⚠ **WARNING:** If the area in which the heater may be operated does not meet the required volume for indoor combustion air, combustion and ventilation air shall be provided by one of the methods described in the *National Fuel Gas Code,* ANSI Z223.1/NFPA 54, the *International Fuel Gas Code,* or applicable local codes.

Ventilation Air from Inside Building

This fresh air would come from an adjoining unconfined space. When ventilating to an adjoining unconfined space, you must provide two permanent openings: one within 12 inches of the ceiling and one within 12 inches of the floor on the wall connecting the two spaces (Figure 3). You can also remove the door into adjoining room (see option 3, Figure 3). Follow the National Fuel Gas Code. ANSI Z223.1/NFPA 54, Air for Combustion and Ventilation for required size of ventilation grills or ducts.

Ventilation Air from Outdoors

Provide extra fresh air by using ventilation grills or ducts. You must provide two permanent openings: one within 12 inches of the ceiling and one within 12 inches of the floor. Connect these items directly to the outdoors or spaces open to the outdoors. These spaces include attics and crawl spaces. Follow the National Fuel Gas Code, ANSI Z223.1/ NFPA 54, Air for Combustion and Ventilation for required size of ventilation grills or ducts.

⚠ **IMPORTANT:** Do not provide openings for inlet or outlet air into attic if attic has a thermostat-controlled power vent. Heated air entering the attic will activate the power vent. Rework worksheet, adding the space of the adjoining unconfined space. The combined spaces must have enough fresh air to supply all appliances in both spaces.

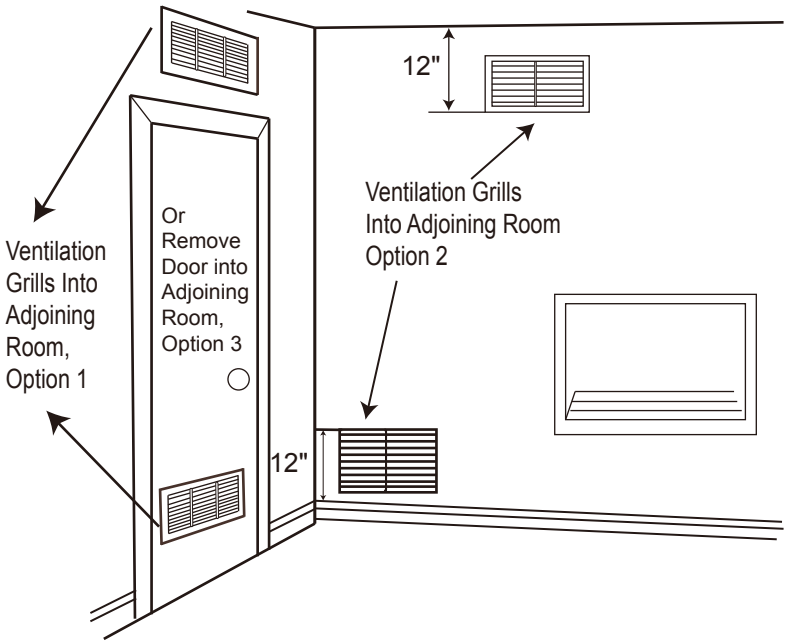


Figure 3 - Ventilation Air from Inside Building
NOTE: Base not included. Not for use in bedrooms or bathrooms.

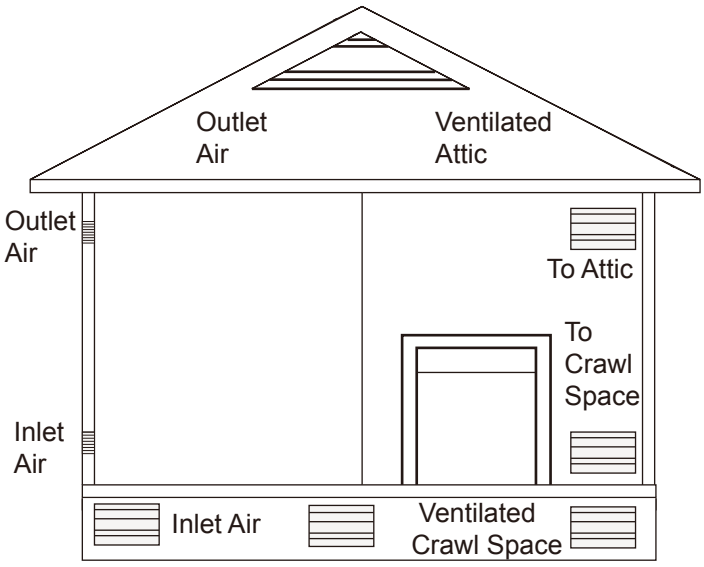


Figure 4 - Ventilation Air from Outdoors

INSTALLATION CONSIDERATIONS

This heater is intended for use as supplemental heat.

