

# BLDV7 Series Direct Vent Gas Fireplace Installation and Operating Instructions

Models: BLDV300(N/P)SC7SB, BLDV400(N/P)SC7SB, BLDV500(N/P)SC7SB

**▲ WARNING:**

**FIRE OR EXPLOSION HAZARD**

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

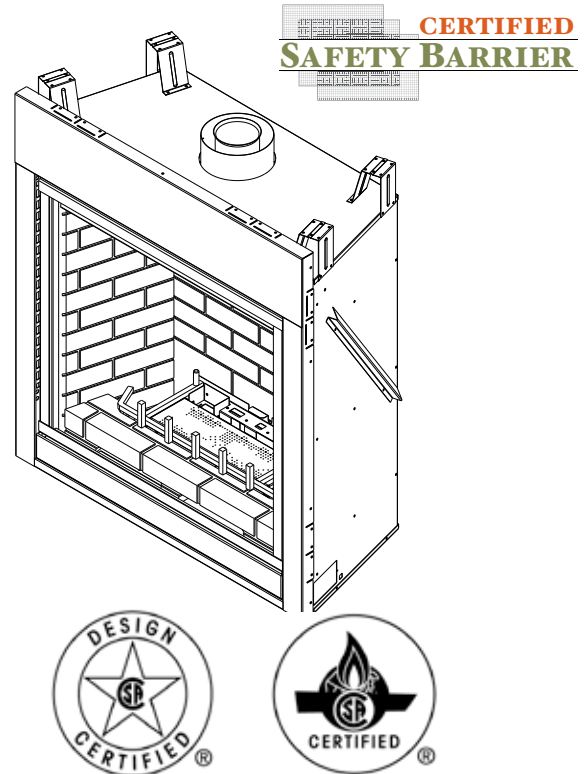
- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS**
  - Do not try to light any appliance.
  - Do not touch any electrical switch; do not use any phone in your building.
  - Leave the building immediately.
  - 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.

**WARNING:** Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

This appliance may be installed in an aftermarket,\* permanently located, manufactured home (USA only) or mobile home, where not prohibited by local codes.

This appliance is for use only 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.

\* Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer.



## DANGER



**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.

**INSTALLER:** Leave this manual with the appliance.  
**CONSUMER:** Retain this manual for future reference.

**Thank you and congratulations on your purchase of a  
Vermont Castings Group Fireplace.**

**PLEASE READ THE INSTALLATION AND OPERATION INSTRUCTIONS BEFORE USING THE APPLIANCE!**

**IMPORTANT: Read all instructions and warnings carefully before starting installation.**

**Failure to follow these instructions may result in a possible fire hazard and will void the warranty.**

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**INSTALLER**

Please leave these instructions with the appliance.

**OWNER**

Please retain these instructions for future reference.

**WARNING**

- **Read this owner’s manual carefully and completely before trying to assemble, operate, or service this fireplace.**
- **Any change to this fireplace or its controls can be dangerous.**
- **Improper installation or use of this fireplace can cause serious injury or death from fire, burns, explosions, electrical shock and carbon monoxide poisoning.**

This fireplace is a vented product. This fireplace must be properly installed by a qualified service person. The glass door must be properly seated and sealed. If this unit is not properly installed by a qualified service person with glass door properly seated and sealed, combustion leakage can occur.

**CARBON MONOXIDE POISONING:** Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, the fireplace may not have been installed properly. Get fresh air at once! Have the fireplace inspected and serviced by a qualified service person. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

Propane/LP gas and natural gas are both odorless. An odor-making agent is added to each of these gases. The odor helps you detect a gas leak. However, the odor added to these gases can fade. Gas may be present even though no odor exists.

Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to safe and proper operation of this fireplace.

1. 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.
2. For propane/LP fireplace, do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lbs. capacity.
3. If you smell gas
  - shut off gas supply.
  - 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.
4. Never install the fireplace
  - in a recreational vehicle

- where curtains, furniture, clothing, or other flammable objects are less than 42" from the front, top, or sides of the fireplace
  - in high traffic areas
  - in windy or drafty areas
5. This fireplace reaches high temperatures. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.
  6. Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at risk 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.
  7. Do not modify fireplace under any circumstances. Any parts removed for servicing must be replaced prior to operating fireplace.
  8. Turn fireplace off and let cool before servicing, installing, or repairing. Only a qualified service person should install, service, or repair the fireplace. Have burner system inspected annually by a qualified service person.
  9. You must keep control compartments, burners, and circulating air passages clean. More frequent cleaning may be needed due to excessive lint and dust. Turn off the gas valve and pilot light before cleaning fireplace.
  10. Have venting system inspected annually by a qualified service person. If needed, have venting system cleaned or repaired. Refer to *Cleaning and Maintenance*, Page 44.
  11. Keep the area around your fireplace clear of combustible materials, gasoline, and other flammable vapor and liquids. Do not run fireplace where these are used or stored. Do not place items such as clothing or decorations on or around fireplace.
  12. Do not use this fireplace to cook food or burn paper or other objects.
  13. Never place anything on top of fireplace.

14. Do not use any solid fuels (wood, coal, paper, cardboard, etc.) in this fireplace. Use only the gas type indicated on rating plate.
15. This appliance, when installed, must be electrically grounded in accordance with local codes or in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70*, or the *Canadian Electrical Code, CSA C22.1*.
16. Do not obstruct the flow of combustion and ventilation air in any way. Provide adequate clearances around air openings into the combustion chamber along with adequate accessibility clearance for servicing and proper operation.
17. When the appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, you must set appliance on a metal or wood panel or hearth pad extending the full width and depth of the appliance.
18. Do not use fireplace if any part has been exposed to or has been under water. Immediately call a qualified service technician to inspect the appliance and replace any part of the control system and any gas control which as been submerged in water.
19. Do not operate fireplace if any log is broken.
20. Do not use a blower insert, heat exchanger insert, or any other accessory not approved for use with this fireplace.
21. Do not operate the fireplace with glass door removed, cracked, or broken.

**CODE APPROVAL**

Direct Vent type appliances draw all combustion air from outside of the dwelling through the vent pipe.

These appliances have been tested by CSA and found to comply with the established standards for VENTED GAS FIREPLACE in the USA and Canada as follows:

**LISTED VENTED GAS FIREPLACE**

TESTED TO (latest edition):

BLDV300: ANSI Z21.50 / CSA 2.22

BLDV400/500: ANSI Z21.88 / CSA 2.33

**STANDARDS**

A manufactured home (USA only) or mobile home OEM installation must conform with the **Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280**, or when such a standard is not applicable, the **Standard for Manufactured Home Installations, ANSI/NCSBCS A225.1**, or **Standard for Gas Equipped Recreational Vehicles and Mobile Housing, CSA Z240.4**.

**IMPORTANT:**  
**PLEASE READ THE FOLLOWING CAREFULLY**

It is normal for fireplaces fabricated of steel to give off some expansion and/or contraction noises during the start up or cool down cycle. Similar noises are found with your furnace heat exchanger or car engine.

**IMPORTANT:**  
**PLEASE READ THE FOLLOWING CAREFULLY**

It is not unusual for gas fireplace to give off some odor the first time it is burned. This is due to the manufacturing process.

**Please ensure that your room is well ventilated during burn off — open all windows.**

It is recommended that you burn your fireplace for at least ten (10) hours the first time you use it. Place the fan switch in the "OFF" position during this time.

**WARNING**

Never connect unit to private (non-utility) gas wells. This gas is commonly known as wellhead gas.

- Improper installation or use of this fireplace can cause serious injury or death from fire, burns, explosions, electrical shock and carbon monoxide poisoning.



**NATIONAL FIREPLACE INSTITUTE**  
**NFI**  
**CERTIFIED**  
[www.nficertified.org](http://www.nficertified.org)

We recommend that our 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.



# DANGER



**HOT GLASS WILL CAUSE BURNS.**

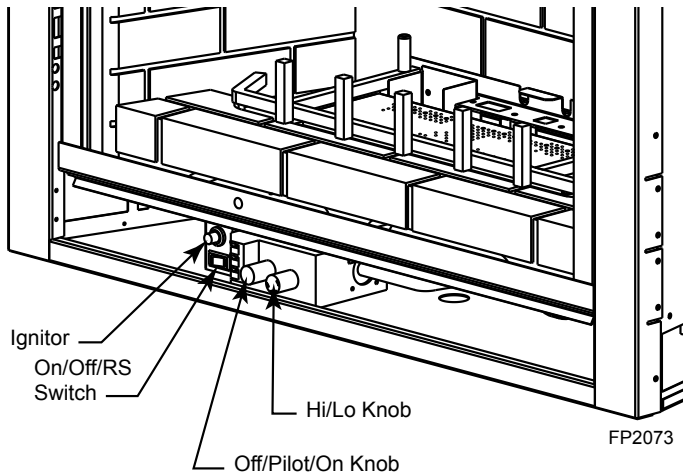
**DO NOT TOUCH GLASS UNTIL COOLED.**

**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.

**PRODUCT SPECIFICATIONS**

- This appliance has been certified for use with either natural or propane gas. See appropriate data plates.
- This appliance is not for use with solid fuels.
- The appliance is approved for bedroom or bedsitting room installations.
- The appliance must be installed in accordance with local codes if any. If none exist use the current installation code. ANSI Z223.1/NFPA 54 in the USA, CSA B149 in Canada.
- This appliance is mobile home approved.
- The appliance must be properly connected to a venting system.
- The appliance is not approved for closet or recessed installations.



**Figure 1 -  
BLDV7 Series Fireplace  
(Millivolt Control shown)**

**HIGH ELEVATIONS**

Input ratings are shown in BTU per hour and are certified without deration for elevations up to 4,500 feet (1,370 m) above sea level.

For elevations above 4,500 feet (1,370 m) in USA, installations must be in accordance with the current ANSI Z223.1/NFPA 54 and/or local codes having jurisdiction.

In Canada, please consult provincial and/or local authorities having jurisdiction for installations at elevations above 4,500 feet (1,370 m).

**GAS PRESSURES**

	Natural	Propane (LP)
Inlet Minimum	4.5" w.c.	11.0" w.c.
Inlet Maximum	10.5" w.c.	13.0" w.c.
Manifold Pressure	3.5" w.c.	10.0" w.c.

**GAS SPECIFICATIONS & ORIFICE SIZE**

Model	Fuel	Max. Input BTU/h	Min. Input BTU/h	Orifice Size
BLDV300NSC7	Nat.	22,000	15,000	2.35 mm
BLDV400NSC7	Nat.	26,000	19,000	2.5 mm
BLDV500NSC7	Nat.	28,000	20,000	#38
BLDV300PSC7	LP	22,000	17,000	1.45 mm
BLDV400PSC7	LP	26,000	21,000	1/16 in.
BLDV500PSC7	LP	27,000	22,000	1.55 mm

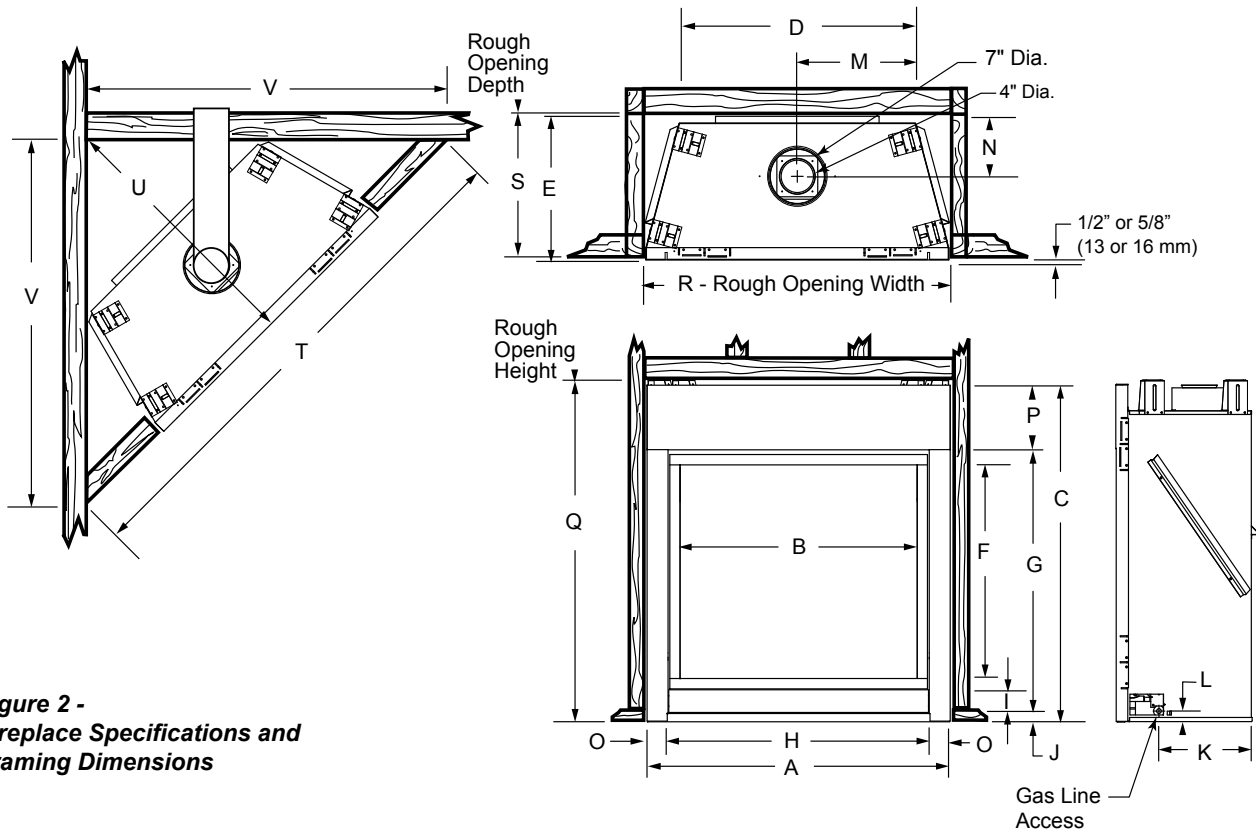


Figure 2 -  
Fireplace Specifications and  
Framing Dimensions

	BLDV300	BLDV400	BLDV500
A	34½" (876 mm)	37⅞" (941 mm)	41⅞" (1043 mm)
B	27⅞" (686 mm)	29" (737 mm)	33" (838 mm)
C	37¾" (959 mm)	40⅝" (1032 mm)	40⅝" (1032 mm)
D	27¼" (692 mm)	30¼" (768 mm)	34¼" (870 mm)
E	15⅝" (395 mm)	17⅞" (446 mm)	17⅞" (446 mm)
F	22⅝" (567 mm)	25⅜" (656 mm)	25⅜" (656 mm)
G	29⅜" (745 mm)	31⅞" (810 mm)	31⅞" (810 mm)
H	30⅞" (764 mm)	31⅝" (811 mm)	35⅝" (913 mm)
I	3" (76 mm)	3" (76 mm)	3" (76 mm)
J	1" (25 mm)	1" (25 mm)	1" (25 mm)
K	9⅞" (243 mm)	11⅝" (289 mm)	11⅝" (289 mm)
L	1⅝" (24 mm)	1⅝" (24 mm)	1⅝" (24 mm)
M	13⅝" (346 mm)	15⅞" (384 mm)	17⅞" (435 mm)
N	7¼" (184 mm)	7⅝" (186 mm)	7⅝" (186 mm)
O	2¼" (57 mm)	2⅞" (65 mm)	2⅞" (65 mm)
P	7½" (191 mm)	7¾" (197 mm)	7¾" (197 mm)
<b>Framing Dimensions</b>			
Q	38⅞" (987 mm)	41¾" (1060 mm)	41¾" (1060 mm)
R	34⅞" (886 mm)	37⅞" (951 mm)	41⅞" (1053 mm)
S	15⅞" (403 mm)	17⅞" (433 mm)	17⅞" (433 mm)
T	56⅝" (1430 mm)	64¾" (1645 mm)	68¾" (1746 mm)
U	28⅜" (736 mm)	32⅞" (822 mm)	34⅝" (873 mm)
V	39⅜" (1011 mm)	45⅜" (1164 mm)	48⅝" (1235 mm)

**BEFORE YOU START**

Read this homeowner manual thoroughly and follow all instructions carefully. Inspect all contents for shipping damage and immediately inform your dealer if any damage is found. Do not install any unit with damaged, incomplete, or substitute parts. Check your packing list to verify that all listed parts have been received. You should have the following:

- Fireplace (Firebox and Burner System)
- Rock Wool
- Log Set

**ITEMS REQUIRED FOR INSTALLATION**

- Phillips Screwdriver
- Hammer
- Saw and/or saber saw
- Electric Drill and Bits
- Pliers
- Square
- Caulking Material (Noncombustible)
- Fireplace Surround Material (Noncombustible)
- Piping Complying with Local Codes
- Pipe Sealant Approved for use with Propane/LPG (Resistant to Sulfur Compounds)
- Framing Materials
- Wall Finishing Materials
- Level
- Tee Joint
- Measuring Tape
- Pipe Wrench

**FIREBOX FRAMING**

Firebox framing can be built before or after the appliance is set in place. Construct firebox framing following *Figure 2* for your specific installation requirements. Refer to *Figure 2* for firebox dimensions. The framing headers may rest on the top of the firebox standoffs. Do not bring headers below top of standoffs. **NOTE:** When planning your framing and installation, keep in mind that your gas line will come in on the right side of the box (as you are facing it) and your electricity will come in on the left side.

The firebox may be installed directly on a combustible floor or raised on a platform of an appropriate height. When the firebox is installed directly on carpeting, tile, or other combustible material, other than wood flooring, the firebox shall be installed on a metal or wood panel extending the full width and depth of the enclosure.

**WARNING**

Do not fill spaces around firebox with insulation or other materials. This could cause a fire.

**NOTE**

**COLD CLIMATE INSULATION**

If you live in a cold climate, seal all cracks around your appliance, and wherever cold air could enter the room, with noncombustible material. It is especially important to insulate the outside chase cavity between the studs and under the floor on which the appliance rests, if the floor is above ground level.

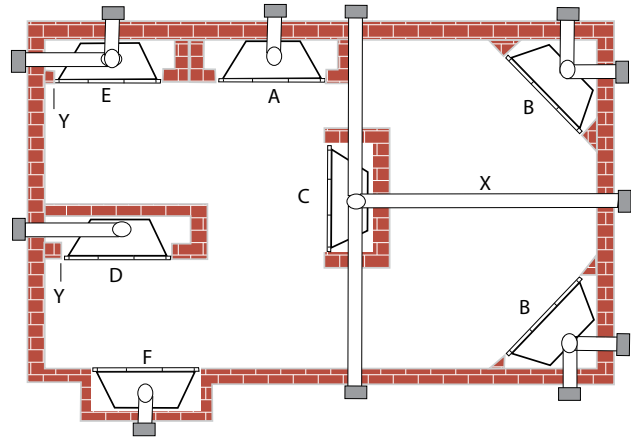
**NOTE:** Refer to cold climate pilot information on Page 40 for more information on standing pilot vs. intermittent pilot options.

## FIREPLACE LOCATION

Plan for the installation of your appliance. This includes determining where the unit is to be installed, the vent configuration to be used, framing and finishing details, and whether any optional accessories (i.e. blower, wall switch, or remote control) are desired. Consult your local building code agency to ensure compliance with local codes, including permits and inspections.

The following factors should be taken into consideration:

- Clearance to side-wall, ceiling, woodwork, and windows. Minimum clearances to combustibles **must be maintained**.
- This fireplace may be installed along a wall, across a corner, or use an exterior chase. Refer to *Figure 3* for suggested locations.
- Location should be out of high traffic areas and away from furniture and draperies due to heat from appliance.
- Never obstruct the front opening of the fireplace.
- Do **not** install in the vicinity where gasoline or other flammable liquids may be stored.
- Vent pipe routing. Refer to *Venting* section found in this manual for allowable venting configurations.
- These units can be installed in a bedroom. Refer to National Fuel Gas Code ANSI Z233.1/NFPA 54 — (current edition), the Uniform Mechanical Code — (current edition), and Local Building Codes for specific installation requirements.
- These units can be installed in a bathroom.



**Figure 3 - Possible Fireplace Locations**

- A Flat on Wall
- B Cross Corner
- C Island\*\*
- D Room Divider\*
- E Flat on Wall Corner\*
- F Chase Installation
- Y 4" Minimum

\*\* Island (C) and room divider (D) installation is possible as long as the horizontal portion of vent system (X) does not exceed 20'.

\* When you install your fireplace in (D) room divider or (E) flat on wall corner positions (Y), a minimum of 4" clearance must be maintained from perpendicular wall and front of fireplace.

