ALMOST HEAVEN
SAUNAS
HARVIA

Magnus Barrel 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 INJURY 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.

A WORD ABOUT BARREL SAUNAS

If you have any questions about assembly, please do not hesitate to call us at **877-842-7842**, or send us an email at sales@harvia.us

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

Your Harvia barrel 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. Water seepage or leakage will NOT harm the sauna and in most cases will evaporate quickly in the hot, dry interior.

Your barrel sauna will include the following:

- ☐ Staves
- ☐ Drain stave
- ☐ Filler stave set
- ☐ Seven barrel end sections (three for rear, four for front)
- ☐ Door (four mounting pieces, four trim pieces, one drip edge)
- ☐ Hardware bag
- ☐ Door handle assembly
- ☐ Four benches (six regular braces and two small braces)
- ☐ Two backrests
- ☐ Two floor kit panels
- ☐ Two banding assembly's
- ☐ Four vent parts
- ☐ Shingles
- ☐ Two drip edge
- ☐ Fourteen stave end covers
- ☐ Cradles (including twelve feet)
- ☐ LED bar (including light bar mounting board)
- ☐ Heater and mounting hardware (if purchased with sauna)
- ☐ Stones (if purchased with sauna)

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 barrel 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
- Drill Bits
- 3/4" Spade or Forstner Bit
- Rubber Mallet
- Hammer
- Framing Square
- Screwdrivers (Phillips and flathead)
- Utility Knife
- Level
- Wrench
- Tape Measure
- Ladder
- Saw
- 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.

Unpack all staves. Identify the drain stave (it will have one or more drainage holes bored into it). This will be the bottommost and first stave used.

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 fastening the feet to the bottom of the cradles using 3.5 X 35 screws. Use two screws per foot, and place two feet on each end, and two in the middle (1-2).



Image 1



Image 2

For optimal assembly, it is important that the cradles are square to each other. Place the outer cradles 74" apart (3); the drain stave should extend over the back cradle by approximately 4-3/8" (4). The drain stave has a hole in the middle, and is rounded on both sides. Then fasten the drain stave directly in the center of the cradles using 4 X 70 screws. Make sure the stave sits perpendicular to the cradles, and the cradles are still square before continuing. Check corner to opposite corner of the cradles, the distances should be matching. To help keep the cradles square while building the base, you can fasten a stave to the uppermost part of the curve (5). This can then be used as the last stave for the base (see next step). Once the two outer cradles are fastened squarely, then fasten the center cradle to the staves midway between the two cradles.



Image 3



Image 4



Image 5

Add five staves to each side of the drain stave, tapping each into place with a rubber mallet. As you are adding staves, fasten each stave to the cradles using 4 X 70 screws. Make sure that each stave is tight to the previous stave, the ends stay flush, and the groove aligns (6-7).



Image 6



Image 7

BARREL END ASSEMBLY

It is now time to assemble the barrel ends. On a clean flat surface, take the four front end pieces, and line them up so that the top and bottom middle panels align with the two outer sections (8). Using the four angle braces, fasten the middle panels to the outer panels using four 3.5 X 40 screws in each bracket (9). We highly recommend predrilling these holes.

NOTICE

• These screws must go in flat or they could break through on the inside or outside of the panel.

Obtain two of the staves and fasten them to the bracing on the inside of the panel using two 4 X 70 screws (10). This is help secure the end panel as you lift it into place. Then carefully lift into the front groove using 2-3 people. The bracing will be to the inside, and the vent hole will be to the top.



Image 8



Image 9



Image 10

Locate and place the center back panel into the groove in the back (11). Orient so that the side panel with the hole will join it on the lower left hand side. Place a temporary stave on top to join it to the front panel to help stabilize them. Now place the two end panels and fasten through the overhanging bracing using one 3.5 X 50 screw in each brace (12). Now that the front and back panels are in place, using your level, make sure both panels are level in the grooves (13). Then make sure the panels are plumb; you may need to have a helper keep the panels plumb until you get some more staves in place (14). Check plumb side to side on the unit and front to back.



Image 11



Image 12



Image 13



Image 14

In the next part of the process you have two options; you can use the provided 4 X 70 screws to fasten the staves to the barrel ends or you can use a pneumatic finish nailer with 2.5" nails (not provided) to fasten the staves. At the bottom as you begin again you will need to fasten every stave to the barrel ends so they don't fall. Tap every stave in place with a rubber mallet so it is tight to the stave before it. Continue checking that your barrel ends have not fallen out of plumb. Also, check that your staves are staying level. Add staves to both sides until you reach approximately the middle.

Once you reach the middle, you are able to install the benches, vent components, and light bar if you like. You can also wait until the barrel is fully enclosed, it is your choice.

Once you reach the midpoint and start working your way to the top, you will only need to fasten every 2-4 staves as you feel is needed. This will depending on how level they are, and that they don't shift as you place the next stave. You may also use a strap or rope around the middle to help keep the staves in place.

