

INSTALLATION INSTRUCTIONS FOR THE SAUNA PRECUT KIT

Thank-you for choosing a Cedro Pre-Cut Sauna Kit. While there are different variations based on your specific needs, your pre-cut sauna kit generally includes everything you need to finish-out the interior of a room that you frame, wire and insulate, transforming it into a sauna. In reading these instructions, always refer to your specific quote as it takes precedence over the standardized instructions. Normally your Cedro Pre-Cut Sauna Kit will include the following items: vapor barrier to staple to your wall studs, tongue and groove wood for interior walls and ceiling, pre-built benching along with necessary supports, pre-hung door including handles and hardware, trim, sauna heater with stones, flooring for your walkarea, a vapor proof light(s) and sauna accessories. Your specific package will be detailed in a separate quotation.

Preparation before you get started:

- 1.) The wall and ceiling boards are tongue and groove (T&G) and can be installed vertically or horizontally as specified when ordering. The T&G boards can be attached to standard stud framing (2"x 3", 2" x 4", etc..), furring strips over masonry walls, or plywood attached to metal studs. Blocking, furring strips, or plywood must be used when installing the boards vertically.
- 2.) Ideally your ceiling height should be roughed in at 7' from the finished floor. This is to ensure proper heat leveling. Going higher is not recommended, and absolutely under no circumstance should your ceiling exceed 8'. Be sure to consult your quotation for the framing rough-in size for the door that is included in your package. Please refer to the layout drawing supplied with the order proposal for correct door location. When positioning the door opening, remember that it is an out-swing unit requiring no latch or locking mechanism.
- 3.) If your package includes benching that is supported by wall cleats, it is very important that you install horizontal studs or "blocking" inside of the walls where these cleats will be located. This blocking should be centered 13 ¾" above the floor for lower benching, and 31" above the floor for upper benching. To ensure that you hit the blocking, it is always a good idea to add extra blocks inside of your wall. This will also allow you margin to move up or down if needed. If you wish to install the benches at a different height, you must modify the position of your blocking accordingly. Benching styles vary in thickness, but as a general rule you want your finished lower bench height to be approximately 18", and your finished upper bench height to be 36".
- 4.) The installation of horizontal studs or "blocking" is also important where your sauna heater will be mounted. Be sure and refer to your sauna heater's installation manual for specifics on where to the blocking should be located. When in doubt, it's better to install extra blocking, rather than not enough.
- 5.) Walls and ceilings must be insulated prior to the installation of the T&G boards. Faced or unfaced fiberglass insulation is preferred, with a minimum of R-13 in the walls, and R-19 in the ceiling. Note: the ceiling is where most heat loss occurs. If you have room for additional there it is worthwhile to add.
- 6.) The floor of the sauna room can be any waterproof surface that is easy to sweep and clean. Typically, it is concrete, tile or rolled goods such as vinyl or linoleum. The flooring provided with the kit is placed loosely on top of the sauna floor in the walk area only and is designed to be removed for cleaning.

- 7.) Electrical supply lines must be in place prior to the installation of the kit and must follow all local and national codes. The supply for the heater should be either 120, 240 or 208 volts. For heater size, kilowatt, amperage and voltage requirements please refer to the proposal information or wiring diagram found in the heater instructions. The sauna light fixture(s) provided with your sauna require a separate 120 volt supply line into a single gang wall box. This box should be mounted approximately 6" down from the inside ceiling and should extend 1/2" beyond the stud so it will be flush with the interior wall surface (or 11/16" when your sauna contains 11/16" thick wall boards). The switch for this light must be mounted outside of the sauna room. IMPORTANT: ALL ELECTRICAL WORK MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
- 8.) The exterior of the sauna walls can be any material (cedar, redwood, drywall, paneling, tile, etc..) as specified and supplied by the purchaser. Note: All fasteners (nails, screws, staples) should be Galvanized or Stainless. These can be purchased at The Sauna Place separately if needed.