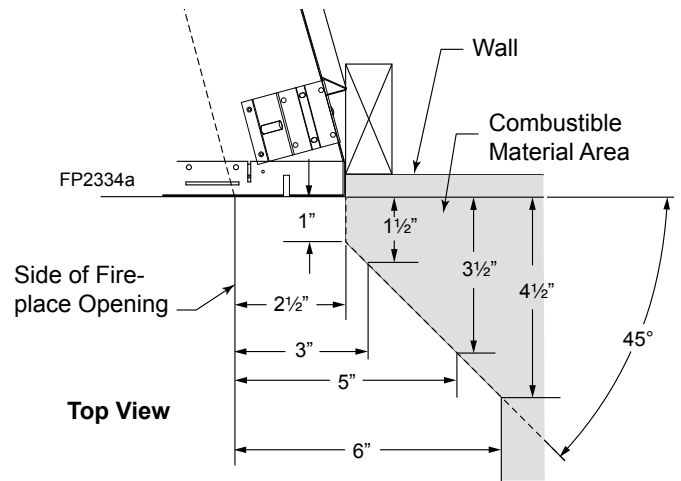


**CLEARANCES TO COMBUSTIBLES**

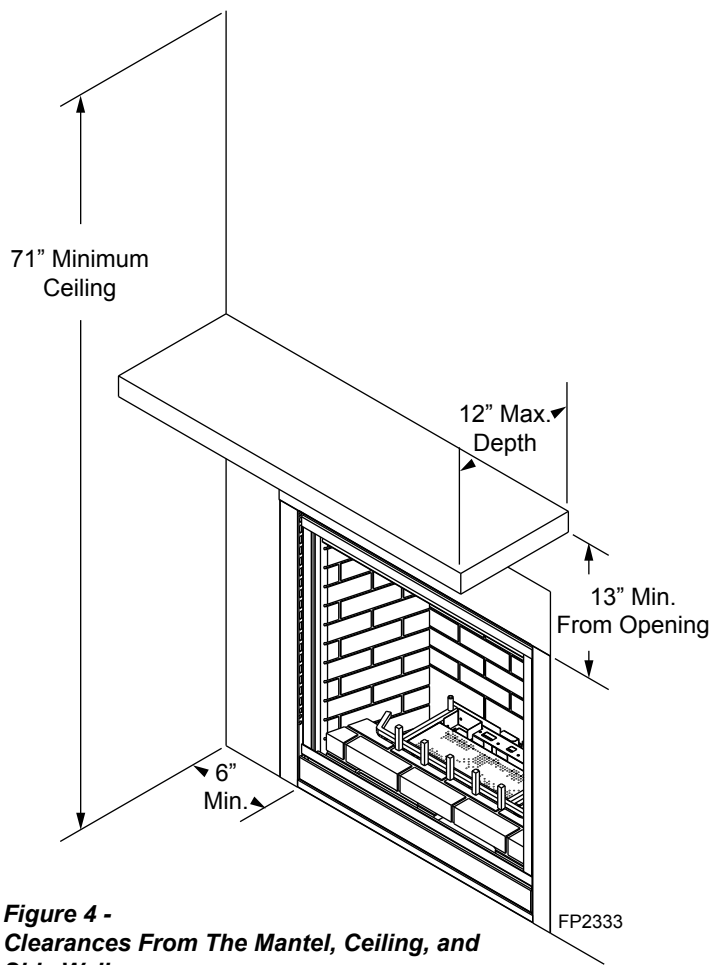
**WARNING**

Follow these instructions carefully to ensure safe installation. Failure to follow instructions exactly can create a fire hazard.

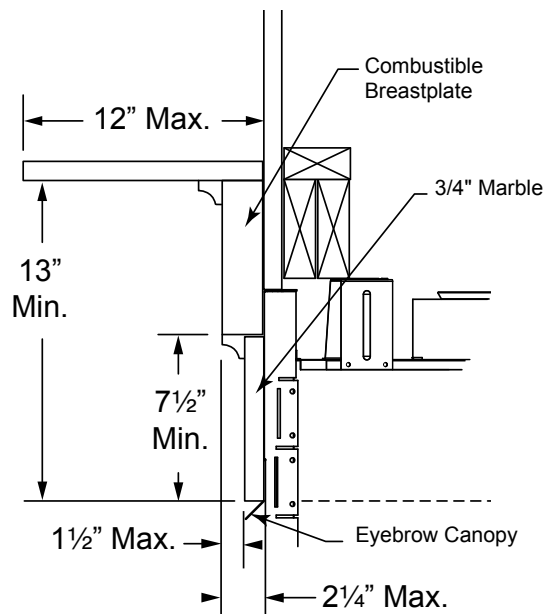
The appliance cannot be installed on a carpet, tile or other combustible material other than wood flooring. If installed on carpet or vinyl flooring, the appliance shall be installed on a metal, wood or noncombustible material panel extending full width and depth of the appliance.



**Figure 4a - Mantel Clearances**



**Figure 4 - Clearances From The Mantel, Ceiling, and Side Wall**

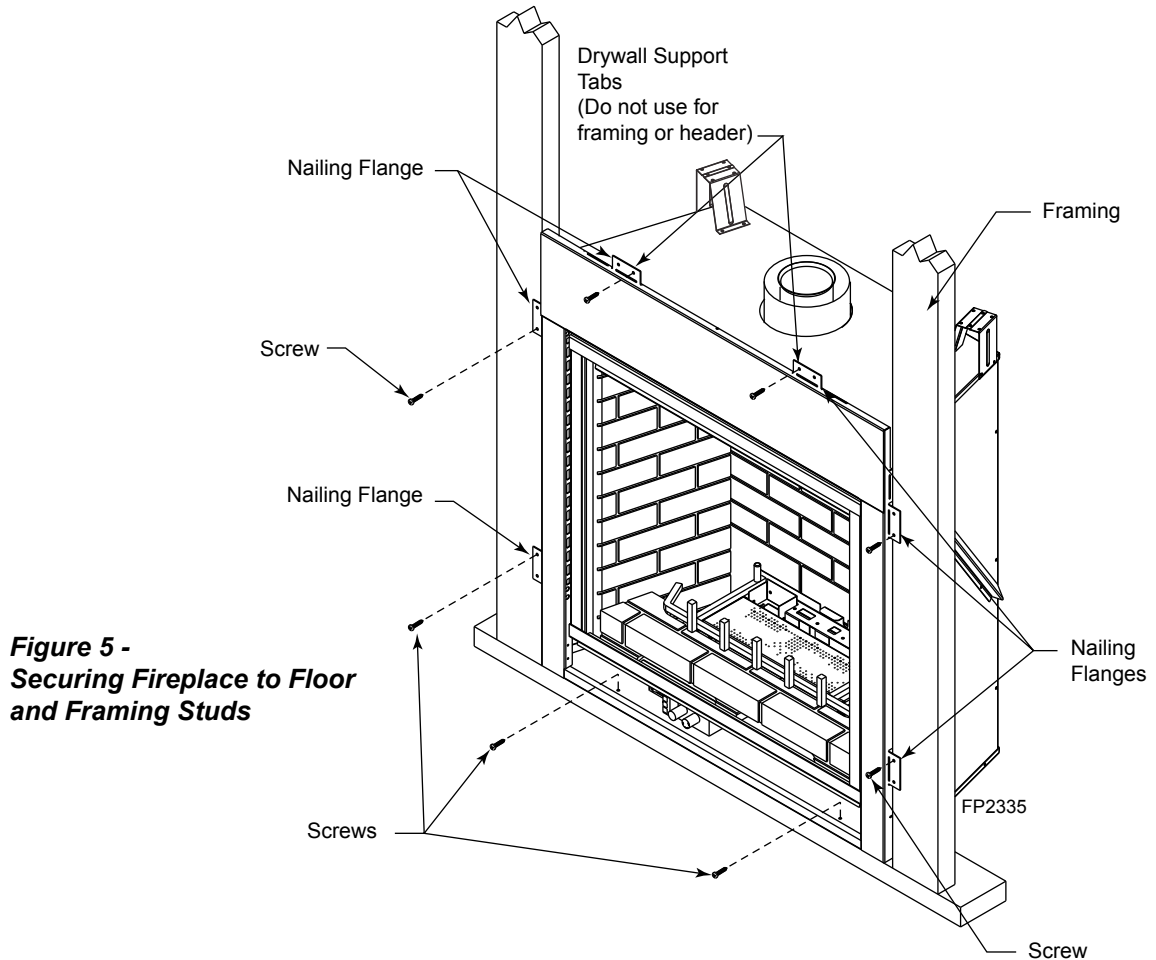


**Figure 4b - Mantel Clearance with Eyebrow Canopy**

**NOTE:** When eyebrow canopy is used, minimum clearance to combustibles is 21/4" maximum out from fireplace front at 71/2" minimum from opening. *Figure 4b.* When eyebrow is not used, clearances to combustibles is 12" maximum out from fireplace front at 13" minimum from opening. *Figure 4*

## SECURING THE FIREPLACE TO THE FLOOR OR FRAMING

The fireplace must be secured to the floor and/or to framing studs as shown in *Figure 5*. Use two (2) wood screws or masonry/ concrete screws to secure fireplace to the floor. Use four (4) screws to attach fireplace to framing. The side nailing flanges are 1/2" or 5/8" to accommodate different wall thickness.



**Figure 5 -  
Securing Fireplace to Floor  
and Framing Studs**

## FINISHING MATERIAL

**NOTE:** Any remote wiring (i.e. remote control, wall switch, and optional fan) must be done prior to final finishing to avoid costly reconstruction.

Only noncombustible materials (i.e. brick, tile, slate, steel, or other materials with a UL fire rating of Zero) may be used to cover the black painted face of the appliance. It is permissible to bring combustible wall board to the top and side edges of the black painted face. A 300°F minimum adhesive may be used to attach facing materials to the black surface. If joints between the finished wall and the fireplace surround are sealed, a 300°F minimum sealant material (General Electric RTV103 or equivalent) must be used.

**WARNING**

Read all instructions completely and thoroughly before attempting installation. Failure to do so could result in serious injury, property damage or loss of life. Operation of improperly installed and maintained venting system could result in serious injury, property damage or loss of life.

**INSTALLATION PRECAUTIONS**

Consult local building codes before beginning the installation. The installer must make sure to select the proper vent system for installation. Before installing vent kit, the installer must read this fireplace manual and vent kit instructions.

Only a qualified installer/service person should install venting system. The installer must follow these safety rules:

- Wear gloves and safety glasses for protection.
- Use extreme caution when using ladders or when on rooftops.
- Be aware of electrical wiring locations in walls and ceilings.

The following actions will void the warranty on your venting system:

- Installation of any damaged venting component.
- Unauthorized modification of the venting system.
- Installation of any component part not manufactured or approved by Vermont Castings Group.
- Installation other than permitted by these instructions.

**WARNING**

Always maintain minimum clearances around vent systems. The minimum clearances to combustibles for horizontal vent pipe are 3" at the top\* and 1" at the sides and bottom of the vent system until the pipe penetrates the nearest vertical wall (1" required). A 1" minimum clearance all around the pipe must be maintained at outside wall and on vertical runs. Do not pack the open air spaces with insulation or other materials. This could cause high temperatures and may present a fire hazard.

\* Unless the vertical run is 7½ feet or higher (top vent units only), the clearances for the horizontal run is 1" at the top.

**GENERAL VENTING**

Your fireplace is approved to be vented either through the side wall, or vertical through the roof.

- **Only Vermont Castings Group venting components specifically approved and labelled for this fireplace may be used.**
- Flexible UL1777 listed venting may be used in any venting application where rigid direct vent components can be used. All restrictions, clearances and allowances that pertain to the rigid piping apply to the flexible venting. Flex kits may not be modified. Flex kits may be added to the end of a vent run made of rigid vent sections using pipe manufacturer's approved flex to pipe adapters. This may occur only if doing so does not violate any of the venting length, height, routing, horizontal to vertical raito requirements or clearance considerations detailed in this manual.
- Venting terminals shall not be recessed into a wall or siding.
- Select the amount of vertical rise desired. All horizontal run of venting must have 1/4" rise for every 12" of run towards the termination below 7½ feet of vertical rise. With 7½ feet or more vertical rise off top of fireplace, the horizontal run may run level. NEVER run vent piping downward.
- Horizontal venting which incorporates the twist lock pipe must be installed on a level plane without an inclining or declining slope.
- Horizontal venting which incorporates the use of flex venting shall have an inclining slope from the unit of 1" (25 mm) per 24" (610 mm).

There must not be any obstruction such as bushes, garden sheds, fences, decks or utility buildings within 24" (610 mm) from the front of the termination hood.

Do not locate termination hood where excessive snow or ice build up may occur. Be sure to check vent termination area after snow falls, and clear to prevent accidental blockage of venting system. When using snow blowers, make sure snow is not directed towards vent termination area.

**Location of Vent Termination**

It is imperative the vent termination be located observing the minimum clearances as shown on following page.

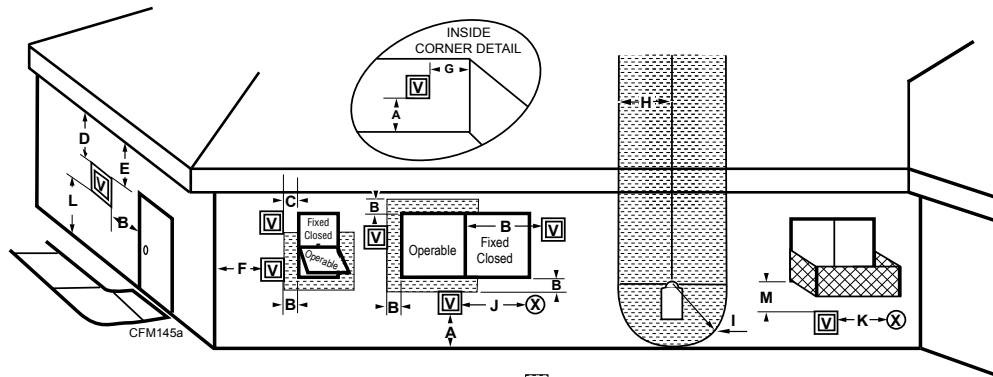
**WARNING**

This fireplace must be vented to the outside. The venting system must NEVER be attached to a chimney serving a separate solid fuel burning appliance. Each gas appliance must use a separate vent system. Do not use common vent systems.

**NOTICE**

Failure to follow these instructions will void the warranty.

**TERMINATION LOCATION**



**Termination Locations**

V VENT TERMINATION   
 X AIR SUPPLY INLET   
 [Hatched Box] AREA WHERE TERMINAL IS NOT PERMITTED

	CANADIAN INSTALLATIONS <sup>1</sup>	US INSTALLATIONS <sup>2</sup>
A = Clearance above grade, veranda, porch, deck or balcony	12" (30cm)	12" (30cm)
B = Clearance to window or door that may be opened	6" (15cm) for appliances <10,000 BTU/h (3kW) 12" (30cm) for appliances >10,000 BTU/h (3kW) and <100,000 BTU/h (30kW) 36" (91cm) for appliances >100,000 BTU/h (30kW)	6" (15cm) for appliances <10,000 BTU/h (3kW) 9" (23cm) for appliances >10,000 BTU/h (3kW) and <50,000 BTU/h (15kW) 12" (30cm) for appliances >50,000 BTU/h (15kW)
C = Clearance to permanently closed window	12" (305mm) recommended to prevent window condensation	12" (305mm) recommended to prevent window condensation
D = Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2' (610 mm) from the center line of the terminal	18" (458mm)	18" (458mm)
E = Clearance to unventilated soffit	12" (305mm)	12" (305mm)
F = Clearance to outside corner	see next page	see next page
G = Clearance to inside corner	see next page	see next page
H = Clearance to each inside of center line extended above meter/regulator assembly	3' (91cm) within a height of 15' (5m) above the meter/regulator assembly	3' (91cm) within a height of 15' (5m) above the meter/regulator assembly
I = Clearance to service regulator vent outlet	3' (91cm)	3' (91cm)
J = Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance	6" (15cm) for appliances <10,000 BTU/h (3kW) 12" (30cm) for appliances >10,000 BTU/h (3kW) and <100,000 BTU/h (30kW) 36" (91cm) for appliances >100,000 BTU/h (30kW)	6" (15cm) for appliances <10,000 BTU/h (3kW) 9" (23cm) for appliances >10,000 BTU/h (3kW) and <50,000 BTU/h (15kW) 12" (30cm) for appliances >50,000 BTU/h (15kW)
K = Clearance to mechanical air supply inlet	6' (1.83m)	3' (91cm) above if within 10' (3m) horizontally
L = Clearance above paved sidewalk or paved driveway located on public property	7' (2.13m) <sup>†</sup>	7' (2.13m) <sup>†</sup>
M = Clearance under veranda, porch, deck or balcony	12" (30cm) <sup>‡</sup>	12" (30cm) <sup>‡</sup>

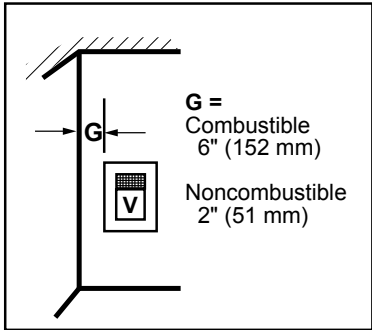
1 In accordance with the current CSA-B149 Installation Codes  
 2 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Codes  
<sup>†</sup> A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings  
<sup>‡</sup> Only permitted if veranda, porch, deck or balcony is fully open on a minimum 2 sides beneath the floor.

**NOTE:** 1. Local codes or regulations may require different clearances.  
 2. The special venting system used on Direct Vent Fireplaces are certified as part of the appliance, with clearances tested and approved by the listing agency.  
 3. Vermont Castings Group assumes no responsibility for the improper performance of the appliance when the venting system does not meet these requirements.

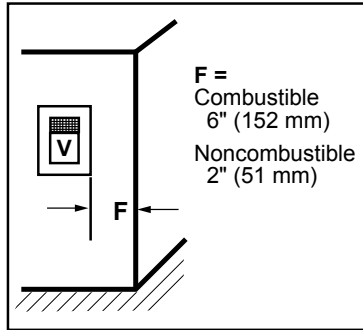
**Termination Clearances**

Termination clearances for buildings with combustible and noncombustible exteriors.

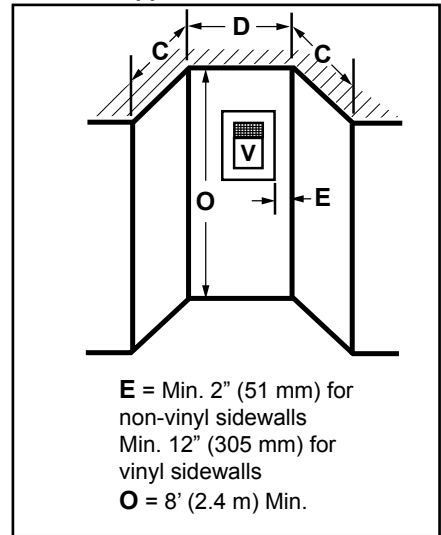
**Inside Corner**



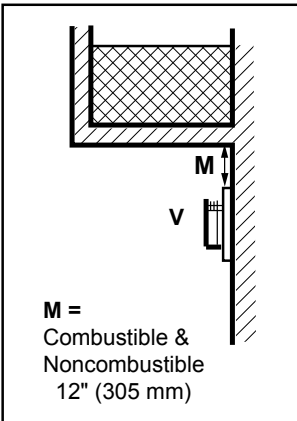
**Outside Corner**



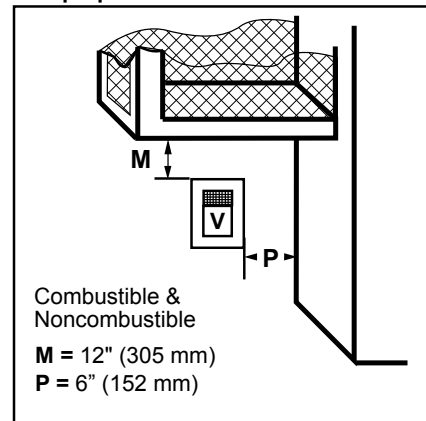
**Alcove Applications\***



**Balcony - with no side wall**



**Balcony - with perpendicular side wall**



No. of Caps	D <sub>Min.</sub>	C <sub>Max.</sub>
1	3' (914 mm)	2 x D <sub>Actual</sub>
2	6' (1.8 m)	1 x D <sub>Actual</sub>
3	9' (2.7 m)	2/3 x D <sub>Actual</sub>
4	12' (3.7 m)	1/2 x D <sub>Actual</sub>

D<sub>Min.</sub> = # of Termination caps x 3  
 C<sub>Max.</sub> = (2 / # termination caps) x D<sub>Actual</sub>

584-15

**\*NOTE:** Termination in an alcove space (spaces open only on one side and with an overhang) is permitted with the dimensions specified for vinyl or non-vinyl siding and soffits. 1. There must be a 3' (914 mm) minimum between termination caps. 2. All mechanical air intakes within 10' (1 m) of a termination cap must be a minimum of 3' (914 mm) below the termination cap. 3. All gravity air intakes within 3' (914 mm) of a termination cap must be a minimum of 1' (305 mm) below the termination cap.

