

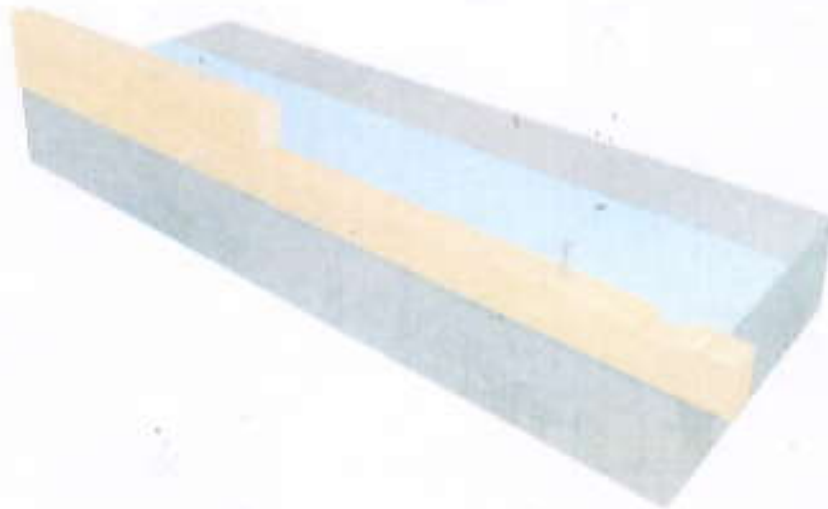
Type of wood

All material is a northern spruce that is grown in a cold climate, creating a tight grain and stable material for construction. The wall logs sizes and moisture content is consistent, allowing for accurate production and assembly.

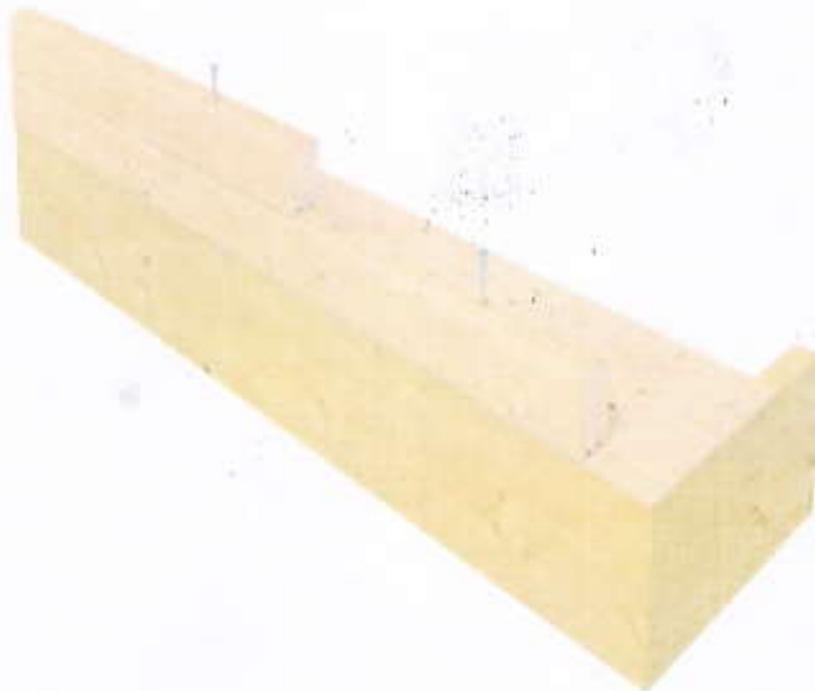
Mounting first two rows of wall logs to foundation

The first TWO rows of wall logs must be secured to the foundation using long screws or lag bolts. A moisture barrier can be applied between the first wall log and the surface it's being mounted to. Local wind codes may require the use of additional metal brackets on the interior. These brackets would be lagged or bolted to the floor and fastened to the wall log. When insulating the wall these brackets are not seen.

