

# Barrel Sauna

## Canopy Barrel Sauna

### Installation & Owner's Manual

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Revised April 20, 2009

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## Parts List

## Quantity Per Sauna

| Description                                  | 6x4 | 6x6 | 6x8 | Canopy       |
|--|-----|-----|-----|--------------|
| Standard Stave                               | *   | *   | *   | *            |
| Final Staves                                 | 2   | 2   | 2   | 2            |
| Drain Stave                                  | 1   | 1   | 1   | 1            |
| Rear Wall                                    | 1   | 1   | 1   | 1            |
| Front Wall with Door Assembly                | 1   | 1   | 1   | 1            |
| Cradle Bases                                 | 1   | 1   | 1   | 3            |
| Interior Seat Set                            | 1   | 1   | 1   | 1            |
| Exterior Seat Set                            | 0   | 0   | 0   | 1            |
| Door Handle Set with Screws                  | 2   | 2   | 2   | 2            |
| Heater 240V 4.5KW                            | 1   | 0   | 0   | 0            |
| Heater 240V 6.0KW                            | 0   | 1   | 0   | 1            |
| Heater 240V 8.0KW                            | 0   | 0   | 1   | 0            |
| Heater Fence Kit with Nails, Screws & Bit    | 1   | 1   | 1   | 1            |
| Rocks -Carton                                | 1   | 1   | 1   | 1            |
| Light Fixture with Outside Access Plate      | 1   | 1   | 1   | 1            |
| Thermometer, Chrome 5"                       | 1   | 1   | 1   | 1            |
| Bucket with ladle                            | 1   | 1   | 1   | 1            |
| Sand timer                                   | 1   | 1   | 1   | 1            |
| Towel hook                                   | 1   | 1   | 1   | 1            |
| Magazine rack                                | 1   | 1   | 1   | 1            |
| Interior Seat Supports                       | 0   | 2   | 2   | 2            |
| Exterior Seat Supports                       | 0   | 0   | 0   | 2            |
| Exterior Seat wall mounts                    | 0   | 0   | 0   | 2            |
| Barrel Sauna Installation and Owner's Manual | 1   | 1   | 1   | 1            |
| <b>Hardware</b>                              |     |     |     |              |
| 12ga. X 2" Stainless Steel Finishing Nails   | 100 | 100 | 100 | 100          |
| 2" stainless steel square drive screws       | 0   | 0   | 0   | 12           |
| Heater Hardware (Included with kit)          | 1   | 1   | 1   | 1            |
| Light Hardware (Included with kit)           | 1   | 1   | 1   | 1            |
| Stainless Steel Bands                        | 2   | 3   | 3   | 4            |
| Stainless Steel Banding Brackets             | 4   | 6   | 6   | 8            |
| Black Vinyl Thread Protectors                | 4   | 6   | 6   | 8            |
| 1/2" x 4-3/4" Threaded Rod                   | 2   | 3   | 3   | 4            |
| Nuts 1-2" x 13                               | 4   | 6   | 6   | Square Drive |
| Screwdriver Bit                              |     |     |     |              |
| Wood Glue                                    |     |     |     |              |

\* Check Packing List for quantity furnished.

Please fill in the following information. It will be very helpful should you ever have questions or concerns regarding your sauna.

Model: \_\_\_\_\_

Serial Number: \_\_\_\_\_

**Read this entire manual through to the end before proceeding with the assembly.**

## **CHECK YOUR BOXES**

Be sure to immediately check your boxes against your shipping list and bill of lading. Examine for any damage and report it to the shipping company immediately. Notify us if there needs to be a repair or replacement of damaged or missing materials.

## **ELECTRICAL REQUIREMENTS**

All electrical wiring must be performed by **A QUALIFIED LICENSED ELECTRICIAN**. Please do not attempt to do the hook-up by yourself. Because of the heat involved in the sauna, it is required that you use copper wire with 90°C insulation. Do not use aluminum wire to make the connection. Consult with an electrician so you can determine the requirements for your particular situation. All wiring must conform to all national, state and local codes and regulations.

## **LOCATING THE SAUNA**

Because the customary sauna experience involves a heating-cooling-resting process, it is important to plan ahead before installing yours. Our method of construction affords the widest number of possible choices because our Barrel Sauna room can be placed in either an indoor or outdoor setting.

