

# Q2GI

DIRECT VENT FIREPLACE - IPI

# OWNER'S MANUAL





WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life. Installation and service must be performed by a qualified installer, service agency or the gas supplier.

### SAFETY PRECAUTIONS



#### **WARNING:**

#### FIRE OR EXPLOSION HAZARD

Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS
  - Do not try to light any appliance.
  - Do not touch any electrical switch; do not use any phone in your building.
  - Leave the building immediately.
  - 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.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

#### **INSTALLER:**

Leave this manual with the appliance.

#### **CONSUMER:**

Retain this manual for future reference.

This appliance may be installed in an after-market permanently located, manufactured (mobile) home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

Massachusetts installations (Warning): This product must be installed by a licensed plumber or gas fitter when installed within the Commonwealth of Massachusetts. Other Massachusetts code requirements: Flexible connector must not be longer than 36in., a shut off valve must be installed; only direct vent sealed combustion products are approved for bedrooms/bathrooms. A carbon monoxide detector is required in all rooms containing gas fired direct vent appliances. The fireplace damper must be removed or welded in the open position prior to installation of a fireplace insert.

# SAFETY PRECAUTIONS

# FOR SAFE INSTALLATION AND OPERATION OF YOUR "ENVIRO" HEATER, PLEASE CAREFULLY READ THE FOLLOWING INFORMATION:

- All ENVIRO gas-fired appliances must be installed in accordance with their instructions. Carefully read all the instructions in this manual first. Consult the building authority having jurisdiction to determine the need for a permit prior to commencing the installation.
- **NOTE**: Failure to follow these instructions could cause a malfunction of the fireplace, which could result in death, serious bodily injury, and/or property damage.
- Failure to follow these instructions may also void your fire insurance and/or warranty.

#### **GENERAL**

- Installation and repair should be done by a qualified service person. The appliance should be inspected before the first use and, at least, annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative the control compartments, burners and circulating air passageways of the appliance be kept clean.
- Due to high temperatures, the appliance should be located out of high traffic areas and away from furniture and draperies.

Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burn or clothing ignition.

- Young children should be carefully supervised when in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is required if there is a risk for individuals in the house. To restrict access to a fireplace or stove install an adjustable safety gate to keep toddlers, young children and other at risk individuals out of the room and away from hot surfaces. Any safety screen, guard, or barrier removed for servicing an appliance must be replaced prior to operating the appliance.
- Clothing or other flammable materials should not be placed on or near the appliance.

• A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals. If the barrier becomes damaged, the barrier shall be replaced with the manufacturer's barrier for this appliance.

#### FOR YOUR SAFETY

- Installation and service must be performed by a qualified installer, service agency or gas supplier.
- This installation must conform to local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or the Natural Gas and Propane Installation Code, CSA B149.1.
- To prevent injury, do not allow anyone who is unfamiliar with the stove to operate it.
- To prevent injury, if the pilot or pilot and burners have gone out on their own, open the glass door and wait 5 minutes to air out before attempting to relight the stove.
- Always keep the area around these appliances clear of combustible material, gasoline and other flammable liquids and vapours.
- These appliances should not be used as a drying rack for clothing or for hanging Christmas stockings/decorations.
- Due to the paint curing on the stove, a faint odor and slight smoking will likely be noticed when the stove is first used. Open a window until the smoking stops.

Always connect this gas stove to a vent system and vent to the outside of the building envelope. Never vent to another room or inside the building. Make sure the specified vent pipe is used, properly sized and of adequate height to provide sufficient draft. Inspect the venting system annually for blockage and signs of deterioration.

**WARNING:** Failure to position the parts in accordance with the diagrams in this booklet, or failure to use only parts specifically approved with this appliance, may result in property damage or personal injury.

**WARNING:** Do not operate with the glass front removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.

- Never use solid fuels such as wood, paper, cardboard, coal, or any flammable liquids, etc., in this appliance.
- 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 or any gas control which has been under water.
- Do not abuse the glass by striking it or slamming the door shut.
- If the Q2GI unit is pulled out of its installation, and the vent-air intake system is disconnected for any reason, ensure that the vent-air intake pipes are reconnected and re-sealed in accordance to the instructions noted in INITIAL INSTALLATION DIRECT VENT





HOT GLASS WILL CAUSE BURNS

**DO NOT TOUCH** GLASS UNTIL COOLED.

**NEVER** ALLOW CHILDREN TO TOUCH GLASS.

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.

# TABLE OF CONTENTS

Safety Precautions	
Table of Contents	4
Codes And Approvals	5
Specifications	6
Dimensions	6
Rating Label Location	6
Operating Instructions	7
Lighting and Turning Off Instructions	7
Air Shutter	
Normal Sounds During Operation	
Remote Control Operation	8
Initializing the System for the First Time	11
Switching to Continuous Pilot	11
Fan Control	13
Maintenance And Service	14
Routine Maintenance	14
Cleaning The Glass	14
Cleaning The Firebox	14
Replacing the Glass	14
Cleaning Decorative Surfaces	15
Glass Door Removal	16
Burner Removal	16
Access Door	16
Fuel Conversion	17
Conversion Kit Installation	18
Initial Installation	20
Introduction	20
Placement and Framing	20
Framing Plate Installation	21
Mantle and Non-Combustible Clearances	22
Corner Installation	23
Direct Vent	23
Vent Termination Restrictions	25
Venting Clearances	26
Approved Venting Parts	26
Allowable Co-Axial Vent Configurations	28
Horizontal Termination	
Vertical Termination	31
Gas Line Connection and Testing	34
Electrical Requirements	35
Secondary Installation	36
Glass Media Installation	
Trouble Shooting	37
Parts List	
Parts Diagram	40
Notes	
Warranty	
Installation Data Sheet	44

# CODES AND APPROVALS

**DIRECT VENT ONLY:** This type is identified by the acronym "DV". This appliance draws all of its air for combustion from outside the dwelling, through a specially designed vent pipe system.

This appliance has been tested and approved for installations from 0 feet to 4500 feet (1372 m) above sea level.

- In the USA: The appliance may be installed at higher altitudes. Please refer to your American Gas Association guidelines which state: the sea level rated input of Gas Designed Appliances installed at elevations above 2000 (610 m) feet is to be reduced 4% for each 1000 feet (305 m) above sea level. Refer also to local authorities or codes which have jurisdiction in your area regarding the de-rate guidelines.
- In Canada: When the appliance is installed at elevations above 4500 feet (1372 m), the certified high altitude rating shall be reduced at the rate of 4% for each additional 1000 feet (305 m).
  - This appliance has been tested by INTERTEK and found to comply with the established VENTED GAS FIREPLACE HEATER standards in CANADA and the USA as follows:

#### **VENTED GAS FIREPLACE HEATER (Q2GI; NATURAL GAS, PROPANE GAS)**

TESTED TO: ANSI Z21.88 / CSA 2.33 VENTED GAS FIREPLACE HEATERS
CSA 2.17 GAS FIRED APPLIANCES FOR HIGH ALTITUDES

#### This ENVIRO Q2GI Fireplace:

- Has been certified for use with either natural gas or propane (see rating label).
- Is not for use with solid fuels.
- Is approved for bedroom or bed sitting room. (IN CANADA: must be installed with a listed wall thermostat. IN USA: see current ANSI Z223.1 for installation instructions.)
- Must be installed in accordance with local codes. If none exist, use current installation code CAN/CGA B149 in Canada or ANSI Z223.1/NFPA 54 in the USA.
- Must be properly connected to an approved venting system and not connected to a chimney flue serving a separate solid-fuel burning appliance.

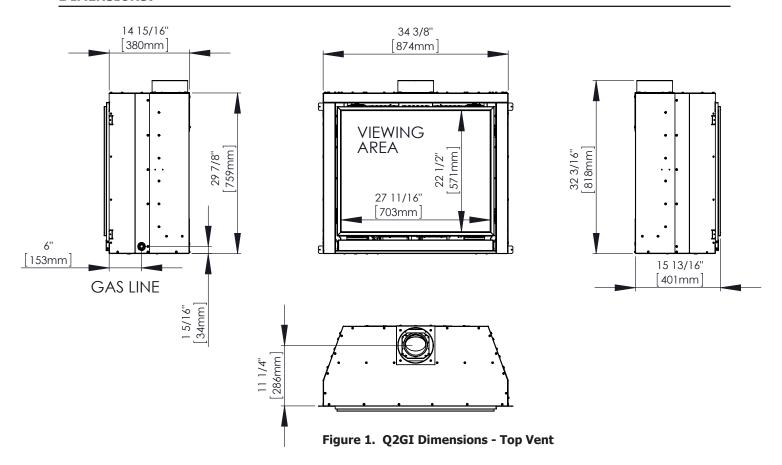
**IMPORTANT NOTICE (Regarding first fire up):** When the unit is turned on for the first time, it should be turned onto high without the fan on (if equipped) for the first 4 hours. This will cure the paint, logs, gasket material and other products used in the manufacturing process. It is advisable to open a window or door, as the unit will start to smoke and can irritate some people. After the unit has gone through the first burn, turn the unit off including the pilot, let the unit get cold then remove the glass door and clean it with a good gas fireplace glass cleaner, available at your local ENVIRO dealer.



gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

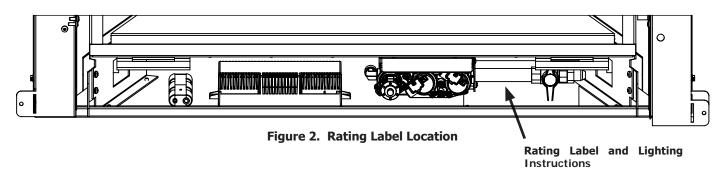
# SPECIFICATIONS

#### **DIMENSIONS:**



#### **RATING LABEL & LIGHTING INSTRUCTIONS LOCATION:**

To access the rating label and lighting instructions flip down the control cover. The plates are attached to a length of chain and are never to be tampered with or removed. All important information for your fireplace is on this label as well of the model specific serial number which you will need for warranty information.



#### For Your Safety, Read Safety Precautions And **Lighting Instructions Before Operating**

WARNING: IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY A FIRE OR EXPLOSION MAY RESULT, CAUSING PROPERTY DAMAGE, PERSONAL INJURY OF LOSS OF LIFE.

#### **LIGHTING AND TURNING OFF INSTRUCTIONS:**

#### FOR YOUR SAFETY READ BEFORE OPERATING

WARNING: IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

- A. This appliance is equipped with an ignition device which automatically lights the pilot. Do <u>not</u> try to light the pilot by hand.
- B. BEFORE OPERATING 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.

WHAT TO DO IF YOU SMELL GAS:

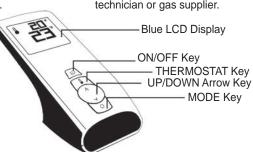
- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- C. Use only your 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. Force or attempted repair may result in a fire or explosion.
- D. 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.

#### **OPERATING INSTRUCTIONS**

- 1. STOP! Read the safety information above on this label.
- Read the owner's manual including the section on "Remote Control" operation.
- 3. Set the thermostat to the lowest setting.
- 4. Turn off all electric power to the appliance.
- 5. Do not attempt to light the pilot by hand.
- 6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
- 7. Turn on all electric power to the appliance.
- 8. Using the remote control, set thermostat to desired setting, or press the ON/OFF key on the remote. "ON" will be indicated on the display of the remote and an audible "beep" will be heard at the unit to indicate the command has been received.