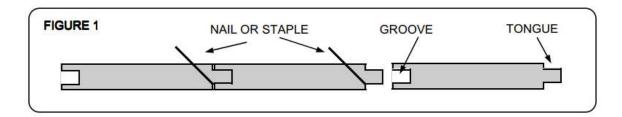
STEP 1: CEILING (unless otherwise specified, install first)

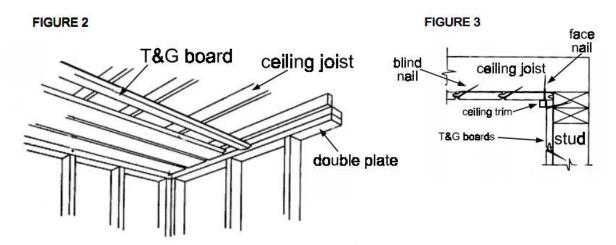
Install tongue & groove boards by nailing through the tongue at a 45 degree angle using #4 finish nails or $1 \frac{1}{2}$ " - $1 - \frac{1}{4}$ " length brad nails or staples with a pneumatic nail or staple gun (SEE FIGURE 1). Note: if wood cracks during installation, it may be necessary to pre-drill holes.

Start at the back and work forward, tongue facing forward (SE FIGURES 2 & 3). The first board must be face nailed as well as blind nailed. The face nails should be within 3/4" of the wall framing so that the wall paneling and trim will hide them.

Continue installing boards nailing through the tongue into each ceiling joist. Make sure all joints are pulled tightly together.

The width of the last board may need to be rip-cut to fit. Again, face nailing is required within 3/4" of the wall framing.





STEP 2: INSTALL REMAINING WALLS

NOTE: The direction of the wall boards is determined at the time the room kit is ordered and an appropriate amount of material is supplied for that application only. A room that is ordered for horizontal installation cannot be changed to a vertical installation. Please note the specified wood direction prior to proceeding.

Horizontal Wood Application: (most common):

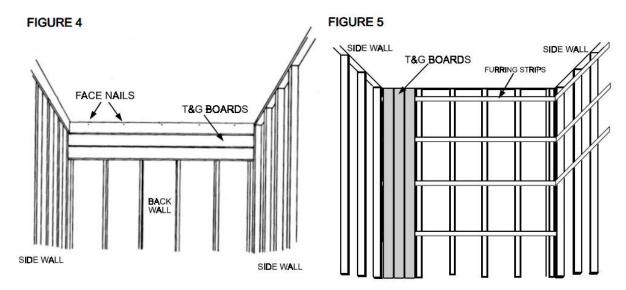
Please refer to the drawing of your sauna that's included with your sauna kit. As previously mentioned, the ceiling is usually installed first. When referencing your drawing, you will note that the walls are numbered. This is how the bundles of tongue and groove wood are labeled in your sauna kit package, and the number also denotes the order in which these walls should be installed. As you begin wall #1, start at the top and work your way down to the floor (SEE FIGURE 4). Repeat this for walls 2, 3 and 4, etc. Make sure that the top board is level. To construct a quality room, it is necessary to use a level periodically to make sure that the seams of the T&G are matched and even. Don't worry about small gaps in the corners or at the ceiling, as these will be covered by trim. As with the ceiling, the first board should be face nailed as well as blind nailed. All boards should be blind nailed. The last board may require rip-cutting and should be face nailed also.

Horizontal Application: Installing Door Wall:

Start at the top and work your way down to the floor (SEE FIGURE 6). The top board(s) will be the longest, and is for the full width of the front wall. Make sure that the top board is level. Hold the board in place and trace the cut out for the top of the door opening with a pencil. Cut out the notch for the top of the door and nail or staple the top board in place. As with the ceiling, the first board should be face nailed as well as blind nailed. After the top board is in place, continue installing boards down both sides of the doorway. Note, because you may decide to move your door opening to the left or the right, the single boards included in your kit are generally long enough to be cut, giving you the desired lengths for each side of the door.

Vertical Wood Application:

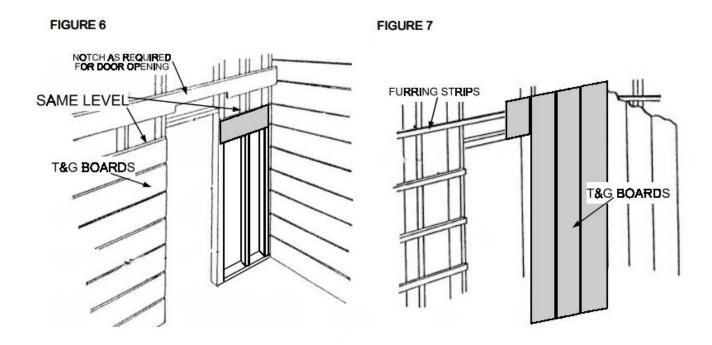
When referencing your drawing, the numbering of your walls is less important. Start at the back wall and install the first board, making sure it is level up and down (SEE FIGURE 5). It should be face and blind nailed in the same manner as the first and last ceiling boards. Continue installing boards across the back wall, blind nailing each board. When you come to the end where you can no longer use a full width board, measure the gap and rip cut a board to fill the space.