Use this heater along with your primary heating system. Do not install this heater as your primary heat source. If you have a central heating system, you may run system's circulating blower while using heater. This will help circulate the heat throughout the house. In the event of a power outage, you can use this heater as your primary heat source.

⚠ **WARNING:** A qualified service person must install heater. Follow all local codes.

⚠ **WARNING:** Never install the heater:

- in a recreational vehicle
- where curtains, furniture, clothing, or other flammable objects are less than 36 inches from the front, top, or sides of the heater
- in high traffic areas
- in windy or drafty areas

⚠ **CAUTION:** This heater creates warm air currents. These currents move heat to wall surfaces next to heater. Installing heater next to vinyl or cloth wall coverings or operating heater where impurities (such as tobacco smoke, aromatic candles, cleaning fluids, oil or kerosene lamps, etc.) in the air exist, may cause walls to discolor.

⚠ **IMPORTANT:** Vent-free heaters add moisture to the air. Although this is beneficial, installing heater in rooms without enough ventilation air may cause mildew to form too much moisture. See Air for Combustion and Ventilation.

Check Gas Type

Be sure your gas supply is right for your heater. Otherwise, call dealer where you bought the heater from for proper type heater.

Clearances to Combustibles

Carefully follow the instructions below. This heater is a freestanding floor seated unit.

⚠ **WARNING:** Maintain the minimum clearances shown in Figure 5. If you can, provide greater clearances from floor, ceiling, and joining wall.

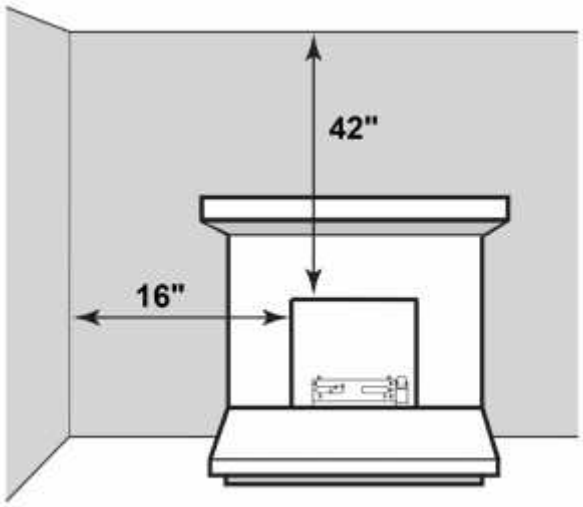


Figure 5 – Minimum Clearance to Combustibles

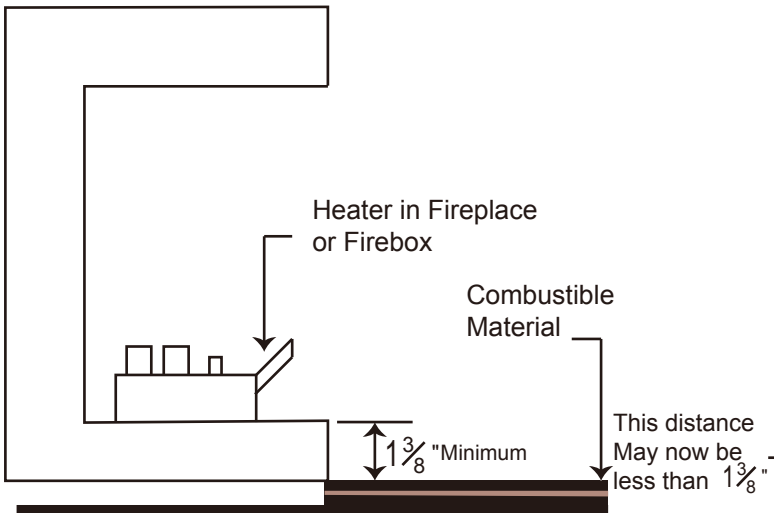


Figure 6 – Minimum Clearance Above Combustible Flooring.

