spenard builders supply 3

How to Build Your Caribou Cabin



Step-by-step instructions on how you can build your own Caribou Cabin!

Build Your Caribou Cabin



FAST! Building shell done in a weekend, ready for your choice of finishes.

Fast - Portable - Flexible

PORTABLE! Most components weigh less 100lbs. and can be handled by two people.

FLEXIBLE! You choose how big or small to build. Customize with Add-Ons.



Floor pgs. 1-2

- Foundation
- Joists on 24" centers
- Engineered floor system
- · Minimal cutting and waste



Walls pgs. 3-5

- · Start in Corner
- Tip into place
- · Pre-assembled doors and windows
- Clamps and Brace hold in place for easy nailing



Roof pgs. 6-8

- Heavy Duty engineered trusses
- Truss stabilizers for fast, accurate layout
- Roof sized for stock metal sheets or shingles
- Maximum size with minimal waste



Millwork pg. 9

- Door
- Window
- Stairs

Having a square and level foundation is essential to the success of your build.

Level Foundation

• Pier blocks with adjustable saddles help level the three 4x8-20' pressure treated beams used for the main support for the floor. This is critical- level between the beams as well as along the length. The entire structure needs to be level.

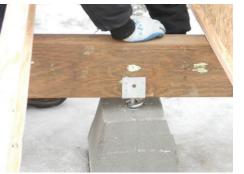


- Temporarily nail a 2x6 to both ends of the beams to hold them in place while you are checking square. You can check the square of any right-angle structure by checking the diagonal measure using the basic 3-4-5 triangle.
- Measure 3 feet along one side, and at 90 degrees from the starting point - measure 4 feet along the other side, - the diagonal between the two points should be 5 feet. Adjust the sides as needed until the diagonal measurement is at 5 feet. (Any combination of 3-4-5 will work; 6-8-10 etc.)
- Verify the overall diagonal measurement from corner to corner. The 12x16 should be around 240", the 16x20 should be around 306"; this may vary slightly, as long as both diagonals are even.
- Adjust beams as needed to get the measurement needed. Secure beams to saddles using 16d galv nails.

Floor Joists

- Check the BCI Bean length, the 12x16' kit should be trimmed to 11' 9-3/4" and the 16x20' kit should be trimmed to 15' 9-3/4".
- To install joist hangers on rim board, trim the rim boards to 16' (12x16) or 20' (16x20) length and set side by side across the beams.
- Measure 22-9/16" from the end of the rim boards and make a mark on both rim boards. Mark at 24" intervals down the boards. Place the joist hangers (ITS2.37/9.5) and

Whether you use timbers, block, or I-beams, a good foundation determines whether the project will be easy or difficult. The panels cover the floor joists and extend a little below them. You will have to trim panels if the foundation is larger than your kit.

















center them on the marks. Attach with 4-10d common galv nails on each top and 2 on the face on the rim boards.

1



FLOOR

WALLS

Floor Joists (Cont.)

- When you are done, you should have 2 rim boards with joist hangers attached at 24" on center.
- Place the 2 rim boards on the long outside edges of beams. Use 16 (12x16) or 20 (16x20) A35Z framing anchors to attach the rim board to the 4x8 beams on the inside of the rim board using joist hanger nails, spaced roughly 24" on center.
- Place the floor joists into the hanger and press down firmly to snap these in place. Do not walk on these floor joists yet as there is a danger of collapsing.
- Temporarily screw 2x4 braces across the joists to strengthen them as you begin to lay plywood flooring in place. (You can toe-nail the joists to the center beam (16x20 only) with 8d galv nails through the web if desired, although it is not necessary.)

Insulation

 If you are insulating the floor, attach the 3/8" CDX plywood underneath the floor joists, place the insulation batts flush with the top of the floor, and put vapor barrier visqueen on before placing the floor sheathing.

Floor Sheathing

- Using PLPA-29 caulking adhesive, spread bead of adhesive on top of first 3 floor joists.
- Starting in the corner with one 3/4" tongue and groove plywood sheet, with the tongue side overhanging the edge (it will be trimmed later) and flush with the corner, screw in place with 2" screws.
- Spread adhesive caulking for next sheet. Place next sheet end to end.
- Start 2nd course with one sheet cut in half—4'x4'—to alternate joints on next course, mating tongue and groove.
- Use a sledgehammer and a scrap 2x4 beater that spans at least 2 joists to knock plywood sheets into place.
- Complete floor by screwing down all sheets using 2" screws every 6" along the edge and every 12" in the center of the sheet.
- After finished, trim tongue overhang flush with the edge to keep from interfering with the panel installation.
- Snap chalk lines 5-1/2" from the outside all around the floor. This will be the inside location of the wall panels.
- Mark where you are going to put the window and door panels. These can be placed at any interior space, but we recommend the door be placed on the gable end to keep snow/rain from blocking the doorway.



