

No one builds a better fire

FOUNDATION SERIES - BAY

Co-linear Direct Vent Gas Fireplaces Installation and Operating Manual

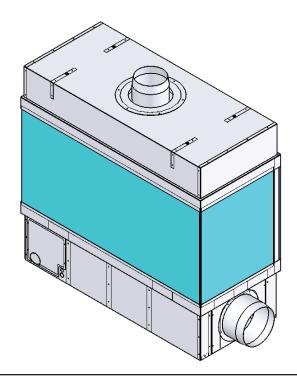
Natural Gas

FDN-4-BAY

FDN-5-BAY

FDN-6-BAY

FDN-7-BAY



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

DO NOT DISCARD

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

 Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS

- · Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

A WARNING



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

GAS-FIRED
US
LISTED

FIREPLACE
INSTITUTE

CERTIFIED

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

Heat & Glo, a brand of Hearth & Home Technologies 7571 215th Street West, Lakeville, MN 55044

Street West, Lakeville, MN 55044 www.heatnglo.com

Please contact your Heat & Glo dealer with any questions or concerns.

For the location of your nearest Heat & Glo dealer,

please visit www.heatnglo.com.

TABLE OF CONTENTS

	1	Safety Information	3
		A. Safety Icon Designations	3
		B. Important Safety Considerations	3
		C. Requirements for the Commonwealth of	4
		Massachusetts	
	2	Fireplace Specifications	5-8
		A. Bay Dimensions	5
→		B. Clearances	6-7
		C. Installation Overview	8
		D. Placement Clearance Requirements	8
	3	Prepare The Fireplace	9-11
		A. Standoff Installation	9-10
		B. Nailing Tab Installation	11
	4	Framing	12-15
		A. Bay Framing Dimensions	13
		B. Fireplace Support	14-15
	5	Mantel Requirements	16-17
→		A. Non-Combustible Zone - Using the Provided 1/2"	16
		Standoffs	
→		B. Non-Combustible Zone - Not Using the Provided	17
		1/2" Standoffs	
	6	Glass Frame Assembly	18-19
		A. Glass Frame Assembly Identification	18
		B. Install Glass Frame Assembly	19
		C. Remove Glass Frame Assembly	19
	7	Gas Line Specifications & Access	20-21
		A. Gas Line Connection	20
		B. Gas and Electrical Access Panels	21
	8	Venting	22-32
		A. Approved Venting	22-25
		B. Pitot Tube Information	26
		C. Horizontal Vent System Clearances	26
		D. Wall Pass-Through	26
		E. Vertical Terminations	27
		F. Horizontal Termination Vent Cap Location &	27-28
		Clearances	
→		G. Powervent and Air-Intake Placement Clearances	29
		H. Vertical Termination Vent Cap Location & Clear-	30
		ances	
		I. Roof Termination Cap Installation With and Without	30
		Optional Mechanical Damper	
		J. Wall Termination Installation With and Without	31
		Optional Mechanical Damper	

	K. Intake Air	33
	L. Changing From Side Intake Air to Bottom Intake Air	33
	M. Optional Universal Exhaust In Air-Intake Louver	34
9	Electrical	35-40
	A. Field Wiring (At Install)	35
	B. Field Wiring - Service and Troubleshooting	36
	C.1 Terminals 1 & 2 - LED Lights	37
	C.2 Terminals 3 & 4 - Main Flame	37
	C.3 Terminals 5 & 6 - Fireplace Power	38
	C.4 Terminals 7 & 8 - Powervent Connection	38
	C.5 Terminals 9 & 10 - Flue Damper Connection	39
	C.6 Terminals 11 & 12 - Flue Damper Prove	40
10	Finishing The Wall	41-42
	A. Finishing The Wall - Using the Provided 1/2"	41
	Standoffs	
	B. Finishing The Wall - Not Using the Provided 1/2"	42
	Standoffs	
11	Lighting & Shutdown	43-44
	A. Lighting The Fireplace	43
	B. If The Fireplace Does Not Light	44
12	Pressure Testing	45
	Inlet Pressure Test	45
13	Finalizing The Installation	45
	A. Installing The Media	45
	B. Flame Appearance	45
14	Maintenance	46-48
	A. Vent System	46
	B. Glass Cleaning and Replacement	46
	C. Replacement Parts List	47-48
	,	
	HHT Limited Lifetime Warranty	49-50

1 - SAFETY INFORMATION

This fireplace complies with ANSI Z21.50-2016·CSA 2.22-2016 "VENTED DECORATIVE GAS APPLIANCES".

Installation must conform with local building codes or in the absence of local building codes,
with the National Fuel Gas Code, ANSI Z223.1/NFPA 54 - Current Edition, or the Natural or Propane Installation Code, CSA B149.1

A. SAFETY ICON DESIGNATIONS

Various safety icons appear throughout this installation manual. Please familiarize yourself with the icons making sure you understand the serious consequences that may occur if ignored or if the products are handled inappropriately.



IMPORTANT NOTE

This indicates additional instructions that you should consider during the installation.



DO NOT

This indicates something that you must never do.



RISK OF FIRE

This designates a danger of risk of fire or damage to property.



HOT GLASS WARNING

This indicates danger of serious bodily injury or property damage if glass is handled while still hot.



CAUTION

This indicates danger of serious bodily injury or property damage.



STOP!

This indicates notes that may include reviewing warnings on other pages throughout the manual.

B. IMPORTANT SAFETY CONSIDERATIONS

- Installation and repair should be done only by a qualified service person. The appliance should be inspected by a qualified service person before use. Annual inspection by a qualified service person is required to maintain warranty. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulation air passageways of the appliance be kept clean.
- 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. 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, install an
 adjustable safety gate to keep toddlers, young children and
 other at risk individuals out of the room and away from hot
 surfaces.
- Clothing or other flammable material should not be placed on or near the appliance.
- Adequate accessibility clearances for servicing and proper operation must be maintained.
- This appliance must not share or be connected to a chimney flue serving any other appliance.
- Keep area around the appliance clear of combustible materials, gasoline and other flammable vapor and liquids.
- The flow of combustion and ventilation air must not be obstructed.

- 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 technician.
- Clean glass only when cool and only with non-abrasive commercially available cleaner.
- Do not operate this appliance with the glass/frame assembly removed, cracked or broken. Replacement of the glass assembly must only be performed by a licensed or qualified service person. DO NOT SUBSTITUTE MATERIALS.
- Do not strike or slam glass assembly.
- · Keep burner and control compartment clean.
- Do not use this fireplace if any part has been under water.
 Immediately call a qualified service technician to inspect this appliance and to replace any part of the control system and any gas control which has been under water.
- DANGER: <u>Under no circumstances should any solid fuel</u> (wood, coal, paper or cardboard etc.) be used in this appliance.
- STATE OF CA WARNING: This product and the fuels used to operate this product (liquid propane or natural gas), and the combustion of such fuels, can expose you to chemicals including benzene, which is known to the State of California to cause cancer and reproductive harm.

For more information go to: www.P65Warnings.ca.gov.

Note: The following requirements reference various Massachusetts and national codes not contained in this document.

C. Requirements for the Commonwealth of 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:

Installation of Carbon Monoxide Detectors

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

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.

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.

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.

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) in. in size, "GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS".

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.

Exemptions

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

- 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
- 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.

MANUFACTURER REQUIREMENTS

Gas Equipment Venting System Provided

When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

- Detailed instructions for the installation of the venting system design or the venting system components; and
- A complete parts list for the venting system design or venting system.

Gas Equipment Venting System NOT Provided

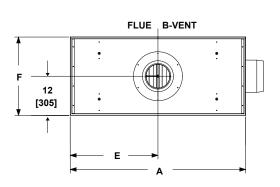
When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:

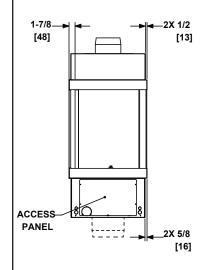
- The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and
- The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

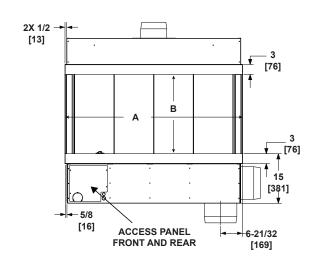
A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

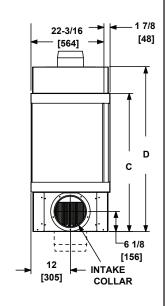
See Gas Connection section for additional Commonwealth of Massachusetts requirements.

A. BAY DIMENSIONS









SF	PECIFICATIONS		DIMENSIONS						
Model #	B-VENT FLUE	OUTSIDE AIR INTAKE	A *	B*	С	D	E	F	
	Diameter	Diameter	Finishing Width	Finishing Height	Height Firebox Top	Height Overall	Edge to Center Flue	Depth	
FDN-4-BAY	8"	10"	53-3/4 [1365]	24 [610]	42 [1067]	50 [1270]	26-7/8 [683]	24 [610]	
FDN-5-BAY	8"	10"	65-3/4 [1670]	24 [610]	42 [1067]	50 [1270]	32-7/8 [835]	24 [610]	
FDN-6-BAY	10"	10"	77-3/4 [1975]	24 [610]	42 [1067]	50 [1270]	38-7/8 [987]	24 [610]	
FDN-7-BAY	10"	10"	89-3/4 [2280]	24 [610]	42 [1067]	50 [1270]	44-7/8 [1140]	24 [610]	
A* & B*	This is the allowable finishing width and height required to fit the glass panels into the fireplace. Finishing materials shall not overlap dimensions.								

Figure 2A

	SPECIFICATIONS TABLE										
MODEL#	DESCRIPTION	B-VENT	OA	REG PV	IN-LINE PV	BTU'S	NG ORIFICE	PROPANE ORIFICE			
FDN-4-BAY	4X2 BAY	8"	10"	PVK-45	PVI-45	60,000	(3X) #43	(3X) #55			
FDN-5-BAY	5X2 BAY	8"	10"	PVK-45	PVI-45	80,000	(4X) #43	(4X) #55			
FDN-6-BAY	6X2 BAY	10"	10"	PVK-67	PVI-67	100,000	(5X) #43	(5X) #55			
FDN-7-BAY	7X2 BAY	10"	10"	PVK-67	PVI-67	120,000	(6X) #43	(6X) #55			

B. CLEARANCES

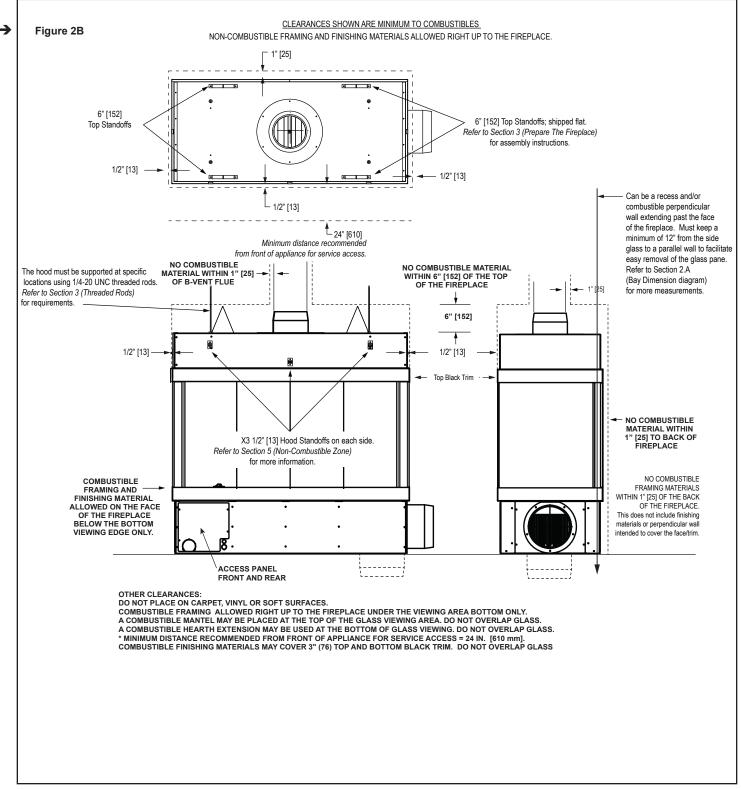


WARNING: NON-COMBUSTIBLE ZONE: USE ONLY NON-COMBUSTIBLE MATERIAL IN THIS AREA FOR ENTIRE WIDTH OF FIREPLACE. DO NOT USE WOOD, SHEETROCK, ETC., IN THIS ZONE. SEE FIGURE 2B



NOTE: OTHER CLEARANCES APPLY. ALL CLEARANCES MUST BE MAINTAINED. Refer to Section 5 (Non-Combustible Zone) and Section 10 (Finishing) for more information.

CLEARANCES		
From unit left & right sides	1"	25mm
To flooring under fireplace	0	0
Unit top to ceiling	6"	152mm
Unit side to adjacent sidewall	1"	25mm
From appliance front*	*See note	e below





NOTE: The qualified installer should follow the procedure best suited for the installation.

