

## TV Stand Project Plans

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### Materials

- 4 – Shelves – 1x12x48” (actual dimensions: 0.75”x11.5”x48”)
- 2 – Vertical Supports – 1x12x36” (actual dimensions: 0.75”x11.5”x36”)
- 2 – Front Diagonal Supports – 1x4x42” (actual dimensions: 0.75”x3.5”x42”)
- Glue, sandpaper, etc.

I used whitewood boards from Home Depot because it’s cheap. Whitewood and pine are soft woods, though, so they’re not really good for furniture. Oak or another hardwood would make this a long-lasting piece.

### Instructions

1. Cut:
  - a. Rough cut purchased lumber into the sizes identified in the materials list. If you can save several small pieces of 1x12, they’ll be helpful in measuring later.
  - b. Mark the top front corner of the vertical support piece that will be removed to allow the diagonal support to sit flush against it.  
*A 1:1 template of this section is included to assist*
  - c. Double check your measurements and remove the top front corners with a saw.
  - d. Measure and mark the cutouts on the vertical support pieces. The cutouts should all be slightly undersized so the shelves fit snugly.
  - e. Mark the cutouts on the diagonal front supports. Lay the diagonal front supports in their place with the vertical supports to use the scraps of 1x12 and the included template to assist.
  - f. Measure everything again to be sure it’s right. Measure it a third time. Then make the cuts.
  - g. Dry fit everything together. Adjust as necessary using files, sandpaper, or a power tool if it’s way off. The shelves should fit snugly but should not require excessive force to insert. If the fit is too tight it will split the wood, if it’s too loose the finished piece won’t be as structurally stable or beautiful.
2. Glue:
  - a. Set the vertical supports on their backs. Run a bead of wood glue on the mating surfaces inside the cutouts for the bottom three shelves. Carefully slide the shelves into place.  
*You might build a jig to keep the spacing correct*
  - b. Apply a bead of wood glue to the surface of the removed top front corner of the vertical supports where they will mate with the diagonal front supports, as well as the mating surfaces inside the cutouts in the diagonal front supports. Carefully slide the diagonal

front supports into place, mating with the bottom three shelves and the vertical supports.

- c. Check for square and that the top-shelf cutout is aligned with the top of the vertical supports. Make adjustments quickly, lest the glue set up.
  - d. Apply large project clamps to ensure uniform pressure at all mating surfaces.  
*Some wedges will help clamp the angled pieces in the front; I had some scraps that worked beautifully*
  - e. Apply a bead of glue to the mating surfaces for the top shelf. Carefully slide the shelf into place and clamp to provide uniform pressure.  
*I waited a day for the previous step to fully dry because I didn't have enough clamps.*
  - f. Wait for all glue to dry completely before removing all the clamps.
3. Finish:
- a. Sand all surfaces with increasing grades of sandpaper, being sure to remove any glue drips.
  - b. I used wood putty to fill gaps caused by jagged cuts, knots, etc.
  - c. Apply stain, polyurethane, paint, or other finish as you choose.

## Afterthoughts

My shelves won't be bearing a significant load, as my TV is wall-mounted. A lateral support could be added toward the rear underneath the top shelf to reduce the risk of sagging and provide more stability without impacting the aesthetics.

As mentioned in the materials section, I used a soft wood for mine. If and when I do it over again, I'll use a hardwood.