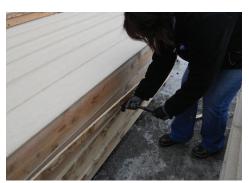






Wall Panels

- Remove the shipping protection for the lap edge on the panels; also, the door panel has a shipping block that must be removed before installation. The wall panel sheathing extends below the panels and will cover the floor joists.
- Start with the corner panel marked "L" (left), place on a corner flush to the outside of the wall and line it up.
- Level and plumb the wall panel and use a temporary brace to hold it in place. This will make the rest of the panel installation easier.
- Once level and plumb, use 16d vinyl sinker nails to secure the panel into the rim board and floor joists (not just the plywood).

















2



Wall Panels (Cont.)

- Put next wall panel in place, making sure the T1-11 panel groove is lining up, and the panel is flush with the inside mark. DO NOT nail the T1-11 seams yet. Use a clamp or two to hold edges of the panels together, and nail the bottom plate as before.
- Nail the panel edges together using 10d nails in staggered rows every 12".
- Check for plumb and level, adding temporary 2x4 braces as needed.
- Continue adding panels, paying attention to where the door and window panels are located, and ending with a corner panel.
- This last panel will be a very tight fit, and you may need a sledgehammer to force the panel into place. Once in place, clamp, and nail together as previously.

















Top Plates

- These align and tie the panels together. Use 2x6 12' and 16' for the 12x16 cabin, and 16' and 20' boards for the 16x20 cabin, for top plates.
- Start in a corner making sure they lap the corner panels. Nail to hold in place for now.
- Check and brace walls for plumb.
 Use a string line run from corner to
 corner on the inside walls and check
 plumb align each wall with the
 corners, bracing all 4 walls using
 2x's as temporary bracing.
- Once all walls are aligned, vertically plumbed and square, clamp top of wall at 3 joints, using a filler block to protect the grooved panels and help pull the joint together evenly.
- Nail top plates with 10d galv nails into every wall panel stud all the way around.
- Nail the T1-11 seams and bottom overlap using 10d galv nails every 6 inches.

















4



ROOF

ROOF

Trusses

- Are set at 24" OC. Mark top plates for placement of trusses. Once laid out, you can place all the trusses upside down together on the top plate.
- To prevent the first truss from falling off the gable end, fasten a couple of keepers sticking up from the gable end wall.
- Add a 7/16" spacer (the edge protectors from the grooved panels works well) to account for the sheathing to be placed on the gable later. Set the gable truss in place and nail the truss to the keepers.
- Nail 4-A35Z framing anchors with joist hanger nails evenly spaced to secure the truss to the top plate.
- To install the remaining trusses, use the TSB2-24 truss spacers. Attach one about halfway down on both sides of the gable truss, set the next truss in place, attach the other end of the truss spacer to the truss, and secure using 10d common nails.
- Secure the truss with one Simpson SDWC Truss screw through the top wall plate into the bottom of the truss on each side.
- Add one TSB2-24 in the center of the bottom chord and nail with 10d common nails. Continue each truss this way. The TSB2-24 spacers stay in place; the roof sheathing goes over them.
- The last gable truss will be attached the same as the first gable truss using 4-A35Z framing anchors.

Gable Ends

- Once all the trusses are in place and secured, nail the plywood edge (z-metal) in place. You can cut to length or simply overlap it.
- Measure and cut the first gable end sheet, being careful to line up the grooves on the T1-11.















Note: the sheets don't go all the way to the end of the truss. These are filled in later with small pieces. Start even with the edge of the wall. Mark your cuts for the gable end vent on the outside under the peak where you want it to go. Cut siding out and caulk vent in place.



- The roof panels run 8" beyond the gables. Cut 2x6 blocks at 6-1/2". You will need at least one at the peak and one at the eave, but you can add more as you like.
- To measure the facia angle cut, measure from outside of the eave to the center of the peak. The angle cut should be 23 degrees on both ends, cut to the proper length. This will be cut out of the 5/4x8" smart trim.



