

# INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL

## INSTALLER:

Leave this manual with the appliance.

## CONSUMER:

Retain this manual for future reference.

### ⚠ WARNING

#### FIRE OR EXPLOSION HAZARD

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS**
  - Do not try to light any appliance.
  - Do not touch any electrical switch; do not use any phone in your building.
  - Leave the building immediately.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

## LUXURY DIRECT VENT ZERO CLEARANCE GAS FIREPLACE HEATER

CONTEMPORARY

DVLL41FP92(N,P)-3

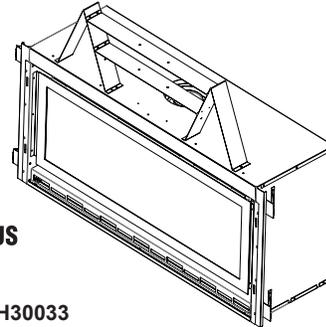
TRADITIONAL

DVTL41BP90(N,P)-1

GAS-FIRED



UL FILE NO. MH30033



### ⚠ 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.

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.

## ⚠ WARNING



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

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

NATIONAL  
FIREPLACE  
INSTITUTE



CERTIFIED  
[www.nficertified.org](http://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.

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# IMPORTANT SAFETY INFORMATION

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

## DO NOT OPERATE THIS APPLIANCE WITHOUT GLASS FRONT PANEL 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.
- Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children, and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at-risk individuals in the house. To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers young children, and other at-risk individuals out of the room and away from hot surfaces.
- A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.
- If the barrier becomes damaged, the barrier shall be replaced with the manufacturer's barrier for this appliance.
- Any safety screen, guard, or barrier removed for servicing an appliance must be replaced prior to operating the appliance.

- 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 ceramic 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 42 to 45.**
- 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 Z21.88/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.

**Commonwealth 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 media.
- Installation and/or use of any component part not manufactured or approved by manufacturer.

# SPECIFICATIONS

	DVLL NAT	DVLL LP	DVTL NAT	DVTL LP
Input Btu/hr Maximum	34,500	31,500	34,500	31,500
Btu/hr Minimum	18,000	20,500	17,000	16,700
KWH (Maximum)	10.1	9.2	10.1	9.2
(Minimum)	5.3	6.0	5.0	4.9
Orifice	#32, P211	#51, P210	#32, P211	#51, P210
Min. Rate Screw	#41	#52	#41	#52
Air Shutter Opening - Front	9/16 in.	FULL OPEN	9/16	FULL OPEN
Height without standoff	24-1/4 in. (616 mm)	24-1/4 in. (616 mm)	24-1/4 in. (616 mm)	24-1/4 in. (616 mm)
Width	51-1/16 in. (129.7 cm)	51-1/16 in. (129.7cm)	51-1/16 in. (129.7cm)	51-1/16 in. (129.7cm)
Depth	15-13/16 in. (402 mm)	15-13/16 in. (402 mm)	15-13/16 in. (402 mm)	15-13/16 in. (402 mm)
Gas Inlet Shutoff Valve (Pipe)	1/2 NPT	1/2 NPT	1/2 NPT	1/2 NPT

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

# FIREPLACE DIMENSIONS

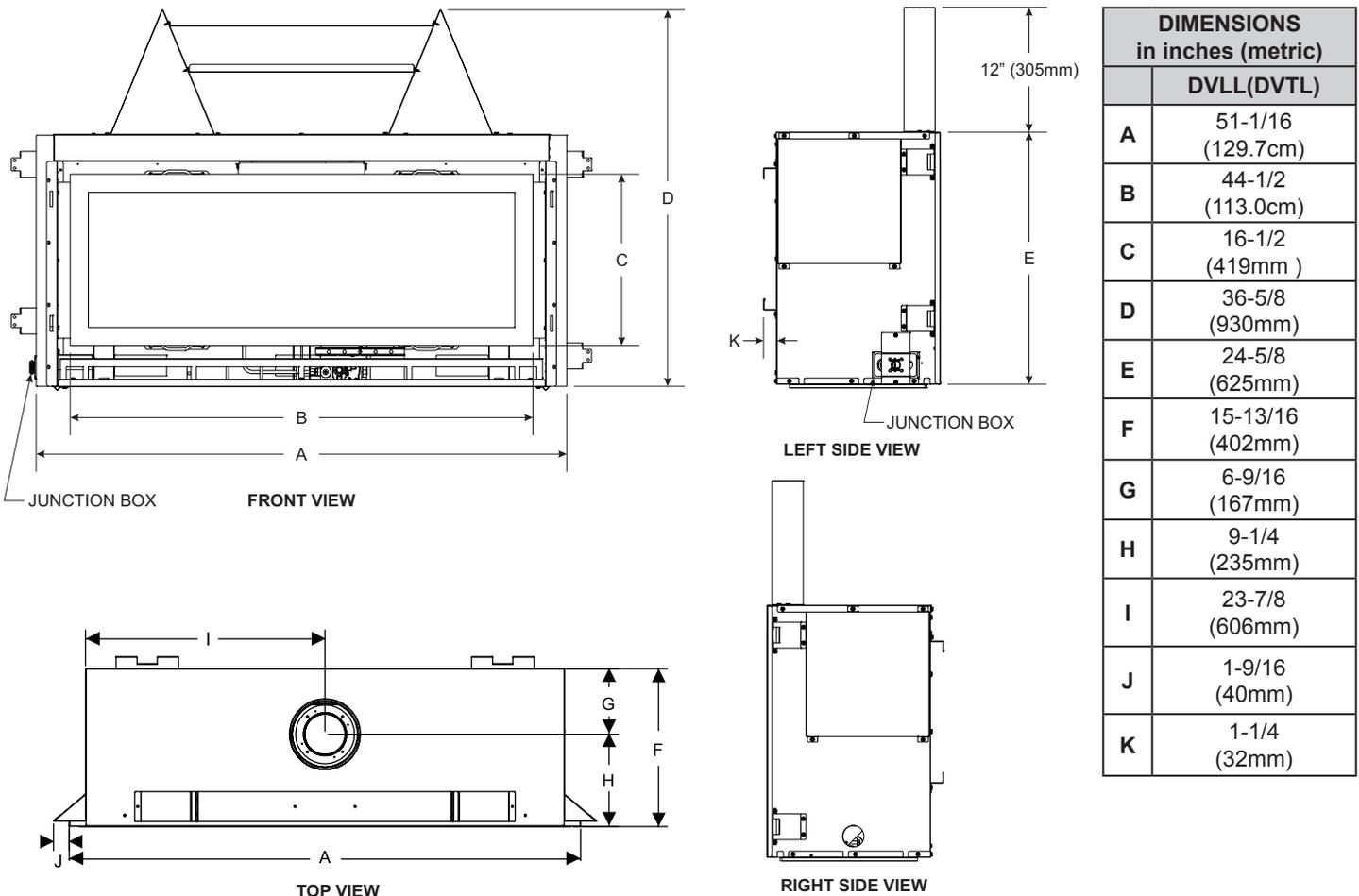


Figure 1

# CLEARANCES

## Clearance to Combustibles - Shown in inches (metric)

Back	1-1/4 (32mm)
Side	3-1/8 (79mm)
Floor	0 (0mm)
Top Stand-off	12 (305mm)
Top Framing Edge	12 (305mm)
Minimum Height from Top of Fireplace Opening To Ceiling	46-3/4 (1.17m)

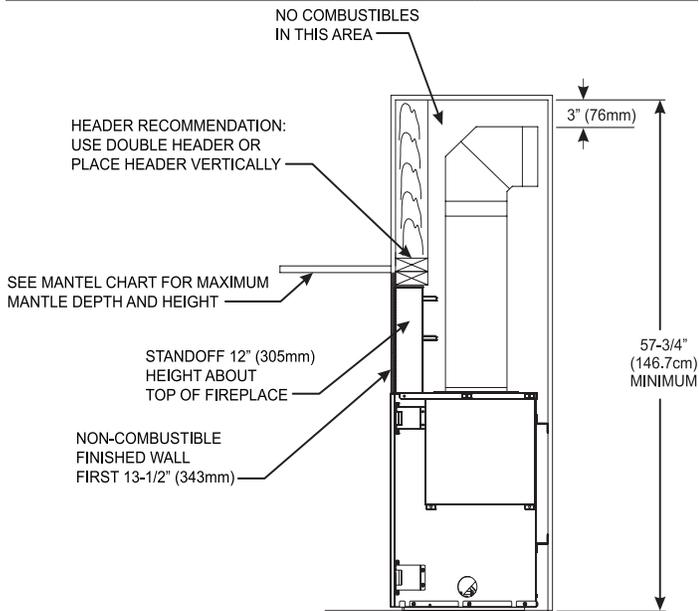


Figure 2

## Combustible Material

No greeting cards, stockings or ornamentation of any type should be placed on or attached to the fireplace. The flow of heat can ignite combustibles.

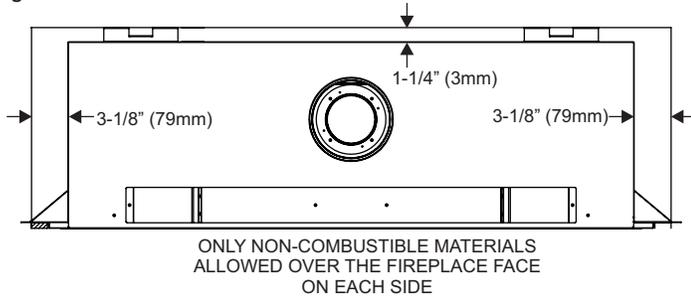


Figure 3

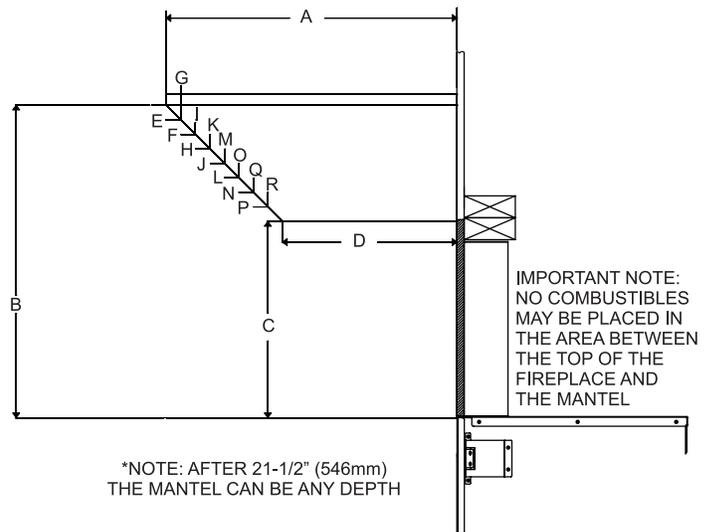
## Television Considerations

Installing a television above a fireplace has become increasingly popular; however, the area above any fireplace gets hot and most TV manufacturers recommend against placing their products near a heat source.

If you install a television above this fireplace, Empire Comfort Systems accepts no responsibility for damage or injuries. Follow the television manufacturer's installation instructions, including any recommendations regarding proximity to heat sources.

If you have a TV above your fireplace, turn off the fireplace and let it cool completely before servicing or touching any buttons on the TV.

## Mantel Chart



A	20" (508mm)	J	17-1/2" (444mm)
B	21-1/2" (546mm)	K	17" (431mm)
C	13-1/2" (343mm)	L	16-1/2" (419mm)
D	12" (305mm)	M	16" (406mm)
E	20-1/2" (521mm)	N	15-1/2" (394mm)
F	19-1/2" (495mm)	O	15" (381mm)
G	19" (482mm)	P	14-1/2" (368mm)
H	18-1/2" (469mm)	Q	14" (356mm)
I	18" (457mm)	R	13" (330mm)

Figure 4

## Ceiling Height and Side Wall Clearances

Minimum ceiling height is 46-3/4" (1.17m) from top of fireplace opening.

Clearance from side of fireplace to adjacent sidewall is 2" (51mm).

Note: Some decorative fronts require more than 2" clearance due to front size.

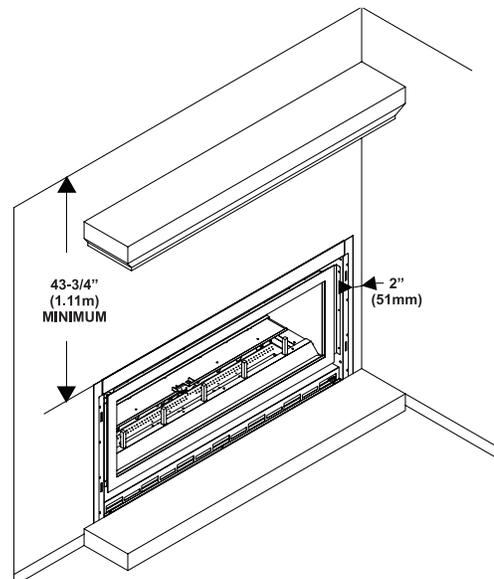


Figure 5

# LOCATING FIREPLACE

**NOTICE:** Island and Room Divider installation is possible as long as the horizontal portion of the vent system does not exceed 20 feet (609.6cm) with a minimum vertical run of 8 feet (243.8cm). See details in Venting Section. See Figure 6.

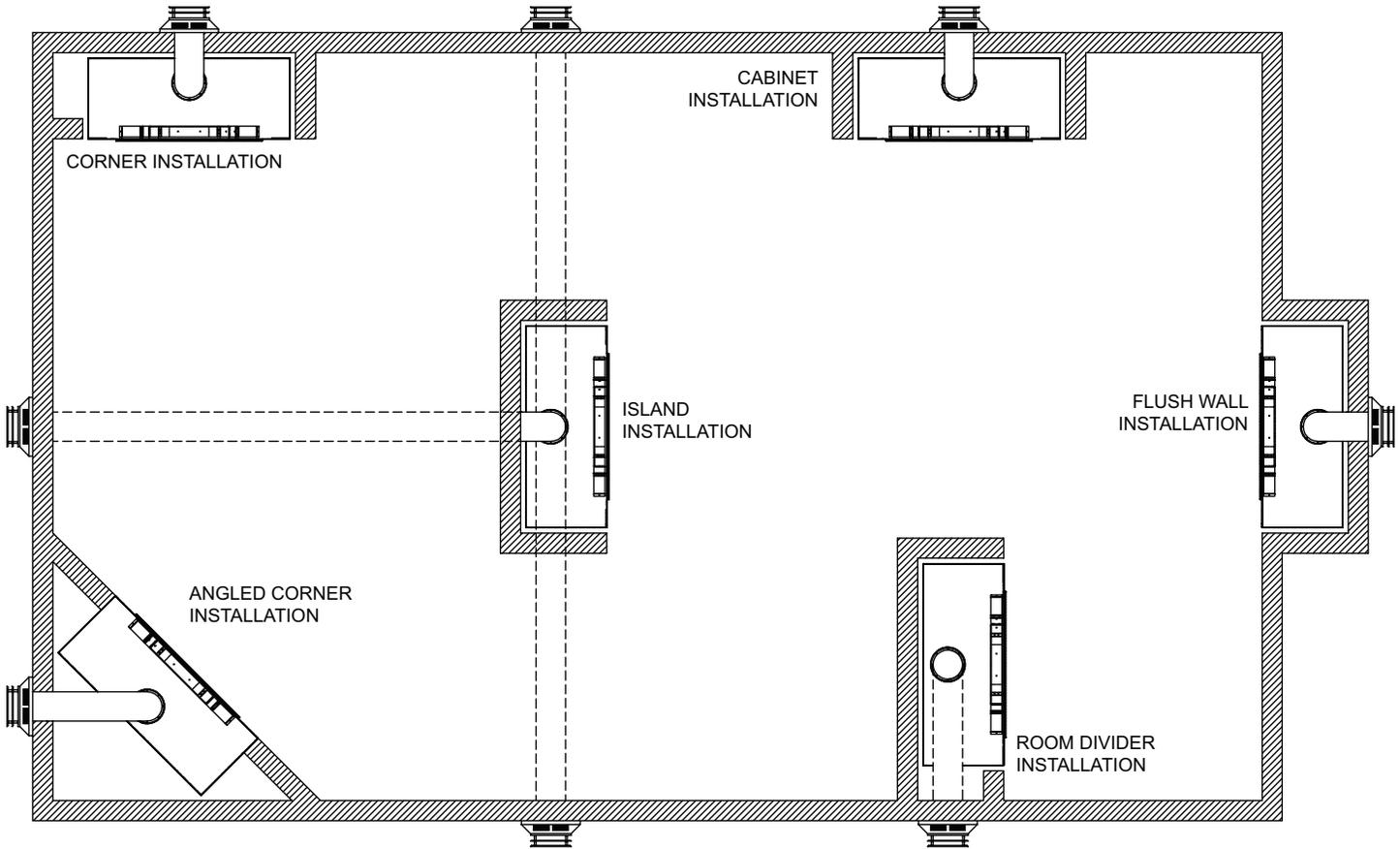


Figure 6

# GAS SUPPLY

The gas pipeline can be brought in through the 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 in. 12.7mm	3/8 in. 9.5mm	1/2 in. 12.7mm	3/8 in. 9.5mm
11-40ft 4-12m	1/2 in. 12.7mm	1/2 in. 12.7mm	5/8 in. 15.9mm	1/2 in. 12.7mm
41-100ft 13-30m	1/2 in. 12.7mm	1/2 in. 12.7mm	3/4 in. 19mm	1/2 in. 12.7mm
101-150ft 31-46m	3/4 in. 19mm	1/2 in. 12.7mm	7/8 in. 22.2mm	3/4 in. 19mm

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

**NOTICE:** 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.

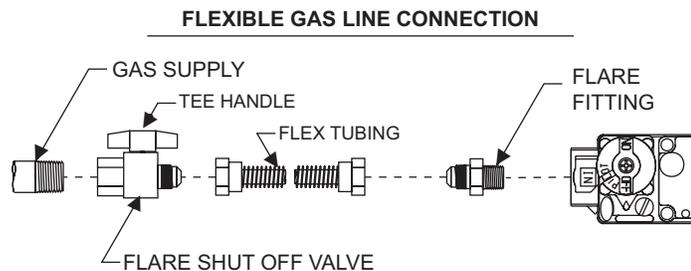


Figure 7

	Gas Supply Pressure (inches w.c.)		
	Minimum	Normal	Maximum
Natural Gas	5.0	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!**

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

When using copper or flex connector use only approved fittings.

The appliance and its 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 in. 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 in. w.c. (.871kPa) at the valve outlet with the inlet pressure to the valve from a minimum of 5.0 in. w.c. (1.245kPa) for the purpose of input adjustment to a maximum of 14.0 in. w.c. (3.484kPa). Propane gas models will have a manifold pressure approximately 10.0 in. (2.49kPa) at the valve outlet with the inlet pressure to the valve from a minimum of 10.8 in. w.c. (2.68kPa) for the purpose of input adjustment to a maximum of 14.0 in. w.c. (3.484kPa).

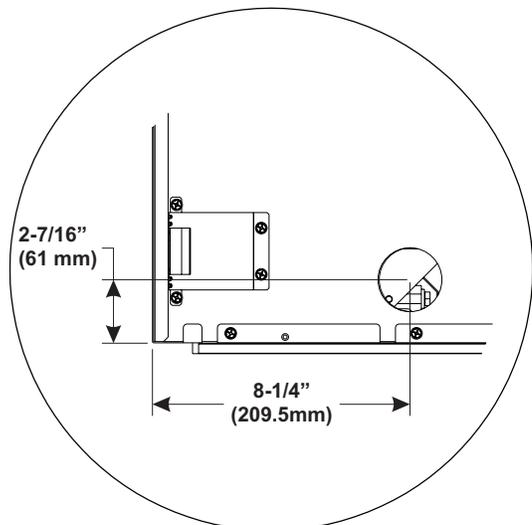


Figure 8

# SPECIAL VENT SYSTEMS

The following vent systems are acceptable for use with DV(TL,LL)41FP series fireplaces:

**Simpson DuraVent® GS 4" - 6 5/8"**

**Selkirk Direct-Temp® 4" - 6 5/8"**

**Security Secure Vent® 4" - 6 5/8"**

Empire Flexvent Kit DVVK-4F, refer to page 30.

