

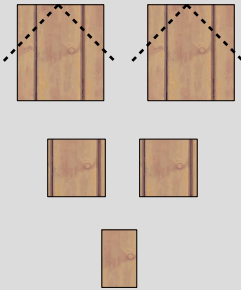
# Barnwood Bird Chalet (Cut List)



8" X 48"  
Working  
Board

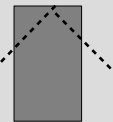
## Main House Body

Start with a wider piece of weathered barn wood. Mine allowed for a full 8 inch wide rip cut and I could still cut out the damaged areas to give me a clean edged board. You could also use rough sawn Cedar. 1 X 8 Cedar would give you dimensions of  $\frac{3}{4}$  inch thick and 7  $\frac{1}{2}$  inches wide. This still works within the license plate roof.



## Initial Cuts

- Cut (2) pieces for front and back of the house at 8 inches wide X 10 inches tall.
- Cut (2) pieces for sides of the house at 4  $\frac{1}{2}$  inches wide by 6 inches tall.
- Leave material for covering the inside bottom of the birdhouse. Roughly 3" X 6  $\frac{1}{2}$ ". Trim cuts will vary.



## Doorway Gable

Using another color of faded barn wood, cut a small piece 4 inches wide X 8 inches tall. This will serve as a decorative accent to the front of the birdhouse and serve as the doorway and entryway hole for the birdhouse.

## Wood Choices:

While painted barn wood provides the most rustic look to the finished birdhouse, rough sawn Cedar or rough sawn pine will also work for your exterior. You can choose to paint or stain the wood as well to give you a two tone look to the front of the house, but all types of wood should be sealed after paint or stain with exterior Spar Urethane to help seal out moisture and provide greater protection for the wood.



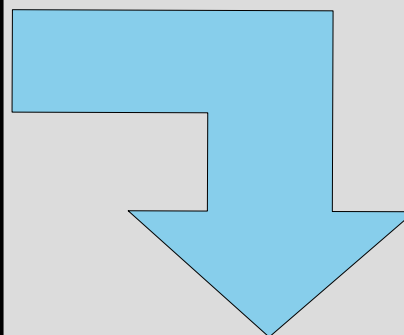
# Barnwood Bird Chalet (Other Materials)



Use a standard North American license plate for the roof. Mexico, Canada and the U.S. all use the 12 inch by 6 inch dimensional standard. When folded in the middle at a 45 degree angle, they will form a roof section that covers a birdhouse roughly 8 inches wide by 5 ½ inches deep.



You have the option to mount this Chalet birdhouse on it's own wood post sunk into the ground and set at a height you prefer. See the video for how this was set up for both bird house projects. You may also choose to drill a hole into the top of the license plate and mount a hook or a threaded eye bolt to hang the house from a tree, fence bracket or other elevated garden hook.



- ¾ inch flat headed trim nails for attaching the roof.
- 1 ½" brad nails to pin the glued corners of the house.
- 1 ½" exterior trim headed screws to secure the bottom.
- 5/16" wooden dowel to be used as the perch sitting under the entry hole
- Titebond III or other exterior waterproof wood glue.
- Hot glue.
- SPAR Exterior Urethane to seal the finished birdhouse
- OPTIONAL: Epoxy and blue colorant to tint the false windows.



# Barnwood Bird Chalet (Tool Options)



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## Getting Started:

For this project and video my primary tools were a table saw, band saw and drill press. I also realize that there are people who would like to do a project like this but who do not own all these tools. That's OK! There are simpler ways to achieve the same cutting and drilling result without an expensive tool set. As we work through the build steps I will highlight where alternative hand tools or more inexpensive power tools can get the job done. For my video, obviously, I use the tools I already own.

## Preferred Tools & Optional Methods:

**Table Saw** for rip, cross and miter cuts

- Optional: A hand saw or inexpensive jig saw can also make these cuts  
Mitered corners are not required. An end-to-end or "butt" joint works too.

**Band Saw** for cutting out the false door frame

- This cut can be performed with a hand scroll saw or jig saw if the wood stock is safely clamped to a work table.

**Drill Press** for bird hole cutout and perch doweling

- Drilling can be accomplished with a basic power drill as well.

**5/16" drill bit** for the perch dowel

**1 3/8" Forstner bit** or paddle bit for bird entry hole

**Hot glue gun**

**Drill & Screw Bits**

**Hammer**

**Chisel**

**Nail Punch**

## Safety & Comfort Levels:

This is considered to be an extremely simple woodworking project by assembling a 4 sided box and attaching a pre-sized metal roof. However if you are a novice woodworker, you must be extremely careful using any power tool in order to avoid injury. Read all the tool usage manuals and safety instructions before using any power tool and stay safe. We want you to keep all your fingers and toes! Novice or not, always be cautious using these power tools.

