Building a Gable Style Chicken Coop

This is a straight forward design of the most popular style the basic gable Chicken Coop

This instruction is for building a fronted by a centrally located chicken door with symmetrically placed windows on both sides.

Let's get started, the overall size of this Chicken Coop requires only concrete blocks or skids for a foundation. We recommend this to give the building better stability. First examine your site area to make sure that it will handle the size structure that you are planning to build. This design can be easily adapted by adjusting the front and back walls to the desired dimensions.

The roof construction is made-up of very simple trusses, which are simple to build and will make the structure more stable. The materials can vary depending on your preference and if the region that your Chicken Coop is located allows. For our example we will use asphalt which we will lay over plywood sheathing and 15-pound roofing felt.

Other materials we will need are as follows:

- Pressure treated 4x6 lumber for skids, precast concrete piers or concrete for footings
- 2x4s for the floor joists, top and bottom plates as well as the wall studs, ceiling joists, rafters and truss supports. Prefer Pressure treated for flooring joists.
- Treated 2x6s to be used as runners
- 5/8-inch plywood for gussets, flooring and roof sheathing.
- 15-lb roofing felt, asphalt shingles and roof caps
- Galvanized nails or outdoor screws
- Anchor Bolts
- Metal framing brackets and fasteners
- Windows
- Door hardware (locking "T" Handles, Hinges and Barrel Bolts
- Vents

Now that the planning is done it is time to get started constructing your Chicken Coop.

The easiest and least expensive foundation is a skid foundation there are several other types to choose from depending on your various needs but this offers you the flexibility to move your coop at a later date if needed. Plus it is offers a very stable foundation for this type of coop.

Let's get started following the following steps:

Preparing the site is very important in keeping your Chicken Coop stable and level. Start by scraping away all grass or weed material from the shed site area. If this area or the soil condition does not drain well, remove 4 to 6 inches of earth from this area and replace it with 4 inches of pea gravel, this will help increase the drainage and minimize the wood to soil contact.

Floor

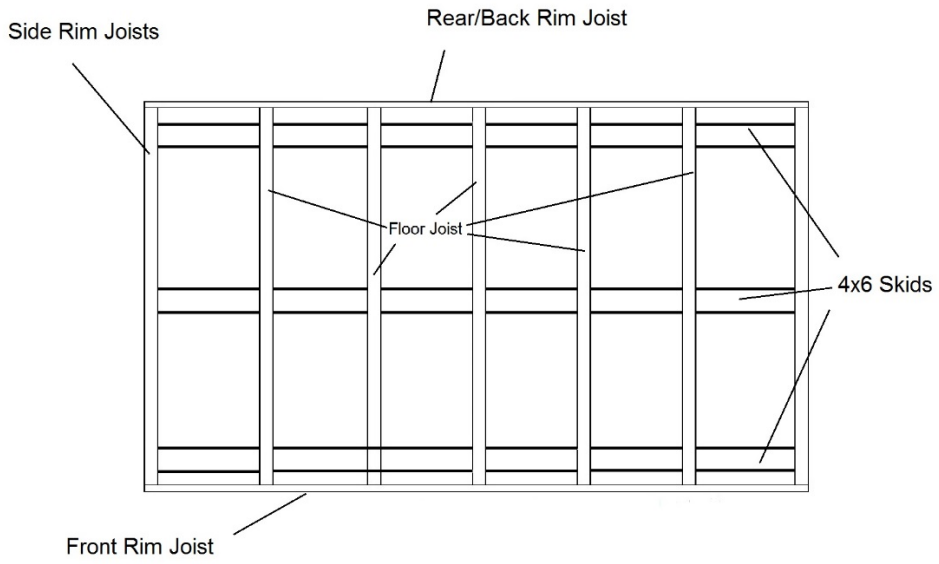
With the site prepared now it is time to place the skids. The skids should be 4x6s of pressure treated wood to prevent them from decay if they come in contact with the ground or moisture. Place the 4x6s by placing one in the center and the other two 3 feet from centerline to centerline and make sure that the skids are level using additional pea gravel where needed.

