



Build this beautiful Cherry TV and Entertainment Stand

Black beveled aluminum T-molding, frameless glass doors, Slimline casters, and a black melamine interior add to the contemporary look of this elegant TV and Entertainment Stand. The Rockler E-Z Plan below has all the information you'll need to construct this attractive blend of modern styling and classic cherry hardwood.

Entertainment Stand Plan - Introduction

How to Use this Plan

Rockler E-Z Plans are divided into sections containing instructions, diagrams of parts, and tables listing materials. The "Instructions" section is designed to provide reliable, easy to follow instructions for woodworkers of all skill levels. Tables listing all of the materials used in this project are supplied in the "Entertainment Stand Materials" section on the last page of this plan. For dimensions of parts, refer to the "Entertainment Stand Dimensions" section immediately following the step-by-step instructions below.

Nominal vs. Actual Thickness

The actual thickness of a sheet material — such as plywood or fiberboard — is often slightly less than the nominal thickness value used to describe it (material sold as $\frac{3}{4}$ " plywood, for example, usually measures slightly less than $\frac{3}{4}$ of an inch). The instructions below are designed to account for problems that can arise due to differences between the "nominal" and actual thickness dimension of materials. For clarity, however, the instructions refer to materials by their common nominal thickness values (i.e. $\frac{3}{4}$ " cherry plywood, $\frac{1}{4}$ " melamine fiberboard).

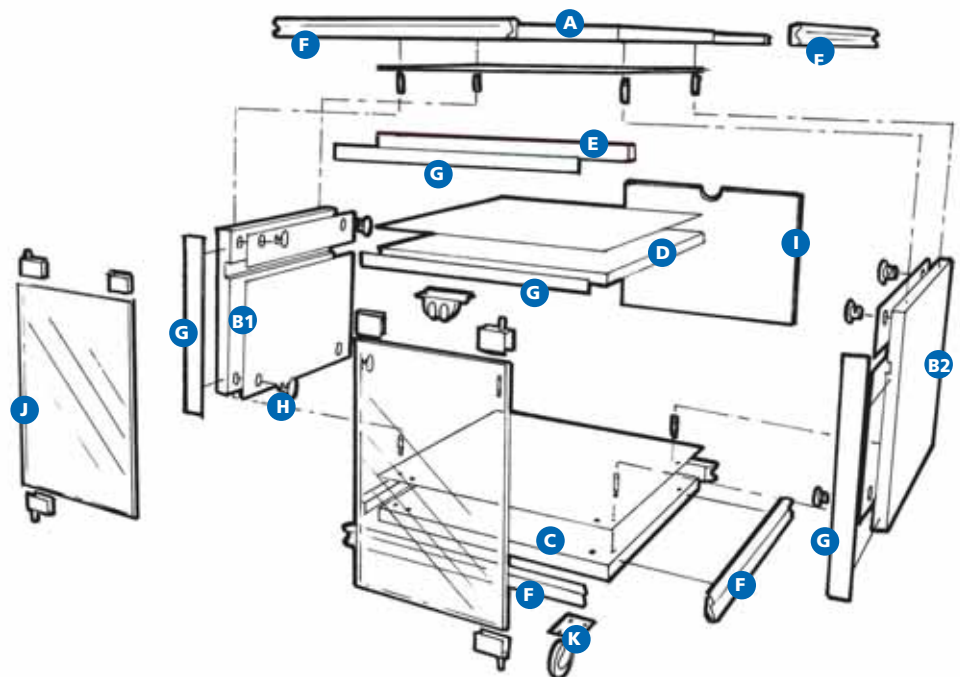


Figure 1

A Note on Laminated Parts (A, B1, B2, C, and D)

The top, bottom, shelf, and sides of the Entertainment Stand are all constructed of $\frac{3}{4}$ " material with $\frac{1}{4}$ " black melamine laminate applied to one surface (see Figure 1). On the completed unit, the top and sides of the unit will have a visible "inside" surface of black laminate and a visible "outside" surface of cherry. These parts are made using $\frac{3}{4}$ " cherry plywood with a laminate of $\frac{1}{4}$ " black melamine fiberboard on the inside surface. The underside of the shelf and the bottom of the unit will not typically be visible during use of the Entertainment Stand. An inexpensive $\frac{3}{4}$ " material — such as MDF — could be used instead of cherry plywood in making parts C and D.