**Figure 7 - Termination Clearances**

**ASSEMBLING VENT PIPES**

**USA Installations**

The venting system must conform to local codes and/or the current National Fuel Code ANSI Z223.1/NFPA 54.

Only venting components manufactured or approved by Vermont Castings Group may be used in Direct Vent systems.

**Canadian Installations**

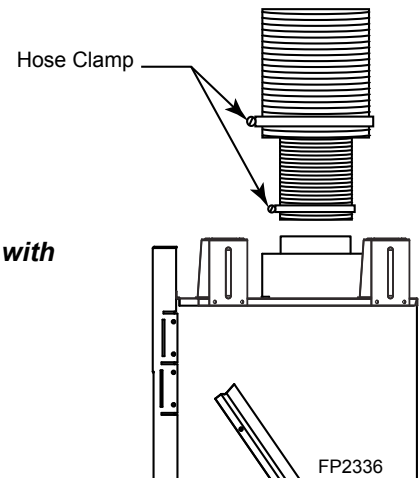
The venting system must be installed in accordance with the current CSA-B149.1 installation code.

**FLEX VENT PIPES**

Secure flex vent pipe in place with a hose clamp (provided).

\*Be sure the flex pipe overlaps at least 1" (25 mm) onto the collars of the fireplace and termination. If the termination has an internal bead, be sure to overlap and secure 1" (25 mm) past the bead.

\* Be sure the vent is actually crushed before proceeding. Apply a tug to be sure the vent will not slip off the collars. Repeat process with 7" flex vent pipe. The same procedure must be performed on the vent side.



**Figure 8 - Secure Flex Pipe with Hose Clamps**

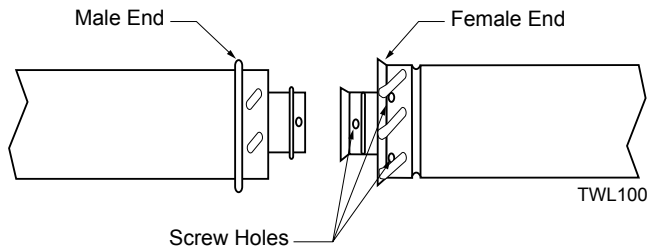
**TWIST LOCK PIPES**

When using twist lock pipe it is not necessary to use sealant on the joints.

To join twist lock pipes together, simply align the beads of the male end with the grooves of the female end, twisting the pipe until the flange on the female end contacts external flange on the male end. It is recommended that you secure the joints with three (3) sheet metal screws, however, this is not mandatory with twist lock pipe. *Figure 9*

**NOTE: Sealant is not required to assemble fireplace venting. Do not use silicone sealant at the inner flue exhaust connections.**

To make it easier to assembly the joints, we suggest putting a lubricant (Vaseline or similar) on the male end of the twist lock pipe prior to assembly.



**Figure 9 - Twist-lock Pipe Joints**

**HOW TO USE THE VENT GRAPH**

The Vent Graph should be read in conjunction with the following vent installation instructions to determine the relationship between the vertical and horizontal dimensions of the vent system.

1. Determine the height of the center of the horizontal vent pipe exiting through the outer wall. Using this dimension on the Sidewall Vent Graph, *Figure 10*, locate the point intersecting with the slanted graph line.
2. From the point of this intersection, draw a vertical line to the bottom of the graph.
3. Select the indicated dimension, and position the fireplace in accordance with same.

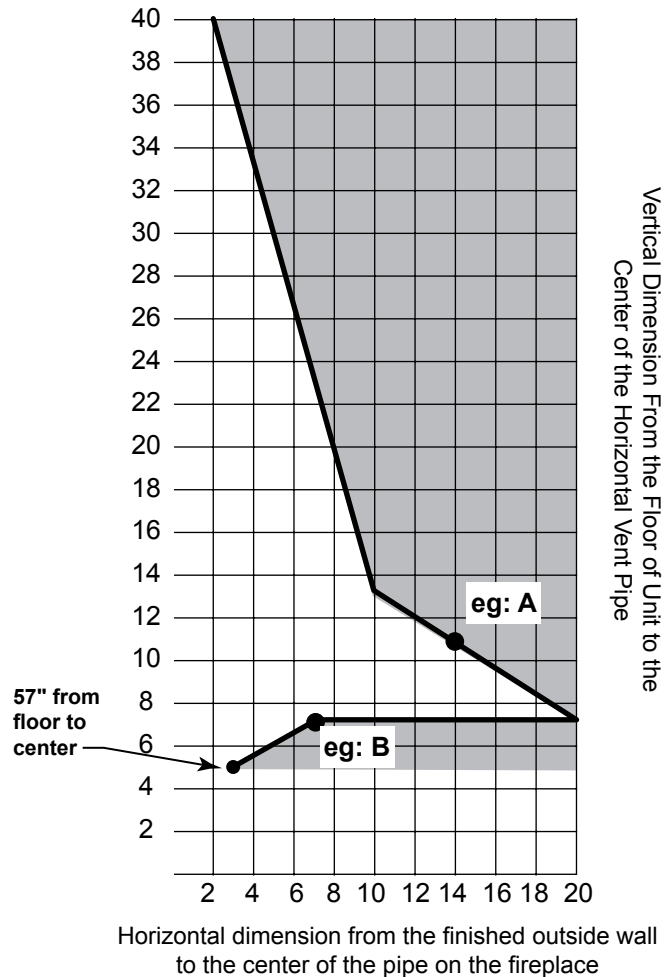
**EXAMPLE A:**

If the vertical dimension from the floor of the unit is 11' (3.4 m) the horizontal run to the face of the outer wall must not exceed 14' (4.3 m).

**EXAMPLE B:**

If the vertical dimension from the floor of the unit is 7' (2.1 m), the horizontal run to the face of the outer wall must not exceed 7' (2.1 m).

Refer to *Page 18* for requirements for snorkels.



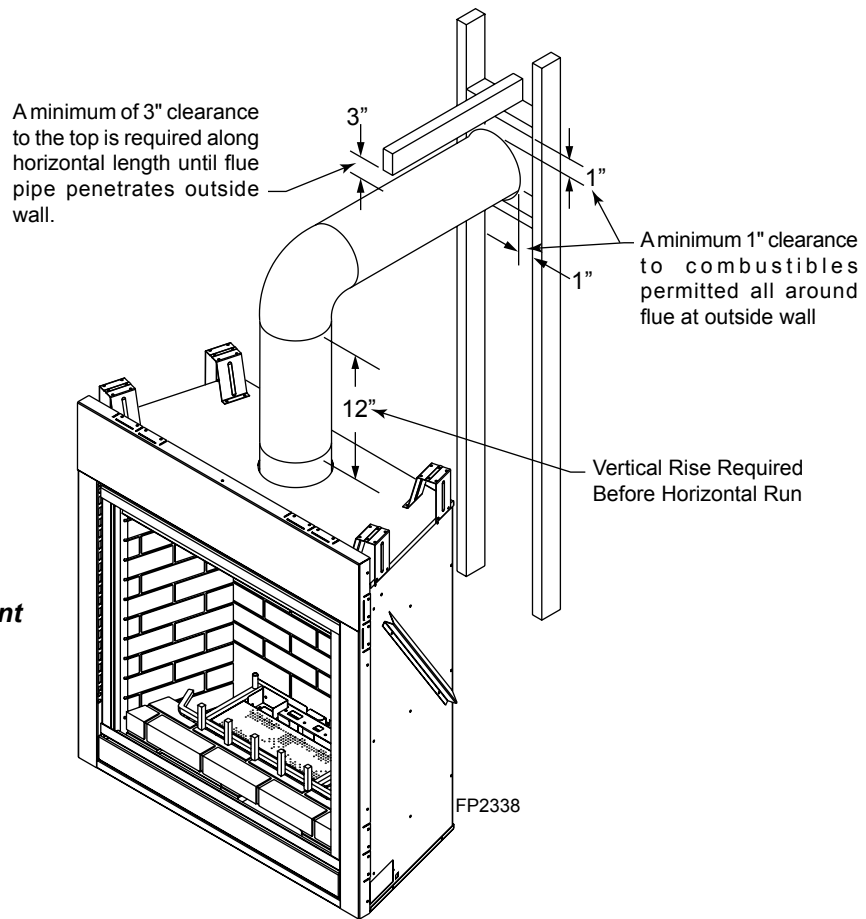
**Figure 10 - Rear Wall Venting Graph**

**WARNING**

Horizontal sections of this vent system require a minimum of 3" clearances to combustibles at the top of the flue and 1" clearance at the sides and bottom ***until the flue penetrates the outside wall.*** A minimum 1" clearance all around the flue is acceptable at this point of penetration.

If the vertical rise is 7 1/2 ft. or more, only a 1" clearance is needed on top of any horizontal run.

Vertical sections of this vent system require a minimum of 1" clearance to combustibles on all sides of the pipe.



**Figure 11 -  
Combustible  
Clearances for Vent  
Pipe**

**VERTICAL SIDEWALL APPLICATION**

**Minimum clearance between vent pipes and combustible materials is 3" (76 mm) on top, and 1" (25 mm) on the bottom and sides unless otherwise noted. Refer to Page 15**

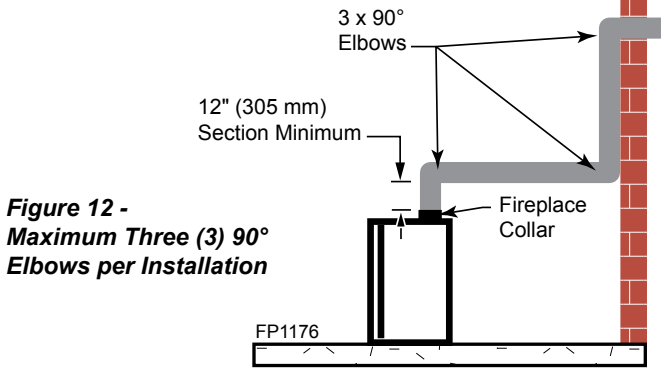
When vent termination exits through foundations less than 20" (508 mm) below siding outcrop, the vent pipe must flush up with the siding.

It is best to locate the fireplace in such a way that minimizes the number of offsets and horizontal vent length.

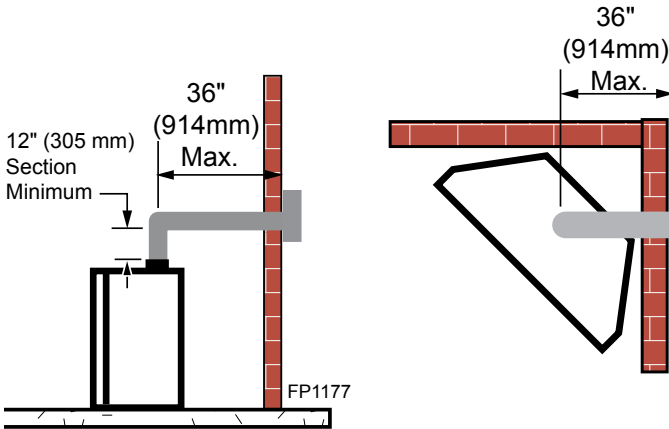
The horizontal vent run refers to the total length of vent pipe from the flue collar of the fireplace (or the top of the Transition Elbow) to the face of the outer wall.

Horizontal plane means no vertical rise exists on this portion of the vent assembly.

- The maximum number of 90° elbows per side wall installation is three (3). *Figure 12*
- If the min. 12" rise with a 90° elbow is fitted directly on top of the first 12" section, the maximum horizontal vent run before the termination or a vertical rise is 36" (914 mm). *Figure 13*
- If a 90° elbow is used in the horizontal vent run (level height maintained) the horizontal vent length is reduced by 36" (914 mm). *Figures 13 & 14*. This does not apply if the 90° elbows are used to increase or redirect a vertical rise. *Figure 12*



**Figure 12 - Maximum Three (3) 90° Elbows per Installation**



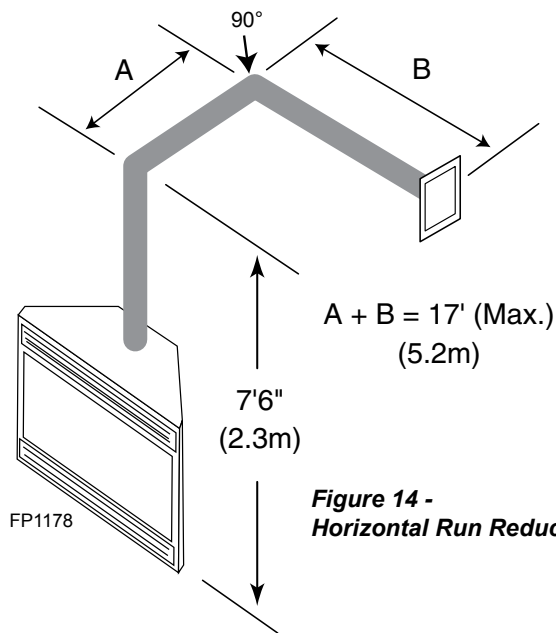
**Figure 13 - Maximum Horizontal Run with 12" Minimum Rise**

**Example:** According to the vent graph (Page 15) the maximum horizontal vent length in a system with a 71/2' (2.3 m) rise is 20' (6 m) and if a 90° elbow is required in the horizontal vent it must be reduced to 17' (5.2 m).

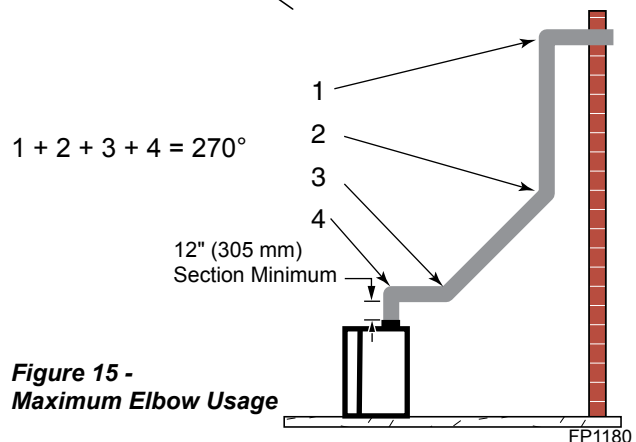
In *Figure 15*, dimension A plus B must not be greater than 17' (5.2 m)

- The maximum number of 45° elbows permitted per installation is six (6). These elbows can be installed in either the vertical or horizontal run.
- For each 45° elbow installed in the horizontal run, the length of the horizontal run **MUST** be reduced by 18" (457 mm). This does not apply if the 45° elbows are installed on the vertical part of the vent system.
- The maximum number of elbow degrees in a system is 270°. *Figure 15*

Example:  
 Elbow 1 = 90°  
 Elbow 2 = 45°  
 Elbow 3 = 45°  
 Elbow 4 = 90°  
 Total angular variation = 270°



**Figure 14 - Horizontal Run Reduction**



**Figure 15 - Maximum Elbow Usage**



**VERTICAL SIDEWALL INSTALLATION - TWIST LOCK PIPE**

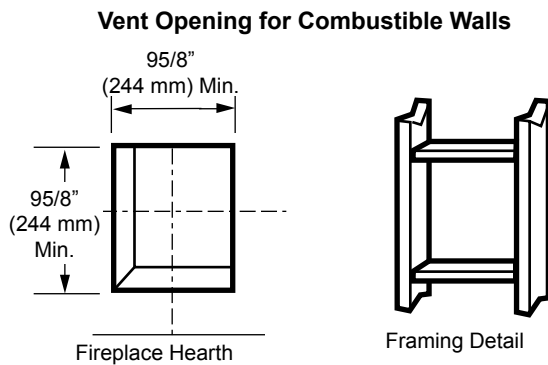
**Step 1**

Locate vent opening on the wall. It may be necessary to first position the fireplace and measure to obtain hole location. Depending on whether the wall is combustible or noncombustible, cut opening to size. *Figure 16* (For combustible walls first frame in opening.)

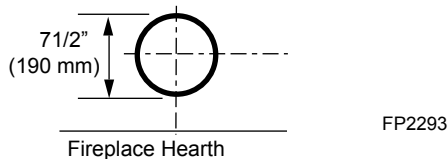
**NOTE:** When using flex vent, the opening will have to be measured according to the 1/2" (13 mm) rise in 12" (305 mm) vent run.

**Combustible Walls:** Cut a 95/8"H x 95/8"W (244 x 244 mm) hole through the exterior wall and frame as shown. *Figure 16*

**Noncombustible Walls:** Hole opening must be 7 1/2" (191 mm) in diameter.



**Opening for Noncombustible Wall**



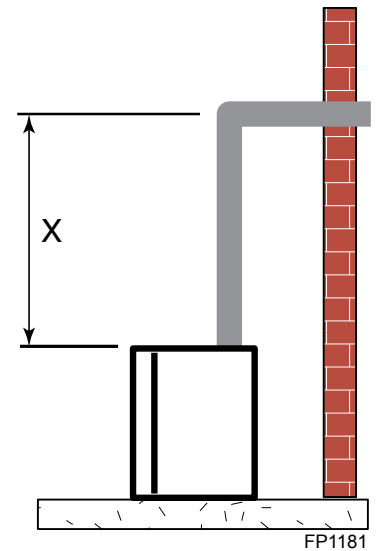
**Figure 16 -**  
Locate vent opening on wall

**Step 2**

Secure firestop to the inside frame, center in the 95/8" x 95/8" vent opening.

**Step 3**

Place fireplace into position. Measure the vertical height (X) required from the base of the flue collars to the center of the wall opening. *Figure 17*



**Figure 17 -**  
Vertical Height Requirement

**Step 4**

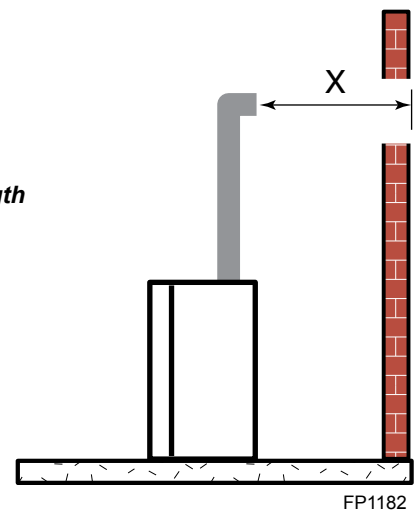
Using appropriate length of pipe section(s) attach to fireplace with three (3) screws. Follow with the installation of the inner and outer elbow, again secure joints with three (3) sheet metal screws.

**Step 5**

Measure the horizontal length requirement including a 2" (51 mm) overlap, i.e. from the elbow to the outside wall face plus 2" (51 mm) (or the distance required if installing a second 90° elbow). *Figure 18*



**Always install horizontal venting on a level plane.**



**Figure 18 -**  
Horizontal Length Requirement

**Step 6**

Use appropriate length of pipe sections - telescopic or fixed - and install. The sections which go through the wall are packaged with the starter kit, and can be cut to suit if necessary.

**Step 7**

Guide the vent terminations 4" and 7" collar into their respective vent pipes. Double check that the vent pipes overlap the collars by 2" (51 mm). Secure the termination to the wall with screws provided and caulk around the wall plate to weatherproof. As an alternative to screwing the termination directly to the wall, you may also use expanding plugs or an approved exterior construction adhesive. You may also attach the termination with screws through the inner body into the 4" vent pipe, however for this method, you must extend the 4" pipe approximately 6" (152 mm) beyond the outer face of the wall.



**Support horizontal pipes every 36" (914 mm) with metal pipe straps.**

### VERTICAL SIDEWALL INSTALLATION - FLEX VENT PIPE

**NOTE:** The 40" (1016 mm) flex vent is used for 90° bend after a straight vertical section (12" min.) then out the back wall. *Figure 20*

Follow Steps 1 - 3 on Page 17.

**Step 4**

Install the four (4) spacer springs on the 4" flex vent pipe. When installing the spacer springs around the 4" pipe, stretch the spring to approximately 15" (381 mm), wrap the spring around the pipe and interlock the ends of the spacer spring approximately 2" (51 mm). Measure 18<sup>3</sup>/<sub>4</sub>" (476 mm) from the end of the pipe. Place the next spring 5" (127 mm) from the previously installed spring. Place the next spring 6" (152 mm) from the last spring. Finally place the last spring 12" (305 mm) from the last spring installed. *Figure 19*

**Step 5**

Install the 4" (102 mm) flex vent pipe to the appliance collar as described on Page 13. Secure the end with the first spring 18<sup>3</sup>/<sub>4</sub>" (476 mm) from the flex pipe end to the unit.

