# **Stride Family**



### Maximize Your Options Maximize Your Outcomes



### **Stance Control Program**



Whatever your experience with stance control happens to be, we have put together a dedicated team to help you every step of the way. We offer everything from online support and training, to personal one-on-one training at your facility working directly with you and your patients. Our program offers educational in-services at your facility with one of our clinical education specialists, arvices via WebEx<sup>IM</sup> to belp you get started

or online in-services via  $\mathsf{WebEx}^\mathsf{TM}$  to help you get started.

### **Education**

Sean McKale, CO, ATC Director of Clinical Education and Support Email: smckale@beckerorthopedic.com Phone: (800) 521-2192 ext. 3192

### **Engineering/Product Development**

Nicholas LeCursi, Chief Technology Officer **Product Development** Email: NLecursi@beckerorthopedic.net Phone: (800) 521-2192 ext. 3161

#### **Technical Support/Central Fabrication**

Rodger Broick **Technical Advisor** Email: RBroick@beckerorthopedic.net Phone: (800) 521-2192 ext. 3150











Scan the QR codes above with your Smartphone to view our Stride videos.

### **Stride Component Selection**

The following chart can be used to help you determine your patient's compatibility with our Stride stance control systems. We also recommend you use our PreStride Assessment Orthosis to qualify patients.

If you would like to speak with one of our stance control experts, please complete and fax the Patient Assessment Form on the following page to either Becker Orthopedic or Becker Oregon prior to scheduling your private consultation. It will serve as a common point of reference for us to understand your patient and help us assist you in selecting the best product to suit their needs.

	FULLSTRIDE™	SAFETYSTRIDE™		
LOCKING ANGLE AND MECHANISM	Requires full extension of the orthotic knee joint to engage positive lock	<ul> <li>Positive lock engaged when orthotic knee join fully extended</li> <li>Internal one way clutch bearing will resist kne flexion at any angle</li> </ul>		
ANKLE R.O.M. (MINIMUM REQUIRED)	Sufficient (3-5°) ankle and/or forefoot movement to generate 4 mm of cable excursion	Sufficient (3-5°) ankle and/or forefoot movement to generate 4 mm of cable excursion		
KNEE EXTENSION R.O.M. REQUIRED	Metal uprights can be contoured to accommodate contractures of 10° or less SafetyStride should be considered wher fails to consistently achieve full knee ext prior to initial contact			
ANKLE STRENGTH	No requirement	No requirement		
KNEE STRENGTH	No requirement	No requirement		
WEIGHT LIMIT	220 lbs. (A) / 140 lbs. (B)	220 lbs.		
GENU VARUS/VALGUS	Yes	Yes		
BI-LATERAL USE	Yes	Yes		
KNEE JOINT ALIGNMENT	<ul> <li>Mobile varus and valgus deformities of the knee joint are not a contraindication. Knee joint should be realigned. Consideration should be given to KAFO design and rigidity to afford maximum control in coronal plane.</li> <li>Fixed varus and valgus deformities less than 15 degrees require careful evaluation. Consideration should be given to KAFO design, side bar material selection and inherent rigidity to afford maximum control in coronal plane.</li> <li>Fixed varus and valgus deformities greater than 15 degrees are a contraindication.</li> </ul>			
GENERAL HIP STRENGTH	<ul> <li>Ideally patient will demonstrate the ability to maintain hip stability while weight bearing with the knee stabilized in the Prestride Assessment Orthosis.</li> </ul>			
HIP EXTENSOR WEAKNESS	Mild: FullStride with 75N GX-Assist Moderate: FullStride with 125N GX-Assist Severe: FullStride with 175N GX-Assist, SafetyStride with 175N GX-Assist, or Stride4 with optional lock			
HIP FLEXOR WEAKNESS	Mild:       FullStride with 75N GX-Assist         Moderate:       FullStride with 125N GX-Assist         Severe:       FullStride with 175N GX-Assist, SafetyStride with 175N GX-Assist, or Stride4 with optional lock			
HIP ABDUCTOR WEAKNESS Note: Walking aid may be required in contralateral hand	Mild:       FullStride with 75N GX-Assist         Moderate:       FullStride with 125N GX-Assist         Severe:       FullStride with 175N GX-Assist or SafetyStride with 175N GX-Assist			



# **PreStride**<sup>™</sup>

The PreStride is an evaluation tool that may be used in combination with a physical examination to assess candidacy for Stride stance control orthotic management.

