SHOPPING LIST
19 – Simpson Strong-Tie® MP24 Mending Plates
19 – Simpson Strong-Tie® TP15 Tie Plates
12 – Simpson Strong-Tie® A21Z Angles
14 – 2x4x8’
22 – 1x6x8’
9 – 1x2x8’
51” of 1x4’
2 – Sheets of ¾” Plywood
2” Wood Screws
1 ¼” Wood Screws
1 ¼” Brad Nails
Wood Glue

TOOLS
Tape Measure
Speed Square
Pencil
Circular or Miter Saw
Drill
Brad Nailer
Jig Saw
Hammer or Mallet
Clamps
### CUT LIST

#### FRONT FRAME
1. 2x4 @ 70 ½” (top rail)
2. 2x4 @ 63 ½” (middle rail)
3. 2x4 @ 33 ⅞” (bottom rail)
4. 2x4 @ 55 ½” (side stiles)
5. 2x4 @ 45” (middle stile)

#### BACK FRAME
1. 2x4 @ 70 ½” (top and bottom rails)
2. 2x4 @ 48” (side stiles)

#### SIDE FRAMES (2)
1. 2x4 @ 48” (bottom rails)
2. 2x4 @ 41 7/32” (top rails, ends cut at 5° angle)
3. 2x4 @ 56 ½” (front stiles, top ends cut at 5° angle)
4. 2x4 @ 51 33/64” (back stiles, top ends cut at 5° angle)

#### RIGHT WALL
1. 1x6 @ 48”

#### LEFT WALL
1. 1x6 @ 48”
2. 1x6 @ 12”
3. ½” Plywood @ 26”x24”
4. 1x2 @ 29” (window trim)
5. 1x2 @ 24” (window trim)

#### BACK WALL
1. 1x6 @ 75”
2. 1x6 @ 12”
3. 1x2 @ 54” (window trim)
4. 1x2 @ 22” (window trim)
5. 1x4 @ 51” (window ledge)

#### FRONT WALL
1. 1x6 @ 75”
2. 1x6 @ 43”
3. 1x6 @ 15”
4. 1x6 @ 12”
5. 1x6 @ 7”
6. 1x2 @ 44” (door trim)
7. 1x2 @ 28” (door trim)
8. 1x2 @ 22” (window trim)
9. 1x2 @ 19” (window trim)
10. 1x2 @ 22” (window ledge)
11. 1x2 @ 59” (transom window trim)
12. 1x2 @ 5 ½” (transom window trim)

#### ROOF
1. ¾” Plywood @ 55”x48”
2. ¾” Plywood @ 55” 31”
**STEP 1**
Build the front frame by joining the 2x4 pieces as shown. Screw in TP15 tie plates to the interior side of the frames at the joints and pound in MP24 mending plates to the exterior side of the frames as shown.
**STEP 2**

Build the back frame in the same way: with TP15 tie plates on the interior side of the frame and MP24 mending plates on the exterior side of the frame.
**STEP 3**

Build two side frames. Keep in mind these sides will mirror each other. Join the wood with TP15 tie plates on the interior side and MP24 mending plates on the exterior side. Notice that the top ends of the side stiles and both ends of the top rail are cut at a 5º angle off square.
STEP 4
Place the four sides together as shown and construct the carcass by attaching with three A21Z angles at each corner. Notice how the MP24 mending plates are on the exterior sides of the frame and TP15 tie plates are on the interior sides of the frame.
STEP 5
Attach the tongue and groove boards to the right side frame with 1 ¼” brad nails. Begin with the bottom board with the tongue facing up and gently tap the next board into place and work your way up. You may want to use a sacrificial scrap block so you don’t damage the tongue. Also, notice that the top board will have to be cut at an angle. I recommend holding the top board in place and marking the line with a pencil, then using a circular saw or jig saw to cut off the excess.
STEP 6
Cut the plywood panel – notice that it is slightly larger than the window opening. Draw 3 circles onto the plywood and cut out with a jigsaw. Large circle: 12” diameter, medium circle: 10” diameter, and small circle: 8” diameter.

Begin attaching the tongue-and-groove boards with 1 ¼” brad nails. Start at the bottom with the tongue facing up and work your way up. Once again, the top board will be cut at an angle. Hold the board in place, mark the line, and cut excess with a circular saw or jig saw. Attach the plywood to the tongue-and-groove boards with 1 ¼” brad nails and wood glue.
STEP 7
Attach window trim with 1 ¼” brad nails and wood glue.
**STEP 8**
Attach tongue and groove boards to the back frame, starting with the bottom board with the tongue facing upward. Attach with 1 ¼” brad nails.
STEP 9
Attach window trim with 1 ⅛” brad nails and wood glue. Add the window ledge last. Use wood glue and 1 ⅛” brad nails.
STEP 10
Attach window trim to the interior side of the back panel with 1 ¼” brad nails and wood glue.
STEP 11
Attach the tongue-and-groove boards to the front frame with 1 ¼” brad nails. Start with the bottom boards, tongue facing upward, and work your way up.
**STEP 12**
Attach transom window trim first. Use 1 ¼” brad nails and wood glue. Next, attach the door and window trim with 1 ¼” brad nails and wood glue.
**STEP 13**
Attach roof panels to the 2x4 frame with 1 ¼" countersunk wood screws. You may need to attach a middle 2x4 support for added strength.