C. INSTALLATION OVERVIEW

- 1. Framing should be built after the fireplace is installed or extra clearance must be planned for at the intake collar. Framing must allow for vent installation.
- 2. If masonry (optional) will be used, prepare foundation for the masonry load. A lintel is required to support the added weight above the fireplace.
- Install hearth if desired.
- 4. Insert fireplace into framing.
- 5. Double check clearances to combustibles.
- 6. Complete gas line installation.
- 7. Complete electrical hook-up.
- 8. Complete venting installation.
- 9. Install facing material, mantel or cabinetry.
- 10. Install optional mirrored glass, optional logs, media, and required glass.
- 11. Verify proper operation of fireplace and all components.

D. PLACEMENT CLEARANCE REQUIREMENTS

- This fireplace must be installed on a level surface capable of supporting the fireplace and venting.
- · Fireplace must be placed directly on wood or non-combustible surface (not linoleum or carpet) extending entire depth and width of fireplace.
- · Due to high surface temperatures, fireplace should be located out of traffic and away from furniture and draperies.
- This fireplace may be installed in a bedroom.

3 - PREPARE THE FIREPLACE



CAUTION: FIREPLACE IS NOT LOAD-BEARING.



NOTE: OTHER CLEARANCES APPLY. ALL CLEARANCES MUST BE MAINTAINED.

A. STANDOFF INSTALLATION



STEP 1: Refer to Figure 3A.1

The (4) standoffs will be shipped in a flat state placed on the firebox top. Locate the standoffs and loosen the screws holding them in place.

STANDOFFS

The Bay fireplace has a quantity of four (4) standoffs that are secured with two (2) screws each (left and right sides of top).

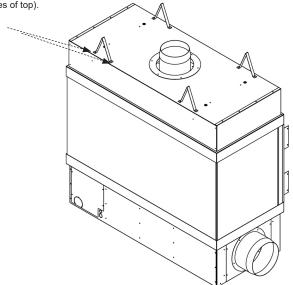
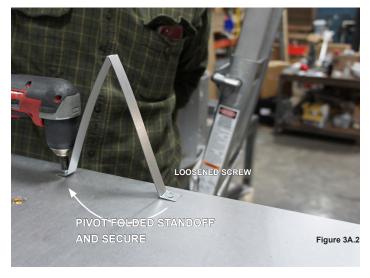


Figure 3A.3 Placement of the standoffs on the Bay design fireplace.



STEP 2: Refer to Figure 3A.2

Fold the center of the standoff up and both ends out at the perforated lines. Using Figure 3A.2 for reference, locate the second pre-installed screw on the firebox top at each standoff location. Remove the screw, pivot the folded standoff into location and re-install the screw to secure the standoff. Tighten up the screw that was loosened in Step 1.

BRACE REMOVAL

1. Remove the shipping brace from the left and right sides as highlighted in Figure 1. Each brace is retained with eight sheet metal screws.

The four sheet metal fasteners removed from the rear panel of each shipping brace **MUST** be replaced prior to placing the appliance into the wall cavity.

All shipping braces can be discarded after removal.

IMPORTANT: The left and right braces highlighted in Figure 3A.4 **MUST** be removed and screws replaced (where applicable) prior to placement of appliance in wall cavity. **DO NOT** remove any other temporary braces at this time.

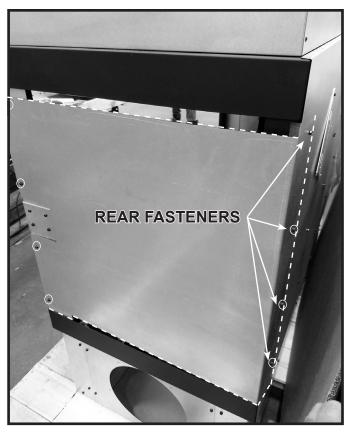


Figure 3A.4 Shipping Brace

NAILING FLANGES

Bay fireplace has a quantity of four (4) nailing flanges that are secured with two (2) screws each (right side and left back of fireplace).

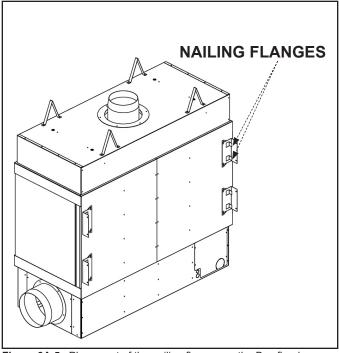


Figure 3A.5 Placement of the nailing flanges on the Bay fireplace.

3 - PREPARE THE FIREPLACE

B. NAILING TAB INSTALLATION



STEP 1: Refer to Figure 3B.1

The four (4) nailing flanges will be shipped in a flat state placed on the firebox back. Locate the nailing flanges and remove the screws holding them in place.



STEP 2: Refer to Figure 3B.2

Bend the two (2) small tabs out on each nailing flange at the perforated lines.
Using Figure 3A.4 for reference, locate the pre-drilled holes on the firebox side each nailing flange will be placed at.



STEP 3: Refer to Figure 3B.3 & Figure 3B.4

Set each nailing flange in place and secure using two (2) screws each. Bend the nailing flange out from fireplace at the remaining perforated line.





The nailing flanges will ensure the 1" minimum clearance is kept to combustible framing. Refer to Figure 3B.5

Depending on your installation and how you frame it out, you may not use the provided nailing flanges.



NOTE: Framing dimensions should allow for wall covering thickness and fireplace facing materials. When using a hearth, adjust rough opening size as necessary to maintain at least minimum clearance requirements.



CAUTION: Install fireplace on metal, concrete or hard wood surface extending the full width and depth of fireplace.



CAUTION: Vent cap location must be in compliance with guidelines in Section 8 of this manual.



CAUTION: FIREPLACE IS NOT LOAD-BEARING.

If masonry is to be used (optional), prepare the necessary foundation for the masonry load. When masonry construction is being used, a lintel must be used over top of fireplace to support the added weight. Build hearth to desired size and height. If a hearth extension is desired, combustible material may be used.



NOTE: Refer to Dimensions section for allowable finishing dimensions required to fit the glass panels into the fireplace. Finishing materials must not overlap the dimensions highlighted in Figure 2A. Never cover the glass with finishing materials.



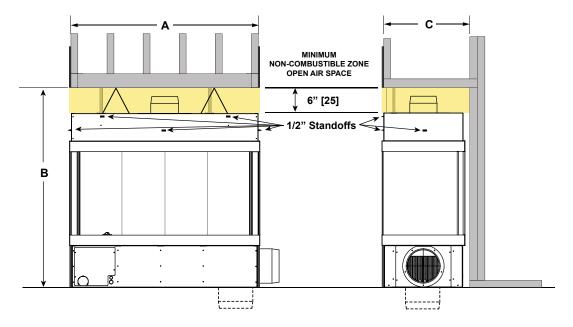
NOTE: DO NOT pierce any of the black painted surfaces with screws, rivets, etc. This includes the three inch black top and bottom glass trim and any painted sides adjacent to the glass.

A. BAY Framing Dimensions

IMPORTANT: FIREPLACE IS NOT LOAD-BEARING.

Refer to Section 5A for information on the 1/2" standoffs.

Refer to Section 4B for information regarding supporting the fireplace hood with 1/4-20 threaded rods.



NOTE: Fireplace MUST be square in both directions prior to finishing or the glass will not fit properly.

ВАҮ							
Model #	A	B	C				
	WIDTH	HEIGHT	DEPTH				
FDN-4-BAY	52 3/4	56	25				
	[1,340]	[1,422]	[635]				
FDN-5-BAY	64-3/4	56	25				
	[1,645]	[1,422]	[635]				
FDN-6-BAY	76-3/4	56	25				
	[1,949]	[1,422]	[635]				
FDN-7-BAY	88-3/4	56	25				
	[2,254]	[1,422]	[635]				

IMPORTANT FRAMING NOTES:

FRAMING SHOULD BE BUILT AFTER THE FIREPLACE IS INSTALLED OR EXTRA CLEARANCE MUST BE PLANNED FOR AT THE INTAKE COLLAR AND FOR THICKNESS OF MATERIALS USED .

FRAMING DIMENSIONS ASSUMING 1/2" [13] DRYWALL AND NON-COMBUSTIBLE BOARD USED.

THESE DIMENSIONS REPRESENT THE FRAMING DIMENSIONS FOR COMBUSTIBLE MATERIAL.

NON-COMBUSTIBLE FRAMING AND FINISHING MATERIALS MAY BE USED WITHIN THESE DIMENSIONS RIGHT UP TO THE UNIT.

NO COMBUSTIBLE MATERIAL WITHIN 6" [152] OF THE TOP OF THE FIREPLACE.

NO COMBUSTIBLE MATERIAL WITHIN 1" [25] OF THE SIDES AND BACK OF THE FIREPLACE.

 ${\tt COMBUSTIBLE\ MATERIAL\ SHALL\ NOT\ BE\ PLACED\ DIRECTLY\ ON\ THE\ FACE\ OF\ THE\ FIREPLACE,\ TOP\ AND\ SIDES.}$

STEEL SURFACE MAY BE COVERED WITH NON-COMBUSTIBLE FINISHING MATERIAL.

1" [25] CLEARANCE TO THE B-VENT MUST BE MAINTAINED.

Figure 4A

B. Fireplace Support

Threaded Rods

The hood must be supported using .250-.20 UNC threaded rods at the locations noted as "Required" in Figure 4B.1. Additional threaded rods can be installed in the locations noted as "Optional" in Figure 4B.2.

The hood shall be supported at specific locations using .250-20 UNC threaded rods. See Section 4.B.							The hood shall be supported at specific locations using .250-20 UNC threaded rods. See Section 4.B.						
	More top	view din	nensions for	und in Section	1 2.A.		N	lore top	view dimen	sions found	d in Section 2	.A.	
MODEL	ODEL QTY J K			MODEL	QTY		J		K	L			
FDN-4-BAY	4	5 in.	127 mm	8 7/8 in.	225 mm	FDN-6-BAY	8	5 in.	127 mm	6 7/8 in.	175 mm	26 7/8 in.	683 mi
FDN-5-BAY	4	5 in.	127 mm	11 7/8 in.	302 mm	FDN-7-BAY	8	5 in.	127 mm	6 7/8 in.	175 mm	32 7/8 in.	835 mi
	K	REQ	UIRED DED RODS		FLUE B-VENT REQUII THREADE	THRE	PTIONA ADED F		FLUE B-	VENT THE	OPTIONAI HREADED R		

Figure 4B.1

Support Brackets

Temporary support brackets are put in place for shipping and support during the installation process. They must stay in place until the fireplace hood is fully supported. See Figure 4B.2.

- 1. Install the threaded rods in the locations noted as "Required" in Figure 4B.1.
- 2. Level the fireplace.
- 3. Ensure fireplace is fully supported and leveled and then remove support brackets.

Caution! Risk of Injury! DO NOT remove support brackets until fireplace is fully supported and level.

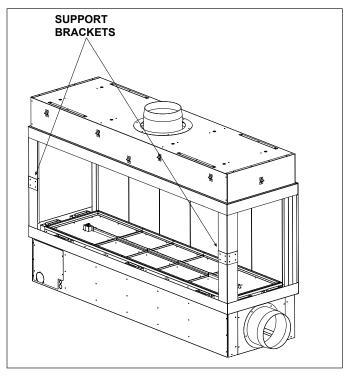


Figure 4B.2 Temporary Shipping Support Bracket

Threaded Rod Installation

There are several different ways to support the fireplace top and one option is to use a Unistrut installed over the fireplace that is secured to structurally sound framing. Refer to Figure 4B.3 or 4B.4.

For each threaded rod installation you may need: Up To Qty 1 Qty 1 Qty 1 Qty 1 1/4-20 Threaded 1/4-20 1/4-20 Fender Qty 3 Super Strut® 1/4-20 Quick Turnbuckle Threaded **Evebolt** Washer or Uni-Strut® Link Rod or All Nut **Thread**



Figure 4B.3

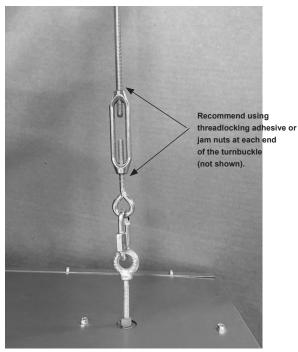


Figure 4B.4

- Install the threaded rod fully into the threaded fastener located on top of the fireplace.
- Insert the threaded rod into a hole in the Unistrut[®] straight above the threaded fastener located on top the fireplace.
- Use a fender washer and nut on the top end of the threaded rod to adjust the height of the fireplace opening. Make sure the opening dimension is exact all the way around. Use threadlocking adhesive to secure the nut from from loosening (not shown).
- If the top of the threaded rod is to be secured into blind threaded fastener or if there isn't clearance above to adjust the rod, you can use a turnbuckle to adjust the height.
- Install an eyebolt fully into the threaded nut located on top of the fireplace.
- Use a quick link to connect the eye bolt to the reverse thread side of the turnbuckle.
- Thread the threaded rod into the normal side of the turnbuckle.
- Use the threadlocking adhesive or jam nuts to secure the turnbuckle from loosening.

