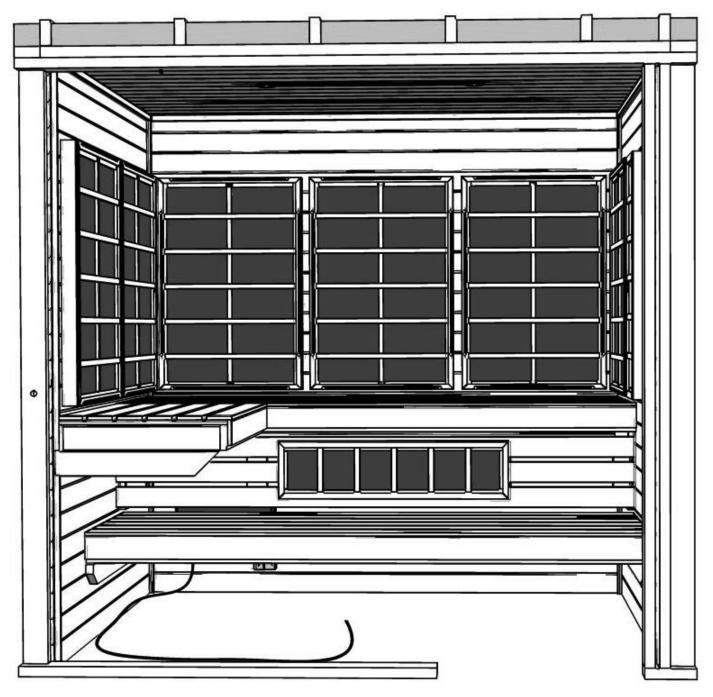
# InfraSauna Custom Cut Installation Guide



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Read all instruction's carefully before installation, including instructions packaged separately with the sauna heater. Please leave all instructions and warranty with the owner.

**WARNING**: When using electrical sauna heaters and associated sauna products, basic precautions must be followed, including the following:

- 1. Grounding is required.
- 2. No electrical receptacle shall be installed in the sauna room.
- 3. Be sure rocks are placed in the heater according to the instructions on page 9 of this manual.
- 4. Do not tamper with the door or install a latching or locking system. Malfunction of which may cause entrapment inside the heated room.
- 5. Do not block ventilation openings. Vents must be kept free of obstruction so proper airflow is maintained in the sauna room. Do not stack anything in front of the vents.

**WARNING**: Prolonged exposure to elevated temperatures is capable of inducing hyperthermia. Hyperthermia occurs when the internal temperature of the body reaches several degrees above the normal body temperature of 98.6°F. The symptoms of hyperthermia include an increase in the normal temperature of the body, dizziness, lethargy, drowsiness, and fainting. The effects of the hyperthermia include failure to perceive heat, failure to recognize the need to exit the room, unawareness of impending hazard, fetal damage in pregnant women, physical inability to exit the room and unconsciousness.

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

**CAUTION FIRE HAZARD**: Do not use the sauna room for drying clothes, bathing suits, etc. Do not hang towels above the heater or place any object, other than the rocks supplied, in the heater. If any darkening of the wall around the heater is noticed, discontinue sauna use immediately.

**Electric Shock Hazard:** High voltage exists within this equipment. There is no user serviceable parts in this equipment. All installation and service to this equipment should be performed by qualified licensed personnel in accordance with local and national codes.

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# Frequently Asked Questions and Answers

# **Materials and Installation**

#### Does my sauna need to have a drain installed?

No, not necessarily. That said, it may be more convenient for cleaning purposes- especially with our traditional saunas.

#### What kind of floor is best for a sauna?

For traditional saunas, the best kind of floor for a sauna is cement, tile or anything that doesn't absorb water. For infrared saunas, wood or tile is perfect. Carpet, however, should never be used- as it absorbs sweat and odors.

## What heater size is appropriate for may sauna?

To find out the appropriate heater size for your sauna, measure Length x Width x Height to find the cubic footage. Next, find the correct heater on the heater sizing chart. On the infrared saunas, the ideal amount of emitters and wattage has already been calculated to each room.

#### What type of circuit breaker should be used for my sauna?

Standard breakers should be used. They should be sized for the heater to correspond with the National Electric Code. Standard infrared saunas, however can be easily plugged into normal household 120 volt outlets (15 and 20 amp).

#### Why are there some many different wood choices recommended?

There are many variables to consider when choosing the appropriate wood choice for performance is a given sauna. All the woods used in our saunas have been used for hundreds of years and hove long proven their viability for sauna use. Wood choice is also largely contingent upon user preference and style. We hand select clear softwoods such as Western Red Cedar and vertical grain Canadian Hemlock and fine-grained European woods such as European Alder and Nordic White spruce. We then complement these choices by matching bench materials which enhance the sauna user's comfort levels. We determine the most ideal profiles, thickness specifications, framing materials, hardware- and give you a product that is built to perform and to last.

## **Other Sauna Questions**

#### How much can I expect to pay monthly for my sauna?

If you use your sauna 3 times per week, a 6 kW heater will use approximately \$4 to \$6 per month. A 2. kW heater, on the other hand, would use about \$2/month. Far-infrared saunas typically use \$3 to \$5 per month.

#### How long, on average, does it take for a sauna to fully heat up?

A traditional sauna generally takes between 30 and 45 minutes to fully heat up. During this time, the rocks will be heated to the perfect temperature for soft heat and soft steam. It takes about 10 minutes for an infrared sauna to heat up. After 10 minutes, the air has wormed up a little and the emitters are running at full power.

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# Frequently Asked Questions and Answers

### What is the best temperature for a sauna?

The appropriate temperature for a sauna depends on your preference! Most people prefer to enjoy their sauna at temperatures between 150° to 175°F for traditional saunas and 110° to 130°F for infrared saunas.

#### How long should I stay inside a sauna?

While this, too, varies between individuals- one can usually stay in the sauna until they begin to feel uncomfortable. Typically, remain in the sauna for about 10-15 minutes and the take a break to cool off for several minutes. Then you can feel free to return to the sauna for another session. A sauna experience can be truly relaxing and rewarding, but don't stay in the sauna for extended periods of time. Set the temperature and humidity level (if your are using a traditional sauna) to your ideal level. If you begin to feel dizzy or uncomfortable, simply leave the sauna and cool off.

#### What should I do after sauna heat bathing?

After your sauna, cleanse your skin via shower or bathe to remove any and all residues or salts left behind. A quick rinse will close your pores once again and is the perfect way to end you sauna experience. It is recommended that you moisturize your skin with a high quality moisturizing lotion. It's also ideal to shampoo your hair afterward. Don't' forget to drink an adequate amount of water, mineral water, fruit or vegetable juice to replace fluids that were lost during your heat bathing.

#### Is it okay to pour water on the rocks of Saunatec traditional heaters?

Pouring water on the rocks of Saunatec traditional sauna heaters is perfectly fine and is an essential aspect of the overall experience! For infrared sauna, however, the humidity will be ambient.

## Are there any health problems that I should be concerned about?

Be sure to consult your personal physician if your have any history of heart problems, high blood pressure or any other health problems before enjoying any kind of sauna.

