



### **Easy Roll 'Stationary' Worm Bin**

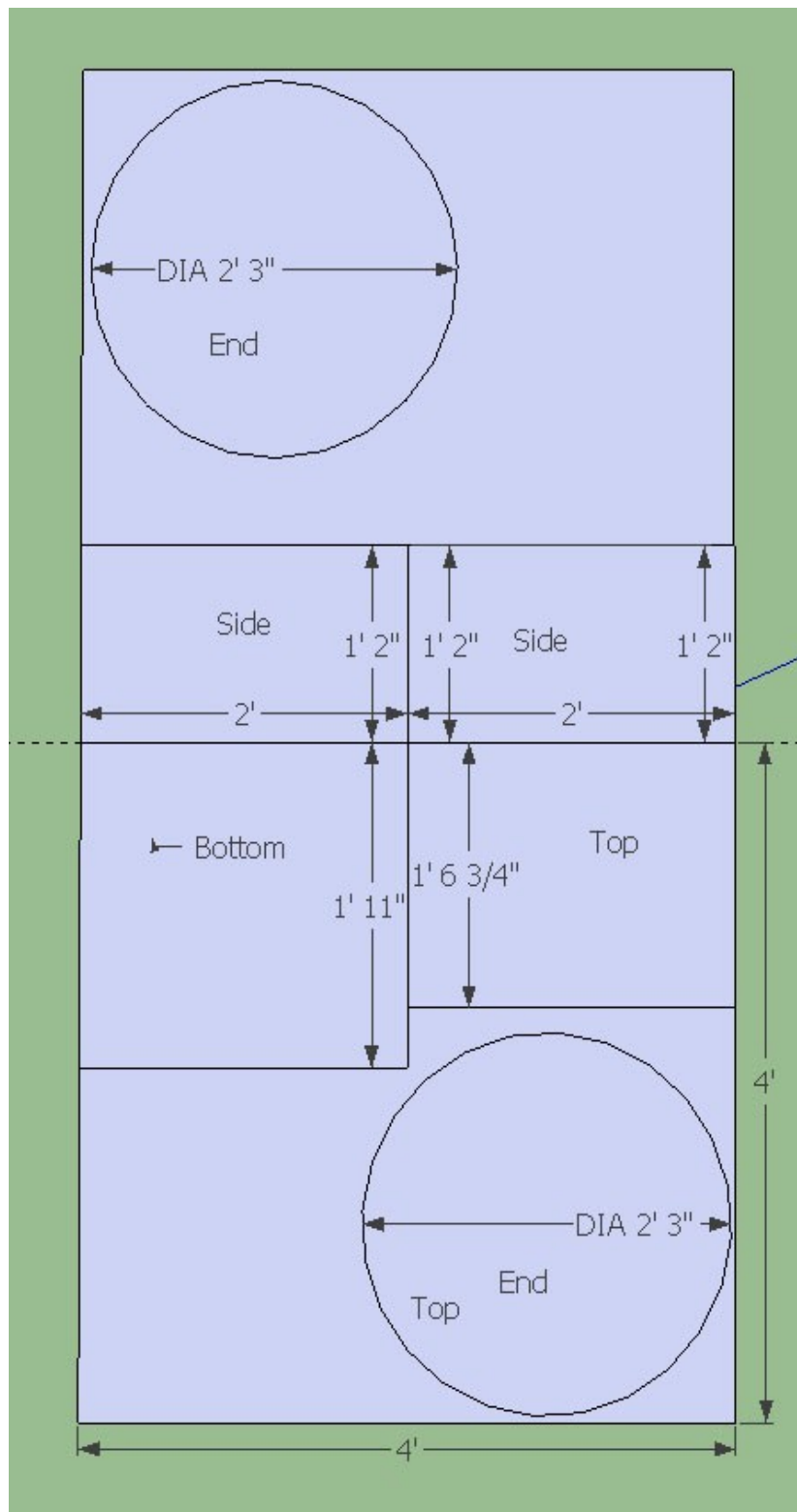
[http://www.youtube.com/watch?v=M9BwT9Q4d\\_I](http://www.youtube.com/watch?v=M9BwT9Q4d_I)

Please refer also to the “Easy Roll Worm Bin” pdf and construction video, as only the following main features differ – and it is these that will be featured in this guide:

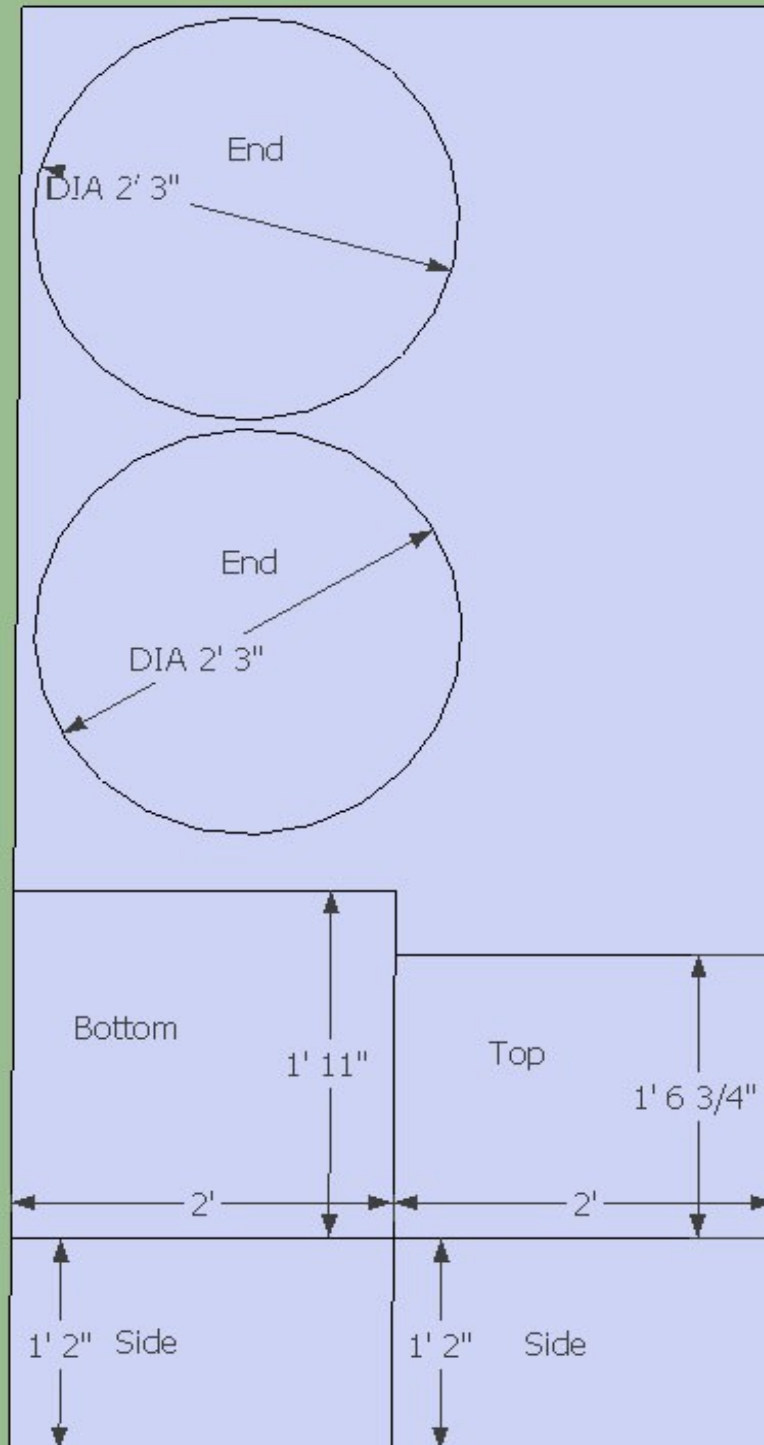
- Circular ends are cut completely round with no flat spots for the top and bottom.
- This results in the unit sitting higher off the ground.
- Patterns are drawn into the circular ends and then cut out.
- Two guide tracks are constructed of which the circular ends will rest and rotate.

**Plywood Layout** – I have provided two different possible layout options below. The first is when using half sheet sections of plywood, or cutting a full sheet exactly in half across the length. The second option is using a full sheet of plywood. The second option provides a larger continuous section of scrap wood.

