



## INSTALLER/CONSUMER SAFETY INFORMATION

**PLEASE READ THIS MANUAL  
BEFORE INSTALLING AND  
USING APPLIANCE**

**WARNING!**  
**IF THE INFORMATION IN THIS  
MANUAL IS NOT FOLLOWED  
EXACTLY, A FIRE OR EXPLO-  
SION MAY RESULT CAUSING  
PROPERTY DAMAGE, PER-  
SONAL INJURY OR LOSS OF  
LIFE.**

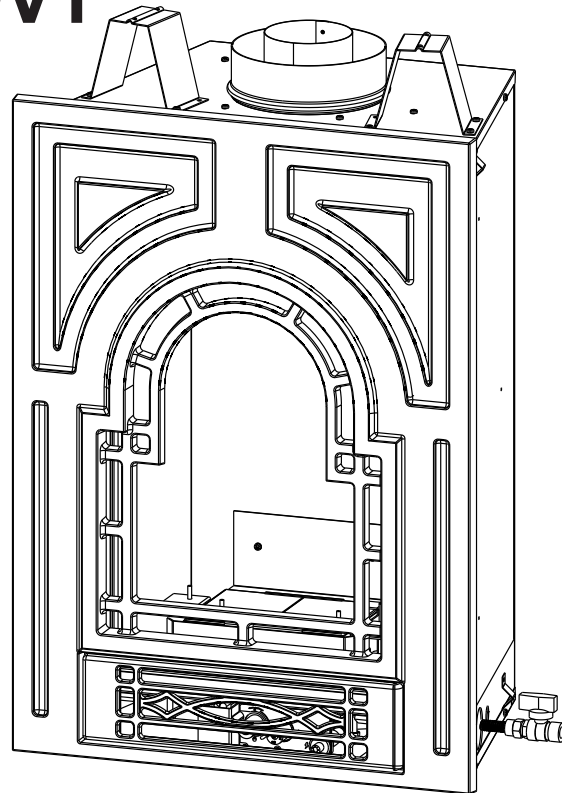
**FOR YOUR SAFETY**  
**Installation and service must  
be performed by a qualified  
installer, service agency or  
the gas supplier.**

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

- Do not try to light any appliance.
- Do not touch any electric switch;  
do not use any phone in your  
building.
- Immediately call your gas  
supplier from your neighbor's  
phone. Follow the gas suppliers  
instructions.
- If you cannot reach your gas  
supplier call the fire department.

**DO NOT STORE OR USE  
GASOLINE OR OTHER  
FLAMMABLE VAPORS AND  
LIQUIDS IN THE VICINITY OF  
THIS OR ANY OTHER  
APPLIANCE.**

## Brookhaven Direct Vent Model: 20DVT



## Installation Instructions and Homeowner's Manual



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

# Table of Contents

**PLEASE READ THE INSTALLATION & OPERATING INSTRUCTIONS  
BEFORE USING APPLIANCE.**

Thank you and congratulations on your purchase of a CFM Corporation fireplace.

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

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

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## Installation & Operating Instructions

This gas appliance should be installed by a qualified installer in accordance with local building codes and with current CSA-B149.1 Installation codes for Gas Burning Appliances and Equipment. For USA Installations follow local codes and/or the current National Fuel Gas Code. ANSI Z223.1/NFPA 54.

In the Commonwealth of Massachusetts, all gas fitting and installation of this heater shall only be done by a licensed gas fitter or licensed plumber.

FOR SAFE INSTALLATION AND OPERATION PLEASE NOTE THE FOLLOWING:

1. This fireplace gives off high temperatures and should be located out of high traffic areas and away from furniture and draperies.
2. Children and adults should be alerted to the hazards of high surface temperatures of this fireplace and should stay away to avoid burns or ignition of clothing.
3. **CAUTION: Due to high glass surface temperature children should be carefully supervised when in the same room as fireplace.**
4. Under no circumstances should this fireplace be modified. Parts removed for servicing should be replaced prior to operating this fireplace again.
5. Installation and any repairs to this fireplace must be performed by a qualified installer, service agency or gas supplier. A professional service person should be contacted to inspect this fireplace annually. Make it a practice to have all of your gas fireplaces checked annually. More frequent cleaning may be required due to excess lint and dust from carpeting, bedding material, etc.
6. Control compartments, burners and air passages in this fireplace should be kept clean and free of dust and lint. Make sure the gas valve and pilot light are turned off before you attempt to clean this fireplace.
7. The venting system (chimney) of this fireplace should be checked at least once a year and if needed your venting system should be cleaned.
8. Keep the area around your fireplace clear of combustible materials, gasoline and other flammable vapor and liquids. This fireplace should not be used as a drying rack for clothing, nor should Christmas stockings or decorations be hung on or around the fireplace.
9. Under no circumstances should any solid fuels (wood, coal, paper or cardboard etc.) be used in this fireplace.
10. The flow of combustion and ventilation air must not be obstructed in any way.
11. When fireplace is installed directly on carpeting, vinyl tile or any combustible material other than wood, the fireplace must be installed on a metal or wood panel extending the full width and depth of the fireplace.
12. This fireplace requires adequate ventilation and combustion air to operate properly.
13. This fireplace must not be connected to a chimney flue serving a separate solid fuel burning fireplace.
14. When the fireplace is not in use it is recommended that the gas valve be left in the **OFF** position.

**WARNING: Check with your electronics manufacturer before installing a television or other electronic device above this fireplace.**

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This appliance may be installed in an aftermarket permanently located, manufactured home or mobile home, where not prohibited by local codes.

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

### IMPORTANT:

#### PLEASE REVIEW THE FOLLOWING CAREFULLY

Remove any plastic from trim parts before turning the fireplace ON.

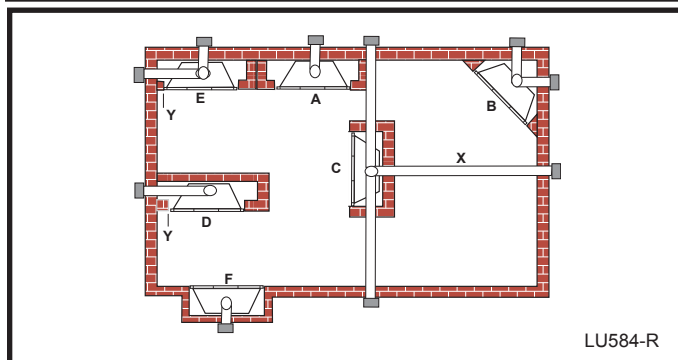
It is normal for fireplaces fabricated of steel to give off some expansion and/or contraction noises during the start up or cool down cycle. Similar noises are found with your furnace heat exchanger or car engine.

It is not unusual for your gas fireplace to give off some odor the first time it is burned. This is due to the curing of the paint and any undetected oil from the manufacturing process.

**Please ensure that your room is well ventilated - open all windows.**

It is recommended that you burn your fireplace for at least ten (10) hours the first time you use it. If the optional fan kit has been installed, place the fan switch in the "OFF" position during this time.

### Locating Your Fireplace



**Fig. 1** Locate gas fireplace.

- A) Flat on wall      B) Cross corner      C) \*\*Island  
D) \*Room divider      E) \*Flat on wall corner      F) Chase installation  
Y) 6" minimum

#### NOTE: (fig. 1)

\*\* Island (C) and Room Divider (D) installation is possible as long as the horizontal portion of the vent system (X) does not exceed 20' (610 cm). See details in Venting Section.

\* When you install your fireplace in (D) Room divider or (E) Flat on wall corner positions (Y), a minimum of 6" (153 mm) clearance must be maintained from the perpendicular wall and the front side edge of the fireplace.

Refer to (Y) in Figure 1.

## 20DVT Fireplace Dimensions

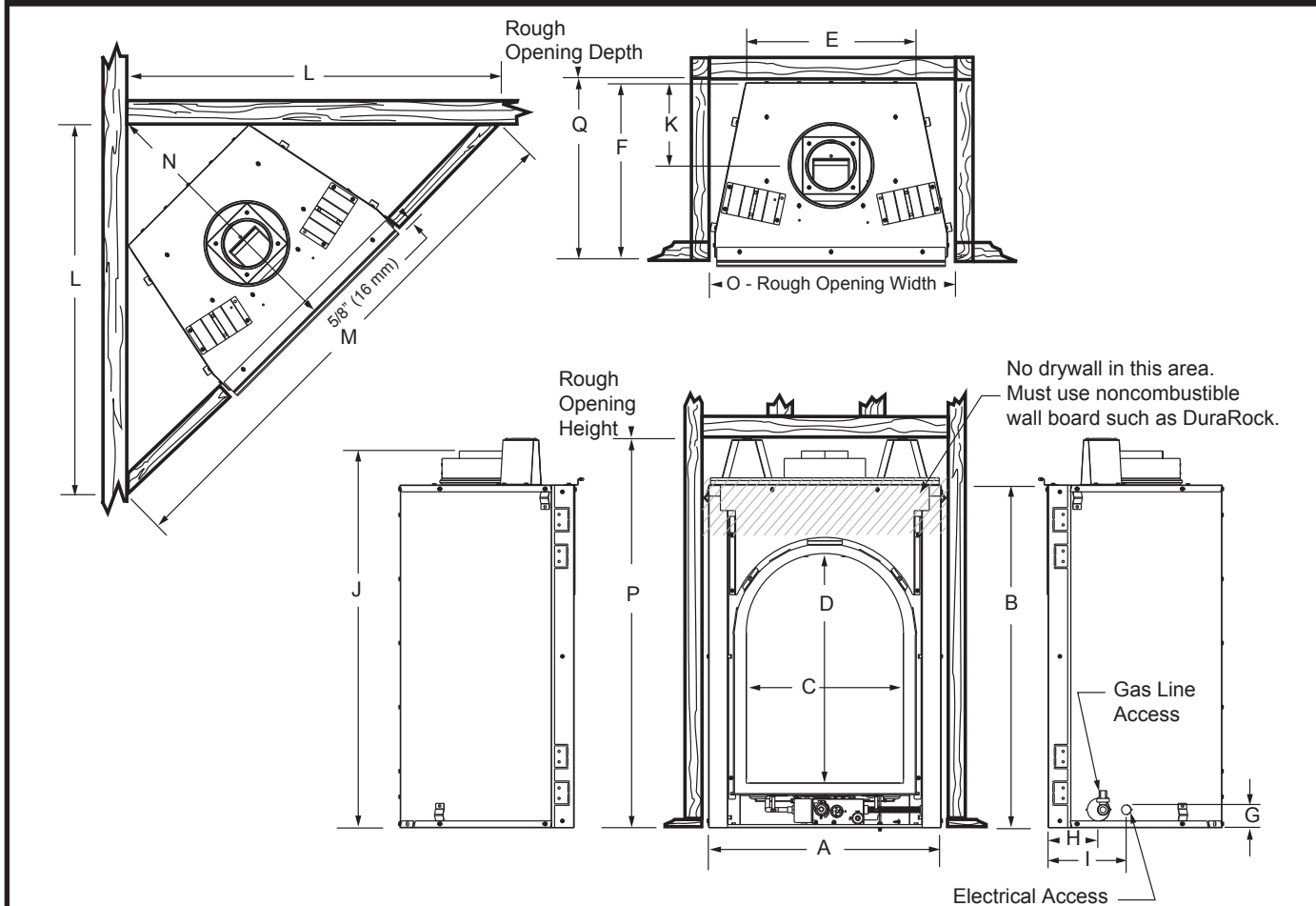


Fig. 2 Fireplace specifications and framing dimensions.

Ref.	20DVT
A	20" (508 mm)
B	29½" (749 mm)
C	13½" (343 mm)
D	19¾" (502 mm)
E	14¾" (375 mm)
F	15" (381 mm)
G	1½" (38 mm)
H	4¼" (108 mm)
I	6¾" (171 mm)
J	32½" (826 mm)
K	8" (203 mm)
<b>Framing Dimensions</b>	
L	31¾" (806 mm)
M	44⅞" (1140 mm)
N	23⅛" (587 mm)
O	21¼" (540 mm)
P	34" (864 mm)
Q	15½" (394 mm)

## Clearance to Combustibles

Top of Unit to Ceiling .....	32" (813 mm)
Front of Unit to Combustibles .....	36" (914 mm)

### Appliance

Top of Standoff .....	0" (0 mm)
Bottom .....	0" (0 mm)
Side .....	3/4" (19 mm)
Back .....	0" (0 mm)

### Venting

Concentric sections of DV Vent .....	1" (25 mm)
Nonconcentric sections of DV Vent	
Sides and Bottom .....	1" (25 mm)
Top .....	2" (51 mm)

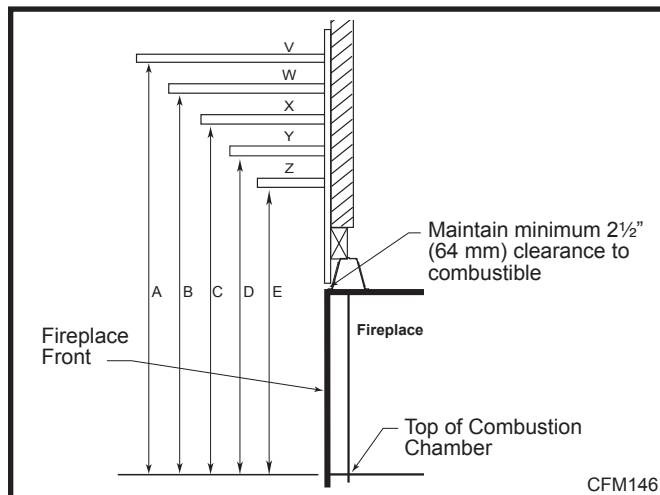
## Mantels

The height that a combustible mantel is fitted above the fireplace is dependent on the depth of the mantel. This also applies to the distance between the mantel leg (if fitted) and the fireplace.