**Step 6**

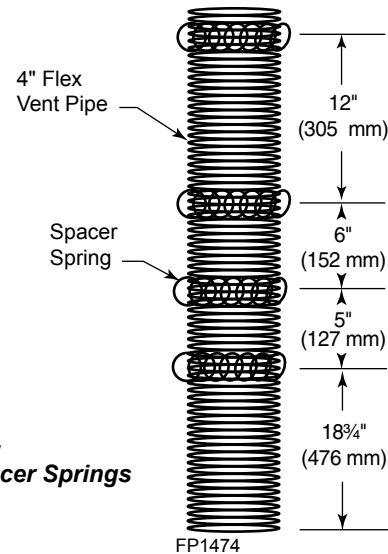
Slide the 7" (178 mm) flex vent pipe over the 4" flex vent pipe and secure the 7" collar as described on Page 13.

**Step 7**

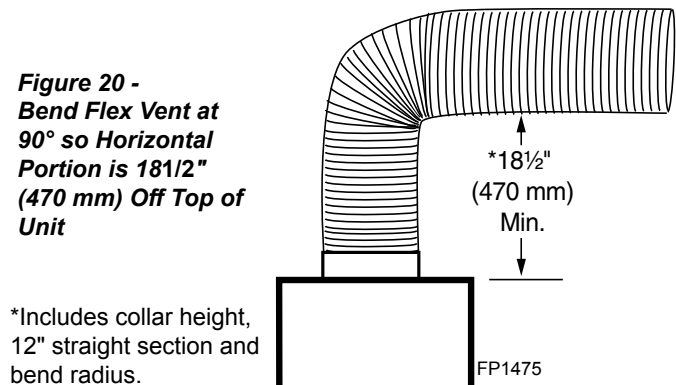
Bend the flex pipe horizontal so the bottom of the horizontal pipe measure 18<sup>1</sup>/<sub>2</sub>" (470 mm) from the top of the unit immediately after the 90° formation. *Figure 20*. Be sure to follow the 1/2" (13 mm) rise in a 12" (305 mm) horizontal run rule.

**Step 8**

Install the 4" flex then 7" flex to the termination.



**Figure 19 - Install Spacer Springs**



**Figure 20 - Bend Flex Vent at 90° so Horizontal Portion is 18<sup>1</sup>/<sub>2</sub>" (470 mm) Off Top of Unit**

\*Includes collar height, 12" straight section and bend radius.

### BELOW GRADE INSTALLATION

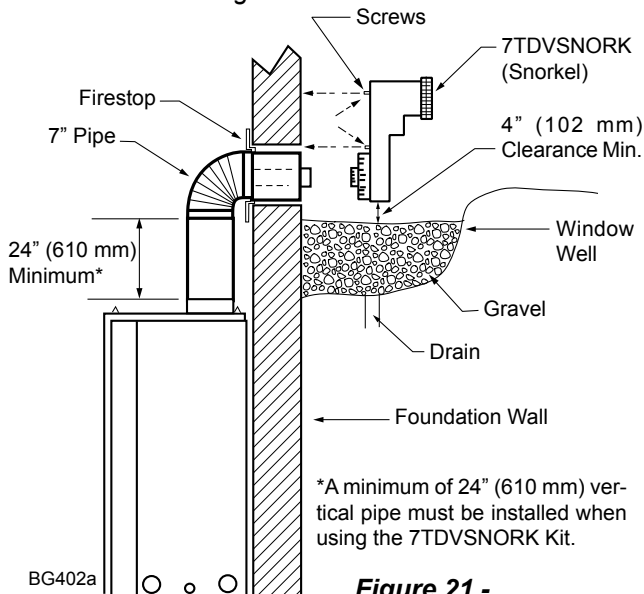
When it is not possible to meet the required vent terminal clearances of 12" (305 mm) above grade level, a snorkel kit is recommended. It allows installation depth down to 7" (178 mm) below grade level. The 7" (178 mm) is measured from the center of the horizontal vent pipe as it penetrates through the wall.

**Ensure the sidewall venting clearances are observed. If venting system is installed below ground, we recommend a window well with adequate and proper drainage to be installed around the termination area.**

If installing a snorkel, a minimum 24" (610 mm) vertical rise is necessary. The maximum horizontal run with the 24" vertical pipe is 36" (914 mm). This measurement is taken from the collar of the fireplace (or transition elbow) to the face of the exterior wall. See the Sidewall Venting Graph for extended horizontal run if the vertical exceeds 24" (610 mm).

1. Establish vent hole through the wall. *Page 17, Figure 16*

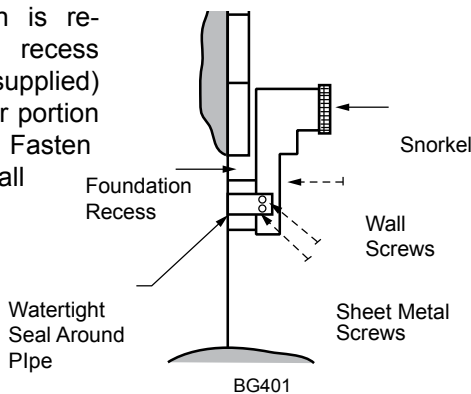
2. Remove soil to a depth of approximately 16" (406 mm) below base of snorkel. Install drain pipe. Install window well (not supplied). Refill hole with 12" (305 mm) of coarse gravel leaving a clearance of approximately 4" (102 mm) below snorkel. *Figure 21*
3. Install vent system.
4. Ensure a watertight seal is made around the vent pipe coming through the wall.
5. Apply high temperature sealant caulking (supplied) around the 4" and 7" snorkel collars.
6. Slide the snorkel into the vent pipes and secure to the wall.
7. Level the soil so as to maintain a 4" (102 mm) clearance below snorkel. *Figure 21*



**Figure 21 -  
Below Grade Installation**

**Do not back fill around snorkel.  
A clearance of at least 4" must be maintained between the snorkel and the soil.**

If the foundation is recessed, use recess brackets (not supplied) for securing lower portion of the snorkel. Fasten recess brackets to wall first, then secure to snorkel with self drilling #8 x 1/2 sheet metal screws. It will be necessary to extend vent pipes out as far as the protruding wall face. *Figure 22*



**Figure 22 -  
Snorkel Installation,  
Recessed Foundation**

**VERTICAL THROUGH-THE-ROOF APPLICATION**

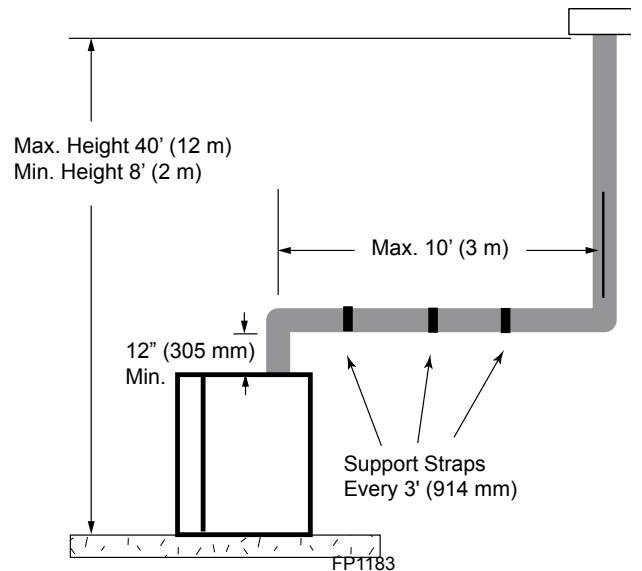
This gas fireplace has been approved for:

- Vertical installations up to 40' (12 m) in height. Up to a 10' (3 m) horizontal vent run can be installed within the vent system using a maximum of two 90° elbows. *Figure 23*
- Up to two 45° elbows may be used within the horizontal run. For each 45° elbow used on the horizontal plane, the maximum horizontal length must be reduced by 18" (450 mm).

**Example:** Maximum horizontal length:

No elbows	= 10' (3 m)
1 x 45° elbow	= 8.5' (2.6 m)
2 x 45° elbows	= 7' (2.1 m)

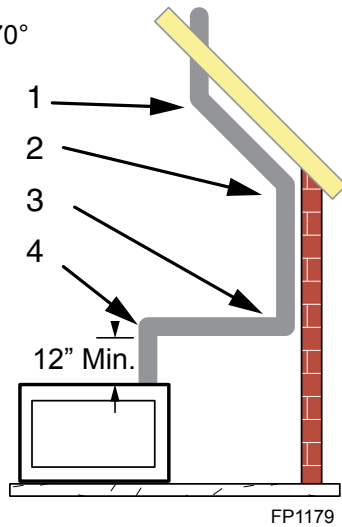
- A minimum of an 8' (2.5 m) vertical rise is required.
- Two sets of 45° elbow offsets may be used within the vertical sections. From 0 to a maximum of 8' (2.5 m) of vent pipe can be used between elbows. *Figure 23*
- 7DVCS supports offsets. *Figure 27*. This application will require that you first determine the roof pitch and use the appropriate starter kit. (Refer to Venting Components List)
- The maximum angular variation allowed in the system is 270°. *Figure 24*
- For the minimum height of the vent above the highest point of penetration through the roof refer to Page 21, *Figure 28*.



**Figure 23 -  
Support Straps for Horizontal Runs**

$1 + 2 + 3 + 4 = 270^\circ$

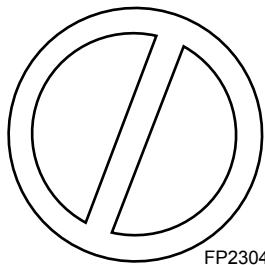
**Figure 24 - Maximum Elbow Usage**



**VERTICAL THROUGH-THE-ROOF INSTALLATION**

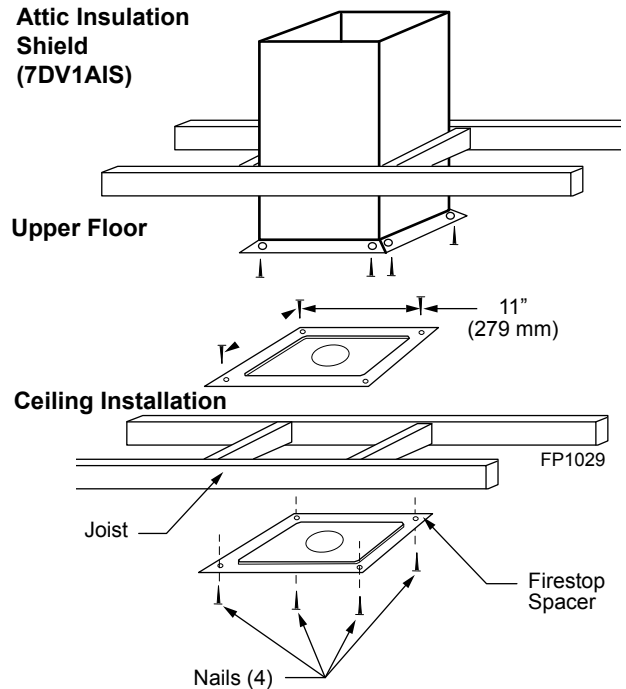
**NOTE:** For all top vent vertical through-the-roof installations, install the supplied cross-bar flue restrictor onto the top edge of the firebox flue adapter. *Figure 25*

1. Locate your fireplace.
2. Plumb to center of the (4") flue collar from ceiling above and mark position.
3. Cut opening equal to 93/4" x 93/4" (248 x 248 mm).
4. Proceed to plumb for additional openings through the roof. In all cases, the opening must provide a minimum of 1 inch clearance to the vent pipe, i.e., the hole must be at least 93/4" x 93/4" (248 x 248 mm).



**Figure 25 - Vertical Through-the-Roof Restrictor (Part #69D3006)**

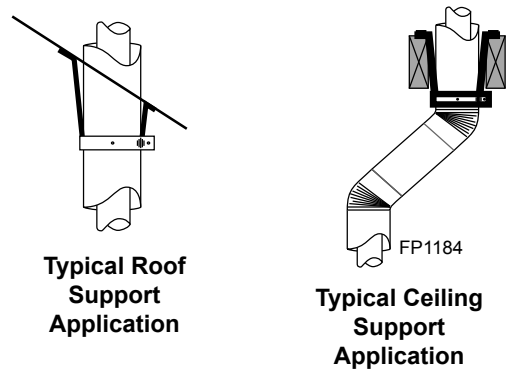
5. Place fireplace into position.
6. Place firestop(s) or Attic Insulation Shield into position and secure. *Figure 26*
7. Install roof support (*Figure 27*) and roof flashing making sure upper flange is below the shingles. *Figure 29*
8. Install appropriate pipe sections until the venting is above the flashing. *Figure 29*
9. Install storm collar and seal around the pipe.



**Figure 26 - Place Firestop Spacer(s) and Secure**

10. Add additional vent lengths for proper height. *Figure 28*
11. Apply high temperature sealant to 4" and 7" collars of vertical vent termination and install.

If there is a room above ceiling level, fire stop spacer must be installed on both the bottom and the top side of the ceiling joists. If an attic is above ceiling level an Attic Insulation Shield must be installed. The enlarged ends of the vent section always face downward.

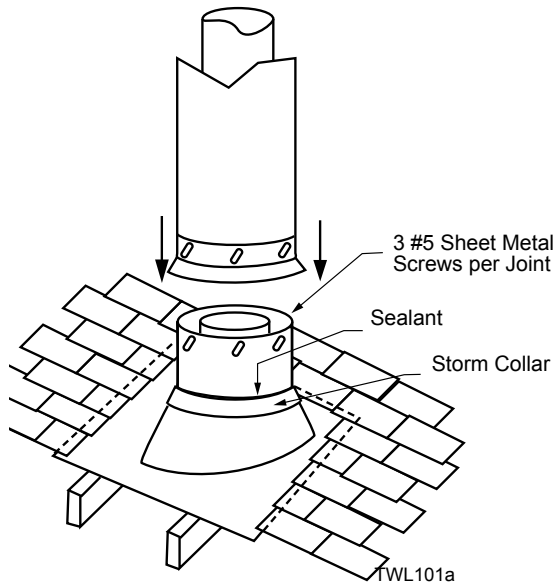
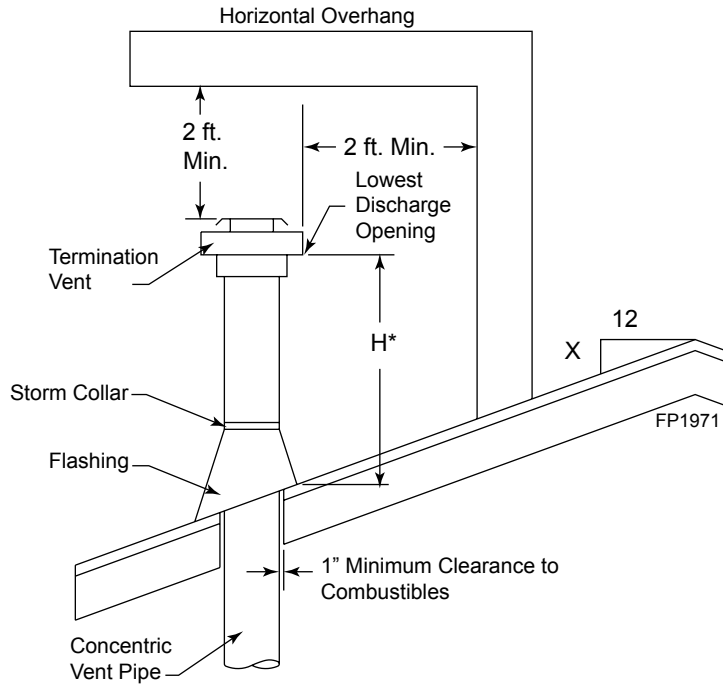


**Figure 27 - Venting Supports**

Roof Pitch	H (feet)
Flat to 6/12	1.0
Over 6/12 to 7/12	1.25
Over 7/12 to 8/12	1.5
Over 8/12 to 9/12	2.0
Over 9/12 to 10/12	2.5
Over 10/12 to 11/12	3.25
Over 11/12 to 12/12	4.0

\*H - Minimum height from roof to lowest discharge opening of vent

**Figure 28 -  
Minimum Chimney Clearance**



**Figure 29 -  
Roof Flashing**

**CHECK GAS TYPE**

Use proper gas type for the fireplace you are installing. If you have conflicting gas type, do not install fireplace. See dealer where you purchased the fireplace for proper fireplace for your gas type or conversion kit.

**INSTALL GAS PIPING TO FIREPLACE / BURNER SYSTEM LOCATION****WARNING**

A qualified installer or service person must connect appliance to gas supply.

Follow all local codes.

**INSTALLATION ITEMS NEEDED**

Before installing fireplace and burner system, make sure you have the items listed below.

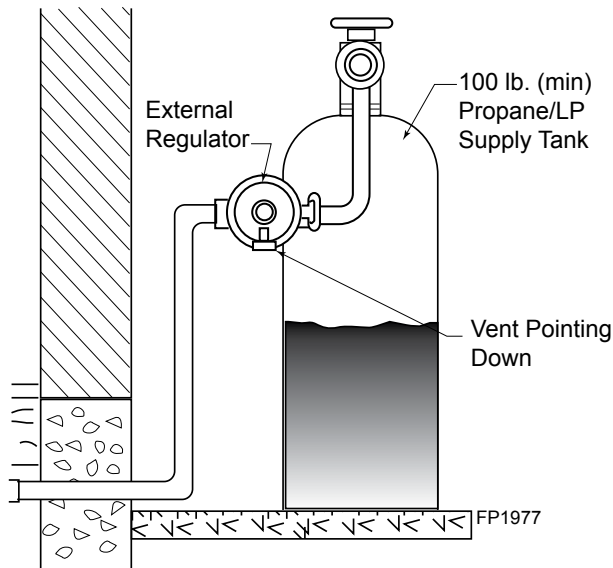
- External regulator
- Tee joint
- Pipe wrench
- Equipment shutoff valve\*
- Test gauge connection\*
- Sediment trap (recommended)
- Piping (check local codes)
- Sealant (resistant to propane/LP gas) (supplied by installer)
- approved flexible gas line with gas connector (if allowed by local codes — not provided)

\* A CSA design-certified equipment shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the CSA design-certified equipment shutoff valve from your dealer.

For propane/LP connections only, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11 and 13 inches of water. If you do not reduce incoming gas pressure, burner system regulator damage could occur. Install external regulator with the vent pointing down as shown in *Figure 30*. Pointing the vent down protects it from freezing rain or sleet.

**CAUTION**

Use only new black iron or steel pipe. Internally tinned copper or copper tubing can be used per National Fuel Code, Section 2.6.3, providing gas meets hydrogen sulfide limits, and where permitted by local codes. Gas piping system must be sized to provide minimum inlet pressure (listed on data plate) at the maximum flow rate (BTU/hr). Undue pressure loss will occur if the pipe is too small.



**Figure 30 - External Regulator with Vent Pointing Down (Propane/LP Only)**

**CAUTION**

For propane/LP units, never connect fireplace directly to the propane/LP supply. This burner system requires an external regulator (not supplied). Install the external regulator between the burner system and propane/LP supply.

When using copper or flex connectors use only fittings approved for gas connections. The gas control inlet is 3/8" NPT.

**WARNING**

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

**NOTE:** The gas line connection may be made using 1/2" rigid tubing or an approved flex connector. Since some municipalities have additional local codes it is always best to consult your local authorities and the current edition of the National Fuel Gas Code ANSI.Z223.1, NFPA54. In Canada CSA-B149 (1 or 2) Installation Code.

A listed manual shutoff valve must be installed upstream of the appliance. Union tee and plugged 1/8" NPT pressure tapping point should be installed upstream of the appliance. *Figure 31*

**IMPORTANT:** Install main gas valve (equipment shutoff valve) in an accessible location. The main gas valve is for turning on or shutting off the gas to the fireplace.

Check your building codes for any special requirements for locating equipment shutoff valve to fireplaces.

