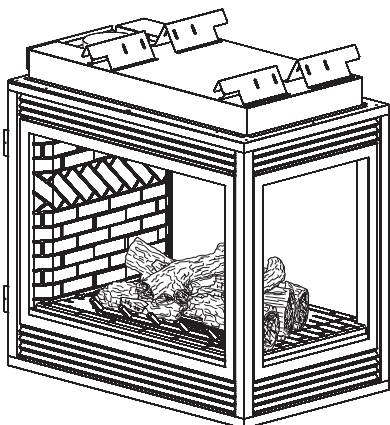


EMPIRE

COMFORT SYSTEMS

INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL

The Direct Vent Zero Clearance Gas Fireplace Heater



Installer: Leave this manual with the appliance.
Consumer: Retain this manual for future reference.

WARNING: If the information in these instructions are not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- 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.
 - 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: If not installed, operated and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or from fuel combustion which can cause death or serious illness.

DIRECT VENT GAS FIREPLACE HEATER

MODEL SERIES

DVP36PP32EN-3

DVP36PP32EP-3

DVP36SP32EN-3

DVP36SP32EP-3

GAS-FIRED



UL FILE NO. MH30033

WARNING



**HOT GLASS WILL
CAUSE BURNS.
DO NOT TOUCH GLASS
UNTIL COOLED.
NEVER ALLOW CHILDREN
TO TOUCH GLASS.**

NATIONAL
FIREPLACE
INSTITUTE



CERTIFIED
www.nficertified.org

We suggest 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.

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

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CARTON CONTENTS

Fireplace Assembly

Installation Package

3/8" x 12" Flexline
Rockwool Packet
Installation Instructions
Serial Number Tag
Recepticle, 3-Prong
Warranty Card
Cover, Junction Box

Hardware Package (See Figure Below)

Romex Connector (2)
#10 x 1/2" Phillips Hex Head Screw
#8-18 x 1/2" Phillips Truss Head

Screw

Nailing Flange

Additional Parts for Peninsula Models Only:

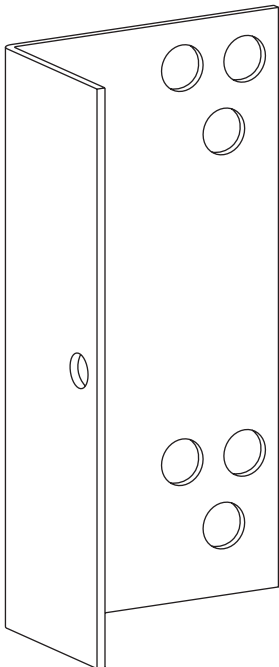
Canopy, End*
Canopy, Right*
Canopy, Left*
End Shield*
Canopy Corner Tie*

*Note: Installation required when using EMPT series Peninsula Mantel

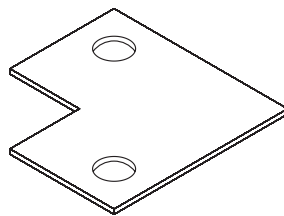
Canopy Hardware Package

Corner Tie - Canopy (2)
#10 x 1/2" Phillips Hex Head Screw (8)
#8-18 x 1/2" Phillips Truss Head Screw (4)

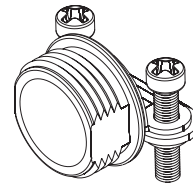
HARDWARE PACKAGE



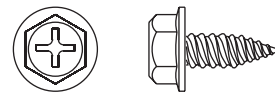
NAILING FLANGE (8)



CORNER TIE - CANOPY
(2 - PENINSULA MODELS)



ROMEX CONNECTOR (2)



#10 X 1/2" PHILLIPS HEX HEAD SCREW
(24 - PENINSULA MODELS)
(16 - SEE-THROUGH MODELS)



#8-18 X 1/2" PHILLIPS TRUSS HEAD SCREW
(4 - PENINSULA MODELS)

Note: Hardware shown to scale where possible.

IMPORTANT SAFETY INFORMATION

Before enclosing the vent pipe assembly, operate the appliance to ensure it is venting properly.

DO NOT OPERATE THIS APPLIANCE WITHOUT ALL GLASS DOOR PANELS INSTALLED

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

The base referred to above does not mean the fireproof base as used on wood stoves. The protection is for rugs that are extremely thick and light colored tile.
- Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.
- Young children should be carefully supervised when they are in the same room as the appliance.
- Clothing or other flammable material should not be placed on or near the appliance.
- Adequate accessibility clearances for servicing and proper operation.
- This appliance must not share or be connected to a flue serving a separate solid-fuel burning appliance.
- Keep the area around your appliance clear of combustible materials, gasoline and other flammable vapor and liquids.
- Under no circumstances should any solid fuels (wood, coal, paper or cardboard etc.) be used in this appliance.
- The flow of combustion and ventilation air must not be obstructed in any way.

- Due to high temperatures the appliance should be located out of traffic and away from furniture and draperies.
- The glass front or any part removed for servicing the appliance must be replaced prior to operating the appliance. Work should be done by a qualified service person.
- Keep burner and control compartment clean.
- Vent cap is hot while fireplace is in operation.
- Installation and repair should be done by a **QUALIFIED SERVICE PERSON**. The appliance should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.
- **DO NOT** put anything around the fireplace that will obstruct the flow of ventilation air.
- Clearance in accordance with local installation codes and the requirements of the gas supplier.
- **DO** keep the appliance area clear and free from combustible material, gasoline and other flammable vapors and liquids.
- **DO** examine venting system periodically and replace damaged parts.
- **DO** make a periodic visual check of pilot and burners. Clean and replace damaged parts.
- **CAUTION:** The glass used in your fireplace is tempered glass. If the glass is cracked or damaged in any way, it should be replaced only with a complete glass frame assembly from Empire. See parts list on Pages 53 through 55 for ordering.
- **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.
- Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the appliance.

SAFETY INFORMATION FOR USERS OF LP GAS

Propane (LP-Gas) is a flammable gas which can cause fires and explosions. In its natural state, propane is odorless and colorless. You may not know all the following safety precautions which can protect both you and your family from an accident. Read them carefully now, then review them point

by point with the members of your household. Someday when there may not be a minute to lose, everyone's safety will depend on knowing exactly what to do. If, after reading the following information, you feel you still need more information, please contact your gas supplier.

LP-GAS WARNING ODOR

If a gas leak happens, you should be able to smell the gas because of the odorant put in the LP-Gas. That's your signal to go into immediate action!

- Do not operate electric switches, light matches, use your phone. Do not do anything that could ignite the gas.
- Get everyone out of the building, vehicle, trailer, or area. Do that IMMEDIATELY.
- Close all gas tank or cylinder supply valves.
- LP-Gas is heavier than air and may settle in low areas such as basements. When you have reason to suspect a gas leak, keep out of basements and other low areas. Stay out until firefighters declare them to be safe.
- Use your neighbor's phone and call a trained LP-Gas service

person and the fire department. Even though you may not continue to smell gas, do not turn on the gas again. Do not re-enter the building, vehicle, trailer, or area.

- **Finally**, let the service man and firefighters check for escaped gas. Have them air out the area before you return. Properly trained LP-Gas service people should repair the leak, then check and relight the gas appliance for you.

NO ODOR DETECTED - ODOR FADE

Some people cannot smell well. Some people cannot smell the odor of the chemical put into the gas. You must find out if you can smell the odorant in propane. Smoking can decrease your ability to smell. Being around an odor for a time can affect your sensitivity or ability to detect that odor. Sometimes other odors in the area mask the gas odor. People may not smell the gas odor or their minds are on something else. Thinking about smelling a gas odor can make it easier to smell.

The odorant in LP-Gas is colorless, and it can fade under some circumstances. For example, if there is an underground leak, the movement of the gas through soil can filter the odorant. Odorants in LP-Gas also are subject to oxidation. This fading can occur if

there is rust inside the storage tank or in iron gas pipes.

The odorant in escaped gas can adsorb or absorb onto or into walls, masonry and other materials and fabrics in a room. That will take some of the odorant out of the gas, reducing its odor intensity.

LP-Gas may stratify in a closed area, and the odor intensity could vary at different levels. Since it is heavier than air, there may be more odor at lower levels. Always be sensitive to the slightest gas odor. If you detect any odor, treat it as a serious leak. Immediately go into action as instructed earlier.

SOME POINTS TO REMEMBER

- **Learn to recognize the odor of LP-Gas.** Your local LP-Gas Dealer can give you a "Scratch and Sniff" pamphlet. Use it to find out what the propane odor smells like. If you suspect that your LP-Gas has a weak or abnormal odor, call your LP-Gas Dealer.
- If you are not qualified, do not light pilot lights, perform service, or make adjustments to appliances on the LP-Gas system. If you are qualified, consciously think about the odor of LP-Gas prior to and while lighting pilot lights or performing service or making adjustments.
- Sometimes a basement or a closed-up house has a musty smell that can cover up the LP-Gas odor. Do not try to light pilot lights, perform service, or make adjustments in an area where the conditions are such that you may not detect the odor if there has been a leak of LP-Gas.
- Odor fade, due to oxidation by rust or adsorption on walls of new cylinders and tanks, is possible. Therefore, people should be particularly alert and careful when new tanks or cylinders are placed in service. Odor fade can occur in new tanks, or reinstalled old tanks, if they are filled and allowed to set too long before refilling. Cylinders and tanks which have been out of service for a time may develop internal rust which will cause odor fade. If such conditions are suspected to exist, a periodic

sniff test of the gas is advisable. **If you have any question about the gas odor, call your LP-Gas dealer. A periodic sniff test of the LP-Gas is a good safety measure under any condition.**

- If, at any time, you do not smell the LP-Gas odorant and you think you should, assume you have a leak. Then take the same immediate action recommended above for the occasion when you do detect the odorized LP-Gas.
- If you experience a complete "gas out," (the container is under no vapor pressure), turn the tank valve off immediately. If the container valve is left on, the container may draw in some air through openings such as pilot light orifices. If this occurs, some new internal rusting could occur. If the valve is left open, then treat the container as a new tank. Always be sure your container is under vapor pressure by turning it off at the container before it goes completely empty or having it refilled before it is completely empty.

REQUIREMENTS FOR MASSACHUSETTS

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 gasfitter 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 gasfitter 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.

(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 instruction.

(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 instructions shall remain with the appliance or equipment at the completion of the installation.

INTRODUCTION

Instructions to Installer

1. Installer must leave instruction manual with owner after installation.
2. Installer must have owner fill out and mail warranty card supplied with the fireplace.
3. Installer should show owner how to start and operate the fireplace.

This direct vent gas fireplace heater is designed to operate with all combustion air being siphoned from the outside of the building and all exhaust gases expelled to the outside of the building. The information contained in this manual pertains to all models and gas control systems unless otherwise noted.

Warning: This unit is not for use with solid fuels.

Appliance Certification

This fireplace is design certified in accordance with American National Standard/CSA Standard ANSI Z.21-88/CSA 2.33 and by Underwriters Laboratories as a Direct Vent Gas Fireplace Heater and shall be installed according to these instructions.

Consult your local building code agency, prior to installation, to ensure compliance with local codes-including permits and inspections.

The fireplace, when installed, must be electrically grounded in accordance with local codes or, in absence of local codes, with the *National Electric Code ANSI/NFPA 70* or Canadian Electric code, CSA C22.1, if an external electrical source is utilized.

These models may be installed in a bedroom or bed-sitting room in the U.S.A. and Canada.

Qualified Installing Agency

Installation and replacement of gas piping, gas utilization equipment or accessories and repair and servicing of equipment shall be performed only by a qualified agency. The term "qualified agency" means any individual, firm, corporation or company which either in person or through a representative is engaged in and is responsible for (a) the installation or replacement of gas piping or (b) the connection, installation, repair or servicing of equipment, who is experienced in such work, familiar with all precautions required and has complied with all the requirements of the authority having jurisdiction.

State of Massachusetts: The installation must be made by a licensed plumber or gas fitter in the Commonwealth of Massachusetts.

The installation must conform with local codes or, in the absence of local codes, with the *National Fuel Gas Code ANSI Z223.1/NFPA 54* Natural Gas and Propane Installation Code*, or *CSA B149.1 in Canada*. *Available from the American National Standards Institute, Inc. 11 West 42nd St., New York, N.Y. 10036.

Warning: ANY CHANGE TO THIS FIREPLACE OR ITS CONTROLS CAN BE DANGEROUS.

Improper installation or use of the fireplace can cause serious injury or death from fire, burns, explosions, or carbon monoxide poisoning.

Any alteration of the original design, installed other than as shown in these instructions or use with a type of gas not shown on the rating plate is the responsibility of the person and company making the change.

Important

All correspondence should refer to complete Model Number, Serial Number and type of gas.

High Altitude

When installing this unit at an elevation above 2000 feet (in the United States) it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Generally, input should be reduced 4 percent for each 1000 feet above sea level. However, if the heating value of the gas has been reduced, this general rule may not apply. Check with local gas utility for proper orifice size identification.

Canadian High Altitude

Altitude: 0-4500 feet (0-1370 m)

When installing this unit at an elevation above 4500 feet (in Canada), check with local authorities.

Consult your local gas utility for assistance in determining the proper orifice for location.

Preparation

This direct vent gas fireplace and its components are tested and safe when installed in accordance with this Installation Manual. Report to your dealer any parts damaged in shipment, specifically check glass condition. Do not install unit with damaged, incomplete, or substitute parts. Read all instructions before starting installation and follow these instructions carefully during installation to insure maximum benefit and safety. Failure to follow them will void your warranty and may present a fire hazard.

The warranty will be voided by, and the warranter disclaims any responsibility for the following actions:

- Installation of any damaged fireplace or vent system component.
- Modification of the fireplace or direct vent system.
- Installation other than as instructed by Empire Comfort Systems, Inc.
- Improper positioning of the logs, glass door or decorative rock.
- Installation and/or use of any component part not manufactured or approved by manufacturer.

SPECIFICATIONS

DVP36(SP,PP) Nat Models	
Input Btu/hr Maximum	35,000
Btu/hr Minimum (millivolt only)	24,000
KWH (Maximum)	10.15
(Minimum)	6.96
Orifice	#33
Air Shutter Opening	5/16"
DVP36(SP,PP) LP Models	
Input Btu/hr Maximum	35,000
Btu/hr Minimum (millivolt only)	28,000
KWH (Maximum)	10.15
(Minimum)	8.12
Orifice	1.75 mm
Air Shutter Opening	FULL OPEN
DVP36(SP,PP) Nat and LP Models	
Height without standoff	34 3/4" (883 mm)
Width, Face	39"
Depth	24"
Gas Inlet Shutoff Valve (pipe)	1/2" NPT

NOTE: Air shutter settings are factory minimum settings. Some venting configurations may require minor air shutter adjustments for optimum performance.

Remote Control Options & Accessories	Description
FRBC	Millivolt Battery Remote ON/OFF
FRBTC	Millivolt Battery Remote T-Stat
FRBTP	Millivolt Battery Remote with Thermostat
TRW	Millivolt Wireless Wall Thermostat
TMV	Millivolt Reed Switch Wall Thermostat
FWS-1	Millivolt Wall Switch
FREC	Electric Remote

Venting Options	Description
DVVK-4TSP (DVVK-4TS)	Top Vent Kit (Horz.) - 5" to 7" wall thickness
DVVK-4TP (DVVK-4T)	Top Vent Kit (Horz.) - 8" to 11" wall thickness
DVVK-4RP (DVVK-4R)	Rear Vent Kit (Horz.) - 5" to 7" wall thickness
DVVK-4VP (DVVK-4V)	Vertical Vent Kit
DVVK-4F	Horizontal Flex Vent Kit (4' Flex)
DVVK-4RE	Horizontal Round Termination wall thickness - 5" to 13 3/4"
DV822	Vinyl Siding Kit for DVVK-4RE
DVVK-4FV	Vertical Flex Vent Kit (6' Flex / 4' Rigid = 10' Total)
DVEK-10	10' Vent Extension Kit
DVEK-25	25' Vent Extension Kit

FIREPLACE DIMENSIONS

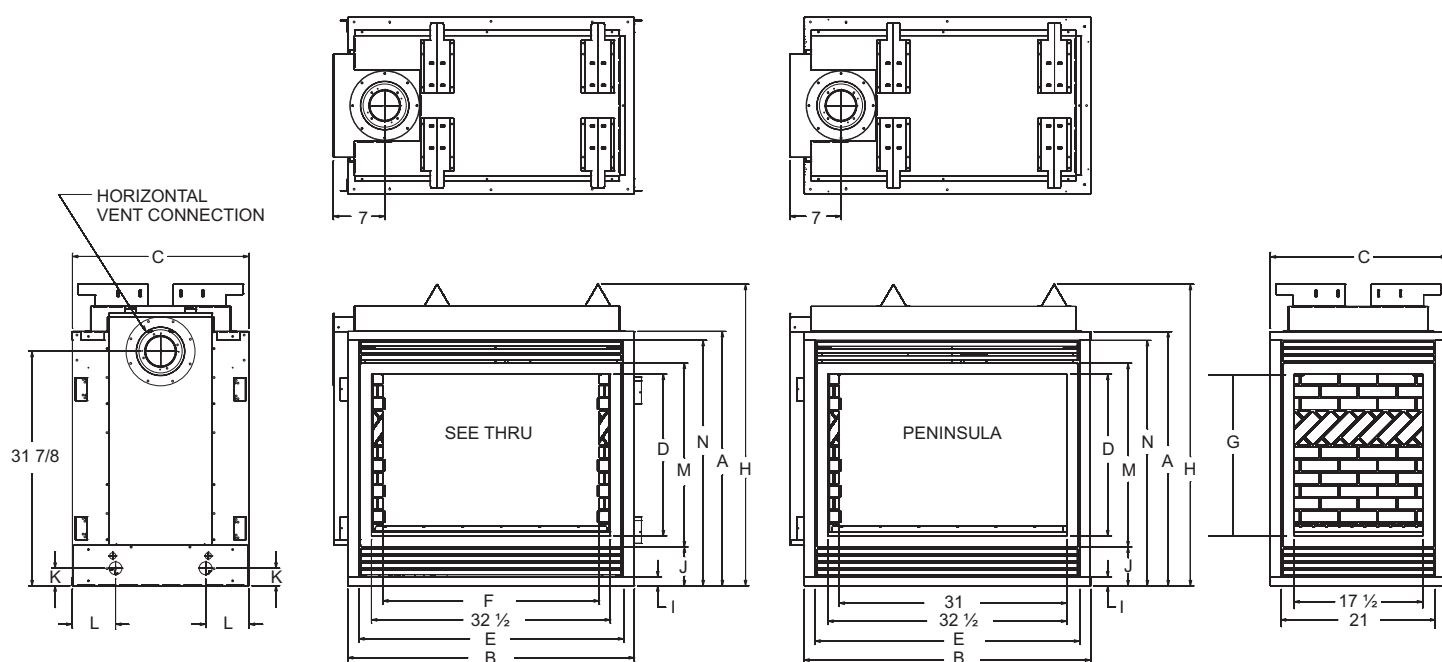


Figure 1

MODEL	DVP36SP32E	DVP36PP32E
A	34 3/4"	34 3/4"
B	39"	39"
C	24"	24"
D	22"	22"
E	36"	36"
F	29 1/4"	32 5/8"
G	22"	22"
H	41 1/8"	41 1/8"
I	1 1/4"	1 1/4"
J	5 3/8"	5 3/8"
K	2 1/2"	2 1/2"
L	6"	6"
M	25"	25"
N	33 1/2"	33 1/2"
MAX WEIGHT (LB)	240	230

CLEARANCES

Clearance to Combustibles	
Air Drop (End)	1/2" (12.7 mm)
Side	1/2" (12.7 mm)
Floor	0" (0 mm)
Top Stand-off	0" (0 mm)
Top Framing Edge	6 3/8" (161.7 mm)

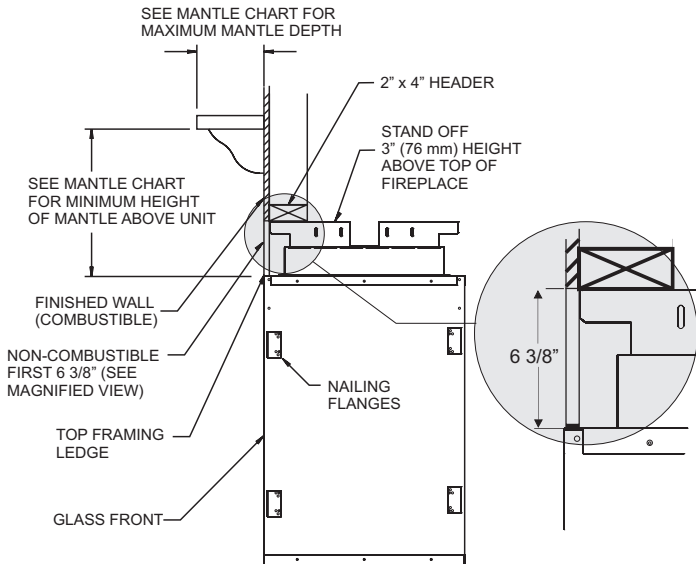


Figure 2

Combustible Material

Do not attach combustible material to the mantel of your fireplace. This is a fire hazard. No greeting cards, stockings or ornamentation of any type should be placed on or attached to the fireplace. This is a heating appliance. The flow of heat can ignite combustibles.

Mantel Chart (Figure 3)

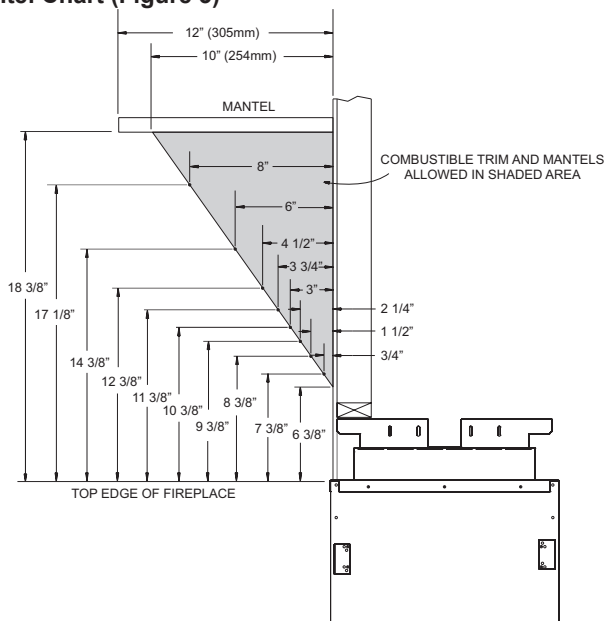


Figure 3

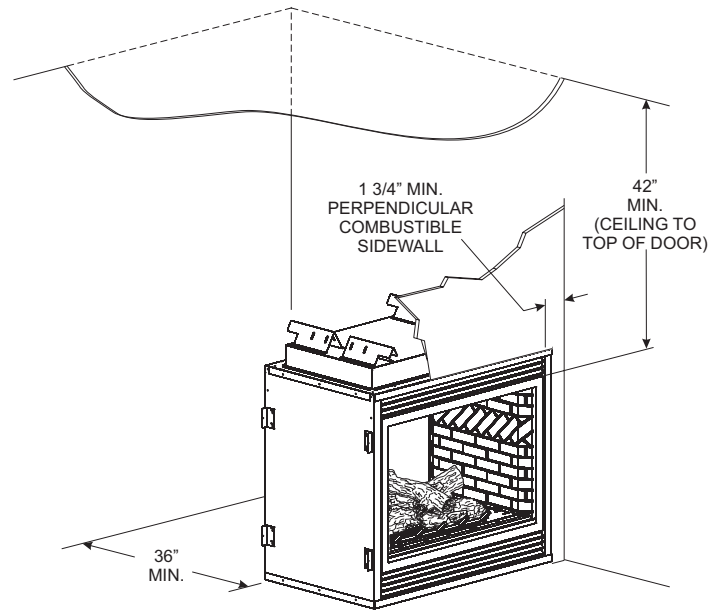


Figure 4a - See Through Fireplace Clearances

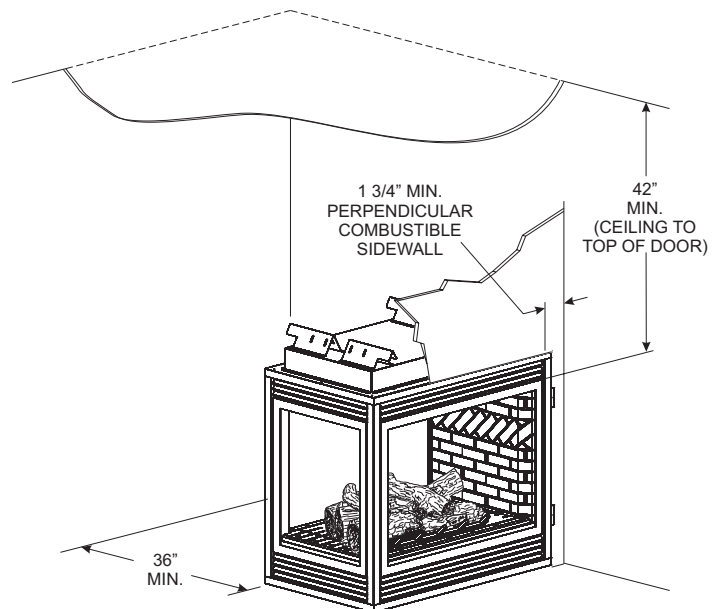


Figure 4b - Peninsula Fireplace Clearances

OPTIONAL EMPT SERIES MANTEL INSTALLATION - PENINSULA MODELS ONLY

The Peninsula Direct Vent fireplaces include a 3-Piece Canopy and End Shield. These additional parts must be installed on the fireplace if the EMPT series Mantel top is to be used.

Note: The 3-piece canopy and End Shield is not required if the fireplace is to be finished off using an installation method as shown in Figure 4b.

Attention: For installation of the EMPT Mantel base and/or Mantel top components, reference the assembly instructions included with the mantel.

Attention: The fireplace venting must start off horizontally when using the EMPT mantel. Once through the wall, the vent system may be run vertically or continue with a horizontal termination. Reference the venting section for additional mantel information.

Installing the 3-Piece Canopy and End Shield

Prior to installing the Peninsula mantel, install the 3-piece canopy and End Shield in conjunction with the (4) Mantel Corner Brackets (included with the Mantel Top) as shown in Figure 5a. Refer to the instructions included with the EMPT Mantel Top for additional installation details.

1. Install (2) of the Mantel Corner Brackets at the vent end corners first. Loosely attach each bracket with one #10 x 1/2" Hex Head screw through the rear flange and into the pilot hole on top of the fireplace. See Figure 5.
2. Position the Rear Canopy with the mitered corner to the open end of the fireplace. The canopy will slide under the flange of

the Rear Mantel Corner Bracket. Align the holes in the canopy with the corner bracket and loosely install a #10 x 1/2" Hex Head screw to retain.

3. Position the Front Canopy with the mitered corner to the open end of the fireplace. The canopy will slide under the Rear Mantel Corner Bracket. Align the holes in the Canopy and Corner Bracket and loosely install a #10 x 1/2" Hex Head screw to retain.
4. Place the other (2) Mantel Corner Brackets on top of the Front and Rear Canopies near the open end of the fireplace and loosely install a #10 x 1/2" screw through the corner bracket and canopy, then into the pilot holes provided. Do not tighten the screws.
5. Install the End Canopy by sliding it under the Open End Mantel Corner Bracket flanges and align mounting holes. Then, place the End Shield above the End Canopy and Mantel Corner Brackets, align holes, then loosely secure all three parts with #10 x 1/2" screws to the fireplace.
6. Adjust the canopies left to right as needed so that the mitered corners meet, then tighten all previously installed screws to secure end shield, canopies, and mantel corner brackets.
7. To finish canopy installation, install two (2) canopy corner tie brackets at the underside of the canopy corners as illustrated by Figure 5a. Use a Phillips screwdriver to install two (2) #8 x 1/2 black sheet metal screws to attach each corner bracket. Before tightening screws, align the canopy mitered corners together then secure.

Figures 5 and 6 show placement of the corner brackets, canopies, and the end shield. Figure 7 shows a finished view of the fireplace mantel, top and base.

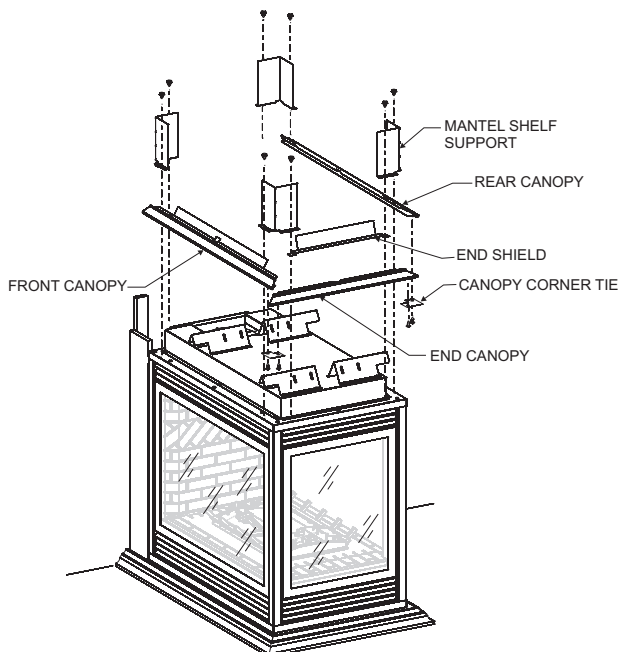


Figure 5

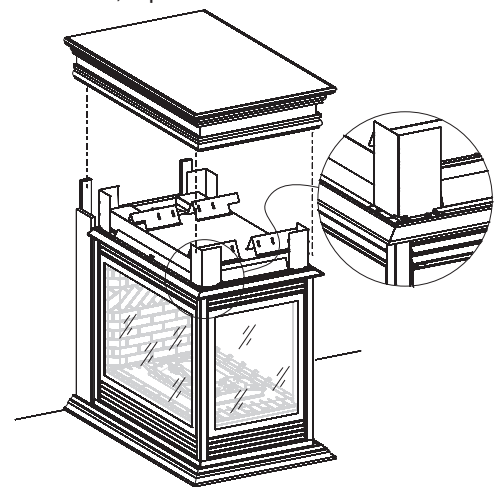


Figure 6

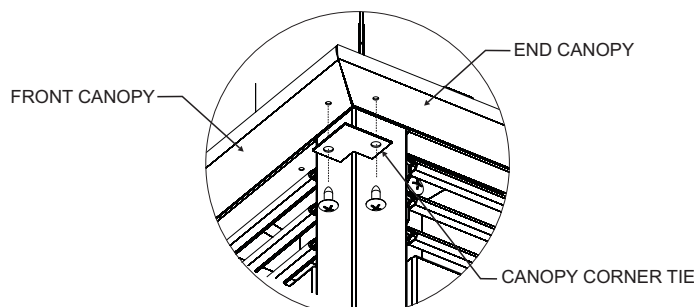


Figure 5a

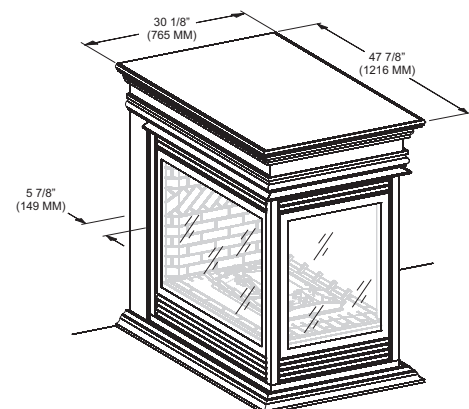


Figure 7

LOCATING FIREPLACE

Note:** Island (C) and Room Divider (D) installation is possible as long as the horizontal portion of the vent system (H) does not exceed 20 feet with a minimum vertical run of 8 feet. See details in Venting Section.

