



THE KUUMA
BLUFLAME

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**OPERATORS
MANUAL**

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Urgent Warning!

A **BLUFLAME** sauna stove is different from an ordinary wood-burning sauna stove. It's a gasification stove designed to burn clean and efficiently.

Please carefully read the operating instructions explaining proper procedures for safe operation.

You do not operate this stove like an ordinary wood-burning sauna stove!

Warnings...

- Do not operate the **BLUFLAME** with the draft control lever in the full-open position for more than 5 – 10 minutes. It's only designed to get the fire going.
- Your chimney must be a “class A” or masonry-type chimney in good operating condition.
- Do not connect this sauna stove to a chimney flue servicing another appliance.
- Never connect to an outside chimney unless it is sufficiently insulated to reduce the amount of condensation to a level that will not interfere with the exhaust of the flue gases.
- In case of a run-away chimney fire...
 - CLOSE THE DRAFT ON THE STOVE AND THE STOVE PIPE IMMEDIATELY.
 - ENSURE THE MAIN FIREBOX DOOR AND ASH-PAN DOOR ARE CLOSED TIGHT.
 - CALL THE FIRE DEPARTMENT.
- Check your chimney flue stove pipe connections frequently to ensure they are secure. Check to see if there is any creosote buildup in the pipes that will require cleaning.
- Serious fire may result if a sufficient amount of creosote builds up in the stove pipes over time.
- Never burn materials other than cordwood or kindling, preferably seasoned (split and dry).
- Do not burn garbage, gasoline, engine oil, kerosene, fuel oil, or other flammable liquids. Do not use chemicals or fluids to start the fire.

- Chimney fire or heat exchanger failure could result from burning large amounts of cardboard, wood shavings, paper scraps, dried Christmas trees, coal, garbage, tires, or other burnable products.
- Stove surfaces will be hot. Keep children away, and do not touch the stove during operation.
- Steam produced from throwing water on the rocks will fluctuate based on rock temperature and volume of water. Please use caution.
- Do not operate with the main firebox door or ash-pan door open.
- Do not store fuel or other combustible material within the required combustible clearances.

Installation Instructions

- The **BLUFLAME** must be installed on a non-combustible surface that extends a minimum of 8 inches beyond both sides and must extend a minimum of 16 inches beyond the front of the stove.
- Once the stove is positioned – install the stainless steel backer plate, ensuring washers face the back wall.
- Install the floor brick first and then the side walls (there is no firebrick on the back wall of the stove) with the brick installed.
- Once the floor fire bricks are installed, proceed to install the side fire bricks by sliding the top of the bricks under the angled support iron on the side of the firebox and by sliding the bottom of the brick out against the outer wall of the firebox.
- A properly installed chimney is one of the most significant operations that will affect the performance of your **BLUFLAME** sauna stove.
 1. Follow the recommended clearances from the stove pipe manufacturer.
 2. Attach a 6-inch diameter standard black stove pipe to the “smoke collar” on the top of the stove.
 3. Connect additional sections until you get near the ceiling. Then, follow the manufacturer's recommendations to transition to a class “A” stainless steel insulated chimney or connect to a proper masonry chimney.
 4. Screw the stove pipe sections together to ensure they remain connected.
 5. The **BLUFLAME** stove will need a manual stove pipe damper installed in the single wall pipe. This can be installed anywhere in the single wall pipe but is traditionally in the first section of the pipe

above the stove. This damper is vital to maintaining proper chimney draft on very cold or windy days.

