

# Easy Blanket Box

## One Sheet of Plywood Makes Two Boxes

31 1/2" long X 18" deep X 16 3/4" high  
25" long X 14 1/2" deep X 13" high

**Project Skill Level: BEGINNER**

**Recommended plywood: CANPLY EXTERIOR Good Two Sides (G2S)**



## Materials list

### **Plywood:**

- (1) Sheet 3/4" X 4 ft X 8 ft Good Two Sides (G2S)

### **Other Materials for both boxes:**

- (60) #8 x 1-1/2" Robertson or Phillips wood screws
- (60) 5/16" diameter x 1/4" deep wood plugs
- (40) 3/4" finishing nails
- (4) Chest hinges
- (2) Lid stays (optional)
- (8) Screw on rubber feet (optional)
- (40) Lineal feet - iron on shelf edge banding - (optional)
- (9) Square feet aromatic cedar (optional)

## Tools Required

**Power Tools:** table-saw; hand drill; jigsaw; plywood cutting table-saw and jigsaw blades; electric palm sander or block plane.

**Hand Tools:** tape measure; 1/8" drill bit; 1 1/2" Forsner bit or hole saw- drill bit; #8 Countersink bit; nail set; multi-head screwdriver; carpenters square; 180/220/320 grit sandpaper; 1/2" wide medium tooth wood file; wood glue; 48" straight edge; paper for drawing graph; pencil; large compass or 25" length of string and a push pin.

## Before Starting

1. Study the plan carefully to make sure you understand all the details.
2. For best results use plywood-cutting blades on the table-saw and jigsaw.
3. All screw holes to be pre-drilled to prevent the wood from splitting.
4. Clamp a scrap piece of wood to the back of all pieces to be drilled to prevent chip-out.
5. Glue all contact surfaces unless noted.
6. Remove excess glue with a damp cloth.
7. Insure plywood panels are well supported and level before cutting.
8. Remove sharp edges and corners with sandpaper.
9. Always use fine sandpaper and sand with the grain, not against it.
10. Follow all power tool and hand tool safety precautions.

## **Building Instructions**

### **PRIOR TO CUTTING**

- To save yourself work in the finishing stages of the project, sand the whole plywood panel, both sides prior to cutting. First sand with 180-grit sandpaper, followed by 220 grit. When finishing the project (painting, staining or a natural finish) you will only require final sanding with 320-grit sandpaper.

### **MAKE A PATTERN LAYOUT**

- Following the pattern layout shown in Figure no. 1, draw all parts onto the plywood panel.
- Transfer all markings relevant to cutting and assembly (ie: slots, center lines).
- Label all pieces with the letter and description indicated.
- Remember to allow at least 1/8" for the width of the saw blade.
- Refer to Figure no. 2 for detailed dimensions on the pattern layout of ENDS.

### **CUT OUT THE PIECES**

- Refer to Figure no. 1 for illustration of cutting lines 'A, B and C' on the plywood panel.
- Cut straight edges on the table saw.
- When setting the table saw to cut your dimensions, measure from the side of the blade facing the fence to the fence itself. This will ensure your dimensions are accurate and aren't affected by the 1/8" of material removed by the saw blade.
- Information on table saw safety and handling techniques can be found in your Owner's Manual or at your local library or bookstore.

1. Cut along line 'A' to create a piece 16" x 96", running the length of the panel.
2. Cut along line 'B' to create a piece 14" x 23-3/8".
3. Cut along line 'C' to create a piece 12" x 72-1/2" and another piece 19-1/2" x 96".
4. From your first piece, cut (3) pieces 16" x 30", running perpendicular to the wood grain. Use the table saw slide or float to do 'cross-cuts'. Label two of these pieces SIDE "A" and one piece BOTTOM "A",
5. From the 12" x 72-1/2" piece, cut (3) pieces 12" x 23-1/2", running perpendicular to the wood grain. Use the table saw slide or float to do 'cross-cuts'. Label two of these pieces SIDE "B" and one piece BOTTOM "B",
6. From the 19-1/2" x 96" piece, cut (2) pieces 19-1/2" x 18", label these END "A"; (1) piece 18" x 30", label this label TOP "A"; and (2) pieces 15-1/2" x 14", label these END "B"

When you are finished cutting on the table saw you should have the following square pieces:

A	TOP (1)	18" x 29-7/8"
A	SIDES (2)	16" x 30"
A	ENDS (2)	18" x 19-1/2"
A	BOTTOM (!)	16" x 30"
B	TOP (1)	14" x 23-3/8"
B	SIDES (2)	12" x 23-1/2"
B	ENDS (2)	14" x 15-1/2"
B	BOTTOM (1)	12" x 23-1/2"

## **HOW TO.... DRAW OUT THE ARCHES**

Refer to Figure no. 2 for the following instructions.

Mark the location of the compass points on the ENDS of the boxes. Note that the distance from the bottom of the ENDS differs for each box.

The distances for each of the arches for Box "A and B" are noted on the diagrams.

Set the compass to the required arch length by measuring the distance between the compass points. See optional instructions for drawing an arch if you do not have a compass.

Using a ruler, position the point of the compass at 0 and extend the arm of the compass to the length you need.

Set the point of the compass on the reference point you've marked on the END.

Before marking, do a sweep with the drawing arm of the compass to ensure the distance is set correctly. The pencil point should fall within the top edge of the END.

Draw the arch.