9. This appliance is equipped with a completely automatic ignition and lighting control. The control will attempt to light the pilot several times if necessary. If it is unsuccessful, it will discontinue operations. If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.



#### TO TURN OFF GAS TO APPLIANCE

- 1. Set thermostat to lowest setting, or press the ON/OFF Key. "OFF" will be indicated on the display and an audible "Beep" will be heard at the unit to indicate the command has been received.
- 2. Turn off all electric power to the appliance if service is to be performed.

C-12455

Figure 3. Lighting Instruction Label

#### AIR SHUTTER:

The air shutter adjustment lever is on the right hand side of the control area (see Figure 4).

The air shutter allows the amount of air coming into the fireplace to be adjusted in order to accommodate different climates and venting arrangements. Start the pilot and then the burner. Make sure the pilot flame is burning normally and none of the burner ports are plugged. Let the fireplace burn for roughly fifteen minutes and make adjustments as necessary.

The ideal flame will be blue at the base and light orange above. The flames should be of medium height. If the flames look like this, no venturi adjustment is needed. If the flames are fairly short and

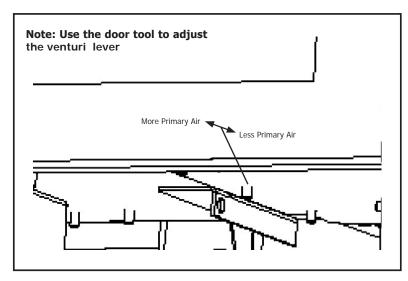


Figure 4. Air shutter adjustment lever.

mostly blue, the fireplace is getting too much air. Therefore, the air shutter should be closed (pulled out) slightly until the correct flames are achieved. Flames that are very orange, with tall, dark, stringy tips, are not getting enough air. Open (push in) the venturi until the flames clean up. If the venturi is opened, or closed all the way, and the correct flames cannot be attained, turn off the gas and contact the dealer.

**Warning:** Incorrect venturi adjustment may lead to improper combustion, which is a safety hazard. Contact the dealer if there is any concern about the venturi adjustment.

#### NORMAL SOUNDS DURING OPERATION:

**Table 1: Normal Sounds** 

Component	Sound & Reason
Fireplace Body	Creaking when heating up or cooling down.
Burner	Light pop or poof when turned off; this is more common with LP units.
Temperature Sensor	Clinking when it senses to turn the blower on or off.
Pilot Flame	Quiet whisper while the pilot flame in on.
Blower / Fan	Air movement that increase and decreases with the speed of the blower. The blower is pushing the heat from the fireplace into the room.
Gas Control Valve	Dull click when turning on or off, this is the valve opening and closing.

#### **REMOTE CONTROL OPERATIONS:**

The Proflame 2 GTMFL is a modular remote control system that directs the functions of the Q2GI. The Proflame 2 GTMFL is configured to control the on/off main burner operation, its flame levels and provides on/off and Smart thermostatic control of the appliance. The system controls a remotely actuated 120V/60Hz power outlet, and fan speed through six (6) levels.

#### SYSTEM DESCRIPTION:

The Proflame 2 Remote Control System consists of two (2) elements:

- 1. Proflame 2 Transmitter.
- 2. Integrated Fireplace Controller (IFC) and a wiring harness to connect the Receiver to the gas valve, stepper motor and Fan Control Module.

#### **ATTENTION!**

- TURN "OFF" THE MAIN GAS SUPPLY OF THE APPLIANCE DURING INSTALLATION OR MAINTENANCE OF THE RECEIVER.
- TURN "OFF" MAIN GAS SUPPLY TO THE APPLIANCE PRIOR TO REMOVING OR REINSERTING THE BATTERIES IN THE BATTERY HOLDER

#### **TECHNICAL DATA**

#### **Transmitter (Remote Control):**

Supply voltage: 4.5 V (three 1.5 V AAA batteries)

Radio frequency: 315 MHz

#### **Integrated Fireplace Controller (IFC):**

Supply voltage: AC IN - 120 V / 60 Hz

Battery Backup IN - 6 Vdc - 200mA (four 1.5 V AA batteries)

Spark voltage / frequency: >10kV / 1Hz Comfort modulating fan: 120 V / 60 Hz / 2A Auxiliary: 120 V / 60 Hz / 5A (not used)

#### **TRANSMITTER:**

The Proflame 2 Transmitter is a remote control with a blue backlit lcd display. It uses a streamline design with a simple button layout and informative lcd readout (Figure 5). The Transmitter is powered by three (3) AAA type batteries. A Mode Key is provided to Index between the features and a Thermostat Key is used to turn on/off or index through Thermostat functions (Figure 5 & 6)

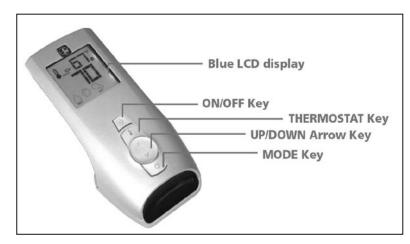


Figure 5: Proflame 2 Transmitter.

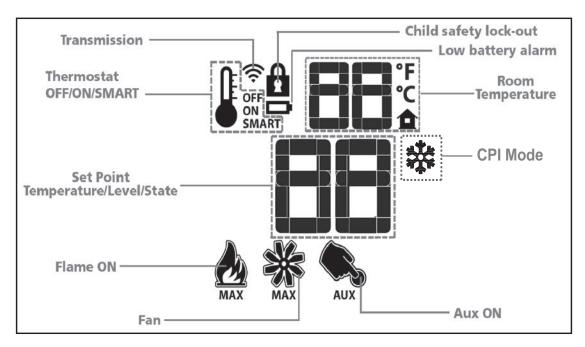
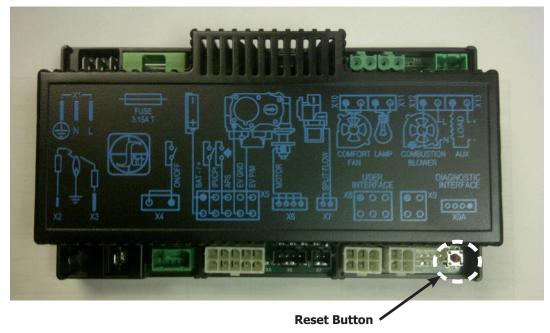


Figure 6: Proflame 2 Transmitter LCD Screen.

#### **INTEGRATED FIREPLACE CONTROLLER (IFC):**

The Proflame 2 IFC (Figure 7) connects directly to the gas valve, stepper motor, pilot, and covection fan with a wiring harness. The IFC is mainly powered by 120 VAC but can also run off a battery backup four (4) AA type batteries for shorter periods of time. The IFC accepts commands via radio frequency from the Transmitter to operate the appliance in accordance with the particular Proflame 2 system configuration. The IFC has a red reset button at the front right corner that is used is to synchronize the Transmitter when using the for the first time, or after the batteries have been replaced.



**Figure 7: Integrated Fireplace Controller** 

#### **OPERATING PROCEDURE:**

#### <u>Initializing The System For The First Time</u>

Install the four (4) AA batteries into the IFC battery holder. Note the polarity of the battery and insert into the battery bay as indicated on the body of the battery holder. Press the reset button on the IFC marked "SW1" (see Figure 7).

The IFC will "beep" three (3) times to indicate that it is ready to synchronize with a Transmitter. Install the three (3) AAA type batteries in the Transmitter battery bay, located on the base of the Transmitter. With the batteries already installed in the Transmitter, push the 'ON' button. The IFC will "beep" four (4) times to indicate the Transmitter's command is accepted and sets to the particular code of that Transmitter. The system is now initialized.

#### **Temperature Indication Display**

With the system in the "OFF" position, press the Thermostat Key and the Mode Key at the same time. Look at the LCD screen on the transmitter to verify that a °C or °F is visible to the right of the Room Temperature display (see Figure 8).

#### **Turn on the Appliance**

Press the ON/OFF Key on the Transmitter. The Transmitter display will show all active Icons on the screen. A single "beep" from the Receiver will confirm reception of the command and will commence to first

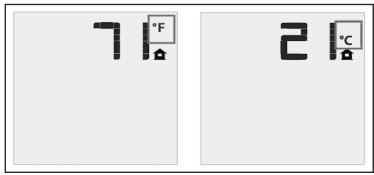
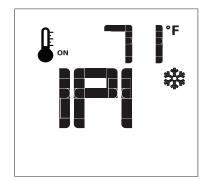


Figure 8: Remote Control Display in Farenheit and Celcius.

ignite the pilot light, followed by the main burner. This should take about 10 seconds to complete.

#### **SWITCHING TO CONTINUOUS PILOT MODE:**

When the Q2GI is turned off press the mode key to index to the constant pilot (CPI) mode icon (see figure 9). Pressing the up arrow key will select Continuous Pilot Ignition (CPI) and pressing the down arrow key will return to IPI. Once a selection is made the IFC will beep once to confirm it had received the command. NOTE: It is recommended to use the continuous pilot mode during the winter when the outside temperature is below 50°F (10°C) to keep the chimney properly heated for updraft during burner ignition. Continuous pilot mode also keeps the firebox warm which eliminates both heat loss to cold air that is trapped inside the firebox as well as excessive exhaust vapour condensation on the door glass.



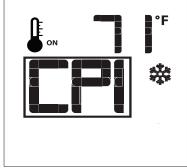


Figure 9: CPI Pilot Mode.

#### **Turn off the Appliance**

Press the ON/OFF Key on the Transmitter. The Transmitter LCD display will only show the room temperature and Icon (see Figure 10). A single "beep" from the IFC confirms reception of the command and both the pilot light (if the unit is not set to continuous pilot) and main burner will turn off.

#### **Room Thermostat (Transmitter Operation)**

The Remote Control can operate as a room thermostat. The thermostat can be set to a desired temperature to control the comfort level in a room. To activate this function, press the Thermostat Key (see Figure 5). The LCD display on the Transmitter will change to show that the room thermostat is "ON" and the set temperature is now displayed (see Figure 10). To adjust the set temperature, press the Up or Down Arrow Keys until the desired set temperature is displayed on the LCD screen of the Transmitter.

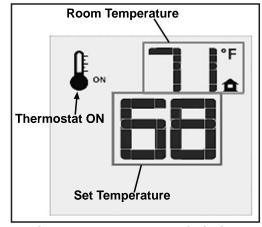


Figure 10: Remote Control Displays Set Temperature.

#### **Smart Thermostat (Transmitter Operation)**

The Smart Thermostat function adjusts the flame height in accordance to the difference between the set point temperature and the actual room temperatures. As the room temperature gets closer to the set point the Smart Function will modulate the flame down. To activate this function, press the Thermostat Key (Figure 5) until the word "SMART" appears to the right of the temperature bulb graphic (Figure 11). To adjust the set temperature, press the Up or Down Arrow Keys until the desired set temperature is displayed on the LCD screen of the Transmitter.

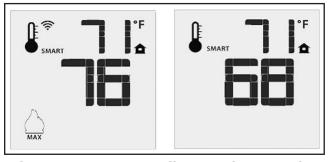


Figure 11: Remote Control's Smart Flame Function.