For this project you should be wearing ear protection, eye protection and a dust mask as you cut any wood. Stay safe. Breathe clean air. Protect your eyes.

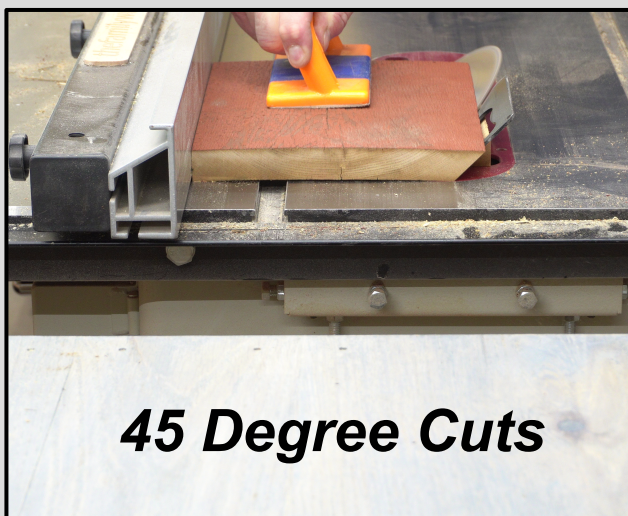
# Barnwood Bird Chalet (General instructions)



**First 90 Degree Cuts:** Start with cutting your two larger house sides first. They will be 8 inches wide by 10 inches tall, where the woodgrain should be running vertically towards the peak of the roof. If your lumber is not the full 8 inch width, as you will find with 1 X 8 Cedar for example, use that maximum board width for the overall house width and cut it down to 10 inches tall. Your board will likely be close to 7 ½ inches wide.

Next you will cut the 2 smaller sides of the house. My video example shows a narrow cut at 4 ½ inches for the width and 6 inches for the height of each rectangular piece.

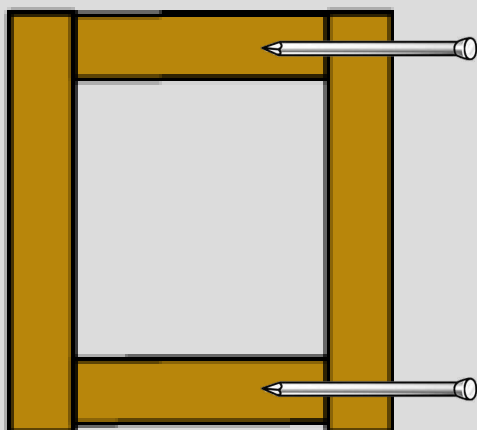
**DESIGN ADJUSTMENT:** If you choose to leave off the decorative gray front addition I show in the video, you can cut your house width at 5 ½ inches and still fit under the license plate roof.



**45 Degree Cuts:** For all corner edges of the house, set your table saw at 45 degrees for mitered cuts. Set rip fence to only cut the bevel up to the top / front facing edge of the board. The goal is to cut a clean bevel but not take away any of the width of the board. Use a quality push stick or grip pad to keep your fingers away from saw blade. See the video for how the cuts were made.

**DESIGN ADJUSTMENT:** If you don't own a table saw and/or do not want to cut a 45 degree bevel joint, you can also join your house corners with a flat edge to edge or "butt" joint. You will need to test fit your pieces together and adjust your cut widths with a butt joint, to make sure your assembled house still fits under the license plate roof.

**NOTE:** the holding strength of the butt joint will not be as strong as mitered corners after the glue up. You will want to add 1 ½" brad nails to help hold the corners together after the glue dries. For that matter, add brad nails to mitered corners too.





# Barnwood Bird Chalet (General instructions)



**The Roof Lines:** For each of the two wider pieces that represent the front and back of the house, mark a center point at the top of each 10 inch piece. If the wood is an honest 8 inches wide, your center point will be at 4 inches.

Using a speed square or a bevel guide, mark a line from the top mark down at that 45 degree angle to each side of the board. This will represent your cut line for the roof.

Without a speed square on a 10 inch tall board, your line should run from the top center mark to a point 6 inches up from the bottom. When finished drawing, you should see a perfectly symmetrical 45 degree roof line on both sides of each front and back piece.

Using the table saw and your miter gauge set at 45 degrees, start your cut on the line and remove the corners.

