



## Rustic Chest

*With its simple beauty and clean lines, this easy-to-build chest resembles Shaker furniture. It is perfect for storing extra blankets, pillows, and sheets. Made with a laminated top, it's quick to construct, and sturdy enough to use as a seat. The finished size is about 20" tall, 19-1/2" deep, and 51-1/2" wide.*



### **Materials List**

#### **Lumber**

- 1 sheet  $\frac{3}{4}$ " plywood (4' x 8')\*
- 17 linear feet of 2 x 2 pine
- 46 linear feet of 1 x 4 pine
- 1 pc. Laminated 1 x 4 pine, 19-1/2" x 51-1/2"  
(OR 26 linear feet. 1 x 4 pine)

## **Hardware**

- Approx. 200 #6 1-1/4" flathead wood screws
- Approx. 125 #6 2" flathead wood screws
- 4 ' brass piano hinge
- 4 brass corner pieces

## **Special Tools and Techniques**

- 2 or 3 bar clamps (optional)
- bevels
- miters

\*See "Notes on the Materials," below.

## **Cutting List**

Code	Description	Qty.	Material	Dimensions
A	Side	2	3/4" plywood	16-1/2" x 15-1/2"
B	Corner Support	4	2 x 2 pine	14-1/4" long
C	Front/Back	2	3/4" plywood	16-1/2" x 48"
D	Bottom	1	3/4" plywood	46-1/2" x 15-1/2"
E	Long Reinforcement	2	2 x 2 pine	46-1/2" long
F	Short Reinforcement	2	2 x 2 pine	12-1/2" long
G	Vertical Trim	8	1 x 4 pine	19" long
H	Leg Supports	4	2 x 2 pine	2-1/2" long
I	Long Horizontal Trim	4	1 x 4 pine	42-1/2" long
J	Short Horizontal Trim	4	1 x 4 pine	11-1/2" long
K	Long Top Trim	2	1 x 4 pine	49-1/2" long
L	Short Top Trim	2	1 x 4 pine	18-1/2" long
M	Top	1	Laminated pine	19-1/2" x 51-1/2"
N	Top Brace	2	1 x 4 pine	16" long

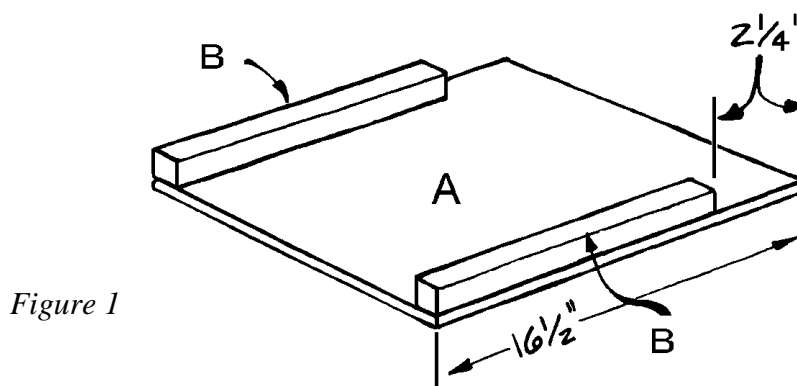
## **Notes on the Materials**

Because I wanted a natural finish on this chest, I used stain-grade plywood. If you plan to paint yours, you can use lower grade, less expensive material. The top of this chest is constructed of laminated 1 x 4 pine boards. Most building supply stores sell sections of pine that have already

been laminated. If you want to laminate the boards yourself, you need 26 linear feet of 1 x 4 pine and at least two bar clamps.

## ***Constructing the Basic Box***

1. Cut two side pieces (A) from  $\frac{3}{4}$ -thick plywood, each measuring 16-1/2 inches by 15-1/2 inches.
2. Cut four corner supports (B) from 2 x 2 pine, each 14-1/4 inches long.
3. Refer to *Figure 1*, and attach one corner support (B) flush with each 16-1/2" edge of one side (A). Note that the corner support (B) is positioned flush at one end and is 2-1/4" short at the other end, as shown in *Figure 1*. This 2-1/4" gap will accommodate the addition of the bottom of the chest and the supports underneath. Use glue and 1" screws placed about every 4 inches. Screw through the side (A) into the corner support (B). Although you don't need to countersink these screws because they will be covered by the trim, be sure to drive them in all the way into the wood so that the screw heads don't protrude.