*When you install your Direct Vent Fireplace, a minimum of 1 3/4 inches clearance must be maintained from the perpendicular wall and the front opening of the appliance. However, on the vent end of the fireplace, if placed against a wall, the perpendicular side wall clearance from the opening would be 2 1/2 inches.

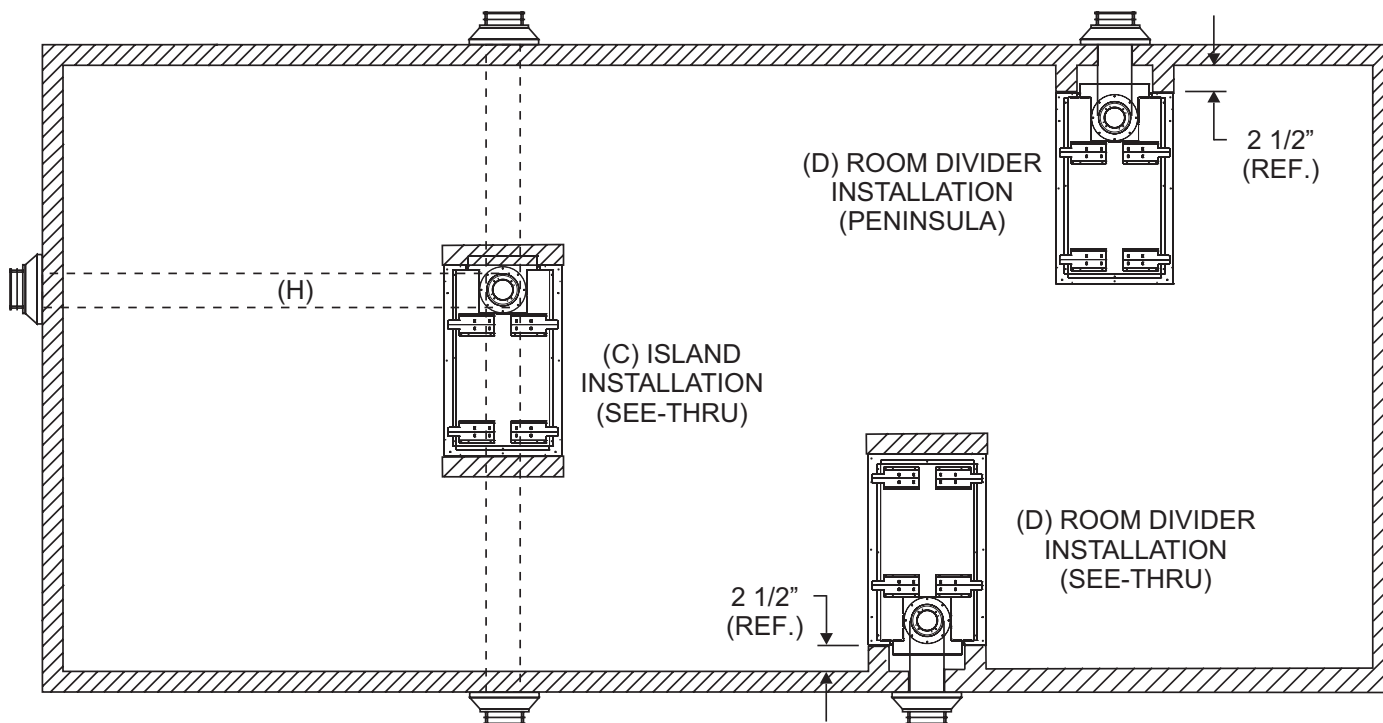


Figure 8

GAS SUPPLY

The gas pipeline can be brought in through the right or left side of the appliance. Consult the current National Fuel Gas Code, ANSI Z223.1 CAN/CGA-B149 (.1 or .2) installation code.

Recommended Gas Pipe Diameter				
Pipe Length	Schedule 40 Pipe Inside Diameter		Tubing, Type L Outside Diameter	
	Nat.	L.P.	Nat.	L.P.
0-10ft 0-3m	1/2"	3/8"	1/2"	3/8"
	12.7mm	9.5mm	12.7mm	9.5mm
11-40ft 4-12m	1/2"	1/2"	5/8"	1/2"
	12.7mm	12.7mm	15.9mm	12.7mm
41-100ft 13-30m	1/2"	1/2"	3/4"	1/2"
	12.7mm	12.7mm	19mm	12.7mm
101-150ft 31-46m	3/4"	1/2"	7/8"	3/4"
	19mm	12.7mm	22.2mm	19 mm

Note: Never use plastic pipe. Check to confirm whether your local codes allow copper tubing or galvanized.

Note: Since some municipalities have additional local codes, it is always best to consult your local authority and installation code.

The use of the following gas connectors is recommended:

- ANS Z21.24 Appliance Connectors of Corrugated Metal Tubing and Fittings.
- ANS Z21.45 Assembled Flexible Appliance Connectors of Other Than All-Metal Construction

The above connectors may be used if acceptable by the authority having jurisdiction. The state of Massachusetts requires that a flexible appliance connector cannot exceed three feet in length.

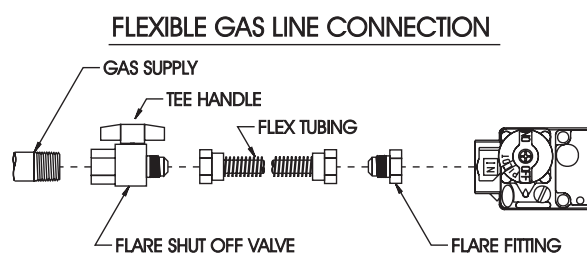


Figure 9

	Gas Supply Pressure (inches w.c.)		
	Minimum	Normal	Maximum
Natural Gas	4.5"	7.0"	14.0"
LP (Propane)	10.8"	11.0"	14.0"
	Manifold Pressure (inches w.c.)		
	Normal (HI)		
Natural Gas	3.5"		
LP (Propane)	10.0"		

Installing a New Main Gas Cock

Each appliance should have its own manual gas cock.

A manual main gas cock should be located in the vicinity of the unit. Where none exists, or where its size or location is not adequate, contact your local authorized installer for installation or relocation.

Compounds used on threaded joints of gas piping shall be resistant to the action of liquefied petroleum gases. The gas lines must be checked for leaks by the installer. This should be done with a soap solution watching for bubbles on all exposed connections, and if unexposed, a pressure test should be made.

Never use an exposed flame to check for leaks. Appliance must be disconnected from piping at inlet of control valve and pipe capped or plugged for pressure test. Never pressure test with appliance connected; control valve will sustain damage!

NOTE: The millivolt gas controls are 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.

The appliance and it's individual shut off valve must be disconnected from supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5kPa).

The appliance must be isolated from the gas supply piping system by closing its individual manual shut off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5kPa).

Attention! If one of the procedures results in pressures in excess of 1/2 psig (14" w.c.) (3.5 kPa) on the fireplace gas valve, it will result in a hazardous condition.

Checking Manifold Pressures

Both Propane and Natural gas valves have a built-in pressure regulator in the gas valve. Natural gas models will have a manifold pressure of approximately 3.5" w.c. (.871kPa) at the valve outlet with the inlet pressure to the valve from a minimum of 4.5" w.c. (1.120kPa) for the purpose of input adjustment to a maximum of 14.0" w.c. (3.484kPa). Propane gas models will have a manifold pressure approximately 10.0" w.c. (2.49kPa) at the valve outlet with the inlet pressure to the valve from a minimum of 10.8" w.c. (2.68kPa) for the purpose of input adjustment to a maximum of 14.0" w.c. (3.484kPa).

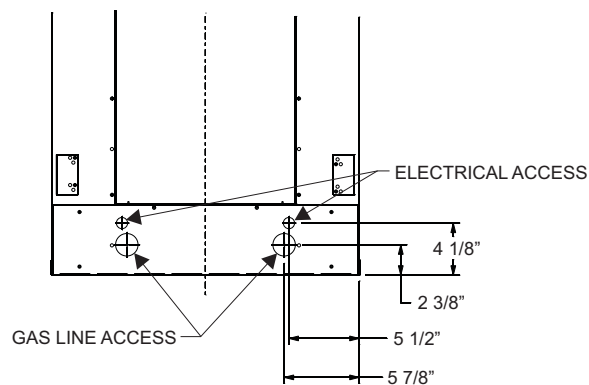
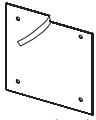


Figure 10

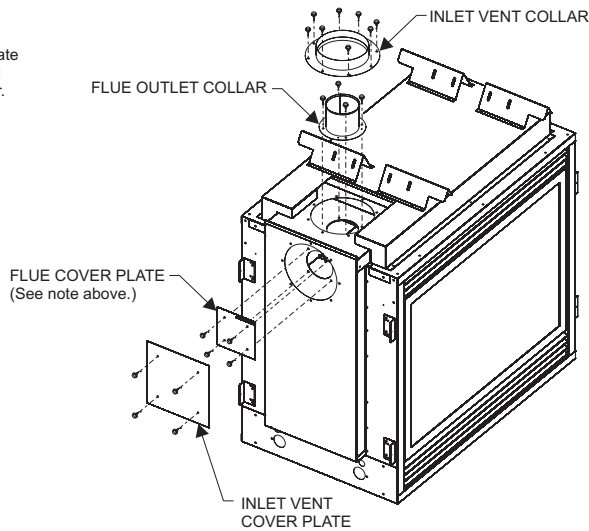
REAR VENT CONVERSION

Note: It is recommended that the flue cover plate tab be pulled outward prior to removal.



This will ensure that the plate is not accidentally dropped inside the rear air chamber.

VERTICAL VENTING



HORIZONTAL VENTING

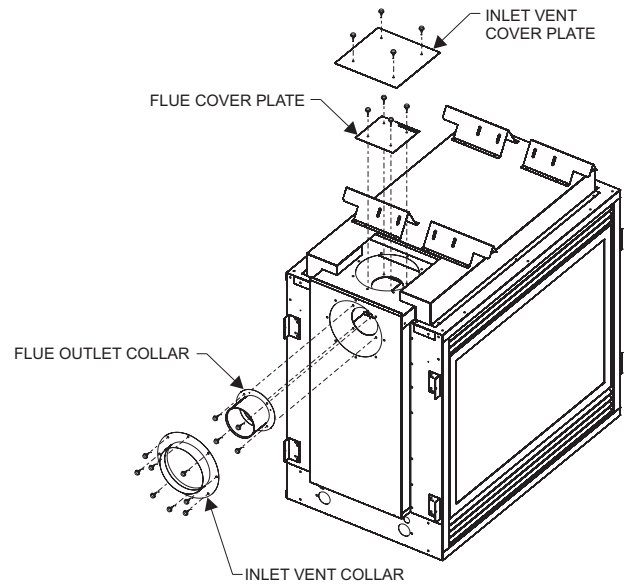


Figure 11

Converting flue take-off to rear venting

When switching out the flue and inlet vent collars to run horizontally off the rear vent, the following steps must be taken.

1. Remove the inlet vent collar (8 screws) and flue collar (4 screws) from the top of the fireplace, and set to the side.
2. Remove the inlet cover plate (4 screws) and flue cover plate (4 screws) located on the back of the fireplace. These will be used to close the top flue and inlet openings.
3. Install flue cover plate over the top flue opening with 4 screws.
4. Reinstall the inlet cover plate over the top inlet opening with 4 screws. See Figure 11.
5. Install the flue collar assembly to the rear flue with 4 screws.
6. Install the inlet vent collar to the rear of the fireplace with 8 screws.
7. This completes the conversion for a rear vent application.

SPECIAL VENT SYSTEMS

The following vent systems are acceptable for use with the DVP36(SP,PP) series fireplaces:

- Simpson Duravent® PRO Series 4" - 6 5/8"
- Selkirk Direct-Temp® 4" - 6 5/8"
- Metal-Fab Sureseal® 4" - 6 1/2" (Note: Adapter pipe starter required)
- Empire Horizontal Round Termination Kit DVVK-4RE, refer to page 39.
- Empire Flexvent Kit DVVK-4F, refer to page 42.
- Empire Flexvent Kit DVVK-4FV Vertical Flex Vent Kit, refer to page 23.

PLANNING INSTALLATION

In planning the installation for the fireplace, it is necessary to determine where the unit is to be installed and whether optional accessories are desired. Gas supply piping should also be planned at this time. A gas shutoff must be installed in this line.

The fireplace can be mounted on any of these surfaces:

1. A flat hard combustible or non-combustible surface.
2. A raised platform of combustible or non-combustible material.
3. Four (4) corners of the fireplace so contact is made on all four perimeter edges on the bottom of the unit.
(Example: Four (4) concrete masonry blocks.)

If the fireplace is installed directly on carpeting, tile or other combustible material other than wood flooring, it should be installed on a metal or wood panel extending the full width and depth of the unit.

At this point, you should have decided what components to include in your installation, and where the fireplace is to be located. If this has not been done, stop and consult your dealer for assistance with this planning.

Accessory kits such as the FBB5 Blower kit, Trim kits, Mantels, plus other Decorative Frame, Hood, and Door accessory kits may be installed after the fireplace is secured to the framing.

Refer to the instructions provided with each of the optional accessory kits for proper installation and operation.

FIREPLACE INSTALLATION INSTRUCTIONS

Fireplace Framing

Framing can be built before or after the fireplace is set in place. Framing should be constructed to accommodate wall covering and fireplace facing material. The fireplace framing should be constructed of 2 x 4 lumber or heavier. The framing headers may rest on the top standoff spacers. Refer to **Figure 12** for framing dimensions.

Note: On Peninsula models, a maximum weight of 230 lbs. must not be exceeded when construction materials are supported by the top standoff spacers.

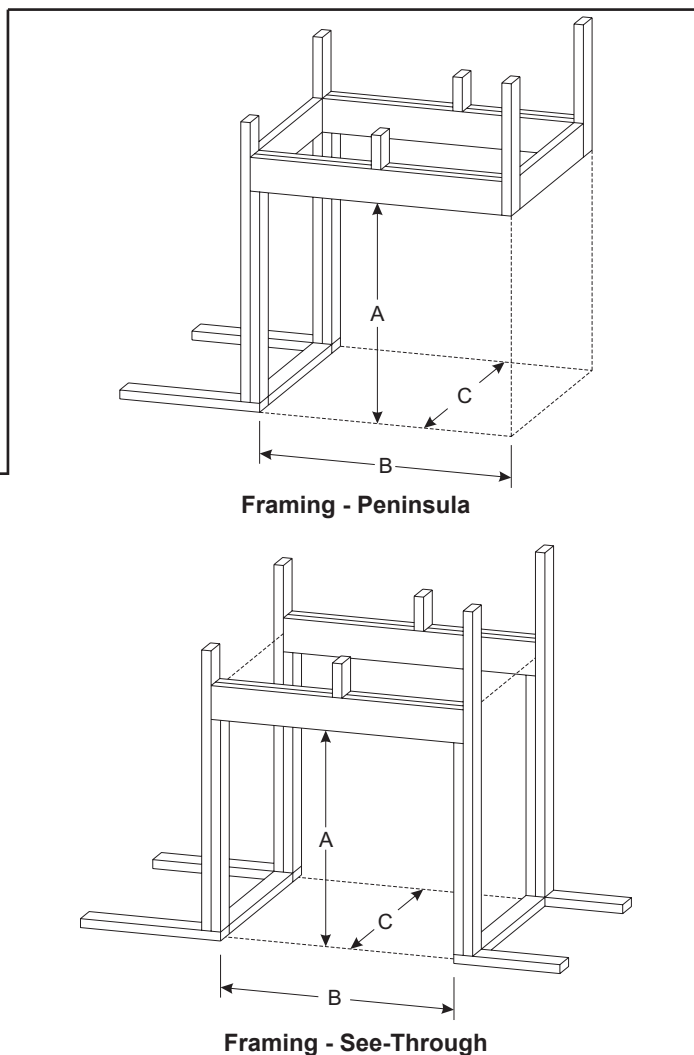


Figure 12

Fireplace Framing Dimensions (in inches)

	"A"	"B"	"C"
Model	Framing Height	Framing Width	Framing Depth
DVP36SP	41 1/2"	40"	23"
DVP36PP	41 1/2"	39"	23"

Attention: Add height of base to "A" Dimension when elevating fireplace if installing on an elevated base.

Framing dimension A includes a three inch clearance for standoffs on top of fireplace.

*Dimension "C" assumes use of 1/2" wall board flush to both front faces.

** Peninsula model framing width assumes use of 1/2" wall board flush to the end face.

FIREPLACE INSTALLATION INSTRUCTIONS (continued)

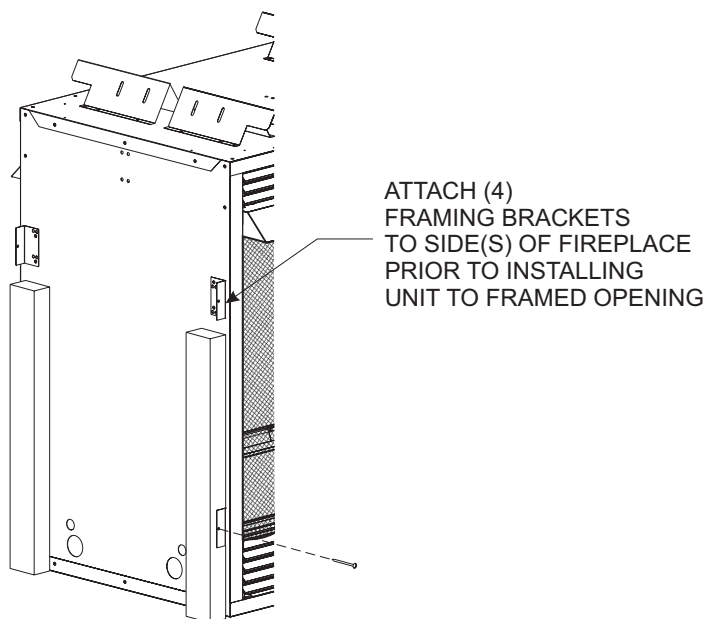
Locating Fireplace

. Attach the framing brackets to the fireplace, place fireplace in framed opening and secure to framing. Different hole locations can be used for finishing materials with thicknesses of 3/8", 1/2" and 3/4". Secure the brackets with screws provided using two (2) per framing bracket. **See Figure 13.**

Framing brackets should fit directly against framing material. Use at least one (1) nail or screw per bracket to secure in place.

IMPORTANT! Check squareness of all openings of the fireplace prior to securing to the framed openings. **See Figure 14.**

NOTICE: The framing brackets are shipped as flat brackets that can be attached to the ends of the fireplace prior to sliding fireplace into framed opening. Once the fireplace is slid into position, the framing brackets can be hand formed to overlap the framing, then secured to the framing once the fireplace is squared up, as shown in Figure 14.



NOTE: On See-Through models, the framing brackets may be installed on the fireplace in the flat state. Once the fireplace is placed into the framed opening, the brackets can be hand bent over the framing and secured.

Figure 13

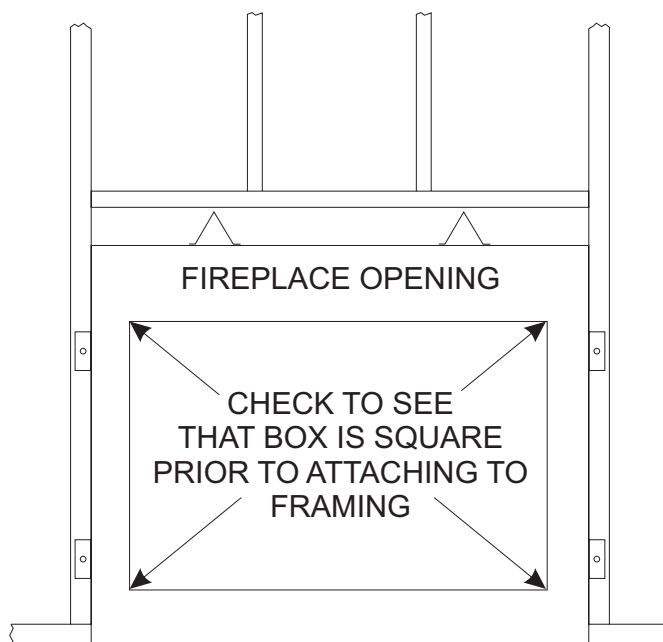


Figure 14

INSTALLATION

Flush Mount Mantel Installation - See-through Models Only (Figure 15)

The fireplace must extend 3/4" beyond finished wall surface when using a flush mount mantel on see-through models. Refer to Figure 15 to locate nailing flanges on fireplace sides. Use eight (8) 1/2" hex-head screws supplied in hardware package to attach nailing flanges to fireplace sides.

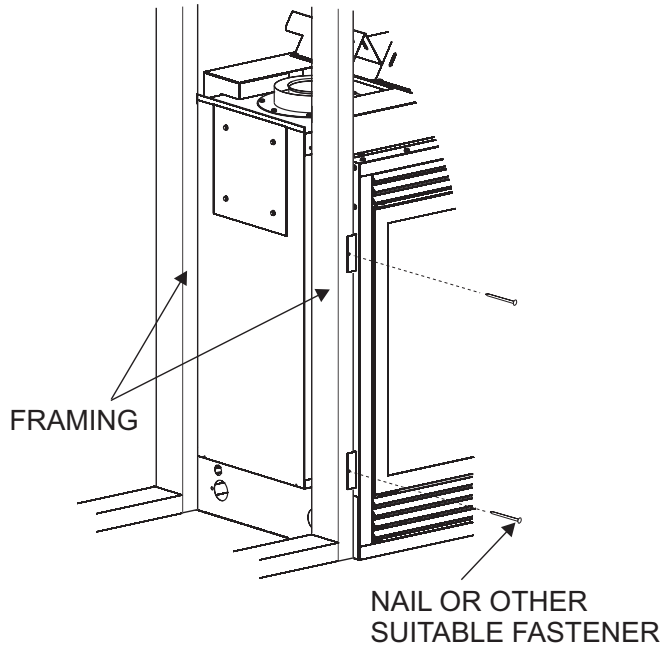


Figure 15

Framing (See Figure 12)

Fireplace framing can be built before or after the fireplace is set in place. Framing should be positioned to accommodate wall covering and fireplace facing material. The fireplace framing should be constructed of 2 x 4 lumber or heavier. The framing headers may rest on the fireplace standoffs.

CAUTION: MEASURE FIREPLACE DIMENSIONS AND VERIFY FRAMING METHODS, AND WALL COVERING DETAILS BEFORE FRAMING CONSTRUCTION BEGINS.

Framing dimension "A" (Figure 12) includes the clearance for standoffs on fireplace. After installing fireplace into framing, the finished non-combustible wall surface must extend down to the top edge of the fireplace face.

Attention: Add 3-3/4" to "A" dimensions when using a flush mantel base.

Attention: If a base or mantel is not used and the appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, it shall be installed on a metal or wood panel extending the full width and depth of the appliance. The vertical dimension must be adjusted when a metal or wood panel is placed beneath the appliance.

Finishing (Figures 16 and 17)

Finish the walls with the material of your choice. Figure 3 on page 10 shows the minimum vertical and corresponding maximum horizontal dimensions of mantels or other combustible projections above the top front edge of the fireplace.

Only non-combustible materials may be used to cover the black fireplace front.

Warning: When finishing the fireplace never obstruct or modify the air inlet/outlet louvers in any manner. Provide adequate clearances around air openings into the combustion chamber.

Caution: If the joints between the finished wall and the fireplace surround (top and sides) are sealed, a 300°F minimum sealant material must be used. These joints are not required to be sealed. Only non-combustible material (using 300°F minimum adhesive if needed), can be applied as facing to the fireplace surround.

Flush Wall Installation - See Through Models

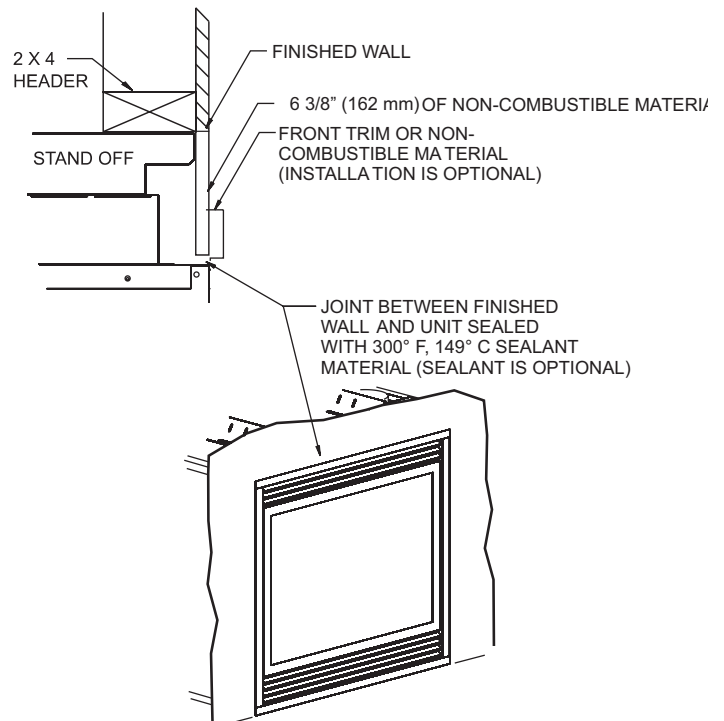


Figure 16

Combustible Surround Installation

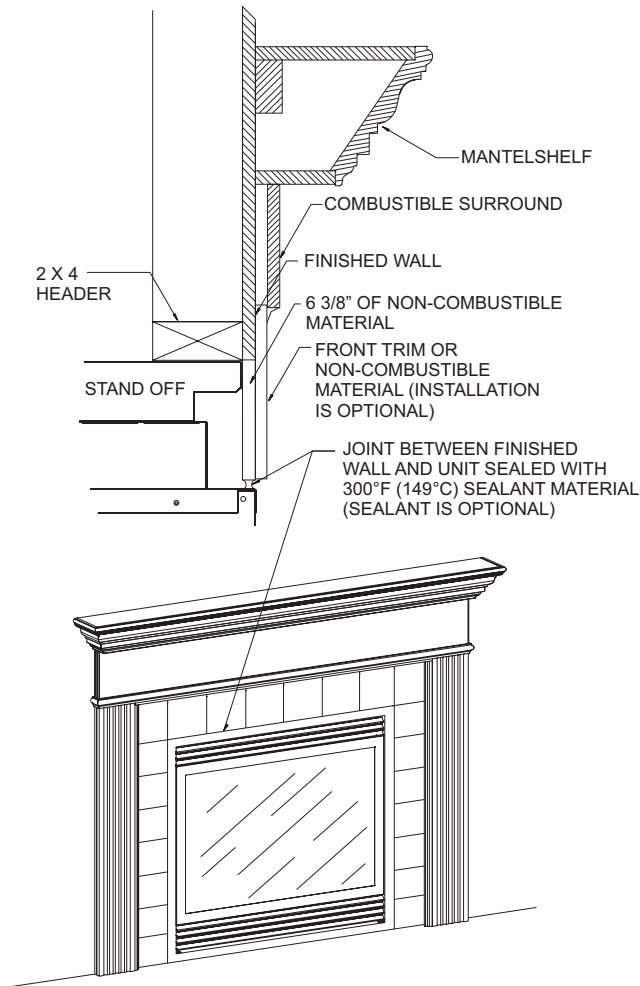


Figure 17

Attention: Cold climate installation recommendation: When installing this unit against a non-insulated exterior wall, it is recommended that the outer walls be insulated to conform to applicable insulation codes.

Vent Runs

In planning the installation for the fireplace, it is necessary to install certain components before the appliance is completely positioned and installed. These include the direct vent system, gas piping for the appliance and the electrical wiring. (If the fan option is used.)

In addition to non-combustible surfaces, the appliance can be mounted on any of the following surface options:

1. A flat, hard combustible (burnable) surface.
2. A raised wooden platform.
3. Four (4) corner supports. (Example: Four (4) concrete masonry blocks.) These supports must be positioned so they contact all four (4) perimeter edges on the bottom of the unit.

