



D I M E N S I O N S :
 129" W x 14½" D x 56¼" H

Up to
65"
 screen size
 fits in center
 cabinet

Doors roll
 smoothly on
 nostalgic
 barn track



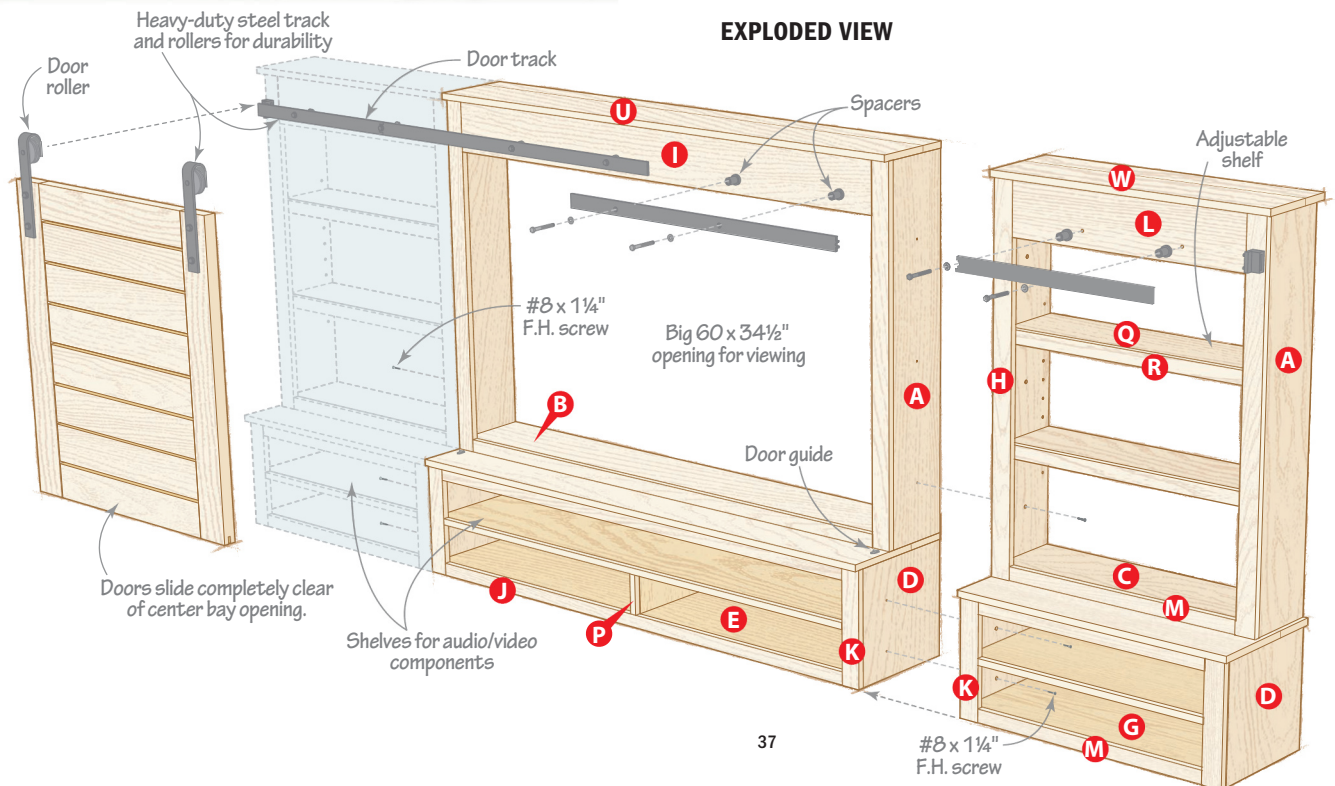


Starring roll Barn-door Entertainment Center

Stylized barn doors conceal a large flat-screen TV display in this handsome entertainment center. For viewing, the doors slide easily to each side.

Start by building six boxes

The entertainment center comprises a large center cabinet flanked by two matching units. Each unit consists of an upper and lower cabinet. For strength, they attach to each other as well as to the wall.



► Space shelf-pin holes accurately.
woodmagazine.com/spaceshelfpins

1 Cut parts A–G [Materials List, Drawings 1 and 2] with dados and rabbets where shown. Drill shelf-pin holes in the four sides (A) for the outer cabinets [Drawing 3].