For the correct mounting height and widths refer to Figs. 3a and 3b, and the following Mantel Charts.

The fitting of a bay window trim kit does not effect the distances and reference points referred to in the diagram and chart.

Noncombustible mantels and legs may be installed at any height and width around the appliance. When using paint or lacquer to finish the mantel, such paint or lacquer must be heat resistant to prevent discoloration.

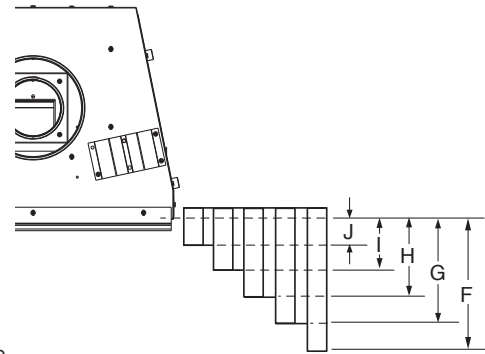


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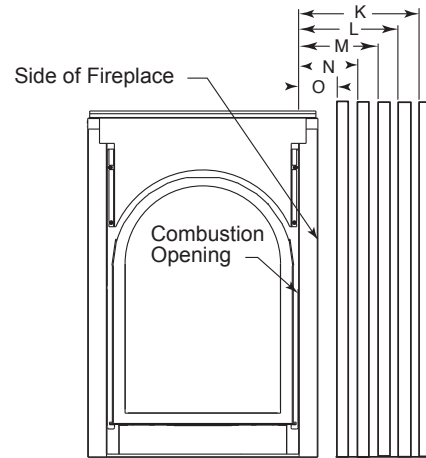
### Mantel Chart

Ref.	Mantel Shelf or Breast Plate Depth	Ref.	Mantel from Top of Combustion Chamber 20DVT
V	10" (254 mm)	A	18 1/2" (470 mm)
W	8" (203 mm)	B	16 1/2" (419 mm)
X	6" (152 mm)	C	14 1/2" (368 mm)
Y	4" (101 mm)	D	12 1/2" (318 mm)
Z	2" (51 mm)	E	10 1/2" (267 mm)

Fig. 3a Combustible mantel minimum installation.



CFM164b



CFM170

Ref.	Mantel Leg Depth	Ref.	Mantel Leg From Side of Comb. Opening
F	12" (305 mm)	K	12" (305 mm)
G	9" (229 mm)	L	9" (229 mm)
H	6" (152 mm)	M	6" (152 mm)
I	4" (102 mm)	N	4" (102 mm)
J	3" (76 mm)	O	3" (76 mm)

Fig. 3b Combustible mantel leg minimum installation.

## Hearth

A hearth is not mandatory but is recommended for aesthetic purposes. We recommend a noncombustible hearth which projects out 12" (305 mm) or more from the front of the fireplace.

### Cold climate installation recommendation:



**When installing this unit against a non-insulated exterior wall or chase, it is mandatory that the outer walls be insulated to conform to applicable insulation codes.**

**Proposition 65 Warning:** Fuels used in gas, wood-burning or oil fired appliances, and the products of combustion of such fuels, contain chemicals known to the State of California to cause cancer, birth defects and other reproductive harm.  
California Health & Safety Code Sec. 25249.6

## Framing and Finishing



**Check fireplace to make sure it is levelled and properly positioned.**

To mount the appliance:

1. Choose the location.
2. This unit comes with four (4) flanges pre-mounted on both sides of the fireplace to allow two different drywall thicknesses to be used. Flange "A" is for 1/2" drywall while flange "B" is for 5/8" drywall.
3. Bend the desired flanges out 90° on both sides of the fireplace. Slide the fireplace into the framed opening until the flanges contact the front surfaces of the framing. Level the unit and secure it firmly in place.

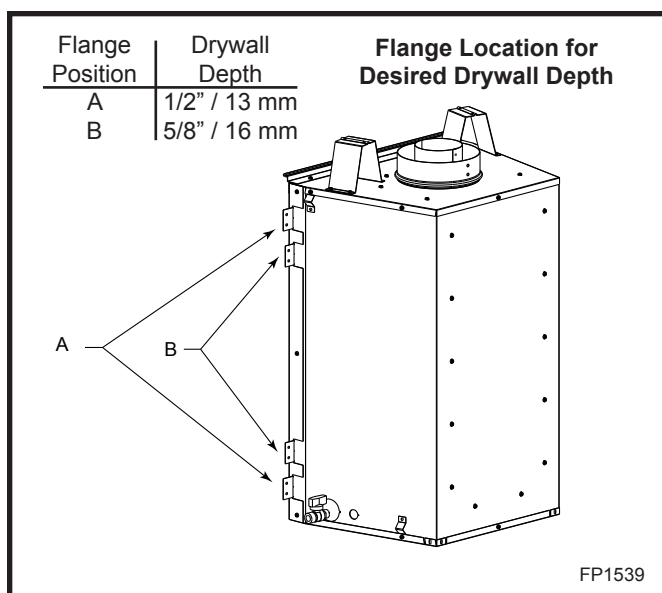


Fig. 4 Nailing flanges.

## Final Finishing

Noncombustible materials such as brick or tile may be extended over the edges of the face of the fireplace.

**DO NOT** cover any vent or grille panels.

If a Trim Kit is going to be installed on the fireplace, the brick or tile will have to be installed flush with the edges of the fireplace.

**20DVT  
Certified To**

**ANSI Z21.88-2005 / CSA 2.33-2005  
Vented Gas Fireplace Heaters**

Unit: GFDN4B0

## Gas Specifications

Model	Fuel	Gas Control	Max. Input BTU/h	Min. Input BTU/h	Air Shutter Setting
20DVTRN	Nat.	Millivolt Hi/Lo	13,000	8,700	Sides & Bottom Half Open
20DVTRP	Prop.	Millivolt Hi/Lo	13,000	8,700	Sides & Bottom Half Open

## Gas Inlet and Manifold Pressures

	Natural	LP (Propane)
Inlet Minimum	5.5" w.c.	11.0" w.c.
Inlet Maximum	14.0" w.c.	14.0" w.c.
Manifold Pressure	3.5" w.c.	10.0" w.c.

## High Elevations

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

For elevations above 4,500 feet (1,370m) 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 (1,370m).

## Gas Line Installation



**When purging the gas lines, the front window frame assembly must be removed.**

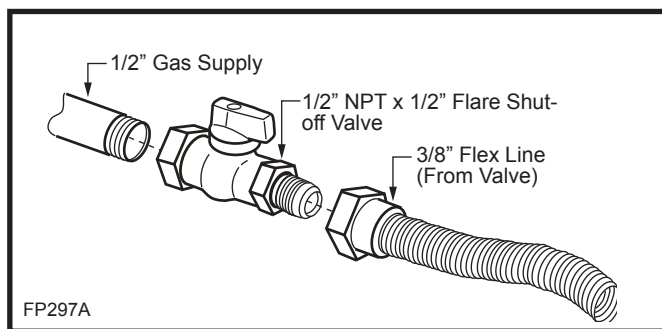
The gas pipeline can be brought in through the rear of the appliance as well as the bottom. Knockouts are provided on the bottom behind the valve to allow for the gas pipe installation and testing of any gas connection. It is most convenient to bring the gas line in from the rear right side of the valve as this allows fan installation or removal without disconnecting the gas line.

The gas line connection can be made with properly tinned 3/8" copper tubing, 3/8" rigid pipe or an approved flex connector. Since some municipalities have additional local codes, it is always best to consult your local authority and the National Fuel Gas Code, ANSI Z223.1/NFPA 54 in the USA or the CSA-B149.1 installation code.



**Always check for gas leaks with a mild soap and water solution applied with a brush no larger than 1" (25 mm). Never apply soap and water solution with a spray bottle. Do not use an open flame for leak testing.**





**Fig. 5** Typical gas supply installation.



**The fireplace valve must not be subjected to any test pressures exceeding 1/2 psi. Isolate or disconnect this or any other gas appliance control from the gas line when pressure testing.**

The gas control is equipped with a captured screw type pressure test point, therefore it is not necessary to provide a 1/8" test point up stream of the control.

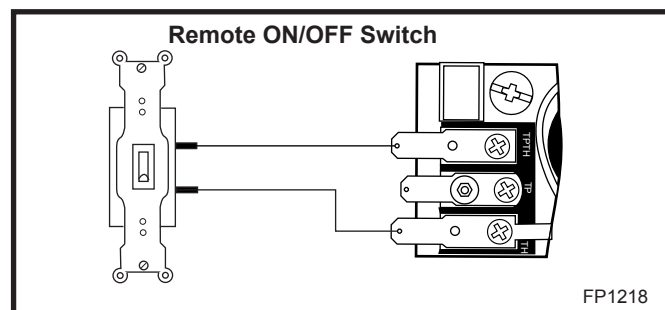
When using copper or flex connector use only approved fittings. Always provide a union when using black iron pipe so the gas line can be easily disconnected for burner or fan servicing. See gas specification for pressure details and ratings.

The fireplace valve must not be subjected to any test pressures exceeding 1/2 psi. Isolate or disconnect this and any other gas appliance control from the gas line when pressure testing.

## Remote ON/OFF Switch

Do not wire the remote ON/OFF wall switch for this gas appliance into a 120v power supply.

1. Thread wire through the electrical knockout located on either side of the unit. Take care not to cut the wire or insulation on metal edges. Ensure the wire is secured and protected from possible damage. Run one end of the gas control valve and the other end to the conveniently located wall switch.
2. Attach the wire to the ON/OFF switch and install switch into receptacle box. Attach cover plate to switch.
3. Connect wiring to gas valve. (Fig. 6)



**Fig. 6** Remote switch wiring diagram for R models.

## General Venting

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

- Only CFM Corporation venting components specifically approved and labelled for this fireplace may be used.
- If vent termination is installed in an accessible location, Vent Termination Guard #53525 shall be installed.
- Vent terminations shall not be recessed into a wall or siding.
- 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 1/2" (13 mm) per 12" (305 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.

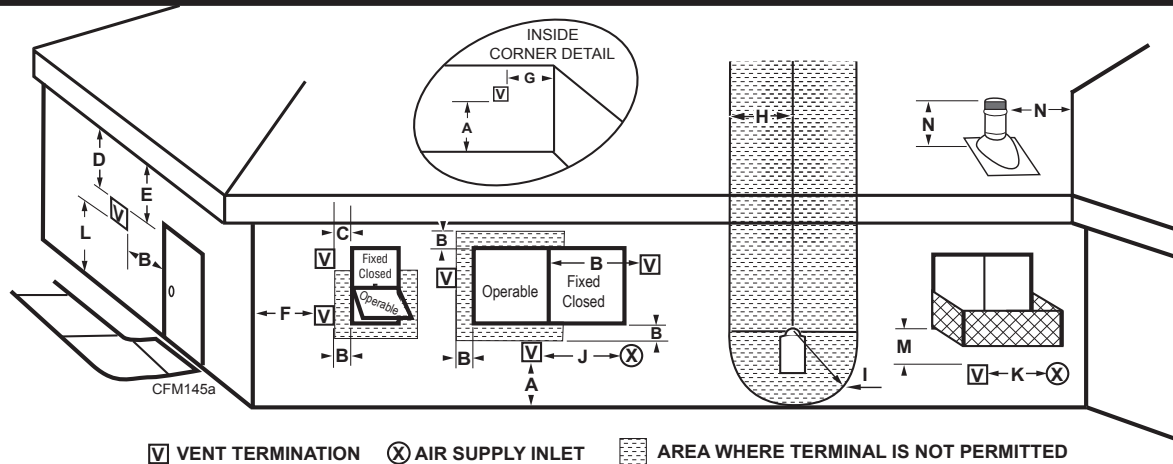
Do not locate termination hood where excessive snow or ice build up may occur. Be sure to check vent termination area after snow falls, and clear to prevent accidental blockage of venting system. When using snow blowers, make sure snow is not directed towards vent termination area.

### Location of Vent Termination

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

\*Check with local codes or in absence of same with CSA B149.1 Installation Codes (1991) for Canada or follow the current National Fuel Gas Code, ANSI Z223.1/NFPA 54 for installations in the USA.

