

# Sizing Box Build Instructions

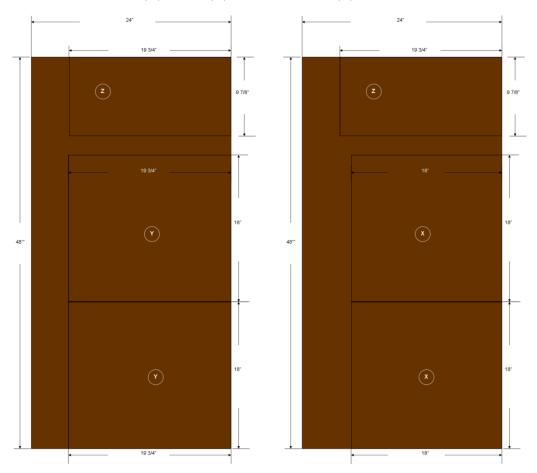
Hardware inspectors use an 18" square sizing box to easily determine that a robot does not exceed the maximum starting size. Sizing boxes may be constructed out of wood or clear polycarbonate, if it is available.

### **Materials**

- 2 sheets of hardboard: 1/8" x 24" x 48"
- 5.5' x <sup>3</sup>/<sub>4</sub>" wood for rails (*cut to the dimensions given below*)
- 1 ¼" flat head wood screws
- Wood glue and 1" brads (wood nails)
- 18" calibration square

### Instructions

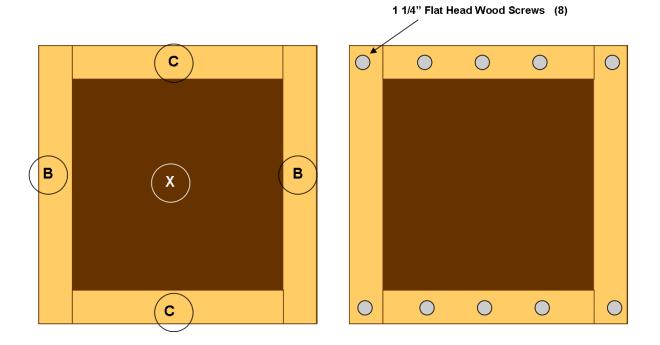
1. Cut pieces for top and bottom (X), sides (Y) and back panel (Z) from the two hardboard pieces, as shown.





- 2. Cut rails for the top and bottom panels to the dimensions indicated in the drawing.
- 3. Attach rails to the hardboard using wood glue and wire brads.

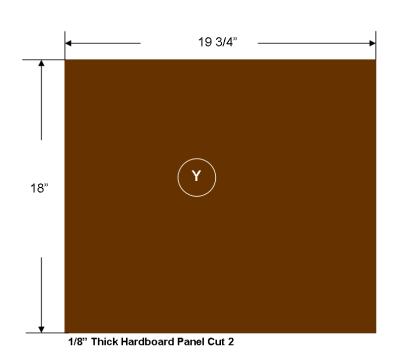
# Top and Bottom Panels 3/4" Thick Wood 2.5" B 2.5" C 18" 18" 18" 18" 2.5" C 2.5" C Rail C 2 Per Panel 2 Per Panel 2 Per Panel

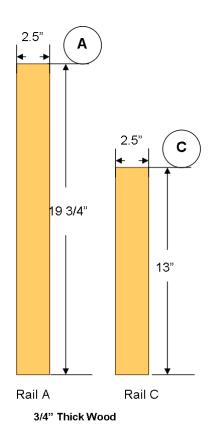




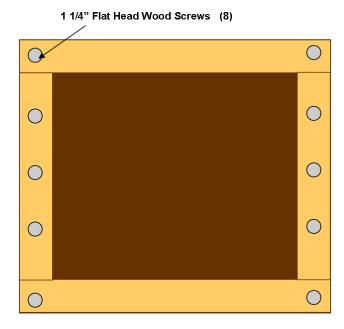
- 4. Cut rails for the side panels to the dimensions indicated in the drawing.
- 5. Attach rails to the hardboard using wood glue and wire brads.

## Side Panels (Build 2)



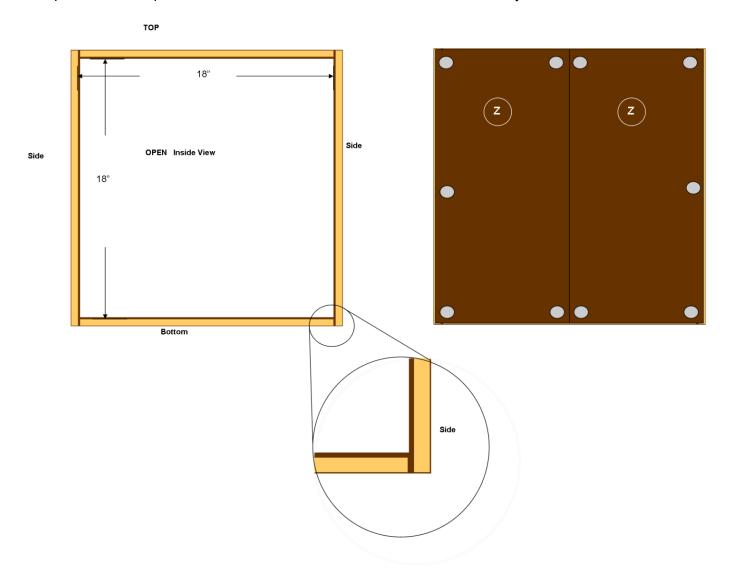


B Y B





- 6. Using the calibration square and  $1\frac{1}{4}$ " flat head screws, attach the side panels to the top and bottom panels with the sides overlapping the top and bottom, as shown in the drawing.
- 7. Affix the back panels (Z) to the back of the box using  $1\frac{1}{4}$ " flat head screws. Front of the box will remain open. Use the square to ensure the inside dimension of the box is exactly 18 x 18 x 18 inches.



Note: A single clear panel may be used instead of hardboard for the back panel.