5 - MANTEL REQUIREMENTS

A. NON-COMBUSTIBLE ZONE - USING THE PROVIDED 1/2" STANDOFFS

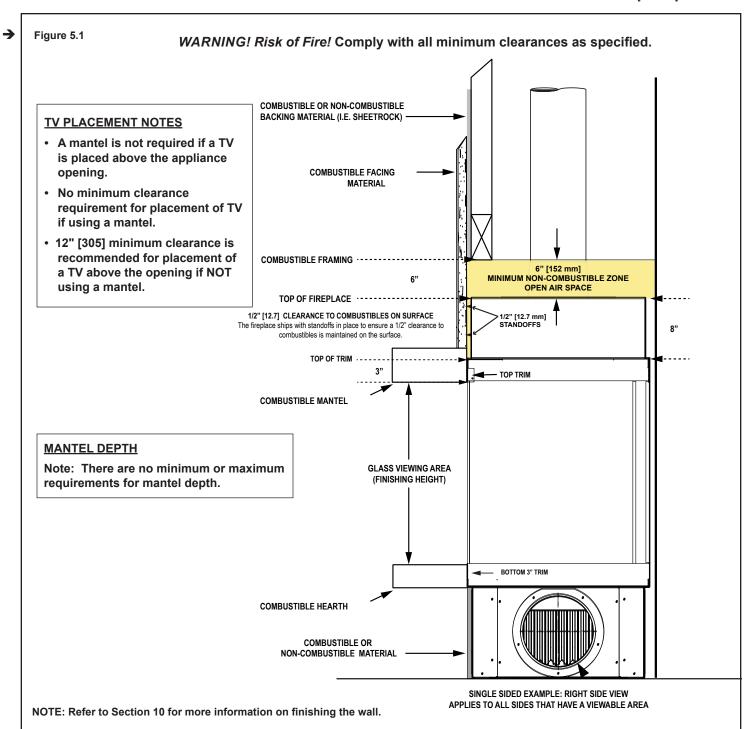
The fireplace has standoffs installed on the front of the fireplace standard from the factory. They are located on the upper left, center and right front of the fireplace and are to ensure that the 1/2" [12.7mm] required clearance to combustibles on the surface of the fireplace is maintained.

If the standoffs are removed, only non-combustible material can be installed against the surface of the fireplace such as a non-combustible backer cement board. 1/2" [12.7mm] minimum thickness must be used in the 15" [381mm] between the top of the 3" trim to the combustible framing the full width of the fireplace. The 15" includes a 7" [178mm] minimum above the top of the fireplace that is recommended for ease of attachment.

Refer to Figure 5.1 for a standard installation using the provided 1/2"standoffs. Refer to Figure 5.2 for requirements when not using the provided 1/2" standoffs.



1/2" [12.7mm] Standoff



5 - MANTEL REQUIREMENTS

B. NON-COMBUSTIBLE ZONE - NOT USING THE PROVIDED 1/2" STANDOFFS

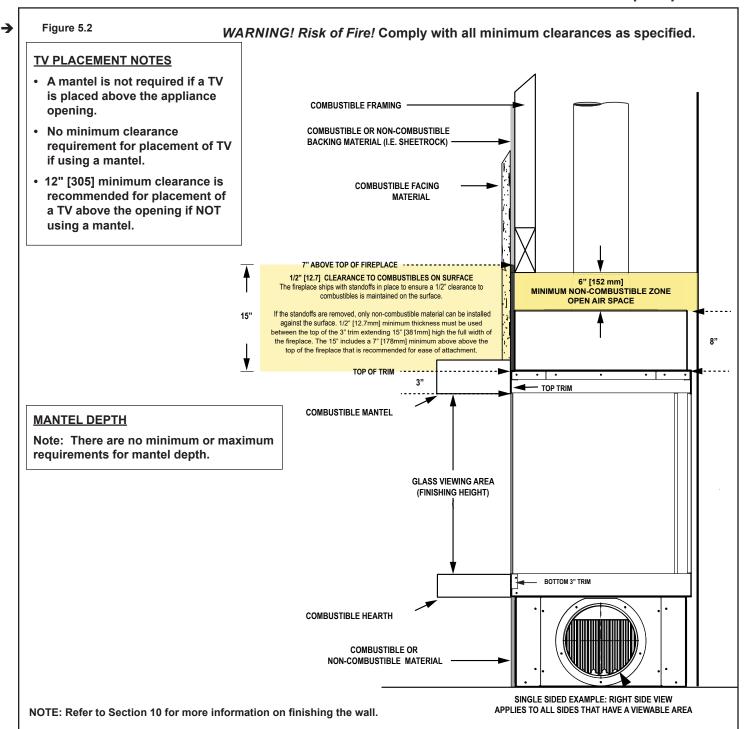
The fireplace has standoffs installed on the front of the fireplace standard from the factory. They are located on the left, center and right front hood of the fireplace and are to ensure that the 1/2" [12.7mm] required clearance to combustibles on the surface of the fireplace is maintained.

If the standoffs are removed, only non-combustible material can be installed against the surface of the fireplace such as a non-combustible backer cement board. 1/2" [12.7mm] minimum thickness must be used in the 15" [381mm] between the top of the 3" trim to the combustible framing the full width of the fireplace. The 15" includes a 7" [178mm] minimum above the top of the fireplace that is recommended for ease of attachment.

Refer to Figure 5.2 for requirements when not using the provided 1/2" standoffs. Refer to Figure 5.1 for a standard installation using the provided 1/2" standoffs.

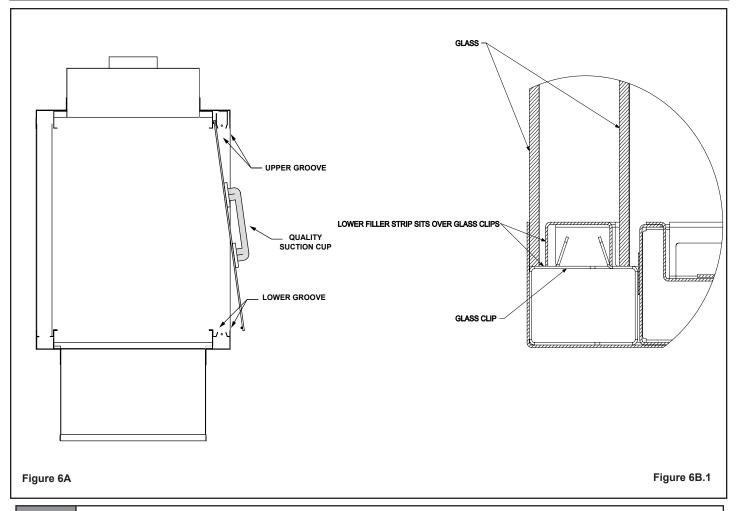


1/2" [12.7mm] Standoff



6 - GLASS FRAME ASSEMBLY

A. GLASS FRAME ASSEMBLY IDENTIFICATION





CAUTION: TO PREVENT GLASS FRAME ASSEMBLY FROM FALLING FROM FIREPLACE AND BECOMING DAMAGED, FOLLOW THE INSTRUCTIONS EXACTLY WHEN REMOVING AND INSTALLING GLASS FRAME ASSEMBLY.



STOP: DO NOT OPERATE THIS FIREPLACE WITH THE GLASS REMOVED, CRACKED OR BROKEN. REPLACEMENT OF GLASS ASSEMBLY SHOULD BE DONE BY A LICENSED OR QUALIFIED SERVICE PERSON.



WARNING! RISK OF INJURY! DO NOT remove glass until it is cooled to room temperature. Glass breakage could occur.



NOTE: GLASS REMOVAL AND INSTALLATION MUST BE PERFORMED WITH TWO PEOPLE.



NOTE: Glass must be removed using quality suction cups.

DO NOT attempt to remove the glass without using proper suction cups.



NOTE: IN CASE OF CHIPPED OR BROKEN GLASS

Have your dealer assist you with contacting Hearth & Home Technologies to get the proper glass specifications.

6 - GLASS FRAME ASSEMBLY

Refer to Glass Frame Assembly Identification Figures 6A & 6B.1 when installing and removing the glass frame assembly.

B. INSTALL GLASS FRAME ASSEMBLY



Figure 6B.2 - Edge Protector



Figure 6B.3 - Vertical Trim Piece

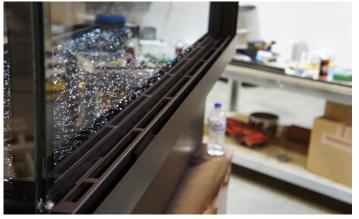


Figure 6B.4 - Horizontal Trim Piece

IMPORTANT: PLASTIC EDGE PROTECTORS

The fireplace is shipped with plastic edge protectors on the outer panes of glass only.

If the edge protectors on the outer panes of glass are not installed, the glass may rattle during operation. See Figure 6B.2.

Inner Glass

- 1. Unwrap the panes of glass carefully making sure to protect the edges.
- 2. Apply the suction cups to the inner glass assembly, following instructions included with the suction cups.
- 3. Lift the glass into place. The top edge slips into the top groove, lift into the groove until the bottom is clear of the bottom trim. Slide the glass down into the inner bottom groove. See Figure 6A.
- 4. Push inner trim vertical panels into place on each side. See Figure 6B.3.
- 5. Place the lower trim panel between the lower glass clips. Slide back against the vertical trim piece. See Figure 6B.4.
- Repeat process for all inner glass panels on appliance.

Outer Glass

- 7. Apply the suction cups to the outer unframed glass (which has the U-shaped edge protector) and lift it into place in the same manner as the inner glass.
- 8. Repeat process for installing all outer glass panels on appliance.

C. REMOVE GLASS FRAME ASSEMBLY



WARNING! RISK OF INJURY! DO NOT remove glass until it is cooled to room temperature. Glass breakage could occur.

- 1. Apply the suction cups to the outer glass panel following the instructions included with the suction cups.
- 2. Gently lift the glass until the bottom edge is clear of the groove it sits in.
- 3. Bring the bottom edge of the glass towards you while lowering it to disengage it from the top groove.
- 4. Set the glass on a padded surface to protect it. IMPORTANT: Protect the glass's edges.
- 5. Remove the lower trim panel that sits between the layer of glass.
- 6. Remove the inner trim vertical panels.
- 7. Using the suction cups, remove the inner panel in the same manner.

7 - GAS LINE SPECIFICATIONS & ACCESS

This fireplace is manufactured for use with Natural Gas or Propane.



CAUTION: Installation of the gas line must only be done by a qualified person in accordance with local building codes, if any. If not, follow ANSI Z223.1.



NOTE: The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at pressures in excess of ½ psi.



NOTE: 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 line at test pressures equal to or less than $\frac{1}{2}$ psi (3.5 kPa).



NOTE: For high altitude installations above 2000 feet, fireplace does not need to be derated.

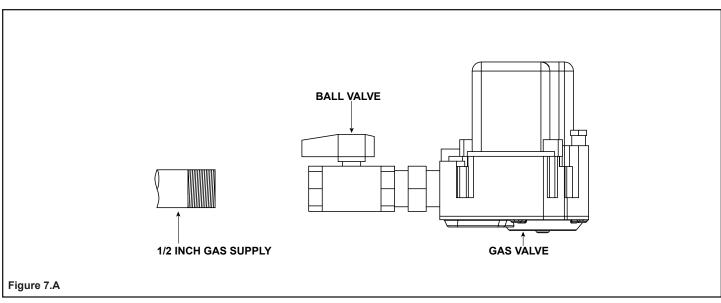
A. GAS LINE CONNECTION

GAS LINE CONNECTION	Propane	Natural Gas
MINIMUM INLET GAS PRESSURE	11.0 inches W.C. (recommended)	7.0 inches W.C. (recommended)
MAXIMUM INLET GAS PRESSURE	14.0 inches W.C.	10.0 inches W.C.
MANIFOLD PRESSURE (HI)	10.0 inches W.C.	3.5 inches W.C.
ORIFICE SIZE	See Specifications Table in Section 2.A.	See Specifications Table in Section 2.A.
INPUT BTU/HR	See Specifications Table in Section 2.A.	See Specifications Table in Section 2.A.

Note: Have the gas supply line installed in accordance with local codes, if any. If not, follow ANSI Z223.1. Installation should be done by a qualified installer approved and/or licensed as required by the locality. (In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter).

Note: A listed (and Commonwealth of Massachusetts approved) 1/2 in. (13 mm) T-handle manual shut-off valve and flexible gas connector are connected to the 1/2 in. (13 mm) control valve inlet.

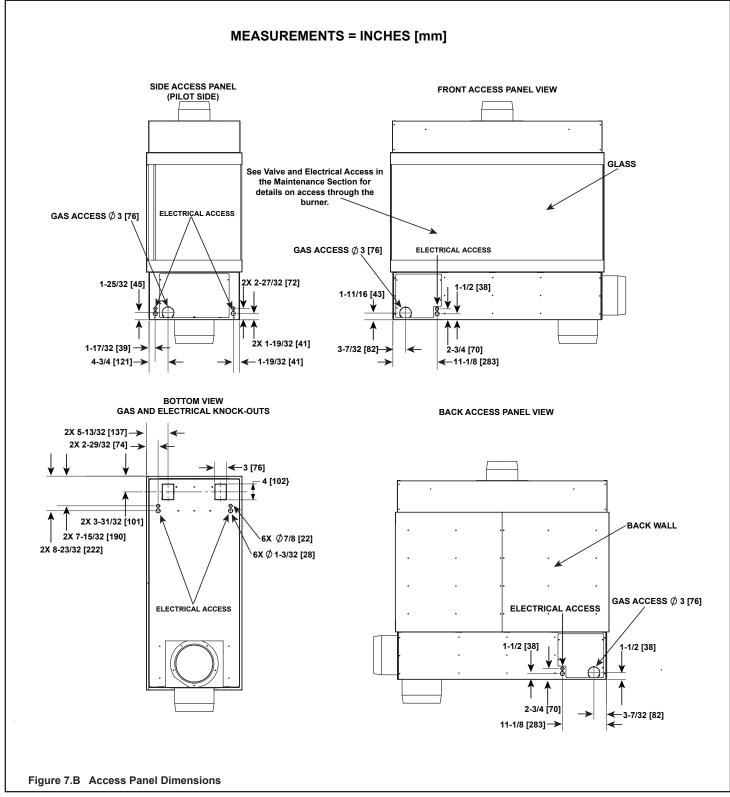
• If substituting for these components, please consult local codes for compliance.



