FINNISH
sauna builders

Installation Instructions for the Sauna Precut Kit



INSTALLATION INSTRUCTIONS FOR THE SAUNA PRECUT KIT

The pre-cut sauna room kit is supplied as individual nominal 1" x 4" or 1" x 6" tongue & groove boards, interior trim, pre-hung door unit with door trim and handles, benching with bench supports and bench trim, light fixture, thermometer, bucket & ladle, headrest, and duckboard floor for the walk area in front of the benches. Materials not provided with the kit include framing, insulation, exterior wall covering, nails ancl screws.

Preparation:

1 - The wall and ceiling boards are tongu13 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.

Note: walls longer than 8' should have the boards installed vertically to avoid splicing.

2 - Ceiling height is roughed in at 7' from the finished floor and the standard pre-hung door unit has a rough opening of 26" wide x 82" high. Optional low clearance doors are available with a rough opening of 26" wide x 74" high. The handicap access door requires a rough opening of 38" wide x 74" or 82" high. Please refer to the layout drawing supplied with the order proposal for correct door loca tion. When positioning the door opening, remember that it is an out-swing unit requiring no latch or locking mechanism. Smaller rooms should have the door opening close to one of the side walls.

3 - If installing 1" x 4" or 2" x 4" style benching, horizontal studs must be located inside the wall framing at 32-¾" and 14-¾" on center from the floor. These are designed to accommodate the bench cleats. If you wish to install the benches at a different height, you must move the horizontal support studs accordingly.

4 - Walls and ceilings must be insulated prior to the installation of the T&G boards. This insulation can be any commonly used material including fiberglass batting (faced or unfaced) or rigid foam. Optimum heat retention is achieved when a foil faced insulation product is used. If not available on the insulation itself, a foil face vapor barrier can be installed.

5 - Electrical supply lines must be in place prior to the installation of the kit and must follow all local and national codes. 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 wall mount light fixture requires a separate 120 volts supply line into a single gang wall box. This box should be mounted 6" down from the inside ceil ing and should extend ½" beyond the stud so it will be flush with the interior wall surface. The switch for this light must be mounted outside the sauna room. **ALL ELECTRICAL WORK SHOULD BE PER FORMED BY A LICENSED ELECTRICIAN.**

6 - The floor of the sauna room can be any surface that is easy to sweep and clean. Typically, it is concrete, tile or rolled goods such as vinyl or linoleum. The duckboard 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 - The exterior of the sauna walls can be any material (cedar, redwood, drywall, paneling, tile, etc..) as specified and supplied by the purchaser.

INSTALLATION

Note: All fasteners (nails, screws, staples) should be galvanized.

STEP 1 - CEILING

Install tongue & groove boards by nailing through the tongue at a 45 degree angle using #4 finish nails or 1-¼" staples and a pneumatic nail or staple gun (SEE FIGURE 1). It may be necessary to pre-drill before nailing.

Start at the back and work forward, tongue facing forward (SEE FIGURES 2 & 3). The first board must be face nailed as well as blind nailed. The face nails should be within ¾" of the 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 ¾" of the wall framing.

