

*Durability • Flexibility • Reliability*

**CARBON**

**RUSH™**

## **Flexeon is New!**

Flexeon is a glass reinforced composite material, providing extraordinary durability.



## **RUSH™ is Nearly Indestructible!**

Flexeon provides an unmatched range of motion. It is nearly indestructible, sensationally flexible and only available on Ability Dynamics prosthetic devices.



## **Radically Simple**

Flexeon is durable, flexible and provides dynamic feedback. The energy return of this foot enables amputees to easily traverse even the most aggressive terrain.

Ability Dynamics utilizes the latest in advanced composite material technology to create the radically simple and incredibly durable RUSH foot.



**ABILITY**  
DYNAMICS™

CALL US TOLL-FREE  
855-450-7300

www.**ABILITY**DYNAMICS.COM

Proudly hand crafted in the U.S.A

# Structural Testing of **RUSH** foot

## AOPA L5987 and L5986 Code Tests

Test	Requirement		
L5987	Keel	Dynamic Keel / Disp $\geq 25$ mm and % Energy return $\geq 75\%$	<b>EXCEEDS</b>
	Heel	Dynamic Heel / Disp $\geq 13$ mm or % Energy return $\geq 82\%$	<b>EXCEEDS</b>
	Vertical	Prosthetic foot (w/footshell) Displacement $> 10$ mm and foot component (w/out footshell) Displacement $> 6$ mm	<b>EXCEEDS</b>

Test	Requirement		
L5986	Sagital Dorsiflexion	Heel contact @ $10^\circ$ (1,230 N Load)	<b>EXCEEDS</b>
	Sagital Plantarflexion	Toe contact @ $8^\circ$ (1,230 N Load)	<b>EXCEEDS</b>
	Inversion / Eversion	Coronal Inversion $\geq 8^\circ$ (1,230 N Load)	<b>EXCEEDS</b>

N = Newton



## Structure Testing

ISO 10328 Requirements			
		Heel Load	Forefoot Load
<b>Static Test</b>	Proof Test [lb]	504	504
	Ultimate Test [lb]	1,007	1,007
<b>Cyclic Test</b>	Minimum Force [lb]	11	11
	Maximum Force [lb]	299	299
	Number Cycles	$2 \times 10^6$	

ISO 10328:2006

RUSH foot exceeds test requirements for the P5 level (220 lb user)

## Physical Testing

- Keel Fatigue Qualification Cycle Test  $> 5$  Million Cycles
- Heel Fatigue Qualification Cycle Test  $> 3$  Million Cycles
- Heel Sizing Tests  
Heel Deflection Confirmation  $> 13$ mm
- Heel Energy Return Tests  
Exceed AOPA Requirements  $> 82\%$
- Bonding Qualification  
Bonding Evaluation Lap Shears, For Environmental Conditions
- Bonding Qualification  
Cycle Test  $> 3$  Million Cycles
- Ultimate Testing  
 $> 2,000$  lbf For 200 lb User

**VISIT [ABILITYDYNAMICS.COM](http://ABILITYDYNAMICS.COM) OR  
CALL US TOLL-FREE AT: 855-450-7300**