7 - GAS LINE SPECIFICATIONS & ACCESS

B. GAS AND ELECTRICAL ACCESS PANELS

Each fireplace will have four points of access for installation and service. There are access panels on the pilot side of the fireplace front, side and rear of the fireplace. Plan in advance of the installation which access location will be used and accommodate for it in the finish work to allow for easy access to service later. You also have access through the interior of the fireplace by removing the mesh on the burner pan in the pilot area. There are gas and electrical gas knock-outs on the bottom if you need to come up from below the fireplace.





CAUTION: Consult the local and national installation codes to assure adequate combustion and ventilation air is available.



NOTE: Flame height and appearance will vary depending upon venting configuration and type of fuel used. Venting requirements apply to both Natural and Propane gas.



STOP: MAINTAIN ALL CLEARANCES AS STATED IN THIS INSTALLATION MANUAL.

A. APPROVED VENTING

Model #		B-VENT	OUTSIDE AIR	POWER VENT	IN-LINE POWER VENT
FDN-4-BAY	4X2 BAY	8"	10"	PVK-45	PVI-45
FDN-5-BAY	5X2 BAY	8"	10"	PVK-45	PVI-45
FDN-6-BAY	6X2 BAY	10"	10"	PVK-67	PVI-67
FDN-7-BAY	7X2 BAY	10"	10"	PVK-67	PVI-67

Refer to the vent systems manufacturer's installation manual for complete installation instructions.

Installation must conform with the venting requirements and restrictions as outlined in this manual.

SEE CHART ABOVE FOR SIZE diameter B-Type Venting that must be used. UL/CSA approved B-Vent only.

DO NOT decrease the vent size.

Vent runs are approved for up to 110 feet with quantity of eleven 90 degree elbows.

Vent runs may also contain a downward component. The downward component may be a maximum of 6 feet plus the distance to the center line of the elbow. See Figure 8A.1.

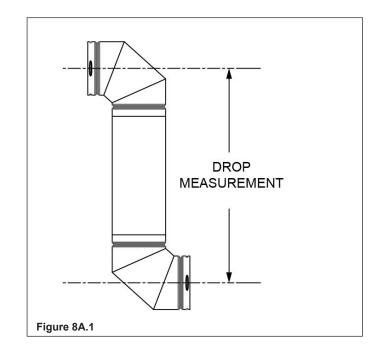
This will be about 87" for 8" diameter pipe and 92" for 10" diameter pipe. Due to natural buoyancy of flue gas products, venting downward increases restriction.

Every inch of vertical drop counts as triple inches subtracted off the total vent run.

Example: a maximum drop of 92" means the total allowed vent run is decreased by 276" (23')

Once a downward component has been utilized, the vent cannot go upwards again. Moisture may get trapped in the vent pipe.

Important: Be sure to do your own calculations based on the center line dimension given from the pipe manufacture you are using for your installation.

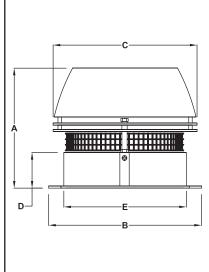


Available Power Venting

A power vent (PVK-45 or PVK-67) is approved for use with this appliance. It is crucial that all B-Vent pipe and elbow joints, and the longitudinal seam are sealed using a high temperature RTV Silicone and/or foil tape.



NOTE: All pipe and elbow joints must be sealed. This includes the longitudinal seam on the pipe. High Temp RTV Silicone and/or foil tape MUST be used on each joint/seam. Failure to do so may cause lack of vacuum and may not trigger the vacuum switch.



MODEL	PVK-45	PVK-67
Fan Type	Axial vane	Axial vane
Motor Type	Totally enclosed, variable speed, Class H	Totally enclosed, variable speed, Class H
Voltage (VAC)	1 x 120	1 x 120
RPM	1600	1600
CFM	950	1400
Amperage (Amps)	1.2	1.4
Motor Output HP (kW)	1/9 (0.08)	1/7 (0.1)
Weight lbs (kg)	37 (17)	47 (21)
Dimension A in. (mm)	11.5 (292)	13.1 (334)
Dimension B x B in.(mm)	14.3 (364)	16.6 (422)
Dimension C in. (mm)	13.5 (344)	15.5 (395)
Dimension D in. (mm)	3.3 (85)	3.9 (100)
Dimension E in. (mm)	11.6 (294)	13.5 (342)
Temperature Rating-Intermittent	575 °F / 300 °C	575 °F / 300 °C
Temperature Rating-Continuous	482 °F / 250 °C	482 °F / 250 °C

Figure 8A.2

Chimney Collar Dimensions

A chimney collar is included for use with the PVK-45 and PVK-67. The chimney collar is used to attach the PVK power vent. Figures 8A.3 and 8A.4 show the dimensions of the chimney collar.

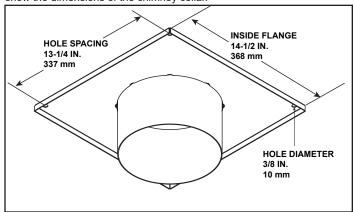


Figure 8A.3 8 Inch Chimney Collar Dimensions (PVK-45)

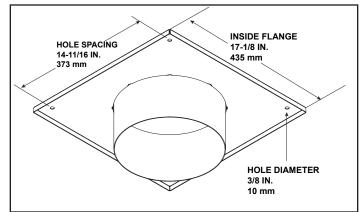


Figure 8A.4 10 Inch Chimney Collar Dimensions (PVK-67)

Available In-Line Power Venting

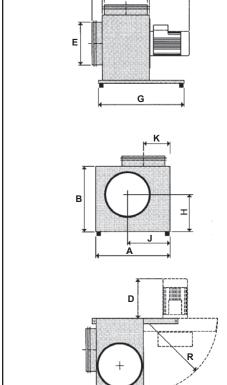
An in-line power vent (PVI-45 or PVI-67) is approved for use with this appliance. It is crucial that all B-Vent pipe and elbow joints, and the longitudinal seam are sealed using a high temperature RTV Silicone and/or foil tape.



2.37 in. (60 mm)

NOTE: All pipe and elbow joints must be sealed. This includes the longitudinal seam on the pipe. High Temp RTV Silicone and/or foil tape MUST be used on each joint/seam.

Failure to do so may cause lack of vacuum and may not trigger the vacuum switch.



MODEL		PVI-45	PVI-67 in.
Fan Type		Centrifugal Impeller (F-Wheel)	Centrifugal Impeller (F-Wheel)
Motor Type		TEFC	TEFC
Voltage	(VAC)	1 x 120	1 x 120
Amperage	Amps	2.9	5.3
Motor Output	hp (kW)	3/7 (.32)	13/16 (.61)
RPM		1600	1600
Weight	lbs (kg)	38 (17)	60 (27)
Duct Connection (E)	in. (mm)	8 (203)	8 (203)
Dimension A	in. (mm)	14.57 (370)	16.15 (410)
Dimension B	in. (mm)	12.60 (320)	13.98 (355)
Dimension C	in. (mm)	9.26 (235)	9.26 (235)
Dimension D	in. (mm)	5.52 (140)	7.68 (195)
Dimension E	in. (mm)	7.9 (200)	7.9 (200)
Dimension G	in. (mm)	15.75 (400)	15.75 (400)
Dimension H	in. (mm)	7.10 (180)	7.88 (200)
Dimension J	in. (mm)	8.27 (210)	9.26 (235)
Dimension K	in. (mm)	5.12 (130)	5.12 (130)
Dimension R	in. (mm)	14.57 (370)	16.15 (410)

Figure 8A.5

IN-LINE POWERVENT PREPARATION - PVI-67

Perform the following steps when installing the PVI-67 on six foot and seven foot models.

- Attach the provided 10 inch B-Vent collar to the intake side of the powervent. The intake side is located opposite the fan motor as shown in Figure 8A.6. The 10 inch B-Vent collar is packaged separately from the powervent. See Figure 8A.7.
- 2. Note the silhouette circle printed on the intake side of the powervent. The pre-drilled screw holes within the circle will be matched with the holes on the intake collar of the base plate. See Figure 8A.8.
- Place the intake collar base plate onto the silhouette, matching up the holes as shown in Figure 8A.9. Fasten the base plate to the silhouette using five selftapping screws.
- 4. Add the rope gasket included with the kit to the outlet side of the inline powervent.
- 5. An adapter to increase from eight inch pipe to ten inch pipe is required on the outlet side of the in-line powervent. The adapter is included in the PVI-67 kit. See Figure 8A.10. Connect the adapter directly to the eight inch outlet collar of the in-line powervent. Connect the ten inch exhaust B-Vent to the collar and continue the vent run.

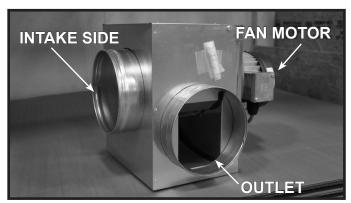


Figure 8A.6 In-Line Powervent (PVI-67)

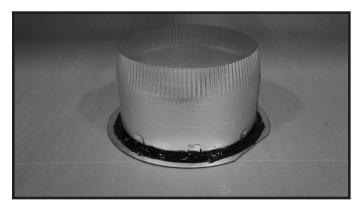


Figure 8A.7 Ten Inch B-Vent Collar

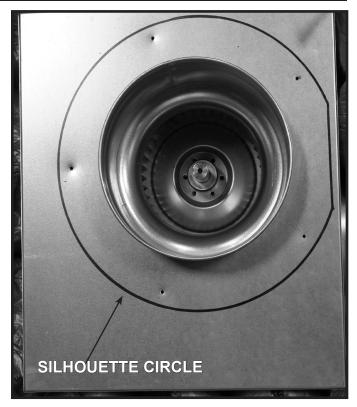


Figure 8A.8 Silhouette Circle on Intake

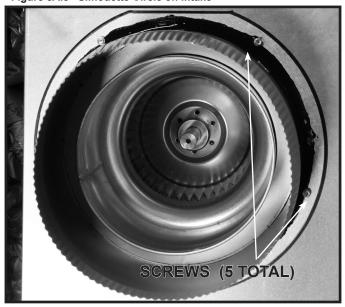


Figure 8A.9 Base Plate Fastened to Intake



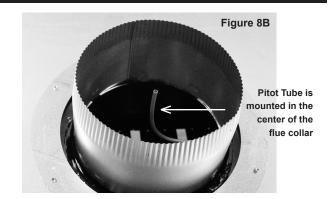
Figure 8A.10

B. PITOT TUBE INFORMATION

There is a 1/4" pitot tube mounted in the center of the flue collar and is connected to the pressure switch (Figure 8B).

This monitors the pressure in the flue and is necessary for proper operation. Take care to keep the end of the tube clean.

IMPORTANT: THIS TUBE MUST NOT BE BENT, CLOGGED, REMOVED, OR ALTERED IN ANY WAY.



C. HORIZONTAL VENT SYSTEM CLEARANCES							
ALL APPROVED VENTING	ТОР	воттом	SIDES				
HORIZONTAL	1 inch (25mm)	1 inch (25mm)	1 inch (25mm)				

D. WALL PASS-THROUGH - Follow all local codes for requirement of firestops.

E. VERTICAL TERMINATIONS

- The Foundation Series fireplace must terminate with the approved powervent termination cap.
- NO SUBSTITUTION IS ACCEPTABLE.
- Carefully follow the instructions included with the approved powervent termination cap.
- DO NOT use an additional speed control on this powervent.
- · You must use the included Capacitor.

F. HORIZONTAL TERMINATION VENT CAP LOCATION & CLEARANCES

This gas appliance must not be connected to a chimney serving any other appliance.

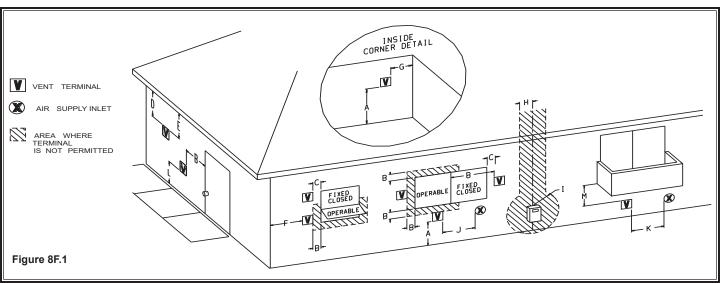
- DO NOT RECESS TERMINATION KIT INTO OUTSIDE BUILDING MATERIALS i.e.: brick, stone, siding, etc. If necessary, extend framing so
 that termination kit will be exposed once building materials are installed.
- Vent termination must not be located where it will become plugged by snow or other material. The flow of combustion and ventilation air must not be obstructed.