Safety

As always, wear appropriate safety equipment such as approved safety glasses and dust mask or respirator.

SPECIAL SAFETY NOTE: The edges of materials can be sharp. Use special care when handling material surfaced with melamine. Also, be sure to use only plate glass with edges that have been sanded or polished appropriately for use as frameless glass doors.

Instructions

1. Cut $\frac{3}{4}$ " cherry plywood to size for the top (A) and the sides (B1 & B2) of the unit. Cut desired $\frac{3}{4}$ " material for the bottom (C), and the shelf (D). (See "Entertainment Stand Dimensions" section).
2. Apply $\frac{1}{4}$ " black melamine fiberboard to one surface of the shelf (D). Use melamine glue or contact adhesive to bond the melamine surface to the cherry plywood or other substrate.
3. Cut a $\frac{1}{4}$ " deep dado in B1 and B2 at the desired shelf height. To calculate the usable vertical shelf space of the unit, you'll need to subtract the 1-1/2" height of the brace (E). Placing the top of the dado at 6-3/4" down from the top edge of parts B1 and B2, for example, will give you 5-1/4" of clearance between the top of the shelf and the bottom of the brace.

Step 2 Tip: Keeping the edges of same-sized parts aligned during the gluing process is difficult. For better edge alignment, cut all of the melamine fiberboard pieces slightly oversized and then trim off the extra melamine with a router and piloted flush trim bit. Be sure to keep the edges of the plywood or other $\frac{3}{4}$ " material free of excess glue, contact cement, or debris that could interfere with the pilot bearing of the router bit.

Step 3 in More Detail: The width of the shelf dado should be equal to the exact thickness of the shelf. The thickness of the shelf will depend on the actual thickness of the materials you use (see "Nominal vs. Actual Thickness" above). An accurate way to get the correct width dado is to cut a "test" dado in a piece of scrap and check it against the thickness of the shelf. Cutting the dado will most likely require two passes on your table saw or router table (the dado will be wider than the maximum cut of most dado blade sets, and probably won't be the exact size of any single router bit). If the dado takes two cuts, you will need to make your first cut in both the "test" piece and in parts B1 and B2. For accurate shelf dados, we recommend the following steps:

1. Cut a $\frac{1}{4}$ " deep by $\frac{3}{4}$ " wide dado in parts B1 and B2 with the top edge of the dado in the correct position for the top edge of the shelf (example: 6-3/4" from the top edge of parts B1 and B2 to the top edge of the dado for 5-1/4" vertical shelf space).
2. Without moving the router table or table saw fence, cut a dado in a piece of scrap material.
3. Make successive cuts, widening the "test" dado a little at a time -- by moving the fence away from the dado blade or router bit -- until the edge of the shelf fits into the dado.
4. When you have the fence positioned to make the perfect second cut, make your final cuts in B1 and B2.

4. Apply the melamine fiberboard pieces to the top, bottom, and sides of the unit. As in Step 2, we recommend cutting the black melamine fiberboard pieces slightly oversized and trimming off the excess after the parts are glued.
5. Before assembling the unit, it is necessary to drill the top and bottom (A and C) to receive the Pivot Hinges (Rockler part # 30023). Drill 9 mm in diameter by 10 mm deep holes for the glass door pivot hinge bushings (4 holes total) at 2-1/2" on center from the outside edge, and 5/8" on center from the front edge of parts A and C.

Step 4 Tip: To help align the melamine laminate with the edges of the dado in parts B1 and B2, cut a piece of scrap 3/4" material 20" long and the same width as the dado. Fit this piece into the dado and butt the laminate up to it during the gluing process.

