



Butler's Chest

Because it's designed to suit a variety of purposes, this butler's chest is a piece of furniture that absolutely anyone can appreciate. Used by itself, it can serve as an end table or can be fit under a window. Two chests placed back-to-back form a great looking coffee table. For extra storage space, you can even stack two or three chests on top of one another.



Special Techniques

- Beveling
- Mitering

Materials and Supplies

- 9 linear feet of 1 x 3 pine
- 10 linear feet of 1 x 4 pine
- 16 linear feet of 2 x 4 pine
- 1 piece of 1/4"-thick plywood, 14" x 25"
- 1 sheet of 3/4"-thick plywood, 4' x 8'
- 20 linear feet of 3/4"-wide decorative molding

Hardware

- Approximately 20 #6 x 3/4" flathead wood screws
- Approximately 100 #6 x 1-1/4" flathead wood screws
- Approximately 20 #6 x 2" flathead wood screws
- Approximately 20 #6 x 2-1/2" flathead wood screws
- Approximately 30 wire brads
- 4 offset door hinges
- 2 decorative cabinet-door pulls

Cutting List

Code	Description	Qty.	Material	Dimensions
A	Long Inner Support	4	2 x 4 pine	34-1/2" long
B	Short Inner Support	4	2 x 4 pine	12-1/2" long
C	Side	2	3/4" plywood	16-1/4" x 20-1/2"
D	Back	1	3/4" plywood	20-1/2" x 36"
E	Vertical Trim	3	1 x 4 pine	20-1/2" long
F	Horizontal Trim	4	1 x 4 pine	12-3/4" long
G	Top/Bottom	2	3/4" plywood	18" x 38"
H	Cabinet Door	2	1/4" plywood	12-1/4" x 13"
I	Top/Bottom Trim	4	1 x 3 pine	14-1/4" long
J	Side Trim	4	1 x 3 pine	10" long

Making the Inner Frame

1. The inner frame of the butler's chest, which is covered with $\frac{3}{4}$ "-thick plywood, consists of two rectangular inner support assemblies connected to each other by two sides and a back. Start by cutting four long inner supports (A) from 2 x 4 pine, each measuring 34-1/2" long.
2. Cut four short inner supports (B) from 2 x 4 pine, each measuring 12-1/2" long.
3. Place two long inner supports (A) on a level surface, parallel to each other, on edge, and 12-1/2" apart. Fit two short inner supports (B) between the two long inner supports (A), as shown in *Figure 1*. Glue the supports together and insert two 2-1/2" screws through the long inner supports (A) into the ends of the short inner supports (B) at each joint. You now have one inner support assembly.
4. Repeat Step 3, using the remaining two short inner supports (B) and two long inner supports (A) to construct a second inner support assembly.

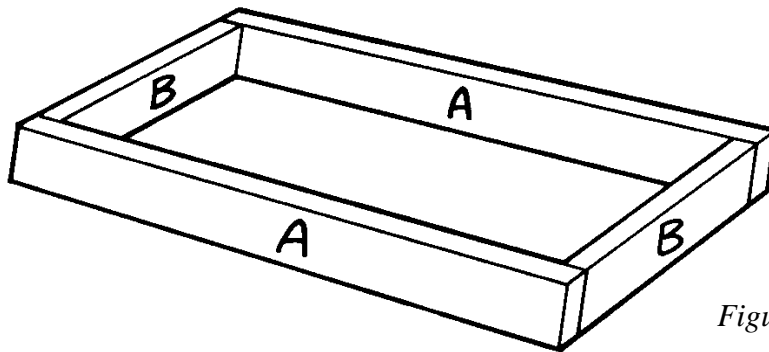


Figure 1

Adding the Sides and Back

1. Cut two 16-1/4" x 20-1/2" sides (C) from $\frac{3}{4}$ "-thick plywood.
2. Bevel one 20-1/2"-long edge of each side (C) at a 45-degree angle, as shown in *Figure 2*.
3. Glue one side (C) to the two inner support assemblies, as shown in *Figure 3*. Note that the two assemblies fit flush with the 15-1/2"-long, non-beveled edge of the side (C) and that the beveled portion of the side (C) extends past the assemblies. Secure with 2" screws inserted through the side (C) and into each of the assemblies spacing the screws about 4" apart.
4. Repeat Step 3 to attach the remaining side (C) to the opposite side of the inner support assemblies.
5. Cut one 10-1/2" x 36" back (D) at a 45-degree angle, in the same manner that you did on one edge of each side (C).