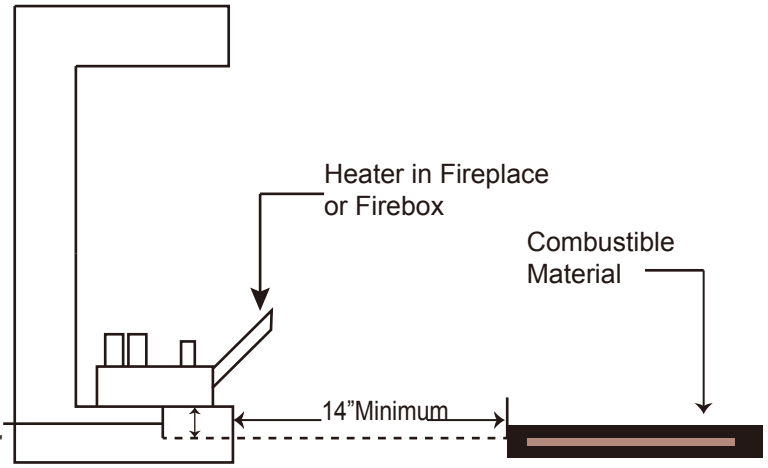


Figure 7 – Minimum Clearance Above Combustible Flooring with Noncombustible Material Installed at Base of Fireplace.

The gas log heater must be installed at least 1 3/8" above any combustible flooring material, such as carpeting or tile, which is closer than 14" to the base of the fireplace. The minimum distance must be maintained from the top surface of carpeting, tile, etc. **See Figure 6.**

OR

The gas log heater may be installed nearer to the floor if a minimum of 14" of noncombustible material such as a slate or marble is installed between the base of the fire place and the combustible flooring. **See Figure 7.**

When installing your log set as a vent free installation the damper clamp can be used to eliminate the potential for odors when burning the logs for the first time.

Note: When the appliance is installed directly on carpeting, tile or other combustible material, other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.

Installing Damper Clamp:

Remove all ashes or other debris from the fireplace. If the fireplace is equipped with an ash dump be sure to seal the door with furnace cement or high temperature silicone. Be sure to check the damper for proper operation and verify that the flue passageway is open.

Place the clamp over the lip of the damper and tighten the hold down bold until the clamp is securely attached to the damper. This will prevent the damper from accidentally closing.

Manual and millivolt controlled gas logs may be installed as a vented decorative log set in compliance with ANSI Z21.11.2-2013 and

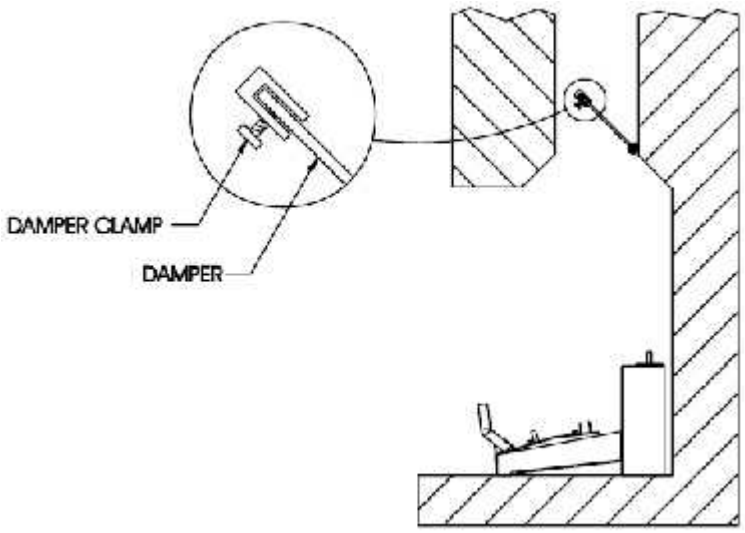


Figure 8 - Damper

National Fuel Gas Code. When the gas logs are operated with the damper open, Non-Combustible material and minimum mantel requirements do not apply.
Note: When installing your log set as a vented installation the damper clamp (Not Provided in hardware) must be used.

