





sauna heat systems POWERED BY SAUNACORE





### **INSTALLATION GUIDELINES HEAT/STOVE UNIT**

Certified to CAN/CSA Std. No. 164
Conforms to UL. Std. 875

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# IT IS UNLAWFUL TO INSTALL THIS UNIT WITHOUT FIRST OBTAINING A PERMIT FROM THE LOCAL ELECTRICAL INSPECTION AUTHORITY

Sauna heater controls enclosure box and contactor enclosure box are NOT supplied with the heating units.

### **Envoy Computer:**

8" deep x 3" wide x 2" high

#### **Contactor Box:**

12.5" deep x 12.5" wide x 6" high

All electrical wiring between sauna heater, high power controls, and magnetic contactor must be through a liquid tight metal conduit raceway.

# The liquid tight metal conduit must be CSA or UL certified and labeled with the following specifications:

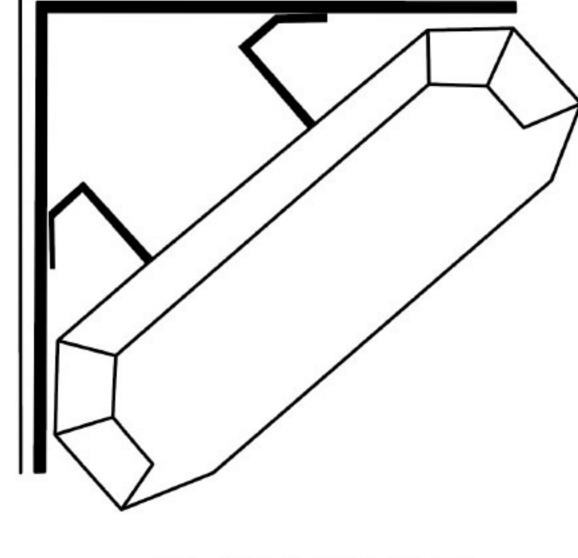
- 105°C/221°F Dry Temperature Rating
- Adequate for 600 volt and lower circuits
- Hazardous location per NEC 501
- In compliance with UL 360
- In accordance with Article 350 of National Electrical Code
- CSA/UL Certified & Labeled on Conduit

All Saunacore controls must only be used with Saunacore sauna heaters. They are certified as a set. If the sauna controls are used with another brand sauna heater, then the control and heater must be re-evaluated.

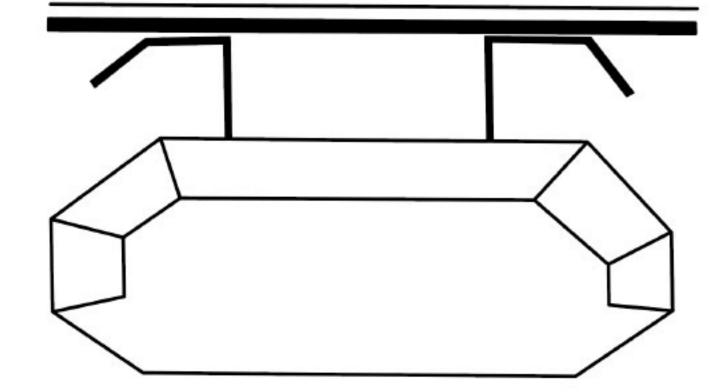
The total connected load should not be more then 80% of the rating of the over current devices.

**FIGURE 1** TOP VIEW OF HEATER

**CORNER MOUNT** 



**FLAT MOUNT** 



# INSTALLATION INSTRUCTION FOR ALL SAUNACORE KW HEATING UNITS

SAUNACORE KW is installed in a corner of the Sauna room or on the straight wall by means of two mounting brackets (see illustration).

The unit should be placed 2" inches (minimum) from the floor, and not closer than 45 inches to the ceiling.

Lift the unit 2 inches (minimum) from the floor, hold it against the corner or straight wall and mark the location. Fasten the brackets with 1-1/2" mounting screws supplied. Be sure that the mounting screws are fastened not only through the soft wood lining of the sauna room but also into a solid piece of strapping, 2"x 4" etc., to hold the weight of the unit (approximately 50lbs. with the rocks).

First perform the electrical hook up. CAUTION: This work should be done by a Licensed Electrician. Then slide the unit back onto the brackets. The Saunacore heating units that do not have a control built in should mount the control box on the outside wall of the sauna room beside the door. The thermostat sensor bulb only, is to be located inside the sauna room and is to be mounted on the ceiling above the SAUNACORE heater. For electrical hook up follow the wiring diagram. This work should be done by a Licensed Electrician only.

Do not install a shower head or water spraying device above the heating unit.

All wiring to the SAUNACORE heater must be routed away from any direct radiation from the SAUNACORE Heating unit, and be made with liquid tight conduit.

# SAUNA ROCKS (STANDARD, SPECIAL EDITION, STEAM VAPORIZER MODEL)

After installation of the SAUNACORE Heating unit, carefully place all the igneous Sauna rocks which are supplied onto the rock basket at the top of the sauna stove. Rocks do not make contact with heating element

THIS UNIT MUST BE OPERATED WITH THE ROCKS IN PLACE

### **SAUNA ROCKS (Ultimate Models)**

Placement of Sauna Rocks

Do not operate the sauna heater without the stones. Use only the stones that are supplied with the sauna heater. Wash stones with water and place them inside of the heater so that rocks are between and around the heating elements onto adjustable tray. Take care, however, not to force the rocks between the elements. Use smaller stones first and continue to fill the heater with larger stones. You may not need all of the stones. Make sure the adjustable rock tray is not lower than level 3 in the heater cavity



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# INSTALLATION INSTRUCTION FOR ALL SAUNACORE KW HEATING UNITS (CONT.)

STONES SHOULD BE PLACED LOOSELY WITHIN THE HEATER SO THAT THERE IS AMPLE HEAT CIRCULATION AROUND THEM. STONES SHOULD ALSO COVER THE HEATING ELEMENTS COMPLETELY! POURING WATER DIRECTLY ON EXPOSED ELEMENTS COULD GREATLY DECREASE THE LIFE OF THE ELEMENTS!