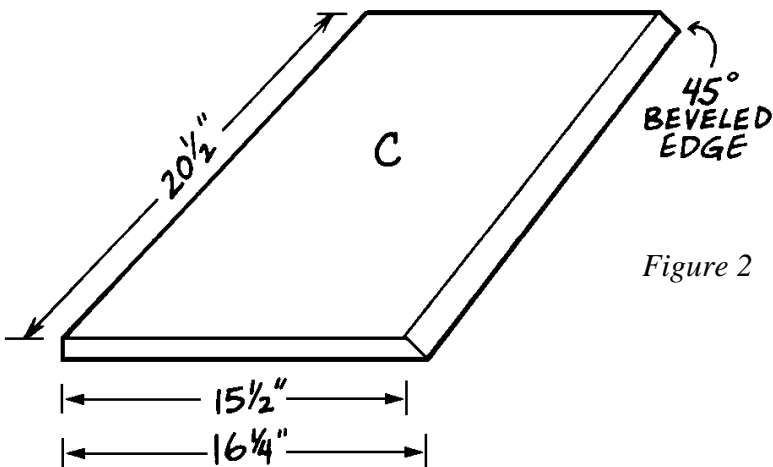


Figure 2

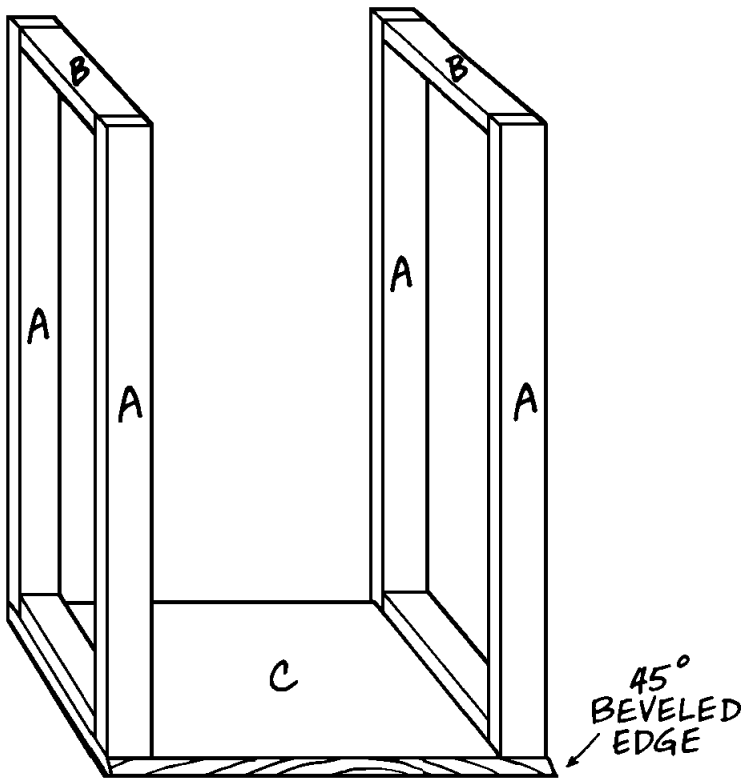


Figure 3

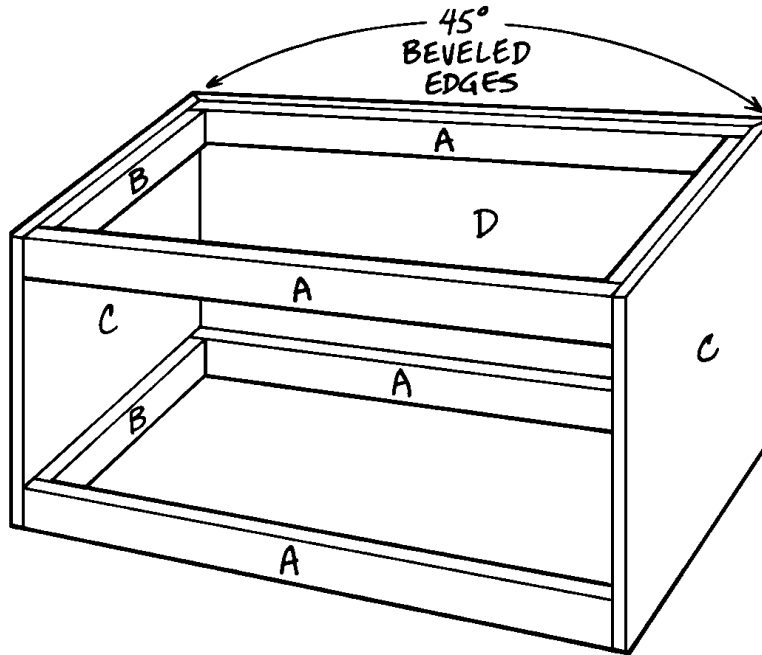
6. Glue the back (D) over the beveled edges of the sides (C), matching the bevels as shown in *Figure 4*. Insert 1-1/4" screws, spaced about 6" apart, through the back (D) and into both of the long inner supports (A).

Adding the Front Trim

1. Cut three 20-1/2"-long vertical trim pieces (E) from 1 x 4 pine.
2. Glue one vertical trim piece (E) to the left side of the cabinet, as shown in *Figure 5*, and insert 1-1/4" screws, spaced about 6" apart, through the vertical trim piece (E) and into the long inner supports (A) and the edge of the side (C).

3. Repeat Step 2 to attach a second vertical trim piece (E) to the right side of the cabinet.
4. Attach a third vertical trim piece (E) in the center of the cabinet, as shown in *Figure 5*, inserting two 1-1/4" screws through the top and bottom of the vertical trim piece (E) into the long inner supports (A) at each joint. Note that the spacing between the vertical trim pieces (E) should be exactly 12-3/4".

Figure 4



5. Cut four 12-3/4"-long horizontal trim pieces (F) from 1 x 4 pine.
6. Using *Figure 5* as a guide, glue the four horizontal trim pieces (F) flush with the top and bottom of the cabinet, between the vertical trim pieces (E). Secure with three 1-1/4" screws driven through each of the four horizontal trim pieces (F). Note that the opening between the top and bottom horizontal trim pieces (F) should be exactly 12-3/4" x 13-1/2".