## General Venting Information - Termination Location



	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 Btuh (3kW), 12" (30cm) for appliances > 10,000 Btuh (3kW) and < 100,000 Btuh (30kW), 36" (91cm) for appliances > 100,000 Btuh (30kW)	6" (15cm) for appliances < 10,000 Btuh (3kW), 9" (23cm) for appliances > 10,000 Btuh (3kW) and < 50,000 Btuh (15kW), 12" (30cm) for appliances > 50,000 Btuh (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' (610mm) 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	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 assy
I = Clearance to service regulator vent outlet	3' (91cm)	3' (91cm)
J = Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliances	6" (15cm) for appliances < 10,000 Btuh (3kW), 12" (30cm) for appliances > 10,000 Btuh (3kW) and < 100,000 Btuh (30kW), 36" (91cm) for appliances > 100,000 Btuh (30kW)	6" (15cm) for appliances < 10,000 Btuh (3kW), 9" (23cm) for appliances > 10,000 Btuh (3kW) and < 50,000 Btuh (15kW), 12" (30cm) for appliances > 50,000 Btuh (15kW)
K = Clearance to a mechanical air supply inlet	6' (1.83m)	3' (91cm) above if within 10 feet (3m) horizontally
L = Clearance above paved sidewalk or paved driveway located on public property	7' (2.13m)†	7' (2.13m)†
M = Clearance under veranda, porch, deck or balcony	12" (30cm)‡	12" (30cm)‡

N = Clearance above a roof shall extend a minimum of 24" (610mm) above the highest point when it passes through the roof surface, and any other obstruction within a horizontal distance of 18" (450mm).

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

† A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings

‡ 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. CFM Corporation assumes no responsibility for the improper performance of the appliance when the venting system does not meet these requirements.

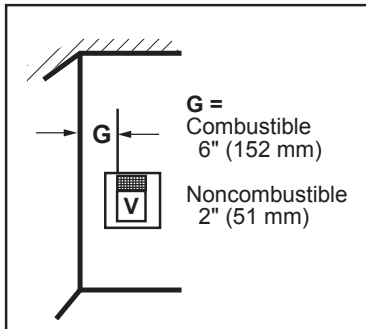
**Fig. 7** Termination location requirements.



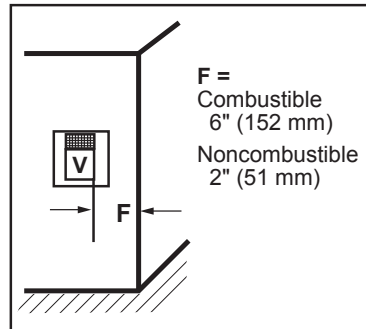
## Termination Clearances

Termination clearances for buildings with combustible and noncombustible exteriors.

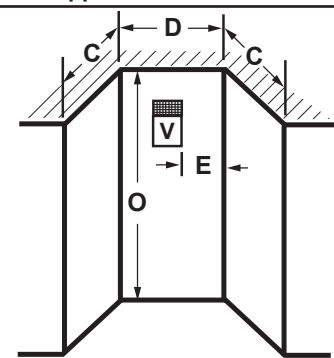
### Inside Corner



### Outside Corner

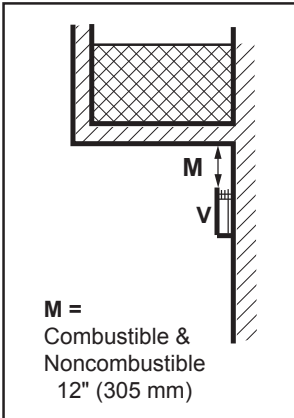


### Alcove Applications\*

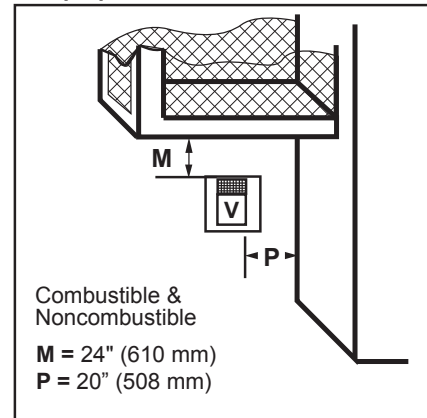


E = Min. 6" (152 mm) for non-vinyl sidewalls  
Min. 12" (305 mm) for vinyl sidewalls  
O = 8' (2.4 m) Min.

### Balcony - with no side wall



### Balcony - with perpendicular side wall



No. of Caps	D <sub>Min.</sub>	C <sub>Max.</sub>
1	3' (.9 m)	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.

Fig. 7a Termination clearances.

## General Information Assembling Vent Pipes

### Canadian Installations:

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

### USA Installations:

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

Only venting components manufactured by CFM Corporation can be used in Direct Vent systems.

### Flex Vent Pipes

Before joining the flex vent pipe to the unit, apply a bead of high temperature sealant\* (provided) to the 4" pipe exiting the fireplace. 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 flex vent is flat and flush with the flue or outer collar 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.

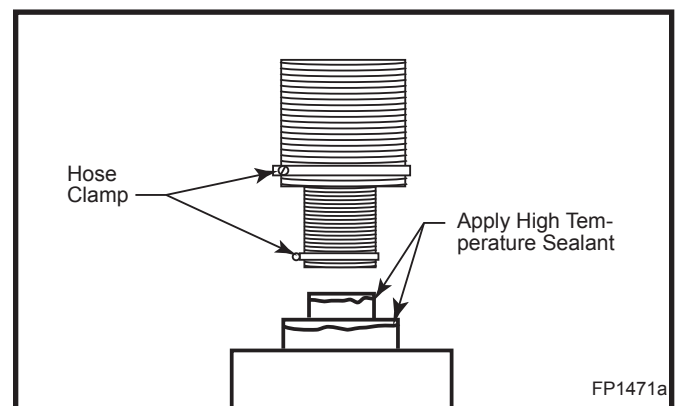


Fig. 8 Apply high temperature sealant to 4" and 7" pipes.

## Twist Lock Pipes

When using CFM Corporation twist-lock pipe it is not necessary to use sealant on the joints. The only areas of the venting system that need to be sealed with high temperature silicone sealant are the sliding joints of any telescopic vent section used in the system.

To join the twist lock pipes together, simply align the beads of the male end with the grooves of the female end, then while bringing the pipe together, twist the pipe until the flange on the female end contacts the 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.

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

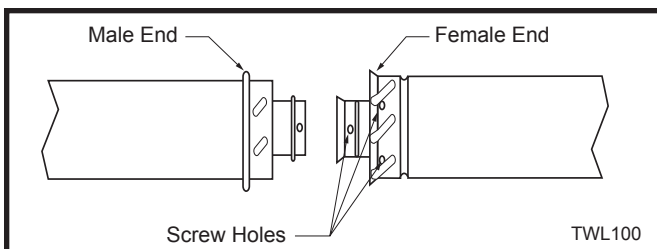


Fig. 9 Twist-lock pipe joints.

## How to Use the Vent Graph

The vent chart should be read in conjunction with the following vent installation instructions to determine the relationship of 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 (Fig. 10) locate the point intersecting with 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 fireplace 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' (2.14 m), the horizontal run to the face of the outer wall must not exceed 8½' (2.6 m).

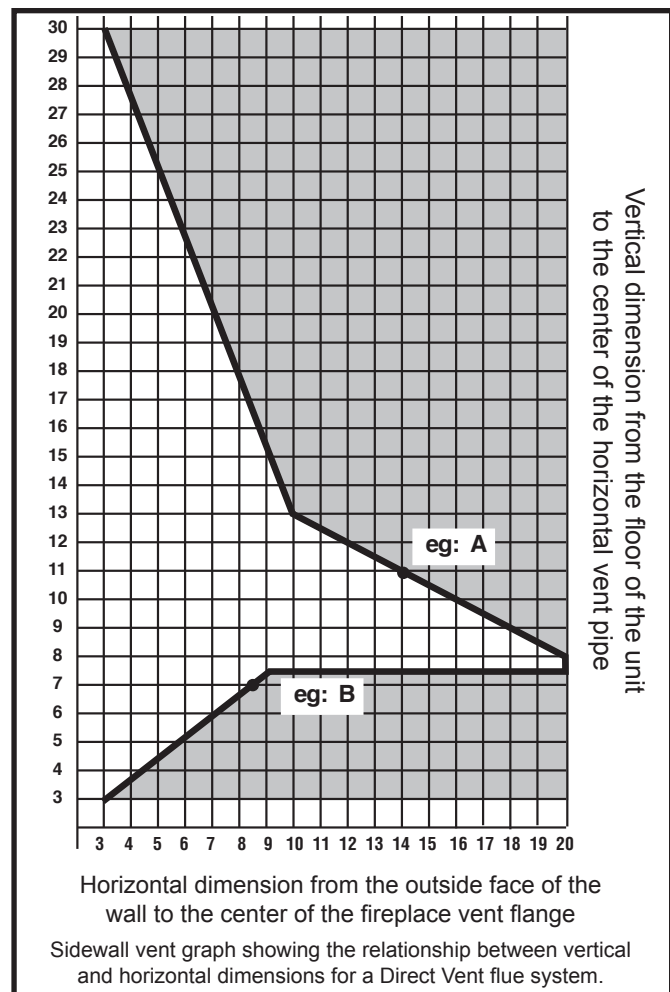


Fig. 10 Sidewall venting graph. (Dimensions in feet)

## Vertical Sidewall Applications

**Since it is very important that the venting system maintain its balance between the combustion air intake and the flue gas exhaust, certain limitations as to vent configurations apply and must be strictly adhered to.**

The Vent Graph shows the relationship between vertical and horizontal side wall venting and will help to determine the various dimensions allowable.

**Minimum clearance between vent pipes and combustible materials is 1" (25 mm) on top, bottom and sides unless otherwise noted.**

When vent termination exits through foundations less than 20" below siding outcrop, the vent pipe must flush up with the siding. It is always 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 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). (Fig. 11)
- If a 90° elbow is fitted directly on top of the fireplace flange, the maximum horizontal vent run before the termination or a vertical rise is 36" (914 mm). (Fig. 12)
- If a 90° elbow is used in the horizontal vent run (level height maintained) the maximum horizontal vent length is reduced by 36" (914 mm). (Fig. 12) This does not apply if the 90° elbows are used to increase or redirect a vertical rise. (Fig. 13)

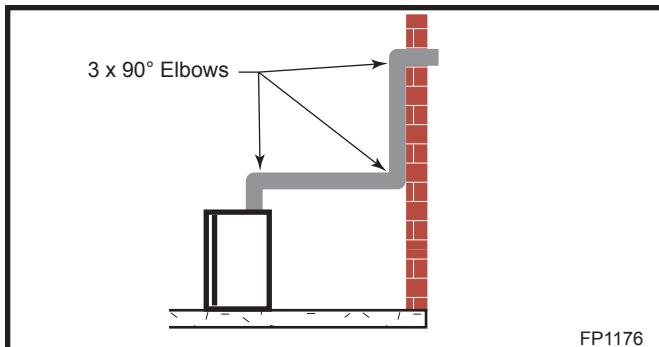


Fig. 11 Maximum three (3) 90° elbows per installation.

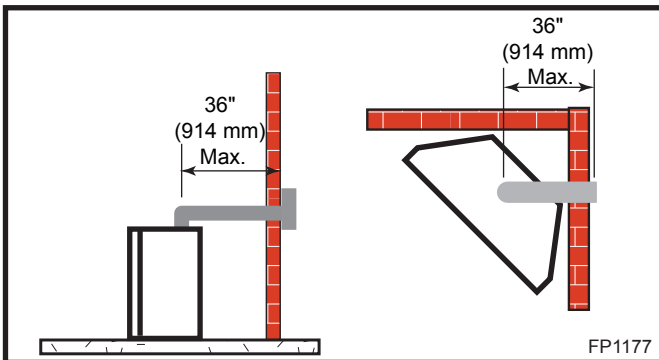


Fig. 12 Maximum horizontal run with no rise.

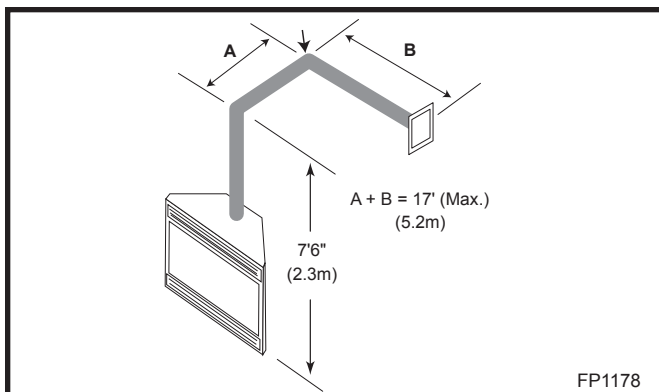


Fig. 13 Horizontal run reduction.

**Example:** According to the vent graph (Page 10) the maximum horizontal vent length in a system with a 7.5' (2.3 m) vertical 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 13 Dimension A plus B must not be greater than 17' (5.2 m).

- The maximum number of 45° elbows permitted per side wall installation is two (2). 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" (45 cm). 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°. (Fig. 14)

Example:

Elbow 1 = 90°  
 Elbow 2 = 45°  
 Elbow 3 = 45°  
 Elbow 4 = 90°

**Total angular variation = 270°**

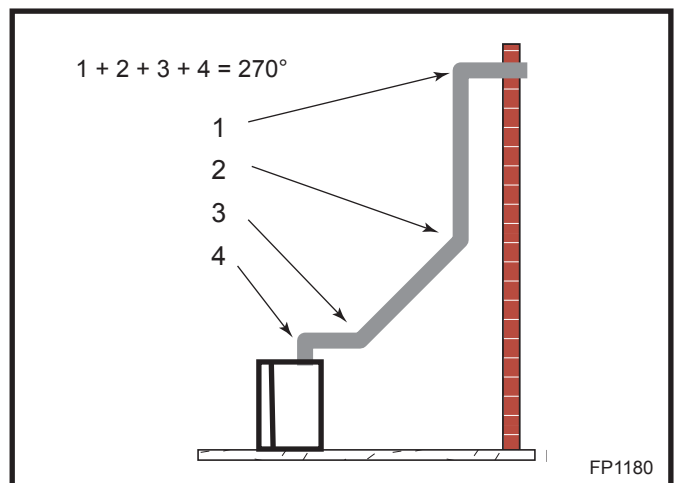


Fig. 14 Maximum elbow usage.