Repeat steps to draw arches on the other END.

Adjust the compass to the arch length needed for Box "B".

Repeat steps to draw arches on both ENDS of Box "B".

### **Optional Instructions for Drawing an Arch if you do not have a compass:**

A 25" length of string and a pushpin can be substituted for a compass.

Tie a knot in one end of the string.

Using the knot as reference point "0", measure the distance needed for the length of the arch, as noted in Figure no. 2.

Tie a second knot in the string at this at this length.

Insert the pushpin into the knot and push this into the reference point you've marked on the END.

Insert a pencil into the second knot and tighten the string to ensure it does not come undone.

Before marking, do a sweep with the drawing arm of the compass to ensure the distance is set correctly. The pencil point should fall within the top edge of the END.

Draw the arch.

Repeat steps to draw arches on the other END.

Adjust the compass to the arch length needed for Box "B".

Repeat steps to draw arches on both ENDS of Box "B".

### **CUTTING THE CURVED EDGES:**

- Use the jigsaw to cut along the curved lines.
- Smooth the curved edges with a block plane or power sander.

## **HOW TO.... CUT OUT THE HOLES FOR THE HANDLES**

- Use the 1-1/2" hole-saw to drill out the ends of the handle holes. Use the jigsaw to cut the straight portions of the handle hole cut outs.

### **APPLY EDGE BANDING (optional):**

- Iron-on edge banding is recommended.
- Before applying edge banding, ensure that all edges are sanded and free of irregularities.
- To ensure satisfaction and performance, apply edge banding as per the manufacturer's instructions
- You will require 40 lineal feet of edge banding to edge band the following pieces:

- Top edges of all SIDES.
- Top edges and sides of all ENDS.

### **ATTACH AROMATIC CEDAR TO BOTTOM (optional)**

• Using 3/4" finishing nails attach the aromatic wood strips to the rough side of bottom panel. Set the nails with the nail set to make sure the heads are below the surface of the wood.

### **ATTACH SIDES TO BOTTOMS**

- Refer to Figure no. 3 for location of pre-drilled screw holes.
- Mark screw hole locations on SIDES and ENDS.
- Using a #8 Countersink drill bit, pre-drill screw holes, as shown in Figure no. 4.
- Position SIDE against BOTTOM as shown in Figure no. 5.
- Align edges flush and secure with clamps.
- Using a 1/8" drill bit, drill into the BOTTOM through the pre-drilled countersink screw holes on the SIDES.
- Remove clamps.
- Using wood glue and #8 x 1-1/2" wood screws, attach SIDE to BOTTOM.
- Repeat steps to attach other SIDE.

### **ATTACH ENDS TO BOTTOMS AND SIDES**

- Refer to Figure no. 6.
- Position END over edges of SIDES and BOTTOM.
- Center it to ensure ENDS overlap SIDES by 1/4", as shown.
- Secure END to SIDES with clamps.
- Using a 1/8" drill bit, drill into the SIDES through the pre-drilled countersink screw holes on the ENDS.
- Remove clamps.
- Using wood glue and #8 x 1-1/2" wood screws, attach ENDS to SIDES and BOTTOM.
- Repeat steps to attach other END.

### **INSTALL TOPS**

- Refer to Figure no. 7.
- Lay the TOPS on their respective boxes to check for fit. If edge banding is going to be applied to the ends of the TOPS, the thickness of the edge banding will need to be accounted for.
- You may have to remove an extra 1/8" off one end of the TOP to ensure the TOP moves freely between the ENDS.
- Attach the edge banding to the correctly sized TOPS. (optional)
- Install the hinges as per the manufacturer's instructions, about 3" from the ends.
- If desired, install lid stays as per the manufacturer's instructions.

### **APPLY SURFACE FINISH**

- Do not finish the interior of the boxes.

#### **Surface Preparation**

- Plywood for interior applications will usually be one of the sanded or textured grades and will require little surface preparation other than to ensure that the surface is thoroughly clean and that all blemishes have been filled with wood filler and sanded smooth.
- Whenever practical, fill the plywood edge grain before painting.

- Always use fine sandpaper and sand with the grain, never across it.
- Do not paint over dust or spots of oil or glue.
- When painting plywood, all knots and pitch streaks should be spot-primed with sealer.
- For best results use good quality paints and follow the paint manufacturer's instructions.

### **Natural Finishes**

- For an easy, inexpensive blonde finish, first apply interior white undercoat thinned so grain pattern shows through.
- Tint if colour is desired.
- Second, apply clear shellac, flat varnish or lacquer.
- Attractive and economical one-coat stain waxes are also available in various colours.
- If a dark stain is preferred, first apply coat of clear resinsealer to subdue grain contrast.

### **A luxurious light stain glaze can be obtained as follows:**

- First apply white undercoat thinned with an equal part of paint thinner.
- Wipe or dry brush for more grain show through.
- Second, apply one coat thinned white shellac or clear resin sealer.
- Third, to provide colour, apply interior undercoat or enamel thinned as in step one.
- Wipe or dry brush to proper colour tone.
- Fourth, apply one coat of flat varnish.
- Rub down with steel wool for added luster.