Vent Pipe Clearance

Note: Maintain one inch (1") of clearance around vertical vent pipe. **See Figure 18.** For horizontal vent, maintain a minimum 1" clearance to the bottom and sides of the vent, and 3" clearance to combustibles above the vent pipe. **See Figure 19.**

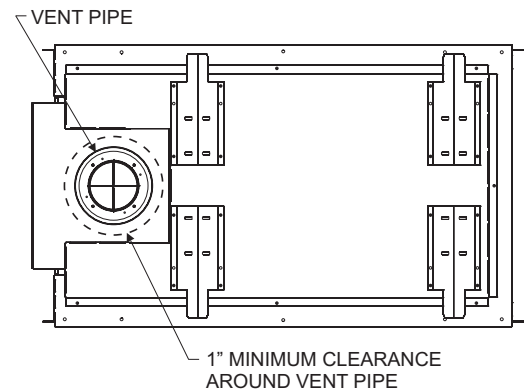


Figure 18

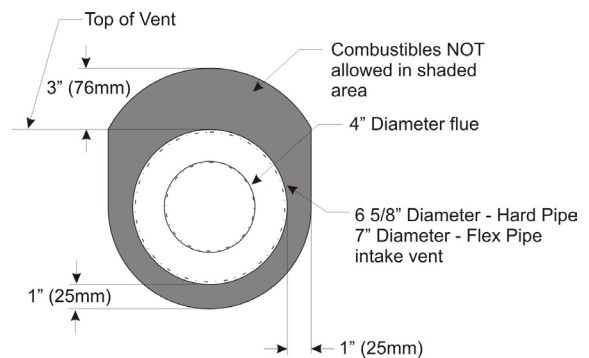
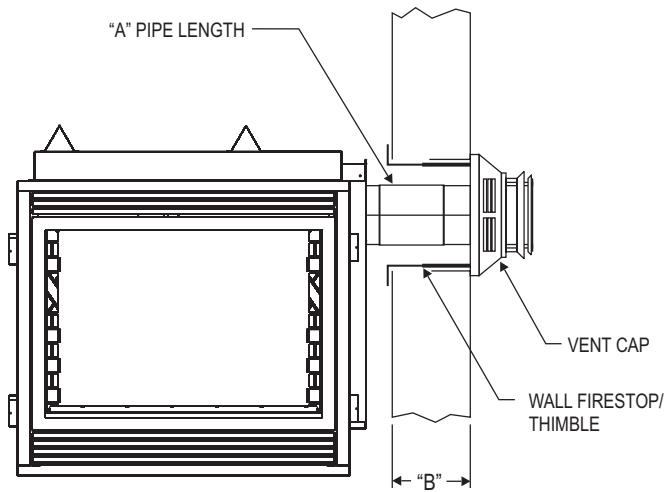


Figure 19

INSTALLATION (continued)

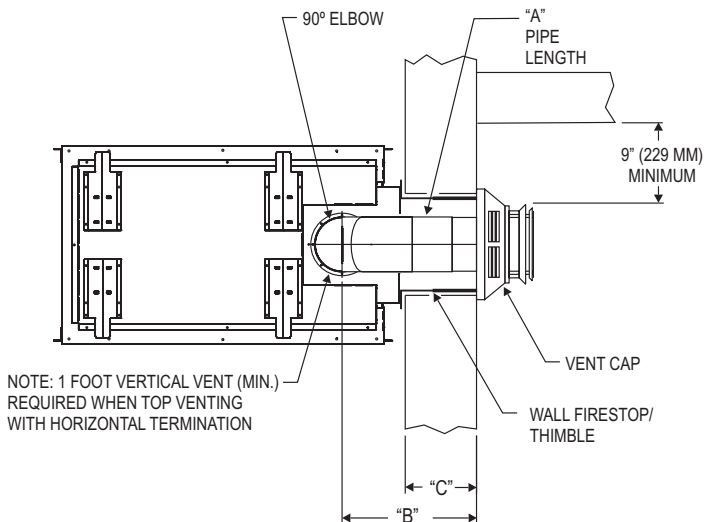
HORIZONTAL ONLY, STRAIGHT OUT THE BACK



"A"	"B"
6"	5 1/8" to 6 1/2"
9"	8 1/8" to 9 1/2"
12"	11 1/8" to 12 1/2"

Figure 20

VERTICAL, 90° ELBOW TO HORIZONTAL OUT THE WALL



"A"	"B"	"C"
6"	11 1/4" to 12 3/4"	4 3/4" to 6 1/4"
9"	14 1/4" to 15 3/4"	7 3/4" to 9 1/4"
12"	17 1/4" to 18 3/4"	10 3/4" to 12 1/4"

Figure 21

VENTING FIREPLACE - TOP

To Use the Vent Graph (Figure 22)

1. Determine the height of the center of the horizontal vent pipe. Using this dimension on the Sidewall Vent Graph, locate the point it intersects 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 unit in accordance with same.

EXAMPLE A: (Top Vent Connections with Vertical Termination)

If the vertical dimension from the floor of the unit is 35 feet, the horizontal run to the outer wall flange must not exceed 6.5 feet.

EXAMPLE B: (Top Vent Connections with Vertical Termination)

If the vertical dimension from the floor of the unit is 6.5 feet, the horizontal run to the outer wall flange must not exceed 14.5 feet.

SPECIAL NOTE: For each 45 degree elbow installed in the horizontal run, the length of the horizontal run **MUST** be reduced by 18" (45cm). This does not apply if the 45 degree elbows are installed on the vertical part of the vent system. Reduce 3' for every 90° elbow.

Example: According to the chart the maximum horizontal vent length is 20' and if two 45 degree elbows are required in the horizontal vent it must be reduced to 17'.

The maximum number of 45 degree elbows permitted per side wall installation is two (2). These elbows can be installed in either the vertical or horizontal run.

Note: On vertical venting the first elbow is not counted.

Venting Graph (Dimensions in Feet)

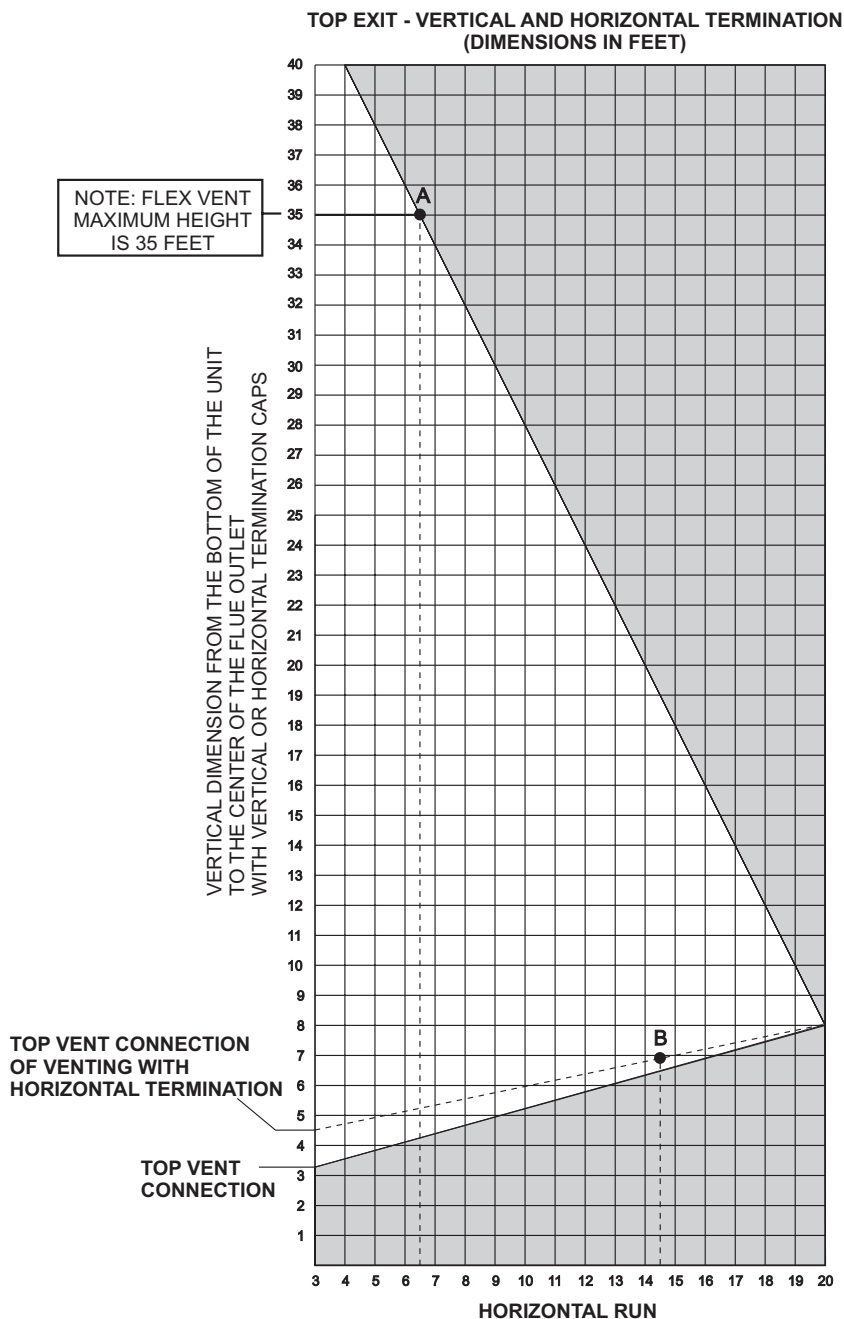


Figure 22

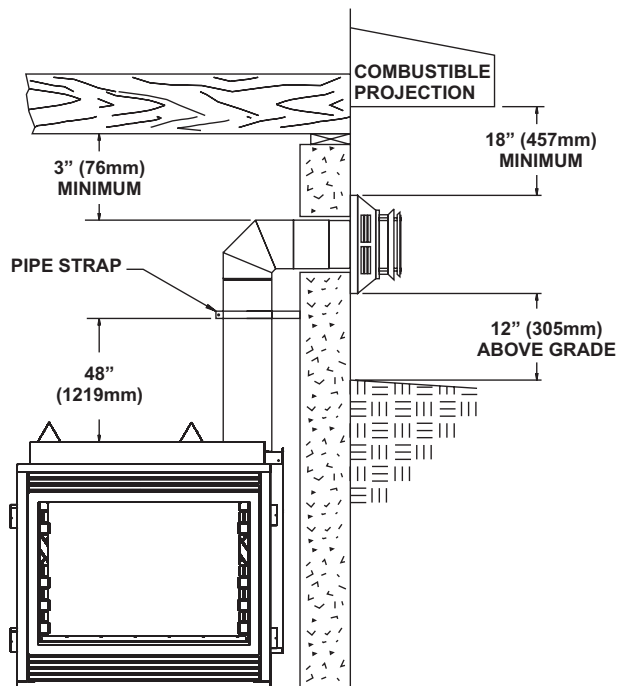
- ☐ Acceptable vertical and horizontal vent run.
Rigid Venting - 40' maximum vertical and 20' maximum horizontal
Flex Venting - 35' maximum vertical and 20' maximum horizontal
- ☒ Unacceptable vertical and horizontal vent run.

VENTING FIREPLACE - TOP (continued)

Below Grade Installation

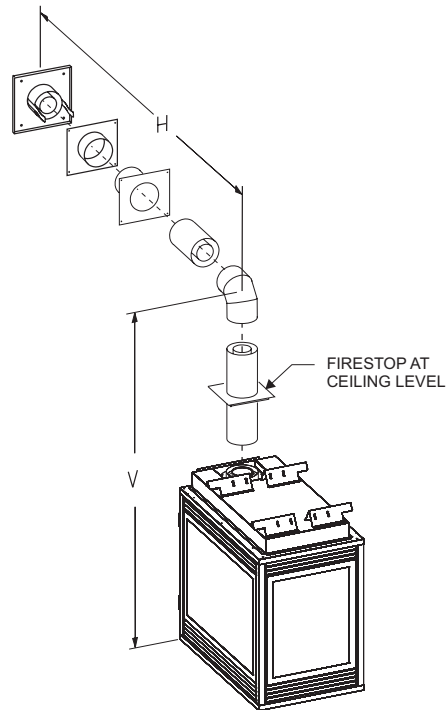
When it is not possible to meet the required vent terminal clearances of 12" (305mm) above grade level, a snorkel kit is recommended. See page 38. It allows installation depth down to 7" (178mm) below grade level. The 7" (178mm) is measured from the center of the horizontal vent pipe as it penetrates 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.



TYPICAL BASEMENT INSTALLATION
Figure 23

Examples of possible venting systems using one (1) 90° elbow. Eight (8) feet is listed as minimum vertical vent run with 20 feet of maximum horizontal vent run. Vertical dimensions are based on centerline to centerline of pipe. Horizontal dimensions are based on centerline of pipe to end of termination.

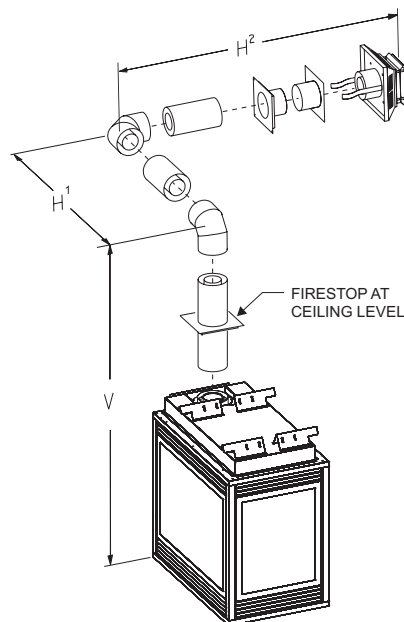


SEE GRAPH FOR PERMISSIBLE "H" AND "V" DIMENSIONS

Figure 24

Examples of possible venting systems using two (2) 90° elbows. V is listed as minimum vertical dimensions and H1 + H2 is listed as total of maximum horizontal dimensions. The maximum vertical and horizontal distances for two (2) 90° elbows as shown in Figure 25 is 20 feet.

Attention: Refer to Figure 22 for additional venting requirements.



SEE GRAPH FOR PERMISSIBLE "H" AND "V" DIMENSIONS
NOTE: H1 AND H2 MUST BE ADDED TOGETHER TO USE CHART

Figure 25

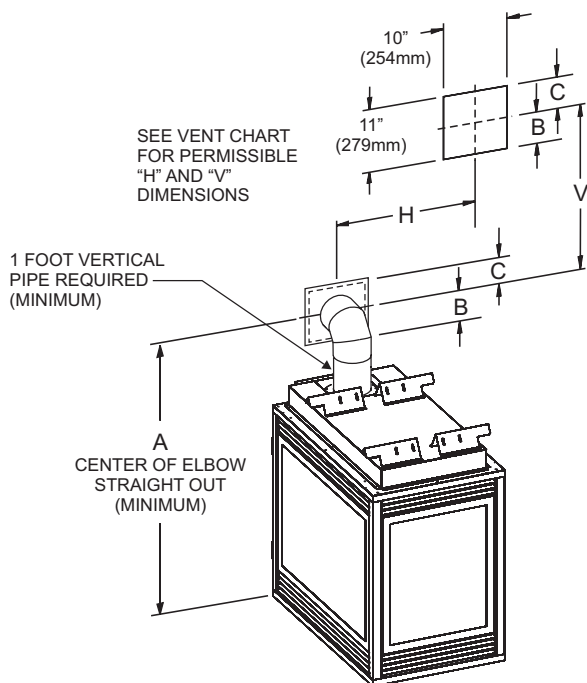


Figure 26

MINIMUM HOLE LOCATION DIMENSIONS FOR THROUGH THE WALL HORIZONTAL INSTALLATIONS WITH 90 DEGREE ELBOW AND 1' VERTICAL VENT OFF TOP OF FIREPLACE

FIREPLACE SERIES	HARD ELBOW DIMENSIONS		
	"A"	"B"	"C"
DVP36(SP,PP)	53" (1346.2mm)	4 1/2" (114.3mm)	6 1/2" (165.1mm)

Positioning the Fireplace

Determine the exact position of the appliance so the direct vent termination will be centered (if possible) between two (2) studs. This will avoid any extra framing. All vent kit pipes should be assembled on the unit after the unit is moved into the final position.

Cutting the Hole (Figures 26)

After the fireplace has been positioned in its permanent location, the hole through the exterior wall of the house can be cut. This hole must be 11" (279.4 mm) high x 10" (254mm) wide with its center line determined by the amount of vertical rise and horizontal run of the termination. **See Figure 26.**

When locating the hole it must be noted that the bottom of the cap must be 12" (305mm) above the ground level, and top of the cap must be no less than 18" (457mm) below a combustible projection, and no closer than 9" (229mm) to any wall running parallel to vent termination. **See Figure 27.**

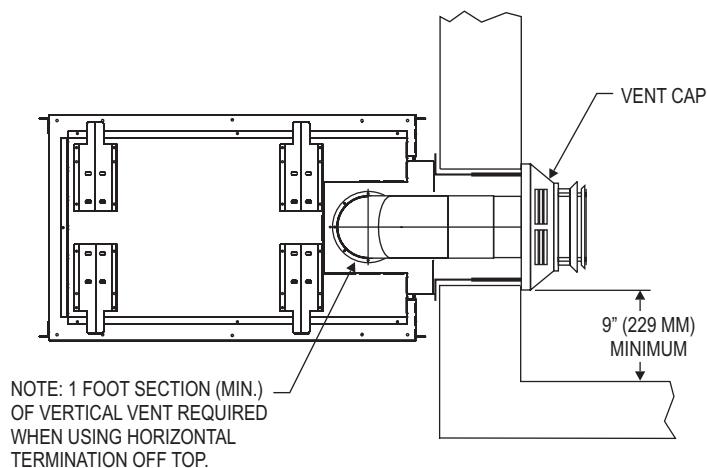


Figure 27

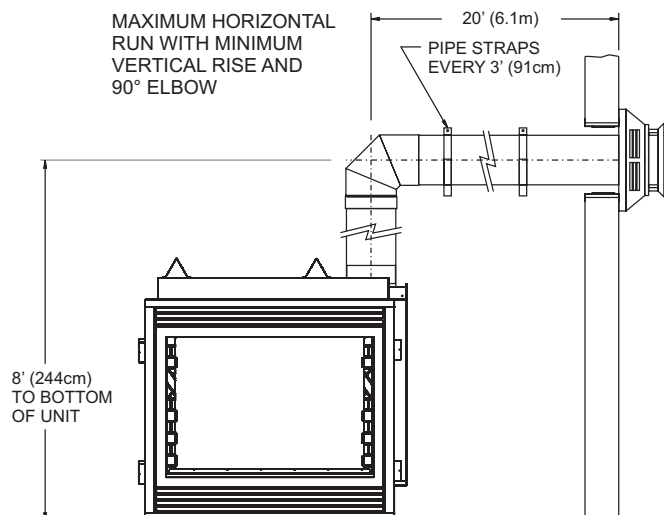
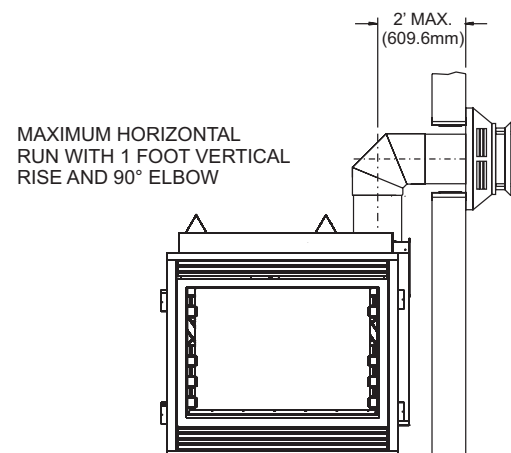


Figure 28

DVVK-4FV DIRECT VENT TERMINATION KIT

Installation Instructions

This termination kit can only be used with Empire Comfort Systems direct vent fireplaces listed for use with DVVK-4FV Vertical Flex Vent Kit. Please review the instructions packaged with your fireplace and verify the fireplace model number. Check that this flex vent system is listed for use with your fireplace model prior to starting the installation.

This vent kit may be installed as an OEM installation in a manufactured home (USA only) or mobile home and must be installed in accordance with the manufacturer's instructions and the manufactured home construction and safety standard, Title 24 CFR, Part 3280 or Standard for Installation in Mobile Homes, CAN/CSA Z240 MH.

CAUTION

All Fireplaces listed for use with the DVVK-4FV will operate safely when installed in accordance with this instruction manual. Read all instructions before starting installation, then follow these instructions carefully to maximize fireplace performance and safety. Report damaged parts to your dealer.

WARNING

Any common venting of the gas appliance using the DV vent kit with other gas appliances is not allowed. Do not connect this appliance to a chimney flue servicing a separate solid fuel-burning appliance.

WARNING

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

WARNING

Always maintain minimum clearances around vent systems. The minimum clearance to combustibles for horizontal runs of vent pipe is 3 inches from the top, and 1 inch from the sides and bottom of the vent system. Do not pack the open air spaces around the fireplace or flue with insulation or other materials. Any horizontal run must have a 1/4" rise for every one (1) foot of run towards the vent termination. The vent above the roof must terminate vertically.

WARNING

Contact your Local Building and Fire Officials about restrictions and installation inspections in your area.

IMPORTANT SAFETY INFORMATION

- The vertical termination cap MUST be vented directly to the outside. The termination kit MUST NEVER be connected to a chimney flue(s) servicing a separate solid-fuel burning appliance or any other appliances.
- Termination cap MUST NOT be mounted horizontally.
- The flexible vent pipe cannot be intermingled with any of the rigid vent pipe section(s). DO NOT connect two sections of flexible vent pipe together to achieve a longer length without the use of approved connectors.
- The installation must conform with local codes or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1 (in the United States) or with the current installation code CAN/CGA B149 (in Canada).
- Only Direct Vent fireplaces approved for use with Empire Comfort Systems, Inc. DVVK-4FV termination kit shall be used. See PARTS LIST/ILLUSTRATIONS section for vent component identification.
- Horizontal vent runs must be supported every 2 feet using wall straps. Vertical runs must be supported every 3 feet using wall straps. Slip wall straps loosely on to pipe. Attach installer provided straps to framing members using nails or screws.
- 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.
- Please refer to the fireplace instructions for information on Termination Cap clearances.

PRE-INSTALLATION INFORMATION:

Items Required For Installation:

Tools	Building Supplies
Phillips Screwdriver Hammer Saw and/or saber saw Level Measuring Tape Electric Drill and Bits Pliers Square Tin Snips	Framing Materials Wall Finishing Materials Caulking Material (Noncombustible) Support Strap supplies

Before You Start:

Plan your installation. Read these instructions and the fireplace installation manual before installing unit and vent system. Set unit in place and survey how best to vent the unit. After the vent configuration has been decided, stretch the flex pipe components out, then trim off what will not be needed.

Refer to the fireplace installation manual for information on vertical venting requirements. The maximum length of vent when using flex venting is 35 feet total. Contact your dealer or distributor for information on flex vent extension kits that may be added to the DVVK-4FV kit, in order to terminate up to 35 feet. Available extension kits include the DVEK-10 (10' Flex) or the DVEK-25 (25' Flex) extension kits. The extension kits include connection hardware.

Installation of the Vertical Flex Termination Kit

WARNING

Ensure that the venting system exits the structure through the roof and does not terminate less than 12 inches (305mm) above the roof.

WARNING

Refer to your fireplace homeowner's manual for the minimum and maximum venting requirement of your fireplace prior to installation. Failure to do so may cause a fire hazard.

WARNING

This flexible pipe termination kit is ONLY for vertical terminations.

WARNING

Any horizontal run section must have a 1/4" rise for every one (1) foot of run towards the vent termination. Never allow the vent pipe to run downward. This could cause high temperatures and may present a fire hazard. This vertical kit may incorporate two (2) 90 degree bends, but must terminate vertically.

CAUTION

This flex vent kit can be installed either vertically or horizontally off of Direct Vent Series fireplaces but must only terminate vertically.

WARNING

Because of sharp edges, always use gloves when handling the flex vent components.

CAUTION

Vent connections should overlap a minimum of 1" for proper sealing.

CAUTION

Always stretch and secure venting with metal strapping secured with nails (nails and strapping not supplied) to ensure that the flex vent runs remain true.

INSTALLATION NOTE:

If space permits, it is generally easier to attach venting in the top vent configuration.

DVK-4FV DIRECT VENT TERMINATION KIT (continued)

Step-By-Step Installation For Flex DV Kit

1. Unpack vent components and check all items for shipping damage.
2. For this venting system to operate as designed it is dependent on the use of all parts and procedures detailed in these instructions. Failure to follow these instructions may potentially affect the performance of this vent system and the attached appliance.
3. As per the fireplace manufacturer's instructions, replace the existing 6 5/8" diameter fireplace vent adapter with the 7" diameter flex vent fireplace adapter included in the vent kit. Install the adapter collar with the screws removed from the standard fireplace collar. Refer to the fireplace manual for additional information on the vent collar removal and installation.
4. Once the fireplace location has been determined, mark the ceiling where the flex vent will pass through. Cut an opening for installation of the firestop thimble assembly. The opening must measure a minimum of 9-1/2" x 9-1/2" square. **See Figure 29.**
5. Next, determine the location for the cutout in the roof opening. This opening must be large enough to provide a minimum 1" air space clearance from the vertical vent pipe to any combustible framing.
6. Install the Firestop/Thimble assembly to the framed opening in the ceiling using common nails or screws.
Note: The thimble assembly is adjustable up or down as needed within the firestop. It is also designed with a pivoting firestop for use with 0 - 3/12 pitch cathedral ceilings.
7. To begin vent system assembly, first layout all the vent components on the floor in the order in which they will be assembled.
8. Stretch the 4" diameter inner flex flue and 7" diameter outer flex vent to the maximum length of 6 feet.
9. Install the spring spacers provided around the 4" diameter flex flue at 1 foot intervals, then slide the flue pipe with spacers into the 7" diameter outer flex vent pipe. Make sure the springs are spaced evenly starting at 12 inches from the fireplace collar. **See Figure 30.**

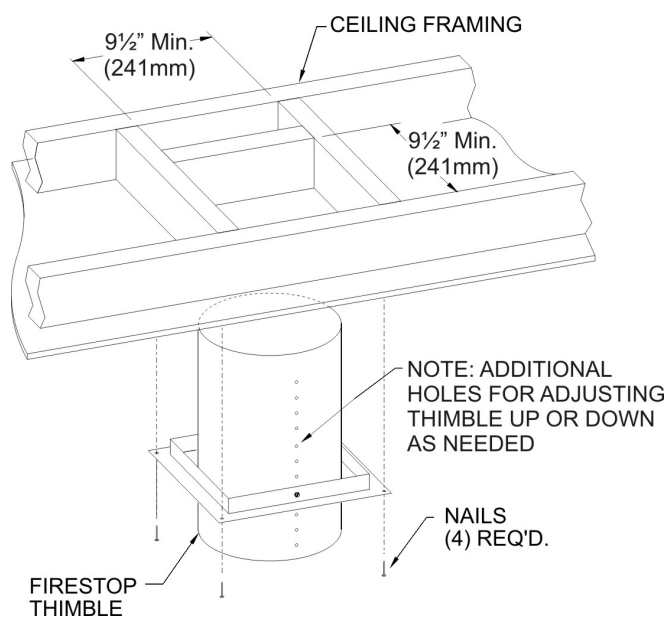


Figure 29

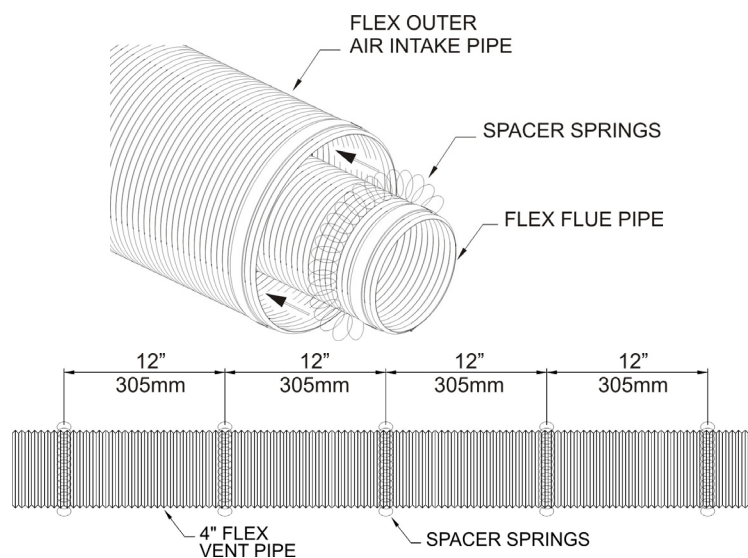


Figure 30

DVVK-4FV DIRECT VENT TERMINATION KIT (continued)

10. With the flex vent assembly and the 48" long hard pipe components laid out on the floor, begin securing these parts together. First, apply a generous bead of silicone sealant to the inside of the 4" diameter flex flue (not the end with the pre-installed connector), then slide the flex flue over the 4" diameter hard pipe flue. Be sure to overlap at least 1-1/4". Secure this connection with a 4" diameter band clamp provided. Be careful not to damage or tear the flex flue when tightening clamp.
11. Repeat the connection process for the outer 7" diameter flex vent to hard pipe connection. Use silicone sealant at this joint also, overlap at least 1-1/4", then secure the joint with the 7" diameter band clamp provided. Be careful not to damage or tear the flex vent pipe when tightening the clamp.
12. While the venting is still on the floor, assemble the roof jack components as shown in Figure 31 and pre-install the roof jack assembly to the hard pipe approximately 18" from the top end of the hard pipe.

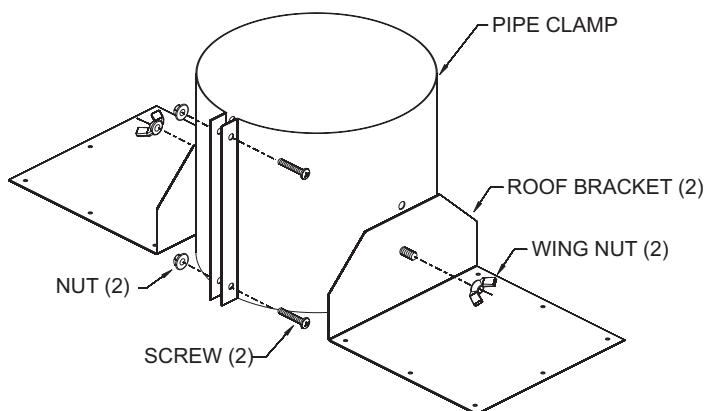
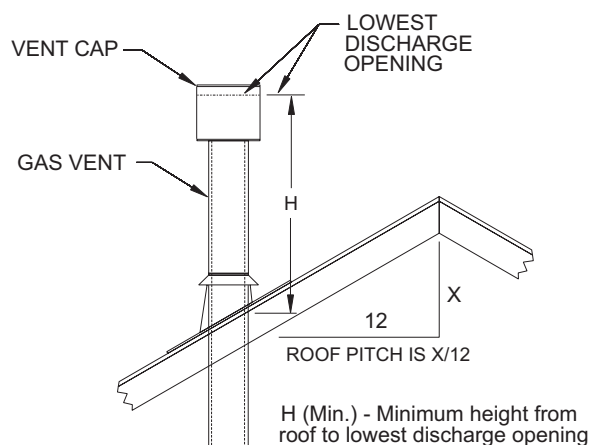


Figure 31

13. Now the pre-assembled vent system may be carried to the roof, then lowered through the roof cutout opening (see step 5). Feed the flex vent end down through the roof opening and firestop/thimble assembly installed in steps 4 through 6.
14. Secure the roof support assembly to the roof sheathing with at least (4) nails/screws through each support bracket. Check that the combustible clearances through the roof framing will maintain at least a 1" clearance from the vent pipe.
15. Determine how high the vent terminal should be located above the roof line based on the roof pitch information shown in Figure 32. Adjust the vent system height by loosening the pre-installed roof support pipe clamp and sliding the vent pipe up or down as pre-determined, then re-tighten the pipe clamp. Install a couple of sheet metal screws through the pipe clamp into the outer hard vent pipe to lock in place.
16. Check to make sure that the bottom end of the flex vent is long enough to reach the fireplace adapter collars. If too long, trim off the extra flex vent not needed.



