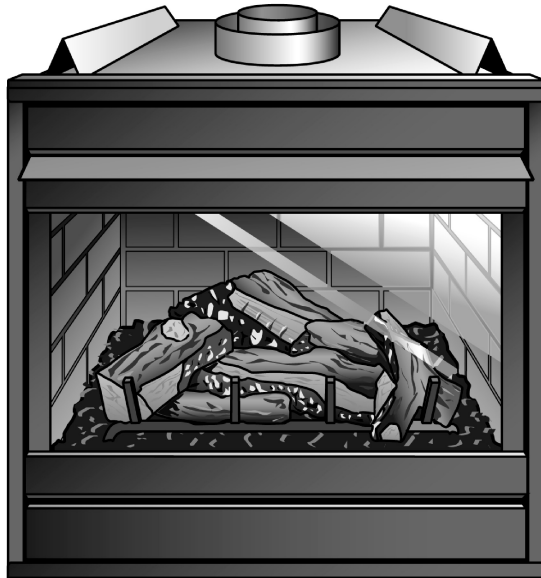




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Dallas, Texas

INSTALLATION INSTRUCTIONS

EDT3530/EDR3530 ELITE® Series



EDT3530 FLUSH-FACED MODEL SHOWN

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

**RETAIN THESE INSTRUCTIONS
FOR FUTURE REFERENCE**

DIRECT VENT
VENTED GAS FIREPLACE HEATERS
850,001M REV. N/C 01/2001
Supersedes 504,024M 09/2000



Litho USA

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Warnock Hersey



WH Report No. J20006701



⚠ WARNING

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

FOR YOUR SAFETY

WHAT TO DO IF YOU SMELL GAS:

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

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

- Do not try to light any appliance.
- Extinguish any open flames.
- 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.

EDT/EDR Unit Dimensions - inches (mm)