Concrete

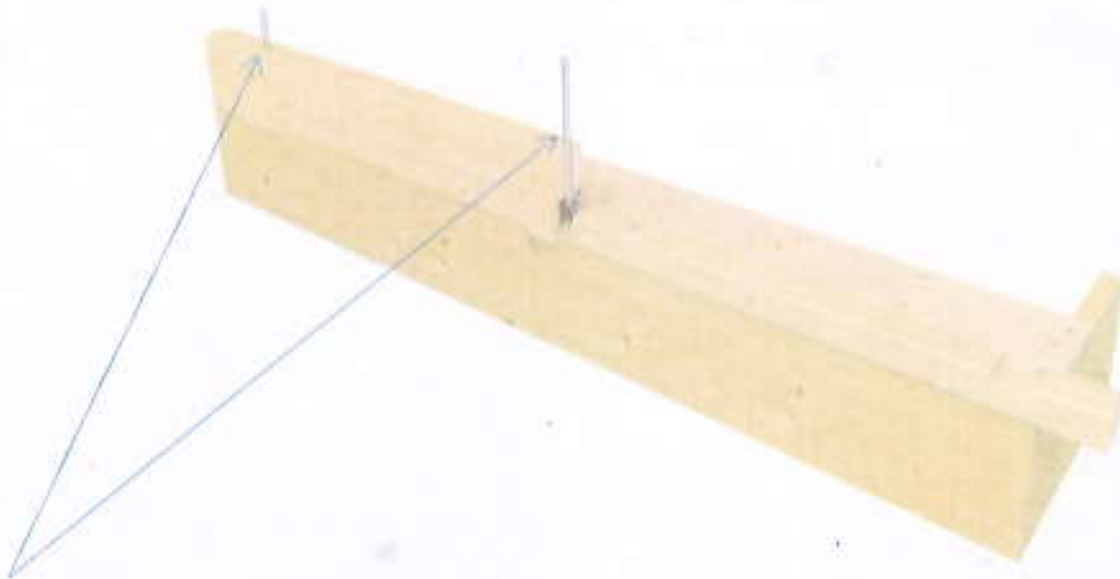
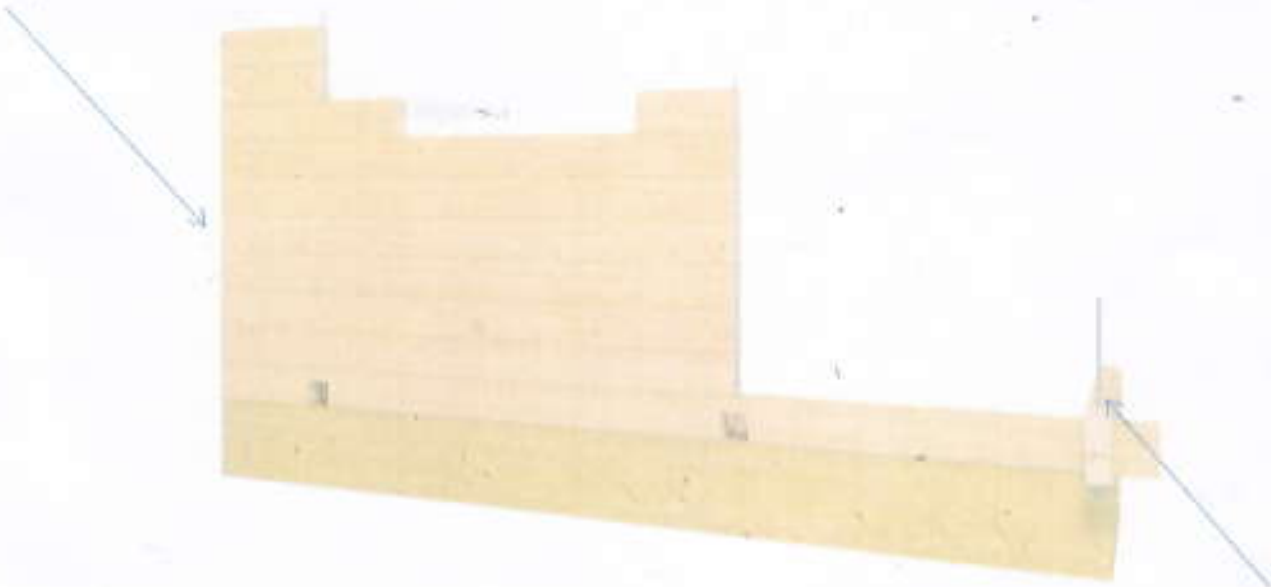


Wood sub floor



Stacking of wall logs

For homes and large cabins, log thicknesses of 2 ¼" or 2 ¾" thick by 4 ½" high are used. The wood is kiln dried to 16% moisture content. Logs are stacked without the use of sealants between the logs. The logs must be allowed to expand and contract to climatise with the local environment. A wall height of 8 feet high will shrink up to 1 ¾" over the first year as the moisture content of the lumber neutralizes.



Rods can also be applied at either side of windows and doors, or any position in the walls to accommodate regional sheering requirements for hurricane or earthquake zones. When rods are positioned at locations other than horns an access port is cut into the logs of 3" wide 3" high at the wall base. Wood plinth blocks are used on the outside and inside to cover the access ports.