ROOF PITCH	H (Min.)
Flat to 6/12	12" (305mm)
6/12 to 7/12	15" (381mm)
Over 7/12 to 8/12	18" (457mm)
Over 8/12 to 16/12	24" (610mm)
Over 16/12 to 21/12	36" (914mm)

Figure 32

DVVK-4FV DIRECT VENT TERMINATION KIT (continued)

17. To attach the vent connections at the fireplace, be sure the 7" diameter adapter collar has been installed per step 3. Apply a bead of silicone sealant to the 4" diameter flex connector, then slide the flex pipe adapter collar into the fireplace flue collar and secure by installing a minimum of two (2) screws through the flue collar and into the adapter. **See Figure 33.**
18. Apply sealant to the 7" diameter adapter collar, slide outer flex vent over the collar, then secure with a 7" diameter band clamp. **See Figure 33.**
19. Once the lower connections are made and the flex pipe is secured with support bands as required (3 feet minimum between supports) then the roof flashing can be installed. **See Figure 34.**
20. Install the roof flashing, and seal using common constructions practices.
21. An additional storm collar band is provided in kit that may be used as an attic insulation shield. The collar can be installed around the flex pipe (or hard pipe) just above the firestop thimble. This collar will act as a shield to prevent blown insulation from entering the thimble.
22. To complete the vent installation, install the vent termination cap to the top of the hard vent pipe assembly. Mate up the flue and outer telescopes with the hard pipe assembly, then secure by installing a minimum of two (2) sheet metal screws into the overlapped flanges of the cap and pipe.
23. Figure 35 shows a completed installation with components identified and other installation information such as heights and clearance to combustibles.

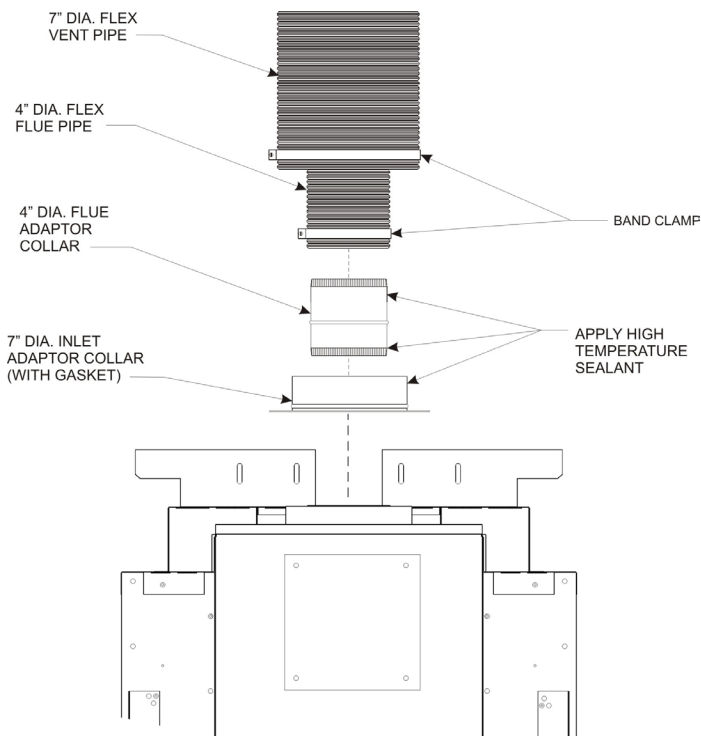


Figure 33

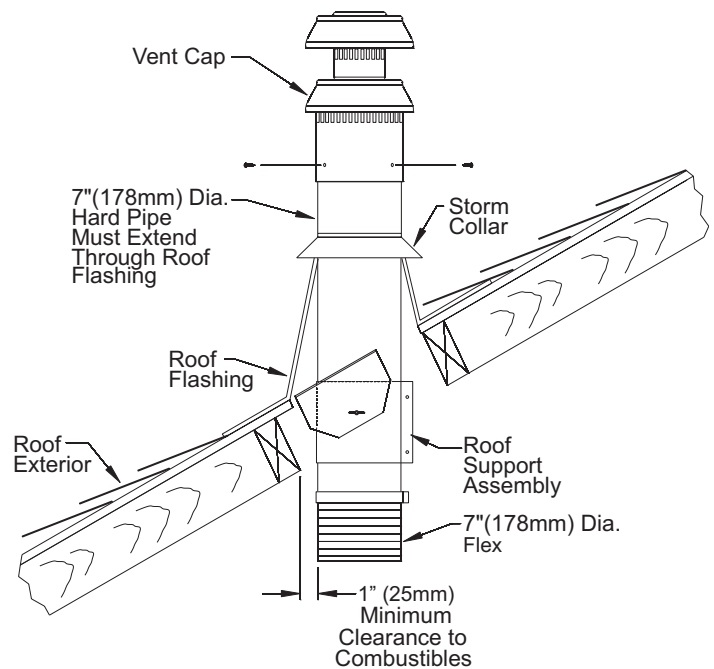


Figure 34

DVVK-4FV DIRECT VENT TERMINATION KIT (continued)

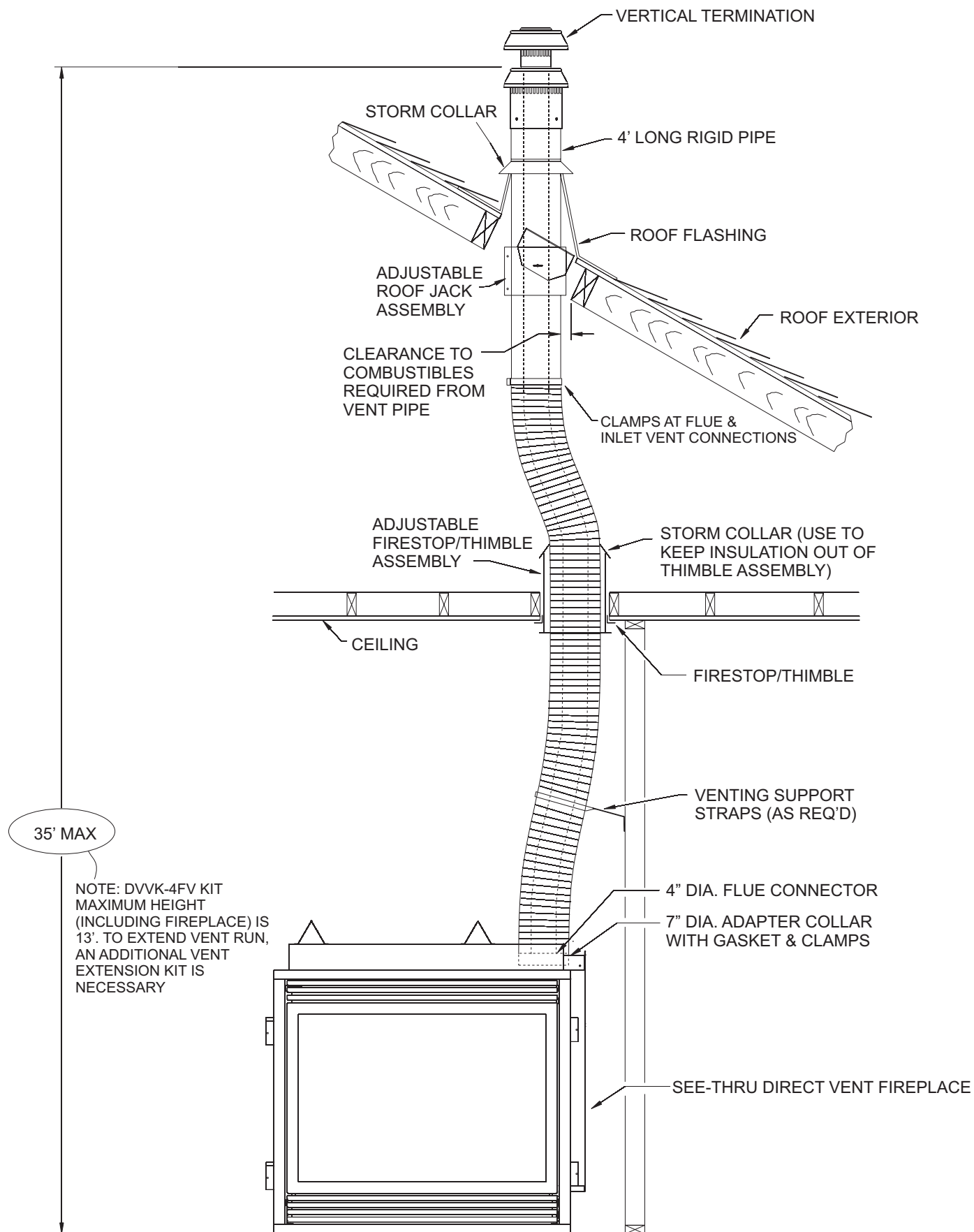
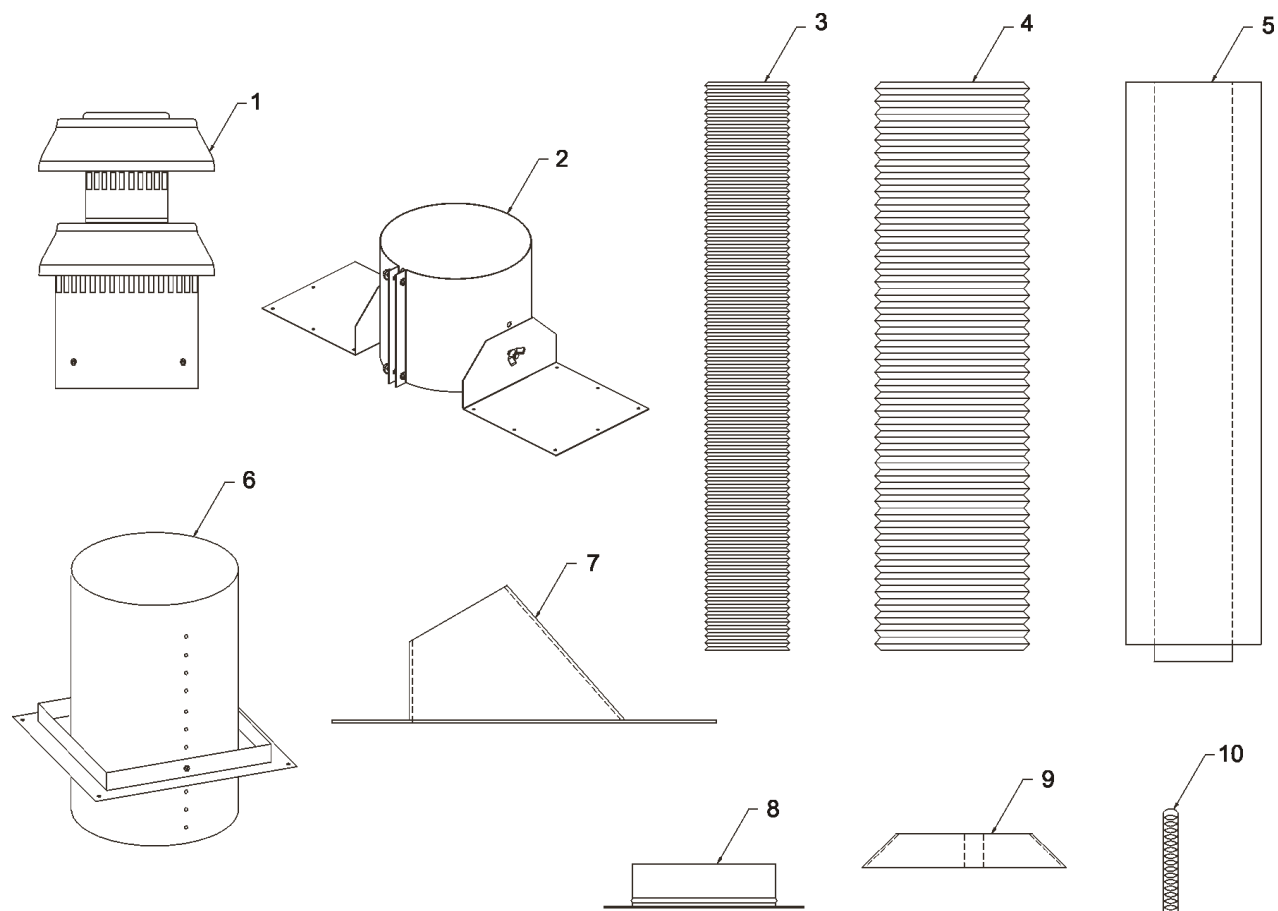


Figure 35

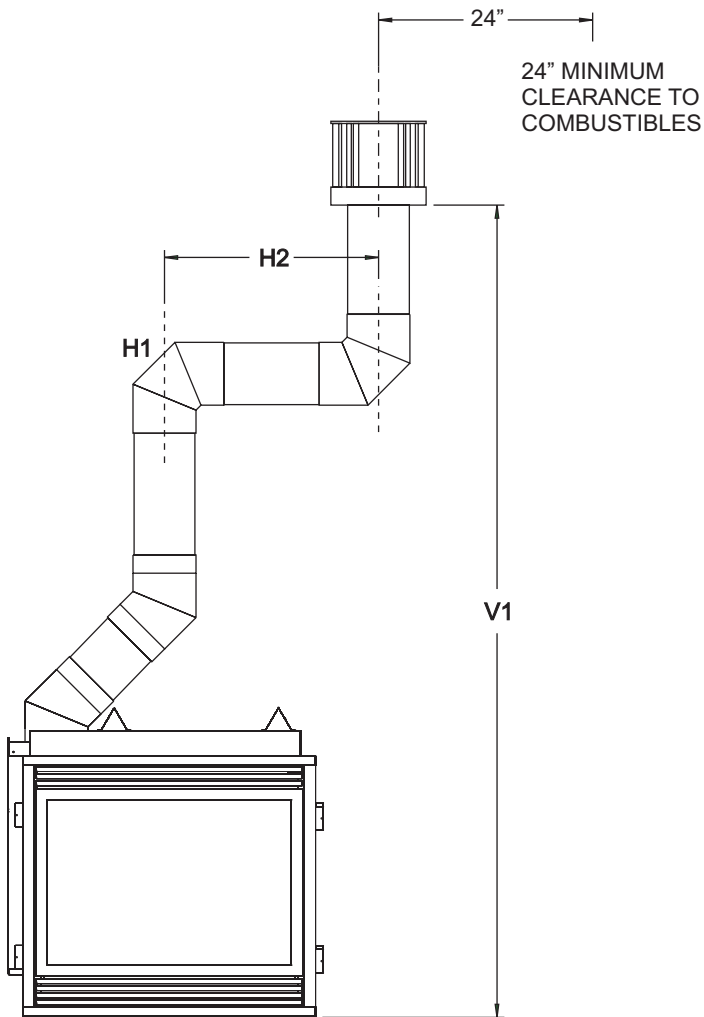
DVVK-4FV DIRECT VENT TERMINATION KIT (continued)

Vertical Flex Termination Kit



Item Number	Item Description	Repair Part No.	Quantity Supplied
1	4"/7" Vertical Termination Cap	MF100038	1
2	Roof Support Kit	MF100503	1
3	2 Ply Alum Flex 4" Diameter by 6 ft.	MF04ALA2F006	1
4	2 Ply Alum Flex 7" Diameter by 6 ft.	MF07ALA2F006	1
5	4"/7" x 48" Rigid Pipe Assembly	MF100554	1
6	Firestop Thimble Assembly	MF100124	1
7	Roof Flashing (0/12 to 6/12)	MF100091	1
8	7" Flex Adapter Collar with Gasket	MF100524	1
9	7" Storm Collar	MF100147	2
10	Spring Spacers	MF100548	5
N/S	Clamp 4" Diameter	MF100330	2
N/S	Clamp 7" Diameter	MF100534	2
N/S	#8 x 1/2" Self Drilling Screws	N/A	20
N/S	HT Silicone	N/A	1
N/S	#8 x 5/8" Self Drilling Screws	N/A	10

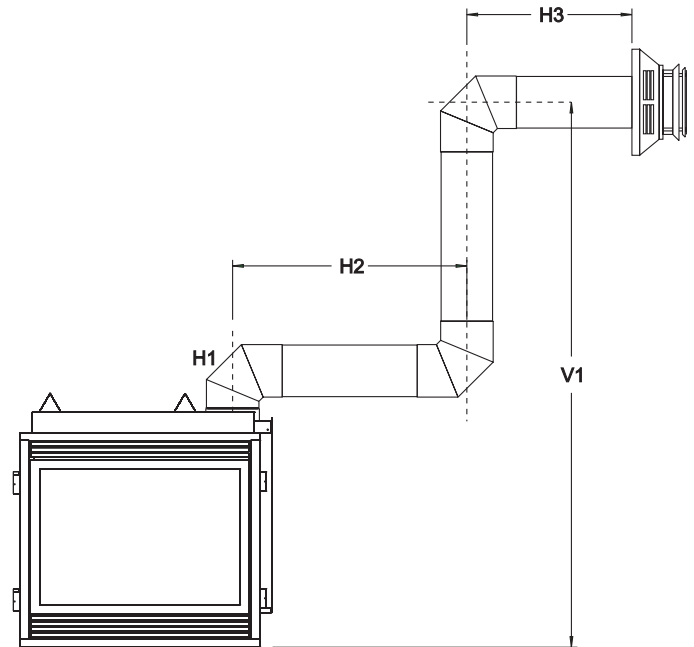
EXAMPLES - TOP VENT RUN



Example
 $H2 = 2\text{ft}$
 $2 - (90^\circ + 90^\circ) = 6\text{ft}$
 $V1 = 21\text{ft}$

$H = 8\text{ft}$ $V = 15\text{ft}$

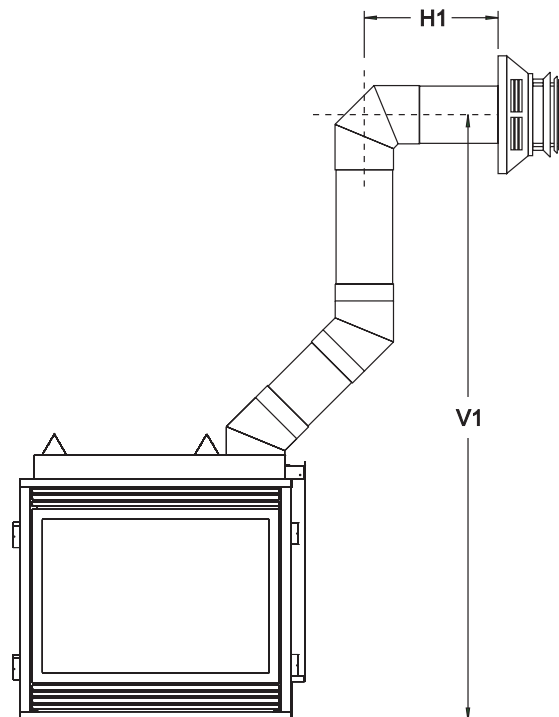
Figure 36



Example
 $H2 = 3\text{ft}$, $H3 = 1\text{ft} = 4\text{ft}$
 $(90^\circ + 90^\circ + 90^\circ) = 6\text{ft}$
 $V1 = 21\text{ft}$

$H = 10\text{ft}$ $V = 21\text{ft}$

Figure 37



Example
 $H1 = 2\text{ft}$
 $V1 = 20\text{ft}$

$H = 2\text{ft}$ $V = 20\text{ft}$

Figure 38

VENTING FIREPLACE - REAR

To Use the Vent Graph (Figure 39)

1. Determine the height of the center of the horizontal vent pipe. Using this dimension on the Sidewall Vent Graph, locate the point it intersects 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 unit in accordance with same.

EXAMPLE A:

If the vertical dimension from the floor of the unit is 12 feet, 4 inches the horizontal run to the outer wall flange must not exceed 12 feet, 3 inches.

EXAMPLE B:

If the vertical dimension from the floor of the unit is 6 feet, 9 inches, the horizontal run to the outer wall flange must not exceed 6 feet, 6 inches.

SPECIAL NOTE: For each 45 degree elbow installed in the horizontal run, the length of the horizontal run MUST be reduced by 18" (45cm). This does not apply if the 45 degree elbows are installed on the vertical part of the vent system. Reduce 3' for every 90° elbow.

Example: According to the chart the maximum horizontal vent length is 20' and if two 45 degree elbows are required in the horizontal vent it must be reduced to 17'.

The maximum number of 45 degree elbows permitted per side wall installation is two (2). These elbows can be installed in either the vertical or horizontal run.

NOTE: FLEX VENT
MAXIMUM HEIGHT
IS 35 FEET

VERTICAL DIMENSION FROM THE BOTTOM OF THE UNIT
TO THE CENTER OF THE FLUE OUTLET
WITH VERTICAL OR HORIZONTAL TERMINATION CAPS

REAR HORIZONTAL
VENT CONNECTION

Venting Graph (Dimensions in Feet)

REAR EXIT - VERTICAL AND HORIZONTAL TERMINATION (DIMENSIONS IN FEET)

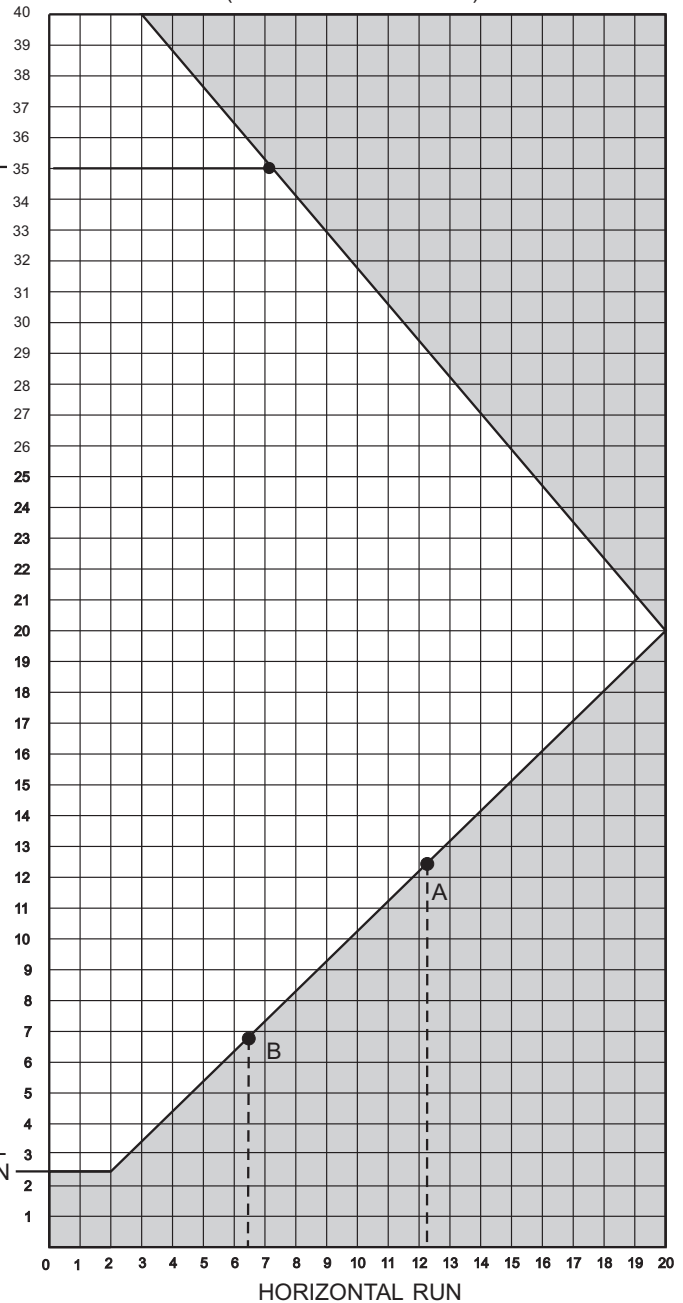


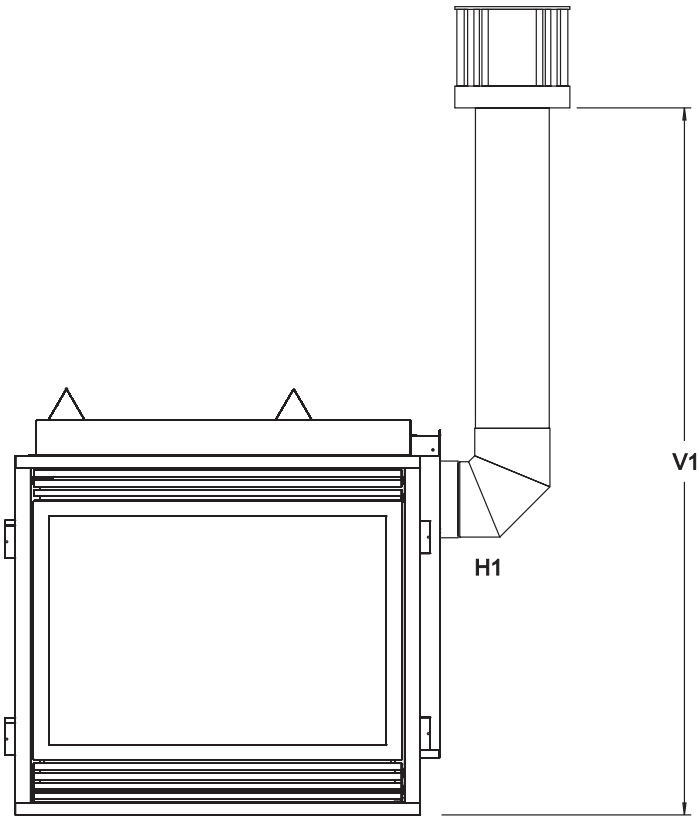
Figure 39



Acceptable vertical and horizontal vent run.

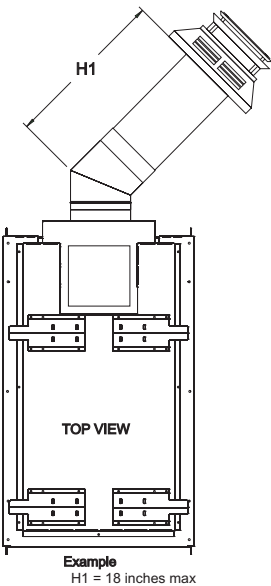
Unacceptable vertical and horizontal vent run.

EXAMPLES - REAR VENT RUN



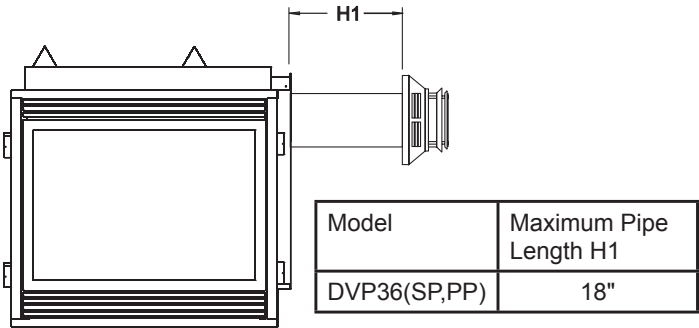
Example
H1 (90°) 3ft H = 3ft V = 22ft
V1 = 22ft

Figure 40



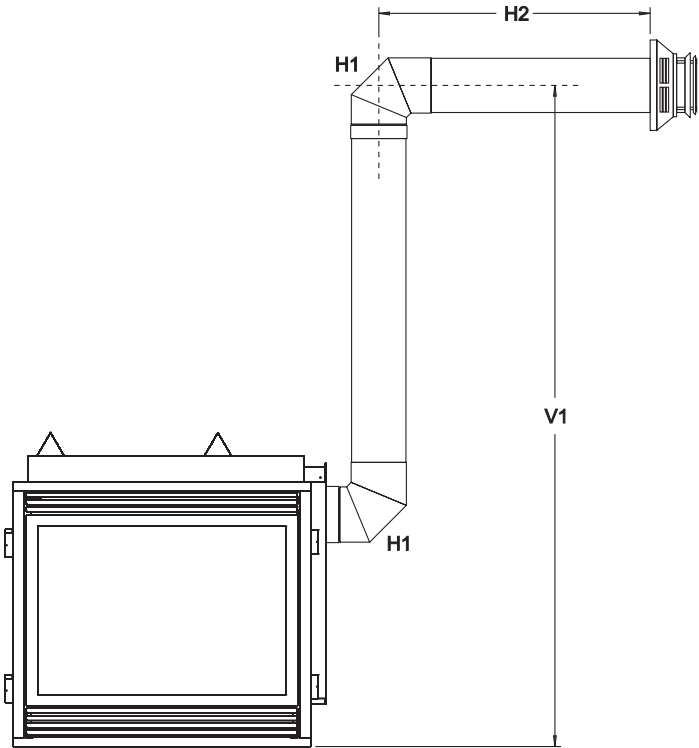
Model	Maximum Pipe Length H1
DVP36(SP,PP)	18"

Figure 41



Example
H1 = 18" MAX.

Figure 42



Example
H2 = 6ft
(90° + 90°) = 6ft
V1 = 12ft
H = 12ft V = 12ft

Figure 43

TERMINATION CLEARANCES

Termination clearance for buildings with combustible and noncombustible exteriors.

