## 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: $1 / 8^{\prime \prime} \times 24^{\prime \prime} \times 48^{\prime \prime}$
- $5.5^{\prime} \times 3 / 4$ " wood for rails (cut to the dimensions given below)
- $11 / 4^{\prime \prime}$ 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.

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.

6. Using the calibration square and $11 / 4$ " 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 $11 /{ }^{\prime \prime}$ flat head screws. Front of the box will remain open. Use the square to ensure the inside dimension of the box is exactly $18 \times 18 \times 18$ inches.

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