Vertical Application: Installing Door Wall:

Start at the side wall and install the first board level up and down with the tongue facing away from the corner (SEE FIGURE 7). As with the ceiling, the first board should be face nailed as well as blind nailed. Continue across the front wall blind nailing each board. When you come to the doorway, hold a board in place and trace the door cutout with a pencil. Cut out the piece for the door and install the board. Install the pre-cut short boards across the top of the doorway until a full width board can be used on the other side. Make sure that this board is level before proceeding. As with the side and back walls, the last board may need to be rip cut to fit.

IMPORTANT: NO MATTER WHICH INSTALLATION YOUR SAUNA KIT IS, DON'T FORGET DRILL HOLES AND FEED THROUGH THE NECESSARY WIRING, TEMP SENSOR, ETC. FOR YOUR SAUNA HEATER WHILE INSTALLING THE WALLS. YOU WILL ALSO CUT-OUT AS NECESSARY AROUND THE ELECTRICAL BOX OR RECESSED HOUSING FOR YOUR SAUNA LIGHT(S).



STEP 3: BENCHES

Depending on your package, there are 2 different possible mounting methods that your sauna kit will have. In some cases it can be a combination of both. Here are the methods:

Wall Cleat Style

This style offers an open look beneath the benching. Your upper bench(s) will generally receive bench cleats for the left and right side walls, then either a center box support or back wall cleat as well. The lower bench will receive bench cleats for the left and right side walls, and then depending on the bench length, a box support for the center. Note: please refer to #3 section of the "Preparation", or the Pre-Cut Preparation Guide for adding necessary blocking behind wall cleats. Note: in some installations, box supports may be substituted on each side of your benching instead of wall cleats.

Installation by Wall Cleat Attachment Method

- 1.) This method uses cleats at each end of the bench (SEE FIGURES 8 & 9). The primary difference between the "Wall Cleat Only" and "Wall Cleat with Center Box Support" methods is that the "Wall Cleat Only" method provides two side cleats and one back cleat for the upper bench, and then two side cleats only for the lower bench. The "Wall Cleat with Center Box Support" offers two wall cleats and a center box support for the upper bench, and two wall cleats and a center box support for the lower bench. This center box support (or equivalent support leg) is normally provided when benches are deemed to need center support.
- 2.) In some cases, benches are shipped with one end open to allow for a custom fit.

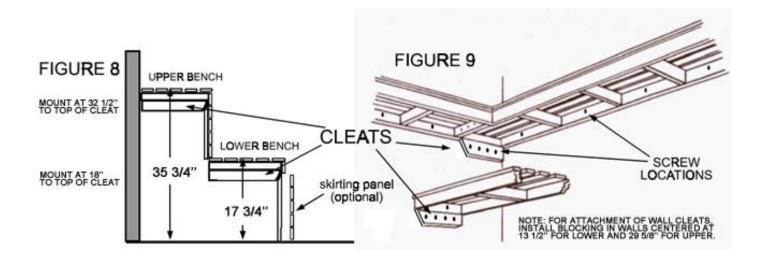
 Benches requiring an angled end cut are normally supplied with an open end. A bench end piece is supplied to close the end once the installer cuts it on site.
- 3.) The upper wall bench should be installed first, as indicated. Attach wall cleats at the specified heights, ensuring that your bench is level and that you have attached to the blocking that was installed previously on the inside of the wall. Finally, install either the back wall cleat or box support as provided with your sauna kit. Note: Attach the wall cleats to the wall with the screws provided. We also recommend that the bench frame be secured to the wall using the appropriate length screws. Locating framing studs as the attachment point is recommended.
- 4.) Install the lower bench next. If your sauna has additional benches along a sidewall, install them last. Remember to install the upper bench before the lower.
- 5.) After all the benches are installed you can finish installing the remaining inside corner trim from the top of the benches to the ceiling trim.

NOTE: When box supports are provided for your benching, it is suggested that you fasten the box support to the bench, to the floor, and to the back wall into a stud if possible (see fig. 10).

