ALMOST HEAVEN
SAUNAS

Blackwater Sauna Installation & Owner's Manual



IMPORTANT SAFETY INSTRUCTIONS

DANGER: Indicates a hazardous situation that, if not avoided, will result in death or serious injury.

WARNING: Indicates a hazardous situation that, if not avoided, could result in death or serious injury.

CAUTION: Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

NOTICE: Indicates information considered important, but not hazard-related.

READ ALL INSTRUCTIONS BEFORE INSTALLATION AND USE TO AVOID INURY OR DAMAGE TO SAUNA

FOLLOW SAFETY INFORMATION IN THIS DOCUMENT TO AVOID SERIOUS INJURY OR DEATH

REFER TO YOUR LOCAL BUILDING CODES FOR ANY SPECIFIC INSTALLATION REQUIREMENTS

ALL ELECTRICAL WORK NEEDS TO BE COMPLETED BY A LICENSED ELECTRICIAN. FAILURE TO DO SO COULD CAUSE INJURY OR DAMAGE TO THE HEATER.

KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE

⚠ WARNING

- **This sauna is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the sauna by a person responsible for their safety.**
- **Consult your doctor about any health-related limitations related to sauna use. Ignoring advice from your medical provider could cause serious injury or death.**
- **Do not let people with pre-existing health conditions bathe in the sauna on their own. Using the sauna could cause these users to lose consciousness.**
- **Parents should consult your pediatrician before allowing children to use the sauna. Ignoring advice from your medical provider could cause serious injury or death.**
- **Do not smoke, use alcohol, or exercise in the sauna. These tasks could cause users to lose consciousness.**
- **Do not exceed 30 min. in the sauna at one time, as excessive exposure may be harmful to health. The sauna should not be used as an endurance test.**
- **Do not place any combustible material over the sauna heater (towels, bathing suits, wooden bucket or ladle)! This will cause the sauna to catch fire.**
- **Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98,6 ºF. The symptoms of hyperthermia include an increase in the internal temperature of the body, dizziness, lethargy, drowsiness, and fainting.**
- **Only use stones approved for sauna heater use. Inadequate stones may crack or explode leading to serious injury.**
- **Do not sleep in a sauna that the heater is operating. Sleeping in a heated sauna may lead to injury or death.**

⚠ CAUTION

- **Keep all occupants away from the heater and when it is hot. The stones and outer surface of the heater may burn your skin.**
- **Do not throw excessive amounts of water on the stones. The evaporating water is boiling hot and could cause burns.**
- **Do not throw water directly onto the elements. This could cause burns and damage to the heater.**
- **Be very careful when moving in the sauna, as the benches and floors may be slippery. This could cause the user to slip and fall.**

• Do not alter the sauna in any way, unless explicitly instructed in this manual. Altering the sauna could lead to structural damage, increasing the risk to bodily harm.
• When moving and lifting heavy pieces, use two or more people. Moving pieces without adequate manpower will lead to injury.

FOR ONYX STAIN



California Prop. 65

WARNING: This product can expose you to chemicals including Titanium dioxide and Ethylbenzene, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

ALMOST HEAVEN
SAUNAS

A WORD ABOUT CUBE SAUNAS

Our sauna kits are designed for ease of assembly by the customer, and every attempt has been made to make assembly information as clear as possible.

If you have any questions about assembly, please do not hesitate to call us at **888-355-3050**, or send us an email at sales@almostheaven.com.

Thank you again for choosing Almost Heaven. We are grateful for your business and know you will have many years of enjoyment in your cube sauna!

Your Almost Heaven sauna is designed for outdoor use although it is perfectly fine to use it indoors. The lumber is naturally resistant to the elements. Rain and sun will not damage the wood, although natural weathering and coloring of the wood will occur over time. To preserve the initial look of the sauna, you may choose to stain the exterior with a UV inhibiting stain. Consult your local paint store for their recommendations on a particular stain for your sauna. We do not recommend that you paint or varnish your sauna.
Properly assembled, you should not experience water dripping in the sauna. You may experience water seepage, particularly on the sides of the sauna. This is due to the porous nature of softwoods as well as the tongue and groove design of the staves. Water seepage or leakage will NOT harm the sauna and in most cases will evaporate quickly in the hot, dry interior.

