LENNOX®

HEARTH PRODUCTS

Intertek

Intertek Report No. 100513650PRT-001

INSTALLATION INSTRUCTIONS

Montebello® DLX Power Vent Direct-Vent Gas Fireplaces

DAVE LENNOX signature® COLLECTION

P/N 506023-16 Rev. A 04/2013

This manual is one of a set of two supporting this product. Refer to P/N 506025-08 for Care and Operation Instructions.

Ce manuel est disponible en francais, simplement en faire la demande. Numéro de la pièce 506223-49.

MODELS

ELECTRONIC:

MDLX40IN-PV **MDLX45IN-PV**

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

INSTALLATEUR : Laissez cette notice avec l'appareil.
CONSOMMATEUR : Conservez cette notice pour consultation ultérieure.

Decorative Product: Not for use as a heating appliance.

NOTICE: Fireplace is not to be operated by a thermostat.

This appliance may be installed in an aftermarket permanently located, manufactured home (USA only) or mobile home, where not prohibited by local codes. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

⚠ WARNING / AVERTISSEMENT / AVISO

HOT GLASS WILL CAUSE BURNS.

DO NOT TOUCH GLASS UNTIL COOLED

NEVER ALLOW CHILDREN TO TOUCH GLASS.

UNE SURFACE VITRÉE CHAUDE PEUT CAUSER DES BRÛLURES.

LAISSER REFROIDIR LA SURFACE VITRÉE AVANT D'Y TOUCHER.

NE PERMETTEZ JAMAIS À UN ENFANT DE TOUCHER LA SURFACE VITRÉE.

EL VIDRIO CALIENTE CAUSARÁ QUEMADURAS.

USTED DEBE NUNCA TOCAR EL VIDRIO CALIENTE.

LOS NIÑOS DEBEN NUNCA TOCAR EL VIDRIO.

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

- 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.

AVERTISSEMENT : Assurez-vous de bien suivre les instructions données dans cette notice pour réduire au minimum le risque d'incindie ou d'explosion ou pour éviter tout dommage matériel, toute blessure ou la mort.

- Ne pas entreposer ni utilizer d'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de cet appareil ou de tout autre appareil.
- QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ :
  - Ne pas tenter d'allumer d'appareil.
  - Ne touchez à aucan interrupteur. Ne pas vous servir des téléphones se trouvant dans le bâtiment où vous trouvez.
  - Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
  - Si vous ne pouvez rejoindre le fournisseur de gaz, appelez le service des incindies.
- L'installation et l'entretien doivent être assurés par un installateur ou un service d'entretien qualifié ou par le fournisseur de gaz.

TABLE OF CONTENTS

Please read and understand these instructions before beginning your installation.

PACKAGING

The assembled vented gas fireplace is packaged with:

BOX 1 - Fireplace:

- Literature Kit (plastic bag shipped inside firebox),
- Bags of Glowing Embers, Platinum Embers, and Volcanic Stone
- Pull Screen
- Door Modesty Shield
- Adaptor with Probe Assembly
- (1) Remote Control Kit and Receiver Kit

BOX 2 - Power Vent Components:

- (1) Power Vent Termination
- (1) Termination Adaptor
- (1) Horizontal Firestop Assembly
- (1) Vacuum Hose
- (1) 11/32" Hose Clamp
- (1) Strain Relief
- (1) Bushing
- (4) Insulated 1/4" Male Terminals
- (2) #10 Ring Terminals

REQUIRED ACCESSORIES

The following accessories are required:

- One of the following **Firebox Liner Kits**:
  a. **Ceramic Liner Kit - Buff Rustic**
  b. **Ceramic Liner Kit - Red Rustic**
  c. **Porcelain Liner Kit - Black**
  d. **Ceramic Liner Kit - Red Herringbone**
  e. **Ceramic Liner Kit - Buff Herringbone**

  NOTE: *Porcelain kits include side and back panels. Optional for use with log sets. Required when using the contemporary burner/floor kit.*
- One of the following **Floor Options**:
  a. **Oak Log Set** *(For use with fireplace as shipped from factory only. Not for use with contemporary burner/floor kit.)*
  b. **Contemporary Burner/Floor Kit**

  *Contemporary Burner/Floor Kit requires one of the following **Media Kits**:*

  i. Crushed Glass - Reflective Black
  ii. Crushed Glass - Platinum
  iii. Crushed Glass - Reflective Blue
  iv. Crushed Glass - Goldfinger
  v. Crushed Glass - Copper

  NOTE: The Contemporary Burner/Floor Kit installation instructions are provided with the kit, and are not detailed in this manual.

INTRODUCTION

These ***Electronic*** appliances are designed to operate on natural gas and have an electronic intermittent pilot ignition system. External 120 Volt AC electrical power is required to operate these units.

These vented gas fireplaces are sealed combustion gas fireplaces designed for residential, manufactured home, and commercial applications.

Use Only These Approved Vent Components

These fireplaces are designed, tested and listed for operation and installation with, the following (4-1/2" inner and 7-1/2" outer) vent components only:

- **Secure Vent®** Direct-vent system components manufactured by Security Chimneys International.

These approved vent system components are labeled for identification. Do NOT use any other manufacturer's vent components with these appliances.

GENERAL INFORMATION

⚠ WARNING

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.

⚠ AVERTISSEMENT

Les jeunes enfants devraient être surveillés étroitement lorsqu'ils se trouvent dans la même pièce que l'appareil. Les tout petits, les jeunes enfants ou les adultes peuvent subir des brûlures s'ils viennent en contact avec la surface chaude. Il est recommandé d'installer une barrière physique si des personnes à risques habitent la maison. Pour empêcher l'accès à un foyer ou à un poêle, installez une barrière de sécurité; cette mesure empêchera les tout petits, les jeunes enfants et toute autre personne à risque d'avoir accès à la pièce et aux surfaces chaudes.

Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.

Les enfants et les adultes devraient être infor-més des dangers que posent les températures de surface élevées et se tenir à distance afin d'éviter des brûlures ou que leurs vêtements ne s'enflamment.

DO NOT ATTEMPT TO ALTER OR MODIFY THE CONSTRUCTION OF THE APPLIANCE OR ITS COMPONENTS. ANY MODIFICATION OR ALTERATION MAY VOID THE WARRANTY, CERTIFICATION AND LISTINGS OF THIS UNIT.

⚠ WARNING

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

⚠ WARNING

Failure to comply with these installation instructions will result in an improperly installed and operating appliance, voiding its warranty. Any change to this appliance and/or its operating controls is dangerous.

⚠ WARNING

Clothing or other flammable material should not be placed on or near the appliance.

⚠ AVERTISSEMENT

On ne devrait pas placer de vêtements ni d'autres matières inflammables sur l'appareil ni à proximité.

⚠ WARNING

Any safety screen or guard removed for servicing the appliance must be replaced prior to operating the appliance.

⚠ AVERTISSEMENT

Tout écran ou protecteur retiré pour permettre l'entretien de l'appareil doit être remis en place avant de mettre l'appareil en marche.

⚠ WARNING

Improper installation or use of this appliance can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.

⚠ WARNING

Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

⚠ AVERTISSEMENT

Risque de dommages ou de blessures si les pièces ne sont pas installées conformément à ces schémas et ou si des pièces autres que celles spécifiquement approuvées avec cet appareil sont utilisées.

Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etcetera. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.

L'installation et la réparation devrait être confiées à un technicien qualifié. L'appareil devrait faire l'objet d'une inspection par un technicien professionnel avant d'être utilisé et au moins une fois l'an par la suite. Des nettoyages plus fréquents peuvent être nécessaires si les tapis, la literie, et cetera produisent une quantité importante de pous-sière. Il est essentiel que les compartiments abritant les commandes, les brûleurs et les conduits de circulation d'air de l'appareil soient tenus propres.

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.

Ne pas utiliser cet appareil s'il a été plongé, même partiellement, dans l'eau. Appeler un technicien qualifié pour inspecter l'appareil et remplacer toute partie du système de commande et toute commande qui a été plongée dans l'eau.

Only trim kit(s) supplied by the manufacturer shall be used in the installation of this appliance.

Seules les trousses de garniture fournies par le fabricant doivent être utilisées pour l'installation de cet appareil.

Codes and Standards

These appliances comply with National Safety Standards and are tested and listed by Intertek (Report No. 100513650) to Z21.50b-2009 (in Canada, CSA-2.22b-2009), and CAN/CGA-2.17-M91 (R2009) in both USA and Canada, as vented gas fireplaces.

These appliances are listed by Intertek for installation in bedrooms and manufactured (mobile) homes.

Installation must conform to local codes. In the absence of local codes, installation must comply with the current National Fuel Gas Code, ANSI Z223.1/NFPA 54 (in Canada, the current CAN/CGA-B149.1 installation code).

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, or the Canadian Electrical Code, CSA C22.1 - latest edition.

Provide adequate clearances around air openings and adequate accessibility clearance for service and proper operation. Never obstruct the front openings of the appliance.

These appliances are designed to operate on natural gas. The use of other fuels or combination of fuels will degrade the performance of this system and may be dangerous.

These appliances must not be connected to a chimney or flue serving a separate solid fuel burning appliance.

These electronic appliances are remotely controlled and feature an electronic intermittent pilot ignition system. External electrical power is required to operate these units.

These electronic models come standard with a remotely-modulated gas valve; flame appearance and heat output cannot be controlled at the gas valve. The BTU Input for these appliances is shown in ***Table 1.***

Input (BTU/HR), Natural Gas	
Model No.	**Input (BTU/Hr)**
MDLX40IN-PV	**26,500 - 42,000**
MDLX45IN-PV	**35,000 - 48,000**

Table 1

Gas Pressure - All Models

Tables 2 and 3 show the appliance inlet and manifold gas pressure requirements.

Inlet Gas Supply Pressure	
Minimum	**Maximum**
5.5" WC (1.37 kPa)	10.5" WC (2.62 kPa)

Table 2

Manifold Gas Supply Pressure	
Low	**High**
1.6" WC (.40 kPa)	3.5" WC (.87 kPa)

Table 3

Test gauge connections are provided on the front of the gas control valve; identified IN for the inlet and OUT for the manifold side (see ***Figure 1***).

The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures **in excess of** 1/2 psi (3.5 kPa).

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

Gas Valve Diagram

See ***Figure 1*** for gas valve diagram.

PURGE CYCLE
This is a power vented fireplace that requires household electrical power to operate. It will not operate during a power failure. When the fireplace is turned off, the exhaust blower will continue to operate for approximately fifteen (15) seconds after shutdown to expel the exhaust gases from the venting system.

Orifice Sizes - Sea Level To High Altitude

These appliances are tested and approved for installation at elevations of 0 - 4500 ft (0 - 1370 m) above sea level, using the standard burner orifice sizes (marked with an "*" in ***Table 4***). For elevations above 4500 ft, contact your gas supplier or qualified service technician.

Deration - At higher elevations, the amount of BTU fuel value delivered must be reduced by either:
- Using gas that has been derated by the gas company.
- Changing the burner orifice to a smaller size as regulated by the local Authorities Having Jurisdiction and by the (USA) National Fuel Gas Code NFPA 54/ANSI Z223.1 - latest edition, or in Canada, the CAN/CGA-B149.1 code - latest edition.

Install the appliance according to the regulations of the local authorities having jurisdiction, and the (USA) National Fuel Gas Code NFPA 54 / ANSI Z223.1 - latest edition,
or (Canada) CAN/CGA-B149.1 - latest edition.

NOTE: Flame appearance will diminish 4% per one thousand feet of altitude.

Burner Orifice Size Elevation 0 - 4500 ft (0 - 1370 m)	
Model	**Orifice Size / Catalog Number**
MDLX40IN-PV	0.125" (1/8") * H7924 •
MDLX45IN-PV	0.136" (#29) * H8141 •

Table 4 ** Standard size installed at factory • Part /Cat. Number*

In Canada - CAN/CGA-2.17-M91 (R2009) (high altitude):

THE CONVERSION SHALL BE CARRIED OUT BY A MANUFACTURER'S AUTHORIZED REPRESENTATIVE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURER, PROVINCIAL OR TERRITORIAL AUTHORITIES HAVING JURISDICTION AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CAN/CGA-B149.1 OR CAN/CGA-B149.2 INSTALLATION CODES.

REQUIREMENTS FOR THE COMMONWEALTH OF MASSACHUSETTS

These fireplaces are approved for installation in the US state of Massachusetts if the following additional requirements are met:
- Install this appliance in accordance with Massachusetts Rules and Regulations 248 C.M.R.
- Installation and repair must be done by a plumber or gas fitter licensed in the Commonwealth of Massachusetts.
- The flexible gas line connector used shall not exceed 36 in. (92 centimeters) in length.
- The individual manual shut-off must be a T-handle type valve.

Massachusetts Horizontal Vent Requirements

In the Commonwealth of Massachusetts, horizontal terminations installed less than seven (7) feet above the finished grade must comply with the following additional requirements:

- A hard wired carbon monoxide detector with an alarm and battery back-up must be installed on the floor level where the gas fireplace is installed. The carbon monoxide detector must comply with NFPA 720, be ANSI/UL 2034 listed and be ISA certified.
- A metal or plastic identification plate must be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade and be directly in line with the horizontal termination. The sign must read, in print size no less than one-half (1/2) inch in size, GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS.

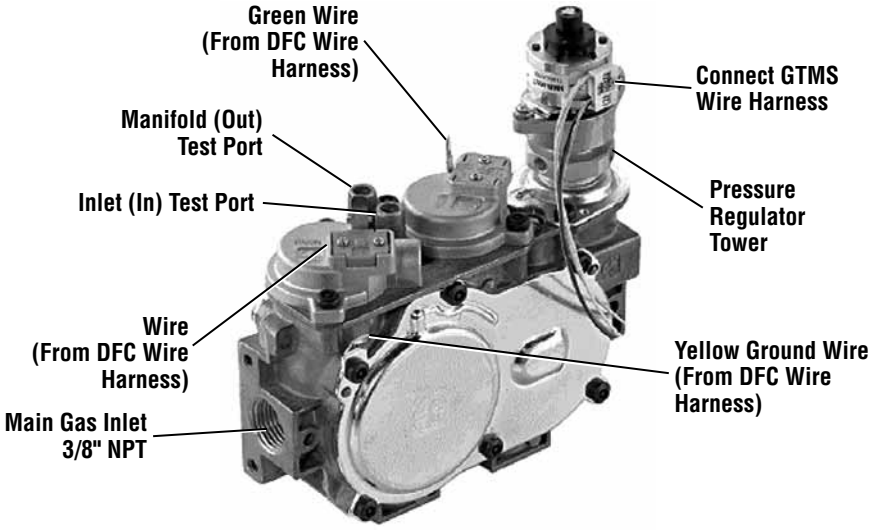


Figure 1 - SIT Electronic Gas Valve

COLD CLIMATE INSULATION

For cold climate installations, seal all cracks around your appliance with noncombustible material and wherever cold air could enter the room. It is especially important to insulate outside chase cavity between studs and under floor on which appliance rests, if floor is above ground level. Gas line holes and other openings should be caulked or stuffed with unfaced fiberglass insulation.

If the fireplace is being installed on a cement slab in cold climates, a sheet of plywood or other raised platform can be placed underneath to prevent cold transfer to the fireplace and into the room. It also helps to sheetrock inside surfaces and tape for maximum air tightness and caulk firestops.

MANUFACTURED HOME REQUIREMENTS

This appliance may be installed in an aftermarket permanently located, manufactured home and must be installed in accordance with the manufacturer's instructions.

Cet appareil peut être installé cómme du matéri-el d'origine dans une maison préfabriquée (É.U. seulement) ou mobile et doit être installé selon les instructions du fabricant.

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.

Cet appareil doit être utilisé uniquement avec le type de gaz indiqué sur la plaque signalétique. Cet appareil ne peut être converti à d'autres gaz.

CAUTION: Ensure that the cross members are not cut or weakened during installation. The structural integrity of the manufactured home floor, wall, and ceiling/roof must be maintained.

CAUTION: This appliance must be grounded to the chassis of the manufactured home in accordance with local codes or in the absence of local codes, with the National Electrical Code ANSI / NFPA 70 - latest edition.