LOCATION CLEARANCES:

- A. Above grade, veranda, porch, deck, balcony 12 inches (305 mm).
- B. Operable window or door 12 inches (305 mm).
- C. Permanently closed window* 12 inches (305 mm) (recommended to prevent condensation on window).
- D. Ventilated soffit* 24 inches (610 mm).
- E. Unventilated soffit* 12 inches (305 mm).
- F. Outside corner* 6 inches (152 mm).
- G. Inside corner* to non-combustibles 12 inches (305 mm). Inside corner* to combustibles 24 inches (610 mm).
- H. Meter / Regulator: Not to be installed above a gas meter/regulator assembly within 3 ft. (914 mm) horizontally from the center-line of the regulator.
- I. Gas Service regulator vent outlet 3 ft. (914 mm).
- J. Non-mechanical air supply inlet to building or the combustion air inlet to any other appliance.
 - US: 9 inches (229 mm) CANADA: 12 inches (305 mm).
- K. Mechanical air supply inlet.
 - US: 3 ft. (914 mm) above if within 10 ft. (3.05 m) horizontal. Massachusetts installations: 10 ft. (3.05 m).
 - CANADA: 6 ft. (1.83 m).
- L. Above paved side-walk or paved driveway located on public property 7 ft. (2.13 m).
- M. Under veranda, porch, deck, or balcony (must be fully opened on a minimum of 2 sides) 24 inches (610 mm).
- N. Between two horizontal terminations 12 inches (305 mm). (Not shown in Figure 8F.1).
- O. Between two vertical terminations 12 inches (305 mm). Terminations may be same height. (Not shown in Figure 8F.1).
- N & O: Minimum of 12 inches (305 mm) required when two exhaust termination caps are placed next to each other. Measurement must be taken from inside edge of one steel chimney adapter to the inside edge of the other steel chimney adapter. A metal divider plate with same length and height as termination cap is required to be installed between the caps. Divider plate is not required if caps are at least 24 inches (610 mm) apart, measured edge to edge.
- P. Above furnace exhaust or inlet 12 inches (305 mm). (Not shown in Figure 8F.1).
- *Clearance must be in accordance with local installation codes & the requirements of the gas supplier.

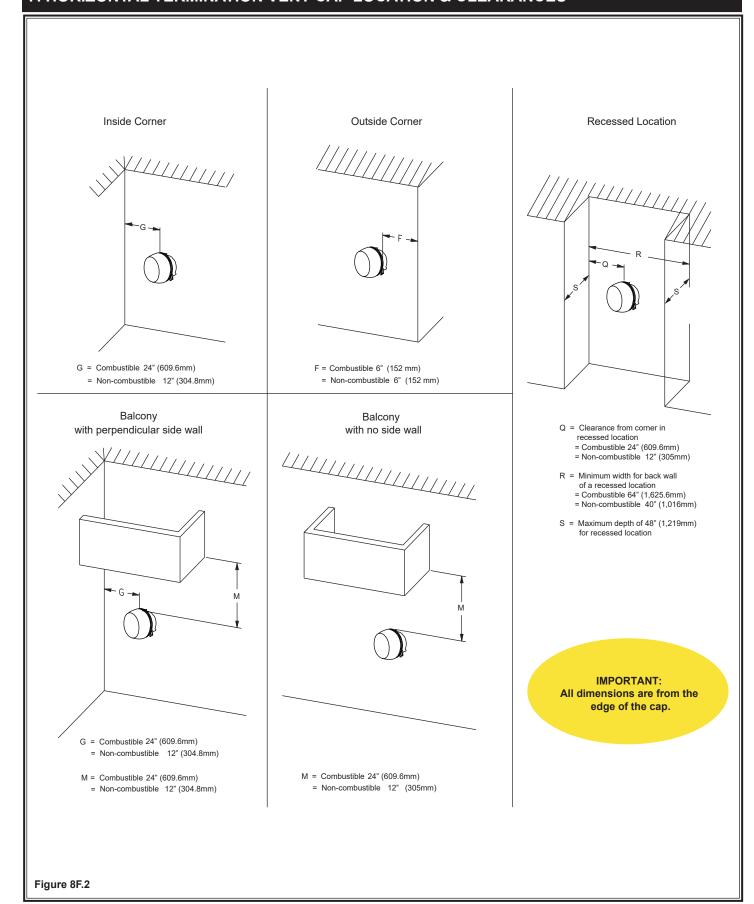


NOTE: A vent cannot be located directly above a side-walk or paved driveway that is located between two single family dwellings and serves both dwellings.



27

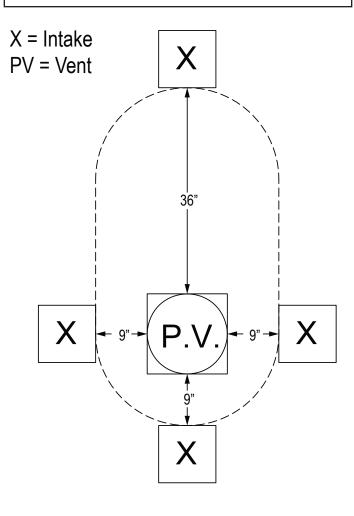
F. HORIZONTAL TERMINATION VENT CAP LOCATION & CLEARANCES

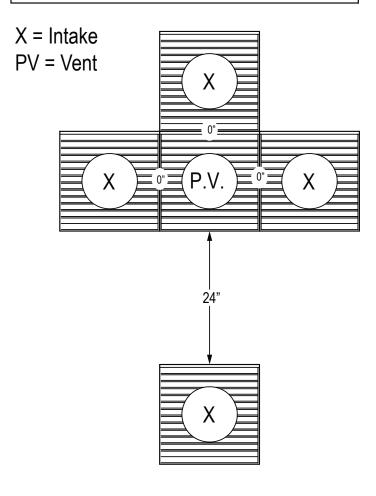


→ G. POWERVENT AND AIR-INTAKE PLACEMENT CLEARANCES

RS SERIES POWERVENT

IN-LINE POWERVENT (LOUVER 8/10)





Minimum Clearance Using an RS Series Powervent Intake Placed Above Vent = 36 Inches Intake Placed to Left Side, Right Side or Below Vent = 9 Inches Minimum Clearance Using an In-Line Powervent Intake Placed Below Vent = 24 Inches Intake Placed to Left Side, Right Side or Above Vent = 0 Inches

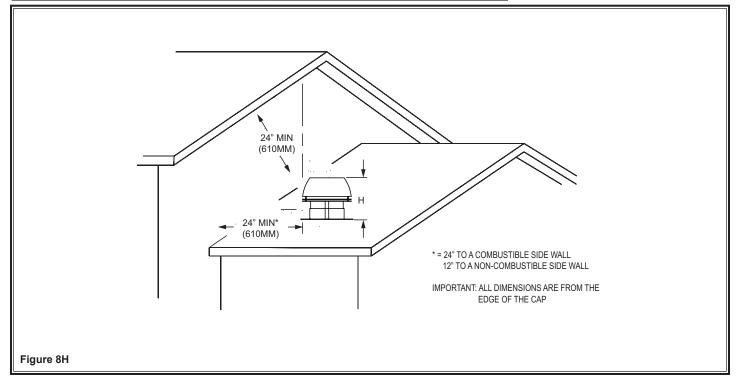
Figure 8G.1

Figure 8G2

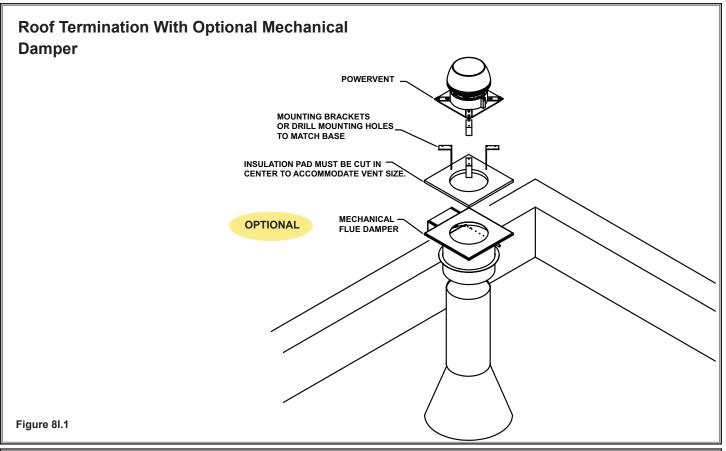
H. VERTICAL TERMINATION VENT CAP LOCATION AND CLEARANCES

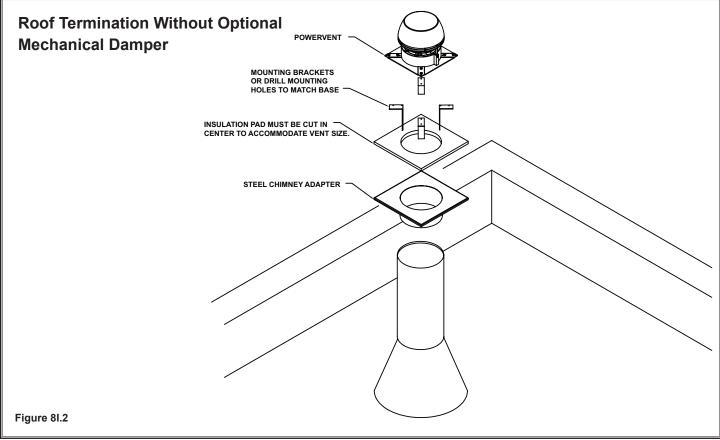
ROOF PITCH	H (Min.) Ft.	H (Min.) M
FLAT TO 6/12	1.0*	0.30
OVER 6/12 TO 7/12	1.25*	0.38
OVER 7/12 TO 8/12	1.5*	0.46
OVER 8/12 TO 9/12	2.0*	0.61
OVER 9/12 TO 10/12	2.5*	0.76
OVER 10/12 TO 11/12	3.25	0.99
OVER 11/12 TO 12/12	4.0	1.22
OVER 12/12 TO 14/12	5.0	1.52
OVER 14/12 TO 16/12	6.0	1.83
OVER 16/12 TO 18/12	7.0	2.13
OVER 18/12 TO 20/12	7.5	2.27
OVER 20/12 TO 21/12	8.0	2.44

* = 3 foot minimum in snowy regions

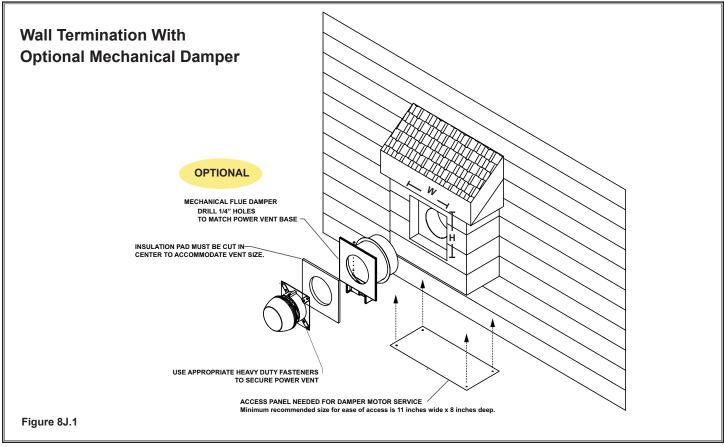


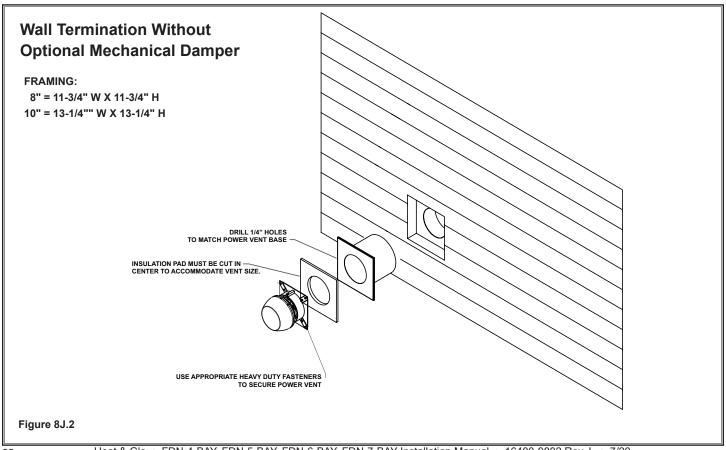
I. ROOF TERMINATION CAP INSTALLATION - WITH AND WITHOUT OPTIONAL DAMPER





J. WALL TERMINATION INSTALLATION - WITH AND WITHOUT OPTIONAL DAMPER





K. INTAKE AIR

This fireplace has the options of air intake connections on the side or the bottom of the fireplace. This fireplace is approved for use with 10 inch rigid metal pipe or UL approved 10 inch Class 0 or Class 1 flex for intake air. Use Table 8K.1 for venting requirements if using UL approved 10 inch flex for intake air.