The PreStride is a modular and fully adjustable stance control KAFO that may be fitted in a controlled clinical setting to most adults who are between 5' 2" and 6' 2" in height. The overall height of the orthosis is quickly and easily adjusted by releasing the spring loaded knobs located on the medial and lateral uprights. Calf and thigh bands are also easily adjusted for varying A-P depths.

The PreStride comes with FullStride<sup>™</sup> stance control knee joints and an optional GX-Assist unit to accommodate individuals with significant weakness of hip musculature.

The GX-Assist uses a pneumatic spring to assist in knee extension by mimicking the swing phase function of the quadriceps muscle group. Model 9007 also offers interchangeability with the SafetyStride<sup>™</sup> stance control knee joint (sold separately), which has the ability of resisting knee flexion at any angle and does not require full 180° knee extension in order to lock.

An additional advantage of the PreStride is that it may be used as an effective gait training tool during rehabilitation.

We offer a full range of technical and clinical support for the successful implementation of stance control technology into your practice. Please see page 2 to learn more about our comprehensive program and how we can help you get into stride with stance control.

### Maximize Your Outcomes

### **FEATURES**

- Fully adjustable and easy to work with modular design
- Can assess potential patients for FullStride, SafetyStride, Stride4
   and GX-Assist
- Accommodates patients from 5' 2" to 6' 2" in height
- Double action ankle joints for gait optimization
- One-piece rigid footplate stirrup assembly
- Removable and disposable padding
- Delivered completely assembled

### INDICATIONS

- Quadriceps weakness or lack of knee control as a result of:
  - Polio
  - MS
  - CVA
  - Femoral Nerve and Incomplete SCI
  - Inclusion Body Myositis
- Genu recurvatum

### CONTRAINDICATIONS

- Patient weight greater than 220 lbs.
- Fixed varus or valgus deformity at the knee in excess of 15°
- Knee flexion contractures greater than 10°
- Knee hyperextension that cannot be controlled by the orthosis
- Substantial leg length discrepancy where the affected side is shorter
- Significant spasticity or tone in hip, knee or ankle musculature that is not controlled by the orthosis
- Insufficient ankle range-of-motion
- Significant impairment in the patient's cognition and/or motivation

### AVAILABILITY

• The PreStride must be ordered directly through Becker Orthopedic

### CODING

• The PreStride is not a prescription device and is designed for use in a controlled environment under clinical supervision as an assessment and therapy tool

### **PreStride Ordering Information**

Order No.	Description
9007-R	PreStride - Right
9007-L	PreStride - Left
9007-P	PreStride - Pair



PreStride<sup>™</sup> KAFO



# **FullStride**<sup>™</sup>

The FullStride is a mechanical stance control orthotic knee joint that utilizes a low-profile cabling system to automatically unlock at the end of stance phase. At the end of swing phase, when the orthotic knee joint reaches full extension, the locking mechanism reengages to provide knee stability for stance phase.

When necessary, the stance control capability of the FullStride can be easily converted into a traditional automatic bail lock.

We offer a full range of technical and clinical support for the successful implementation of stance control technology into your practice. Please see page 2 to learn more about our comprehensive program and how we can help you get into stride with stance control.

### **FullStride Ordering Information**

Order No.	Description
9006-A6	FullStride Kit with Aluminum Uprights
9006-A6S	FullStride Kit with Stainless Steel Uprights
9006-A6TI	FullStride Kit with Titanium Uprights
322*	Custom FullStride KAFO



### Modular Design

### FEATURES

- Automatic, mechanical locking and unlocking
- Flexible, adaptive, modular design
- Durable, straightforward components
- Cost effective
- Interchangeable with the SafetyStride and Stride4
- Available with aluminum, stainless steel or titanium uprights

### INDICATIONS

- Quadriceps weakness or lack of knee control as a result of:
  - Polio
  - MS
  - CVA
  - Femoral Nerve and Incomplete SCI
  - Inclusion Body Myositis
- Genu recurvatum