**Congratulations! You did it.**

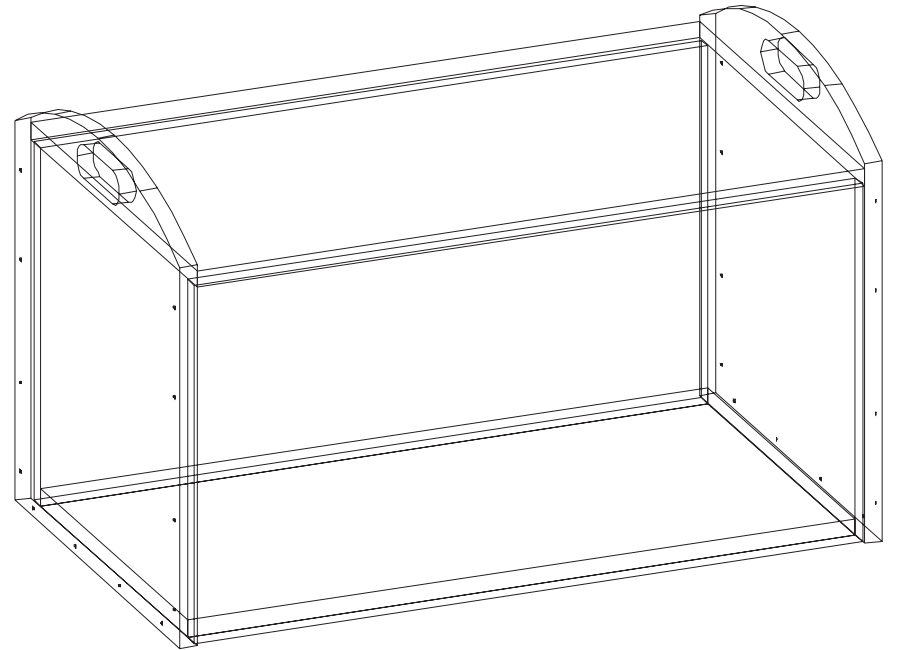
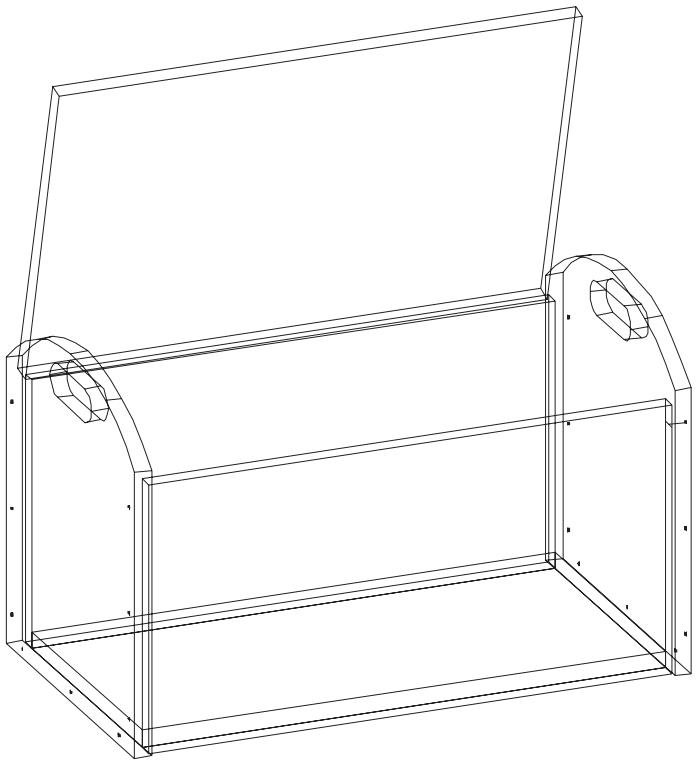
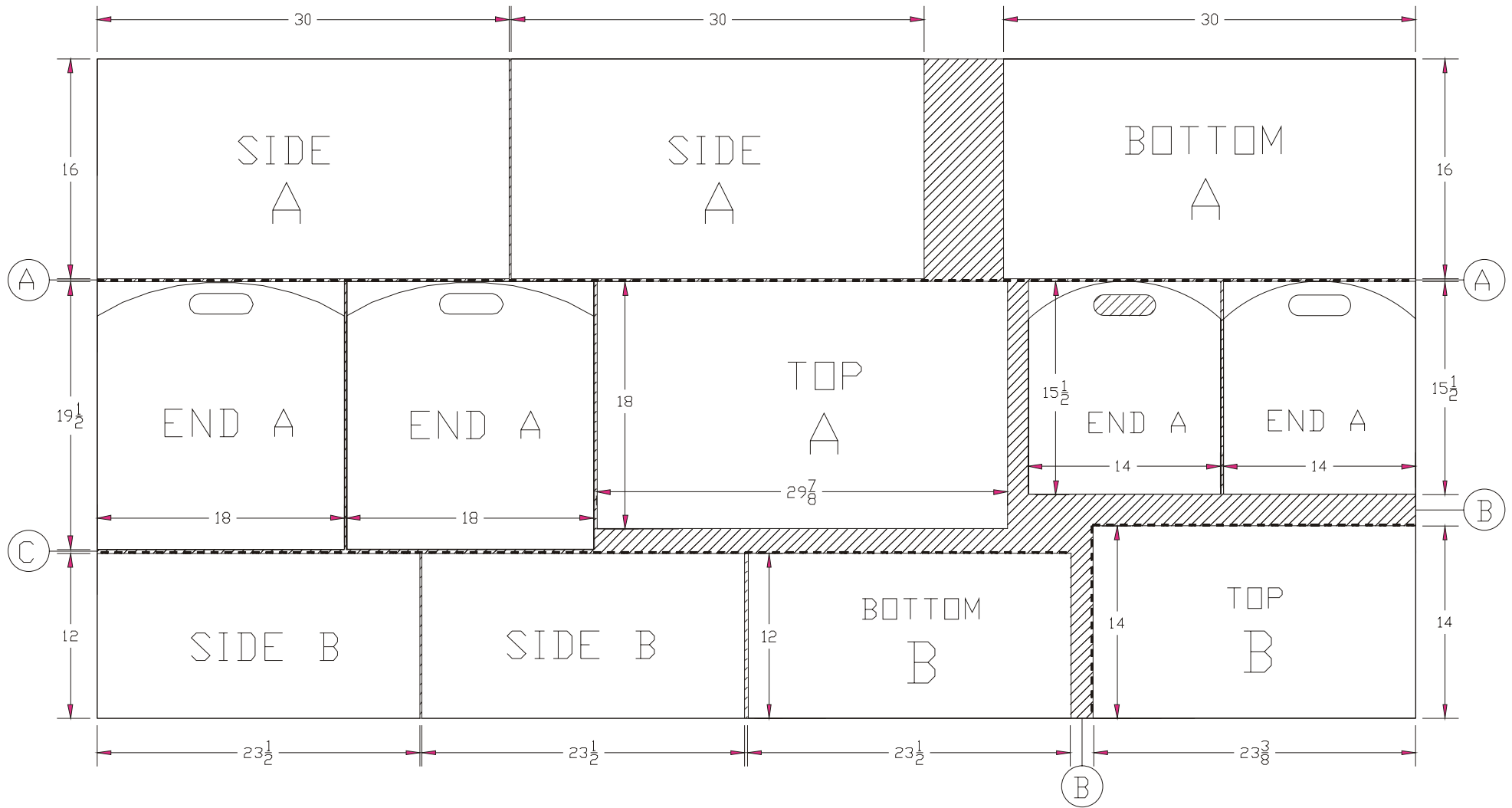


