HEAVY-DUTY BEAR RESISTANT GARBAGE BIN

This bin is heavy-duty and is suitable for areas that will have very frequent and repeated bear visits and raid attempts. It is constructed from untreated lumber and should be painted.

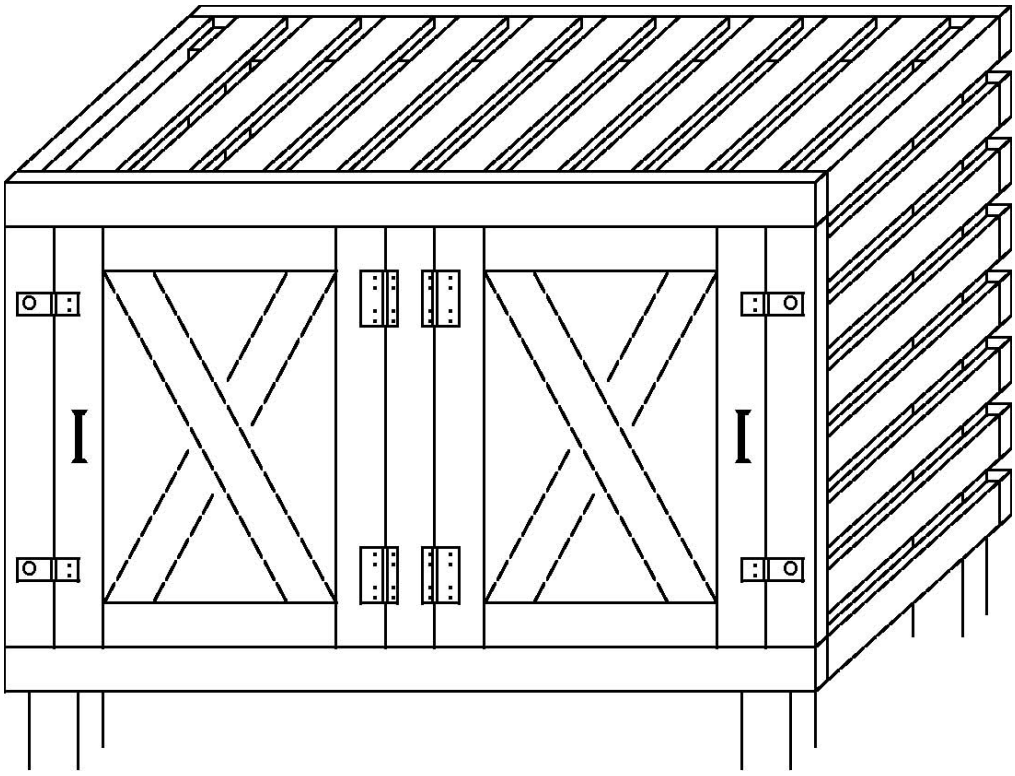
Pressure treated wood could be used for longer-life and lower maintenance and also could be painted or stained to match or complement your home.

Labor time - 6-8 hours depending on ability

Tools required - Circular saw
Framing square
Hand drill
Tape measure

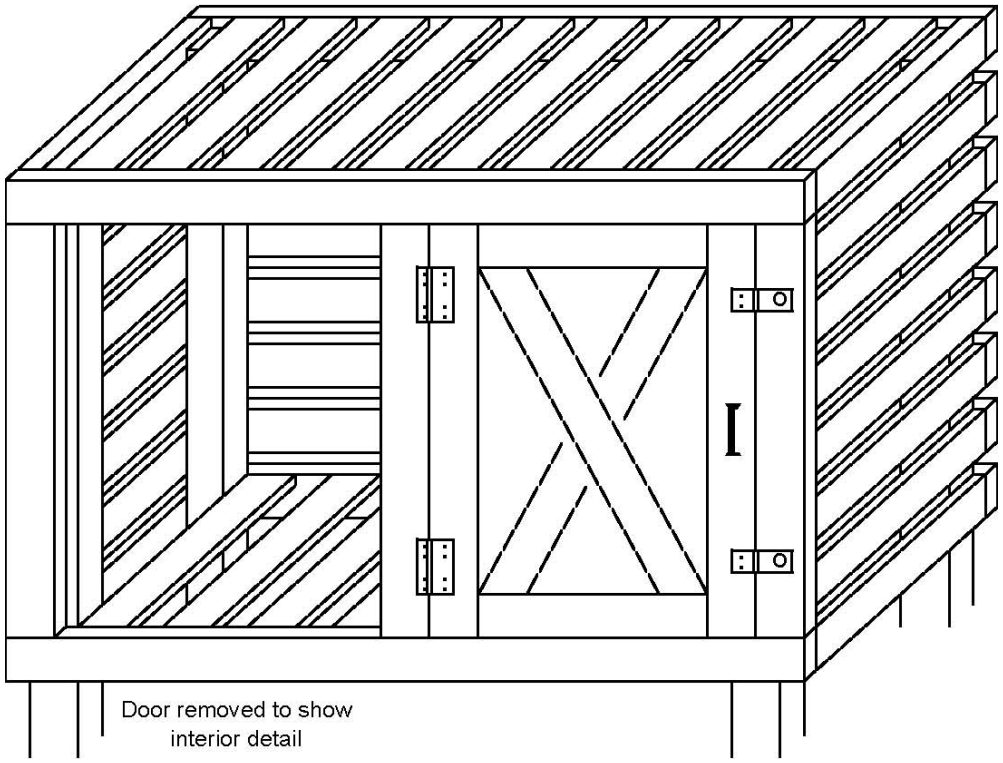
Approximate material cost
-Untreated lumber - $121.37
-Pressure treated - $150.05