6. Miter cut the key molding (F) to size and attach to the edges of the top (A) and the bottom (C).
7. Cut a 1/4" deep by 1/2" wide rabbet into the back edge of parts B1 and B2 (see Figure 2). Don't forget that parts B1 and B2 are mirror images of one another. In other words, if you lay B1 on top of B2 with the inside surface of the parts touching, the edges of the dado and the rabbet on B1 should line up with the edges of the dado and rabbet on B2.
8. Cut a piece of 3/4" by 1-1/2" hardwood to length for the brace (E) and drill for pocket screws.
9. Using a 5/64" slot cutter (Rockler part # 95332), slot the front edge of parts B1 and B2 and the front edge of the shelf (D) to receive the black aluminum T-molding. The slots should be located 3/8" on center from

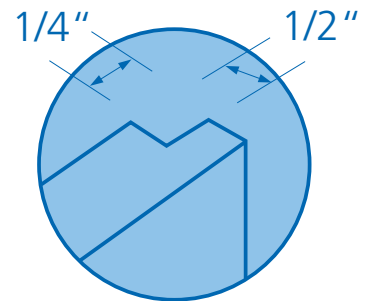


Figure 2

Step 8 in more detail: The brace (E) is made of 3/4" by 1-1/2" hardwood and is finished on the front surface with 1-1/2" black aluminum T-molding. The brace attaches with pocket screws to the underside of part A and to the inside surface of parts B1 and B2. For the parts of the Entertainment Stand to fit together correctly, the length of the brace must be equal to the distance between the two sides (B1 and B2) of the assembled unit. The most accurate way to determine the correct length of the brace is to "dry-fit" the shelf and sides together and then measure the distance between the two sides. For an accurate measurement:

1. Fit the ends of the shelf into the dados in parts B1 and B2 and clamp the three parts lightly together.
2. With the shelf in place, measure the distance between the inside edge of parts B1 and B2 at a point as close as possible to where the shelf and sides meet (the distance should be close to 26").
3. Cut a piece of 3/4" by 1-1/2" hardwood to the length just measured and check to make sure that it fits snugly in between the two sides near the point where they meet the shelf.

After the material for the brace is cut, drill a sufficient number of pocket holes to attach it securely to the underside of part A (5 evenly spaced holes will work well) and drill a pocket hole in each end of the brace to attach it to parts B1 and B2.

NOTE: We recommend the [K2000 Pocket Hole Jig](#) for drilling pocket holes. If a pocket hole jig is not available, pre-drill and countersink for 2-1/4" # 8 screws.

the outside edge of parts B1 and B2, and 3/8" on center from the top edge of the shelf. Slot the brace 3/8" on center from its bottom edge.

10. Install T-molding into parts B1, B2, E and D. The T-molding can be cut on a chop saw with an aluminum-cutting blade or with a hacksaw. We recommend cutting the T-molding for parts B1, B2, and E slightly

long and then filing the aluminum flush with the edge of the part. T-Molding for the shelf (D) must be cut to the same length as the brace (D) and centered on the front edge of the shelf.

11. Cut 1/4" melamine fiberboard to size for the back of the unit (J). We recommend also cutting a 3" diameter half-circle out of the top center and bottom center of the back for cords and cables to pass through.
12. Mark the correct location on parts A and C for the inside edge of parts B1 and B2. Following the Minifix package instructions, install Minifix fittings (Rockler Part # 22161) connecting bolts in parts A and C, and locking cams in parts B1 and B2 (see Figure 1). **NOTE:** We strongly recommend using the Minifix JIG IT® Template (figure 3) to position and drill holes for the Minifix hardware on parts B1 and B2. You will also need an 8mm Metric Brad Point (Rockler # 28516) with an 8mm stop collar (Rockler # 93237) and a 15mm Forstner Bit (Rockler # 21249) with a 10mm stop collar (Rockler # 93253) to drill holes for the Minifix hardware.
13. Begin assembling the unit by attaching the sides (B1 and B2) to the top (A).
14. Attach the brace to the underside of part A. The front edge of the brace must be positioned 2" back from

Step 12 in more detail: To correctly install the Minifix hardware, you will need to mark the position where the inside edge of parts B1 and B2 meet the top and bottom of the unit (A and C). Since the length of the brace (E) is equal to the distance that should be maintained between the inside surface of parts B1 and B2 at all points, it can be used as a reference when marking off the correct position for the Minifix hardware on the top and bottom of the unit.