## INSTALLATION

### Vent Pipe Clearance

**NOTICE:** Maintain one inch (1 in.) of clearance around vertical vent pipe. See Figure 9. For horizontal vent, maintain a minimum 1 in. clearance to the bottom, two inches to the sides of the vent, and 3 in. clearance to combustibles above the vent pipe. See Figure 10.

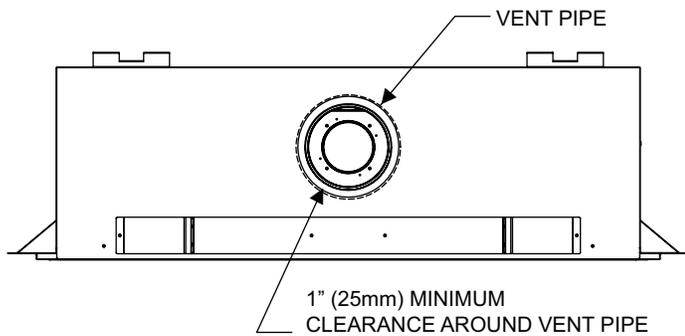


Figure 9

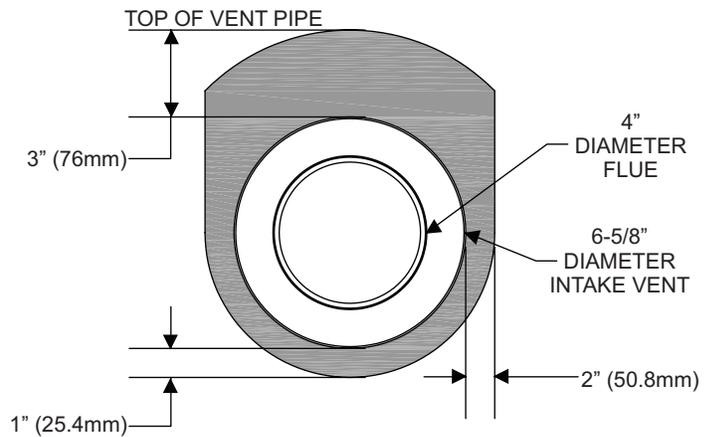


Figure 10

**Attention:** Horizontal venting through a wall requires a wall thimble on the interior side of the wall above the pipe.

# INSTALLATION

## Framing and Finishing

**NOTICE:** You must use the standoffs that are supplied with the fireplace. The standoffs are shipped in a flat-state on top of the fireplace.

1. Locate the two (2) steel standoffs and two (2) header shields attached to the back of the fireplace.
2. Remove the two (2) screws that secure the standoffs and header shields in place; save the screws.
3. The right and left standoffs have a perforation located in the middle. Bend them at the perforation to a little more than 90°.
4. Bend the short tabs on each end the opposite direction. Secure the standoffs to the fireplace top with three (3) screws each from the hardware bag. There are pilot holes located in the top of the fireplace for each stand-off.
5. Verify that the front of the standoffs are 1/2 in. (13mm) back from the face of the fireplace. Verify that the stand-off is 12 in. (305mm) tall.
6. Locate the bottom header shield; it is the shorter one. Using four (4) screws, attach it between the standoffs.
7. Locate the top header shield; it is the longer one. Using four (4) screws, attach it between the standoffs. **See Figure 12.**
8. Remove the non-combustible board that is shipped between the fireplace and pallet.
9. Frame in fireplace with a header across the top.  
**IMPORTANT:** Allow for finished face when setting the depth of the frame.
10. Attach the fireplace to the framing. **See Figure 12.**
11. Install the non-combustible board across the top and sides of the fireplace. The board sits on the 1/2 in. surface on top of the fireplace and in front of the standoffs. **See Figure 11.**

The fireplace must extend 3/4 in. (19mm) beyond finished wall surface when using a flush mount mantel. Refer to Figure 12 to locate nailing flanges on fireplace sides. Mark and drill four (4) 1/8 in. holes into fireplace side to mount each nailing flange. Use eight (8) 1/2 in. hex-head screws supplied in hardware package to attach nailing flanges to fireplace sides.

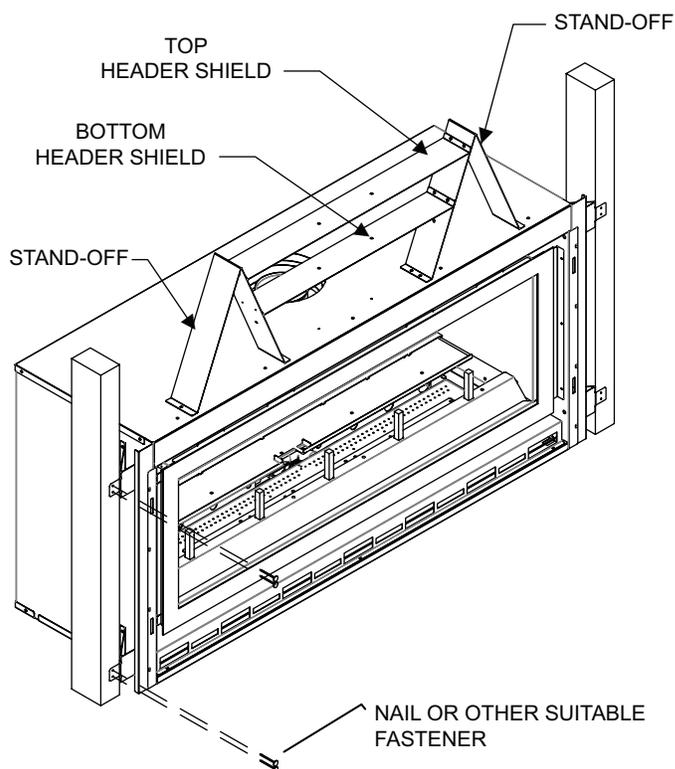


Figure 12

### IMPORTANT

In order to use some optional fronts, you must raise the fireplace on a hearth so the bottom of the fireplace is a minimum distance above the top of the hearth extension finishing material. Check decorative front dimensions prior to setting the height of the fireplace hearth extension.

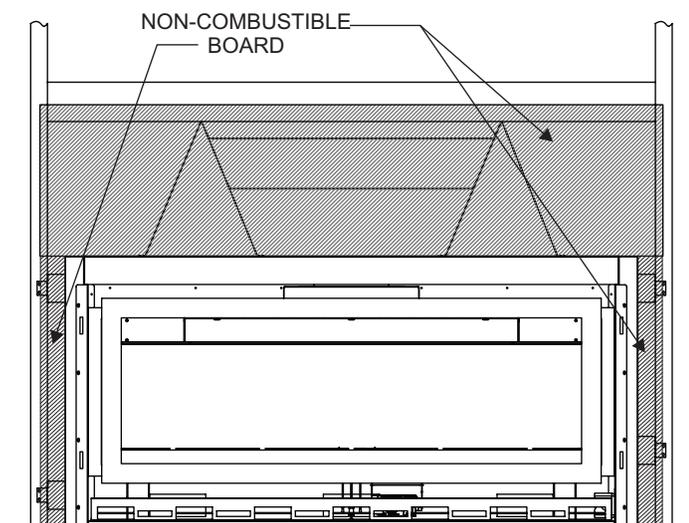


Figure 11

## Flush Mount Mantel Installation

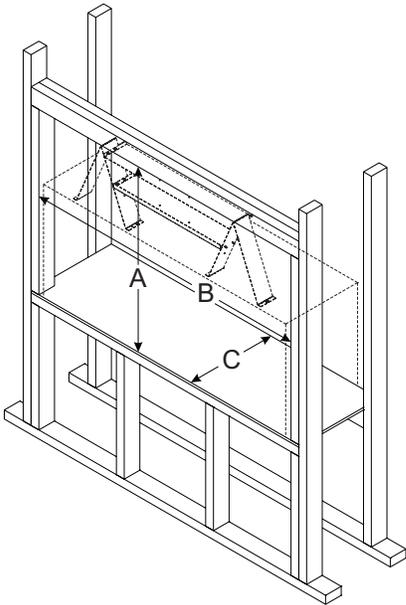
# INSTALLATION

## Framing

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. **Refer to Figure 13 for minimum framing dimensions.**

### ⚠ CAUTION

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



	DVLL/DVTL
A	36-7/8 in. (937mm)
B	54-1/2 in. (138.4cm)
C	17-1/16 in. (433mm)

Figure 13

Framing dimension "A" includes a 12 in. (304 mm) clearance for standoffs on firebox. After installing firebox into framing, the finished wall surface must cover the 12 in. (304mm) opening above the firebox. Board provided with fireplace.

**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 in **Figure 13** must be adjusted when a metal or wood panel is placed beneath the appliance.

### ⚠ 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.

## Finishing

Finish the walls with the material of your choice. Figure 4 on page 8 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 metal fireplace face.

## Flush Wall Installation

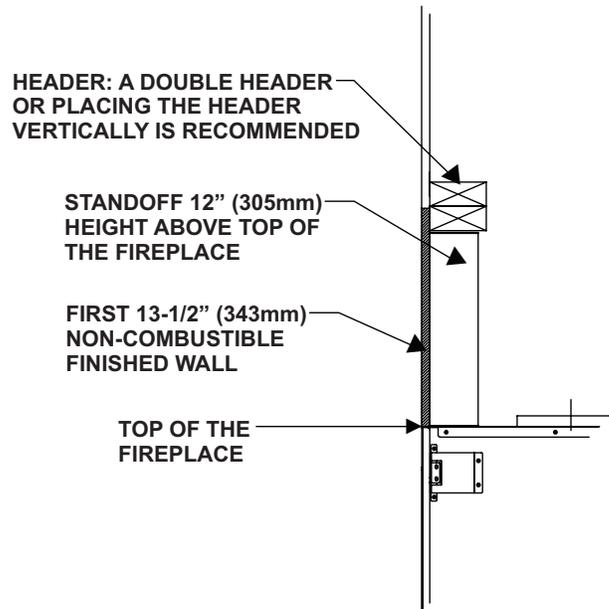


Figure 14

## Combustible Surround Installation

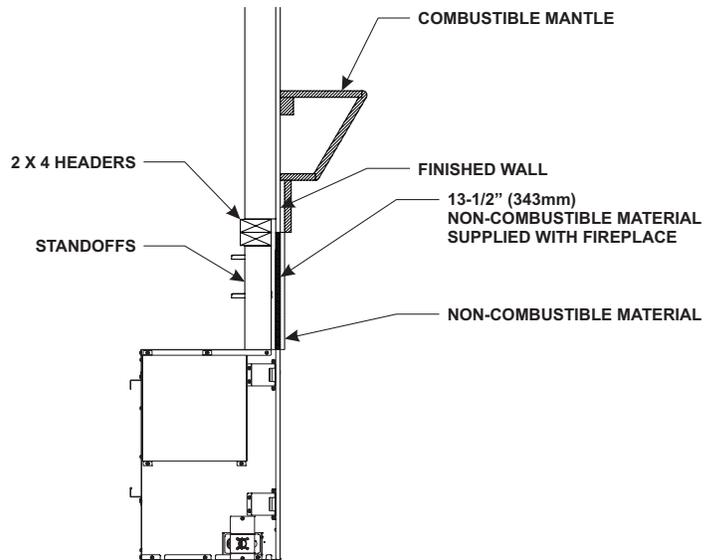


Figure 15

# VENTING FIREPLACE

**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.

The appliance can be mounted on any of the following surfaces:

1. A flat, hard combustible 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 and under the center leg supports. Two more supports spaced evenly for front and back may be required pending local code.

## Vertical, 90° Elbow With Horizontal Termination

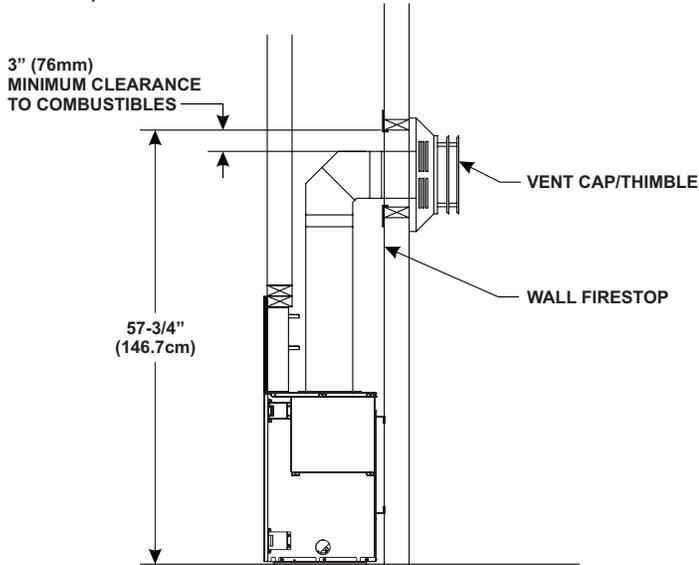
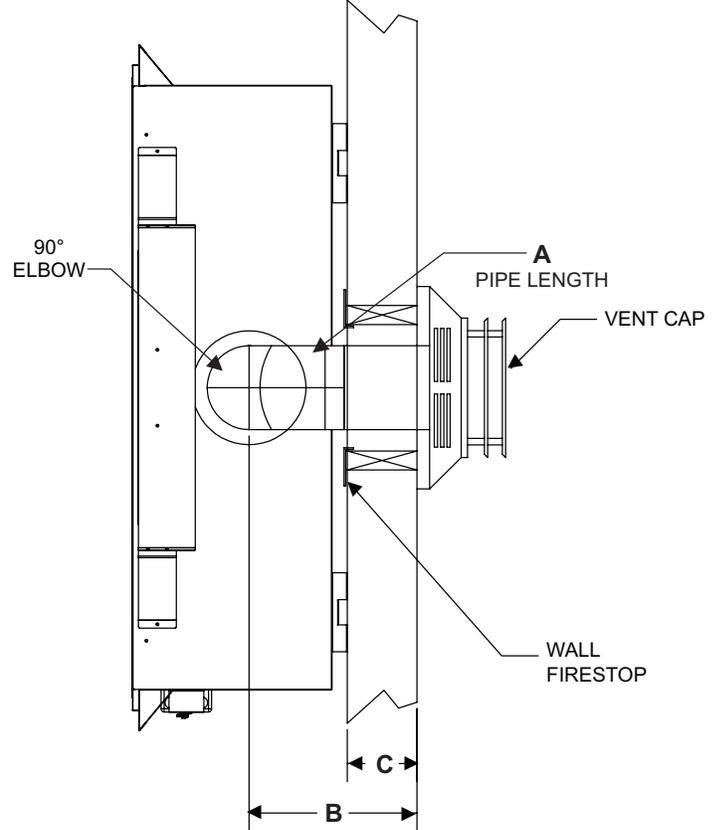


Figure 16

## IMPORTANT: MINIMUM HEIGHT OFF THE TOP REQUIREMENTS

DVLL & DVLT - MUST USE a 2 ft. (610 mm) vertical vent pipe as the first section BEFORE installing the elbow.

## Vertical, 90° Elbow To Horizontal Out The Wall

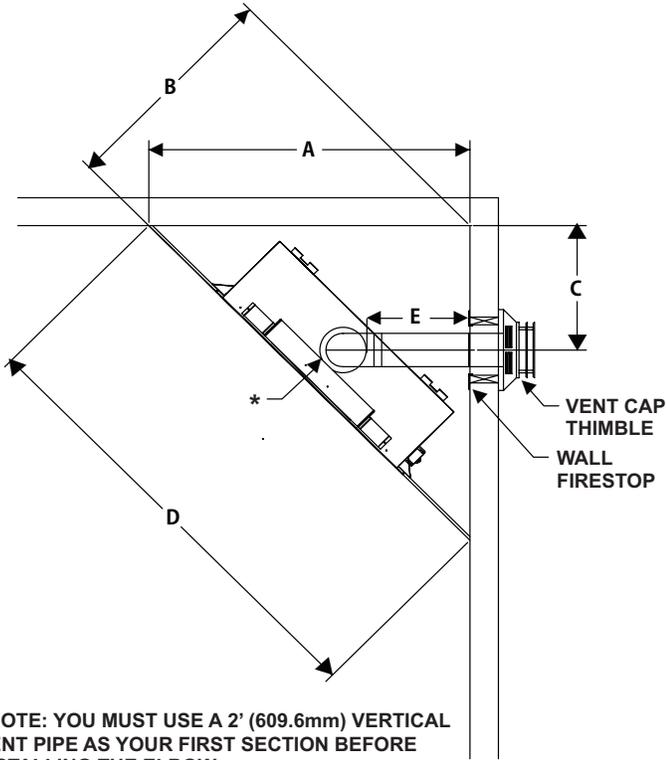


A	B	C
6 in.	11-3/4 in. to 12-3/4 in. (298mm to 323mm)	4-3/4 in. to 6-1/4 in. (121mm to 159mm)
9 in.	14-1/4 in. to 15-3/4 in. (362mm to 400mm)	7-3/4 in. to 9-1/4 in. (197mm to 235mm)
12 in.	17-1/4 in. to 18-3/4 in. (438mm to 476mm)	10-3/4 in. to 12-1/4 in. (273mm to 311mm)

Figure 17

# VENTING FIREPLACE

Corner Installation Vertical, 90° Elbow  
To Horizontal Out The Wall



\*NOTE: YOU MUST USE A 2' (609.6mm) VERTICAL VENT PIPE AS YOUR FIRST SECTION BEFORE INSTALLING THE ELBOW.

	DVLL/DVTL
A	62-1/4 in. (158.1 cm)
B	44-1/16 in. (111.9 cm)
C	24-5/8 in. (62.6 cm)
D	88-1/16 in. (223.7 cm)
E	24 in. (60.9 mm)

Figure 18

**NOTICE:** Corner installation may require more vertical vent pipe than just the minimum required depending on wall thickness and horizontal dimension.