## 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. (Fig. 15) (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** (Fig. 15): Cut a 9 3/8" H x 9 3/8" W (240 x 240 mm) hole through the exterior wall and frame.

**Noncombustible Walls** (Fig. 15): Hole opening must be 7.5" (190 mm) in diameter.

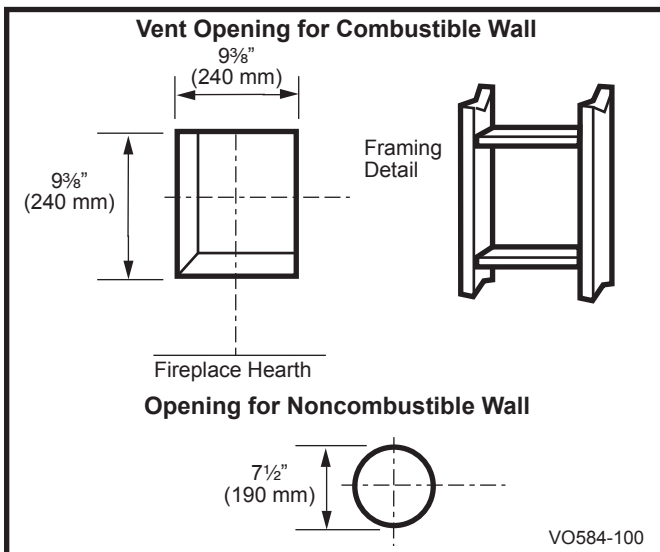


Fig. 15 Locate vent opening on wall.

### STEP 2

Measure wall thickness and cut adjustable zero clearance sleeve parts to proper length (MAXIMUM 12"/305 mm). Assemble sleeve and attach to firestop with #8 sheet metal screws (supplied). Install firestop assembly. (Fig. 16)



**Zero clearance sleeve is only required for combustible walls.**

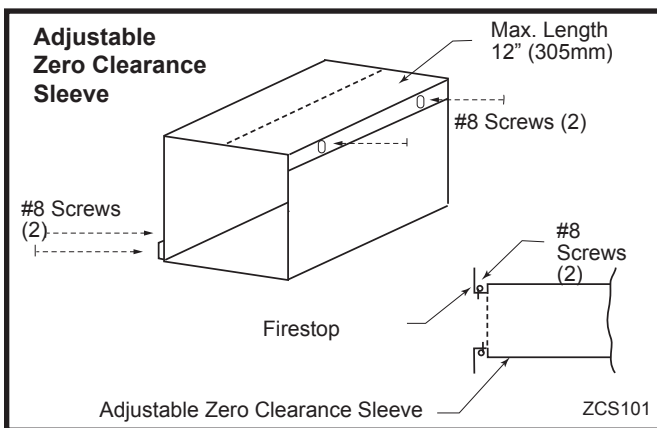


Fig. 16 Adjustable zero clearance sleeve.

### 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. (Fig. 17)

### STEP 4

Apply a band of silicone to the inner and outer flue collars of the fireplace and 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. Wipe off any excess silicone.

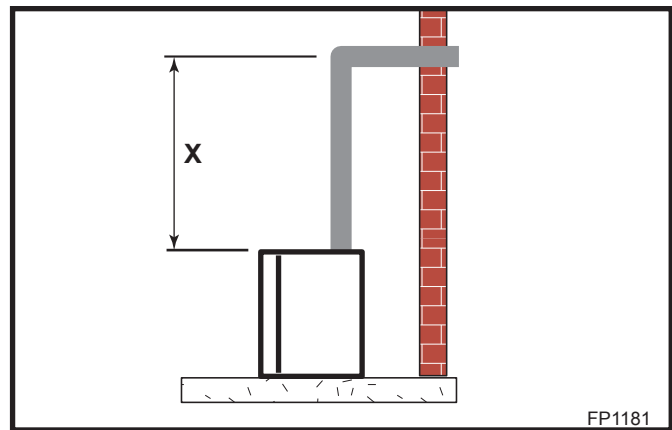


Fig. 17 Vertical height requirements.

### STEP 5

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



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

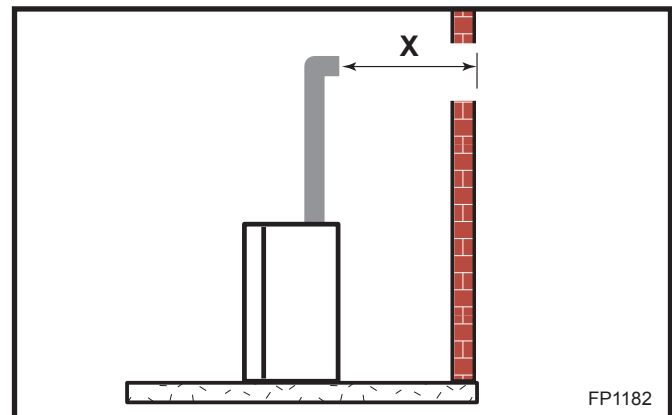


Fig. 18 Horizontal length requirement.

### STEP 6

Use appropriate length of pipe section - 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.

**Sealing vent pipe and firestop gaps with high temperature sealant will restrict cold air being drawn in around fireplace.**

## STEP 7

Apply high temperature sealant to 4" (102 mm) and 7" (178 mm) collars or the termination one inch away from the end. Guide the vent termination's 4" and 7" collars 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.**

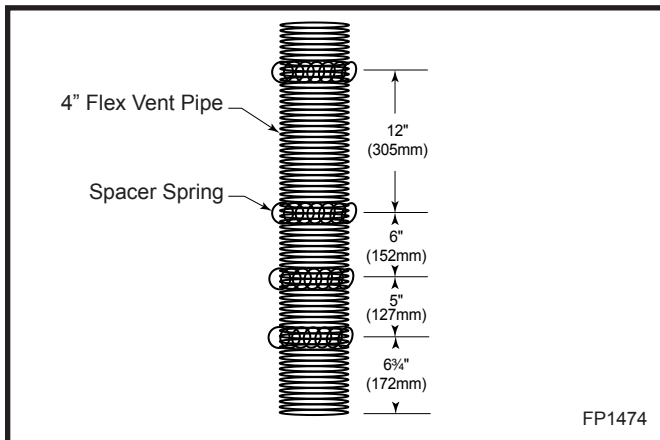
## Vertical Sidewall Installation Flex Vent Pipe

**NOTE:** The 40" (1016 mm) flex vent is used for 90° off the top of the unit then out the back wall.

Follow Steps 1 and 2 on Page 11.

## STEP 3

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 6¾" (172 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. (Fig. 19)



**Fig. 19** Install spacer springs.

## STEP 4

Install the 4" (102 mm) flex vent pipe to the appliance collar as described on Page 13. Secure the end with the first spring 6¾" (172 mm) from the flex pipe end to the unit.

## STEP 5

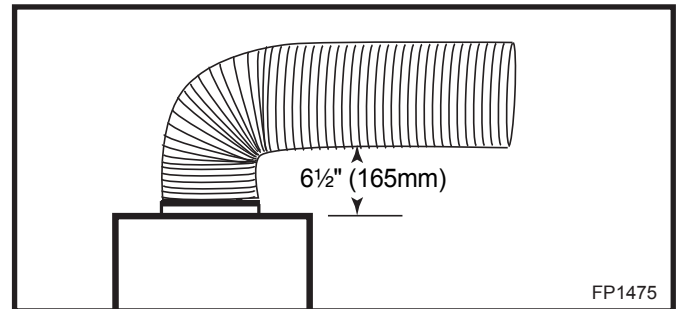
Slide the 7" (178 mm) flex vent pipe over the 4" flex vent pipe and secure 7" collar as described on Page 14.

## STEP 6

Bend the flex pipe horizontal so the bottom of the horizontal pipe measures 6½" (165 mm) from the top of the unit immediately after the 90° formation. (Fig. 20) Be sure to follow the 1/2" (13 mm) rise in a 12" (305 mm) horizontal run rule.

## STEP 7

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



**Fig. 20** Bend flex vent at 90° so horizontal portion is 6½" (165 mm) off top of unit.

## Below Grade Installations

When it is not possible to meet the required vent terminal clearances of 12" (305 mm) above grade level a snorkel kit is recommended. This allows installation depth of down to 7" (178 mm) below grade level. The 7" 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.

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. (Fig. 15)
2. Remove soil to a depth of approximately 16" (406 mm) below base of snorkel. Install window well (not supplied). Refill hole with 12" (305 mm) of coarse gravel leaving a clearance of approximately 4" (102 mm) below snorkel. (Fig. 21)

3. Install vent system. See Page 12, Steps 2 through 5.
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 pipe and secure to the wall.
7. Level the soil to maintain a 4" (102 mm) clearance below snorkel. (Fig. 21)

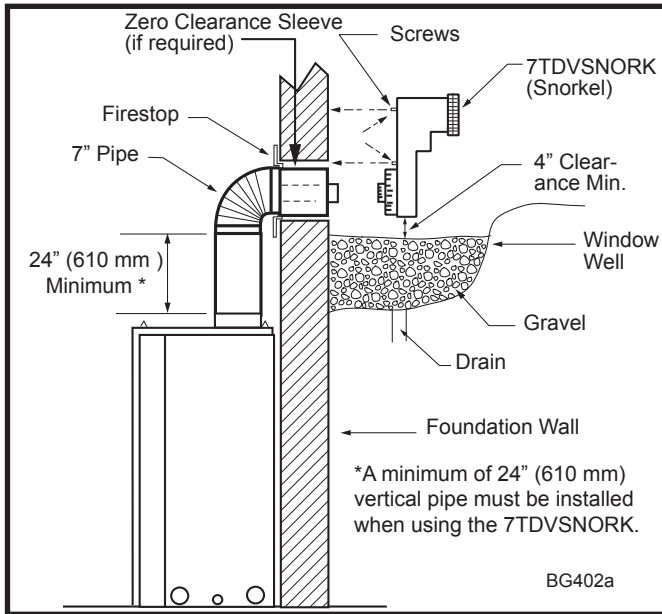


Fig. 21 Below grade installation.



**Do not backfill 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 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. (Fig. 22)

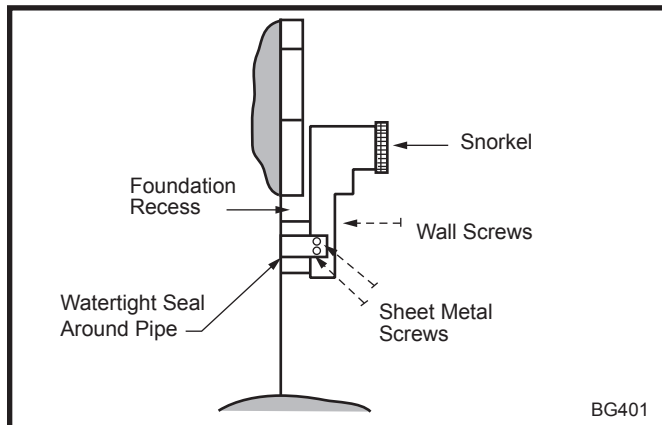


Fig. 22 Snorkel installation, recessed foundation.

## 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. (Fig. 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' (2.5m) 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. (Fig. 24)
- 7DVCS supports offsets. (Fig. 25) 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°. (Fig. 24)
- The minimum height of the vent above the highest point of penetration through the roof is 2' (610 mm). (Fig. 27)

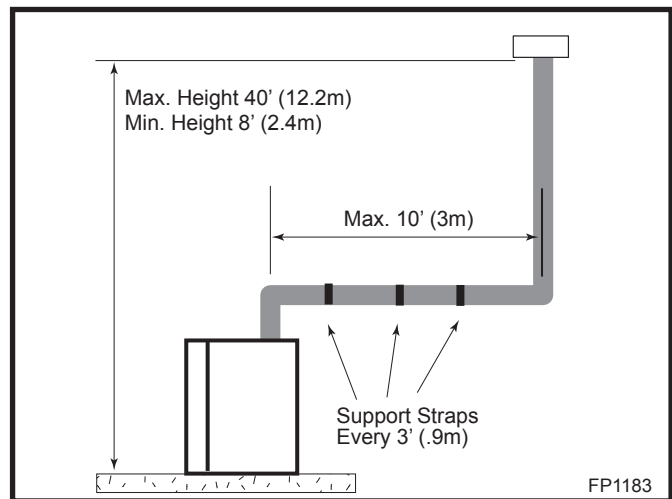
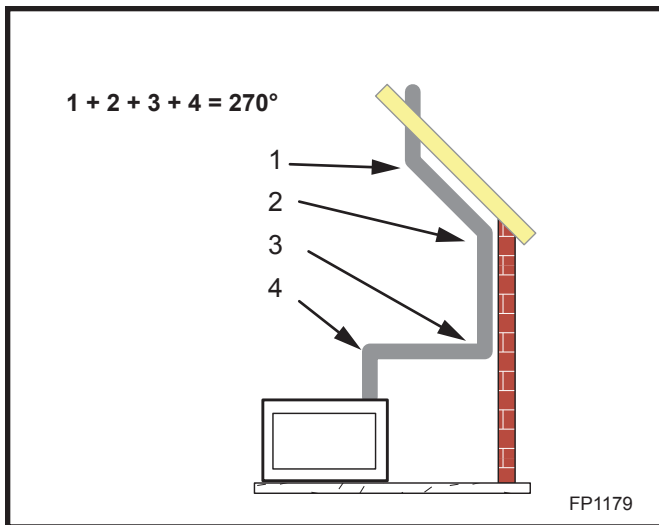


Fig. 23 Support straps for horizontal runs.