Figure no. 1

PATTERN LAYOUT






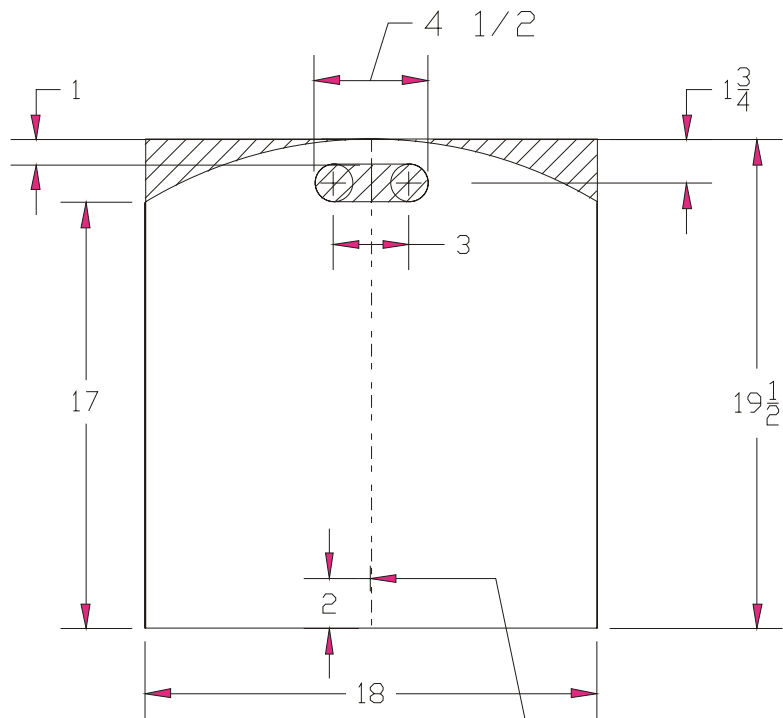
-  - indicates material to be remove
-  - indicates material removed with jigsaw cut
-  - indicates cutting line