Maximum Horizontal Run For A Minimum Vertical Rise

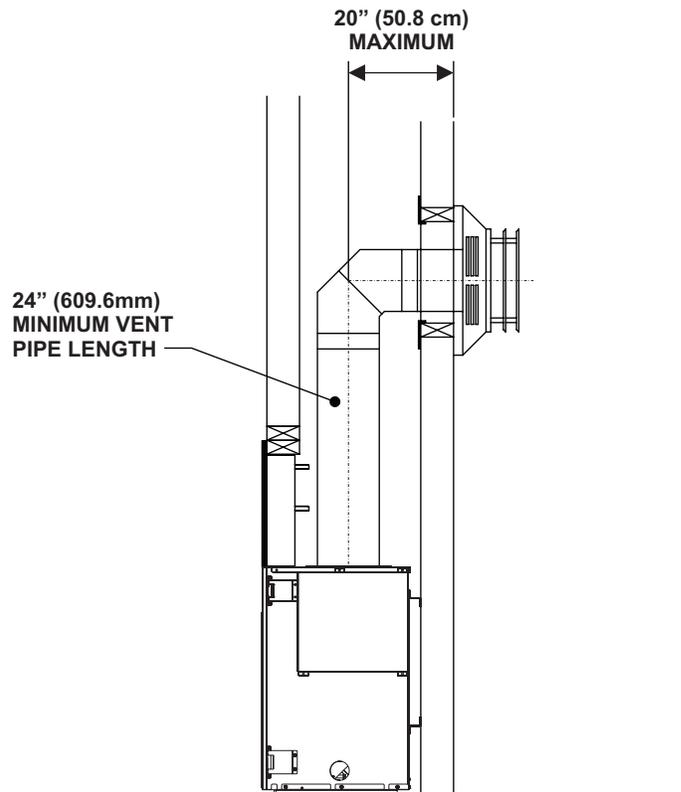


Figure 19

Minimum Vertical Rise For Maximum Horizontal Run

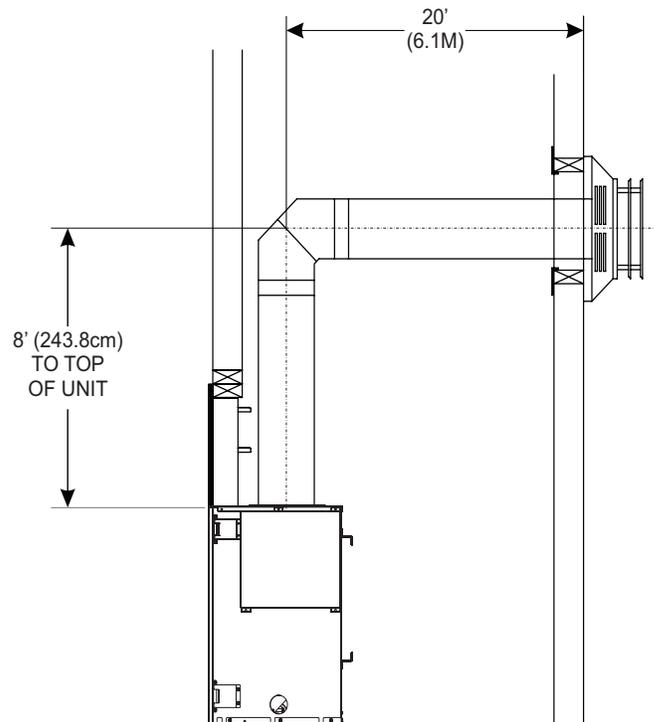
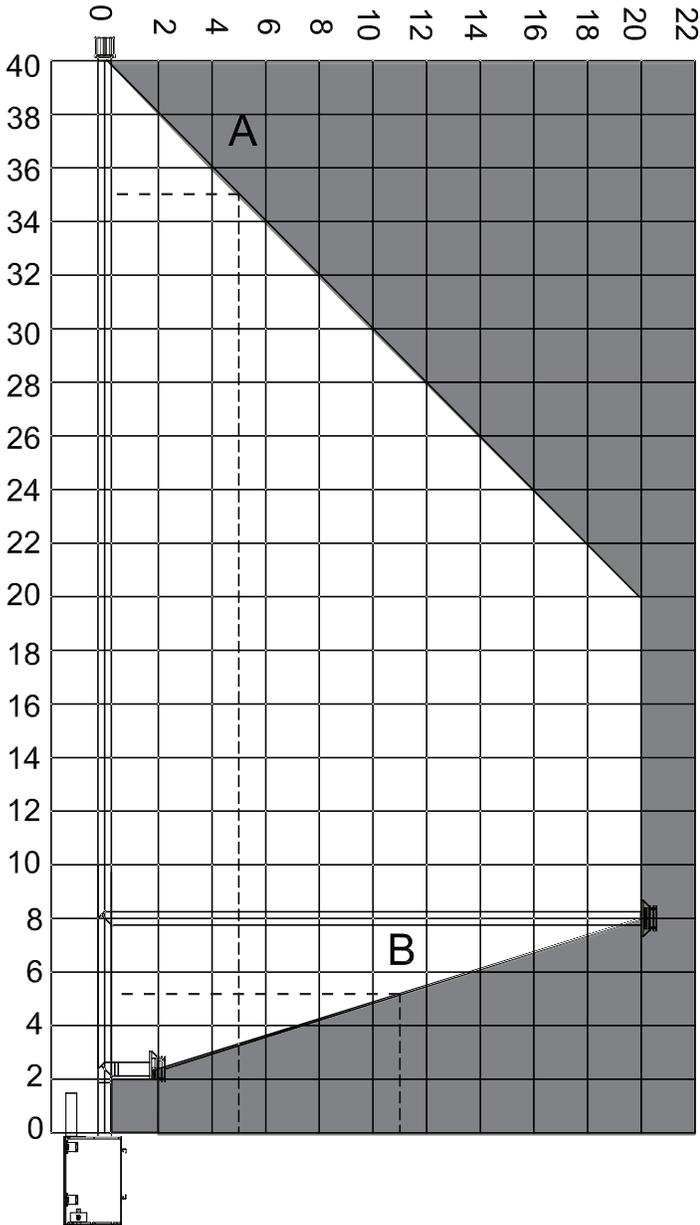


Figure 20

# VENTING FIREPLACE

## To Use the Vent Graph

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.



- Acceptable vertical and horizontal vent run. (40 ft. (12.19 m) maximum vertical and 20 ft. (6.10 m) maximum horizontal)
- Unacceptable vertical and horizontal vent run.

Figure 21

## EXAMPLE A:

If the vertical dimension from the top of the unit is 35 ft. (10.67 m), the horizontal run to the outer wall flange must not exceed 5 ft. (1.52 m).

## EXAMPLE B:

If the vertical dimension from the top of the unit is 5 ft. (1.52 m), the horizontal run to the outer wall flange must not exceed 11 ft. (3.35 m).

**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 ft. (91.4 cm) for every 90° elbow.

**Example:** According to the chart the maximum horizontal vent length is 20 ft. (6.10 m) and if two 45 degree elbows are required in the horizontal vent it must be reduced to 17 ft. (5.18 m).

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

**NOTICE:** The first elbow does not get counted.

## Vertical Venting

When venting long straight vertical sections, use of the vertical vent baffles may be required for optimal flame performance.

To install vertical vent baffles, align the two holes on the vertical vent baffle with the two holes in the flue baffle. Secure the vertical vent baffle with the screws provided. Repeat for both sides of the flue baffle.

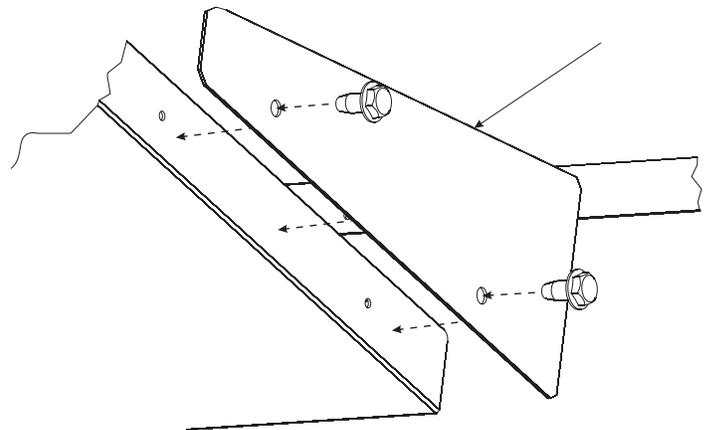


Figure 22

# VENTING FIREPLACE

## Below Grade Installation

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

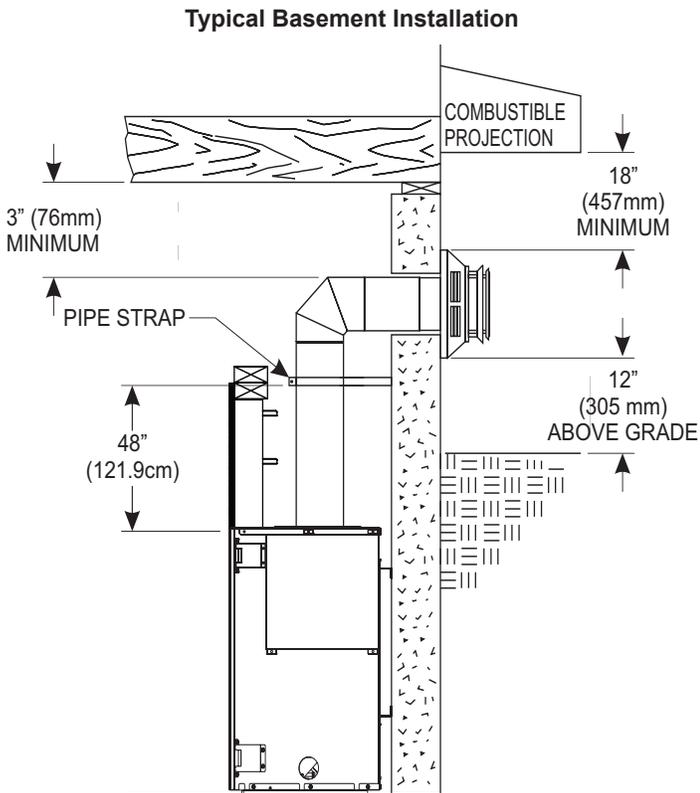
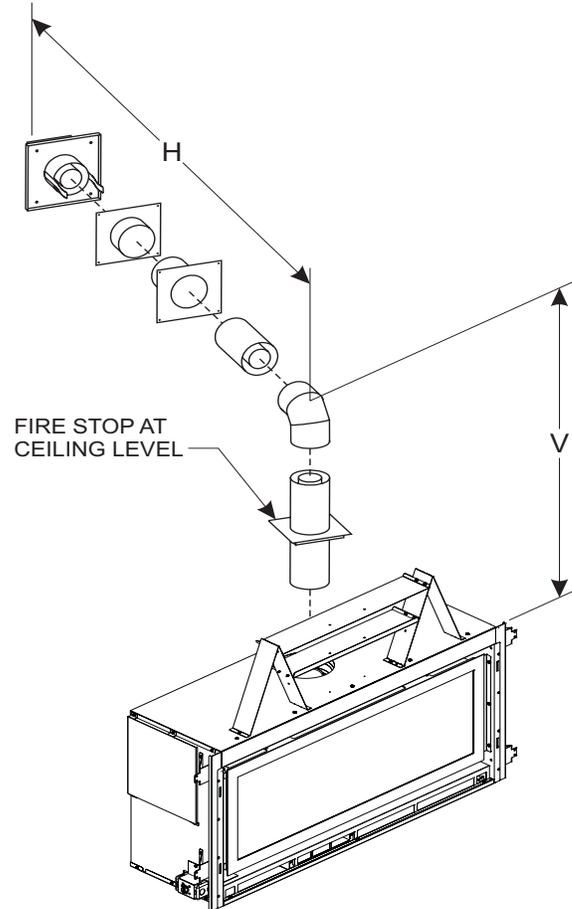


Figure 23

## Example Of Possible Venting System Using One 90° Elbow

8 ft. (2.44 m) is listed as minimum vertical vent run with 20 ft. (6.10 m) of maximum horizontal vent run. Vertical dimensions are based on centerline to centerline of pipe. Horizontal dimensions are based on centerline of pipe to exterior of wall.



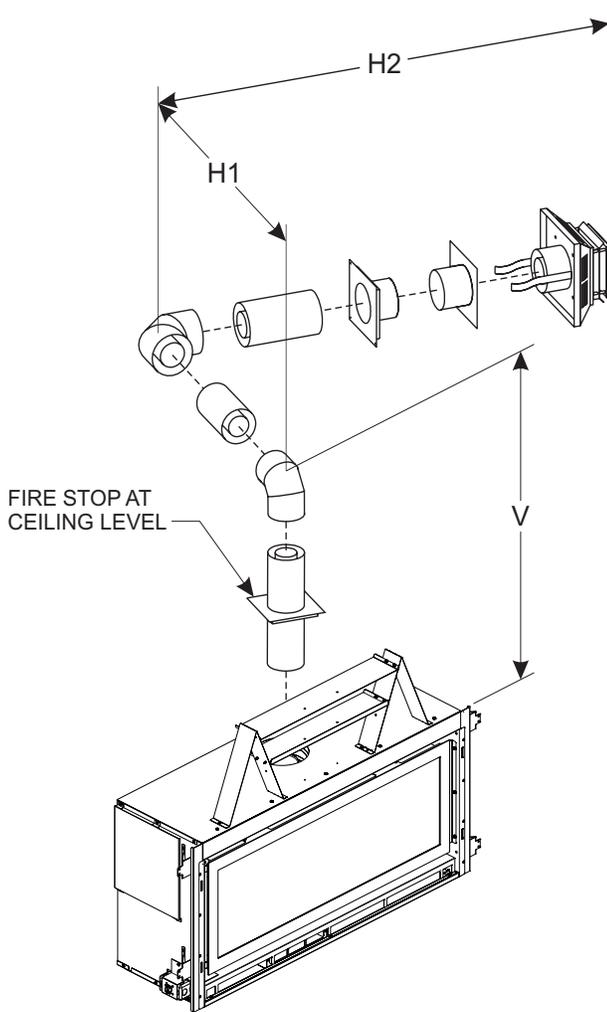
SEE GRAPH (Figure 21) FOR PERMISSIBLE "H" AND "V" DIMENSIONS

Figure 24

# VENTING FIREPLACE

## Example Of Possible Venting System Using Two (2) 90° Elbows

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 37 ft. (11.28 m).



SEE GRAPH (Figure 21) FOR PERMISSIBLE  
"H" AND "V" DIMENSION

**NOTICE:** H1 AND H2 MUST BE ADDED TOGETHER TO USE  
GRAPH THEN SUBTRACT 3' (91.4 cm) FOR THE SECOND  
90° ELBOW

Figure 25

# VENTING FIREPLACE

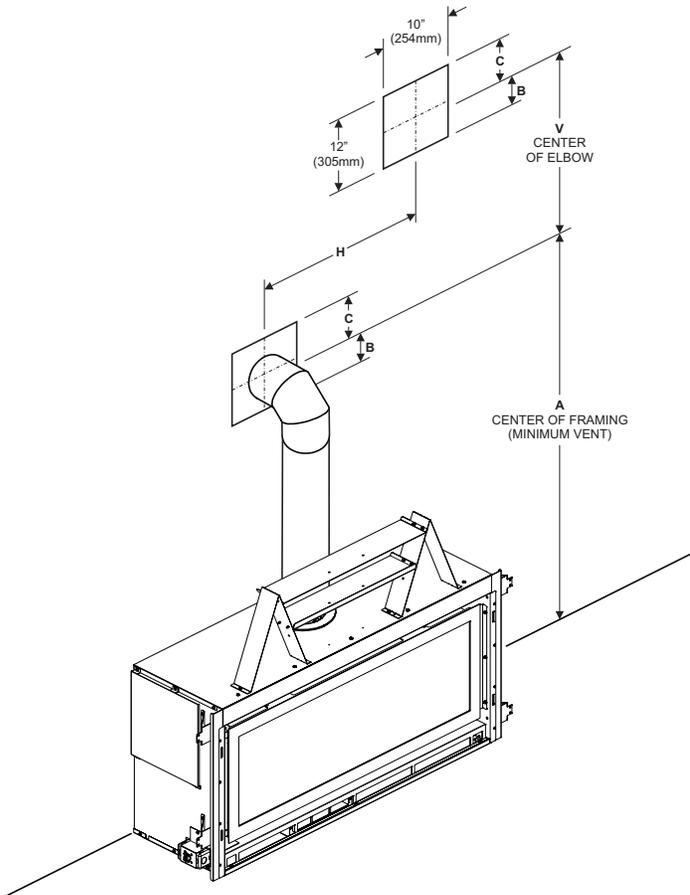


Figure 26

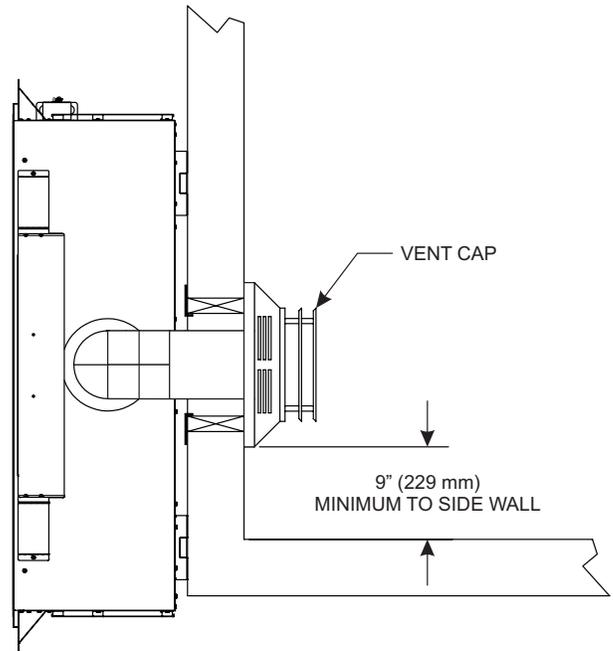


Figure 27

## MINIMUM HOLE LOCATION DIMENSIONS FOR THROUGH THE WALL HORIZONTAL INSTALLATIONS WITH 90 DEGREE ELBOW OFF TOP OF FIREPLACE

### Positioning the Fireplace

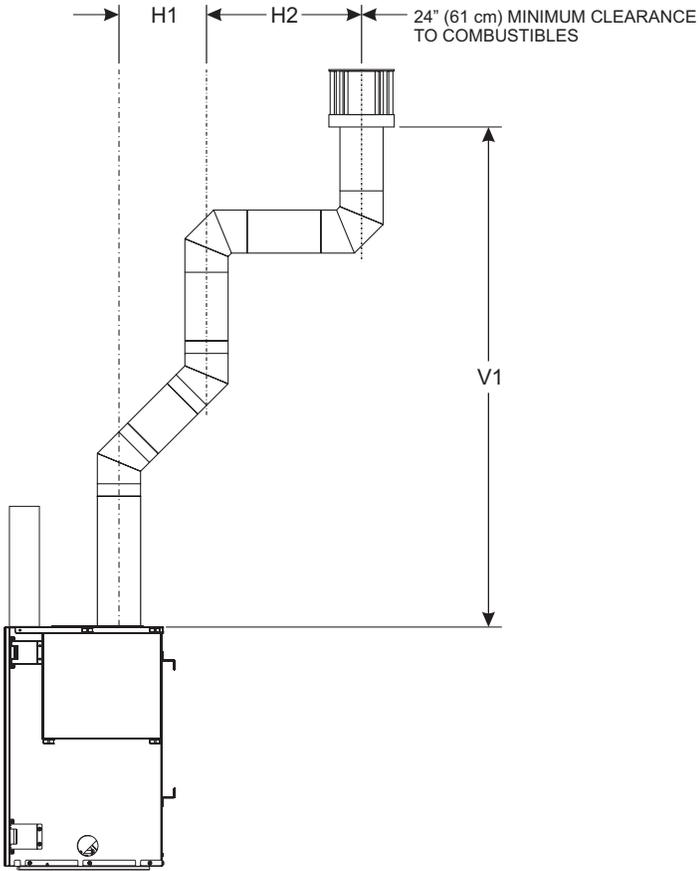
FIREPLACE SERIES	HARD ELBOW DIMENSIONS		
	A	B	C
DVLL/DVTL	55-5/8 in. (141.3 cm)	5 in. (127 mm)	7 in. (178 mm)

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

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 12 in. (305mm) high x 10 in. (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 in. (305mm) above the ground level, and top of the cap must be no less than 18 in. (457mm) below a combustible projection, and no closer than 9 in. (229mm) to any wall running parallel to vent termination. **See Figure 27.**

# EXAMPLES - TOP VENT RUN



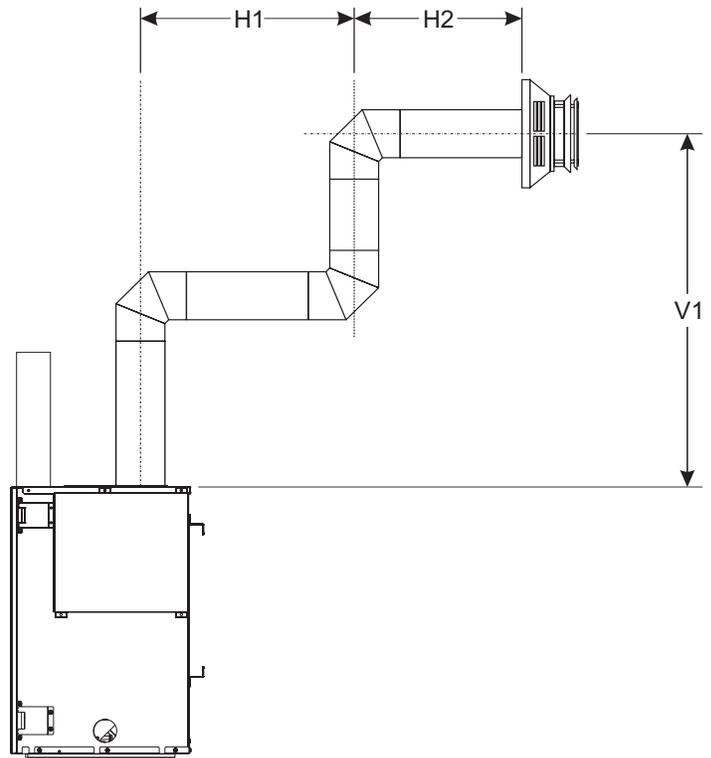
If total horizontal needs to be 8' (2.44 m), then the minimum required vertical is 5' (1.52 m).

$$H=8' (+90^\circ) = 11' \text{ (equivalent horizontal)}$$

$$H=2.44 \text{ m } (+90^\circ) = 2.44 \text{ m (equivalent horizontal)}$$

From the graph the required vertical is 5' (1.52 m).