### **HEATER GUARD**

A non metallic Guard shall be used and located not closer than 6" from the SAUNACORE Heater.

#### **CAUTION**

If the manually-resettable Temperature-limiting Control (Hi-Limit) trips frequently, a qualified serviceman should be contacted.

### **TEMP-LIMITING CONTROL**

Each heater is equipped with a high limit control switch as a safety device. If an abnormal heating condition should occur, the heater will automatically shut off. The high limit switch will need to be reset manually before the heater will operate. To reset the high limit, locate the reset button (bottom front) and push inward until the contactor engages. If the reset button continues to trip, contact a qualified service person. If using GFI and tripping occurs heater must be operated first with non GFI breaker to bake elements (remove initial moisture that may cause GFI to trip)

### **Electrical Outlets**

Electrical outlets are not permitted in a sauna room. If speakers are installed in a sauna, they should not be installed higher than 2 feet from the floor and should be located away from the sauna heater.

### **Heater Guard**

A heater guard rail is necessary to protect the sauna bathers from the hot surfaces of the sauna heater. The guard rail should be attached to the wall and should not be placed higher than the top of the heater, below the rock line. STD(HD) & ULTC6 (ED); The heater guard must extend up to ceiling (Fig. 3)

#### **WARNINGS!**

- Do not smoke, use alcohol, or exercise in the sauna.
- Do not exceed 30 minutes in the sauna at one time as excessive exposure can be harmful to your health.
- Persons in poor health should consult a physician prior to using the sauna.
- Do not place any combustible material on or over the sauna heater.
- At no time should towels, bathing suits, buckets or dippers or any other flammable material be placed on or over the heater.
- Use only clean tap water on the sauna stones. Do not use any chemically treated water (such as spa or pool water) on the heater at any time. Use of chemically treated water can result in rapid oxidation of the heater components, voiding warranty.

Note: Warranty is void on Saunacore heaters and controls if the installer or electrician fails to follow the necessary wiring information as provided in this wiring diagram or fails to follow any and all applicable codes pertaining to the installation of this product.

### FIGURE 2 SAUNA ROOM

### STD, SE, SV, ULT MODELS

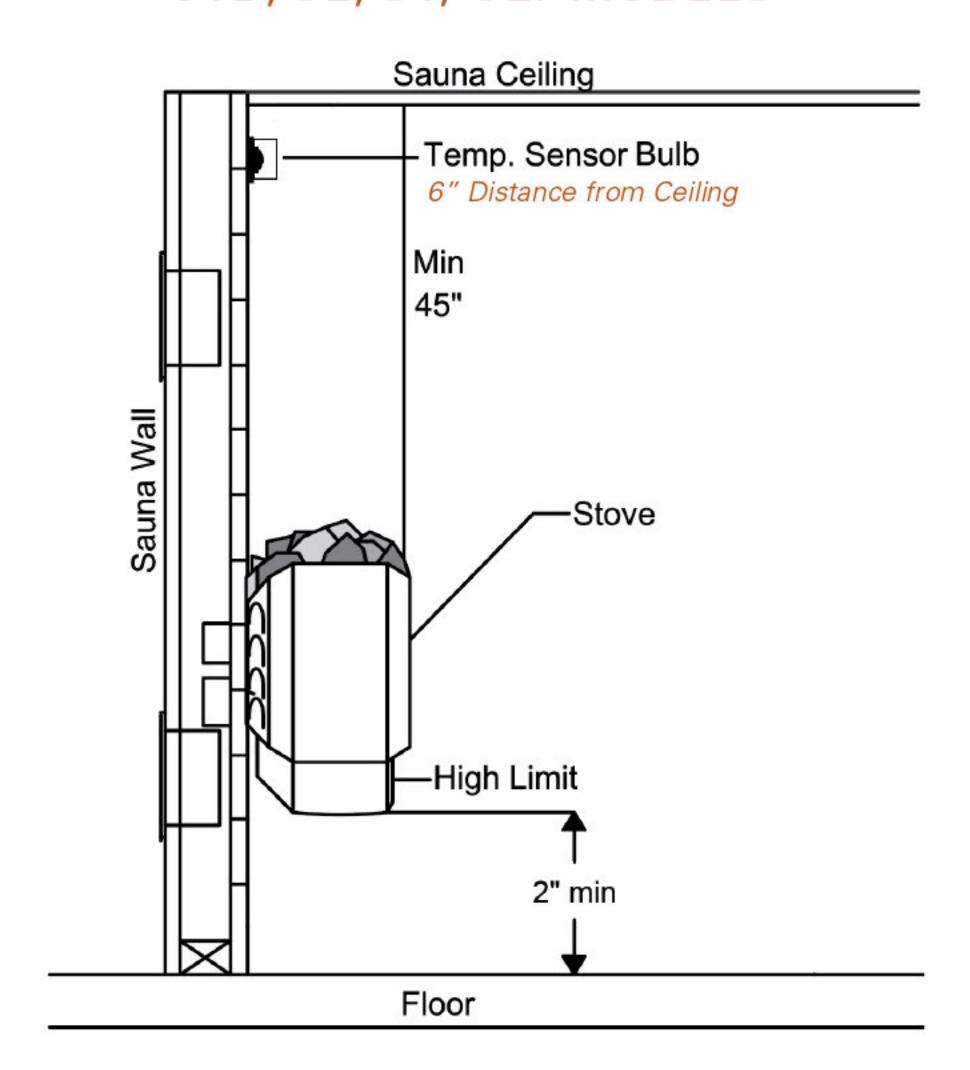
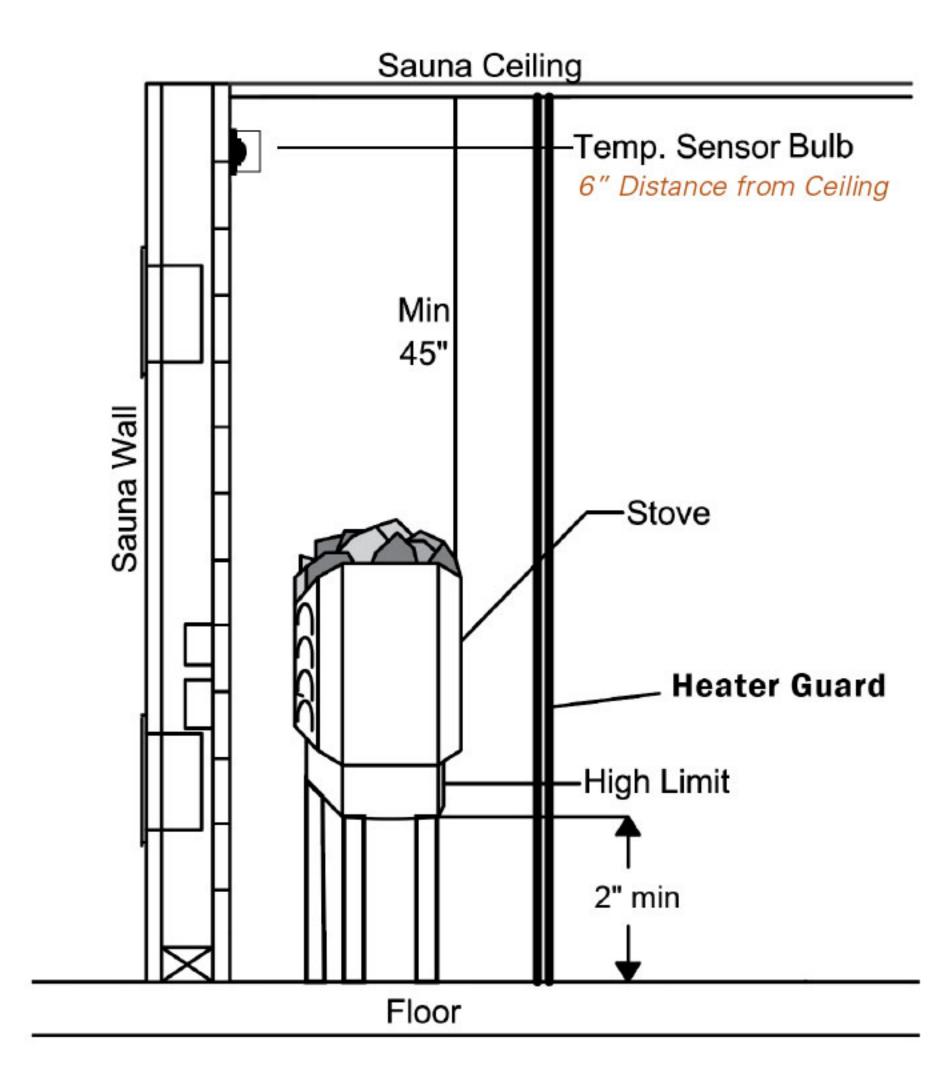