### CONTRAINDICATIONS

- Patient weight greater than 220 lbs.
- Fixed varus or valgus deformity at the knee in excess of 15°
- Knee flexion contractures greater than 10°
- Knee hyperextension that cannot be controlled by the orthosis
- Substantial leg length discrepancy where the affected side is shorter
- Significant spasticity or tone in hip, knee or ankle musculature that is not controlled by the orthosis
- Insufficient ankle range-of-motion
- Significant impairment in the patient's cognition and/or motivation

### FABRICATION

- Can be fabricated into a variety of orthotic designs including conventional metal and leather, composites and prepreg. To ensure that optimal joint alignment and function is maintained throughout the gait cycle, we recommend the use of inherently rigid materials when designing your FullStride KAFO.
- We strongly recommend that you select an ankle joint configuration that limits dorsiflexion and allows for accurate alignment of the foot ankle complex in the sagittal plane

### AVAILABILITY

 The FullStride can be purchased as a kit through Becker Orthopedic, or fabricated into a variety of custom KAFO designs by Becker Central Fabrication

### CODING

 We recommend you consider coding the FullStride with a base code of L2005. The responsibility of accurate coding lies with the patient care facility that is billing for the product and service. The HCPCS Alpha-Numeric System is subject to revisions and periodic updates and should be consulted prior to billing.



FullStride<sup>™</sup> KAFO in automatic bail lock configuration.



FullStride<sup>™</sup> KAFO in Stance Control configuration.

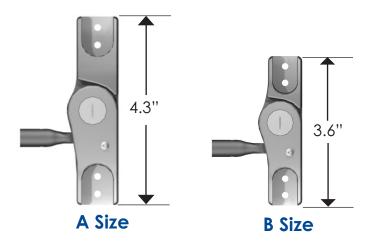


# FullStride<sup>™</sup>- B Size

The FullStride is also available in our "B," or youth size for smaller adults and adolescents. Offering a 25% reduction in weight to enhance the clinical application, the "B" size FullStride gives you additional possibilities in offering stance control to your patients.

The FullStride is a mechanical stance control orthotic knee joint that utilizes a low-profile cabling system to automatically unlock at the end of stance phase. At the end of swing phase, when the orthotic knee joint reaches full extension, the locking mechanism reengages to provide knee stability for stance phase. When necessary, the FullStride can also be easily converted into an automatic bail lock knee joint.

We offer a full range of technical and clinical support for the successful implementation of stance control technology into your practice. Please see page 2 to learn more about our comprehensive program and how we can help you get into stride with stance control.



#### **FullStride B Size Ordering Information**

Order No.	Description
9006-B6	FullStride B Size Kit with Aluminum Uprights
9006-B6S	FullStride B Size Kit with Stainless Steel Uprights
322-B*	Custom FullStride B-Size KAFO

### Step into the Stride Family

### FEATURES

- · Automatic, mechanical locking and unlocking
- Flexible, adaptive, modular design
- Durable, straightforward components
- Cost effective
- Interchangeable with the SafetyStride and Stride4
- Available with aluminum, stainless steel or titanium uprights

### INDICATIONS

- Quadriceps weakness or lack of knee control as a result of:
  - Polio
  - MS
  - CVA
  - Femoral Nerve and Incomplete SCI
  - Inclusion Body Myositis
- Genu recurvatum

### CONTRAINDICATIONS

- Patient weight greater than 220 lbs.
- Fixed varus or valgus deformity at the knee in excess of 15°
- Knee flexion contractures greater than 10°
- Knee hyperextension that cannot be controlled by the orthosis
- Substantial leg length discrepancy where the affected side is shorter
- Significant spasticity or tone in hip, knee or ankle musculature that is not controlled by the orthosis
- Insufficient ankle range-of-motion
- Significant impairment in the patient's cognition and/or motivation

### FABRICATION

- Can be fabricated into a variety of orthotic designs including conventional metal and leather, composites and prepreg. To ensure that optimal joint alignment and function is maintained throughout the gait cycle, we recommend the use of inherently rigid materials when designing your FullStride KAFO.
- We strongly recommend that you select an ankle joint configuration that limits dorsiflexion and allows for accurate alignment of the foot ankle complex in the sagittal plane

### AVAILABILITY

• The FullStride can be purchased as a kit through Becker Orthopedic, or fabricated into a variety of custom KAFO designs by Becker Central Fabrication

### CODING

 We recommend you consider coding the FullStride with a base code of L2005. The responsibility of accurate coding lies with the patient care facility that is billing for the product and service. The HCPCS Alpha-Numeric System is subject to revisions and periodic updates and should be consulted prior to billing.