Once you reach the top, you will find you don't have room to place another stave (15). Now you will need to locate the filler staves, we are thinner pieces of staves. Find the combination that will fit the remaining gap. You must use at least the two socket pieces, and fill with square edge ones as needed. You don't want the staves to fit without any sort of pressure, a snug fit means less heat loss and lower chance water gets into the sauna. You also might need to lift previous staves to get the filler staves in place (16). Once in place, tap down with rubber mallet.



Image 15



Image 16

BANDS

Locate the three bands. Place a band around the front and rear of the sauna, over where the barrel ends are; place the third mid span between those. Place the rod through the angle bracket on both ends of the band. If you fastened your staves using the 4 X 70 screws, you must remove all the screws. The band will hold the staves in place after the screws are removed. The bands will be roughly 3" in from rear end and 14-3/4" from the front end (17-18). The bands should cover the nails or screw holes. Shift the bands so the rod is about 1/3 up the side so they don't interfere with the shingles. Tighten the bands and replace the black cover caps (19).



Image 17



Image 18



Image 19

VENTS AND LIGHT BAR

Find the two exterior vents. Bend out the three tabs to hold the vents in place (20). Press into place out the outside of the front and rear panels (21-22).



Image 20



Image 21



Image 22

Place the interior rear vent over the hole and fasten using three 3 X 25 screws (23). Open the interior front vent and unscrew the front from the back (24). Mount the metal piece using three 3 X 25 screws over the front vent (25). Screw the wood portion into the metal portion (26).



Image 23

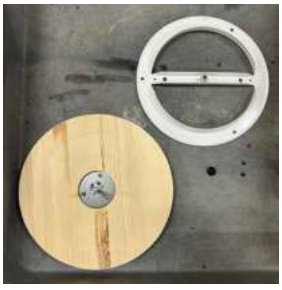


Image 24



Image 25



Image 26

Locate the 1" X 1" X 31-1/2" light bar mount. Fasten to the back wall above the lower brace using three 3.5 X 50 screws, predrilling the holes first. (27). Take the mounting brackets off of the light bar and fasten to the light bar mount using two 3 X 20 screws (28).



Image 27



Image 28

Using the 3/4" bit, drill a hole through the rear panel and feed the cord through the hole (29). Place the power supply outside the back of the sauna and find the light bar cord (30). Connect the light bar to the power supply (31). The power supply can be mounted to your choosing.


Image 29

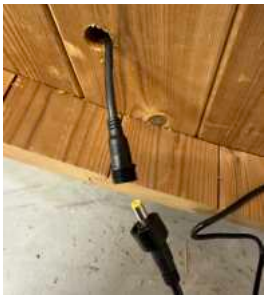

Image 30


Image 31

BENCH ASSEMBLY

Locate the four bench braces and fasten using three 4 X 70 screws in each brace. Place two braces on the rear panel, one on each side (32) and two braces on the front panel, one on each side (33).


Image 32


Image 33

Place the bench on the braces (34). Fasten benches to sauna using six 4 X 70 screws. Place four on the bottom through the back into the barrel, and place one on each end through the bench into the end panel (35-36). We recommend you predrill these holes.


Image 34


Image 35


Image 36

BACKRESTS

The backrests will mount roughly 8" up from the top of the bench, or whatever is most comfortable for you.
Fasten one 3.5 X 40 screw through each of the three braces (37-38).


Image 37


Image 38

FLOOR KIT

Place the first floor kit piece in the back and place a level on it to ensure its flat. Fasten in place using four 3.5 X 50 screws (39). Then place the second piece shifted towards the door so there is an gap between the two pieces. Fasten again using four 3.5 X 50 screws (40-41).



Image 39



Image 40



Image 41

DOOR ASSEMBLY AND INSTALLATION

Note: The canopy benches can be installed before or after the door, it is your choice.
Place the door on a smooth clean surface and find the four 1-1/8" X 1-1/8" door frame pieces (42). Measure 1-9/16" from the front and mark to place the door frame pieces. The two 66-1/2" pieces will be the same height as the door, and the two 25-7/16" pieces will overlap. Predrill holes and fasten them using four 4 X 60 screws into the long pieces, and three 4 X 60 screws into the shorter pieces (43-46).



Image 42



Image 43



Image 44



Image 45



Image 46

The door is symmetrical so it can be install so it opens left or right. Lift the door into the sauna so the frame pieces you just added are inside the sauna. Get the door plumb and square in the opening. Using 4 X 60 screws, predrill and fasten through the door frame pieces and into the front end panel (47-48). Use two screws through the top and bottom, and use four on both sides. Depending on how the door fit in the opening, you might need to put these screws in at a slight angle to ensure you fasten into the front panel.



Image 47



Image 48

Place the outer door trim over the gap around the door and the opening. Predrill the holes and fasten using 3.2 X 40 trim screws, three in the top and bottom and four in the two sides (49-50). Similar to above, depending on how the door sat in the opening, these screws might need to go in at a slight angle to fasten to the end panel. Now predrill and fasten the door drip edge using three 4 X 60 screws (51).