Vent runs utilizing 10 inch rigid metal pipe may be 110 feet with 11 elbows. We recommend insulating the intake air duct or using UL approved Class 1 insulated flex in hot, humid or cold climates.

The intake pipe must maintain 1.5X the square inches of the flue pipe in free area. Intake screen/vent must be sized appropriately. Failure to do so will result in higher operating temperatures.

The fireplace may also take room air for combustion. Intake screen/vent must be sized appropriately. You must plan for the replacement air that is consumed from the room by the fireplace. Do not draw intake air from a crawl space or an attic (ventilated or not ventilated).

WARNING! Risk of Fire! DO NOT draw intake air from an attic or crawl space. Appliance could overheat.

Use Table 8K.2 for reference on CFM replacement air if drawing intake air from inside the house and open air requirements for intake screen/vent or consult Hearth & Home Technologies for more information.

Table 8K.1

UL Approved 10 Inch Class 1 or Class 0 Flex Intake Air Venting Requirements							
		Number of offsets					
		0-3	4	5	6	7	8
FDN-4-BAY	Length of Run	100 ft	90 ft	80 ft	70 ft	60 ft	50 ft
FDN-5-BAY		45 ft	35 ft	25 ft	15 ft	5 ft	N/A
FDN-6-BAY		70 ft	60 ft	50 ft	40 ft	30 ft	20 ft
FDN-7-BAY		32 ft	20 ft	15 ft	10 ft	N/A	N/A

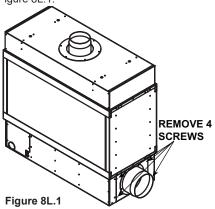
Table 8K.2

Fireplace Size	Required CFM	Open Air Requirement
FDN-4-BAY	480 CFM	78 Sq. Inches
FDN-5-BAY	640 CFM	78 Sq. Inches
FDN-6-BAY	800 CFM	78 Sq. Inches
FDN-7-BAY	960 CFM	78 Sq. Inches

L. CHANGING FROM SIDE INTAKE AIR TO BOTTOM INTAKE AIR

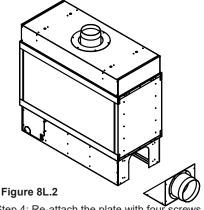
Step 1: Remove 4 screws that hold collar plate in place.

Refer to Figure 8L.1.

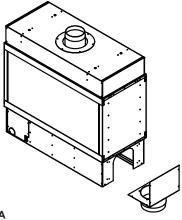


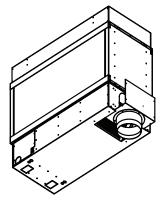
Step 3: Turn plate so collar is facing down, slide plate into slots on each side. Refer to Figure 8L.3A and Figure 8L.3B.

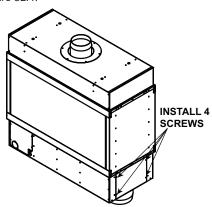
Step 2: Slide collar plate off fireplace. Refer to Figure 8L.2.



Step 4: Re-attach the plate with four screws. Refer to Figure 8L.4.







33

Figure 8L.3A Figure 8L.3B Figure 8L.4

→ M. OPTIONAL UNIVERSAL EXHAUST IN AIR-INTAKE LOUVER

MODEL	UNITS	USE
LOUVER-8	4 ft, 5 ft	Exhaust and Air-Intake
LOUVER-10	6 ft., 7 ft	Exhaust and Air-Intake

This kit is an optional method of terminating the fresh air and/or exhaust for the appliance.

Exhaust terminations must be installed with an inline powervent.



FOLLOW COMPLETE INSTALLATION INSTRUCTIONS PROVIDED WITH THE LOUVER KIT

LOUVER-8 & LOUVER-10

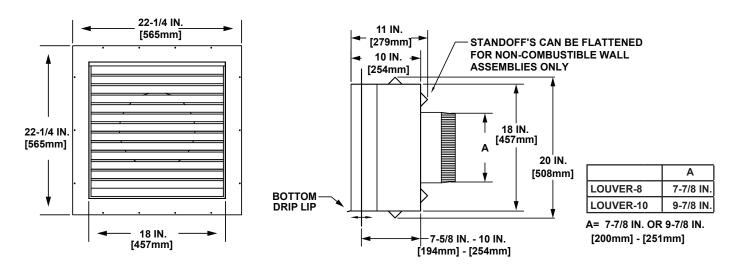
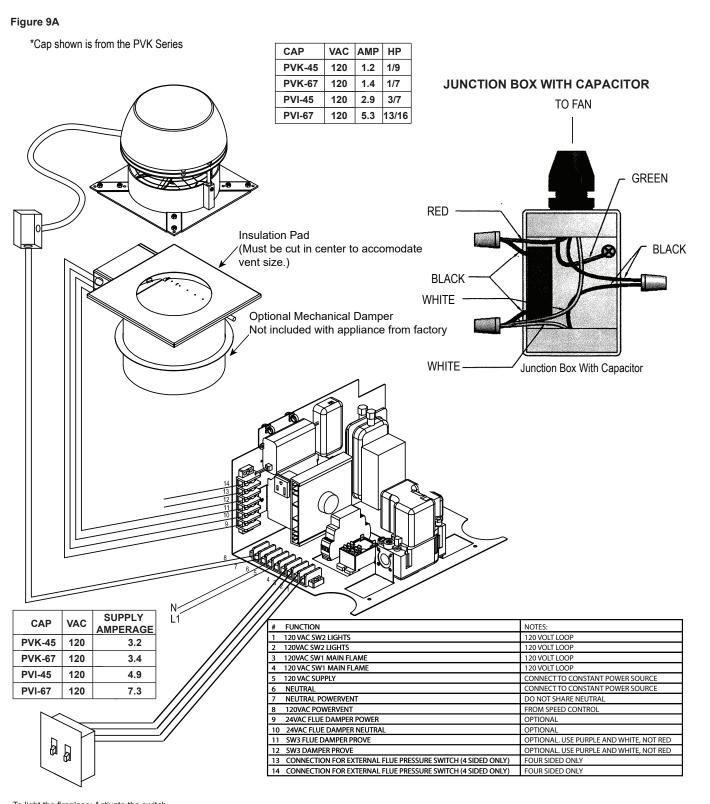


Figure 8M

9 - ELECTRICAL

A. FIELD WIRING (AT INSTALL) See Terminal Details in Section 9B and 9C.

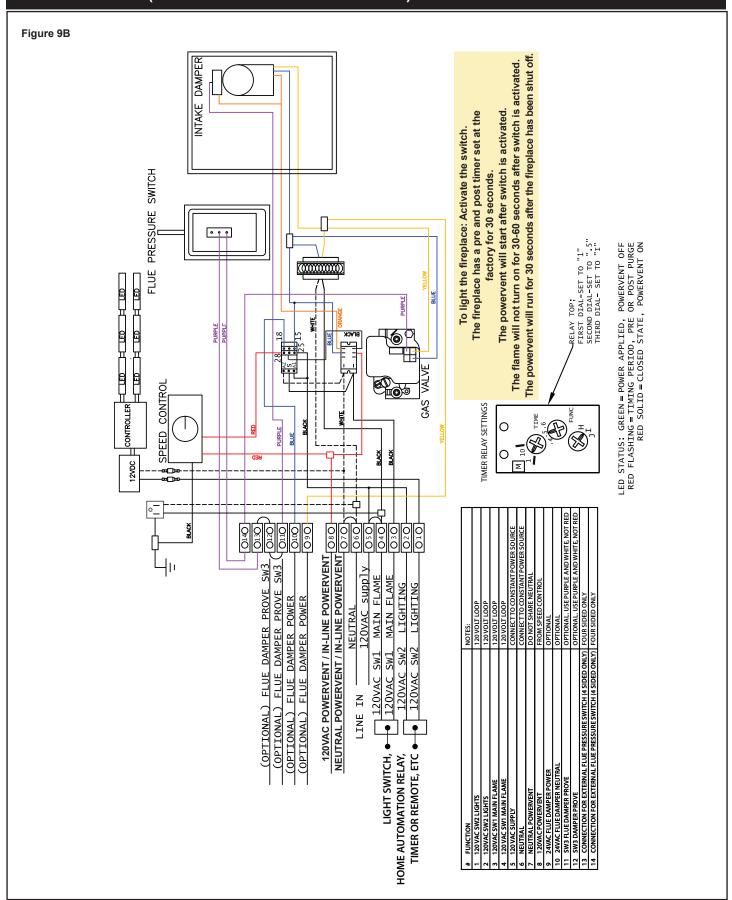


To light the fireplace: Activate the switch.
The fireplace has a pre and post timer, set at the factory for 30 seconds.
The powervent will start after switch is activated.
The flame will not turn on for 30-60 seconds after switch is activated.

The powervent will run for 30 seconds after the fireplace has been shut off.

9 - ELECTRICAL

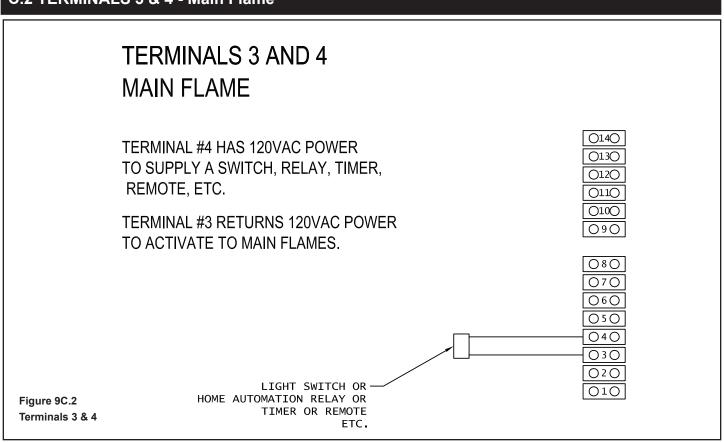
B. FIELD WIRING (SERVICE & TROUBLESHOOTING)



C.1 TERMINALS 1 & 2 - LED Lights

TERMINALS 1 AND 2 LED LIGHTING TERMINAL #2 HAS 120VAC POWER O14O TO SUPPLY A SWITCH, RELAY, TIMER, O13O REMOTE, ETC. O12O O11O TERMINAL #1 RETURNS 120VAC POWER 0100 TO ACTIVATE THE LED DRIVER. 090 080 070 060 050 040 030 020 010 Figure 9C.1 LIGHT SWITCH OR HOME AUTOMATION RELAY OR Terminals 1 & 2 TIMER OR REMOTE FTC.

C.2 TERMINALS 3 & 4 - Main Flame



C.3 TERMINALS 5 & 6 - Fireplace Power

TERMINALS 5 AND 6 FIREPLACE POWER

TERMINAL #5 IS THE 120VAC POWER SUPPLY FOR THE FIREPACE. THIS IS A CONSTANT POWER SUPPLY AND SHOULD NOT BE SWITCHED. A SERVICE DISCONNECT MAY BE DESIRED.

TERMINAL #6 IS THE NEUTRAL CONNECTION.

LINE IN

Figure 9C.3 Terminals 5 & 6 080 070 -060

O14O

O13O

O12O O11O

O10O

090

O5O O4O

030 020 010

C.4 TERMINALS 7 & 8 - Powervent Connection

MOTOR

TERMINAL #7 IS THE NEUTRAL CONNECTION FOR THE POWERVENT MOTOR.

TERMINAL #8 IS THE HOT CONNECTION FOR THE POWERVENT MOTOR FROM THE SPEED CONTROL.

POWERVENT POWER MUST COME FROM THE TERMINAL BLOCK AND NOT ANY OTHER POWER SOURCE.