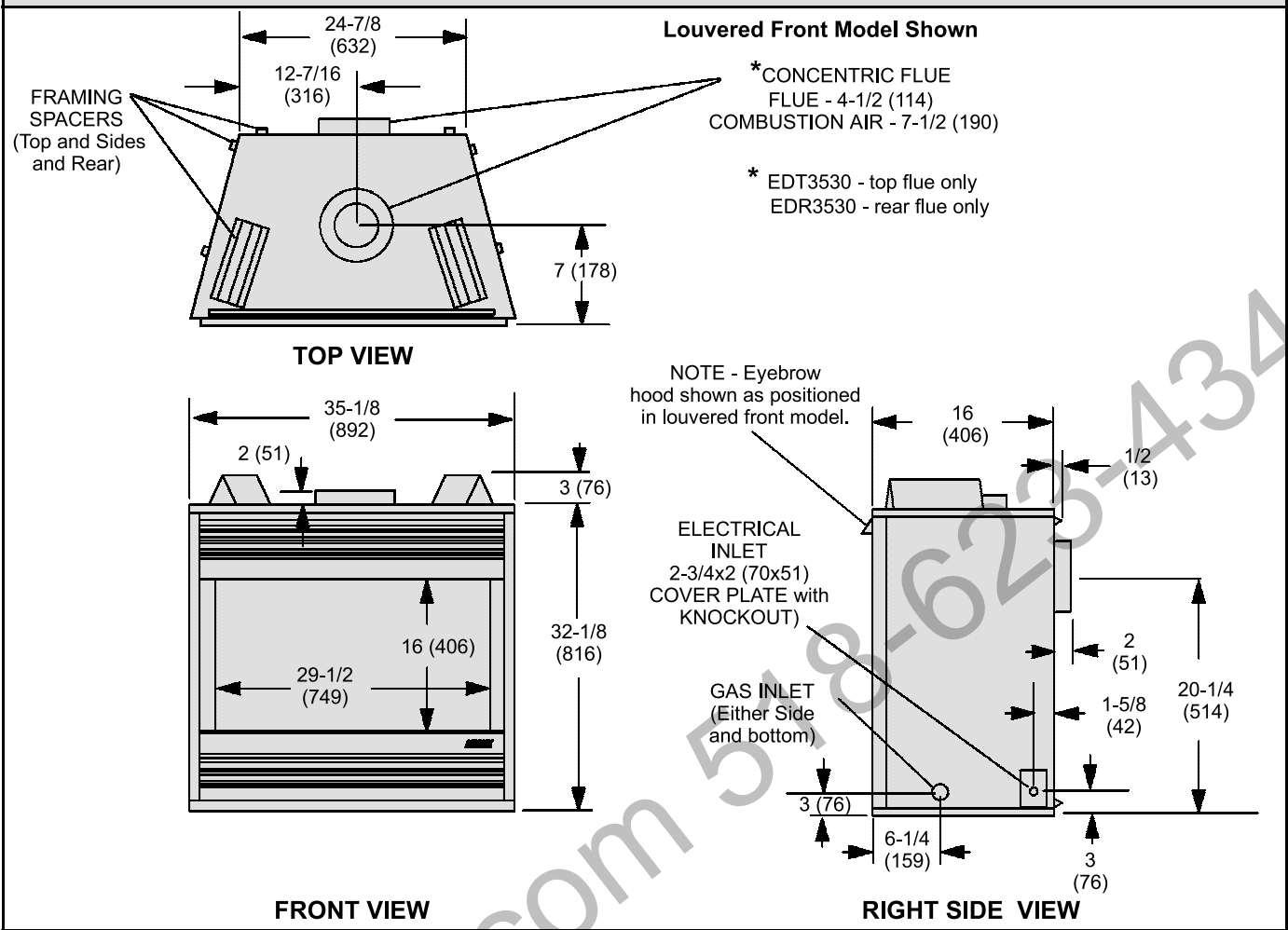


FIGURE 1

Elite® Series - EDT3530 & EDR3530

Elite® Series fireplaces are sealed-combustion (direct vent), heat-circulating gas appliances. The appliances utilize a 100 percent safety shut-off gas control with a Piezo ignition system. Models equipped with optional forced air fan assembly require 120V electrical connection. Decorative trim kits, forced air fan assemblies, wall thermostat, remote wall switch, and hand-held remote control are available as options. Refer to table 1 for model designations.

The fireplace has provisions for side(s) or bottom entry for gas piping. This appliance must be vented to the outside and must not be connected to a flue servicing another appliance.

The appliance must be installed using only approved Lennox concentric venting components (4-1/2 in. / 7-1/2 in.).

The millivolt gas valve is self-powered and does not require 120V power wiring.

Do not attempt to alter or modify the construction of the appliance or venting components. Any modification or alteration of construction will void the warranty, certification and approval of these units.

Burner operation can be controlled by a unit- or wall-mounted ON / OFF switch, or an approved thermostat. Flame appearance and heat output can be controlled by adjusting the HI/LO knob on the manually-modulated gas valve.

TABLE 1

Model No.	Suffix
EDT3530	C - Louvered Front
EDR3530	F - Flush Faced Front
	N - Natural Gas
	P - Propane Gas (LP)
	M - Millivolt System

Shipping and Packing List

Package 1 of 1 contains:

- 1 - Assembled fireplace (includes log set, rock wool, and lava rock)
- 1 - Envelope containing installation instructions, user's manual, warranty, survey card, and vent restrictor
- 1 - Eyebrow

Check for shipping damage. The receiving party should contact last carrier immediately if any shipping damage is found. All venting components are ordered and shipped separately.

Requirements

Lennox Elite® Series gas fireplace heaters are Warnock Hersey certified.

Installation of Lennox gas appliances must conform with local building codes. In the absence of local codes, units must be installed according to the current National Fuel Gas Code (ANSI-Z223.1) in the United States. The National Fuel Gas Code is available from:

American National Standards Institute, Inc.
11 West 42nd Street
New York, NY 10036

In Canada, installation must conform with current National Standard of Canada CAN/CGA-B149.1 "Installation Code for Natural Gas Burning Appliances and Equipment" and CAN/CGA-B149.2 "Installation Code for Propane Gas Burning Appliances and Equipment" and other applicable local codes.

This appliance is Warnock Hersey certified for installation clearances to combustible material as listed on appliance rating plate and in table 2. Accessibility and service clearances must take precedence over fire protection clearances.

**TABLE 2
CLEARANCES TO COMBUSTIBLES**

BACK	1/2 in.(13 mm); 0 in. (0 mm) spacers
SIDES	1/2 in. (13 mm); 0 in. (0 mm) spacers
TOP SPACERS	0 in. (0 mm)
FLOOR	0 in. (0 mm)
VENT	1 in. (25.4 mm)*
SERVICE CLEARANCES	
FRONT	3 Feet. (0.9 meters)

* 3 in. (75mm) above any horizontal vent component.

NOTE - For installation on combustible floors, appliance shall not be installed directly on carpeting, tile, or other combustible material other than wood flooring.

Fireplace must be installed so that electrical components (if applicable) are protected from water.

When 120 volt power is installed, appliance must be electrically grounded in accordance with local codes. In addition, in the United States, installation must conform with the current National Electric Code, ANSI/NFPA No. 70. The National Electric Code (ANSI/NFPA No. 70) is available from:

National Fire Protection Association
1 Battery March Park
Quincy, MA 02269

In Canada, all electrical wiring and grounding for the unit must be according to the current regulations of the Canadian Electrical Code Part I (C.S.A. Standard C22.1) and/or local codes.

Field wiring connection with unit must meet or exceed specifications of type T wire and withstand a maximum temperature rise of 180°F (82°C) .

These units have been Warnock Hersey certified for installation in bedrooms and mobile homes.

General

These instructions are intended as a general guide and do not supersede local codes in any way. Consult authorities having jurisdiction before installation.

⚠ WARNING

Product contains fiberglass wool.

Disturbing the insulation in this product during installation, maintenance, or repair will expose you to fiberglass wool. Breathing this may cause lung cancer. (Fiberglass wool is known to the State of California to cause cancer.)

Fiberglass wool may also cause respiratory, skin, and eye irritation.

To reduce exposure to this substance or for further information, consult material safety data sheets available from address shown below, or contact your supervisor.