You will probably shower during or after each sauna bath, so consider having a shower stall nearby. You can place the sauna in your backyard, especially if you have a hot tub or swimming pool there. If your setting is rural, locating near a pond or stream is ideal.

Besides the shower, you may want to have a lounging area set aside for relaxing after your sauna bath. Make sure the floor or ground is level and can support the weight of the sauna (which can exceed 1,000 lbs. when filled with people). A reinforced concrete pad is always best for outdoor installations.

Verify that both the inlet and outlet vents will remain unobstructed. For indoor installations be sure that both vents open into the same room or space.

## **BASIC TOOLS**

You should have the following tools:

- |   |  |
|---|--|
| * Wrench-adjustable, box, open end (10mm, 3/4", 1/2" and 7/16") | * Nail Set                             |
| * Rubber Mallet   | * Pencil                               |
| * Sandpaper – 120 Grit  | * Utility knife                        |
| * Screwdrivers (Phillips and Flathead)                          | * Level                                |
| * Framing Square  | * 3/16" drill bit (Canopy Barrel only) |
| * 5/16" drill bit (Canopy Barrel only)                          |  |

When building this sauna, you will need to have an understanding on the terms plumb, level and square. These terms are more difficult to explain than to apply, but it is critical that the unit is installed square and on a level surface.

- \* Square - Two perpendicular lines are square when they form a 90° angle with one another.
- \* Plumb - If you hang a weight on a string, the string will hang perpendicular to the horizon, representing the pull of the earth's gravity. The line of the string is plumb.
- \* Level - When you stand on the beach and look out to sea, the horizon looks more or less like a straight line. That line, and any line parallel to it, is level. A line is level when it is square to a line that is plumb.



To help speed up the installation, substitute a deep well socket wrench for the  $\frac{3}{4}$ " wrench and a reversible power drill for the screwdrivers.

## FIRST CONSIDERATIONS

When you begin the initial layout for assembly, it is very important to check your floor or deck to see if it is level. Most garage floors, basement floors, and decks are sloped for drainage. If this is the case in your installation, you must use shims to make the sauna level. Failure to do this will result in unplumbed panels, poor fit and or poor function of your sauna.

## OUTDOOR INSTALLATION RECOMMENDATIONS

- Take caution to prevent the wind from catching and breaking the glass door.
- Do not install boards with knots on the top of the sauna where water could accumulate and freeze, causing the board to split.

## ROOM ASSEMBLY

Before beginning the assembly, unpack all of the staves and identify the drain stave, which will be the first one used. It has a hole cut into its center. As you examine the staves, you will notice that each end has a croze on its inside face. The croze is the square cut groove into which the sauna end panels fit. **(See Figure 1)**

Begin the assembly by placing the cradle bases on the floor or foundation. **(See Figure 1)**. If it is an exterior installation, anchor bolts should be used to secure the structure against wind damage.

Place a cradle base at each end of the sauna so that it is 4 inches in from the end of the stave. This will facilitate placement of the end hoops. For the 8' models the third cradle section should be placed in the center (do not block the drain hole). Be sure the cradle bases are parallel to each other.

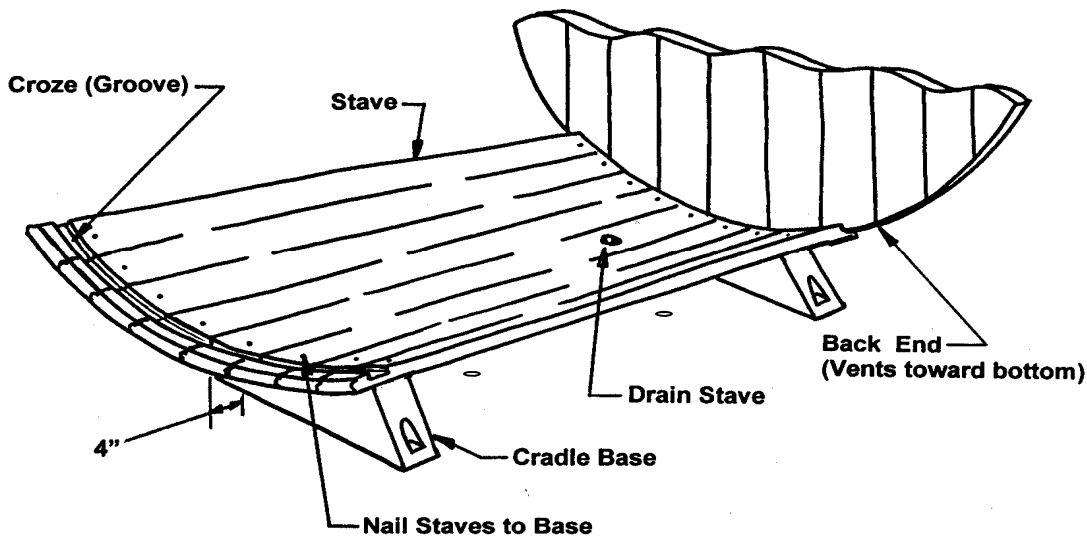
Place the drain stave exactly in the center of the cradle base to provide good drainage. Lay out additional staves on each side of the drain stave to each end of the cradle base. **Using a framing square, make sure that all the staves are square to the cradle and that the croze is lined up on all pieces.** Nail the bottom staves to the base with 2½ inch stainless steel nails as shown in **Figure 1**.