## Vertical Through-the-Roof Installation

1. Locate your fireplace.
2. Plumb to center of the (4") flue collar from ceiling above and mark position.
3. Cut opening equal to 9 3/8" x 9 3/8" (240 x 240 mm).

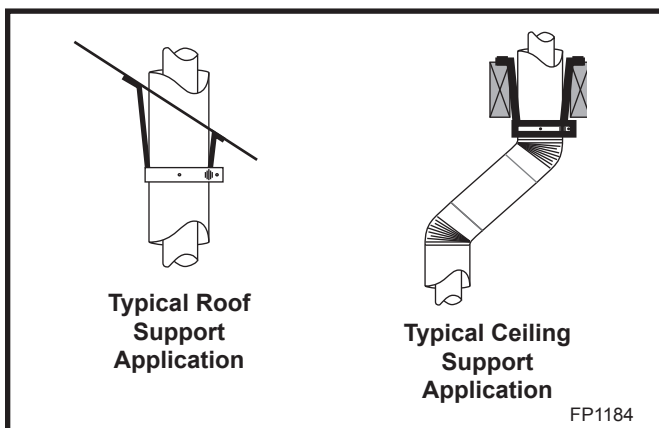




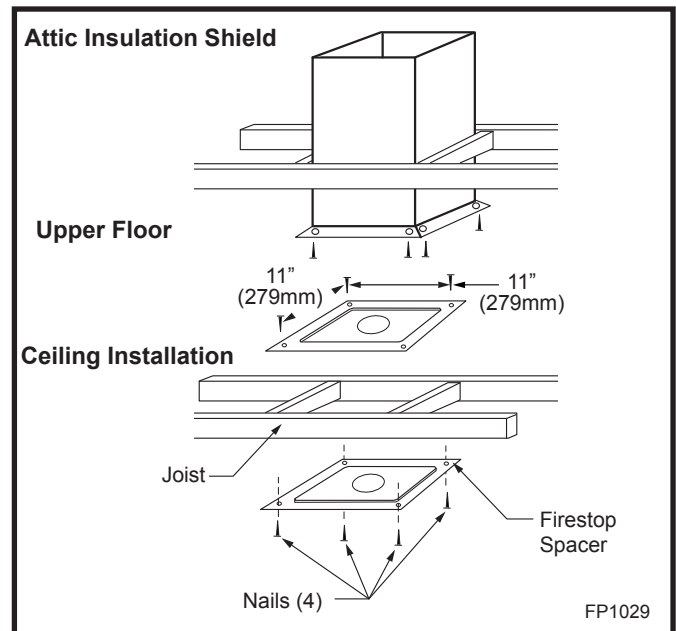
**Fig. 24** Maximum elbow usage.

4. Proceed to plumb for additional openings through the roof. In all cases, the opening must provide a minimum of 1" (25 mm) clearance to the vent pipe, i.e., the hole must be at least 9 $\frac{3}{8}$ " x 9 $\frac{3}{8}$ " (240 x 240 mm).
5. Place fireplace into position.
6. Place firestop(s) #7DVFS or Attic Insulation Shield #7DVAIS into position and secure. (Fig. 26)
7. Install roof support (Fig. 25) and roof flashing making sure upper flange is below the shingles. (Fig. 28)
8. Install appropriate pipe sections until the venting is above the flashing. (Fig. 28)
9. Install storm collar and seal around the pipe.
10. Add additional vent lengths for proper height. (Fig. 28)
11. Apply high temperature sealant to 4" and 7" collars of vertical vent termination and install.

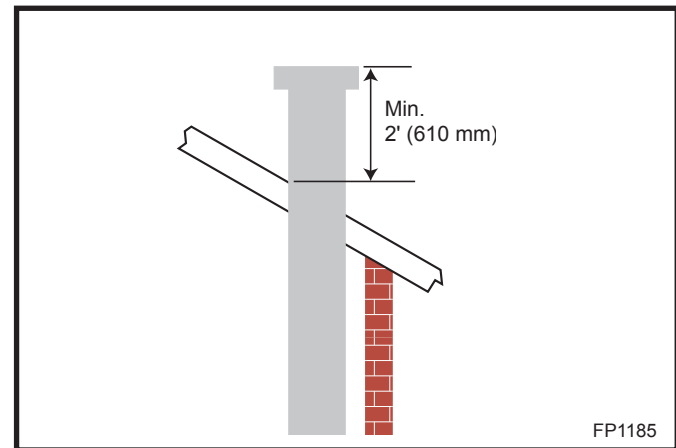
If there is a room above ceiling level, fire stop spacer must be installed on both the bottom and the top side of the ceiling joists. If an attic is above ceiling level a 7DVAIS (Attic Insulation Shield) must be installed. The enlarged ends of the vent section always face downward.



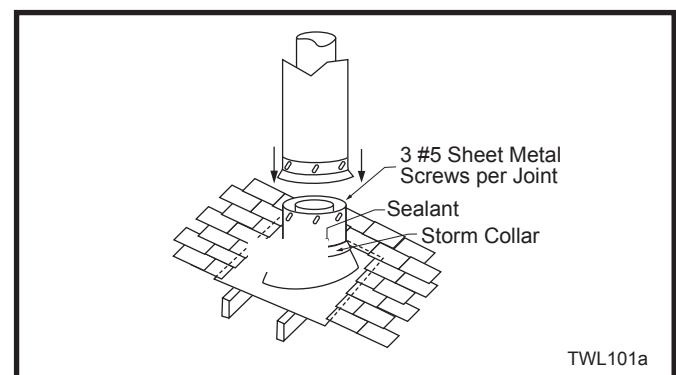
**Fig. 25** Venting supports.



**Fig. 26** Place firestop spacer(s) and secure.

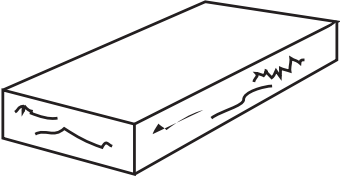
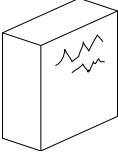


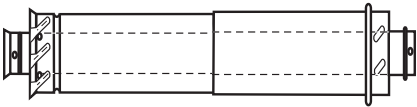

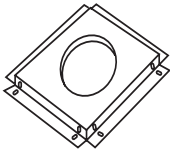
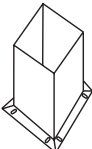



**Fig. 27** Minimum termination to roof clearance.



**Fig. 28** Roof flashing.

## Venting Components

	<p>Starter Kit -            Model 7TDVSK - Sidewall Venting (Twist Lock Pipe)            Model 7FDVSK - Sidewall Venting (Flex Vent Pipe)            Models 7TDVTK/TV - Hot Touch Termination Kits            Model 7TDVTVTK/TV - Cool Touch Termination Kit            Starter Kit - Model 7TDVSKV - Vertical Venting            for 7TDVSKV-A order 1/12 to 6/12 roof pitch            for 7TDVSKV-B order 7/12 to 12/12 roof pitch            for 7TDVSKV-F order flat roof            Starter Kit for Below Grade Installation            Model 7TDVSKS -Snorkel Kit (Twist Lock Pipe)            Model 7FDVSKS -Snorkel Kit (Flex Vent Pipe)</p>
	<p>Starter Pipe            Model 7TDVP 20/8 - 24" Starter Pipe Bulk            Model 7FDVP 30/8 - 30" Flex Pipe Bulk</p>
	<p>45° Elbow            7TDV45 for Rear Vent to Vertical Vent            or Vertical/Horizontal Offsets</p>
	<p>90° Transition Elbow            7TDVRT90 for Rear Vent to Vertical Vent            90° Elbow            7TDV90 Vertical/Horizontal Offset</p>
	<p>Telescopic vent sections            7TDVP1117 -11" to 17" adjustable length            7TDVP3567 -35" to 67" adjustable length</p>
	<p>Pipe sections for vertical or horizontal venting            Model 7TDVP8" - 4 per box            Model 7TDVP12" - 4 per box            Model 7TDVP24" - 4 per box            Model 7TDVP36"            Model 7TDVP48"</p>
	<p>Firestop Spacer            Model 7DVFS</p>
	<p>Attic Insulation Shield            Model 7DVAIS</p>
	<p>Vertical/Horizontal Combination Offset Support            Model 7DVCS</p>

## Operating Instructions

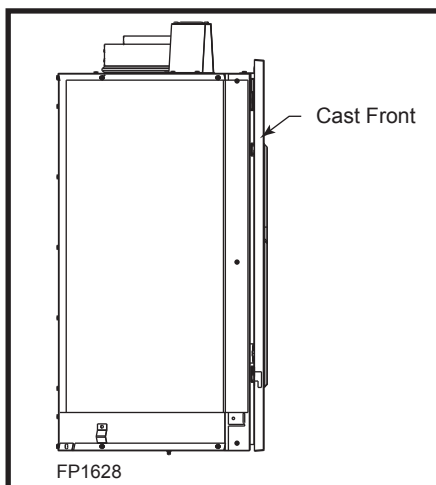
### Glass Information



**Only glass approved by CFM Corporation should be used on this fireplace.**

- The use of any non-approved replacement glass will void all product warranties.
- Care must be taken to avoid breakage of the glass.
- **Do not operate appliance with glass front removed, cracked or broken.**
- **Replacement glass (complete with gasket and window frame) is available through your CFM Corporation dealer and should only be installed by a licensed qualified service person.**

### Cast Front Panel



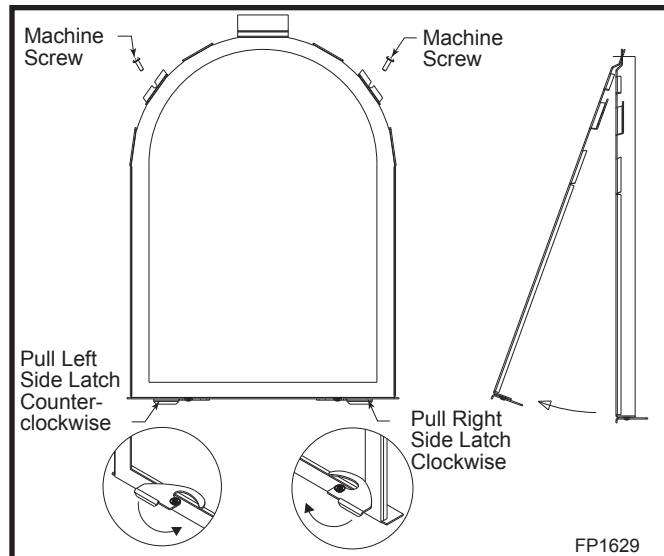
Attach the cast panel by hooking onto top of fireplace.

To remove the cast front assembly, pull cast front up then lift out.

**Fig. 29** Remove cast front by lifting up then out.

### Window Frame Assembly Removal

1. Turn the fireplace OFF (including the pilot).
2. If the unit has been operating, allow time for the components to cool.
3. Remove cast front assembly.
4. Unlock the frame window by removing the two (2) machine screws at the top corners of the window frame.
5. Unlock the frame window by pulling the handle of the two latches at the bottom part of the window frame. Pull the left latch counterclockwise and the right latch clockwise.
6. Pull the bottom of the glass frame assembly out and slide the top of the frame assembly out the slot at the top.
7. To replace the window frame assembly, reverse this procedure.



**Fig. 30** Window frame assembly removal.

### Glass Cleaning

It is necessary to clean the glass periodically. During start-up condensation, which is normal, forms on the inside of the glass and causes lint, dust and other airborne particles to cling to the glass surface. Also initial paint curing may deposit a slight film on the glass. It is therefore recommended the glass be cleaned two or three times with a non-ammonia household cleaner and warm water (gas fireplace glass cleaner is recommended). After the initial cleaning process the glass should be cleaned two or three times during each operating season depending on the environment in the house.



**Clean the glass after the first two weeks of operation.**

**Do not clean glass when hot.**

**Do not use abrasive cleaners.**

**Do not strike or slam the glass.**

## Installation of Logs



**The logs are fragile and should be handled with care. Keep the packaging material out of the reach of children and dispose of the material in a safe manner.**



**The individual logs can be easily identified by the numbers cast on the underside of each log.**

### Log Identification Chart

LOGS	20DVT
Log Rear	J11
Log Front	J12

### Log Installation

1. Remove cast front assembly.
2. Remove window frame assembly.
3. Remove log box from inside firebox.
4. Unpack the logs from packaging and remove each log from its wrapping material. Set aside the ember and the lava rock bags.



