



## White Buffet

*If you need a stylish buffet for your dining room, this is it! Not only is it inexpensive to build, but also its expensive-looking finish is easier to accomplish than sanding and painting. And its square drawers are perfect for storing napkins, napkin rings, and other dining necessities.*



## **Materials**

- 4 linear feet of 1 x 1 pine
- 6 linear feet of 1 x 2 pine
- 50 linear feet of 1 x 4 pine
- 16 linear feet of 1 x 6 pine
- 6 linear feet of 2 x 4 pine
- 14" x 24" piece of 1/4" plywood
- 1 sheet (4' x 8') 3/4" plywood
- 6 linear feet of 4" PVC pipe

## **Hardware**

- 2" (6d) finishing nails
- 1-1/4" wood screws
- 1-1/2" wood screws
- 2" wood screws
- 3" wood screws
- Four drawer pulls

## **Special Tools and Techniques**

- Heavy-duty double-sided tape
- Hand plane
- Router with 3/8" round-over cutter (optional)
- Dadoes

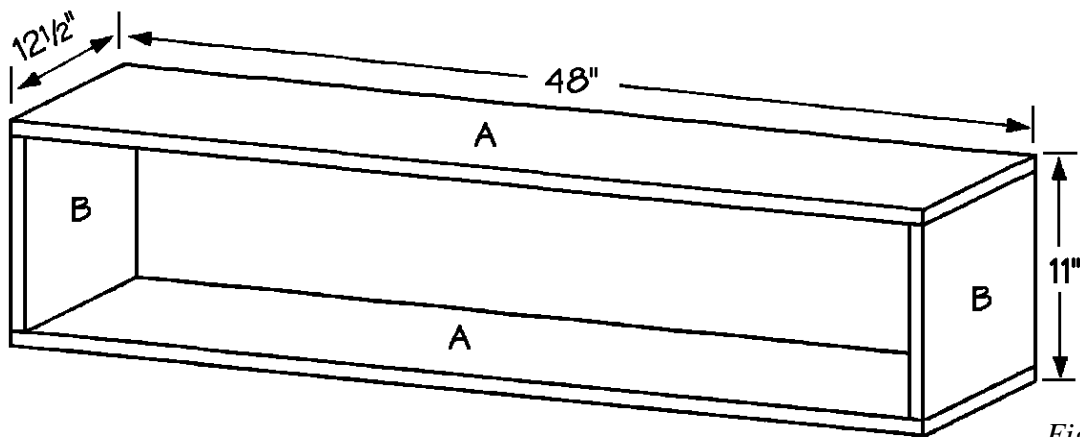
## **Cutting List**

Code	Description	Qty.	Materials	Dimensions
A	Top/Bottom	2	3/4" plywood	12-1/2" x 48"
B	Side	2	3/4" plywood	9-1/2" x 12-1/2"
C	Vertical Trim	5	1 x 4 pine	11" long
D	Horizontal Trim	8	1 x 2 pine	7-5/8" long
E	Trim Support	1	1 x 1 pine	46-1/2" long
F	Base Top/Bottom	2	3/4" plywood	12-1/2" x 48"
G	Large Leg Support	4	2 x 4 pine	17-1/2" long
H	Small Leg Support	4	1 x 4 pine	17-1/2" long
I	Base Side	2	1 x 4 pine	12-1/2" long
J	Base Front/Back	2	1 x 4 pine	48" long
K	Small Leg	4	1 x 4 pine	3-1/2" long
L	Large Leg	4	1 x 6 pine	5-1/2" long
M	Outer leg	4	4" PVC pipe	17-1/2" long

N	Long Bottom Support	2	1 x 4 pine, ripped	46-1/2" long
O	Short Bottom Support	2	1 x 4 pine, ripped	11" long
P	Long Guide	8	1 x 4 pine	12-1/2" long
Q	Short Guide	8	1 x 4 pine	11" long
R	Back	1	3/4" plywood	11" x 48"
S	Drawer Front/Back	8	1 x 6 pine	7-1/2" long
T	Drawer Side	8	1 x 6 pine	10-1/2" long
U	Drawer Bottom	4	1/4" plywood	6-3/8" x 10-3/8"
V	Drawer Front	4	1/2" plywood	9-3/4" square