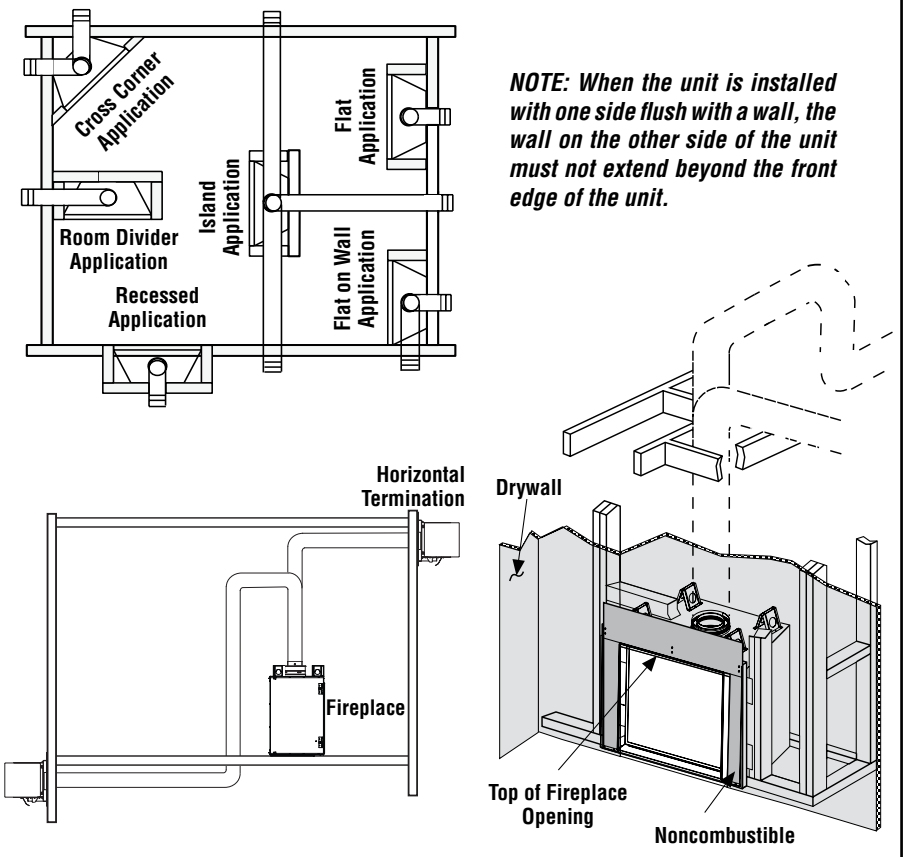


Figure 2 - Typical Installation

LOCATION

In selecting the location, the aesthetic and functional use of the appliance are primary concerns. However, vent system routing to the exterior and access to the fuel supply are also important.

Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies (Figure 2).

En raison des températures élevées, l'appareil devrait être installé dans un endroit où il y a peu de circulation et loin du mobilier et des tentures (Figure 2).

The location should also be free of electrical, plumbing or other heating/air conditioning ducting.

Be aware that this is a heat producing appliance. Objects placed above the unit are exposed to elevated temperatures.

Do not insulate the space between the appliance and the area above it.

The appliance must be mounted on a fully supported base extending the full width and depth of the unit. The appliance may be located on or near conventional construction materials. However, if installed on combustible materials, such as carpeting, vinyl 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.

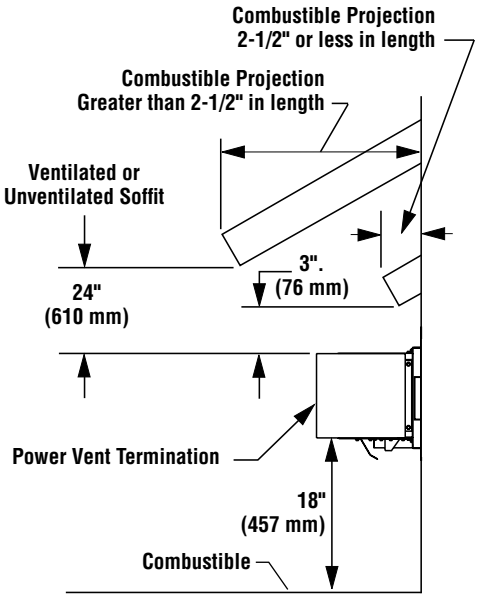
NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

VENT TERMINATION CLEARANCES

These instructions should be used as a guideline and do not supersede local codes in any way. Install venting according to local codes, these instructions, and the current (USA) National Fuel Gas Code ANSI-Z223.1 / NFPA 54, or (Canada) CAN/CGA-B149.1 standards.

Horizontal Vent Termination Clearances

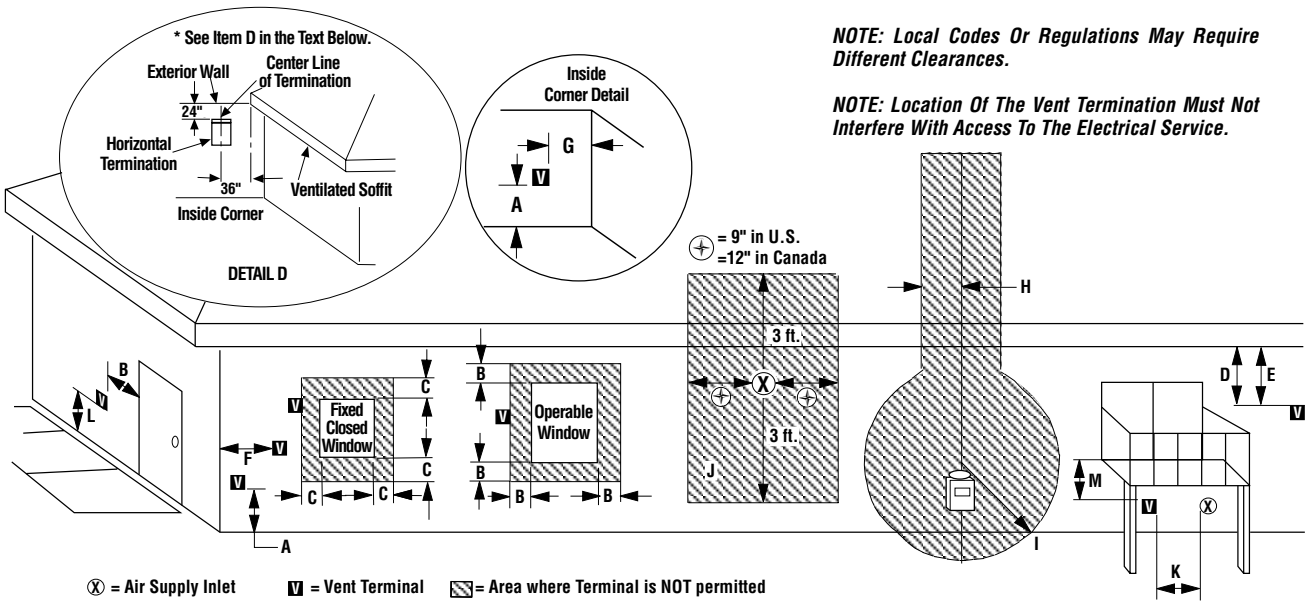
The horizontal vent termination must have a minimum of 3" (76 mm) clearance to any overhead combustible projection of 2-1/2" (64 mm) or less (see ***Figure 3).*** For projections exceeding 2-1/2" (64 mm), see ***Figure 3***. For additional vent location restrictions refer to ***Figure 4 on Page 7***.



See Figure 19 on Page 17 for the recess allowances, into exterior walls, of the power vent terminations.

Side Elevation View

Figure 3 - Horizontal Vent Termination Clearances



NOTE: Local Codes Or Regulations May Require Different Clearances.

NOTE: Location Of The Vent Termination Must Not Interfere With Access To The Electrical Service.

Minimum Clearances		Canadian Installation *	US Installation **
A	Clearance above grade, veranda, porch, deck or balcony.	12" (30 cm) *	12" (30 cm) **
B	Clearance to window or door that may be opened.	6" (15.2 cm) for appliances < 10,000 BTU/hr (3kW), 12" (30 cm) for appliances > 10,000 BTU/hr (3kW) and < 100,000 BTU/hr (30kW), 36" (91 cm) for appliances > 100,000 BTU/hr (30kW)*	6" (15.2 cm) for appliances < 10,000 BTU/hr (3kW), 9" (23 cm) for appliances > 10,000 BTU/hr (3kW) and < 50,000 BTU/hr (15kW), 12" (30 cm) for appliances > 50,000 BTU/hr (15kW)*
C	Clearance to permanently closed window	12" (305 mm) recommended to prevent window condensation	9" (229 mm) recommended to prevent window condensation
D	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 36" (91.4cm) from the center line of the terminal	24" (61.0 cm)	24" (61.0 cm)
E	Clearance to unventilated soffit	24" (61.0 cm)	24" (61.0 cm)
F	Clearance to outside corner	5" (12.7 cm)	5" (12.7 cm)
G	Clearance to inside corner	36" (91.4 cm)	24" (61.0 cm)
H	Clearance to each inside of center line extended above meter / regulator assembly	3 ft (91 cm) within a height of 15 ft above the meter / regulator assembly *	3 ft (91 cm) within a height of 15 ft above the meter / regulator assembly **
I	Clearance to service regulator vent outlet	3 ft (91 cm) *	3 ft (91 cm) **
J	Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance	6" (15.2 cm) for appliances < 10,000 BTU/hr (3kW), 12" (30 cm) for appliances > 10,000 BTU/hr (3kW) and < 100,000 BTU/hr (30kW), 36" (91 cm) for appliances > 100,000 BTU/hr (30kW)*	6" (15.2 cm) for appliances < 10,000 BTU/hr (3kW), 9" (23 cm) for appliances > 10,000 BTU/hr (3kW) and < 50,000 BTU/hr (15kW), 12" (30 cm) for appliances > 50,000 BTU/hr (15kW)*
K	Clearance to mechanical air supply inlet	6 ft (1.83 m) *	3 ft (91 cm) above, if within 10 ft (3 m) horizontally**
L	Clearance above paved sidewalk or paved driveway located on public property	7 ft (2.13 m) ‡	7 ft (2.13 m) ‡
M	Clearance under veranda, porch, deck or balcony	18" (46.0 cm) * ‡	18" (46.0 cm) ** ‡

* In accordance with the current CAN/CGA-B149.1 National Gas and B149.2 Propane Installation Code - Latest Editions.

** In accordance with the current ANSI Z223.1 / NFPA 54 National Fuel Gas Code - Latest Edition.

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

*‡ Only permitted if veranda, porch, deck or balcony is fully open on a minimum 2 sides beneath the floor.

Figure 4 - Exterior Horizontal Vent Termination Clearance Requirements

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

MINIMUM CLEARANCES TO COMBUSTIBLES

Appliance And Vent Clearances

The appliance is approved with zero clearance to combustible materials on all sides. Refer to ***Table 5*** for minimum clearance values. For typical installations, see ***Figure 2*** on ***Page 5***.

MINIMUM CLEARANCES* Inches (millimeters)	
Sides	1/2" (13 mm) 0" (0 mm) Spacers **
Top Spacers	0" (0 mm)
Floor	0" (0 mm)
Back	1/2" (13 mm) 0" (0 mm) Spacers
Bottom of Appliance To Ceiling	64" (1626 mm)
Vent	3" (76 mm) Top* 1" (25.4 mm) Sides and Bottom
SERVICE CLEARANCES Feet (meters)	
Front	3 feet (0.9 meters)

Table 5

**** 3" (75 mm) above any horizontal/inclined vent component.***

***** See Page 9, Step 1 for clearance requirements to the nailing flange located at each side of the unit and any screw heads adjacent to it.***

Wall Finishes / Surrounds / Mantels

NOTE: Combustible wall finish materials and/or surround materials must not be allowed to encroach the area defined by the appliance front face (black sheet metal). Never allow combustible materials to be positioned in front of or overlapping the appliance face. See *Figure 6 and Figure 44 on Page 26*.

Noncombustible materials, such as surrounds and other appliance trim, may be installed on the appliance front face with these exceptions: they must not cover any portion of the removable glass panel.

Vertical installation clearances to combustible mantels vary according to the depth of the mantel (see ***Figure 5***). Mantels constructed of noncombustible materials may be installed at any height above the appliance. Minimum clearance requirements include any projections such as shelves, window sills, mantels, etc. above the appliance.

NOTE: We recommend the use of high temperature paint (rated 175 °F or higher) on the underside of the mantel.

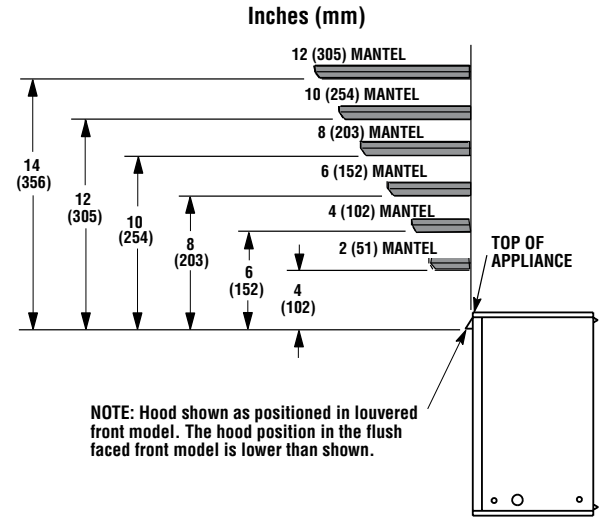


Figure 5 - Minimum Mantel Clearances

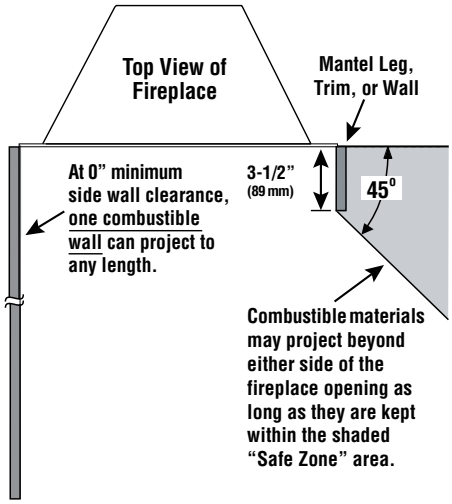


Figure 6 - Minimum Distance to Unprotected Side Wall

PRE-INSTALLATION STEPS

The appliance is shipped with all gas controls and components installed and pre-wired.

Before installing the appliance, follow these steps:

1. Remove the shipping carton.
2. Remove the shipping pad, exposing the front glass door.
3. Using a Phillips screwdriver, unfasten the two (2) screws located at the top of the glass frame (see ***Figure 40*** on ***Page 24***). Tilt the top of the glass frame away from the unit. Lift it carefully off the bottom door track and set the door aside, protecting it from inadvertent damage.
4. Remove the embers and volcanic stone from the control compartment.

TYPICAL INSTALLATION SEQUENCE

The typical sequence of installation is outlined below. However, each installation is unique and may result in variations to the steps described.

See the page numbers references in the following steps for detailed procedures.

Step 1. *(**Page 9**)* Construct the appliance framing. Position the appliance within the framing and secure with nailing brackets.

Step 2. *(**Page 11**)* Route gas supply line to the right side.

Step 3. *(**Page 12**)* Install the vent system and exterior termination.

Step 4. *(**Page 18**)* Field Wiring
Connect 120 VAC electrical power to the appliance receptacle.

Step 5. *(**Page 20**)* Remove glass door assembly.

Step 6. *(**Page 21**)* Make connection to gas supply.

Step 7. *(**Page 21**)* Install firebox liner kit.

Step 8. *(**Page 21**)* Verify appliance operation.

Step 9. *(**Page 22**)* Install volcanic stone, glowing embers, and logs.

Step 10. *(**Page 24**)* Install glass door assembly.

Step 11. *(**Page 24**)* Adjust burner to ensure proper flame appearance.

Step 12. *(**Page 27**)* **Attach Safety-in-Operation Warnings.**

DETAILED INSTALLATION STEPS

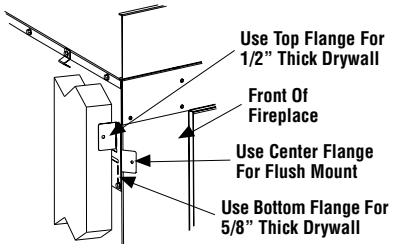
Step 1. FRAMING

Frame these appliances as illustrated in ***Figure 8 on Page 10***, unless the appliance is to be installed in a corner. See ***Figure 9 on Page 11*** for corner framing installations. All framing details must allow for a minimum clearance to combustible framing members as shown in ***Table 5 on Page 8***.

If the appliance is to be elevated above floor level, a solid continuous platform must be constructed below the appliance.

Headers may be in direct contact with the appliance top spacers but must not be supported by them or notched to fit around them.

The fireplace should be secured to the side framing members using the unit nailing flanges - one top and bottom on each side of the fireplace front *(see **Figure 7**)*. Use 8d nails or their equivalent.