#### **Remote Flame Control**

The Proflame 2 GTMF has six (6) flame levels. With the system on, and the flame level at the maximum in the appliance, pressing the Down Arrow Key once will reduce the flame height by one step until the flame is turned off. The Up Arrow Key will increase the flame height each time it is pressed. If the Up Arrow Key is pressed while the system is on but the flame is off, the flame will come on in the high position (refer to Figure 12). A single "beep" will confirm reception of the command.

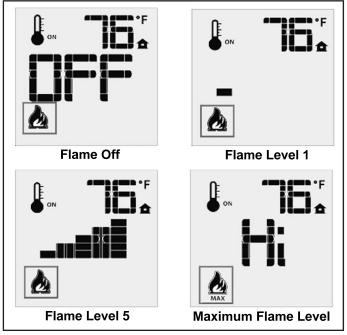


Figure 12: Remote Control's Flame Levels.

#### **Fan Control**

The Q2GI comes with a convection fan that can be controlled with the Transmitter. The fan speed can be adjusted thorugh six (6) speeds. To control the fan press the MODE key (Figure 5) to index to the fan control icon (Figure 13). Use the UP/DOWN arrow keys to turn on, off, or adjust the fan speed (Figure 13). A single beep from the IFC will confirm the command has been received

#### **Key lock**

This function will lock the keys to avoid unsupervised operation. To activate this function, press the MODE and UP keys at the same time and the a lock will appear (see Figure 15). To de-activate this function, press the MODE and UP Keys at the same time.

#### **Low Battery Power Detection**

Transmitter: The life span of the remote control batteries depends on various factors: quality of the batteries used, the number of ignitions of the appliance, the number of changes to the room thermostat set point, etc. When the Transmitter batteries are low, a Battery Icon will appear on the LCD display of the Transmitter (see Figure 16) before all battery power is lost. When the batteries are replaced this Icon will disappear.

IFC: The life span of the IFC batteries depends on various factors during a prolonged power outage: quality of the batteries used, the number of ignitions of the appliance, the number of changes to the room thermostat set point etc. When the IFC batteries are low, No "beep" will be emitted when it receives an On/Off command from the Transmitter. This is an alert for a low battery condition for the IFC. When the batteries are replaced the "beep" will be emitted from the Receiver when the ON/OFF Key is pressed (See Initializing the System for the First Time).



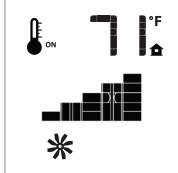


Figure 13: Fan Control

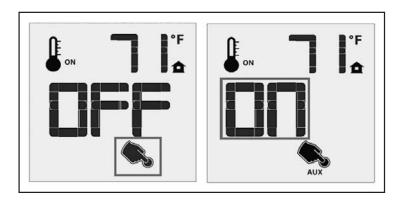
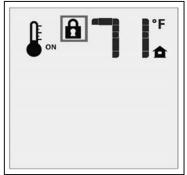


Figure 14: Remote Control with Aux (not used)





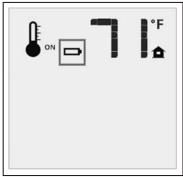


Figure 16: Low Battery Indicator.

WARNING: Fire Hazard. Can cause severe injury or death The Receiver causes ignition of the appliance. The appliance can turn on suddenly. Keep away from the appliance burner when operating the remote system or activating manual by pass of the remote system.

WARNING: Shock Hazard. Can cause severe injury or death. This device is powered by line voltage. Do not try to repair this device. In no way is the enclosure to be tampered with or opened. Disconnect from line voltage before performing any maintenance.

WARNING: Devices rated more than 5A shall not be connected to the OUT receptacle. Devices rated more than 1A shall not be connected to the FAN receptacle. Devices rated more than 2A shall not be connected to the AUX receptacle.

CAUTION: Property Damage Hazard. Excessive heat can cause property damage. The appliance can stay lit for many hours. Turn off the appliance if it is not going to be attended for any length of time. Always place the Transmitter where children cannot reach it.

Page 13

#### **ROUTINE MAINTENANCE:**

At least once a year, run through the following procedures to ensure the system is clean and working properly. Check the burner to see if all the ports are clear and clean. Check the pilot to make sure it is not blocked by anything. The pilot flame should be blue with little or no yellow on the tips.

Warning: Clearances must be sufficient to allow access for maintenance and service

**Warning:** Failure to position the parts in accordance with this manual, or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

The venting system must be periodically examined; it is recommended the examination is done by a qualified agency.

#### **CLEANING THE GLASS:**

When the fireplace has cooled, remove the face of the fireplace (if applicable) along with the glass door. See Maintenance And Service - Glass Door Removal. Check the gasket material on the back of the glass, making sure that it is attached and intact.

During a cold start up, condensation will sometimes form on the glass. This is a normal condition with all gas fireplaces. However, this condensation can allow dust and lint to cling to the glass surface. Initial paint curing of the appliance can leave a slight film behind the glass, a temporary problem. The glass will need cleaning about two weeks after installation. **Use a mild glass cleaner and a soft cloth**. **Abrasive cleaners will damage the glass and painted surfaces.** Depending on the amount of use, the glass should require cleaning no more than two or three times a season. **Do not clean the glass when it is hot.** 

#### **CLEANING THE FIREBOX:**

Remove all of the glass media from the tray, a vacuum cleaner with an empty canister or new bag works best. At this time, inspect the burner tray for cracking or severe warping. If a problem is suspected, contact the dealer. Check the glass media for large amounts of soot; a small amount on the bottom side of the glass is normal. Re-install the glass as in the Secondary Installation - Glass Media Installation section. If new or glass is required, contact your nearest ENVIRO dealer.

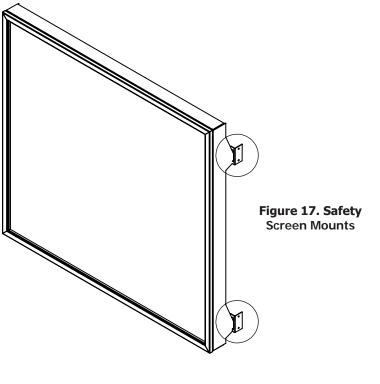
#### REPLACING THE GLASS:

The glass in the fireplace is a high temperature ceramic. If the glass is damaged in any way, a factory replacement is required (see PARTS LIST). Wear gloves when handling damaged glass door assembly to prevent personal injury. Do not operate with the glass front removed, cracked or broken. Removal and replacement of the glass from the door **must** be done by a licensed or qualified service person. **The glass must be purchased from an ENVIRO dealer. No substitute materials are allowed.** Remove the door (see page 15). The replacement glass will come with a new gasket installed. Remove any silicone remnants from the door. Apply high temperature silicone to all four faces of the door and install the new piece of glass with gasket (be sure to maintain edge clearances). Apply even pressure to the glass to allow the silicone to adhere to the gasket material.

#### **CLEANING DECORATIVE SURFACES:**

Painted and porcelain faces should be wiped with a damp cloth periodically. If a plated face has been purchased, it should be unpacked/unwrapped carefully to avoid getting anything on the surface of the finish, including cleaners, polish and finger prints. It is important to note that fingerprints and other marks can leave a permanent stain on plated finishes. To avoid this, give the face a quick wipe with denatured alcohol on a soft cloth BEFORE lighting the fireplace. Never clean the face when it is hot. Do not use other cleaners as they may leave a residue, which can become permanently etched into the surface.

#### **GLASS DOOR REMOVAL:**



The door needs to be removed for sceduled cleaning and to install the glass media and other options.

First remove the safety screen by grabbing the top and bottom of the frame and lifting it up and out. To remove the glass door use your two index fingers to pull the spring latches up over the two door tabs. Once release pivot the door to out and pull it out of the bottom door retainers. The door must be angled in order for it to pull out.

To replace the glass door, simply reverse the above procedure.

**WARNING:** Do not touch or attempt to remove the glass door if the fireplace is not completely cold.

**WARNING:** Never operate the fireplace with the glass door removed.

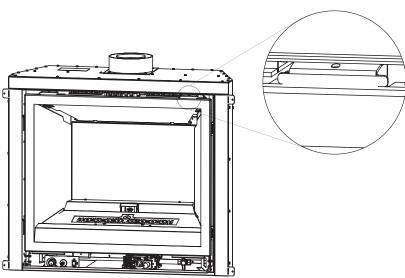


Figure 18A. Upper Door Latch

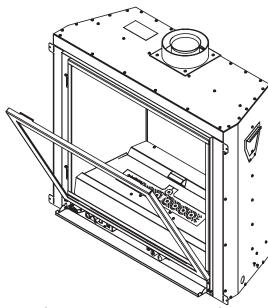


Figure 18B. Bottom Door Retainers

#### **BURNER REMOVAL:**

The burner may need to be removed for a few reasons, including cleaning under the burner or fuel conversion. **Proceed only when the unit has completely cooled down.** 

**Step 1:** Remove the glass door as shown in the Maintenance and Service - Glass Door Removal.

**Step 3:** Unscrew the burner pan using a T20 screwdriver then rotate it clockwise and pull it out of the venturi box (Figure 19).

To re-install the burner follow steps 1-3 in reverse. When placing the burner back in the unit be sure not to move the air shutter.

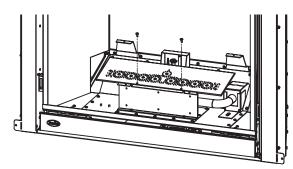


Figure 19. Removing Burner

**Step 2:** Remove the glass media and the enameled glass tray as shown in Figure 20.

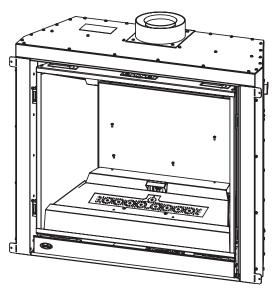


Figure 20. Removing Glass Tray

#### **ACCESS DOOR:**

There is an access door in the bottom on the firebox that is used for servicing components after the unit is installed in a construction enclosure. **Proceed only when the unit has completely cooled down.** 

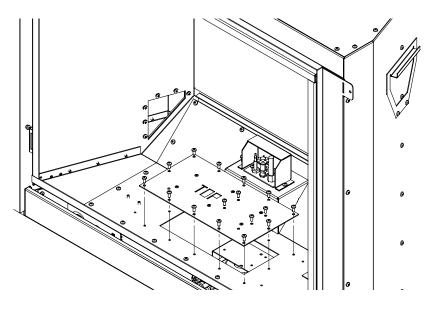


Figure 21. Removing Access Door

- **Step 1**: Remove the burner as shown in the Maintenance and Service Burner Removal.
- **Step 2:** Remove the Upper Air Diverter by removing (2) T-20 bolts. Remove the Lower Air Diverter.
- **Step 3**: Remove the right and left burner stands by removing (4) T-20 bolts.
- **Step 4**: Remove the (16) T-20 bolts retaining the access door as shown in Figure 21.
- **Step 5**: After servicing assemble in the reverse order and be sure the gasket is still intact. Replace if necessary.

#### **FUEL CONVERSION:**

#### TO BE INSTALLED BY A QUALIFIED SERVICE AGENCY ONLY

Please read and understand these instructions before installing.

Warning: This conversion kit shall be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, explosion or production of carbon monoxide may result causing property damage, personal injury or loss of life. The qualified service agency is responsible for the proper installation of this kit. The installation is not proper or complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit.