## **Making the Top Section**

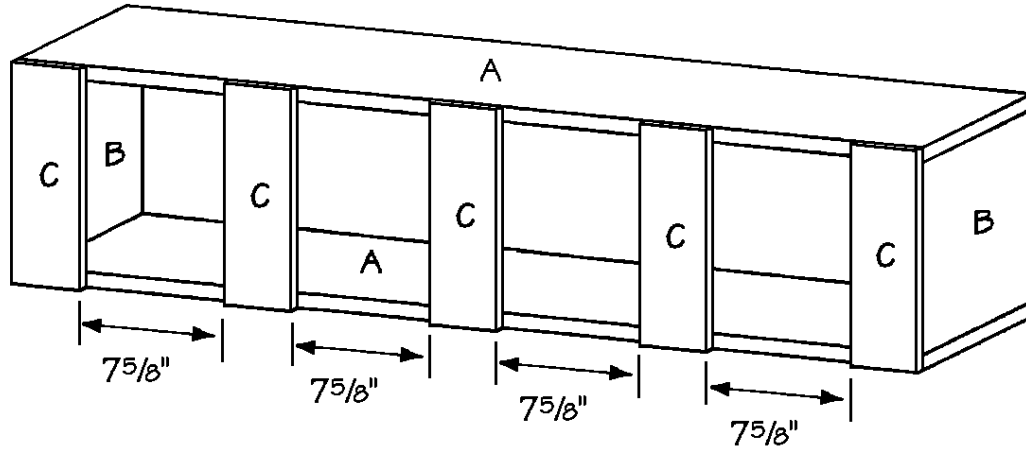
1. Cut two top/bottoms (A) from 3/4-inch plywood, each measuring 48 x 12-1/2 inches.
2. Cut two sides (B) from 3/4-inch plywood, each measuring 9-1/2 x 12-1/2 inches.
3. Place the two top/bottoms (A) on a level surface, parallel to each other and 9-1/2 inches apart. Fit the two sides (B) between the ends of the two top/bottoms (A), as shown in *Figure 1*. Apply glue on the meeting surfaces, and screw through the top/bottoms (A) into the edges of the sides (B) using four 1-1/2-inch screws on each joint.



*Figure 1*

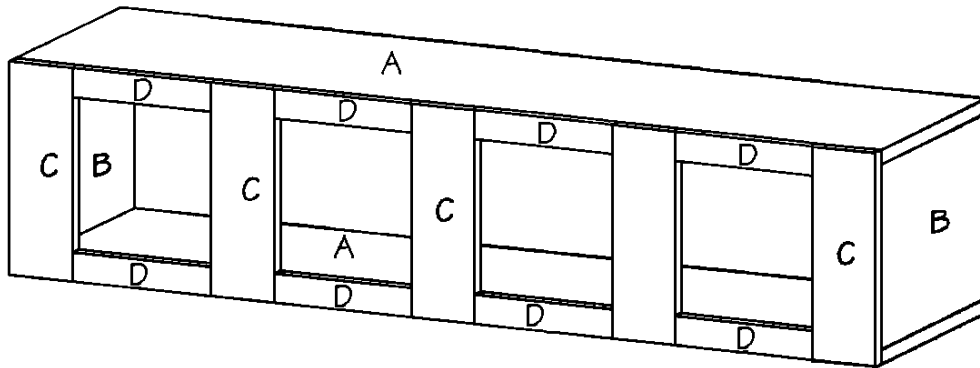
4. Cut five vertical trims (C) from 1 x 4 pine, each measuring 11 inches long.
5. Refer to *Figure 2* to attach each of the five vertical trims (C) across the open front of the buffet top. The first vertical trim (C) should be flush with the outer edges of the sides (B) and

exactly cover the edges of both top/bottoms (A). Screw through the vertical trim (C) into the edges of the top/bottoms (A) using two 1-1/2-inch screws and into the edges of the sides (B) using two 1-1/2-inch screws.