Your cube sauna will include the following:

- ☐ One Full Set of Staves
- ☐ Drain Stave
- ☐ Filler Stave Set
- ☐ Vent Stave
- ☐ Six Cube End Sections (three per end panel)
- ☐ Heater and Mounting Hardware (if purchased)
- ☐ Stones (if purchased)
- ☐ Hardware Bag
- ☐ Door Handle Assembly
- ☐ Two Benches
- ☐ Four Bench Braces
- ☐ Backrest with LED Light Bar
- ☐ Three Banding Kits
- ☐ Two 4X4 Cradles
- ☐ Three Pieces of Metal Roofing (including fasteners)
- ☐ Three Piece Metal Trim for Front

LOCATING THE SAUNA

Because the traditional sauna experience involves a heating-cooling-resting regimen, it is important to plan ahead before installing your sauna. Our method of construction allows you to place your cube sauna in a wide variety of settings.

Be sure the surface is firm and level, and can support the weight of the sauna and its users (1,000+ lbs). A deck or concrete slab is certainly an option, but if your sauna sits directly on the ground, be sure the cradle supports rest on paver stones or something similar to prevent the cradles from settling into the ground.

BASIC TOOLS

These tools are helpful in the assembly of your barrel sauna:

- Cordless drill
- Rubber mallet
- Hammer
- Framing square
- Screwdrivers (Phillips and flathead)
- 1/4" Hex Bit
- 5/8" Drill Bit
- Level
- Wrench
- Ladder
- Metal Snip (For M3 heater installation if purchased)
- Plumb Bob (For M3 heater installation if purchased)
- Jig Saw (For M3 heater installation if purchased)
- Pneumatic Nailer (optional)

FIRST CONSIDERATIONS

Before beginning assembly, ensure that the installation surface is level. Many garage, basement or deck floors are sloped for drainage. A slight slope will not be an issue, but a more pronounced slope will require shimming to make the sauna level. An uneven installation surface can result in poor-fitting staves leading to poor sauna function. Also, if the site might receive heavy winds, it is recommended extra precautions are taken to ensure the door does not blow open. In most situations, this factor will not be a concern.

ELECTRICAL REQUIREMENTS

Costs of an electrician can vary greatly depending on several factors, including your sauna's distance from your electrical service box, where you live and cost of materials. We always recommend you get quotes from two to three different licensed electricians before you begin installation in order to get the best possible service and price.

Use copper wire with 90C 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.

For further information and instruction on your heater installation and operation, please consult the provided heater manual.

FLOOR ASSEMBLY

⚠ CAUTION

• Ensure sauna foundation is sturdy and level. If the foundation is not, the sauna could tilt, shift or fall leading to injury.

Begin assembly by placing the 4X4 cradles on the ground with the chamfered corners facing up. Place the cradles roughly 61" apart, making sure the cradles are square. Place the drain stave in the center (1), it should overhang the cradles roughly 5" on both ends. On the front, the ball should be facing to the right, and the socket facing the left (2). Make sure they distance is the same on both sides, and then nail into place.
NOTE: Nails are provided in your sauna kit, but using your own pneumatic nailer and nails will speed this process up.

For optimal assembly, we recommend you fasten a stave to both sides of the cradles to keep them square while assembling the base. Double check the cradles are square, then screw a stave to both ends of the cradles (3). Add 10 staves to both sides of the drain stave, keeping the notch aligned in each stave (4). Ensure they are tight together by using a rubber mallet, and nail every other stave to keep them in place during assembly. Once those staves are in place, remove the temporary alignment staves (5).