FullStride<sup>™</sup> KAFO in automatic bail lock configuration.



FullStride<sup>™</sup> KAFO in Stance Control configuration.



# **SafetyStride**<sup>™</sup>

The SafetyStride is a mechanical stance control orthotic knee joint that utilizes a low-profile cabling system to automatically unlock itself at the end of stance phase. The key feature of the SafetyStride is its ability to resist knee flexion at any angle. The SafetyStride does not require full 180° knee extension to resist knee flexion in stance phase.

Designed to unlock at terminal stance, an internal lever re-engages during swing phase to ensure knee joint stability prior to heel contact. Individuals who intermittently fail to reach full extension will now have the added security and stability they require while ambulating.

The SafetyStride works in conjunction with the FullStride and can be easily installed on a FullStride equipped KAFO.

We offer a full range of technical and clinical support for the successful implementation of stance control technology into your practice. Please see page 2 to learn more about our comprehensive program and how we can help you get into stride with stance control.

#### SafetyStride Ordering Information

Order No.	Description
9005-A6	SafetyStride Kit with Aluminum Uprights
9005-A6S	SafetyStride Kit with Stainless Steel Uprights
9005-A6TI	SafetyStride Kit with Titanium Uprights
321*	Custom SafetyStride KAFO



## Maximize Mobility

### FEATURES

- Automatic, mechanical locking and unlocking
- Flexible, adaptive, modular design
- Durable, straightforward components
- Cost effective
- · Available with aluminum or stainless steel uprights

### INDICATIONS

- Quadriceps weakness or lack of knee control as a result of:
  - Polio
  - MS
  - CVA
  - Femoral Nerve and Incomplete SCI
  - Inclusion Body Myositis
- Genu recurvatum

### CONTRAINDICATIONS

- Patient weight greater than 140 lbs.
- Fixed varus or valgus deformity at the knee in excess of 15°
- Knee flexion contractures greater than 10°
- Knee hyperextension that cannot be controlled by the orthosis
- Substantial leg length discrepancy where the affected side is shorter
- Significant spasticity or tone in hip, knee or ankle musculature that is not controlled by the orthosis
- Insufficient ankle range-of-motion
- Significant impairment in the patient's cognition and/or motivation

### FABRICATION

- Can be fabricated into a variety of orthotic designs including conventional metal and leather, composites and prepreg. To ensure that optimal joint alignment and function is maintained throughout the gait cycle, we recommend the use of inherently rigid materials when designing your FullStride B Size KAFO.
- We strongly recommend that you select an ankle joint configuration that limits dorsiflexion and allows for accurate alignment of the foot ankle complex in the sagittal plane

### AVAILABILITY

• The FullStride B Size can be purchased as a kit through Becker Orthopedic, or fabricated into a variety of custom KAFO designs by Becker Central Fabrication

### CODING

• We recommend you consider coding the FullStride B-Size with a base code of L2005. The responsibility of accurate coding lies with the patient care facility that is billing for the product and service. The HCPCS Alpha-Numeric System is subject to revisions and periodic updates and should be consulted prior to billing.



FullStride<sup>™</sup> B Size KAFO in automatic bail lock configuration.



FullStride<sup>™</sup> B Size KAFO in Stance Control configuration.