2 Construct the upper and lower center cabinets (A/B and D/E/F) and outer units (A/C and D/G) [Drawings 1 and 2].

3 Cut the face-frame stiles and rails H–M to size. Assemble face frames H/I/J, J/K, H/L/M, and K/M with glue and pocket screws [Drawings 1 and 2]. Glue the face frames to the cases, flush at the sides, top, and bottom.

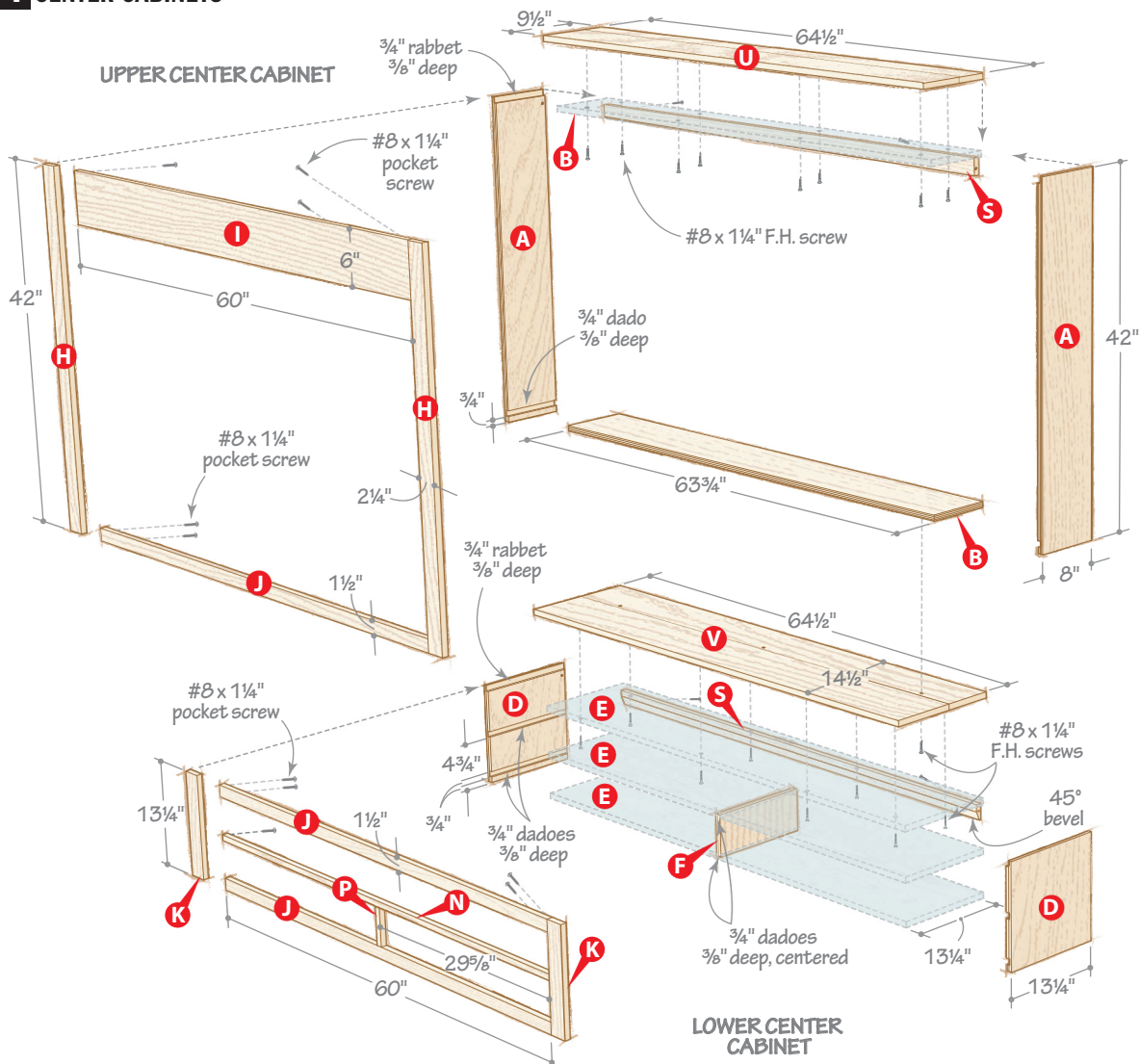
4 Mill blanks for the lower cabinet middle rails and stile (N–P) about 3" longer than shown. Trim the rails to fit [Photo A], and glue them in place. Then install stile P.