*Figure 1*

4. Repeat Step 3 to attach the remaining two corner supports (B) to the other side (A).
5. Cut two front/back pieces (C) from  $\frac{3}{4}$ -thick plywood, each measuring 16-1/2 x 48 inches.
6. Place the two sides (A) opposite each other, with the 2-1/4" gap at the bottom of both sides (A). Glue and screw the sides (A) to the front and back (C), matching 16-1/2-inch edges, as shown in *Figure 2*. The front and back (C) should overlap the exposed edges of the sides (A). Use 2-inch-long screws placed about every 4 inches. Screw through the front and back (C) into the corner supports (B).

## ***Adding the bottom***

1. Cut one bottom (D) from  $\frac{3}{4}$ -thick plywood, measuring 46-1/2 x 15-1/2 inches.
2. Turn the assembly upside down so that the 2-1/4-inch offsets are at the top. Then fit the bottom (D) inside the front, back, and sides (A and C), resting it on the ends of the four corner supports (B). Glue and screw the bottom in place at all four corners using one 2-inch

long screw in each corner. This will hold the bottom in place until you add the reinforcements.

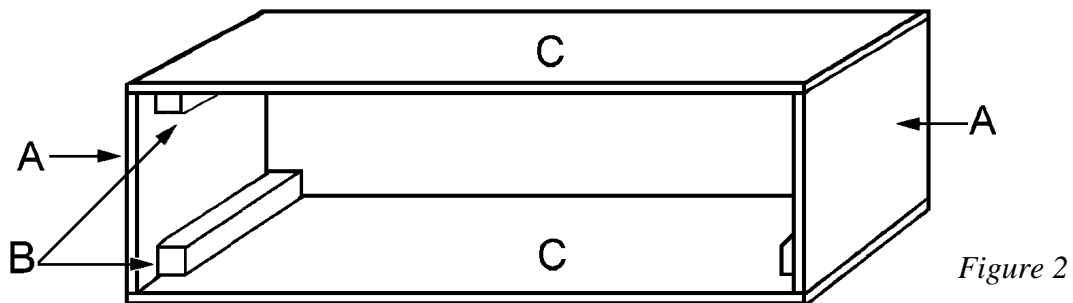


Figure 2

3. Cut two long reinforcements (E) from 2 x 2 pine, each 46-1/2 inches long.
4. Cut two short reinforcements (F) from 2 x 2 pine, each 12-1/2 inches long.
5. Glue and screw one long reinforcement (E) in place, flush against the bottom (D) and front and back (C) as shown in *Figure 3*. Screw through the front and back (C) into the long reinforcement (E). Use 2"-long screws and space them about 4 inches apart.

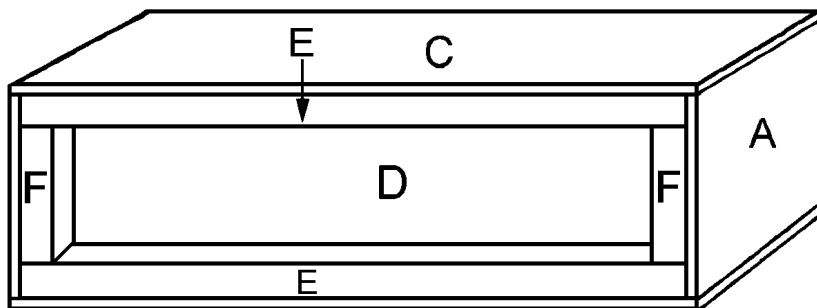


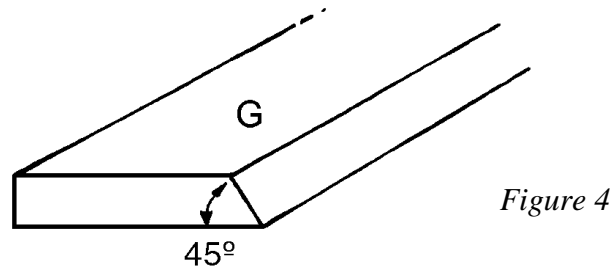
Figure 3

6. Repeat Step 5 to attach the remaining long reinforcement (E).
7. Turn the assembly right side up. Now screw through the bottom (D) into each of the long reinforcements (E), placing one 2" long screw about every 5 inches.
8. Following the same procedures as you used Steps 5 through 7, glue and screw the two short reinforcements (F) between the long reinforcements (E). Again refer to *Figure 3*.