6. Periodically inspect the stove pipes and smoke collar for any creosote accumulation. Clean as needed.
- Install heat shields on the stove and/or combustible walls according to the diagrams on pages 11, 12, and 13.
 - Because the top of the stove is designed to drain excess water out the back, we suggest installing the stove with a slight backward tilt to ensure water will run toward the back.
 - Never locate the stove in a sauna hot room that is too air-tight. The stove consumes oxygen for proper combustion, and sauna occupants need sufficient air/oxygen for breathing.
 - Ensure the firebox door closes tightly. If the door is not tight – loosen the bolts on the hinges and adjust the door according. If you run out of adjustment - it is time to replace the rope gasket on the inside of the door.
 - Before using the stove for the first sauna, it is necessary to do a stove-curing burn. (to avoid a non-toxic odor, you may choose to do the curing burn outdoors before installation inside your sauna if you prefer).
 - Before lighting a fire for a cure burn, first ensure fire bricks are installed.
 - Always attach at least one section of stove pipe to ensure draft before curing.
 - Place some newspaper or an appropriate fire starter inside the firebox near the front door.
 - Next, place some small wood kindling on the newspaper.
 - Finally, place 3 or 4 pieces of well-cured firewood on top of the kindling. We suggest pieces that are 15 to 16 inches in length. Push these chunks back until the ends touch the back wall of the firebox.
 - Move the draft-control handle (located directly below the main firebox door) to the full-open position (move the handle up as far as it will go).

- Open the ash pan door to get additional combustion air during the lighting process, light the newspaper, and close the main firebox door.
- Once the newspaper and kindling are burning well (about 1 minute), close the ash-pan door. **DO NOT LEAVE ASH PAN DOOR OPEN!**
- Once the fire is burning well, move the manual draft control knob on the stove pipe closed about 50%. Next, lower the draft control lever on the stove until it is open, only about ½ throttle or less if you have drier wood.
- Let the stove burn until the fire goes out.
- If you are doing your stove-cure burn inside your hot room, we suggest propping the sauna door open and potentially installing a room fan to help blow smoke out of the hot room.
- The stove will smoke a fair amount (non-toxic) as the paint is hard-cured, and any remaining oils and/or preservatives on the steel are burned off.

You are now ready to enjoy your first sauna!

