Test Rig and Course Specifications

Table Of Contents

01 Test Rig and Course Plan View
02 Test Rig and Course Elevation View
03 Test Rig Cad Details (launching platform)
04 Test Rig Cad Details (target landing zones)
05 Test Rig Cad Details (mountain range and pylon)
06 Test Rig Home Built Sample

Final Design • October 23, 2015
The Tech Challenge 2016   Test Rig And Course   Plan View

SCALE: 1/4"=1'-0"

- Wear safety goggles at all times
- Read all warnings on label before use
- Critical dimensions are in blue
- Tolerance of all parts and dimensions need to be plus or minus 1/4"

NOTES:

Target Area 1:
- Surface area is a 35-3/4" x 1/2" diameter round plywood disc (covered in low pile carpet) supported by 2x4 (1-1/2" x 3-1/2") on edge total height 2" above target area 2. OSH hardware SKU# 253-7264

Target Area 2:
- Surface area is a 6W x 6W x 2H 1/2" plywood supported by 2x4 (1-1/2" x 3-1/2") on edge (covered in low pile carpet)

Target Area 3:
- Surface area is a 7'L x 8W Area defined by banner material

Pylon (storm cell):
- 10" Dia X 72"H Sakrete™ Model # 65470006 HomeDepot™ Sku # 336963 (requires (2) 48" tubes taped together and trimmed with cardboard base)

Mountain range (obstacle):
- 6W x 42H x 1/2" thick foamcore with gussets for support

Challenge course:
- 6W x 22L banner material

Safety zone:
- 6W x 8L banner material

Launching platform:
- Base: 24"W x 20"H x 48"L fabricated from 1/2" exterior plywood
- Top: 36"W x 60"W x 1/2" Use # 12 wood screws to assemble all parts. (suggested) total height 20-1/2"

The Tech Museum of Innovation

>jvieira

10/23/15

DETAIL CAD PLAN/ELEV VIEW

The Tech Challenge 2016   Test Rig And Course   Plan View

SCALE: 1/4"=1'-0"
The Tech Challenge 2016 Test Rig And Course Elevation View

SCALE: 1/4"=1'-0"

Wear safety goggles at all times
Read all warnings on label before use
Critical dimensions are in blue
Tolerance of all parts and dimensions need to be plus or minus 1/4"

---

NOTES:

Target Area 1:
- Surface area is a 35-3/4" x 1/2" diameter round plywood disc (covered in low pile carpet) supported by 2x4 (1-1/2" x 3-1/2") on edge total height 2" above target area. OSH hardware SKU# 253-7264

Target Area 2:
- Surface area is a 6'W x 6'H x 1/2" plywood supported by 2x4 (1-1/2" x 3-1/2") on edge (covered in low pile carpet)

Target Area 3:
- Surface area is a 7'L x 8" Area defined by banner material

Pylon (storm cell):
- 10" Dia X 72" Sakrete™ Model # 65470006 HomeDepot™ Sku # 336963
  (requires (2) 48" tubes taped together and trimmed with cardboard base)

Mountain range (obstacle):
- 6'W x 22'H x 1/2" thick foamcore with gussets for support

Challenge course:
- 6'W x 22'L banner material

Safety zone:
- 6'W x 8'L banner material

Launching platform:
- Base: 24"W x 20'H x 48"L fabricated from 1/2" exterior plywood
  - Top: 36"W x 60"H x 1/2" Use # 12 wood screws to assemble all parts. (suggested)
    total height 20-1/2"
Target Area 1:
- Surface area is a 35-3/4" x 1/2" diameter round plywood disc (covered in low pile carpet) supported by 2x4 (1-1/2" x 3-1/2") on edge total height 2" above target area 2. OSH hardware SKU# 253-7264

Target area 2:
- Surface area is a 6W x 6W x 2'H 1/2" plywood supported by 2x4 (1-1/2" x 3-1/2") on edge (covered in low pile carpet)

Target area 3:
- Surface area is a 7'L x 8'W Area defined by banner material

Pylon (storm cell):
- 10” DIA X 72” Sakrete™ Model # 65470006 HomeDepot™ Sku # 336963 (requires (2) 48” tubes taped together and trimmed with cardboard base)

Mountain range (obstacle):
- 6’W x 42”H x 1/2” thick foamcore with gussets for support