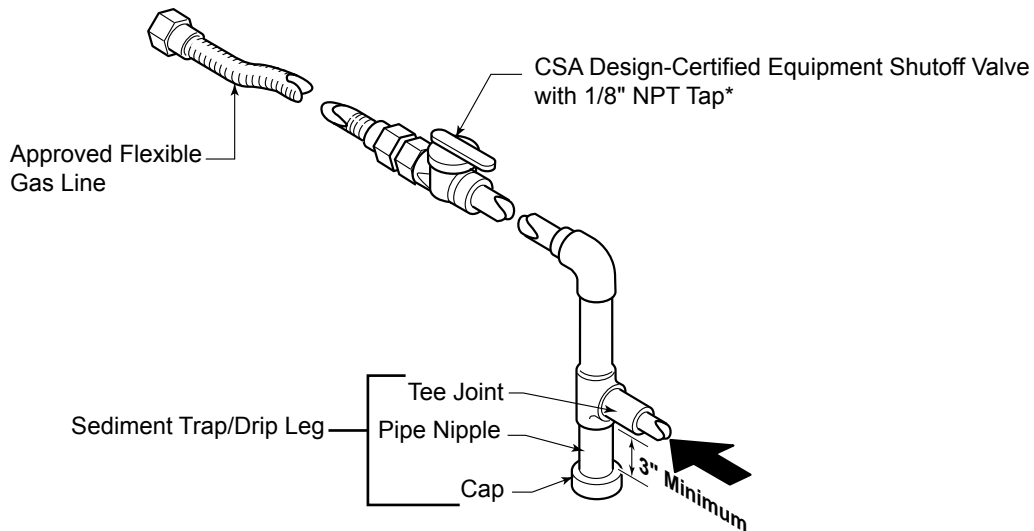
**CAUTION**

A manual shutoff valve must be installed upstream of the appliance. Union tee and plugged 1/8" NPT pressure tapping point should be installed upstream of the appliance. *Figure 31*

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 burner system valve. We recommend that you install a sediment trap/drip leg in supply line as shown in *Figure 31*. Locate sediment trap/drip leg where it is within reach for cleaning. Install in piping system between fuel supply and burner system. Locate sediment trap/drip leg where trapped matter is not likely to freeze. A sediment trap collects moisture and contaminants and keeps them from going into the burner system gas controls. If sediment trap/drip leg is not installed or is installed wrong, burner system may not run properly.

**CAUTION**

Use pipe joint sealant that is resistant to liquid petroleum (LP) gas.



**Figure 31 - Gas Connection**

**Natural Gas**  
From Gas Meter  
(4.5" w.c. to 10.5" w.c. Pressure)  
**Propane/LP**  
From External Regulator  
(11" w.c. to 13" w.c. Pressure)

**GLASS FRAME REMOVAL**

**NOTE:** If the safety barrier is in place, you must first remove it before you remove the glass frame. To remove the barrier, simply lift up and pull out until the tabs are clear of their corresponding slots on the fire-box. Then proceed to remove the glass frame by following the steps below.

1. Remove access panel by lifting up and out.
2. Release two clamps (500 model has three clamps) on bottom of fireplace. *Figure 32*
3. Tilt glass frame out and lift glass frame up until it clears three tabs on top of fireplace.
4. Set glass frame aside.


DANGER



**HOT GLASS WILL CAUSE BURNS.**

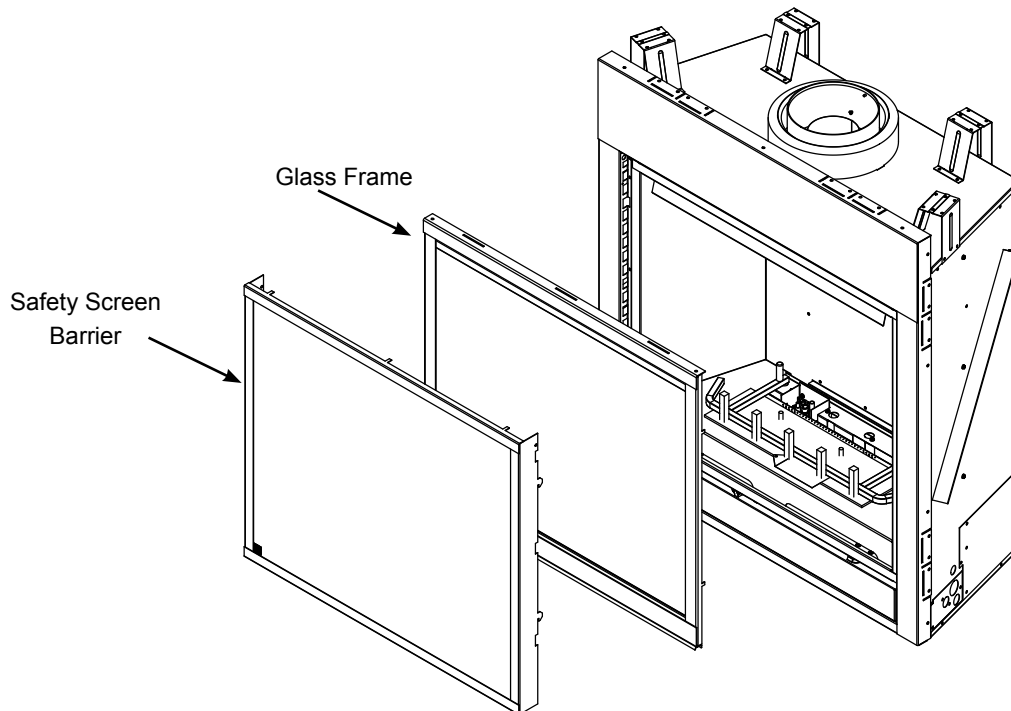
**DO NOT TOUCH GLASS UNTIL COOLED.**

**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.

CAUTION

Each clamp has a quick spring force. When reinstalling clamps, keep fingers clear.



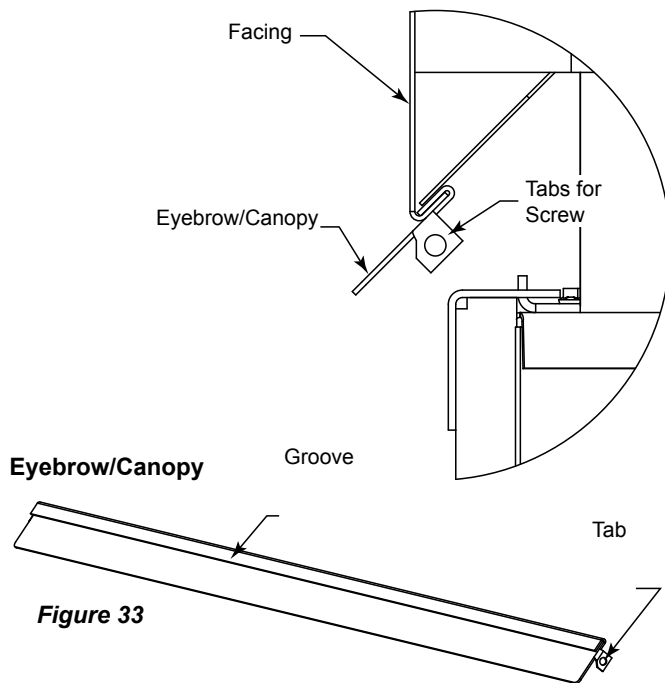
**Figure 32 - Remove Glass Frame**



**EYEBROW/CANOPY INSTALLATION**

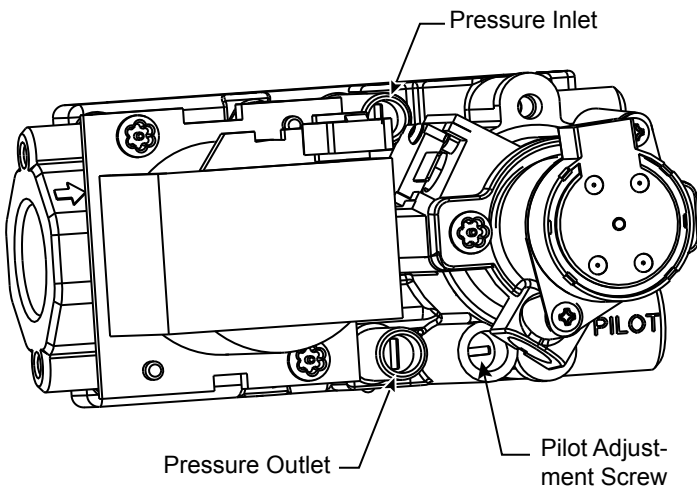
1. Remove glass frame.
2. Hold eyebrow/canopy with groove facing up and tabs for screws facing down. *Figure 33*
3. Install by placing eyebrow under bottom lip of facing. Hook bottom lip of facing into groove of eyebrow. Pull eyebrow forward until it stops. *Figure 33*
4. Insert self-tapping screws into tabs on bottom of eyebrow and into sides of facing.

**NOTE:** Eyebrow/canopy is optional depending upon clearances to combustible mantels and trim. Refer to Page 9.



**CHECK THE GAS TYPE AND PRESSURE**

1. Check gas type. The gas supply must be the same as stated on the appliance's rating decal. If the gas supply is different from the fireplace, **STOP!** Do not install the appliance. Contact your dealer immediately.
2. To ease installation, a 24" (610 mm) flex line with manual shut-off valve has been provided with on this appliance. Install and attach 1/2" gas line onto shut-off valve.
3. After completing gas line connection, purge air from gas line and test all gas joints from the gas meter to the fireplace for leaks. Use a solution of 50/50 water and soap solution or a gas sniffer.
4. To check gas pressures at valve, turn captured screw counter clockwise 2 or 3 turns and then place tubing to pressure gauge over test point. Turn unit to high. *Figure 34.* After taking pressure reading, be sure and turn captured screw clockwise firmly to reseal. Do not over torque. Check test points for gas leaks.



**Figure 34 -  
Signature Command Valve**

**WARNING**

Do not use open flame to check for gas leaks.

**ELECTRICAL WIRING**

**General**

1. This fireplace is equipped with the Signature Control valve which operates on 6 volts. The 6 volt DC adapter plugs into the fireplace junction box A/C power supply. Four (4) "AA" batteries are used for back up during power outages.
2. The Signature Command System can also be operated without A/C power. The system can run on four (4) "AA" batteries for approximately six (6) months under normal use.
3. A/C power must be used to power the A/C module, blowers, lights and AUX accessories if used with this fireplace.

**Optional Accessory Requirements**

1. This fireplace may be used with a wall switch, wall mounted thermostat and/or Signature Command wireless controls.
2. The command center control may be mounted on the wall with the use of the SCSWEK 15ft. wall mount extension kit.

**WARNING**

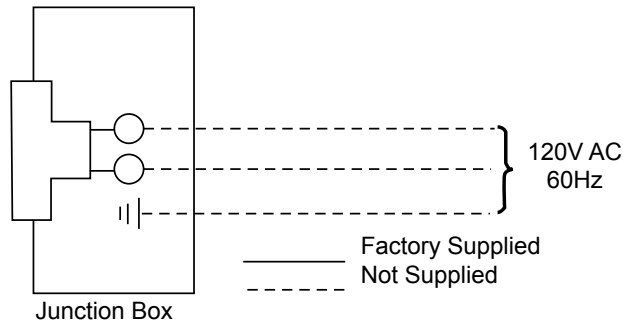
Electrical connections should only be performed by a qualified, licensed electrician. Main power must be off when connecting to main electrical power supply or performing service. All wiring shall be in compliance with all local, city and state codes. The appliance, when installed, must be electrically grounded in accordance with local codes or in the absence of local codes, with the National Electrical Code ANSI/NFPA 70 (latest edition) and Canadian Electrical Code, CSA C22.1.

**CAUTION**

Label all wires before disconnecting when servicing controls. Wiring errors can cause improper and dangerous operation.

## JUNCTION BOX WIRING

1. This should be done before framing the fireplace. Wire the receptacle into an electrical circuit. Wire with minimum 60° C wire in accordance with prevailing codes.
2. Remove the external junction box cover by removing the screw from the side of the outside firebox wall. Junction box was installed at the factory.
3. The junction box cover has a factory installed "romex" style strain relief connector. After connecting the wires, route the wire leads through this connector. Refer to the wiring diagram in *Figure 35*.



**Figure 35 -  
Junction Box Wiring Diagram**

## COMMAND CENTER WALL INSTALLATION

The command center may be mounted on the wall with the use of the SCSWEK Kit (15ft. cable, junction box, wall cover).

Mount the junction box provided at the desired location on the wall. Do not extend beyond the 15 ft. wire cable provided. If a longer distance is required, the 15 ft. may be extended up to 30 ft. maximum by using two (2) SCSWEK cables plugged together.

Route the wire from junction box to lower control area at bottom of fireplace. Unplug the 12" cable from the command center. Attach the connector to the pins from wire by pushing in to connector making sure to follow the color code on connector. Plug the 15 ft. extension cable into the 2 ft. cable. Remove command center from the fireplace and plug the other end of the extension cable into the command center. Snap on wall cover provided and screw to junction box.

## WALL SWITCH INSTALLATION

The wall switch wire connection is located off the 2 ft. wire harness from the control box to the command center. *Figure 36*. The connection is labeled "Wall Switch". Unplug the male and female connectors and connect the two (2) low voltage wires provided. Run wire to desired location on wall. Up to 50 ft. of 18 ga. wire may be used if necessary. Attach wires to wall switch. Mount the wall switch in to junction box and screw on cover.

### WARNING

Do not connect wall switch to 110 V circuit.

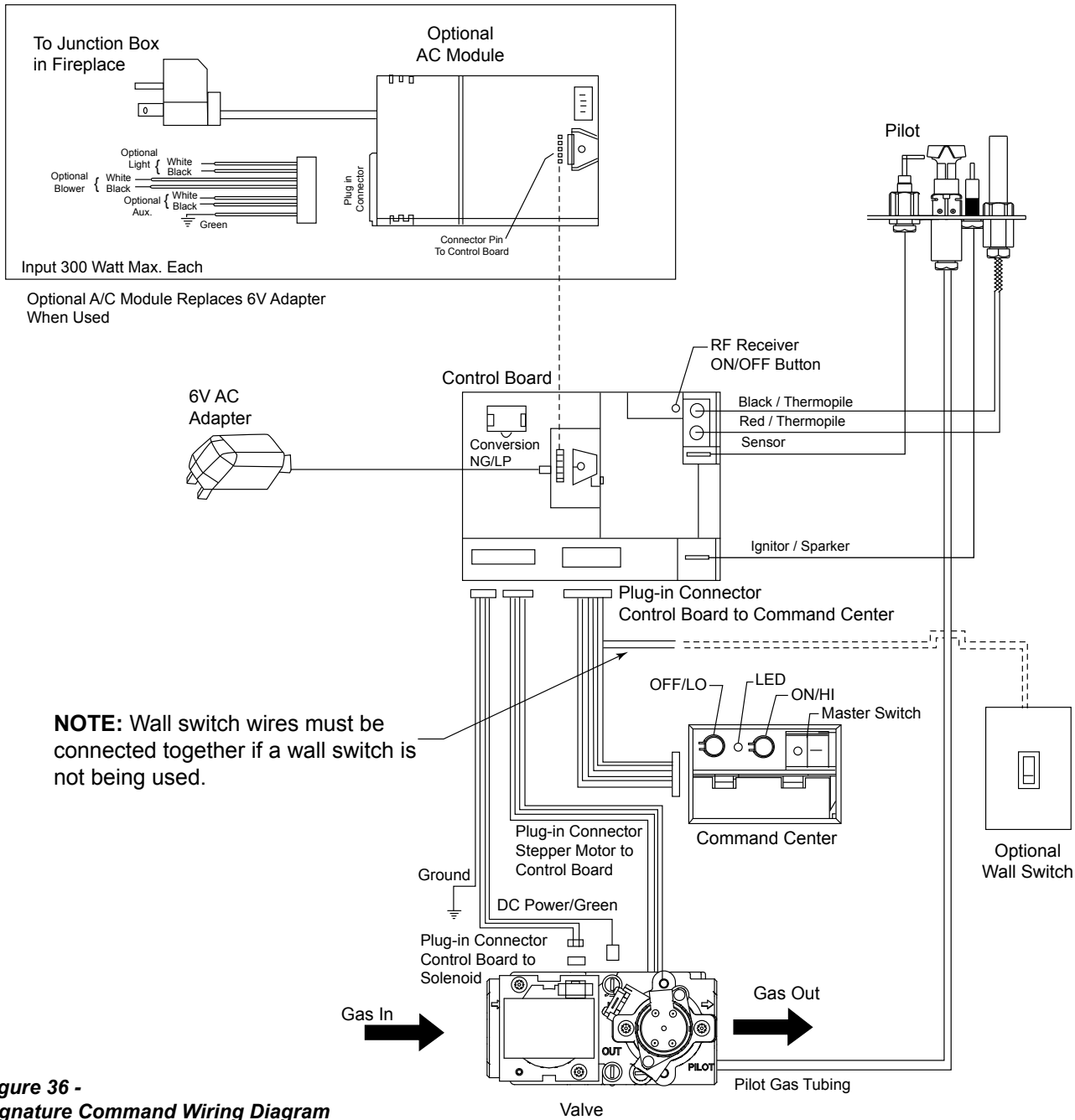


Figure 36 - Signature Command Wiring Diagram

**CAUTION** Electrical connections should only be performed by a qualified, licensed electrician. Main power supply must be turned off before connecting fans to the main electrical power supply or performing service.

**WARNING**

Electrical Grounding Instructions: This appliance 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 receptacle.

**WARNING**

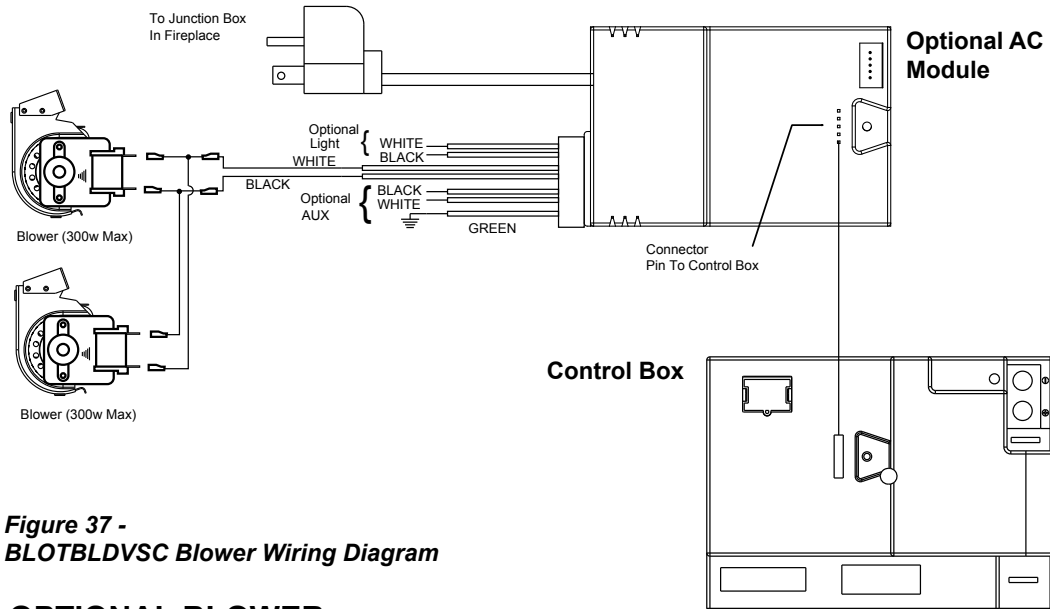
Electrical connections should only be performed by a qualified licensed electrician. Main power supply must be turned off before connecting the fan to the main electrical power supply or performing service.

**BLOTBLDVSC OPTIONAL BLOWER**

The BLOTBLDVSC Blower Kit requires the SCSACM A/C Module and the TSFSC remote to install and operate this kit. Refer to blower instructions for installation.

**NOTE**

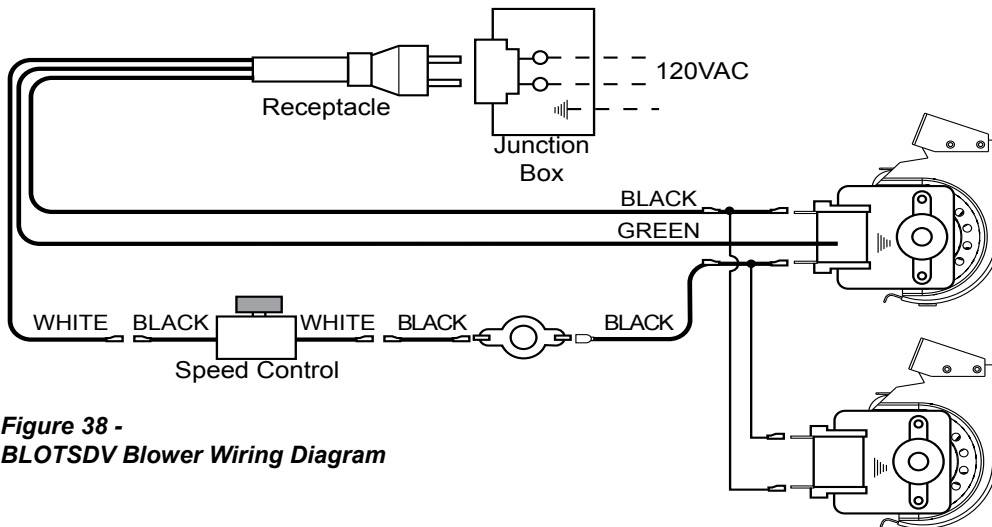
The black and white wires on the AC box wiring harness are marked 'Blower', 'Light' and 'Aux'. It is important to use the wires marked 'Blower' or the control will not work correctly.



