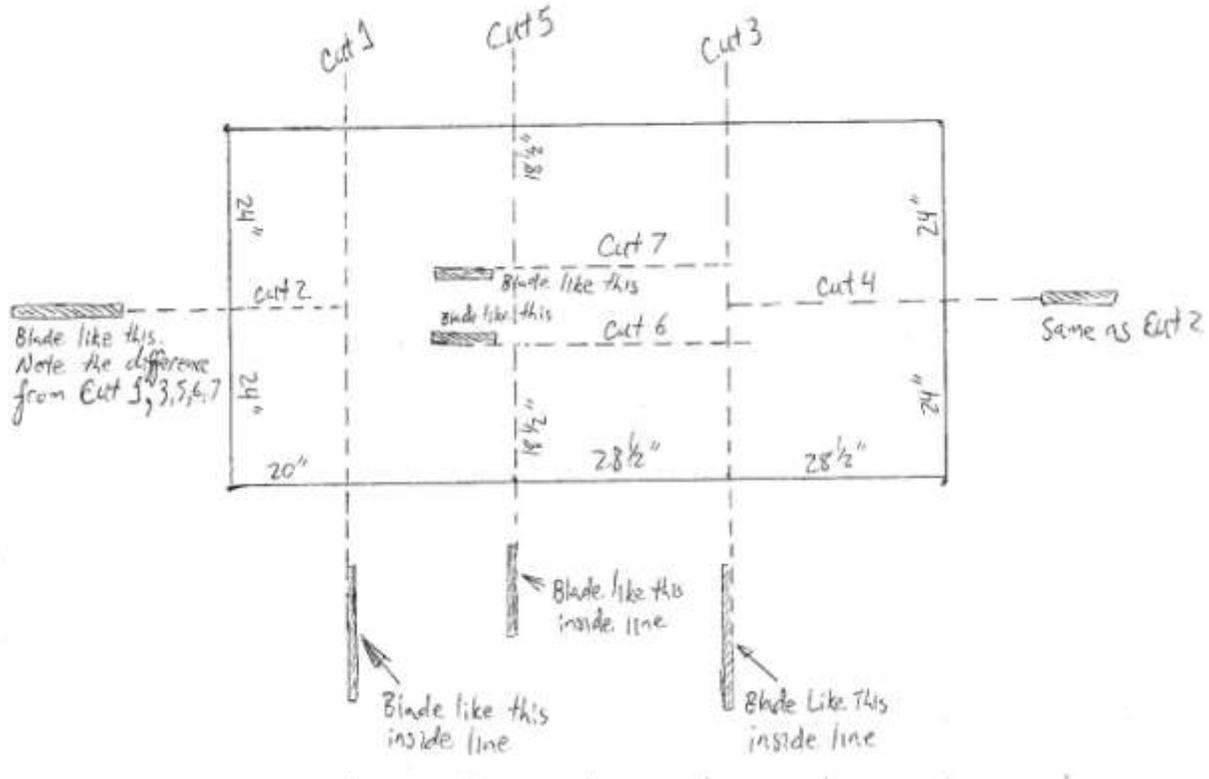


BUILDING A 20"x24"x30" PLYO BOX

Materials: 4x8 sheet of 3/4" plywood, 1 5/8" or 2" drywall screws

Tools: Circular saw with plywood blade (has lots of teeth, you can get a two pack of blades at Walmart for \$6), drill/driver, jigsaw

Cutting diagram. Refer back to this as you go:



20" from the end of the sheet draw a line. Using the circular saw, cut along the edge of this line (towards the center of the sheet) so you have a piece that is 20" x 48". This is Cut 1. Down the center of this piece, draw a line and cut this line so you have two equal pieces each 20" x 24". This is Cut 2. You will have two pieces like this:



Next, working from the opposite edge of the remaining sheet, measure a line $28\frac{1}{2}$ " from the edge, cut along the edge of this line so you have a piece that is $28\frac{1}{2}$ " x 48". This is Cut 3. Down the center, draw a line and cut this line so you have two equal pieces each $28\frac{1}{2}$ " x 24". This is Cut 4. You will have two pieces like this:



Next, working from the cleanest/straightest edge of the remaining sheet, measure a line $28\frac{1}{2}$ " from the edge, cut along the edge of this line so you have a piece that is $28\frac{1}{2}$ " x 48". This is Cut 5. Draw two lines, each $18\frac{1}{2}$ " from each edge and cut inside each of these lines towards the center of the sheet so you have two equal pieces each $18\frac{1}{2}$ " x $28\frac{1}{2}$ ", plus a strip between them 11" x $28\frac{1}{2}$ ". These are Cuts 6 and 7. You will have three pieces like this (plus a 48 " x $18\frac{1}{2}$ " strip of scrap for use on other projects):



You will now have five pieces that are $28\frac{1}{2}$ " long, two of which are 24" wide, two that are $18\frac{1}{2}$ " wide, and one that is 11" wide. The first four pieces form the body of the box, with the two 20 " x 24 " pieces as end caps. The 11 " x $28\frac{1}{2}$ " piece is used as a cross brace.

Take a look at the picture below of the box as screwed together:

A few points:

1. The top of the box in the picture is an $18\frac{1}{2}$ " x $28\frac{1}{2}$ " piece, but by surrounding it on all sides with $\frac{3}{4}$ " ply, the total dimension becomes 20"x30".
2. Note where the tape measure lies on the top, and the line of drywall screws that follows it along the top and partially down the side. This is where the brace runs across the box.
3. You can clearly see how the 20x24 piece is an end cap, and the 24x $28\frac{1}{2}$ piece forms the side.



Final product:

1. I highly recommend you cut handholds for carrying. The box is a bulky 60 pound beast without them. I cut handholds for carrying by tracing the outline of the holes on each of the 20x24 end caps and drilling out the corners of the outline and then using a jigsaw to finish cutting it out. If I had it to do over I would have cut these out BEFORE assembling the box, because I ended up having to stick a shop vac hose into the holes to clean sawdust and chips from inside the box.
2. I then marked the three best landing areas with my name. For the top, I marked the face where the brace is, and picked the **long edge** with the smoothest fit. If you look very carefully you can see that the opposite long side of the top has a very slight lip. I picked the side with zero lip. I did the same on the 20x24 side, and the 24x30 side.



Now I have a completed box, where I flip it to the height I need and “aim for the name” when I jump.