**Lennox Industries Inc.
P.O. Box 799900
Dallas, TX 75379-9900 USA**

- 1 - This appliance is certified for use with the factory-supplied glass panel only. Do not operate the appliance if the glass is broken or cracked or if the glass has been removed. Striking the glass panel may result in glass breakage. Replacement glass panel must be ordered from Lennox and should only be installed by a qualified service technician.
- 2 - All parts removed for servicing should be replaced before operating the appliance.
- 3 - Solid fuel must not be used with this appliance.
- 4 - Surface temperatures on the appliance are very high. Make sure that both children and adults are aware of the danger of burns or clothing ignition.
- 5 - Warn the homeowner against leaving young children unsupervised in the room with the appliance.
- 6 - Due to high temperatures, locate the appliance out of traffic and away from furniture and draperies.
- 7 - Instruct the homeowner not to leave damp or wet clothing or other flammable material to dry on or near the appliance.
- 8 - Keep the appliance area clear and free of combustible materials, gasoline and other flammable vapors and liquids.
- 9 - On initial start-up, operate the appliance continuously for 10 to 12 hours on the high flame setting. During this period, make sure that the room is well ventilated. This "break-in" procedure is required to burn off the odors associated with a new fireplace.

Combustion Air

This Lennox Elite® Series gas fireplace has been designed to use 100 percent air from outdoors for combustion.

⚠ WARNING

Do not install appliance in a corrosive or contaminated atmosphere. Meet all combustion and ventilation air requirements, as well as all local codes.

Location Selection

Install the fireplace out of direct sunlight to maximize the unit's visible glow effect. Also, consider the following when selecting a location for the Lennox gas fireplace:

- 1 - All requirements indicated in venting section must be met. This includes restrictions on horizontal and vertical vent lengths and vent termination locations.
- 2 - Center appliance between two wall studs, if possible, to simplify venting.
- 3 - If optional blower is used, consider power wiring requirements.
- 4 - Air circulation patterns should be unobstructed.
- 5 - See figure 2 for typical appliance applications.
- 6 - Do not install appliance directly on carpeting.
- 7 - If fireplace is to be installed on tile or other combustible material other than wood flooring, it must be installed on a metal or wood panel extending the full width and depth of the base.
- 8 - Provide a minimum 3 ft. (.9m) clearance in front of the appliance for service and proper operation.