**Figure 28**



If total horizontal needs to be 10' (3.05 m), then the minimum required vertical is 7' (2.13 m).

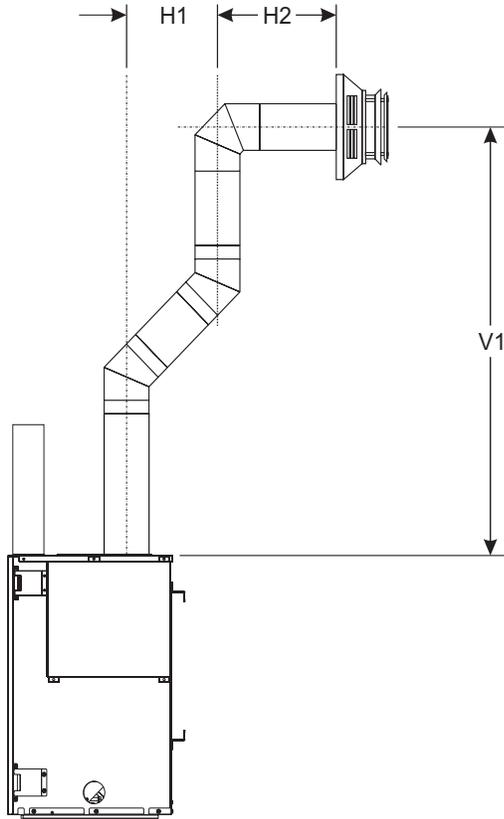
$$H=10' (90^\circ + 90^\circ) = 16' \text{ (equivalent horizontal)}$$

$$H= 3.05 \text{ m } (90^\circ + 90^\circ) = 4.88 \text{ m (equivalent horizontal)}$$

From the graph the required vertical is 7' (2.13 m).

**Figure 29**

# EXAMPLES - TOP VENT RUN



If total vertical is to be 9' (2.74 m), then the maximum allowed horizontal run can be 20' (6.10 m).

H=20'

H=6.10 m

From the graph the allowed vertical is 20' (6.10 m).

**Figure 30**

# TERMINATION CLEARANCES

Termination clearance for buildings with combustible and noncombustible exteriors.

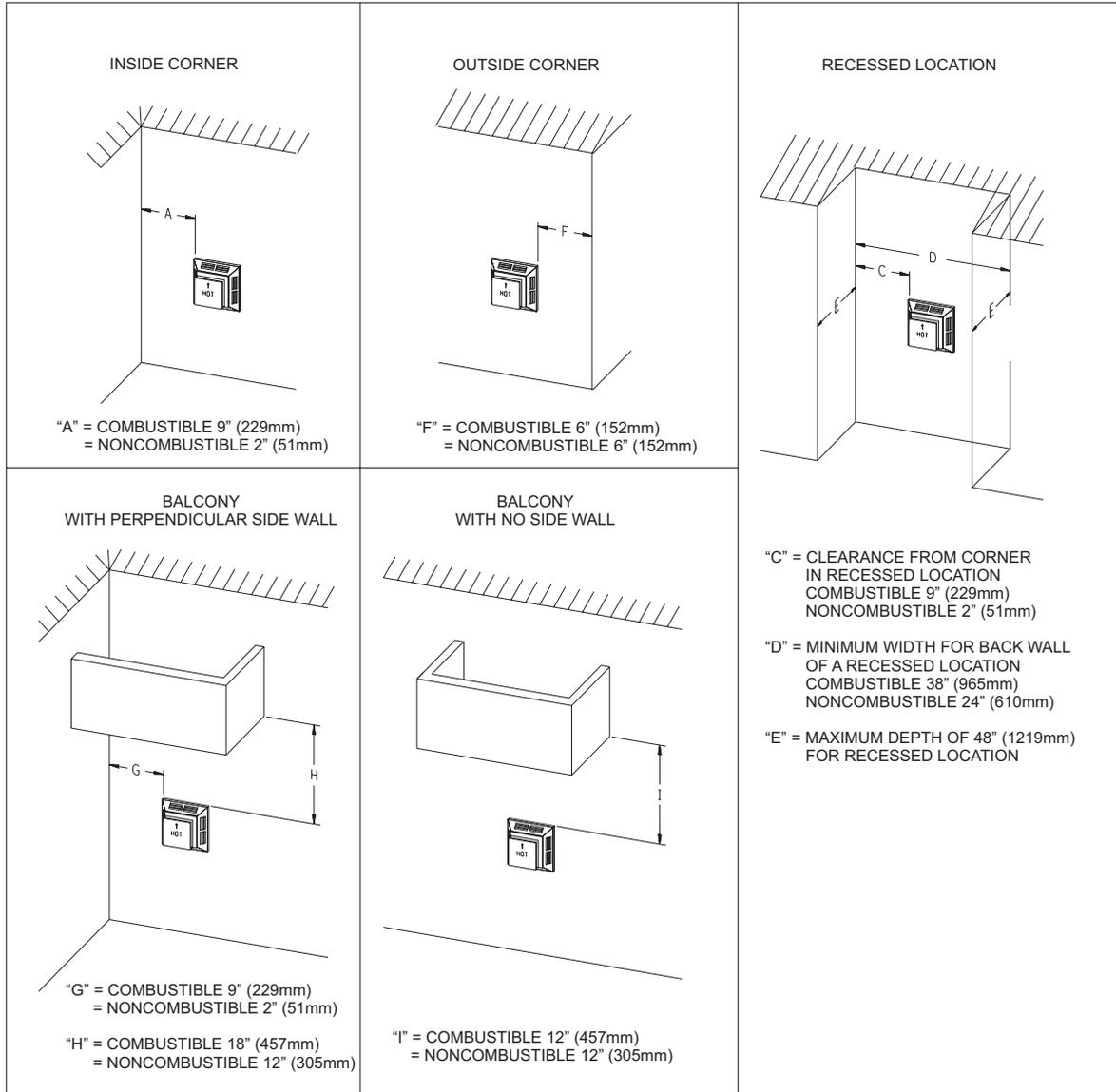


Figure 31

## Vertical Sidewall Installations

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

**Important!** When vent termination exits through foundation less than 20 in. (508 mm) 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 ft. (457 cm) when the vertical vent rise is 8 ft. (244 cm). **See Figure 21.**

Venting terminals shall not be recessed into wall or siding.

# VENT CLEARANCES

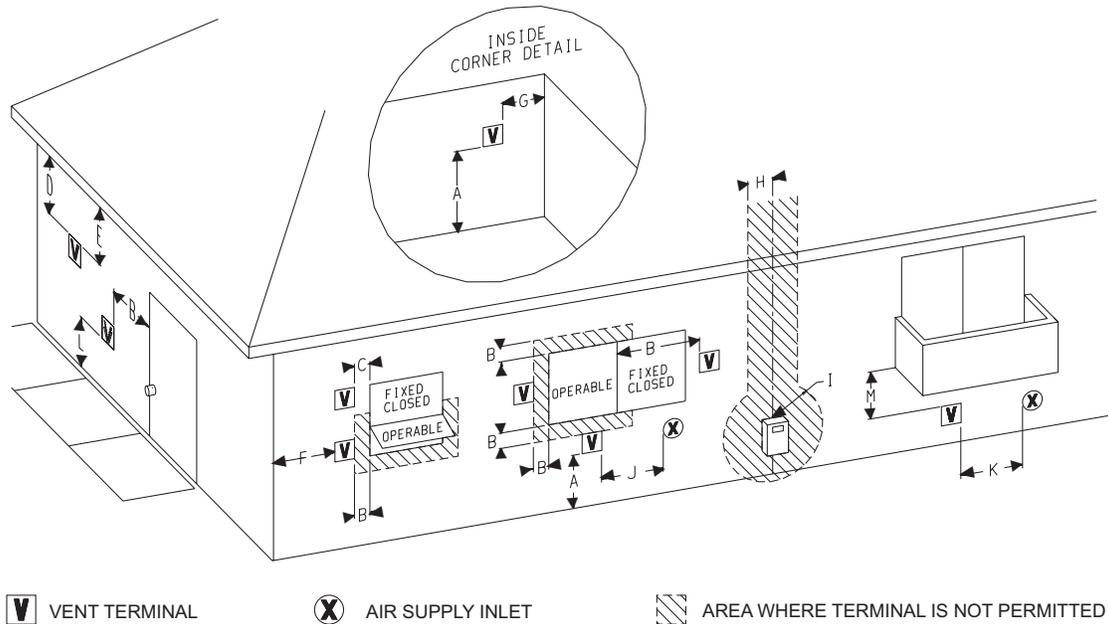


Figure 32

	Canadian Installations <sup>1</sup>	US Installations <sup>2</sup>		Canadian Installations <sup>1</sup>	US Installations <sup>2</sup>
A= Clearance above grade, veranda, porch, deck, or balcony	12 in (30 cm)	12 in (30cm)	I= Clearance to service regulator vent outlet	3 ft (91 cm)	6 ft
B= Clearance to window or door that may be open	6 in (15 cm) for appliances ≤ 10,000 Btuh (3 kW), 12 in (30 cm) for appliances > 10,000 Btuh (3 kW) and ≤ 100,000 Btuh (30 kW), 36 in (91 cm) for appliances > 100,000 Btuh (30 kW)	6 in (15 cm) for appliances ≤ 10,000 Btuh (3 kW), 9 in (23 cm) for appliances > 10,000 Btuh (3 kW) and ≤ 50,000 Btuh (15 kW), 12 in (30 cm) for appliances > 50,000 Btuh (15 kW)	J= Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliance	6 in (15 cm) for appliances ≤ 10,000 Btuh (3 kW), 12 in (30 cm) for appliances > 10,000 Btuh (3 kW) and ≤ 100,000 Btuh (30 kW), 36 in (91 cm) for appliances > 100,000 Btuh (30 kW)	6 in (15 cm) for appliances ≤ 10,000 Btuh (3 kW), 9 in (23 cm) for appliances > 10,000 Btuh (3 kW) and ≤ 50,000 Btuh (15 kW), 12 in (30 cm) for appliances > 50,000 Btuh (15 kW)
C= Clearance to permanently closed window	12 in (30 cm)	12 in (30 cm)	K= Clearance to a mechanical air supply inlet	6 ft (1.83 m)	3 ft (91 cm) above if within 10 ft (3 m) horizontally
D= Vertical clearance ventilated soffit located above the terminal within a horizontal distance of 2 feet (61 cm) from the center line of the terminal	24 in (61 cm)	24 in (61 cm)	L= Clearance above paved sidewalk or paved driveway located on public property	7 ft (2.13 m) †	7 ft (2.13 m) †
E= Clearance to unventilated soffit	12 in (30 cm)	12 in (30 cm)	M= Clearance under veranda, porch, deck, or balcony	12 in (30 cm) ‡	12 in (30 cm) ‡
F= Clearance to outside corner	6 in (15 cm)	6 in (15 cm)	1 In accordance with the current CSA B149.1, Natural Gas and Propane Installation Code		
G= Clearance inside corner	9 in (23 cm)	9 in (23 cm)	2 In Accordance with the current ANSI Z223.1/NFPA 54, National Fuel Gas Code		
H= Clearance to each side of center line extended above meter/regulator assembly	3 ft (91 cm) within a height 15 ft (4.5 m) above the meter/regulator assembly	3 ft (91 cm)	† A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings		
<b>ATTENTION: Vinyl Soffit, Vinyl Ceiling, Vinyl Overhang Disclaimer</b> Clearances are to heat resistant material (i.e. wood, metal). This does not include vinyl. Empire Comfort Systems Inc. will not be held responsible for heat damage caused from terminating under vinyl overhangs, vinyl ceilings or vinyl ventilated/unventilated soffits.			‡ Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.		
			* For clearances not specified in ANSI Z223.1/NFPA 54 or CSA B149.1, one of the following shall be indicated:		
			Clearance in accordance with local installation codes and the requirements of the gas supplier.		

# VENT SYSTEM IDENTIFICATION

## Installing Vent Components

Begin the vent system installation by installing the first Duravent component to the starting collar, 24 inch (60.10 cm) minimum straight pipe on the top of the appliance, then the remaining pipe length and the horizontal or vertical termination kit.

**NOTICE: 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.**

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.

## Special Venting Components (Duravent)

See Empire Comfort Systems Retail Price List for 4 x 6-5/8 inch Duravent part numbers and pricing.

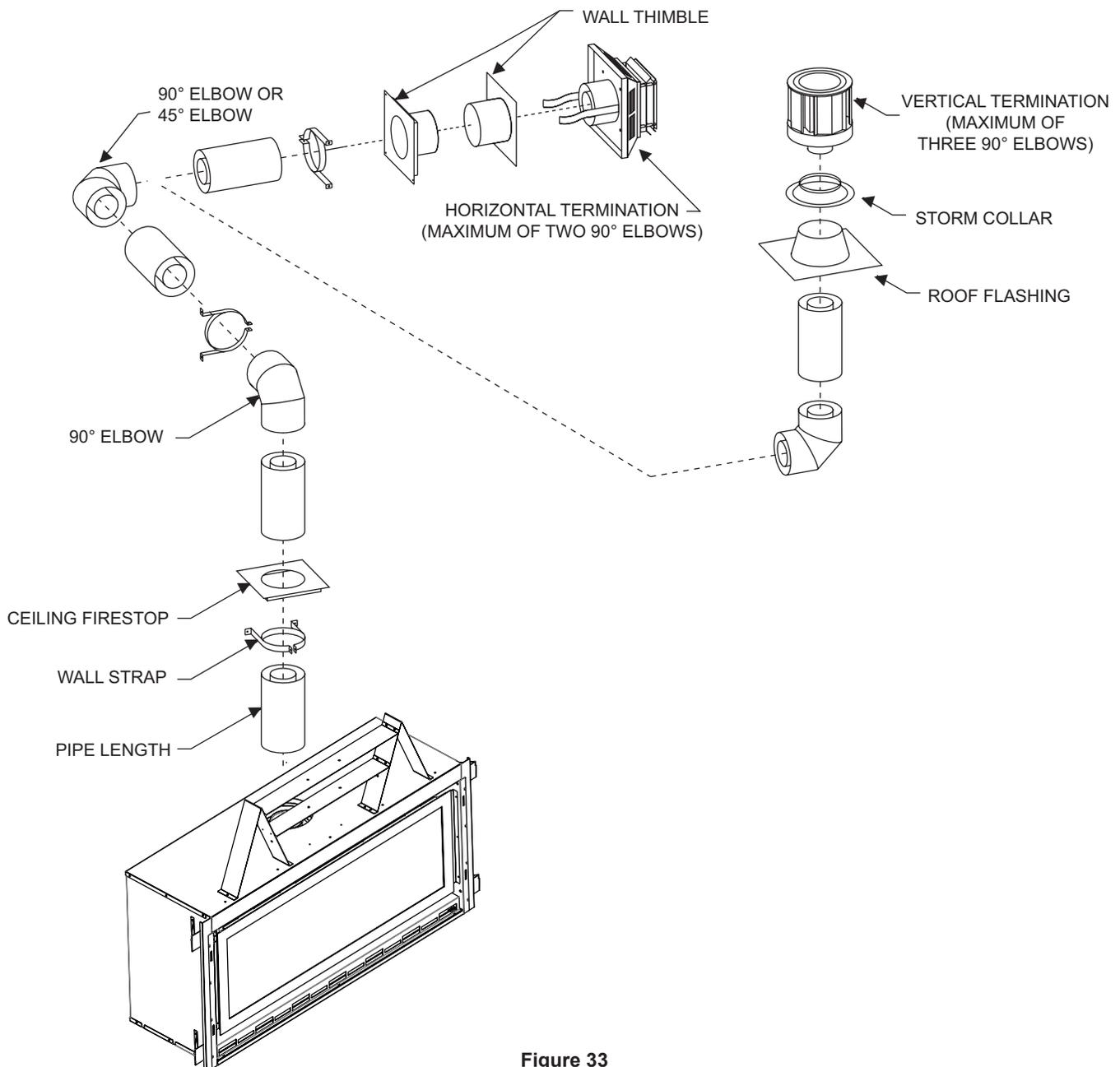


Figure 33

# VENTING FRAMING AND FINISHING

## Installing Support Brackets

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 flue pipe and elbows and 1 inch clearance on both sides and bottom of the flue 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 vent pipe and secured with nails or screws to structural framing members.

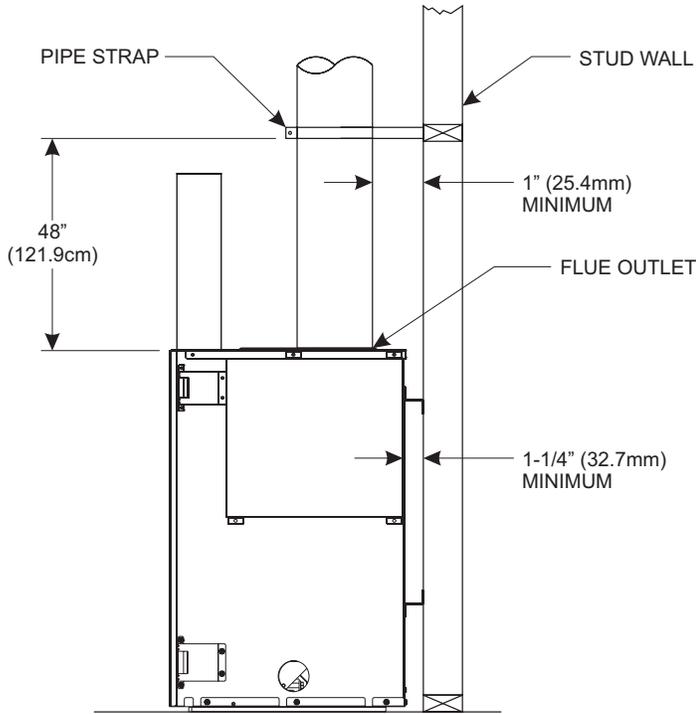


Figure 34

## Installing Firestops

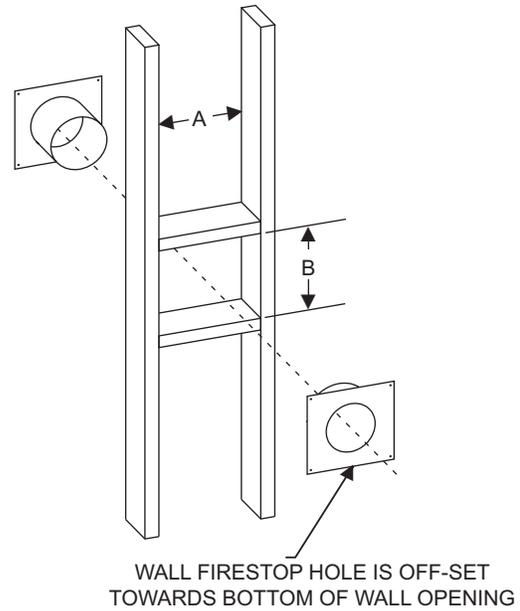
Firestops are required for safety whenever the vent system passes through an interior wall, an exterior wall, or a ceiling. These firestops act as a firebreak heat shield and as a means to insure that minimum clearances are maintained to the vent system.

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.

Cut an appropriate sized hole in wall. **See Figure 35.** Position firestop on interior side of wall for hole.

**Attention:** Wall firestop hole is off-set towards bottom of wall opening. Secure with nails or screws. Continue the vent run through the firestop. **See Figure 35.**

**Attention:** Horizontal venting through a wall requires a wall thimble on the interior side of the wall above the pipe.