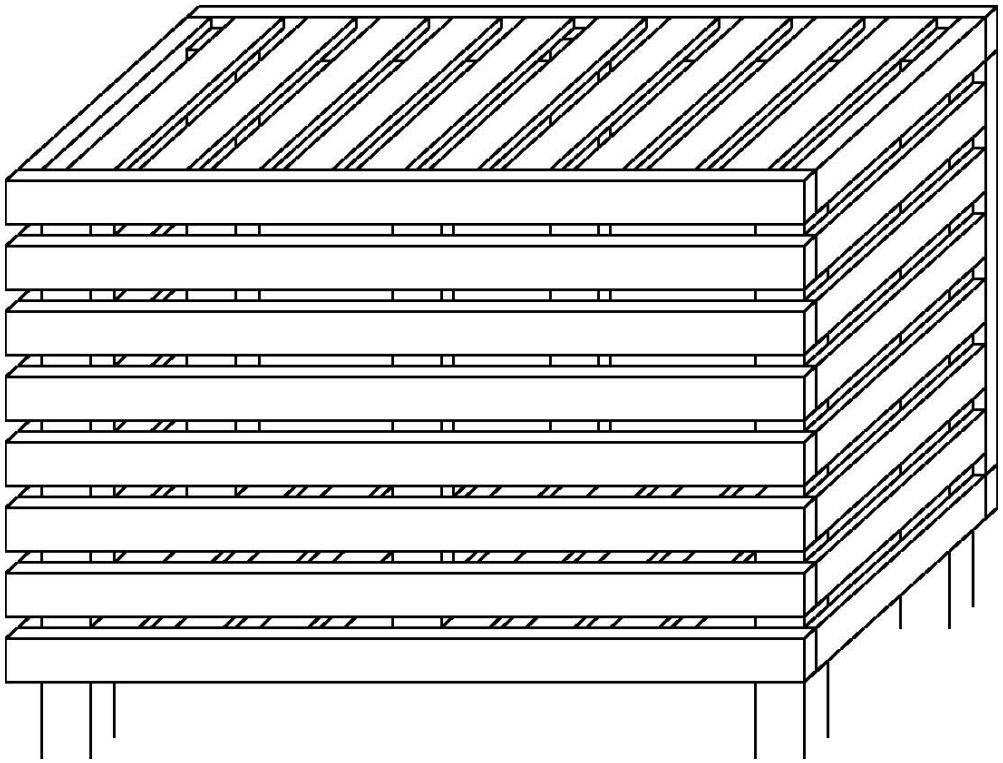
BEAR RESISTANT GARBAGE CAN CADDY



Florida Fish and Wildlife Conservation Commission

Front and Back 3-D Views of Bear Resistant Garbage Can Caddy





Material List for Bear Resistant Garbage Bin

(These prices are approximate and may vary by location.)

Lumber

2 x 4 x 8 ft	20 @ $1.99 untreated $2.97 pressure treated	$39.80	($59.40 for pressure treated)
1 x 4 x 8 ft	4 @ $1.87 untreated $2.39 pressure treated	$7.48	($9.56 for pressure treated)
4 x 4 x 10 ft	2 @ $8.98 pressure treated	$17.96	
3/4" exterior plywood	1 @ $19.99 untreated $26.99 pressure treated	$19.99	($26.99 for pressure treated)
	Lumber Total	**$85.23**	**($113.91 for pressure treated)**

Hardware

Hinges (3")	2 pair @ $3.39	$6.78
Latches (3")	4 @ $2.84	$11.36
Handles	2 @ $1.46	$2.92
Deck screws (3")	3 box @ $3.77	$11.31
Deck screws (1.25")	1 box @ $3.77	$3.77
	Hardware Total	**$36.14**