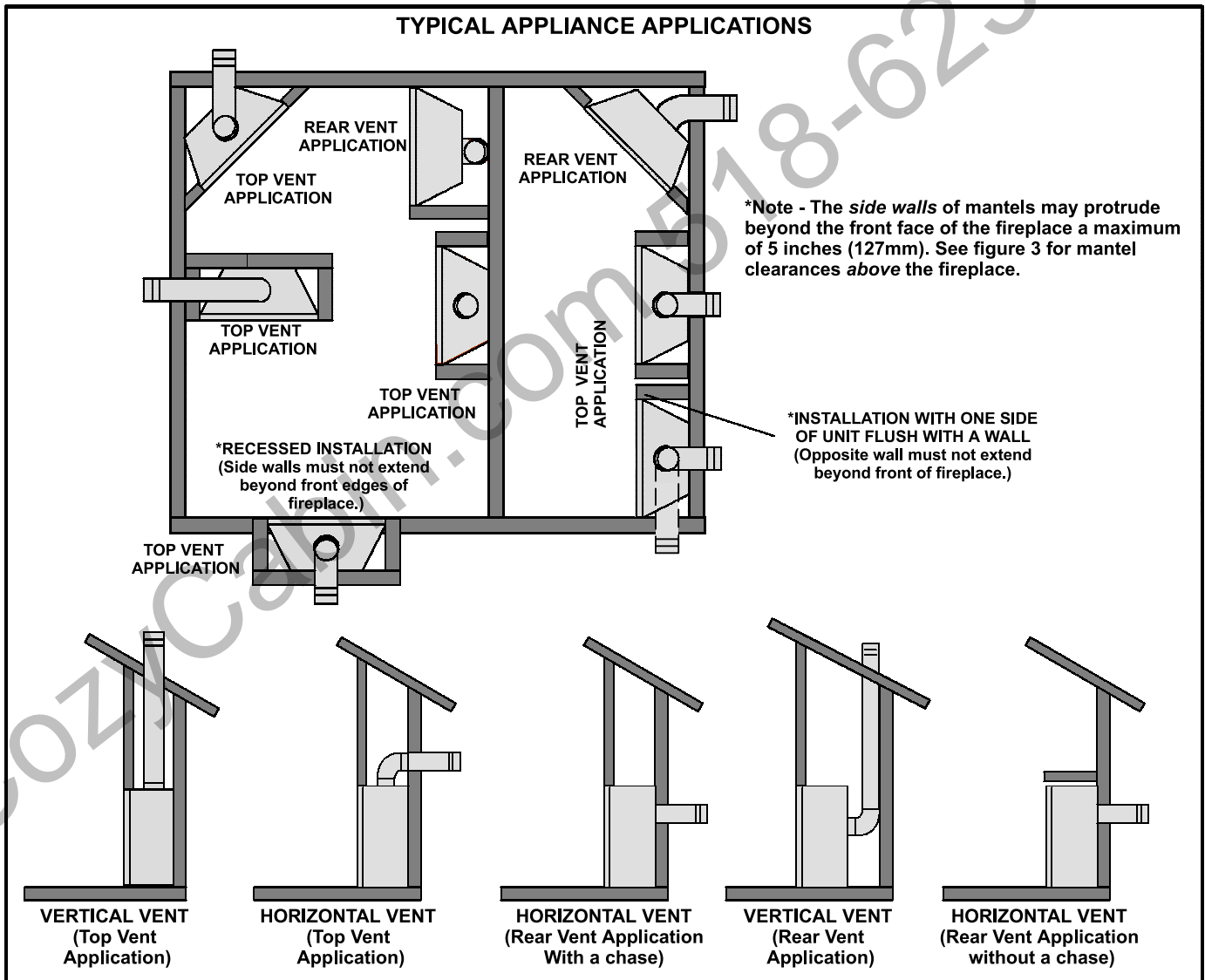


FIGURE 2

Installation Clearances

Clearances to Combustibles

The Lennox Elite® Series gas fireplaces are approved with zero clearance to combustible materials on all sides (as detailed in table 2), with the following exception: When the unit is installed with one side flush with a wall, the wall on the other side of the unit must not extend beyond the front edge of the unit. In addition, when the unit is recessed, the side walls surrounding the unit must not extend beyond the front edge of the unit. See figure 2.

Mantel Clearances

Vertical installation clearances to combustible mantels vary according to the depth of the mantel. Figure 3 details these required clearances. Mantels constructed of non-combustible materials may be installed at any height above the appliance opening; however, do not allow anything to hang below the eyebrow.

NOTE - Paint or lacquer used to finish the mantel must be heat resistant in order to avoid discoloration.

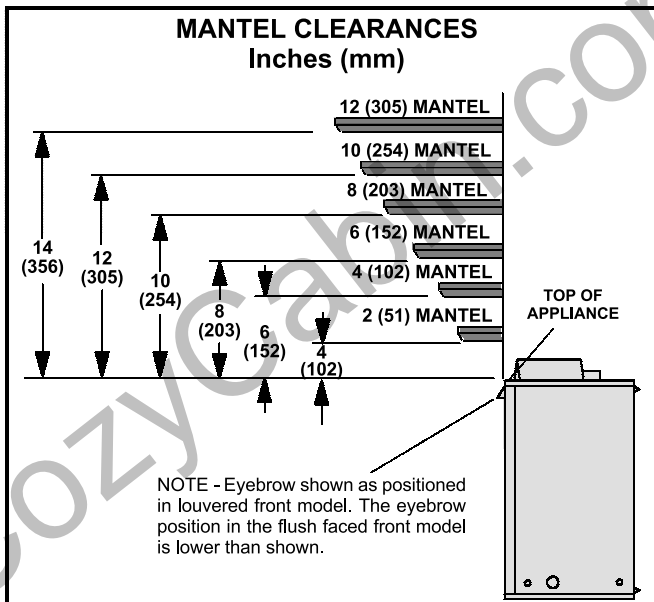


FIGURE 3

Corner Installations

Units installed across the corner of two joining walls require a minimum diagonal span as detailed in figure 4. This span accommodates the unit depth.

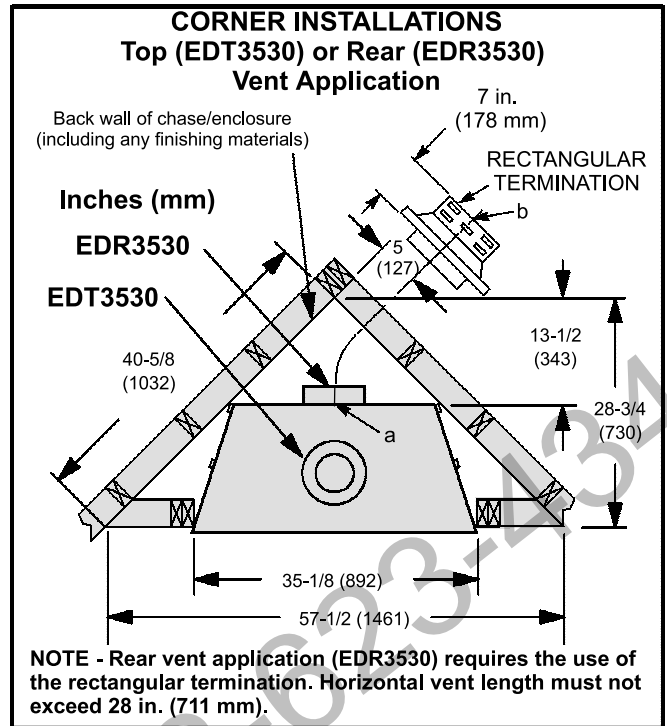


FIGURE 4

Framing

Wood or metal framing must accommodate unit outer shell as shown in figure 5 (EDT3530) or figure 6 (EDR3530). If unit is to be elevated above floor level, a solid platform providing continuous support (e.g. plywood decking) must be constructed.