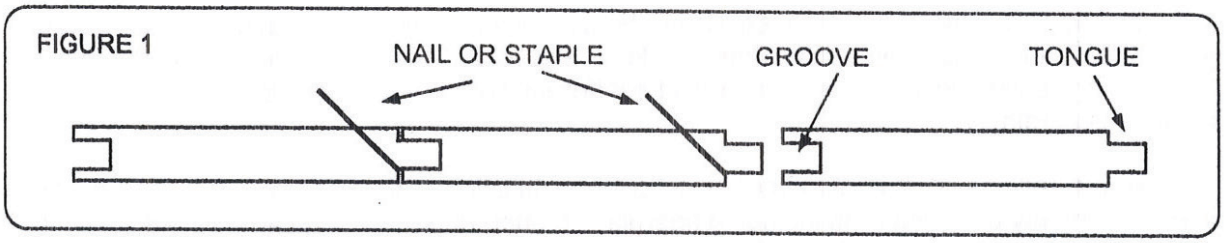


FIGURE 2

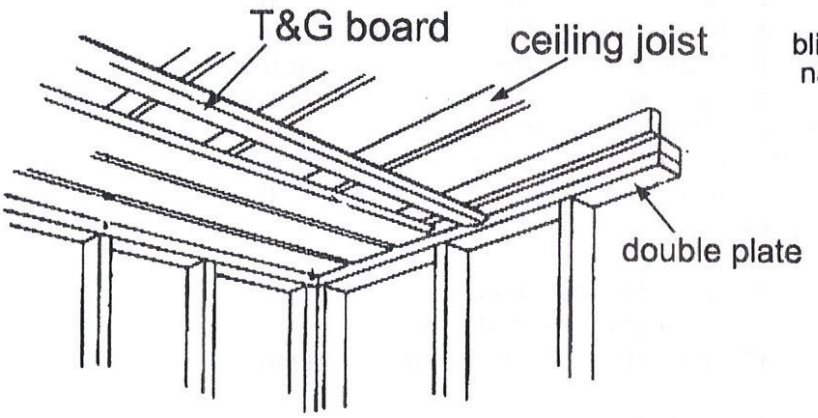
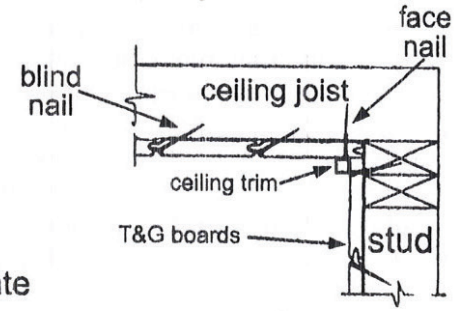


FIGURE 3



STEP 2 - BACK WALL

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 Application:
Start at the top and work your way down to the floor (SEE FIGURE 4). 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 around the ceiling since 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.

Vertical Application:
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 in the space.

STEP 3 - SIDE WALLS

Both side walls are installed in the same manner as the back wall. A perfect fit is not necessary in the corners since they are to be trimmed with the mouldings provided.

FIGURE 4

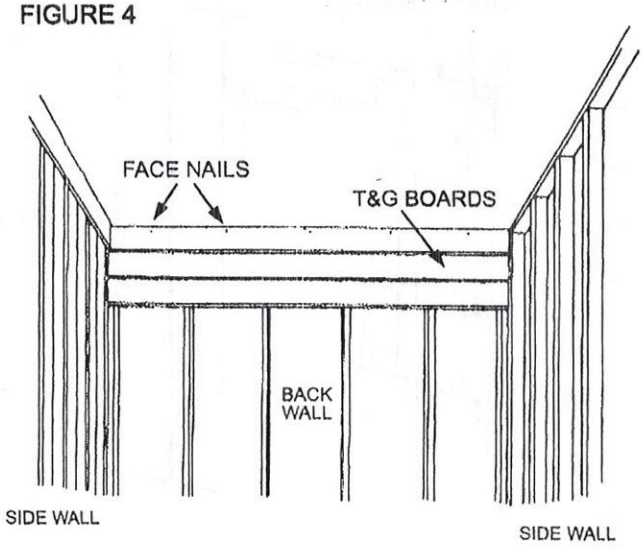
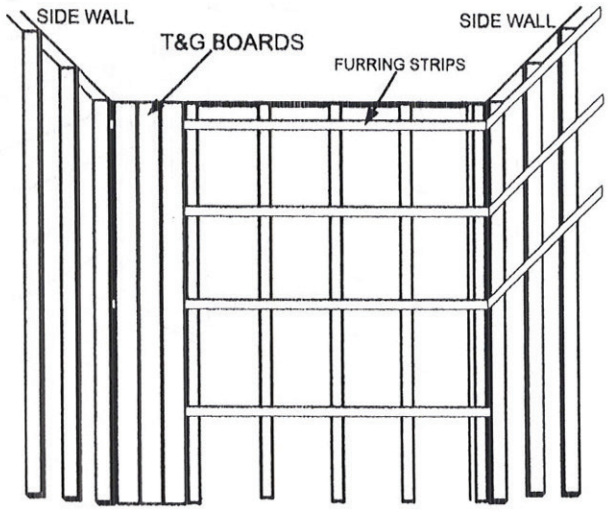


FIGURE 5



STEP 4 - FRONT WALL

Horizontal Application:

Start at the top and work your way down to the floor (SEE FIGURE 6). The top board will be 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. The first boards should be started on the same level. Make the cut out for light box as needed. Pull the heater wire through a hole drilled in the T&G boards approximately 12" from the floor. Also, leave approximately 2 feet of wire to make the electrical connections.

Vertical Application:

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.