NOTE: The nailing flanges, combustible members and screw heads located in areas directly adjacent to the nailing flanges, are EXEMPT from the 1/2" clearance to combustible requirements for the firebox outer wrapper. Combustible framing may be in direct contact with the nailing flanges and may be located closer than 1/2" from screw heads and the firebox wrapper in areas adjacent to the nailing flanges. Frame the opening to the exact dimensions specified in the framing details of this manual.

Left Side Front Corner of Fireplace Shown (Right Side Requirements the Same).

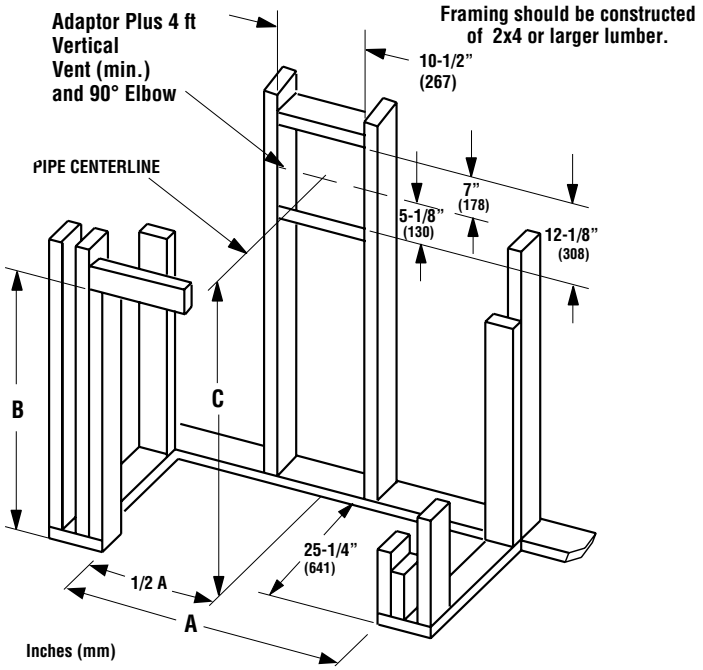
Figure 7 - Unit Secured by Nailing Flanges to the Framing

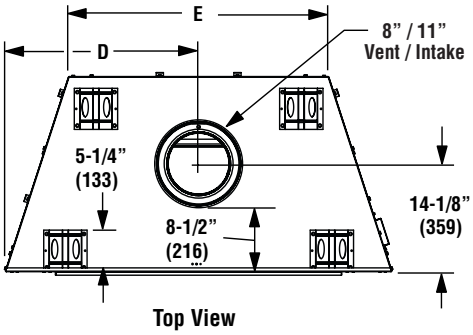
NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

FIREPLACE AND FRAMING SPECIFICATIONS

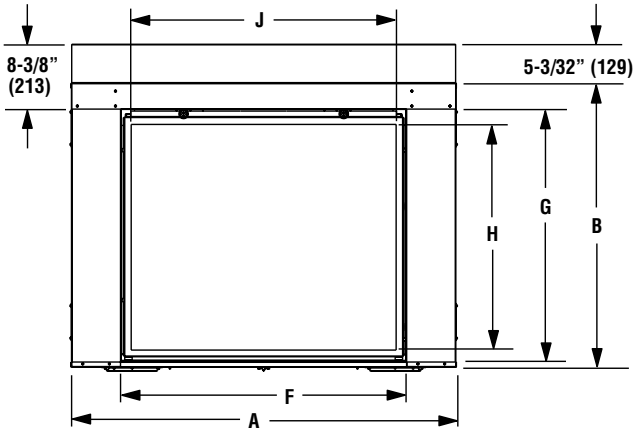
Model No.		A	B	C *
MDLX40IN-PV	in.	50-3/4	43	139-1/8
	mm	1289	1092	3534
MDLX45IN-PV	in.	56-7/8	48	144-1/8
	mm	1445	1219	3661

** C = Adaptor Plus 4 ft Vertical Vent (min.) and 90° Elbow*

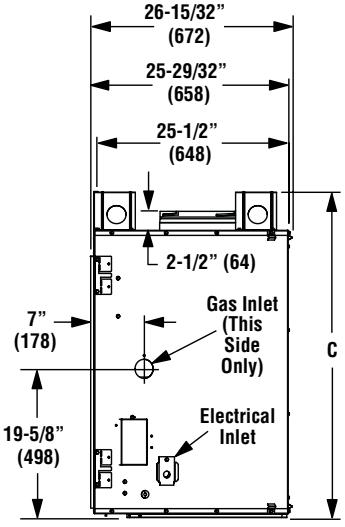




Top View



Front View



Right Side View

Vent Size	
Co-axial DV Vent Size	4-1/2" Inner 7-1/2" Outer

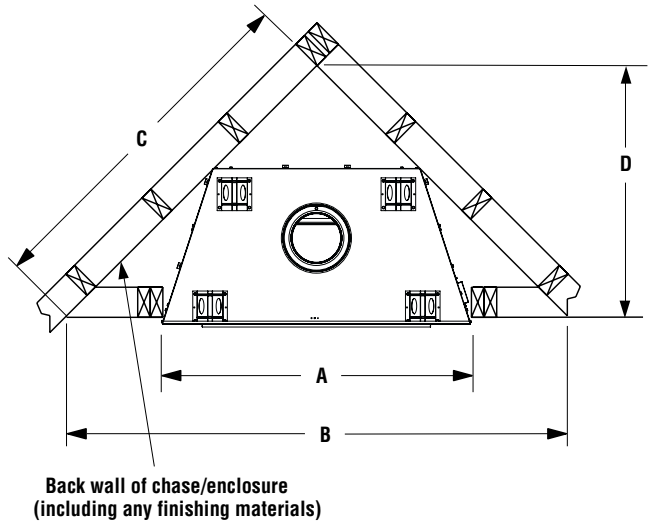
Notes

Diagrams, illustrations and photographs are not to scale - consult installation instructions. Product designs, materials, dimensions, specifications, colors and prices are subject to change or discontinuance without notice.

Model No.		A	B	C	D	E	F	G	H	J
MDLX40IN-PV	in.	50-5/8	37-1/4	42-7/8	25-5/16	34	37-5/8	33-3/32	29-9/32	34-3/4
	mm	1286	946	1089	643	864	956	840	744	883
MDLX45IN-PV	in.	56-11/16	42-1/4	47-7/8	28-3/8	40-1/8	43-5/8	38-3/32	34-1/2	40-59/64
	mm	1440	1073	1216	721	1019	1108	968	876	1039

Figure 8 - Fireplace and Framing Specifications

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.



Model No.		A	B	C	D
MDLX40IN-PV	in.	50-5/8	83-5/8	59-1/8	41-7/8
	mm	1286	2124	1502	1064
MDLX45IN-PV	in.	56-3/4	89-7/8	63-1/2	44-7/8
	mm	1441	2283	1613	1140

Figure 9 - Corner Framing with Power Vent Termination

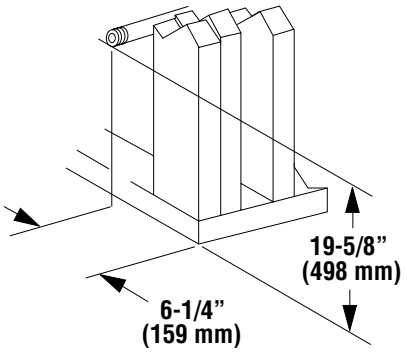


Figure 10 - Right-Front Corner of Fireplace Framing

Step 2. ROUTING GAS LINE

Route a 1/2" (13 mm) gas line along the inside of the right side framing as shown in ***Figure 10***. Gas lines must be routed, constructed and made of materials that are in strict accordance with local codes and regulations.

All appliances are factory-equipped with a flexible gas line connector and 1/2" shutoff valve. (see **Step 6** on ***Page 21***).

Proper Sizing of Gas Line

Properly size and route the gas supply line from the supply regulator to the area where the appliance is to be installed per requirements outlined in the (USA) National Fuel Gas Code, ANSI Z223.1/NFPA 54 - latest edition, or (Canada) CAN/CGA-B149.1 - latest edition.

Never use galvanized or plastic pipe. Refer to ***Table 6*** for proper sizing of the gas supply line, if black iron pipe is being used.

Schedule 40 Black Iron Pipe Inside Diameter	
Length	**Inside Diameter**
0 - 10 ft (0 - 3.1 m)	1/2" (12.7 mm)
10 - 40 ft (3.1 - 12.2 m)	1/2" (12.7 mm)
40 - 100 ft (12.2 - 30.5 m)	1/2" (12.7 mm)
100 - 150 ft (30.5 - 45.7 m)	3/4" (19.1 mm)
150 - 200 ft (45.7 - 61.0 m)	3/4" (19.1 mm)

Table 6

Gas lines must be routed, constructed and made of materials that are in strict accordance with local codes and regulations. We recommend hiring a qualified plumber or gas fitter to correctly size and route the gas supply line to the appliance. Installing a gas supply line from the fuel supply to the appliance involves numerous considerations of materials, protection, sizing, locations, controls, pressure, sediment, and more. Only a qualified installer should attempt sizing or installing gas pipe.

NOTES:

- *All appliances are factory-equipped with a flexible gas line connector and 1/2" shutoff valve (see **Figure 30** on **Page 21**).*
- *See **Massachusetts Requirements** on **Page 4** for additional requirements for installations in the state of Massachusetts in the USA.*
- *The gas supply line should Not be connected to the appliance until **Step 6** (**Page 21**).*
- *A pipe joint compound rated for gas should be used on the threaded joints. Be very careful that the pipe compound does not get inside the pipe.*
- *Installing a sediment trap in the supply line as close as possible to the appliance is recommended.*
- *Check with local building official for local code requirements.*

Step 3. INSTALL THE VENT SYSTEM

General Information

These instructions should be used as a guideline and do not supersede local codes in any way. Install venting according to local codes, these instructions, and the (USA) National Fuel Gas Code, ANSI Z223.1/NFPA 54 - latest edition, or (Canada) CAN/CGA-B149.1 - latest edition.

These fireplaces are designed, tested and listed for operation and installation only with Secure Vent® (SV4.5) and Secure Flex® Direct-Vent System Components, manufactured by Security Chimneys International. These approved vent system components are labeled for identification. DO NOT use any other manufacturer's vent components with these appliances.

Ensure clearances are in accordance with local installation codes and the requirements of the gas supplier.

Dégagement conforme aux codes d'installation locaux et aux exigences du foumisseunde gaz.

Use only approved venting components. See *Approved Vent Components* on *Page 2*.

These fireplaces must be vented directly to the outside.

The vent system may not service multiple appliances, and must never be connected to a flue serving a separate solid fuel burning appliance. The vent pipe is tested to be run inside an enclosed wall (such as a chase). There is no requirement for inspection openings in the enclosing wall at any of the joints in the vent pipe.

Venting System

With the appliance secured in framing, determine vent routing and identify the exterior termination location. The following sections describe horizontal (exterior wall) vent applications. **A list of approved venting components is shown on *Page 28*.**

Power Vent Components

Locate the fireplace as instructed in this manual. Make the following modifications to add the components used with the Power Vent Kit. This kit may only be used in conjunction with Direct-Vent series electronic versions of Lennox Hearth Products Fireplaces. This installation must conform with local codes, or, in the absence of local codes, with the (USA) National Fuel Gas Code, ANSI Z223.1/NFPA 54 - latest edition, or (Canada) CAN/CGA-B149.1 - latest edition.

CAUTION: This power vent kit cannot be used with millivolt appliances. Use the kit only with the electronically controlled fireplaces listed for its use as shown in this document.

Item No.	Part Number	Description	Qty.
1	604187-01	Adaptor Assembly With Probe	1
2	601970-01	Vacuum Hose	1
3	601451-01	Termination Assembly	1
4	74L61	SV Termination Adaptor (SV4.5RCH)	1
5	102010-01	Strain Relief - 3/8"	1
6	H2246	Firestop Assembly (Horizontal)	1
7	102022-01	Hose Clamp - 11/32"	2
8	P-8-7102	Snap Bushing	1
9	-	Ring Terminal - #10	2
10	-	Insulated 1/4" Male Terminal	4

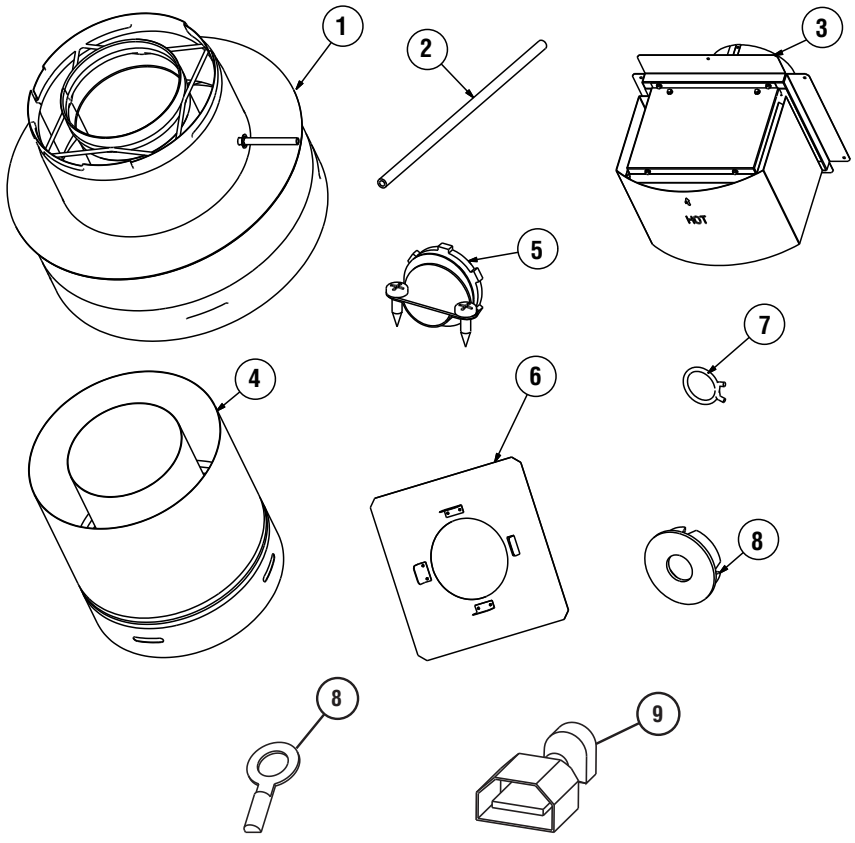


Figure 11 - Power Vent Kit Components

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

VENT SECTION LENGTHS

Determine the number of straight vent sections required. 4-1/2" (114 mm), 10-1/2" (267 mm), 22-1/2" (572 mm), 34-1/2". (876 mm) and 46-1/2" (1181 mm) net section lengths are available (see ***Tables 7 and 8***).

Offset Installation

Analyze the vent routing and determine the quantities of vent sections and number of elbows required. Refer to ***Figures 16 and 17 on Page 15*** showing vent run requirements to aid in selecting the type of vertical installation desired. Vent sections are available in net lengths of 4-1/2" (114 mm), 10-1/2" (267 mm), 22-1/2" (572 mm), 34-1/2" (876 mm) and 46-1/2" (1181 mm). Refer to the **Vent Section Length Chart** for an aid in selecting length combinations. Elbows are available in 90° and 45° configurations. Refer to ***Figure 15 on Page 14*** for the SV4.5 E45 and SV4.5 E90 elbow dimensional specifications.

Where required, a **telescopic vent section (SV4.5LA)** may be used to provide the installer with an option in installing in tight and confined spaces or where the vent run made up of fixed length pieces develops a joint in a undesirable location, or will not build up to the required length. The SV4.5LA Telescopic Vent Section has an effective length of from 1-1/2" (38 mm) to 6-3/4" (171 mm). The SV4.5LA is fitted with a dimpled end (identical to a normal vent section component) and a plain end with 3 pilot holes. Slip the dimpled end over the locking channel end of a standard SV4.5 vent component the required distance and secure with three screws.

Maintain a minimum 1" (25 mm) clearance to combustible materials for all vertical elements. Clearances for all horizontal elements are 3" (76 mm) on top, 1" (25 mm) on sides and 1" (25 mm) on the bottom.