**As with all plastic bags - these are not toys and should be kept away from children and infants.**

5. Place the log rear (J11). Place the two underside holes of the log over the two pin studs of the bracket on the left and right sides of the burner housing. (Fig. 31)

6. Place the log front (J12). Place the two underside holes of the log over the two pin studs of the bracket on the left and right sides of the front burner housing. (Fig. 32)
7. Place ember material on top of burner. Scatter the ember material over the tiles on the front area of the burner housing. (Fig. 31) Do not pack the ember material. Separate it when unpacking and keep it in a fluffy and loose condition for more realistic ember effect.
8. Place large lava rock onto the two sides of the burner tray. (Fig. 31)



**Do not place any of the lava rock material on the burner housing assembly.**

Figure 31

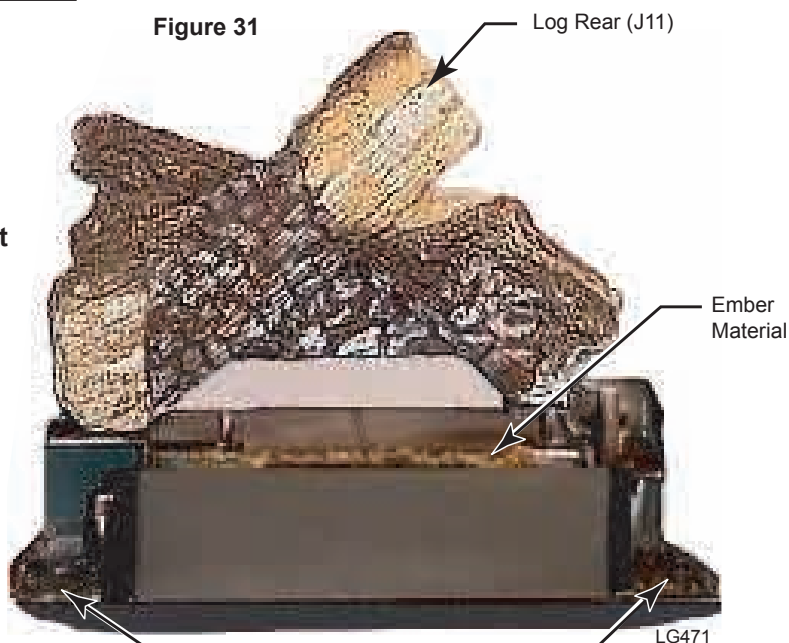
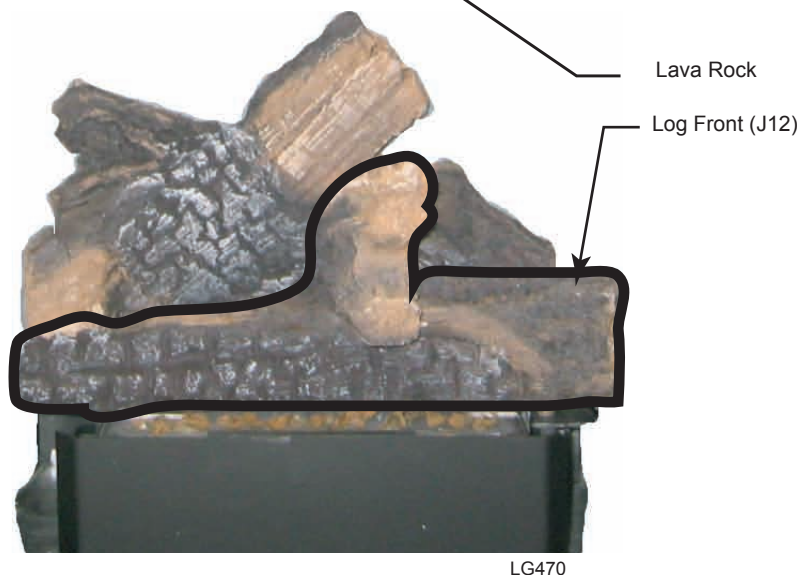


Figure 32



## Large Lava Rock

The large bag of lava rock provided with this fireplace must be placed on the firebox base around the sides of the burner assembly and on the tray beneath the grate.

**Under no circumstances should this large lava rock be placed on any part of the burner assembly.**

## Flame & Temperature Adjustment

For fireplaces equipped with Hi/Lo valves, flame adjustment is accomplished by rotating the Hi/Lo adjustment knob located near the centre of the gas control. (Fig. 33 or 34)

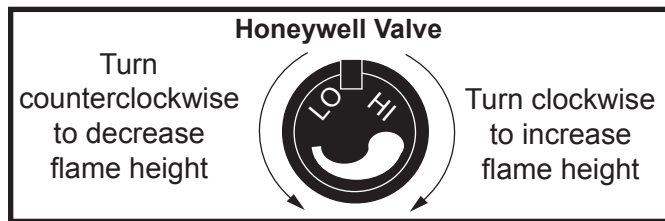


Fig. 33 Flame adjustment knob for Honeywell valve.

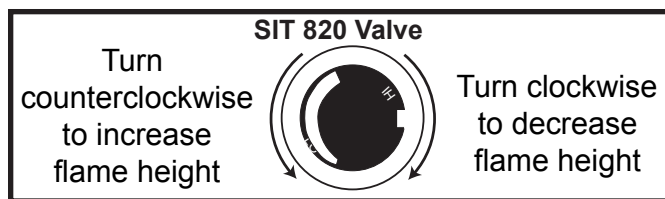


Fig. 34 Flame adjustment knob for SIT valve.

## Flame Characteristics

It is important to periodically perform a visual check of the pilot and the burner flames. Compare them to Figures 35 & 36. If any of the flames appear abnormal call a service person.

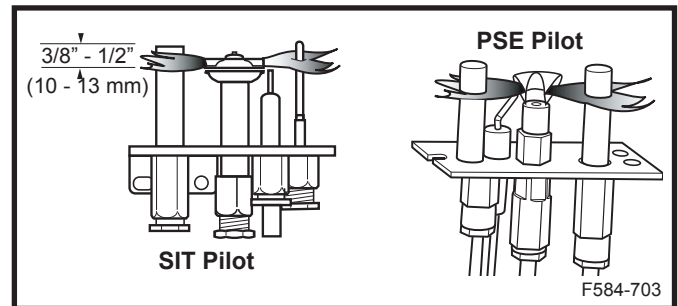


Fig. 35 Correct pilot flame appearance.

## Inspecting the Venting System

This appliance venting system is designed and constructed to develop a positive flow adequate to remove flue gases to the outside atmosphere.

Any foreign objects in the venting system, except those designed specifically for the venting system, may cause spillage of flue gases.

To inspect the venting system, make sure the main gas valve is off. Remove window frame assembly (Refer to Window Frame Assembly Removal Section). Using a flashlight, check the area above the baffle in the combustion dome. Clean if necessary.

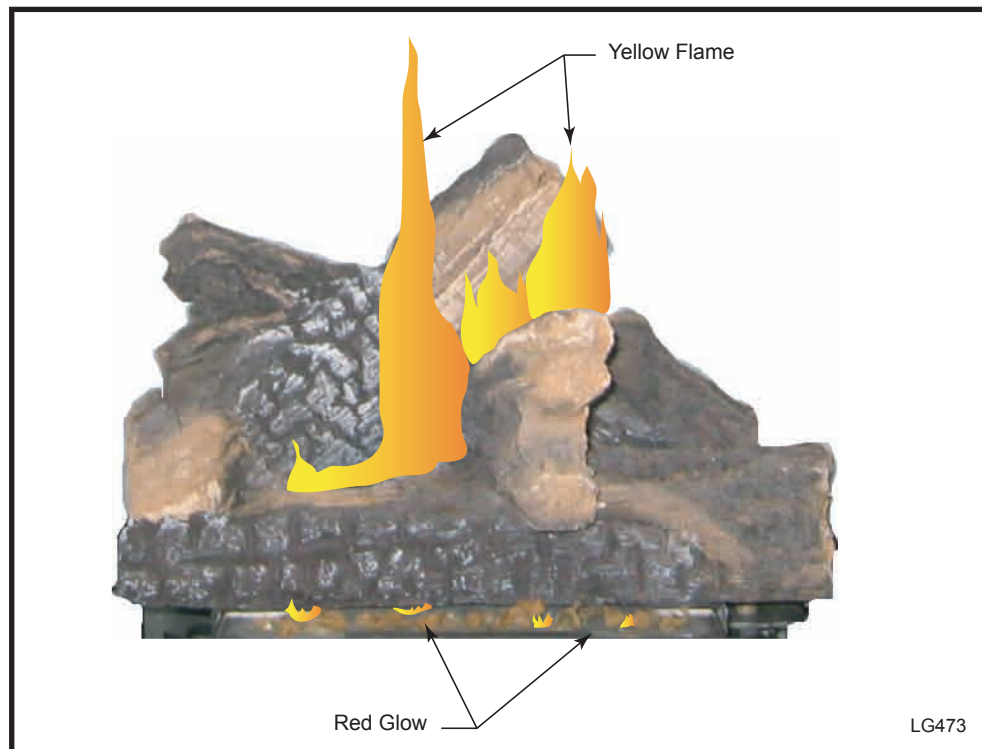


Fig. 36 Correct burner flame appearance for the 20DVT.

# Lighting and Operating Instructions

## FOR YOUR SAFETY READ BEFORE LIGHTING

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

- A. This heater has a pilot which must be lit manually. When lighting the pilot follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the heater area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

### WHAT TO DO IF YOU SMELL GAS

- Do not try to light any fireplace
- 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.

er's instructions.

- If you cannot reach your gas supplier, call the Fire Department

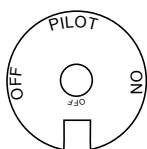
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, do not try to repair it, call a qualified service technician. Applying force or any attempted repair may result in a fire or explosion.
- D. Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect the heater and to replace any part of the control system and any gas control which has been under water.

## Lighting Instructions

1. **STOP!** Read the safety information above.
2. Turn off all electrical power to the fireplace.
3. For MN/MP/TN/TP appliances ONLY, go on to Step 4. For RN/RP appliances turn the On/Off switch to "OFF" position or set thermostat to lowest level.
4. Open control access panel.
5. Push in gas control knob slightly and turn clockwise to "OFF".



Euro SIT



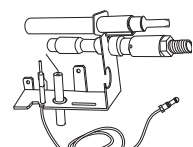
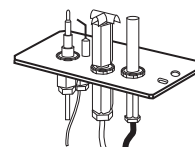
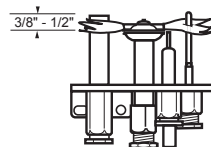
SIT NOVA



Honeywell

6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above. If you do not smell gas, go to the next step.
7. Remove glass door before lighting pilot. (See Glass Frame Removal section).
8. Visibly locate pilot by the main burner.
9. Turn knob on gas control counterclockwise to "PILOT".

10. Push the control knob all the way in and hold. Immediately light the pilot by repeatedly depressing the piezo spark ignitor until a flame appears. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 8.



- If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
  - If after several tries, the pilot will not stay lit, turn the gas control knob to "OFF" and call your service technician or gas supplier.
11. Replace glass door.
  12. Turn gas control knob to "ON" position.
  13. For RN/RP appliances turn the On/Off switch to "ON" position or set thermostat to desired setting.
  14. Turn on all electrical power to the fireplace.

## To Turn Off Gas To Heater

1. Turn the On/Off switch to Off position or set the thermostat to lowest setting.
2. Turn off all electric power to the fireplace if service is to be performed.
3. Open louvre assembly bottom.
4. Push in gas control knob slightly and turn clockwise to "OFF". Do not force.
5. Close control access panel.



# Troubleshooting the Gas Control System

## SIT NOVA 820 MILLIVOLT VALVE

NOTE: Before troubleshooting the gas control system, be sure external gas shut off is in the "On" position.