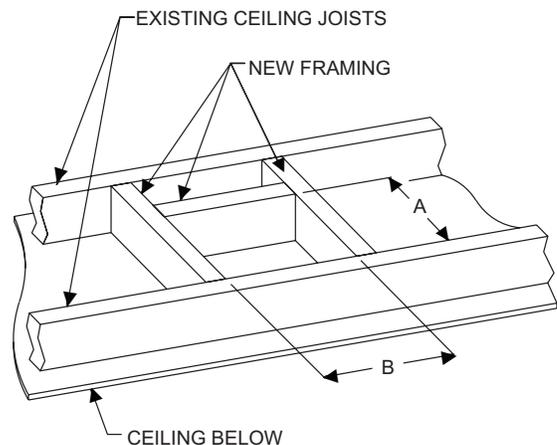
Vent Size	A	B
6-5/8 in. (168.3 mm)	12-3/8 in. (314.3 mm).	12-3/8 in. (314.3 mm)

Figure 35

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 an appropriate sized hole through the ceiling, using the center point previously marked. **See Figure 36.** Frame the hole with framing lumber the same size as the ceiling joists. **See Figure 36.**



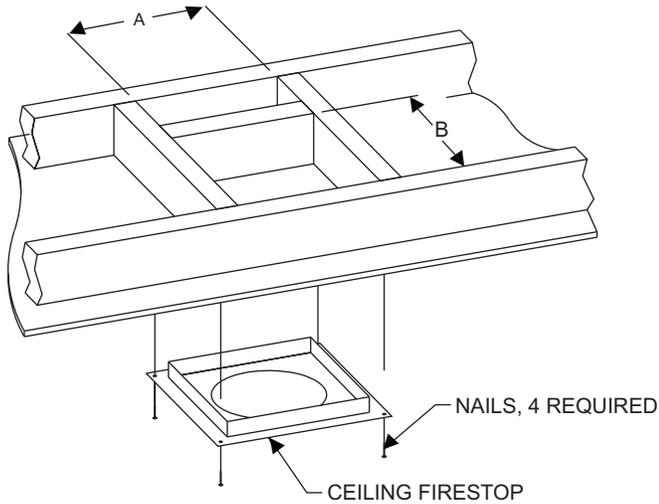
Vent Size	A	B
6-5/8 in. (168.3 mm)	9-1/2 in. (241.3 mm)	9-1/2 in. (241.3 mm)

Figure 36

# VENTING FRAMING AND FINISHING

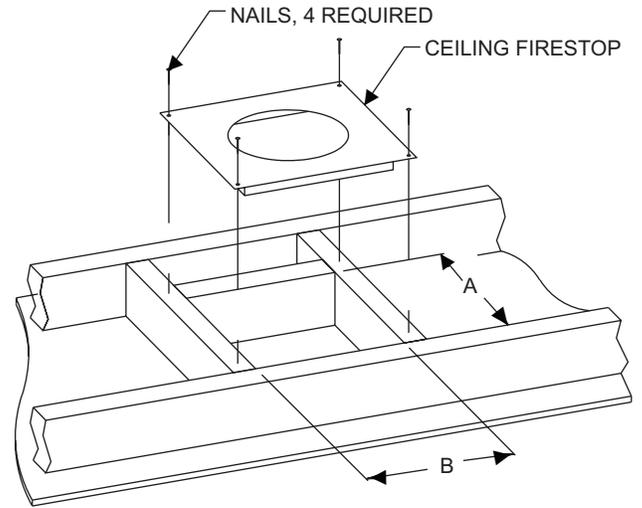
If the area above the ceiling is NOT an attic, position and secure the ceiling firestop on the ceiling side of the previously cut and framed hole. **See Figure 37.** If the area above the ceiling is an attic, position and secure the firestop on top of the previously framed hole. **See Figure 38.**

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



Vent Size	A	B
6-5/8" (168.3 mm)	9-1/2" (241.3 mm)	9-1/2" (241.3 mm)

**Figure 37**



Vent Size	A	B
6-5/8" (168.3 mm)	9-1/2" (241.3 mm)	9-1/2" (241.3 mm)

**Figure 38**

# HORIZONTAL TERMINATION

**NOTICE:** 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.**

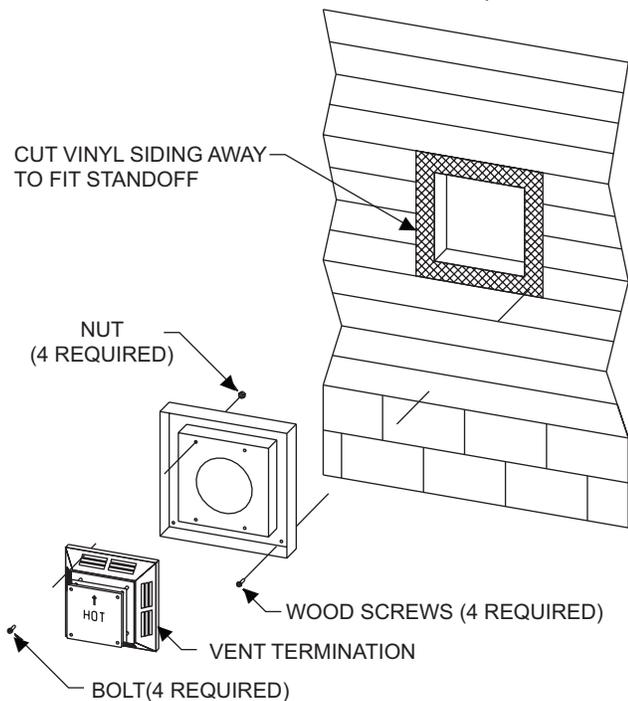
Attach the termination cap with the four wood screws provided. Before attachment of the termination, run a bead of silicone sealant rated above 250°F on its outside edge too, so as to make a seal to the exterior wall.

**NOTICE:** 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 39.** 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 39**

# 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.

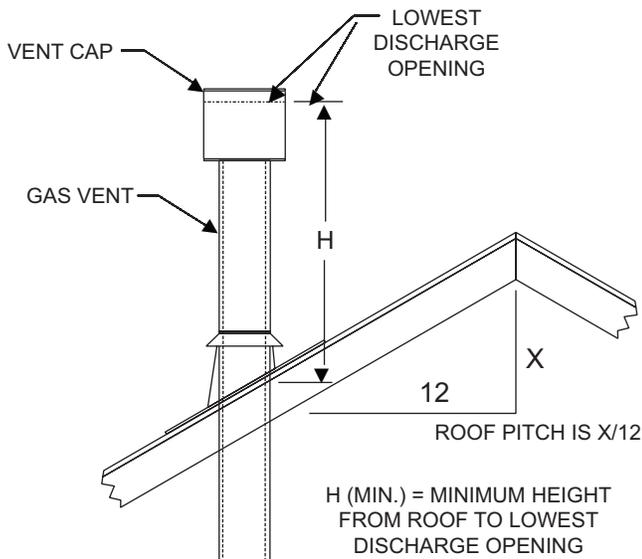
**NOTICE:** Size of the roof hole dimensions depend on the pitch of the roof. There must be a 1 inch clearance (25mm) to the vertical pipe sections. This clearance is to all combustible material.

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 40.



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

Figure 40

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.

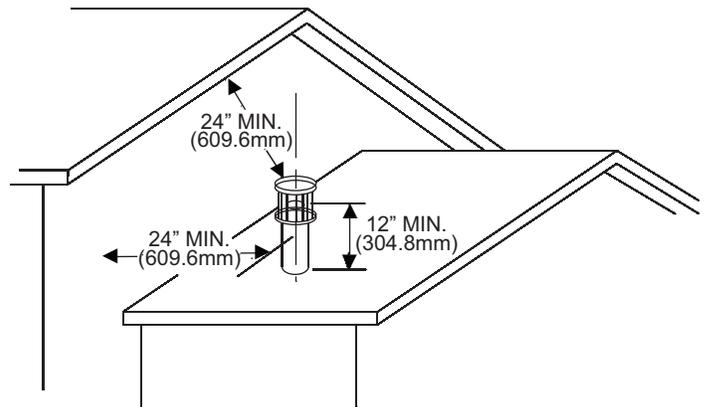


Figure 41

When terminating the vent cap near an exterior wall or overhang, maintain minimum clearances as shown in Figure 41.

## 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.

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

**NOTICE:** 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 41.

# VERTICAL TERMINATION

## 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.

**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.

**NOTICE:** 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.

## Reassembly and Resealing Vent Pipe System

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

All 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.

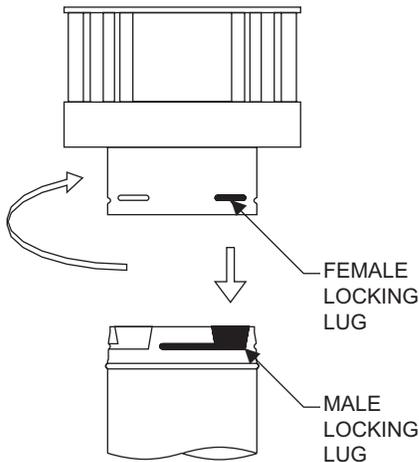


Figure 42

## Vertical Through the Roof Applications

Your Gas Fireplace has been approved for:

- a) Vertical installations up to 40 ft. (12.19 m) 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. **See Figure 43.**
- c) Wall straps must be used to support offset pipe every 4 ft. (1.22 m).

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

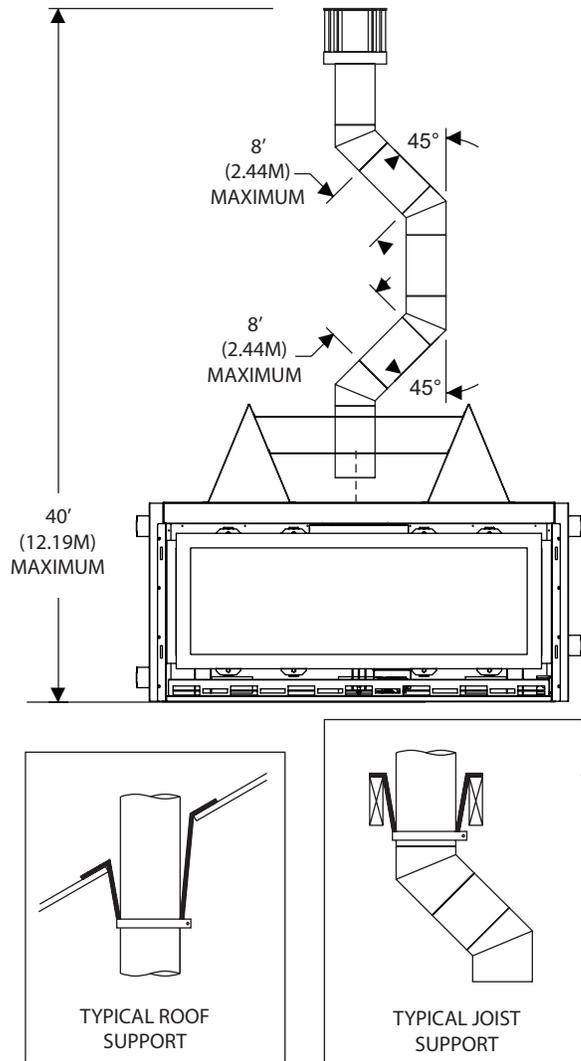


Figure 43

# DVVK-4F FLEX VENT INSTRUCTIONS

The DVVK-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

**NOTICE:** If installing the DVVK-4F Flex Vent Kit, an SD46DVA-FCFX7 Flex Adaptor Collar Assembly must also be used (purchased separately). Flex venting can only be installed vertically off of the DVLL and DVTL Series fireplaces. When installing a horizontal vent run from top connections, maintain at least ½" rise for every 12" of vent run.

## CAUTION

Always stretch and secure venting with wire or metal strapping to ensure that the horizontal runs do not sag. 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 44.** 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 45.** Maintain equal distance between spring spacers.

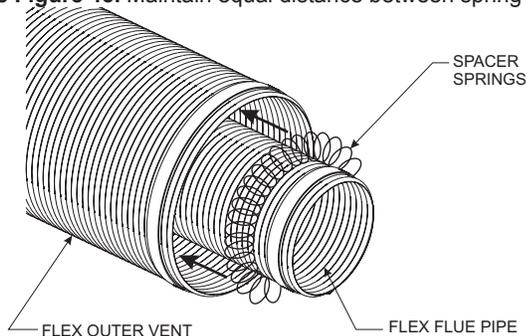


Figure 44

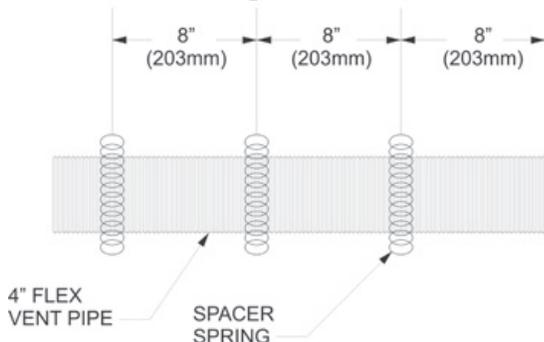


Figure 45

3. Connect the SD46DVA-FCF Adaptor to the vent and flue collars on top of the fireplace.
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 11" wide by 11" high. The minimum combustible clearance from the horizontal vent is 2" from sides and bottom, and 3" above the vent pipe. **See Figure 47.**
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 too long, trim off any excess vent before attaching the vent end connectors.

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 46.**
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.

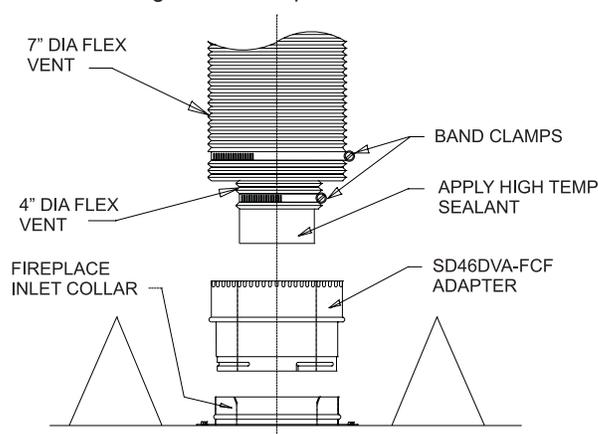


Figure 46

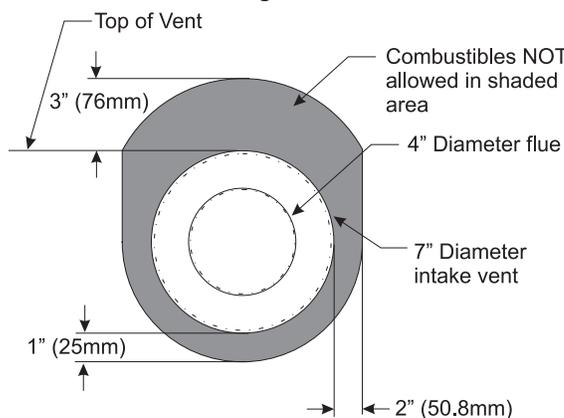


Figure 47

# FINISHING THE WALL

## Finishing The Wall For DFQ414BL, DFQ41W Series And DFQ41EHPBL Decorative Front

A minimum of 5/8 in. (15.8mm) is required from the bottom of the fireplace to the top of the hearth extension material.

A minimum of 1/8 in. (3mm) is required from the side of the unit to combustible material.

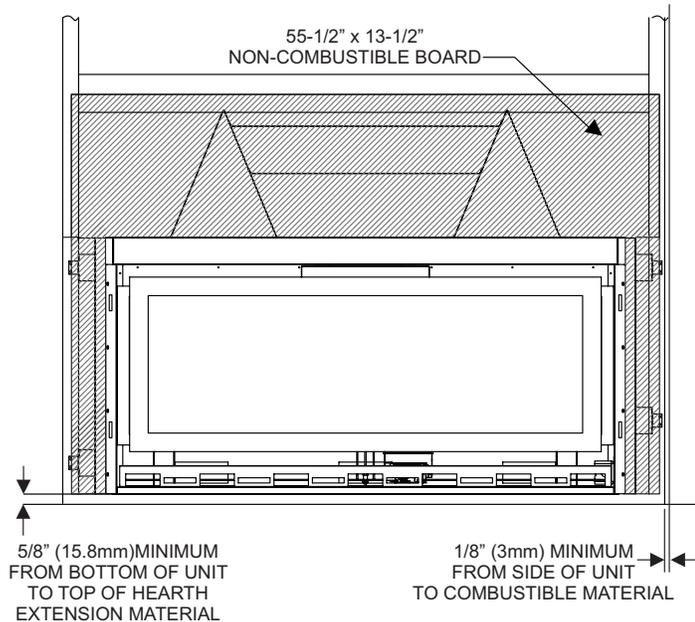


Figure 48

## Finishing The Wall For DFQ41W Series, DFQ414BL Decorative Front With Finishing Materials Less Than 1 in. (25.4mm) Thick - Figure 45

Stop finishing materials at the top and bottom of the unit.

Finishing materials up to 1 in. (25.4mm) thick may come up to the sides of the unit. The Optional Front will overlap the finishing materials.

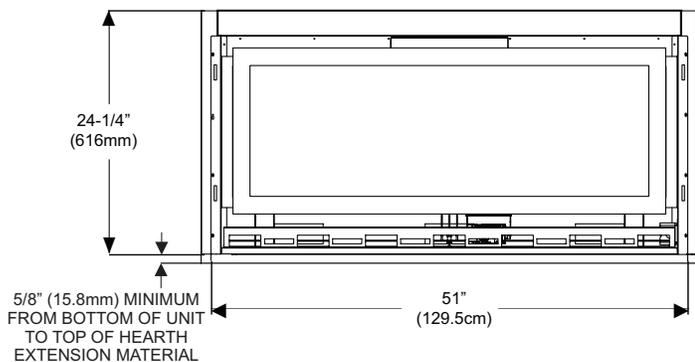


Figure 49

## Finishing The Wall For DFQ414BL And DFQ41W Series Decorative Front With Finishing Materials Greater Than 1 in. (25.4mm) Thick

For finishing materials over 1 in. (25.4mm) thick, center the unit side to side in a 26 in. x 53-3/4 in. (660mm x 136.5cm) opening. The front will fit inside the finishing material.

Stop Finishing Materials 1 in. (25mm) from the top of the unit. This will allow 3/8 in. (10mm) of space for lifting the front to unhook and remove it.

Stop Finishing Materials 3/4 in. (19mm) from the bottom of the unit.

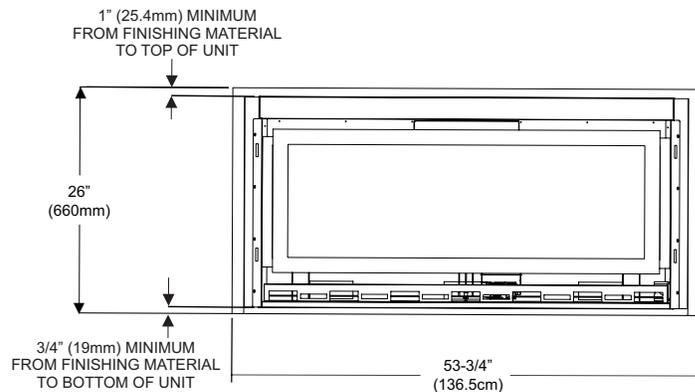


Figure 50

# FINISHING THE WALL

## Finishing The Wall for DFQ412BL Decorative Front With Inside Fit

The inside fit front allows for finishing over the face of the fireplace and right up to the removable front.

1. After installing the fireplace, install the front kit.
2. Locate the two side stone stops. Loosen the top and bottom screws on the inside opening of the fireplace but do not remove them. See Figure 51.
3. Slip the side stone stop under the two screws and tighten. Repeat for the other side.
4. Locate the steel hood stone stop. Loosen the 7 screws under the top edge of the fireplace - do not remove. Slip the hood stone stop under the 7 screws and tighten while holding back tightly against the top face of the fireplace.
5. Secure front face of the hood stone stop to upper fireplace face with three screws.
6. Hang the decorative front on the four rectangle cut-outs on the face of the fireplace.
7. Finish around the fireplace, you must use only non-combustible material to cover the steel face and non-combustible board on the fireplace. All non-combustible finishing materials must stop at the side and hood stone stops. Finishing material must not go past the stone stops or the front will not fit. Stop the finishing material at the bottom of the valve opening so the valve and fans are clear for service.

