



# Kinterra™ L-Code Technical Testing Report

## Introduction

The Kinterra was tested according to the American Orthotic and Prosthetic Association (AOPA) test specifications published in September 2010 of *AOPA Prosthetic Foot Project Report*. The Kinterra exceeds all required thresholds necessary to recommend the Healthcare Common Procedure Coding System (HCPCS) codes L5981 and L5968. All tests were conducted using a standard 27 cm foot, category 4 for an adult 80 kg patient. Abbreviated test descriptions and results are described below.

### L5981 – All lower extremity prostheses, flex-walk system or equal

In order to use code L5981, the prosthetic foot must meet the Dynamic Keel threshold of Keel Test, and must meet the Dynamic Heel threshold of Heel Test, and must have independently deflecting heel and keel as described in *AOPA Prosthetic Foot Project Report*.

The Keel Test involves loading the toe of the prosthetic foot at an angle of 20° with a force of 1230 N and determining the displacement while under that load and percent of energy returned by calculating the area between loading and unloading curves. Based on the test results the Keel can be classified as Rigid, Flexible, or Dynamic based on the classification criteria below.

Keel Type	Displacement @ 1230 N	% Energy Return
Rigid	<25 mm	NA
Flexible	≥25 mm	<75%
Dynamic	≥25 mm	≥75%

For the Kinterra, the actual displacement exceeded 25 mm and the percent of energy returned exceeded 75% which meets the criteria for the Dynamic Keel threshold of the Keel Test.

The Heel Test involves loading the heel of the prosthetic foot at an angle of 15° with a force of 1230 N and determining the displacement while under that load and percent of energy returned by calculating area between loading and unloading curves. Based on the test results the Heel can be classified as Dynamic or Cushioned based on the classification criteria below.

Heel Type	Displacement @ 1230 N	% Energy Return
Dynamic	≥13 mm or pass % Energy Return	≥82% or pass Displacement
Cushioned	Does not meet displacement and % Return Criteria for Dynamic	

For the Kinterra, the actual displacement exceeded 13 mm which meets the criteria for the Dynamic Heel threshold of the Heel Test.

**L5968 – Addition to lower limb prosthesis, multiaxial ankle with swing phase active dorsiflexion feature.**

The Kinterra includes a multiaxial ankle with an active dorsiflexion feature to bias the toe during swing phase as described by the code description. In addition, precedent has been set by similar competitive products with CMS issuing a decision that L5968 applies and adequately describes a prosthetic device that combines the properties of a dynamic energy storing foot with integrated hydraulic ankle functions.

Note: The *AOPA Prosthetic Foot Project Report* states, in Appendix C, that L5968 is outside of the scope of that project. Thus, there are no AOPA sanctioned tests to conduct to recommend qualification for L5968.

DRAFT