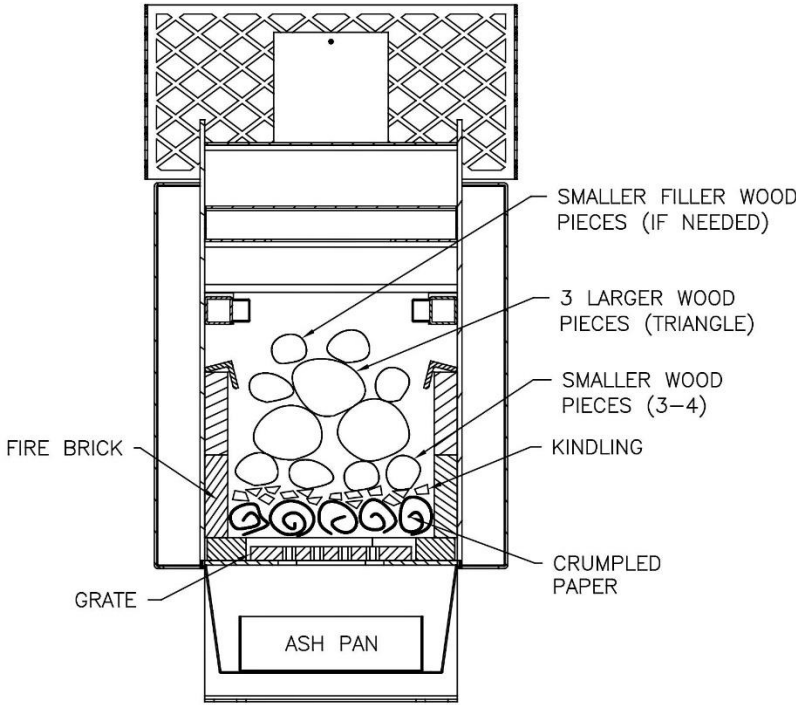
General Firing Instructions

- Use approximately 16-inch firewood chunks for the bottom row when loading the stove. We like to think of the bottom row as large kindling chunks designed to light the row above. We recommend at least two levels of wood pieces for best burn results.
- Load the 16-inch lengths lengthwise, front to back, directly against the back wall of the firebox.
- Wood shorter than 16 inches should be loaded so that the front of the chunks are 1 inch back from the front air inlet.
- If you use a mixture of 16-inch wood and shorter wood, place the longer pieces at the bottom and the shorter pieces on top for the 2nd and 3rd rows of wood.
- Open the draft handle on the front of the stove wide open for lighting. Keep fully open for 5 - 10 minutes.
- After the fire is burning nicely, lower the handle to 50% position for as long as you wish. If the wood is very dry, you can close to about 1/8th open. This will vary by your wood, how dry it is, and how many coals you have.
- The [BLUFLAME](#) is designed to burn the wood from “front to back.”
- If you wish to add more wood for an extended burn, first pull the remaining hot coals forward, leaving approximately 1 inch from the front of the stove (it is important not to block airflow from the front of the stove), and re-load with a minimum of 3 pieces of wood arranged in a triangular pile (see page 10 diagram).

Additional information unique to the BLUFLAME

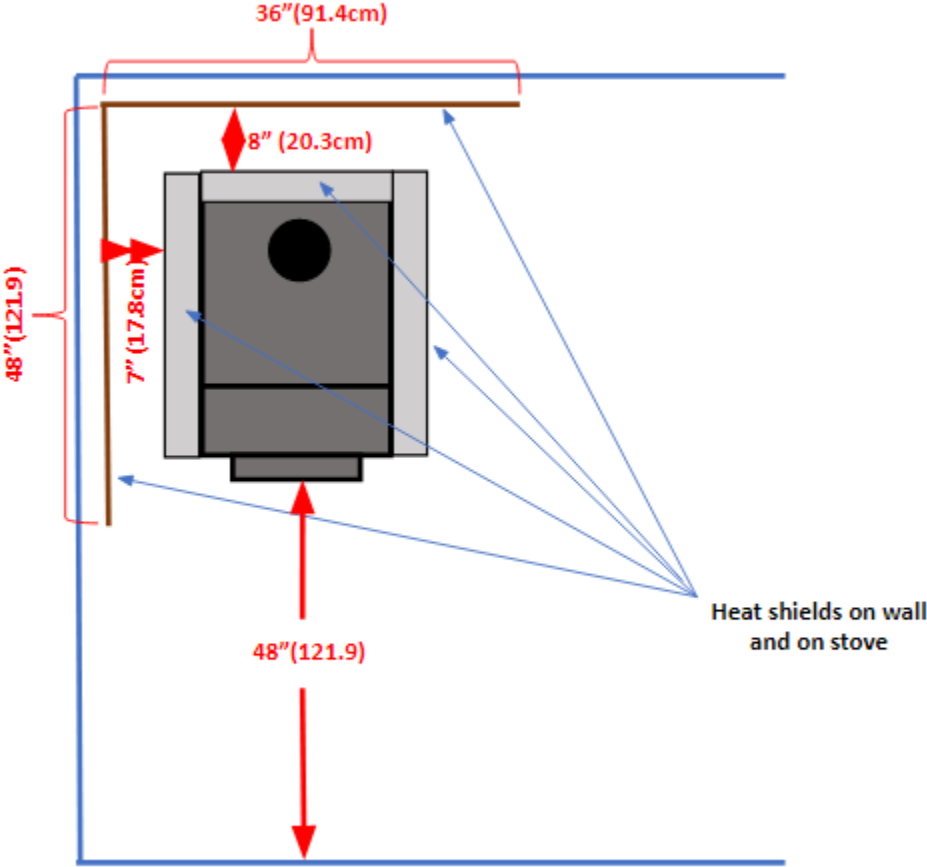
- The **BLUFAME** does not require as much wood (depending on the amount of rock you use, wood quality, and heat demand) as traditional sauna stoves and will provide nice long burns on relatively small loads.
- You can vary your hot room temperature by varying the size of your wood load. A smaller wood load will produce a 165 – 195 degree temperature. You will need to experiment depending on the type and dryness of the wood you are using and your hot room efficiency.
“A larger load will produce a much warmer hot room temperature.”
- The moisture content of the wood can also play a significant factor in wood burning.
- Reloading after everything is hot (stove, rocks, walls, benches) is where the BluFlame efficiency shines. Don’t overload, but use at least three pieces (make them smaller if needed), or you will significantly increase the hot room temperature.
- We suggest that until you are familiar with the operation of your stove, you start with smaller loads.
- Ensure that the stove can get a sufficient draft. This is important for burning wood clean. On days with less draft, you might need to operate with the air draft control open more. We don’t like to use restrictive chimney caps.
- In the future, we will continue updating our website, Facebook, and YouTube pages with videos (operational, tips/tricks, etc.)