At this point, uncrate the ends and place them in the croze on each end of the assembly **(See Figure 1)**. Make sure that the joints on the end assemblies are perfectly vertical, and that the horizontal brace boards are to the inside of the sauna. Using your level, check the horizontal boards on the insides of both ends to be sure that you have the panels plumb. The vent hole (with cork) is to be on the BOTTOM on the back (heater) end, and at the TOP on the door end of the sauna.

### **Note for Canopy Barrel:**

The croze cut-out for the front wall section on the Canopy Barrel is located 24" back from the front edge of the sauna.

**Figure 1—Base Assembly**



Work from one side and start placing the staves on the ends. Nail the staves (from the outside) below the middle of the sauna to hold them in place until the hoops are placed. **Be very careful to keep the staves tight against each other.** Use a mallet if necessary. You should be able to stop nailing once you have gone half way up the side.

**T  
I  
P**

The fewer nails you use now, the easier it will be if you ever need to dismantle and move the sauna.

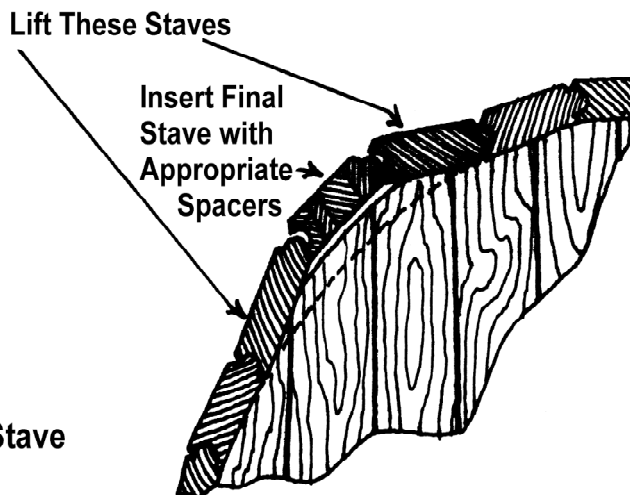
**Note for Canopy Barrel:**

Use the 2" stainless steel square drive screws to attach the staves to the front cradle base on the Canopy Barrel. This is because this will be an exposed area, and the stainless screw heads will provide a more finished look. Drill a 3/16" hole through the center of the stave into the cradle, and then drill a slight countersink with a 5/16" drill bit. Screw in the stainless screws so that the screw head is flush with the stave. See figure 1A.

Countersunk  
Stainless Screws  
in exterior canopy



**Figure 1A**



**Figure 2 - Final Stave**

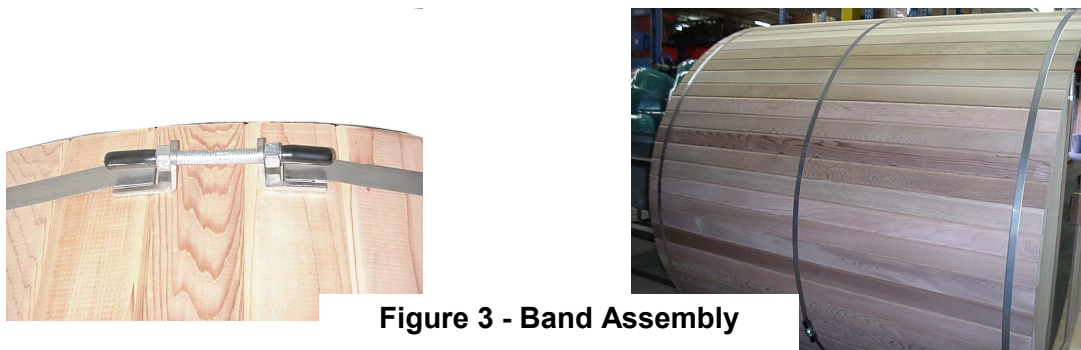
When you come to the point of closing the assembly you will find that the space left over may not be equal to a whole stave. We have provided a final stave set cut into various widths, (**See Figure 2**). If necessary, use the correct combination of pieces to provide the tightest fit. Install by tilting out the adjacent staves, placing the final stave, and pushing back into place.