FIGURE 3 SAUNA ROOM

# STANDARD HD & ULT C6 +1 (applies to Canadian application)

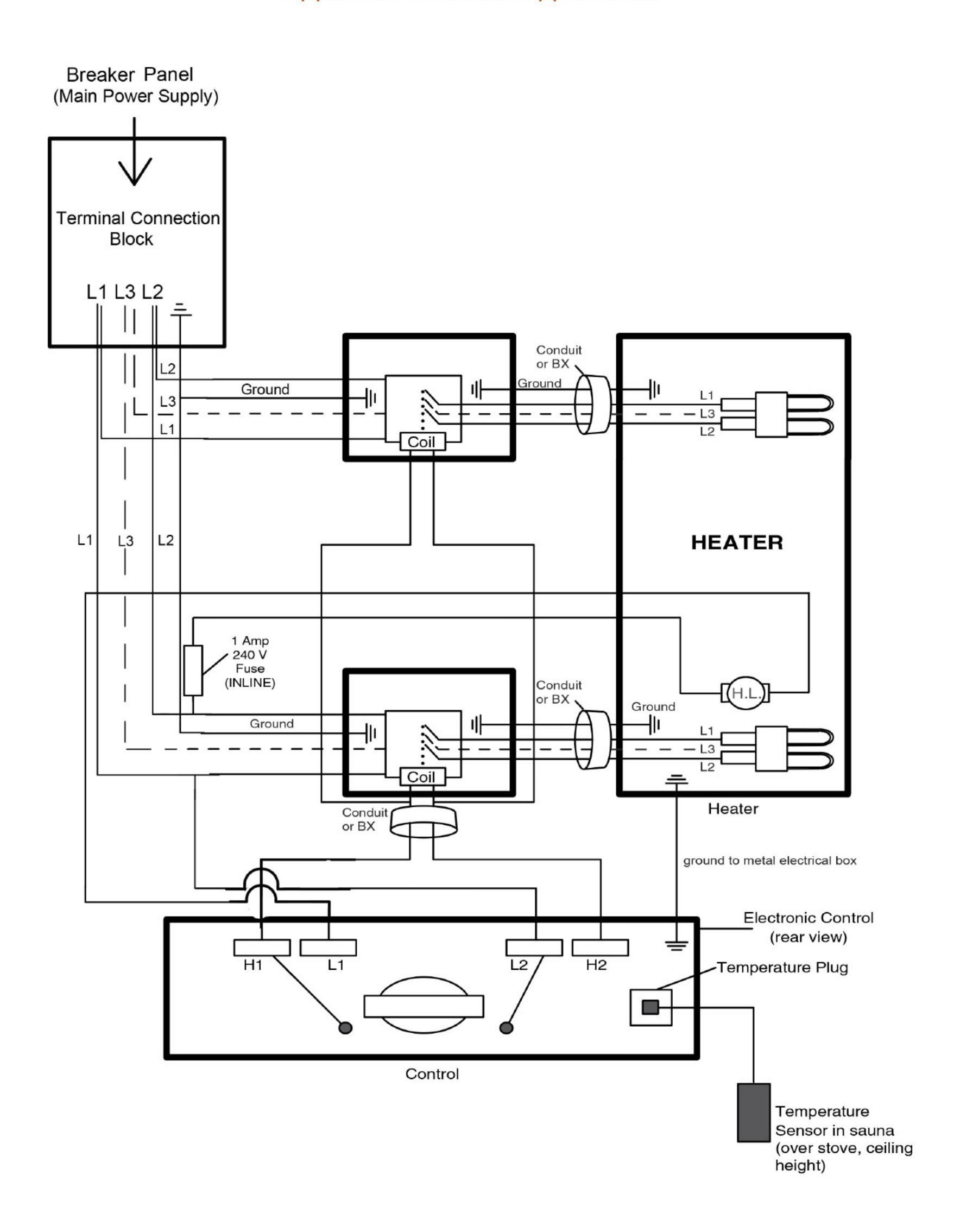




# INSTALLATION GUIDELINES CONNECTION GUIDELINES

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# (240v/208v 1 or 3 Phase 50 Amps and Over) (applies to Canadian application)







# INSTALLATION GUIDELINES MECHANICAL CONTROLS - WIRING (WALL OR BUILT-IN)

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CAUTION: THE MANUAL RESET LIMIT SHALL BE WIRED IN THE CIRCUIT

#### **European Connection**

(L2 = N - "Neutral")

For supply connections, use suitable AWG wires suitable for at least 90° C (190° F). (Use only copper wire). Ground wire must be insulated.