Fig #1

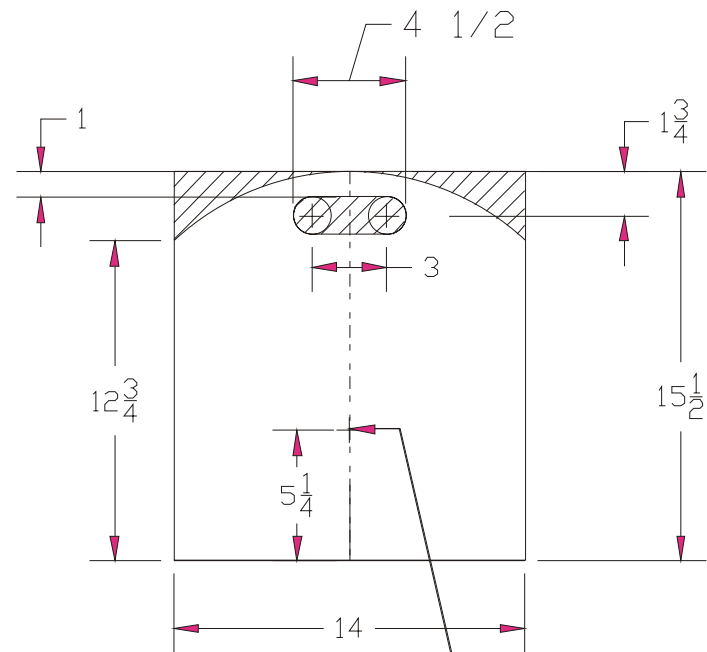
Figure no. 2

PATTERN LAYOUT FOR ENDS

BOX A



BOX B



compass point for drawing arch  
set distance  $17 \frac{1}{2}$ " long