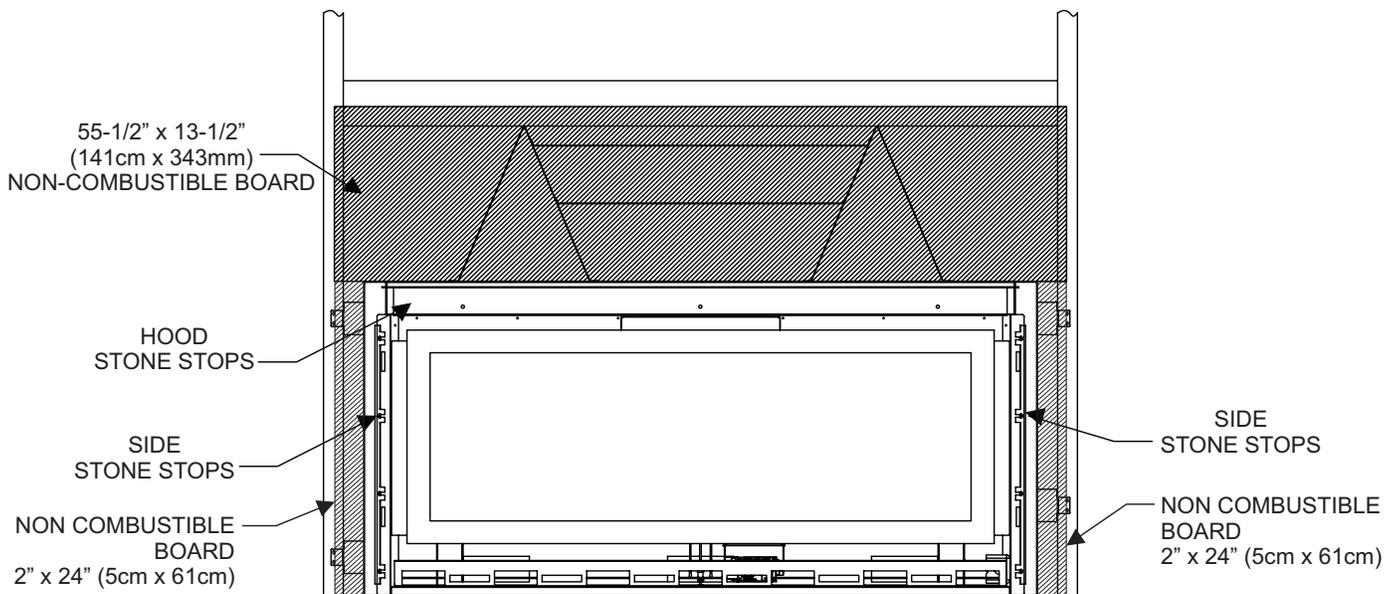


Figure 51

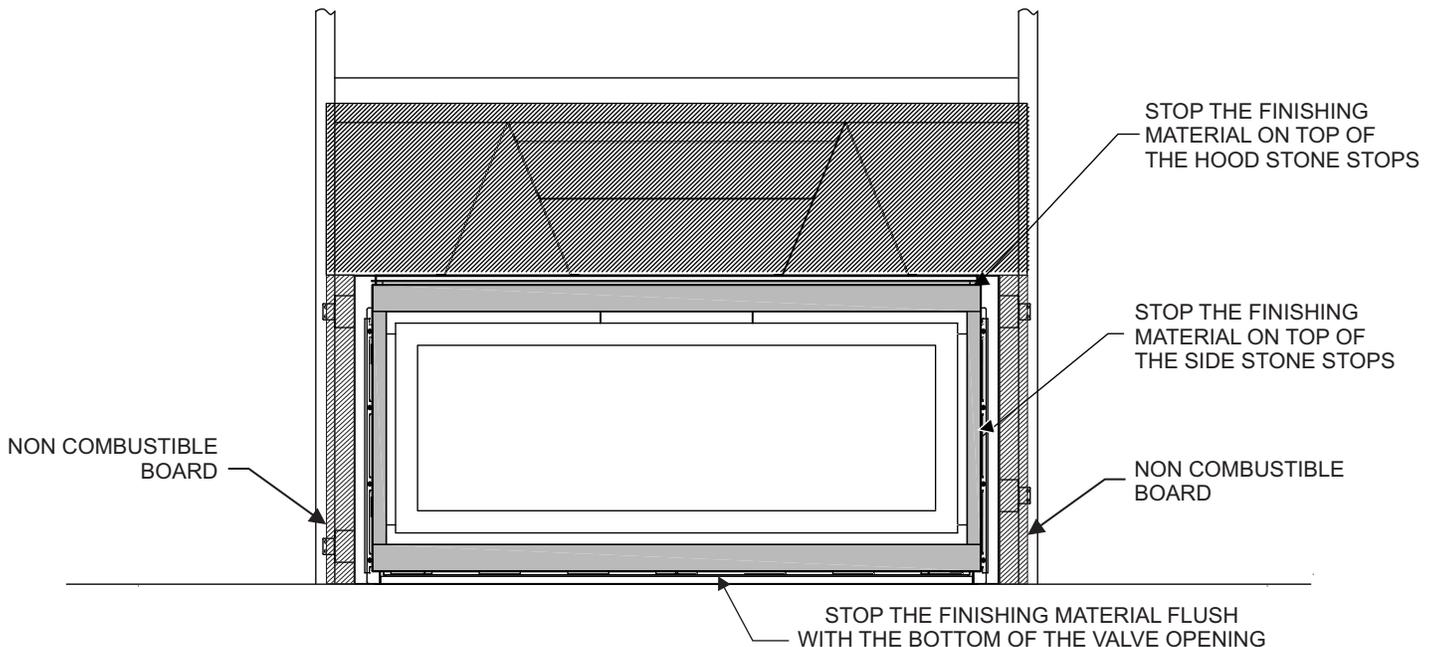


Figure 52

# DVTL LOG PLACEMENT

The DVTL41BP Series fireplaces are shipped without a Log set, however a log set must be installed for proper operation. Optional Log sets are available and must be ordered separately. Contact your dealer for available options.

Follow the installation instructions supplied with the Log sets for proper handling, positioning, and care.

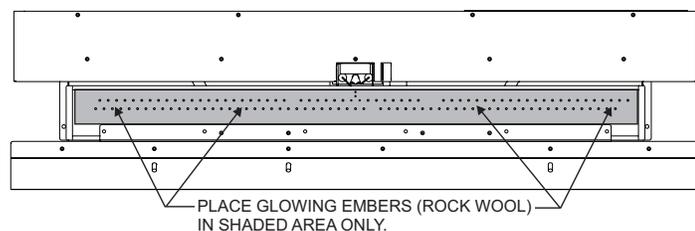
When installing the logs into the fireplace, always wear gloves to prevent skin irritation from ceramic fibers. After handling logs, wash your hands gently with soap and water to remove any traces of fiber.

Use extra care in the handling of the logs to avoid accidental breakage. Long slender logs and branches are susceptible to breakage if not handled properly.

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

Please refer to Figure 53 and corresponding WARNING, when completing the Ember and Log placement steps. Embers should be dime-sized pieces that are fluffed up prior to placement onto the burner. A single layer of embers is sufficient: do not over-apply.

**NOTICE:** Once the installation is complete with the log set and embers in place, operate the fireplace to verify flame appearance. If there are flames directly impinging a log, turn off fireplace, then remove the ember material directly below where the flame impingement occurred. This should eliminate sooting on the log, and provide a more pleasing flame appearance.



**Figure 53**

# DVLL DECORATIVE MEDIA INSTALLATION

Proper installation of the decorative media is critical to safe and clean operation of the fireplace.

## ⚠ WARNING

Failure to position the parts in accordance with the diagrams and instructions below or failure to use only parts specifically approved for use with this heater may result in property damage or personal injury.

### DECORATIVE GLASS ACCESSORY PLACEMENT

This Linear Contemporary fireplace is approved for use with smooth glass media measuring as small as 1/4 inch and up to 1/2 inch in diameter. Empire Comfort Systems offers a selection of glass media for this fireplace. Additional colors may be available from your Empire dealer. Use properly sized smooth glass media approved for gas fireplaces. Follow the diagrams in this manual for placement of media and clearance to burner ports.

### DECORATIVE ROCK MEDIA

The Linear Contemporary fireplace is approved for use with small ceramic fiber decorative rock media. The small rock kit is available from your Empire Comfort Systems dealer. Place small rock media only to the outside of the flanged area on the media tray. Never place the fiber rocks on top of, or next to the burner.

1. Remove the front and the glass frame assembly.
2. Place the long thin glass piece (media retainer) into the groove in front of the media tray in the firebox opening. This will keep the decorative media from falling out.
3. Place dime-sized pieces of ember across the burner surface. A single layer, is sufficient; do not over-apply. See Figure 54 inset.
4. Carefully open the bag of glass or fiber rock media. Distribute the media evenly across the media tray, taking care not to let the media fall down by the burner or the pilot. If they do, make sure they don't block the burner or pilot. There are 1/2" walls around the burner, pilot and back air slots to keep the beads out.
5. Replace the glass frame assembly and decorative front.

**NOTICE:** The total area for decorative media placement is approximately two square feet.

## ⚠ CAUTION

Use of gloves and eye protection is required while applying the decorative glass.

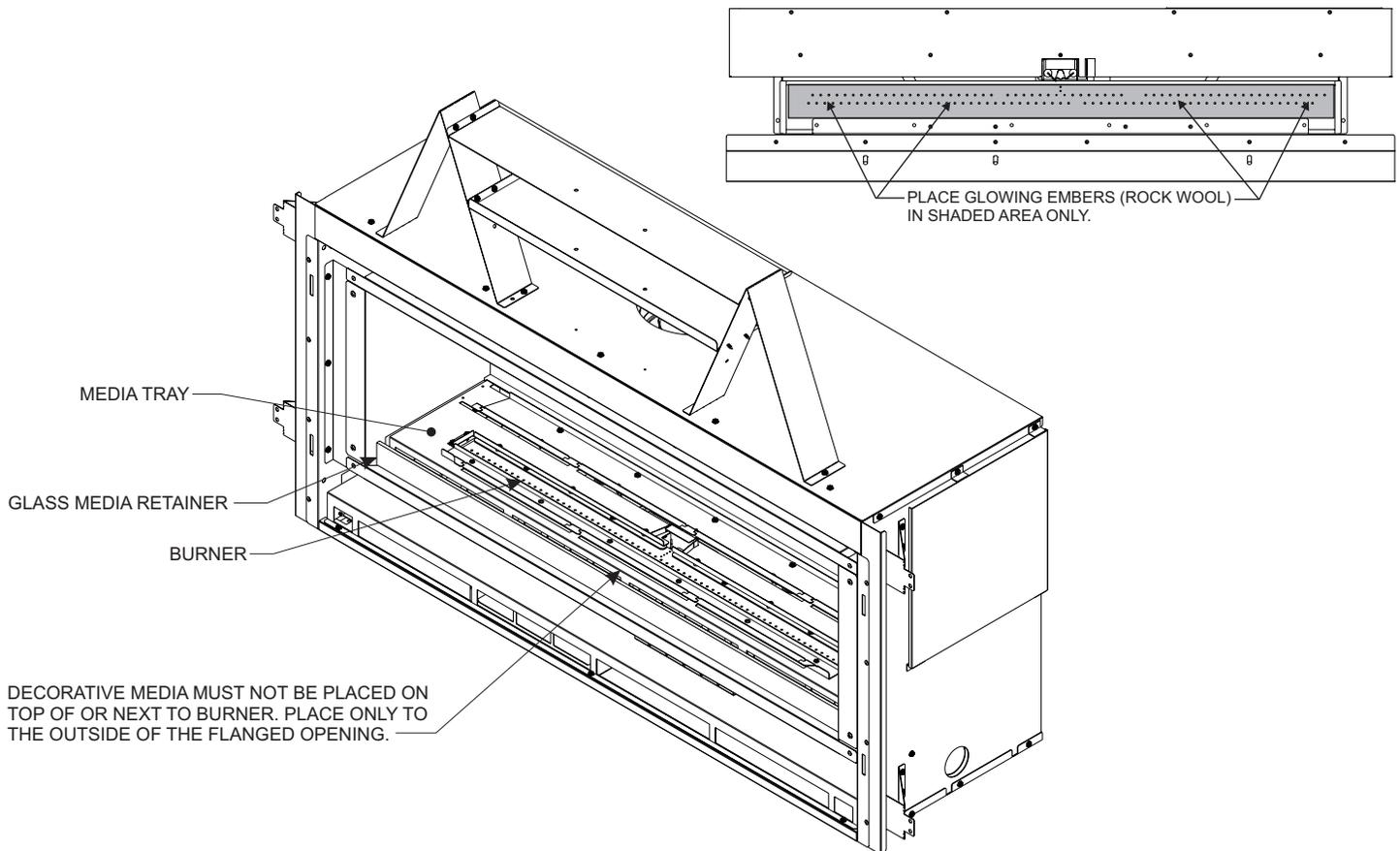


Figure 54

# MULTIFUNCTION REMOTE LIGHTING INSTRUCTIONS

## FOR YOUR SAFETY READ BEFORE LIGHTING

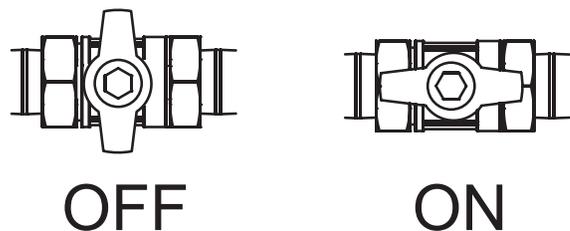
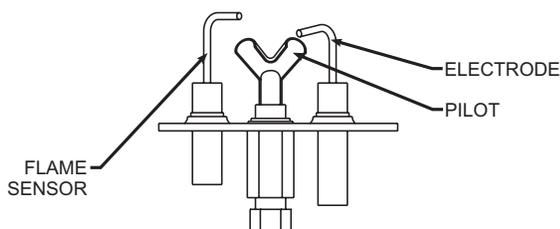
### ⚠ WARNING

**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 around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- WHAT TO DO IF YOU SMELL GAS**
- Do not try to light any appliance.
  - Do not touch any electrical switch.
  - Do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions. If you can not reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn the gas control
- knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

## LIGHTING INSTRUCTIONS

1. **STOP!** Read the safety information above.
2. Turn **OFF** electric power to the appliance.
3. Open bottom louver assembly (if applicable).
4. Turn gas cock counterclockwise  to "ON" position.
5. Wait ten (10) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow "B" in the safety information above on this label. If you do not smell gas, go to the next step.
6. Turn **ON** electric power to the appliance.
7. Find pilot - Follow metal tube from gas control. The pilot is behind the burner on the right side.
8. Using the remote control, turn main flame to "ON." If the pilot does not light within 60 seconds, stop and go to Step 5.
9. Refer to remote control instructions for detailed information, control features, and operation. Note: There is a switch on the side of the Electronic Control Module that allows for a continuous standing pilot mode or an intermittent pilot mode. See appliance manual for location of this switch. If the pilot or burner does not stay lit (in the standing pilot mode), stop and immediately call a qualified service technician or gas supplier.
10. If the burner or pilot does not operate properly after several tries, turn the gas control knob clockwise  to "OFF" and call your service technician or gas supplier.
11. Close bottom louver assembly.
12. Operation of the gas valve, blower, and/or optional light must be controlled by using the hand held remote control. Refer to remote instructions for detailed operation information.



## TO TURN OFF GAS TO APPLIANCE

1. Turn off all electric power to the appliance if service is to be performed (if applicable).
2. Open bottom louver assembly.
3. Locate On/Off gas cock and turn clockwise to  "OFF." Do not force.
4. Close bottom louver assembly.

# OPERATING INSTRUCTIONS

## RF VALVE OPERATION (AF-4044 Electronic Gas Valve system only)

**NOTICE: THE FIREPLACE WILL ONLY OPERATE WITH THE HAND HELD REMOTE TRANSMITTER. THE TRANSMITTER CONTROLS ALL FUNCTIONS OF THE FIREPLACE.**

Please refer to the separate instructions for detailed operation and programming of the Multi-function Remote Control.

The AF-4044 Electronic Gas Control Valve features a Remote controlled High/Low Variable - 6 Volt DC Motor Drive. This gas control uses a spark to pilot burner assembly. For use with Propane or natural gas (pre-set at the factory).

This gas control system includes the items identified in **Figure 55**.

Index No.	Description
1	Battery Back-up
2	AF Valve, RF
3	AF Control Module
4	AF Extension Module
5	AC Adapter
6	Pilot Assembly - Nat
	Pilot Assembly - LP
Not Shown	Remote Control

## SPECIAL FEATURES ON THE CONTROL MODULE

The Control Module has two special pilot mode features built into the system.

**CONTINUOUS PILOT FEATURE:** This allows the user to change from a spark to pilot system to a standing pilot system.

1. There is a switch located on the right side of the Control Module (#4) that reads CONTINUOUS PILOT ON/OFF. This switch will allow the user to select the pilot mode of operation.
2. When the continuous pilot switch is in the OFF position and the appliance turned ON, the pilot will spark and light, then the main burner will light as well. When the appliance is turned OFF, the pilot and main burner will shut OFF.
3. When the continuous pilot switch is in the ON position and the appliance is turned ON, the pilot will spark and light. Then when the appliance is turned OFF the pilot will remain ON, but the main burner will shut OFF.

Note: The Continuous pilot mode setting is generally recommended on Direct Vent appliances during cold climate seasons to help keep the firebox warm.

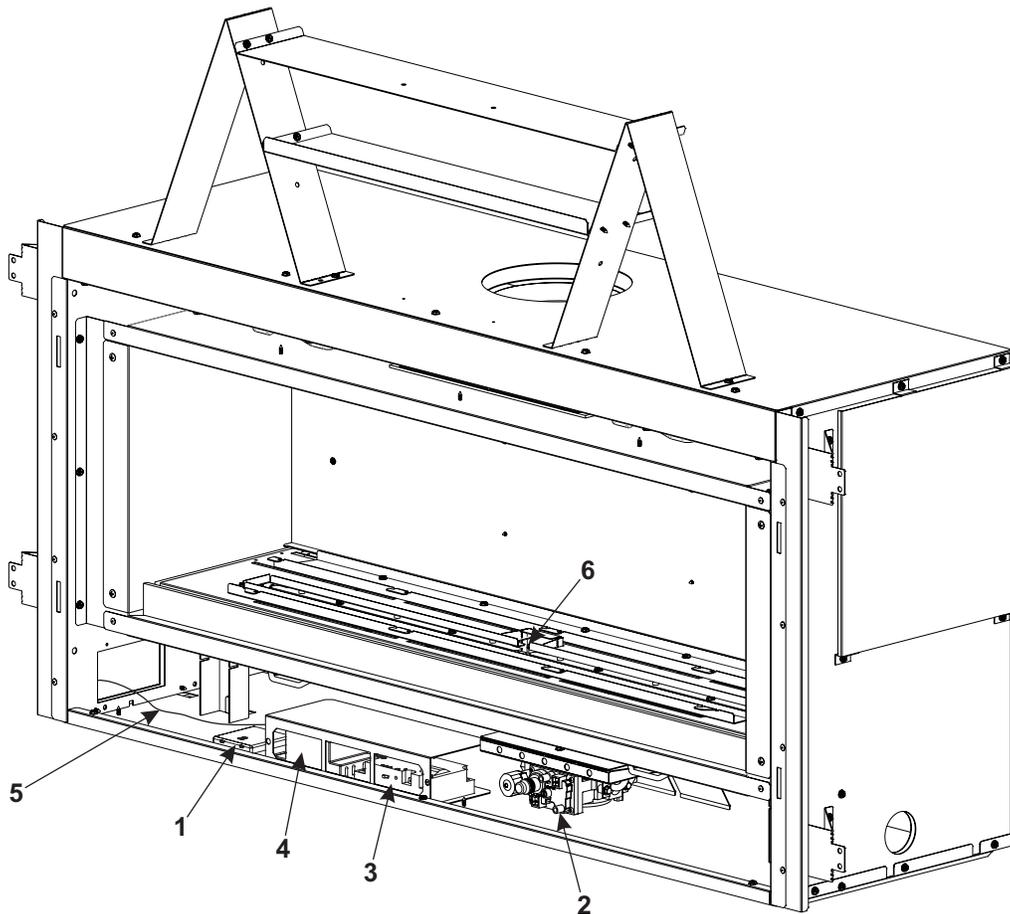


Figure 55

# OPERATING INSTRUCTIONS

**REMOTE CONTROL FEATURE:** The Control Module has a built in remote control receiver which allows the user to program the hand held remote transmitter.