## BAND ASSEMBLY

Each of the Band Assemblies are made of the following components:

- (1) Stainless Steel Bands
- (2) Stainless Steel Banding Brackets
- (2) 1/2" Nuts
- (2) Black vinyl caps
- (1) 4-3/4" Threaded Rod

Place bands with pre-assembled brackets around sauna, spaced evenly apart. Insert threaded rod through the bracket. Install nuts evenly. Before tightening nuts, check to make sure bands are still even. Tighten nuts and install black vinyl thread protectors. (**See Figure 3**)



**Figure 3 - Band Assembly**

### Note for Canopy Barrel:

Position one band each around where the two wall sections attach. Place the third band equal distance between these two bands. Place the fourth band 3" back from the front of the sauna around the exterior sitting area.

## DOOR HANDLE/TOWEL BAR

The door handle/towel bar assembly will consist of the following components:

- |                         |                        |
|-------------------------|------------------------|
| (2) Door handles        | (1) Binding nut        |
| (2) Short round spacers | (1) Long machine screw |
| (2) Long round spacers  | (2) Wood screws        |

Locate the single hole in the glass door. Push the long machine screw through one of the pre-drilled handles, through a long round spacer, through the glass, through another long round spacer and then through the other pre-drilled handle. Turn the long machine screw into the binding nut but don't fully tighten. With a level, position each of the handles so that they are horizontal and then screw the end of the handles into the hinge board that is attached to the glass door with the wood screws. Now tighten the long machine screw into the binding nut. TAKE CARE THAT YOU DO NOT OVER TIGHTEN THE SCREW AND BINDING NUT OR ALLOW THE WOOD SCREWS TO HIT THE GLASS. BROKEN GLASS IS NOT COVERED UNDER WARRANTY.



**Door Handle Assembly**



**Door Handle Assembly**



## SEATS & TRIM

Each bench consists of 3 slats (**See Figure 5**). Lay the slats on the lower cleats mounted on each end. Space the slats evenly and nail them into the cleats. Install center supports (on 6' and 8' models) as shown in illustration. Be sure to set nail heads below the surface so you will not burn yourself while using sauna.

A small tube of glue has been included in this kit for your convenience. This glue can be used to repair boards that crack or splinter inadvertently during assembly.

Use stainless steel nails

Rear End Cleat



**Figure 5 - Seat Installation**

Center Seat Support

### Note for Canopy Barrel:

Assemble the exterior benches as shown below in the same way you assembled the interior seats and trim. You will attach an exterior seat wall mount to the sauna wall, using a level to insure that the seat is level.



Wall Mount

Seat Support

## HEATER

Mount the heater as shown in the manufacturer's instructions. The heater should be positioned between the seats on the back wall and no lower than 6-1/2 inches from the floor. The lower the heater is, the hotter the temperature will be at the benches. All the necessary hardware is supplied with the heater. Do not attempt to wire the heater yourself. Contact a licensed electrician.

NOTE: Use the two 1/4" x 1-1/4" Stainless Steel Lags for the top mounting bolts on the heater.



## HEATER FENCE ASSEMBLY AND INSTALLATION

The Heater Fence is necessary to ensure that bathers in the sauna do not accidentally contact parts of the heater that would burn them. It consists of four precut, vertically notched posts and six horizontal rails that must be assembled before it is installed to the wall adjacent to the heater.