#### What are some of the most notable benefits of using a sauna?

Relaxation is by far the most cited benefit from regular bathers, followed closely by the positive effects seen from detoxification.

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These instructions were written for contractors and do-it-yourselfers who are constructing their own saunas. Much of the installation is performed with basic construction practices. However, these tips should help make the process easier and help to ensure your sauna is professionally installed for optimum enjoyment.

- A. Materials that *are not* furnished include: framing material, insulation and exterior finish (unless specified).
  - B. All electrical work should be completed by a professional electrician.
  - C. Review the entire instruction packet prior to installation of the sauna kit.

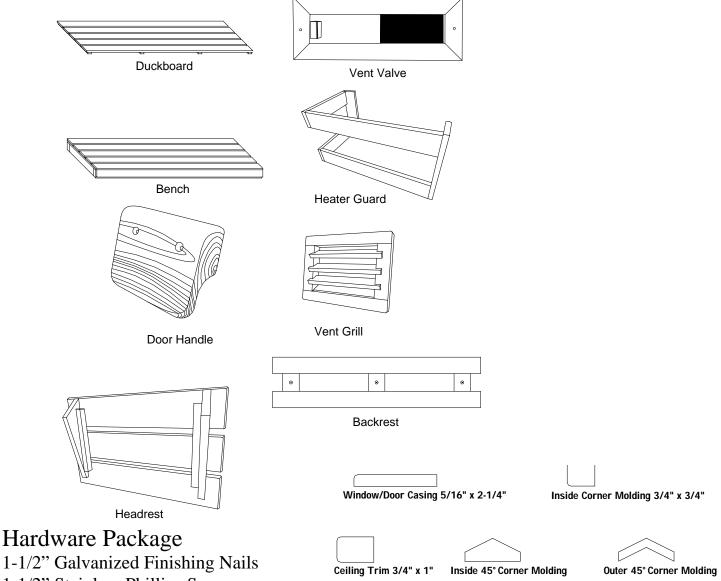
**NOTE:** Each lumber bundle is marked as to the order of installation. Minor trimming may be needed to fit job conditions.

Your sauna can be placed on concrete, tile, or any surface that does not absorb water. Do not install the sauna on carpeting or any surface that does absorb water.

# TOOLS REQUIRED FOR INSTALLATION

18 GAUGE BRAD NAILER
HANDSAW OR MITRE BOX (PREFERRED)
CORDLESS SCREWGUN
TAPE MEASURE
CARPENTER'S SQUARE
LEVEL
2-3/4" Hole saw (for option light kit)
3/8" WOOD DRILLBIT (if sauna has an L-bench)
NOTE: TORX BIT IS PROVIDED

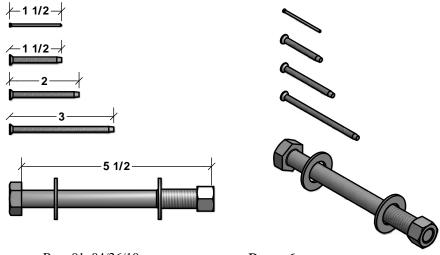
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# Hardware Package

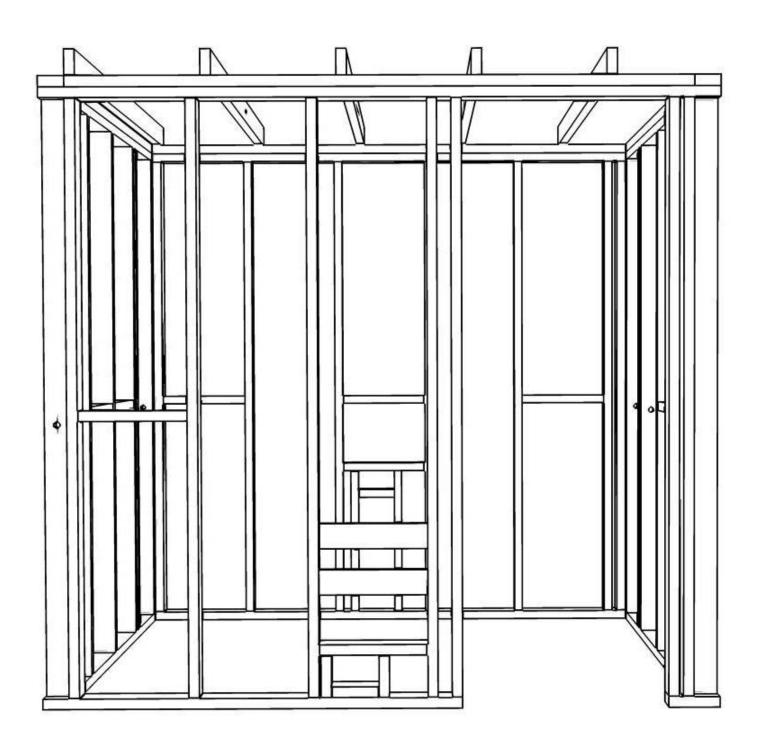


- 2" Torx Head Wood Screws
- 3" Torx Head Wood Screws
- 5-1/2" Carriage Bolts, w/ Nuts and Washers (for saunas with L-benches) Torx Bit (not shown)



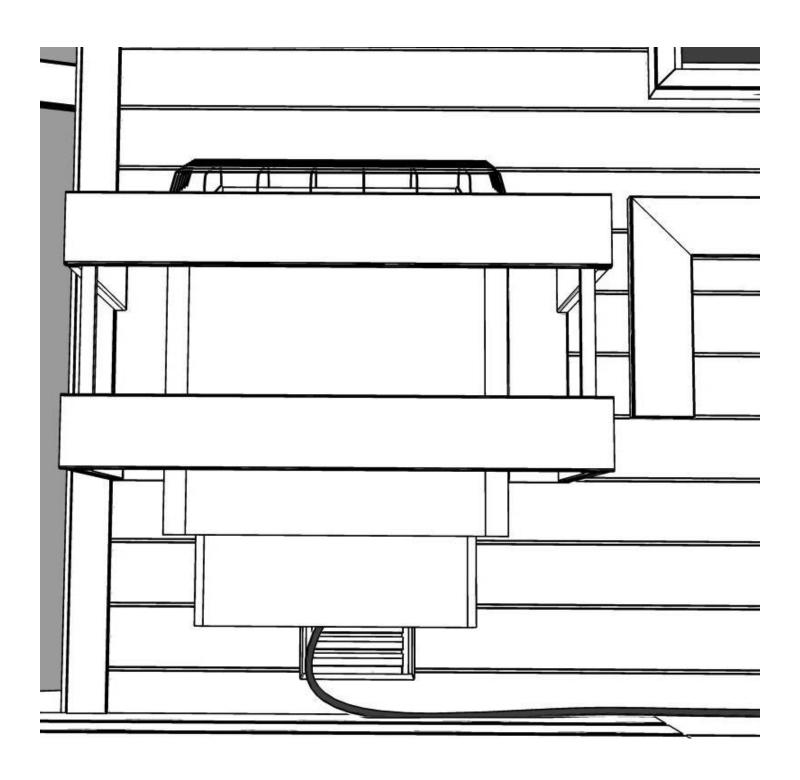
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*Framing the sauna stucture.* Standard framing consists of 2x4 walls framed 16" on center. Two vent locations are suggested. One vent near the floor (vent sizes to be 6" x 4") at the heater location and one vent on the opposite side of the room 23" from the floor to the top of the vent. Frame in blocking for the heater.