► Glue and clamp square carcasses.
woodmagazine.com/clampsquare
woodmagazine.com/clampingbrace



A Position the middle rail across the face frame and mark the length with a knife for maximum precision. Mark the stile for the center cabinet the same way.

1 CENTER CABINETS



Add shelves and cleats

1 Cut the shelves and edges (Q, R) to size. Glue the edges to the shelves [Drawing 2] and finish-sand the shelf assemblies.

2 After cutting the attaching cleats (S, T), rip a 45° bevel on one edge of two center cleats (S) and four outer cleats (T). Leave the other three cleats square-edged.

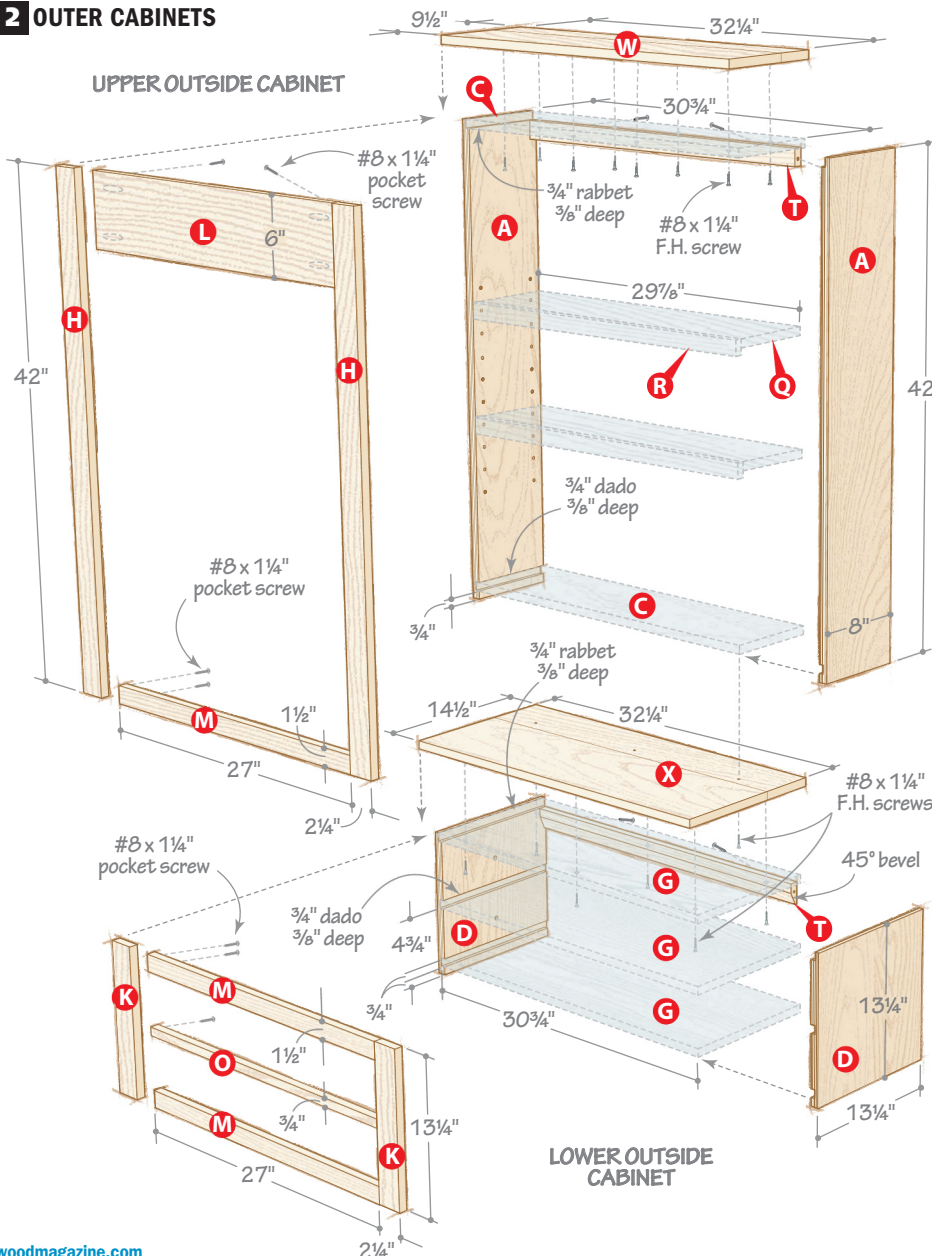
3 Screw and glue a square-edged cleat to the underside of the top on each upper cabinet, flush at the back [Drawings 1 and 2]. Similarly, attach a beveled cleat to each lower case [Photo B], keeping the three mating parts to attach to the wall later.