Air Door

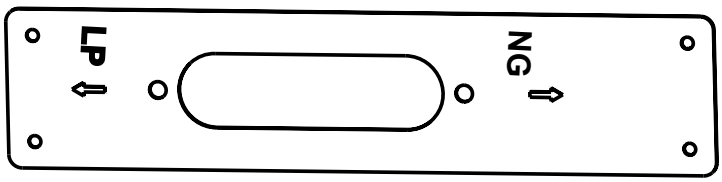
When using natural gas, a simple adjustment can be made to get the best yellow flame color and pattern possible. This adjustment controls the fuel to air ratio in your burner for the most realistic flame effect. The gas logs have a default setting on propane so an adjustment is only needed when using natural gas.

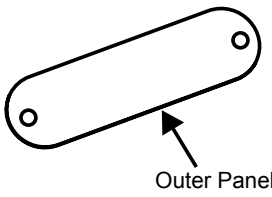
To adjust for Natural Gas, follow these instructions:

- Using a Philips head screwdriver, unscrew the outer panel
- Unscrew the Air Door
- Slide the Air Door all the way to the right, which assumes the Natural Gas setting
- Tighten the Air Door screw, so that it cannot move freely

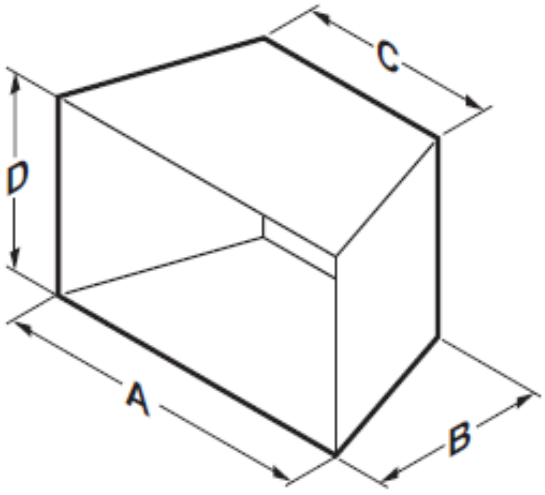
In the event that you need to switch back to the Liquid Propane setting, simply loosen and shift the Air Door back to its original left position.

Note that no adjustment is necessary out of the box when using Liquid Propane as your fuel source.





Minimum Firebox Dimensions



Model	A-Front Width	B-Length	C-Rear Width	D-Height
GLDF24R-VF	28"	16"	26"	24"

Log Placement

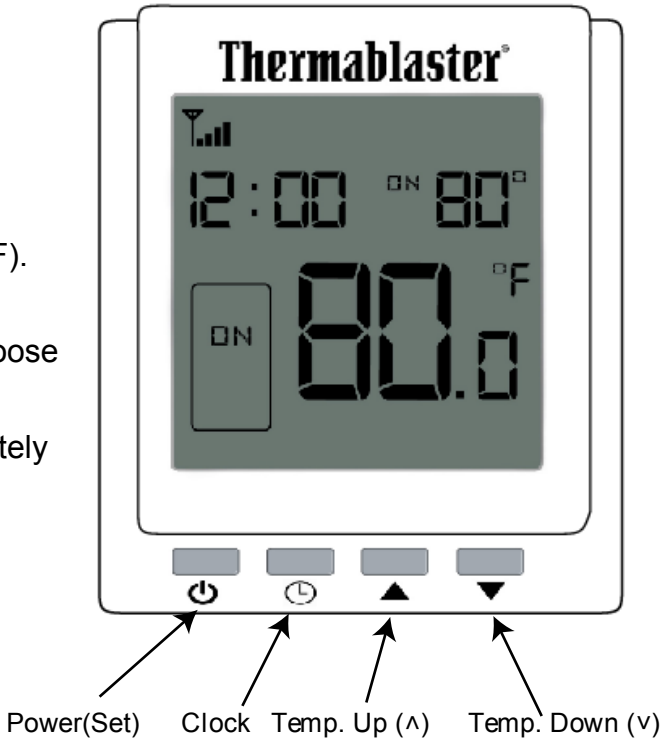
Ensure that your heater's logs are placed as shown below. It's important that your logs do not cover burner holes, as this can lead to sooting and an overall drop in the performance of your heater. Logs should be placed sequentially, from lowest to highest, as the numbering indicates. There are grooves on many of the logs that allow for simple placement and help to prevent the logs from shifting positions.