Next we need to nail the outer rim joist to the skid starting with the side joists using 2x8s toe nailing them to the skid then adding the front and rear rim joist.

Now we are ready to construct the floor frame, first make sure that the floor frame is square.

Once that is done we are ready to complete the floor framing by adding the remaining 2x8 floor joists at 16 – inch centers to the rim joists by either using at least 3-16 d coated sinkers at each end or for extra strength metal joist hangers.

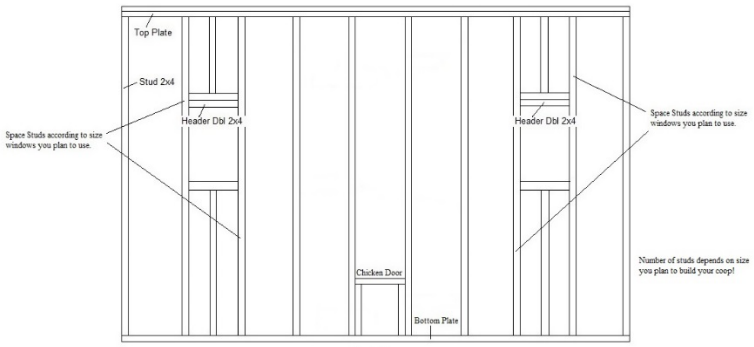
You're now to install the 4x8 foot x ¾-inch CDX plywood to construct the floor. Fasten the plywood to the floor joist using 8d nails 6-inches on center at the edge of the sheets and 10 inches on center along the secondary joists. Of course the number of joist or studs will depend on how large you intend on building your coop.



Wood Skid Foundation

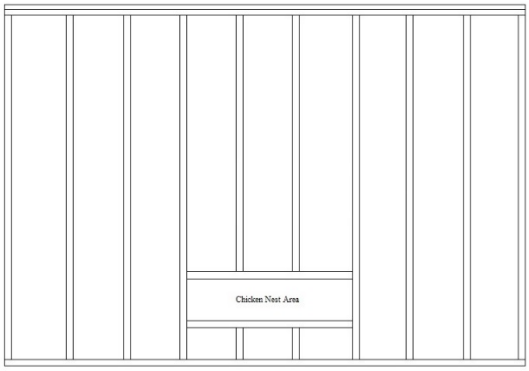
Walls

The walls are easy as you construct them independently and then raise them. First you start by cutting the 2x4s for the top and bottom plates and the wall studs. For the studs you will need 2x4s spaced 16 inches on center. Once the frames are assembled, you can now make cuts for the doors and window openings. Add the required headers, cripple studs and jack studs where needed. (see detail drawings)



Front View

To attach the walls start by raising the first wall and drive 3-inch screws through the bottom plate into the frame. Brace it in place and repeat the process with the other three walls. After we check that the walls are plumb attach them at the corners. Now we need to mark the locations for the roof trusses. They need to be placed on 24-inch centers on the double top plate. Make sure to cut the bottom plate for the door before moving on at this point. It is much easier to do this after the wall is in place.

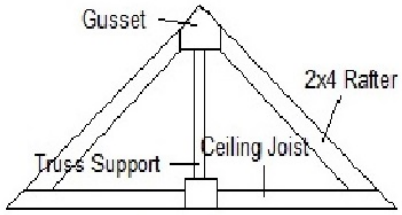


Back View

Trusses

The roof framing consists of seven premade trusses that are placed, as we said earlier on 24-inch centers. These are constructed of an ceiling joist and long rafters that meet a 21-inch long truss support. These pieces

are held together with a 5/8-inch gusset made from plywood. (see detail drawing)