**Figure 37 - BLOTBLDVSC Blower Wiring Diagram**

**BLOTBLDV OPTIONAL BLOWER**

Before installing the blower, wire the receptacle into an electrical circuit. This should be done before framing the fireplace. Wire with minimum 60° C wire in accordance with prevailing codes.



**Figure 38 - BLOTSDV Blower Wiring Diagram**

## HEARTH BRICK PLACEMENT

Place the hearth brick centered in front of burner and slide back until it hits the stops on the right and left of burner.

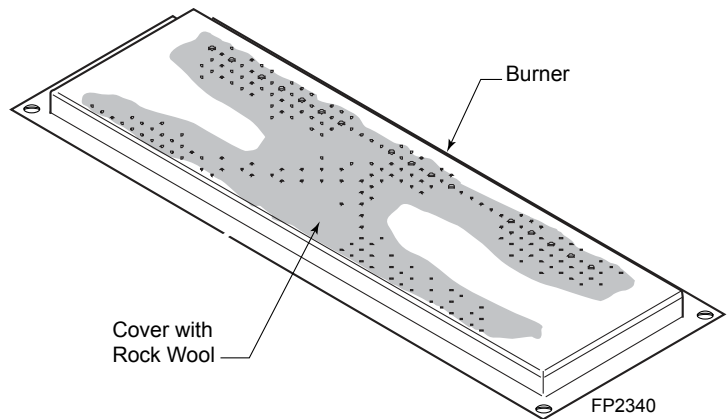
## ROCK WOOL PLACEMENT

1. Place rock wool on burner to provide glowing embers. For best results, pull the rock wool apart into pieces the size of a dime or smaller.
2. Distribute one layer of rock wool to cover the burner.  
*Figure 49*
3. Place the logs on the burner. Refer to *Log Placement* below. Light unit and after 15 minutes, check burner flame and glow. Refer to *Burner Flame*, in the Cleaning and Maintenance section of this manual.

If the flame is blue and only in the center, turn off unit and let cool. After unit cools, remove logs. If the back holes are clear, add more rock wool to the center of the burner. Replace logs and check flame again. Save left over rock wool to refresh when cleaning later. Too much rock wool can disturb the flame and cause sooting on the glass or logs.

### WARNING

Do not use the entire bag of rock wool to cover the burner. This could cause the flame to burn poorly and may lead to sooting.



**Figure 39 -  
Placement of Rock Wool on Burner**

**SAFETY BARRIER INSTALLATION INSTRUCTIONS**



**NOTE:** 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.\* Any safety screen, guard, or barrier removed for servicing the appliance must be replaced prior to operating the appliance.  
 \* See parts list for model number.

1. Remove screen from packaging.
2. Align the four tabs on the sides of the screen frame (two top, two bottom) *Figure 40* with the corresponding slots on the firebox. *Figure 41*.
3. Slide the screen down into the slots until it fits securely in place.

**NOTICE:** It is the responsibility of the installer to ensure the barrier is affixed to the fireplace at the time of installation.

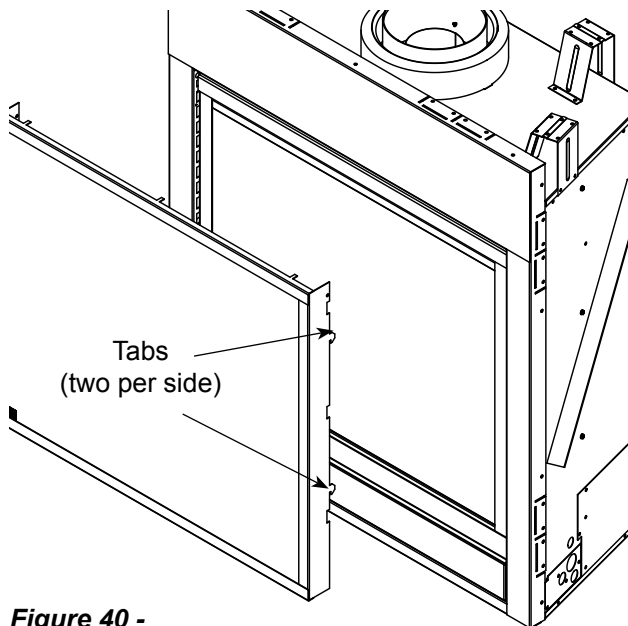


Figure 40 -

DANGER

**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.

**WARNING:** The safety screen barrier must be installed after the glass front is in place. It is **NOT** a replacement for the glass and the unit must **NOT** be operated without the glass in place.

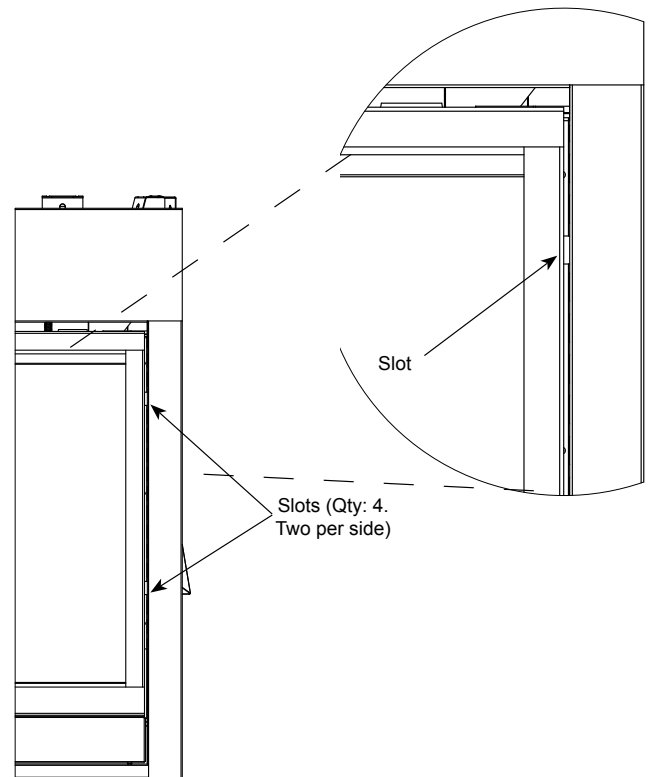


Figure 41 -

**LOG PLACEMENT**

1. Place the rear log (#1) in place by sliding it over the rear pins on the right and the left.

**Step 1 - Rear Log (#1)**

2. Place the right front log (#3) over the burner and grate by matching the hole on the bottom of the log with the pin on the burner. Also match the cut-out on the bottom of the log with the bars on the grate. **NOTE:** When this log is in place pull towards the front.

**Step 2 - Right Front Log (#3)**

3. Place the left front log (#5) over the burner and grate by matching the holes on the bottom of the log with the pin on the burner. Also match the cut-out on the bottom of the log with bars on the grate. **NOTE:** When this log is in place the branch on this log will lay over the rear log on the left. Pull log forward.

**Step 3 - Left Front Log (#5)**

4. Place the right upper log (#2) at an angle toward the burner by matching the rectangular notch on the bottom of this log with the rectangular protrusion on the right front log (#3). The burned side of this log will point toward the burner.

**Step 4 - Right Upper Log (#2)**

5. Place the left upper log (#6) at an angle by matching the rectangular notch on the bottom of this log with the rectangular protrusion on the side of the left front log (#5). The split end should point toward the front.

**Step 5 - Left Upper Log (#6)**

6. Place the small twig (#4) by having the small pointed end of the log toward the front of the fireplace and the fat end resting evenly with the pointed ends of the right and left front logs. Also, the notch on this log will match the middle tong on the grate.

**Step 6 - Small Twig (#4)**



**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 lie.

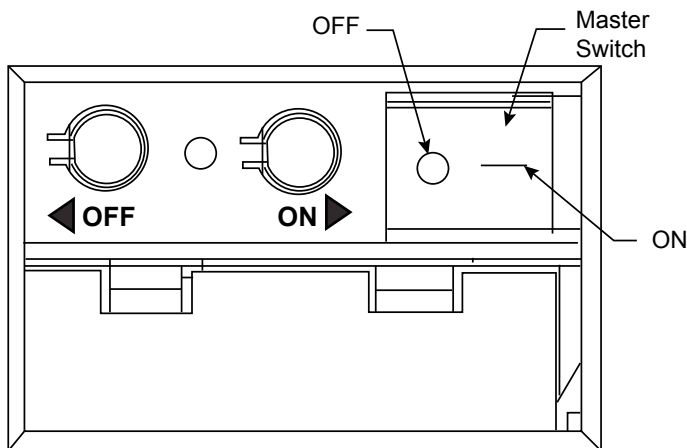
- A.** This appliance is equipped with an ignition device which automatically lights the pilot. Refer to the instructions.
- B.** BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

**WHAT TO DO IF YOU SMELL GAS:**

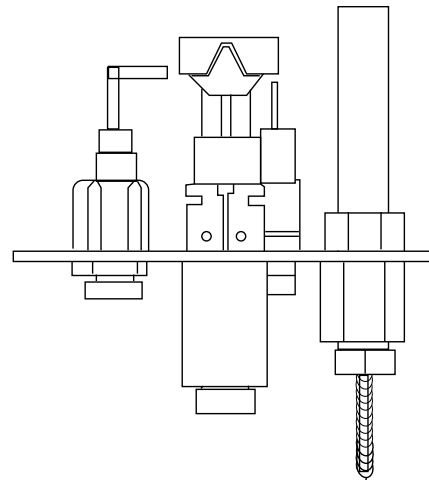
- Do not attempt to light any appliance.
  - Do not touch any electric switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- C.** Use only your finger to push in the master switch. Never use tools. If the switch will not function by hand, do not 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 of it 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 that has been under water.

## OPERATING INSTRUCTIONS

1. **STOP!** Read the safety information above.
2. This appliance is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.
3. With 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 on page 38. If you do not smell gas, go to next step.
4. Press the master switch to the "ON" (-) position. Within eight (8) seconds it will beep once. This indicates the system is ready.
5. Press "ON " button. Sparker will spark and pilot flame will light.
6. Once pilot flame is established, the main burner flame will light automatically.
7. If the pilot will not stay lit after several tries, turn the master switch to "OFF" and call your service technician or gas supplier.



**Command Center**



## TO TURN OFF GAS TO APPLIANCE

1. Turn master switch to "OFF".
2. Turn off all electrical power to the appliance if service is to be performed.

**FEATURES**

**Command Center**

- Easy Access Function Operation and System Configuration
- Operation Confirmation/Fault Diagnostic Indications (LED/Buzzer)
- ON/OFF/Hi/Med/Low Operation
- Optional Wall Mounting

**Control Board**

- Electronic Ignition
- Pilot Lockout safety feature
- Electric Power Regeneration from Thermopile to save battery
- 6-hour Automatic Shut Down Option
- Convenient NG/LP Gas Type Conversion
- Standing Pilot/Intermittent pilot Conversion
- Previous settings Restoration Ability (Memory Off)
- Uninterrupted Operation During Power Outage (Automatic Battery Backup)
- ON/OFF RF Remote Receiver
- Optional Transmitter Learn Capability

**AC Module Board (Optional, requires TSFSC Remote)**

- Easy Snap-on Design
- Embedded Compact 120 VAC Adapter with Auto Battery Back up Feature
- Remote Controlled 3-step Blower, Lighting, and On/Off Auxiliary AC Outputs

**Transmitter (Optional)**

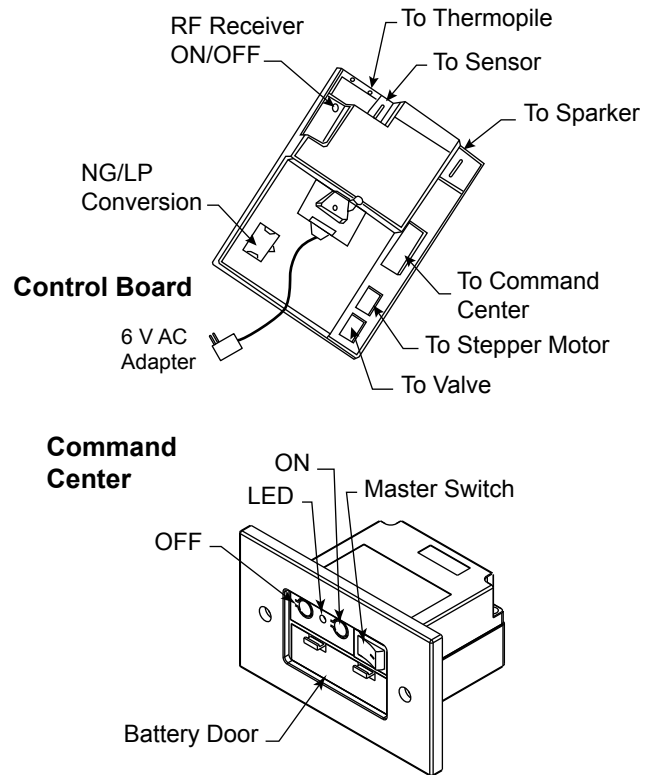
	TSFSC	TSTSC	TSMSC	RTSC	RMSC
Three Flame Height Settings	X	X	X	X	X
Low battery Indication for Transmitter	X	X	X	X	X
Child Proof Lock-out	X	X	X	X	X
LCD Backlight	X	X	X	X	X
Security Codes 16	X	X	X	X	X
Countdown 6 hr Timer	X	X	X	--	--
Standard Thermostatic Control Mode	X	X	--	X	--
Smart Mode® Thermostat (Auto Flame & Blower Modulation)	X	X	--	--	--
Three Brightness Settings for Lights	X	--	--	--	--
Three Speed Control for Blower	X	--	--	--	--
On/Off Auxiliary	X	--	--	--	--
Programmable Timer to turn blower on and off	X	--	--	--	--

**BATTERY INSTALLATION**

The Command Center uses four (4) "AA" batteries as back up for power outages. The system can operate for approximately six (6) months on battery power.

**To Install Batteries (not included):**

1. Press down the battery door tabs and pull out to remove battery door.
2. Install the batteries as indicated on Command Center.
3. Close battery door by snapping in place.
4. When the four (4) batteries are installed the system will operate without power.
5. The batteries should be replaced when the LED indicates low battery or at least once a year.



**Figure 42 - Signature Command System Components**

## SYSTEM CONFIGURATION/SETUP

All System configuration/setup is done on the Command Center.

**NOTE:** When using On/Off wall switch, the switch must be in the ON position to perform all configuration set ups at the command center.

## COLD CLIMATE OPTION

Choose the Mode That Best Suits Your Needs

The Signature Command System is designed to operate in either Standing Pilot or Intermittent Pilot mode.

- The Standing Pilot Mode is best for colder climates when the pilot must remain on continuously to prevent condensation and ensure reliable operation.
- The Intermittent Pilot Mode is ideal for maximum efficiency, igniting the pilot only when needed to start your fireplace, lowering fuel consumption and reducing your carbon footprint.

Either mode benefits from the instantaneous battery back-up, so you never have to worry about a power outage.

**NOTE:** The Signature Command System comes standard in the Intermittent Pilot mode, so you must follow the instructions below to switch to Standing Pilot Mode if needed.

### Intermittent/Standing Pilot Setup (Default intermittent)

1. Holding the ON button on the Command Center while turning on the master switch will toggle between standing pilot and intermittent pilot.
2. After the above operation, one beep (for standing pilot) or two beeps (for intermittent pilot) will be given as confirmation.

### Six-hour Safety Shutdown Option (Default ON)

1. The system comes preset from the factory with a six (6) hour shutdown from its last command of operation. This is done to prevent the fireplace from continuing to operate if unattended. You may disable this feature if you wish.

**NOTE:** By disabling this feature, your fireplace may continue to operate unattended.

2. When the master switch is in the ON position (“-”), pressing the ON button and the OFF button on the Command Center simultaneously will toggle between enabling and disabling the six-hour shutdown option.
3. After the above operation, one beep (for enabling the six-hour shutdown option) or two beeps (for disabling the six-hour shutdown option) will be given as confirmation.

### Remote Transmitter Learn Function (Default OFF)

1. The RF receiver button located on the Control Board must be in the on position before the learn function can begin. Use paper clip to depress button. One beep for RF receiver ON or two beeps for RF receiver OFF will be given as confirmation. Refer to Figure 57 for location.
2. After the RF receiver is on, holding the OFF button on the Command Center while turning on the master switch will activate the learn function for the transmitter.
3. After the above operation, two beeps will be given and the green LED on the Command Center will flash for 10 seconds.
4. During the 10 seconds, press the OFF button on a transmitter to learn. Another two beeps will be given to confirm a successful learning. Refer to transmitter instructions for remote operations.

### Shutting Off the Standing Pilot (Temporary Shut Off)

To shut off the standing pilot for service or summer shut down, press and hold the ON button on the Command Center for 3 seconds when the master switch is in the ON position (“-”) and the main burner is off.

**Note:** Pilot will resume the next time system is turned on.

### Key Combinations for System Settings

**NOTE:** When On/Off wall switch is used, it must be in the ON position to perform all system setups.

Function	Operation	Default Setting
Intermittent/Standing Pilot Setup	Hold the ON ▲ button while turning on the master switch (Beep once for standing pilot, twice for intermittent pilot)	Intermittent Pilot
Standing Pilot Temp. Shutoff	Hold the ON ▲ button 3 seconds (when the master switch on the main burner is off)	
RF Remote Receiver On/Off	Push the RF receiver On/Off button on the control board (Beep once for ON and beep twice for OFF)	RF OFF
Learn Remote Transmitter	Hold the OFF ▼ button while turning on the master switch (Beep twice then press any handheld remote button)	
6-hour Safety Shutdown setup	Press the ON ▲ button and OFF ▼ button simultaneously (Beep once for ON, twice for OFF)	ON

**FUNCTIONS/OPERATION**

**Turning on the fireplace**

1. Turn on the master switch and wait for a beep.
2. Press the ON button on the Command Center or turn on wall switch. Pilot will light and burner will come on High setting or last memory setting (See Turning Off Fireplace below). For memory feature.

**Pilot Safety Lockout Function**

1. If the pilot doesn't light after sparking for 30 seconds, pilot trial lockout happens. The LED on the Command Center flashes Green once every 2 seconds, until reset.
2. If the pilot flame is lost during normal operation, the system will try three (3) times to relight after three (3) failures, flame loss lockout happens. The LED on the Command Center flashes Red-Green once every 2 seconds, until reset.
3. Turning the master switch on the Command Center to the off position, then ON again will reset the system.

**Flame Height Control**

1. Press the ON button (on the Command Center) once to turn on the main burner with maximum flame height.
2. Press the OFF button to decrease flame height. The first

two presses will decrease the flame height to medium and low.

3. The third press on OFF will turn off the main burner. In standing pilot configuration, the pilot will stay; in intermittent pilot configuration, the pilot will be shut off.

**Turning the Fireplace Off**

There are three ways to turn the fireplace off.

1. Flip the master switch to the off ("O") position. (This will turn the entire system OFF.)
2. Press the OFF button to Medium, Low, then Off.
3. Hold the OFF button anytime for three seconds or by turning off the wall switch. These two commands of OFF are (Memory Off) the system will remember all last settings before turning off. The next time the fireplace is turned on, all settings will resume. To reset, change to the desired settings and shut off by using the Memory Off commands and the system will be reset to those new settings.

**Self Diagnostics Chart**

The Command Center has a self-diagnostic LED enabling you to troubleshoot problems and potentially avoid a service call. Please refer to the charts below for indicator reference.

Function	Operation
Power Up	Flip the master switch to the ON ("I") position to power up the system
Fireplace ON	Press the ON ▲ button on the Command Center or turn on wall switch to turn the fireplace on
Fireplace OFF	Flip the master switch to the OFF ("o") position OR press the OFF ▼ button 3 times OR for Memory Off, hold the OFF ▼ button 3 seconds, or turn off wall switch
Flame Height Up	Press the ON ▲ button once to turn on the fireplace with maximum flame height
Flame Height Down	Press the OFF ▼ button to lower the flame height to Medium and Low

Fault	LED Indication
Conversion Cover Missing	One RED (1 time)
Spark Fail	Two RED (1 time)
No Sensor Signal	Three RED (1 time)
Pilot Lockout - trial	One GREEN, every 2 sec. (until manual reset)
Pilot Lockout - flame loss	One RED-GREEN, every 2 sec. (until manual reset)
Low Battery	One RED, every 10s (continuously)
No or Low Thermopile Power	Two RED, every 10s (continuously)
Learning	GREEN Flashes, every 1 sec. (for 10 sec.)
AC Power On	GREEN solid
Pressure Switch Failure (Power Vent Only)	One RED every 2 sec. (until manual reset)

**WARNING**

Turn off gas before servicing fireplace. It is recommended that a qualified service technician perform these check-ups at the beginning of each heating season

**BURNER, PILOT AND CONTROL COMPARTMENT**

Keep the control compartment, logs, and burner areas surrounding the logs clean by vacuuming or brushing at least twice a year. Make sure the burner porting, pilot air opening and burner air opening are free of obstructions at all times.