Total Material Costs

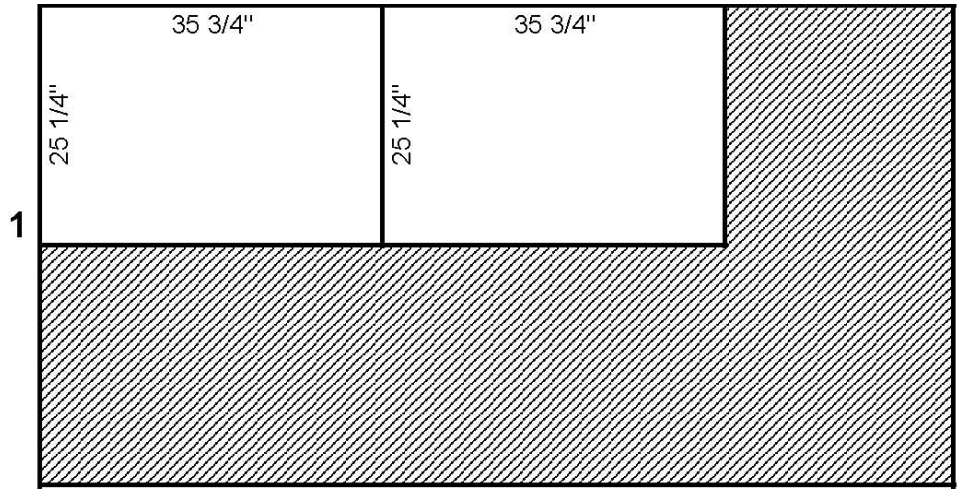
Untreated Lumber $121.37

Pressure Treated Lumber $150.05

Cutting Chart for Bear Resistant Garbage Can Caddy

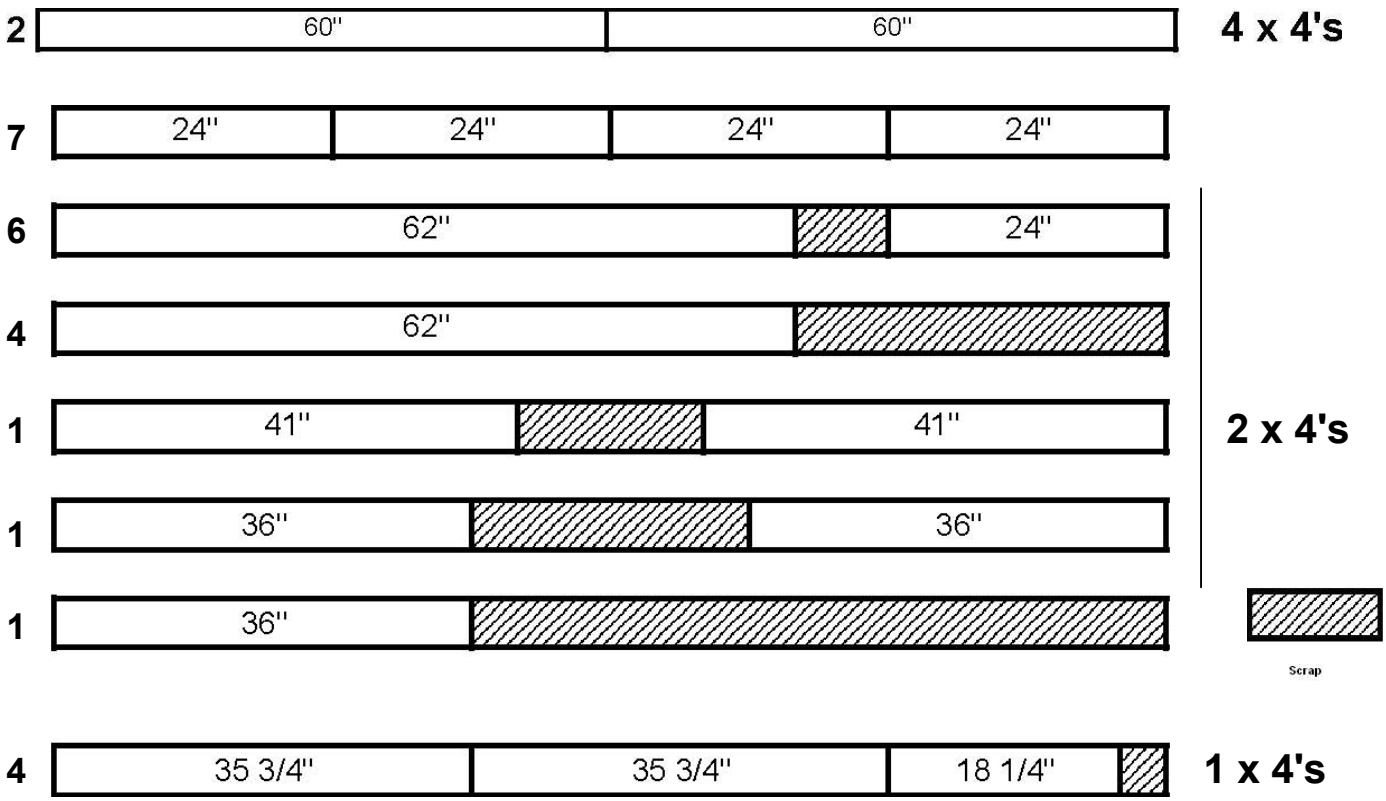
(The more precise the cutting the better the final product)

Important Note: Experience has shown that the 2x4 boards need to be spaced closer together (1/2 in apart). Therefore, this will require more wood then what is included in these instructions.



Your lumber supplier may cut these pieces for less than purchasing entire sheet.

3/4" Plywood



PLYWOOD	4 x 4's	2 x 4's	1 x 4's
2 - 25 1/4" x 35 3/4"	4 - 60"	34 - 24"	8 - 35 3/4"
		10 - 62"	4 - 18 1/4"
PIECE COUNT FOR CUT LUMBER		2 - 41"	
		3 - 36"	

Assembly Instructions for Bear Resistant Garbage Can Caddy

These instructions should enable a person with some woodworking experience to construct the caddy with minimal difficulty. Experienced woodworkers may prefer slightly different methods. We encourage people to try modifications and variations and contact us with their results so we can pass them on (there is always room for improvement). The caddy was designed around two Rubbermaid Roughneck 32-gallon plastic garbage cans, but will accommodate larger cans (up to 36" high x 24" wide).

Tools required:	**Saw (circular or table)** **Electric Drill** **(w/drill bit and driver bit)** **Tape Measure** **Framing Square**	Remember to follow proper safety precautions and wear eye and hearing protection when using power tools.