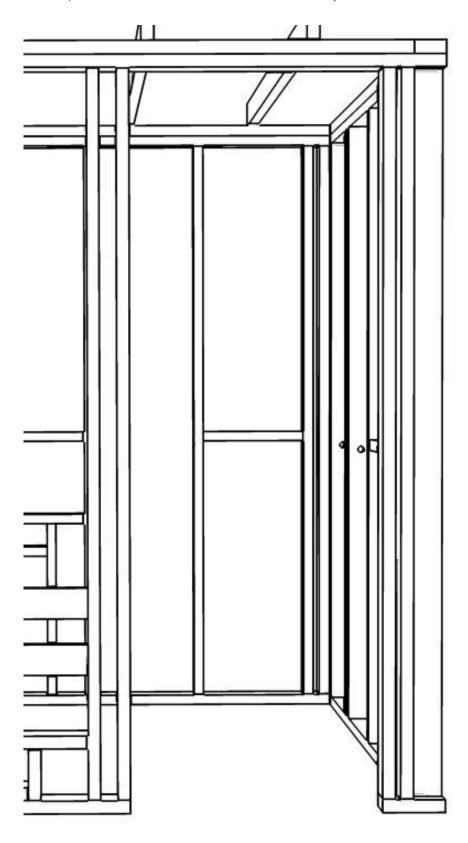


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Refer to heater *Installation and Operating Instructions* for proper sauna heater installation.

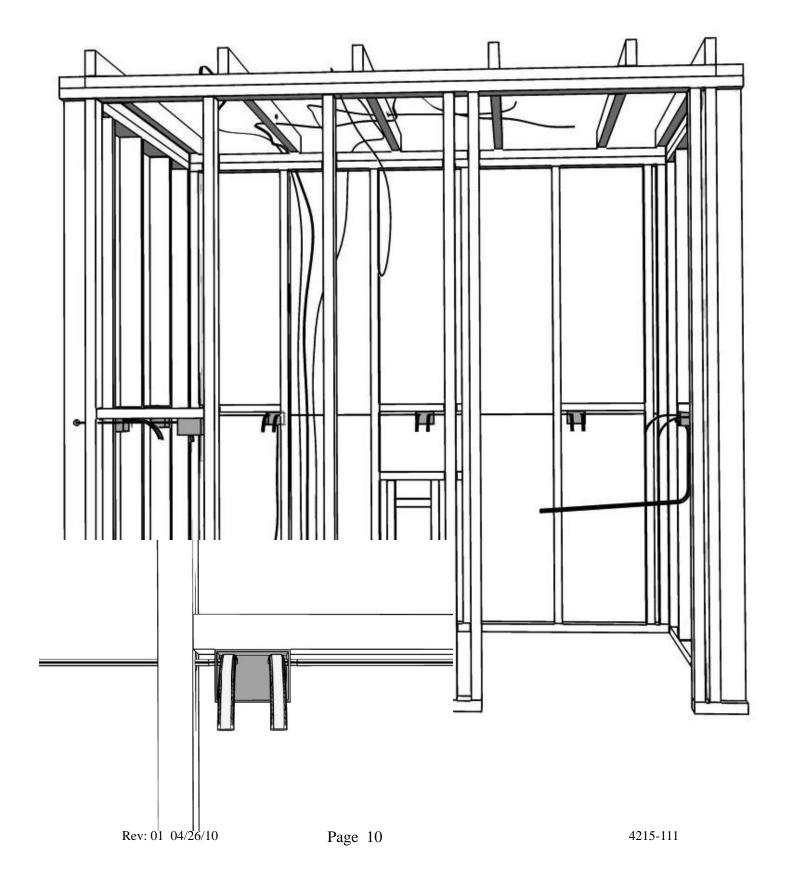


*Framing for the door.* The rough opening of the door will be determined on the door ordered. To calculate the R.O. size, if a wood door is ordered add 2 inches to the width and 2 inches to the height (Example: 24" x 80" door size, the R.O. will be 26" x 82"). To calculate the R.O. of an all glass door, add 2-1/4 inches to the height and 3-1/2 inches to the width (Example: 24" x 80" all glass door size, the R.O. will be 27-1/2" x 82-1/4").

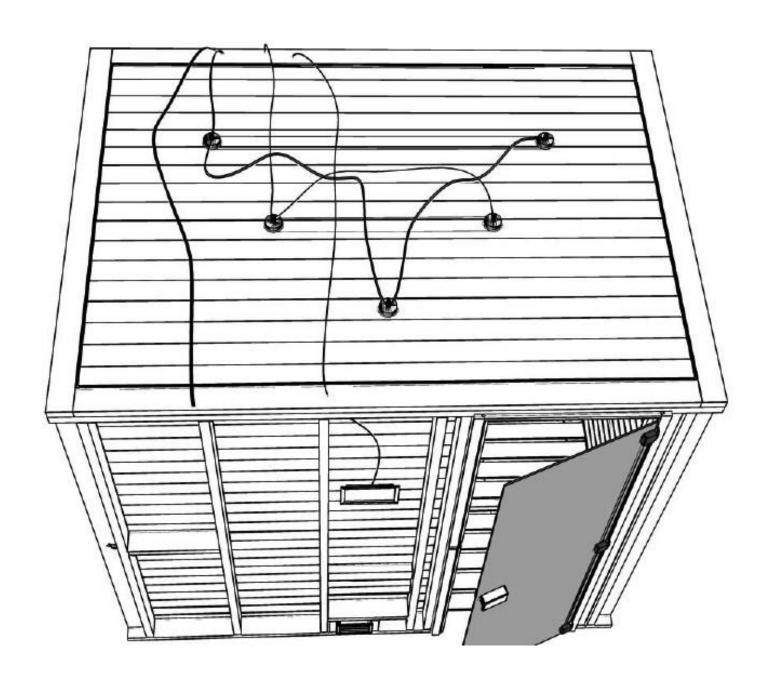


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IR heating panel heights will be determined based on finished bench heights. Typical finished bench heights are 35" from the floor to the top of the upper bench. Electrical boxes can be roughed in approximately 5" above the finished bench heights.