*Figure 2*

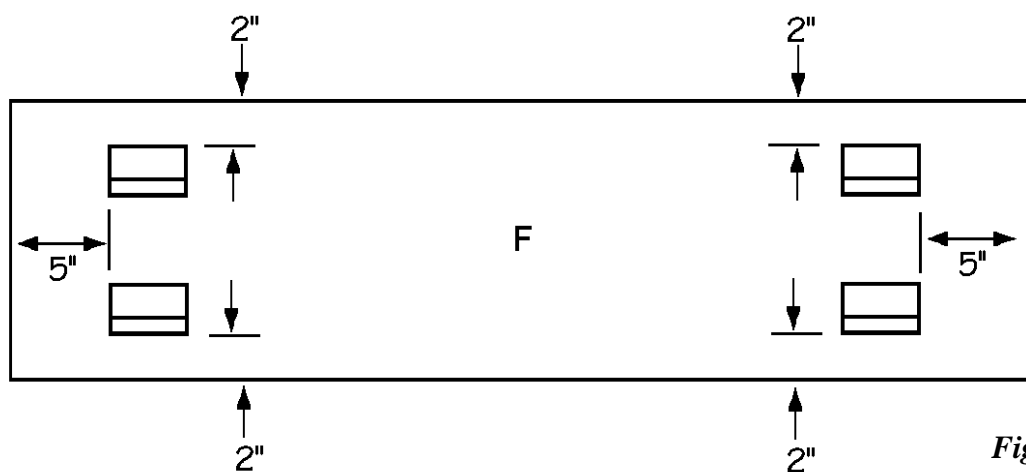
6. Repeat step 5 to attach a second vertical trim (C) to the opposite side of the assembly.
7. The third vertical trim (C) should be positioned 7-5/8 inches from the first. Screw through the ends of the vertical trim (C) into both of the top/bottoms (A) using three 1-1/2-inch-long screws on each joint.
8. Repeat Step 7 to attach the fourth vertical trim (C) 7-5/8 inches from the third.
9. Repeat Step 7 to attach the fifth vertical trim (C) 7-5/8 inches from the fourth and second.
10. Cut eight horizontal trims (D) from 1 x 2 pine, each measuring 7-5/8 inches long.
11. Apply glue to the meeting surfaces and screw one horizontal trim (D) to the top/bottom (A) between each pair of vertical trims (C) as shown in *Figure 3*. Use three 1-1/2-inch screws on each vertical trim (C).
12. To reinforce the joints between the horizontal and vertical trims (C and D), cut one trim support (E) from 1 x 1 pine measuring 46-1/2 inches long. You can rip this piece from one of the pieces of 1 x 4 pine to be used for the long bottom supports (N).
13. Apply glue to the meeting surfaces and screw the trim support (E) to the inside of the cabinet, against the horizontal and vertical trims (C and D) and the top (A). Note that there is only one trim support and that it will be at the top of the finished buffet. The lower horizontal and vertical trims (C and D)-will be reinforced later. Screw through the trim supports (C and D) and the top (A) using 1-1/4-inch screws spaced about every six inches.