These instructions may seem awfully long, but don't be overwhelmed. They aren't that complicated when you get into them. It just takes a lot of words to explain something clearly when you can't be there to show someone

Assembly is best done on a flat, solid surface like a concrete pad or driveway. If assembling inside a workshop, be sure the door is big enough to get unit through. Two people are recommended during the assembly process (1 person can assemble it if they are experienced, but it is very challenging). Depending on ability and experience, it will take about 4-8 hours to assemble the caddy.

The unit will be heavy (150 lbs. or more) and cumbersome when assembled and will take 2 or 3 people to move to installation site and install.

ASSEMBLY

Begin by cutting all lumber to lengths specified in cutting chart. Place same sized pieces together to facilitate finding them later.

CADDY ENDS (You will make 2 of these)

STEP 1: This step may seem a little tedious, but take your time and make sure everything is square or other pieces will not fit right later. Place 2 of the 60" 4x4's parallel to each other 24" apart to outside edges. Place a straight scrap 2x4 on edge across one end of 4x4s. Using framing square, make sure the 4x4's and 2x4 are square to each other and then verify that 4x4's are still 24" apart along their entire length. Keep checking back and forth between square and tape measure. To confirm squareness, measure from corner A to corner B and from corner C to corner D. Measurements A to B and C to D should be the same. If not, recheck other measurements and try again. (Figure 1).

STEP 2: Carefully remove the scrap 2x4 and with a pencil or marker, accurately mark the position of the 4x4's on floor to confirm they don't move during the following steps and to save time positioning the 4x4's on the second end assembly. This can be done with tape if you don't want to make marks on floor. (Figure 2).

STEP 3: Reposition the scrap 2x4 on edge across the end of the 4x4's. Take one of the 24" 2x4's and place flat on 4x4's so that its ends are flush with the sides of the 4x4's and its edge is flush with top of scrap 2x4. Secure with two 3" deck screws into each 4x4. Remove scrap 2x4. (Figure 3).
IMPORTANT - To prevent splitting of wood and make driving easier it may advisable to pre-drill pilot holes (1/16 – 1/8") for deck screws through 2x4's.

STEP 4: From the bottom of the attached 2x4 measure 36" down both 4x4's and make marks. Place another 24" 2x4 at these marks and check that it is square to the 4x4's and secure with two 3" deck screws on each end. (Figure 4).

STEP 5: Evenly space 6 more of the 24" 2x4's between the attached 2x4's. The gap between the 2x4's should be about 2 1/8", but due to variation in lumber dimensions this may vary. When all the 2x4's are evenly spaced attach to 4x4's with 3" deck screws. (Figure 5).

Place remaining two 4x4's on the marks on floor and repeat steps 3 through 5 to complete other end assembly.

CADDY BACK

STEP 6: Place the 2 caddy end assemblies on edge. Using the same procedure outlined in Step 1 make sure the 2 end assemblies are square and parallel to each other and 62" to outside edges of attached 2x4's. (Figure 6).

STEP 7: Place a 62" 2x4 across the 4x4's to match up and overlap the outermost 2x4's on the top of the end assembly. Check that the 2x4 is square to the 4x4's and attach with 3" deck screws. Place another 62" 2x4 across the 4x4's to match up and overlap the outermost 2x4's on the bottom of the end assembly and check that it is square and attach with deck screws. (Figure 7).

STEP 8: Attach six more 62" 2x4's across back of caddy to match the 2x4's on the end assemblies using the same screw pattern. (No figure).

CADDY FRONT

STEP 9: Carefully roll the caddy until the attached 62" 2x4's are on the ground. Repeat the procedure outlined in Step 7 to attach two 62" 2x4's to the front of the caddy. (Figure 7).
STEP 10: Place a 36" 2x4 along one of the 4x4's so that it covers the exposed ends of 2x4's on end assembly. Secure to 4x4 and ends of 2x4's with 3" deck screws. (Figure 10). Repeat on other end.

CADDY BACK BRACE

Step 11: Place one of the 41" 2x4's on the inside of the 2x4's forming the back of the caddy. It should be centered (about 24 ¼" from each of the side 4x4's). It should be 1 1/2" from the top edge of the top 2x4 – a scrap piece of 2x4 on edge can be used to get the proper spacing. Secure with 3" deck screws. (Figure 11).

CADDY FRONT BRACE

Step 12: Place the last 36" 2x4 on the floor and then place the last 41" 2x4 directly on top of the 36" piece, extending over the ends by 2" on one end and 3" on the other end. Secure the two pieces together with 3" deck screws through the 41" piece. (Figure 12).

Step 13: Carefully roll the caddy until the front is on the floor. Place the front brace assembly (with 36" piece down) between the top and bottom 2x4's with the same spacing as discussed in Step 11 and secure with 3" deck screws. (Figure 13).

CADDY TOP

Step 14: Evenly space ten of the 24" 2x4's across the top of the caddy. The sides of the 2x4's should be flush with the top of the caddy. The gap between the 2x4's should be slightly more the 2 1/8", but due to variations in lumber dimensions this may vary. Secure each 2x4 with two 3" deck screws driven through the back outside 2x4. Other end of 2x4's will be attached in Step 16. (Figure 14).

CADDY BOTTOM

Step 15: The final eight 24" 2x4's will be used on bottom of caddy. The sides of the 2x4's should be flush with the top of the bottom 2x4's. The gap between the 2x4's should be slightly more than 3 ¼", but due to variations in lumber dimensions this may vary. The 2 outermost and 2 innermost 2x4's should butt against the corner 4x4's and brace 2x4's. Secure each 2x4 with two 3" deck screws driven through the back outside 2x4. Other end of 2x4's will be attached in Step 16. (Figure 15).