Mechanical control must be installed outside of the sauna room, into a 3 gang masonry electrical box.

When a magnetic contactor is used, it also must be installed into an appropriate metal electrical enclosure box outside the sauna.

(For control and contactor box sizes refer to page 4 of this manual)

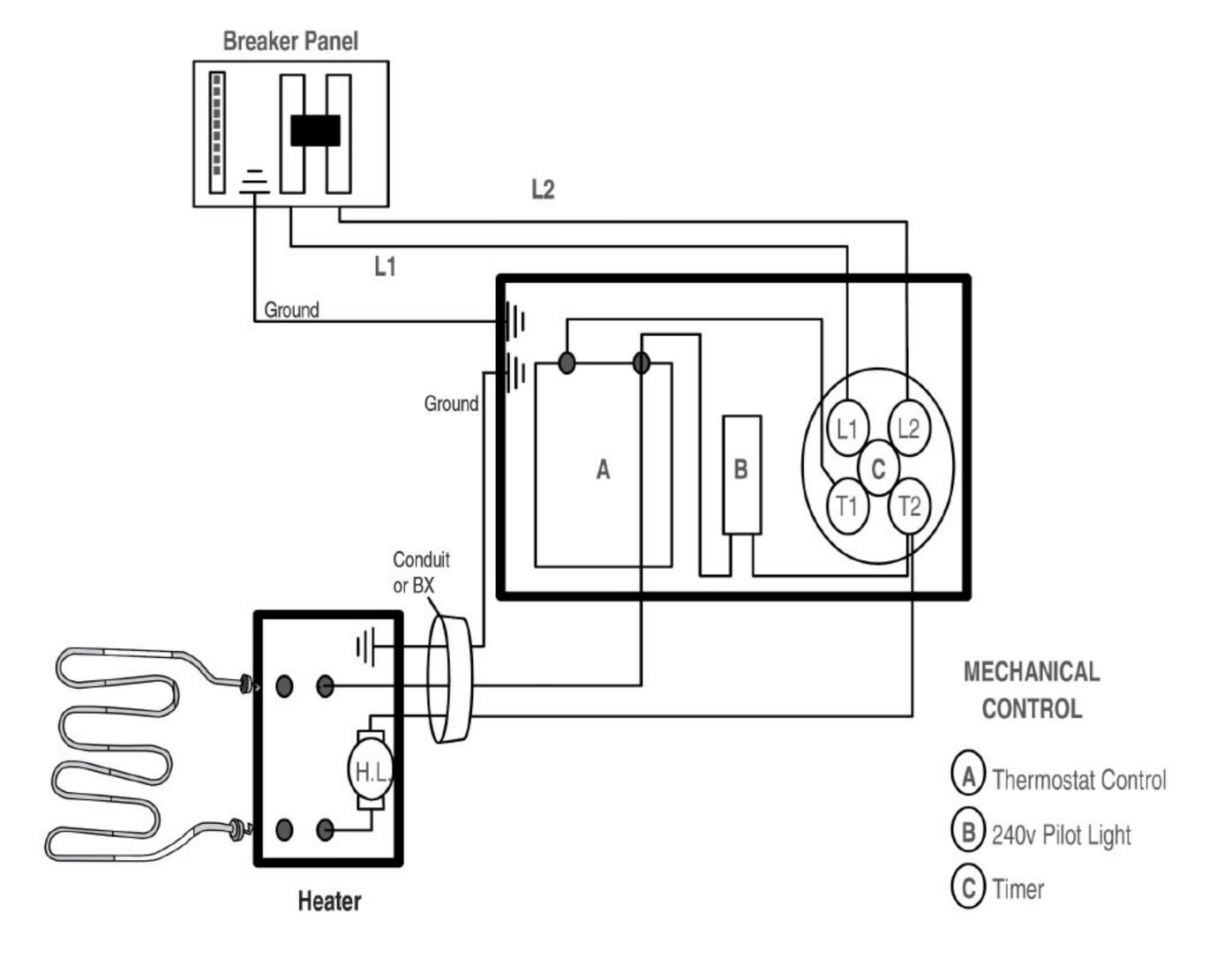
Inline Fuse: 5 amp 240 Volts MAX (Offers Coil Protection)

**Note:** All power supply wires from control box to stove must be protected by metal conduit.

Loose connections or connectors may cause electrical shortage. Make sure all connections and connectors are firmly secure.