1. Begin by centering the brace from side to side on the melamine surface of part A so that it is 3" in from the front edge and parallel to it. Make a light mark at each end of the brace with a sharp colored pencil.
2. Repeat the procedure in Step 1 above for the back edge of part A.
3. Repeat Steps 2 and 3 above for marking the location of the inside edge of parts B1 and B2 on part C

The correct position of the connecting bolt holes will be 3" in from the front and back edges of parts A and C and 9.5mm* (towards the outside edge) from the marks you made in steps 1, 2, and 3 above.

* 3/8" is a workable approximation of 9.5mm for the purpose of positioning the connecting bolt holes.

Minifix fittings and Jig It Template

An easy-to-use marking and drilling guide for fasteners. Mark location of cam holes with a center punch. Includes drill guide bushing for drilling 8mm horizontal hole.



NOTE: Use a brad point drill bit for the 8mm holes and a Forstner bit for the 15mm hole.

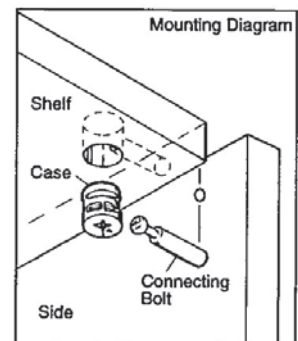
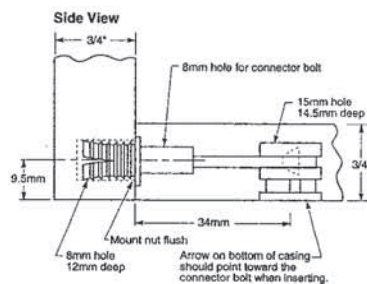
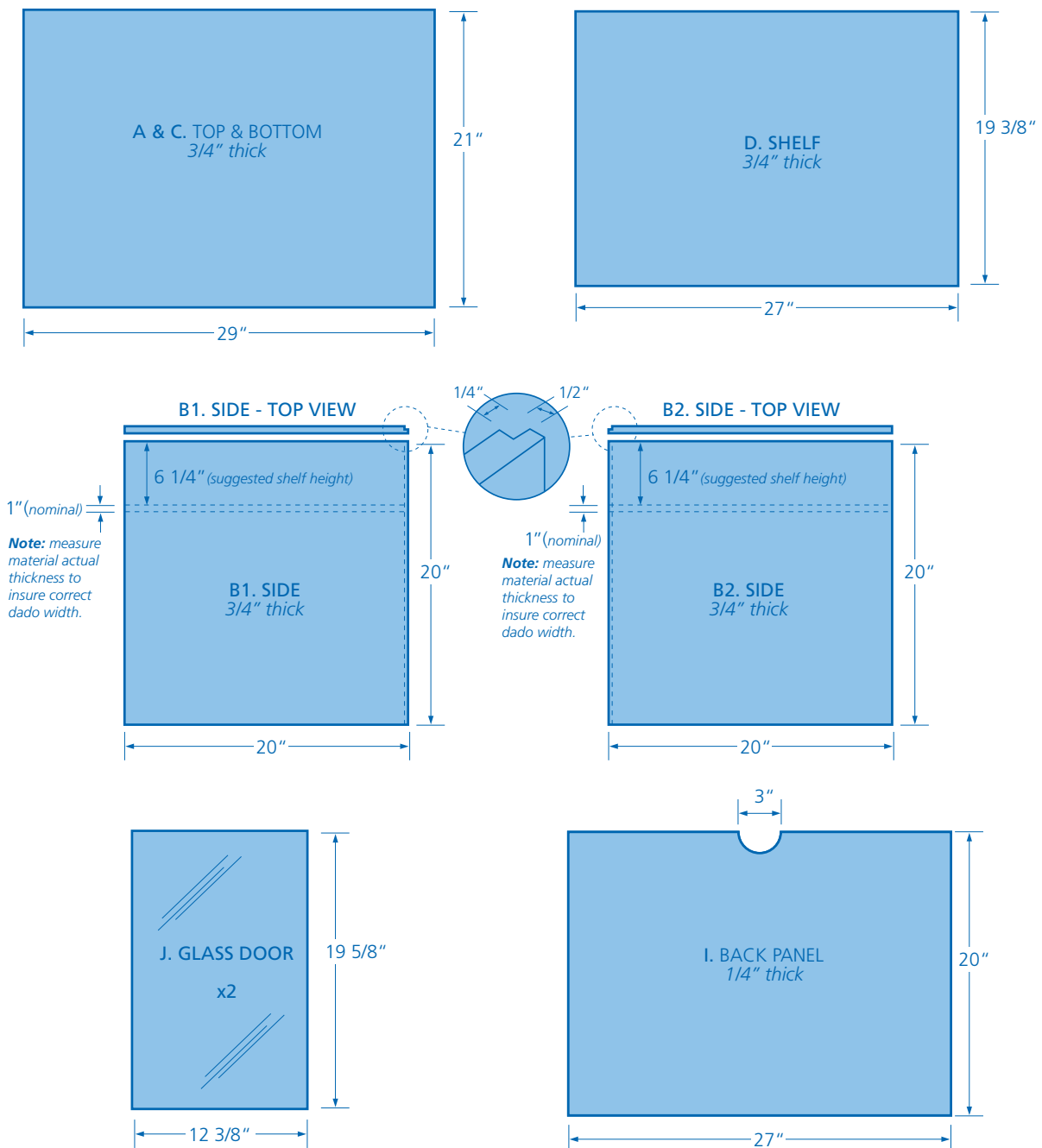


