

## MAINTENANCE GUIDELINES

### 01 ///

CRG Sauna Systems strongly recommends that the sauna floor is made of a material that is easily cleaned. Ceramic tile, concrete, marble, sheet vinyl, etc. are all suitable for use in a sauna. When the sauna floor is made of a non-porous material, it is easy to keep clean, sanitary and odor free. Carpet is not recommended for use in the sauna.

### 02 ///

To remove perspiration stains from the walls and benches, the wood may be lightly sanded with fine sandpaper to restore its appearance. We do not recommend that stains or sealers be used in the sauna, as they may produce toxic vapors.

### 03 ///

To maintain appearance of the sauna heater, remove water stains by wiping cool heater with a damp cloth.

### 04 ///

The sauna room will heat faster if the high vent is kept in a 1/2 closed position during the initial heat up period. The low vent should always be kept in the open position.

### 05 ///

Use a disinfectant when needed. Typical maintenance in a commercial application is about once a week. Each sauna bather should sit or lie on a towel when taking a sauna, to aid in prolonging the life of the benches.

### 06 ///

A floor drain is recommended for use in commercial applications. It facilitates drainage when a large volume of bathers uses the sauna, as well as easy maintenance.

### 07 ///

Remove duck board flooring and wash with disinfectant. On wooden duck boards, test disinfectant on a small area to ensure that there is no chemical reaction that may discolor the wood. Hose off duck board and replace in sauna.

### 08 ///

Required warning signs should always be posted according to the instructions.

### 09 ///

Never use water on the sauna stones. Do not use any chemically treated water (such as spa or pool water) on the heater as it will cause rapid oxidation of the internal heater components.

### 10 ///

CRG sauna heaters require no special maintenance when properly installed by a qualified electrical contractor. After about one year of use, inspect the stones to determine if they need replacement. Rocks may crack or crumble over time.

## MAINTENANCE GUIDELINES SAUNA USE PROCEDURES

1. Sauna must be turned on approximately 1/2 hour before each initial use in order to heat up sufficiently.
2. Shower before entering the sauna, in order to remove body oils, and dirt. Remain wet, do not towel off.
3. When entering the sauna, the vent should be open, for maximum oxygen circulation. **EXTREMELY IMPORTANT!**
4. May stay in sauna for desired length of time.(max 30 minutes).
5. When completed having a sauna, rinse your body with cool water to close pores and continue bathing.
6. Eat something light and have a refreshing drink after the sauna. RELAX!!!

**CAUTION:** Avoid a fire, do not place any combustible material on sauna heater. Reduce the risk of electrocution and burns.  
DO NOT OPERATE UNLESS THE GUARD IS IN PLACE.

### WARNING: REDUCE THE RISK OF OVERHEATING

1. Exit immediately if uncomfortable, dizzy, or sleepy. Staying too long in a heated area is capable of causing overheating.
2. Supervise children at all times.
3. Check with a doctor before use if pregnant, in poor health, or under medical care.
4. Breathing heated air in conjunction with consumption of alcohol, drugs, or medication is capable of causing unconsciousness.

### VENTILATION

Ventilation in a sauna room is extremely important to achieve the utmost in satisfaction and pleasure. It will also speed up the preheating of the sauna room.

Lack of fresh air due to insufficient ventilation or poor arrangement of ventilation can create an uncomfortable feeling. This often results in the symptoms of difficulty in breathing or burning of the skin. The expended hot air in the sauna contains proportionately less oxygen than the denser atmosphere outside. Bathers sometimes experience faintness unless the air is changed regularly.

An amount of fresh air enters each time the door is opened; this is insufficient, however. Normally two ventilators are built into the walls. The diagrams below show the proper location of the vent openings. The inlet being located below the heating unit (or close to it) and the outlet is located on the opposite side, on the ceiling or just below the ceiling. Recommended ventilation openings are 4" to 6" diameter, depending on the size of the sauna room.