Effective Vent Length	
Model	**Effective Length**
SV4.5L6	4-1/2"
SV4.5L12	10-1/2"
SV4.5L24	22-1/2"
SV4.5L36	34-1/2"
SV4.5L48	46-1/2"

Table 7

Nominal Section Length (inches)		6	12	24	36	48	TOTAL QTY
Net Section Length (inches)		4-1/2	10-1/2	22-1/2	34-1/2	46-1/2	
Height of Vent		Number of Vent Sections					
inches	ft						
4.5	0.375	1	0	0	0	0	1
9	0.75	2	0	0	0	0	2
10.5	0.875	0	1	0	0	0	1
15	1.25	1	1	0	0	0	2
22.5	1.875	0	0	1	0	0	1
31.5	2.625	0	3	0	0	0	3
34.5	2.875	0	0	0	1	0	1
37.5	3.125	1	1	1	0	0	3
43.5	3.625	0	2	1	0	0	3
45	3.75	0	0	2	0	0	2
46.5	3.875	0	0	0	0	1	1
51	4.25	1	0	0	0	1	2
55.5	4.625	0	1	2	0	0	3
57	4.75	0	0	1	1	0	2
67.5	5.625	0	0	3	0	0	3
69	5.75	0	0	0	2	0	2
73.5	6.125	1	0	0	2	0	3
79.5	6.625	0	1	0	2	0	3
81	6.75	0	0	0	1	1	2
91.5	7.625	0	0	2	0	1	3
93	7.75	0	0	0	0	2	2
97.5	8.125	1	0	0	0	2	3
103.5	8.625	0	0	0	3	0	3
108	9	1	0	0	3	0	4
117	9.75	1	0	5	0	0	6
118.5	9.875	1	1	0	3	0	5
126	10.5	0	0	1	3	0	4
130.5	10.875	1	0	1	3	0	5
135	11.25	0	0	6	0	0	6
139.5	11.625	0	0	0	0	3	3
142.5	11.875	1	0	0	4	0	5
144	12	1	0	0	0	3	4
154.5	12.875	1	1	0	0	3	5
160.5	13.375	0	2	0	0	3	5
172.5	14.375	0	0	0	5	0	5
177	14.75	1	0	0	5	0	6
186	15.5	0	0	0	0	4	4
196.5	16.375	0	1	0	0	4	5
207	17.25	0	0	0	6	0	6
211.5	17.625	1	0	0	6	0	7
217.5	18.125	0	1	0	6	0	7
229.5	19.125	0	0	1	6	0	7
232.5	19.375	0	0	0	0	5	5
241.5	20.125	0	0	0	7	0	7
246	20.5	1	0	0	7	0	8
252	21	0	1	0	7	0	8
276	23	0	0	0	8	0	8
279	23.25	0	0	0	0	6	6
280.5	23.375	1	0	0	8	0	9
289.5	24.125	0	1	0	0	6	7
301.5	25.125	0	0	1	0	6	7
310.5	25.875	0	0	0	9	0	9
325.5	27.125	0	0	0	0	7	7
330	27.5	1	0	0	0	7	8
345	28.75	0	0	0	10	0	10
349.5	29.125	1	0	0	10	0	11
372	31	0	0	0	0	8	8
379.5	31.625	0	0	0	11	0	11
418.5	34.875	0	0	0	0	9	9
465	38.75	0	0	0	0	10	10
475.5	39.625	0	1	0	0	10	11
480	40	1	1	0	0	10	11
492	41	1	0	1	0	10	12
499.5	41.625	0	0	0	1	10	11
504	42	1	0	0	1	10	12
511.5	42.625	0	0	0	0	11	11
520.5	43.375	0	2	0	1	11	14
531	44.25	0	2	2	0	11	15
538.5	44.875	1	0	0	2	11	14
549	45.75	1	0	2	1	11	15
558	46.5	0	0	0	0	12	12
562.5	46.875	1	0	0	0	12	13
568.5	47.375	0	1	0	0	12	13
573	47.75	1	1	0	0	12	14
580.5	48.375	0	0	1	0	12	13
589.5	49.125	0	1	2	2	10	15
595.5	49.625	1	1	1	0	12	15
604.5	50.375	0	0	0	0	13	13
615	51.25	0	1	0	0	13	14
625.5	52.125	0	2	0	0	13	15
631.5	52.625	1	0	1	0	13	15
637.5	53.125	0	1	1	0	13	15
651	54.25	0	0	0	0	14	14
655.5	54.625	1	0	0	0	14	15
672	56	0	2	0	0	14	16
678	56.5	1	0	1	0	14	16
688.5	57.375	1	1	1	0	14	17
697.5	58.125	0	0	0	0	15	15
702	58.5	1	0	0	0	15	16
712.5	59.375	1	1	0	0	15	17
720	60	0	0	1	0	15	16

Table 8 - Vent Section Length

NOTE: Convert inches into metric equivalent measurement, as follows:

Millimeters (mm) = Inches x 25.4
Centimeters (cm) = Inches x 2.54
Meters (m) = Inches x .0254

A. Frame ceiling opening - Use a plumb line from the ceiling above the appliance to locate center of the vertical run. Cut and/or frame an opening, 10-1/2" x 10-1/2" (267 mm x 267 mm) inside dimensions, about this center mark *(**Figure 12**)*.

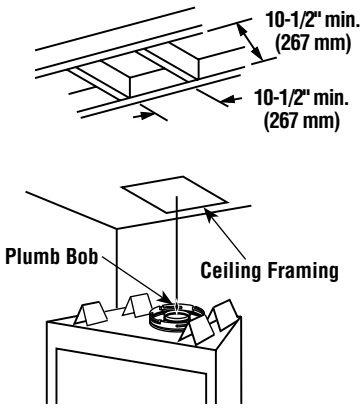


Figure 12 - Framing Ceiling Opening

B. Attach adaptor (with probe) to appliance collar - Secure Vent® SV4.5 direct-vent system components are unitized concentric pipe components featuring positive twist lock connections (see ***Figure 13***).

All of the appliances covered in this document are fitted with collars having locking inclined channels. The dimpled end of the adaptor fits over the appliance collar to create the positive twist lock connection.

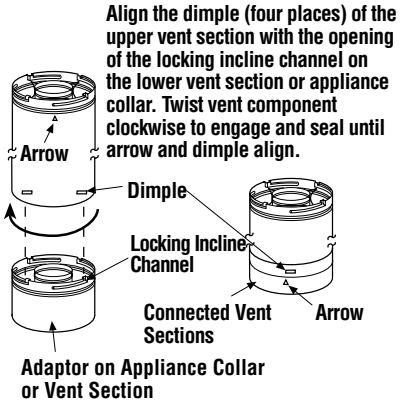


Figure 13 - Attaching the Vent Adaptor

To attach a vent component to the adaptor on appliance collar, align the dimpled end over the adaptor collar, adjusting the radial alignment until the four locking dimples are aligned with the inlet of the four inclined channels on the collar (refer to ***Figure 13***). Push the vent component against the collar until it fully engages, then twist the component clockwise, running the dimples down and along the incline channels until they seat at the end of the channels.

The unitized design of the Secure Vent® components will engage and seal both the inner and outer pipe without the need for sealant or screws. If desired a #6 x 1/2" screw may be used at the joint, but it is not required as the pipe will securely lock when twisted.

C. Attach vent components to each other - Other vent sections may be added to the previously installed section in accordance with the requirements shown in ***Figures 16 and 17 on Page 15***.

To add another vent component to a length of vent run, align the dimpled end over the inclined channel end of the previously installed section, adjusting the radial alignment until the four locking dimples are aligned with the inlets of the four incline channels of the previous section.

Push the vent component against the previous section until it fully engages, then twist the component clockwise running the dimples down and along the incline channels until they seat at the end of the channels. **This seating position is indicated by the alignment of the arrow and dimple as shown in *Figure 13.***

D. Install firestop/spacer at ceiling - When using Secure Vent, use SV4.5VF firestop/spacer at ceiling joists. If there is living space above the ceiling level, the firestop/spacer must be installed on the bottom side of the ceiling. If attic space is above the ceiling, the firestop/spacer must be installed on the top side of the joist. Route the vent sections through the framed opening and secure the firestop/spacer with 8d nails or other appropriate fasteners at each corner.

Maintain 1" (25 mm) clearance to combustibles, framing members, and attic or ceiling insulation when running vertical chimney sections. Attic insulation shield (H3907) may be used to obtain the required clearances indicated here. See installation accessories on *Page 28*. The gap between the vent pipe and a vertical firestop may be sealed with noncombustible caulking.

E. Support the vertical vent run sections -

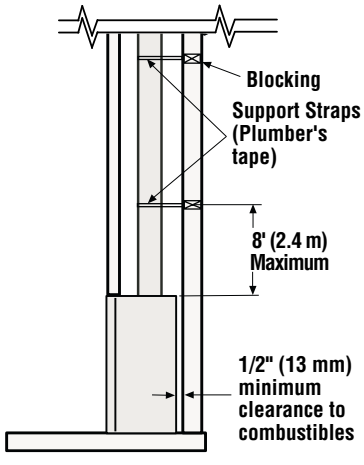


Figure 14 - Supporting Vertical Vents

Support the vertical portion of the venting system every eight feet (2.4 m) above the fireplace vent outlet. One method of support is by utilizing field provided support straps (conventional plumber's tape). Secure the plumber's tape to the framing members with nails or screws. Strap the tape around the vent, securing the ends of the tape to the framing. If desired, sheet metal screws #6 x 1/2" length may be used to secure the support straps to the vent pipe.

F. Change vent direction to horizontal/inclined run - At transition from or to a horizontal/inclined run, install the SV4.5E45 and SV4.5E90 elbows in the same manner as the straight vent sections. The elbows feature a twist section to allow them to be routed about the center axis of their initial collar section to align with the required direction of the next vent run element. **Twist elbow sections in a clockwise direction only so as to avoid the possibility of unlocking any of the previously connected vent sections (see *Figures 13 and 15*)**.

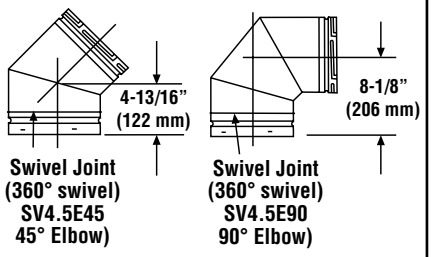


Figure 15 - Vent Elbow Sections

G. Continue installation of horizontal/inclined sections - Continue with the installation of the straight vent sections in horizontal/inclined run as described in **Step C.** Install support straps every three feet (914 mm) along horizontal/inclined vent runs using conventional plumber's tape (***Figure 16*** on ***Page 15***).

NOTE: Maintain the horizontal/inclined run in a straight, slightly elevated plane - approximately 1/4" per foot (20 mm per meter) - in a direction away from the fireplace. Smaller rise per foot run ratios are acceptable, down to at or near level. Use a carpenter's level to measure from a constant surface and adjust the support straps as necessary.

NOTE: Maintain the required clearances to combustibles: 1" (25 mm) at all sides for all vertical runs; and 3" (76 mm) at the top, 1" (25 mm) at sides, and 1" (25 mm) at the bottom for all horizontal/inclined runs.

VENT FIGURES

NOTES:

- *Secure Vent® components (rigid vent pipe and terminal) are shown.*
- *Two 45° elbows may be used in place of one 90° elbow.*
- *SV4.5VF (Secure Vent) firestop/spacer must be used anytime vent pipe passes through a combustible floor or ceiling. SV4.5HF (Secure Vent) firestop/spacer must be used anytime vent pipe passes through a combustible wall.*
- ***Maintain the horizontal/inclined run in a straight, slightly elevated plane - approximately 1/4" per foot (20 mm per meter) - in a direction away from the fireplace. Smaller rise per foot run ratios are acceptable, down to at or near level. Use a carpenter's level to measure from a constant surface and adjust the support straps as necessary.***

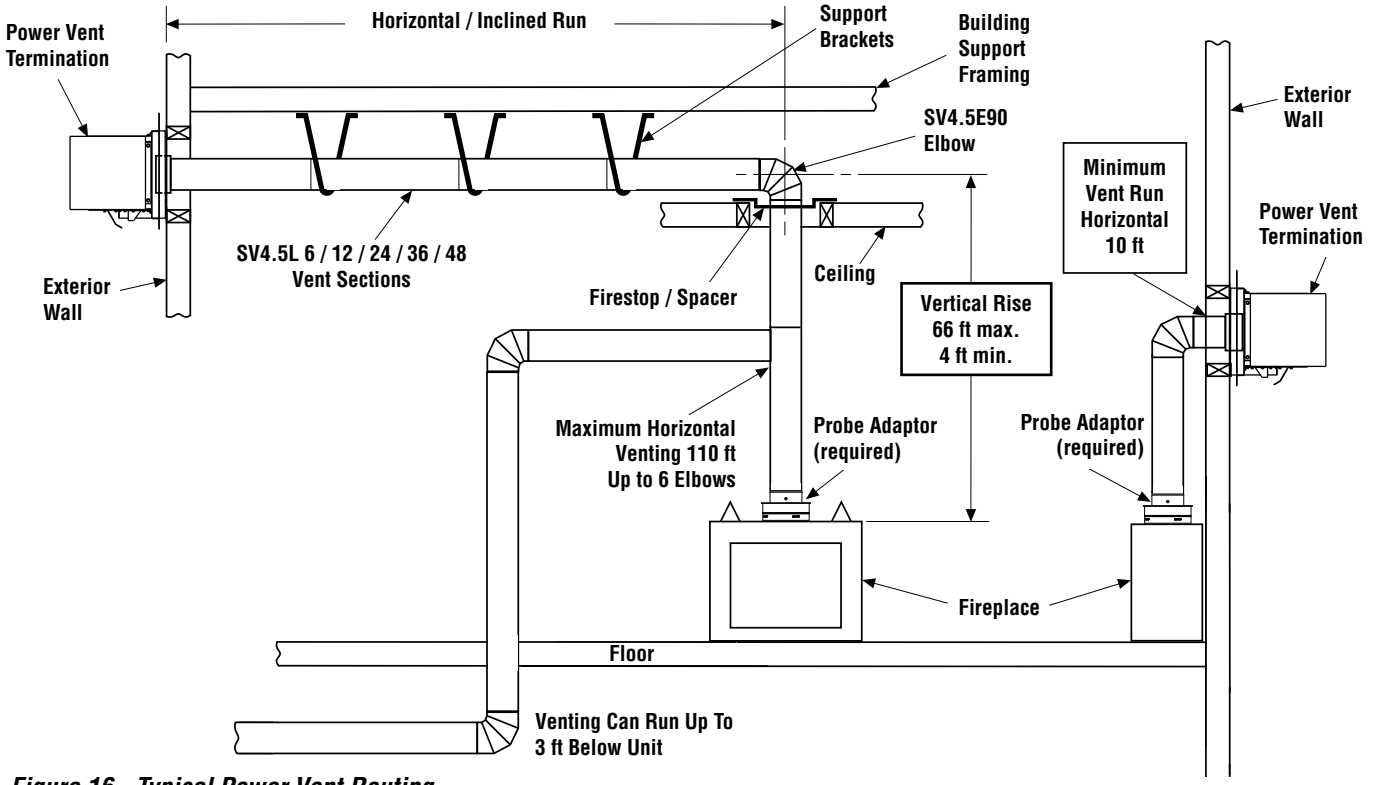


Figure 16 - Typical Power Vent Routing

Power Venting		
Maximum Number Of Elbows	-	6
Maximum Feet Of Run	A + B	110 ft
Minimum Horizontal Run	B	10 ft
Minimum Vertical Run	A	Adaptor Plus 4 ft Vertical Vent (min.) and 90° Elbow
Maximum Vertical Rise	A	66 ft

Table 9

Minimum Clearance to Combustibles	
Vertical Vent Pipe	1.0" (25.4 mm)
Horizontal Vent Pipe	Top - 3" (76.2 mm) Sides - 1" (25.4 mm) Bottom - 1" (25.4 mm)

Table 10

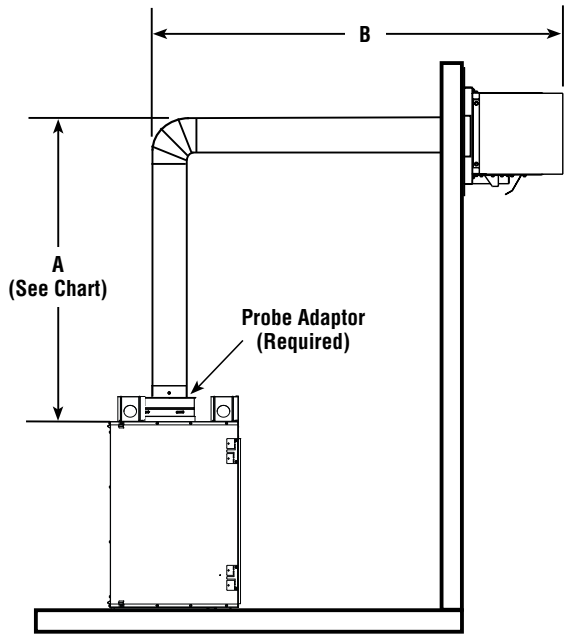


Figure 17 - Power Vent Routing with Probe Adaptor

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

HORIZONTAL (OUTSIDE WALL) TERMINATION SYSTEM

See Figures 16 and 17 on Page 15 illustrating the various horizontal venting configurations that are possible for use with these appliances. ***Table 9 on Page 15*** shows each system's minimum and maximum vertical and horizontal length values that can be used to design and install the vent components in a variety of applications.