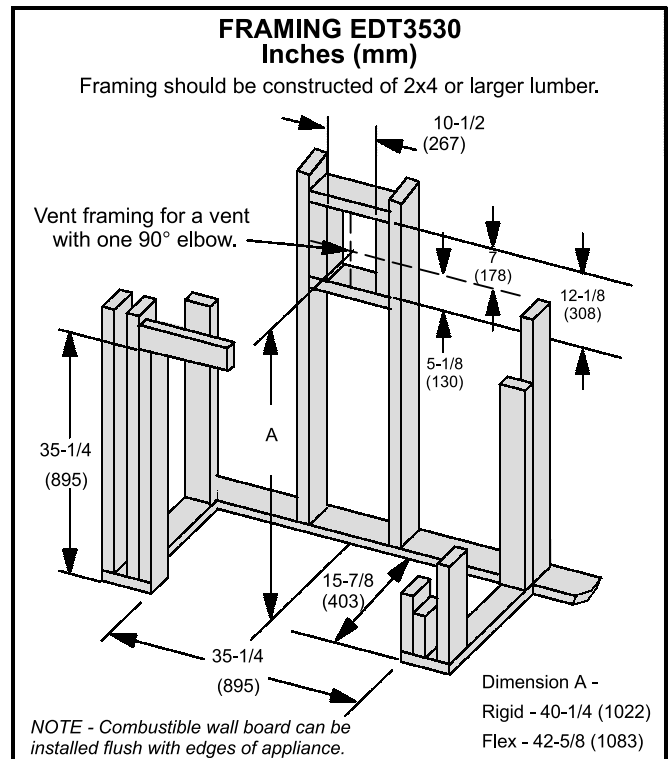


FIGURE 5

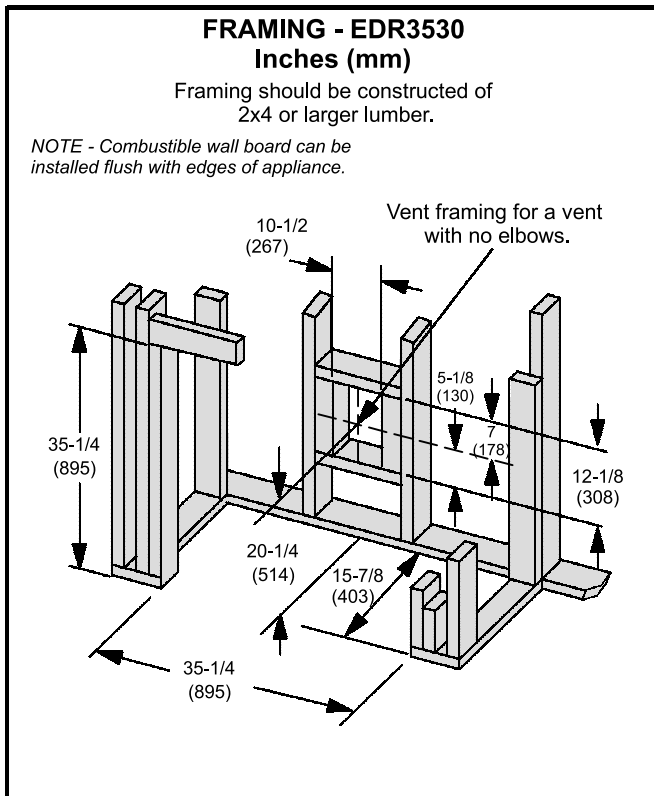


FIGURE 6

Installation

Installation should be performed by a qualified technician according to these instructions and local codes.

- 1 - Carefully remove the assembled fireplace from the packaging and place in desired location.

⚠ WARNING

Combustible materials may be installed flush with both sides and top front edges of the fireplace. Combustible materials must **NEVER** overlap the edges onto the front face of the appliance. Joints between the finished wall and the fireplace edges can only be sealed with a 300°F (149°C) minimum sealant.

Non-combustible materials can be used to cover the gap between the combustible wall materials and the fireplace. On flush-faced models, non-combustible materials may cover the upper portion of the top panel down to, but not beyond the top of, the eyebrow. You must not modify the air inlet or outlet grills in any way. Access to panels must not be obstructed.

- 2 - Lift and remove the bustle; in flush-faced model applications, remove the top panel; in louvered-face model applications, remove the louvers.
- 3 - Lower bottom hinged panel. Remove three securing screws at bottom of glass panel. Raise and remove glass panel.

- 4 - Cut and remove the nylon shipping straps securing burner, grate and log set to the interior of the fireplace. **Handle logs carefully, to prevent breakage.**
- 5 - Remove the protective end cap from each of the grate tines, and reinstall the grate in the upright position as shown in figure 7.

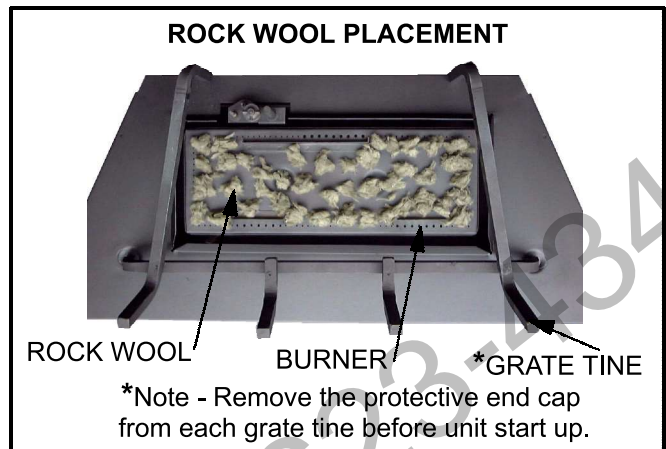


FIGURE 7

- 6 - Separate the rock wool into pieces about the size of a nickle. Keep the pieces fluffed up, not matted. Distribute these pieces over the entire pan burner area, leaving a space of approximately 1/8 inch between each piece as shown in figure 7; **however, do not place any pieces on the ports of the burner.**

NOTE - Your application may not require the use of all of the provided rock wool. Reserve remaining rock wool for replacement, if necessary.