Truss Detail

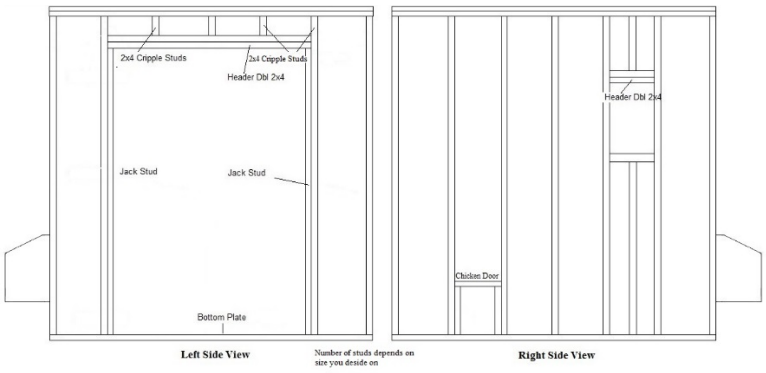
After we have made the trusses it is now time to attach them to the top plate. Start with the end trusses first. Place the truss on the end plate so that they hang over the front and back equally and flush with the wall frame on the side. Now take the other five trusses and place them on the marks you made previously on the top plate aligning them with the end trusses and attach them.

Since we are using asphalt shingles, lay down 5/8-inch plywood sheathing on top of the trusses. This is done by starting at the bottom and working your way upward. Now cover it with the 15-pound roofing felt, the shingles and ridge caps. If you are working with another type of roofing material please make sure to follow the manufacturers recommendations for installation.

Finishing Walls

Finishing the walls can be done using multiple materials such as vinyl siding, cedar siding etc.

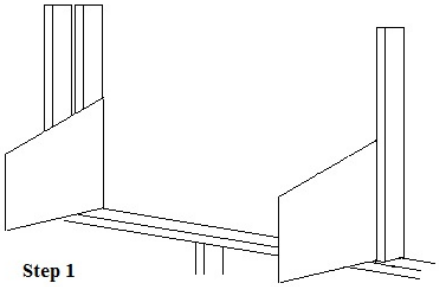
For our coop in this we are going to use what is called t-111 sheets. Start by placing the first sheet ¾-inch below the bottom plate and install the siding vertically until you reach the top plate. Now finish installing all the exterior trim as desired.



Chicken Coop Nest Box

Step 1

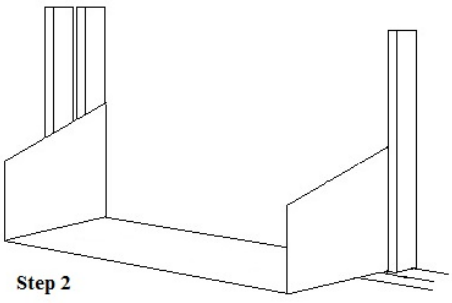
To get started measure and cut two pieces from your plywood. 14” wide, 18” high on the tall end, and 12” high on the short end. Then attach these pieces to the studs to act as the sides for your box, make sure they are flush to the back of the studs, and drive screws or nails through the plywood and into the studs.



Step 1

Step 2

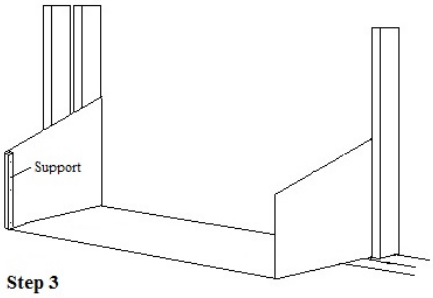
Next measure and cut a piece of plywood 40- 3/4” wide, 14” deep, this will serve as the bottom of the box. Attach it between the side pieces, driving screws or nails from the side. It should also fit flush to the front, back, and bottom.



Step 2

Step 3

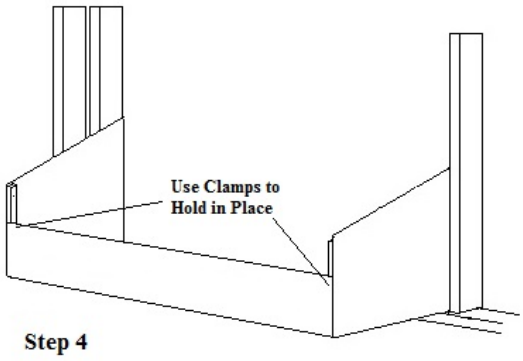
Now measure and cut two pieces using one-by-two lumber, each 11” long to serve as side supports. Attach these two pieces to the inner front edge of side walls.



