



# Physical Testing Protocols

January 2021

**1. Anthropometry**

- a. Standing Reach

**2. Power & Agility**

- a. Vertical jump – Block
- b. Vertical jump – Spike
- c. Pro-Agility

## 1. Anthropometry

### a. Standing Reach (shoes on)

This test will help in determining the athletes' overall vertical jump.

**Equipment:** Vertec or Metric Wall Tape

**Protocol:** *VERTEC:* The athlete (with shoes on) and feet flat on the ground will displace as many slats as possible on the Vertec, recorded to the nearest ½ inch.



*WALL TAPE:* The athlete (with shoes on) stands with their side to a wall (of their dominant arm) and reach up as far as they can with the hand closer to the wall. Make sure their feet remain flat on the floor and that the athlete is really reaching up as far as possible.

Record measurement to the nearest 0.5cm or ½ inch.

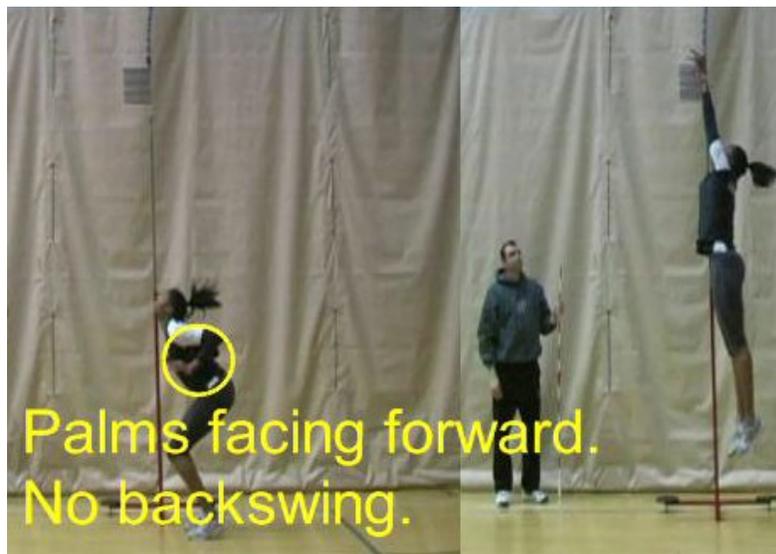
## 2. Power & Agility

### a. Block Touch

**Equipment:** Vertec

**Protocol:** Athlete is positioned beneath and slightly behind the Vertec with hands in front of the chest, palms facing out away from the body.

- Without swinging the arms (although the arms may be thrust upwards), the athlete performs a counter-movement jump and reaches up to touch the highest possible point with **both hands**.
- Hands must reach together and touch simultaneously; palms must remain in view and be facing out away from the body throughout the entire movement.
- **3 attempts will be recorded.**
- Highest point is recorded in feet and inches to the **nearest ½ inch** and converted to centimeters (by multiplying total inches by 2.54).



## b. Spike Touch

**Equipment:** Vertec

**Protocol:** Athlete is positioned at their desired approach distance from the Vertec.

- A full spike approach is performed with the athlete touching the highest possible point with one hand as they pass beneath the Vertec in their jump.
- Athlete should be given **feedback** as to where to position their start in order to **reach peak jump height** as they pass under the Vertec.
- **3 attempts will be recorded.**
- Highest point is recorded in feet and inches to the **nearest ½ inch** and converted to centimeters (by multiplying total inches by 2.54).