The horizontal vent system terminates through an outside wall. Building codes limit or prohibit terminating in specific areas. Refer to ***Figure 4 on Page 7*** for location guidelines.

Secure Vent® SV4.5 direct-vent system components are unitized concentric pipe components featuring positive twist lock connection, (refer to ***Figure 13 on Page 14***). All of the appliances covered in this document are fitted with collars having locking inclined channels. The dimpled end of the vent components fit over the appliance collar to create the positive twist lock connection.

A. Plan the vent run -
Analyze the vent routing and determine the types and quantities of sections required 4-1/2" (114 mm), 10-1/2" (267 mm), 22-1/2" (572 mm), 34-1/2" (876 mm) and 46-1/2" (1181 mm) net section lengths are available. Make allowances for elbows as indicated in ***Figure 15 on Page 14***.

Maintain a minimum 1" (25 mm) clearance to combustibles on the vertical sections. Clearances for the horizontal runs are: 3" (76 mm) on top, 1". (25 mm) on sides, and 1" (25 mm) at the bottom.

B. Frame exterior wall opening -
Locate the center of the vent outlet on the exterior wall according to the dimensions shown in ***Figure 8 on Page 10***.

Cut and/or frame an opening, 10-1/2" x 12-1/8" (267 mm x 308 mm) inside dimensions, about this center.

C. Frame ceiling opening - If the vertical route is to penetrate a ceiling, use a plumb line to locate the center above the appliance. Cut and/or frame an opening, 10-1/2" x 10-1/2" (267 mm x 267 mm) inside dimensions, about this center (see ***Figure 12*** **on** ***Page 14***).

D. Attach vent components to appliance - To attach a vent component to the appliance collar, align the dimpled end over the collar, adjusting the radial alignment until the four locking dimples are aligned with the inlets of the four incline channels on the collar (*refer to* ***Figure 13*** **on** ***Page 14***).

Push the vent component against the collar until it fully engages, then twist the component clockwise, running the dimples down and along the incline channels until they seat at the end of the channels. The unitized design of the Secure Vent components will engage and seal both the inner and outer pipe elements with the same procedure. Sealant and securing screws are not required.

E. Attach vent components to each other - Other vent sections may be added to the previously installed section in accordance with the requirements of the vent tables. To add another vent component to a length of vent run, align the dimpled end of the component over the inclined channel end of the previously installed section, adjusting the radial alignment until the four locking dimples are aligned with the inlets of the four incline channels of the previous section. Push the vent component against the previous section until it fully engages, then twist the component clockwise running the dimples down and along the incline channels until they seat at the end of the channels. **This seating position is indicated by the alignment of the arrow and dimple as shown in** ***Figure 13*** **on** ***Page 14.***

F. Install firestop/spacer at ceiling -
When using Secure Vent, use SV4.5VF firestop/spacer at ceiling joists. If there is living space above the ceiling level, the firestop/spacer must be installed on the bottom side of the ceiling. If attic space is above the ceiling, the firestop/ spacer must be installed on the top side of the joist. Route the vent sections through the framed opening and secure the firestop/spacer with 8d nails or other appropriate fasteners at each corner. The gap between the vent pipe and a firestop can be sealed with noncombustible caulking.

Maintain 1" (25 mm) clearance to combustibles, framing members, and attic or ceiling insulation when running vertical chimney sections.

G. Support the vertical run sections -
On the vertical run, support the venting system every eight feet (2.4 m) above the fireplace vent outlet with field provided support straps (Plumber's tape). Attach the straps to the vent pipe and secure to the framing members with nails or screws.

H. Change vent direction - At transitions from or to a horizontal/inclined run, install the SV4.5E45 and SV4.5E90 elbows in the same manner as the straight vent sections. The elbows feature a twist section to allow them to be routed about the center axis of their initial collar section to align with the required direction of the next vent run element. **Twist elbow sections in a clockwise direction only so as to avoid the possibility of unlocking any of the previously connected vent sections (see** ***Figure 13*** **on** ***Page 14)***.

I. Continue installation of horizontal/inclined sections - Continue with the installation of the straight vent sections in horizontal/inclined run as described in **Step E**. Install support straps every three feet (1914 mm) along horizontal/inclined vent runs using conventional plumber's tape (see ***Figure 16 on Page 15***).

NOTE: Maintain the horizontal/inclined run in a straight, slightly elevated plane - approximately 1/4" per foot (20 mm per meter) - in a direction away from the fireplace. Smaller rise per foot run ratios are acceptable, down to at or near level. Use a carpenter's level to measure from a constant surface and adjust the support straps as necessary.

Installing Power Vent Termination

J. Assemble vent run to exterior wall - If not previously measured, locate the center of the vent on the exterior wall. Prepare an opening as described in this manual. Assemble the vent system to a point where the terminus of the last section is within 8" of the outside wall surface where the power vent is to be mounted (see ***Figure 18 on Page 17***).

If the terminus of the last section is not within this distance, use the **telescopic vent section SV4.5LA**, as the last vent section. For wall thicknesses greater than that shown in ***Figure 19 on Page 17***, refer to ***Table 11 on Page 17*** for the additional venting components needed (in addition to the termination and adaptor) for a particular range of wall thicknesses.

K. Attach termination adaptor - Attach the adaptor (SV4.5RCH - provided with the power vent kit) to the vent section telescoping vent section, or elbow, as shown in ***Figures 18 and 19 on Page 17*** in the same manner as any SV4.5 vent component.

L. Install Firestop/Spacer at exterior wall - Install SV4.5HF Firestop/Spacer, provided with the power vent kit, over the opening at the **exterior** side of the framing, long side up, with the 3" spacer clearance at the top as shown in ***Figure 18***, and nail into place. The Firestop/Spacer may also be installed over the opening at the interior side of the framing. The gap between the vent pipe and a firestop can be sealed with noncombustible caulking.

(The Firestop/Spacer may also be installed over the opening at the interior side of the framing).

M. Install the Power Vent termination - From outside the exterior wall, slide the collars of the termination onto the adaptor until the termination seats against the exterior wall surface to which it will be attached. Orient the housing of the termination with the arrow pointed upwards. Secure the termination to the exterior wall. **The termination must not be recessed into the exterior wall or siding** by more that the 1-1/4" (32 mm) as shown in ***Figure 19***.

The Power Vent termination has been designed to perform in a wide range of weather conditions. Terminations meet or exceed industry standards.

When selecting the location of termination, do not place the termination where water from eaves and adjoining roof lines may create a heavy flow of cascading water onto the termination. If the termination must be placed where the possibility of cascading water exists, it is the responsibility of the builder to direct the water away from the termination cap by using gutters or other means.

Carefully follow the Installation Instructions for the termination, including the use of silicone caulking where required.

See Table 11 as an aid in venting component selection for a particular range of exterior wall thicknesses.

WARNING: The vent termination is hot while in operation and for a period of time following the use of the fireplace. Young children should be carefully supervised when in the same area as a hot termination.

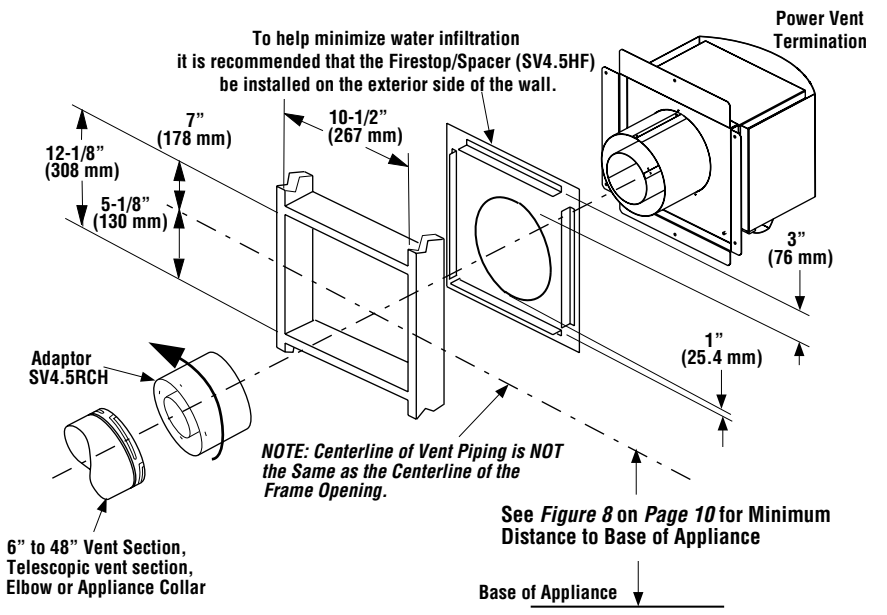


Figure 18 - Installing Power Vent Horizontal Termination

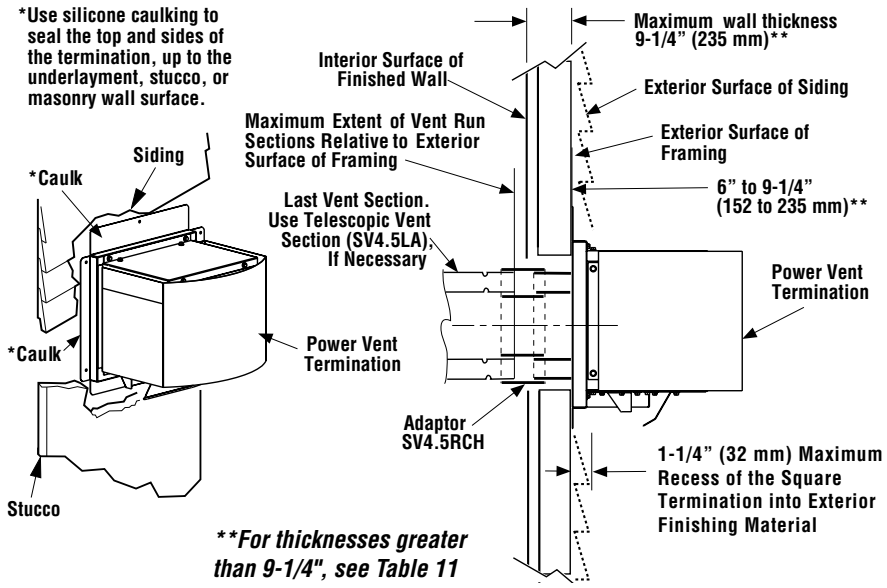


Figure 19 - Venting Connection and Exterior Wall Recessing of the Power Vent Horizontal Termination

Venting Components Required for Various Exterior Wall Thicknesses when Using the Power Vent Termination	
Vent Components Required	**Exterior Wall Thickness**
Termination Kit Only	6 to 9-1/4" (152 to 235 mm)
Termination Kit and 6" Vent Section (SV4.5L6)	10-3/4 to 14" (273 to 356 mm)
Termination Kit and 12" Vent Section (SV4.5L12)	16-3/4 to 20" (426 to 508 mm)
Termination Kit and Telescopic Section (SV4.5L12)	11-3/4 to 20" (299 to 508 mm)

Table 11

Step 4. FIELD WIRING

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

ATTENTION: Au moment de l'entretien des commandes, étiquetez tous les fils avant de les débrancher. Des erreurs de câblage peuvent entraîner un fonctionnement inadéquat et dangereux.

Verify proper operation after servicing.

S'assurer que l'appareil fonctionne adéquatement une fois l'entretien terminé.

CAUTION: Ground supply lead must be connected to the wire attached to the green ground screw located on the outlet box. See *Figures 27 and 28 on Page 20*. Failure to do so will result in a potential safety hazard. The appliance must be electrically grounded in accordance with local codes or, in the absence of local codes, the (USA) National Electrical Code, ANSI/NFPA 70 - latest edition, or the Canadian Electrical Code, CSA C22.1 - latest edition.

Route Cable

NOTE: Electrical wiring must be performed by a qualified electrician.

- Install the strain relief in the hole provided on the right side of fireplace for the electrical wiring (see ***Figure 20***).
- Either use the intgrated junction box, or position an electrical junction box (not provided) within reach of the termination wiring pigtail (see ***Figure 23 on Page 19***). Route the pigtail to the junction box as the termination is installed.
- Route 14 gage AWG grounded solid wire Romex® or equally-sized stranded cable (e.g., SJOT) from the fireplace to the newly installed junction box near the termination. Ensure the cable is safety plated to prevent damage from framing nails and finish drywall screws. Route it into the lower control compartment and cut to length before installing the terminals. Install provided hardware on the ends of the cable. Cable is not provided. The provided crimp terminals are intended for use with stranded cable. If using Romex, connect per National Electric Code or local code.

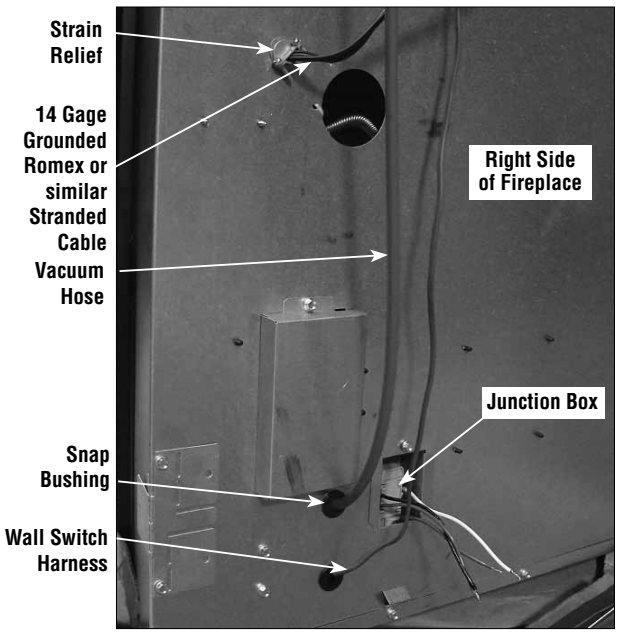
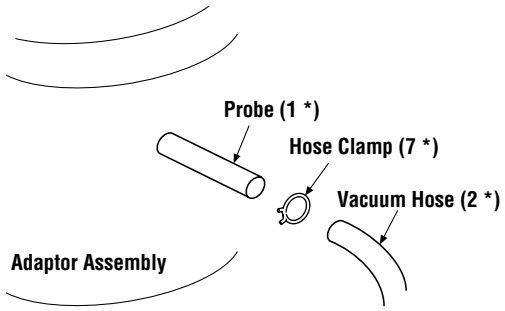


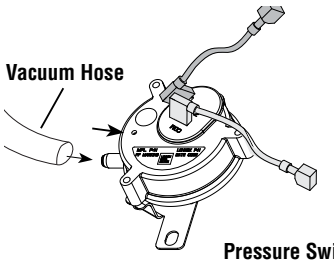
Figure 20 - Routing Wiring

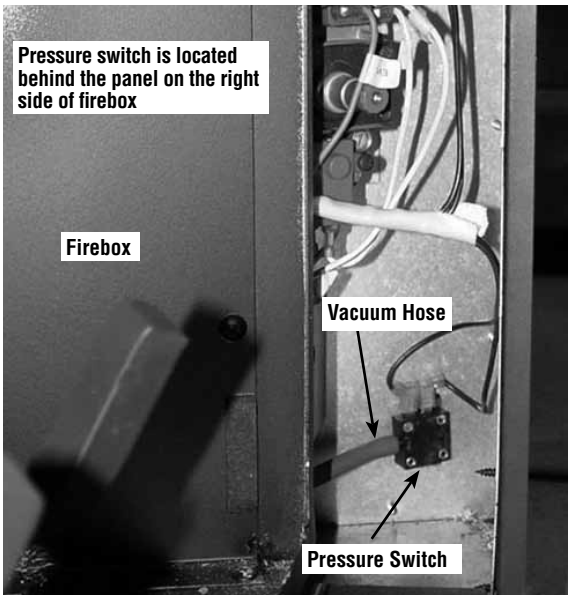
- Refer to ***Figure 25 on Page 19*** and install the electrical hardware on the ends of the cable. Male terminals on the Black and White wires, and ring terminals on the ground wire.
- Using standard electrical practices and the terminals provided, connect the three wires of the cable to the termination pigtail within the Electrical junction box. Ensure ground.
- The fireplace end of the cable will be addressed in **Connecting The Power Vent To The Fireplace Control System**.