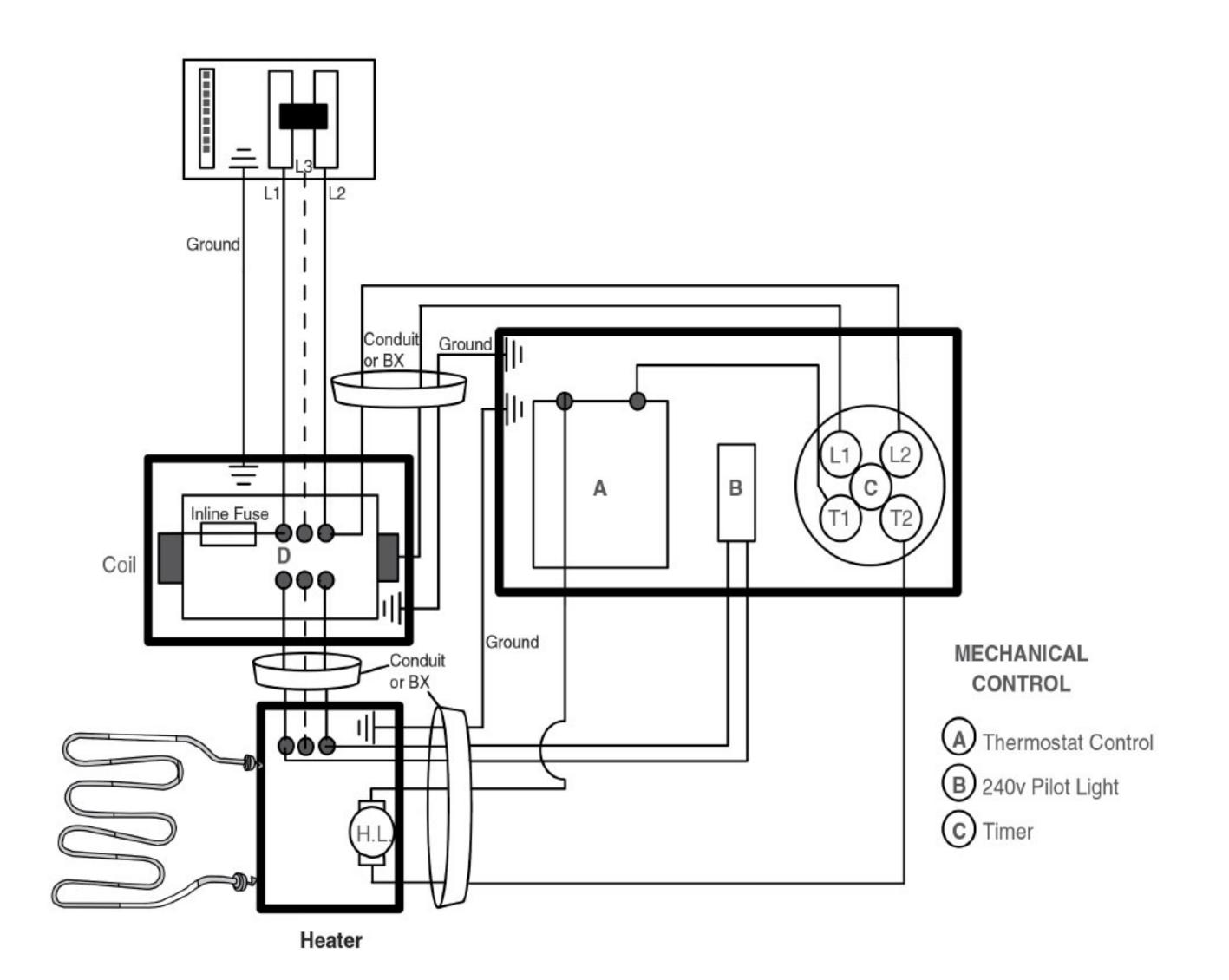
### **FIGURE 1** MECHANICAL CONTROL

(120v/240v 1 Phase 30 Amps + Under)



# FIGURE 2 MECHANICAL CONTROL

(240v/208v 1 Phase Over 30 Amps or ANY 3 Phase)







## INSTALLATION GUIDELINES MECHANICAL CONTROLS - WIRING (WALL OR BUILT-IN)

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#### **MECHANICAL CONTROL**

Controls must be installed outside of the sauna room, into a 3 gang masonry electrical box. When a magnetic contactor is used, it also must be installed into an appropriate metal electrical enclosure box outside of the sauna.