FIGURE 6

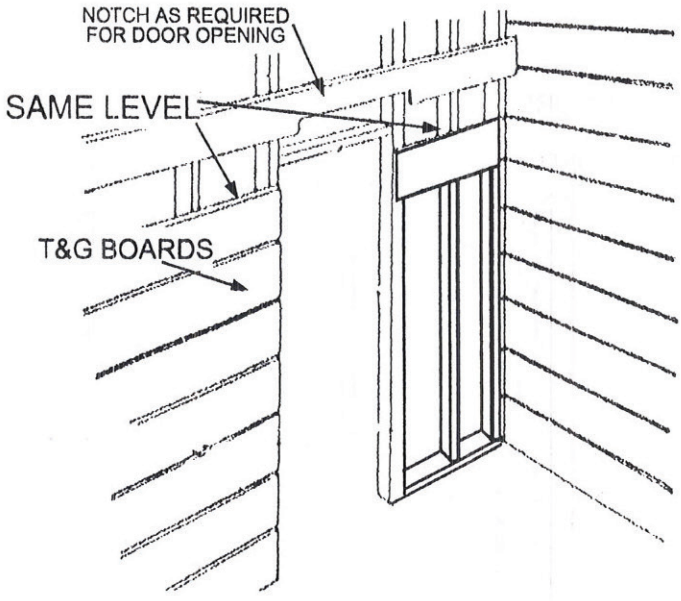
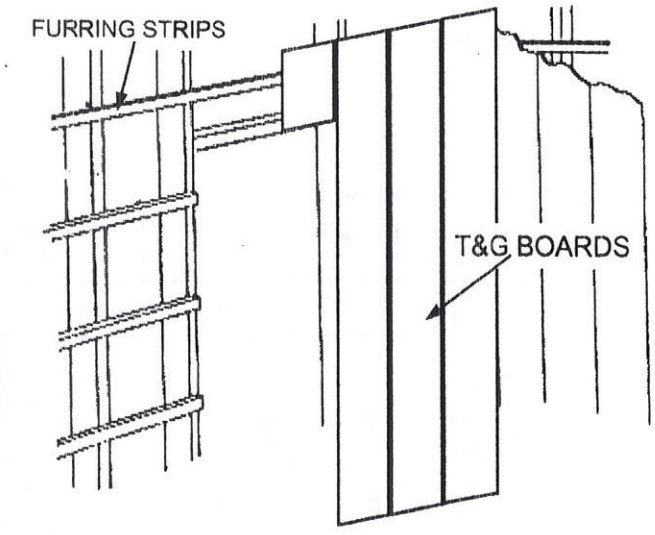


FIGURE 7



STEP 5 - BENCHES

Confirm what style bench you received with your room. This will be noted in your packing list as 1"x 4", 2"x2",or 2"x4" benching. Once you have determined your bench style, please follow the instructions for the installation of that type as shown below and on the next page. Carefully review the LAYOUT SHEET that accompanies the room. It shows the correct positioning of the benches and supports.

INSTALLATION OF 1"x4" AND 2"x4" STYLE BENCHES:

1 - These two styles of benches are installed using cleats at each end of the bench and by attaching the upper bench to the wall along its length (SEE FIGURES 8 & 9).

2 - Benches less than 6' long do not require a center support leg.

3 - 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 2"x3" bench end piece is supplied to close the end once it is cut.

4 - The upper back wall bench should be installed first, as indicated. Attach one end to the side wall through the cleat at the appropriate height. Next, attach the other end of the same bench in the same manner being careful to keep the bench level. In addition to the 3" screws used in the bench cleats, the bench frame should also be secured to the wall.

5 - Install the lower back wall bench next. If your sauna has additional benches along a sidewall, install them last. Remember to install the upper bench before the lower.

6 - 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.

FIGURE 8

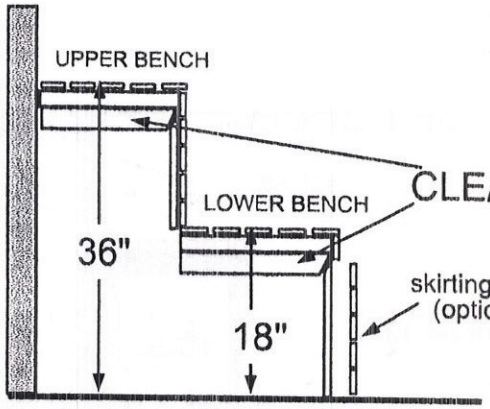
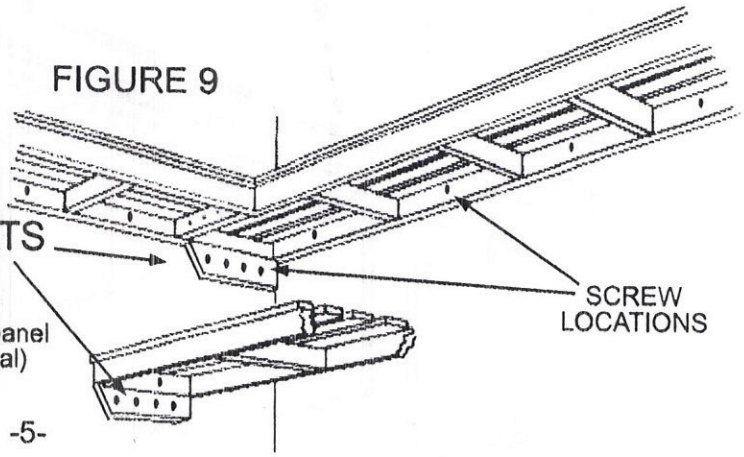