compass point for arch  
set distance  $10 \frac{1}{4}$ " long

Figure no. 3

# LOCATION OF PRE-DRILLED SCREW HOLES

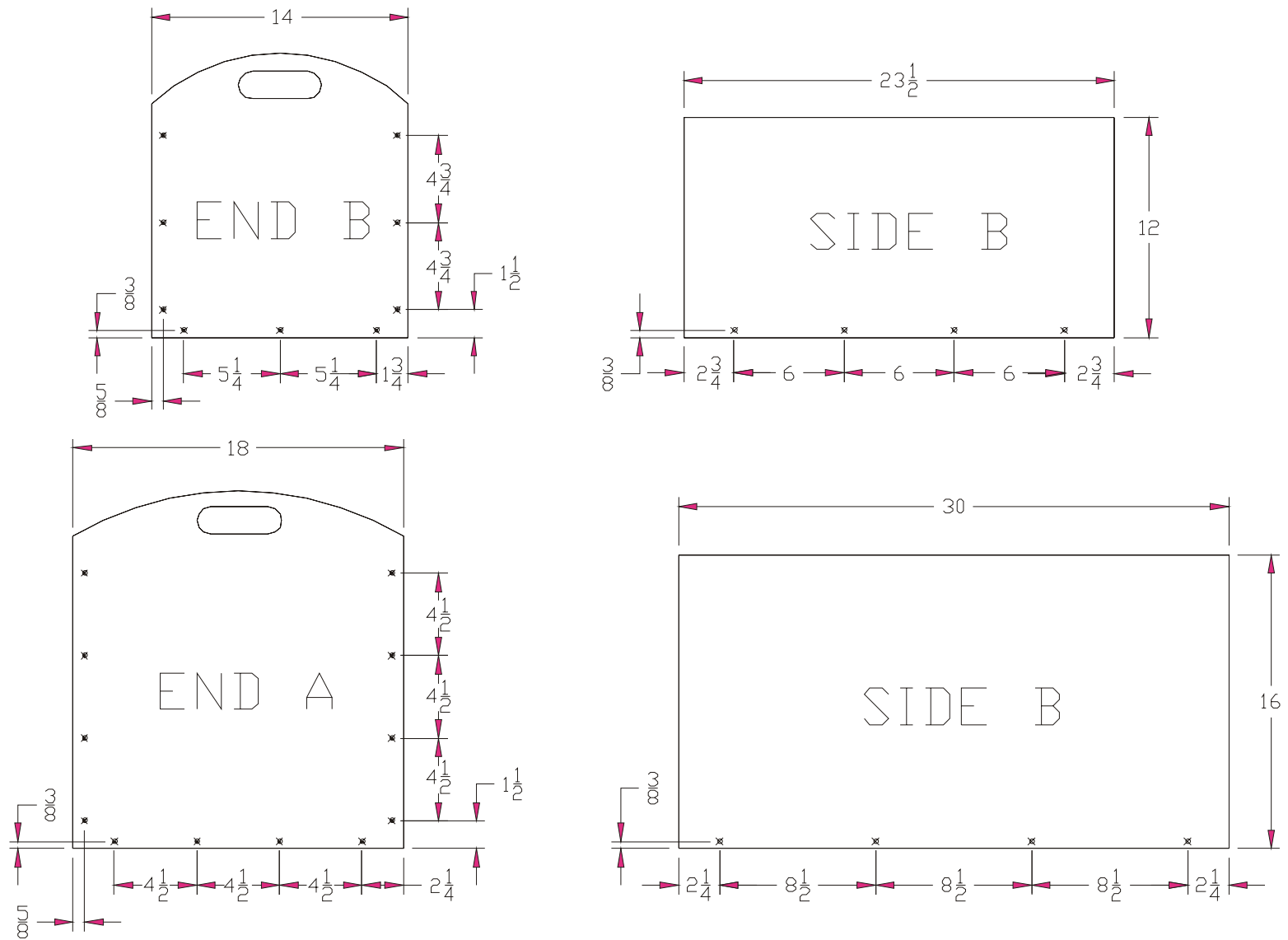
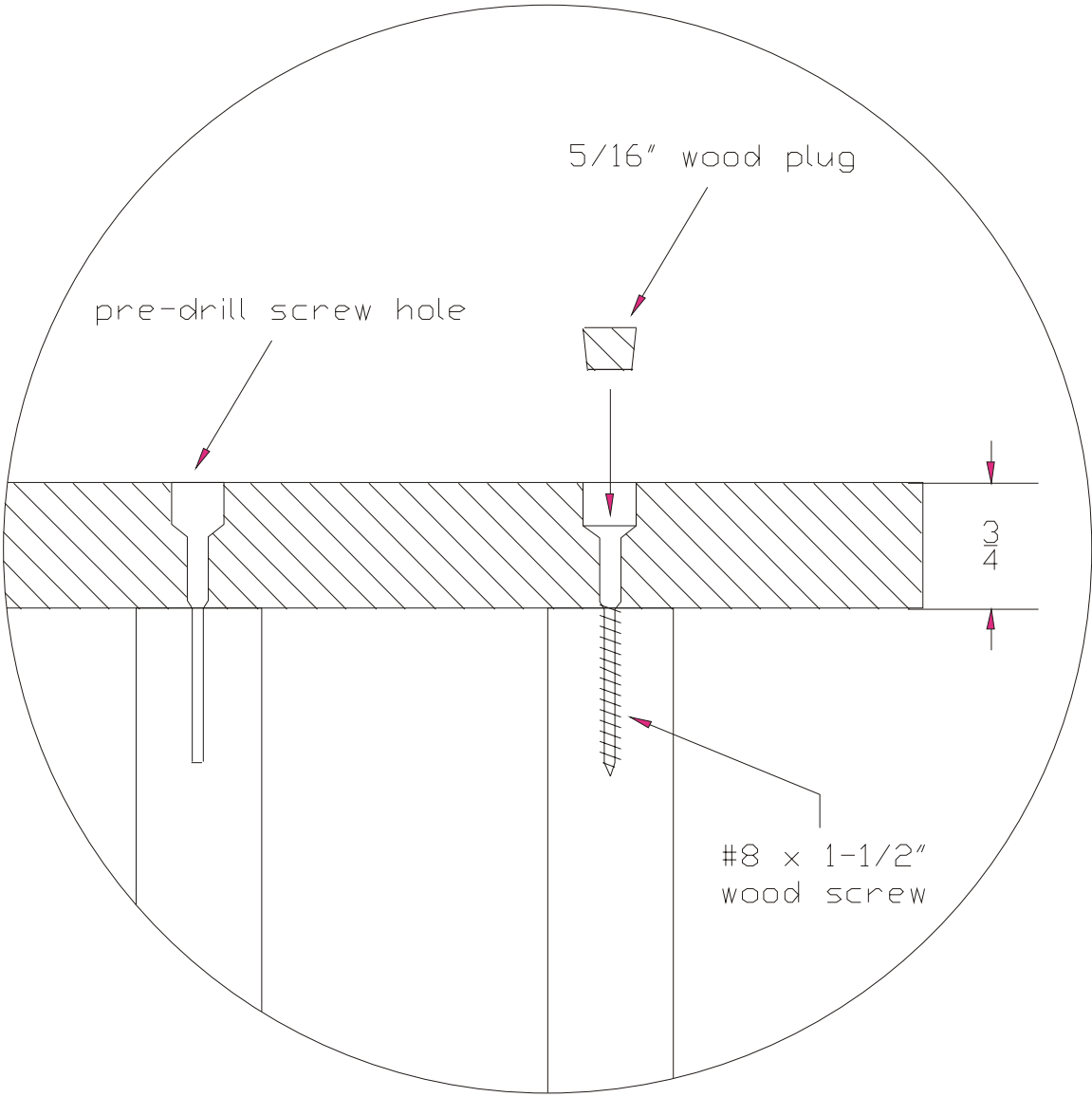