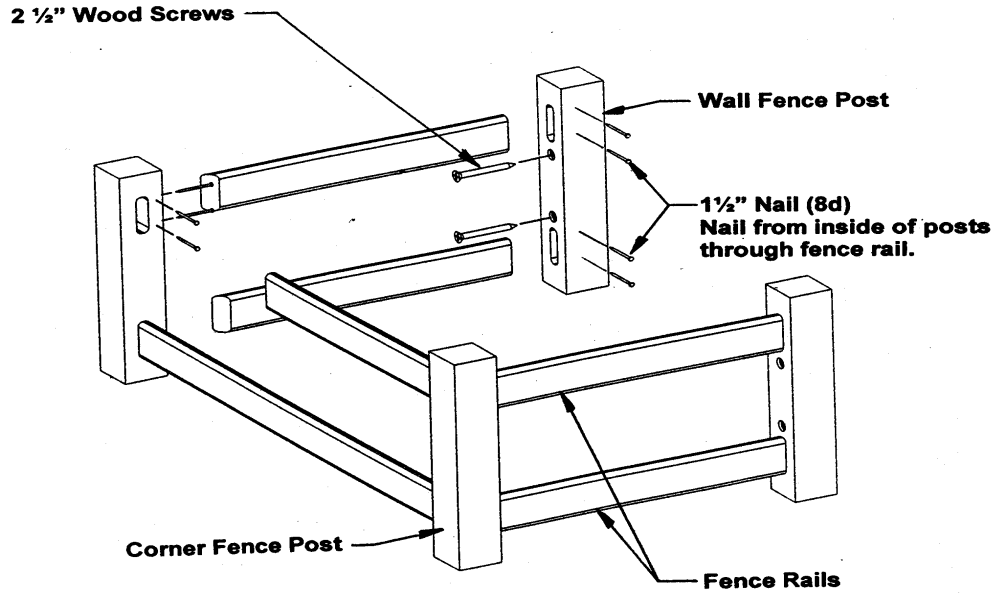


Figure 6 - Heater Fence Assembly

The vertical fence posts have slots cut into them for the rails. The two vertical fence posts that go against the wall have slots on just one face, as well as counter-bored screw holes for attaching them to the sauna wall. The two fence posts that sit away from the wall will have slots cut into two of their faces.

Note the beveled ends on the fence rails that go into the corner posts. The ends of the rails that go into the fence posts that attach to the wall are square. Assemble the fence before attaching it to the wall by placing the rails into the slots in the posts and using the supplied 1" nails as shown in **Figure 6**. You may want to put a small amount of glue into the slots. Be sure to nail at an angle so that the points will not go through the post. Countersink all nails.

Once the fence is assembled, attach it to the wall behind the heater using the supplied wood screws.

## LIGHT

Have a licensed electrician mount and wire the light fixture (on a separate circuit) into the electrical box mounted in the sauna's back wall.

Do not install your light switch inside the sauna. No special type of light bulb is required, but the heat of the sauna will shorten the life of a normal bulb. An appliance bulb, such as those used in a kitchen oven, will last longer than a standard bulb. Most people prefer subtle, low wattage lighting in the sauna. Do not exceed the wattage recommended by the light's manufacturer.

## TREATING THE SAUNA

Saunas have traditionally been left untreated to retain the natural look and feel of the wood. Never treat the inside of the sauna, and treatment of the external of the sauna is optional. If a protectant is desired for the exterior of your sauna, contact your local paint supply store for a suitable cedar wood treatment for the exterior of your sauna. A suggested treatment to retain the color of the sauna is a 50/50 mixture of linseed oil and rubbing alcohol that can be rubbed onto the exterior of the sauna. Left untreated, the exterior of an outdoor sauna will eventually become silvery-gray in color, and it is fine to let the sauna weather naturally if you prefer.

## OPERATION

After the sauna has been installed, sweep down the inside to remove any sawdust and wood shavings, and then vacuum completely. Using a damp cloth and warm water, wipe down the entire sauna including the benches to remove any remaining dirt and debris. Rinse off the sauna rocks and install them in the heater. Turn the heater on to the maximum setting and operate it for about 30 minutes with the door propped open. Then close the door and allow your sauna to come up to the desired temperature.

If the sauna wood has absorbed moisture in storage, the staves may become loose after the intense heat causes the wood to cure. It may be necessary to retighten the stainless steel bands periodically if this occurs.

The controls of the sauna heater are mounted at the bottom of the heater. The right dial is the temperature setting and the left dial is the combined timer on-off switch. Please refer to the manual that came with your heater for full heater operational instructions.

When operating the heater, always begin by turning the timer fully clockwise. The heater should come on as indicated by the light, and operate for one hour and then shut off automatically.