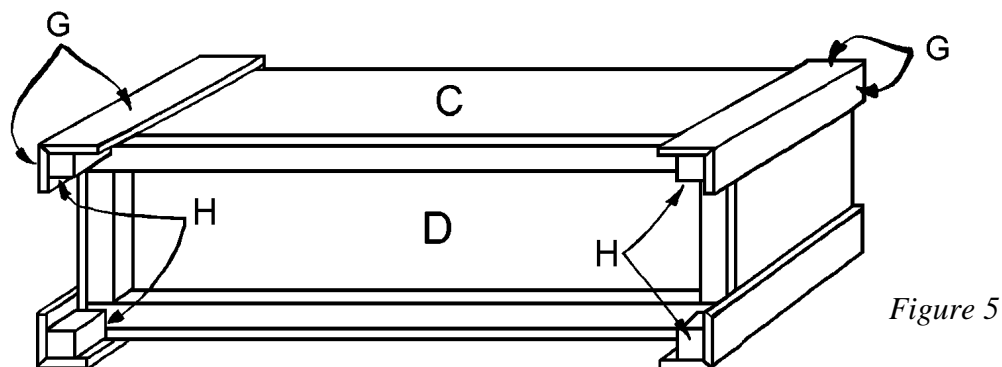
## ***Adding the Trim***

1. The vertical trim serves two purposes: it covers the exposed edges of the front and back (C) and it extends down from the basic box to form the legs.

2. Cut eight vertical trim pieces (G) from 1 x 4 pine, each measuring 19 inches long.
3. Bevel one 19-inch side of each of the eight vertical trim pieces (G) at a 45-degree angle, as shown in *Figure 4*.



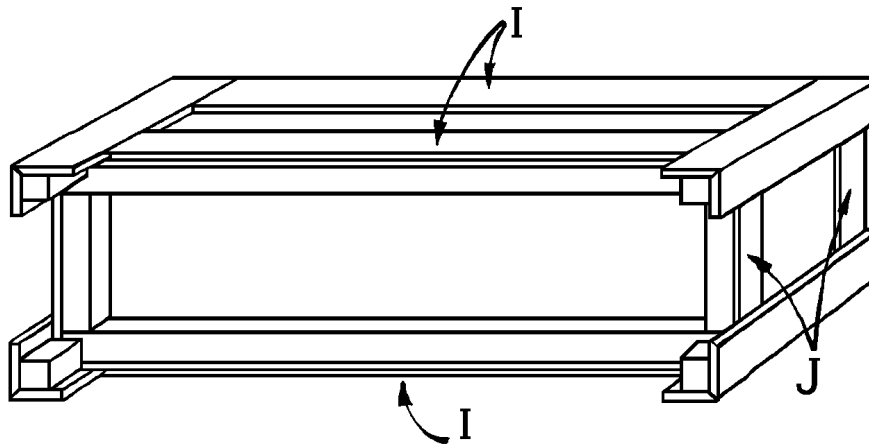
4. Set your saw blade to cut at 45 degrees off vertical, and bevel one 19"-long edge of each of the eight vertical trim pieces (G) as shown in *Figure 4*.
5. Attach two of the vertical trim pieces (G) to each corner of the assembly, matching the beveled edges as shown in *Figure 5*. Note that the vertical trim pieces (G) are flush at the top with the front, back and sides (C and A), and extend 2-1/2" past the bottom. Wipe glue on all of the surfaces to be joined, and use 1-1/4" screws placed about every 4 inches. To avoid having screw holes on the outside, screw from the inside of the chest through the front, back, and sides into the vertical trim (G).
6. Cut four leg supports (H) from 2 x 2 pine, each 2-1/2 inches long.



7. Glue and screw one leg support (H) to the inside of the leg that is formed by the vertical trim pieces (G), as shown in *Figure 5*. Screw through the leg support (H) into the vertical trim (G) using two 2-inch-long screws on each side of the leg support (H).
8. Cut four long horizontal trim pieces (I) from 1 x 4 pine, each measuring 46-1/2 inches.
9. Glue and screw one long horizontal trim piece (I) between the two vertical trim pieces

(G), putting it flush with the top of the front (C) as shown in *Figure 6*. Again, to avoid screw holes on the outside, screw through the inside of the front (C) into the long horizontal trim piece (I). Use 1-1/4-inch-long screws placed about every 5 inches.

