Drop Jump Test

Patient information Full name: Gender: Age: Test date:

1. Prepare



2. Drop



3. Land & rebound



4. Vertical jump



5. Land



6. Hold



Source: Moticon ReGo Drop Jump test for assessing plyometric skills and foot loading. (n.d.). https://moticon.com/the-drop-jump-test-relevance-application-and-tips-for-athletic-training-2

Equipment

Box height: cm Measurement device used:

Procedure

- 1. Athlete stands on the box with hands on hips.
- 2. Athlete steps/drops off the box and lands on the measurement device.
- 3. Athlete immediately performs a maximal vertical jump.
- 4. Athlete lands back on the measurement device.
- 5. Repeat the test for a total of _____ trials.

Trial # Jump height (cm) Ground contact time (ms) Reactive strength index (RSI) 1 2 3 4 5 5 Average

Note about normative data: Ideally, the performance of athletes is measured against normative data. However, there is no publicly available data on athlete performance. It is highly recommended that you create your own baseline for your athletes, specific to their sport, age, and gender.

You may also use this grading system for Reactive Strength Threshold (jump height/ground contact time) (Flanagan, 2016):

• Fair: < 1

• Good: 1.5 - 2

• **Very good:** 2.0 - 2

• **Excellent:** > 2.5

Inclusions

- The test involves dropping from an elevated platform (typically 20-100 cm) onto the ground, then immediately performing a maximal vertical jump.
- It measures metrics like jump height, ground contact time, and Reactive Strength Index (RSI).
- The test is used to assess explosive power and reactive strength of the lower body.
- It is commonly used in sports that require rapid force production, like soccer, football, basketball, and athletics.
- Keeping the hands on the hips throughout the test helps isolate lower-body power.

Exclusions

- The test should not be performed after injury unless the athlete is fully recovered, as it places significant stress on the musculoskeletal system.
- Arm swing is typically restricted during the test, as allowing arm swing can affect the ability to directly measure lower-body power.
- Comparing results with and without an arm swing is not recommended, as the arm swing can contribute to jump height.
- Standard box heights may not be readily available and may need to be custom-made.
- · Results can be influenced by body position during takeoff and landing, so proper technique is important.



Evaluator's comments and recommendations	
Evaluator's full name:	
Signature:	