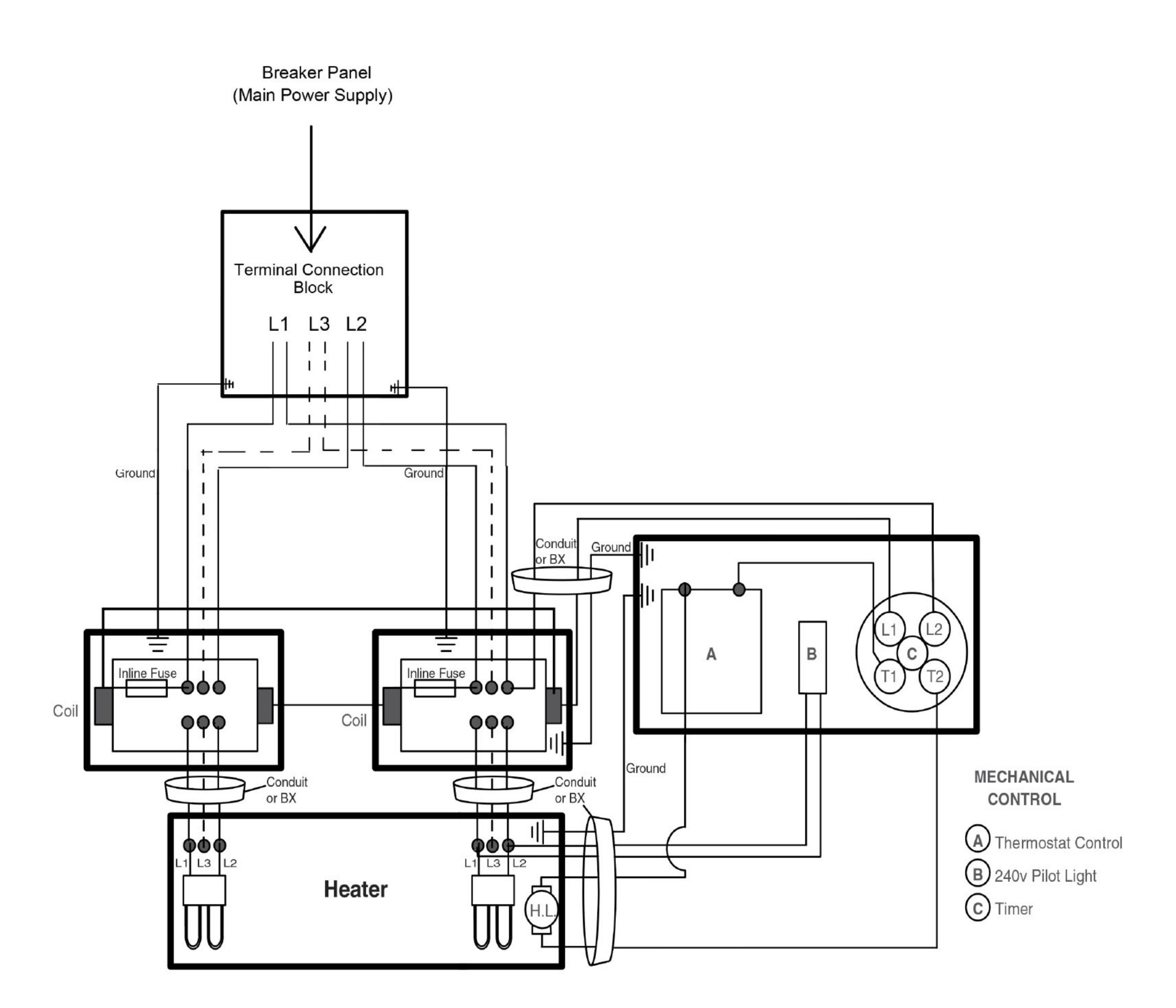
For supply connections, use suitable AWG wires suitable for at least 90°C (190°F).

# CAUTION: THE MANUAL RESET LIMIT SHALL BE WIRED IN THE CIRCUIT

Use copper wire only Ground wire must be insulated

# FIGURE 3 MECHANICAL CONTROL

(240v/208v 1 or 3 Phase 50 Amps and Over) (applies to Canadian application)







### **INSTALLATION GUIDELINES** HEATER MOUNTING

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A non-metallic guard rail must be away from the residential sauna heater models by a minimum of 4 inches, and the residential heater models must be minimum 4 inches away from any vertical surface. There must be a minimum of 45 inches clearance above the heater to the ceiling and a minimum of 2 inches above the floor.