**PILOT FLAME**

The flames from the pilot should be visually checked as soon as the heater is installed and periodically during normal operation. **The pilot flame must always be present when the fireplace is in operation.** *Figure 43.* The pilot flame has three distinct flames, one engulfing the thermopile, one engulfing the thermocouple or sensor, and the other reaching to the main burner.

**BURNER**

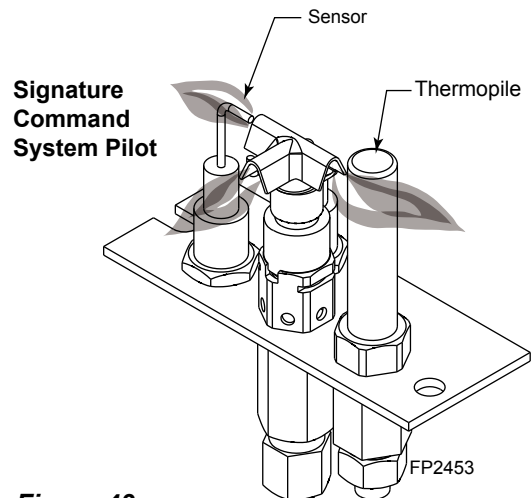
Inspect area around the injector. Remove any lint or foreign material with a brush or vacuum.

**BURNER FLAME**

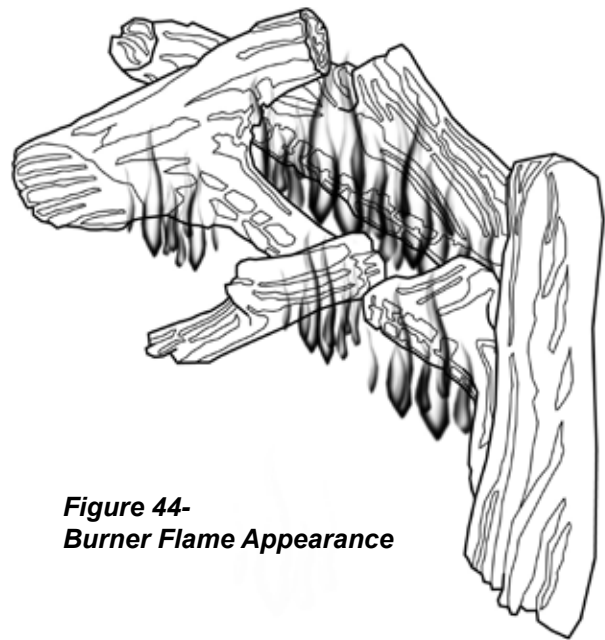
The flames from the burner should be visually checked as soon as the heater is installed and periodically during normal operation. In normal operation, at full rate, and after operating for about 15 to 30 minutes, the flame should be yellow and slightly taller than the rear log. *Figure 44*

If the flame is blue and only in the center, turn off unit and let cool. After unit is cool, remove logs and check to make sure the back holes in the burner are not covered with rock wool. If the back holes are clear, add more rock wool to the center of the burner. Replace logs.

**NOTE: The type of installation, vent system configuration, and wind effects may cause the flame patterns to vary.**



**Figure 43 -  
Pilot Flame**



**Figure 44-  
Burner Flame Appearance**

LG647

## VENT SYSTEM

The fireplace and venting system should be inspected before initial use and at least annually by a qualified field service person. Inspect the external vent cap on a regular basis to make sure that no debris is interfering with the airflow. Inspect entire venting system to ensure proper function.

## GLASS DOOR

Thoroughly clean the inside of the glass door after using the fireplace for ten hours. Periodically clean the glass door as necessary.

When cleaning the glass, remember:

- **Do not remove the glass when hot.** Allow glass to cool before removal.
- NEVER use abrasive materials.
- Keep children and pets a safe distance away.
- Never operate the fireplace without the glass door properly secured.
- Never operate the fireplace if the glass is broken.
- Replace any glass that is chipped, cracked, or broken. Replacement glass door assemblies **MUST** be supplied by the fireplace manufacturer – **No substitute materials may be used.**
- Handle glass door with care to avoid striking or scratching it on hard objects.

To clean glass door, follow “Glass Removal” procedure outlined in the *Final Installation* section. Film deposit on the inside of the glass should be cleaned off using a nontoxic, non-corrosive, non-abrasive, mild-cleaning solution. Simply apply an adequate amount to the glass and wipe off with a damp cloth. After all maintenance has been completed, re-install glass door and safety screen barrier.

## LOGS

Leave logs installed in the fireplace for cleaning. Vacuum surface of the logs with a brush attachment. If logs must be removed for cleaning, handle carefully by holding gently at each end. Gloves are recommended to prevent skin irritation from ceramic fibers. If skin becomes irritated, wash gently with soap and water. Vacuum surface of logs with brush attachment or brush logs with a soft bristle brush (i.e. clean, dry paintbrush). To place logs back in the fireplace, see “Log Placement” found in the *Final Installation* section.

**NOTE: Do not use fluids to clean ceramic fiber logs.**

## ROCK WOOL

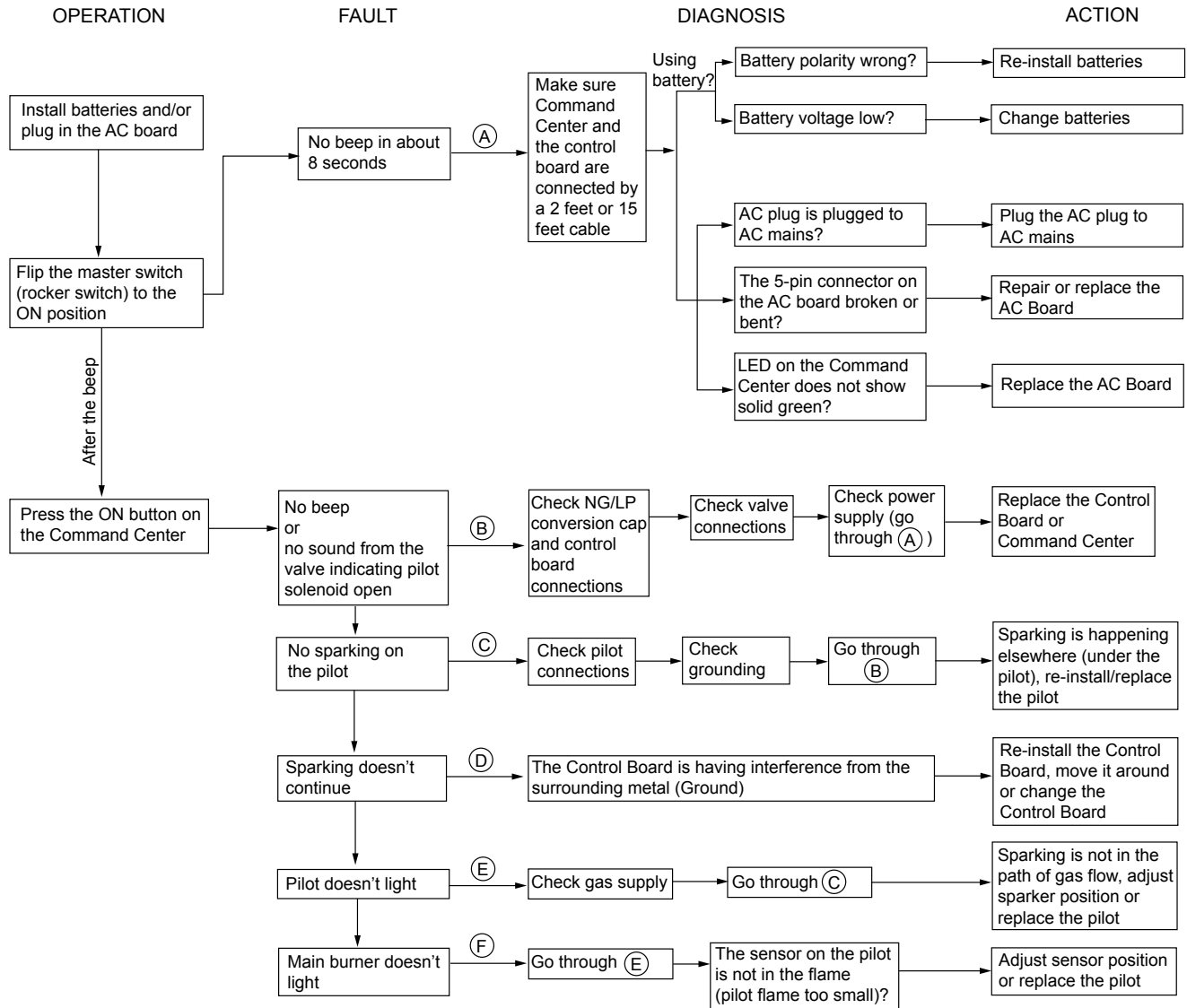
Replace or add rock wool as required following installation instructions in the *Final Installation* section of this manual.

**GENERAL TROUBLESHOOTING**

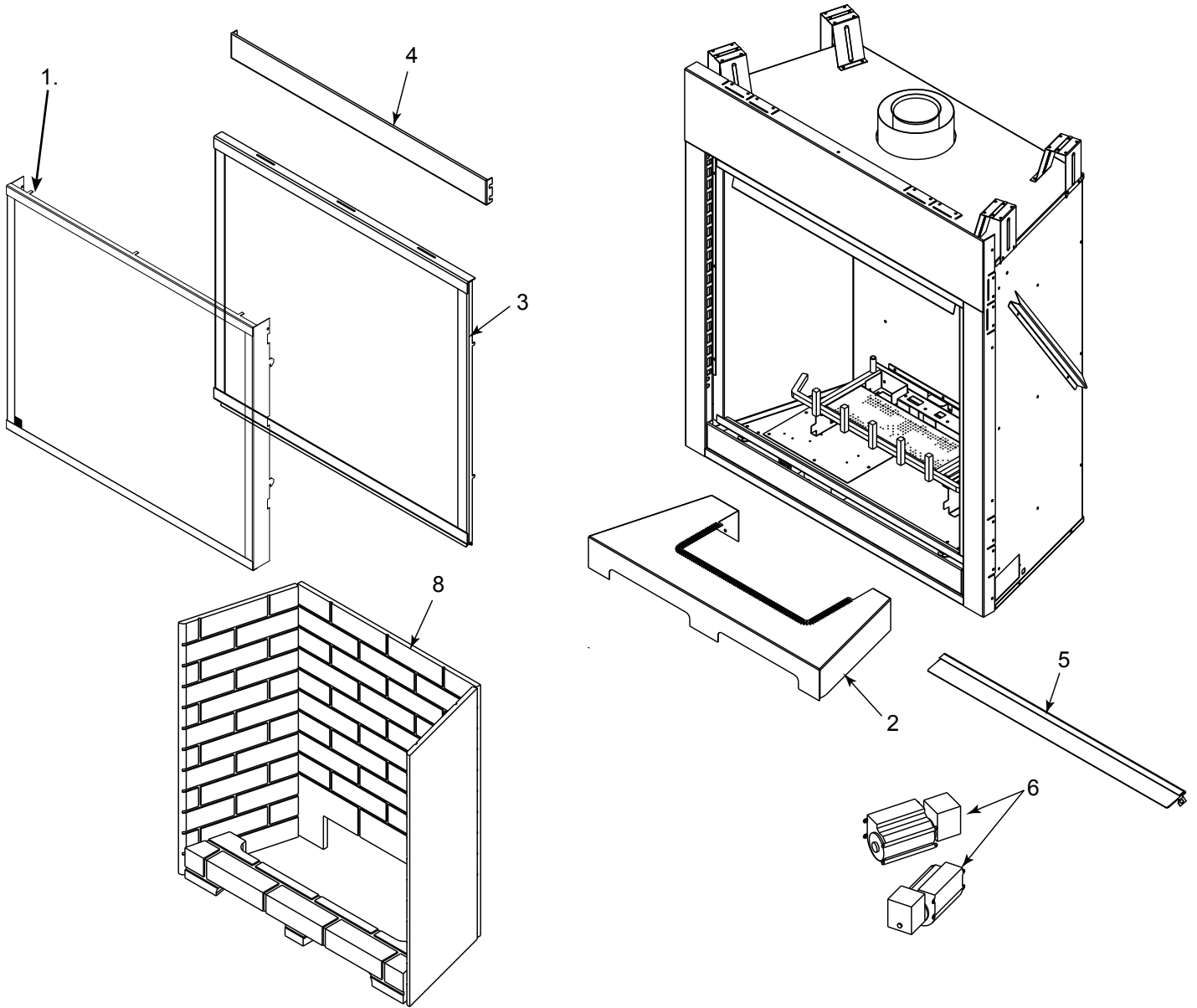
<b>SYMPTOM</b>	<b>POSSIBLE CAUSE</b>	<b>ACTION</b>
1. The pilot and main burner extinguish while in operation	<p>A. Inner vent pipe leaking exhaust gases back into system</p> <p>B. Horizontal vent improperly pitched</p> <p>C. Improper vent cap installation</p>	<p>A. Check for flue product leak. Replace defective pipe section.</p> <p>B. Check horizontal-venting piping is running upward 1/4" per foot. Do not run the pipe level or downward.</p> <p>C. Check for proper installation and freedom from debris or blockage.</p>
2. Glass Soots	A. Flame impingement on logs	<p>A. Install log set per the instructions Inspect the injector and air intake area. Make sure this area does not have any blockage from debris and clean. Check gas supply</p>
3. Flame burn blue and lifts off burner (ghosting)	A. Insufficient oxygen being supplied	<p>A. Ensure that the vent cap is installed properly and free of debris. Ensure that the vent system joints are tight and have no leaks. Ensure that no debris has been blocking the inner air intake at the bottom back of the combustion chamber. Ensure that the glass is properly secure and latch.</p>



SIGNATURE COMMAND SYSTEM



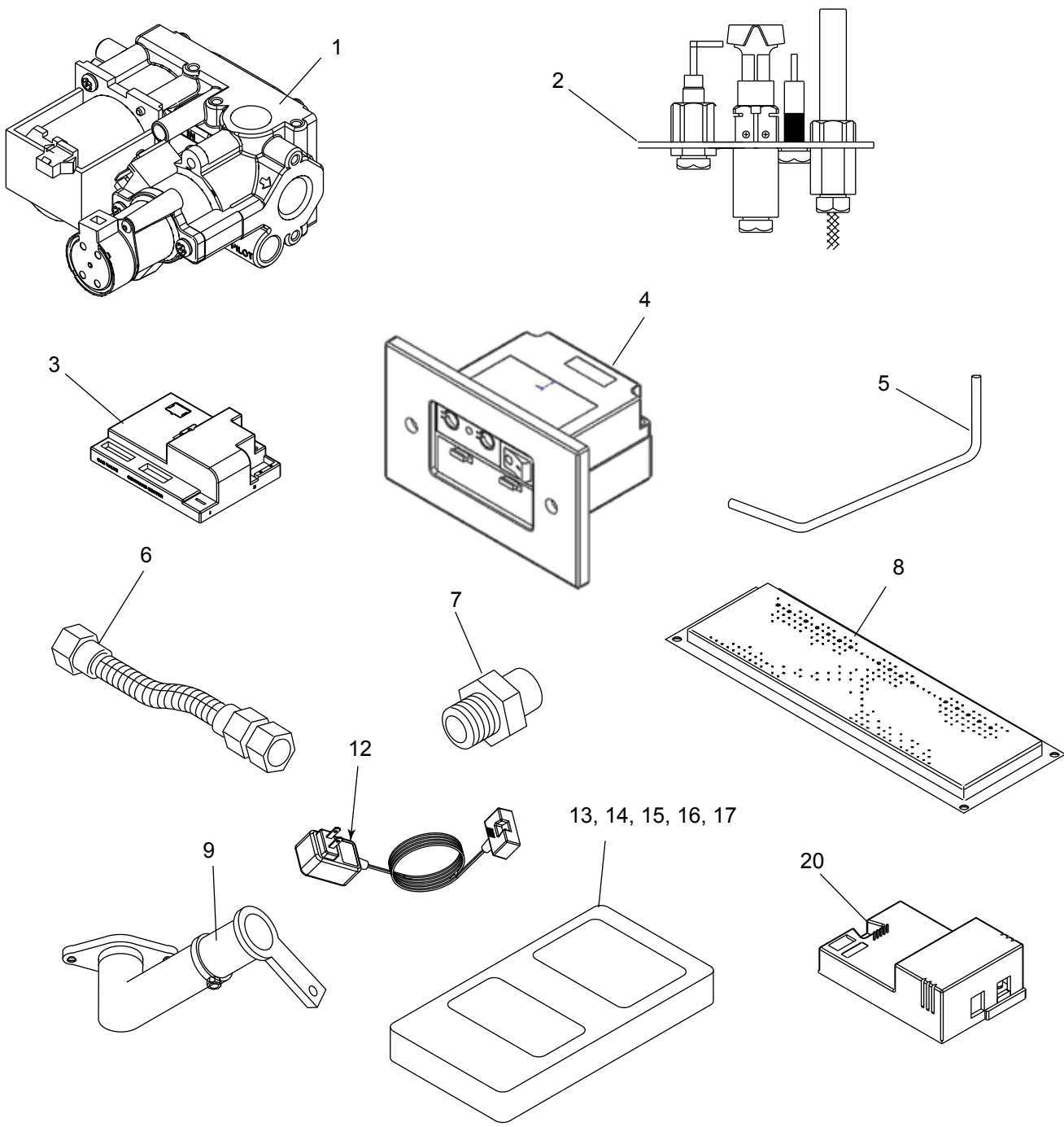
FIREBOX COMPONENTS



**FIREBOX COMPONENTS**

Ref.	Description	Qty.	BLDV300	BLDV400	BLDV500
1.	Safety Screen Barrier	1	20306627K	20306633K	20306639K
2.	Sheet Metal Base	1	20302194	74D0514	74D0515
3.	Glass Frame Assy	1	20301034	74D0096K	74D0211TK
4.	Control Cover	1	20302002	74D0038K	74D0119
5.	Eyebrow Canopy	1	20302585K	20302586K	20302587K
	Junction Box Assy (not shown)	1	26D2128K	26D2128K	26D2128K
<b>Accessories / Field Installed Options</b>					
6.	T-Stat Blower w/ Speed Control	1	BLOTBLDV	BLOTBLDV	BLOTBLDV
6.	SCS Blower w/ Speed Control & Time Delay	1	BLOTBLDVSC	BLOTBLDVSC	BLOTBLDVSC
8.	Firebrick Set - Cottage Clay	1	FBBLDV300CC	FBBLDV400CC	FBBLDV500CC
8.	Firebrick Set - Cottage Red	1	FBBLDV300CR	FBBLDV400CR	FBBLDV500CR
8.	Firebrick Set - Vintage Brown	1	FBBLDV300VB	FBBLDV400VB	FBBLDV500VB
	Porcelain Blk Liner Kit (not shown)	1	BLPB300	BLPB400	BLPB500
10.	Light Kit (not shown)	1	BL300LK	BL400LK	BL500LK
11.	Cover Kit (not shown)	1	RLSCB300	RLSCB400	RLSCB500
12.	Stone Kit (not shown)	1	BLCS3	BLCS	BLCS
13.	Glass Kit 2.25 lbs. (not shown) (BLDV400/500 Series require 2 bags)	1	GLB,O,D,S,E	GLB,O,D,S,E	GLB,O,D,S,E

SIGNATURE COMMAND SYSTEM



**SIGNATURE COMMAND SYSTEM**

Item	Description	Qty.	BLDV 300NSC7	BLDV 300PSC7	BLDV 400NSC7	BLDV 400PSC7	BLDV 500NSC7	BLDV 500PSC7
1.	Gas Valve Assembly	1	80D0001	80D0002	80D0001	80D0002	80D0001	80D0002
2.	Pilot Assembly	1	80D0006	80D0007	80D0006	80D0007	80D0006	80D0007
3.	Control Box	1	80D0018	80D0019	80D0018	80D0019	80D0018	80D0019
4.	Command Center	1	80D0005	80D0005	80D0005	80D0005	80D0005	80D0005
5.	Burner Tube	1	74D0604	74D0604	74D0604	74D0604	74D0604	74D0604
6.	Flexhose with Shutoff Valve	1	69D0030	69D0030	69D0030	69D0030	69D0030	69D0030
7.	Injector	1	20H3155	33D4046	20H3147	33D5039	33D5040	57D0210
8.	Burner Assembly	1	74D0098K	74D0098K	74D0098K	74D0098K	74D0098K	74D0098K
9.	Venturi	1	69D1119	69D1026	69D1119	69D1026	69D1119	69D1026
	Wire Valve/Control (not shown)	1	80D0010	80D0010	80D0010	80D0010	80D0010	80D0010
	Wire Command Center Control Box (2 feet) (not shown)	1	80D0008	80D0008	80D0008	80D0008	80D0008	80D0008
12.	A/C Adapter (6 volt)	1	80D0041	80D0041	80D0041	80D0041	80D0041	80D0041