Since you most likely will use your sauna as both a "wet sauna" and a "dry sauna", you should install the sauna rocks that have been included with the heater, following the manufacturers instructions. These stones are necessary if water will be sprinkled on the heater to create the "wet sauna", and they will produce more consistent heating in the dry mode (without the use of water). It is common for a stone to occasionally crack during initial heating. If excess amounts of water are used during sauna, prop door open for 30 minutes after use to let the humidity escape.

The amount of ventilation in the sauna can be adjusted by means of the inlet vent positioned near the heater and the outlet vent on the front wall. If the sauna is located outdoors you should keep the vents closed when the sauna is not in use to prevent insects and rodents from entering the sauna. When using the sauna it is important that these vents are open in order to provide fresh air flow while taking your sauna. These vents combined with the drain hole in the floor and gaps around the door provide the proper amount of ventilation in your sauna.

## ELECTRICAL

Wiring requirements for up to 30 feet distance from the breaker box are as follows:

- 4.5kw and 6.0kw heaters require 10-2 w/ground, copper only wire, and 30amp non-GFCI breaker.
- 8.0kw heaters require 8-2 w/ground, copper only wire, and 40amp non-GFCI breaker.

NOTE: All wiring must be done by a licensed electrician according to national and local electrical codes.

## **TAKING A SAUNA BATH**

The sauna as we know it comes from Finland. Taking a sauna bath induces excessive perspiration, which cleanses the skin. It stimulates circulation and reduces muscular tension. It can also be an excellent relaxational or social activity.

Not to be confused with a steam bath, a sauna is a dry heat bath. The relative humidity rarely exceeds 30% even in a wet sauna. This is because the sauna is made of porous wood and absorbs moisture. This makes higher temperatures more tolerable.

Shown below are the steps that are involved in taking a traditional bath. You may or may not want to adhere to this regimen.

### **TRADITIONAL STEPS IN TAKING A SAUNA BATH**

STEP #1 - Set your heater so that the sauna room achieves the desired temperature, usually between 150° F and 170° F. As a novice, you should begin at the lower end of this range and work your way up to the higher temperatures over several sauna baths.

STEP #2 - Remove all clothing (except maybe your swimsuit), eyeglasses, contact lenses, jewelry, etc. Take a quick shower with warm water and soap, or a quick dip in your hot tub.

STEP #3 - Enter the sauna initially for about 5 to 15 minutes. Bring a towel into the sauna onto which you can sit or lay. Leave the sauna room once you have begun to perspire freely.

STEP #4 - Now you may take a cold plunge in your swimming pool, shower or snow bank. After that, relax and cool down for another 10 to 20 minutes.

STEP #5 - Reenter the sauna. On this return visit you may wish to spill small amounts of water onto the rocks creating bursts of steam. If the water spills through the heater and onto the floor, you are using too much.

STEP #6 - After your final visit to the sauna, relax for at least 20 minutes. Shower with soap and warm water. Finish your shower with cooler water to close the pores of your skin. Dress only after you have cooled down completely.

### **MAINTAINING YOUR SAUNA**

Inside the sauna, certain areas will eventually darken due to normal use and the effects of perspiration. This can be minimized, but not eliminated. Occasionally scrub down the inside with baking soda and water to remove the odor and stains of perspiration. Light sanding can also be effective but should be kept to a minimum.

### **ACCESSORIES**

Mount the thermometer on the opposite wall as the heater and no lower than 6" from the peak of the ceiling.

A wooden bucket and ladle are provided for you to sprinkle water over the hot sauna rocks.

Mount the towel hook and magazine rack where desired.

A traditional sand timer is provided and should be mounted on the opposite wall as the heater.

## **ALMOST HEAVEN SAUNAS LIMITED WARRANTY**

Almost Heaven Saunas extends this Limited Warranty solely to the original consumer purchaser of any Almost Heaven Sauna manufactured and installed in the USA after April 20, 2009.

### **TWENTY-FIVE YEAR ROOM WARRANTY**

Almost Heaven Saunas warrants that the Almost Heaven Sauna shall be free from defects in material and workmanship under normal conditions of use and service, for a period of twenty-five (25) years for residential applications after delivery to the original purchaser. This warranty is limited to making good at our factory component of the sauna room, which in the judgment of Almost Heaven Saunas is deemed defective in materials or workmanship. The warranty is for material only and does not cover installation or delivery of components.