CADDY TOP and BOTTOM

Step 16: Carefully roll the caddy onto the back and attach the other ends of the 2x4's from Steps 14 and 15 in the same manner. (No figure).

CADDY DOORS

Step 17: Place two 35 ¾" and two 18 ¼" 1x4's flat on ground to form rectangle as shown in Figure 17. Place one of the pieces of plywood on top of the 1x4's so that edges are flush. Secure 1x4's to plywood with 1 ¼" deck screws screwed through plywood. Guide lines drawn 3 ½" from edge of plywood will help guide screw placement. Repeat for other door. (Figure 17).

Step 18: Turn one of the doors with 1x4's facing up. Place one of the remaining 1x4's across the door coinciding to "**1**" in Figure 18. Use a straight edge to mark angles at ends of 1x4 and cut. Test-fit and trim if necessary. When piece fits correctly, go to back of door and using existing guide lines use the cut piece to make additional guide lines for screw placement. Return piece to front of door and attach with 1 ¼" deck screws using guide lines for screw placement. Repeat procedure for "**2**" and "**3**" in Figure 18. Repeat entire procedure for other door. (Figure 18).

Step 19: Install hinges, latches, and handles on doors. For additional strength, substitute 1 ¼" deck screws for the smaller screws normally provided with hardware wherever possible. (Figure 19).

Step 20: Use small wedges of wood or cardboard to center doors in openings and attach hinges and catch portion of latches to caddy using 1 ¼" deck screws where possible. There should be about a 1/8" gap at top and bottom and about a ¼" gap on sides of doors. (No figure).

INSTALLATION, FINISHING and USE

Dig 4 holes to match the 4x4 legs. The unit can be installed with bottom 2x4's directly on ground or slightly (1-2") above ground. If bear pressure isn't excessive, simply repacking the dirt around legs should be sufficient. If there is heavy pressure, you may want to add pressure treated "deadmen" (Figure A) to bottom of legs or add concrete in holes to prevent tipping. Caddy can leveled "by eye" or using a level.

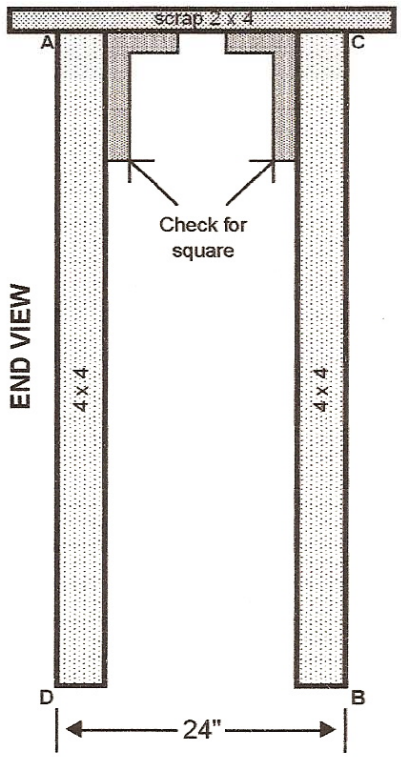
Caddy can now be painted, stained or allowed to weather naturally.

Snap hooks or other locking fasteners should be used to secure latches during use. Wash down the caddy and garbage cans occasionally to reduce any lingering odors and attraction.

Assembly Illustrations for Bear Resistant Garbage Can Caddy

(The more precise the measuring, squaring and aligning the better the final product)