<b>Accessories</b>		
13.	Hand Held Remote Control with HI/LO and Timer	RMSC
14.	Hand Held Remote Control with HI/LO and Tstat	RTSC
15.	Touch Screen Remote w/Opt. Light, Aux & Blower Control	TSFSC
16.	Touch Screen Remote Hi/Lo and Timer	TSMSC
17.	Touch Screen Remote Hi/Lo and TStat	TSTSC
18.	Wall Thermostat ON/OFF (not shown)	WT
19.	SCS Wall Mount Extension Kit (15' wire, rough-in box, wall cover) (not shown)	SCSWEK
20.	SCS AC Module (Opt. blower, light & aux control)	SCSACM
21.	Forged Andiron 83/4 (not shown)	FAI83/4
22.	Contemporary Stone Kit	BLCS3, BLCS
23.	Contemporary Reflective Glass Kit	GKD, GKO, GKE, GKS, GKB

**NOTE:** TSFSC must be used with SCS A/C Module to control lights, blower and aux.

**Fuel Conversion Kits - Signature Command System**

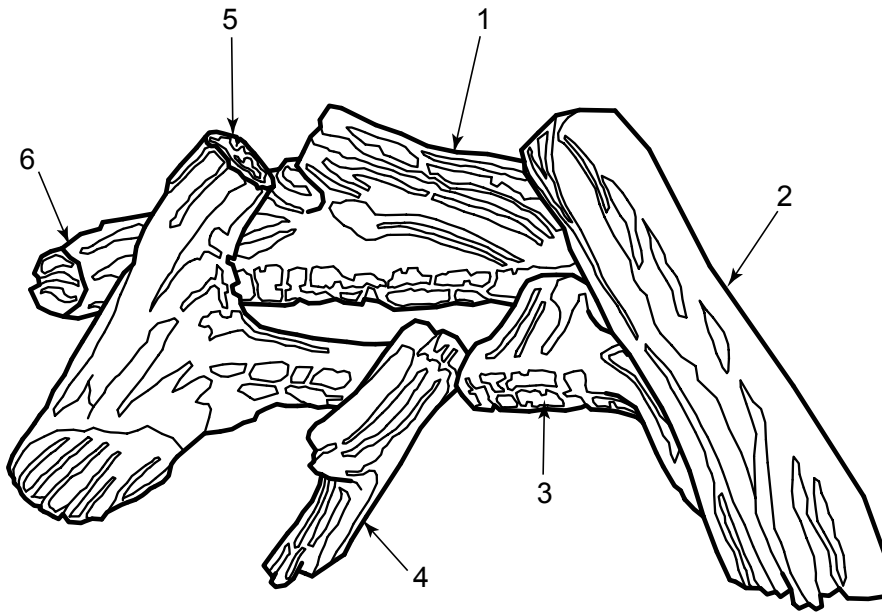
**Natural Gas to LP**

- BLDV300      Kit #BLCK300CKPS
- BLDV400      Kit #BLCK400CKPS
- BLDV500      Kit #BLCK500CKPS

**LP to Natural Gas**

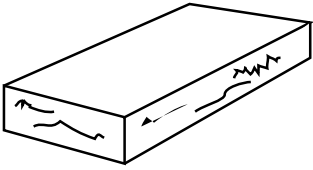
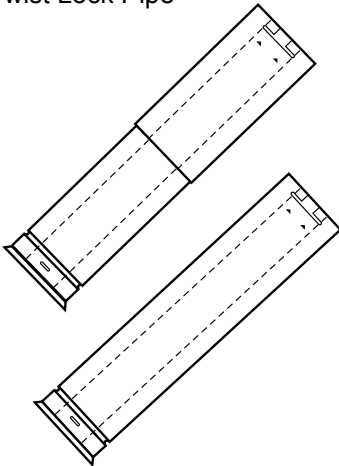
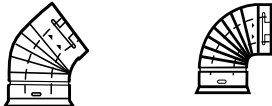
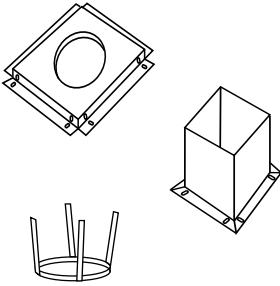
- BLDV300      Kit #BLCK300CKNS
- BLDV400      Kit #BLCK400CKNS
- BLDV500      Kit #BLCK500CKNS

LOGS

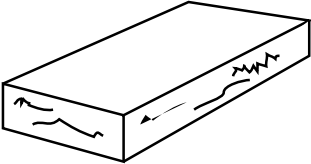
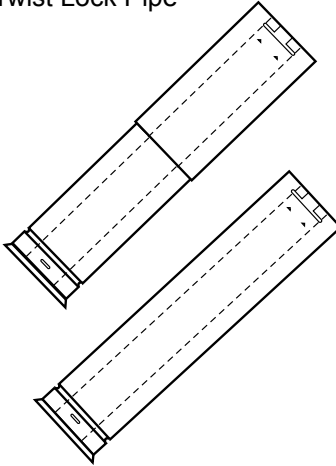
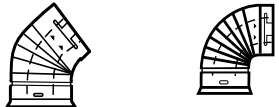
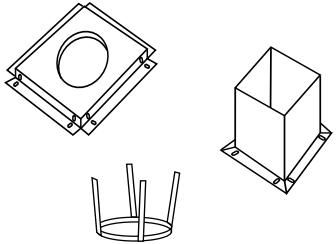


Ref.	Description	Qty.	BLDV300	BLDV400	BLDV500
1.	Rear Log #1	1	20302139	74D0053	74D0053
2.	Right Upper Log #2	1	20302140	74D0054	74D0054
3.	Right Front Log #3	1	20302141	74D0055	74D0055
4.	Small Twig #4	1	20302142	74D0056	74D0056
5.	Left Front Log #5	1	20302143	74D0057	74D0057
6.	Left Upper Log #6	1	n/a	74D0058	74D0058

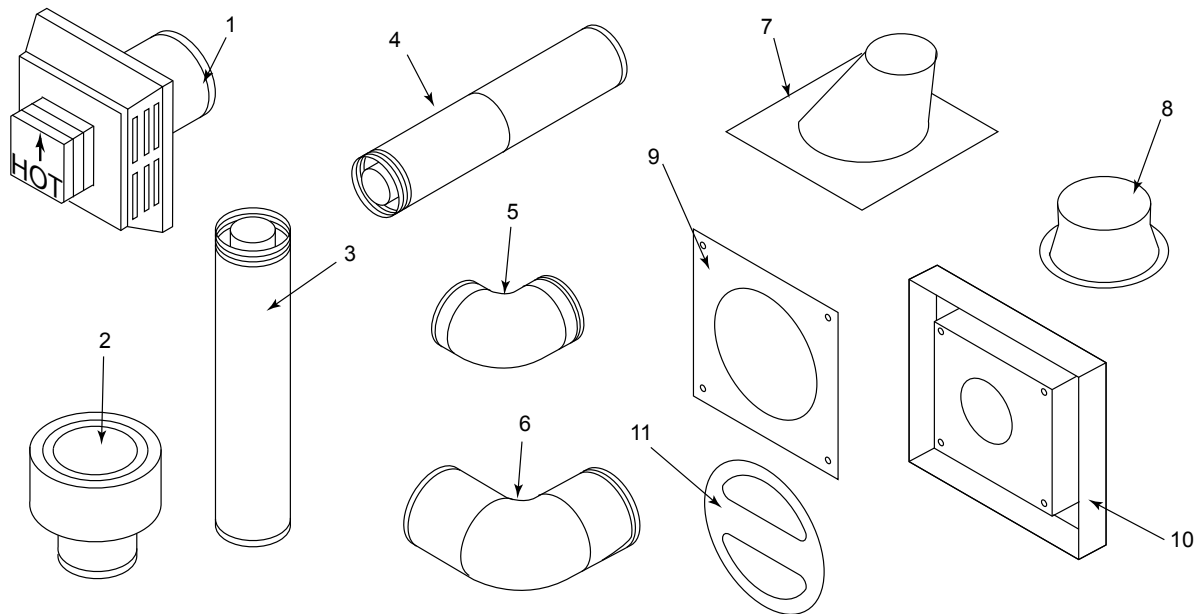
**VERTICAL VENTING**

	<b>Description</b>	<b>Model Number</b>
Vertical Vent Termination Kits 	Vertical Vent Termination w/ Storm Collar (flashing NOT included)	7TDVSKV
	Vertical Vent Termination w/ Storm Collar - 8 pack (flashing NOT included)	7TDVSKV/8
	Vertical Vent Termination w/ 1/12 - 6/12 Flashing, Storm Collar and Ceiling Support Kit	7TDVSKVA*
	Vertical Vent Termination w/ 6/12 - 12/12 Flashing, Storm Collar and Ceiling Support Kit	7TDVSKVB*
	Vertical Vent Termination w/ Flat Flashing, Storm Collar and Ceiling Support Kit	7TDVSKVF*
Twist Lock Pipe 	20" Rigid Pipe - single pack	7TDVP20
	30" Flex Pipe - single pack	7FDVP30
	12" - 18" Adjustable Vent Length	7TDVP1218
	35" - 64" Adjustable Vent Length	7TDVP3564
	8" Vent Pipe - 4 pack	7TDVP8/4
	12" Vent Pipe - 4 pack	7TDVP12/4
	24" Vent Pipe - 4 pack	7TDVP24/4
	36" Vent Pipe	7TDVP36
	36" Vent Pipe - 30 pack	7TDVP36/30
	48" Vent Pipe	7TDVP48
	48" Vent Pipe - 30 pack	7TDVP48/30
Twist Lock Elbows 	45° Elbow for Vertical/Horizontal Offset	7TDV45
	45° Elbow for Vertical Offsets - 8 pack	7TDV45/8
	90° Elbow for Vertical/Horizontal Offset	7TDV90
	90° Elbow for Vertical/Horizontal Offset - 8 pack	7TDV90/8
Shields and Supports 	1" Firestop	7DV1FS
	1" Attic Insulation Shield	7DV1AIS
	Combination Horizontal Offset/Roof Support	7DVCS

**HORIZONTAL VENTING**

	<b>Description</b>	<b>Model Number</b>
Horizontal Vent Termination Kits 	Rear Vent Hot Touch Termination Kit w/ 10" to 16" Adjustable Termination Pipe, Firestop, and Hot Touch Termination w/ Siding Shield	7TBRHTK
	Up and Out Side Wall Termination Kit w/ 10" to 16" Adjustable Termination Pipe, 90° Elbow, Firestop, and Cool Touch Termination w/ Siding Shield	7TDVSCTK
	Rear Vent Cool Touch Termination w/ Siding Shield for Straight-out Applications and Firestop - 8 pack	7TRVCT/8
	Rear Vent Hot Touch Termination w/ Siding Shield for Straight-out Applications and Firestop - 8 pack	7TRVHT/8
	Termination Guard for 7" T.L. Rear Vent Hot Touch Terminations (97TRVT/7TSVKT)	7TRVTG
	Snorkel Termination	7TDVSNORK
	7" T.L. DVRTSB Termination Screen Guard	7TBSG
	Up and Out Starter Kit w/ 40" Flex Pipe, Firestop, Cool Touch Termination w/ Siding Shield, and 2 ea. Clamp Bands	7FDVSCTK
Twist Lock Pipe 	20" Termination Pipe - 8 pack	7TDVP20/8
	10" - 16" Adjustable Termination Pipe - 4 pack	7TDVPA/4
	12" - 18" Adjustable Vent Length	7TDVP1218
	35" - 64" Adjustable Vent Length	7TDVP3564
	8" Vent Pipe - 4 pack	7TDVP8/4
	12" Vent Pipe - 4 pack	7TDVP12/4
	24" Vent Pipe - 4 pack	7TDVP24/4
	36" Vent Pipe	7TDVP36
	36" Vent Pipe - 30 pack	7TDVP36/30
	48" Vent Pipe	7TDVP48
	48" Vent Pipe - 30 pack	7TDVP48/30
Twist Lock Elbows 	45° Elbow for Vertical/Horizontal Offset	7TDV45
	45° Elbow for Vertical Offsets - 8 pack	7TDV45/8
	90° Elbow for Vertical/Horizontal Offset	7TDV90
	90° Elbow for Vertical/Horizontal Offset - 8 pack	7TDV90/8
Shields and Supports 	1" Firestop	7DV1FS
	3" Firestop	7DV3FS
	1" Attic Insulation Shield	7DV1AIS
	Combination Horizontal Offset/Roof Support	7DVCS





**VENT COMPONENTS FOR 4" X 6<sup>5</sup>/<sub>8</sub>" (Duravent, Selkirk)  
4" x 6<sup>1</sup>/<sub>2</sub>" (Metal-Fab)**

Qty/ Item	Box	Description	Current Duravent or Vermont Castings Group Part no.	Old Duravent or Vermont Castings Group Part no.	Selkirk Part no.	Metal-Fab Part no.
1	1	Thru-roof Flexible Pipe Termination Kit with flex adapter 24" rigid pipe, roof support 4" x 6 <sup>5</sup> / <sub>8</sub> " and termination cap	TRFK	--	--	--
1	1	Horizontal Square Termination Cap with built-in vinyl siding standoff, heat deflector and firestop	BHRTK	BHRTK	--	--
1	1	Square Horizontal Termination Cap	46DVA-HC	985	4DT-HC	4DHT
1	1	Round Horizontal Termination Cap	46DVS-HRCS	--	--	--
1	1	Sconce Termination Cap (aluminum)	46DVA-HSC	--	--	--
2	1	Low-Profile Vertical Termination Cap	46DVA-VC	980	4DT-VC	4DVT
3	6	6" Pipe Length (galvanized)	46DVA-06	908	4DT-06	4DV6
3	6	9" Pipe Length (galvanized)	46DVA-09	907	4DT-09	--
3	6	12" Pipe Length (galvanized)	46DVA-12	906	4DT-1	4D12
3	6	24" Pipe Length (galvanized)	46DVA-24	904	4DT-4	4D24
3	6	36" Pipe Length (galvanized)	46DVA-36	903	4DT-36	4D36
3	6	48" Pipe Length (galvanized)	46DVA-48	902	4DT-48	4D48
4	6	8 <sup>1</sup> / <sub>2</sub> " Pipe Extension (galvanized)	46DVA-08A	--	4DT-AJ	--
4	6	16" Pipe Extension (galvanized)	46DVA-16A	--	4DT-AJ14	--
5	6	45° Elbow (galvanized)	46DVA-E45	945	4DT-EL45	4D45L
6	6	90° Elbow (galvanized)	46DVA-E90	990	4DT-EL90	4D90L
7	6	Adjustable Roof Flashing 0/12 - 6/12	46DVA-F6	943	4DT-AF6	4DF
8	6	Storm Collar	46DVA-SC	953	4DT-SC	4F5C
9	6	1" Firestop	46DVA-FS	963	4DT-FS	4DF5
9	6	3" Firestop	FS3	--	--	--
10	1	Vinyl Siding Standoff	46DVA-VSS	950	4DT-VS	4DVS
11	1	Restrictor Disk	45D0551	45D0551	--	--
	1	Attic Insulation Shield	46DVA-IS	--	--	--
	6	Steep Roof Flashing 7/12 - 12/12	46DVA-F12	943S	--	--
	8	Horizontal Termination with 1" firestop	BHRT/8	--	--	--
	8	Flex Adapter Starter	DVFFA/8	--	--	--
		Reducer Adapter (from 4" x 7")	MBSPA	--	--	4DMA

For more information about, or instructions for, the venting components referenced, please contact the component manufacturer:  
 Selkirk Corporation: [www.selkirkcorp.com](http://www.selkirkcorp.com) or 800-992-8368; Duravent: [www.duravent.com](http://www.duravent.com) or 800-835-4429;  
 Metal-Fab, Inc.: [www.metal-fabinc.com](http://www.metal-fabinc.com) or 316-943-2351

# MASSACHUSETTS RESIDENTS ONLY

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## Please read and follow these special requirements

### NOTE REGARDING VENTED PRODUCTS

This product must be installed by a licensed plumber or gas fitter when installed within the Commonwealth of Massachusetts.

Any residence with a direct vent product must have a carbon monoxide (CO) detector installed in the residence.

Installation of the fireplace or vented gas log in the State of Massachusetts requires the damper to be permanently removed or welded in the fully open position.

In addition, a naturally vented gas log may not be installed in a bedroom or bathroom in the State of Massachusetts.

Flex line installation must not exceed 36 inches and must have a T shutoff valve.

### NOTE REGARDING VENT FREE PRODUCTS

This product must be installed by a licensed plumber or gas fitter when installed within the Commonwealth of Massachusetts.

In addition, vent free products may not be installed in a bedroom or bathroom regardless of size or type in the State of Massachusetts.

Flex line installation must not exceed 36 inches and must have a T shutoff valve.

### CARBON MONOXIDE DETECTOR REQUIREMENTS

(2) Revise 10.8.3 by adding the following additional requirements:

(a) For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

1. **Installation of carbon monoxide detectors.** At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gas fitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors

a. In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

b. In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector

with an alarm shall be installed.

2. **Approved Carbon Monoxide Detectors.** Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

3. **Signage.** A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, "GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS."

4. **Inspection.** The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.

(b) **Exemptions:** The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

1. The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and

2. Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

(c) **Manufacturer requirements — Gas Equipment Venting System Provided.** When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

1. Detailed instructions for the installation of the venting system design or the venting system components; and

2. A complete parts list for the venting system design or venting system.

(d) **Manufacturer requirements — Gas Equipment Venting System Not Provided.** When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems," the following requirements shall be satisfied by the manufacturer:

1. The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and

2. The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

(e) A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design

# LIMITED LIFETIME WARRANTY POLICY

## LIFETIME WARRANTY

The following components are warranted for life to the original owner, subject to proof of purchase: Firebox, Combustion Chamber and Heat Exchanger.

## FIVE YEAR WARRANTY

The following components are warranted five (5) years to the original owner, subject of proof of purchase: Ceramic Fiber Logs.

## BASIC WARRANTY

Vermont Castings Group warrants the components and materials in your gas appliance to be free from manufacturing and material defects for a period of two years from date of installation. After installation, if any of the components manufactured by Vermont Castings Group in the appliance are found to be defective in materials or workmanship, Vermont Castings Group will, at its option, replace or repair the defective components at no charge to the original owner. Vermont Castings Group will also pay for reasonable labor costs incurred in replacing or repairing such components for a period of two years from date of installation. Any products presented for warranty repair must be accompanied by a dated proof of purchase.

This Limited Lifetime Warranty will be void if the appliance is not installed by a qualified installer in accordance with the installation instructions. The Limited Lifetime Warranty will also be void if the appliance is not operated and maintained according to the operating instructions supplied with the appliance, and does not extend to (1) firebox/burner assembly damage by accident, neglect, misuse, abuse, alterations, negligence of others, including the installation thereof by unqualified installers, (2) the costs of removal, re-installation or transportation of defective parts on the appliance, or (3) incidental or consequential damage. All service work must be performed by an authorized service representative.

This warranty is expressly in lieu of other warranties, express or implied, including the warranty of merchantability of fitness for purpose and of all other obligations or liabilities. Vermont Castings Group does not assume for it any other obligations or liabilities in connection with sale or use of the appliance. It states that do not allow limitations on how long an implied warranty lasts, or do not allow exclusion of indirect damage, those limitations of exclusions may not apply to you. You may also have additional rights not covered in the Limited Lifetime Warranty.

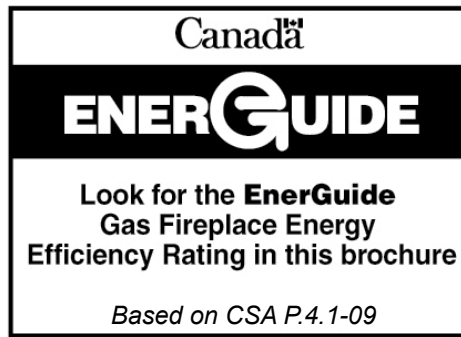
Vermont Castings Group reserves the right to investigate any and all the claims against the Limited Lifetime Warranty and decide upon method of settlement.

## IF WARRANTY SERVICE IS NEEDED:

1. Contact your supplier. Make sure you have your warranty, your sales receipt and the model/serial number of your Vermont Castings Group product.
2. DO NOT ATTEMPT TO DO ANY SERVICE WORK YOURSELF.

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**EFFICIENCY RATINGS**

<b>MODEL</b>	<b>ENERGUIDE RATINGS FIREPLACE EFFICIENCY PERCENTAGE</b>
BLDV300NSC7	60.2
BLDV400NSC7	68.1
BLDV500NSC7	64.1
BLDV300PSC7	64.2
BLDV400PSC7	62.8
BLDV500PSC7	67.9



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