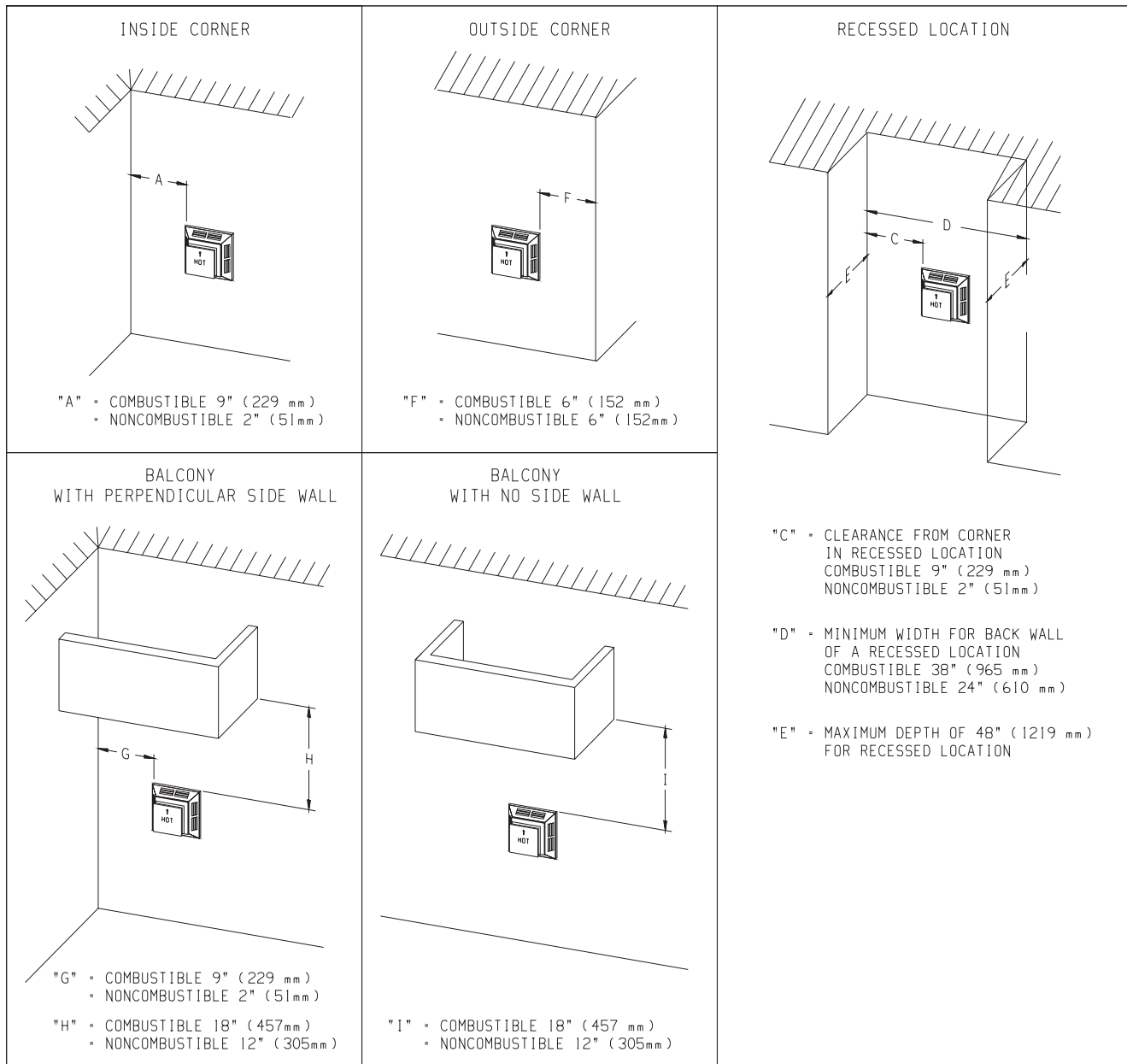


Figure 44

Vertical Sidewall Installations

Important! Minimum clearance between vent pipes and combustible materials is three (3") (76mm) on top, and (1") (25mm) on bottom and sides.

Important! When vent termination exits through foundation less than 20" below siding outcrop, the vent pipe must extend outward so that the horizontal vent terminal is located flush to, or beyond the outcrop siding.

Information on Various Venting Routes and Components

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

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.

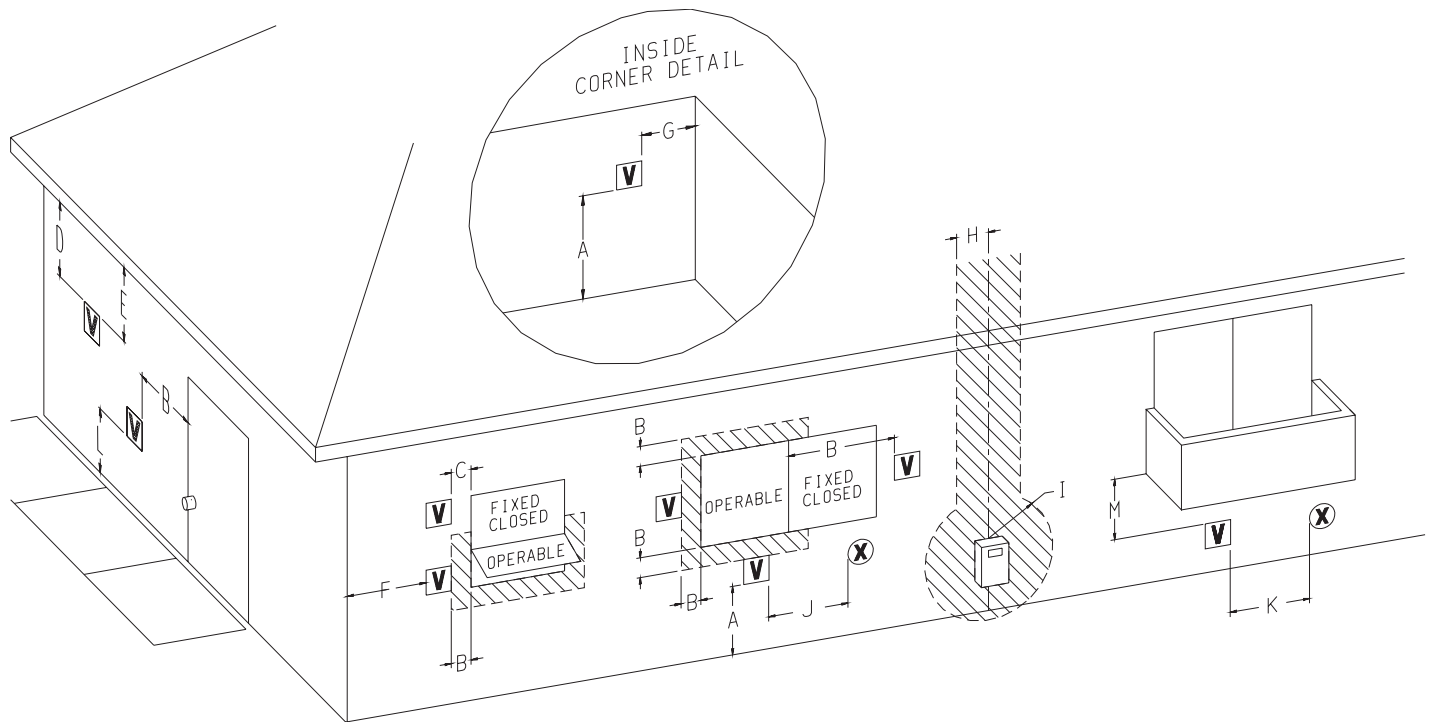
The graph showing the relationship between vertical and horizontal side wall venting will help to determine the various vent lengths allowable.

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.

The maximum horizontal vent run is 20 feet (457 cm) when the vertical vent rise is 8 feet (244 cm). **See Figure 22.**

Venting terminals shall not be recessed into wall or siding.

VENT CLEARANCES



V VENT TERMINAL **X** AIR SUPPLY INLET [Hatched Area] AREA WHERE TERMINAL IS NOT PERMITTED

Figure 45

- | | |
|--|--|
| <p>A = *Clearance above grade, veranda, porch, deck or balcony [*12 inches (30cm) minimum]</p> <p>B = clearance to window or door that may be opened [*12 inches (30cm) minimum for appliances < 100,000 Btuh (30kW)]</p> <p>C = clearance to permanently closed window [minimum 12 inches (30cm) recommended to prevent condensation on window]</p> <p>D = vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 24 inches (60 cm) from the center of the terminal [18 Inches (46 cm) minimum]</p> <p>E = clearance to unventilated soffit [12 inches 30cm) minimum]</p> <p>F = clearance to outside corner. See Page 33.</p> <p>G = clearance to inside corner. See Page 33.</p> <p>H = *not to be installed above a meter/regulator assembly within 3 feet (90cm) horizontally from the center-line of the regulator</p> <p>I = clearance to service regulator vent outlet [*6 feet (1.8m) minimum]</p> | <p>J = clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance [*12 inches (30cm) minimum for appliances ≤ 100,000 Btuh (30 kW) 36 inches (90cm) minimum for appliances > 100,000 Btuh (30kW)]</p> <p>K = clearance to a mechanical air supply inlet [* 6 feet (1.8m) minimum]</p> <p>L = †clearance above paved sidewalk or a paved driveway located on public property [*7 feet (2.1m) minimum]</p> <p>M = clearance under veranda, porch, deck, or balcony [*12 inches (30cm) minimum]</p> <p>† a vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings*</p> <p>¥ only permitted if veranda, porch, deck, or balcony, is fully open on a minimum of 2 sides beneath the floor*</p> <p>* as specified in CGAB149 Installations Codes or ANSI Z223.1. Note: Local Codes or Regulations may require different clearances.</p> |
|--|--|

VENT SYSTEM IDENTIFICATION

Installing Vent Components (Figure 46)

Begin the vent system installation by installing the first Simpson Duravent component, 90° elbow to the starting collars or straight pipe on the top of the appliance, then the straight pipe length and then horizontal or vertical termination kit.

NOTE: All outer connection joints must be sealed with aluminum tape, screws or silicone sealant rated above 300°F/149°C. The inner flue joints do not require any sealant.

Simpson Duravent vent system components lock into place by sliding the concentric pipe section with four (4) equally spaced interior beads onto the appliance collar or previously installed component end with four (4) equally spaced indented sections. When the internal beads of each starting outer pipe line up, rotate pipe section clockwise 90° (approximately 3 inches). The vent pipe is now locked together.

Continue adding components per the pre-planned vent system configuration. Be certain that each succeeding vent component is securely fitted and locked into the preceding component in the vent system.

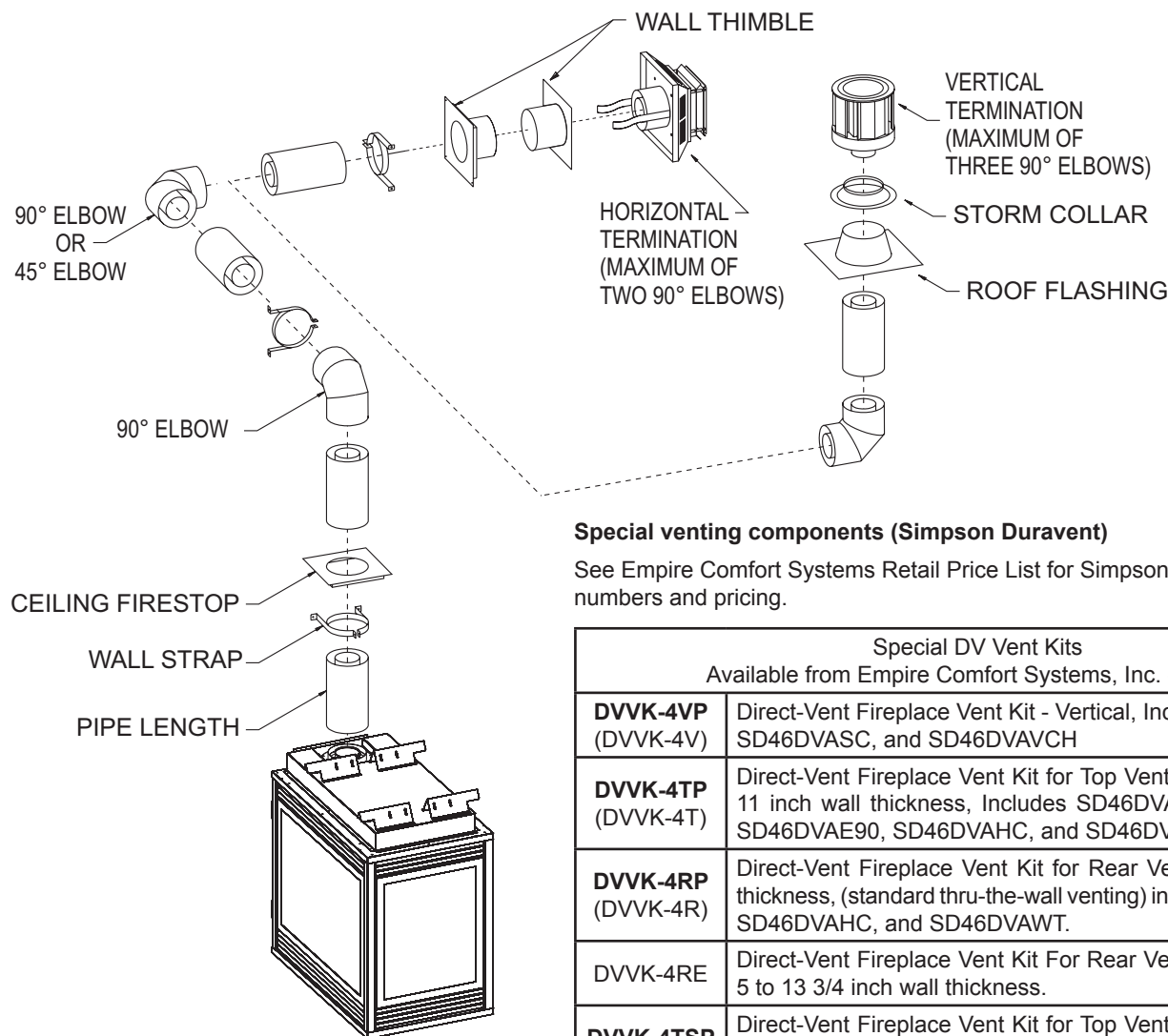


Figure 46

Special venting components (Simpson Duravent)

See Empire Comfort Systems Retail Price List for Simpson Duravent part numbers and pricing.

Special DV Vent Kits Available from Empire Comfort Systems, Inc. dealers.	
DVVK-4VP (DVVK-4V)	Direct-Vent Fireplace Vent Kit - Vertical, Includes SD46DVAF6, SD46DVASC, and SD46DVAVCH
DVVK-4TP (DVVK-4T)	Direct-Vent Fireplace Vent Kit for Top Vent, Thru-the-wall, 8 to 11 inch wall thickness, Includes SD46DVA08A, SD46DVA09, SD46DVAE90, SD46DVAHC, and SD46DVAWT
DVVK-4RP (DVVK-4R)	Direct-Vent Fireplace Vent Kit for Rear Vent, 5 to 7 inch wall thickness, (standard thru-the-wall venting) includes SD46DVA06, SD46DVAHC, and SD46DVAWT.
DVVK-4RE	Direct-Vent Fireplace Vent Kit For Rear Vent, Thru-the-wall for 5 to 13 3/4 inch wall thickness.
DVVK-4TSP (DVVK-4TS)	Direct-Vent Fireplace Vent Kit for Top Vent, Thru-the-wall, 5 to 7 inch wall thickness, Includes SD46DVA06, SD46DVAE90, SD46DVAHC, and SD46DVAWT.
DVVK-4FV	Vertical Flex Vent Kit 4" x 7"
VIB6A	Vertical Inlet Baffle Kit For 6 5/8" diameter
VIB7A	Vertical Inlet Baffle Kit For 7" diameter

FRAMING AND FINISHING

Installing Support Brackets (Figure 47)

A horizontal pipe support **MUST BE** used for each 3 feet of horizontal run. The pipe supports should be placed around the pipe and nailed in place to framing members. There **MUST BE** a 3 inch clearance to combustibles above 6 5/8 inch diameter pipe and elbows and 1 inch clearance on both sides and bottom of 6 5/8 inch pipe to combustibles on all horizontal pipe sections and elbows.

Vertical runs of this vent systems must be supported every 4 feet above the appliance flue outlet by wall brackets attached to the 6 5/8 inch vent pipe and secured with nails or screws to structural framing members.

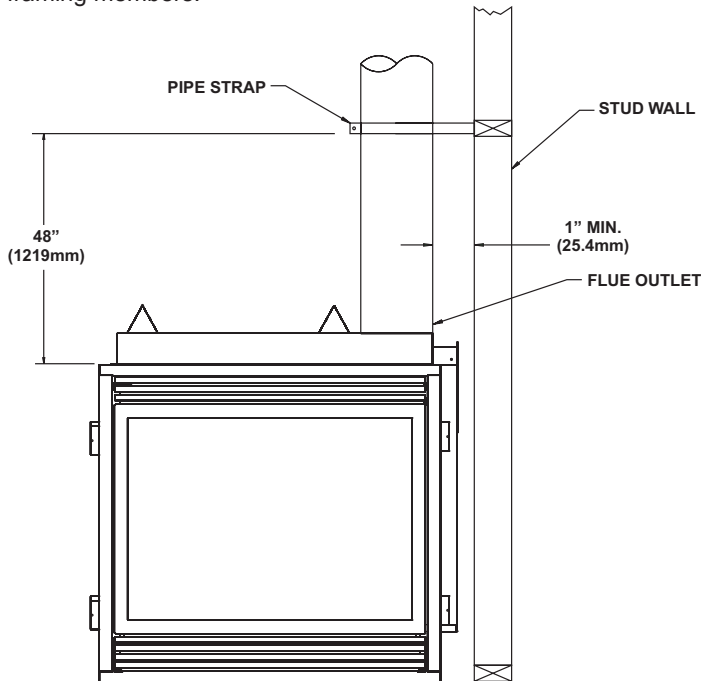


Figure 47

Installing Firestops (Figures 48, 49, 50, and 51)

Firestops are required for safety whenever the vent system passes through an interior wall, an exterior wall, or a ceiling. These firestops act as a firebreak heat shield and as a means to insure that minimum clearances are maintained to the vent system.

Horizontal runs in the vent system which pass through either interior or exterior walls, require the use of wall firestops on both sides of the wall through which the vent passes.

Position the firestops on both sides of the 10 inch x 11 inch hole, previously cut. Secure with nails or screws. The heat shields of the firestops **MUST BE** placed towards the top of the hole. Continue the vent run through the firestops. **See Figure 48.**

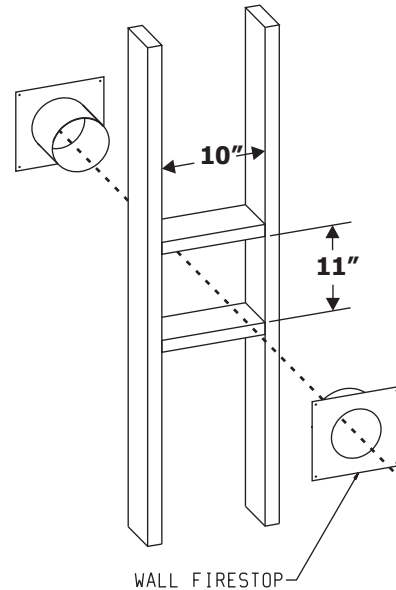


Figure 48

Vertical runs of this system which pass through ceilings require the use of **ONE (1)** ceiling firestop at the hole in each ceiling through which the vent passes.

Position a plumb bob directly over the center of the vertical vent component and mark the ceiling to establish the center point of the vent. Drill a hole or drive a nail through this center point and check the floor above for any obstructions such as wiring or plumbing runs. Reposition the appliance and vent system, if necessary, to accommodate ceiling joists and/or obstructions.

Cut a 10 inch x 11 inch hole through the ceiling, using the center point previously marked. Frame the hole with framing lumber the same size as the ceiling joists. **See Figure 49.** If the area above the ceiling is **NOT** an attic, position and secure the ceiling firestop on the ceiling side of the previously cut and framed hole. **See Figure 50.** If the area above the ceiling is an attic, position and secure the firestop on top of the previously framed hole. **See Figure 51.**

NOTE: Remove insulation from the framed area in the attic before installing the firestop and/or vent pipes.

FRAMING AND FINISHING (continued)

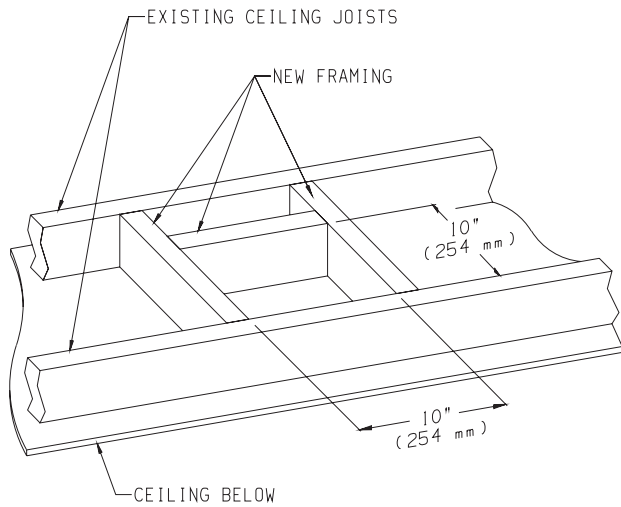


Figure 49

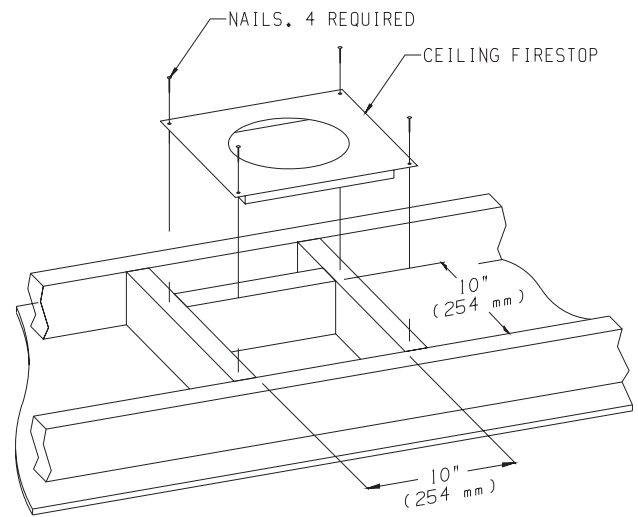


Figure 51

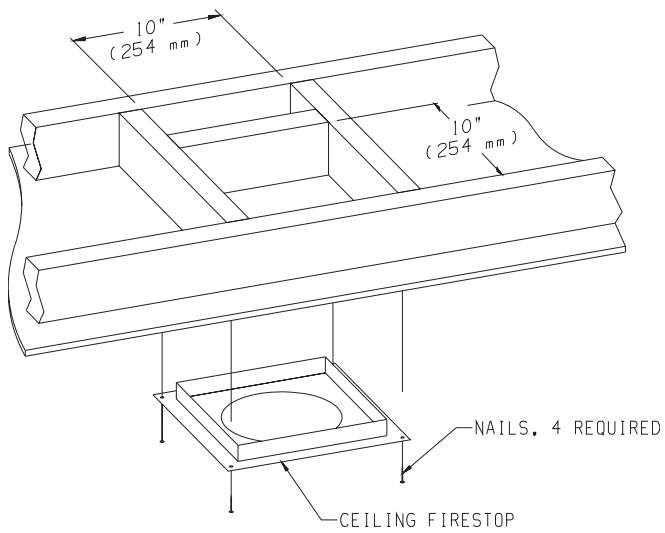


Figure 50

HORIZONTAL TERMINATION

NOTE: Termination cap should pass through the wall firestop from the exterior of the building. Adjust the termination cap to its final exterior position on the building.

WARNING: Termination cap must be positioned so that arrow is pointing up.

Attach the termination cap with the four wood screws provided. Before attachment of the termination, run a bead of silicone sealant rated above 250°F on its outside edge too, so as to make a seal to the exterior wall.

NOTE: Wood screws can and should be replaced with appropriate fasteners for use on stucco, brick, concrete or other types of siding.

CAUTION: If exterior walls are finished with vinyl siding (or materials that could become discolored or warp), it is necessary to install a vinyl siding standoff.

The vinyl siding standoff will be installed between the vent termination and the exterior wall. **See Figure 52.** This horizontal vent termination bolts onto the flat portion of the vinyl siding standoff, so an air space will exist between the wall and the termination cap.

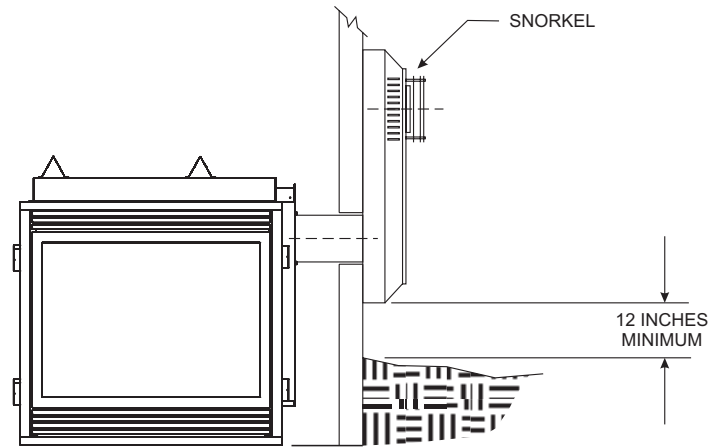


Figure 53a

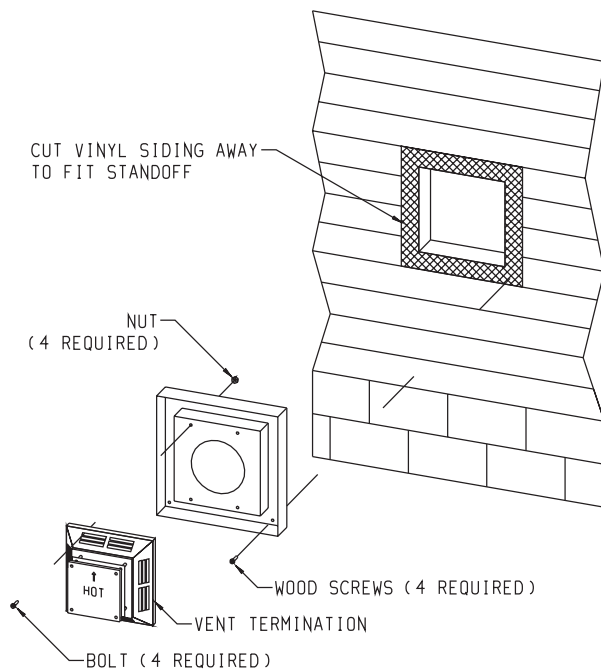


Figure 52

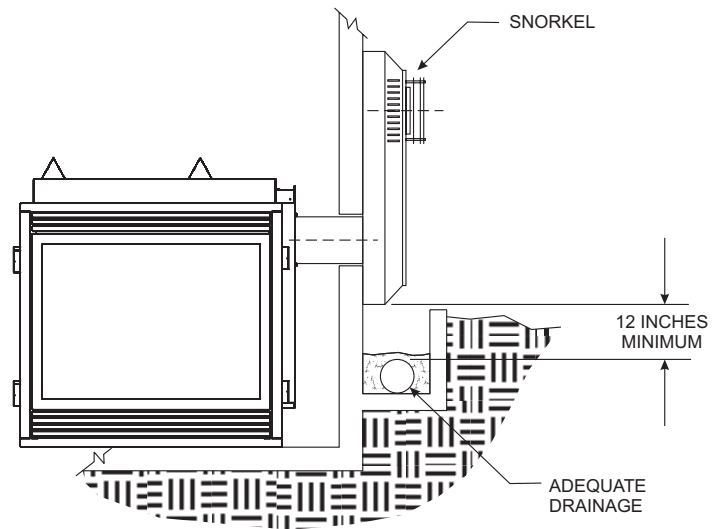


Figure 53b

For installations requiring a vertical rise on the exterior of the building, 14-inch and 36-inch tall Snorkel Terminations, as shown in Figure 53a are available. Follow the same installation procedures as used for standard Horizontal Terminations. If the Snorkel Termination must be installed below grade (i.e. basement applications, proper drainage must be provided to prevent water from entering the Snorkel Termination. **See Figure 53b.** Do not attempt to enclose the Snorkel within the wall or any other type of enclosure.

DVVK-4RE VENT KIT INSTALLATION INSTRUCTIONS

CAUTION: Sharp edges, use protective gloves when installing.

Tools Needed for Installation:

Sheet metal snips

5/16" nut driver

Phillips head screwdriver - #2

High temperature sealant or furnace cement rated for continuous use at 1,000°F minimum

Measuring tape

Parts Verification

See parts list on page 41 to verify components included in this vent kit prior to installation.

NOTE: If installing onto wood, lap, or vinyl siding, the vinyl siding kit should be used (sold separately, part number DV-822).

The vinyl siding vent kit, DV-822, is available from Empire Comfort Systems, Inc. The depth is 3" (76mm), which enables the vent cap to be extended away from vinyl siding or projections. The wall depth plus the additional 3" (76mm) depth of the vinyl siding vent cap extension should not exceed a total depth of 13 3/4" (349mm).

If wall depth exceeds 13 3/4" (349mm), extend system using 6 5/8" (168mm) x 4" (102mm) rigid venting (See Fireplace Instructions for approved lengths) **See Figure 55.**

Installing Wall Thimble/Firestop Assembly

1. Fix fireplace to permanent location. If using rigid venting system, install up to the location where it will exit the building.
2. Cut hole in wall for wall thimble/firestop assembly (**Figure 54**) into your combustible wall. Note: On brick or block exterior wall a 7" (178mm) diameter hole needs to be cut.

Measure the total wall thickness to determine whether or not the extension thimble is to be used. If the combustible wall depth is over 5 3/8" (137mm), then the extension thimble should be used (**Figure 54**).

3. Install the wall thimble assembly through the framed opening so the firestop plate is on the interior wall (**Figure 54**). Telescope section should extend all the way through the exterior wall. Attach with (4) 10 x 1" screws.
4. When placing the vent cap on an exterior wall covered with combustibles such as wood, lap, or vinyl siding, install the vinyl siding kit to the exterior wall sheathing.