### **Patient Assessment Form**

Foday's Date: Prescribing Physician:				
Facility:	Account #	Orthotist:		
Street:	City:		State:	Zip:
Phone Number:	F	Fax Number:		
DATES: Assessment:	Delivery:		Follow-up:	
Patient ID:		Affected Side:	Left 🗌 Right 🗖	Bilateral 🗌
Height:Weight:	Age:	Gender: M	🗆 F 🗖	
Diagnosis:		DX Onset:	. <u> </u>	
Gait Description:				
Center of Mass (COM): Anterior	leutral 🔲 Posterior 🗌			
Previous type of orthosis (ankle joints, l	knee joints, trimlines):			
Type of walking aid:				
Treatment goal:				
Proprioception:				
Sensation:				
Other circumstances (e.g. upper extrem	ity weakness):			
RANGE OF MOTION (Limits, specified,	WNL, contracture)			
Hip:			Ankle:	
Genu valgum:°				
Ankle valgus:°	Ankle varus:		0	
Foot Progression Angle: Toe in:	0	Toe out:		0

### MANUAL MUSCLE TESTING

Left Leg		MMT ISOMETRIC GRADING	Right Leg
lin Elevene	5	Holds test position against maximal resistance	
Hip Flexors:	4+	Holds test position against moderate to strong pressure	Hip Flexors:
lip Extensors:	4	Holds test position against moderate resistance	Hip Extensors:
lip ABductors:	4-	Holds test position against slight to moderate pressure	Hip ABductors:
lip ADductors:	3+	Holds test position against slight resistance	Hip ADductors:
	3	Holds test position against gravity	
Knee Extensors:	3-	Gradual release from test position	Knee Extensors: Knee Flexors:
nee Flexors:	2+	Moves through partial ROM against gravity or moves through complete	
Plantarflexors:		ROM gravity eliminated and holds against pressure	Plantarflexors:
Dorsiflexors:	2	Able to move through full ROM gravity eliminated	Develflewerer
	2-	Moves through partial ROM gravity eliminated	Dorsiflexors:
	1	No visible movement; palpable or observable tendon prominence/flicker ctx	
	0	No palpable or observable muscle ctx	

## Stride

The following accessories may be ordered individually, or included with your FullStride, SafetyStride, or Stride4 kit. Please refer to our Stride Family Kits Ordering Information guide for more information on available kits by visiting our website, or scanning the QR code below with your smartphone. For further convenience, we also offer custom central fabrication services that will meet or exceed the expectations of you and your patient in terms of quality, delivery, and service.

### **MODEL GX-ASSIST**

For individuals with significant weakness of hip musculature, the FullStride and SafetyStride may be ordered with a GX-Assist option that incorporates a pneumatic spring on the lateral or medial joint unit to assist in knee extension during the swing phase of gait. Available with your choice of a 75N, 125N (for standard applications), or 175N pneumatic spring, the GX-Assist can also be retrofit to existing FullStride and SafetyStride KAFO's.

### **GX-Assist Add-On Kit Ordering Information**

Order No.	Description	
9006-GX-A	GX-Assist Add-On Kit for FullStride (3/16" x 3/4")	
9006-GX-B	GX-Assist Add-On Kit for FullStride B size (3/16" x 5/8")	
9005-GX-A	GX-Assist Add-On Kit for SafetyStride (3/16" x 3/4")	

### Conversions

Conversions			
Pressurization	Torque	Band	
Force (N)	(in-lbf)	Color	
75N	17	Blue	Ŧ
125N	28	Green	T
175N	39	No Band	

### MODELS 9006-MD-A/LMB-C063-FD-A MOLDING DUMMIES

Molding dummies are available for the FullStride, SafetyStride and Stride4 knee joints. The FullStride and SafetyStride utilize the same, universal, nylon molding dummy, which can be used on the left or right side. Sold individually.

Since the Stride4 knee joint does not have one fixed center of rotation, **we strongly recommend** using the Stride4 molding dummies for fabrication. The dummies have a 3/8" hole to mark knee center and are made of stainless steel. Stride4 dummies are left and right specific and may be ordered individually or in pairs.

### Molding Dummy Ordering Information

Order No.	Description	
9006-MD-A	FullStride / SafetyStride A Size Molding Dummy	
9006-MD-B	FullStride B Size Molding Dummy	







Phone: (800) 521-2192 (248) 588-7480 Fax: (800) 923-2537 (248) 588-2960 CENTRAL FABRICATION Fax: (248) 588-4555



ISO9001 CERTIFIED

BeckerOrthopedic.com