Image 49



Image 50



Image 51

Unpack the door handle and lay out the pieces (52). Place the wooden spacer into the wooden handle and place a screw through it, then a metal spacer followed by the plastic. Place wooden handle inside the sauna and place the screw through the top hole in the glass. Install the metallic spacer then plastic spacer on the metal handle and match on the outside of the glass (53-54). Begin tightening the screw to attach the two handles together, but do not fully tighten. Repeat for the bottom handles (55). Now fully tighten both screws until the handles are tight (56).



Image 52



Image 53



Image 54



Image 55



Image 56

CANOPY BENCHES

Find the remaining two bench braces. Make a mark on both sides of the outer front wall, 19" up from the drain stave. Fasten them using three 4 X 70 screws (57). Make sure the braces and level, and both are identical heights. Place the smaller braces so the tops are even with the previously installed brace. Make sure it is level, predrill the holes, and fasten using three 4 X 60 screws (58). Predrill two holes into the larger brace through the bottom up through to the top to fasten the bench. Fasten using two 5 X 100 screws in each brace/bench (59). Locate the bench legs and place them so the notch matches the notch in the underside of the bench, and the angled cut on the base matches the curvature of the barrel. Fasten using two 4 X 60 screws in the top (60). Predrill the bottom and fasten using two 4 X 60 screws (61). Completed benches (62).



Image 57

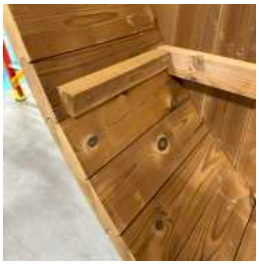


Image 58



Image 59



Image 60



Image 61



Image 62

ROOFING

Measure up from the ground 63" and mark the barrel. Place the triangular drip edge at that mark and fasten using four 4 X 60 screws (63-64).



Image 63



Image 64

When doing the shingles, always start the row at the front, and work towards the back. Start the roof by cutting a shingle in half at the notch and nail into drip edge using the provided roofing nails (65). Then use full shingles until they overhang the back; mark and cut it using a square and nail in place (66).



Image 65



Image 66

On the next row, cut half a tab and place over the previous row, nailing into the tar spots on the shingle (67). Again finish the row until it overhangs, cut square and nail into place (68). The remnants being cut off can be used for the row ends on the opposite side. Starting the 3rd row, square the edge and then place over the previous row using the alignment marks on the end of the shingles. Again, nail into the tar spots on the shingles (69). The next row should just cover the top of the notch from the previous shingle. Finish the row as done previously.



Image 67



Image 68



Image 69

Continue this process switching from full tab to half tab so the notches skip every other row. Again, always start from the front and work backwards. Once you get to the top where the shingles meet, you will need to cut a strip off the shingle so they come as closely together as possible (70-71). Depending on how the shingles lay, you might need to do this twice (72). You don't want your nails more than 8" apart so the ridge shingles cover the nails.



Image 70



Image 71



Image 72

Once you get to the top, you will need to cut the tabs apart on your shingles. Cut the four tabs in the middle of the notch. Once you have the four tabs, cut a 45 degree on both corners (73). This will be on the side opposite of the notches. When installing the ridge shingles, you will want to work towards the direction the wind predominantly comes from. The first shingle will be nailed opposite of the direction you are working (74). Then nail the next one directly over top to start the direction you will be working (75). Then repeat across the entire ridge (76). Once you get to the end, make the last tab end flush with the stave end (77). You may have to cut the length of this tab down slightly. Once the last tab is laid on the ridge, take one final tab that is cut square and cover to make the ridge appear uniform (78).


Image 73


Image 74


Image 75


Image 76


Image 77


Image 78

The last step is to attach the stave end covers. Before you attach the end covers, make sure the shingles do not overhang the stave ends. If they do, use your utility knife to cut them flush. Start by attaching the top middle by predrilling and using two 4 X 60 screws. The end cover should overhang the stave approximately 3/16" on the bottom. Complete by attaching three down both sides of the middle one (79-80). Repeat for the back of the sauna.


Image 79


Image 80

HEATER - ***Please see heater manual.***

⚠ 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.

ALTERNATE HEATER MOUNTING

If the heater you are using in your sauna does not mount flat to the existing barrel end, there will be two 1" thick planks to fasten to the back wall to give you a flat surface to wall mount your heater. Fasten these to the back wall using three 4 X 60 screws in each board (81). Space them apart so they provide an adequate surface for the mounting brackets to fasten to.



Image 81

OPTIONAL HEATER FENCE ASSEMBLY

Attach the front board to the two legs using two 3.5 X 40 screws in each leg (82). Use two 4 X 60 screws in each leg to attach to the back panel.



Image 82

Your kit also came with pieces of wire covering trim that can use to conceal wires if necessary.

They can be mounted using 3.2 X 40 trim screws.

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.

TRADITIONAL SAUNA USE

Congratulations! You are ready to enjoy your barrel 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!**

ALMOST HEAVEN SAUNAS
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