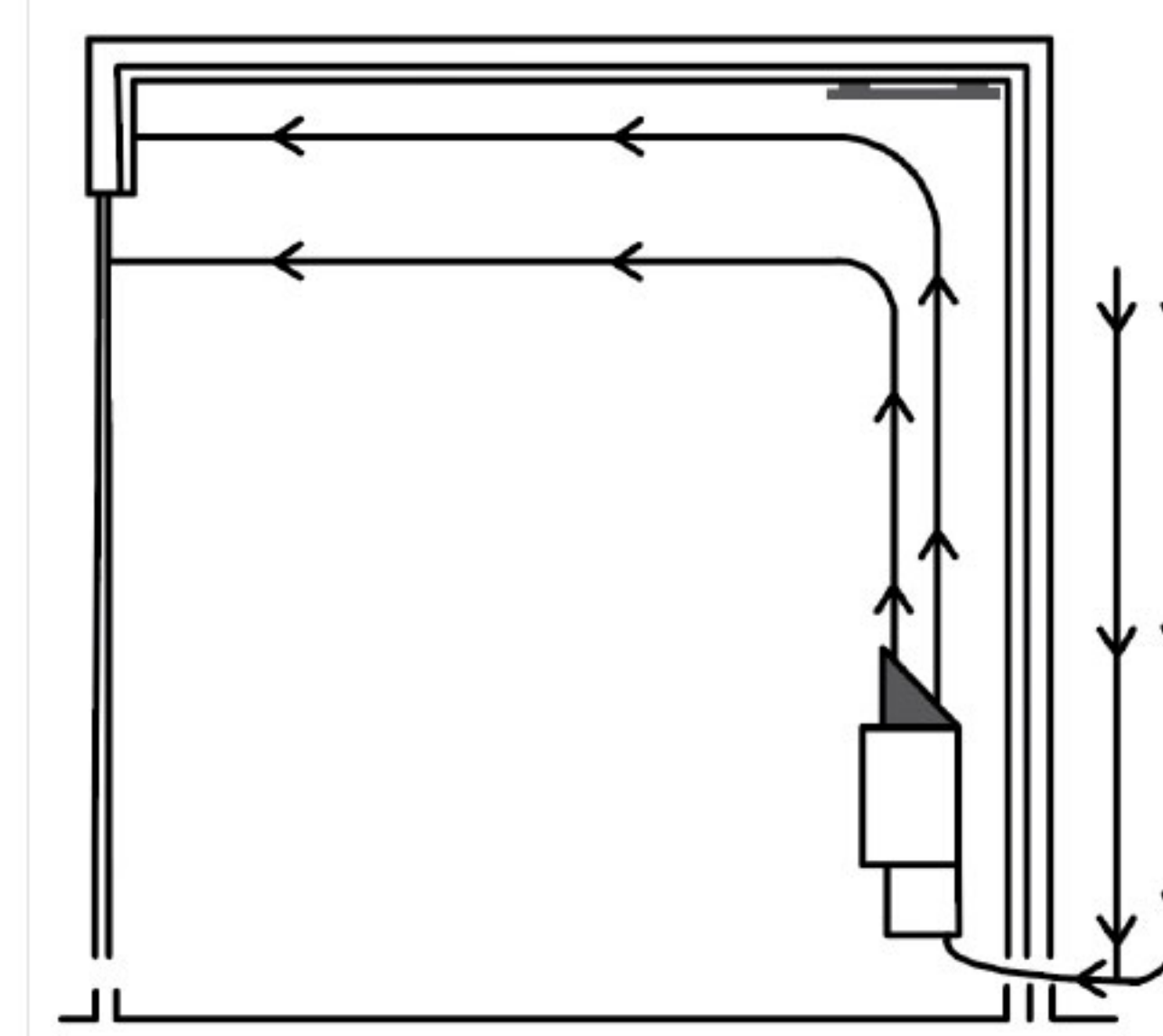


Figure 1

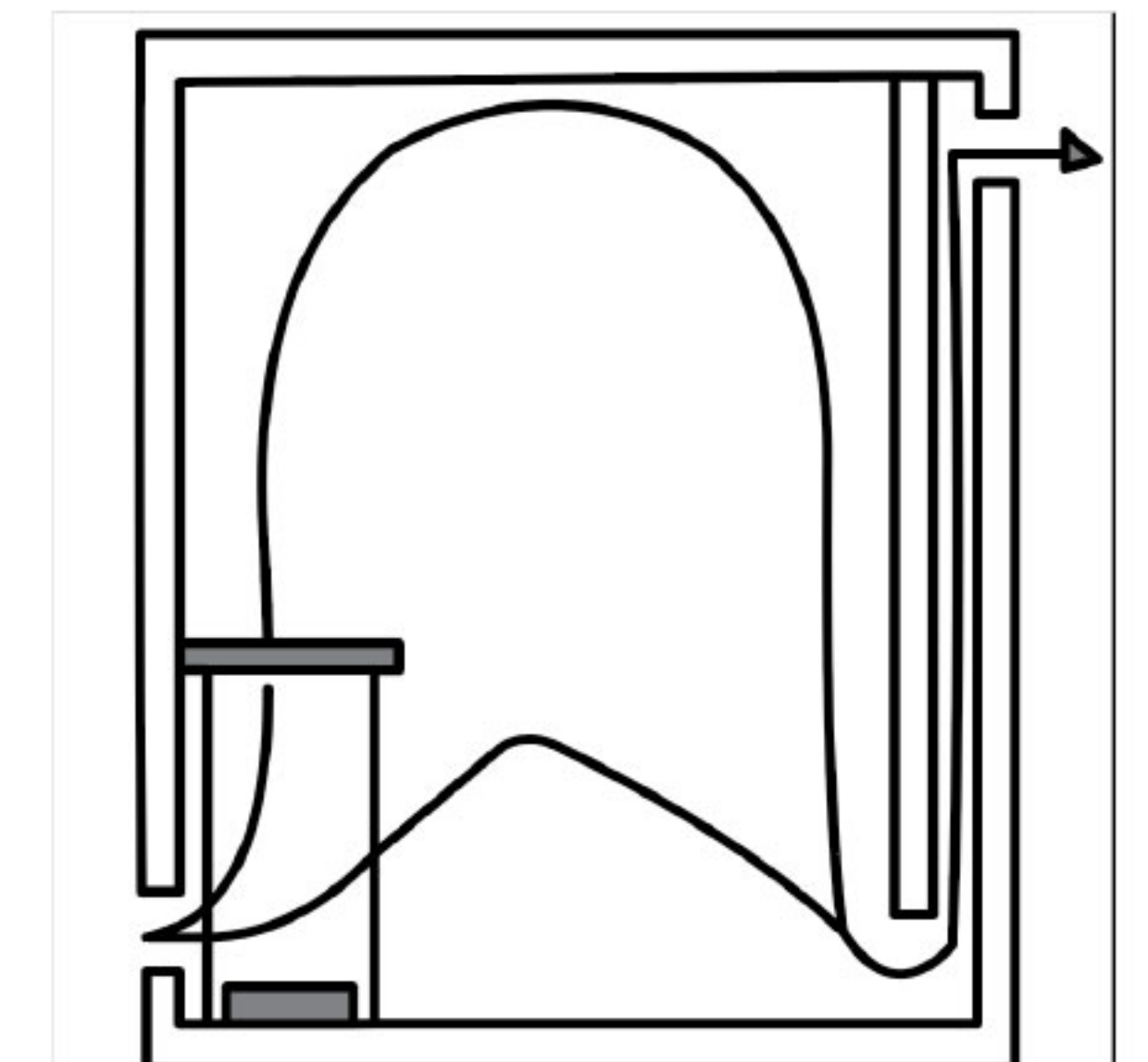


Figure 2

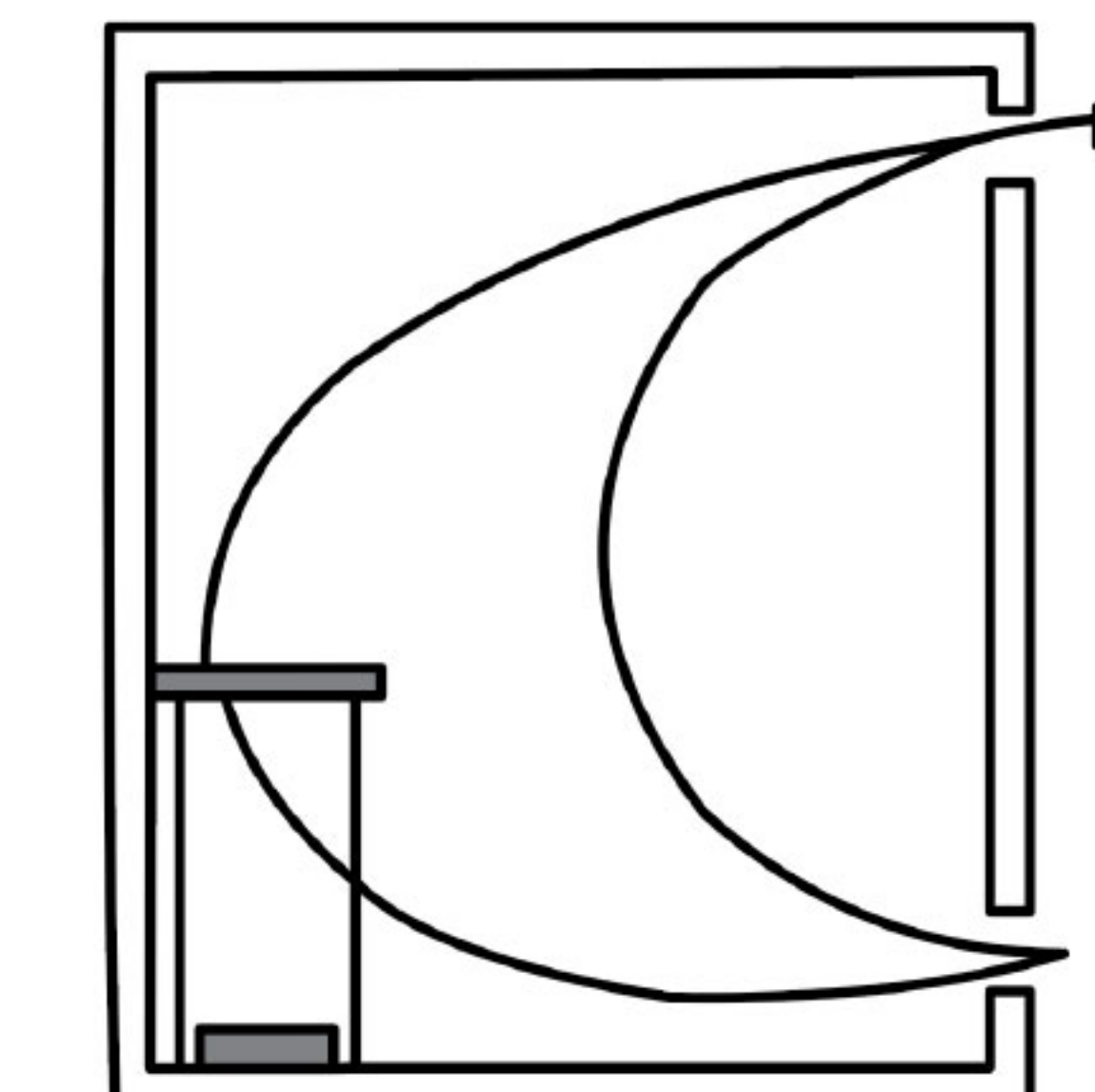


Figure 3

**ALL HEATING UNITS ARE MANUFACTURED TO MEET THE LATEST CSA, UL & CE SAFETY REQUIREMENTS.**

## MAINTENANCE GUIDELINES SAUNA USE PROCEDURES (CONT.)

### HEATING UNITS

The heat and moisture content will cause stress to the heating unit in any sauna. Therefore, only the best materials and craftsmanship are used in our units.

Our heaters have been designed by the means of advanced technology to provide you with years of enjoyment. So for energy efficient and service-free heaters, we feel you have made a good choice with us. Our heaters range from 2000 watts to 21000 watts, and there are 4 physical sizes available: a petite wall mount to a large floor mount.

#### *Sauna material and wood thickness recommendation:*

Materials recommendations for the sauna room should be a long lasting soft wood, such as cedar, red wood, etc. Western red cedar is an ideal choice for the interior sauna liner for the walls and ceiling. Ideal thickness of paneling is 0.25 to 0.75 inches thick. Cedar is renowned for its high impermeability to liquids and its natural phenol preservative. It is ideally suited for exterior and interior use where humidity is high. Cedar's natural oils are the reason it is decay-resistant and rich in color.

### CAUTION:

Prolonged exposure in the sauna may cause hyperthermia. Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98°F. The symptoms of hyperthermia include an increase in the internal temperature of the body, dizziness, lethargy, drowsiness, and fainting. The effects of hyperthermia include failure to perceive heat, failure to recognize the need to exit the sauna, unawareness of impending hazard, fetal damage in pregnant women, physical ability to exit the room and unconsciousness.