1. There is a switch located on the right side of the Control Module that reads REMOTE/OFF.
2. When the remote/off switch is in the OFF position the appliance will operate from an appliance mounted rocker switch or optional wall switch connected to the two (2) BROWN wires on the Control Module.
3. When the remote/off switch is in the REMOTE position the appliance will operate from the Remote Control transmitter.

The Control Module must be programmed to the Remote Control.

1. To program, located the learn button on the left side of the Control Module Note: Press and release the learn button. There will be a beep sound from the Control Module, then press any key on the remote transmitter. Once the internal receiver accepts the transmitter code there will be a series of confirming beeps.
2. The remote system is ready for use. Please refer to the separate Multi-function Remote Control Instruction manual for programming and detailed operational information.

## REMOTE CONTROL OPERATION

1. The MODE button toggles between ON, THERMO and OFF.
2. The FLAME MAIN button will control the level of the burner with level 7 being the largest flame and 1 being the smallest flame.
3. The LIGHTS button will control the level of intensity of the media light on the DVLL with level 6 being the brightest and level 0 being off.
4. The FAN button will control the level of the fan speed after the first 12 minutes of operation with level 6 being the highest and 0 being off.

## POWER SUPPLY SYSTEM

The Gas Control system is powered by a standard 110 volt AC through a 6.0 volt DC adaptor. The AC adaptor is connected to the Control Module with two 1/4 in. (6.35 mm) female terminals.

This control system also includes a Battery Back-up pack that allows the Gas Control system only to operate in the event of a power outage.

**NOTICE:** The Accent Light and/or Blower features will not operate during a power outage.

**NOTICE:** All Batteries should be replaced at least once each year, preferably at the beginning of the heating season.

**CAUTION:** Fire or explosion hazard. Can cause property damage, sever injury or death.

Do not attempt to take apart the gas control or to clean it. Improper assembly and cleaning can cause unreliable operation.

This control system also includes a Battery Back-up pack that allows the Gas Control system only to operate in the event of a power outage.

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**CAUTION:** Fire or explosion hazard. Can cause property damage, sever injury or death.

Do not attempt to take apart the gas control or to clean it. Improper assembly and cleaning can cause unreliable operation.

# MAINTENANCE INSTRUCTIONS

## MAINTENANCE

Maintenance frequency must be determined individually for each application. Some considerations are:

- Exposure to water, dirt, chemicals and heat can damage the gas control and shut down the control system.
- Cycling frequency. Appliances that may cycle 20,000 times annually should be checked monthly.
- Intermittent use. Appliances that are used seasonally should be checked before shutdown and again before the next use.
- Dusty, wet or corrosive environment. Because these environments can cause the gas control to deteriorate more rapidly, the system should be checked more often.
- Any control should be replaced if it does not perform properly on checkout or service. In addition, replace any module if it is wet or looks like it has been wet.

## SERVICE

Do not disassemble the gas control; it contains non-replaceable components. Attempted disassembly or repair can damage the control.

Exactly follow the warnings and the lighting instructions.

1. Before lighting, smell around the appliance area for gas. If the appliance uses LP (bottled) gas, be sure to smell next to the floor because LP gas is heavier than air. If you smell gas, immediately shut off the manual valve in the gas piping to the appliance or on LP at the tank. Do not try to light any appliance. Do not touch any electrical switch or use the phone. Leave the building and call your gas supplier. If your gas supplier cannot be reached, call the fire department.
2. The gas control must be replaced if it has been flooded with water. Call a qualified service technician.
3. The gas control is a safety device. It must be replaced in case of any physical damage such as bent terminals, missing parts, stripped threads, or evidence of exposure to excessive heat.

Follow the operating instructions provided by the manufacturer of your heating appliance.

# MAINTENANCE INSTRUCTIONS

## TROUBLESHOOTING

**IMPORTANT:** All service and trouble-shooting procedures should be performed by an experienced qualified service technician.  
If the pilot will not stay lit:

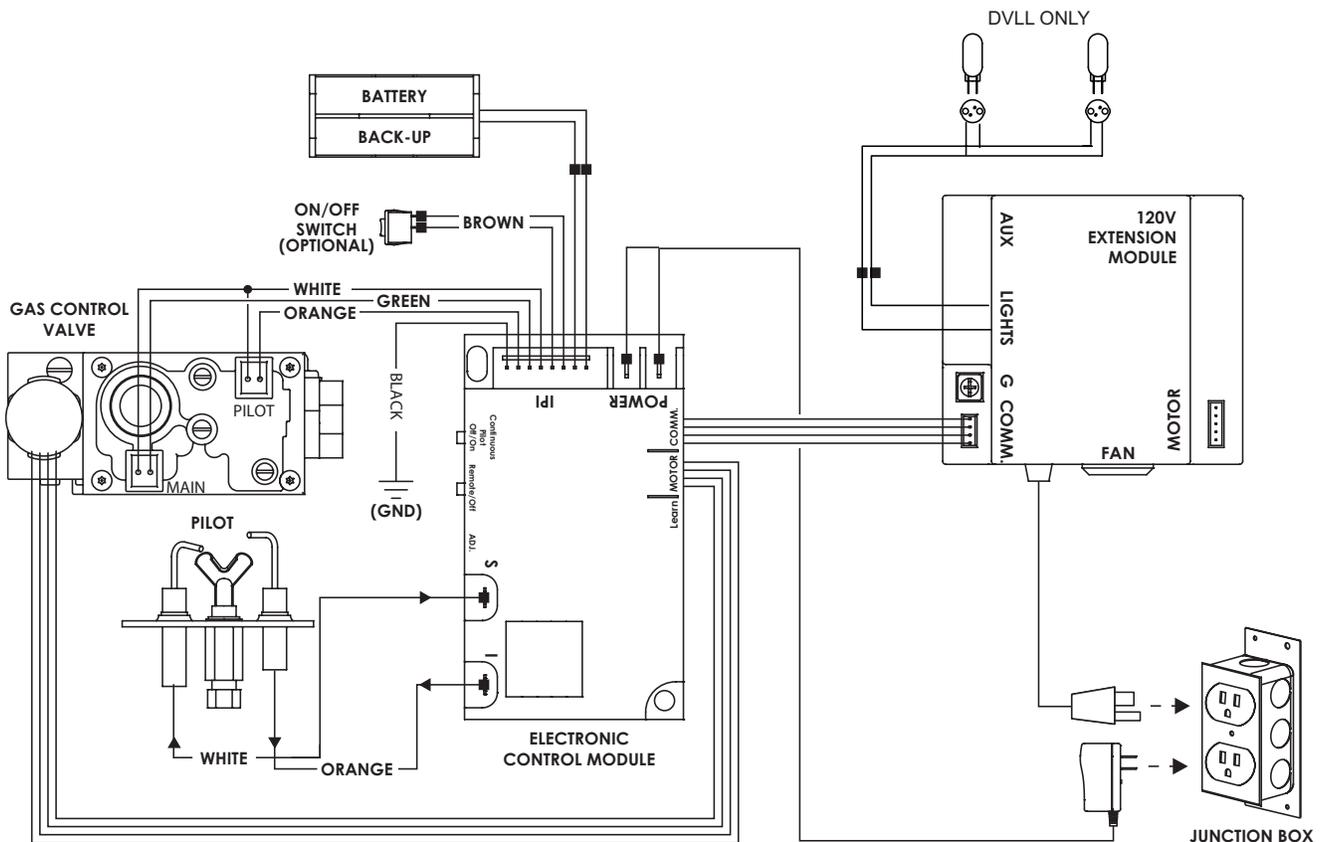
1. Confirm that the sensor wire (white) and the ignitor wire (orange) are properly connected to the Control Module "S" and "I" terminals.
2. Confirm that the Spark to Pilot burner is properly grounded to the Gas Control Valve and the Control Module.
3. Check the power source from the 6-volt power adaptor or the Battery Back-up pack connection and condition of batteries.
4. Check the position of the CONTINUOUS PILOT switch on the Control Module. If main burner does not come ON when the manual switch and remote control is turned ON:
  - a. Confirm that the pilot sparks and lights.
  - b. Check the two (2) pin plastic connectors that plug into the face of the Gas Control valve.
  - c. Confirm that the Gas Control valve is properly grounded to the Control Module.

## OPTIONAL GAS CONVERSION KITS

Please contact your dealer or distributor for the proper Conversion kit for these fireplace models. Conversion kits will include complete instructions, minimum rate screw, plus the pilot and main burner orifice for the gas type required. The AF-4044 Electronic Gas Control Valve is convertible to use either natural or propane gas by simply turning a small Rotary knob located at the front of the gas valve. This rotary knob is located under a small rubber (or aluminum) cap and should only be adjusted when converting gas type.

**CAUTION:** The gas type has been pre-set at the factory and must not be changed unless a complete conversion is made which includes changing of the gas pilot injector, air shutter settings and main burner orifice.

# WIRING DIAGRAM



**NOTICE:** For "RF" Fireplace models with Premium Multi-Function Remote Control, Refer to the separate instructions for operation of the remote control system.

Figure 56

# 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.**

**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 control module.
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 ammonia free household cleaner and warm water (we recommend gas fireplace glass cleaner, contact a local dealer for this product). 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

1. Remove the front .
2. Unlatch the 4 spring clips going around the glass frame assembly. Use the included tool to make it easier.
3. Grasp the glass frame on the top and the bottom. Pull the glass straight out to disengage the glass from the fireplace.
4. To replace, reverse the above steps. See **Figure 57**.

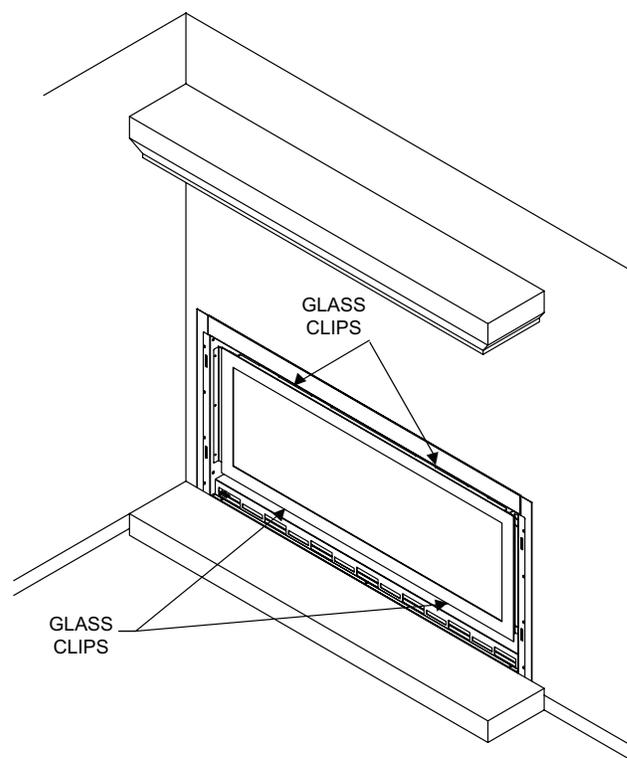


Figure 57

### 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.

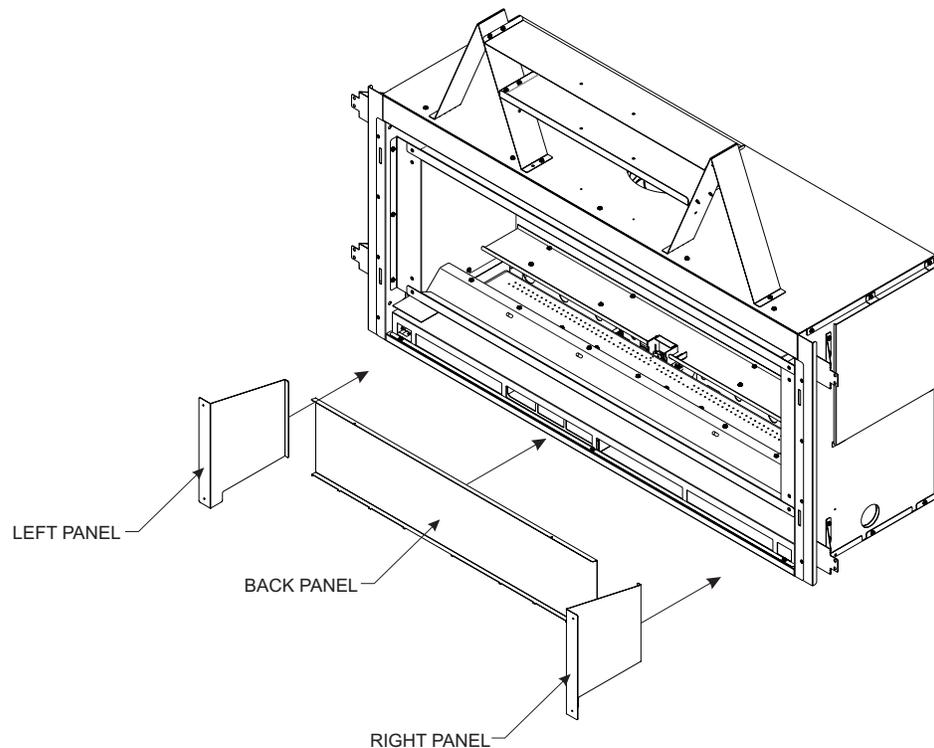
# ACCESSORIES

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.

DECORATIVE ACCESSORIES	
DFQ412BL	2" (50.8 mm) Decorative Front
DFQ414BL	4" (101.6 mm) Decorative Front
DG41C	Decorative Glass Panels (DVLL Only)
DVP41LKR	Liner, Black Reflective (DVTL Only)
FBB9	Blower Kit
DFQ41WBL	Tide Water Decorative Front, Black
DFQ41WHP	Tide Water Decorative Front, Hammered Pewter

## OPTIONAL PORCELAIN PANELS (DVTL ONLY)

**NOTICE:** Install liner before positioning the logs in place.



**Figure 58**

### PLACING THE OPTIONAL PORCELAIN PANELS INTO THE DVTL41 FIREPLACE:

1. Locate the left and right side porcelain pieces.
2. Place them into the firebox, tight against the side walls and pushed back tight against the back wall.
3. Place the back porcelain piece into the back of the fireplace. The bend with the two screw holes is on the top.
4. Align the two screw holes on the angled bend. With the two pilot holes in the angled exhaust baffle on the roof of the fireplace. Drive a screw through each hole to hold the back in place. The back locks the sides in place.
5. Locate the two holes in each side porcelain piece. These will line up with two holes in the front face of the firebox. Place a screw through each hole and fasten. **See Figure 58.**

# OPTIONAL DECORATIVE GLASS PANELS (DVLL ONLY)

**NOTICE: THIS NEEDS TO BE DONE BEFORE INSTALLING THE GLASS MEDIA BEADS.**

## PLACING THE OPTIONAL DECORATIVE GLASS PANELS INTO THE DVLL FIREPLACE:

Use the Glass Identification Chart as a dimensions guide for the glass panel parts.

1. Remove front glass and front door assembly. Be sure there are no glass media beads on the media tray.
2. Carefully unpack the glass panels. Wear gloves to prevent any accidental cuts and to prevent fingerprints on the glass.

3. Place the two "A" panels through the small tabs and into the center rear slots in the media tray base.
4. Place the two "B" panels through the small tabs and into the outer rear slots in the media tray base.
5. Place the three "C" front glass panels through the small tabs and into the front slots in the media tray base.
6. Install the glass media beads around the media tray to hide the small tabs that hold the glass. The glass edges will be illuminated from the light below the media tray. See DVLL Glass Media Installation Section in the fireplace Installation Instructions.

GLASS IDENTIFICATION CHART				
ITEM NUMBER	PART NUMBER	HEIGHT	WIDTH	QUANTITY SUPPLIED
A	R11263	3-1/2"	9-7/8"	2
B	R11383	3-1/2"	8-1/8"	2
C	R11261	2-1/2"	9-7/8"	3

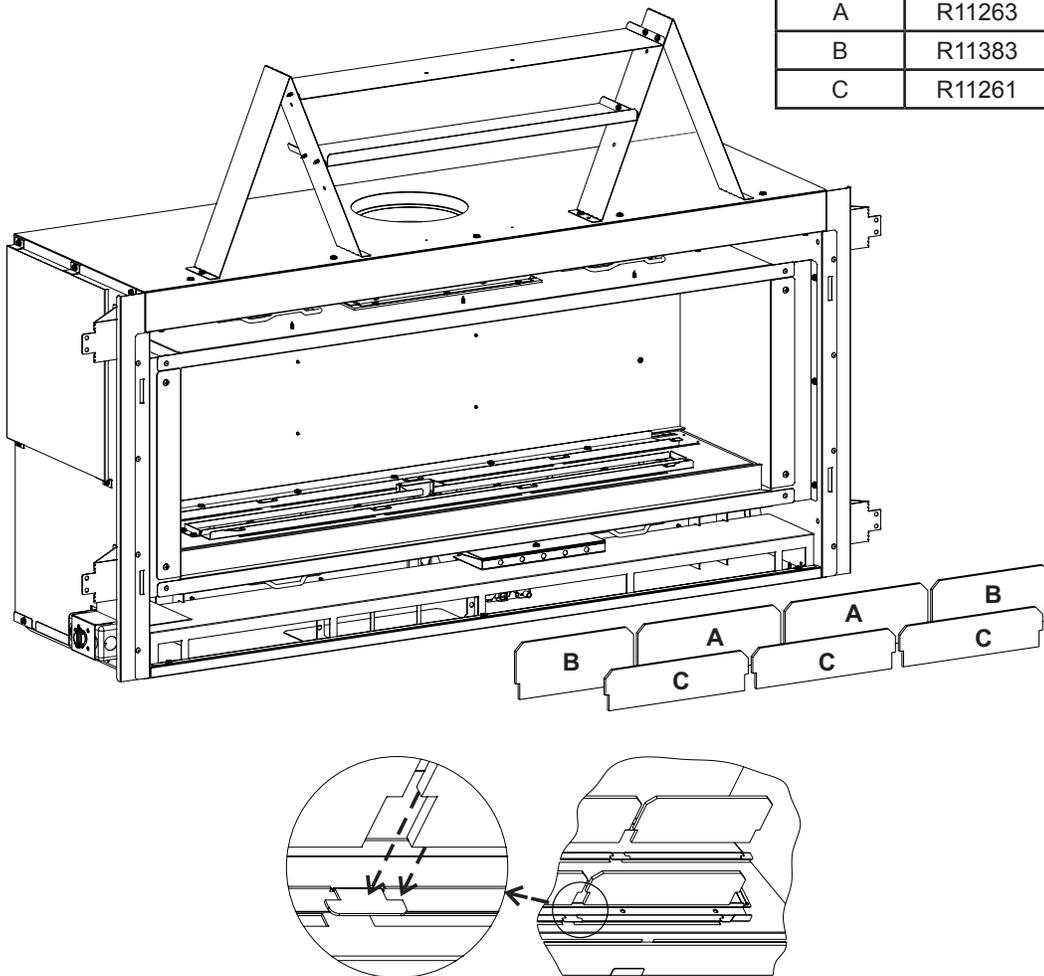


Figure 59

# DVLL PARTS LIST

INDEX NO.	PART NO.	DESCRIPTION
1	28452	Standoff Support
2	28454	Standoff Support
3	28453	Upper Standoff (Qty. 2)
4	30100BL	Porcelain Firebox Liner - Left
5	30101BL	Porcelain Firebox Liner - Back
6	30576BL	Porcelain Firebox Liner - Right
7	28465	Support Bracket (Qty. 2)
8	28428	Vertical Vent Baffle (Qty. 2)
9	32155	Pilot Shield, Contemporary
10	R3492	Three-prong receptacle (Qty. 2)
11	R3490	Junction Box
12	28466	Junction Box Heat Shield
13	R9189	Gasket, Pilot
14	R11266	Burner, Modern
15	32146	Media Tray Assembly, Modern
16	28412	Glass Frame Assembly
17	28441	Valve Cover
18	R11260	Glass Media Retainer
19	28450	Nailing Tab (Qty. 4)
20	R11443	Non-Combustible Board (Qty. 2)
21	28451	Rear Standoff (Qty. 4)
22	R11258	Non-combustible Board
23	R10499	5-PIN Wire Harness
24	R11007	Control Module
25	*R10415	Valve, Gas
26	R10419	7.5V AC Adaptor
27	R10418	Battery Back-up
28	R10416	120V Extension Module
29	R10497	Extension Harness
30	R10498	8-PIN Wire Harness
31	32153	Burner Brace Assembly
32	32151	Media Bracket Assembly (Qty. 2)
33	37116	Junction Box Cover