All Box Supports (with Bench Blinders or Skirting Panels) Style

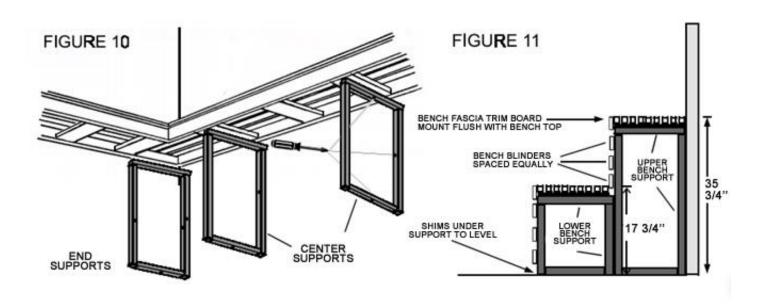
With this style, your benching is completely supported by box supports. Then you will have bench blinders (install horizontally across box supports), or removable skirting panels that go over the top. (see figures 10 and 11). Once you have determined your attachment method, please follow the instructions for the installation of that type as shown below:

Carefully review the LAYOUT SHEET that accompanies the room for any specific notes on your install.



All Box Supports with Bench Blinders or skirting attachment method

- 1.) This style of bench is installed using support frames. The position of the support frames is shown in Figures 10 and 11. When installing the box supports, it's important to take note of any "up arrows" which specify the proper orientation of the box support. Depending on your installation, additional bench supports and/or bolts are located in areas where two benches intersect. In some cases, benches are shipped with one end open to allow for a custom fit. Benches requiring an angled end cut are always supplied with an open end. A bench end piece is supplied to close the end once it is cut.
- 2.) Bench supports are installed at each end of the benching and evenly spaced across the width of the bench. Please note figure # 10 for proper support orientation.
- 3.) Install the upper bench supports in the back corners first, and set the bench on top of the supports. Set the remaining supports in place, making sure to line them up with the cross bracing.
- 4.) All supports must be level in both directions (side to side and front to back) before nailing in place with #10 galvanized finish nails, 2" galvanized pneumatic staples or 2" galvanized drywall screws. Nail or screw the end supports to the back and side walls, and to the floor. Center supports are nailed or screwed to the back-wall and floor.
- 5.) When you are sure that the supports are level and plumb, attach the bench. Use 2" drywall screws to attach the bench to the supports using two screws per support.
- 6.) Follow the same procedure for the lower bench supports. If possible, line up and attach the center supports of the lower bench to the upper bench supports.
- 7.) The final step is to install the optional bench blinders or removable skirting panels. For blinders, space them evenly apart, and fasten with #6 finishing nails or brad nails (with pneumatic gun). All nails are to be countersunk. Note: You may prefer to install the bottom 2 or 3 blinders with small wood screws, to allow for removal when cleaning. For skirting panels, they are attached with screws and can be removed when desired.



IMPORTANT: All trim must be cut to fit. Plan and measure carefully before cutting all trim to ensure you are using the correct piece for its corresponding location. If unsure, ask your sales representative.

- 1.) Start by installing the trim around the ceiling of the room using #4 finishing Nails or an air brad nailer. All nails should be countersunk.
- 2.) Next, install the base trim where applicable. Note: base trim is only provided for the visible areas of the room, and must be cut to fit.
- 3.) Next, install the corner trim from the benches up to the ceiling trim. Nail trim from both exposed sides. Note: corner trim is not needed for below the benching.
- 4.) Finally, install the corner trim on the front wall.

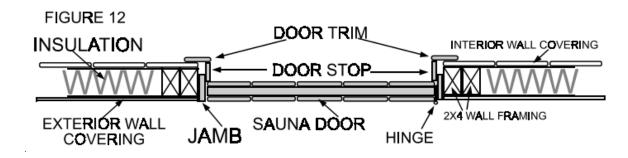
STEP 5: PREHUNG DOOR UNIT

DOUGLAS FIR DOOR WITH GLASS WINDOW (ALSO SOME CEDAR DOOR MODELS):

Installation of this door is sometimes easier with two people. One person will be inside the room and one person will be outside of the room. The person inside the room will require shims, nails, a hammer and a level.