Figure 1



*** NOTE ***
Figure numbers match "Step" numbers in written directions

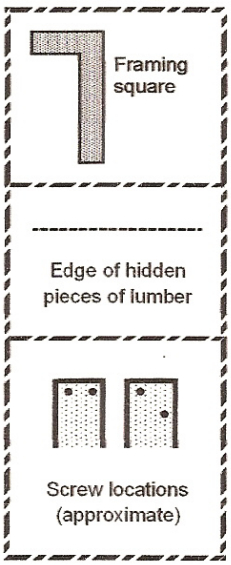


Figure 2

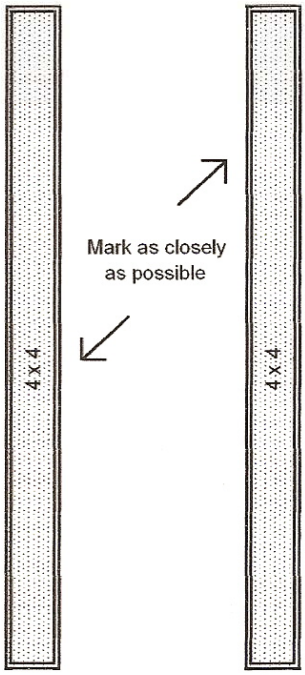


Figure 3

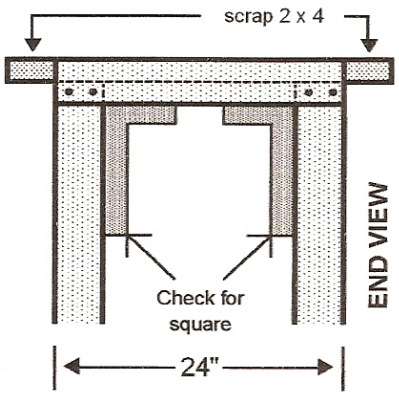


Figure 4

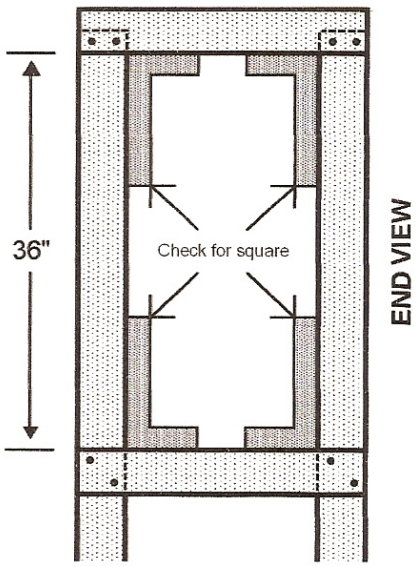


Figure 5

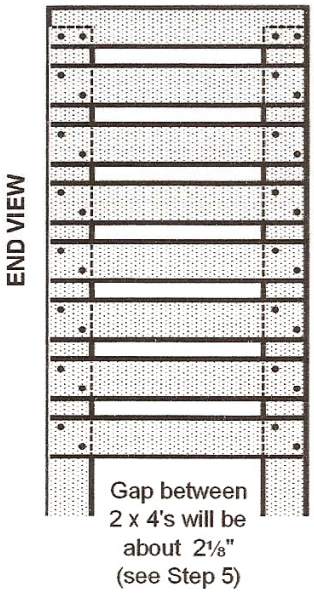


Figure 6

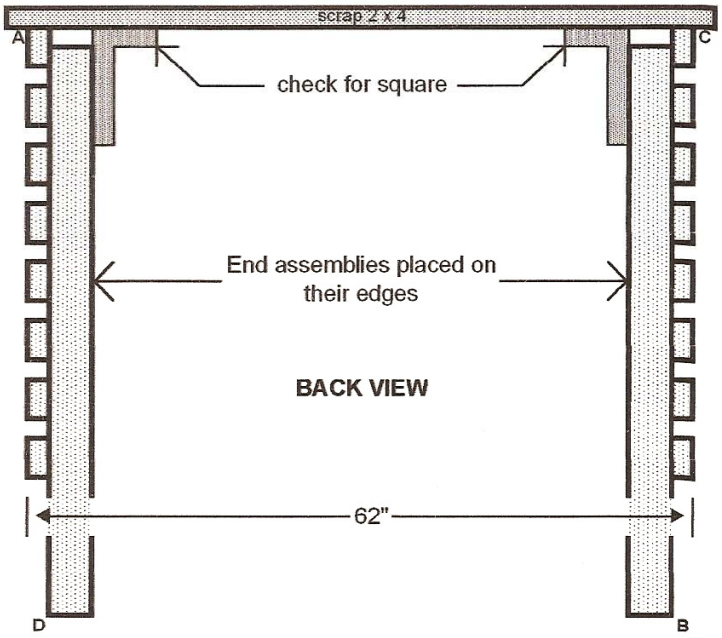


Figure 7

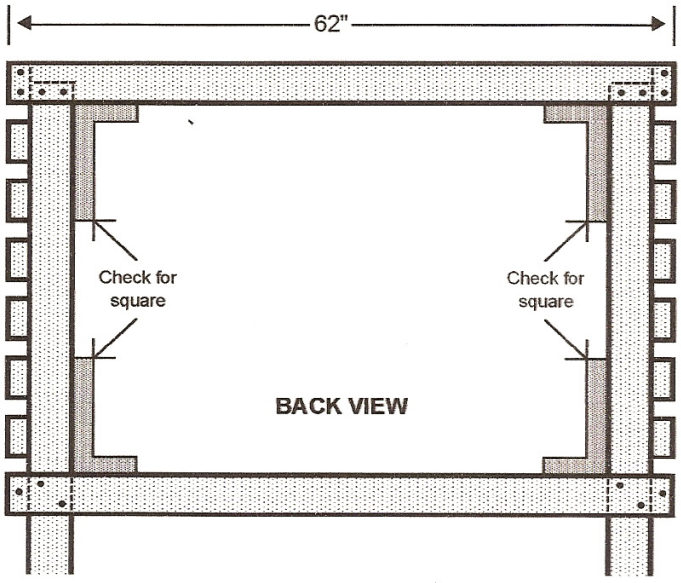


Figure 10

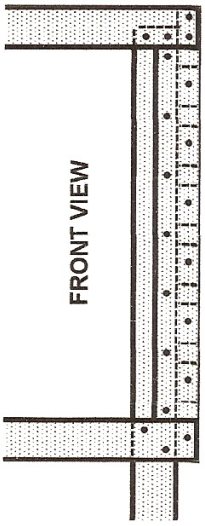
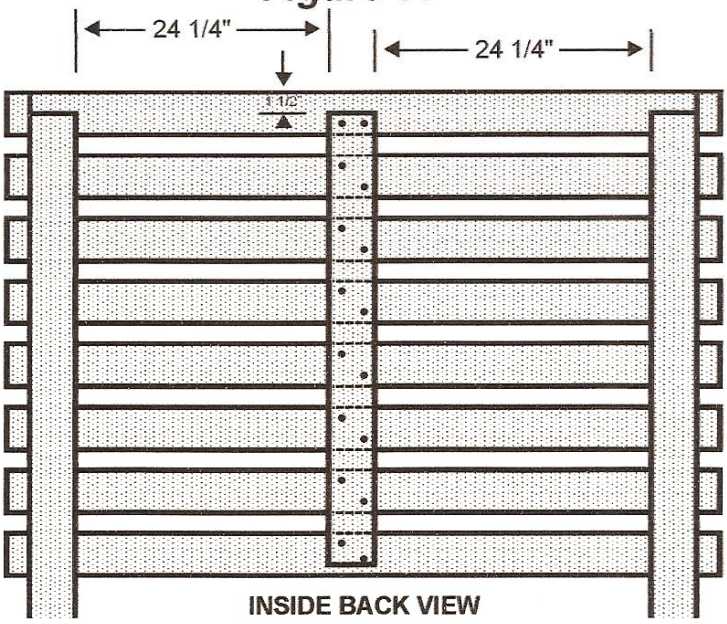