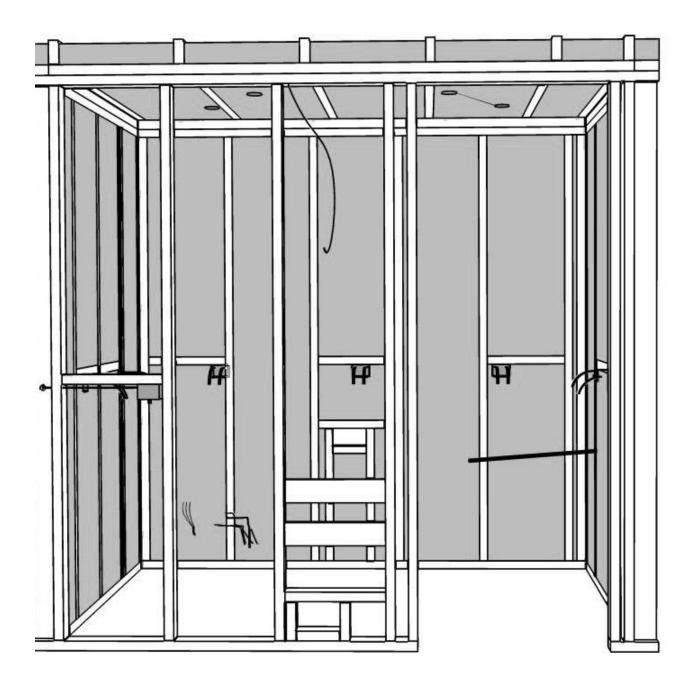


Example of low voltage light locations. (This is an optional light kit. Your kit may not include this light kit). Run wire harnesses before installing ceiling tongue and groove. Sensor wire (included) will also need to be run from the CBPK box location to the location of the sensor. See Heater Installation and Operating Instructions for details regarding sensor location.

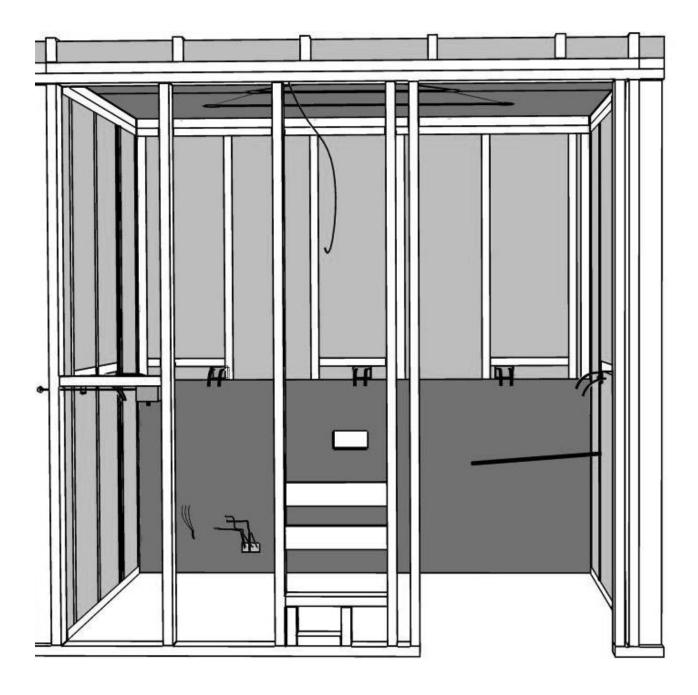


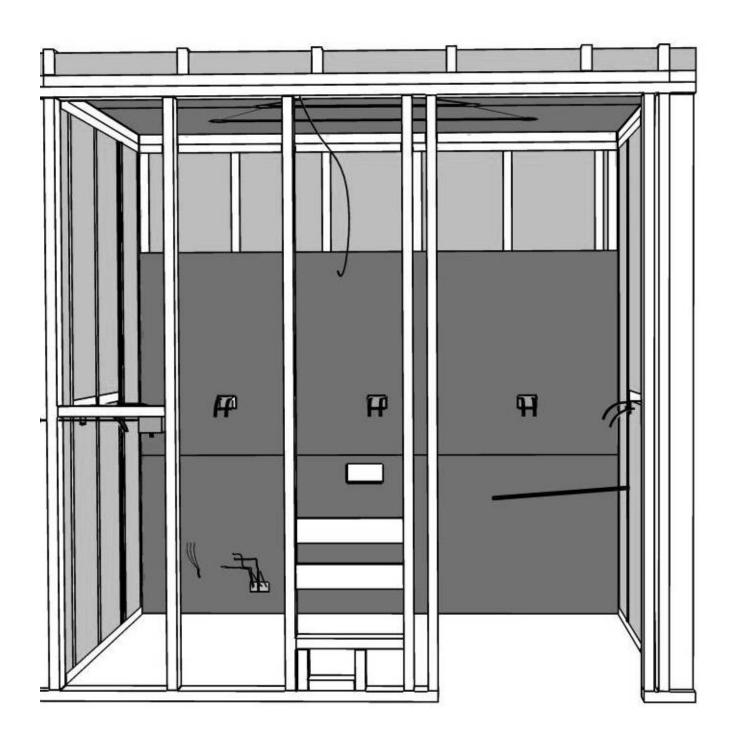
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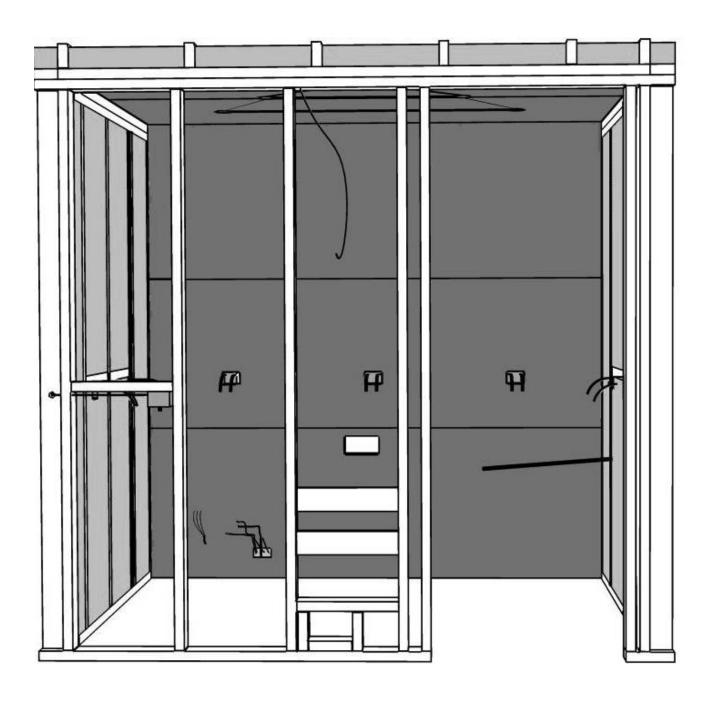
Insulate the walls and ceiling with unfaced fiber glass insulation. Insulation needs to be sized depending on wall stud thickness.