**WARNING: REMOVE GLASS FRONT BEFORE DOING ANY GAS CONTROL SERVICE WORK.**

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
1. Spark ignitor will not light	A. Defective or misaligned electrode at pilot.	Using a match, light pilot. If pilot lights, turn off pilot and push the red button again. If pilot will not light, check the gap at electrode and pilot; it should be 1/8" to have a strong spark.
	B. Defective ignitor (Push Button)	Push piezo Ignitor Button. Check for spark at electrode and pilot. If no spark to pilot, and electrode wire is properly connected, replace ignitor.
2. Pilot will not stay lit after carefully following lighting instructions.	A. Defective pilot generator (thermocouple), remote wall switch.	Check pilot flame. Must impinge on thermocouple/thermopile. NOTE: This pilot burner assembly utilizes both a thermocouple and a thermopile. The thermocouple operates the main valve operation (ON/OFF). Clean and/or adjust pilot for maximum flame impingement on thermopile and thermocouple.
	B. Defective automatic valve	Turn valve knob to "Pilot." Maintain flow to pilot; millivolt meter should read greater than 10 mV. If the reading is okay and the pilot does not stay on, replace the gas valve. NOTE: An interrupter block (not supplied) must be used to conduct this test.
3. Pilot burning, no gas to main burner	A. Wall switch or wires defective	Check wall switch and wires for proper connections. Jumper wires across terminals at wall switch; if burner comes on, replace defective wall switch. If okay, jumper wires across wall switch wires at valve; if burner comes on, wires are faulty or connections are bad.
	B. Thermopile may not be generating sufficient millivoltage.	<ol style="list-style-type: none"> <li>1. Be sure wire connections from thermopile at gas valve terminals are tight and thermopile is fully inserted into pilot bracket.</li> <li>2. One of the wall switch wires may be grounded. Remove wall switch wires from valve terminals if pilot now stays lit, trace wall switch wiring for ground. May be grounded to fireplace or gas supply.</li> <li>3. Check thermopile with millivolt meter. Take reading at thermopile terminals of gas valve—should read 250-300 millivolts (minimum 150) while holding valve knob depressed in pilot position and wall switch "OFF." Replace faulty thermopile if reading is below specified minimum.</li> </ol>
	C. Plugged burner orifice.	Check burner orifices for debris and remove.
	D. Defective automatic valve operator.	Turn valve knob to "ON," place wall switch to "ON" — millivolt meter should read greater than 100 mV. If the reading is okay and the burner does not come on, replace the gas valve.
4. Frequent pilot outage problem.	A. Pilot flame may be too low or blowing (high) causing the pilot safety to drop out.	Clean and/or adjust pilot flame for maximum flame impingement on thermopile and thermocouple.
	B. Possible blockage of the vent terminal.	Check the vent terminal for blockage (recycling the flue gases)
	C. Low gas supply pressure	Check gas supply pressure to be between minimum and maximum with the burner in the "ON" position.

## Conversions must be completed by qualified personnel

### Fuel Conversion Instructions

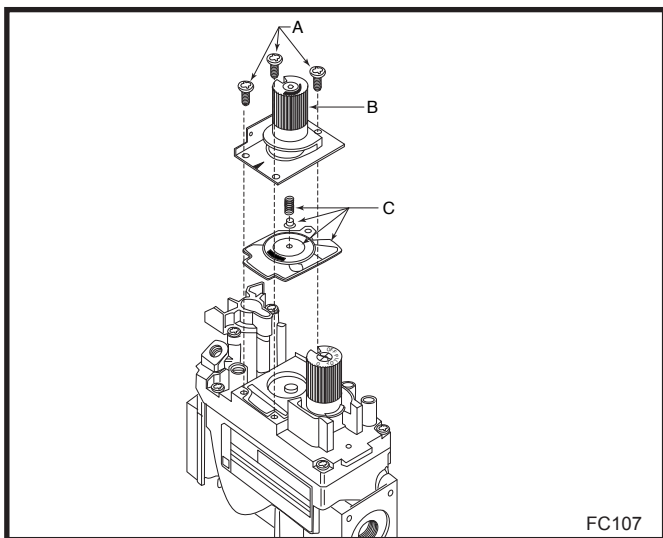
To convert the 20DVT unit for use with a different gas follow these instructions. Before proceeding, turn control knob on valve to “OFF” and turn gas supply OFF. Turn OFF any electricity that may be going to the appliance.

**CAUTION: Logs may be HOT! Allow to cool before proceeding.**

1. Remove window frame assembly. (Refer to “Window Frame Assembly Removal”, Page 17, Fig. 30)
2. Remove logs if previously installed.

#### NOVA SIT820 Valve Conversion

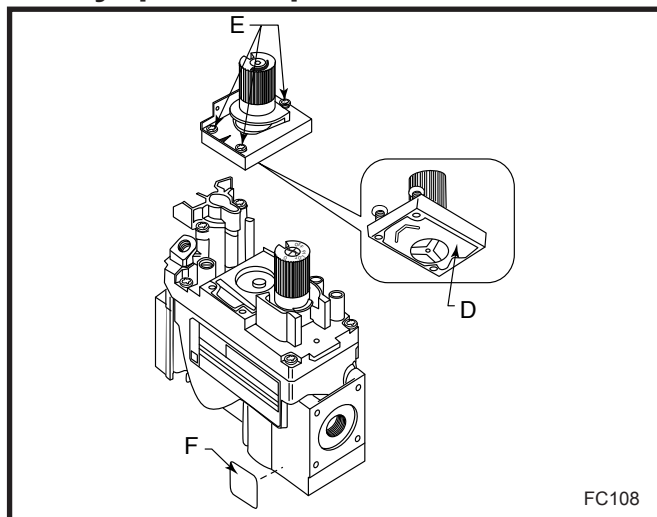
1. Using the TORX T20 bit, remove and discard the three (3) pressure regulator mounting screws (A), pressure regulator tower (B) and the spring and diaphragm assembly (C). (Fig. 37)



**Fig. 37** Remove mounting screws, pressure regulator tower and spring and diaphragm assembly.

2. Insure the rubber gasket (D) is properly positioned and install the new HI/LO pressure regulator assembly to the valve using the new screws (E) supplied with the kit. Tighten the screws securely. (Ref. torque = 25 in/lb) (Fig. 38)
3. Install the enclosed conversion label (F) to the valve body where it can easily be seen. (Fig. 38)

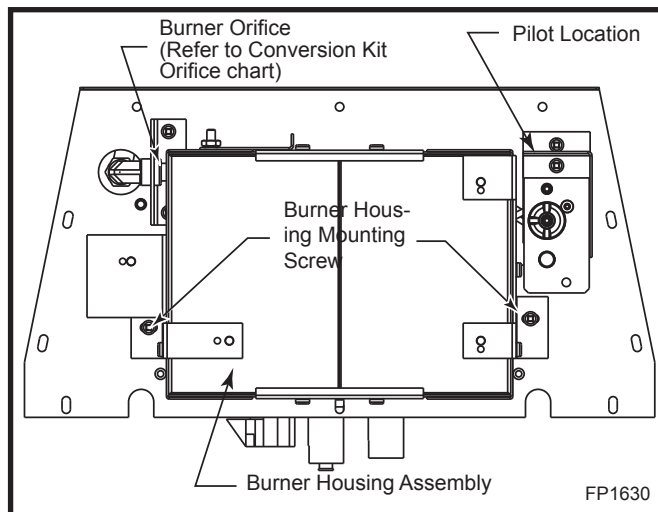
Valve conversion is complete.



**Fig. 38** Replace regulator.

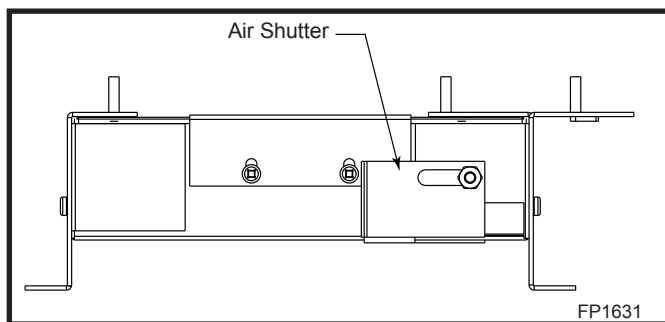
#### Burner Orifice Conversion

1. Remove two (2) burner housing assembly mounting screws. (Fig. 39)
2. Lift burner housing up and remove burner orifice from manifold assembly using 7/16” wrench. (Fig. 39)



**Fig. 39** Burner housing assembly.

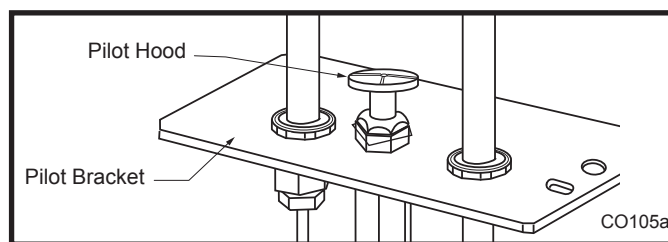
3. Install conversion orifices in place of orifices just removed.
  4. Air shutter settings should be:  
Natural Gas: sides and bottom half open  
LP: Side and bottom half open
  5. Reinstall manifold to burner pan.
- NOTE:** It is not necessary to remove the pilot tube for conversion.



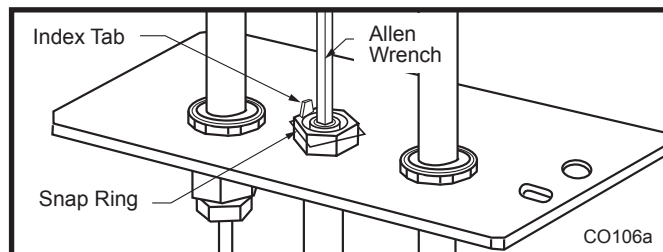
**Fig. 40** Back burner housing.

### Pilot Orifice Conversion

1. Remove pilot hood by lifting up. (Fig. 41)
  2. Remove pilot orifice with 5/32" Allen wrench. (Fig. 42)
  3. Install conversion pilot orifice.
  4. Reinstall pilot hood and be sure to align with index tab.
  5. Turn the gas supply valve and gas valve on and test for leaks. Use a 50/50 solution of liquid soap and water to test for leaks at gas fittings and joints. Apply water/soap solution with brush only - *do not over apply. **NEVER test with an open flame.***
  6. Follow procedure on rating plate to light the pilot. Check for leaks.
  7. Turn main burner on and check for leaks.
  8. Reinstall logs and window frame assembly. Refer to Page 18 for proper log placement.
- Installation complete.



**Fig. 41** Remove pilot hood.



**Fig. 42** Remove pilot orifice.

## Maintenance

### Burner and Burner Compartment

It is important to keep the burner and the burner compartment clean. At least once per year the logs and lava rock/ember material should be removed and the burner compartment vacuumed and wiped out. Remove and replace the logs as per the instructions in this manual.



**Always handle the logs with care as they are fragile and may also be hot if the fireplace has been in use.**

Contact your local representative to arrange an annual service program.

### Cleaning the Standing Pilot Control System

The burner and control system consists of

- burner tube • gas orifice
- pilot assembly • thermopile
- millivolt gas valve

Most of these components may require only an occasional checkup and cleaning and some may require adjustment. **If repair is necessary, it should be performed by a qualified technician.**



### Logs May Be HOT!!

1. Turn off pilot light at gas valve side.
2. Let fireplace cool if it has been running.
3. Remove window frame assembly. (Refer to Window Frame Assembly Removal section)
4. Remove logs.
5. Vacuum burner compartment especially around orifice primary air openings.
6. Visually inspect pilot. Brush or blow away any dust or lint accumulation.
7. Reinstall logs.
8. Ignite pilot - Refer to Lighting Instructions.
9. Reinstall window frame assembly.

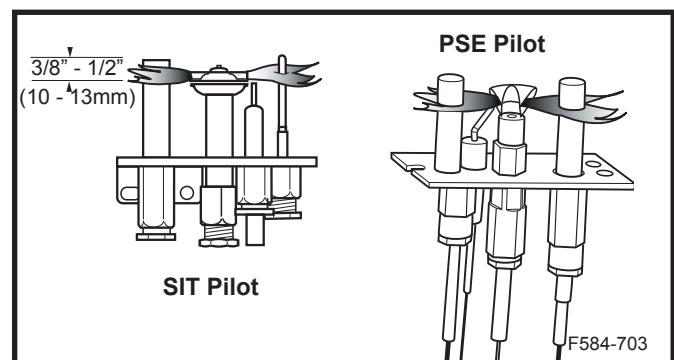
To obtain proper operation, it is imperative that the pilot and burner's flame characteristics are steady, not lifting or floating.