*Figure 3*

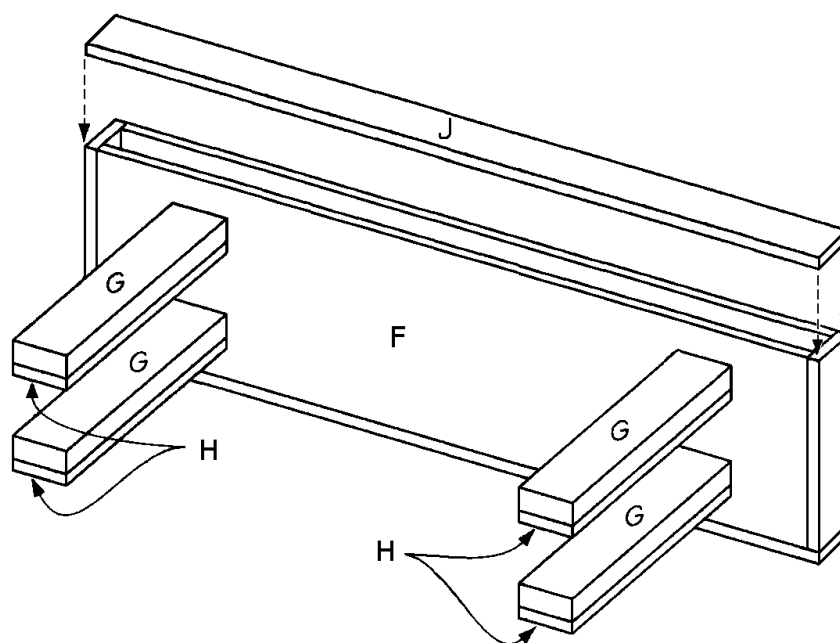
## **Making the Base**

1. Cut two base top/bottoms (F) from 3/4-inch-thick plywood, each measuring 12-1/2 x 46-1/2 inches.
2. The four round legs that connect the base to the top of the buffet are lengths of PVC pipe, which are reinforced by wooden supports. Cut four large leg supports (G) from 2 x 4 pine, each measuring 17-1/2 inches long.
3. Cut four small leg supports (H) from 1 x 4 pine, each measuring 17 1/2 inches.
4. Glue each large leg support (G) to one small leg support (H), matching ends and edges, to make a leg support assembly 2 1/4 inches thick. Either clamp the pieces together for an hour or drive three 1 1/2-inch screws through each small leg support (H) into its large leg support (G).
5. Try to slide each leg support assembly (G/H) into a length of 4-inch PVC pipe. Using a hand plane, chamfer the corners of the leg support assemblies (G/H) until each slides easily into the pipe.
6. Following the measurements in *Figure 4*, draw four 2 1/4" x 3 1/2" rectangles on one of the base top/bottoms (F). This will be the exact placement for the four leg support assemblies (G/H).
7. Attach the four leg support assemblies (G/H) to the base top (F), placing them exactly over the rectangles that you drew. Screw through the base top (F) into the leg support assemblies (G/H), using four 3-inch screws on each leg support assembly (G/H).
8. Cut two base sides (I) from 1 x 4 pine, each measuring 12-1/2 inches long.



*Figure 4*

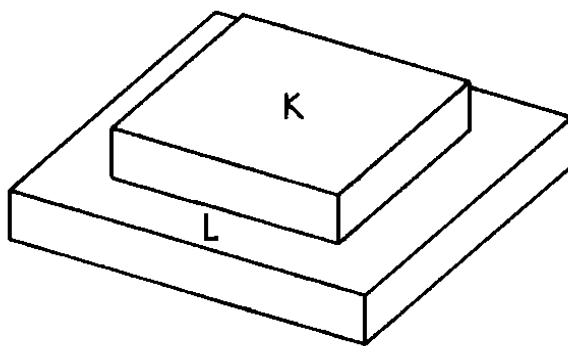
9. Place the two base top/bottoms (F) on their long edges on a level surface, parallel to each other and 2 inches apart. Use props under two of the leg support assemblies (G/H). Place one base side (I) over the 12-1/2-inch edges of both base top-bottoms (F), as shown in *Figure 5*. Apply glue to the meeting surfaces and screw through the base side (I) into the ends of both of the base top/bottoms, using four 1-1/2-inch screws on each joint.



*Figure 5*

10. Repeat Step 4 to attach the remaining base side (I) to the opposite ends of the two base top/bottoms (F).
11. Cut two base front/back (J) from 1 x 4 pine, each measuring 48 inches long.

12. Place one base front/back (J) over the base assembly, flush with the outer surfaces of the two base top/bottoms (F) and the two base sides (I), as shown in *Figure 5*. Apply glue to the meeting surfaces and screw through the base front/back (J) into the edges of the two base top/bottoms (F) and the two base sides (I), using 1 1/2-inch screws spaced 6 inches apart.
13. Turn the base assembly over and repeat Step 12 to fasten the remaining base front/back (J) to the other side of the base assembly.
14. Cut four small legs (K) from 1 x 4 pine, each measuring 3-1/2 inches long.
15. Cut four large legs (L) from 1 x 6 pine, each measuring 5-1/2 inches long.



*Figure 6*

16. Center one small leg (K) over one large leg (L), as shown in *Figure 6*. Apply glue to the back of the small leg (K), reposition it on the large leg (L) and screw through the small leg (K) into the large leg (L). Use three 1-1/4" screws on each joint.
17. Repeat Step 16 three more times using the remaining three small legs (K) and three large legs (L).
18. Apply glue to the top of one small leg (K) and attach one leg assembly (K/L) to one corner of the base assembly. The large leg (L) portion of the leg assembly should be even with the outer edges of the base assembly. Screw through the leg assembly into the base assembly, using three 2-inch screws.
19. Repeat Step 17 three more times to attach the remaining three leg assemblies to the remaining three corners of the base assembly.