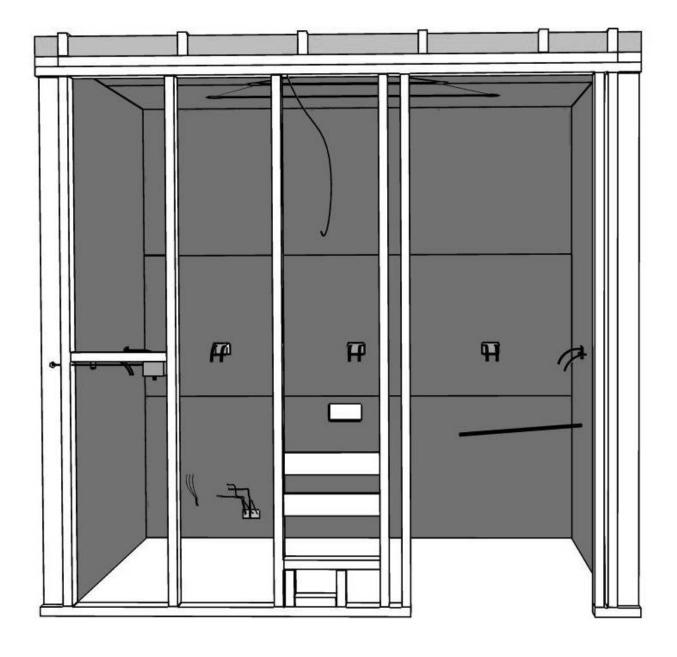


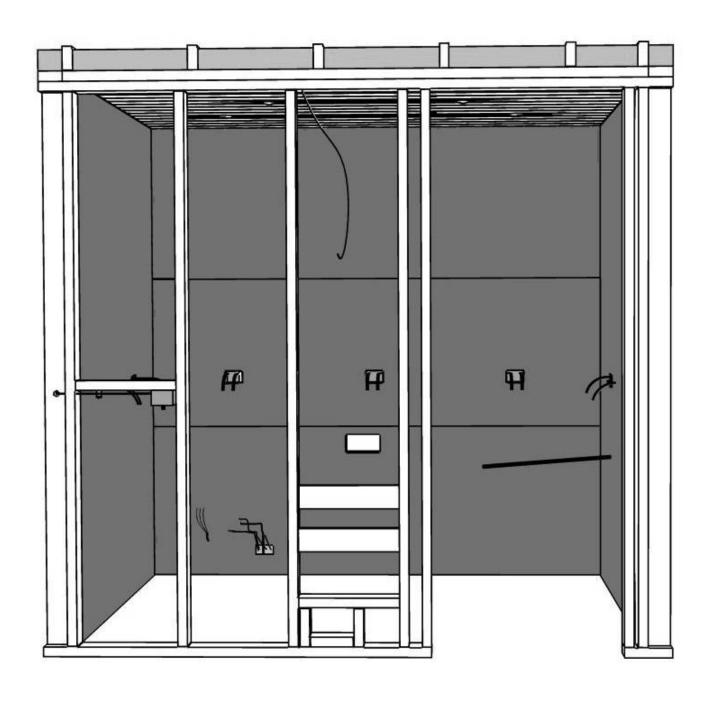
After the sauna is insulated, apply the foil vapor barrier to the ceiling and then the walls. When applying the foil to the walls, start from the bottom and work up.



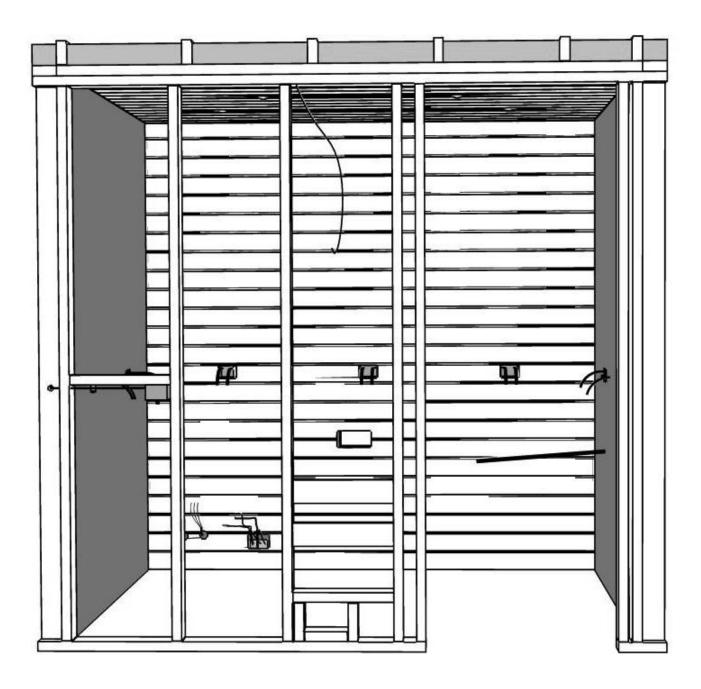








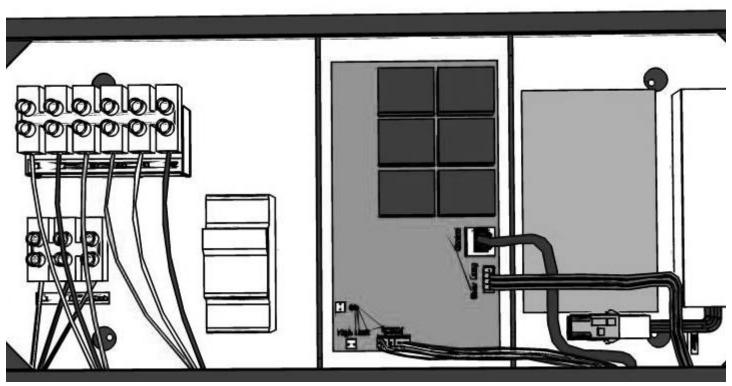
Install the ceiling T&G first, followed by the back wall, then the side walls followed lastly by the front wall. The sauna kit is manufactured following this process. Using a pneumatic brad nail gun will be the most efficient method to nail the T&G to the wall studs. If the kit was ordered with vertical T&G install the ceiling first. Start the vertical T&G in a corner and work around the perimeter of the room.



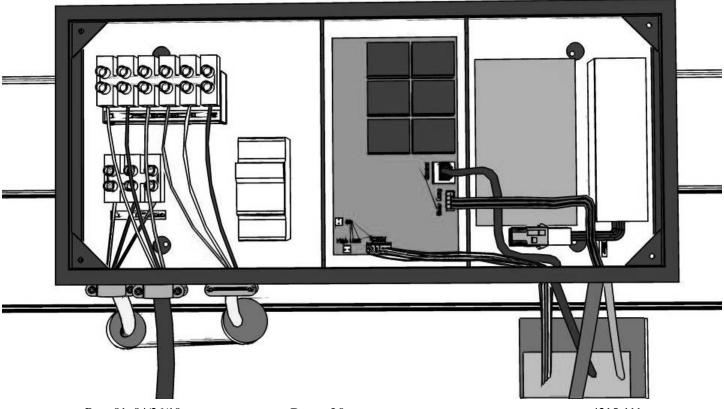
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Refer to *Installation and Operating Instructions* for suggested CBPK box location and wiring requirements.