Typically, the top 3/8" or 1/2" of the thermopile should be engulfed in the pilot flame. (Fig. 43)

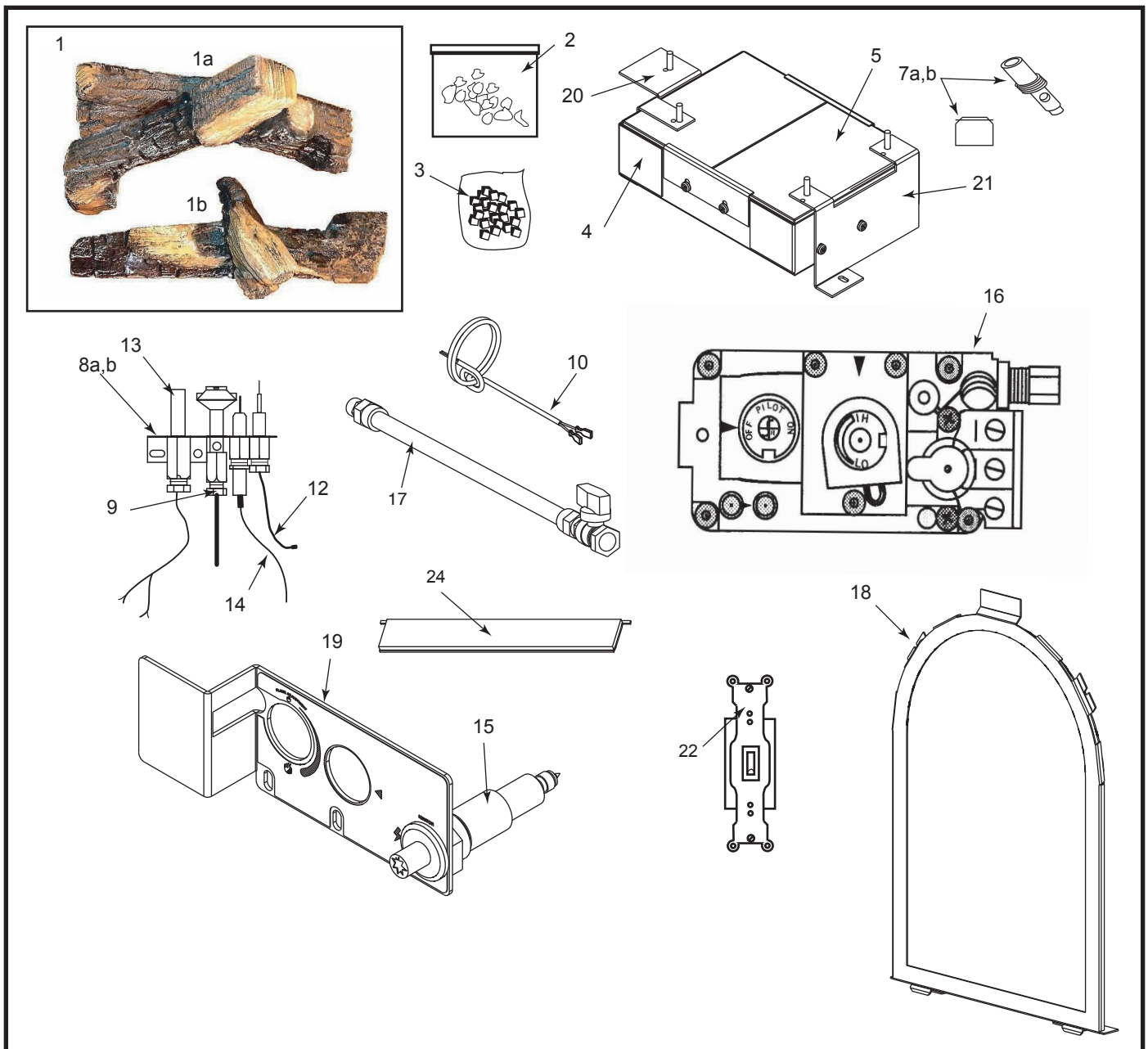
To adjust pilot burner; (by qualified service technician)

1. Remove pilot adjustment cap.
2. Adjust pilot screw to provide properly sized flame.
3. Replace pilot adjustment cap.

The primary air shutter is set at factory and should only be adjusted, if necessary, by a qualified service technician.



**Fig. 43** Correct pilot flame appearance.



CFM Corporation reserves the right to make changes in design, materials, specifications, prices and discontinue colors and products at any time, without notice.

## 20DVT

Ref.	Description	20DVT
1.	Log Set (Complete)	10009451
1a.	Log Rear	J11
1b.	Log Front	J12
2.	Lava Rock (Pkg)	10001454
3.	Ember (Pkg)	10000550
4.	Burner Housing Assy	10009061
5.	Ceramic Tile (single)	57803
6a.	Orifice Burner - Nat. (not shown)	Refer to Rating Plate for Orifice Size
6b.	Orifice Burner - Prop. (not shown)	Refer to Rating Plate for Orifice Size

**20DVT (continued)**

<b>Ref.</b>	<b>Description</b>	<b>20DVT</b>
7a.	Orifice Pilot - Natural	10002268
7b.	Orifice Pilot - Propane	10002269
8a.	Pilot Assy. SIT - RN	10002264
8b.	Pilot Assy. SIT - RP	10002265
9.	Pilot Tubing w/Fittings SIT	10001296
10.	Remote Switch Wire Assy.	20010345
11.	Manifold Tubing w/Fittings (not shown)	57318
12.	Thermocouple (RN/RP)	53373
13.	Thermopile (RN/RP)	51827
14.	Electrode Ignitor w/Cable (RN/RP)	10001297
15.	Ignitor Piezo w/Nut	50932
16.	Valve SIT 820.662 (RN)	20010563
17.	Flexible Gas Line w/ON/OFF Shut-Off Valve	10009064
18.	Frame Window w/Glass Assy.	10009485
19.	Console Assy.	10009081
20.	Support Housing & Log Left Assy.	10009060
21.	Support Housing & Log Right Assy.	10009463
22.	ON/OFF Switch	51842
23.	Ceramic Refractory Lining Kit (not shown)	10009457
24.	Relief Plate Assy.	10009064
25.	Remote Switch Kit (not shown)	53875

**Fuel Conversion Kits**

Conversion Kit, NG to LP

20DVT Kit #10009486

Conversion Kit, LP to NG

20DVT Kit #10009488



## Optional Accessories Available

### Remote Controls

Optional remote control units are available to control different functions of the appliance.

Model	Functions Controlled
RC1	ON/OFF
RC2	ON/OFF and Temperature
IMTFK	Wall mounted thermostat control

### Ceramic Refractory Panels



**NOTE:** The ceramic refractories are shipped separate from the unit and **MUST BE** installed.

Take care when handling the refractory panels as they are fragile until held in place and supported.

#### Installation Instructions

1. Remove window frame assembly and logs.
2. Place rear ceramic panel in back of unit. (Fig. 44)
3. Place side panels.
4. Re-install logs and window frame assembly.

### Optional Trim Kits

**NOTE:** The cast panel is optional, however, a cast panel **MUST BE** installed with the fireplace.

Item #	Model #	Description
GAET4B0	BHTRIMEBBLK	Ebony Black
GABT4B0	BHTRIMCLBLK	Classic Black

### Optional Cabinet

A cherry finish corner cabinet is available for the 20DVT. Item #BACG6B0, Model #BCCGF20CC.

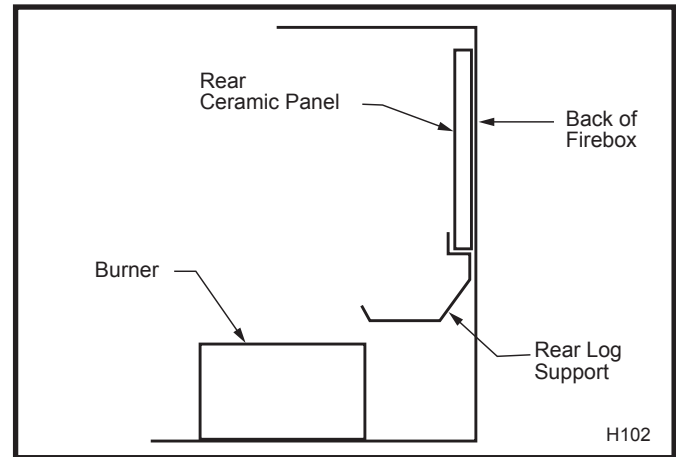


Fig. 44 Rear ceramic panel placement.







# LIMITED LIFETIME WARRANTY

## PRODUCT COVERED BY THIS WARRANTY

All Vermont Castings gas stoves, gas inserts, and gas fireplaces, and all Majestic brand gas fireplaces equipped with an Insta-Flame Ceramic Burner, or standard steel tube burner.

## BASIC WARRANTY

CFM Corporation (hereinafter referred to collectively as the Company) warrants that your new Vermont Castings or Majestic Gas Fireplace/Stove is free from manufacturing and material defects for a period of one year from the date of purchase, subject to the following conditions and limitations.

## EXTENDED LIFETIME WARRANTY

The heat exchanger, where applicable, and combustion chamber of every Vermont Castings or Majestic gas product is warranted for life against through wall perforation. All appliances equipped with an Insta-Flame Ceramic Burner have limited lifetime coverage on the ceramic burner plaque. Warrantees are made to the original owner subject to proof of purchase and the conditions and limitations listed on this Warranty Document

## COMPONENT WARRANTY

**CAST IRON:** All external and internal cast iron parts are warranted for a period of three years.

**Note:** On porcelain enamel finished external parts and accessories The Company offers no Warranty on chipping of enamel surfaces. Inspect all product prior to accepting it for any damage to the enamel.

The salt air environment of coastal areas or a high humidity environment can be corrosive to the porcelain enamel finish. These conditions can cause rusting of the cast iron beneath the porcelain enamel finish, which will cause the finish to flake off.

Dye lot variations with replacement parts and/or accessories can occur and are not covered by warranty.

**GLASS DOORS:** Glass doors are covered for a period of one year. Glass doors are not warranted for breakage due to misuse or accident. Glass doors are not covered for discoloration or burned in stains due to environmental issues, or improper cleaning and maintenance.

**BRASS PLATED PARTS AND ACCESSORIES:** Brass parts should be cleaned with Lemon oil only. Brass cleaners cannot be used. Mortar mix and masonry cleaners may corrode the brass finish. The Company will not be responsible for, nor will it warrant any brass parts which are damaged by external chemicals or down draft conditions.

**GAS VALVES:** Gas valves are covered for a period of one year

**ELECTRONIC AND MECHANICAL COMPONENTS:** Electronic and mechanical components of the burner assembly are covered for one year. All steel tube burners are warranted for one year.

**ACCESSORIES:** Unless otherwise noted all components and CFM Corporation company supplied accessories are covered for a period of one year.

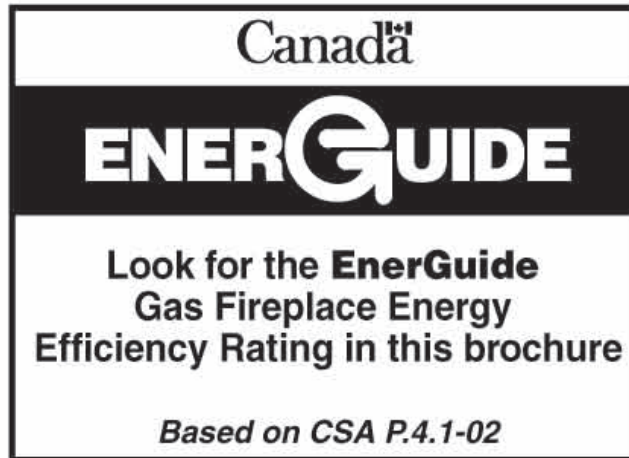
## CONDITIONS AND LIMITATIONS

- This new Vermont Castings or Majestic product must be installed by a competent, authorized, service contractor. A licensed technician, as prescribed by the local jurisdiction must perform any installation/service work. It must be installed and operated at all times in accordance with the Installation and Operating instructions furnished with the product. Any alteration, willful abuse, accident, or misuse of the product shall nullify this warranty.
- This warranty is non-transferable, and is made to the original owner, provided that the purchase was made through an authorized supplier of the Company.
- The customer must pay for any Authorized Dealer in-home travel fees or service charges for in-home repair work. It is the dealers option whether the repair work will be done in the customer's home or in the dealer's shop.
- If upon inspection, the damage is found to be the fault of the manufacturer, repairs will be authorized at no charge to the customer parts and/or labor.

- Any part and/or component replaced under the provisions of this warranty is covered for six months or the remainder of the original warranty, whichever is longest.
- This warranty is limited to the repair of or replacement of part(s) found to be defective in material or workmanship, provided that such part(s) have been subjected to normal conditions of use and service, after said defect is confirmed by the Company's inspection.
- The company may, at its discretion, fully discharge all obligations with respect to this warranty by refunding the wholesale price of the defective part(s)
- Any installation, labor, construction, transportation, or other related costs/expenses arising from defective part(s), repair, replacement, or otherwise subjected to normal conditions of use and service, shall the Company assume responsibility for same. Further, the Company will not be responsible for any incidental, indirect, or consequential damages except as provided by law.
- *SOME STATES DO NOT ALLOW FOR THE EXCLUSION OR LIMITATIONS OF INCIDENTAL AND CONSEQUENTIAL DAMAGES OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOUR CIRCUMSTANCES. THIS WARRANTY GIVES YOU SPECIFIC RIGHTS AND YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.*
- All other warranties-expressed or implied- with respect to the product, its components and accessories, or any obligations/liabilities on the part of the Company are hereby expressly excluded.
- The Company neither assumes, nor authorizes any third party to assume on its behalf, any other liabilities with respect to the sale of this Vermont Castings or Majestic product
- The warranties as outlined within this document do not apply to chimney components or other non CFM Corporation accessories used in conjunction with the installation of this product..
- Damage to the unit while in transit is not covered by this warranty but is subject to claim against the common carrier. Contact the dealer from whom you purchased your fireplace/stove (do not operate the appliance as this might negate the ability to process the claim with the carrier).
- The Company will not be responsible for:
  - a) Down drafts or spillage caused by environmental conditions such as near-by trees, buildings, roof tops, hills, or mountains.
  - b) Inadequate ventilation or negative air pressure caused by mechanical systems such as furnaces, fans, clothes dryers, etc.
- This warranty is void if:
  - a) The fireplace has been operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals.
  - b) The fireplace has been subjected to prolonged periods of dampness or condensation
  - c) Any damages to the fireplace, combustion chamber, heat exchanger or other components due to water, or weather damage, which is the result of but not limited to, improper chimney/venting installation.
  - d) Any alteration, willful abuse, accident, or misuse of the product has occurred.

## 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 CFM Corporation product.
- 2) DO NOT ATTEMPT TO DO ANY SERVICE WORK YOURSELF.



Efficiency Ratings			
Model	EnerGuide Ratings Fireplace Efficiency (%)	Steady State (%)	D.O.E. (AFUE%)
20DVTRN	60.1	80	64
20DVTRP	60.1	81	64

**NATIONAL  
FIREPLACE  
INSTITUTE**



**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.

### CFM Corporation

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