- 7 - Position the individual logs as shown in figures 8 & 9. Logs are notched to accommodate burner grate and each other.

EXTRA PLACEMENT INSTRUCTIONS FOR LOG NO. 1 (DIAGONAL LOG)

Note - The left rear corner of the diagonal log must be within 1-1/2 inches of the outside rear edge of the grate leg.

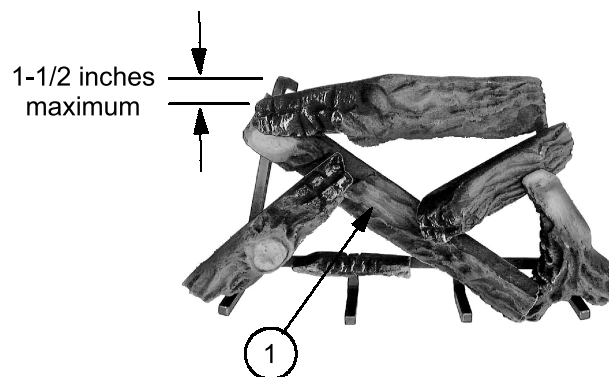
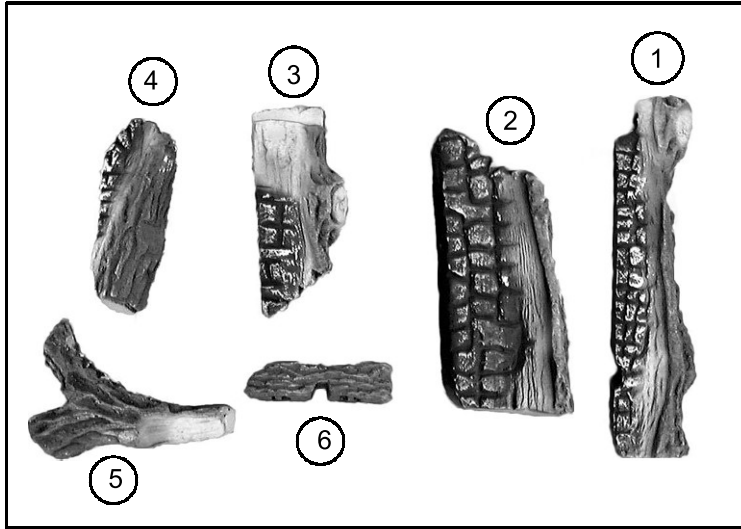


FIGURE 8

EDT/EDR 3530 LOG PLACEMENT



Log Number	Log Stamping Part Number	Lennox part Number
1	1959	37L07
2	1960	37L05
3	1962	37L08
4	1961	37L06
5	1963	37L10
6	1964	37L09