**Plywood Layout using 4' x 4' section (or cut in half)**

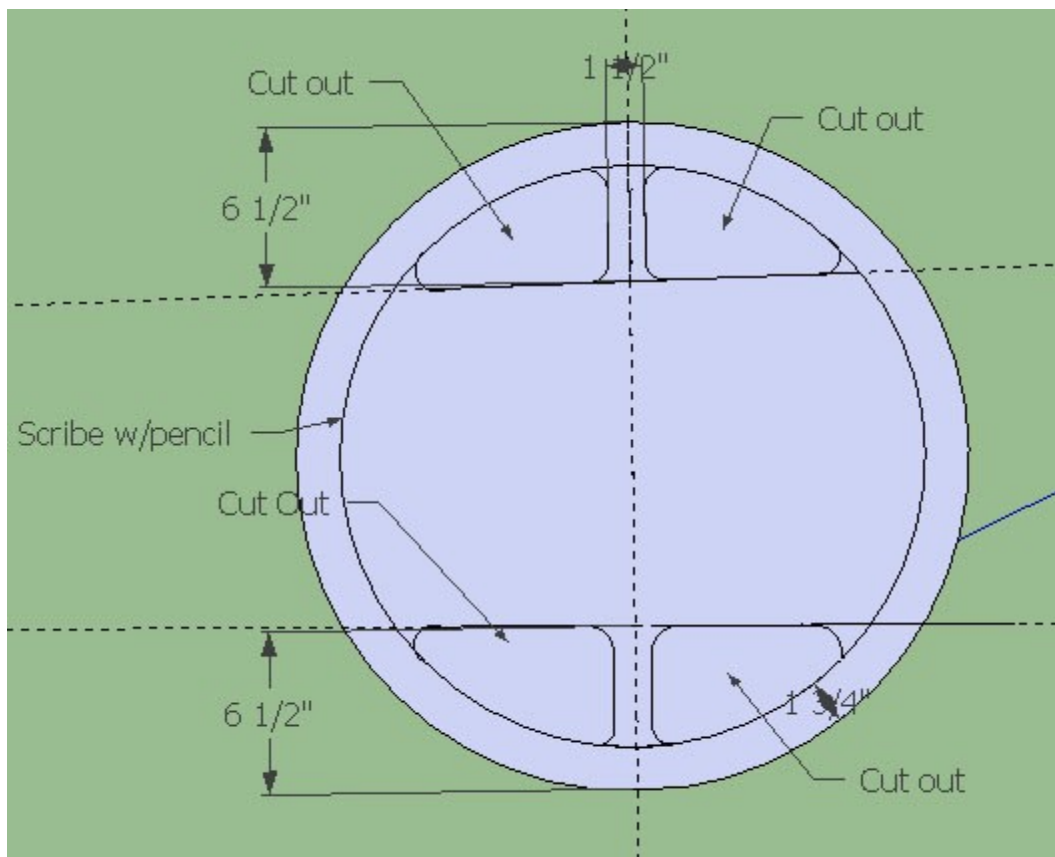


## Plywood Layout from full sheet



## Cutting out Patterns in the Circular Ends

- After the 27" diameter circular ends have been cut out, use a pencil to scribe another circle with a radius of  $12\frac{3}{4}$ " as shown in drawing (the inside circle that is  $1\frac{3}{4}$ " in from outside circle). This will be used as a guide to cut out the patterns as shown.
- Use a ruler or yard stick to mark a line through the full diameter and passing through the center (represented by vertical line in diagram).
- Using a square, mark two perpendicular lines  $6\frac{1}{2}$ " from ends as shown. These are represented by the two horizontal lines. Then, mark the  $1\frac{1}{2}$ " inside thickness as shown.
- Now you can use these lines as guides to freehand draw the curves as the 'cut out' areas shown.
- Finish by using a jig saw to cut these areas out. Use a drill to start an insert area for the blade or make a pocket cut. You can also use a router with a cutoff bit to remove the tight curves if they are too tight for your jig saw.





## Making the two Guide Tracks for stationary rolling

1. Cut two sections of pressure treated 2x4 with lengths of 17" each.
2. If possible, cut the above sections to 1" thickness (a 2x4 is normally 1-1/2" thick etc) using a table saw or band saw.
3. Now, as in the picture below, mark two lines 1" in from the ends of the feet. Lay a completed end onto the track as shown so that the circle just touches the 1" lines. Take a pencil and scribe an arc as shown.



4. Now take the two ends that you have traced the arcs onto, and cut out the arcs using a jigsaw or band saw.
5. Referring to the next picture below, the construction has been completed for one of the tracks. The first thing to notice, is that I have used two 1" nylon glides that have been nailed in at either end of the arc. Be sure to nail them exactly in the center of the width. These can be purchased at hardware stores, and/or the ones shown were bought at Walmart.
6. There are two pieces of plywood 'guide' strips cut; The far one is the same height as the 2x4 foot, and you can see that I have additionally nailed two nylon drawer glides to reduce friction.
7. At the nearest end, the height of the plywood strip is determined by measuring the height of the glides and adding an extra 1/4". This height will be added to the height at the bottom of the curve. For example in this case, height at bottom of curve= 1 1/8". Height of glides= 3/8". So  $1\text{--}1/8" + 3/8" + 1/4" = 1\text{--}3/4"$  for height of plywood strip. The reason the inside height is not the full height like the outside, is because there is approximately 1/4"+ clearance between the box and the circular ends, and this would cause it to hit on rotation. Please measure in your case

and don't just use my example measurements above!

8. Before screwing down the plywood end guides, make sure that they are very flush with the bottom of the 2x4 so they rest squarely on the floor.



**Completed Foot Guide**

### **Finishing up**

Once you have completed the ends and the box, all you have to do is find a suitable place for your bin and lift one end at a time and slide the guide tracks underneath. You can experiment with the best placement if need be. This model is idea for a patio, porch, lanai, or wash room in the house. There is also plenty of room to place a 'catch' tray underneath if you are concerned with the bedding dripping etc.