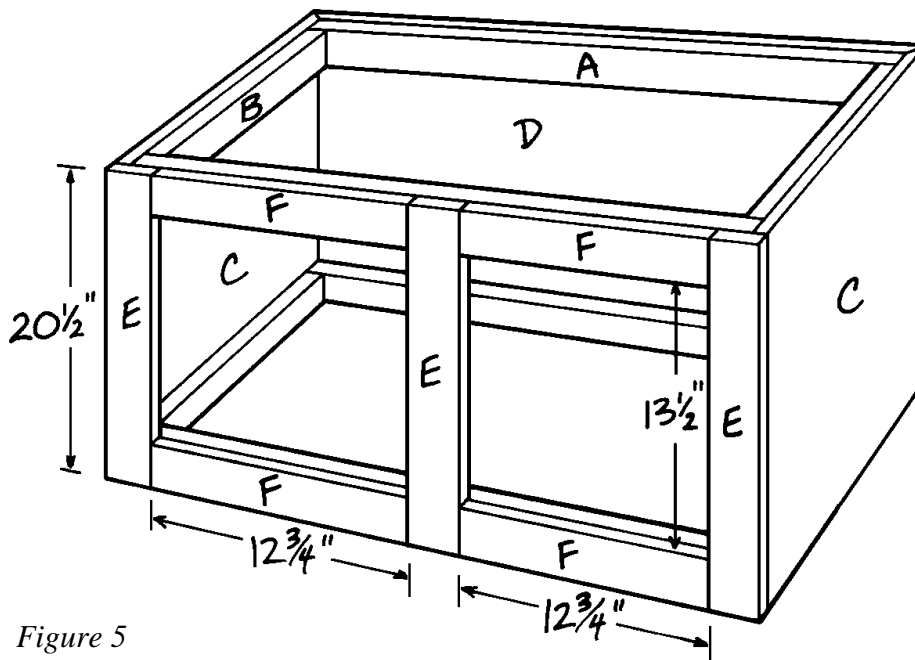


Figure 5

Adding the Top and Bottom

1. Cut two 18" x 38" top/bottom pieces (G) from $\frac{3}{4}$ "-thick plywood.
2. Center one top/bottom (G) over the cabinet assembly so that it's flush with the edge of the back (D) and overhangs by 1" at the front and at each side. Glue the top/bottom (G) in place and insert 1-1/4" screws through it and into the inner support assemblies spacing the screws about 6" apart.
3. Turn the cabinet upside-down and Repeat Step 2 to attach the remaining top/bottom (G) to it.
4. To cover the exposed edges and ends of the plywood top/bottom pieces (G), cut and fit $\frac{3}{4}$ "-wide decorative molding, mitering the molding at the corners. Glue the molding in place and secure with wire brads spaced about 6" apart.

Making the Cabinet Doors

1. The cabinet doors are nothing more than pieces of $\frac{1}{4}$ "-thick plywood trimmed with borders of 1 x 3 pine. They're easy to make, but do be certain that the finished doors are perfectly square. Start by cutting two 12-1/4" x 13" cabinet door pieces (H) from $\frac{1}{4}$ "-thick plywood.
2. Cut four 14-1/4" long top/bottom trim pieces (I) from 1 x 3 pine.
3. Cut four side trim pieces (J) from 1 x 3 pine, each measuring 10" long.
4. Place two top/bottom trim pieces (I) and two side trim pieces (J) on a level surface, as shown in *Figure 6*. Center the cabinet door (H) over the trim pieces. There should be a 1"-wide border of trim visible along each of the four edges of the cabinet door (H). Glue the pieces together and insert $\frac{3}{4}$ " screws through the door (H) and into the trim pieces, spacing them about 4" apart.

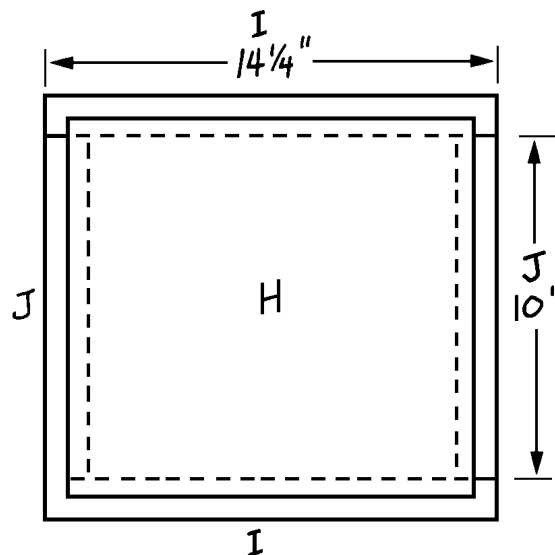


Figure 6

5. Repeat Step 4 to assemble the second cabinet door.

Finishing

1. Fill any cracks, crevices, or holes with wood filler.
 2. Sand all surfaces thoroughly.
 3. Paint or stain the cabinet and doors the color of your choice.
 4. Install the hinges on each of the doors, first measuring carefully to ensure that the hinges are positioned the same distance from the top and bottom of each door.
 5. Have someone help you support the doors while you hold them over the door openings. Line up each door evenly with the door next to it and make sure that neither door scrapes any surface of its opening. Then attach the remaining sides of the hinges to the cabinet.
 6. Attach the pulls to each of the cabinet doors, spacing them evenly and aligning them with each other.
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