Windows and doors

Standard building packages include high quality European tilt & turn, multi locking wood windows and doors. Windows and doors are **NOT** fastened to the wall logs with fasteners. This allows free movement for the logs to settle as they climatise. The wall logs have a dado (groove) cut into the edge at the rough opening and the window jamb has a protruding strip of wood built into the jamb that fits into the dado. This joint prevents with window from coming out of the wall, creates an air barrier and allows the wall logs to settle.

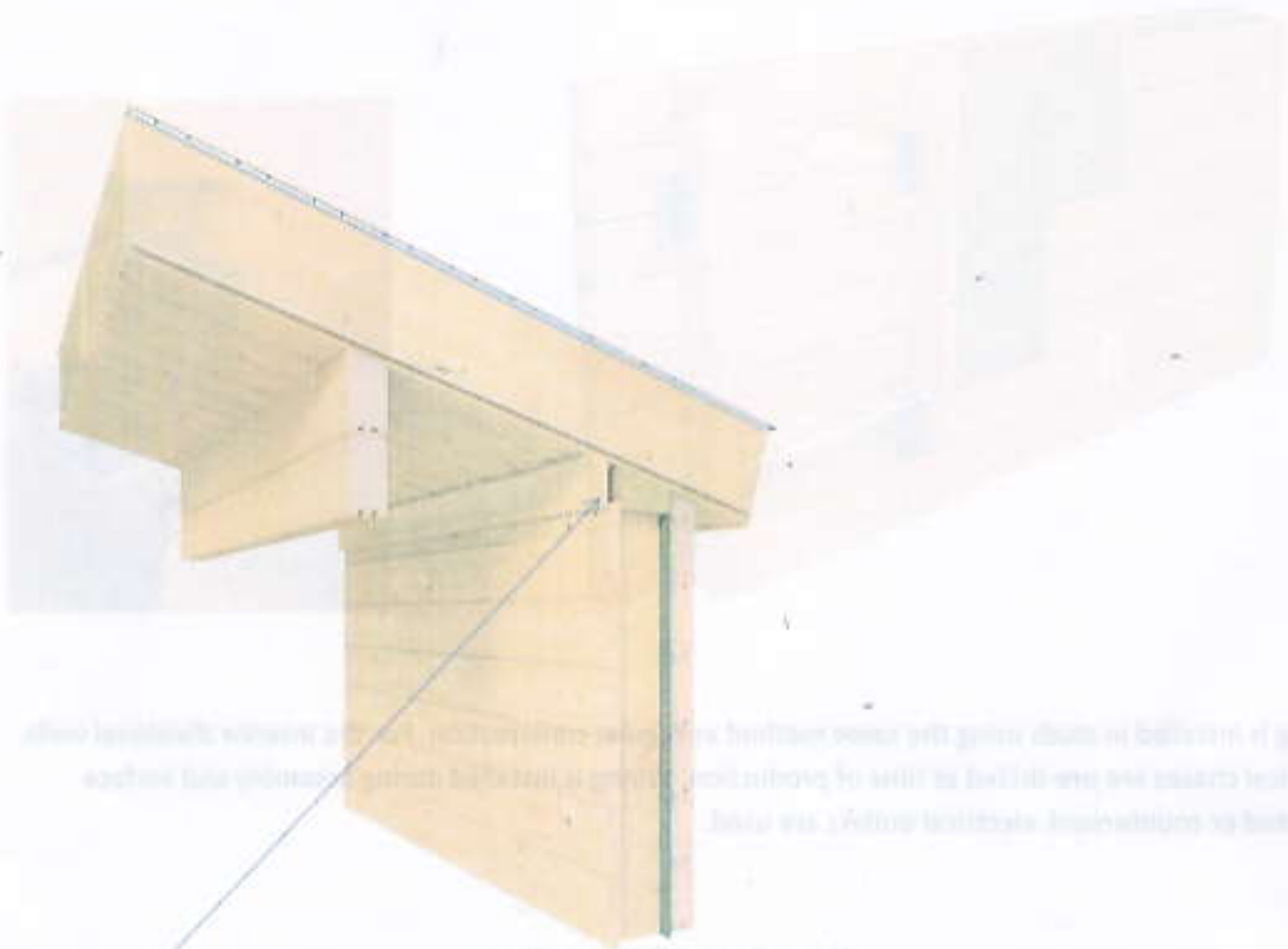




Insulation can be applied from the interior by placing insulation between the purlins and then applying a cover board to the underside of the purlins. Insulating from the underside reduces ceiling heights. Walls can be increased in height if requested.