FIGURE 1 STANDARD / SPECIAL EDITION / STEAM VAPORIZER MODELS

#### Mounting Diagram for Residential Model

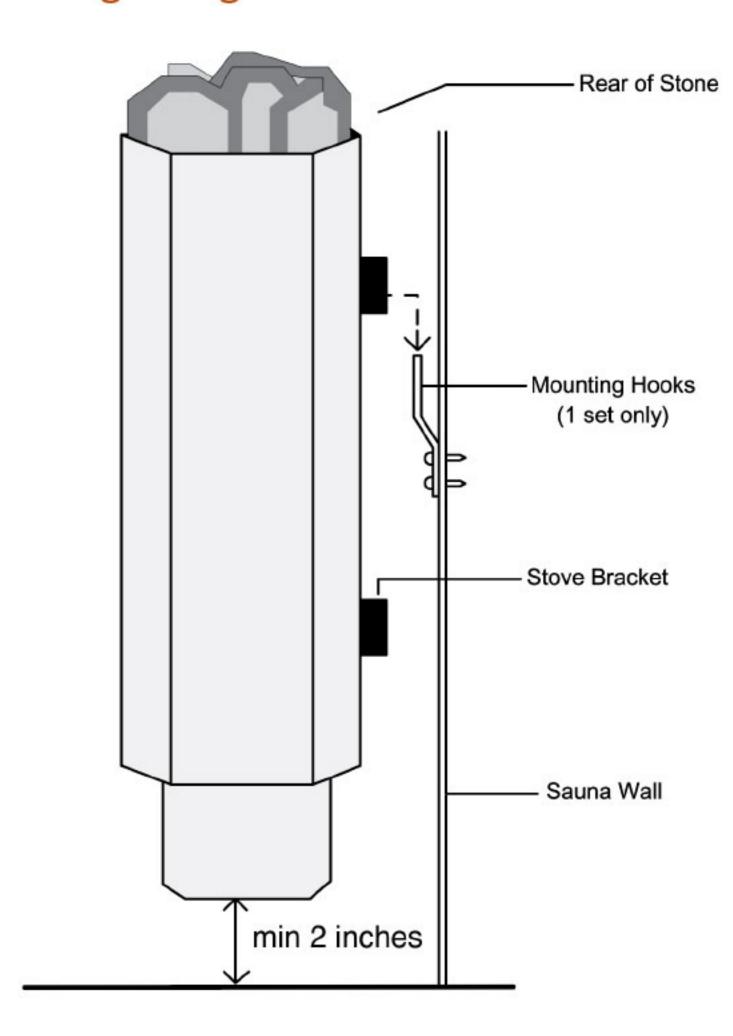
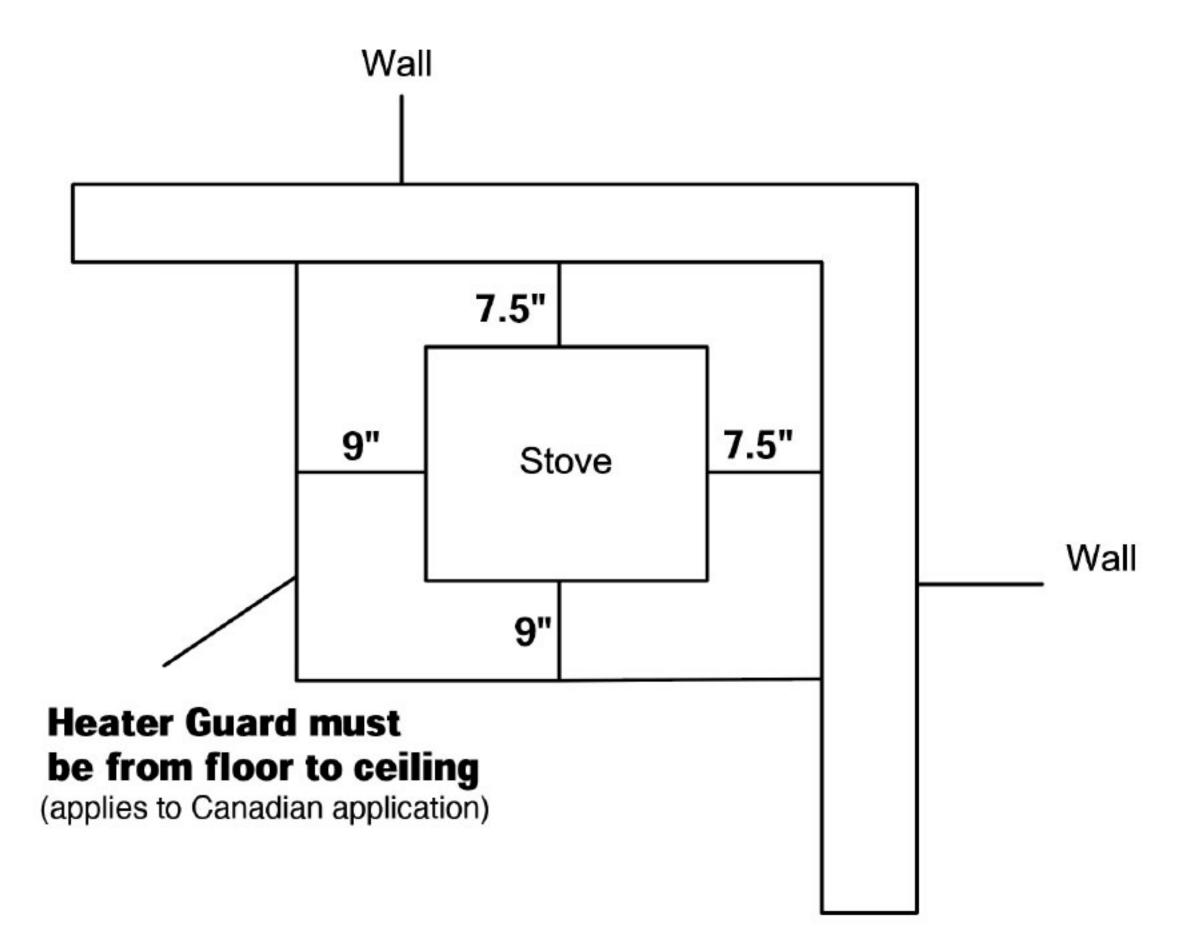