#### **Kit Parts List for all Q2GI Models:**

- 1 Orifice (NG #40 DMS or LP #55 DMS) as marked
- 1 Stepper Regulator with diaphragm
- 1 Installation instruction sheet
- 1 Conversion label

Carefully inspect all parts supplied with this conversion kit. If any parts have been damaged or are missing, contact your dealer to have them replaced before starting this installation.

#### Conversion Kit Installation:

- 1. Turn the unit off by pressing the ON/OFF Key on the remote and shut off gas supply at the shut-off valve upstream of the unit. CAUTION: The gas supply must be shut off prior to disconnecting the electrical power and before proceeding with the conversion. Allow the valve and unit to cool down to room temperature.
- 2. Remove the glass door as shown in the Maintenance and Service Glass Door Removal.
- 3. Carefully remove the glass media, glass tray, and pilot shield.
- 4. Remove the burner as shown in the Maintenance and Service Burner Removal.
- 5. Convert the pilot injector (see Figure 22):
  - a) Using a <sup>7</sup>/16" wrench, turn the pilot head a <sup>1</sup>/4 turn counter-clockwise
  - b) Push the slider with your finger or flat head screwdriver
    - Natural Gas is marked NAT.
    - Propane gas is marked LP with an indicating hole between L and P.
       It is also marked red.
  - c) Turn the pilot head a <sup>1</sup>/<sub>4</sub> turn clockwise back to its original position.



Figure 22. Pilot Slider set to LP

#### 6. Convert the burner orifice:

- a) Remove the main burner orifice with a 1/2" deep socket
- b) Replace the NG orifice with the LP orifice. Do not over-tighten. The LP orifice hole will always be smaller then the NG hole.
- 7. Convert the SIT gas valve:
- a) Use a T-20 driver to remove the two screws that hold the stepper regulator to the gas valve and disconnect the wire harness from the IFC.
- b) Remove the rubber regulator diaphragm that is situated between the stepper regulator and the valve body. The new stepper regulator already has this diaphragm installed.
- c) Install the LP stepper regulator, with the new longer T-20 screws included in the kit and connect the harness to the IFC.
- 8. Reinstall the burner, pilot shield, glass tray, glass media, and glass door. Refer to Secondary Installation Glass Media Installation in your Owner's Manual. When re-installing the burner, ensure that the burner to pilot hood and shield relationship is similar to what is shown in Figure 23.
- 9. Reconnect the main gas line if it was disconnected and open the shut-off valve at the gas line to the unit.
- 10. Reconnect the electrical power to the unit.
- 11. Use a small brush to apply a warm soapy water solution to all gas connections (use a half dish soap and half warm water). If a gas leak is present, bubbling will occur. Gas leaks can be repaired by using an approved pipe thread sealant or approved Teflon tape. NEVER USE AN OPEN FLAME WHEN TESTING FOR LEAKS.
- 12. Relight the pilot and confirm the flame properly covers the flame sensor (see Figure 23). Should the

13. Relight the main burner in both the "HI" and "LO" positions to verify proper burner ignition, operation and proper flame appearance. Confirm the inlet and manifold pressures are within the acceptable ranges as directed in section Intial Intallation - Gas Line Connection and Testing. If the Q2GI has been installed at an altitude higher than 2000ft (610m) it is required to de-rate the unit accordingly:

In the USA: The appliance may be installed at higher altitudes. Please refer to your American Gas Association guidelines which state: the sea level rated input of Gas Designed Appliances installed at elevations above 2000 (610 m) feet is to be reduced 4% for each 1000 feet (305 m) above sea level. Refer also to local authorities or codes which have jurisdiction in your area regarding the de-rate guidelines.

In Canada: When the appliance is installed at elevations above 4500 feet (1372 m), the certified high altitude rating shall be reduced at the rate of 4% for each additional 1000 feet (305 m).

14. MAKE SURE that the conversion label is installed on or close to the rating label to signify that the unit has been converted to a different fuel type.



Figure 23. Correct Burner & Pilot Shield Placement (Q1 IPI model shown but similar to Q2 IPI model)

#### **QUALIFIED INSTALLERS ONLY**

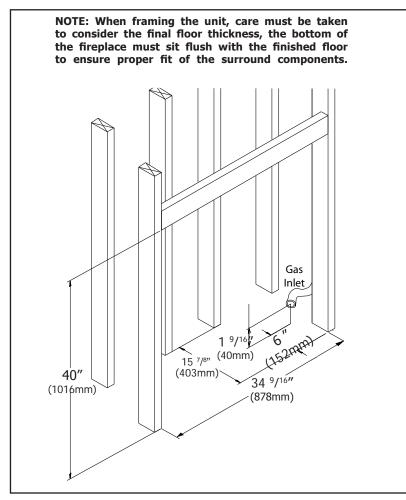
#### **INTRODUCTION:**

This section of the owner's manual is for the use of qualified technicians only. Fireplace placement, hearths, facing, mantels, and venting terminations will be covered, as well as the gas and electric systems. There are several installation safety guidelines that must be adhered to. Please carefully read the safety precautions at the front of this manual.

NOTE: The O2G models can ONLY be run as a top vent; the rear vent is only available for the O2L models.

**CAUTION:** Clearances must be sufficient to allow access for maintenance and service.

#### **PLACEMENT AND FRAMING:**



**Table 2. Framing Dimensions.** 

Minimum Framing Dimensions			
Depth	15 <sup>7/8</sup> "	403mm	
Width	34 <sup>9/16</sup> "	878mm	
Header Height	40"	1016mm	
Chase Height (Rear Vent)	N/A	N/A	
Chase Height (Top Vent)	*54"	1372mm	
Gas Inlet (Front)	6"	152mm	

<sup>\*</sup>Minimum dimension with only an elbow off the top. Any vertical rise added increase the chase height respectively.

Figure 24. Dimensions for Framing the Firebox

The location for the fireplace can be along a wall, raised, at floor level, or in a corner. There are specific framing measurements for each situation. The basic opening should have the dimensions shown in Figure 17. The fireplace must have a strong and level surface to be placed on. The surface should be made of wood or a non-combustible material, not carpet.

The gas line, **3/8" JIC fitting**, should be brought to the right side of the fireplace. The location should be chosen so the fireplace will be at least **36 inches (914 mm)** from drapes, doors and other combustibles. The framed opening should also be a minimum of **4 5/8" (117 mm)** from the nearest perpendicular wall (sidewall to the edge of the opening).

#### **QUALIFIED INSTALLERS ONLY**

#### FRAMING PLATE INSTALLATION:

A steel framing plate is included with your Q2GI. The plate does not come installed on the unit but it attaches very easily with a 1/4" hex driver as shown below. This plate is used as a supportive surface to fill in the air gap above the unit in the installation construction. Non combustible material can be placed over this plate such a cement board. Non combustible material is only necessary over the fireplace opening and does not need to span the entire width of the framing plate. A wood mantle can we placed over top of the non-combustible as long as it stays within the mantle specicifactions.

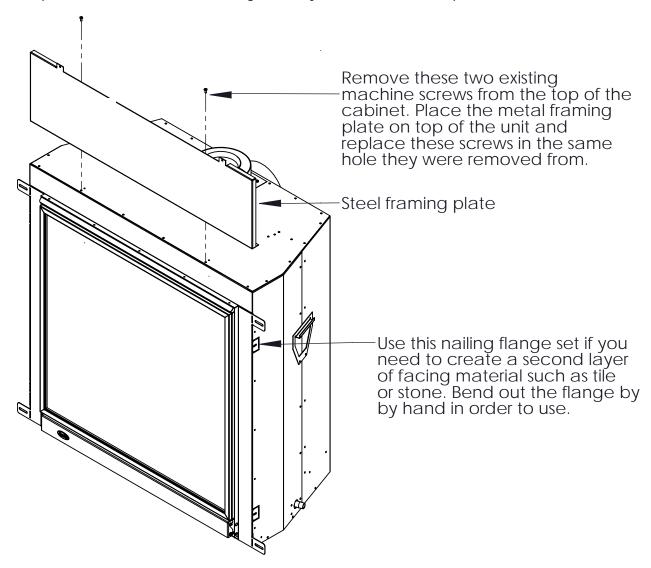


Figure 25. Framing Plate Installation

#### **QUALIFIED INSTALLERS ONLY**

#### MANTLE & NON-COMBUSTIBLE CLEARANCES:

When installing the Q2GI as a zero clearance fireplace the correct clearances and materials must be used: **ABOVE UNIT:** A minimum **10" (254mm)** of non-combustible facing material must be used above the firebox opening (in front of the included steel framing plate). The non-combustible is only required directly over the firebox opening and does not need to span the entire width of the framing plate.

**IN FRONT OF UNIT:** The Q2GI can be placed on the floor if desired although it is recommended that it be raised aleast an inch or higher for more heat sensetive materials such as carpet or linoleum.

**ADJACENT/SIDEWALL:** There must be a minimum distance of **4 5/8" (117mm)** from the side of the Q2GI cabinet to an adjacent wall composed of combustible material.

**MANTLE:** It is not necessary to install a mantle, but if one is desired the guidelines as shown in Figure 27. Side mantle clearence should be no less then the distance from the top of the unit to the bottom on the top portion of the mantle.

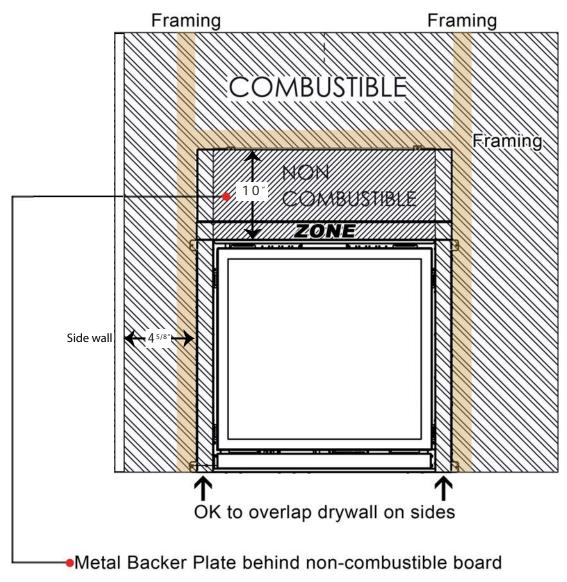


Figure 26. Non Combustable Material

#### QUALIFIED INSTALLERS ONLY

# **Minimum Mantle Clearances**

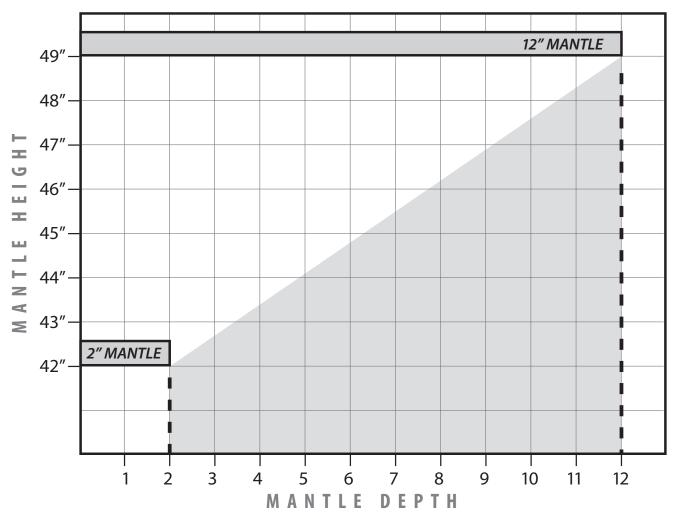


Figure 27. Mantle Clearances

Note: Mantle height dimensions are based from the bottom of the appliance.

