



Ortho Innovations' braces featuring Mackie Hinge technology are designed to stretch soft tissue contractures and return the maximum range of motion possible to the joint. The Mackie Hinge features infinitely adjustable angle settings, non-slip static-progressive action, removable knobs for low-profile use and is available in prefabricated and custom braces or alone. Pediatric hinges are also available.



Wrist Brace

Great for night-time use or adaptable to other prescribed wearing protocols. Incorporated Mackie Hinge technology and features removable knob for low-profile use and enhanced compliance.



Elbow Brace

Provides incremental stretch to reduce soft tissue contractures of the elbow. Incorporates Mackie Hinge technology and features medial or lateral removable flexion/extension control knob.



Knee Brace

Provides incremental stretch to reduce soft tissue contractures of the knee. Incorporates Mackie Hinge technology and features infinitely adjustable angle settings, non-slip, static-progressive action and removable knobs.



Hip Abduction Orthosis

Minimally intrusive abduction orthosis features adjustable flexion, an ultra low-profile pelvic section and thigh shell that is rigid where it matters and flexible where it counts. Contourable uprights.



Patient survey results and custom brace order forms available at www.cascade-usa.com. In-services available by Ortho Innovations staff. To schedule call 800-888-0865.

ORTHO INNOVATIONS BRACES — Continued

Selection Guide

Prefabricated Wrist Brace

Small	Medium	
OI1028	OI1030	Left
OI1029	OI1031	Right

Size	Measure	Circumference	Diameter M-L	Length
Small	Forearm (at band/strap location)	6.5-9"	2-2.75"	
	Wrist (just proximal to ulnar and radial styloids)	6-8"	1.75-2.5"	
	Hand (across MP joints)		2.5-3.25"	
	Distance (radial styloid to max brace length)			5"
	Distance (from ulnar styloid to 5th MP joint)			2.5"
	Distance (from radial styloid to 2nd MP joint)			4"
Medium	Forearm (at band/strap location)	9-11"	2.75-3.5"	
	Wrist (just proximal to ulnar and radial styloids)	7.5-10"	2.5-3.125"	
	Hand (across MP joints)		3.25-4.25"	
	Distance (radial styloid to max brace length)			5"
	Distance (from ulnar styloid to 5th MP joint)			2.75"
	Distance (from radial styloid to 2nd MP joint)			4.5"

M-L gauge should be used to take M-L measurements.

Prefabricated Elbow Brace

Small	Medium	Large	
OI1001	OI1002	OI1003	Left Medial, Right Lateral Knob
OI1004	OI1005	OI1006	Right Medial, Left Lateral Knob

Size	Measure	Circumference	Diameter M-L
Small	Upper Arm (measured 7"/17.8cm above joint center)	8-11.75" (20.3-29.8cm)	2.5-3.75" (6.4-9.5cm)
	Elbow (measured at joint center) ¹	8-11.75" (20.3-29.8cm)	2.5-3.75" (6.4-9.5cm)
	Lower Arm (measured 7"/17.8cm below joint center)	5.75-8" (14.6-20.3cm)	1.4-2" (3.8-5.1cm)
Medium	Upper Arm (measured 7"/17.8cm above joint center)	10.25-14.25" (26-36.2cm)	3.25-4.5" (8.3-11.4cm)
	Elbow (measured at joint center) ¹	10.25-14.25" (26-36.2cm)	3.25-4.5" (8.3-11.4cm)
	Lower Arm (measured 7"/17.8cm below joint center)	6.75-10.5" (17.1-26.7cm)	1.75-2.75" (4.4-7cm)
Large	Upper Arm (measured 7"/17.8cm above joint center)	12.75-16.5" (32.4-41.9cm)	4-5.25" (10.2-13.3cm)
	Elbow (measured at joint center) ¹	12.75-16.5" (32.4-41.9cm)	4-5.25" (10.2-13.3cm)
	Lower Arm (measured 7"/17.8cm below joint center)	8-11.75" (20.3-29.8cm)	2.5-3.75" (6.4-9.5cm)

¹ M-L should be taken in line with the humeral condyles and reflect the widest M-L. Note any swelling for future condyle pad adjustment needs.

Prefabricated Knee Brace

Small	Medium	Large	
OI1007S	OI007M	OI1007L	

Size	Measure	Circumference	Diameter M-L
Small	Upper Thigh (measured 10"/25cm above joint center)	12.75-16.5" (32.4-41.9cm)	4-5.25" (10.2-13.3cm)
	Knee (measured at knee center) ²	11.75-14.5" (29.8-36.9cm)	3.75-4.5" (9.5-11.4cm)
	Lower Calf (measured 10"/25cm below joint center)	8-11.75" (20.3-29.8cm)	2.5-3.75" (6.4-9.5cm)
Medium	Upper Thigh (measured 10"/25cm above joint center)	18-21" (45.7-3.3cm)	5.75-6.5" (14.6-16.5cm)
	Knee (measured at knee center) ²	15-17" (38.1-43.2cm)	5-5.5" (12.-14cm)
	Lower Calf (measured 10"/25cm below joint center)	9.5-12.5 (24.1-31.8cm)	3-4" (7.7-10.1cm)
Large	Upper Thigh (measured 10"/25cm above joint center)	21-24" (53.3-61cm)	6.5-7.5" (16.5-19cm)
	Knee (measured at knee center) ²	17-20" (43.2-50.8cm)	5.5-6.25" (14-15.8cm)
	Lower Calf (measured 10"/25cm below joint center)	12.75-16.5" (32.4-41.9cm)	4-5.5" (10.2-13.3cm)

² M-L should be taken in line with mid-patella and reflect the widest M-L. Note any swelling for future condyle pad adjustment needs.

ORTHO INNOVATIONS BRACES — Continued

Selection Guide — Continued

Hip Abduction Orthosis (HAO)

Pelvic Assembly, One Size

Left Right

OI1013 **OI1014**

Thigh Assembly

Small Medium Large

OI1015 **OI1017** **OI1019** Left

OI1016 **OI1018** **OI1020** Right

Size	Proximal	Distal
Small	15-22" (38.1-55.88cm)	13-19" (33.02-48.26cm)
Medium	18-25" (45.72-63.5cm)	15-21" (38.1-53.34cm)
Large	21-27" (53.34-65.58cm)	17-23" (43.18-58.42cm)

Initial fitter is required to be proficient at bending metal. (Bending irons required, not included).

Patient should be fit laying down, unless otherwise instructed by physician.

Measure thigh circumference at proximal and distal levels to determine size for thigh assembly.

Measure waist circumference. This product will fit a patient with a waist circumference from 32-65".

Replacement Soft Goods Kit

Item No. Description

OI1001SGK Soft Goods Kit, Elbow, Small

OI1002SGK Soft Goods Kit, Elbow, Medium

OI1003SGK Soft Goods Kit, Elbow, Large

OI1007SGK Soft Goods Kit, Knee (Medium)

Mackie Hinge Only

Item No.	Description	Extended Description	Dimensions
OI2023	Knee Hinge	Straight Geared Hinge with 2.75" Knob	.18" x .58" x 28"
OI2029	Elbow Hinge	Straight Geared Hinge with 2" Knob	.18" x .58" x 28"
OI2024	Elbow Hinge	Striaight Idler Hinge	.125" x .58" x 28"
OI2025	Pediatric Hinge	Straight Geared Hinge with 2" Knob	.187" x .58" x 18"
OI2026	Pediatric Hinge	Straight Idler Hinge	.125" x .58" x 18"