Loading your Kuuma *BLUFLAME*

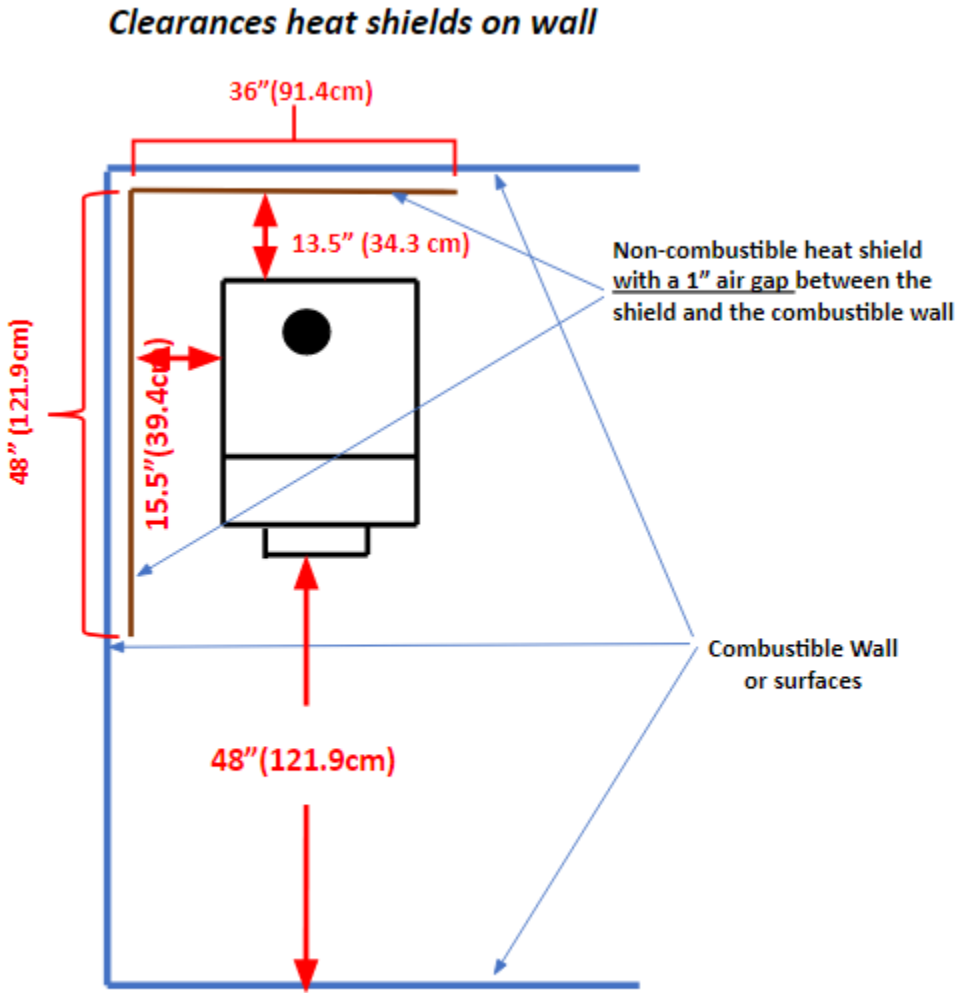


LOADING YOUR KUUMA BLUFLAME
(END VIEW)

