Test Rig and Safety Area Specifications

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Final Design  •  October 20, 2023
**Target #1 "The Pit"**
- The target surface without the pillow is 61cm off the floor.
- The target surface has a 8.3cm edge lip mounted to the perimeter of the target area.
  (see A1.03 for details)

**Target #2 "The Shelf"**
- The target surface is 122cm off the floor.
- The target surface has a 38cm tall semi-circle backboard mounted to the outside of the target area.
- 80 grit sandpaper affixed to the target surface.
  (see A1.04 for details)

**Target #3 "The Rocky Slope"**
- The target surface is at a 10º angle with loose lava rocks.
- The front edge of the target surface without the lava rocks is 91cm off the floor.
- The target surface has a 1.3cm edge lip mounted to the perimeter of the target area.
  (see A1.05 for details)

**Launch Platform and Launch Area**
- The launch platform surface is a 90.8cm x 1.9cm thick plywood disc.
- The launch platform surface is 30cm off the floor.
  (see A1.02 for details)

**NOTES:**
- The test rig is comprised of a launch area, launch platform, and (3) different target surfaces.
- The launch area is an 2.44m x 2.44m square with the launch platform centered and 25.4cm back from the front edge.
- The launch platform surface is a 90.8cm diameter plywood disc that is elevated 30cm off the floor.
- Critical dimensions are in blue.
- Tolerance: + plus or - minus 0.6cm.
- See (A1.06) for support ideas.
NOTES:
• The launch platform surface is a 90.8 cm diameter x 1.9 cm thick plywood disc.
• The launch platform surface is 30 cm off the floor.
• It may be substituted with a disc (round) from OSH or Lowes Hardware stores.
• Tolerance: plus or minus 0.6 cm.
• See (A1.06) for details.
• The target surface without the pillow is 61 cm off the floor.
• The target surface has a 8.3 cm edge lip mounted to the perimeter of the target area.

NOTES:
• The target surface has a 8.3 cm edge lip mounted to the perimeter of the target surface.
• Tolerance: plus or minus 0.6 cm.
• See (A1.06) for support ideas.
Target #2 "The Shelf" Plan View
Scale: 1:20

Target #2 "The Shelf" Isometric View
Scale: NTS

Target #2 "The Shelf" Front View
Scale: 1:20

Target #2 "The Shelf" Side View
Scale: 1:20

NOTES:
- The target surface is 122cm off the floor.
- The target surface has a 38cm tall semi-circle backboard.
- 80 grit sandpaper affixed to the target surface.
- Tolerance: plus or minus .6cm.
- See (A1.06) for support ideas.
The target surface is at a 10° angle with loose lava rocks.

• The front edge of the target surface without the lava rocks is 91 cm off the floor.
• The target surface has a 1.3 cm edge lip mounted to the perimeter of the target area.

1.3 cm edge lip extends above the target surface.

NOTES:

• The target surface is at a 10° angle with loose lava rocks.
• The front edge of the target surface without the lava rocks is 91 cm off the floor.
• The target surface has a 1.3 cm edge lip mounted to the perimeter of the target surface.
• Tolerance: plus or minus 0.6 cm.
• See (A1.06) for support ideas.
Chairs, stools, and boxes are possible vertical support items when measuring out the test rig.

NOTES:

• The test rig is comprised of a launch area, launch platform, and (3) different target surfaces.

• See (A1.02, A1.03, A1.04, and A1.05) for details.

• The launch area is an 2.44m x 2.44m square with the launch platform centered and 25.4cm back from the front edge.

• The launch platform surface is a 90.8cm x 1.9cm diameter plywood disc that is elevated 30cm off the floor.

See (A1.01) for details.

• Tolerance: + plus or - minus 0.6cm.