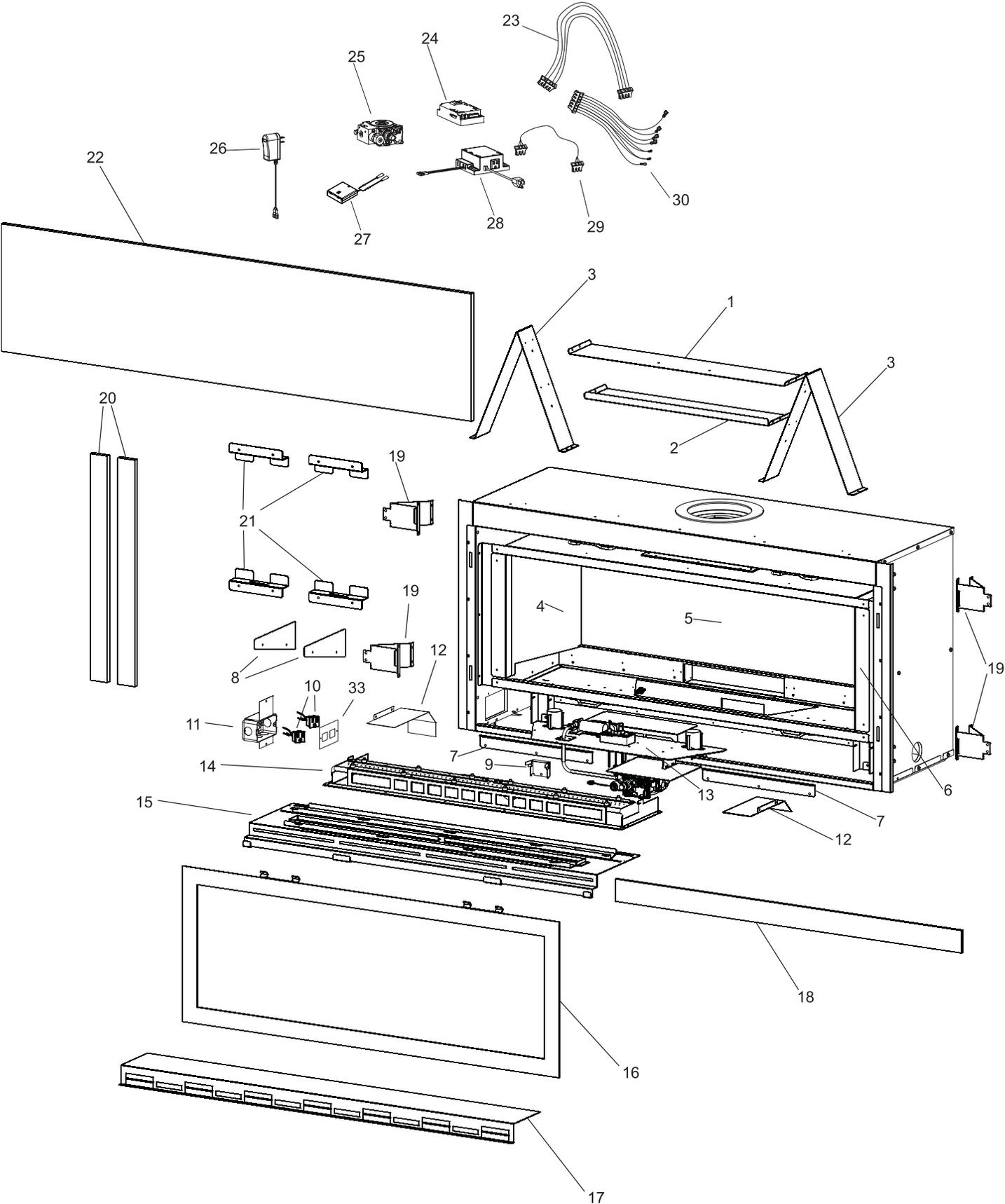
INDEX NO.	PART NO.	DESCRIPTION
N/S	28431	Flue Baffle
N/S	P209	Orifice, Nat
N/S	P211	Orifice, LP
N/S	R10928	Bulb, Halogen
N/S	R11259	Lens, Red
N/S	R10925	Glass Media
N/S	R10423	Pilot, Nat
N/S	R10424	Pilot, LP
N/S	R11393	Minimum Rate Screw, Nat
N/S	R10428	Minimum Rate Screw, LP
N/S	R11006	Remote Control
N/S	16458	Bottom Standoff (Qty. 3)
N/S	28499	Extension Module Plate
N/S	30674	Heat Shield - Left
N/S	30675	Heat Shield - Right
N/S	28501	Tubing, Manifold
N/S	R11262	Glass Clip Pull Tool

N/S - Not Shown

**\*NOTICE:** For fireplace with serial #1634000000 and earlier.  
Also order 28447 valve bracket.

**Use Only Manufacturer's Replacement Parts. Use of Any Other Parts Could Cause Injury Or Death.**

# DVLL EXPLODED VIEW



Use Only Manufacturer's Replacement Parts. Use of Any Other Parts Could Cause Injury Or Death.

# DVTL PARTS LIST

INDEX NO.	PART NO.	DESCRIPTION
1	28452	Top Standoff Support
2	28454	Top Standoff Support
3	28453	Top Standoff (Qty. 2)
4	R11443	Non-Combustible Board (Qty. 2)
5	28498	Pilot Shield
6	R11441	Three-prong receptacle (Qty. 2)
7	R3490	Junction Box
8	28499	Extension Module Mount Plate
9	28466	Junction Box Heat Shield
10	28414	Burner Base Assembly
11	28444	Support Brackets (Qty. 2)
12	28445	Media Tray
13	28443	Wind Baffle
14	28413	Burner Assembly
15	28415	Grate Assembly
16	28412	Glass Frame Assembly
17	28441	Valve Cover
18	28450	Nailing Tab (Qty. 4)
19	28428	Vertical Vent Baffle (Qty. 2)
20	28451	Rear Standoff (Qty. 4)
21	R11258	Non-combustible Board
22	R10499	5-PIN Wire Harness
23	R11007	Control Module
24	*R10415	Valve, Gas
25	R10419	7.5V AC Adaptor
26	R10418	Battery Back-up
27	R10416	120V Extension Module
28	R10497	Extension Harness
29	R10498	8-PIN Wire Harness
30	37116	Junction Box Cover

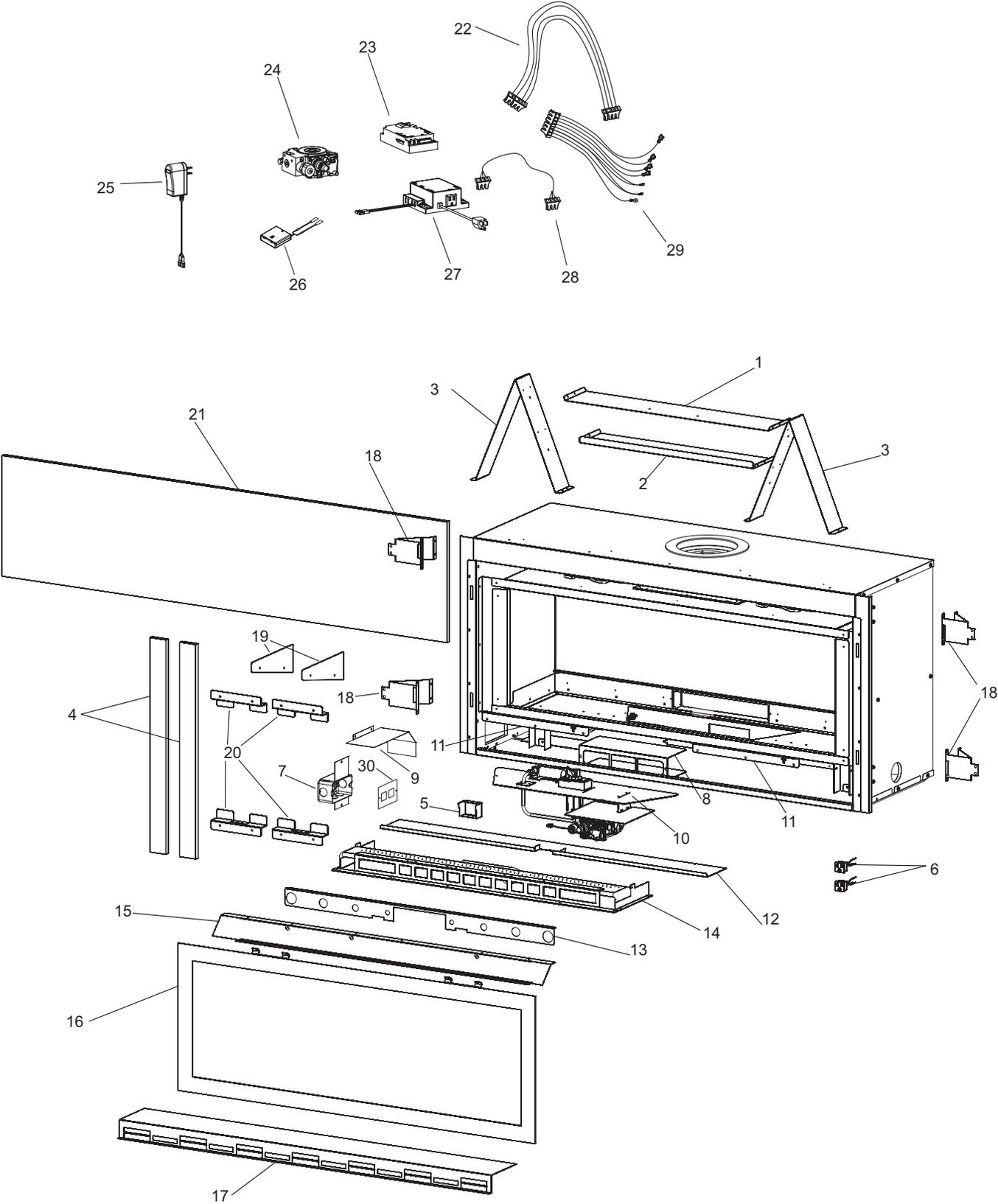
INDEX NO.	PART NO.	DESCRIPTION
N/S	28431	Flue Baffle
N/S	P211	Orifice, Nat
N/S	P210	Orifice, LP
N/S	29749	Log Set
N/S	R10423	Pilot, Nat
N/S	R10424	Pilot, LP
N/S	R11393	Minimum Rate Screw, Nat
N/S	R10428	Minimum Rate Screw, LP
N/S	R11006	Remote Control
N/S	16458	Bottom Standoff (Qty. 3)
N/S	30674	Heat Shield - Left
N/S	30675	Heat Shield - Right
N/S	R9189	Gasket, Pilot
N/S	R11262	Glass Clip Pull Tool
N/S	16458	Bottom Standoff (Qty. 3)
N/S	28499	Extension Module Plate
N/S	30674	Heat Shield - Left
N/S	30675	Heat Shield - Right
N/S	28501	Tubing, Manifold
N/S	R11262	Glass Clip Pull Tool

N/S - Not Shown

**\*NOTICE:** For fireplace with serial #1634000000 and earlier.  
Also order 28447 valve bracket.

**Use Only Manufacturer's Replacement Parts. Use of Any Other Parts Could Cause Injury Or Death.**

# DVTL EXPLODED VIEW



Use Only Manufacturer's Replacement Parts. Use of Any Other Parts Could Cause Injury Or Death.

# MASTER PARTS DISTRIBUTOR LIST

To Order Parts Under Warranty, please contact your local Empire dealer. See the dealer locator at [www.empirecomfort.com](http://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](http://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](http://www.deydistributing.com)

**Parts: Heater, Hearth and Grills**

## 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](http://www.fwwebb.com) & [www.victormfg.com](http://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](http://www.eastcoastenergy.com)

**Parts: Heater, Hearth and Grills**

# 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.

# JUNCTION BOX WIRING INSTALLATION INSTRUCTIONS

**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).**

A factory installed junction box is located on the lower left side of the fireplace. Wiring must be fed to the junction box and attached to the receptacle that is 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.

Install the receptacle into the junction box. Attach cover plate.

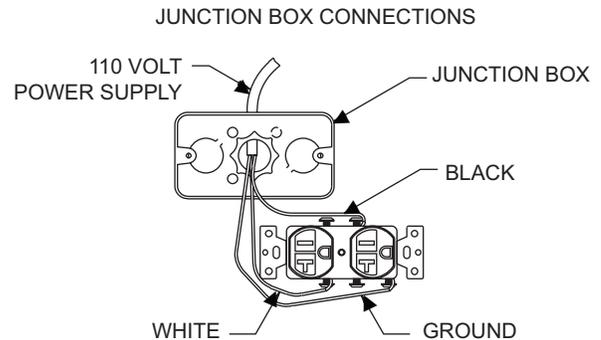


Figure 60

# ACCENT LAMP LIGHT REPLACEMENT - DVLL

Your Luxury Direct Vent Gas Fireplace (DVLL ONLY) comes equipped with our "Accent Lamp." The light has been pre-wired and is controlled from the remote.

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

1. Unplug the remote from the junction box or disconnect all power to the fireplace.
2. Remove the decorative front access panel.
3. Remove the valve cover to access the area underneath the firebox.
4. Remove the wing nuts on each side of the light socket. Lower the socket straight down.
5. Wearing gloves, pull the light bulb out of the socket. Replace the light bulb with a new one of the exact type, making sure the white gasket is in place around the bulb. **IMPORTANT: Do not handle the lamp (bulb) with bare fingers, protect with clean dry cloth.**
6. Raise the socket and bulb straight up onto the bolts and tighten the wing nuts. **DO NOT OVER-TIGHTEN.**

**NOTICE:** The lamp will pull straight out of the socket.

Replace with 35 Watt/120 Volt Halogen bulb.

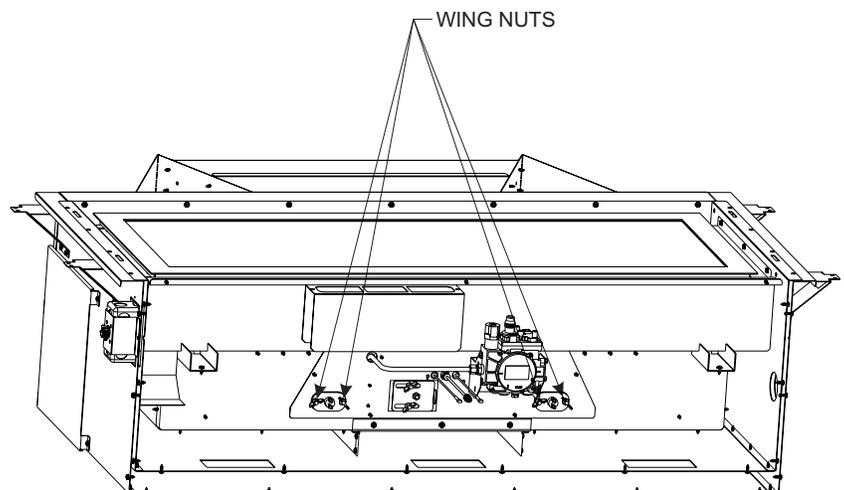
When re-installing, ensure integrity of gasket seal.

Light bulb specs if purchased at a hardware store:

- 120V, 35W
- Halogen, GY6.35
- Base, T3 Shape

Replacement Parts Number:

- Bulb R10928
- Red colored light filter R10924



UNIT SHOWN FROM THE BOTTOM WITH THE BASE REMOVED FOR CLARITY.

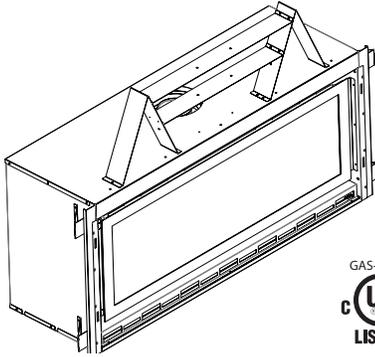
Figure 61





**Empire Comfort Systems**  
 918 Freeburg Avenue  
 Belleville, Illinois 62220-2623

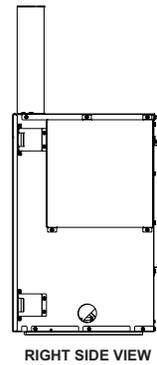
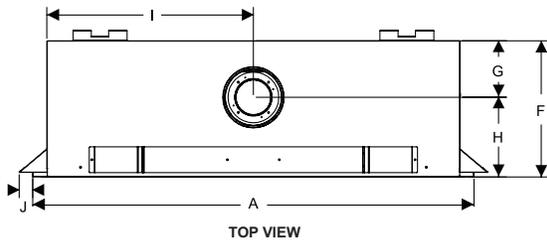
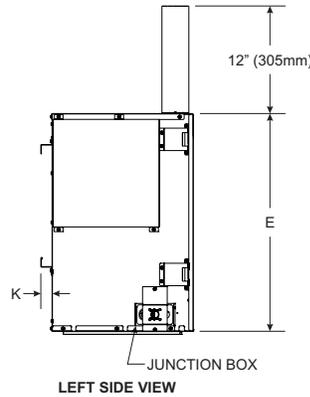
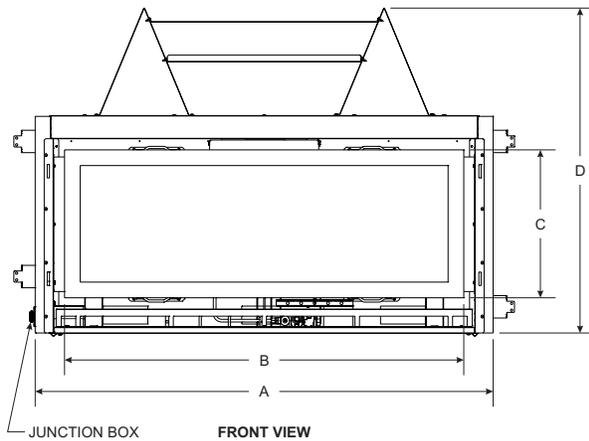
Web Site [www.empirecomfort.com](http://www.empirecomfort.com)



## Direct Vent Zero Clearance Gas Fireplace Heater

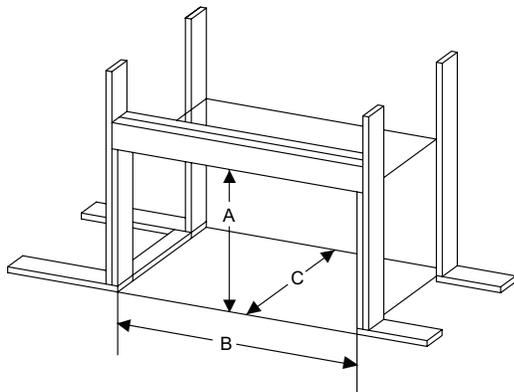
**INTERMITTENT PILOT:**  
**MODERN - DVLLFP92(N,P)-3**  
**TRADITIONAL - DVTL41BP90(N,P)-1**

### FIREBOX DIMENSIONS



DIMENSIONS in inches (metric)	
	DVLL(DVTL)
A	51-1/16 (129.7cm)
B	44-1/2 (113.0cm)
C	16-1/2 (419mm)
D	36-5/8 (930mm)
E	24-5/8 (625mm)
F	15-13/16 (402mm)
G	6-9/16 (167mm)
H	9-1/4 (235mm)
I	23-7/8 (606mm)
J	1-9/16 (40mm)
K	1-1/4 (32mm)

### FRAMING DIMENSIONS



	DVLL/DVTL
A	36-7/8 in. (937mm)
B	54-1/2 in. (138.4cm)
C	17-1/16 in. (433mm)

# 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. Empire will not warranty any Château, Boulevard, or Mantis fireplace that is not installed by the selling dealer or that dealer's direct contract agents. 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](mailto:info@empirecomfort.com) with "Consumer Relations" in the subject line.

## **Your Rights Under State Law**

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





**Empire Comfort Systems Inc.  
Belleville, IL**

If you have a general question  
about our products, please e-mail  
us at [info@empirecomfort.com](mailto:info@empirecomfort.com).

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

SINCE 1932

**[www.empirecomfort.com](http://www.empirecomfort.com)**