Insulating the exterior of a ceiling



Insulating from the outside requires a buildup using local materials. Insulation is installed and then a layer of plywood before installing the finished roofing materials. Larger fascia trims are required for this method.

The interior wall cover boards must be cut 2" short of the ceiling and a crown molding is fastened to the ceiling. As the wall settles the crown molding lowers.

Electrical Wiring



Wiring is installed in studs using the same method as regular construction. For the interior divisional walls, electrical chases are pre-drilled at time of production. Wiring is installed during assembly and surface mounted or countersunk electrical outlets are used.

Vapor Barrier & House Wraps

Must be determined by local engineers

Wood Treatments

The wood must be sealed on the interior and exterior wall surfaces immediately following assembly. High quality treatments are available locally, similar to what is used on wood decks or fences. Research the wood treatments used in your region from approved manufacturers

Maintenance

During the first year, storm rods will need to be tightened monthly as the moisture content reduces and the building shrinks. At the end of the first year the building will have climatized and further tightening will not be required. Exterior and interior staining or painting will be required as recommended by the stain or paint manufacturers

Kits are supplied with technical data sheets in each package. The data sheets list components size, quantity and visual description. Additional assembly instructions are provided by dealers that are specific to building style: *gable roof, octagon, pentagon, sloped roof* and *multi-room* models. These 10 tips will improve the outcome of your assembly.

Top 10 Assembly Tips

- 1) Kits are designed for concrete slabs, but can be installed on skids to make portable. The base must be level & square before assembly. Continually check for level and square as you assemble.



- 2) Kits include small treated floor joists. The technical details will indicate to lay them flat or stand on end. Laying them flat or on end will change the distance to the outside edge. The walls will overhang the treated joists by approximately 1/8" if done correctly



- 3) Counter sink and screw the first two rows to the base
- 4) Counter sink and screw gable ends to wall logs & screw purlins to gable ends
- 5) Use ratchet straps at all junctions and tighten down wall logs when fully assembled. Tap walls & tighten pulling joints tight. Leave in place as long as possible



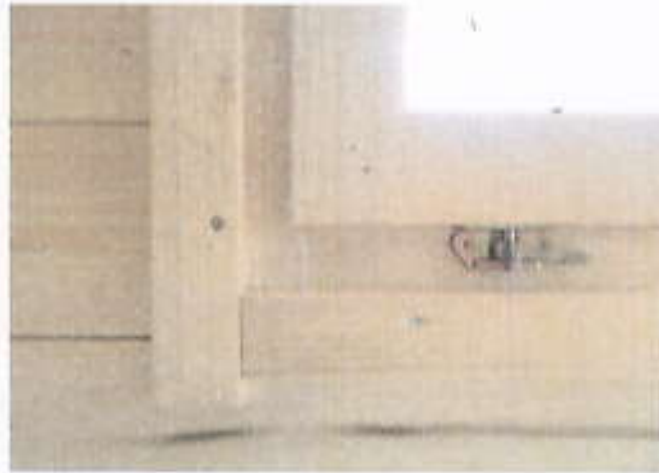
- 6) Install storm straps to outside corners behind the horn. Place the single hole at the top log and secure and tighten the bolt. In the two lower slotted holes, install bolt **AT THE BOTTOM OF THE SLOT** and finger tighten only. Now remove ratchet straps and the logs will not open, but allow shrinkage.



7) Where there are double purlins, screw them together from the top or bottom



8) Exterior & Interior trim boards are not fastened to wall logs. (NO NOT NAIL OR SCREW TRIMS TO WALL LOGS) They trims create a trough only for the wall logs to move



9) Tongue & groove boards for roof and floor have a V-joint on one side & and flat joint on the other. When installing roof boards the V-joint is to face down into the room. Floor boards can be installed with V-joint up or down

10) Use construction adhesive when putting floor and roof boards down



NOTE: FOR LARGE OPEN GARAGE OR ONE ROOM MODELS, THE WALL MAY NEED TO BE SCREWED AS THEY ARE STACKED. THIS IS THE EXCEPTION TO THE STANDARD ASSEMBLY GUIDELINES.



10) Exterior & interior trim boards are not fastened as well (do NOT NAIL OR SCREW TRIM TO WALL LOGS). They trim create a trough only for the wall logs to move.



11) Tongue & groove boards for roof and floor have a V-joint on one side & not the other. When installing roof boards the V-joint is to face down into the room. Floor boards can be installed with V-joint up or down.

12) The construction advises when putting floor and roof boards down.