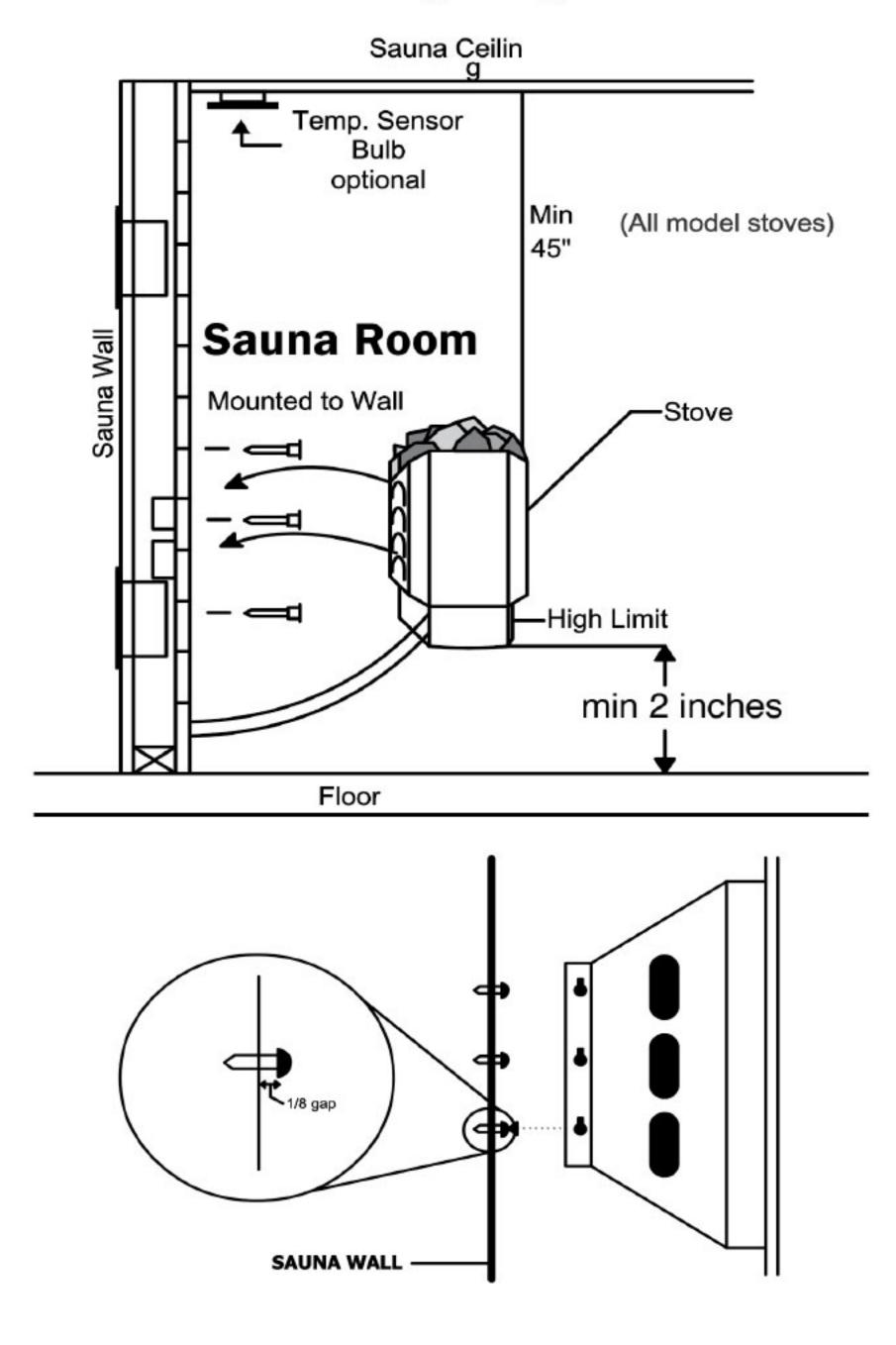
FIGURE 2 STANDARD HD & ULT C6+1



### Stove must have:

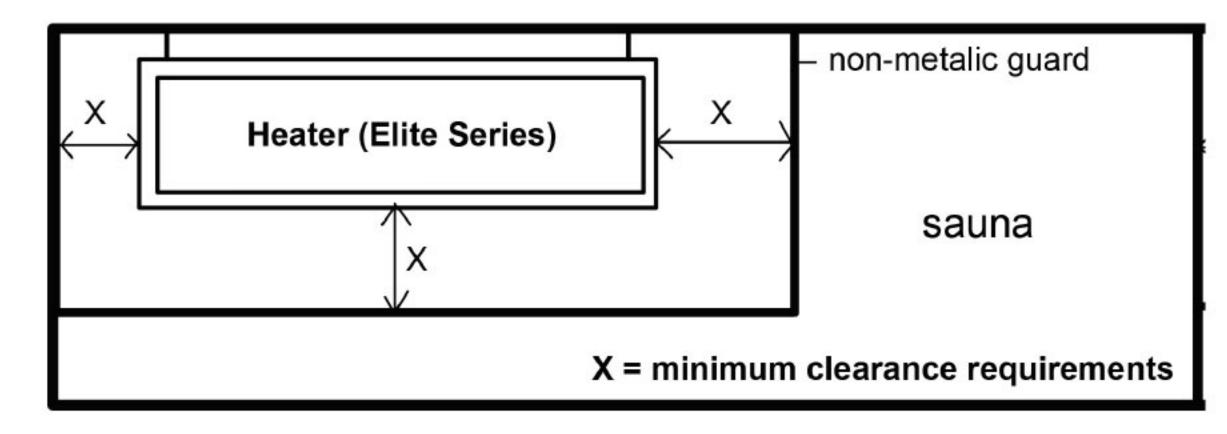
A non metallic guard rail must be away from sauna heater by a minimum of 9 inches, and the heater must be a minimum of 7.5 inches away from any vertical surface. There must be a minimum of 45 inch clearance from the top of the heater to the ceiling.

FIGURE 3
ULTIMATE RESIDENTIAL
Mounting Diagram

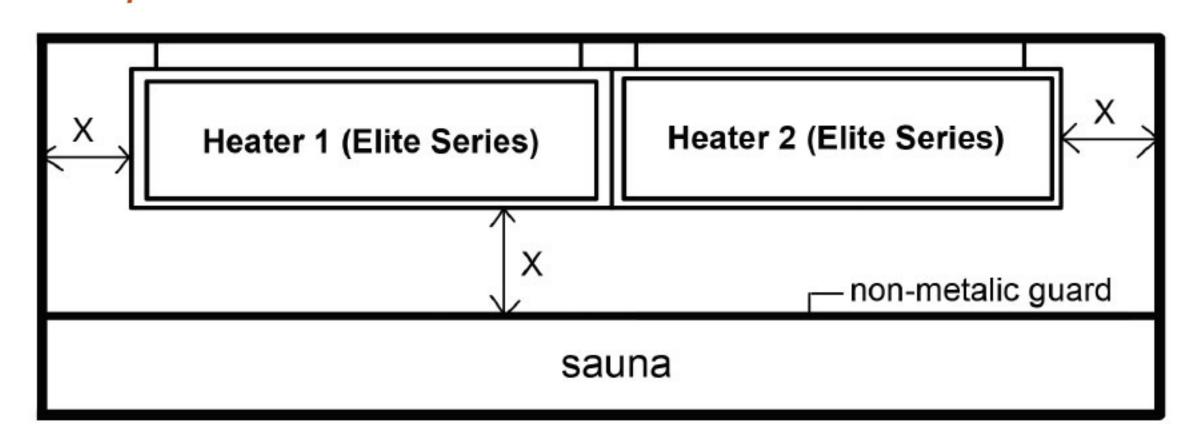


Elite series unit my be mounted side by side tom make one complete long unit, but overall clearances stated above must be met for the multi assembled heaters set.

**FIGURE 4**ELITE SERIES



6kw up to 10.5kw (X = 4 inches) - 12kw (X = 9 inches)



#### Stove must have:

A non metallic guard rail must be away from sauna heater 4 inches or 9 inches based on Kilowatt rating of the individual heater. There must be a minimum of 45 inches clearance from the top of the heater to the ceiling.

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