**ALTERNATE TOOLS:** Without a table saw, these 45 degree cut offs can be completed with a hand saw or an inexpensive jig saw. Be sure to clamp down the board to keep it secure and allow for whatever cutting blade you choose to have free movement through the wood and away from any table or bench. Keep your hands away from the board, and avoid holding the board with your free hand as you cut. No finger damage please!

**The Decorative Front:** With an different colored or stained piece of barn wood, cut a rectangular piece of that wood 8 inches tall by 4 inches wide. Following the same instructions above for marking and cutting the roof lines, cut 45 degree angles on the top of the piece to match the angle of the larger roof line.

Mark a center line on the back of the piece from the peak of the roof down the middle of the piece. Mark a point 4 inches up from the bottom of the piece. This will be the drill point for the 1 3/8 inch Forster or paddle bit.

Using a drill press or power drill, add the bird hole at the marked center point 4 inches up from the bottom. Once complete, place the decorative front to the bottom left of the wider front piece as shown in the video. Mark the hole on the wider house front and drill out the bird hole on the house front. When stacking the two pieces together, the bird entry holes should line up.



# Barnwood Bird Chalet (General instructions)



Draw 2 straight lines down from the sides of the bird hole square to the sides of the decorative front. This will simulate an arched doorway on the front of the house. Your width of this doorway should match the diameter of the drill bit used. In the video, this was the 1 3/8 inch Forstner bit. Cut out the doorway on the band saw.

**ALTERNATE TOOLS:** Without a band saw, it is easy enough to clamp the peak of the roof on the edge of a work table and cut straight lines with a jig saw or hand saw.

**ASSEMBLY:** Starting with the 4 sides to the bird house, align the bottoms of the 4 sides painted side up on your work table. Once the bottom edges are aligned and square to each other, stretch two lines of painters tape or masking tape across the four pieces, pressing the tape down for a good bond. Carefully flip over your 4 sides so that the tape side is now down on the table, exposing the mitered edges for glue up.



Add liberal amounts of Titebond III or similar waterproof glue to the joints and roll the pieces up to bring the corners together. The tape should help keep the pieces in line as you press the last corner together and stretch the tape across the final corner to complete the frame. See video for this process.

**DESIGN ADJUSTMENT:** If using butt joints, tape will still help hold your corners together, though you will have to adjust the positioning of the pieces to make sure they fit together neatly in the corners. If you own longer clamps, use those here.



**Cut The Bottom Last:** Depending on the wood you choose and the actual thickness of the boards, your final dimensions for the inset bottom will likely be different from mine. Standard lumber yard Cedar will be pretty close to 3/4 inches thick, but my barn wood was nearly an inch in thickness. After you complete the construction of your 4 walls, measure the gap on the inside bottom and cut your final piece of wood accordingly. Don't make it too tight. You'll want to undo those screws annually to pull off the bottom and clean out the previous owner's crud. Use 1 1/2 inch to 2 inch exterior rated small head deck screws to secure the bottom to the house. They will never rot or rust when you need to take them out.



# Barnwood Bird Chalet (General instructions)



**The ROOF, The ROOF:** We skipped over the license plate roof but I didn't forget! This can be any North American automotive license plate. What I didn't know until researching the dimensions is that Mexico, Canada and the U.S. all use the 6 inch by 12 inch standard. Makes it easier to manufacture bumpers across national boundaries I guess, but a cool option for you as you build this!

Bend the plate on a center line over a square edged work table or a bench vise. You can use the holes already punched in the plate for screws to attach to the bird house, though I also had to punch small holes to allow the use of  $\frac{3}{4}$  inch flat head trim nails to attach the front side of the plate.



**The Perch:** Just below the bottom of the bird hole, drill a  $\frac{5}{16}$  inch hole through the front wall for a wooden dowel. Trim the dowel to allow the length to be glued well into the hole but stick out the front of the house just past the width of the false front trim.

**Display:** This little birdhouse can be mounted in a ton of different ways. In the video, I used the branch cut off from a post that holds up my earlier "Three Level Bird Condo", a video and set of free plans I created last year. Plans available on the same thefamilywoodworker.com website. I mounted the new Chalet on an angle to the original post and it looks pretty awesome. The roof is sturdy enough to hold the weight of the house, so a center drilled hole and an attached hook on the top of the license plate would allow you to hang this from any tree or garden hook.

**OPTIONAL STUFF:** If you are comfortable working with a chisel and colored epoxy then a fake window is right up your alley! Carve out a square to a shallow depth and add a thin layer of epoxy for a cool window effect.



Best of luck on your build! Please drop us a line on how the project went and the color combinations you were able to find in weathered barn wood. I saw some faded yellow barn wood at my local supplier and thought that would look pretty awesome too. Ah well. Sounds like another project!

Best,  
Mark - TFW