4 Glue up stock for the tops (U-X). Cut them to size and finish-sand. (You'll attach them to the cabinets later.) Finish-sand the six cabinets.

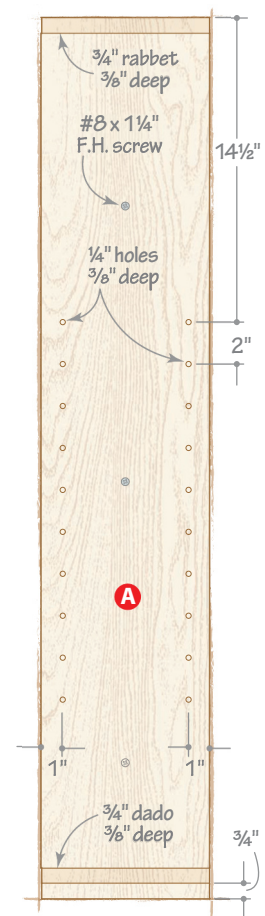


B Attach the beveled lower-cabinet cleats with pocket screws. The remaining beveled parts attach to the wall and mate with the case when you install the completed unit.

2 OUTER CABINETS

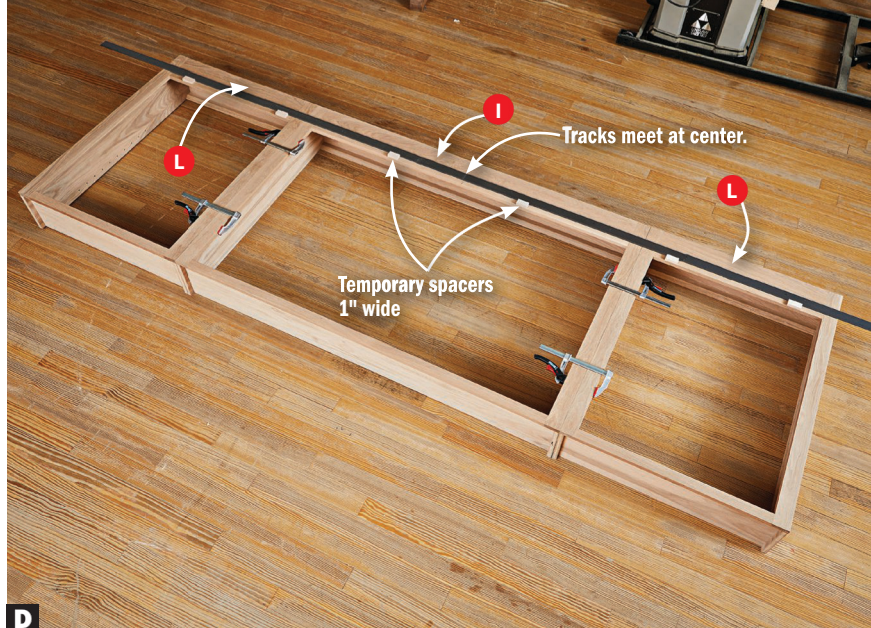


3 SHELF-PIN HOLE SPACING





C Position the slats flush with the front of the frame as you assemble the doors. Spacers (about $\frac{9}{32}$ ") maintain equal gaps between the slats and the top and bottom rails.



D Position the door track on the face-frame rails to mark the mounting-hole locations. Butt the two track ends together at the middle of the cabinet.