Remote Control Operation

1. To synchronize the remote control and the gas log heater, keep the remote control on OFF setting (the screen will show OFF). Simultaneously depress Down(∨) and Clock until the remote control shows "Cd" on the screen.
2. On the unit's front control panel, press down the Power Button to turn the unit ON, wait 10 seconds, then press down the Power Button again to power OFF. The screen will show OFF. Depress and hold the Burner ON and OFF buttons simultaneously until the screen shows "Cd"
3. Press Clock on the remote control. If the remote control and gas log control shows "Ed" simultaneously, they are synchronized.
4. Simultaneously depress Up(∧) and Down(∨) on the remote control to exit the synchronization.
5. Now the remote control and gas log control are successfully synchronized.

Set to ℃ or ℉:

- ℃ refers to Centigrade. ℉ refers to Fahrenheit
- Set the remote control to OFF (the screen will show OFF).
- Press Up(∧) and Down(∨) simultaneously. When the temperature icon flashes, press Up(∧) or Down(∨) to choose the temperature unit. The setting will be saved and exit automatically after a short time, or you can exit immediately by pressing Clock.
- Default setting: ℉



Remote Function

- **Power (Set):** Function allows you to only shut off the whole system when depressed
- **Clock:** Will set the time on the remote control
  1.Depress clock button until time is blinking.
  2.Use Up (∧) and Down (∨) arrows to set time on the remote control
  Note: When desired time is set, no further action is necessary
- **Up (∧) and Down (∨):** These buttons will allow you to set the heat to your desired temperature. You can also turn on and off the main burner by adjusting temperature.
- **Remote control distance:** 10m (393.7in).

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

CAUTION

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC RF Radiation Exposure Statement（within 20cm distance in actual use between the device and user）：

This equipment complies with FCC‘s RF radiation exposure limits set forth for an uncontrolled environment. environment 。End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

CONNECTING TO GAS SUPPLY

⚠ **WARNING:** A qualified service technician must connect heater to gas supply. Follow the heater specification and all local codes. Wrong gas supply may result improper operation, or damage on your heater, property or/and personal body.

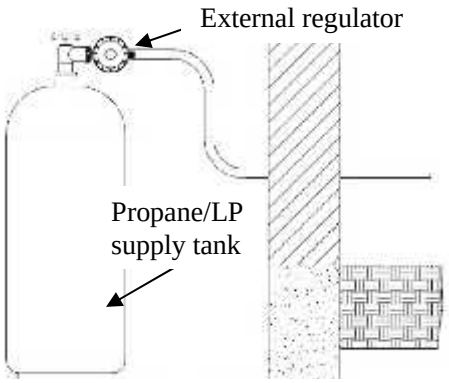


Figure 9 - External Regulator with Vent Pointing Down

⚠ **WARNING:** This appliance requires a 5/8-inch UNF (Unified National Fine) inlet connection to the pressure regulator.

⚠ **WARNING:** Never connect heater to private (non-utility) gas wells. This gas is commonly known as wellhead gas.

⚠ **WARNING:** Do not over-tighten gas connections.

⚠ **CAUTION:** Use only new, black iron or steel pipe. Internally tinned copper tubing may be used in certain areas. Check your local codes. Use pipe of 1/2-in. diameter or greater to allow proper gas volume to heater. If pipe is too small, undue loss of pressure will occur.

NATURAL GAS MODELS:

⚠ **CAUTION:** Check your gas line pressure before connecting heater to gas line. Gas line pressure must be no greater than 8 inches of water column. If gas line pressure is higher, damage on appliance regulator could occur.

PROPANE MODELS:

⚠ **CAUTION:** Never connect heater directly to the gas supply. This heater requires an external regulator (not supplied). Install the external regulator between the heater and gas supply.

⚠ **CAUTION:** Avoid damage to regulator. Hold gas regulator with wrench when connecting into gas piping and/or fittings.

⚠ **CAUTION:** Use pipe joint sealant that is resistant to gas (Propane or Natural Gas).

IMPORTANT: Install an equipment shutoff valve in an accessible location where the gas pipe goes indoors. The equipment shutoff valve is for turning on or shutting off the gas to the appliance. Apply pipe joint sealant lightly to male threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in clogged heater valves. The installer must supply an external regulator with nominal outlet pressure of 11” water column and sufficient flow rates. Install external regulator with the vent pointing down as shown in Figure 9. Pointing the vent down protects it from freezing rain or sleet. If flexible gas hose is applied, it should meet the requirements of ANSI/UL569 Standard for Pigtail and Flexible Hose Connection for LP-Gas. Improper regulator and/or gas hose assembly may occur damage on your heater, property or/and personal body.