FIGURE 9



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STEP 5 - BENCHES - *continued*

INSTALLATION OF 2"x2" STYLE BENCHES:

1 - This style of bench is installed using support frames (SEE FIGURES 10 & 11). The position of the support frames is shown on the room layout drawing that accompanies this instruction package. End and bench junction support locations are marked on the drawing with an "**X**". Additional supports are positioned beneath the bench cross bracing.

2 - 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.

3 - 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.

4 - 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.

5 - 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.

6 - 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.

7 - 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.

8 - After the benches are in place and secure, install the bench fascia on both the upper and lower benches using #4 finishing nails. Be sure that the top edge of the fascia is flush with the top of the bench. Counter sink all nails.

9 - The final step is to install the optional bench blinders. Blinders are spaced 2-⅛" apart and are fastened using #6 finishing nails. All nails are to be countersunk.

FIGURE 10

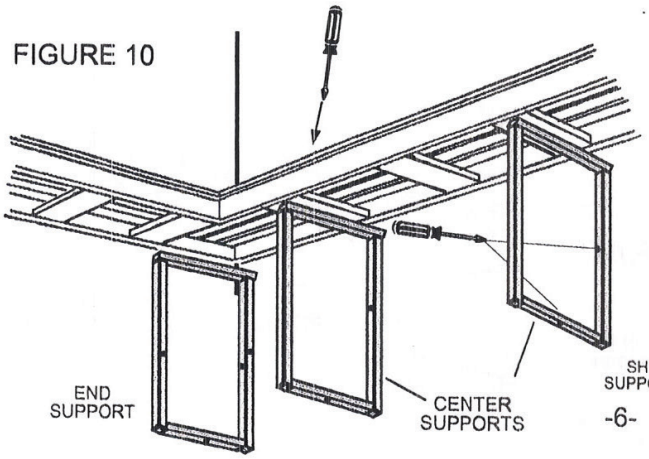
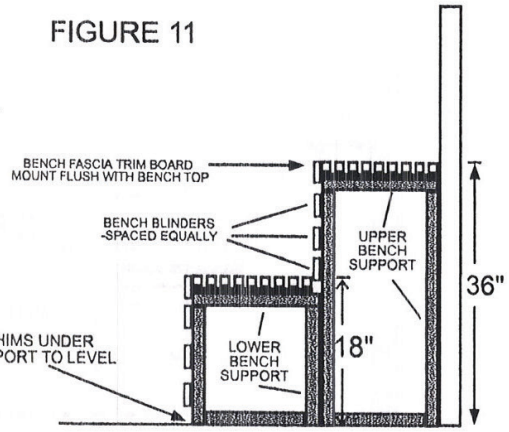


FIGURE 11



-6-

STEP 6 - CORNER TRIM

1 - Start by installing the trim around the ceiling of the room, using #4 finishing nails. All nails are to be countersunk.

2 - Next, install the corner trim from the benches up to the ceiling trim. Nail trim from both exposed sides.

3 - Finally, install the corner trim on the front wall.

STEP 7 - PREHUNG DOOR UNIT

NOTE: Installation of the door will require two people. One person will be inside the room and one person will be outside of the room. The person inside the room will need shims, nails, hammer and level.

1 - Remove the double-headed nails from the door jambs and reposition them to 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 out side of the door, and cut the excess off the shims with a razor knife.