Image 1

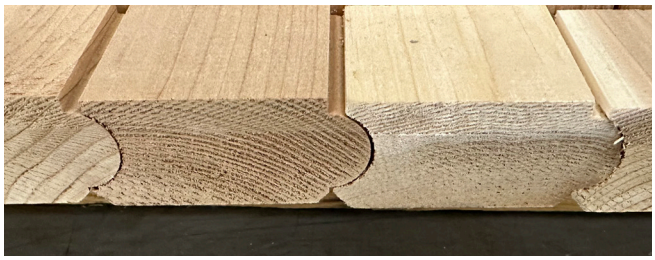


Image 2

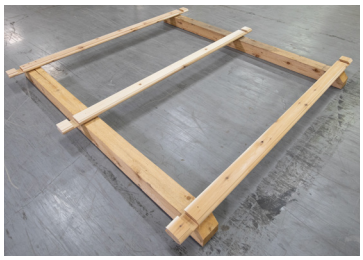


Image 3

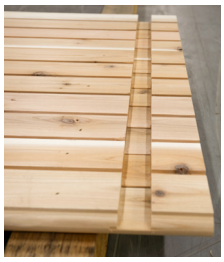


Image 4



Image 5

WALL ASSEMBLY

Set the center front door panel in the notches in the front of the sauna (6). Ensure its set so the slight curve is on top, and the door swings outward. Then place the rear center panel, again making sure the slight curve is on top and the braces are inside the unit (7). Now place a stave across the top of the two sections to help stablize them (8). This process will likely take three people, one each to hold the front and rear, and then one to place the stave. One person should remain holding them while completing the next steps, until the next set of temporary staves is placed.



Image 6



Image 7



Image 8

Find the wings for the rear panel and set in place, fasten to the center panel using 2" screws from hardware bag through the brace (9-10). Ensure the wings are tight to the center panel and there are no gaps in the joint. Repeat for the front window panels (11-12).


Image 9


Image 10

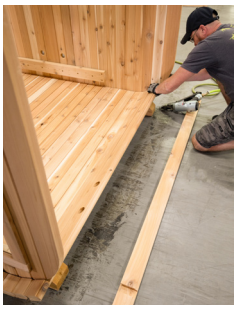

Image 11


Image 12

Check that the panels are still centered on your staves you previously fastened to the cradles. Now install two more staves to the right side, and then find the vent stave and nail into place (13-15). Your heater will be place above these vent holes for proper ventilation.


Image 13


Image 14


Image 15

ROOM ASSEMBLY

Now we recommend placing the two temporary staves about halfway up the sides to further stabilize the walls while you work on adding staves. Make sure both wall panels are plumb by using a level (16-17). Once they are plumb, screw the temporary staves in place (18).


Image 16


Image 17


Image 18

Start adding staves to both sides, nailing every other stave. Periodically check your walls are still plumb, and your staves are staying level (19-20). You might need to tap the staves with a rubber mallet to get them to fit together tightly.

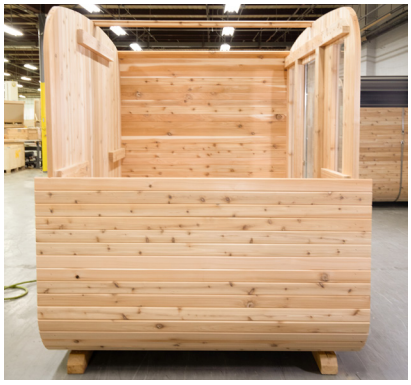

Image 19


Image 20

Once you get close to the temporary staves, remove them and set them to the side. Continue the process above placing staves up both sides and periodically checking level on the staves (21). Once you get halfway on both sides, stop on one side and continue the process on just one side (22-23).


Image 21


Image 22


Image 23

Continue installing staves over the top, but only nail every 3-5 staves (24). Start going down the opposite, nailing every other board again (25).


Image 24


Image 25

Once you get to the point you only have a few boards left, its time for filler staves (26). Place boards in place without nailing to see what size fillers you need. Install the filler staves by tilting the adjacent staves up, insert and mallet in the filler staves, and push them all back into place (27-29). It is important that you use as many staves and fillers as you can prior to tightening the stainless-steel bands in order to ensure the tightest seal possible. You want the staves lifting up and require pressure to force them into place. Nail final configuration in place so they don't pop out.


Image 26


Image 27


Image 28


Image 29

BAND ASSEMBLY

Position the bands around your sauna, 2" from each end. Insert the threaded rod through the bracket and tighten the nuts by hand evenly until no longer able. Before continuing to tighten, verify the bands are 2" from the edge all the way around (30). Align the brackets along the side of the sauna according to personal preference. Make sure they are not too high to they do not infere with the metal roofing. Tighten nuts evenly, making sure they are tight and prevent the staves from shifting (31). Repeat for the middle band, which is located in the center of the sauna.

NOTICE

• Be careful when installing the black hardware, it could chip the paint if mishandled.