### **ONE YEAR POLAR HEATER WARRANTY**

Polar heaters are warranted by the manufacturer against defects in workmanship for a period of one (1) year from the date of purchase for residential applications to the original purchaser only. Damage caused by improper electrical hook-up or wiring voids the warranty. Travel, trip or mileage costs are not covered under this warranty and service charges will be assessed to the purchaser by the dealer.

### **90 DAY IMPORT HEATER WARRANTY**

Restek import heaters are warranted by the manufacturer against defects in workmanship for a period of 90 days from the date of purchase for residential applications to the original purchaser only. Damage caused by improper electrical hook-up or wiring voids the warranty. Travel, trip or mileage costs are not covered under this warranty and service charges will be assessed to the purchaser by the dealer.

### **EXTENT OF WARRANTY**

This warranty extends only to the original "consumer" purchaser of the sauna as that term is defined in the Magnuson-Moss Warranty Act, 15 USC Section 101, as amended. Coverage shall commence as of the original date of purchase and the duration of such coverage shall not extend for any reason beyond the stated time periods. This warranty terminates upon transfer of ownership.

### **WARRANTY PERFORMANCE**

In the event of any malfunction or defect covered by this warranty, contact the authorized Almost Heaven Saunas Dealer from whom you purchased your sauna. In the event there is not an authorized Almost Heaven Saunas Dealer or repair firm in your area, the component can be returned prepaid freight (you pay) to Almost Heaven Saunas for repair of the defect, Almost Heaven Saunas will then ship the component back to you pre-paid (Almost Heaven Saunas pays) upon completion of the repair. In the event of a return, contact Almost Heaven Saunas in advance at: Almost Heaven Saunas, HC66, Box 465-A, Renick, WV 24966, telephone number: (304) 497-3991, for packaging and shipping instructions. In addition, Almost Heaven Saunas reserves the right to inspect or designate a person to inspect any part that is claimed to be defective and covered by this warranty. For any warranty service, Almost Heaven Saunas reserves the right to choose, at its option, repair of the problem or a replacement of the defective part. The purchaser is responsible to provide adequate access to the sauna and its equipment. Almost Heaven Saunas reserves the right to substitute a part or component of equivalent value, either new or factory reconditioned, and any such repair or replacement shall assume as its warranty only the remaining portion of the warranty on the original product. Normal wear and tear, cosmetic issues involving the wood on components or changes to individual pieces of lumber due to natural aging and weathering are not covered.

### **ACTS INVALIDATING WARRANTY**

This warranty is void if the Almost Heaven Sauna has been subject to alteration, misuse or abuse, or if any repairs on the sauna are attempted by anyone other than an authorized representative of Almost Heaven Saunas. Alteration shall include, but is not limited to any component change, electrical conversion, or the addition of any non-approved device or heating system, which contributes to a component or unit failure, or unsafe operating system. Use of the sauna in an application for which it is not designed will void this warranty. This includes, but is not limited to, damage caused by operation of the sauna at temperatures outside the range specified in the Operating Instructions, damage caused by defective components, damage to the sauna's surface caused by harsh chemicals which are not recommended by the manufacturer, damage caused by movement of the product, and damage caused by acts of God. Wood-burning heaters are not covered under warranty by the manufacturer or by Almost Heaven Saunas.

### **DISCLAIMERS**

Any implied warranties arising out of an original purchaser's purchase of an Almost Heaven sauna, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose, are limited in duration equal to the duration of the applicable warranty stated above. Almost Heaven Saunas shall not be liable for loss of use of the Almost Heaven Sauna or other incidental or consequential costs, expenses or damage, which may include but are not limited to, the removal of or reinstallation of a wall, deck or other fixture, water leakage, costs of shipping or packaging, applicable taxes, or the payment of any costs or expenses of disassembly, removal, or reinstallation of the product or any part. Under no circumstances shall Almost Heaven Saunas or its representatives be held liable for injury to any person or damage to any property, however arising, even if caused by Almost Heaven Saunas or its representatives' negligence. Some states do not allow limitation on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages, so these limitations or exclusions may not apply to you. These warranties give you specific legal rights, and you may also have other rights, which vary, from state to state. No distributor, salesperson, dealer, retailer, or other representative of Almost Heaven Saunas has the authority to alter or change these warranties either orally or in writing.