Lennox Part Number for entire log set: 37L02

1 See also figure 8 for the placement of log no. 1.

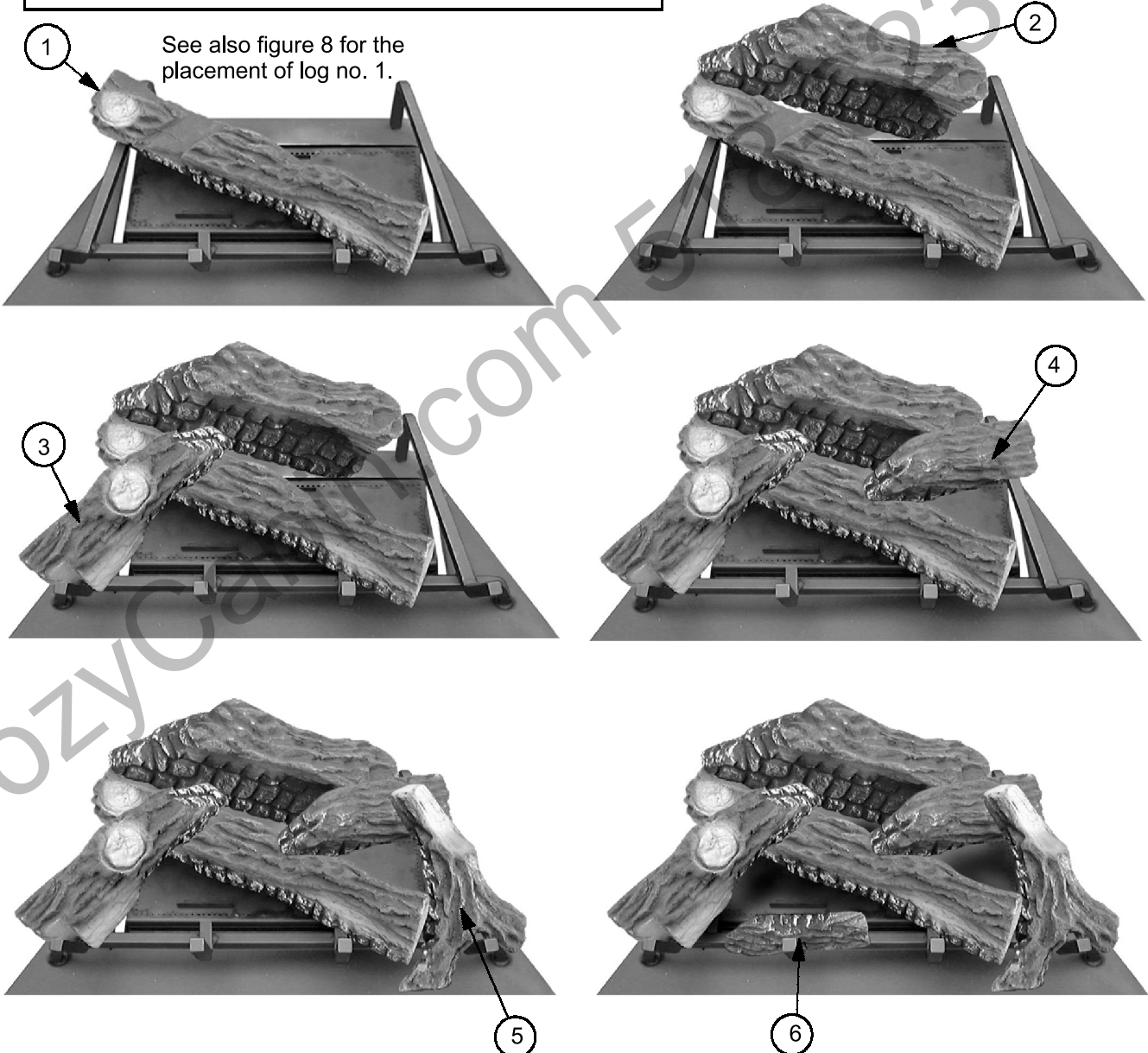


FIGURE 9

- 8 - Place the lava rock over the entire area of the fire box floor that surrounds the log set as shown in figure 10.

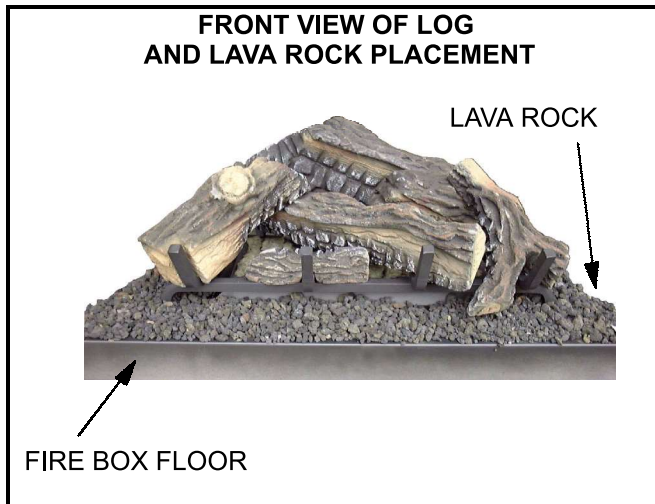


FIGURE 10

- 9 - Remove cardboard from pressure relief valves located on top of the firebox.
- 10 - Remove two screws securing control panel to side panels. Carefully remove control panel.
- 11 - Secure appliance to floor using fold-down tabs on the sides of the fireplace. Additional holes for securing screws are also provided in the base of the unit under the firebox.
- 12 - **Millivolt Wiring -**

Millivolt wiring is required only if an optional wall-mounted ON/OFF switch or an optional thermostat is being installed.

If optional wall-mounted ON/OFF switch is used, mount field-provided handy box in convenient location adjacent to appliance. Install ON/OFF switch and faceplate and wire according to the diagram shown on page 21. If optional thermostat is used, mount in a suitable location and wire according to the diagram shown on page 21.

Note - 15 ft. (4.5 m) of wire is provided inside the unit for installation of ON/OFF switch or thermostat.

Note - Turn unit-mounted ON/OFF switch to the off position if optional wall-mounted ON/OFF switch or optional thermostat is installed.

13 -120 Volt Wiring -

120 volt wiring is required on Millivolt units **only** when the optional fan kit is being installed.

Wiring knockouts are provided on the side panels and base of the unit. A factory-installed junction box is provided. For unit wiring, refer to the wiring diagram on page 21.

When 120 volt electrical power is applied, the appliance must be electrically grounded according to local codes or, in the absence of local codes, with the current National Electric Code, ANSI/NFPA No. 70, in the USA or CSA C22.1 Canadian Electrical Code in Canada.

- 14 - Prepare the vent collar for use as indicated in the venting section. Attach either Lennox flexible or unitized rigid concentric vent to vent collar, at the top (EDT units) or rear (EDR units), of the appliance as indicated in the venting section. Vent terminations are indicated in venting section.
- 15 - Make gas piping connections as indicated in gas piping section.
- 16 - Reinstall the control panel carefully. Make sure that all wire connections are tight and secure.