Image 30



Image 31

DOOR HANDLE

Install door handles with wood to the interior and metal to the exterior. Open door handle package and lay out the pieces of the door handle (32). Install both wood spacers into wooden handle. Insert screw into wooden handle through the spacer and place metal spacer and plastic spacer over screw (33). Insert screw through the top hole in the glass from the inside, so the wooden handle is inside the unit (34). Now place the plastic spacer and metal spacer over the screw. Mate the metal handle to the screw on the outside of the unit, and partially tighten screw. Swing handle to the side to access screw (35). Repeat process from above by applying metal spacer and plastic spacer over screw. Push screw through bottom hole in the glass, and swing the metal handle out to apply both spacers. Partially tighten bottom screw; make sure handle is straight from top to bottom and finish tightening screws to complete installation (36).



Image 32



Image 33



Image 34



Image 35



Image 36

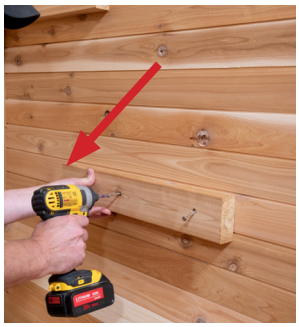
BENCHES AND SUPPORTS

Find your 20-1/2" braces and install so the top height matches the braces on the back wall. Attach using predrilled holes and 2.5" screws from the hardware bag (37). Make sure the braces are level before completely fastening all the screws. Now find your 18" lower bench braces. Measure down 13-1/2" from the bottom of the top brace (38), and measure 19-1/2" from the back wall (39). This point will be the back top corner of the brace, again install using provided 2.5" screws (40).


Image 37


Image 38


Image 39


Image 40

Place the upper bench on top of the braces and fasten using predrilled holes in bench and screws from hardware bag (41-42). Repeat for the lower bench (43).


Image 41


Image 42


Image 43

Under the top bench there will be a brace on both sides with predrilled holes to fasten the bench to the back wall braces. Fasten using screws from hardware bag (44).


Image 44

LED BACKREST INSTALLATION

Center the LED backrest between the two sides and position it vertically at a height most comfortable for you (typically 8-12" from the bench). Using a level to ensure proper installation, fasten the backrest into place using the 2" screws (45-46).


Image 45


Image 46

To connect the LED light to the power source, bore a 5/8" hole through the back of the panel at the bottom right corner of the backrest and push the LED pigtail through (47 & 48). Now mount the power supply to the back of the sauna at the base of the rear panel (49). Connect the power supply and LED by twisting the connection until tight (50). Ensure the light bar is connected to the power supply, then plug in to an outlet.


Image 47


Image 48


Image 49


Image 50

ROOF INSTALLATION

⚠ CAUTION

• Wear gloves when handling the metal roofing, the edges are sharp and can cause lacerations on your hands.

Place one of the roof panels on the center of the sauna roof. Find the center of the panel and align it with the center of the sauna, using the wide board over the door as a guide (51-52).


Image 51


Image 52

Ensure the roofing is flush or just slightly recessed from the end of the staves, if its overhanging it could interfere with the trim installation. You also need to make sure the roofing is perfectly parallel or the two edge pieces installed in the following steps could overhang the front of the staves. Now install 4 roofing fasteners roughly 1-1/4" back from the edge. Make sure you do not hit you banding, and try to hit the center of a stave if possible (53-55). Repeat this for the back of the roofing panel.


Image 53

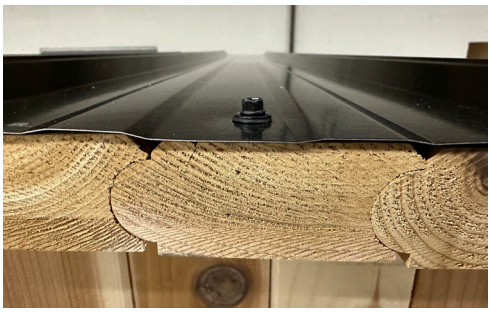
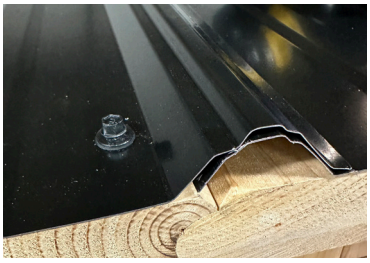

Image 54


Image 55

Note: If you purchased an M3 wood burnering heater, skip ahead to "Heater" section of this manual. You will need to install the heater now before continuing the installation. Now place another panel on one side of the center roof panel. Lift up the edge of the center roof panel and slide the end panel below the center panel (56-57). Then install another screw next to the overlap in the panels (58).