0140 0130 0120

O11O

090

080

120VAC POWERVENT / IN-LINE POWERVENT NEUTRAL POWERVENT / IN-LINE POWERVENT

070 060

050

O4O O3O

020

TERMINALS 7 AND 8
POWERVENT CONNECTION

Figure 9C.4

38

Terminals 7 & 8

C.5 TERMINALS 9 & 10 - Flue Damper Connection

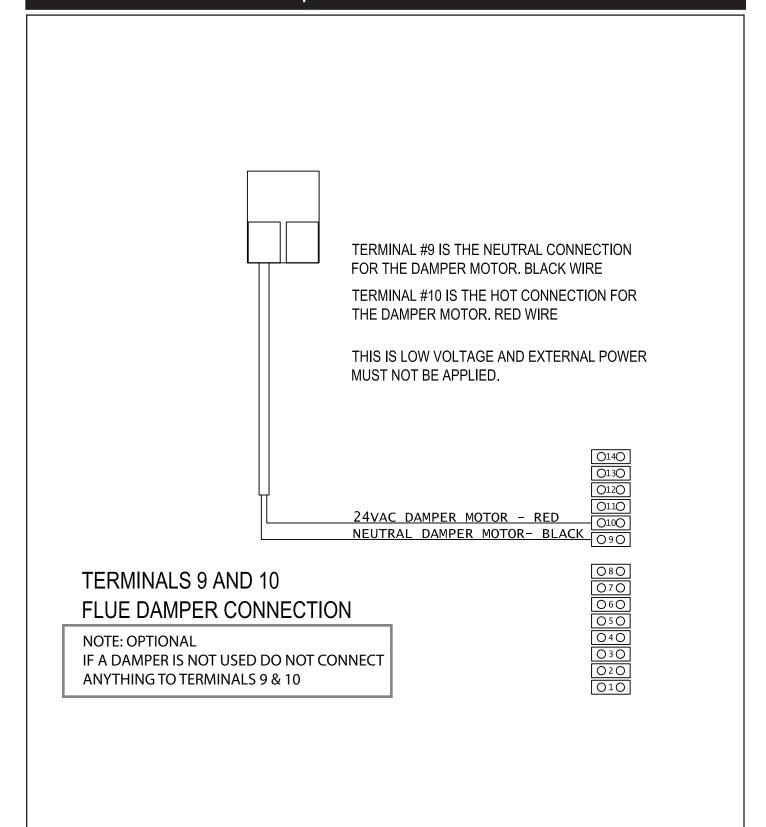
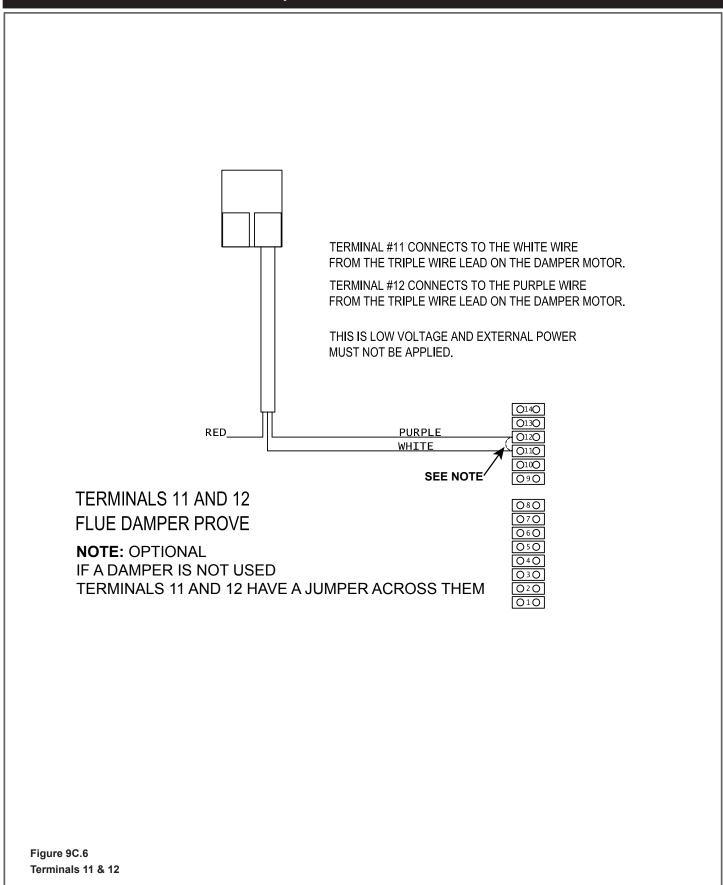


Figure 9C.5 Terminals 9 & 10

C.6 TERMINALS 11 & 12 - Flue Damper Prove



10 - FINISHING

A. FINISHING THE WALL - USING THE PROVIDED 1/2" STANDOFFS



NOTE: REFER TO DIMENSIONS SECTION FOR ALLOWABLE FINISHING DIMENSIONS REQUIRED TO FIT THE GLASS PANELS INTO THE FIREPLACE. FINISHING MATERIALS MUST NOT OVERLAP THE FRAMING DIMENSIONS HIGHLIGHTED IN SECTION 2.A. NEVER COVER THE GLASS WITH FINISHING MATERIALS.



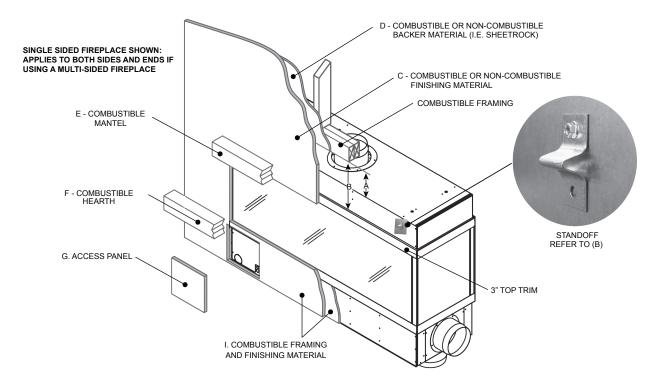
NOTE: <u>DO NOT</u> PIERCE ANY OF THE BLACK PAINTED SURFACES WITH SCREWS, RIVETS, ETC.
THIS INCLUDES THE 3" BLACK TOP AND BOTTOM GLASS TRIM AND ANY PAINTED SIDES ADJACENT TO THE GLASS.



NOTE: REFER TO MANTEL REQUIREMENTS: NON-COMBUSTIBLE ZONE USING PROVIDED 1/2" STANDOFFS FOR MORE INFORMATION (SECTION 5A).

Figure 10A.1 WARNING! Risk of Fire! DO NOT apply combustible materials beyond the minimum clearances. Comply with all minimum clearances to combustibles as specified in this manual.

IMPORTANT: NEVER COVER THE GLASS WITH FINISHING MATERIALS



A. No combustible materials may be within 6" [152mm] of the top of the fireplace.

B. 1/2" [12.7] CLEARANCE TO COMBUSTIBLES ON SURFACE. The fireplace ships with standoffs in place to ensure a 1/2" clearance to combustibles is maintained on the surface. See Figure 10A.1. If the standoffs are removed, only non-combustible material can be installed against the surface of the fireplace such as a non-combustible backer cement board. 1/2" [12.7mm] minimum thickness must be used in the 15" [381mm] between the top of the 3" trim to the combustible framing the full width of the fireplace. The 15" includes a 7" [178mm] minimum above above the top of the fireplace that is recommended for ease of attachment. See Figure 10A.2

- C. Combustible material may cover the non-combustible area mentioned in B.
- D. Combustible finishing materials allowed
- E. Combustible or Non-Combustible mantel may be placed above the top of the glass viewing area. There are no restrictions on mantel depth.
- F. Combustible hearth may be placed below the bottom of the glass viewing area.
- G. Flat covers will cover the components access. Gas and electric inlets are located behind this panel. There are four access panel options all located on the pilot side of the fireplace; front (shown above), side, back and inside behind the glass.
- Please take consideration of which option will be used to access the components for service later during planning.
- I. Combustible framing and finishing materials allowed.

10 - FINISHING

B FINISHING THE WALL - NOT USING THE PROVIDED 1/2" STANDOFFS



NOTE: REFER TO DIMENSIONS SECTION FOR ALLOWABLE FINISHING DIMENSIONS REQUIRED TO FIT THE GLASS PANELS INTO THE FIREPLACE. FINISHING MATERIALS MUST NOT OVERLAP THE FRAMING DIMENSIONS HIGHLIGHTED IN SECTION 2.A. NEVER COVER THE GLASS WITH FINISHING MATERIALS.



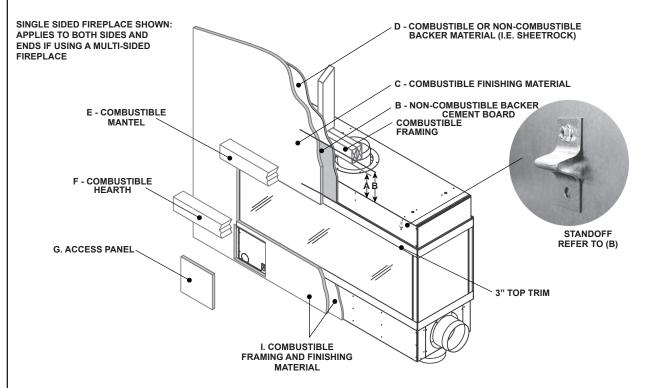
NOTE: <u>DO NOT</u> PIERCE ANY OF THE BLACK PAINTED SURFACES WITH SCREWS, RIVETS, ETC. THIS INCLUDES THE 3" BLACK TOP AND BOTTOM GLASS TRIM AND ANY PAINTED SIDES ADJACENT TO THE GLASS.



NOTE: REFER TO MANTEL REQUIREMENTS: NON-COMBUSTIBLE ZONE NOT USING PROVIDED 1/2" STANDOFFS FOR MORE INFORMATION (SECTION 5B).

Figure 10A.2 WARNING! Risk of Fire! DO NOT apply combustible materials beyond the minimum clearances. Comply with all minimum clearances to combustibles as specified in this manual.

IMPORTANT: NEVER COVER THE GLASS WITH FINISHING MATERIALS



- A. No combustible materials may be within 6" [152mm] of the top of the fireplace.
- B. 1/2" [12.7] CLEARANCE TO COMBUSTIBLES ON SURFACE. The fireplace ships with standoffs in place to ensure a 1/2" clearance to combustibles is maintained on the surface. See Figure 10A.1. If the standoffs are removed, only non-combustible material can be installed against the surface of the fireplace such as a non-combustible backer cement board. 1/2" [12.7mm] minimum thickness must be used in the 15" [381mm] between the top of the 3" trim to the combustible framing the full width of the fireplace. The 15" includes a 7" [178mm] minimum above above the top of the fireplace that is recommended for ease of attachment. See Figure 10A.2
- C. Combustible material may cover the non-combustible area mentioned in B.
- D. Combustible finishing materials allowed.
- E. Combustible or Non-Combustible mantel may be placed above the top of the glass viewing area. There are no restrictions on mantel depth.
- F. Combustible hearth may be placed below the bottom of the glass viewing area.
- G. Flat covers will cover the components access. Gas and electric inlets are located behind this panel. There are four access panel options all located on the pilot side of the fireplace; front (shown above), side, back and inside behind the glass.
 - Please take consideration of which option will be used to access the components for service later during planning.
- I. Combustible framing and finishing materials allowed.

11 - LIGHTING & SHUTDOWN

FOR YOUR SAFETY - READ BEFORE LIGHTING



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

DUE TO HIGH SURFACE TEMPERATURES, KEEP CHILDREN, CLOTHING AND FURNITURE AWAY.

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air. It is important to make sure the termination cap remains unobstructed at all times from snow, ice, leaves or other debris.

- This fireplace is equipped with an ignition device which automatically lights the pilot and main burner.
 The pilot and burner light automatically with the wall switch. DO NOT try to light the pilot by hand. Before lighting this fireplace, follow these instructions exactly.
- BEFORE LIGHTING, smell all around the appliance for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- 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 which has been under water.

WHAT TO DO IF YOU SMELL GAS:

- Do not touch any electrical switches
- Do not try to light any appliance
- Do not use the phone in your building
- Immediately call your gas supplier from a neighbor's phone
- Follow the gas supplier's instructions
- If you cannot reach your gas supplier, call the fire department

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



NOTE: A PAINT SMELL WILL OCCUR DURING THE FIRST FEW HOURS OF BURNING.



NOTE: THIS FIREPLACE MAY PRODUCE NOISES OF VARYING DEGREE AS IT HEATS AND COOLS DUE TO METAL EXPANSION AND CONTRACTION. THIS IS NORMAL AND DOES NOT AFFECT THE PERFORMANCE OR LONGEVITY OF THE FIREPLACE.

A. LIGHTING THE FIREPLACE

To light the fireplace:

Activate the switch.

The fireplace has a pre and post timer, set at the factory for 30 seconds. The powervent and flame will not turn on for 30-60 seconds after switch is activated and the powervent will run for 30 seconds after it has been shut off.

11 - LIGHTING & SHUTDOWN



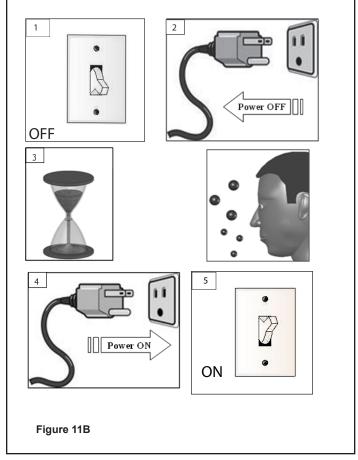
STOP! Read safety information on previous page and front cover of this manual before continuing.



NOTE: This fireplace is equipped with an ignition device which automatically lights the pilot. DO NOT try to light the pilot by hand.

B. IF THE FIREPLACE DOES NOT LIGHT

- 1. Turn off the fireplace at switch.
- 2. Turn off all electrical power to fireplace.
- Wait five (5) minutes to allow any gas that may have accumulated inside firebox to escape. If you then smell gas, STOP! Follow safety information on front cover and on previous page of the installation manual. If you don't smell gas, go to next step.
- 4. Turn ON all electrical power to fireplace.
- 5. Turn fireplace on at switch.





CAUTION: If fireplace will not operate, follow instructions TO TURN OFF GAS TO APPLIANCE on lighting instructions tag fastened to the appliance and call your service technician or the gas supplier.



NOTE: When fireplace is initially lit, condensation could appear on the glass; this is normal in all gas fireplaces and will disappear after several minutes.

12 - PRESSURE TESTING



NOTE: The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at pressures in excess of $\frac{1}{2}$ psi.



NOTE: 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 line at test pressures equal to or less than $\frac{1}{2}$ psi (3.5 kPa).

INLET PRESSURE TEST

- 1. The valve has an allen plug on the inlet and outlet.
- 2. Install a barb fitting on the tap you want to measure.
- 3. Light the fireplace, check the pressure.
- 4. Turn off fireplace; reinstall plug.
- Check for leaks.