Figure 3

the front edge of the melamine surface to allow room for the magnetic door catch.

15. Glue and clamp the shelf in place so that the back edge of the shelf is flush with the inside edge of the rabbets on parts B1 and B2.
16. Attach the assembled sides and top of the unit to the bottom. Fit the back (J) into the rabbets in B1 and B2 and attach with narrow-crown staples or countersunk all-purpose screws.
17. Install the casters at the desired location.
18. Attach the pivot hinge hardware to the door glass and install the doors.

Entertainment Stand Dimensions



Entertainment Stand Materials

Part	Description	Materials	Thickness	Width	Length/Height	Qty.
A	Top	¾" cherry plywood* ¼" black melamine fiberboard*	1"*	29"	21"	1
B1&B2	Sides	¾" cherry plywood* ¼" black melamine fiberboard*	1"*	20"	20"	2
C	Bottom	¾" cherry plywood* ¼" black melamine fiberboard*	1"*	29"	21"	1
D	Shelf	¾" cherry plywood* ¼" black melamine fiberboard*	1"*	27"	19-1/4"	1
E	Brace	¾" hardwood	3/4"	1-1/2"	See Instr. Step 8	1
F	Cherry Key Molding	Cherry			Approx. 220" total	
G	T-Molding	Black Aluminum Beveled T-Molding	See Rockler Parts List (below)			
H	Minifix Fitting	Minifix fittings	See Rockler Parts List			
I	Back	¼" black melamine fiberboard*	¼"*	27"	20"	1
J	Glass Doors	Glass	¼"	12-3/8"	19-5/8"	2
K	Slimline Casters	Slimline Casters	See Rockler Parts List			

*Indicates nominal thickness

Rockler Parts List

Part	Description	Rockler #	Size
G	Black Aluminum Beveled T-Molding	37357	1-1/2" x 48"
(Use with G)	Slot Cutter	95332	5/64" Kerf, 1/4" Shank
H	Minifix Fittings	22161	8 per pack
(Use with H)	Brown Minifix Caps	30676	8 per pack
(Use with H)	Minifix Jiglt Template	92114	1 per pack
(Use with H)	8mm Metric Brad Point	28516	1
(Use with H)	8mm stop collar	93237	1
(Use with H)	15mm Forstner Bit	21249	1
(Use with H)	10mm stop collar	93253	1
(Use with J)	Pivot Hinge - satin black (pair)	30023	2 per pack
	Low profile magnetic catch	26542	5/16" x 2" x 13/16"
K	Casters - Slimline black and silver	37565	3-3/16" diameter x 1/2" tread

To order supplies with product #'s above, please call Rockler Woodworking and Hardware at 1-800-279-4441 or go online at www.rockler.com.