Clearances Heat Shields on Wall and Stove

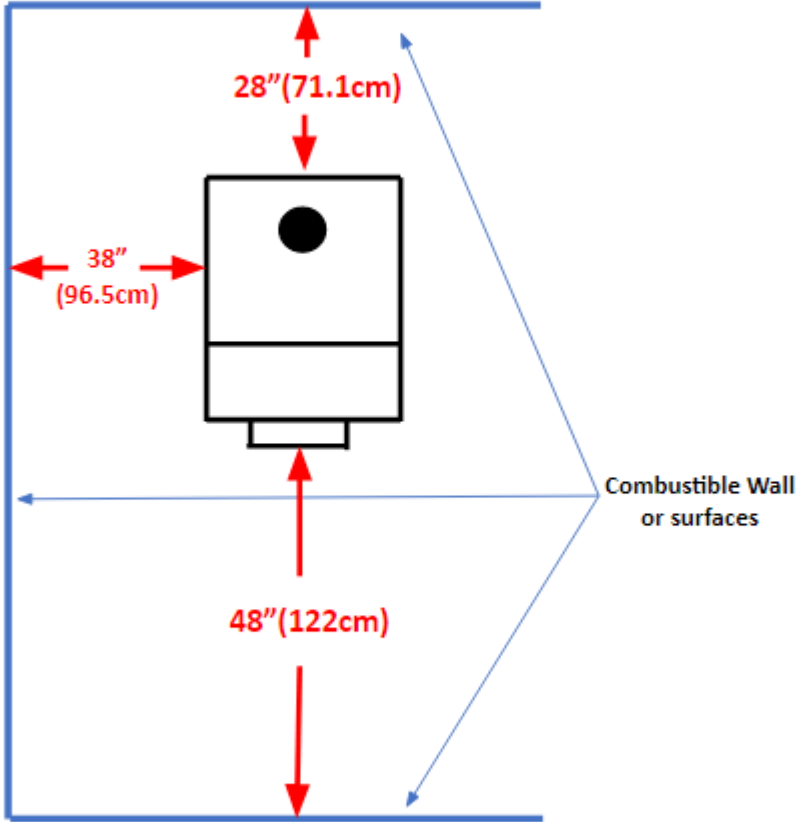


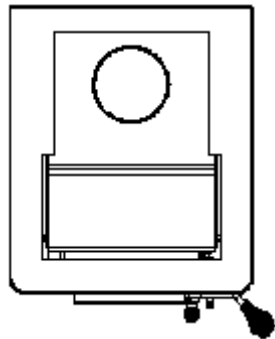
Clearances Heat Shields only on the Wall