** See Figure 11 on Page 12*

Figure 21 - Vacuum Hose Connection to Probe





NOTE: Pressure switch style may vary from that shown.

Figure 22 - Vacuum Hose Connection to Pressure Switch

Wiring - Fireplace (See *Figures 27 and 28 on Page 20)*

NOTE: These electronic appliances must be connected to the main power supply. The gas valve is set in place and pre-wired at the factory.

1. Route a 3-wire 120 Vac 60 Hz 1ph power supply to the appliance junction box.
2. Remove the electrical inlet cover plate from the side of the unit by removing the plate securing screws (see ***Figure 8 on Page 10*).**
3. Remove the cover plate knockout and then feed the power supply through the knockout opening and into the unit junction box.
4. Connect the black power supply to the **power outlet** red pigtail lead and the white power supply to the **common** terminal of the outlet as shown in ***Figures 27 and 28 on Page 20.***
5. **Connect the ground supply to the pigtail lead attached to outlet green ground screw.**
6. Wall-mounted ON/REMOTE/OFF burner control switch and remote control kits may be used. Mount the switch in a convenient location on a wall near the fireplace.

NOTE: One end of the supplied wire (15 ft) is factory-connected and the other end is attached to the side of the unit.

CAUTION: Do Not connect the ON/REMOTE/OFF wall switch to a 120 V power supply.

8. Turn the wall-mounted ON/REMOTE/OFF burner control switch to the OFF position.
9. After the wiring is complete, replace the cover plate.

Wiring - Power Vent Termination

Alternate Instructions (For use when access to the termination is easy and a secondary electrical junction box installation is not desired).

- Remove the junction box cover from the termination by removing the attaching screw (see ***Figure 23*)**.
- Loosen the strain relief on the termination shown in ***Figure 25***. Pull the pigtail in and shorten it to fit within the junction box cover.

WARNING: Crimp connectors may be used on stranded cables (such as SJOT cable) only. Solid wire Romex must be connected per the National Electric Code, NEC 70 - latest version, or local codes.

- Route 14 gage AWG grounded solid wire Romex or equally sized stranded cable (e.g., SJOT) from the fireplace to the newly installed junction box near the termination. Ensure the cable is safety plated to prevent damage from framing nails and finish drywall screws. Route it into the lower control compartment and cut to length before installing the terminals. Install provided hardware on the ends of the cable. Cable is not provided. The provided crimp terminals are intended for use with stranded cable. If using Romex, connect per National Electric Code or local code.

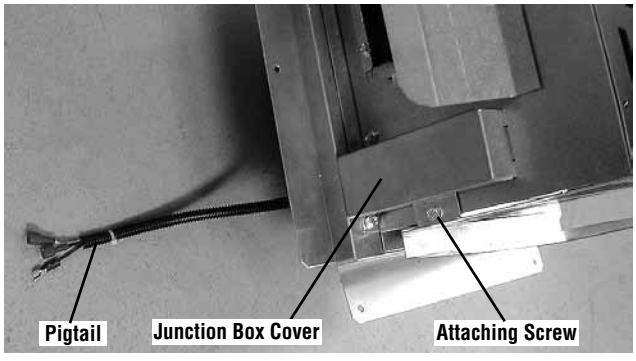


Figure 23 - Bottom of Termination

- Refer to ***Figure 26*** and install the electrical hardware on the fireplace end of the cable. Male terminals (#10) on the Black and White wires, and ring terminals (#9) on the ground. The termination end of the cable will be connected to the termination with wire nuts (not provided).
- Refer to ***Figure 26*** to connect the three wires of the cable to the termination. Ensure the ground ring terminal is grounded beneath a structural screw as shown. Attach the junction box cover to the termination with the screw previously removed.
- The fireplace end of the cable will be addressed in **Connecting The Power Vent To The Fireplace Control System**.

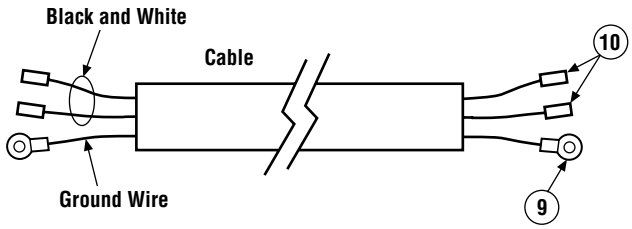


Figure 24 - Cable Connections

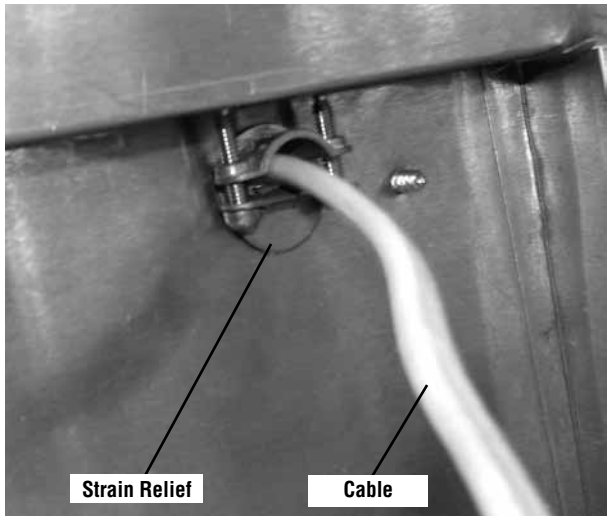


Figure 25 - Back of Termination

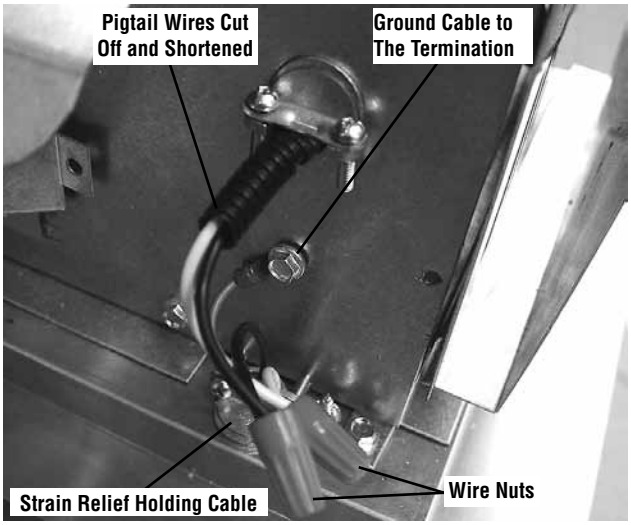


Figure 26 - Junction Box Cover Removed

ELECTRONIC WIRING DIAGRAM

(Schematic representation only)

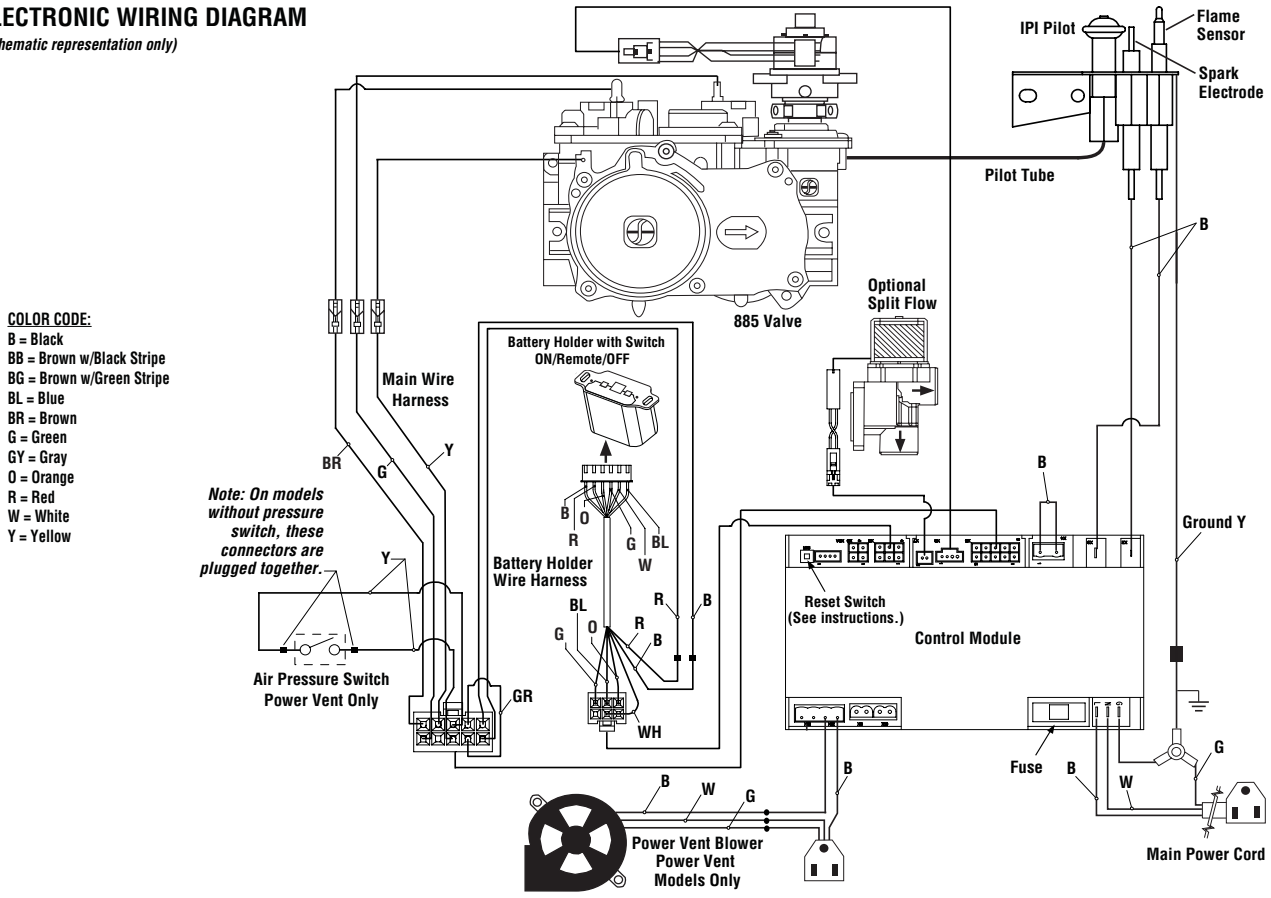


Figure 27 - Electronic Wiring Diagram

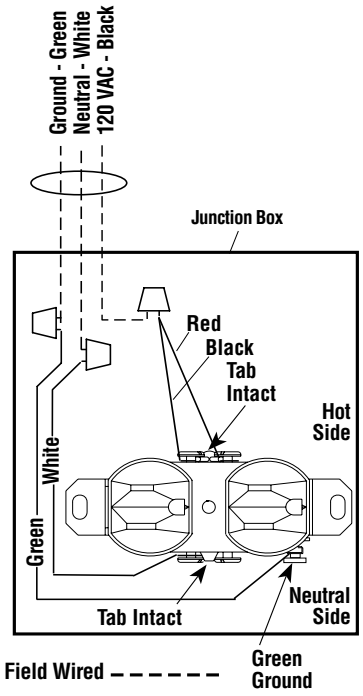


Figure 28 - Junction Box Wiring - 120 V, 60 hz, 1-phase

Step 5. REMOVE THE GLASS DOOR ASSEMBLY

⚠ WARNING

- **Handle this glass with extreme care! Glass is susceptible to damage - Do not scratch or handle roughly.**
- **Do not attempt to substitute the materials used on this door, or replace cracked or broken glass with any materials other than those provided by the appliance manufacturer.**
- **The glass door of this appliance must only be replaced as a complete unit as provided by the manufacturer. Do not attempt to replace broken, cracked, or chipped glass separately.**

Refer to *Figure 40 on Page 24* and remove the front glass door assembly as follows:

To remove the firescreens, lift up the center of the rod to disengage it from the center bracket, bend down at center, hold left side with hand until it disengages from left side, being careful not to scratch the paint. Slowly remove the rod from the right side.

Using a Phillips screwdriver, unfasten the two (2) screws located at the top of the glass door assembly.

Tilt the glass door assembly at the top away from the unit. Lift it carefully off the bottom door track and set the glass door assembly aside, protecting it from inadvertent damage.

Step 6. CONNECTING GAS LINE

All codes require a shut-off valve mounted in the supply line. The orientation of the shut-off valve should face the front. ***Figure 30*** illustrates two methods for connecting the gas supply. A Sediment Trap is recommended to prevent moisture and debris in gas line from damaging the valve.

The flex-line method is acceptable in the USA where local codes permit. Installation must be in compliance with local codes. These appliances are equipped with a gas flex-line for use in connecting the unit to the gas line.See ***Figure 30*** for flex-line description.

A manual shutoff valve is also provided with the flex-line. The gas control valve is located on the right side of the unit.

When using solid gas line connector, access the valve by removing the front door assembly on the valve access side and the access plate (see ***Figure 29)***.

The electronic control valve has a 3/8" (10 mm) NPT thread gas supply inlet.

Secure all joints tightly using appropriate tools and sealing compounds.

Bring the shutoff valve on the end of the flex-line over to the hard pipe and tighten with wrenches from above through the firebox opening.

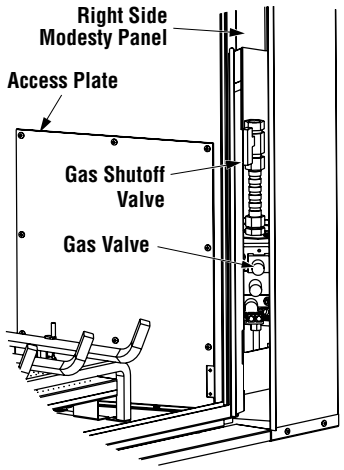


Figure 29 - Fireplace Right Side

TEST ALL CONNECTIONS FOR GAS LEAKS (FACTORY AND FIELD)

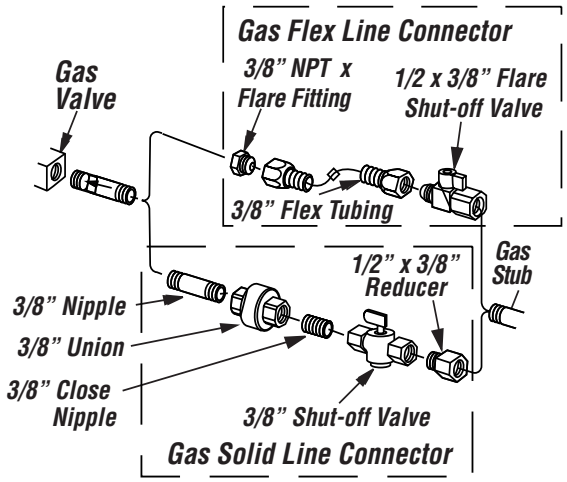
⚠ WARNING

Never use an open flame to check for leaks.

Turn on gas supply and test for gas leaks using a gas leak test solution (also referred to as bubble leak solution).

NOTE: Using a soapy water solution is an effective leak test solution but it is not recommended, because the soap residue that is left on the pipes/fittings can result in corrosion over time.

A. Light the appliance (refer to the lighting instructions label in control compartment or in the Care and Operation instructions manual).
B. Brush all joints and connections with the gas leak test solution to check for leaks. If bubbles are formed, or gas odor is detected, turn the unit off. Either tighten or refasten the leaking connection, then retest as described above.
C. When the gas lines are tested and leak free be sure to rinse off the leak testing solution.
D. Re-install the access plate, making certain the gasket has not been damaged.



Note: The gas supply line must be installed in accordance with building codes 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.

Figure 30 - Gas Connection

Step 7. INSTALL FIREBOX LINER KIT

Install the firebox liner kit per the included instructions.

Step 8. VERIFYING APPLIANCE OPERATION

Turn on burner then observe the individual tongues of flame on the burner. Make sure all ports are open and producing flame evenly across the burner. If any ports are blocked, or partially blocked, clean out the ports.

With gas line installed run initial system checkout before closing up the front of the unit. Follow the pilot lighting instructions provided.

NOTE: Lighting Instructions are also found on the literature tag tied to the bracket above the gas valve. To access the tag, reach into the right side opening.

When first lighting the appliance, it will take a few minutes for the line to purge itself of air. Once purging is complete, the pilot and burner will light and operate as indicated in the instruction manual. Subsequent lighting of the appliance will not require such purging. Inspect the pilot flame (remove logs, if necessary, handling carefully).

