

Managing Gait Dysfunction



Functional Bracing with Adjustable Dynamic Response *only from...*


Patient Inspired Solutions

Unprecedented Stability and Motion

Ultraflex's Adjustable Dynamic Response (ADR)

A New Technology - Address the Entire Gait Cycle Providing Unrestricted Motion, Customized Stability, and Smooth Rollover

Treatment Specialties	Age Groups
Post-stroke	Adult
Post-polio	Adult
Crouch gait	Adolescent/adult
Drop foot	Adolescent/adult
Foot slap	Adolescent/adult

Biomechanical Rationale

Ankle

- Ultraflex ADR AFO uses the lower durometer (less stiff) elastomer to augment the tibialis anterior in early to mid stance. The higher durometer (more stiff) elastomer is used to augment the gastroc-soleus in mid to late stance.
- Traditional AFO designs which use stops to address "drop foot" in swing often impede gait in stance unnecessarily.
- ADR selectively augments and provides support for the tibialis anterior and gastroc-soleus muscles and alters their response to ground reaction forces (GRF) as needed.
- Ultraflex ADR restrains ROM, does NOT hold it or stop it (unless desired) as in traditional designs – offering natural ROM that is stabilized.
- ADR provides much greater motion (40° dorsiflexion and plantarflexion) as compared to traditional double action ankle joint (DAAJ) (15° dorsiflexion and plantarflexion).
- ADR provides sufficient force to restrain GRF whereas DAAJ only provides mild spring assist for toe pick up.

(Changing the restraint levels are accomplished with simple set screw adjustments.)

Knee

- Ultraflex ADR technology addresses the limitations of stance control KAFOs.
- ADR provides safe stance control without locking the knee - adjustable stance control angle from 0-30°.
- Prevents knee buckling when standing - ratchet support from 120° flexion to full extension.
- Ultraflex ADR KAFO provides an alternative that is more patient inclusive, technically elegant, and available through conventional coding and coverage.

To learn more:

Call: 800-220-6670

Visit: www.ultraflexsystems.com

What Do Patients Say About Their Ultraflex Adjustable Dynamic Brace?

“Walking naturally is easier with better control and no tiredness or pain.”

“I had no trouble using it right away. It fits great and is smooth and comfortable. I feel like I don’t have a problem.”

Compliance

Ultraflex UltraSafeStep orthoses can be worn throughout the day for ambulatory and non-ambulatory activities as tolerated but should be removed during sleep.

Patients may need to gradually work into wearing their orthosis and should follow the specific instructions given to them by their orthotist.

(Adjustments or modifications may be necessary to the orthosis. Patients should report any discomfort, irritation, or rubbing caused by the orthosis to their orthotist.)

Delivering Patient Inspired Solutions

For Support	Call 800-220-6670, Monday - Friday, 7:00am - 6:00pm (EST)
Clinical	brace selection/design, measurement, casting, fitting, wear schedule guidelines
Reimbursement	pricing, L Code, and prior authorization recommendations
Fabrication	assistance with fabrication or for custom fabrication through Ultraflex – carbon composite and thermoplastic
Ultraflex’s Patient Assistance Program	uninsured or patients with financial need

Our FDA Class I braces are available only through a physician’s prescription and are fitted and billed by certified orthotists. Ultraflex braces and components are covered by most insurance providers.

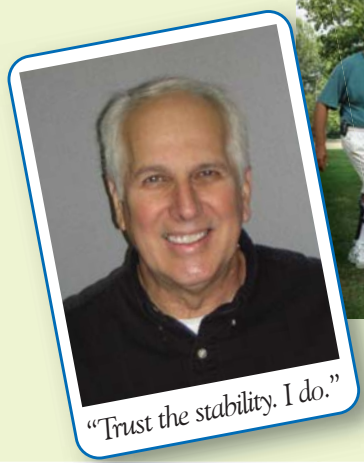
Focuses more on the ability of the patient than the disability¹

Set up your own in-service training session

800-220-6670



Reference

1. T Bowman. Managing Gait Deviations with Adjustable Dynamic Response. *The Academy Today*. March 2008.



“When I went to the Ultraflex brace there was a tremendous difference. The improvement was like night and day.”