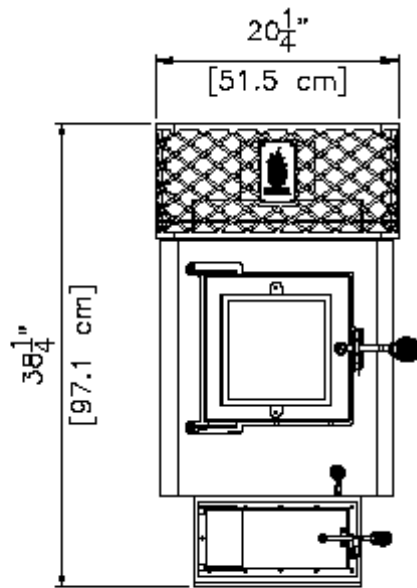
Clearances with no Heat Shielding

Clearances no heat shields

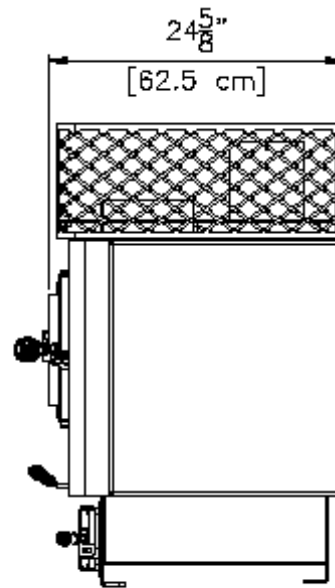




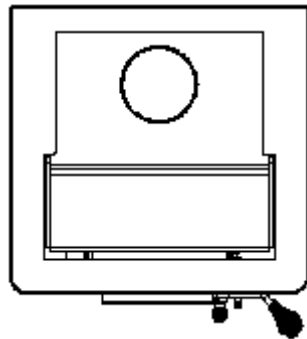
SMALL BLUFLAME
TOP VIEW



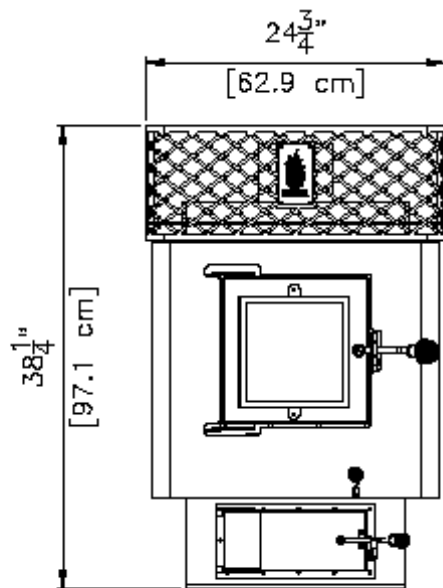
SMALL BLUFLAME
FRONT VIEW



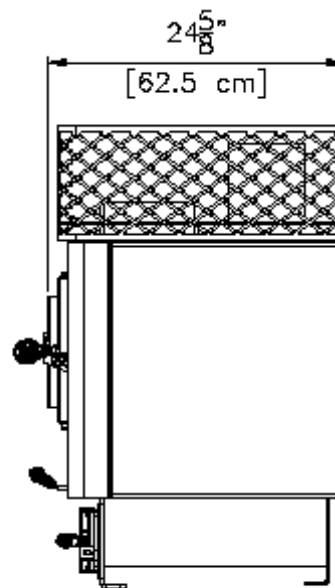
SMALL BLUFLAME
RIGHT SIDE VIEW



MEDIUM BLUFLAME
TOP VIEW



MEDIUM BLUFLAME
FRONT VIEW



MEDIUM BLUFLAME
RIGHT SIDE VIEW

Recommended Maintenance

(Annually or as needed)

1. A microfiber cloth and water work great to wipe down the stove and rock surround
2. Disconnect the chimney and clean it with a chimney brush
3. Vacuum inside the smoke collar on top of the baffle
4. Pull rocks, check and replace disintegrating rocks
5. Vacuum rock box, firebox, and ash pan surround
6. Check the fire brick; the cracks are okay. If the brick is disintegrating, replace
7. Kuuma sauna stoves are made with thick American-made mild steel. To help protect the longevity of your stove, we recommend using a Scotch-Brite pad to scuff areas where paint has chipped, scratched, and worn away (Especially in the rock box area). Then, touch up the areas with black high-temperature flat/matte paint (Stove Bright, Thurmalox, VHT, Rustoleum, all available at box stores, auto part stores, or on Amazon). The paint will help keep a protective barrier between the water and the metal of the stove.
8. Always remember to do the bake and breath method when you finish your sauna session for the day. Bake and Breathe method (Blog)

These simple steps will help you protect your KUUMA sauna stove, keep it looking nice, and extend its longevity for years or decades.