#### QUALIFIED INSTALLERS ONLY

#### **CORNER INSTALLATION:**

The dimensions for installing a fireplace in the corner of a room are given in Figures 27. Refer to "INITIAL INSTALLATION - ALLOWABLE CO-AXIAL VENT CONFIGURATIONS" for allowable pipe lengths.

Do not interfere with the structural integrity of the walls.

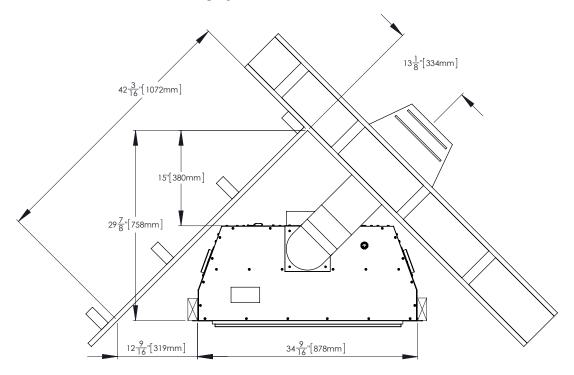


Figure 28. Dimensions for a corner installation

#### **DIRECT VENT:**

WARNING: This appliance has been designed to draw room air for proper heat circulation from the bottom of the unit, and out the top front. Blocking or modifying these openings in any way can create hazardous situations.

The vent length for the Q2GI must be between **6" (150 mm)** and **40' (12.2 m)**. This model is vented with co-axial **4"** intake, **6 5/8"** exhaust aluminum or stainless steel approved rigid vent leading into a vertical or horizontal termination cap. This model can also be used with aluminum or stainless steel flex venting. The flue collar of this model will fit inside of a standard **4"** x **6 5/8"** vent and must be either correctly interlocked or fastened, with three screws directly to the vent collar.

Check periodically that the vents are unrestricted. Also ensure that all direct vent pipes have been properly sealed and installed after routine inspection or cleaning. The air intake and exhaust pipes must be installed in the correct locations on the top of the Q2GI.

#### **QUALIFIED INSTALLERS ONLY**

#### **VENT TERMINATION RESTRICTIONS:**

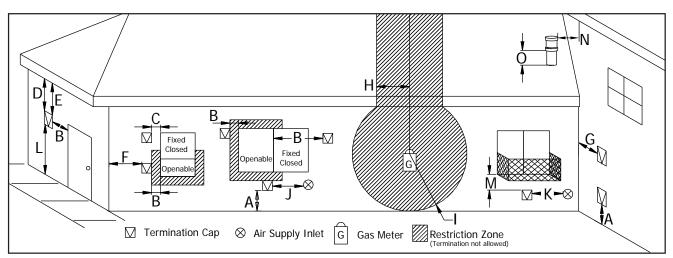


Figure 29. Vent Termination Restrictions, refer to Table 3

**Table 3: Vent Termination Clearances** 

Letter	Canadian Installation <sup>1</sup>	US Installation <sup>2</sup>	Description	
Α	12 in (30 cm)		Clearance above grade, verandah, porch, deck, or balcony.	
В	12 in (30 cm)	9 in (23 cm)	Clearance from window or door that may be opened.	
С	12 in (:	30 cm)*	Clearance from permanently closed window (to prevent condensation).	
D	24 in (60 cm)*		Vertical clearance to ventilated soffit located above the terminal, within a horizontal distance of 2 ft (60 cm) from center line of terminal.	
E	18 in (4	45 cm)*	Clearance to unventilated soffit.	
F	12 in (3	30 cm)*	Clearance to outside corner.	
G	12 in (3	30 cm)*	Clearance to inside corner.	
Н	3 ft (91 cm) within a height of 15 ft (4.5 m) above the meter/ regulator assembly	3 ft (91 cm) within a height of 15 ft (4.5 m) above the meter/ regulator assembly*	Clearance to each side of center line extended above meter/regulator assembly.	
1	3 ft (91 cm)	3 ft (91 cm)*	Radial clearance around service regulator vent outlet.	
J	12 in (30 cm)	9 in (23 cm)	Clearance to non-mechanical air supply inlet to building, or the combustion air inlet to any other appliance.	
K	6 ft (1.83 m) 3 ft (91 cm) above if within 10 ft (3 m) horizontally		Clearance to mechanical air supply inlet.	
L	7 ft (2.13 m <sup>)t</sup>	7 ft (2.13 m) <sup>*†</sup>	Clearance above paved sidewalk or paved driveway located on public property.	
М	12 in / 30 cm <sup>+</sup> 12 in / 30 cm <sup>*+</sup>		Clearance under verandah, porch, deck, or balcony.	
N	12 in (30 cm)*		Clearance horizontally to any surface (such as an exterior wall) for vertical terminations.	
0	12 in (30 cm)		Clearance above roof line for vertical terminations.	

<sup>&</sup>lt;sup>1</sup> In accordance with the current CSA B149, Natural Gas and Propane Installation Code.

Clearances are in accordance with local installation codes and the requirements of the gas supplier.

 $<sup>^{2}</sup>$  In accordance with the current ANSI Z223.1 NFPA 54, National Fuel Gas Code.

<sup>\*</sup> These numbers are only estimates.

<sup>&</sup>lt;sup>t</sup> A vent shall not terminate directly above a side walk or paved driveway that is located between two single family dwellings and it serves both dwellings.

<sup>&</sup>lt;sup>+</sup> Permitted only if verandah, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.

#### QUALIFIED INSTALLERS ONLY

#### **VENTING CLEARANCES:**

A 1" (25 mm) clearance to combustibles must be maintained around any vertical vent pipe. Around a horizontal vent pipe, the clearance to combustibles should be 2" (51 mm) above and 1½" (38 mm) on the sides and bottom. When combustible materials are directly above a 90° elbow, 3" (76 mm) of clearance are necessary.

	Vertical Pipe to the Side Walls	Horizontal Pipe to the Sides & Bottom	Above an Elbow Above the Unit	Above an Elbow Not Above the Unit	Above Horizontal Vent Pipe	Wall Frame 8" (203mm) or less
Hard	1"	1½"	3"	3"	2"	10"x10"
Pipe	(25.4 mm)	(38.1 mm)	(76.2 mm)	(76.2 mm)	(51 mm)	(25x25cm)

A **10" (254 mm)** x **10" (254 mm)** frame (see Figure 29) will assure the proper support and spacing for the vent pipe as it passes through the wall. Installations in Canada require that a wall thimble be used for passing through walls and ceilings. All sealing and vapour barriers must comply with local building codes.

The configuration of the venting pipes depends on the locations of walls, ceilings, and studs. However, the pipes cannot be of arbitrary length and arrangement. Because the length of the vertical and horizontal sections dramatically affects the burning efficiency of the fireplace, certain guidelines have been set in INITIAL INSTALLATION - ALLOWABLE CO-AXIAL VENT CONFIGURATIONS. Venting terminals can not be recessed into a wall or siding.

WARNING: This gas appliance must not be connected to a chimney flue serving a separate solid-burning appliances.

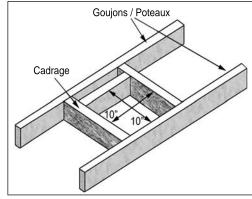


Figure 29. Vent Framing For Wall or Ceiling

#### **APPROVED VENTING PARTS:**

**Table 5: Approved Vent Manufacturers** 

Manufacturer	Trade Name	Nominal Sizes
American Metal Products	AmeriVent Direct	4" - 6 5/8"
ICC	EXCELDirect	4" - 6 5/8"
Security Chimneys International LTD	Secure Vent	4" - 6 5/8"
Selkirk Metalbestos	Direct-Temp	4" - 6 5/8"
M&G DuraVent	Direct Vent GS	4" - 6 5/8"

The Q2GI fireplace has been tested and certified for use with AMERICAN METAL PRODUCTS "AMERIVENT DIRECT", SIMPSON DURAVENT TYPE GS PIPE FOR GAS STOVES. SECURITY CHIMNEY'S "SECURE VENT DIRECT VENT SYSTEM" and SELKIRK "DIRECT-TEMP VENT SYSTEM" kits are available for horizontal and vertical venting. When using Simpson Duravent, it is recommended that, before installation, a bead of RTV High Temperature Silicone should be applied to each outer vent joint, and Mil-Pac to each inner joint. When planning an installation, it will be necessary to select the proper length of vent pipe for the particular requirements.

WARNING: Do not mix parts from different vent manufacturers' systems.

#### **QUALIFIED INSTALLERS ONLY**

EXCEPTION TO WARNING: This product has been evaluated by Intertek for using a Direct Vent GS starting collar in conjunction with Secure Vent, Direct-Temp, AmeriVent Direct, and EXCELDirect venting systems. Use of these systems with the Direct Vent GS starting collar is deemed acceptable and does not affect the Intertek WH listing of the appliance.

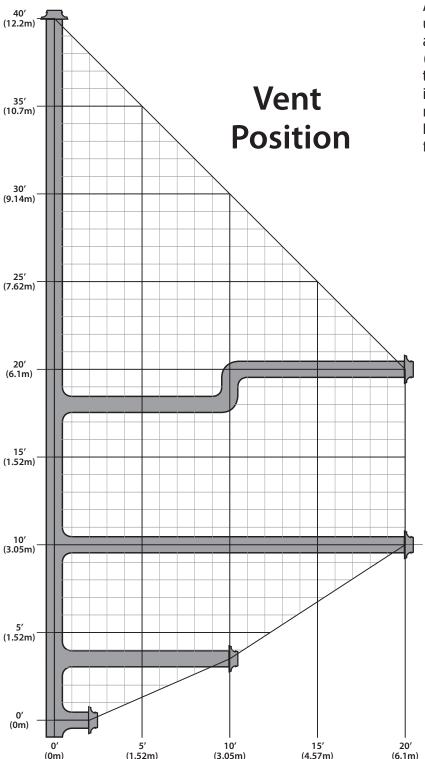
Table 6: Vent part numbers (Must state if galvanized or black wanted, PART NUMBERS)

Direct Vent GS	Direct-Temp	Secure Vent	Ameri Vent Direct	Description
908	4DT-6	SV4L6		6" pipe length
	>><	$>\!\!<$	4D7	7" pipe length
907	4DT-9	$>\!\!<$		9" pipe length
906	4DT-12	SV4L12	4D12	12" pipe length
904	4DT-24	SV4L24	4D2	24" pipe length
903	4DT-36	SV4L36	4D3	36" pipe length
902	4DT-48	SV4L48	4D4	48" pipe length
945	4DT-EL45	SV4EBR45	4D45B	45° elbow, black
990	4DT-EL90	SV4EBR90	4D90B	90° elbow, black
950	4DT-VS	SV4VS		Vinyl siding standoff/sheild
942	4DT-WT	SV4RSN	4DWT	Wall thimble
953	4DT-SC	SV4FC	4DSC	Storm collar
963	4DT-FS	SV4BF	4DFSP	Fire stop
988	4DT-WS/B	SV4BM	4DWS	Wall strap/support/band
970	4DT-HKA	SV0SHK	4DHTK1	Horizontal termination kit (SD: Basic Kit, SEL: Kit A, SC: Standard Kit)
911		$>\!\!<$		11" to 14 %" pipe, adjustable
	4DT-AJ	> <	4D12A	4" to 10" pipe , adjustable
	>><	SV4LA12		1½" to 12" pipe , adjustable
943	4DT-AF6	>>	4DF	Flashing, 0/12 to 6/12 roof pitch
943S	4DT-AF12	> <	4DF12	Flashing, 7/12 to 12/12 roof pitch
	>><	SV4FA		Flashing, 1/12 to 7/12 roof pitch
	>><	SV4FB		Flashing, 8/12 to 12/12 roof pitch
943F	>><	SV4F		Flat flashing
991	4DT-HVC	>>		High wind vertical termination
985	4DT-HHC	> <		High wind horizontal termination
978	4DT-VKC	SV0FAK	4DVTK	Vertical termination kit
971	4DT-HKB	SV0SHK2	4DHTK2	Horizontal termination kit (SD: Kit A, SEL: Kit B, SC: Kit)

#### **QUALIFIED INSTALLERS ONLY**

#### **ALLOWABLE CO-AXIAL VENT CONFIGURATIONS:**

Figures 30 shows the range of venting options for **top vented configurations only** using either vertical or horizontal terminations; any layout that remains within the shaded area is acceptable. Having the fewest number of elbows is ideal as they tend to disrupt air movement. Using 45° elbows is preferable to using 90° elbows. Also, a shorter vent system will perform better than a longer one. The total length of horizontal vent pipe can not exceed 20 feet (6.1m) and the total vent length can not exceed 40ft (12.2m).



