



PERFORMANCE TRAINING, INC.

ACL Prevention Training Program Results Overview

There are four still photos needed for the analysis: hyperextension, toe-touch, landing, and take-off.

Hyperextension: we assess hyperextension by looking at the athlete from the side. This picture provides a good visual depiction of whether hyperextension on the knee is present.

Toe-Touch: this photo represents the athlete jumping off the box at initial touch down with the knee in its most fully extended position while the athlete can still control the width of their stance. The measurement calculates the width

Landing: the full squat picture was chosen because of the initial theory that the knees are in the most valgus (knock-kneed) and out-of-control position upon landing. The measurement calculates the width in mm between the hip, knee, and ankle markers respectively. Control of landing is demonstrated by a knee measurement of 60% or more as compared to the hip measurement of 100%

Take-Off: The picture of the take-off further analyses knee separation because it was determined that the maximum valgus (knock-kneed) shift often does not occur until the subject prepares to jump. The measurement calculates the width in mm from the hip, knee, and ankle markers respectively. Control of landing is demonstrated by a knee measurement of 60% or more as compared to the hip measurement of 100%



Knee Alignment

Hyperextension

Pre-Landing (P.L.)

Knee Separation (mm)

Phase	Value (mm)	%
P.L.	311.6	88%
Land	401.3	113%
T.O.	477.2	134%

Hip Separation (mm)

Phase	Value (mm)	%
P.L.	392.7	100%
Land	425.0	108%
T.O.	459.7	117%

Ankle Separation (mm)

Phase	Value (mm)	%
P.L.	482.2	100%
Land	555.0	115%
T.O.	629.7	131%

Landing

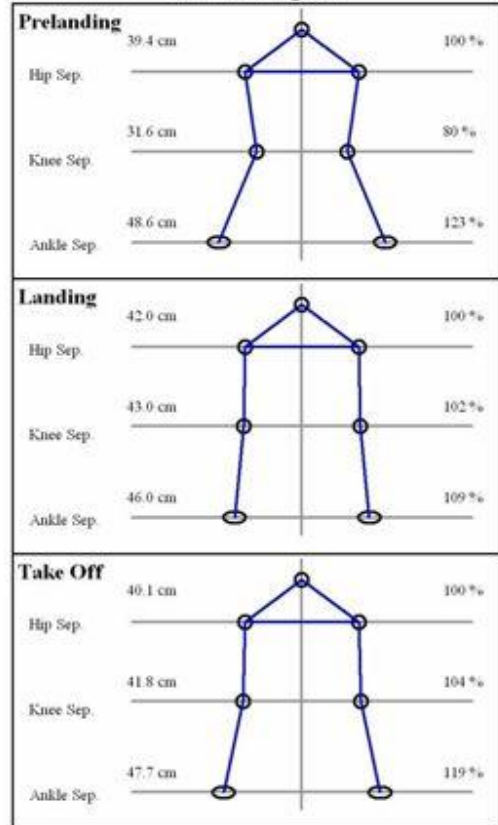
Max Jump

Maximum Height = 41.9 cm

Take Off (T.O.)

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Ashley Good II
 February 20, 2008 at 06:51 PM
 Dominant Leg: n/a





Knee Alignment

Ciara Bad II
 February 20, 2008 at 06:49 PM
 Dominant Leg: n/a

Hyperextension

Pre-Landing (P.L.)

Landing

Take Off (T.O.)

Max Jump
 Maximum Height = 18.5 cm

Knee Separation (mm)

Phase	Value (mm)
P.L.	~150
Land	~100
T.O.	~100

Hip Separation (mm)

Phase	Value (mm)
P.L.	~250
Land	~250
T.O.	~250

Ankle Separation (mm)

Phase	Value (mm)
P.L.	~250
Land	~250
T.O.	~250