Fig #3

Figure no. 4

CROSS SECTION OF A COUNTERSUNK SCREW HOLE



HOLE DRILLED WITH #8 COUNTERSINK DRILL BIT

Fig #4

Figure no. 5

ATTACH SIDES TO BOTTOM

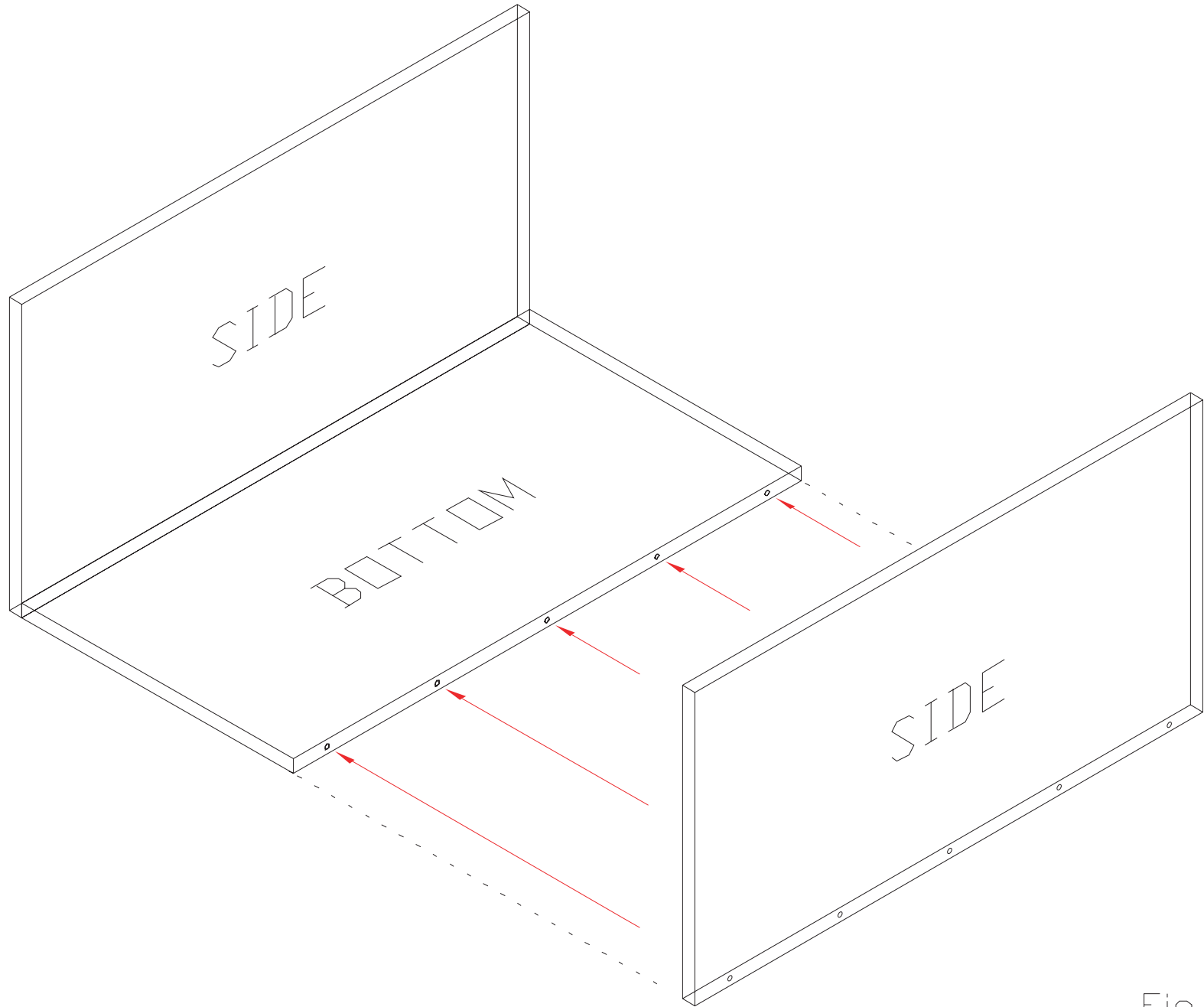
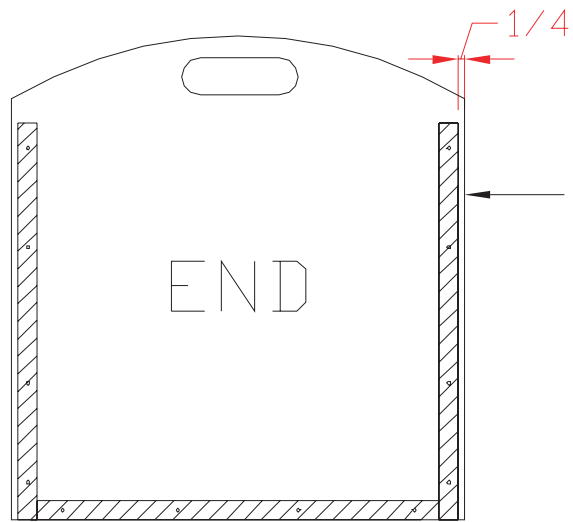


Fig #5

Figure no. 6  
ATTACH ENDS TO SIDES



NOTE: Sides are inset 1/4" on ends.