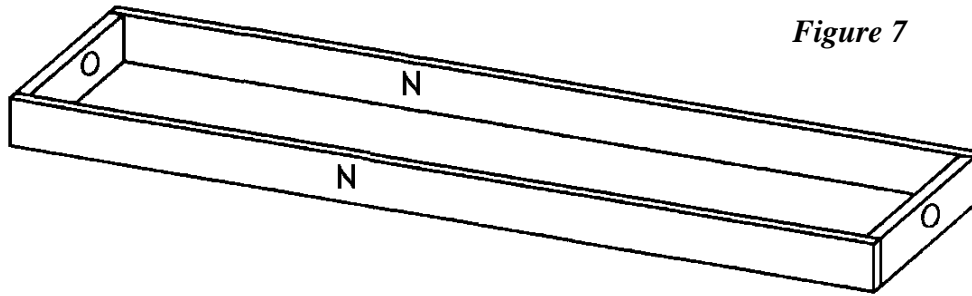
## **Connecting the Base and Top Assemblies**

1. Cut four outer legs (M) from 4-inch PVC pipe, each measuring 17-1/2 inches long.
2. Place the base assembly right side up and slide the four outer legs (M) over the leg support assemblies (G/H). Center the top assembly over the legs, making certain that the sides and front of the top assembly are exactly even with the sides and front of the base assembly. Use a straightedge held against those surfaces to check the accuracy of your alignment. Also make certain that the trim support (E) is on the inside upper edge of the top assembly. Then screw

through the inside of the top assembly into each of the four leg supports assemblies (G/H) using four 3-inch screws on each joint.

## **Making the Drawer Guides**

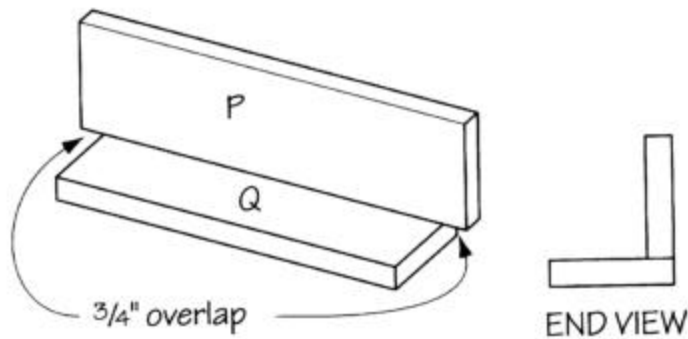
1. Rip a total of 11 feet of 1 x 4 pine to 2-1/2 inches in width.
2. Cut two long bottom supports (N) from the ripped material, each measuring 46-1/2 inches long.
3. Cut two short bottom supports (O) from the ripped material, each measuring 11 inches long.
4. Place the two long bottom supports (N) on a level surface, parallel to each other, on edge, and 11 inches apart. Place the two short bottom supports (O) between the two long bottom supports (N), as shown in *Figure 7*. Screw through the long bottom supports (N) into the short bottom supports (O) using two 1-1/2-inch screws on each joint.