Figure 11



INSIDE BACK VIEW

Figure 12

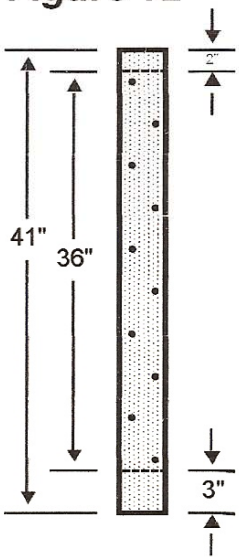
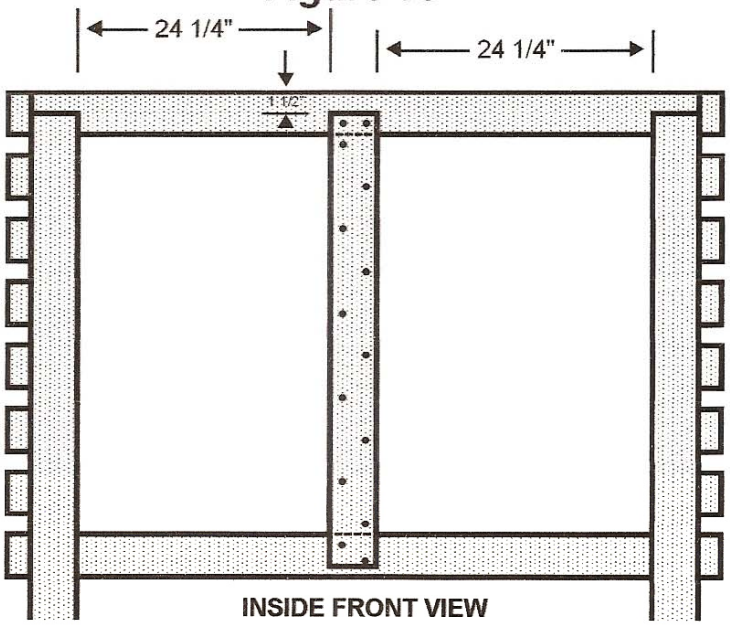