 - indicates location of sides & bottom on ENDS

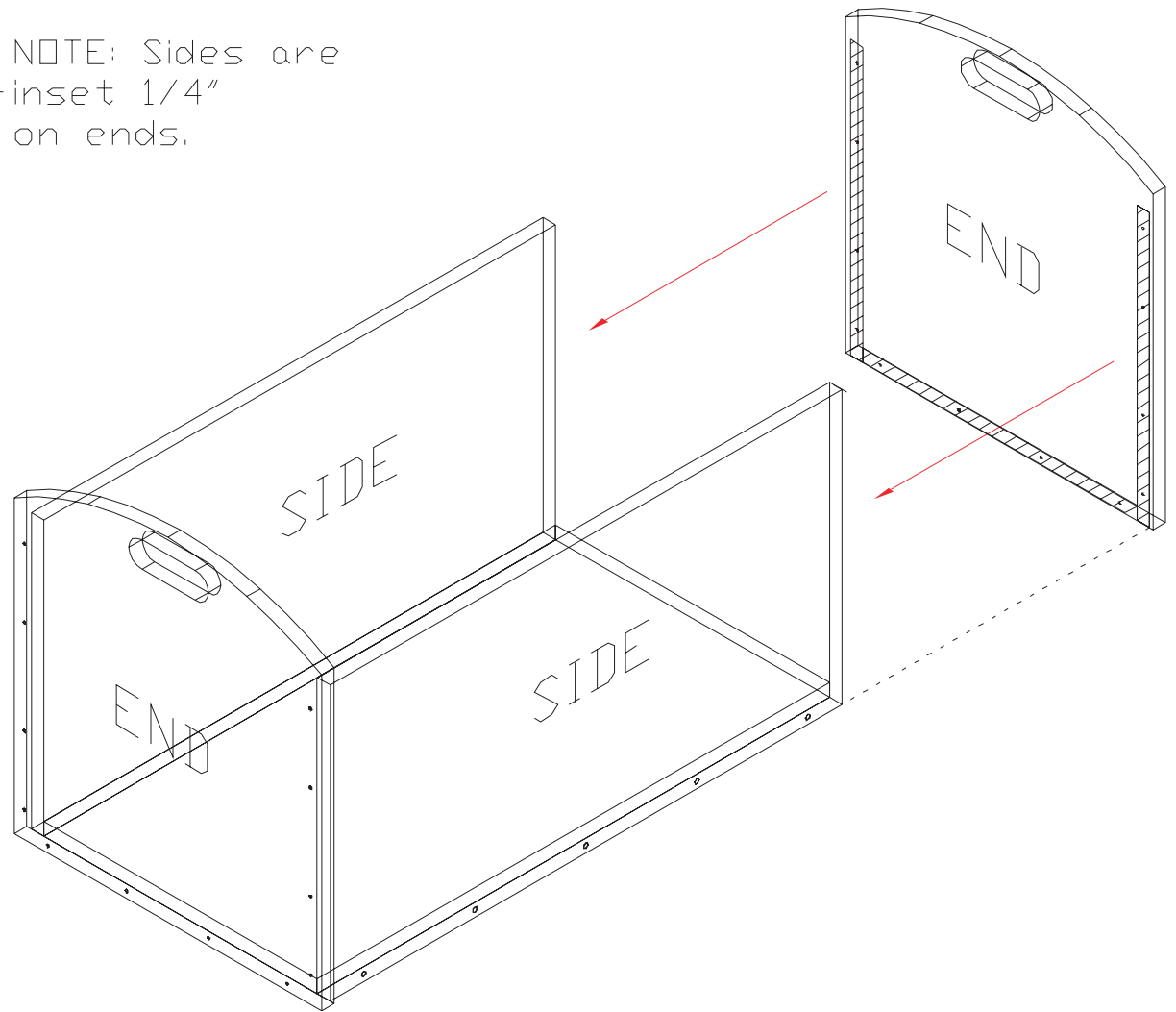


Fig #6

Figure no. 7

# Chest Hinge Detail

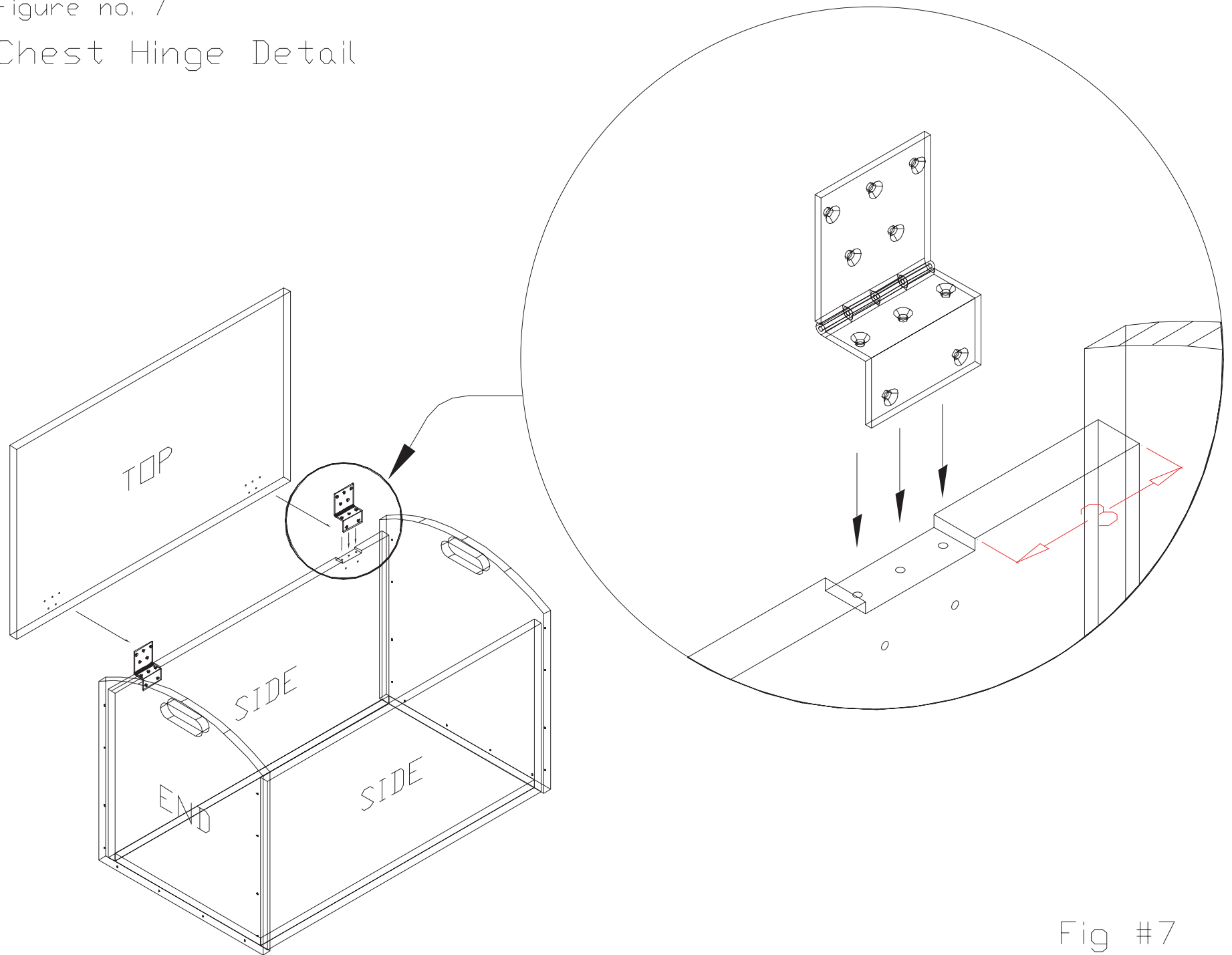


Fig #7