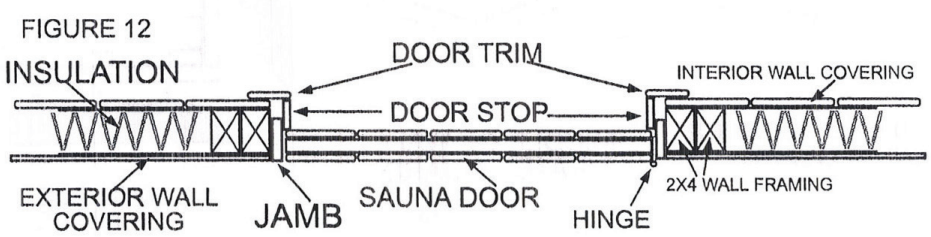
5 - Close the door and install the door stop. To set the door stop properly, the out side of the door should be flush with the outside of the door jamb. The stop should cover the jamb and come flush with the cedar or redwood on the interior wall. Nail the door stop in place with #6 finish nails.

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 1-⅝" drywall screws to attach handles.

FIGURE 12



STEP 8 - 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. Do not put the sauna rocks in the heater at this time.

Important Note:

All electrical work must be performed by a registered and licensed electrician.

HEATER GUARD

Some heaters DO NOT require a wooden fence in residential applications

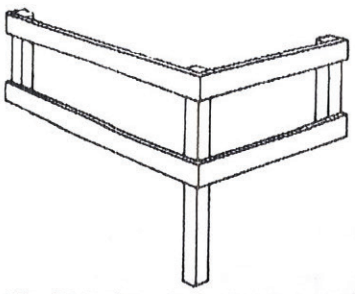
If your heater does require a guard, and it is pre-assembled, please proceed to #1 below. If your heater guard requires assembly, please proceed to #3 below.

1 - Place the pre-assembled guard around the heater. Leave at least 2" of space between the heater and the guard on all three sides.

2 - Attach it to the wall behind the heater with the 1-⅝" screws provided.

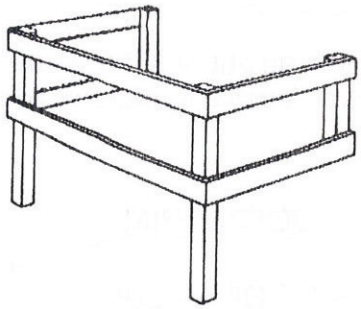
3 - If a heater guard kit was supplied with your room, it will be necessary for you to assemble it prior to installation (SEE FIGURES 13, 14 & 15). It will also be necessary to miter the corners of the top trim. Use #6 finishing nails to assemble the fence and attach the trim. Use 1-⅝" screws to attach the fence to the wall.

FIGURE 13



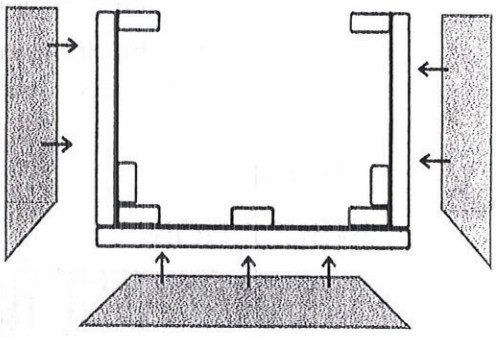
TWO SIDED OR CORNER HEATER GUARD

FIGURE 14



MIDDLE OF WALL HEATER GUARD

FIGURE 15



TRIM TOP OF FENCE

STEP 9 - 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 6-8" down from the ceiling on a wall opposite from the door. 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.

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.

STEP 10 - SAUNA CARE & MAINTENANCE

A sauna in residential use generally requires very little care and maintenance. A double layer of terrycloth 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.

Redwood (unlike cedar) should never be washed or allowed to become wet. Redwood and water do not react well together - excess water will cause redwood to discolor permanently. A slightly damp cloth may be used to wipe cool surfaces for cleaning.

The sauna light can be used with any color bulb, 60 watt or less. Amber-orange bulbs are best at providing a soft, warm and comfortable light. A shorter than normal bulb life is common for sauna lights.

*******CAUTION*******

NEVER use or apply any type of sealant, finish, coating or oil to the interior surfaces of your sauna! The high temperatures in your sauna may cause the release of harmful, or even fatal, toxic fumes. DO NOT use polyurethane, paint, wood sealer, etc..

STEP 10 - TYLÖ START UP

1 - 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.

Tylö sauna heaters are designed with a vertical rock chamber that allows the sauna rocks to be in direct contact with the heating elements (SEE FIGURE 16). Remove the center grille (not needed) and place the stones down in the center chamber only. Al low them to stack naturally and to settle around the heating elements. Never block the left or right side chambers. Continue stacking the sauna rocks in the center section until they form a small pile above the location of the removable grille.

DO NOT PACK THE ROCKS AROUND THE ELEMENTS!

Packing the rocks around the elements restricts the airflow and causes the heater's high limits to trip and shut off.

2 - 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.

FIGURE 16