Ultraflex Exclusive Component Technology*

Component	Description	Features
	<p>Adjustable Dynamic Response (ADR) Ankle Joint</p> <p>Dually adjustable dynamic stance phase control for motion with stability</p>	<ul style="list-style-type: none"> • Recommended for patients up to 250 lb. (medial and lateral joints together) • Continuously adjustable: <ul style="list-style-type: none"> 0-40° Plantarflexion ROM 0-40° Dorsiflexion ROM • Adjustable dynamic response muscle augmentation: <ul style="list-style-type: none"> Plantarflexion up to 240 in/lb. Dorsiflexion up to 360 in/lb.
	<p>Adjustable Dynamic Response (ADR) Knee Joint with Cable Release</p> <p>Adjustable dynamic stance phase flexion for stability without locking the knee</p>	<ul style="list-style-type: none"> • Recommended for patients up to 250 lb. • 0-30° ROM for both stance and swing • Elastomer durometer: <ul style="list-style-type: none"> 85 D for patients 175 lb. or less 95 D for patients over 175 lb. • Cable lengths for thermoplastic braces: <ul style="list-style-type: none"> Small: 9" & 11" Medium: 12" & 15" Long: 15" & 18" Extra Long: 18" & 21" • For carbon composite cable length please call 800-220-6670

*Components come with a limited lifetime warranty.

Easily convert a KAFO to an AFO with a quick release feature**



- Allows for maximum treatment options in one orthosis
- Ideal for patients with changing physiology



**Available as single component or with custom fabricated orthosis

Realize your patient's functional ambulation potential



- Reduce risk of falls
- Improve gait speed and symmetry
- Reduce fatigue
- Address the entire gait cycle
- Exclusive adjustable dynamic response technology addresses gait dysfunction with fewer compromises than conventional orthoses

General Guidelines for UltraSafeStep™

Extension Gait Moment

Deficits/Other Criteria	Clinical Goals	Ultraflex Solution/Rx
<ul style="list-style-type: none"> • Loss of heel or ankle rocker with forefoot initial contact • Fair to good hip flexors and knee extensors • Zero to fair ankle dorsiflexors and/or plantarflexors • Ankle range of motion within normal limits • No incidences of knee buckling or falling 	<ul style="list-style-type: none"> • Restore heel contact and ankle rocker • Improve gait speed and symmetry • Reduce fatigue 	 <p>Rx: Ultraflex Custom Molded ADR AFO with Posterior Band</p>
<ul style="list-style-type: none"> • Knee recurvatum and forefoot contact • History of falling from knee instability • Inability to stand for extended periods necessary for functional patient goal • Loss of one or more ankle rockers due to weakness • Fair to good hip flexors • Zero to fair knee extensors, dorsiflexors, plantarflexors • Hip, knee, and ankle motion within normal limits 	<ul style="list-style-type: none"> • Control recurvatum and restore heel strike and ankle rocker • Improve gait speed and symmetry • Prevent falls • Reduce fatigue 	 <p>Rx: Ultraflex Custom Molded ADR KAFO with Anterior Bands</p>

Flexion Gait Moment

Deficits/Other Criteria	Clinical Goals	Ultraflex Solution/Rx
<ul style="list-style-type: none"> • Loss of forefoot or toe rocker with crouch • Fair to good hip flexors and knee extensors • Zero to fair ankle dorsiflexors and/or plantarflexors • Ankle range of motion within normal limits • No incidences of knee buckling or falling 	<ul style="list-style-type: none"> • Restore forefoot and toe rocker • Improve gait speed and symmetry • Restrict excessive crouch • Reduce fatigue 	 <p>Rx: Ultraflex Custom Molded ADR AFO with Anterior Band</p>
<ul style="list-style-type: none"> • Early knee flexion and crouch • History of knee buckling or falling • Inability to stand for extended periods necessary for functional patient goal • Loss of one or more ankle rockers due to weakness • Fair to good hip flexors • Zero to fair knee extensors, dorsiflexors, plantarflexors • Hip, knee, and ankle range of motion within normal limits 	<ul style="list-style-type: none"> • Control crouch • Improve gait speed and symmetry • Prevent falls • Reduce fatigue 	 <p>Rx: Ultraflex Custom Molded ADR KAFO with Posterior Bands</p>

This chart is provided as an example only; the final bracing solution will be determined by the prescribing physician and the physician's rehab team.