*Figure 7*

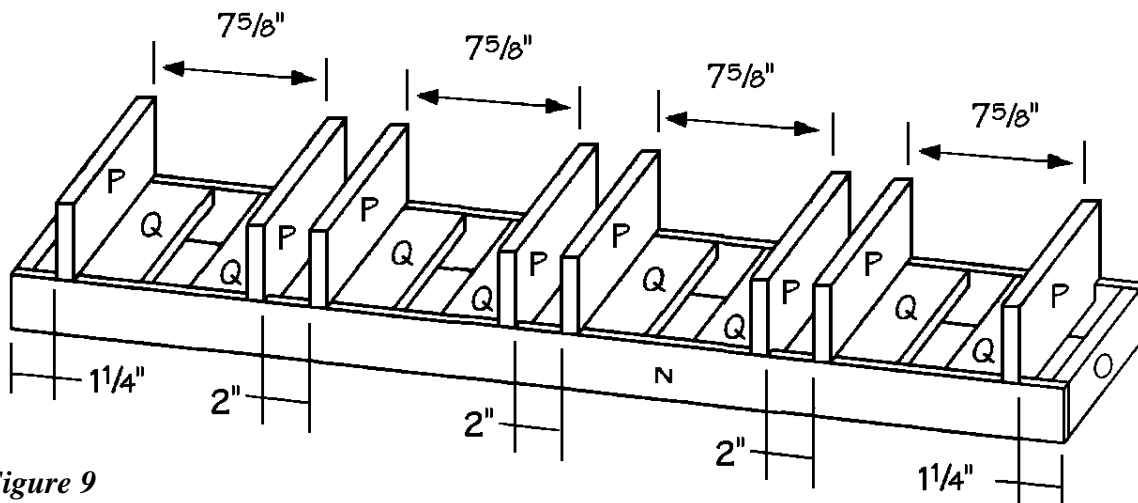
5. Cut eight long guides (P) from 1 x 4 pine, each measuring 12-1/2 inches long.
6. Cut eight short guides (Q) from 1 x 4 pine, each measuring 11 inches long.
7. Screw and glue one short guide (Q) to one long guide (P), as shown in *Figure 8*, leaving a 3/4-inch space at each end of the long guide (P). Note that the back face of the long guide (P) should be flush with the back edge of the short guide (Q). Fasten the pieces with glue and three 1-1/2-inch-long screws, spacing them evenly along the joint.
8. Repeat Step 7 seven more times, using the remaining seven long guides (P) and seven short guides (Q).





*Figure 8*

9. Attach the guide assemblies to the support assembly, as shown in *Figure 9*. Position all the pieces and mark their locations. Then slide the marked support assembly into the top assembly to check the locations of the long guides (P). The long guides (P) will butt against the backs of the vertical trims (C), with the face of each long guide (P) flush with an edge of its vertical trim (C). Begin on the left side, placing the first guide assembly with its short guide (Q) portion inside the support assembly and with the outer face of its long guide portion (P) 1-1/4" from the end of the support assembly.



*Figure 9*

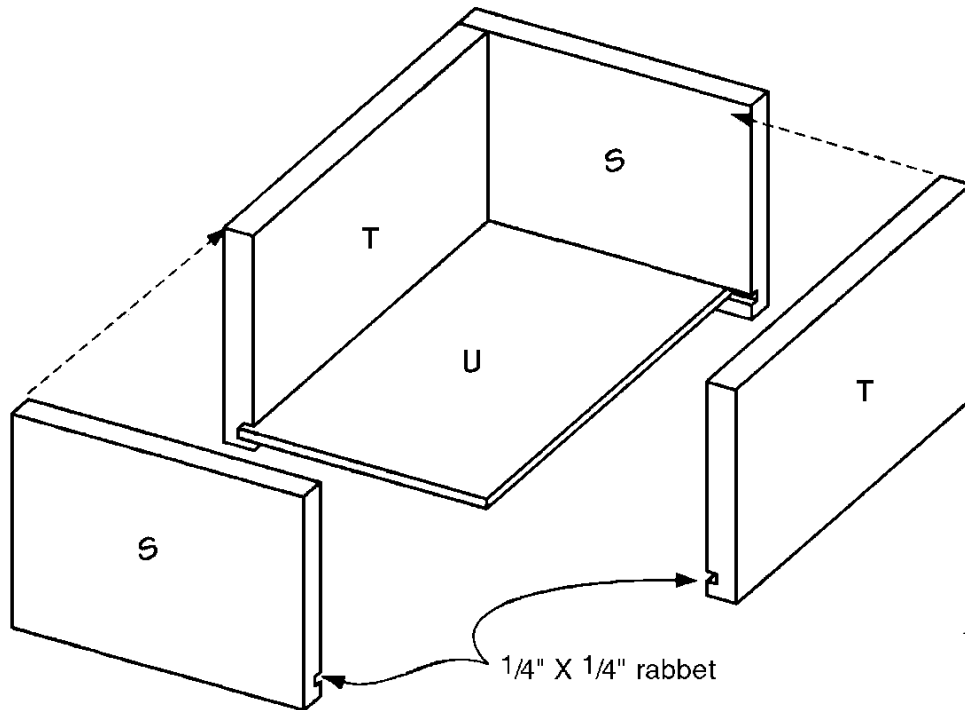
10. Position the second guide assembly so that the long guide (H) portion is 7-5/8 inches from that of the first guide assembly.
11. Position the third assembly so that the long guide (H) portions of the second and third assemblies are 2 inches apart.