Any combination of rise and run can be used as long as it lays within the shaded area (a total of two (2) 90° elbows or four (4) 45° elbows can be used. In addition to what is shown, if a 90° elbow is used in the horizontal plane, 3 feet (91.4cm) must be subtracted from the allowable horizontal run (for each 45° elbow, 1½ feet must be subtracted).

Figure 30. Possible Vent Configurations for Top Vent Only. Vertical and Horizontal Terminations

#### **QUALIFIED INSTALLERS ONLY**

#### FLEX VENTING:

This fireplace is certified to work with aluminum co-axial flex venting; figure out your venting configuration to determine which option is correct for your particular setup (see APPROVED CO-AXIAL VENT CONFIGURATIONS section of Owner's Manual). **WARNING: Adhere to all rigid venting safety measures and clearances.** 

Note: Flex venting can be used for any configuration that rigid is approved for.

#### **Approved flex venting options:**

4X7 BDM Pro-Form 5ft kit [50-3461]: Complete venting kit for "up & out" applications, vertical rise between 18" (457mm) and 30" (762mm).

4X7 BDM Pro-Form 10ft kit [50-3462]: Complete venting kit for "up & out" applications, vertical rise between 30" (762mm) and 78" (1981mm).

4X7 Flex Adapter Kit [50-3788]: This kit will allow you to adapt co-axial flex to the fireplace, make your vent run, then adapt back to rigid venting (flex not included).

4X6<sup>5/8</sup> Duravent 4ft length [46DVA-48FF]: Flexible solution to an otherwise rigid vent run (DuraVent Pro systems ONLY, order through dealer).

4X6<sup>5/8</sup> Duravent 10ft length [46DVA-120FF]: Flexible solution to an otherwise rigid vent run (DuraVent Pro systems ONLY, order through dealer).

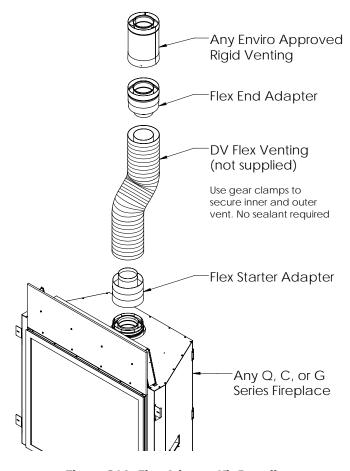


Figure 31A. Flex Adapter Kit Install

# **Important Information:**

- -Do not bend horizontal vent over 90 degrees.
- -All horizontal runs should have a minimum 1/4" (6mm) rise per foot for optimal performance.
- -Do not allow the inner flex pipe to contact the outer pipe, keep it pulled tight and use spacer springs.
- -Spacers are required at the start, middle, and end of each elbow to ensure the gap is maintained.
- -Do not add any extensions to the preset kits, if more length is required, use rigid pipe.
- -No need for liquid sealant; secure flex venting with aluminum vent tape and apply sufficient self-tapping screws.
- -Up & out kits have flex already secured to termination cap, do not detach.

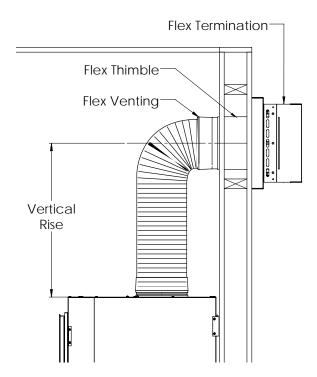


Figure 31B. "Up & Out" Flex Application

#### **QUALIFIED INSTALLERS ONLY**

#### **HORIZONTAL TERMINATION:**

#### **NOTES:**

- 1. Horizontal pipes must not be level. For every 12" (305 mm) of horizontal travel (away from the stove), there should be at least 1/4" (6.4 mm) of vertical travel. Never allow the vent to run downward, as this could cause high temperatures or even present the possibility of a fire.
- 2. The exterior of the horizontal vent termination must not be blocked or obstructed.
- 3. If the vent termination is not being attached to wood, the four wood screws provided should be replaced with material appropriate fasteners.
- 4. For buildings with vinyl siding, a vinyl standoff should be installed between the vent cap and the exterior wall. Attach the vinyl siding standoff to horizontal termination. the the termination Note that bolts onto the flat portion of the standoff, providing an air space between the wall and the vent termination. The air gap prevents excessive heat from possibly melting the vinyl siding.
- 5. Horizontal pipes must be supported every **3' (914 mm)**. Plumber's all round strap will suffice.

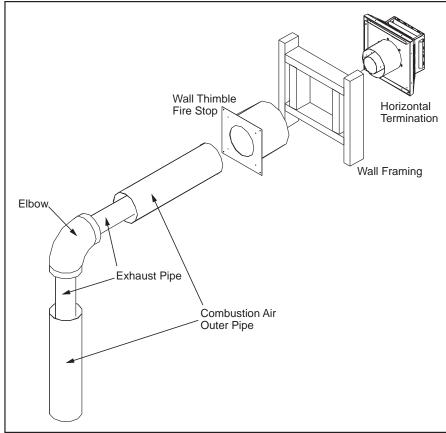


Figure 31. Horizontal Vent Termination

- 6. When running horizontal pipe, clearances to combustibles must be maintained 1½ inches (38 mm) sides, 1½ inches (38 mm) bottom, and 2" (51 mm) top.
- **Step 1.** Set the fireplace in the desired location. Check to determine if wall studs will be in the way when the venting system is attached. If this is the case, the location of the fireplace may have to be adjusted or the venting may have to be offset.
- **Step 2.** Direct vent pipe sections are designed with special twist-lock connections. Dry fit the desired combination of pipe and elbows to the appliance adaptor.
- **Step 3.** With the pipe in the correct position and attached to the fireplace, mark the wall for a **10**" **(25.4 cm)** x **10**" **(25.4 cm)** square hole (see Figure 31). The center of the hole should match the center line of the horizontal pipe. Cut and frame the hole in the exterior wall where the vent will be terminated. If the wall being penetrated is made of a non-combustible material (i.e. masonry or concrete) a **7**" **(17.8 cm)** hole is acceptable.

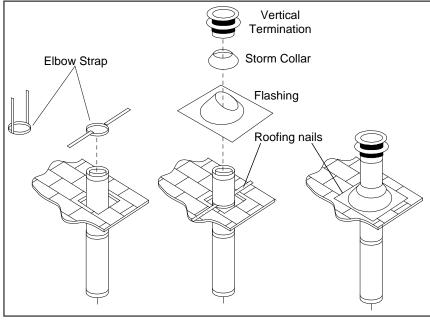
#### **QUALIFIED INSTALLERS ONLY**

**NOTE:** For Simpson Duravent only, place a bead of Mil-Pac or Rutland No 78 Stove and Gasket Cement on the outer edge of the inner exhaust pipe (non-flared end). Push the pipe sections together, then twist about ¼ turn, making sure the two sections are fully locked. Wrap all seams with foil ducting tape.

- **Step 4.** With the hole now framed, the wall thimble installed, and the pipe extending into the wall, proceed to the outside. Attach the termination to the pipe using RTV and Mil-Pac or Rutland No 78 Stove and Gasket Cement to seal joints. The vent pipe must extend into the vent cap at least **1½ inches (3.2 cm)**. Secure the connection between the vent cap and the pipe by attaching the two (2) sheet metal straps, which extend from the vent cap assembly to the outer wall of the vent pipe. Bend any remaining portion of the strap back towards the vent cap. Security Secure Vent uses a twist lock cap.
- **Step 5.** Position the horizontal vent termination in the center of the **10" (25.4 cm)** square hole and attach to the exterior wall with the four screws provided. The arrow on the vent termination should be pointing up. Run a bead of non-hardening mastic around the edges of the vent cap, to make a seal with the wall. Ensure the proper clearances to combustibles have been maintained.

#### **VERTICAL TERMINATION:**

- **Step 1.** Check the instructions for required clearances (air spaces) to combustibles when passing through ceilings, walls, roofs, enclosures, attic rafters, or other nearby combustible surfaces. Do not pack air spaces with insulation.
- **Step 2.** Set the gas appliance in the desired location. Drop a plumb bob down from the ceiling to the position of the appliance flue exit, and mark the location where the vent will penetrate the ceiling. Drill a small hole at this point. Next, drop a plumb bob from the roof to the hole previously drilled in the ceiling, mark the spot where the vent will penetrate the roof. Determine if ceiling joists, roof rafters, or other framing will obstruct the venting system. You may wish to relocate the appliance, or to offset, to avoid cutting load bearing members.
- Step 3. To install the Round Support Box/Wall Thimble in a flat ceiling, cut a 10" (25.4 cm) square hole in the ceiling, centered in the hole drilled in Step 2. Frame the hole as shown in Figure 32.
- Step 4. Assemble the desired lengths of black pipe and elbows necessary to reach from the appliance adapter up through the Round Support Box. Insure that all pipe and elbow connections are in their fully twist-locked position.