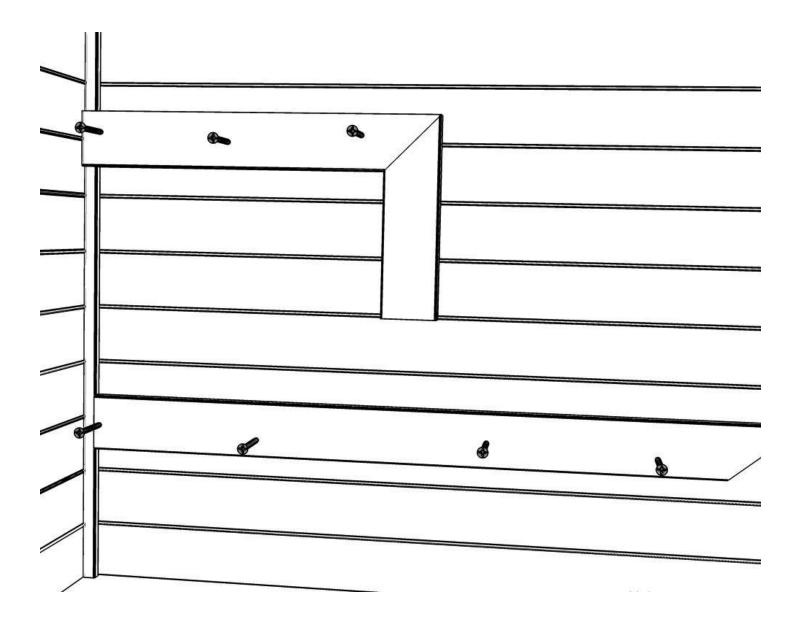


Plug low voltage cables into the appropriate locations on the circuit board. The blue "phone" cable is the control cable, multi colored cable is the sensor wire, blue and white cable is the color therapy cable, 2 conductor red/black wire is the sauna heater high limit cable and the black/ white cable is for the power for the CD player.

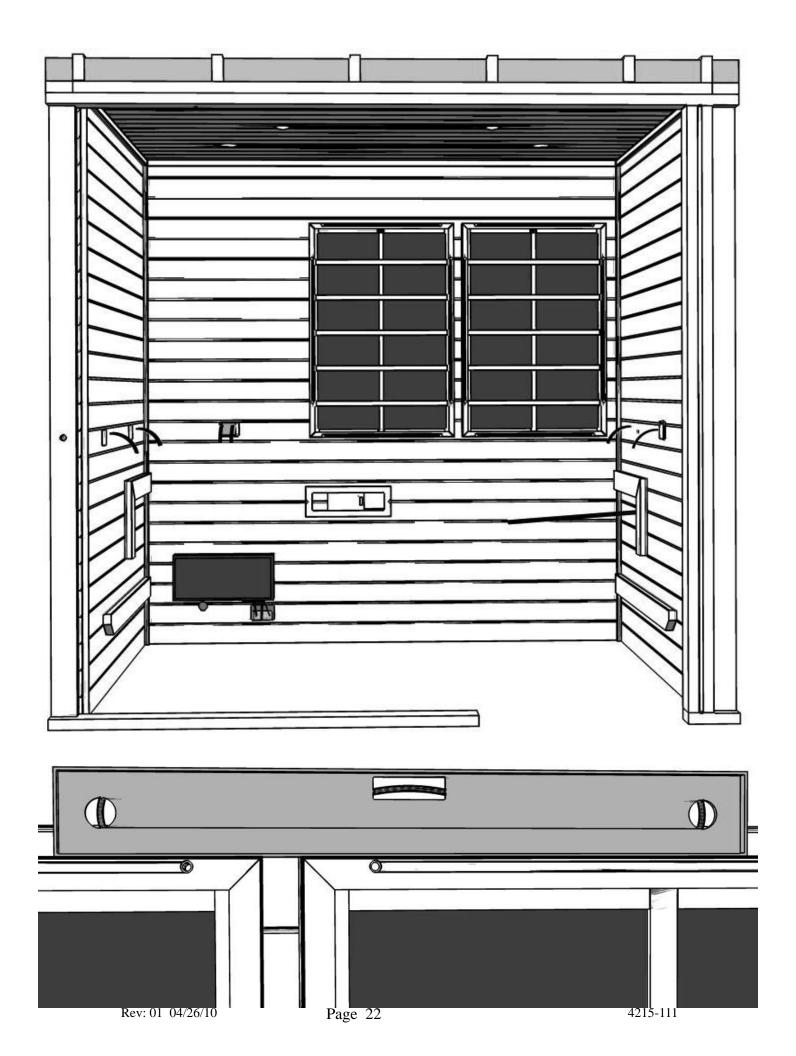


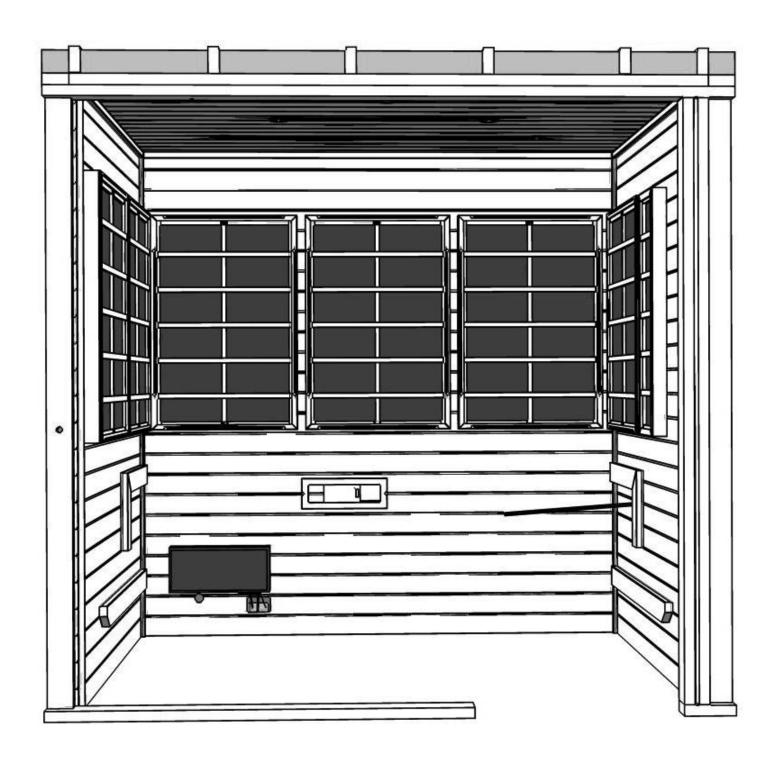
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Suggested bench support heights are based on a 84" ceiling heights. Suggested bench supports heights are 12" from the floor to the top of the *lower bench support* and 30" from the floor to the top of the *upper bench support*. The vertical support is intended for the mounting of the bench skirt.

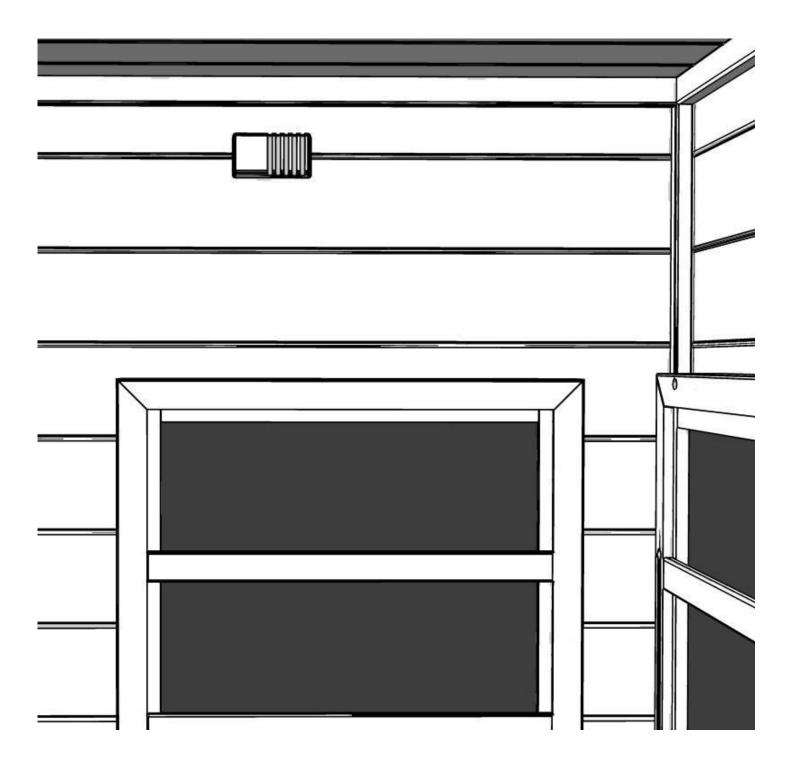


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Sensor location mounted above sauna heater. *Shown for illustration purposes only*. Refer to the heater installation instructions for proper placement.