Make the barn doors

- 1 Cut the stiles, rails, and slats (Y, Z, AA). Drill pocket holes at the ends of the rails and slats [Drawing 4].
- 2 Assemble the doors with glue and pocket screws [Drawing 4, Photo C].
- 3 Saw or rout the guide groove along the bottom of each door and drill holes for the door rollers [Drawing 4, Source]. Mount the rollers to verify fit; then, remove them and finish-sand the doors.

Tip! Verify mounting dimensions for the door rollers with the manufacturer's instructions.

Attach the door track

- 1 Lay down the upper cabinets and clamp them together with the tops and bottoms

flush. Mark the middle of the center cabinet on the upper face-frame rail (I).

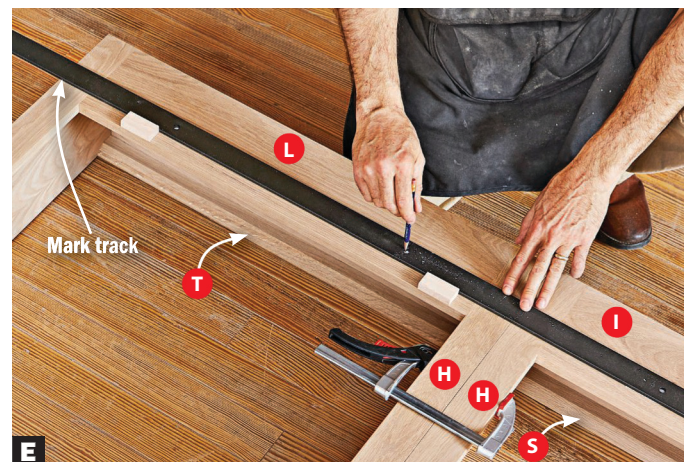
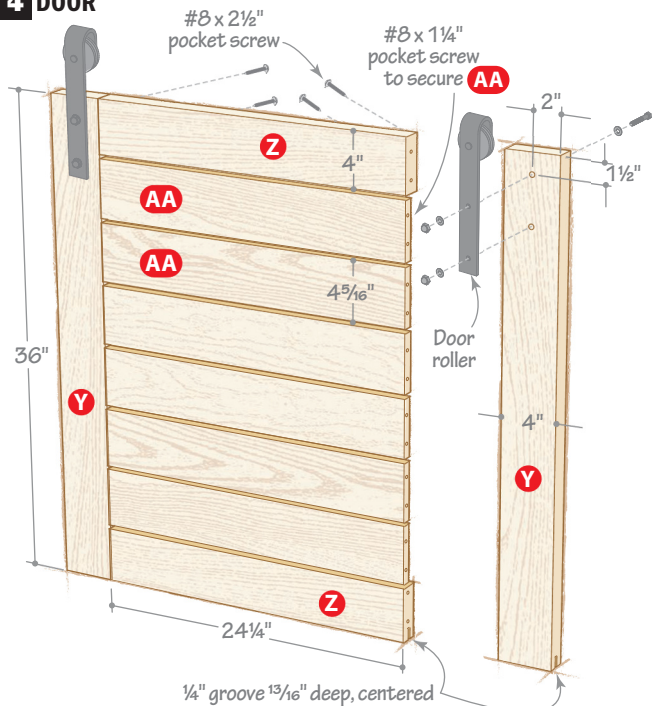
2 Attach six $\frac{3}{4}$ "x1"x2" temporary spacers to rails I and L with double-faced tape, flush with the rail bottoms [Photo D]. Center the door track sections along the tops of the spacers.

3 Mark the track-mounting-hole centers [Photo E]. Set aside the tracks and remove the spacer blocks.

4 Cut blocking BB and CC. Temporarily attach the spacer blocks from Step 2 to the back of the face-frame rails I and L, flush at the bottom. Position BB and CC on the rails at the top of the spacers and glue the blocking in place [Drawing 5]. Remove the spacers.

5 Drill pilot holes for the track mounting screws at the marked locations. Cut the track sections to length and test-mount them with lag screws, washers, and track spacers, following the hardware manufacturer's instructions [Exploded View, Drawing 5]. Remove the tracks and hardware.

4 DOOR



E Draw the track mounting holes on the cabinet face frames. Also mark the ends of the tracks flush at each side of the cabinets and identify each track for position.