⚠ **CAUTION:** Two gas lines installation at the same time is forbidden. Do not the open cover while the heater is running.

⚠ **CAUTION:** To avoid gas leakage at the inlet of appliance regulator, a qualified installer or service technician must use steel or metal hex plug with sealant.

Changing from Liquid Propane to Natural Gas supply:

1. Your heater is equipped with a unique automatic gas source detection and configuration system, allowing it to perform using both liquid propane and natural gas without any manual conversion.
2. Only a qualified installer or service technician can perform gas type conversion from between liquid propane and natural gas supply. This is due to the type of connection and installation required external the heater.

CHECKING GAS CONNECTIONS

⚠ **WARNING:** Test all gas piping and connections for leaks after installing or servicing. Correct all leaks at once.

⚠ **WARNING:** Never use an open flame to check for a leak. Apply a mixture of liquid soap and water to all joints. If bubbles form, there is a leak. Correct all leaks at once.

Pressure Testing Gas Supply Piping System
Test Pressures in Excess of 1/2 PSIG (3.5kPa)

1. Disconnect heater with its appliance main gas valve (control valve) and equipment shutoff valve from gas supply piping system. Pressures in excess of 1/2 PSIG will damage heater regulator.
2. Cap off open end of gas pipe where equipment shutoff valve was connected.
3. Pressurize supply piping system by either using compressed air or opening gas supply valve.
4. Check all joints of gas supply piping system. Apply mixture of liquid soap and water to gas joints. If bubbles form, there may be a leak.
5. Correct all leaks at once.
6. Reconnect heater and equipment shutoff valve to gas supply. Check reconnected fittings for leaks.

Test Pressures Equal to or Less Than 1/2 PSIG (3.5 kPa)

1. Close equipment shutoff valve
2. Pressurize supply piping system by either using compressed air or opening natural supply tank valve.
3. Check all joints from gas meter to equipment shutoff valve. Apply mixture of liquid soap and water to gas joints. If bubbles form, there is a leak.
4. Correct all leaks at once.

Pressure Testing Heater Gas Connections

1. Open equipment shutoff valve.
2. Open gas supply tank valve.
3. Make sure control knob of heater is in the OFF position.
4. Check all joints from equipment shutoff valve to control valve. Apply mixture of liquid soap and water to gas joints. If bubbles form, there may be a leak.
5. Correct all leaks at once.

UNIT OPERATION

FOR YOUR SAFETY READ BEFORE LIGHTING

⚠ **WARNING:** If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

1. When lighting the pilot, follow these instructions exactly.
2. BEFORE LIGHTING, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
3. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician or gas supplier. Forced or attempted repair may result in a fire or explosion.
4. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

WHAT TO DO IF YOU SMELL GAS

Open the window or door immediately.
Do not try to light any appliance.
Do not touch any electric switch, do not use any phone in your building.
Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
If you cannot reach your gas supplier, call the fire department.

Thermoelectric Generating system, USB 2.0 Micro Port & Re-Chargeable AA Batteries

Two re-chargeable 14500 batteries are included to start the heater. After the heater is running, the uniquely equipped thermoelectric generating system will power the complete unit, as well as recharge the batteries if necessary. Therefore, theoretically the batteries can last as long as all their life time. Furthermore, you will notice an input port on the front of the unit for a USB 2.0 micro port, in case the batteries were bad, you can connect the attached cord with your smart phone adapter and plug in a wall socket, then the unit can be started normally either.

LIGHTING INSTRUCTIONS

Before Lighting:

1. Make sure the heater is properly installed and connected. Open the external safety shut off valve (not part of the heater) on gas inlet line to the heater.
2. Wait five (5) minutes to clear out air inside gas lines. Smell if there is any leakage.

IMPORTANT: If you smell any gas, do not try to light any appliances, do not touch electrical switches or use any phone in the building. Shut off the valve on gas inlet line immediately and contact gas supplier from a neighbor's phone. Follow gas supplier's instructions. If you can't reach the gas supplier, call the fire department. Only when you make sure there is no gas leakage, go to the next step.

Note: During first seasonal use, gas smell is expected to be more noticeable than in standard operation.