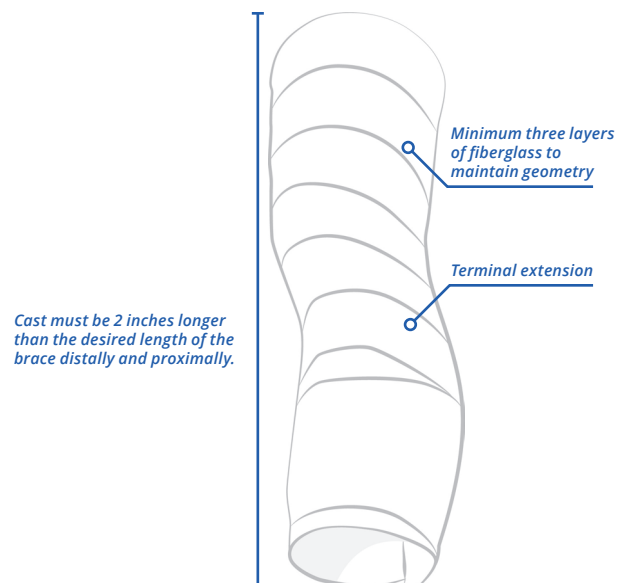
### RIGIDITY / THICKNESS

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

### TIPS

- Wait at least an hour before putting the cast in a box for shipping
- Must remove stockinette
- Stuff the cast to maintain its structure during shipping
- No web roll or Compressogrip®

### KO Cast Parameters



# KAFO Casting

## MEDIUM

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

## RECOMMENDED TECHNIQUE

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

## POSITION

### AFO Section

- 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)
- Metatarsal touching the casting platform
- Optimal saggital 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 sections to bond when you start the KO casting. Allow it to cure and then start the KO section casting process

### KO Section

- Non-weightbearing
- Sitting on the edge of a chair
- Terminal extension
- Coronal and saggital alignment must be within +/- 5° of the intended brace position\* (\*except in case of contracture)

## CAST LENGTH

- **AFO:** mid-calf and captures all toes.
- **KO:** 2" taller than the desired length of the brace

## CUT STRIP

- Anterior on the dorsum of the foot to transition laterally

## MARKINGS ON THE CAST

### AFO Section

- Outside of the cast
- Fibula head, patella, medial & lateral condyle (+deformity, scar tissue, and any other area of concern)

### KO Section

- Fibula head, metatarsal heads, base of 5th metatarsal, navicular, medial and lateral malleoli, tibial crest, tibial tubercle (+ if applicable: deformity, scar tissue, and any other area of concern)
- Reference hashmarks on top of cutting strip
- Write name of patient and clinic on cast

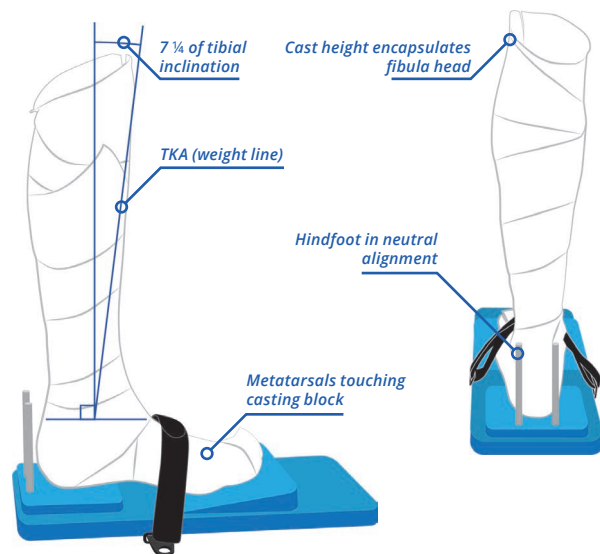
## RIGIDITY / THICKNESS

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

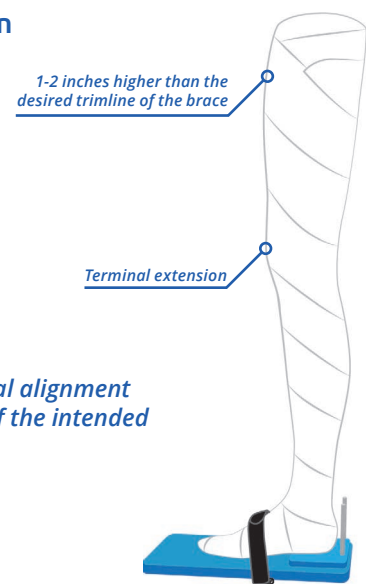
## TIPS

- Wait at least an hour before putting the cast in a box for shipping
- Must remove stockinette
- Stuff the cast to maintain its structure during shipping
- No web roll or Compressogrip®

### Part 1: AFO Section



### Part 2: KO Section



## Returns, Exchanges & Credits Product Returns

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.