F Screw the cleats to the wall with 3½" screws. Drive screws into studs. Keep the tops of the three cleats level and even.

Finish and install the units

1 Touch up the finish-sanding. Apply a finish to the cabinets and doors as desired. (We sprayed the units with three coats of clear lacquer.)

2 Fasten the tops (U, V, W, and X) in place with screws driven from inside the cabinets. Make left and right outer cabinets.

3 Measure from the floor to the desired bottom edge of the attaching cleats (S, T). Draw a level line at that height on the wall where the entertainment center will be installed. Mark the positions for the mating cleats along the line.

4 Screw the cleats to the wall, keeping them level [Photo F]. Hang the lower cabinets on the cleats.

5 Mark the edges of the upper center cabinet bay on the wall and install a TV wall mount, centered side-to-side at a suitable height. Wire the power and TV cable outlets according to local codes.

6 Screw the lower cabinets to each other. Set the upper cabinets on the lower ones. Attach them at the top with 3½" screws through cleats S and T into wall studs [Drawing 5]. Screw them to the lower cabinets and each other.

7 Reinstall the door tracks on the cabinets and the rollers on the doors. Hang the doors and install the door stops on the tracks. Install the door bottom guides on the lower cabinet tops [Exploded View, Photo G].

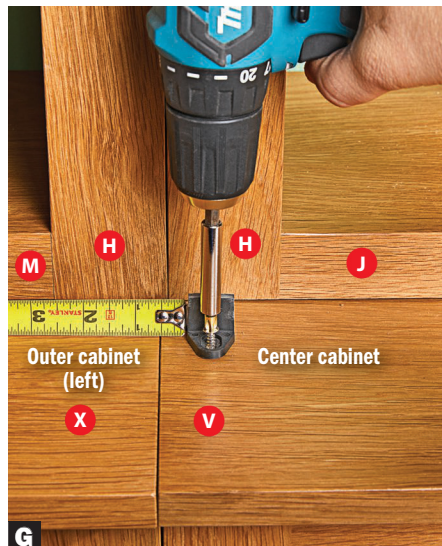
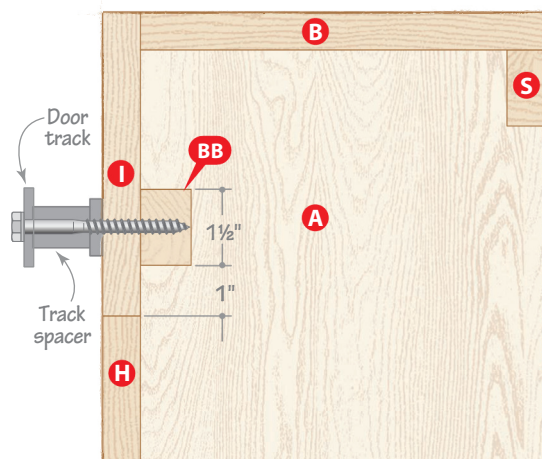
8 Install the electronics. Then, bring in friends and family and roll back the doors for the premier showing of your new big-screen production. 🌳

Tip! On the lower cabinets, drill screw holes through the top shelves (E, G). Then, drive screws into the tops (V, X) from inside the cabinet using a right-angle drill adapter.

Tip! Check the wall for plumb before installing the cabinets. Shim the cabinets as necessary to plumb them. Apply quarter-round or cove molding to cover gaps.

Tip! Determine where components will sit within the cabinets. Then, drill holes and run any in-wall cables to connect the electronics before installing the cabinets.

5 UPPER CENTER CABINET SECTION VIEW



G Attach the door guides to the top of the lower center cabinet. The tab on the guide engages the slot in the bottom of the door to keep it from swinging out while sliding.