**Warning:** *The use of alcohol, drugs, or medication is capable of greatly increasing the risk of fatal hyperthermia.*

**The sauna door should NOT** include any locking or latching system, malfunction of which could cause entrapment inside the heated room. The sauna door should always open outwards from the sauna room.

### Hi Limit Reset Tripping

*(Possible Cause)*

- Wiring attached to high limit should be adequate gauge.
- Excess power supply wire within heater connection box.
- Power supply wire or electrical wires must not make any contact within the electrical connection box other than the actual connections.
- Inadequate or no sauna room ventilation, an intake & outtake is required (3" diameter per vent hole), gap beneath door is inadequate.
- Room insulation must not be greater than R12.
- Heater wattage (output) is greater than required.  
*(1000 watts per 50 cubic feet)*
- Thermostat temperature probe is not located in proper location within the sauna room. Must be located on the wall above the heater, 6" from the ceiling.
- Sauna bathers are tampering with thermostat temperature probe, by wetting the thermostat allowing it to read cooler inaccurate room temperature. This will cause the sauna heater to remain on for longer periods, causing internal overheating of the heater.
- The hi-limit reset switch can only be reset once the sauna heater has cooled.
- Hi-Limit requires replacement by qualified serviceman.
- Sauna rocks should be placed loosely within the heater, do not overfill allow heater to breathe and allow air to flow through heater body. Do not place rocks below rock tray. Use large diameter rocks.
- Heater guard must be set back from heater body according to CSA/UL requirement, listed on label attached to heater body.

## MAINTENANCE GUIDELINES SAUNA USE PROCEDURES (CONT.)

### How to Enjoy the Best in Saunas

Every sauna enthusiast will develop their own style once fully acquainted and confident in the sauna process. There are no fixed rules to follow for enjoying the sauna, as everyone should be free to experiment to get the maximum enjoyment out of their sauna.

This also applies to sauna regulars. There are nights when you just can't take it as hot, as well as days when you wonder how you found all of your extra energy. The sauna can be relaxing or invigorating - depending on you. One should never take more heat than is comfortable and enjoyable and never push the limits of endurance.

### Before You Start

1. Be prepared to give the sauna plenty of time to do its work - a leisurely sauna is far more beneficial. One to two hours of time is ideal for total relaxation. A number of sessions can be spent in the sauna with short cooling-off and rest periods in between. A longer drying-off and rest period is very relaxing once the sauna is finished.
2. Always wait at least one hour after eating a large meal before using the sauna. Some people find that a sauna first thing in the morning is very invigorating and a great way to start the day. Another ideal time is in the evening - it beats any sedative.
3. Preheat the sauna to a temperature of your liking by setting the thermostat. Most regular sauna users enjoy the heat around 180°F (82°C) although the popular temperature range is from 170° to 190°F (77° to 90°C).
4. Bathers not accustomed to sauna heat should start at a lower temperature around 160°F (70°C) and allow their capacity for enjoying hotter temperatures to develop. Take as much heat as you find comfortable.
5. Wear as little as possible. A loose towel can be used if necessary. Remove any watches, pendants, jewelry and glasses that would become uncomfortably hot.
6. CAUTION - if you have any form of medical condition or disorder, you should consult your doctor before using the sauna if you are not accustomed to it.

### The Sauna Way

7. Many bathers start with a brief warm shower to wash off body oils and dirt.
8. Enter the sauna and relax on the top level for 10 to 15 minutes (or the lower level if you prefer a moderate heat). Many bathers spend about half of their total time lying down. The dry heat will increase the blood circulation and will eventually bring the body to the perspiration point. Otherwise, do not expect to perspire heavily in the dry heat of the first session.  
  
Do not stay longer than 30 minutes - the sauna is not a test of toughness. Any exposure beyond that time can become hazardous as well as beyond all levels of comfort and enjoyment. The feet should be raised above the head level by using permanent footrests installed on the wall or by placing a portable footrest under the ankles. Portable back and headrests are ideal for greater levels of personal comfort and enjoyment.
9. Shower again or take a cool refreshing swim (hardy types may take an icy dip or a roll in fresh snow). Sudden temperature changes can be bracing and invigorating. Any extreme cold must be followed by sauna heat to avoid catching a chill.
10. Rest for 10 to 15 minutes to allow your body to cool down slowly and then repeat the cycle of heat, shower and rest.