Hexagon Desk How-to

Materials needed 2 4'x8' sheets of ¾" baltic birch ply 17 and $\frac{1}{2}$ of 2 inch diameter steel tube 4 3.3" diameter "thick steel circles 8 4" diameter Silent-Roll Casters with Rubber Wheels (McMaster Carr)

Tools needed Jigsaw Tablesaw MIG or TIG Welder Drill Palm Sander Cold Saw Clamps Chisel

Table Top

Saw one sheet of plywood in half and glue it together. Using a printed template, mark the dimensions of the table top on the 1 $\frac{1}{2}$ " thick plywood sheet. Using a jigsaw, cut out the shape of the table top. Using a palm sander, clean up the edges of the table and sand the top and bottom to desired finish. Finish with your choice of water resistant coating.

Frame

Cut steel tube to dimensions specified by drawing with a Cold Saw. Drill four equidistant holes on the outer edge of each of the metal circles. Weld the metal circles to the tops of each vertical support.

Weld the horizontal supports to the vertical supports at specified dimensions. Use clamps to hold supports in place while welding. Weld casters to the bottom of each vertical support. Pre-drill holes to attach frame to base. Attach frame to base using wood screws.





Shelves

Using second sheet of plywood, mark out dimensions of each wall and shelf of the structure

as specified in the drawings. Using a table saw, cut $\frac{3}{4}$ " finger joints on the three connecting edges of each wall.

Using table saw, cut a ¼" deep rabbet at 13 ¼" on each vertical wall.

Glue walls together. Using table saw, cut a ¼" groove on the three connecting edges of the shelf.

Glue shelf.

Clean unit with a chisel if needed.

Sand unit and finish with your choice of water resistant coating. Pre-drill holes for casters.

Attach casters at locations specified in drawings.





welded steel frame









finger joint frame construction