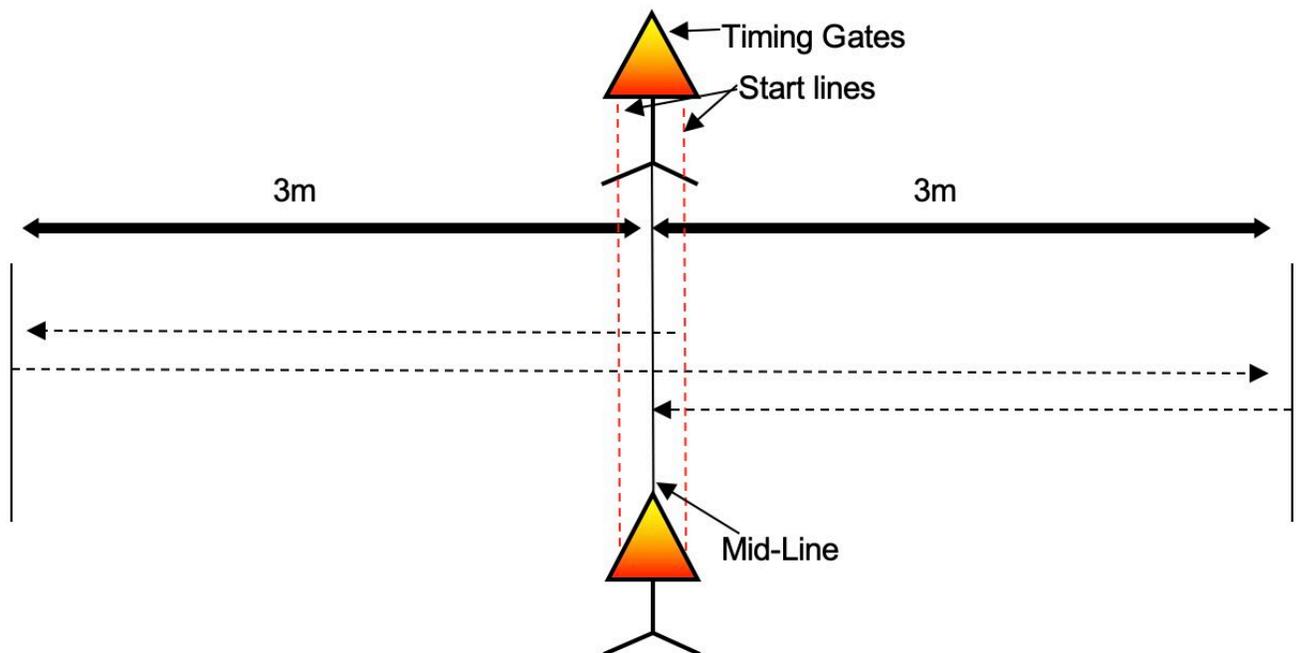
### c. Pro Agility test

The Pro Agility Test is a measure of agility for athletes. It includes forward &, lateral running.

**Equipment:** Timing gates, 4 cones, Measuring tape, masking tape.

#### Pro Agility

When taping out the course ensure the *inside* edges of the tape are used to mark the 6m distance between lines precisely. The timing gates are then set at mid point 3m from each sideline. A start line should be taped with the distal edge 10 cm from the timing gates/finish line mid-point. There will be a start line on both sides of the timing gate line. Timing gates should be set to a beam height of 1 meter. **Dashr system: Athletes will line up the inside leg with the light in the half squat stance – the lights should be set up around knee level.**



1. Participant ready's themselves in a 3-point position with their lead leg on the start-line and feet shoulder width apart. The foot in contact with the start line during the 3-point position determines which direction the athlete should travel. For example, if the participant is going right, then they must start with their right foot on the start-line to the left of the mid-line. Their right hand should then also be down and touching the ground mid way between their feet.
2. The athlete should also be instructed that once they reach the turn-around line, they **MUST** touch the line with their lead FOOT ONLY.
3. Participant can initiate the test in their start when ready.
4. Spotters should be positioned on the turn-around lines to officiate the performance and ensure the athlete's foot touches the line.

5. Participant's must accelerate maximally to the first line, then change direction and accelerate to the opposite line, before again changing direction and accelerating through the finish gate.
6. Each participant **MUST** complete a **MINIMUM OF TWO EFFORTS** in each direction, and each effort must be separated by a 2-3 minute rest period.
7. All successfully completed trials should be recorded and all failed trials repeated following adequate rest.

### *Important Notes*

- Each athlete gets one practice run in each direction (instructed to run at 70% effort). **The athlete completes 2 tests in each direction in alternating fashion.** The lowest time for each direction will be used for their score.
- The athlete **only has 1 makeup** trial for a failure to touch the marked points on the ground.
- Encourage the athletes to “run through” the gates so they do not slow down prematurely.