## Contact

Toll Free: 800.432.3466

Fax: 800.798.2722

## Customer Service

Toll Free: **800.700.2722**

**M-Th** 7am to 4:30pm (PST)

**Friday** 7am to 4pm (PST)

## Available Colors

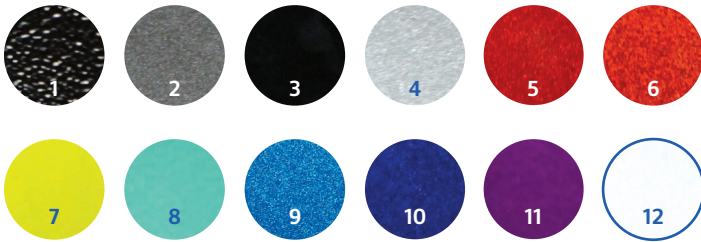
See product order forms for standard and optional colors

### Rebel Series Braces

*Powdercoat Colors*

Standard\*

- |                   |                  |                   |
|-------------------|------------------|-------------------|
| 1. Texture Black* | 5. Sparkle Red   | 9. Sky Blue       |
| 2. Argento Gray*  | 6. Copper        | 10. Electric Blue |
| 3. Gloss Black    | 7. Bengal Yellow | 11. Violet        |
| 4. Silver         | 8. Candy Green   | 12. Bengal White  |

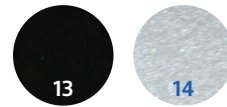


### RelieverOne OA

*Powdercoat Colors*

Standard\*

- 13. Gloss Black\*
- 14. Silver\*



### Premier Series Braces

*Paint Colors*

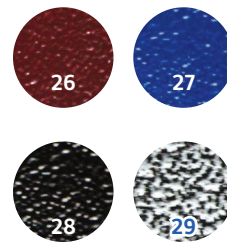
- |                 |                   |                 |
|-----------------|-------------------|-----------------|
| 15. Gloss Black | 19. Burgundy      | 23. Royal Blue  |
| 16. Quicksilver | 20. Burnt Orange  | 24. Steel Blue  |
| 17. Pearl White | 21. Indy Yellow   | 25. Dark Violet |
| 18. Beige       | 22. Emerald Green |                 |



### Premier Series Braces

*Textured Powdercoat Colors*

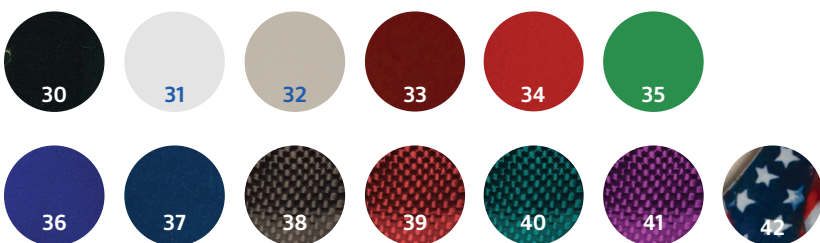
- 26. Burgundy
- 27. Royal Blue
- 28. Black
- 29. Pewter



### Full Shell Series Braces

*Fabrics/Pigments*

- |                 |                |                  |                 |
|-----------------|----------------|------------------|-----------------|
| 30. Gloss Black | 34. Red        | 38. Clear        | 42. Flag Fabric |
| 31. Grey        | 35. Green      | 39. Sheer Red    |                 |
| 32. Beige       | 36. Navy Blue  | 40. Sheer Teal   |                 |
| 33. Burgundy    | 37. Royal Blue | 41. Sheer Purple |                 |





## Townsend Joints

### Free Motion Knee Joints



1



2



3



4

### FREE MOTION KNEE JOINTS

1. Aluminum or Stainless TM5+
2. Aluminum TM6
3. 5 Bar Free Knee
4. Townsend Original