- Start the eave 3 trusses in from the gable end. (Eave trim is 5/4x8" smart trim.) Measure from the center of the 3rd truss to the end of the gable blocks.
- Nail to the truss ends. Measure from the center of the truss out the other direction and finish the eave run the same way. Your eave and fascia should line up.

















 $_{6}$



ROOF MILLWORK

Roof Sheathing

- Start with the 3rd truss in from the gable and measure from the center of the truss to the fascia.
- Cut one sheet to fit, and place that on the roof. Factory edge should be even with the centerline of the third truss from the end. The sheet does not need to go to the edge of the eave.
- Attach the sheet with screws to the smart trim; they hold better than nails but use 8d galv nails for the rest of the roof sheathing. Make sure to drive the nails into the trusses.
- Run full sheets past the opposite fascia; mark and cut flush with t he fascia.
- Stagger the sheathing joints on the next run. Rip sheets 2'x8' to finish the last run at the peak. Repeat on the other side.
- You will have a small gap at the top of the roof decking; this is normal and will not affect the roofing in any way.

Roofing

- Apply eave trim, felt with 3/8" staples (or 1" roofing nails), start at the bottom of the roof and overlap the seams by at least 2 inches.
- Begin to lay metal on roof. Refer to metal roof instructions for proper metal and screw installation. The metal should overhang the eave by 1"- there will be a small gap at the top of the roof that will be covered by the ridge cap.
- Finish with gable trim and ridge cap.

Soffit

- Measure each end of the overhang and cut a 1x2 to make a stop at the gable end truss.
- Cut the 1x6 and 1x8 to length, making sure you measure each side and compensate for any variation.
- Nail the 1x8 in place using 8d galv nails, keeping the nails away from the front edge so you can slip the a continuous soffit vent under it.

















- Once you have slid the vent in place, nail in place (or use caulk to hold it).
- Measure the remaining space and rip the 1x6 to fit. Once in place, nail both boards at each truss with 8d galv nails. Repeat on the other side.

Door

- Make sure the threshold area is clean of debris. Caulk a generous bead of silicone caulking around the top and edges of the door, but not at the bottom.
- Tip door (do not fully place in hole yet) and hold it while someone run a thick bead or two of caulking under the threshold to seal it.
- Push door fully in place, and screw in place through brick mold once level and plumb.
- Place door shims in 3 places; at each hinge and on the opposite strike side even with hinges.
- Check for level and plumb, then screw into frame through the shims.
 You can hide the screws behind the weatherstrip. Follow the door manufacturer's install instructions.
 Clean any excess caulking.

Windows

- The install of the windows is similar to the door install. Start with a generous bead of silicone caulking around the entire outside of the window opening.
- Place the window from outside in the opening. Place shims at the bottom of the window and level the window by adjusting the shims.
- Once level, secure the window using 1-1/4" screws between 6" and 9" spacing. Every hole does not need to be used. Do not overtighten the screws which could break the window flange. Caulking should squeeze out.
- Measure and cut the 4/4" x 4" smart trim to the width of the window, place one board at the top and bottom flush with the sides of the window. Nail in place with 8d galv nails.
- Measure from the top of the trim to the bottom of the trim along the sides and cut to length and nail the side trim in place with 8d galv nails.

Stairs

- The stairs mount directly to the building under the bottom of the front door. We supply three 3-stair stringers, which will allow you approximately 21" to the bottom of the door and should be set for a 4' wide stairway.
- Place blocks or treated lumber under the stringers to level and support them. Use the Simpson LCS adjustable stringer connector. See https://www.strongtie.com/decks_ decksandfences/lsc_connect/p/lsc for instructions.
- Use joist hanger nails to attach each hanger to the stringer.
- Once in place, use 2x6 treated drydeck for the stair treads, keeping a gap in between the two treads for drainage- usually a 16d nail width.
- Screw in place using 3" exterior screws.
- Use the 2x4 drydeck for the rail posts, attaching them to the bottom outside stringer and at the top stringer using 3" screws.
- Measure from the top to the bottom of the steps and cut the keyhole stair rail to fit. The railing should be about 36" off the stair nose.
- Screw to the inside of the 2x4's using 2" screws.

Helpful Links:

SBS Caribou Lnstructions: https://www.youtube.com/ watch?v=qJuTSyUsBV0

BCI Instructions:

https://p.widencdn.net/l6alxy PDF

Simpson Hardware Instructions:

https://www.strongtie.com/ resources/literature/woodconstruction-connectors-catalog

ASC Metal Instructions:

https://www.youtube.com/ watch?v=8vzbwLZ7dOg