Challenge course:
- 6’W x 22’L banner material

Safety zone:
- 6’W x 8’L banner material

Launching platform:
- Base: 24”W x 20”H x 48”L fabricated from 1/2” exterior plywood
- Top: 36”W x 60”L x 1/2” Use # 12 wood screws to assemble all parts. (suggested) total height 20-1/2”

NOTES:
- Wear safety goggles at all times
- Read all warnings on label before use
- Critical dimensions are in blue
- Tolerance of all parts and dimensions need to be plus or minus 1/4”
Target Area 1:
- Surface area is a 35-3/4" x 1/2" diameter round plywood disc (covered in low pile carpet) supported by 2x4 (1-1/2" x 3-1/2") on edge total height 2" above target area 2. OSH hardware SKU# 253-7264

Target area 2:
- Surface area is a 6'W x 6'W x 2"H 1/2" plywood supported by 2x4 (1-1/2" x 3-1/2") on edge (covered in low pile carpet)

Target area 3:
- Surface area is a 7'L x 8'W Area defined by banner material

Pylon (storm cell):
- 10" DIA X 72"H Sakrete™ Model # 65470006 HomeDepot™ Sku # 336963
- (requires (2) 48" tubes taped together and trimmed with cardboard base)

Mountain range (obstacle):
- 6'W x 42"H x 1/2" thick foamcore with gussets for support

Challenge course:
- 6'W x 22'L banner material

Safety zone:
- 6'W x 8'L banner material

Launching platform:
- Base: 24"W x 20'H x 48"L fabricated from 1/2" exterior plywood
- Top: 36"W x 60"H x 1/2" Use # 12 wood screws to assemble all parts. (suggested) total height 20-1/2"
Target Area 1:
- Surface area is a 35-3/4" x 1/2" diameter round plywood disc (covered in low pile carpet) supported by 2x4 (1-1/2" x 3-1/2") on edge total height 2" above target area 2. OSH hardware SKU# 253-7264

NOTES:
- Wear safety goggles at all times
- Read all warnings on label before use
- Critical dimensions are in blue
- Tolerance of all parts and dimensions need to be plus or minus 1/4"

Target Era 2:
- Surface area is a 6'W x 6'H x 1/2" plywood supported by 2x4 (1-1/2" x 3-1/2") on edge (covered in low pile carpet)

Target Area 3:
- Surface area is a 7'L x 8'W Area defined by banner material

Pylon (storm cell):
- 10" DIA X 72"H Sakrete™ Model # 65470006 HomeDepot™ Sku # 336963 (requires (2) 48" tubes taped together and trimmed with cardboard base)

Mountain range (obstacle):
- 6W x 42"H x 1/2" thick foamcore with gussets for support

Challenge course:
- 6W x 22'L banner material

Safety zone:
- 6W x 8'L banner material

Launching platform:
- Base: 24"W x 20"H x 48"L fabricated from 1/2" exterior plywood
- Top: 36"W x 60"L Use # 12 wood screws to assemble all parts. (suggested) total height 20-1/2"
Target Area 1:
• Surface area is a 35-3/4" x 1/2" diameter round plywood disc (covered in low pile carpet) supported by 2x4 (1-1/2" x 3-1/2") on edge total height 2" above target area 2. OSH hardware SKU# 253-7264
NOTES:
• Wear safety goggles at all times
• Read all warnings on label before use
• Critical dimensions are in blue
• Tolerance of all parts and dimensions need to be plus or minus 1/4"

Target Area 2:
• Surface area is a 6’W x 6’W x” x 2”H 1/2” plywood supported by 2x4 (1-1/2" x 3-1/2") on edge (covered in low pile carpet)

Target Area 3:
• Surface area is a 7’L x 8’W Area defined by banner material

Pylon (storm cell):
• 10” Dia X 72” H Sakrete™ Model # 65470006 HomeDepot™ Sku # 336963 (requires (2) 48” tubes taped together and trimmed with cardboard base)

Mountain range (obstacle):
• 6’W x 42”H x 1/2” thick foamcore with gussets for support

Challenge course:
• 6’W x 22’L banner material

Safety zone:
• 6’W x 8’L banner material

Launching platform:
• Base: 24”W x 20”H x 48” L fabricated from 1/2” exterior plywood
• Top: 36”W x 60”W x 1/2” Use # 12 wood screws to assemble all parts. (suggested)
total height 20-1/2”