Produced by **Larry Johnston** with **Kevin Boyle**
 Project design: **Kevin Boyle**
 Illustrations: **Roxanne LeMoine, Lorna Johnson**

Materials List

Part	FINISHED SIZE			Matl.	Qty.	
	T	W	L			
Carcases						
A	upper sides	¾"	8"	42"	OP	6
B	upper center top/bottom	¾"	8"	63¾"	OP	2
C	upper outer tops/bottoms	¾"	8"	30¾"	OP	4
D	lower sides	¾"	13¼"	13¼"	OP	6
E	lower center shelves	¾"	13¼"	63¾"	OP	3
F	lower center divider	¾"	13¼"	5½"	OP	1
G	lower outer shelves	¾"	13¼"	30¾"	OP	6
Face frames						
H	upper cabinet stiles	¾"	2¼"	42"	O	6
I	upper center top rail	¾"	6"	60"	O	1
J	center cabinet rails	¾"	1½"	60"	O	3
K	lower cabinet stiles	¾"	2¼"	13¼"	O	6
L	upper outer top rails	¾"	6"	27"	O	2
M	lower outer rails	¾"	1½"	27"	O	6
N*	lower center middle rail	¾"	¾"	60"	O	1
O*	lower outer middle rails	¾"	¾"	27"	O	2
P*	lower center middle stile	¾"	¾"	4¾"	O	1

Shelves, cleats, tops						
Q	adjustable shelves	¾"	7¼"	29⅞"	OP	4
R	shelf edges	¾"	1½"	29⅞"	O	4
S	center attaching cleats	¾"	1½"	63"	O	3
T	outer attaching cleats	¾"	1½"	30"	O	6
U	upper center top	¾"	9½"	64½"	EO	1
V	lower center top	¾"	14½"	64½"	EO	1
W	upper outer tops	¾"	9½"	32¼"	EO	2
X	lower outer tops	¾"	14½"	32¼"	EO	2
Doors						
Y	stiles	1½"	4"	36"	O	4
Z	rails	1½"	4"	24¼"	O	4
AA	slats	¾"	4⅞"	24¼"	O	12
BB	center blocking	1½"	1"	63"	O	1
CC	outer blocking	1½"	1"	30"	O	2

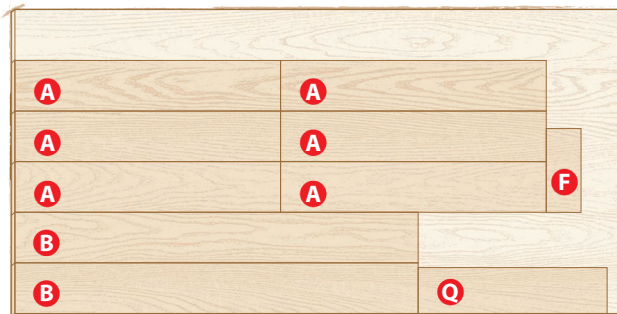
*Parts initially cut oversize. See the instructions.

Materials key: OP-oak plywood, O-oak, EO-edge-joined oak.

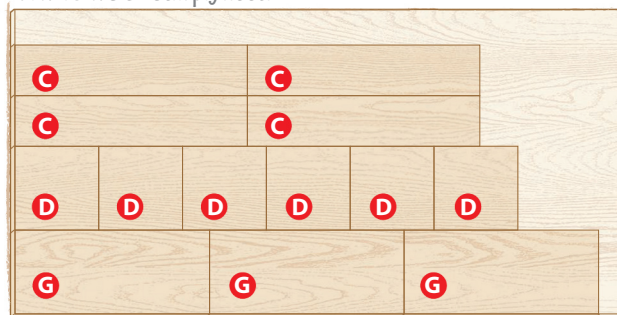
Supplies: #8x1¼" pocket screws, #8x2½" pocket screws, #10x3½" flathead screws, #8x1¼" flathead screws.

Source: Homedex 6.6' Country Black Barn Wood sliding-door hardware (2), \$43, woodmagazine.com/barndoor.

Cutting Diagram



¾ x 48 x 96" Oak plywood



¾ x 48 x 96" Oak plywood



¾ x 48 x 96" Oak plywood



¾ x 7¼ x 96" Oak



¾ x 9¼ x 96" Oak



¾ x 9¼ x 96" Oak



¾ x 9¼ x 96" Oak



¾ x 9¼ x 72" Oak (2 needed)



¾ x 9¼ x 72" Oak



¾ x 7¼ x 72" Oak



¾ x 5½ x 72" Oak (2 needed)



¾ x 9¼ x 72" Oak



¾ x 7¼ x 72" Oak



¾ x 9¼ x 96" Oak (2 needed)



1½ x 5½ x 96" Oak



1½ x 5½ x 96" Oak (2 needed)