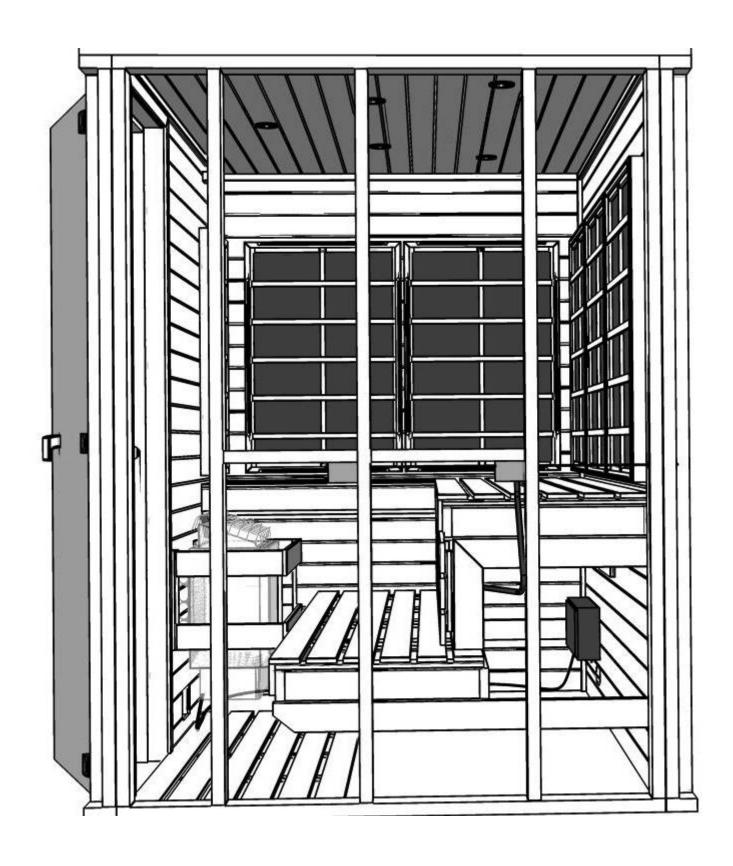
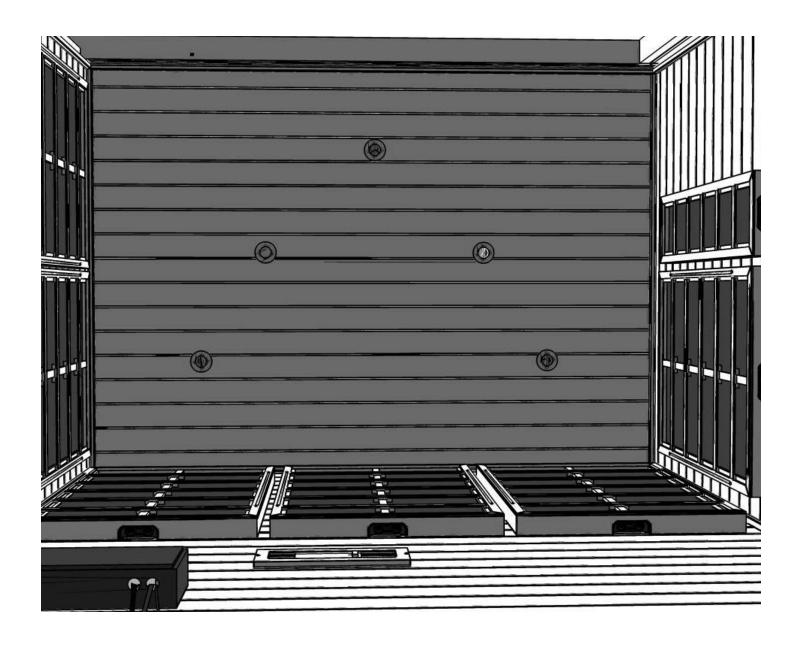
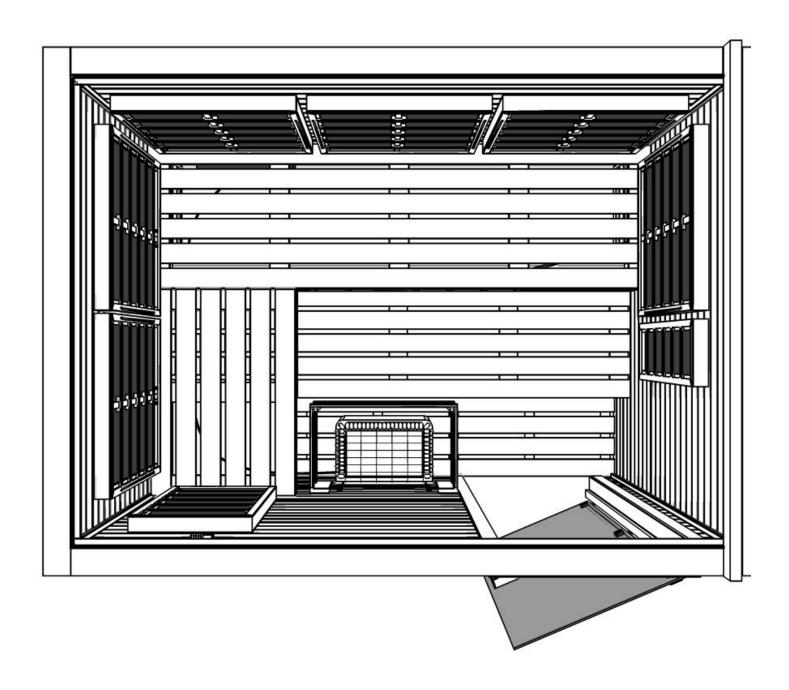


Illustration shows a view from the bottom up. View shown depicts light locations along with IR panel locations.





## SAUNALOGIC CONTROL OPERATION FOR IS ROOM

#### OPERATING INSTRUCTIONS FOR LIGHTING

Press "External Light" to switch on or off.

Press "Internal Light" to switch on or off.

Press "Color Light" to scroll through the colors and then off.



#### OPERATING INSTRUCTIONS FOR IS ROOM

Press the control POWER button once. The room temperature will be displayed on the control and an LED will glow above the Infrared or Traditional button. The LED that is glowing indicates the system chosen. Press the button for the type of heat desired.