CAUTION: A LOW PRESSURE READING CAN CAUSE DELAYED IGNITION



NOTE: If inlet pressure reading is too high or too low, contact the gas company. Only a qualified gas service technician should adjust incoming gas pressure.

13 - FINALIZING THE INSTALLATION

A. INSTALLING THE MEDIA

Figure 13

Place the supplied glass media into the base tray.

Cover the base evenly. Do not use more than the supplied amount.

Do not get any glass media into the pilot area; a hazardous condition could result!

You should be able to see the burner slightly through the media.

DO NOT COVER THE BURNERS; POOR FLAME APPEARANCE WILL RESULT.



NOTE: DO NOT SUBSTITUTE THE SUPPLIED MEDIA WITH ANY OTHER KIND OF MEDIA.

B. FLAME APPEARANCE

Flame appearance is affected by several factors including altitude, venting configuration and fuel quality. Although the venturi setting has been factory set, adjustments may be necessary for optimal performance and visual aesthetics.

When fireplace is first lit, the flames will be blue. Flames will gradually turn yellowish-orange during first 15 minutes of operation. If flames remain blue, or become dark orange with evidence of sooting (black tips), the burner tube venturi may need adjustment.

14 - MAINTENANCE

The appliance is required to be inspected at least once a year by a professional service person. The compartment below firebox (behind lower access panel) must be cleaned at least once a year, more frequent cleaning may be required due to excessive lint from carpeting, bedding materials, or other fibrous materials. It is imperative that the burner be cleaned once a year.

VALVE AND ELECTRICAL ACCESS

There is an access panel in the floor of the firebox should more extensive service be needed. Using the suction cups, remove the inner and outer glass panels. Remove the glass media or natural stone on the end with the pilot. Remove the screws on the mesh screen and remove the mesh screen. Remove the Phillips head screws on the LED "U" shaped metal tray and gently fold metal tray over the burners. Remove the 6 screws on the solid access panel and remove panel.



NOTE: INSTALLATION AND REPAIR SHOULD BE DONE ONLY BY QUALIFIED SERVICE PERSON. THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND 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 CIRCULATION AIR PASSAGEWAYS OF THE APPLIANCE BE KEPT CLEAN.

A. VENT SYSTEM

- · Annual examination of venting system by a qualified agency is required.
- IF VENT-AIR INTAKE SYSTEM IS DISASSEMBLED FOR ANY REASON, RE-INSTALL PER INSTRUCTIONS PROVIDED WITH INITIAL INSTALLATION.
- The flow of combustion air must not be obstructed.

B. GLASS CLEANING & REPLACEMENT



WARNING! RISK OF INJURY! DO NOT remove glass until it is cooled to room temperature. Glass breakage could occur. See Section 6 for glass installation and removal instructions.

- Clean glass only when cool and only with non-abrasive cleansers.
- Do not operate this fireplace with glass/frame assembly removed, cracked or broken.
- The glass assembly shall only be replaced as a complete unit, as supplied by Hearth & Home Technologies.
- Replacement of glass & frame assembly, must only be performed by a licensed or qualified service person.
 DO NOT SUBSTITUTE MATERIALS.
- · Do not strike or slam glass door assembly.



CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. VERIFY PROPER OPERATION AFTER SERVICING. KEEP APPLIANCE AREA CLEAR OF COMBUSTIBLE MATERIALS, SUCH AS GASOLINE AND OTHER FLAMMABLE VAPORS AND LIQUIDS. VAPORS AND LIQUIDS.

C. REPLACEMENT PARTS LIST

PART	PART NUMBER			
Gas Valve	SV9501			
Pilot (Natural Gas / Propane)	112-5000-NG / 112-5000-LP			
Pilot Tube	16400-2851			
Vacuum Switch	112-5003			
Transformer, 24 VAC	112-5002			
Orifice, NG #43	16400-2043			
Orifice, Propane #55	16400-2055			
Propane Conversion Kit	LPK-FDN			
Side Service Class 4 ft	GLA-B4-IN (INNER)			
Side Service Glass, 4 ft.	GLA-B4-OUT (OUTER)			
Side Semiles Class E ft	GLA-B5-IN (INNER)			
Side Service Glass, 5 ft.	GLA-B5-OUT (OUTER)			
Side Service Class 6 ft	GLA-B6-IN (INNER)			
Side Service Glass, 6 ft.	GLA-B6-OUT (OUTER)			
Side Service Glass, 7 ft.	GLA-B7-IN (INNER)			
Give Service Glass, / It.	GLA-B7-OUT (OUTER)			

PART	PART NUMBER	QUANTITY
Crystal Rock 5 lb bag	2188-851	Varies by model size FDN-4-BAY = 10 bags FDN-5-BAY = 12 bags FDN-6-BAY = 14 bags FDN-7-BAY = 16 bags

PART	PART NUMBER
Replacement Capacitor - PVK-45	601.0400.0064
Replacement Capacitor - PVK-67	604.0400.0064
Replacement Capacitor - PVI-45	604.0600.0064
Replacement Capacitor - PVI-67	604.0800.0064

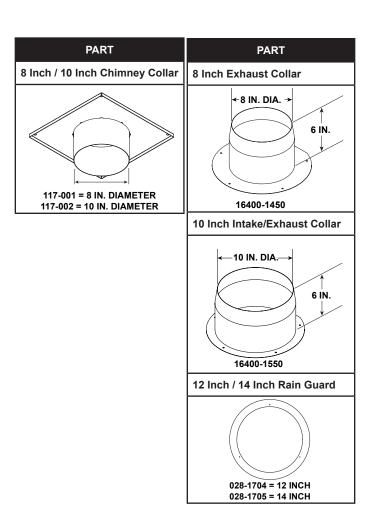
PART	PART NUMBER		
End Service Glass (All Sizes - Inner)	GLA-B-IN (INNER)		
End Service Glass (All Sizes - Outer)	GLA-B-OUT (OUTER)		

NOTE: All appliances utilize two pieces of end service glass. The Outer pane of glass has the plastic U-Channel on the top and bottom.

	Vertical Trim Pieces MODEL Between Glass		Left Hand Horizontal Trim (As viewed from front)		Horizontal Trim Pieces Between Glass		Right Hand Horizontal Trim (As viewed from front)		
		Part #	Qty	Part #	Qty	Part #	Qty	Part #	Qty
	FDN-4-BAY	SRV16400-1033	2	SRV16400-1145	1	SRV16400-1044	1	SRV16400-1245	1
	FDN-5-BAY	SRV16400-1033	2	SRV16400-1145	1	SRV16500-1044	1	SRV16400-1245	1
Γ	FDN-6-BAY	SRV16400-1033	2	SRV16400-1145	1	SRV16600-1044	1	SRV16400-1245	1
	FDN-7-BAY	SRV16400-1033	2	SRV16400-1145	1	SRV16700-1044	1	SRV16400-1245	1

C. REPLACEMENT PARTS LIST

PART	PART NUMBER		
8 Inch Exhaust Collar	16400-1450		
10 Inch Intake/Exhaust Collar	16400-1550		
LED Controller	16400-1901		
LED Remote Control	16400-1901R		
Switch, 15 Amp Toggle	16400-3013		
2-Gang Electrical Box	16400-3014		
White Nylon 2-Gang Plate	16400-3015		
Timer Relay	112-5014		
Relay	112-5009		
Suction Cup	675-9605		
12 Inch Rain Guard (For use on PVK-45)	028-1704		
14 Inch Rain Guard (For use on PVK-67)	028-1705		
8 Inch Chimney Collar	117-001		
10 Inch Chimney Collar	117-002		
Touch Up Paint	TUP-FDN-12		



Limited Lifetime Warranty

Hearth & Home Technologies LIMITED LIFETIME WARRANTY

Hearth & Home Technologies, on behalf of its hearth brands ("HHT"), extends the following warranty for HHT gas, wood, pellet and electric hearth appliances that are purchased from an HHT authorized dealer.

WARRANTY COVERAGE:

HHT warrants to the original owner of the HHT appliance at the site of installation, and to any transferee taking ownership of the appliance at the site of installation within two years following the date of original purchase, that the HHT appliance will be free from defects in materials and workmanship at the time of manufacture. After installation, if covered components manufactured by HHT are found to be defective in materials or workmanship during the applicable warranty period, HHT will, at its option, repair or replace the covered components. HHT, at its own discretion, may fully discharge all of its obligations under such warranties by replacing the product itself or refunding the verified purchase price of the product itself. The maximum amount recoverable under this warranty is limited to the purchase price of the product. This warranty is subject to conditions, exclusions and limitations as described below.

WARRANTY PERIOD:

Warranty coverage for consumers begins at the date of installation. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the product by an independent, authorized HHT dealer/distributor, whichever occurs earlier. However, the warranty shall commence no later than 24 months following the date of product shipment from HHT, regardless of the installation or occupancy date. The warranty period for parts and labor for covered components is produced in the following table.

The term "Limited Lifetime" in the table below is defined as: 20 years from the beginning date of warranty coverage for gas appliances, and 10 years from the beginning date of warranty coverage for wood and pellet appliances. These time periods reflect the minimum expected useful lives of the designated components under normal operating conditions.

Warranty Period		HHT Manufactured Appliances and Venting					
Parts	Labor	Gas	Pellet	Wood	Electric	Venting	Components Covered
1 Ye	ear	x	x	x	x	x	All parts including handles, external enamaled components and other material except as covered by Conditions, Exclusions, and Limitations listed
			х	х			Igniters, Auger Motors, Electronic Components, and Glass
2 ye	ars	x					Electrical components limited to modules, remotes/wall switches, valves, pilots, blowers, junction boxes, wire harnesses, transformers and lights (excluding light bulbs)
		Х		Х			Molded Refractory Panels, Glass Liners
3 ye	3 years		х				Firepots, burnpots, mechanical feeders/auger assemblies
5 years	5 years 1 year						Vent Free Burners, Vent Free Logs
- 7	,		X	X			Castings, Medallions and Baffles
6 years	3 years			Х			Catalyst - Limitations Listed
7 years	3 years		х	х			Manifold tubes, HHT Chimney and Terminations
10 years	1 year	Х					Burners, logs and refractory
Limited Lifetime	3 years	х	х	х			Firebox and heat exchanger, FlexBurn® System (engine, inner cover,access cover and fireback)
1 Year	None	х	х	х	х	х	All replacement parts beyond warranty period

Limited Lifetime Warranty (continued)

WARRANTY CONDITIONS:

- This warranty only covers HHT appliances that are purchased through an HHT authorized dealer or distributor. A list of HHT authorized dealers is available on the HHT branded websites.
- This warranty is only valid while the HHT appliance remains at the site of original installation.
- This warranty is only valid in the country in which the HHT authorized dealer or distributor that sold the appliance resides.
- Contact your installing dealer for warranty service. If the installing dealer or distributor is unable to provide necessary parts, contact the nearest HHT authorized dealer or supplier. Additional service fees may apply if you are seeking warranty service from a dealer other than the dealer from whom you originally purchased the product.
- Check with your dealer in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this warranty.
- Limited Catalyst Warranty
 - o For wood burning products containing a catalyst, the catalyst will be warranted for a six-year period to the original purchaser at the site of original installation. The purchaser must provide the name, address, and telephone number of the location where the product is installed, proof of original purchase date, date of failure, and any relevant information regarding the failure of the catalyst.

WARRANTY EXCLUSIONS:

This warranty does not cover the following:

- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur. This is not a flaw and is not covered under warranty.
- Damage to printed, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items, or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the warranty period are not covered. These parts include: paint, wood and pellet gaskets, firebricks, grates, flame guides, batteries and the discoloration of glass.
- Expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to this noise are not covered by this warranty.
- Damages resulting from: (1) failure to install, operate, or maintain the appliance in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the appliance; (2) failure to install the appliance in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/incorrectly performed repairs (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operation instructions; (7) installation or use of components not supplied with the appliance or any other components not expressly authorized and approved by HHT; (8) modification of the appliance not expressly authorized and approved by HHT in writing; and/or (9) interruptions or fluctuations of electrical power supply to the appliance.
- Non-HHT venting components, hearth connections or other accessories used in conjunction with the appliance.
- Any part of a pre-existing fireplace system in which an insert or a decorative gas appliance is installed.
- HHT's obligation under this warranty does not extend to the appliance's capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper appliance for the application. Consideration must be given to the appliance location and configuration, environmental conditions, insulation and air tightness of the structure.

This warranty is void if:

- The appliance has been over-fired, operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals.
 Over-firing can be identified by, but not limited to, warped plates or tubes, deformation/warping of interior cast iron structure or components, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The appliance is subjected to prolonged periods of dampness or condensation.
- There is any damage to the appliance or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

LIMITATIONS OF LIABILITY

50

• The owner's exclusive remedy and HHT's sole obligation under this warranty, under any other warranty, express or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above. In no event will HHT be liable for any incidental or consequential damages caused by defects in the appliance. Some states do not allow exclusions or limitation of incidental or consequential damages, so these limitations may not apply to you. This warranty gives you specific rights; you may also have other rights, which vary from state to state. EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFICED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE.

4021-645K 1/20 Page 2 of 2