Figure 13



INSIDE FRONT VIEW

Figure 14

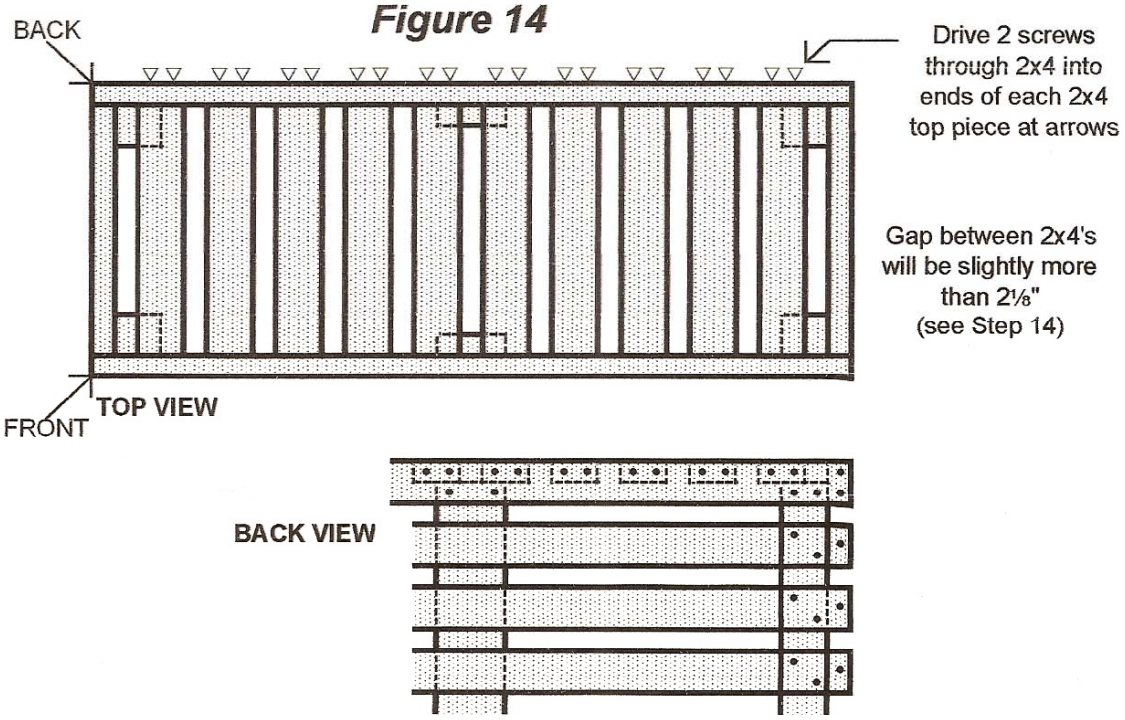


Figure 15

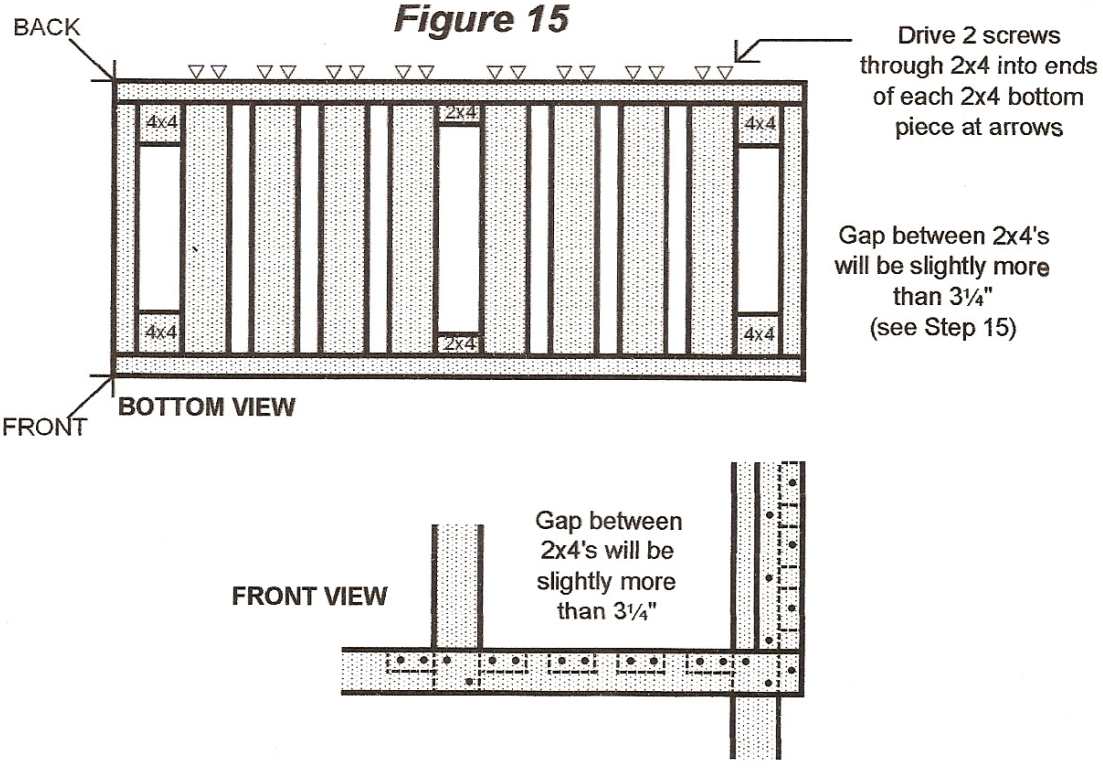


Figure 17

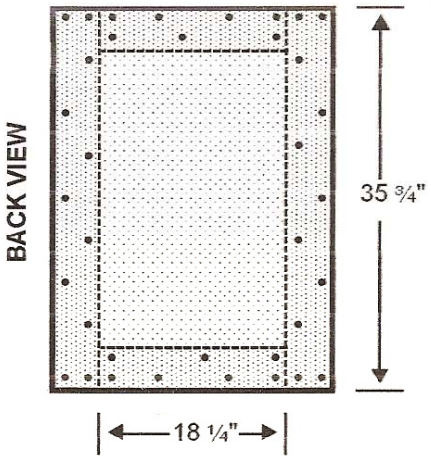


Figure 18

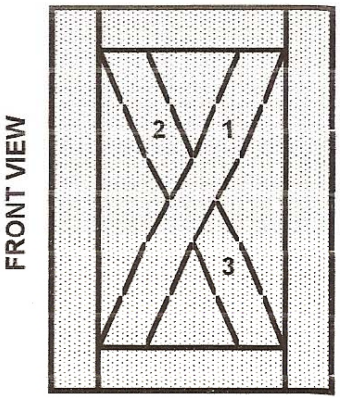


Figure 19

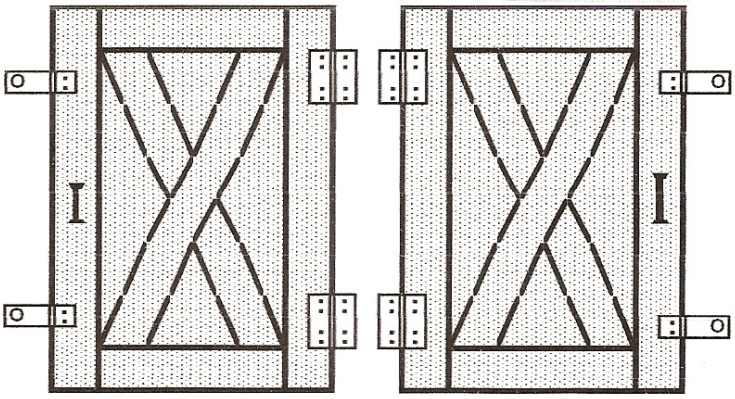


Figure A