

Three Tier Plant Stand

Project design and plan by Char Miller-King
See more of her work at www.thewoodenmaven.com



This tiered planter stand is great for kitchen countertops or balconies. It's small footprint and folding capabilities allow for easy storage when not in use.

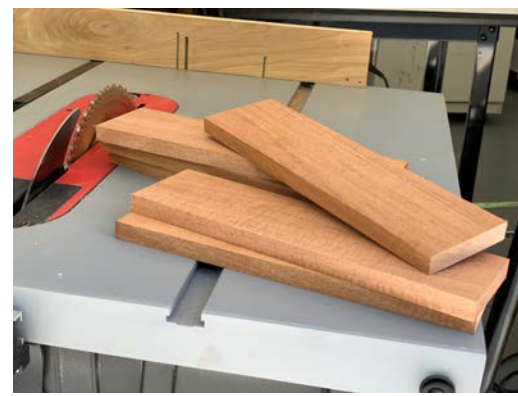
The stand is made entirely from African Mahogany which is naturally resistant decay and infestations.

Each of the three boxes uses less than three feet of lumber with a dado near the bottom to accept the $\frac{1}{4}$ " piece of the same species. Joined together with box joints that will ensure strength and integrity for years to come.

The boxes are mounted between two posts cut down from 2" x 2" blanks joined at an angle at the base to create the tiered aesthetic. Connector bolts and cap nuts tightly screwed together hold each box at the ideal angle, while loosening the cap nuts allows the boxes to fold up for storage.

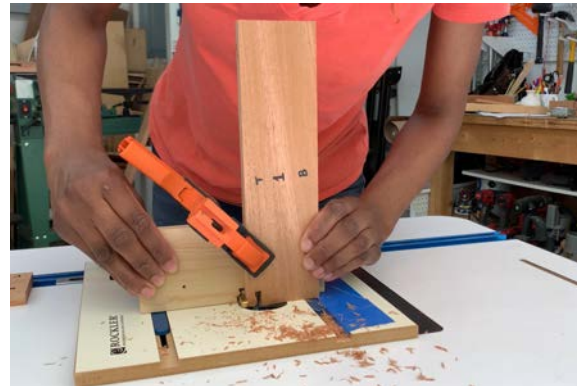
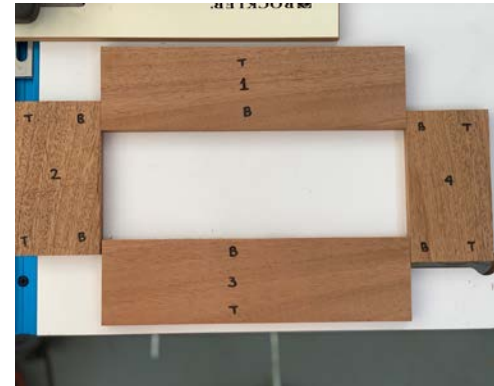
A nice coat of Tung oil brings out the grain pattern and gives the mahogany a rich natural hue as well as protect it from the harsh seasonal elements.





This project uses 1/2" x 3" African Mahogany boards

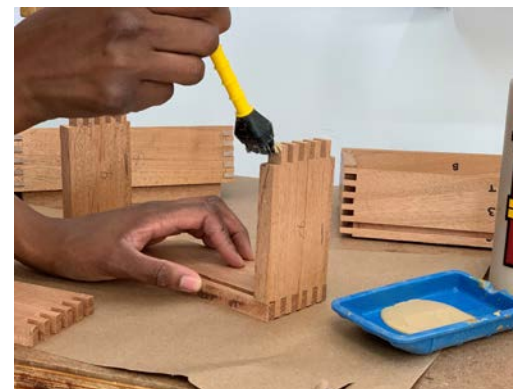
Add the table saw cut 6 pieces at 10" and 6 pieces at 5" each



Each of the three boxes will use 2-1/2 x 3 x 10 and 2- 1/2" x 3x 5. Label each piece A-D and note the top and bottoms sides

With the upcut spiral bit height set correctly, begin by making passes with the "top" closes to the bit. Use a clamp to secure workpiece to fence

Begin routing Piece B, by using Piece A as a guide, ensuring the top side is closes to the bit



Before assembly, make a $\frac{1}{4}$ " wide dado to support the 5" wide bottom, cut at $9\frac{1}{2}$ " long and dry fit all pieces

Add wood glue to pins



Use a rubber or wood mallet to ensure a tight fitting joint



Place paint tape on the outside of joints to prevent excessive squeeze out. Use scrap wood cauls for added pressure. Allow glue to dry completely before removing tape





Remove proud pins with a hand plane



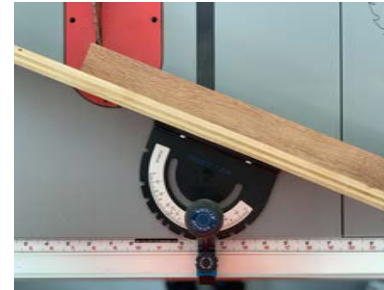
Sand all surfaces with 150 and 220 grit sandpaper



Cut 2 of the 2" x 2" at 9.75" for the base and 2 at 20" at for the planter stand poles



*Optional: Cut poles down to 1 3/4" square to accommodate 2" connector bolts. The thickness of your wood will determine the length of the bolt.



Cut each piece at 22.5 degrees



Identify and mark where boxes will sit before drilling holes to connect them to the poles



Drill 3- 3/8" hole on what will be the exterior side of the poles, there will be three holes o each side.



Drill 3-holes on each pole on the interior side with a 7/32" bit



Use a try square to ensure your holes are level



Drill a pocket hole in the bottom of the taller poles



Join the base and pole together with 1 ¼" screw



Drill ¼" holes on both sides of each box



Join each box with a bolt and cap nut, securing with an allen wrench. A galvanized washer can be used.



Complete your project with a coat of Tung Oil