Image 56


Image 57


Image 58

Now install 4 more roofing fasteners as done previously on the center roof panel. Make sure the last fastener is near the bottom of the panel so the panel doesn't lift if there is excessive wind (59). Again repeat for the back of the panel.



Image 59

Now repeat for the opposite corner panel, again sliding the panel below the center panel as in image 56 .

FRONT TRIM INSTALLATION

Place the roof trim pieces so they match the contour of the sauna and roof panels. Keep slight pressure on the trim to keep them in place, then fasten using two screws through the top of the trim into the rib of the metal roofing (60). We recommend one on the top and one in the curve (61-62). Then repeat for the opposite side.



Image 60



Image 61

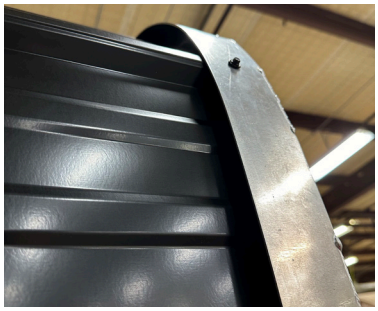


Image 62

Now install the keystone piece over the joint in the pieces, which is centered over the door. Offset the keystone roughly 1/4" out from the other metal trim pieces (63). Screw through the keystone so it hits either a rib in the metal roofing, or the other metal trim pieces (64).



Image 63

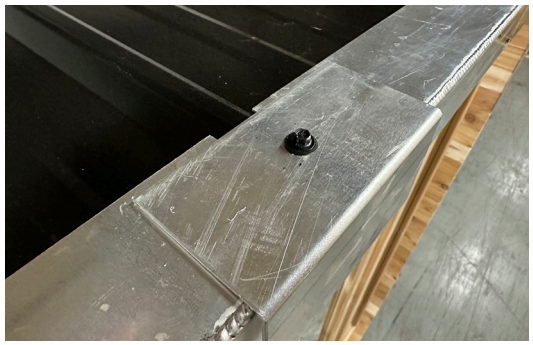


Image 64

HEATER - *For heater installation in your Cube sauna, please consult the Almost Heaven Heater Guide sent with your sauna kit. This guide will provide you with heater installation instructions specific to the sauna heater ordered with your Cube sauna. Specific directions regarding the installation of the Virta and Wood Burning heater options can be found below.*

⚠ DANGER

• Turn off power to heater at breaker before beginning installation or performing maintenance on the heater. Failure to turn off the power will lead to electrocution and even death.

⚠ CAUTION

• Improper installation of heater or heater mounting bracket could cause the heater to fall leading to burns and other injuries.

• Before placing or adjusting stones, ensure heater is back to room temperature. Failure to do so may cause burns.

VIRTA HEATER

If installing a Virta Heater, adjust the feet so the front legs are extended and the back feet are shortened (65-66). This allows you to slide the heater back as close to the wall as possible. Ensure the heater is still level and not too far up the curve in the floor.



Image 65

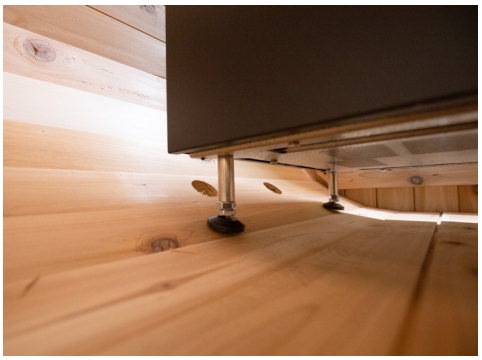


Image 66

M3 WOOD BURNING HEATER

⚠ CAUTION

• M3 wood burning heater is heavy. Two people with proper lifting techniques will be required to lift heater into place.

Remove the protective bedding, turn it over and back out the adjustable legs on one of the short sides (67). Place the protective bedding on the floor, centered between the front wall and front edge of the bench with the extended legs towards the door (68). Place a level on the protective bedding, and adjust it so its sitting level on the floor (69).



Image 67



Image 68



Image 69

Install the protective surround to the M3 heater. Pre-burn the heater outside the sauna, then once cool, place it on the protective bedding centered between the bench and the front wall (70). It should be 2-3" from the wall and bench. Slide it as far back on the protective bedding as possible (71).