Step 3

Step 4

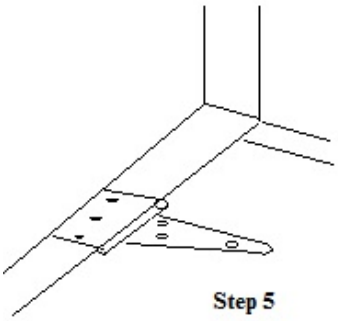
Taking your plywood measure and cut the door side, 8- 3/8” high, 42- 1/4” wide. It should sit flush to the edges and bottom of the box. Use clamps to hold it in place.



Step 4

Step 5

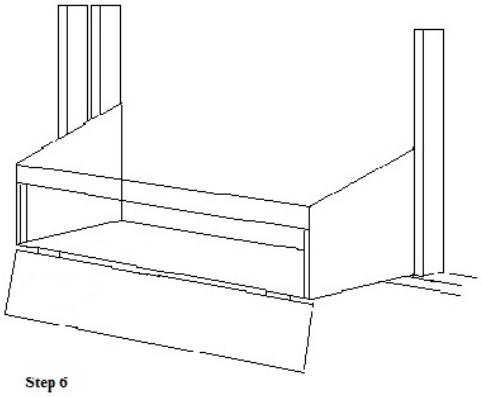
Attach hinges to the bottom of the door section. While pressing the door section flush to the bottom of the box, attach the other side of the hinges to the bottom of the box.



Step 5

Step 6

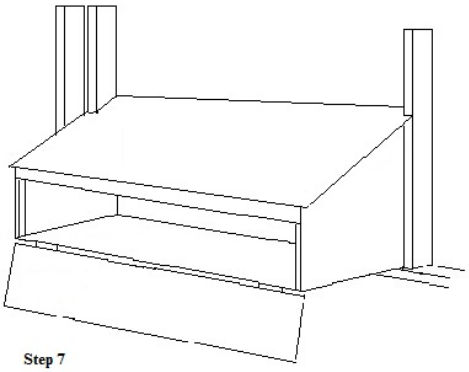
Now measure and cut the top front piece, 3- 1/8” high, 42- 1/4” wide. If you can angle the foot plate on your circular saw, set it at about 30 degrees so that the top cut will match the angle of the side pieces and roof. Line up the bottom edge of the top front piece so that there’s an even gap of about 1/8” to 1/4” between the closed door and the top piece. Attach the top front piece to the sides.



Step 6

Step 7

Measure and cut the roof piece, 45- 1/4” wide, 17- 1/2” deep. Make sure to measure the dimensions of your studs, and cut out notches from the upper corners of the roof so that the piece will fit around the studs. Attach the roof piece to the side pieces.

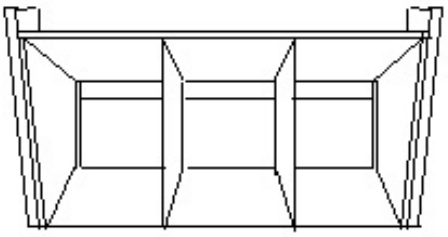


Step 7

Step 8

Now it is time to work on the dividers. Measure and cut the nesting box dividers, 14” wide, 17 1/4” high on the tall end, and 11- 1/4” high on the short end. Space them where you want them, making sure they fit between the floor and the roof and sit flush with the edge of the floor (on the henhouse side). Use a square to get everything straight, trace with a pencil on the floor and roof where the dividers will go, then remove them.

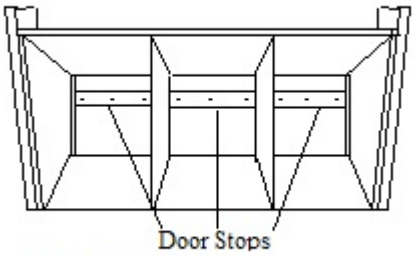
For each divider, pre-drill a couple holes between the pencil marks all the way through the floor and again through the roof. Reinsert the dividers, then attach them from above and below, driving through the holes you just made.



Step 8

Step 9

At this point we need to add door stops. We need to measure and cut the three door stops from the one-by-two, 12- 1/4" for the left and right stops, 13- 1/4" for the center stop. Attach using screws from inside the henhouse so that they overlap the outer door opening by 1/2" or so. These stops will help keep light and drafts out of the boxes. Also just in-case your plywood door has a slight bow to it, and it runs into the stops and does not close flush, you can loosen the stops a bit until you get the closure you desire.