**Figure 32. Vertical Vent Termination** 

#### QUALIFIED INSTALLERS ONLY

- **Step 5.** Cut hole in the roof centered on the small hole placed in the roof from Step 2. The hole should be of sufficient size to meet minimum requirements for Clearance to Combustibles, as specified. Continue to assemble lengths of pipe and elbows necessary to reach from the ceiling support box up through the roof line. Galvanized pipe and elbows may be utilized in the attic, as well as above the roof line. The galvanized finish is desirable above the roof line, due to the higher corrosion resistance.
- **Step 6.** Once the pipe sections have been joined, and run up through the hole in the roof, slip an elbow strap over the exposed sections, bend the support straps outwards, and push the elbow strap down to the roof level, as shown in Figure 32. Tighten the clamp around the pipe section. Use a level to make sure the pipe is truly vertical. With roofing nails, secure the support straps to the roof. Seal the nails holes heads with non-hardening mastic. Trim the excess length of the support straps that extend out beyond the edge of the flashing.
- **Step 7.** Slip the flashing over the pipe section protruding through the roof. Secure the base of the flashing to the roof with roofing nails. Use a non-hardening sealant between the uphill edge of the flashing and the roof. Insure the roofing material overlaps the top edge of the flashing. Verify that you have at least the minimum clearance to combustibles at the roof line.
- **Step 8.** Continue to add pipe sections until the height of the vent cap meets the minimum code requirements. Refer to Figure 33 and Table 7. Note that for steep roof pitches, the vent height must be increased. In high wind conditions, nearby trees, adjoining roof lines, steep pitched roofs, and other similar factors can result in poor draft, or down drafting. In these cases, increasing the vent height may solve the problem.
- **Step 9.** Slip the storm collar over the pipe, and push it down to the top of the roof flashing as shown in Figure 32. Use the non-hardening sealant around the joint between the pipe and the storm collar.
- **Step 10.** Twist-lock the vent cap.

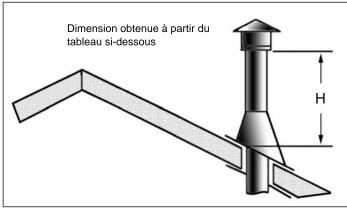


Figure 33: Height of Vertical Termination; Reference Table 7

Table 7: Minimum 'H' for Figure 33.

Roof Pitch	Pitch   Minimum Height (H	
	Feet	Meters
Flat to 7/12	1	0.3
Over 7/12 to 8/12	1.5	0.46
Over 8/12 to 9/12	2	0.61
Over 9/12 to 10/12	2.5	0.76
Over 10/12 to 11/12	3.25	0.99
Over 11/12 to 12/12	4	1.22
Over 12/12 to 14/12	5	1.52
Over 14/12 to 16/12	6	1.83
Over 16/12 to 18/12	7	2.13
Over 18/12 to 20/12	7.5	2.29
Over 20/12 to 21/12	8	2.44

#### QUALIFIED INSTALLERS ONLY

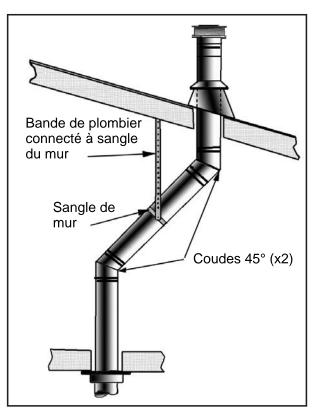


Figure 34: Use of Wall Straps.

(4) Any occupied areas above the first floor, including closets and storage spaces, which the vertical vent passes through, must be enclosed. The enclosure may be framed and sheet-rocked with standard building materials. However consult the appliance manufactures installation instructions for the minimum allowable clearance between the outside of the vent pipe, and the combustible surfaces of the enclosure. Do not fill any required air spaces with insulation.

#### **NOTES:**

- (1) If an offset is necessary in the attic to avoid obstructions, it is important to support the vent pipe every 3' (914 mm), to avoid excessive stress on the elbows, and possible separation. Wall straps are available for this purpose (see Figure 34).
- (2) When ever possible, use 45° degree elbows instead of 90° degree elbows. The 45° degree elbow offers less restriction to the flow of flue gases and intake air.
- (3) For multi story installations; a ceiling firestop is required at the second floor, and any subsequent floors (see Figure 28). The opening should be framed to 10" (254 mm) x 10" (254 mm) inside dimensions, in the same manner as shown in Figure 35.

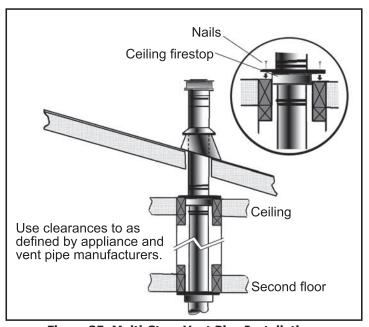


Figure 35: Multi-Story Vent Pipe Installation

#### **QUALIFIED INSTALLERS ONLY**

#### **GAS LINE CONNECTION AND TESTING:**

**WARNING:** Only persons licensed to work with gas piping may make the necessary gas connections to this appliance.

#### **GAS LINE CONNECTION**

- This stove is equipped with a certified flexible pipe located on the left side of the unit terminating in a 3/8" female JIC fitting. Consult your local authorities codes or the CAN/CGA B 149 (1 or 2) installation code in Canada, or in the USA gas installations follow either local codes or the current edition of the National Fuel Gas Code ANSI Z223.1.
- The efficiency rating of this appliance is a product thermal efficiency rating determined under continuous operating conditions and was determined independently of any installed system.

The appliance and its shutoff valves must be disconnected from the gas supply piping system during any pressure testing where the pressure exceeds ½ PSIG (3.45 KPa) or damage will occur to the valve.

The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ psig (3.45 KPa).

Always check for gas leaks with a soap and water solution after completing the required pressure test.

# Manifold Pressure Tap Stepper Regulator Regulator Pilot Adjustment Screw \*Gas Valve will be mounted upside down on some models some models

#### Figure 36: Fully Labeled Gas Valve.

16,000 BTU/hr (4.69 KW)

#### **TO TEST VALVE PRESSURES**

The pressure taps are located on the top right of the valve shown in Figure 36.

• Turn set screw 1 turn counter clockwise to loosen.

Min. BTU/hr Input

- Place 5/16" (8 mm) I.D. hose over pressure tap system.
- Check pressures using a manometer.
- When finished, release pressure, remove hose & tighten set screw.

**Natural Gas Propane Main Orifice** #40 DMS #55 DMS 3.5" W.C. (0.87 KPa) **Manifold Pressure** 10.0" W.C. (2.49 KPa) 1.6" W.C. (0.40 KPa) 6.4" W.C. (1.59 KPa) Min. Manifold Pressure 11.0" W.C. (2.74 KPa) 7.0" W.C. (1.74 KPa) **Max Supply Pressure Min. Supply Pressure** 4.5" W.C. (1.12 KPa) 10.4" W.C. (2.59 KPa) Max BTU/hr Input 24,000 BTU/hr (7.03 KW) 20,000 BTU/hr (5.86 KW)

**Table 8: Pressure and BTU Information** 

# NEVER USE AN OPEN FLAME FOR LEAK TESTING.

17,000 BTU/hr (1.12 KW)

#### **QUALIFIED INSTALLERS ONLY**

#### **ELECTRICAL REQUIREMENTS:**

The fireplace must be electrically connected and grounded in accordance with local codes or, in the absence of local codes, with the current CSA C22.1 Canadian Electrical Code Part 1, Safety Standards For Electrical Installations, or The National Electrical Code ANSI / NFPA 70 in the US.

**WARNING:** The electrical grounding instructions must be followed. The unit is equipped with a three-prong (grounding) plug for your protection against shock hazard, and should be plugged directly into a properly grounded three-prong outlet. DO NOT cut or remove the grounding prong from this plug.

**CAUTION:** When servicing controls, label all wires prior to disconnection. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

If any of the original wire as supplied with the appliance must be replaced, it must be replaced with 18 AWG wire with a temperature rating of 105°C

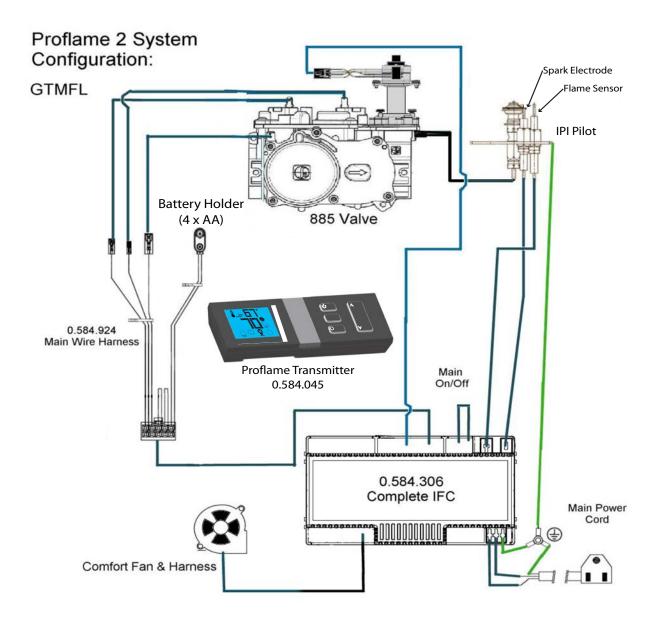


Figure 37: Wiring Diagram

# SECONDARY INSTALLATION

#### GLASS MEDIA INSTALLATION (50-2937):

Caution! Always wear gloves when handeling the crushed glass; some pieces can be very sharp.

A 4 lb bag of diamond glass is included with the Q2GI. Open the bag carefully and spread it out evenly over the enameled tray. Do not pour the entire bag contents out just use enough glass to cover the tray lightly. The rest of the glass should be kept for replacement if needed. If too much crush glass is used the flame appearence could be compromised or soot build-up may occur. The holes in the burner pan are used to supply fresh air to the flame; the glass may jam in on itself over these holes. It is perfectly acceptable for some glass pieces to fall through upon installation.

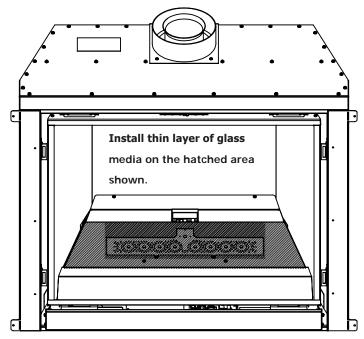


Figure 38. Glass Media Installation

# TROUBLE SHOOTING

#### **DIAGNOSTIC FLASH CODES:**

- 1. Fail to ignite: If there is no positive ignition, the board will go into lock out and the LED will blink 3 times in intervals until the system is reset.
- 2. Low battery condition (<4V): the LED indicator will blink one (1) time in intervals.
- 3. Parasitic Pilot Flame: the LED indicator will blink two (2) times in intervals.
- 4. System Lock out: the LED indicator will blink three (3) times in intervals.

#### Additional Ignition Information

- 1. The Proflame2 IFC will try two (2) times for ignition.
- 2. Each try for ignition will last approximately 60 seconds.
- 3. The wait time between the two tries is approximately 35 seconds.