Image 70



Image 71

Place the adaptor pipe on the stove chimney outlet located on the top of the stove (72). NOTE: remove the cover from the outlet and then place it on the rear heater outlet. You may need to remove a metal covering secured by a single screw to access the rear outlet. Using a plumb bob located over the center of the adaptor pipe, find the center point at the ceiling of the sauna and place a mark (73). Drill a 1/2" hole at this point all the way through the ceiling of the sauna. Cut out the template using the 1:25 oval circle. Position the template on the top of the sauna, putting the center point directly over the hole you drilled and squaring the template with the sauna. The long portion of the oval should be oriented down the slope of the roof. Using a jig saw, cut a hole in the sauna following the edge of the template (74). NOTE: Place a blanket or similar over the sauna heater to catch the debris that falls as you cut.



Image 72

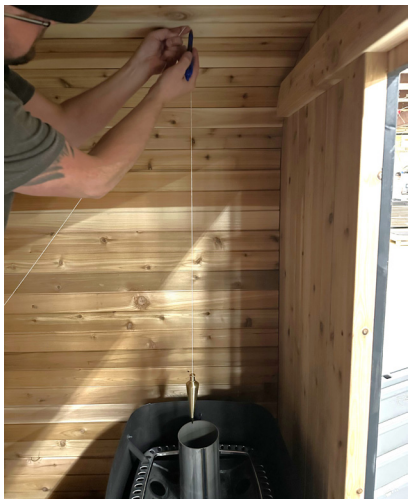


Image 73



Image 74

Lay the piece of roofing in place per image 56. Using a marker, trace the hole in the roof onto the bottom of the metal roofing. Cut out the hole in the roofing using metal snips. Now you can finish the roofing installation per the steps above.
Place the chimney sections through the hole and attach to the adapter pipe (75).

Image 75



Find the insulation ring sections, and cut a 3" tall section (76). It might be easiest to install the bands supplied in chimney kit prior to cutting. Then place it over the chimney from the top and slide into place where the chimney exits the sauna ceiling (77).

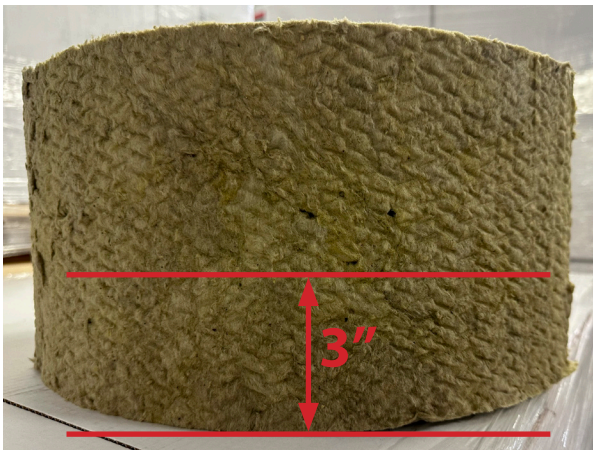


Image 76


Image 77

Place the lead through flange around the chimney and fasten into place (78). Note: This image still shows the protective plastic over the flange, remove plastic before installation. Next slide the protective chimney boot down over the chimney, conform the outer lip over the contours in the metal roofing (79).


Image 78


Image 79

Place a bead of silicone from the tube included in your kit, on the bottom outer rim of the chimney boot (80). Push the boot firmly into place over the roofing contours and insert screws supplied in the chimney kit through the outer lip on the boot (81).


Image 80


Image 81

Next, install the clamp around the top of the boot so its tight to the chimney (82). Lastly, place the chimney cover and cap over the top of the chimney (83).



Image 82



Image 83

FINAL THINGS

Once assembly is complete, sweep and vacuum the inside of the sauna. Wipe down the entire interior with a damp cloth to remove any remaining dirt, dust and debris.

Note: If the sauna has absorbed moisture in storage, the staves may shrink as the high heat evaporates that moisture. This may require you to tighten the bands even further. If your sauna is left in the open rain, this wall cause the staves to expand again resulting in an even tighter seal.

The wood of the outdoor sauna is untreated. To increase the durability of the wood, we recommend treating the outside only with an exterior grade stain or sealant of your choice. This will help to protect the wood from excessive moisture.

TRADITIONAL SAUNA USE

Congratulations! You are ready to enjoy your cube sauna! You may use your sauna in a wet or dry fashion. Dry, meaning you do not sprinkle any water onto the stones; wet, meaning you increase the humidity of the room by sprinkling water on the stones. Please note, not much water is needed to achieve a wet sauna experience.