10. Glue and screw one short horizontal trim piece (J) between the two vertical trim pieces (G), placing it flush with one side (A), as shown in *Figure 6*. Again, screw through the side (A) into the short horizontal trim piece (J). Use 1-1/4" screws placed about 5 inches apart.
11. Glue and screw a second short horizontal trim piece (J) flush with the bottom of side (A), as shown in *Figure 6*. Screw through the inside of the side (A) into the short horizontal trim piece (J), and use 1-1/4" screws placed about 5 inches apart.



*Figure 6*

12. Repeat Steps 12 and 13 to attach the remaining two short horizontal trim pieces (J) to the remaining side (A).

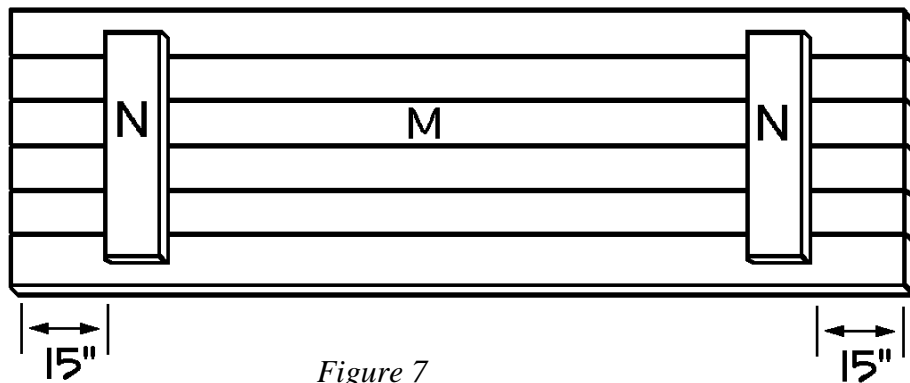
### ***Adding the Top Trim***

1. The top trim is a 1 x 4 pine frame that covers the exposed edges at the top of the chest.
2. From 1 x 4 pine, cut two long top trim pieces (K), each 49-1/2" long, and two short top trim pieces (L), each 18-1/2" long.
3. Setting each top trim piece (K and L) on its face, miter both ends at a 45-degree angle.
4. Fit the mitered trim pieces (K and L) onto the top of the chest, carefully matching the miters. Glue and screw them in place using 1-1/4" long screws. Screw through the top trim pieces (K and L) into the long and short horizontal trim pieces (I and J). Countersink the screws.

### ***Installing the Top***

1. If you purchased material already laminated, trim the piece to 19-1/2 x 51-1/2" to make the top (M). Then skip down to Step 4.

2. To make the laminated top (M) yourself, cut six lengths of 1 x 4 pine, each 51-1/2" long. Before gluing the wood lengths together, rip a minuscule amount from each edge to ensure a solid bond in the lamination process. Then spread glue on the adjoining edges, and place the lengths of wood side by side. Clamp them together securely, using at least two bar clamps, and leave them clamped overnight.
3. Trim the laminated section to make one top (M) measuring 19-1/2" by 51-1/2".
4. Sand every surface of the laminated top (M) thoroughly. Examine both faces of the top (M), and choose the better-looking one for the outside.
5. Cut two top braces (N) from 1 x 4 pine, each 16" long.
6. Attach the two top braces (N) to the inside face of the top (M). As shown in *Figure 7*, center the top braces between the long edges of the top, and place each one 15 inches in from the short sides of the top. Use glue and 1-1/4" screws spaced about 4 inches apart to secure the braces to the top.



## ***Finishing***

1. Fill all exposed screw holes with wood filler.
2. Sand the chest assembly thoroughly.
3. Install the top (M) onto the chest using a 4-foot-long piano hinge. The hinge is screwed into the long top trim (K) and the inside back edge of the top (M). The hinge should be installed so that the back edge of the top (M) is flush with the back of the chest. The top overhangs the front and the sides of the chest by 1 inch.
4. Stain or paint the completed project the color of your choice. I used a maple-colored stain.
5. Attach the brass corner trim to all four corners of the finished chest.