Electronic Appliance Checkout

To light the burner, turn the ON/REMOTE/OFF wall switch or remote control to the ON position. Ensure the igniter lights the pilot. The pilot flame should engulf the flame sensor as shown in ***Figure 31***.

NOTE: The control must detect the pressure switch in the open state, at startup, and then close after the blower starts.

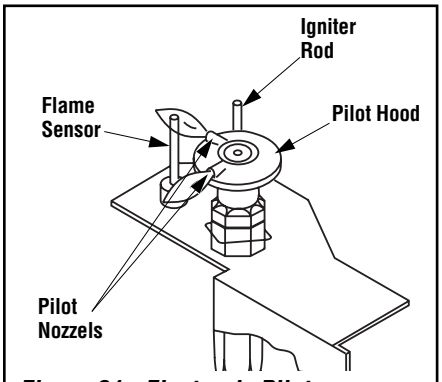


Figure 31 - Electronic Pilot Assembly - Proper Pilot Flame Appearance

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

Step 9. INSTALL VOLCANIC STONE, GLOWING EMBERS, AND LOGS

NOTE: If installing the contemporary burner/floor kit, skip this step and instead refer to the instructions provided with the kit.

⚠ WARNING

- **DO NOT operate this appliance without the required accessories properly installed:**
  - **floor (log set or contemporary kit), and**
  - **panels (ceramic or porcelain).**

⚠ WARNING

- **DO NOT attempt to install the logs until the appliance installation has been completed, the gas line connected and tested for leaks and the initial burner operation has been checked out.**
- **The size and position of the log set was engineered to give the appliance a safe, reliable and attractive flame pattern. Any attempt to use a different log set in the fireplace will void the warranty and will result in incomplete combustion, sooting, and poor flame quality.**
- **Logs get very hot and will remain hot up to one hour after gas supply is turned off. Handle only when logs are cool. Turn off all electricity to the appliance before you install grate, volcanic stone, embers and logs.**
- **This appliance is not designed to burn wood. Any attempt to do so could cause irreparable damage to the appliance and prove hazardous to your safety.**
- **If logs are not installed according to the log installation instructions, flame impingement and improper combustion could occur and result in soot and/or excessive production of carbon monoxide (CO), a colorless, odorless, toxic gas.**

Step 1. Install the ceramic or porcelain panels per the instructions provided in kit (P/N 506019-91).

Step 2. Place volcanic stone around the burner (the entire bag of volcanic stone will NOT be used). **DO NOT PLACE VOLCANIC STONE ON THE BURNER**. See ***Figure 32***.

Step 3. Separate the glowing embers (rockwool) into pieces about the size of a quarter *(see **Figure 33**)*. Keep the pieces fluffed, not matted. Distribute these pieces over the burner as shown in ***Figure 34***. Do not use more than is necessary. When properly positioned, the glowing embers will cover approximately 75% of the burner.

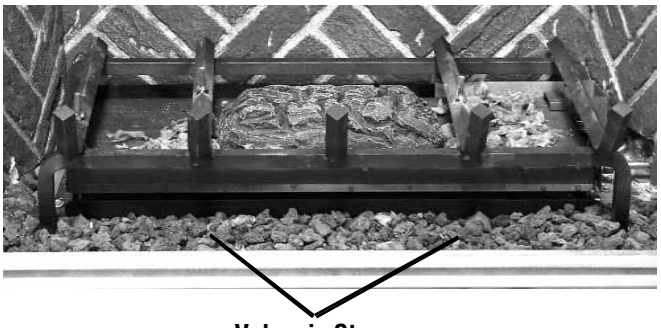
Step 4. Distribute the platinum embers over the burner as desired. Do not use more than is necessary.

NOTE: Excessive use of embers may result in sooting or poor flame. This appliance is provided with enough embers for several applications, do not use all that is in a new bag. For best glowing effect, replace the ember material annually. Replacement volcanic stone, glowing embers, and platinum embers are available.

Firebox Accessories		
Cat. No.	**Model**	**Description**
88L53	FGE	Bag of Glowing Embers
80L42	FDVS	Bag of Volcanic Stone
H8312	PGE	Bag of Platinum Embers

Step 5. Position the individual logs as shown in ***Figures 36 through 39***. Logs should be placed in the order shown. **Place logs 2 and 3 against the pins on the grate, NOT over them**.

Proper log and twig placement is critical to encourage outstanding flame appearance and prevent sooting. When positioned properly, as shown, twigs will be positioned between flame peaks and will not impinge any flames.



Volcanic Stone

Figure 32 - Volcanic Stone Placement (MDLX45IN-PV Shown)

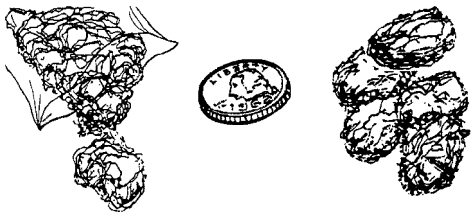
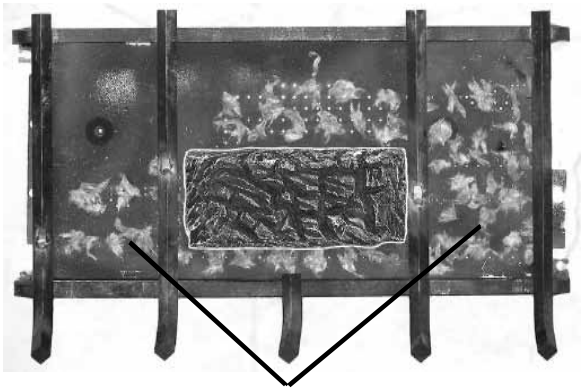


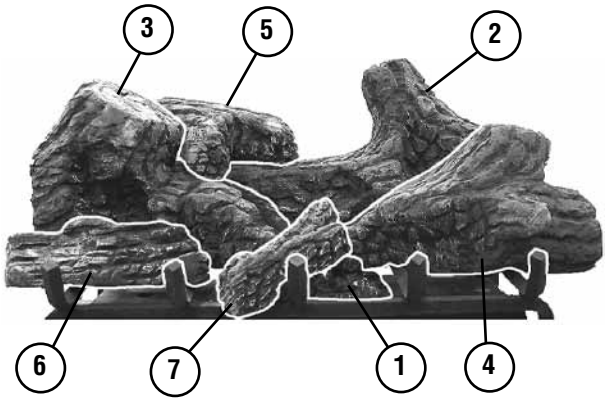
Figure 33 - Separating Glowing Embers



Glowing Embers (Rockwool)

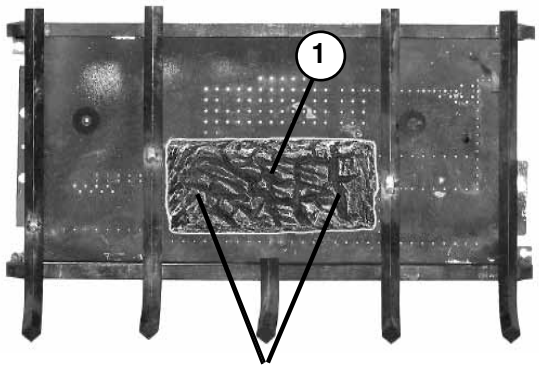
Figure 34 - Glowing Ember Placement

MDLX40IN-PV and MDLX45IN-PV Log Placement



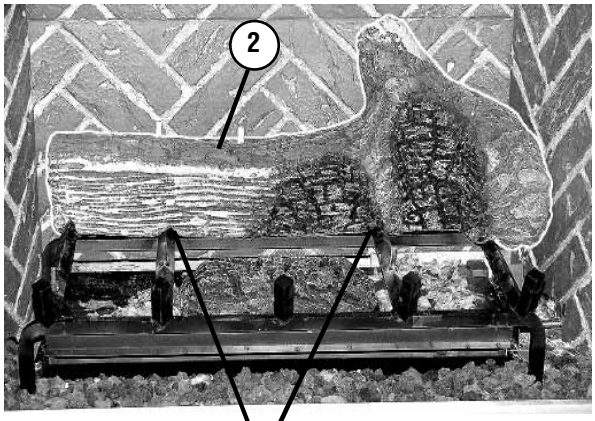
Log Number	Description
1	Log, Center
2	Log, Rear
3	Log, Center/Left
4	Log, Center/Right
5	Log, Rear/Top
6	Log, Front/Left
7	Log, Front/Center

Figure 35 - Complete Log Set



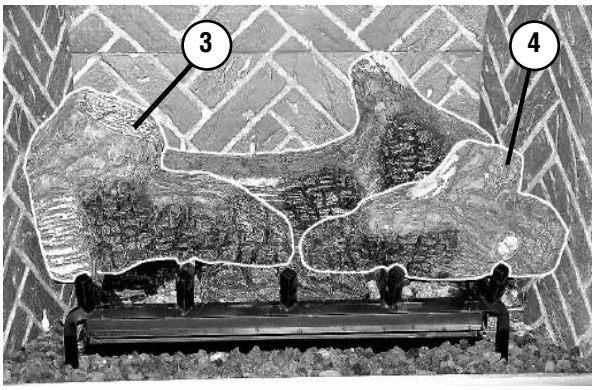
Align Two Holes At Bottom Of Log (1) Over The Pins On The Gas Burner.

Figure 36 - Placing Log 1



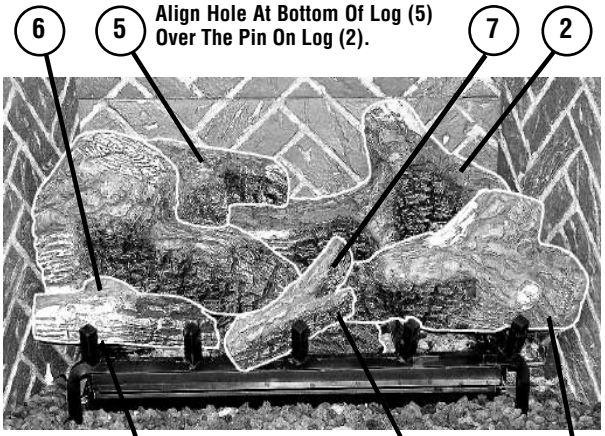
Align Groove At The Bottom Of Log (2) Over The Grate And Push It Towards The Rear.

Figure 37 - Placing Log 2



Engage Logs (3 & 4) With The Grate Pins And Align Groves At The Bottom Of The Logs Over The Grate.

Figure 38 - Placing Logs 3 and 4



Engage Log (6) With The Grate Pin And Align Groove At The Bottom Of The Log Over The Grate.

Engage Log (7) With The Pin On Log (4).

Figure 39 - Placing Logs 5, 6 and 7

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

Step 10. INSTALLATION AND REMOVAL OF GLASS DOOR

⚠ WARNING

- **When reinstalling the glass door, the door latch screws must be securely tightened to prevent the glass door from falling out, which could potentially cause damage and possible injury.**
- **Do not attempt to substitute the materials used on this door, or replace cracked or broken glass.**
- **Handle this glass with extreme care! Glass is susceptible to damage - Do not scratch or handle roughly while reinstalling the glass door frame.**
- **The glass door of this appliance must only be replaced as a complete unit as provided by the manufacturer. Do not attempt to replace broken, cracked or chipped glass separately.**
- **Do not attempt to touch the front enclosure glass with your hands while the fireplace is in use.**

⚠ WARNING

Do not operate appliance with the glass front removed, cracked or broken.

⚠ AVERTISSEMENT

Ne pas utiliser l'appareil si le panneau frontal en verre n'est pas en place, est craqué ou brisé.

Only doors certified with the appliance shall be used.

Seules des portes certifiées pour cet appareil doivent être utilisées.

WARNING: DO NOT abuse glass door by striking or slamming shut.

WARNING: Any safety screen or guard removed for servicing the appliance must be replaced prior to operating the appliance.

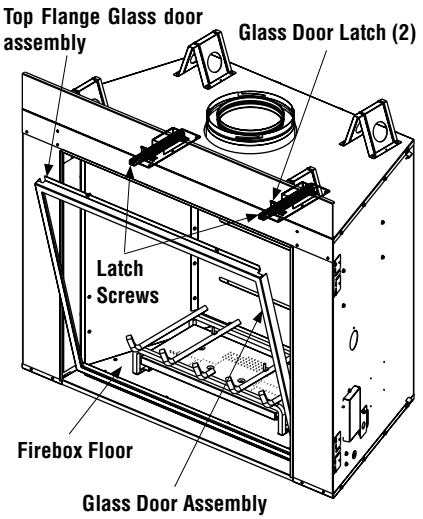
AVERTISSEMENT : Tout écran ou protecteur retiré pour permettre l'entretien de l'appareil doit être remis en place avant de mettre l'appareil en marche.

Installing Glass Enclosure Panel (see *Figure 40)*

To install the front glass door assembly, proceed as follows:

1. Retrieve the glass door assembly. Visually inspect the gasket on the backside of the panel. The gasket surface must be clean, free of irregularities and seated firmly.
2. Position the door frame in front of the firebox opening and engage the bottom flange over the rail at the bottom of the firebox opening.
3. Swing the door up and back. Ensure the gasket seats evenly as the door draws shut. Engage the nut insert and fasten with two screws to secure the door.
4. Install the door modesty shield on top flange glass door as follows: grab the door modesty shield with both hands, with the open hem going down and engage it with the upper lip of the glass door frame by pushing it all the way down. Make sure the installed shield is firmly in place.
5. With the firescreen hanging on the screen rod, drop in the right side of the rod to the right modesty panel. Then drop in the left side of the rod through the slot of the left modesty panel. Make sure that the rod is supported by the bracket in the center of the fireplace.

WHEN INSTALLING THE GLASS DOOR, SECURELY TIGHTEN THE LATCH SCREWS - SEE THE FIRST WARNING ON THIS PAGE.



When installing the glass door, ensure the spacing on both sides are equal.

Figure 40 - Installing the Glass Door

Step 11. BURNER ADJUSTMENTS

Flame Appearance and sooting

Proper flame appearance is a flame which is blue at the base and becomes yellow-orange in the body of the flame. When the appliance is first lit, the entire flame may be blue and will gradually turn yellow-orange during the first 15 minutes of operation. After 15 minutes of operation, if the flame is blue, or if the flame is orange with evidence of sooting (black tip), the air shutter opening may need to be adjusted.

If the air shutter opening is closed too far, sooting may develop. Sooting is indicated by black puffs developing at the tips of very long orange flames. Sooting results in black deposits forming on the logs, appliance inside surfaces and on exterior surfaces adjacent to the vent termination.

Sooting is caused by incomplete combustion in the flames and lack of combustion air entering the air shutter opening. To achieve a warm yellow-orange flame with an orange body that does not soot, the shutter opening must be adjusted between these two positions.

Air Shutter Adjustment Guidelines

- If there is smoke or soot present, first check the log set positioning to ensure that the flames are not impinging on any of the logs. If the log set is properly positioned and a sooting condition still exists, then the air shutter opening should be increased.
- The more offsets in the vent system, the larger the air shutter opening will need to be.
- An appliance operated with the air shutter opened too far, may have flames that appear blue and transparent. These weak, blue and transparent flames are termed anemic.

The following chart is provided to aid in correctly adjusting the air shutter.

Air Shutter Adjustment Guidelines		
Amount of Primary Air	**Flame Color**	**Air Shutter Adjustment**
If air shutter is closed too far →	Flame will be orange →	Air shutter gap should be increased
If air shutter is open too far →	Flame will be blue →	Air shutter gap should be decreased

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

Burner Air Shutter Adjustment Procedure

⚠ WARNING

- **Air shutter adjustment should only be performed by a qualified professional service technician.**
- **Ensure that the front glass door assembly is in place and sealed After adjustment.**

⚠ CAUTION

Soot will be produced if the air shutter is closed too much. Any damage due to carboning resulting from improperly setting the air shutter is not covered under the warranty.

To adjust the flame, move the adjustment air shutter (located on the lower venturi) back or forward to increase or reduce the air shutter opening, respectively. Position the air shutter to the factory setting as shown in ***Figure 41***. Allow the burner to operate for at least 15 minutes. Observe the flame continuously. If it appears weak or sooty as previously described, adjust the air shutter until the flame appearance is as desired.

When satisfied that the appliance operates properly, finish the installation. Leave the ON/REMOTE/OFF wall switch in the REMOTE position and turn the remote switch OFF.

Use the remote to adjust the flame height as desired.