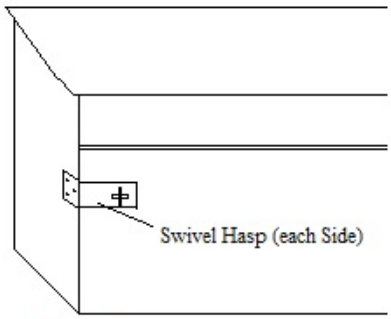
Step 9

Step 10

It is time to prime and paint or stain/seal the wood. You should apply a couple coats of glossy white on the inside of the boxes for the best protection. If you're not going to add any additional roofing material, add a third coat of paint/sealer to the nesting box roof. At this point you can caulk any gaps before you paint using a clear silicone caulk or wait until, after attaching the siding.

Attach your siding to the wall of your henhouse, cutting it around your nesting boxes.

Add latches to prevent predators from getting to the nesting area. You may need one or two depending on your preference.

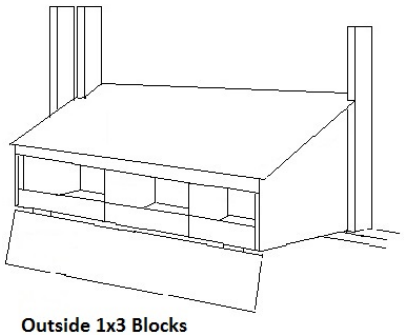


Step 10

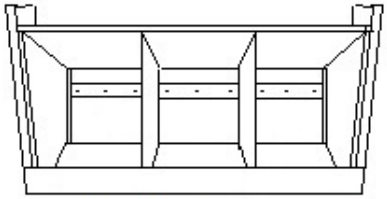
The Last Step

Keeping the nesting in the nest and easily cleaning the nest and not having things go all over the coop. Measure and cut a 1x3 to fit between the boxes place just inside the door. Do not attach this way it will be

easy to remove for cleaning from the outside and keep the next in place when the door is open to collect the eggs. On the inside measure and cut a piece of 1x3 and place across the entire length of the nesting box making sure that it fits flush with the bottom and sides.



Outside 1x3 Blocks



Inside Block or Purch

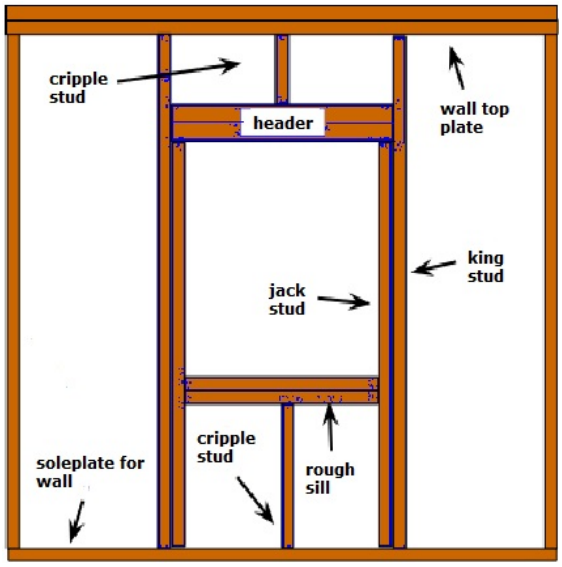
Windows and Doors

Installing the windows for chicken coops is easy.

Window Framing and Installing

At Shed Windows and More, Inc. we offer a wide range of window sizes and shapes. For our purpose here we will just address the vertical slider (single hung type) windows.