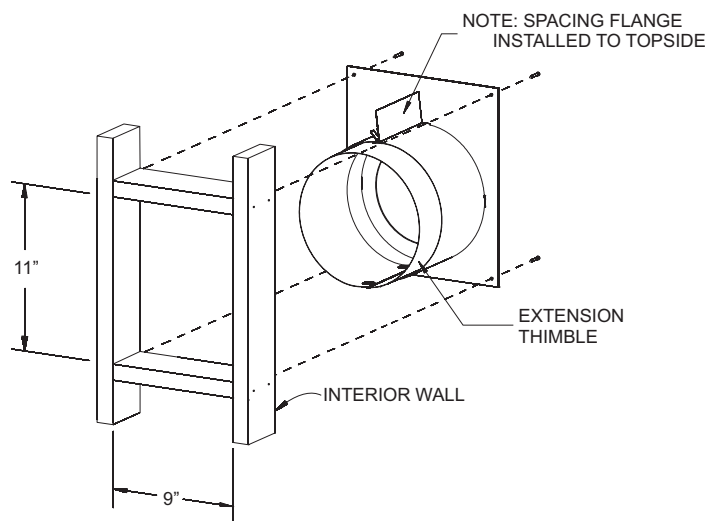


Figure 54

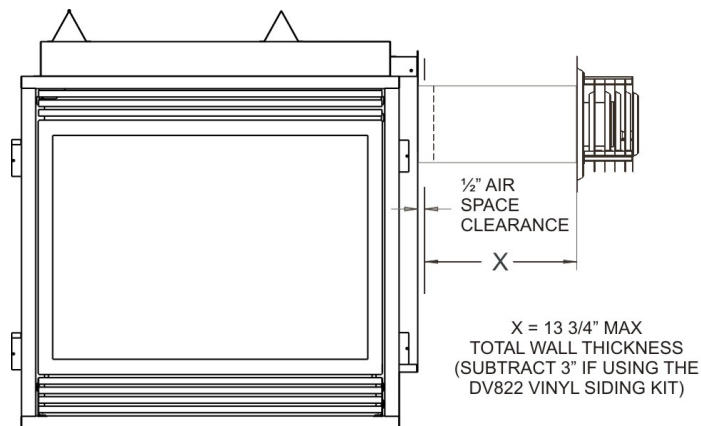


Figure 55

Cutting Vent Tubes

This is the most important part of the installation. With the fireplace (and the rigid venting system if used) fixed to its permanent location, the 6 5/8" (168mm) diameter air inlet tube and the 4" (102mm) diameter flue outlet tube are to be marked and cut using the following procedure. **See Figure 55.**

5. Attach the inlet tube to the outside mounting plate. Align tinnerman clips on the tabs of the air inlet tube to the holes on outside mounting plate, and fix with (2) #10 x 1/2" screws.
6. With the vinyl siding kit installed to wall (if necessary), insert the 6 5/8" (168mm) diameter tube with outside mounting plate attached through hole in wall. Connect to collar on fireplace or rigid vent system. Measure between wall or vent cap extension and outside mounting plate (**Figures 56 and 57**).

DVKK-4RE VENT KIT INSTALLATION INSTRUCTIONS (continued)

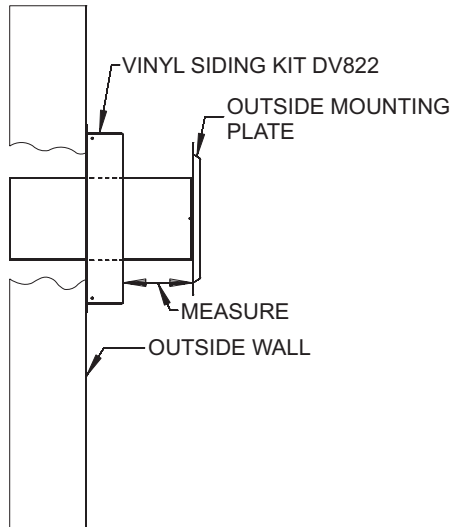


Figure 56

7. Remove outside mounting plate with tube attached from wall. Mark and cut the extra length of the 6 5/8" (168mm) diameter tube from the opposite end. Do not crimp or enlarge tube.

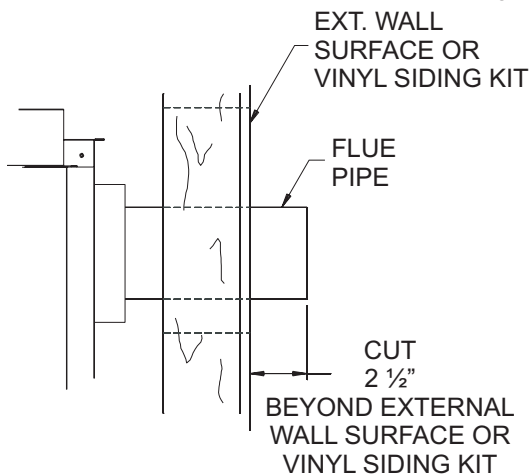


Figure 57

8. Attach the 4" (102mm) diameter flue outlet tube onto the rigid venting system or directly to fireplace. Ensure the 4" (102mm) diameter flue outlet tube is placed as far as possible onto the rigid venting system. Mark the 4" (102mm) diameter flue outlet tube 2 1/2" (64mm) beyond the vinyl siding kit or wall. See **Figure 57**. Remove the 4" (102mm) diameter flue outlet tube from rigid venting system. When installing directly to fireplace, tape gasket needs to be used.
9. Mark or wrap tape completely around the tubes at the marked points to help in making a true cut. Do not crimp or enlarge tubes.
10. From outside: Push the 6 5/8" (168mm) diameter inlet tube/ mounting plate onto end of rigid venting system to correct position. Fasten the outside mounting plate to the vinyl siding kit or wall with (4) 10 x 1 1/2" screws. (Ensure upward slope).
11. From inside: Attach the inlet tube to the collar on the back of the fireplace (or the rigid venting system) using (3) self tapping screws.
12. Seal the 4" (102mm) diameter flue outlet tube. Follow instructions and diagram (**Figure 58**).
13. Fasten 4" (102mm) diameter flue outlet tube in place. Do not "twist" the flue outlet tube into the fireplace collar (or rigid venting system). Hold the tube by the seam and push in using a perpendicular "rocking" motion. This ensures the seam on the tube stay intact.
14. Fasten vent cap end using (3) 10 x 1/2" screws to mounting plate.

Sealing 4" (102mm) Diameter Flue Outlet Tube

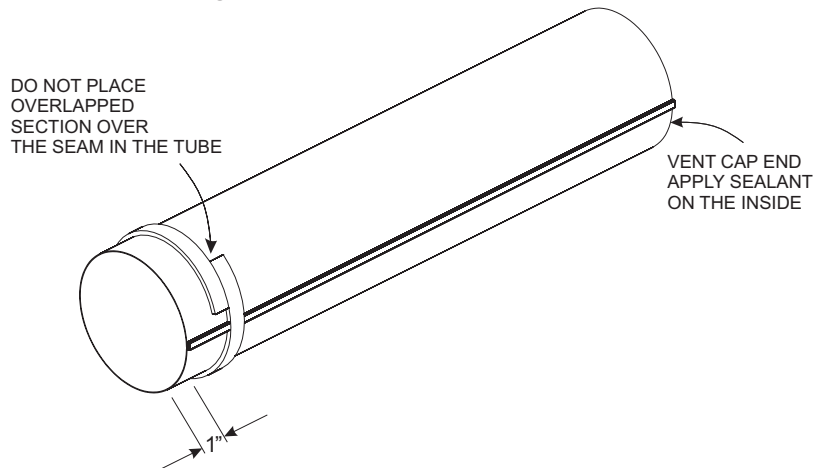


Figure 58

Note: Tape gasket to be applied prior to installing to fireplace flue outlet tube only. Tape gasket should not be used when mating the flue outlet tube to a rigid venting system.

DVVK-4RE VENT KIT INSTALLATION INSTRUCTIONS (continued)

Follow correct option according to venting method.

Connecting Directly to Fireplace

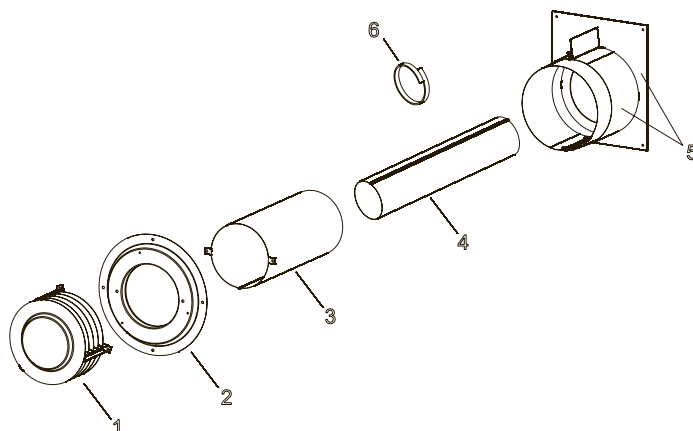
If the air inlet and flue outlet tubes are to be connected directly to the unit (no rigid venting system is being used), then the gasket provided must be used to seal the 4" (102mm) flue outlet tube. Peel the paper off the self-adhesive gasket and then wrap it around the end of the tube (if tube was cut, it is recommended to use cut end) as shown in Figure 58. Pull the gasket tight at all times while wrapping it around tube. The gasket ends should align, to form a complete seal. The overlapped section should NOT come in contact with the seam in the tube. Apply high temperature sealant to the opposite end of the tube (on the inside of the tube). The end with the gasket will attach to the back of the unit. Continue with Step 13.

Connecting to Rigid Vent System

If the air inlet and flue outlet tubes are to be connected to a rigid venting system (and not directly to the back of the unit), then **do not** use the gasket provided. High temperature sealant should be applied to the outside of the 4" diameter (102mm) flue outlet tube (if tube was cut, it is recommended to use cut end) and to the inside of the tube on the end that connects to the vent cap. Continue with step 13.

PARTS LIST

INDEX NUMBER	PART NUMBER	DESCRIPTION
1	DV769	Vent Cap Assembly
2	19193	Outside Mounting Plate
3	19194	Air Inlet Tube
4	DV524	Flue Outlet Tube
5	19196	Firestop/Thimble Assembly
6	20527	Gasket



DVK-4F FLEX VENT INSTRUCTIONS

The **DVK-4F FLEX VENT KIT** includes the following components:

- (1) Horizontal Termination Cap
- (1) 4-foot section of Flex vent with spacers (4" flue/7" outer pipe)
- (1) 4" diameter Flue adapter collar
- (1) 7" diameter Outer Vent adapter collar
- (1) Wall Firestop/Thimble Assembly
- Hardware pack that includes band clamps and screws

Flex venting can be installed either vertically or horizontally off of the DVD Series fireplaces. When installing a horizontal vent run from top connections, maintain at least $\frac{1}{2}$ " rise for every 12" of vent run. When venting horizontal off the rear vent connections, allow a minimum rise of 2". Refer to Figure 44 when mounting termination near vinyl siding.

CAUTION: Always stretch and secure venting with wire or metal strapping to ensure that the horizontal runs do not sag. If space permits, it is generally easier to attach venting in the top vent configuration.

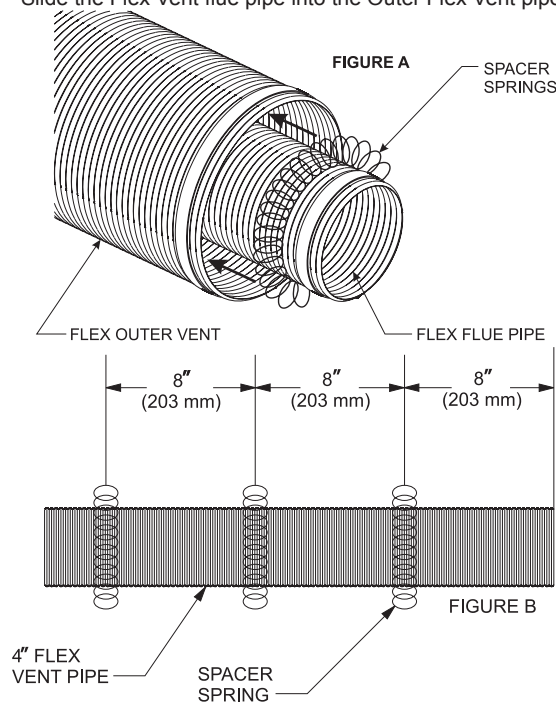
Because of sharp edges, always use gloves when handling the flex vent components.

Vent connections should overlap a minimum of 1" for proper sealing.

Always follow the general venting requirements for vent terminal location, vent lengths, and clearance to combustible materials.

INSTALLATION

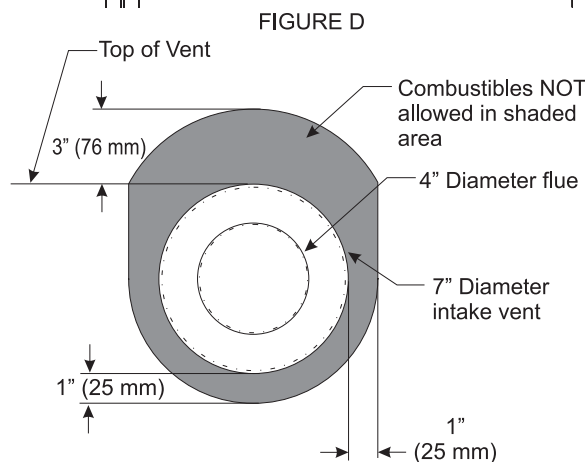
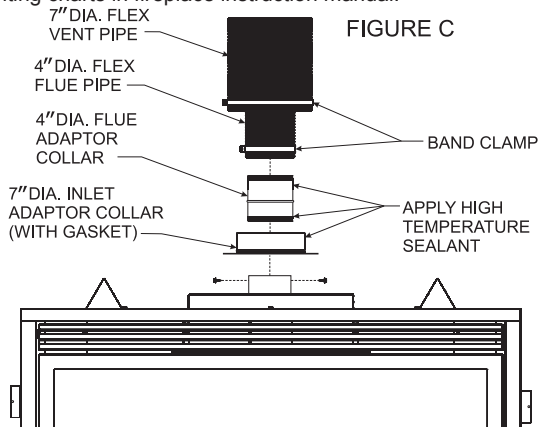
1. Unpack vent components and check that all items are included.
2. Check to see that the vent spacer springs are located around the flue vent at 8" and 12" intervals along its length. See Figure A. If not, stretch the spacer springs to about 15" long and wrap them around the flue, then interlock the ends of each spring about 2". See Figure B. Maintain equal distance between spring spacers.
3. Remove the 6- $\frac{5}{8}$ " diameter Vent collar from the fireplace. Replace this collar with the 7" diameter Flex Vent adapter collar provided with the vent kit.
4. Slide the Flex Vent flue pipe into the Outer Flex Vent pipe.



5. Install the Wall Firestop/Thimble assembly as required through the wall. Refer to the venting charts in the fireplace manual to determine the proper height and size of the vent opening. The minimum opening should be 9" wide by 11" high. The minimum combustible clearance from the horizontal vent is 1" from sides and bottom, and 3" above the vent pipe. See Figure D.
6. In most cases, after determining the length of the vent that is needed, it may be easier to install the flue and outer vent pipes to the Termination Cap first, then from the outside, feed the venting through the wall to the fireplace.
7. If the venting is to long, trim off any excess vent before attaching the vent end connectors.

CAUTION: Do not use force when installing the Horizontal Vent Termination into the flex venting. Always stretch venting out first, then cut off excessive vent material prior to sliding the vent termination into the flue and inlet venting. Forcing the termination cap into the flex venting will deform the flue venting, which will restrict the exhaust gases, and cause improper operation of the fireplace.

8. Attach the Termination Cap to the outside of the house.
9. Prior to making the vent connections, apply high temperature sealant (1000 degree F min.) to the vent connections before securing with the band clamps provided. Note: the flue pipe end **without the adapter** is to be installed to the Termination Cap.
10. Apply sealant to the outside of the flue pipe adapter and connect to the flex flue pipe. Then insert the adapter into the fireplace flue. Secure flue adapter to the fireplace flue with a minimum of two screws provided. See Figure C.
11. Attach the Outer Vent pipe to the 7" diameter Collar on the fireplace with a large band clamp provided. Sealant may also be used on the outer vent connections.
12. Check all vent connections for tightness. Make sure horizontal venting has the proper rise and combustible clearances required. Refer to venting charts in fireplace instruction manual.



VERTICAL TERMINATION

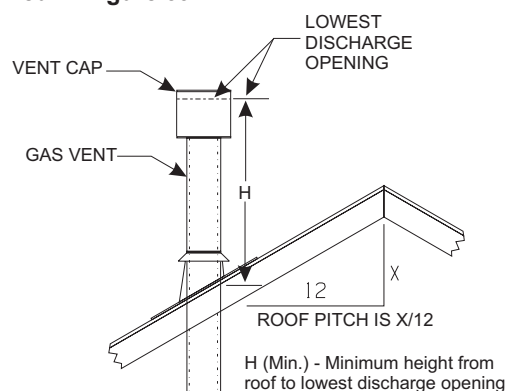
Locate and mark the center point of the venting pipe. Using a nail on the underside of the roof and drive this nail through this center point. Make the outline of the roof hole around this center point.

NOTE: Size of the roof hole dimensions depend on the pitch of the roof. There must be a 1 inch clearance (25mm) to the vertical pipe sections. This clearance is to all combustible material.

Cover the opening of the vent pipe and cut and frame the roof hole. Use framing lumber the same size as the roof rafters and install the frame securely. Flashing anchored to frame must withstand high winds. The storm collar is placed over this joint to make a water-tight seal. Non-hardening sealant should be used to completely seal this flashing installation.

Determining Minimum Vent Height Above the Roof.

WARNING: Major U.S. building codes specify minimum chimney and/or vent height above the roof top. These minimum heights are necessary in the interest of safety. These specifications are summarized in Figure 59.



ROOF PITCH	H (Min.)
Flat to 6/12	12" (305 mm)
6/12 to 7/12	15" (381 mm)
Over 7/12 to 8/12	18" (457 mm)
Over 8/12 to 16/12	24" (610 mm)
Over 16/12 to 21/12	36" (914 mm)

Figure 59

Note that for steep roof pitches, the vent height must be increased. In high wind conditions, nearby trees, adjoining roof lines, steep pitched roofs, and other similar factors can result in poor draft, or down-drafting. In these cases, increasing the vent height may solve this problem.

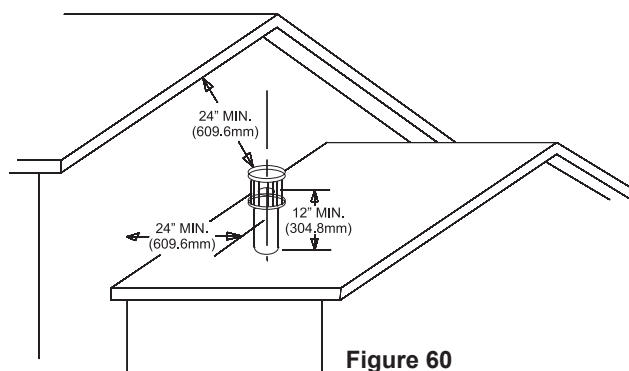


Figure 60

When terminating the vent cap near an exterior wall or overhang, maintain minimum clearances as shown in Figure 60.

General Maintenance

Conduct an inspection of the venting system semi-annually. Recommended areas to inspect are as follows:

1. Check areas of the venting system which are exposed to the elements for corrosion. These will appear as rust spots or streaks and, in extreme cases, holes. These components should immediately be replaced.
2. Remove the cap and shine a flashlight down the vent. Remove any bird nests or other foreign material.
3. Check for evidence of excessive condensate, such as water droplets forming in the inner liner and subsequently dripping out at joints. Condensate can cause corrosion of caps, pipe and fittings. It may be caused by having excessive lateral runs, too many elbows and exterior portions of the system being exposed to cold weather.
4. Inspect joints to verify that no pipe sections or fittings have been disturbed and, consequently, loosened. Also, check mechanical supports, such as wall straps or plumbers' tape for rigidity.

Venting terminal shall not be recessed into a wall or siding.

A removable panel or other means must be provided in the enclosure for visual inspection of the flue connection.

NOTE: This also pertains to vertical vent systems installed on the outside of the building.

Slide the vertical vent cap over the ends of the vent pipe and secure. See Figure 61.

Installing the Vent System in a Chase

A chase is a vertical box-like structure built to enclose the gas appliance and/or its vent system. Vertical vent runs on the outside of a building may be, but are not required to be installed inside a chase.

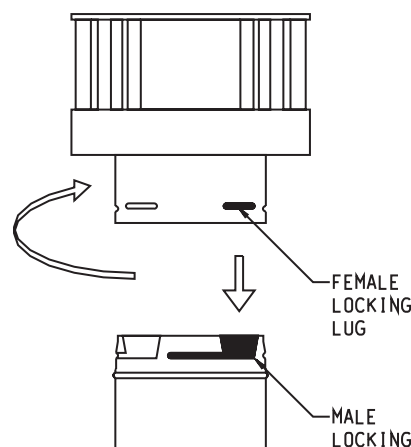


Figure 61

CAUTION: Treatment of firestop spacers and construction of the chase may vary with the type of building. These instructions are not substitutes for the requirements of local building codes. Therefore, your local building codes must be checked to determine the requirements for these steps.

VERTICAL TERMINATION (continued)

NOTE: When installing this vent system in a chase, it is always good building practice to insulate the chase as you would the outside walls of your home. This is especially important for cold climate installations. Upon completion of building your chase framing, install the vent system by following the instructions in this manual. Remember to build the chase large enough so that minimum clearance of combustible materials (including insulation) to the vent system are maintained.

Installation of Vertical Inlet Baffle

The vertical inlet baffle is to be used only in a completely vertical vent installation. The vertical inlet baffle can be used when the vertical vent rise is between 10 feet and 40 feet. To maintain the yellow flame in the main burner, purchase Vertical Inlet baffle, VIB6A for use with 6 5/8" diameter vent systems, or the VIB7A for use with 7" diameter vent systems. These are available from your Empire Comfort Systems, Inc. distributor or dealer.

In a vertical vent rise the rear (yellow) flame on the main burner can be reduced due to the drawing action from the flue exhaust pipe and the air inlet pipe. A decrease in the height or the appearance of the yellow flame may occur when the vertical vent rise is between 10 feet and 40 feet. To enhance the yellow flame on the main burner, the vertical inlet baffle can be attached to the direct vent high wind vertical top.

Please refer to the instructions included with the Air Inlet Baffle Kit for proper installation.

Reassembly and Resealing Vent Pipe System

Attach vent pipe to inlet and outlet vent adaptor on fireplace in either the vertical or horizontal position, replace horizontal and vertical pipe lengths, elbows and horizontal or vertical termination kit.

All rigid pipe vent system components lock into place by sliding the concentric pipe section with four (4) equally spaced interior beads onto the appliance collar or previously installed component end with four (4) equally spaced indented sections. When the internal beads of each starting outer pipe line up, rotate pipe section clockwise 90° (approximately 3 inches). The vent pipe is now locked together.

Continue replacing components per the vent system configuration. Be certain that each succeeding vent component is securely fitted and locked into the preceding component in the vent system.

Vertical Through the Roof Applications (Figure 62)

Your Gas Fireplace has been approved for:

- a) Vertical installations up to 40 feet in height.
- b) Two sets of 45 degree elbow offsets within these vertical installations. From 0 to a maximum of 8 ft. a vent pipe can be used between elbows.
- c) Wall straps must be used to support offset pipe every 4'.

This application will require that you first determine the roof pitch and use the appropriate venting components.

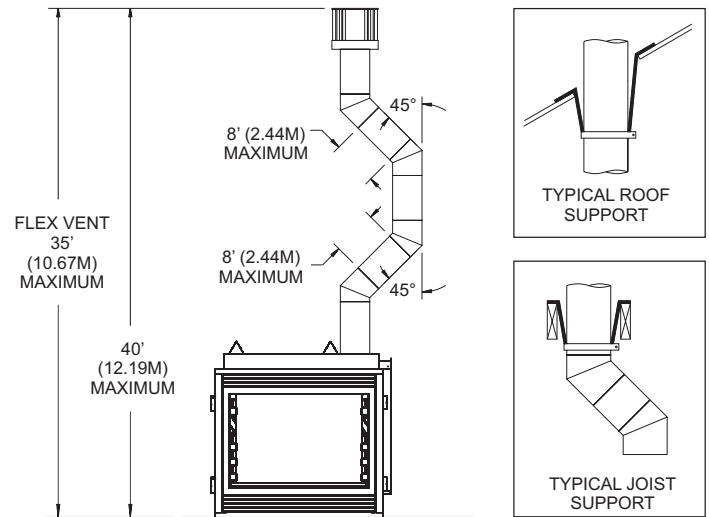


Figure 62

PLACEMENT OF GLOWING EMBERS

Placement of the glowing embers (rockwool) is very individual and light coverage of the areas indicated will provide your best effects. We recommend separation of the rockwool by hand and to make your coverage as light and fluffy as possible.

Place just enough embers on the burner to obtain the glow and a gold yellow flame.

Do not place rockwool over large port areas.

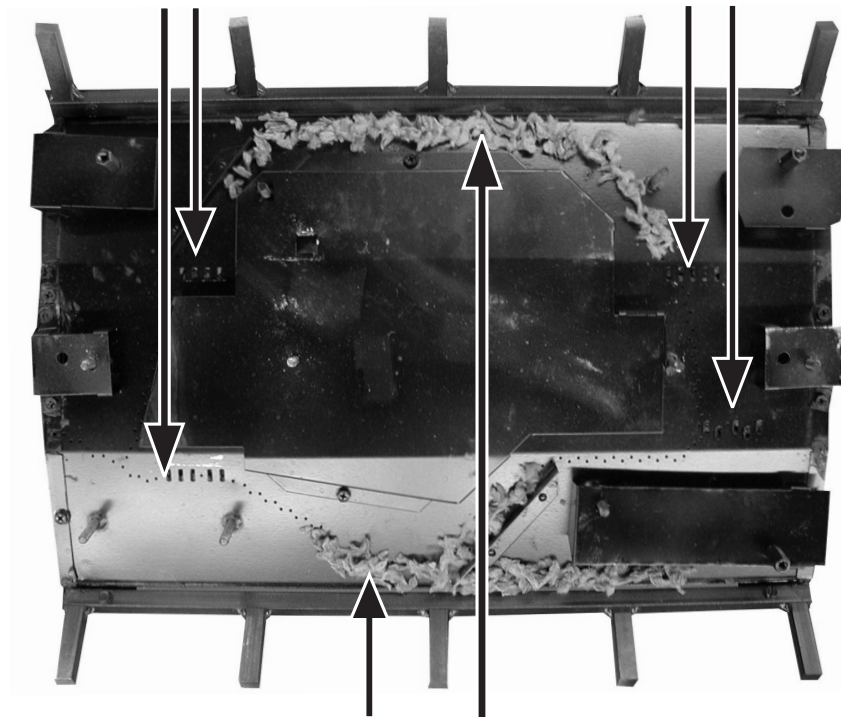
Rockwool should not be placed in the area of the pilot assembly.

Over time, the rockwool will break down and new rockwool will need to be placed to recreate the original glowing embers effect. Remove all old rockwool from the appliance and apply new rockwool as shown in Figure 63.

Note: Only the rockwool supplied with this unit or ordered in accordance with the Parts List on page 53 should be used on this burner. See the Parts List on page 53 to order replacement rockwool.

Optional Platinum Embers (PE-20-1) may also be used with this fireplace. Contact your dealer for availability.

Do not cover any large ports with
ember material (glowing embers)



Place ember material only
over port areas as shown

TOP VIEW

Figure 63

OPERATION INSTRUCTIONS/FLAME APPEARANCE

Before you begin: Do not handle the logs with your bare hands! Always wear gloves to prevent skin irritation. After handling logs, wash your hands gently with soap and water.

All Logs

The positioning of the logs is critical to the safe and clean operation of this heater. Sooting and other problems may result if the logs are not properly and firmly positioned in the appliance.

Instructions for placement of the logs in the fireplace are included with the logset. Logset approved for use in the DVP36(S,P)P fireplaces include model LSU24RR-2, and must be ordered separately.

Flames from the pilot (rear right back side of the pan burner) as well as the main flame should be visually checked as the log set is installed.

In normal operation at full rate after 10 to 15 minutes, the flame appearance should be sets of yellow flames. Natural gas burners will tend to have blue flames with yellow flame tips.

NOTE: All flames will be random by design, flame height will go up and down.

Glowing embers (rockwool) can cover the pan burner in areas as shown in Figure 63, but very little is necessary to cover these areas. Excess ember material causes the yellow flame to become orange and stringy. Apply just enough to obtain slow glow and a gold or yellow flame.

During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These chemicals are not harmful, but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance, possibly causing headaches or eye or lung irritation. This is a normal and temporary occurrence.

The initial break-in operation should be 5 to 10 minutes on (at the highest setting) then let cool for 10 to 15 minutes. Repeat this On/Off cycle two to three times to cure sealants. Provide additional ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in will be slight and will disappear with continued use.

PERIODIC CLEANING – Refer to parts diagram for location of items discussed below.

- Do not use cleaning fluid to clean logs or any part of heater.
- Logs - brush with soft bristle brush or vacuum with brush attachment.
- Remove loose particles and dust from the burner areas, controls, piezo covers and grate. Don't remove ceramic media from inside burner box.
- Inspect and clean burner air intake hole. Remove lint or particles with brush. Failure to keep air intake hole clean will result in sooting and poor combustion.

ANNUAL CLEANING/INSPECTION – Refer to parts diagram for location of items discussed below.

- Inspect and clean burner air intake hole. Remove lint or particles with vacuum or brush. Failure to keep air intake hole clean will result in sooting and poor combustion.
- Inspect and clean all burner ports.
- Inspect pilot for proper operation.
- Verify flame pattern and log placement for proper operation.
- Verify smooth and responsive ignition of main burner.
- Check level of ceramic media in burner. Burner should be full, up to the level of openings in burner top.

OPERATING INSTRUCTIONS

750 Millivolt System

The standing pilot (750 millivolt system) is a continuous burning pilot. The pilot remains ON even when the main burner is OFF.

When you ignite the pilot, the thermopile produces millivolts (electrical current) which energizes the magnet in the gas valve. After 30 seconds to 1 minute time period you can release the gas control knob and the pilot will stay ON. Allow your pilot flame to operate an additional one (1) to two (2) minutes before you turn the gas control knob from the PILOT position to the ON position. This time period allows the millivolts (electrical current) to build-up to a sufficient level allowing the gas control to operate properly.

1. Follow the SAFETY and LIGHTING INSTRUCTIONS for standing pilot controls found in this manual and on labels found in control compartment behind the door assembly.

CAUTION: During the initial purging and subsequent lightings, never allow the gas valve control knob to remain depressed in the “pilot” position without pushing the piezo ignitor button at least once every second.

2. During the operating season, leave the control valve knob in the “ON” position. This will allow the pilot flame to remain lit. Turn the burner flame on or off with the fireplace REMOTE/OFF/ON switch, wall switch or remote controls.

NOTE: The gas control valve allows you to increase or decrease the height of the main burner flame. The control valve has a pressure regulator with a knob as shown in Figure 64. Rotate the knob clockwise to “HI” to increase the flame height and counterclockwise to “LO” to decrease the flame height.

3. When the operating season is over, turn the REMOTE/OFF/ON switch to “OFF” and the control valve to “OFF”. The system, including the pilot light, will be shut down.