The sauna as we know it originates in Finland. The typical sauna experience follows the steps below, but you may enjoy your sauna in any way you like!

- Set your heater so your sauna achieves the desired temperature. This is typically 160 -185+ degrees F. Novice sauna users should begin at the lower end of that range and increase their high temperature over time.
- Take a quick shower or a quick dip in a hot tub or pool.
- Step into the sauna and enjoy for 5-15 minutes, bringing a towel to sit or lay on. Leave the sauna once you are perspiring freely.
- Take a plunge in a pool, shower, snowbank, lake - anything that will cool you down! After that, relax and cool down for 10-20 minutes.
- Step into the sauna again. During this visit, you may wish to sprinkle small amounts of water onto the stones to create bursts of steam. If water spills through the heater to the floor, you are using too much water, though this will not hurt the heater or the sauna.
- Continue repeating this process. After your final visit to your sauna, relax for at least 20 minutes. Shower with warm water initially, finishing with cool water to close your skin pores.
- Prepare to feel refreshed for the day or to have an amazing night's sleep!

Whatever your sauna routine, it is imperative that you **STAY HYDRATED!**

CARE & MAINTENANCE

TREATING LUMBER
The lumber we use is naturally resistant to the elements. Left untreated, the exterior of the sauna will weather naturally, and that's fine. At any point in the future you can pressure wash (low pressure only) your sauna to bring back most of the original color.

If you wish to retain the natural color of the lumber, your local paint store can recommend a suitable exterior stain. Be sure that it has a UV inhibitor so that it will best resist the effects of sunlight. Follow the manufacturer's instructions for application. NEVER TREAT THE INTERIOR OF THE SAUNA UNLESS APPROVED FOR USE IN A SAUNA, AND NEVER USE VARNISH OR PAINT ON THE EXTERIOR.

MINIMIZING WATER SEEPAGE
Substantial or driving rain may cause water to seep into the joints between the staves; this will not hurt the sauna. When assembling your sauna, it is important that the staves are tight and the bands are snug to minimize gaps between the staves. When constructing the sauna, put as many staves and filler stave pieces under the bands as possible so the bands can pull the staves tight without leaving gaps. Over time the wood will swell into the bands when it gets wet. Eventually you may need to add additional filler staves into the sauna to fill any gaps caused by shrinkage, and extra staves have been provided for this purpose. Add staves by loosening the band brackets, inserting the additional filler staves, and then tightening the brackets again. Be sure the wood is dry before inserting more staves and tightening the bands.

CLEANING THE LUMBER
You should vacuum or brush out your sauna periodically to remove lose dirt. Over time the floor and seats of your sauna may discolor due to perspiration, dirt and general wear. You can remove dirt or stains with a solution of baking soda and water, lightly scrubbing the wood with the solution and then rinsing. Heavier stains or scuffs can be sanded out with fine grit sandpaper. Alternatively, pressure washing the interior of the sauna with a low-pressure, wide pattern nozzle will remove stains and dirt very effectively.

LOCATION AND GEOGRAPHY
Climate and temperature affect the lumber in different ways and to varying degrees. The effects of swelling and contraction as well as fading from sunlight will vary depending on the intensity of the sun and the levels of humidity and amounts of moisture in your area. The degree of these effects will not affect the quality or performance of your sauna, but may require you to tighten bands or re-stain your sauna more or less frequently. It is a good idea to check the tension of your bands and examine the degree of fading every few months, especially in the first months of owning your sauna so that you can respond accordingly.

REPLACEMENT OF SAUNA STONES
Over time your sauna stones may crack and split due to the fluctuations in temperature the stones experience. If you ever need to replace stones, only use sauna stones designed for use in your sauna heater. You can purchase replacement stones from Almost Heaven Saunas at any time.

REPLACEMENT PARTS
If you ever damage the exterior of the sauna, you can purchase replacement staves, doors, and components from Almost Heaven Saunas at any time.

ACCESSORIES
Almost Heaven Saunas offers a full line of accessories to compliment your sauna. From red cedar leg rests, back rests, drink holders, robe hooks and magazine racks to eucalyptus fragrance and more, visit www.almostheaven.com for all of your sauna accessory needs!

ALMOST HEAVEN
SAUNAS