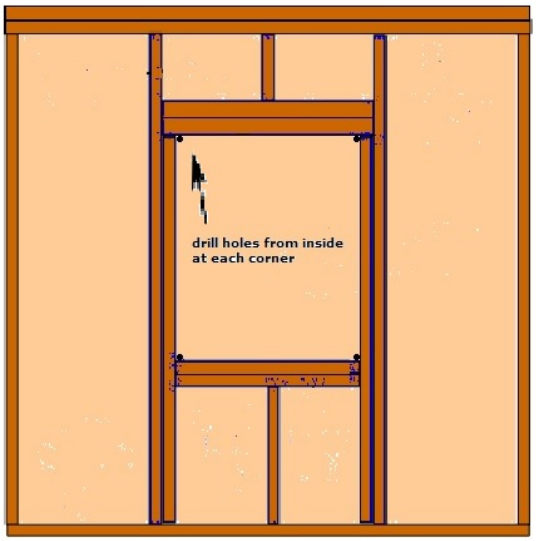
The window frame is important when building a shed or chicken coop since it supports the weight of the wall around the opening using the various studs to transfer the load to the foundation. Starting at the top wall plate the stud called the cripple stud transfers the load from the top plate to the header (two 2x4's nailed together) (for home construction a 2x6 is generally used). At the sides both the jack and king studs support the header and transfers the load to the soleplate or floor. The bottom of the window opening we again use two, 2x4's that are nailed together to form what is called a sill (some call it a rough sill) which while supported by a cripple stud does itself not support any of the wall weight, but merely acts as a place to anchor the base of the window. (see figure 1.)



Framing for Window

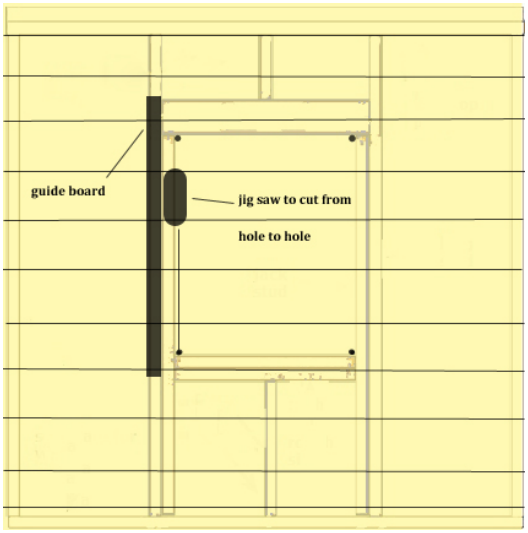
Figure 1.

The rough opening or buck size can be obtained by going to our catalog page. If you are using an out-door T-111 type siding on the outside of your shed you can use either the flush mounted window or J channel (sometimes called J lapp) window. After attaching the T-111 to the outside of the framing it is time to cutout the opening for the window. Drill a hole at each corner using a 5/8" drill bit in-order to make the holes large enough to accept a tape measure for marking your cutting lines on the outer siding and the saw blade of your saber saw to cutout the opening. Before cutting you should fasten a straight, 1x3 board to the siding along the lines to use as a fence to guide the saw blade. Be sure when fastening this guide board that the holes left by these fasteners can be covered by any molding you are going to use. (see Figure 2 & 3) Be sure to take the width of your saws base-plate (including width of the blade) into account when setting the fence board.



Inside Wall

Figure 2.



Outside Wall

Figure 3.

If you are using a vinyl siding, the J channel window should be used since it offers a separate channel to accept the vinyl siding. Some people also like to use this channel on the T-111 to use with their trim boards around the windows. (see Figure 4.)

"J" Channel Window

Figure 4.

Remember whenever you are cutting out a hole to add a vent or some other items to always make note where your studs are located and to plan ahead if at all possible.

How to Make a Door

Making a door for a shed or chicken coop is fairly simple even if you have never done so before. These instructions are for making a single door just make the necessary adjustments for the double door application.

First you measure the height and width of the opening for the door carefully. (Split in Half for Double Door) Then transfer these measurements to a sheet of t-111 plywood marking the dimensions with a pencil. Cut the sheet along the marks with your circular saw. Next hold the cut sheet of plywood in place over the opening to verify the measurements. Mark any adjustments needed onto the wood and trim with your saw.

With the t-111 Plywood ready now cut two 2-inch-by-4-inch planks to the width of the door with a saw. Hold the planks against the cut plywood to verify the size. The ends of the plank should be flush with each edge of the t-111 plywood sheet.