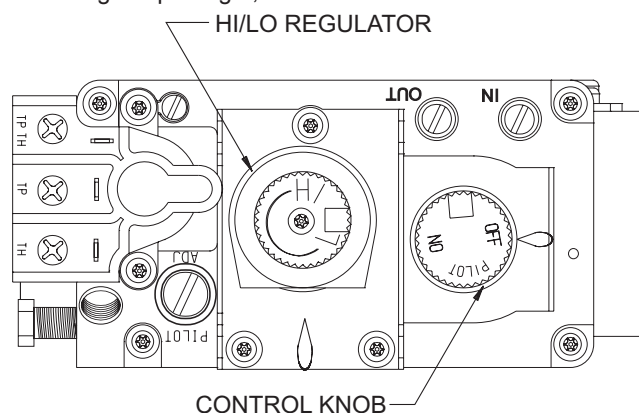


Figure 64

The OWNER should carefully read and follow these operating instructions at all times. Lower the door assembly to view the gas controls for the fireplace.

Initial Lighting

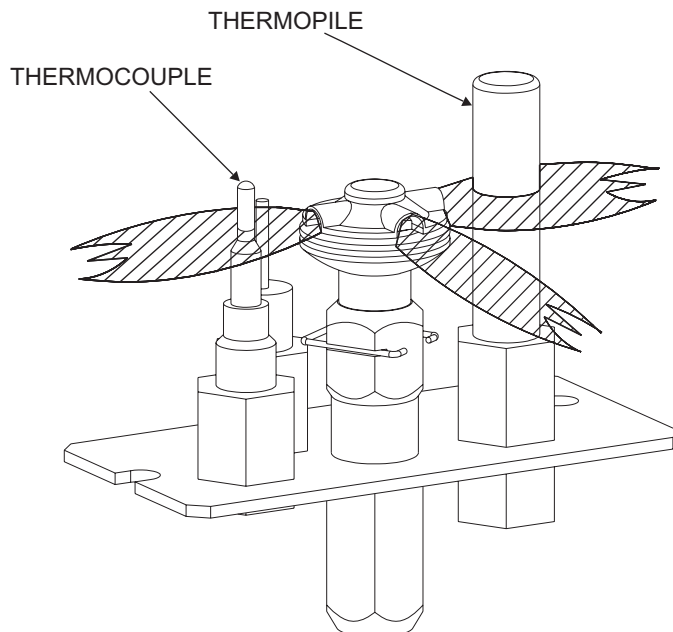
Upon completing the gas line or turning the gas valve on after it has been in the “OFF” position, a small amount of air will be in the lines. When first lighting the fireplace, it will take a few minutes for the lines to purge themselves of this air. Once the purging is complete,

the fireplace will light and operate satisfactorily.

Subsequent lightings of the appliance will not require such purging if the gas valve is not turned to “OFF.”

Pilot Flame (Figure 65)

The thermopile/thermocouple (standing pilot) tips should be covered with flame.



PILOT ASSEMBLY

Figure 65

OPERATING INSTRUCTIONS (continued)

STANDING PILOT OPERATING INSTRUCTIONS

REMOTE/OFF/ON Switch

The fireplace is equipped with a REMOTE/OFF/ON switch. A wire harness is attached to the REMOTE/OFF/ON switch. The red, black and green (wires) female push-ons attach to the REMOTE/OFF/ON switch. At the opposite end of the wire harness, the black and green (wires) female push-ons attach to the gas valve. An additional green wire and the red wire, which are stripped and bare, will attach to one of the accessories that can be purchased for use with your fireplace.

Operation of REMOTE/OFF/ON Switch with no Accessories

To ignite main burner, turn the control knob on the gas valve from the PILOT position to the ON position. Turn the REMOTE/OFF/ON switch from the OFF position to the ON position. The additional green wire and red wire, which are stripped and bare are not used.

Wall Switch, FWS-1

Connect the green and red, stripped and bare, wires on the REMOTE/OFF/ON switch wire harness to the wall switch. Turn the REMOTE/OFF/ON switch to the REMOTE position. Pivot the rocker switch on the FWS-1 to the ON position.

Wall Thermostats (optional)

TRW - Wireless for Millivolt models

TMV - Reed switch for Millivolt models

Battery Operated Remote Controls, FRBC, FBRTC, FRBTP and TRW

Connect the green and red, stripped and bare, wires on the REMOTE/OFF/ON switch wire harness to the remote receiver that is a component in the remote kit. Turn the REMOTE/OFF/ON switch to the REMOTE position. Follow instructions included with the remote to complete installation.

Note: If batteries fail in the remote, and immediate heat is desired, turn the REMOTE/OFF/ON switch from the REMOTE position to the ON position.

Electric (120 volt) Operated Remote Control, FREC

Connect the green and red, stripped and bare, wires on the REMOTE/OFF/ON switch wire harness to the wires on remote receiver that is a component in the FREC. Turn the REMOTE/OFF/ON switch to the REMOTE position. Follow instructions in the FREC to complete installation.

NOTE: If electric (120 volt) fails in FREC, and immediate heat is desired, turn the REMOTE/OFF/ON switch from the REMOTE position to the ON position.

Reassembly and Resealing Gas Accumulation Relief System Glass Frame Assembly and Combustion Chamber

Whenever the glass frame assembly is pivoted open by a delayed ignition in the main burner, the glass frame assembly gaskets and combustion chamber must be examined by a qualified service person for damage. All damaged gaskets on the glass frame assembly and combustion chamber must be replaced by a qualified service person. If damage occurs to the combustion chamber, it must be replaced by a qualified service person. Contact Empire Comfort Systems, Inc. for replacement parts.

Installation of Remote Receiver

Place remote receiver on the floor of fireplace behind the louver as far forward as possible.

Attention: The Velcro loop and hook are not necessary in this installation but can be used to secure remote receiver.

Refer to remote control installation and operating instructions for more details on remote control.

Millivolt Control

The valve regulator controls the burner pressure which should be checked at the pressure test point. Turn captured screw counter clockwise 2 or 3 turns and then place tubing to pressure gauge over test point (Use test point "A" closest to control knob). After taking pressure reading, be sure and turn captured screw clockwise firmly to re-seal. Do not over torque. Check for gas leaks.

Millivolt thermopile is self generating. Gas valve does not require 24 volts or 110 volts.

Check System Operation

Millivolt system and all individual components may be checked with a millivolt meter 0-1000 MV range.

It is important to use wire of a gauge proper for the length of the wire:

Recommended Wire Gauges	
Maximum Length	Wire Gauge
1' to 10'	18
10' to 25'	16
25' to 35'	14

STANDING PILOT WIRING DIAGRAM

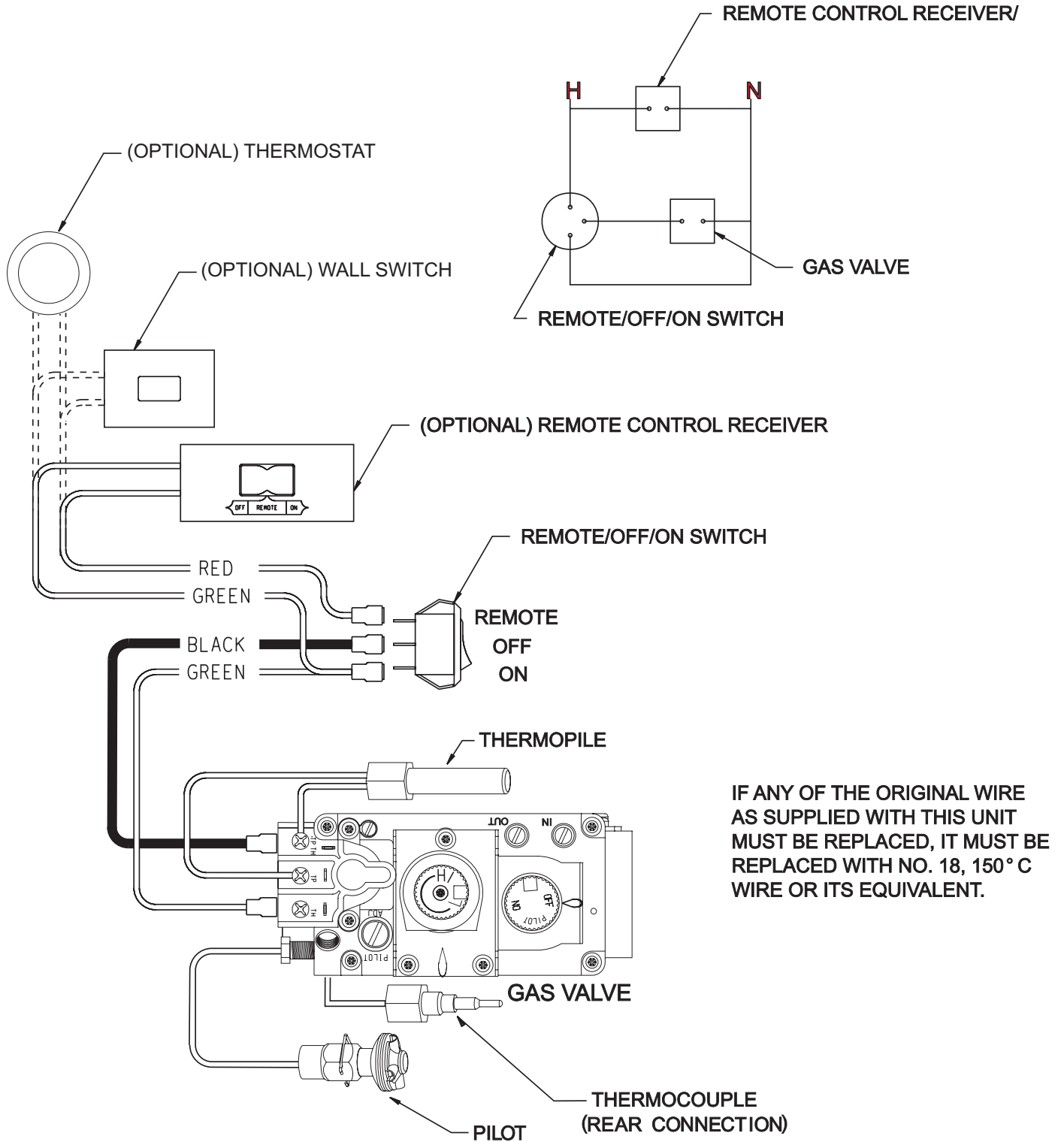


Figure 66

STANDING PILOT LIGHTING INSTRUCTIONS

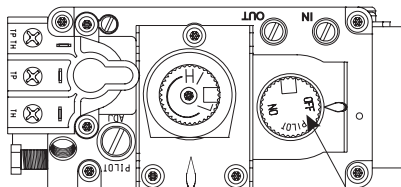
FOR YOUR SAFETY READ BEFORE LIGHTING

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

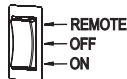
- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. Before lighting smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
What To Do If You Smell Gas
 - Do not try to light any appliance.
 - Do not touch any electrical switch;
 - Do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

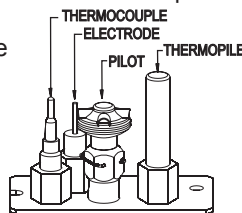
1. Stop! Read the safety information above.
2. Set REMOTE/OFF/ON switch to OFF.
3. Turn off all electric power to the appliance (if applicable).
4. Lower bottom louver assembly.
5. Push in gas control knob slightly and turn clockwise to "OFF."



GAS CONTROL KNOB SHOWN IN "OFF" POSITION



- Note: Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.
6. Wait ten (10) minutes to clear out any gas. Then smell for gas, including near the floor. If you then smell gas, STOP! Follow "B" in the safety information above. If you do not smell gas, go to the next step.
 7. Find pilot - Follow metal tube from gas control. The pilot is behind the burner on the right side.
 8. Turn gas control knob counterclockwise to "PILOT."



9. Push in control knob all the way and hold in. Repeatedly push the piezo ignitor button until the pilot is lit. Continue to hold the control knob in the 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 9.
 - If the control knob does not pop up when released, STOP and IMMEDIATELY call a qualified service technician or gas supplier.
 - If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
10. Turn gas control knob counterclockwise to "ON."
11. Close bottom louver assembly.
12. Turn on all electric power to the appliance (if applicable).
13. Set REMOTE/OFF/ON switch to desired setting.

TO TURN OFF GAS TO FIREPLACE

1. Set REMOTE/OFF/ON switch to OFF.
2. Turn off all electric power to the appliance if service is to be performed (if applicable).
3. Lower bottom louver assembly.
4. Push in gas control knob slightly and turn clockwise to "OFF." Do not force.
5. Close bottom louver assembly.

STANDING PILOT TROUBLESHOOTING

With proper installation and maintenance, your new Direct Vent Gas Fireplace will provide years of trouble-free service. If you do experience a problem, refer to the Trouble Shooting Guide below. This guide will assist a qualified service person in the diagnosis of problems and the corrective action to be taken.

1. Spark ignitor will not light pilot after repeated triggering of piezo ignitor button.

- a. Defective ignitor (no spark electrode)
—Check for spark at electrode and pilot; if no spark and electrode wire is properly connected, replace ignitor.
- b. No gas or low gas pressure.
—Check remote shut off valves from fireplace. Usually there is a valve near the main. There can be more than one (1) valve between the fireplace and main.
—Low pressure can be caused by a variety of situations such as a bent line, too narrow diameter of pipe, or low line pressure. Consult with plumber or gas supplier.
- c. No LP in tank.
—Check LP (propane) tank. Refill tank.

2. Pilot will not stay lit after carefully following lighting instructions.

- a. Defective thermocouple.
—Check that pilot flame impinges on thermocouple. Clean and/or adjust pilot for maximum flame impingement.
—Ensure the thermocouple connection at the gas valve is fully inserted and tight (hand tight plus 1/4 turn). Faulty thermocouple if reading is below specified minimum of 15 millivolts.
—Disconnect the thermocouple from the valve, place one millivolt meter lead wire on the end of the thermocouple and the other millivolt meter lead wire on the thermocouple copper wire. Start the pilot and hold the valve knob in. If the millivolt reading is less than 15 millivolt, replace the thermocouple.
- b. Defective valve.
—If thermocouple is producing more than 15 millivolts, replace faulty valve.

3. Pilot burning, no gas to burner, valve knob “ON”, REMOTE/OFF/ON switch “ON.”

- a. REMOTE/OFF/ON switch, wall switch, remote control or wires defective.
—Check REMOTE/OFF/ON switch and wires for proper connections. Place jumper wires across terminal at switch. If burner comes on, replace defective switch. If OK, place jumper wires across switch wires at gas valve—if burner comes on, wires are faulty or connections are bad.
- b. Thermopile may not be generating sufficient millivolts.
—If the pilot flame is not close enough physically to the thermopile, adjust the pilot flame.
—Be sure the wire connections from the thermopile at the gas valve terminals are tight and the thermopile is fully inserted into the pilot bracket.
—Check the thermopile with a millivolt meter. Take the reading at TH-TP & TP terminals of the gas valve. The meter should read 350 millivolts minimum, while holding the valve knob depressed in the PILOT position, with the pilot lit, and the REMOTE/OFF/ON switch in the OFF position. Replace the faulty thermopile if the reading is below the specified minimum.
—With the pilot in the ON position, disconnect the thermopile leads from the valve. Take a reading at the thermopile leads. The reading should be 350 millivolts minimum. Replace the thermopile if the reading is below the minimum.

c. Defective valve.

—Turn valve knob to ON. Place REMOTE/OFF/ON switch to ON. Check with millivolt meter at thermopile terminals. Millivolt meter should read greater than 200 millivolts. If the reading is okay and the main burner does not ignite, replace the gas valve.

d. Plugged main burner orifice.

—Check main burner orifice for blockage and remove.

4. Frequent pilot outage problem.

- a. Pilot flame may be too high or too low, or blowing (high), causing pilot safety to drop out.
—Clean and adjust flame for maximum flame impingement on the thermocouple. Follow lighting instructions carefully.

5. The pilot and main burner extinguish while in operation.

- a. No LP (Propane) in tank.
Check LP (Propane) tank. Refill fuel tank.
- b. Inner vent pipe leaking exhaust gases back into system
—Check for leaks.
- c. Glass too loose, gasket leaks in corners after usage.
—Be certain glass assembly is installed correctly.
- d. Horizontal vent improperly pitched.
—The horizontal vent cap should slope down only enough to prevent any water from entering the unit. The maximum downwards slope is 1/4 inch.
- e. Bad thermopile or thermocouple.
—Replace if necessary.
- f. Improper vent cap installation.
—Check for proper installation and freedom from debris or blockage.

6. Glass soots.

- a. Flame impingement on logs.
—Check and adjust log position. Contact your Dealer.
- b. Debris around throat of main burner.
—Inspect the opening at the base of the main burner. It is imperative that NO material be placed in this opening.

7. Flame burns blue and lifts off main burner.

- a. Insufficient oxygen being supplied.
—Check to make sure vent cap is installed properly and free of debris. Make sure that vent system joints are tight and have no leaks.
—Check to make sure that no material has been placed at the main burner base.

MAINTENANCE AND SERVICE

PLEASE NOTE

It is normal for appliances fabricated of steel to give off some expansion and/or contraction noise 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 six (6) hours the first time you use it. If optional fan kit has been installed, place fan in the "OFF" position during this time.

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

• Clean Burner and Control Compartment

Keep the control compartment, logs, and burner areas surrounding the logs clean by vacuuming or brushing at least twice a year.

Cleaning Procedure

1. Turn off pilot light at gas valve.
2. Remove glass front. (See Glass Removal)
3. Vacuum burner compartment.
4. Reinstall glass front.
5. Ignite pilot. (See Lighting Instructions)
6. Operate the pilot burner. If it appears abnormal call a service person.

• Check Vent System

The appliance and venting system should be inspected before initial use and at least annually by a qualified service person. Inspect the external vent cap on a regular basis to make sure that no debris is interfering with the air flow.

Glass Cleaning

It will be 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 that the glass be cleaned two or three times with a non-abrasive household cleaner and warm water (we recommend gas fireplace glass cleaner). After that the glass should be cleaned two or three times during each heating season depending on the circumstances present.

General Glass Information

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

Only glass approved for use by the manufacturer in fireplace may be used for replacement. The glass replacement should be done by a licensed or qualified service person.

WARNING:

1. The use of substitute glass will void all product warranties.
2. Care must be taken to avoid breakage of the glass.
3. Under no circumstances should this appliance be operated without the glass front or with a broken glass front. Replacement of the glass (with gasket) as supplied by the manufacturer should be done by a qualified service person.
4. Do not abuse the glass by striking or hitting the glass.

WARNING: Do not use abrasive cleaners on glass. Do not attempt to clean glass when glass is hot.

Glass Removal and Replacement (Figure 67)

1. Remove top louver, grasp louver and pull forward.
2. Lower bottom louver.
3. Release two glass frame clamps at bottom of firebox.
4. Remove glass frame.
5. Place glass frame onto firebox.
6. Attach two glass frame clamps at bottom of firebox.
7. Align clips on top louver with slots on front posts. Replace top louver into fireplace.
8. Close bottom louver.

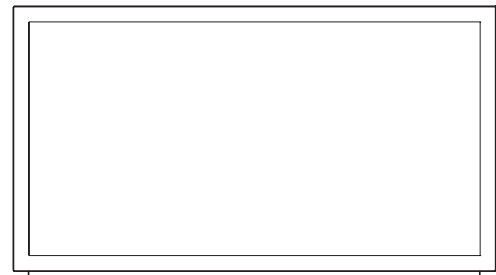
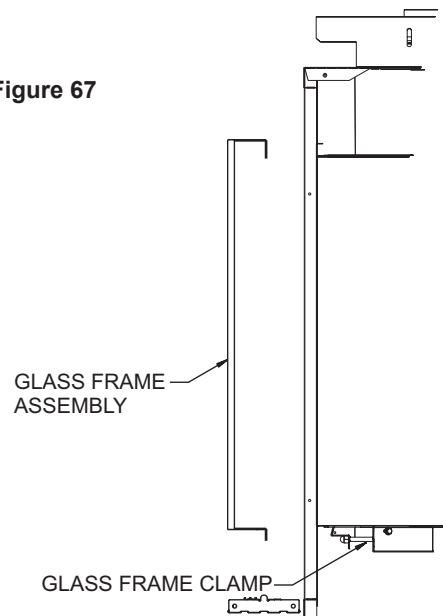


Figure 67



Louver Removal and Installation

1. Remove top louver, grasp louver and pull forward.
2. Lower bottom louver.
3. Align clips on top louver with slots on front posts. Replace top louver into fireplace.
4. Close bottom louver.

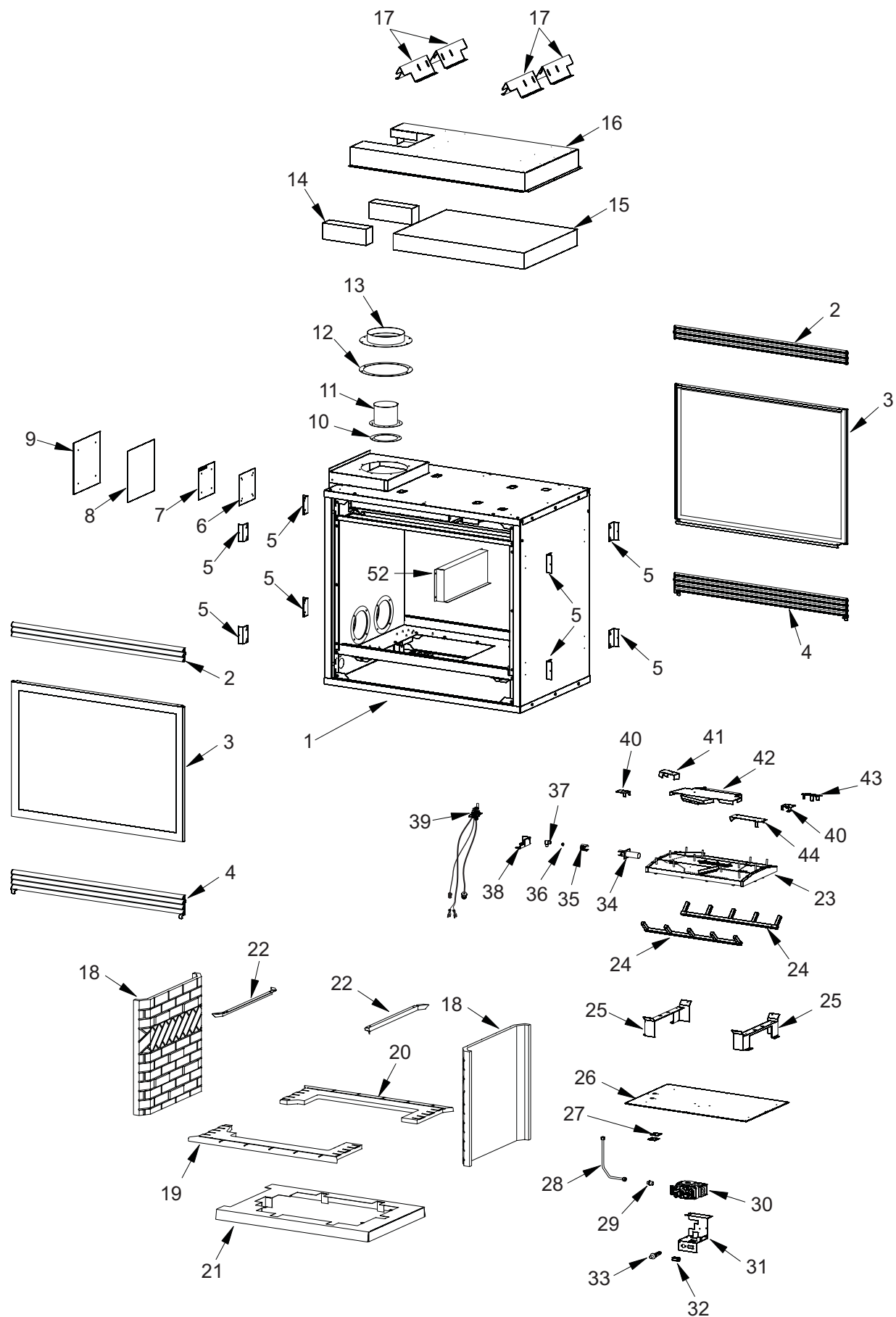
PARTS LIST

INDEX NO.	PART NO.		DESCRIPTION
	DVP36SP	DVP36PP	
1	24316	24316	FIREPLACE ASSEMBLY
2	18807	18807	UPPER LOUVER ASSEMBLY
3	24307	24307	GLASS FRAME ASSEMBLY
4	18808	18808	LOWER LOUVER ASSEMBLY
5	28688	10554	NAILING FLANGE
6	R7574	R7574	FLUE OUTLET GASKET
7	17141	17141	FLUE COVER PLATE
8	R7575	R7575	VENT COVER PLATE GASKET
9	17142	17142	VENT COVER PLATE
10	M163	M163	FLUE OUTLET GASKET
11	24503	24503	FLUE OUTLET COLLAR
12	R7573	R7573	AIR INLET VENT GASKET
13	17234	17234	AIR INLET COLLAR
14	R9934	R9934	TOP INSULATION 2 3/8 X 8 7/8
15	R9933	R9933	TOP INSULATION - 19 X 27
16	24420	24420	TOP CAP - SEE THRU
17	17301	17301	TOP STANDOFF
18	R10375	R10375	BRICK LINER - END (SIDE)
19	R10373	R10370	BRICK LINER - BOTTOM REAR
20	R10372	R10369	BRICK LINER - BOTTOM FRONT
21	24022	24022	BRICK LINER SUPPORT
22	26588	26588	BRICK LINER BRACKET
23	24710	24710	BURNER ASSEMBLY
24	24144	24144	GRATE ASSEMBLY
25	24282	24282	BURNER SUPPORT
26	24283	24283	BURNER BASE
27	11269	11269	GAS LINE BRACKET
28	24296	24296	TUBING ASSEMBLY

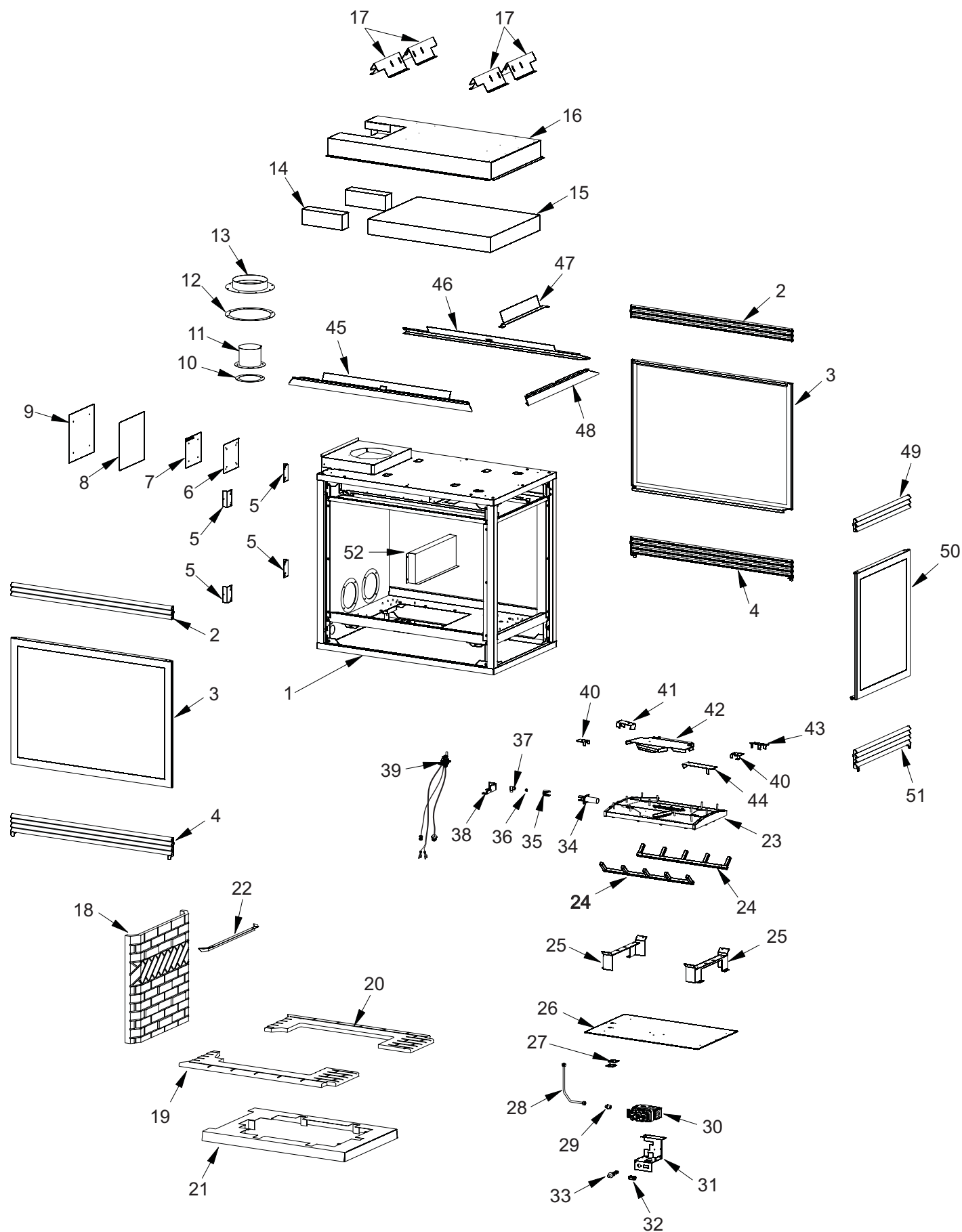
INDEX NO.	PART NO.		DESCRIPTION
	DVP36SP	DVP36PP	
29	R2423	R2423	MALE 5/16 X 3/8 NPT CONNECTOR
30	R7577	R7577	VALVE - NAT
30	R7578	R7578	VALVE - LP
31	17161	17161	VALVE BRACKET
32	R3436	R3436	REMOTE/OFF/ON SWITCH
33	R9760	R9760	PIEZO IGNITOR
34	R5677	R5677	VENTURI TUBE
35	R5676	R5676	AIR SHUTTER
36	P244	P244	ORIFICE #33 - NAT
36	P298	P298	ORIFICE 1.75mm - LP
37	P253	P253	ORIFICE FITTING
38	24285	24285	PILOT BRACKET
39	R7612	R7612	PILOT ASSEMBLY - NAT
39	R7611	R7611	PILOT ASSEMBLY - LP
40	24661	24661	LOG SUPPORT
41	24664	24664	LOG SUPPORT
42	24291	24291	LOG SPACER PLATE
43	24663	24663	LOG SUPPORT
44	24662	24662	LOG SUPPORT
45	N/A	24673	FRONT CANOPY
46	N/A	24674	REAR CANOPY
47	N/A	24651	END SHIELD
48	N/A	24672	END CANOPY
49	N/A	24059	UPPER LOUVER ASSEMBLY
50	N/A	24328	GLASS DOOR FRAME ASSEMBLY
51	N/A	24058	LOWER LOUVER ASSEMBLY
52	26589	26589	INLET AIR BOX
N/S	N/A	15999	ROCKWOOL
N/S	R10947	R10947	WIRE ASSEMBLY

N/S - Not Shown

DVP36SP PARTS VIEW



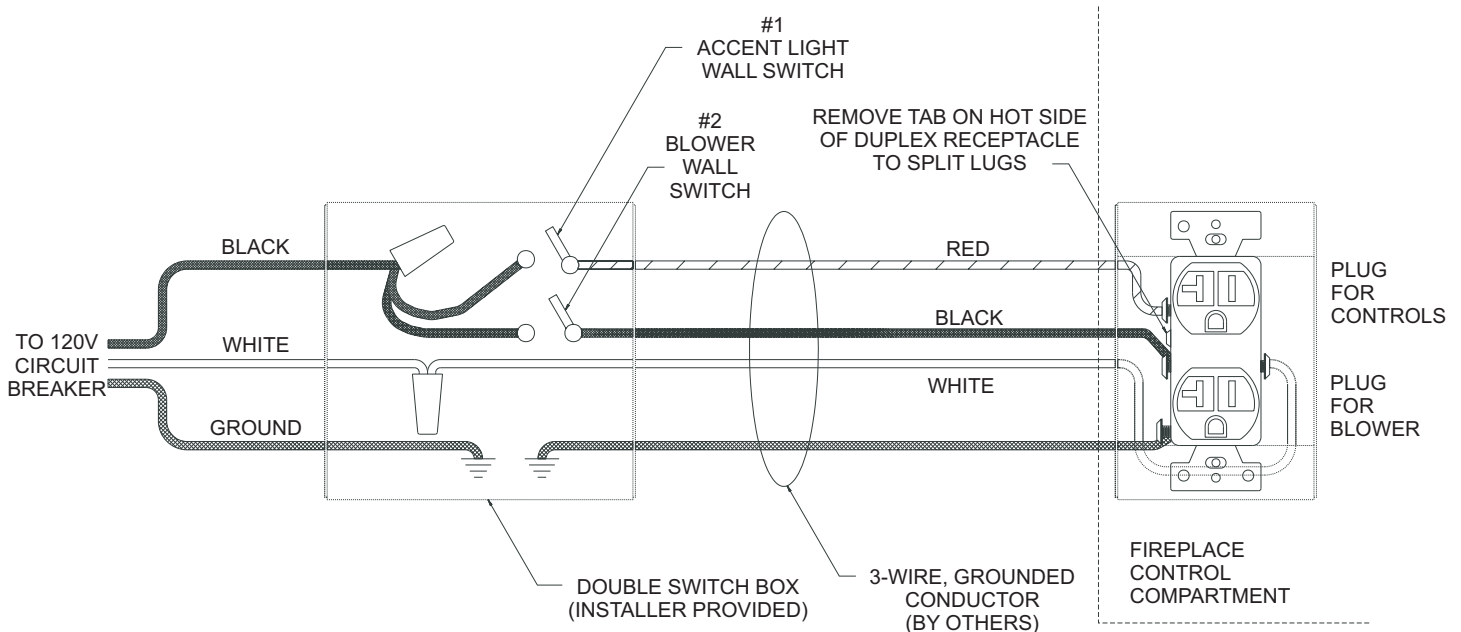
DVP36PP PARTS VIEW



WIRING INSTRUCTIONS FOR INSTALLING A DUAL SWITCH / RECEPTACLE

In order to install both the optional Blower and Accent Light accessories, it will be necessary to install the junction box so that the Duplex Receptacle wiring is split. This will allow each side of the receptacle to operate independently off separate wall switches. See diagram below.