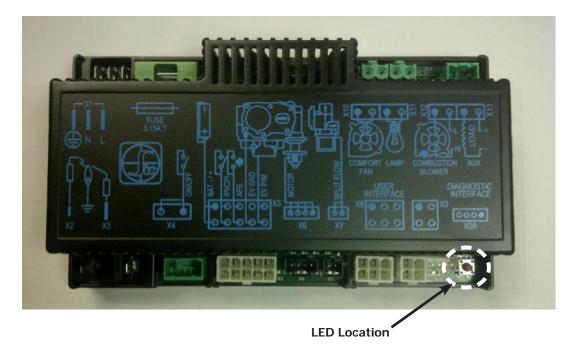


Figure 39: IFC LED Location

# TROUBLE SHOOTING

Problem	Possible Cause	Solution	
The main burner does not ignite when called for.	Thermostat is not calling for heat.	Adjust the thermostat several degrees above ambient temperature.	
	Problem with gas valve.	<ul> <li>Use a DC voltmeter to measure the voltage across the TPTH and TP terminals. Main operator voltage: Open circuit ≥ 325mV Closed circuit ≥ 100mV</li> <li>If voltage is not present, check the control circuit for proper operation.</li> <li>If proper control system voltage is present, replace the gas control.</li> </ul>	
Pilot will not remain lit.	Problem with Flame Sensor circuit.	<ul> <li>Check for proper connection of the Flame Sensor.</li> <li>Check pilot for full flame impingement around Flame Sensor.</li> <li>If the flame is too small, check gas pressure, adust pilot rate screw, check pilot head for damage.</li> <li>Ensure the ground wire is properly attached to the pilot mounting bracket and that it makes a good connection.</li> </ul>	
Burners will not remain lit.	Problem with thermopile circuit.	<ul> <li>Check gas line pressure .</li> <li>Check for flame impingement on thermopile. If low, see "Pilot will not remain lit".</li> <li>Check thermopile for minimum of 300 mV when burner is switched on.</li> <li>Check wiring to thermostat for breaks.</li> </ul>	
Flame lifting	Leak in vent pipe	Check for leaks in vent connections.	
	Improper vent configuration	Check vent configuration with manual.	
	Terminal may be recirculating flue gases	<ul><li>Check to see if terminal is on correctly.</li><li>May need to install high wind termination cap.</li><li>Contact dealer.</li></ul>	
Glass fogs up	Normal Condition: after the appliance warms up the glass will clear.  **Due to additives in gas, glass may get hazy during operation** Clean as needed.		
Blue Flames	Normal during start up: flames v	will yellow as the fireplace heats up.	
Flames are burning "dirty" or sooting	Flame impingement	<ul> <li>Check log positioning.</li> <li>Increase primary air by opening the venturi shutter and/ or by opening the vent restrictor.</li> <li>See also "Burners will not remain lit."</li> </ul>	
Remote control does not	The pilot light has gone out.	See " Pilot will not remain lit".	
work	One of the two remote control or receiver batteries are dead.	Replace the batteries.	
	The remote contriol receiver is turned "OFF".	Check the remote control instructions.	
	The remote is too far away from the heater.	Use the remote closer to the heater.	
	Problem with fireplace	<ul> <li>The on/off switch is turned to OFF.</li> <li>The gas control valve is turned to PILOT or OFF.</li> <li>The pilot has gone out.</li> </ul>	
No reaction to command	Receiver or Transmitter batteries are low.	Replace the batteries.	
	A maximum number of failed ignitions or flame restorations	Remove any possible blocking conditions. See "locking conditions".	
	have been reached.	See how to reset the board from Lockout.	
	No communication between	Reprogram the transmitter to the receiver.	
	the remote control and the receiver.	Follow the initializing system for the first time.	

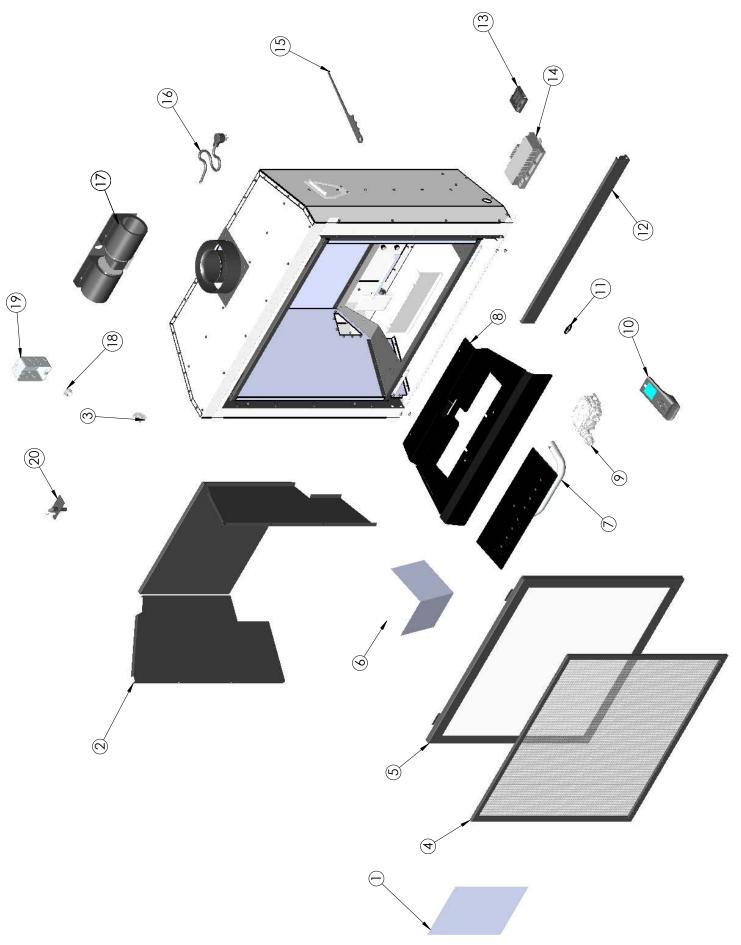
<sup>\*</sup>If you are having any other problems, see "IPI System Troubleshooting Guide".

# PARTS LIST

Table 10: Q2GI Parts List

Reference Number	Part Description	Part Number
1	Q2GI Owner's Manual	50-3058
2	Black Enameled Steel Liner Set (3 Pieces)	50-2978
3	120 Degree Fan Temperature Sensor	EC-001
4	Door Complete	50-3049
5	Q2 Safety Screen and Frame	50-3051
6	Diamond Glass - Black (1lb) *4 lbs required*	50-3850
7	Q2 Burner Pan	50-3046
8	Q2 Enameled Glass Tray	50-3047
9	S.I.T. 885 Valve w/ NG Stepper Motor	50-2682
-	Pilot Assembly Gasket	EC-021
10	Proflame 2 Transmitter (GTMFL) - Hand Held	50-3029
-	Proflame 2 Transmitter (GTMFL) - Wall Mount	50-3028
11	Enviro Gel Decal	50-322
12	Control Cover w/ Decal	50-3022
13	Battery Holder 4 x AA	50-3027
14	Proflame 2 Integrated Fireplace Control (IFC)	50-3010
-	Proflame 2 IFC Wire Harness (0.584.924)	50-3030
15	Door Release Tool	50-2510
16	Domestic Power Cord (115v)	EC-042
17	Convection Fan only	50-2493
18	Electrical Box Strain Relief	50-3019
19	Electrical Box	50-3018
20	IPI Pilot Assembly (PSE-C7-539)	50-3026
-	12 oz. Can of Metallic Black Touch Up Paint	PAINT-12-MB
-	12 oz. Can of Flat Black Touch Up Paint	PAINT-12-FB
-	Door Glass w/ Gasket (28.5 x 23.8in)	50-3021
-	Q2 NG to LP Conversion Kit (For 820 Valve)	50-3035
-	Q2 NG to LP Conversion Kit (For 820 Valve)	50-3034

# PARTS DIAGRAM



# Notes

# Notes



# ENVIRO Warranty for Enviro Gas Products

Sherwood Industries Ltd. ("Sherwood") hereby warrants, subject to the terms and conditions herein set forth, this product against defects in material and workmanship during the specified warranty period starting from the date of original purchase at retail. In the event of a defect of material or workmanship during the specified warranty period, Sherwood reserves the right to make repairs or to assess the replacement of a defective product at Sherwood's factory. The shipping costs are to be paid by the consumer. All warranties by Sherwood are set forth herein and no claim shall be made against Sherwood on any oral warranty or representation.

#### Conditions

- A completed warranty registration must be submitted to Sherwood within 90 days of original purchase via the online warranty registration page or via the mail-in warranty registration card provided. Have the installer fill in the installation data sheet in the back of the manual for warranty and future reference.
- This warranty applies only to the original owner in the original location from date of install.
- The unit must have been properly installed by a qualified technician or installer, and must meet all local and national building code requirements.
- The warranty does not cover removal and re-installation costs.
- Sherwood Industries Ltd. reserves the right to make changes without notice.
- Sherwood Industries Ltd. and its employees or representatives will not assume any damages, either directly or indirectly caused by improper usage, operation, installation, servicing or maintenance of this appliance.
- A proof of original purchase must be provided by you or the dealer including serial number.
- This warranty does not cover any discoloration of the safety screen mesh.

#### **Exclusions**

An expanded list of exclusions is available at www.enviro.com/help/warranty.html This warranty does not cover:

- Damage as a result of improper usage or abuse.
- Damage caused from over-firing due to incorrect setup or tampering.
- Damage caused by incorrect installation.

#### To the Dealer

- Provide name, address and telephone number of purchaser and date of purchase.
- Provide date of purchase. Name of installer and dealer. Serial number of the appliance. Nature of complaint, defects or malfunction, description and part # of any parts replaced.
- Pictures or return of damaged or defective product may be required.

#### To the Distributor

Sign and verify that work and information are correct.

#### Sherwood Industries Ltd.

6782 Oldfield Road, Victoria, BC . Canada V8M 2A3 Online warranty registration: www.enviro.com/warranty/

Category	One Year	Two Year	Limited Lifetime (7yr)
Parts 1,2 (unit serial number required)		✓	
Firebox Liner Panels <sup>3</sup>		<b>✓</b>	
Firebox			<b>✓</b>
Heat Exchanger			<b>✓</b>
Burner			<b>✓</b>
Ceramic Logs <sup>4</sup>			<b>✓</b>
Ceramic Glass 5	<b>✓</b>		
Pedestal / Legs (excluding finish)			✓
Door Assembly			✓
Surround Panels (excluding finish)			<b>✓</b>
Exterior Panels (excluding finish)			Up to 5 years
Electrical Components		✓	
Exterior Surface Finishing	<b>✓</b>		
Labour	<b>✓</b>		

- <sup>1</sup> Whereas warranty has expired, replacement parts will be warrantied for 90 days from part purchase date. Labour not included. Unit serial number required.
- <sup>2</sup> 50-173 Westport Fan Kit covered for up to 5 years from purchase date. Labour not included. Unit serial required.
- <sup>3</sup> Excluding damage to the finish caused by improper setup of the appliance, or color changes.
- <sup>4</sup> Log set and panels excludes wear and tear or breakage caused by cleaning or service.
- <sup>4</sup> Glass is covered for thermal breakage. Photos of box, inside of door, and unit serial # must be supplied for breakage due to shipping.
- <sup>6</sup> Exterior Surface finishing covers plating, enamel or paint and excludes colour changes, chipping, and fingerprints. Travel costs not included.

Jan 2018

# INSTALLATION DATA SHEET

The following information must be recorded by the installer for warranty purposes and future reference.

NAME OF OWNER:	NAME OF DEALER:
ADDRESS:	ADDRESS:
PHONE:	PHONE:
MODEL:	NAME OF INSTALLER:
SERIAL NUMBER:	
DATE OF PURCHASE: (dd/mm/yyyy)	
DATE OF INSTALLATION:(dd/mm/yyyy)	ADDRESS:
☐ NATURAL GAS (NAT) ☐ PROPANE(LPG)	
INLET GAS PRESSURE:in wc	
MAIN BURNER ORIFICE:# DMS	PHONE:
PILOT ORIFICE #ORin diam.	
INSTALLER'S SIGNATURE:	

MANUFACTURED BY:
SHERWOOD INDUSTRIES LTD.
6782 OLDFIELD RD. SAANICHTON, BC, CANADA V8M 2A3
www.enviro.com
March 2020
C-14529