# 10 ft. Bailout Prop Build Instructions

This bailout prop is a modification of the original design by Dale G. Pekel. The original prop was constructed to be 8 foot total height, and when using it for bailout training with a descent device students were already touching the ground with their feet after transitioning through the window opening.

The new design incorporates an overall height of 10 feet which gives enough room for the students to transition through the window and complete an effective lower of a few feet.  The 10 foot height works well as it does not require the use of a belay line.

***However, we do recommend that you have instructors on the opposite side of the wall from the platform to brace the student in the event that their anchor does not set.***

This prop also incorporates a taller platform to accommodate the new overall height, and a small set of steps to make it easier to transitioning onto the platform. This document contains all build photos, and a cut list for the build.

NOTE:  It is the responsibility of the end user to ensure all safety best practices and equipment manufacturer recommendations are followed. Engine House Training LLC is not responsible for any injury that may occur during the use of this prop.

**Materials List:**

| | |
|---|---|
| 4 - 2x4x10’ | 1 Lb. Box 3” Drywall Screws |
| 13 - 2x4x8’ | 2 Lb Box 1-5/8” Drywall Screws |
| 2 - 2x6x8’ | 3 - 4x8x5/8” or 4x8x3/4" Plywood |

**Either thickness of plywood will be fine, but depending if your prop will be mobile or permanent you can choose the best option for your situation as far as overall weight.

## Step 1 - Build the Frame

Start by constructing the frame 4 feet wide by 10 feet high. Window sill height is 6 feet 6 inches and opening is 24 inches wide.

## Step 2 - Cover Frame with Plywood

Once the frame is built, attach a 4x8 sheet of plywood to **upper portion** of the frame **(cover the window opening).** This should leave 2' of exposed framing on the bottom.

## Step 3 - Cover Other Side of Frame with Plywood

Flip frame and attach second 4x8 sheet of plywood to the opposite side of the frame. This will leavve (2) 2'x4' pieces of plywood to install at the bottom of the frame.  Once these two pcs. are cut, it should leave a 4'x4' piece of plywood for the platform.

## Step 4 - Cut & Cover the 2x4 Sections of the Frame

Cut and install 2'x4' plywood pieces to the bottom of the frame on both sides. The entire frame should be completely covered.

## Step 5 - Measure and Draw Out Window Opening

Measure over 12 1/2" from both sides, 6’ 6-1/2” up from the bottom and 2" from the top.  draw a box.  this should be just inside the framing members for the window.

## Step 6 - Drill a Hole at One Corner of the Window Opening

Use a hole saw or large drill bit and drill a hole inside the box at one of the corners

## Step 7- Cut Out the Window Frame

Use jig saw or circular saw to cut out the plywood just inside the window frame.

## Step 8 - Use Router or Sander to Finish Window Edges

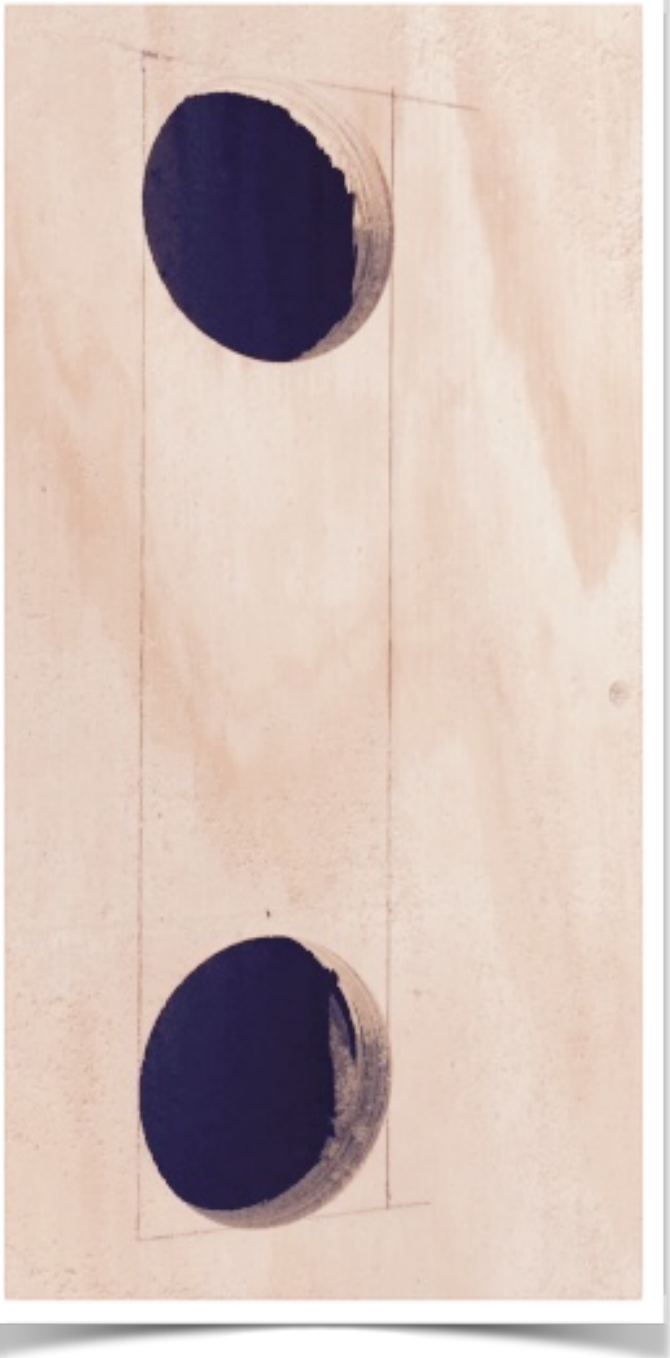
Use a router with a 1/2" spiral cut pattern bit to cut the edge of the plywood smooth with the framing.  This could also be accomplished by cutting out the plywood closer to the framing and using a belt sander.

## Step 9 - Make Cut Outs for “Tool in the Wall Anchor”

Prior to turning the prop over, add the cut outs for practicing the tool in the wall technique. The bottom of the hole should be 6" above the window sill. Bottom of sill is where tape measure starts in this photo (Left side of Photo)

## Step 10 - Make Cut Outs for “Tool in the Wall Anchor”

Use a 3" hole saw to cut the top and bottoms of the opening, and finish the opening with a jig saw.




## Step 11 - Use Router or Sander to Finish Edges

Just as before use router or sander to finish off the edges of the opening. when making props with plywood, we feel its best to limit the amount of sharp edges if possible. we used a round over bit in the router and smoothed all edges

## Completed Window Prop Wall Section

At this point you should have a completed window prop with smooth edges and “tool in the wall” openings on one side of the prop.

## Step 13 - Build Platform Top & Bottom Frames

Build a 4'x4' frame ***with two supports on 16" centers.***

Then build a second 4’x4’ frame for the bottom with ***No Inside Supports.***

## Step 15 - Cover Platform with Plywood

Cover the platform with the remaining 4'x4' piece of plywood.

## Step 16 - Install Steps on Platform

Cover the platform with the remaining 4'x4' piece of plywood.

## Step 17 - Install the Base Supports onto the Prop

Place the 2x6x8' boards along the bottom of the prop to help support the wall.  The 2x6's would can be bolted to the the wall prop and the platform, or you can use screws to make the system more portable.

Also install 2x4x8' on each side as diagonal brace from point where middle platform support meets 2x6 and to the wall prop just below the level of the sill. (Red line on picture)

# Step 18 - Install the Steps on the Platform