CAUTION: ALL WIRING SHOULD BE DONE BY A QUALIFIED ELECTRICIAN AND SHALL BE IN COMPLIANCE WITH ALL LOCAL, CITY AND STATE BUILDING CODES. BEFORE MAKING THE ELECTRICAL CONNECTION, MAKE SURE THAT MAIN POWER SUPPLY IS DISCONNECTED. 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).



DUAL SWITCH ELECTRICAL WIRING TO FIREPLACE RECEPTACLE

1. To wire Junction Box Receptacle, remove the tab on the side of the receptacle (hot side) to split receptacle. This will be required to separate blower and Accent Light circuits.
2. Power for switched and live sides of Duplex Receptacle must come from the same power source. (One circuit breaker on main panel must switch all power off.)
3. From the wall box to the fireplace a 3-wire conductor with ground is recommended, however (2) two-wire conductors with grounds may be used in place of a 3-wire conductor with a ground if the black wires from the Accent Light and blower accessories are identified.
4. Two wall switches may be used to activate the two receptacle plugs independently.

Note: Wiring to the Junction Box should be run through the 7/8" diameter access hole located on one of the sides of the fireplace outer wall. A Romex type connector is provided and should be used to protect and restrain the wiring where it passes through the fireplace outer wall. The Junction Box should be positioned in the lower compartment of the fireplace/firebox so that it does not interfere with moving parts of the blower assembly. The Junction Box incorporates magnets on the bottom side to retain and reduce the chance of movement or vibration during blower operation.

Note: If only the blower option is to be installed, wiring may be performed as described and illustrated in the following Blower Installation section.

ACCENT LAMP

Your Direct Vent Gas Fireplace comes equipped with an "Accent Lamp." The light has been pre-wired and is controlled from the Rheostat.

If in the event the lamp or lens needs to be replaced, follow the instructions below:

1. Unplug the Accent Lamp from the junction box inside the fireplace.
2. Remove the four screws that secure the lens frame. This frame retains the glass lens. The bulb can now be accessed.

Note: Do not handle the lamp (bulb) with bare fingers, protect with clean dry cloth.

The lamp will pull straight out of the socket. Replace with 25W/120 Volt Halogen bulb.

When re-installing, ensure integrity of gasket seal.

THE FIREBOX MUST BE SEALED.

Over-tightening the screws could break the lens.

"Light Leakage" from the upper area may be observed. The holes in the lamp housing are necessary for ventilation and must not be covered.

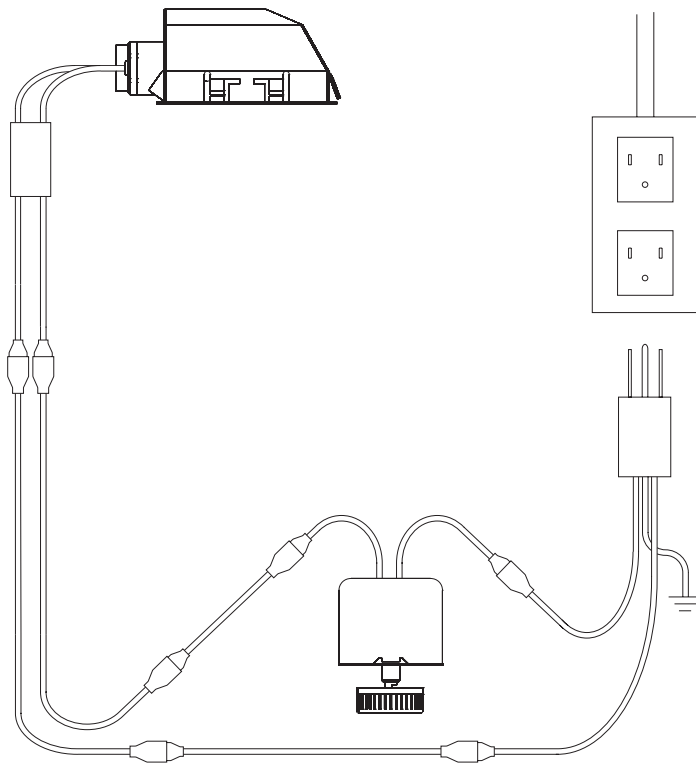
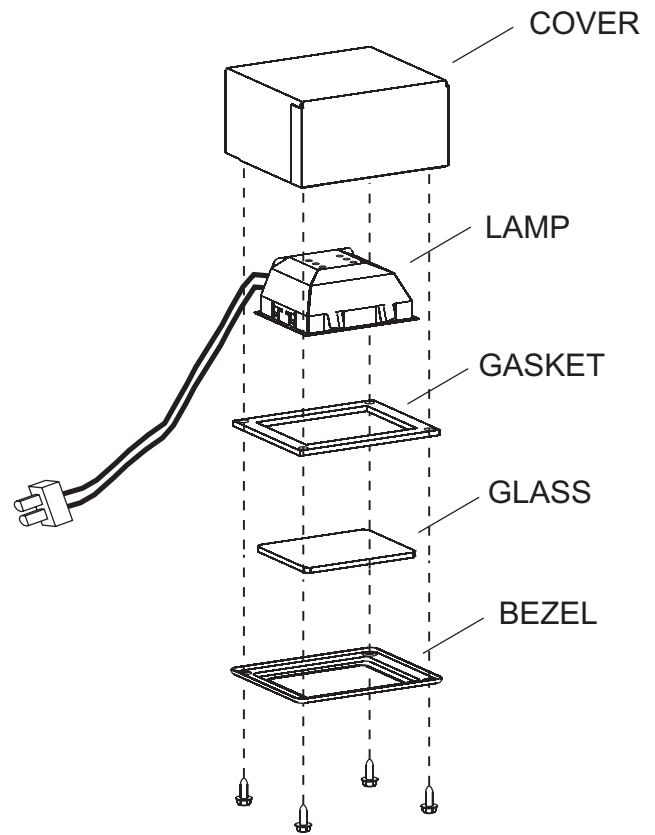


Figure 68 - Accent Lamp Wiring



Part Number	Description
23116	Cover
R11117	Lamp
R9658	Gasket
R9341	Glass
R9342	Bezel

Figure 69 - Accent Lamp Parts

OPTIONAL FBB5 BLOWER INSTALLATION INSTRUCTIONS

Attention: Install blower assembly before connecting gas inlet supply line.

Wiring

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*, if an external electrical source is utilized. **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. Do not cut or remove the grounding prong from this plug.** For an ungrounded receptacle, an adapter, which has two prongs and a wire for grounding, can be purchased, plugged into the ungrounded receptacle and its wire connected to the receptacle mounting screw. With this wire completing the ground, the appliance cord plug can be plugged into the adapter and be electrically grounded.

Caution: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

Note: Junction box is to be located in the lower compartment of the fireplace and must be pre-wired at time of fireplace installation for use with blower assembly. A standard ON/OFF wall switch or SCV-1 variable speed control kit should be installed to activate power to the Junction Box and provide power for the operation of the blower assembly. It is recommended that installation of the wiring be performed by a qualified electrician. **See Figure 70.**

1. If installed, turn OFF gas supply to fireplace.
2. If applicable, turn OFF electric supply to fireplace.
3. Remove bottom louver from fireplace.

CAUTION: ALL WIRING SHOULD BE DONE BY A QUALIFIED ELECTRICIAN AND SHALL BE IN COMPLIANCE WITH ALL LOCAL, CITY AND STATE BUILDING CODES. BEFORE MAKING THE ELECTRICAL CONNECTION, MAKE SURE THAT MAIN POWER SUPPLY IS DISCONNECTED. THE APPLIANCE, WHEN INSTALLED, MUST BE ELECTRICAL- LY GROUNDED IN ACCORDANCE WITH LOCAL CODES, WITH THE NATIONAL ELECTRICAL CODE ANSI/NFPA 70 (LATEST EDITION).

To install the blower kit or access the junction box, remove lower louver as illustrated by figure 71.

A factory included junction box is located in the lower compartment of the fireplace. Wiring must be fed through the 7/8" diameter hole provided on the lower side of the fireplace, and secured to the outer wrap with the clamp provided. Leave approximately 6" of wire in the junction box for connection.

Attach black wire to one side of the receptacle and white wire to opposite side of receptacle. The ground wire should be attached to the green (ground) screw. **See Figure 74.**

Install the receptacle into the junction box as illustrated. Attach cover plate. Place Junction Box so that it is approximately 8 to 12" away from the outer wrap wall. Secure wiring at outer wrap of fireplace with wire clamp provided.

Attention: If installed, do not damage gas inlet supply line when blower assembly is inserted into fireplace. In some cases, removal of the gas inlet supply line may be necessary.

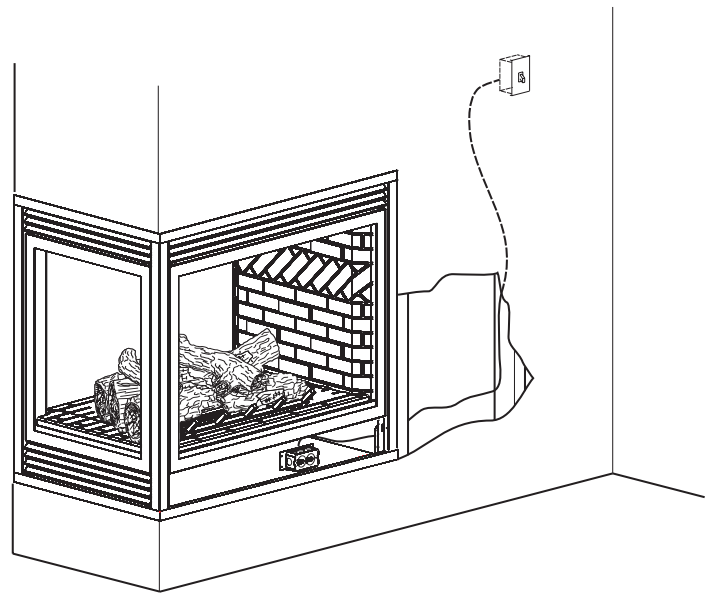


Figure 70

OPTIONAL BLOWER INSTALLATION INSTRUCTIONS (continued)

4. Insert blower assembly into interior, bottom of fireplace. Note: On peninsula models, the blower must be installed at the end which has the brick panel installed. Position blower assembly so that you align the notch on back of blower assembly with the center screw on side/end panel, then push the blower assembly against fireplace outer panel. The blower wheel must be centered with the side/end wall of the fireplace. The magnets on the back and bottom of blower assembly will sufficiently hold blower assembly in place. **See Figure 71.**
5. Once the blower assembly is in position, remove the upper louver as shown and locate the switch tab (end of support channel) on top of the firebox. Install the fan control switch by first removing the two pre-installed screws in the tab, then secure the fan control switch to the tab. **See Figure 72.** Once the fan control has been secured, bend the tab forward so that the face of the fan control is pushed down so it contacts the firebox top.
6. Next, find the fan control wire assembly. Feed the wires over the top of the firebox. The fan control wires will slide down between the firebox and outer wrap near the blower assembly. **See Figure 71. Attach the two 3/16" wire terminals to the fan control switch as shown in Figure 72. Attach the wire terminals at the blower as shown by letters "A" and "B" in Figure 75 on page 60.**

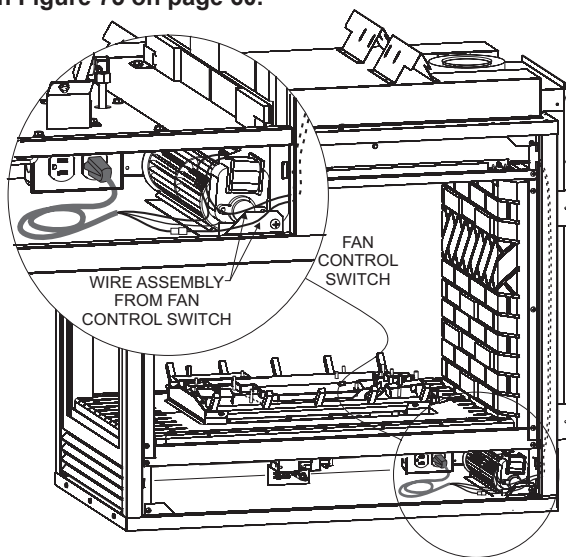


Figure 71

7. Route the wires away from moving parts of the blower assembly and retain wires together near the blower motor using the plastic purse clip provided.
8. To complete the installation, plug the power cord into the junction box receptacle previously installed in the bottom of the fireplace. **See Figures 70 and 71.**
9. Once all connections are made electrically, it is recommended that you test the blower fan control operation by turning on power to the blower (Caution: 110 Volt). Turn the fireplace on and let run until blower is activated. This should take approximately 10 to 20 minutes from a cold start. Once blower is activated, check for proper operation. Do not place hands near blower assembly or other wiring while power is on.

10. Replace louver(s).
11. This completes the installation of the optional FBB5 Blower kit accessory.

Note: This blower is equipped with a heat activated fan control switch. Blower will operate when the fireplace warms up, and will turn off automatically when the fireplace cools down. The time will vary for the activation of the fan control switch depending on several factors including fireplace type, BTU input variables, and log set style. Generally, it may take from 10 to 20 minutes to activate blower/fan control from a cold start.

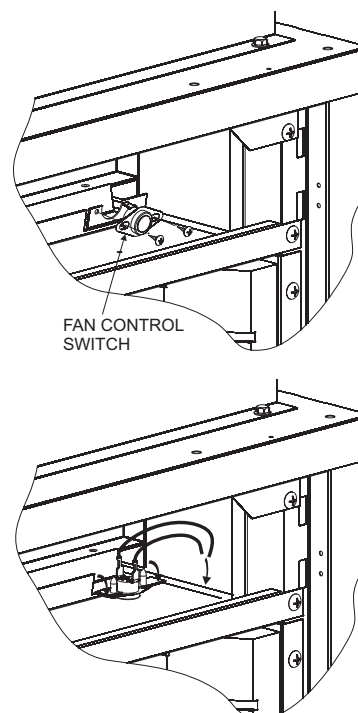


Figure 72

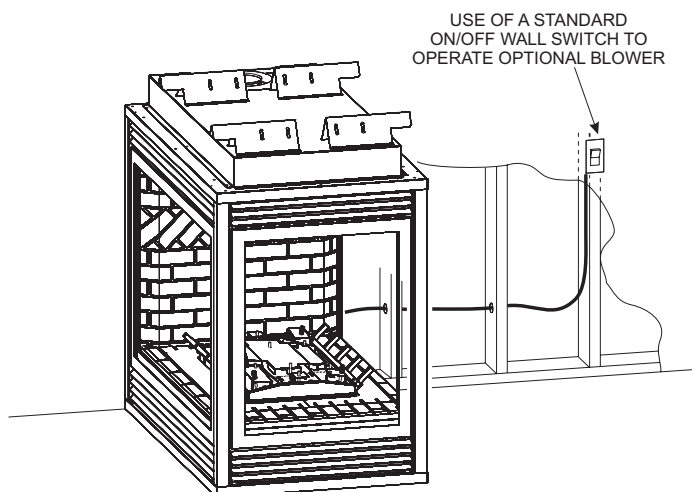


Figure 73

OPTIONAL BLOWER INSTALLATION INSTRUCTIONS (continued)

Wiring

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*, if an external electrical source is utilized. **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. Do not cut or remove the grounding prong from this plug.** For an ungrounded receptacle, an adapter, which has two prongs and a wire for grounding, can be purchased, plugged into the ungrounded receptacle and its wire connected to the receptacle mounting screw. With this wire completing the ground, the appliance cord plug can be plugged into the adapter and be electrically grounded.

CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

Blower Motor

The blower motor does not have oiling holes. Do not attempt to oil the blower motor.

Blower Wheels

The blower wheels will collect lint and could require periodic cleaning. If the air output decreases or the noise level increases, it indicates a dirty blower wheel. Remove blower and clean blower wheels.

WARNING:

Unplugging of blower accessory will not stop the heater from cycling. To turn off gas to the unvented heater: Push in gas control knob slightly and turn clockwise to "OFF." Do not force.

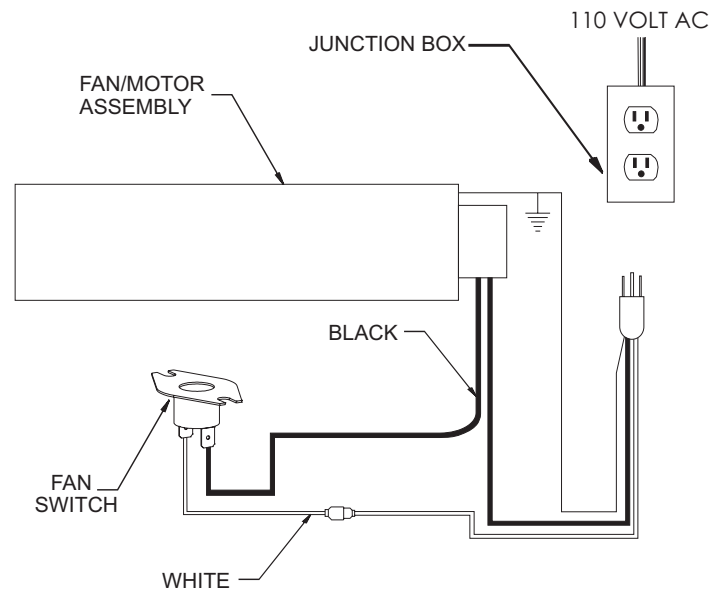
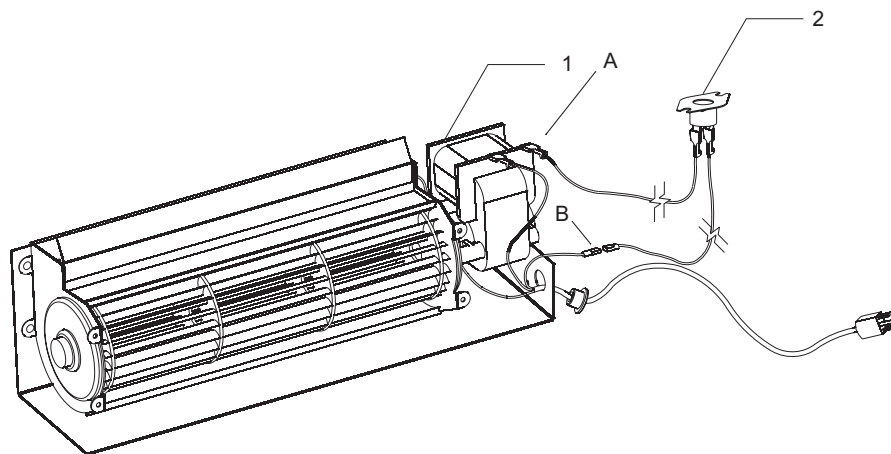


Figure 74

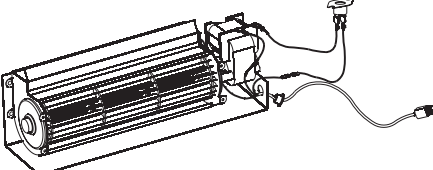
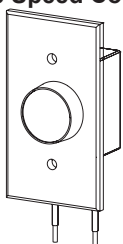


1	FBB5	BLOWER ASSEMBLY COMPLETE
2	R9901	FAN CONTROL SWITCH

Figure 75

ACCESSORIES

The following accessory parts can be obtained from your Empire Comfort Systems dealer. If you need additional information beyond what your dealer can furnish, contact Empire Comfort Systems Inc., Nine Eighteen Freeburg Ave., Belleville, Illinois 62220-2623.

Accessory	Description	Model Numbers
Fan Kit 	Designed to provide forced air flow.	FBB5
Variable Speed Control Kit 	Wall mounted variable speed control for use with FBB5 blower	SCV-1

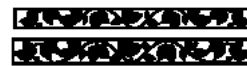
DECORATIVE ACCESSORIES



Decorative Louver Mission



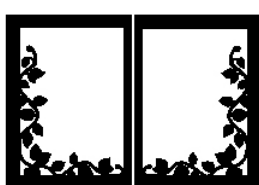
Decorative Louver Arch



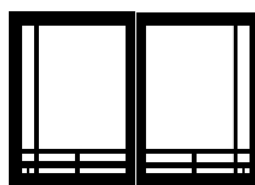
Decorative Louver Leaf



Decorative Frame Rectangle with hinges



Decorative Door Leaf Rectangle



Decorative Door Mission Rectangle



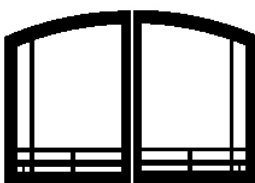
Decorative Door Plain Rectangle



Decorative Frame Arch with hinges



Decorative Door Leaf Arch



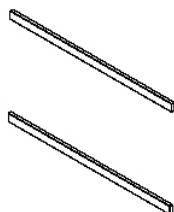
Decorative Door Mission Arch



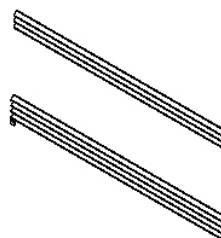
Decorative Door Plain Arch



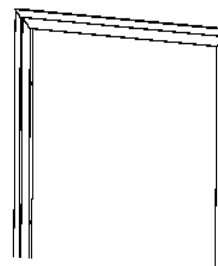
Decorative Frame Arch without hinges only Black



Window Trim



STD Louvers 45 Deg



Outside Frame Kits
(See-through models only)

MASTER PARTS DISTRIBUTOR LIST

To Order Parts Under Warranty, please contact your local Empire dealer. See the dealer locator at www.empirecomfort.com. To provide warranty service, your dealer will need your name and address, purchase date and serial number, and the nature of the problem with the unit.

To Order Parts After the Warranty Period, please contact your dealer or one of the Master Parts Distributors listed below. This list changes from time to time. For the current list, please click on the Master Parts button at www.empirecomfort.com. Please note: Master Parts Distributors are independent businesses that stock the most commonly ordered Original Equipment repair parts for Heaters, Grills, and Fireplaces manufactured by Empire Comfort Systems Inc.

Dey Distributing

1401 Willow Lake Boulevard
Vadnais Heights, MN 55101

Phone: 651-490-9191

Toll Free: 800-397-1339

Website: www.deydistributing.com

Parts: Heater, Hearth and Grills

Victor Division of F. W. Webb Company

200 Locust Street
Hartford, CT 06114

Phone: 860-722-2433

Toll Free: 800-243-9360

Fax: 860-293-0479

Toll Free Fax: 800-274-2004

Websites: www.fwwebb.com & www.victormfg.com

Parts: Heater, Hearth and Grills

East Coast Energy Products

10 East Route 36
West Long Branch, NJ 07764

Phone: 732-870-8809

Toll Free: 800-755-8809

Fax: 732-870-8811

Website: www.eastcoastenergy.com

Parts: Heater, Hearth and Grills

Able Distributors

2501 North Central Avenue
Chicago, IL 60639

Phone: 773-889-5555

Toll Free: 800-880-2253

Fax: 773-466-1118

Website: www.abledistributors.com

Parts: Heater

HOW TO ORDER REPAIR PARTS

Parts Not Under Warranty

Parts can be ordered through your Service Person, Dealer, or a Master Parts Distributor. See this page for the Master Parts Distributors list. For best results, the **service person or dealer** should order parts through the distributor. Parts can be shipped directly to the **service person/dealer**.

Warranty Parts

Warranty parts will need a proof of purchase and can be ordered by your Service Person or Dealer. Proof of purchase is **required** for warranty parts.

All parts listed in the Parts List have a Part Number. When ordering parts, first obtain the Model Number and Serial Number from the name plate on your equipment. Then determine the Part Number (**not** the Index Number) and the Description of each part from the following illustration and part list. Be sure to give all this information . . .

Appliance Model Number _____ Part Description _____

Appliance Serial Number _____ Part Number _____

Type of Gas (Propane or Natural) _____

Do not order bolts, screws, washers or nuts. They are standard hardware items and can be purchased at any local hardware store.

Shipments contingent upon strikes, fires and all causes beyond our control.

WARRANTY

Empire Comfort Systems Inc. warrants this hearth product to be free from defects at the time of purchase and for the periods specified below. Hearth products must be installed by a qualified technician and must be maintained and operated safely, in accordance with the instructions in the owner's manual. This warranty applies to the original purchaser only and is not transferable. All warranty repairs must be accomplished by a qualified gas appliance technician.

Limited Lifetime Parts Warranty – Combustion Chamber, Heat Exchanger, and Factory-Installed Glass

If the combustion chamber, heat exchanger (see parts list) or factory-installed glass fails because of defective workmanship or material, Empire will repair or replace at Empire's option.

Limited Three-Year Parts Warranty – All Other Components

(Except Remote Controls, Thermostats, Accessories and Replacement Parts)

Should any part fail because of defective workmanship or material within three years from the date of purchase, Empire will repair or replace at Empire's option..

Limited One-Year Parts Warranty – Remote Controls, Thermostats, Accessories, and Parts

Should any remote control, thermostat, accessory, or other part fail because of defective workmanship within one year from the date of purchase, Empire will repair or replace at Empire's option.

Duties Of The Owner

The appliance must be installed by a qualified installer and operated in accordance with the instructions furnished with the appliance.

A bill of sale, cancelled check, or payment record should be kept to verify purchase date and establish warranty period.

Ready access to the appliance for service.

What Is Not Covered

Damages that might result from the use, misuse, or improper installation of this appliance.

Travel, diagnostic costs and freight charges on warranted parts to and from the factory.

Claims that do not involve defective workmanship or materials.

Unauthorized service or parts replacements.

Removal and reinstallation cost.

Inoperable due to improper or lack of maintenance.

How To Get Service

To make a claim under this warranty, please have your receipt available and contact your installing dealer. Provide the dealer with the model number, serial number, type of gas, and purchase verification. The installing dealer is responsible for providing service and will contact the factory to initiate any warranted parts replacements. Empire will make replacement parts available at the factory. Shipping expenses are not covered.

If, after contacting your Empire dealer, service received has not been satisfactory, contact: Consumer Relations Department, Empire Comfort Systems Inc., PO Box 529, Belleville, Illinois 62222, or send an e-mail to info@empirecomfort.com with "Consumer Relations" in the subject line.

Your Rights Under State Law

This warranty gives your specific legal rights, and you may also have other rights, which vary from state to state.



Empire Comfort Systems Inc.
918 Freeburg Ave. Belleville, IL 62220

If you have a general question about our products, please e-mail us at
info@empirecomfort.com.

If you have a service or repair question, please contact your dealer.

www.empirecomfort.com