Main Burner Factory Air Shutter Opening Setting - Inches (millimeter)	
Model	**Nat.Gas**
MDLX40IN-PV	1/8" (3.18 mm)
MDLX45IN-PV	1/8" (3.18 mm)

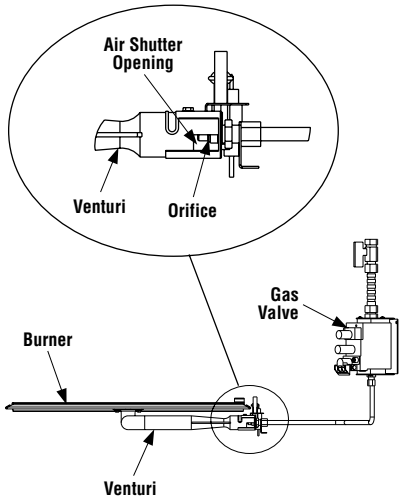


Figure 41 - Air Shutter Adjustment

Contemporary Media Shown (MDLX40)

Figure 42 - Burner Flame Appearance

Rustic Oak Logs Shown (MDLX45)

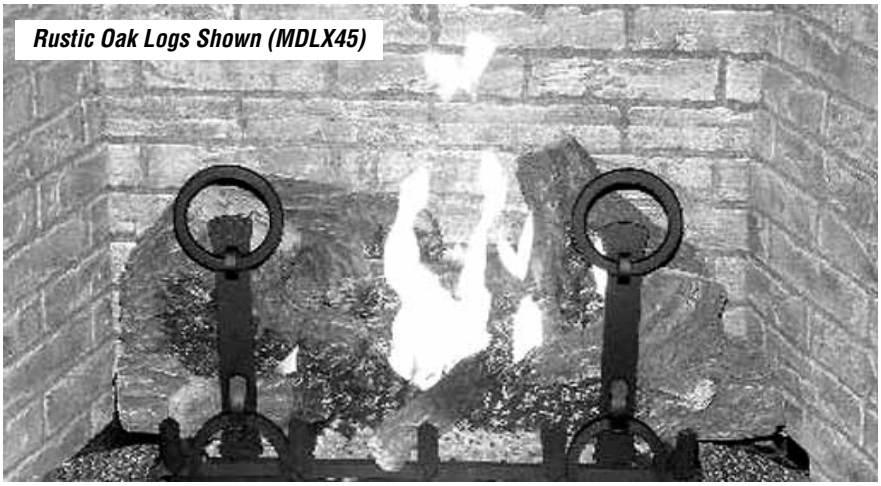
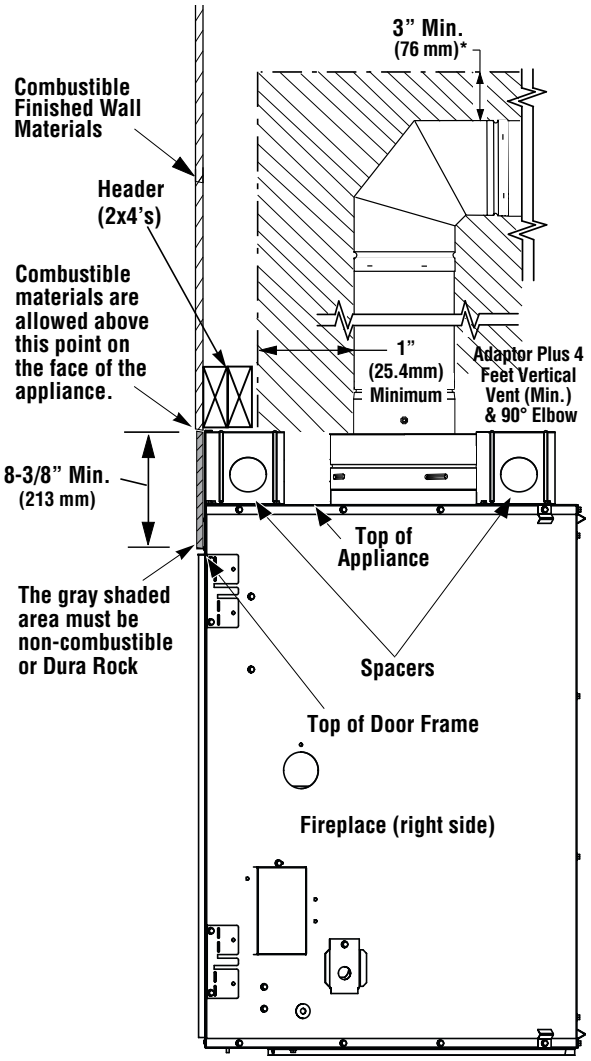


Figure 43 - Burner Flame Appearance

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

FINISHING REQUIREMENTS
Wall Details

Complete the finished interior wall. To install the appliance facing flush with the finished wall, position framework to accommodate the thickness of the finished wall *(**Figure 44**)*.



*** Insulation is NOT ALLOWED in the clearance zones around vent components. Keep this area free from combustible materials.**

Figure 44 - Finished Wall

A hearth extension is not required with this appliance. If a hearth extension is used, there are two methods of installation:

Combustible or noncombustible finish material may abut the front face of the fireplace and the floor panel (see ***Figure 45***).

Combustible or noncombustible finish material may be positioned below the fireplace (see ***Figure 46***). Remove the floor panel as shown in ***Figure 45*** by removing the screws on the right side of the panel and sliding the left side away from the tab. Discard the screws and floor panel.

NOTE: There must be least a 1/8" gap between the bottom of the door track and the surface of the finish material.

Noncombustible materials, such as surrounds and other appliance trim, may be installed on the appliance front face with the exceptions.

Vertical installation clearances to combustible mantels vary according to the depth of the mantel (see ***Figure 5 on Page 8***). Mantels constructed of noncombustible materials may be installed at any height above the appliance opening.

Combustible materials may project beyond the side of the fireplace opening as long as it is kept within the shaded area illustrated in ***Figure 6 on Page 8***.

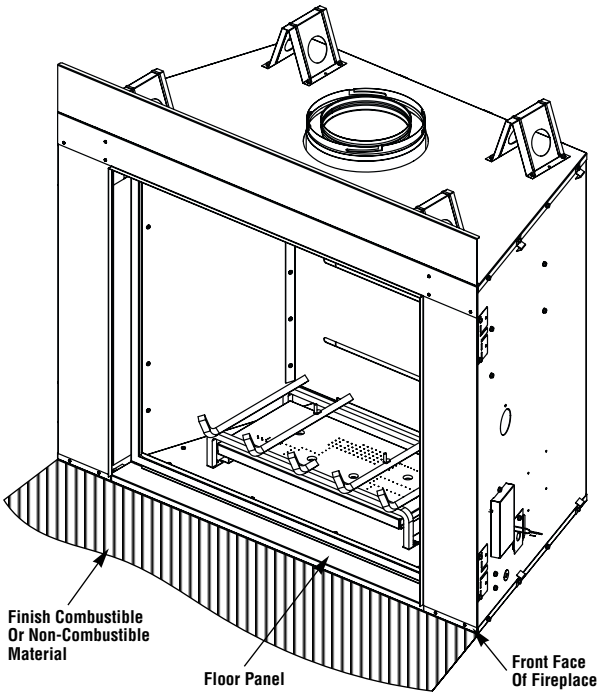


Figure 45 - Hearth Extension

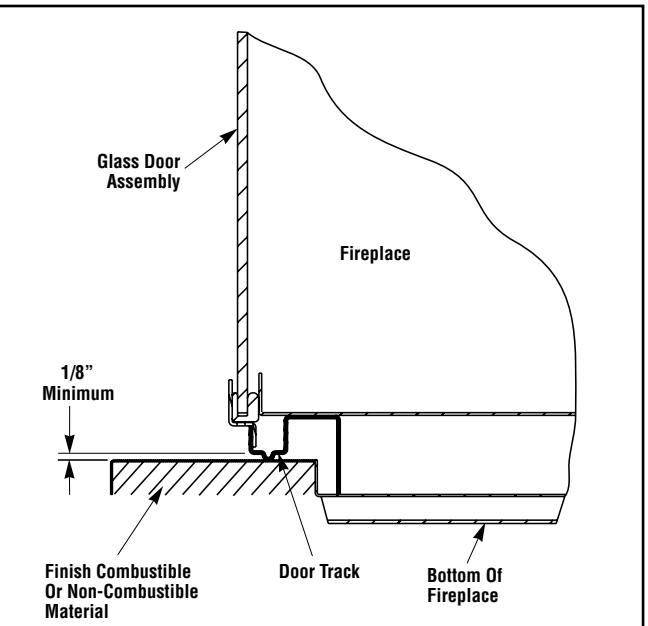


Figure 46 - Hearth Extension Profile

Step 12. INSTALLER INSTRUCTIONS - ATTACHING SAFETY IN OPERATION WARNINGS

It is the installers responsibility to ensure these warnings are properly affixed during installation. These warning labels are a critical step in informing consumers of safe operation of this appliance.

ATTACHING SAFETY IN OPERATION WARNINGS

It is required that the set of safety instruction labels that have been furnished with the fireplace be affixed to the operation and control points of the fireplace. A safety instruction label must be affixed to the receiver wall switch plate where the fireplace is turned on and off *(See **Figure A**)* and on the remote control handheld transmitter *(See **Figure B**)*. To properly complete the installation of this fireplace, locate the multi-lingual adhesive labels provided with the Care and Operation Instructions and proceed as follows:

1. Locate the wall receiver that controls the fireplace (verify the switch operates the fireplace by turning it on and off). Clean the wall receiver plate thoroughly to remove any dust and oils. Affix the label to the surface of the plate of the wall receiver that controls the fireplace *(**Figure A**)*. Choose the language primarily spoken in the home. If unknown, affix the English language label.
2. Locate the remote control transmitter and clean it thoroughly to remove any dust and oils. Affix the label to the surface of handheld transmitter *(**Figure B**)*. Choose the language primarily spoken in the home. If unknown, affix the English language label.
3. If you are unable to locate the labels, please call Lennox Hearth Products or your nearest Lennox Hearth Products dealer to receive additional safety instruction labels free of charge.

   Cat. No. H8024 Replacement Label Kit

   LENNOX HEARTH PRODUCTS
   1-800-655-2008

Note: English is red text on clear label. French and Spanish are white text on black label.

APPOSITION DES MISES EN GARDE RELATIVES À LA SÉCURITÉ D'UTILISATION

Il est impératif que le jeu d'étiquettes de sécurité qui ont été fournies avec le foyer soient collées à côté des dispositifs de contrôle du foyer. Une étiquette de sécurité doit être collée sur la plaque du récepteur mural contrôlant l'allumage du foyer *(voir **Figure A**)* et sur le boîtier de la télécommande *(**Figure B**)*. Pour achever l'installation correcte de ce foyer, procédez comme suit avec les étiquettes adhésives en langues étrangères fournies avec les instructions d'utilisation et d'entretien :

1. Repérez le récepteur mural qui contrôle le foyer (vérifiez que l'interrupteur contrôle le fonctionnement du foyer en le faisant basculer de Marche à Arrêt, et vice-versa). Nettoyez soigneusement la plaque du récepteur mural pour éliminer la poussière et les traces de graisse ou d'huile. Collez l'étiquette sur la surface de la plaque du récepteur mural qui contrôle le foyer *(**Figure A**)*. Choisissez la langue qui est principalement parlée dans la résidence du propriétaire. En cas de doute, collez l'étiquette en anglais.
2. Repérez la télécommande et nettoyez-la soigneusement pour éliminer la poussière et les traces de graisse ou d'huile. Collez l'étiquette sur le boîtier de la télécommande *(**Figure B**)*. Choisissez la langue qui est principalement parlée dans la résidence du propriétaire. En cas de doute, collez l'étiquette en anglais.
3. Si vous ne trouvez pas les étiquettes, veuillez appeler Lennox Hearth Products ou votre distributeur Lennox Hearth Products local pour recevoir gratuitement des étiquettes supplémentaires.

   Étiquettes de remplacement, n° cat. H8024

   LENNOX HEARTH PRODUCTS
   1-800-655-2008

Remarque : Le texte anglais est rouge sur un support transparent. Le texte français et espagnol est blanc sur un support noir.

COLOCACIÓN DE ADVERTENCIAS DE SEGURIDAD EN OPERACIÓN

Se requiere que el juego de etiquetas de instrucciones de seguridad que se incluyeron con la chimenea se coloque en los puntos de operación y control de la misma. Se debe colocar una etiqueta de instrucciones de seguridad en la placa del interruptor de pared del receptor desde el cual se enciende y se apaga la chimenea *(ver la **Figura A**)* y en el transmisor de control remoto *(ver la **Figura B**)*. Para completar correctamente la instalación de esta chimenea, encuentre las etiquetas adhesivas multilingües incluidas con las instrucciones de cuidado y operación y haga lo siguiente:

1. Identifique el receptor de pared que controla la chimenea (verifique que el interruptor opera la chimenea encendiéndola y apagándola). Limpie bien la placa del receptor de pared para quitar el polvo y aceite. Pegue la etiqueta en la superficie de la placa del receptor de pared que controla la chimenea *(**Figura A**)*. Seleccione el idioma que más se habla en la casa. Si no sabe cuál es, use la etiqueta en inglés.
2. Identifique el transmisor de control remoto y límpielo bien para quitar el polvo y aceite. Pegue la etiqueta en la superficie del transmisor *(**Figura B**)*. Seleccione el idioma que más se habla en la casa. Si no sabe cuál es, use la etiqueta en inglés.
3. Si no puede encontrar las etiquetas, sírvase llamar a Lennox Hearth Products o al distribuidor de Lennox Hearth Products más cercano para recibir etiquetas de instrucciones de seguridad adicionales gratuitas.

   Juego de etiquetas de repuesto - Nº de cat. H8024

   LENNOX HEARTH PRODUCTS
   1-800-655-2008

Nota: La etiqueta en inglés es transparente con texto rojo. Las etiquetas en francés y español son negras con texto blanco.

SAFETY LABEL DIAGRAMS

DIAGRAMMES DES ÉTIQUETTES DE SÉCURITÉ

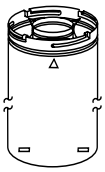
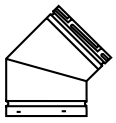
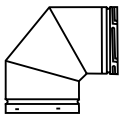
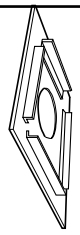
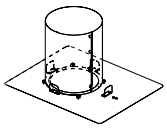
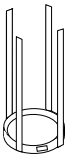
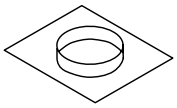
DIAGRAMAS DE ETIQUETAS DE SEGURIDAD

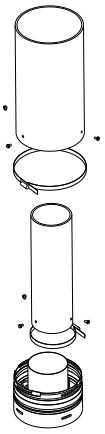
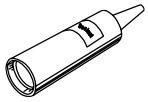
Figure A

Figure B

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

INSTALLATION ACCESSORIES

Listed Secure Vent® Components			
	Cat. No.	Model No.	Description
	77L70	SV4.5L6	6" (152mm) Vent Section
	77L71	SV4.5L12	12" (305mm) Vent Section
	77L72	SV4.5L24	24" (610mm) Vent Section
	77L73	SV4.5L36	36" (914mm) Vent Section
	77L74	SV4.5L48	48" (1219mm) Vent Section
	77L75	SV4.5LA	Telescopic Section
	77L76	SV4.5E45	45 Degree Elbow
	77L77	SV4.5E90	90 Degree Elbow
	H2246	SV4.5HF	Firestop/Spacer, Horizontal (3 - 1 - 1 spacing) 10 pack
	H2247	SV4.5VF	Firestop/Spacer, Vertical (1 - 1 - 1 spacing) 10 pack
The following flashings come packaged with a storm collar:			
	H5816	SV4.5-TWSK	Through Wall Shield Kit (used to shield the direct-vent pipe from blown insulation) Ref. instr. # 750247M
	96K93	SV4.5SU	Support Strap
	96K92	SV4.5SP	Support Plate

Listed Secure Vent / Secure Flex® Components			
	Cat. No.	Model No.	Description
	H3907	SV4.5RSA	Attic Insulation Shield (adjustable 12" to 22")
	H7748	FVK36	36" Flex Vent Kit *NOTE: Flex attaches to appliance collar at one end and to rigid venting at the other end.*
	10K81	SFMP	Mill-Pac, Black, High Temperature Sealant
	89L40	SFMP-12	Mill-Pac, Black, High Temperature Sealant - Bulk 12 pack
	91L66	SF-GC4-6	Gear Clamp 4.5" (114 mm) for flex (6 pieces)
	91L67	SF-GC7-6	Gear Clamp 7.5" (190.5 mm) for flex (6 pieces)

LENNOX® HEARTH PRODUCTS

1508 Elm Hill Pike, Suite 108 • Nashville, TN 37210