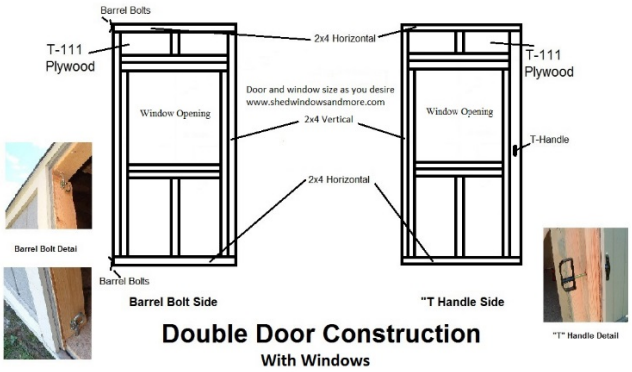
Spread wood glue along the face of each plank and press the glued face against the plywood so that one plank is flush with each side of the t-111 plywood and the top of the plywood, while the other plank is flush with the bottom and sides. Clamp the planks to the t-111 plywood.

Drive 2-inch screws or nail every 8 inches through the face of the t-111 plywood into the sides of the planks.

Repeat the process with three additional planks that will stand vertically flush with the edges and press against the edges of the upper and lower horizontal planks. Cut the vertical planks to the height measurement minus the width of the top and bottom 2x4s. Attach the planks to the plywood with glue and screw or nail. The side that you plan to have the “T” Handle Lock should have one 2x4 laying on the 4-inch side flush with the end of the t-111 plywood and another 2x4 butted up against it. See the “T” Handle Detail.

Starting at the top of the door, the stud called the cripple stud (remember from the window section) transfers the load from the top plate to the header (two 2x4’s nailed together). At the sides both the jack and king studs support the header and transfers the load to the soleplate or floor. The bottom of the window opening we again use two, 2x4’s that are nailed together to form what is called a sill (some call it a rough sill) which while supported by a cripple stud does itself not support any of the wall weight, but merely acts as a place to anchor the base of the window.

The rough opening or buck size can be obtained by going to our website. If you are using an out-door T-111 type siding on the outside of your shed, playhouse or chicken coop you can use either the flush mounted window or J channel (sometimes called J lapp) window. After attaching the T-111 to the outside of the framing it is time to cutout the opening for the window. Drill a hole at each corner using a 5/8” drill bit in-order to make the holes large enough to accept a tape measure for marking your cutting lines on the outer siding and the saw blade of your saber saw to cutout the opening. Before cutting you should fasten a straight, 1x3 board to the siding along the lines to use as a fence to guide the saw blade. Be sure when fastening this guide board that the holes left by these fasteners can be covered by any molding you are going to use. (see Figure 2 & 3 of the window section)) Be sure to take the width of your saws base-plate (including width of the blade) into account when setting the fence board.



How to Install A “T” Hinge

A "**T"-hinge** is a very common type of hinge shaped like the letter "T." This hinge is known for placing practicality over good looks but at times can be most decretive. They are often used on barn and shed doors, lids for toolboxes and cabinets. Because they are not recessed like some other types of hinges, installing them is very easy and can be done by anyone even you.

Step 1 – Drill Pilot Holes For Screws

Dry fit the **"T"-hinge** onto the items to which it is going to be attached and mark where the screws are to go. If you where to hold the **"T"-hinge** upright so that it resembles the letter "T," the shorter horizontal portion would be the base and should be attached to the anchored non-moving part of the project. For example, if the **"T"- hinge** is being attached to a door, the horizontal part of the "T" shape should be attached to the frame and the longer vertical piece should be connected to the door itself. Once you have the screw holes marked, drill pilot holes to keep the material from splitting when the screws are installed or simply use a screw with an arbor tip.

Step 2 – Securing the Screws

Once you are ready to secure the **"T"-hinge** and have either pre-drilled the pilot holes, or are using the arbor tipped screws, the thread screws through the holes provided on the hinge. Be sure to screw them into the anchored or non-moving side first. Use a screwdriver or power driver to tighten them down fully. Next, install the screws just the way you just have done on the door or other swinging item the hinge will be moving.