- 1.) Remove the double-headed nails from the door jambs and reposition them to allow the door allow the door unit to fit in the rough opening. Orient the door to swing out and shim to plumb and level (SEE FIGURE 12).
- 2.) The outside of the door jamb should be flush with the exterior of the room. Do not worry that the inside of the jamb is not flush with the interior of the room. The door stop will make up the difference when it is installed.
- 3.) When the shims are in place, begin installing 3" screws through the jamb from the inside of the room. Screw through the shims and into the door framing studs. It may be necessary to adjust the shims as you proceed.
- 4.) Now that the door is in place, permanently remove the double headed nails from the jambs and open the door. Remove the spacers from around the outside of the door, and cut the excess off the shims with a razor knife.
- 5.) Close the door and install the door stop. To set the door stop properly, the outside of the door should be flush with the outside of the door jamb. The stop should cover the jamb and come flush with the tongue and groove on the interior wall. Nail the door stop in place with #6 finish nails.
- 6.) Install the interior door trim, mitering the corners and nailing in place with #4 finish nails. Exterior door trim is installed in the same way.
- 7.) Adjust the tension on the spring hinges as per the hinge manufacturer's instructions supplied with the kit.

8.) Install the door handles at a height of 36" from the floor to the center of the handle. Use 1-5/8" screws to attach handles.



DOORS WITH 4-SIDED JAMBS:

1.) Doors with 4 sided jambs are designed to slide right into your rough-opening. Ensure that everything is square and plumb. Shim if necessary, then screw the frame of the door into your framed opening using the screws provided. Note: There are pre-drilled holes in the door for this. Once this is done, install your door handle as directed. Most of these doors incorporate a magnetic catch. Once you have ensured that everything is aligned, and that your door latches correctly, you can install the wooden plugs provided for the screw holes.

STEP 6: HEATER INSTALLATION

The installation of the heater shall be according to the manufacturer's instructions, and by following the templates provided. The warning plate, which is provided with the heater, should be installed at this time. Only install the sauna stones after you have mounted and wired your heater, and prior to starting it up.

IMPORTANT NOTES:

- All electrical work must be performed by a registered and licensed electrician.
- Some heaters do not require a wooden heater guard in residential applications. If your package
 does not include one but you feel you need, these can be purchased separately.

STEP 7: CLEAN-UP & START-UP

Once assembly of your sauna is completed, a number of steps still remain before you can enjoy the first sauna. Curing a sauna is a simple process of cleaning the sauna completely, operating the heater for the first time, and allowing the heat to "break-in" the heater and woodwork.

- 1.) CLEAN-UP: Begin by removing all construction remains. Next vacuum the floor, benches and walls. Wipe down all the wood with a damp (not dripping) cloth using warm water.
- 2.) THERMOMETER: Install the thermometer 3"-6" down from the ceiling on a wall opposite from the Door when possible. This allows it to be seen through the door window from outside the room.

- 3.) SAUNA ROCK PLACEMENT: To properly install the sauna rocks in the heater, first wash them to remove any dust or dirt. Next refer to the heater installation sheets for correct rock placement. As a rule, loose is better.
- 4.) HEATER STARTUP: After all electrical connections have been completed, operate the heater on high for 1 hour to burn off any impurities. Leave the door open slightly to release the small amount of odor and smoke which may occur. NOTE: Consult the user manual on your specific sauna heater model for specific instructions on the installation and operation of your heater.

STEP 8: SAUNA CARE AND MAINTENANCE

A sauna in residential use generally requires very little care and maintenance. A double layer of terry cloth should be used on top of the benching for comfort as well as keeping the bench top free of perspiration stains. When finished using the sauna, wet towels should be removed immediately. Under normal conditions as a "dry" sauna, (minimal use of water), washing the floor occasionally will maintain its cleanliness.

Cedar can be washed with a mild solution of liquid cleaner and water to remove light soil and perspiration stains. Never use ammonia or harsh chemicals which will turn the cedar a dark gray.

The sauna light can be used with any color bulb, 60 watt or less. A shorter than normal bulb life is common for sauna lights.

CAUTION: Do not use or apply any type of sealant, finish, coating or oil to the interior surfaces of your sauna unless it is specifically designed for such use. The high temperatures in your sauna may cause the release of harmful, toxic fumes. Do Not use polyurethane, paint, wood sealer, etc.

TIP: It is common to mistakenly scratch or gouge the Western Red Cedar during the installation of your package. Because this wood is unfinished, you can fix this by taking a piece of fine grit sandpaper and sanding the grain of the wood to remove most light blemishes. This includes scratches, gouges, dirt, oil and fingerprints. For deeper spots, nail holes, etc., DAP Plastic Wood in the "Red Oak" color matches pretty well with the reddish tones of the wood. Of course Western Red Cedar comes in different shades. For lighter boards, the same product in the "Natural" color works well. Simply fill the area, then with fine grit sandpaper sand the spot after about 5-10 minutes of drying.