Once the desired type of heat is chosen, follow the "Setting the Time" and Setting the Temperature" section of the manual to operate the room.

#### SETTING THE TIME AND TEMPERATURE

To set the sauna length time, press the control POWER button to turn on the system. Press the TIME "+" or "-" buttons on the control to increase or decrease time for desired setting. The maximum length of operation is 60 minutes.

To set the temperature, press the control POWER button to turn on the system. Press the TEMP "+" or "-" buttons on the control to increase or decrease temperature for desired setting. The maximum temperature is  $194^{\circ}F$  (90°C) for traditional Sauna and  $150^{\circ}F$  (65°C) for Infrared.

#### OPERATING INSTRUCTIONS FOR INFRARED SAUNA HEATER

Default settings for temperature are preset to 120°F, The time is set to 60 minutes and 0 minute delay to start to heat. These settings are adjustable (as described above) from 100° to 150°F. Length of sauna can be set from 0 to 60 minutes. The time delay before start can be up to 23 hour and 59 minutes. Any changes are remembered by the system for your next sauna session. Should the room power be lost then restored, the settings will return to their default values.

#### OPERATING INSTRUCTIONS FOR TRADITIONAL SAUNA HEATER

Default settings for temperature are preset to 176°F, the time is set to 60 minutes and 0 minute delay to start to heat. These settings are adjustable (as described below) from 125° to 194°. Length of sauna can be set from 0 to 60 minutes. The time delay before start can be up to 23 hour and 59 minutes. Any changes are remembered by the heater for your next sauna session. Should the system power be lost then restored, the settings will return to their default values.

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#### STARTING IR OR TRADITIONAL HEATING SYSTEM IMMEDIATELY

Immediately after pressing the Power On button, the selected heating system will engage. The heater(s) will start heating the room to the set point. At the end of the selected time (60 minutes maximum), the heating system will turn off. The control display will turn off and all lights will turn off 5 minutes after heating system.

#### PRE-SETTING DELAYED START

Press the control POWER button once. The room temperature will be displayed on the control. Press the "Presetting" button. Press the TIME "+" or "-" buttons on the control to increase or decrease delay time for desired setting. The maximum of time is 23 hours and 59 minutes. If no delay start is desired, set to 00:00 and press "Pre-Setting" button.

Note: The ":" will flash between the numbers in the time display when system is in the delayed start mode.

#### INFRARED SAUNA EXPECTATIONS

Infrared Saunas have a typical operating range of 110°F (34°C) to 135°F (57°C). This lower heat range is ideal for new users to sauna bathing and the lower temperature does not dry out mucus membranes.

Also, Infrared energy is the same energy produced by the Sun and thus does not heat the air, rather it heats objects in the room. In fact, less than 20% of the infrared energy is used to heat the air. The rest is available to be directly converted to heat within the body. The key is the room should feel warm upon entry (after approximately 15-20 minute heat up). Infrared energy heats objects not the air. When the body is placed in front of infrared heat, the infrared causes water molecules to vibrate in the skin on a molecular level. As the skin warms, the inner core temperature of the body rises. When the core temperature rises, the bodies cooling mechanism is to sweat.

Your sauna's typical heat-up time is usually about 15 to 20 minutes but can vary depending on a few key factors listed below. Please consider these factors when choosing a location for your sauna.

- Locate your sauna indoors and in an area with an ambient air temperature of about 70°F. (25°C.) and on a flat, level and dry surface.
- Supply voltage should be a nominal of 240 volts AC. Refer to the heater manual for proper breaker size.
- "House" wiring gauge size should match the amperage of the product being used.
- Keep the length of wiring run from the breaker panel to your sauna to a minimum.
- Do not use surge protection devices or extension cords.
- Use a dedicated 240 volt AC circuit of appropriate amperage for your sauna.

It is important to remember that whether the sauna achieves 100° or 125°F, the effectiveness of the infrared energy is the same. There is not necessarily a benefit to waiting for a long period of time to allow the sauna to heat up.

Some people will sweat easier than others and if you are having difficulty in achieving a deep sweat, please consider the following tips to help you reach your desired goals.

- Drink plenty of fluids before using the sauna. Hydration is very important!
- Perform some light exercise before using the sauna, this will help elevate your body's core temperature and induce sweating.
- Your body may be low on trace minerals such as sodium or salt. Consult your doctor before taking supplements.
- Take a warm shower prior to using the sauna.

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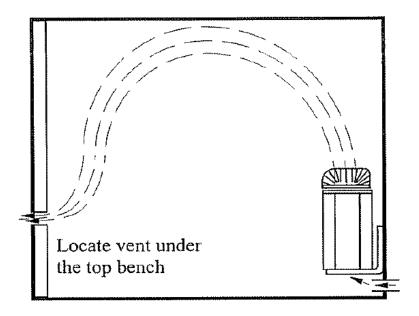
#### TRADITIONAL SAUNA EXPECTATIONS

Steam- Your traditional sauna heater is designed to have water ladled on the rocks after they are hot. Proper use of water in the sauna is important. One cup of water will produce 2500 cups of steam. One to two cups of water every three to five minutes will be sufficient. Only use clean tap water.

Do not use water with any chemicals present. (spa or pool). This will damage the sauna heater. Over usage of water will only cool down the rocks, thus producing less steam. This will also allow water to pass through the rocks and out the bottom of the heater, ending up on the floor of the sauna. Water on the floor of the sauna means you are using to much water.

Before using your new sauna heater, verify proper rock placement. The wall thermometer is placed no more than 12" from the ceiling near the seating area.

Ventilation- Proper ventilation will provide fresh air into the sauna room and will circulate the heat in the room more evenly, resulting in a more consistent heat through out the sauna.



#### **USER MAINTENANCE INSTRUCTIONS**

Room Instructions for Cleaning:

Perspiration and dirt may absorb into the wood, so periodic cleaning is needed. Scrubbing the benches and floorboards with a stiff brush and mild detergent is normally sufficient. Light sanding is another option.

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#### TROUBLESHOOTING SECTION

#### **CONTROL ERROR CODES**

\*Sn:

The sensor is not connected to the CB PK-4 box. Check the connections between sensor and CB PK Box.

#### \*HL:

The high limit safety switch in sauna heater is not connected to the CB PK-4 box. Check the connections between traditional sauna heater and CB PK box.

#### **PERFORMANCE QUESTIONS**

\*No Heat:

Control is delay mode? Ensure system is not in the delay mode.

#### \*Infrared Room not reaching set point:

Infrared system will not reach set point typically. System is designed to keep heating panels on so the body can absorb the infrared heat. Refer to operation for more details.

### \*Room not reaching set point while using Traditional heat:

This room is designed to be indoors with a start temperature of 70°F. If this room is located in a cooler location, pre-heating time will increase and higher temperatures may not be reached.

\*Ensure power supply is correct for room. This system should be connected directly to an outlet. Do not use an extension cord. Low supply voltage can cause poor temperature performance.

#### \*No control functions:

Verify the control wiring has been connected.

### **CUSTOMER SERVICE**

For troubleshooting or service questions call 1-888-780-4427 and ask to speak with the Technical Support Department.

Prior to calling, please have the Model and Type number available. You may also e-mail us at techsupport@saunatec.com

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