12. Repeat Steps 10 and 11 to add the remaining guide assemblies, as shown in *Figure 9*.
13. When you are sure that the spacing is exactly correct, secure each of the guide assemblies to the support assembly. Screw through each of the long supports (N) into the ends of the short guide (Q) portions of the guide assemblies. Use two 1-1/2-inch screws on each of the joints.
14. Slide the entire guide/support assembly inside the back of the top assembly. Check the alignment and then screw through the front vertical trims (C) into the ends of each of the guide assemblies. Use two 1-1/2-inch screws on each of the joints.
15. Cut one back (R) from 3/4-inch plywood, measuring 11 x 48 inches.
16. Fit the back (R) over the edges of the top/bottoms (A) and the sides (B). Apply glue to the meeting surfaces and screw through the back (R) into the edges of the top/bottoms (A) and sides (B) using 1-1/2-inch-long screws spaced about every six inches.

## **Making the Drawers**

There are four identical drawers in this buffet. All four are constructed as shown in the assembly diagram in *Figure 10*.

1. Cut eight drawer front/back (S) from 1 x 6 pine, each measuring 7-1/2 inches long.
2. Cut eight drawer sides (T) from 1 x 6 pine, each measuring 10-1/2 inches long.
3. Cut a 1/4 x 1/4-inch dado on the inside of each drawer piece (S and T), 3/8-inch from the lower edge, to accommodate the plywood bottom.
4. Cut four drawer bottoms (U) from 1/4-inch plywood, measuring 6-3/8 x 10-3/8 inches.
5. Assemble one drawer as shown in *Figure 10*. Note that the drawer front/back pieces (S) overlap the ends of the drawer sides (T). Use three 2-inch (6d) finishing nails on each end of the overlapping boards. The drawer front (V) will be added later.
6. Repeat the drawer assembly three times using the remaining six drawer front/back (S), the six drawer sides (T), and the three drawer bottoms (U).



*Figure 10*

## **Adding the Drawer Fronts**

1. Cut four drawer fronts (U) from 1/2-inch plywood, each measuring 9-3/4 inches square.
2. Drill a 3/16-inch hole through the exact center of each drawer front (V) to act as a guide for installing the drawer pulls later.
3. For a more finished appearance, round the edges of the front side of the drawer fronts (V) using a hand plane or a router.
4. To attach the drawer fronts (V) to the assembled drawers, set each of the drawers inside the drawer openings, on top of the drawer glides. Place a piece of wood between the back of each drawer and the back of the buffet so that the drawers are held just proud of the front of the buffet. Use heavy-duty double-sided tape to hold a drawer front temporarily in place on each drawer until you have all four drawer fronts positioned exactly right. The drawer fronts should be level with each other, centered vertically on the front of the top assembly, and the spacing should be equal on both sides of the center drawers. Then attach the fronts to the drawers. Use three 1-inch screws, countersunk 1/8 inch, to screw through the drawer into the drawer front (V).



Close up of drawer

## **Finishing**

1. We used a 3/8-inch round-over cutter in a router to round all the edges of the top and bottom assembly. This treatment complements the textured finish, but it is not necessary if you plan to simply paint your buffet.
2. We finished our buffet by marbleizing the legs and covering the top, base, and feet with textured sand finish. If you plan to do the same, you must only sand the PVC pipe so that it will accept a coat of paint. Because the textured sand finish is so thick, it is not necessary to fill or sand the wood prior to texturing. And because the textured finish is off-white, we did not paint the textured areas (although you certainly can, if you prefer a different color).

We also used a marbleizing kit to paint the legs. Simply follow the manufacturer's directions to achieve the same result.

If you plan to paint or stain your buffet, you first must fill any screw holes, cracks, and crevices with wood filler and thoroughly sand the entire project.

3. Install the drawer pulls, centering them on each of the four drawers, and screwing through the inside of the drawer into the drawer pulls using a 3-inch-long screw.