⚠ WARNING

Do not operate appliance unless glass frame is properly installed. Glass must not be broken or cracked. If glass is damaged, replace with appropriate glass/frame assembly available through Lennox repair parts. Substitution of any other than Lennox-specified glass can lead to property damage or personal injury.

- 17 - *Carefully* reinstall the glass door. **Tighten the three bolts at the bottom of the door securely.**
- 18 - Install the bustle; in flush-faced model applications, install the top panel; in louvered-face model applications, install the louvers.
- 19 - Remove the eyebrow from its protective wrapping. Slide the eyebrow into the slots on the lower edges of the radiant panel (flush-faced model applications) or the lower edges of the cabinet top (louvered-face model applications).
- NOTE - The eyebrow must be used in all applications.*
- 20 - Continue with the procedures indicated in the start-up and adjustments section.

Venting

General Requirements

These instructions should be used as a guideline and do not supersede local codes in any way. Install vent according to local codes, these instructions, the current National Fuel Gas Code (ANSI-Z223.1) in the USA or the current standards of CAN/CGA-B149.1 and -B149.2 in Canada.

This gas fireplace is equipped with a concentric vent collar for ease of installation. The concentric vent pipe will bring in outdoor air for combustion and will remove exhaust gases. Vent terminations are ordered separately.

This Lennox gas fireplace is for use only with Lennox approved concentric vent pipe: rigid vent pipe in vertical venting applications, and rigid or flexible vent pipe in horizontal applications. Each vent must be terminated using a Lennox vent termination. Approved venting kits and components are listed on page 22 of this manual.

NOTE - The vent terminations are certified for use with this unit and must be installed without modification.

⚠ WARNING

All vent system connections/joints must be properly sealed using only Lennox MILL-PAC BLACK HIGH TEMPERATURE SEALANT, Catalog Number 10K81. Failure to properly seal the vent system could allow carbon monoxide leakage resulting in injury or death.

Sealing and Joining Rigid Vent Pipe

Apply only Lennox MILL-PAC BLACK HIGH TEMPERATURE SEALANT (Catalog number 10K81) around outside of inner and outer vent collars before assembling vent to collar. Outer pipe must also be secured to outer collar using three sheet metal screws. See figure 11. Sealant must be applied to all rigid pipe joints and the outer pipe must be secured with three sheet metal screws.

SECURING RIGID VENT PIPE TO COLLAR

APPLY ONLY LENNOX MILL-PAC BLACK HIGH TEMPERATURE SEALANT (Catalog No. 10K81) AND SLIDE RIGID PIPE OVER INNER AND OUTER COLLARS.

NOTE - The bottom part of the outer pipe is omitted in order to show the detail of the inner pipe.

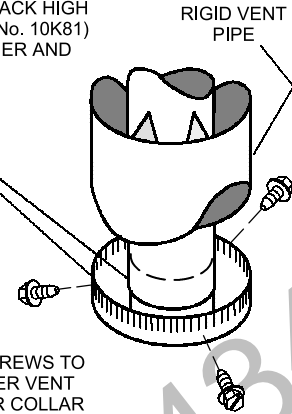


FIGURE 11

Sealing and Connecting Flexible Vent Pipe

Flexible vent pipe is packaged and shipped in its contracted state. When installing flexible vent pipe, its length may be expanded to twice its contracted size. You should expect to extend a 3 ft. section of flexible pipe up to 6 ft.

⚠ IMPORTANT

Under no circumstances, may separate sections of concentric flexible vent pipe be joined together.

When flexible vent pipe is used, both inner and outer pipes should be secured to the fireplace concentric collar and to the vent termination using only Lennox MILL-PAC BLACK HIGH TEMPERATURE SEALANT (Catalog number 10K81), and metal gear clamps and 3 screws as shown in figure 12.

Note - Overlap flex and collar a minimum of 1-3/4 in. (44 mm), place clamp approximately 3/4 in. (19 mm) from the end of the flex and securing screws just below the clamps.

SECURING VENT PIPE TO COLLAR

NOTE - Part of the outer pipe is pulled away to show the detail of the inner pipe.

APPLY ONLY LENNOX MILL-PAC BLACK HIGH TEMPERATURE SEALANT (Catalog No. 10K81) AND SLIDE FLEXIBLE PIPE OVER INNER AND OUTER COLLARS.

SECURING SCREWS (3 PLACES EQUIDISTANT FOR EACH CLAMP)

HOLES PROVIDE SCREWDRIVER ACCESS FOR TIGHTENING INNER GEAR CLAMP.

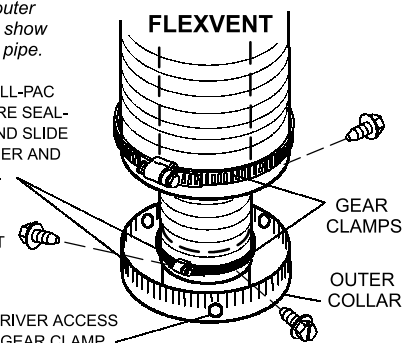


FIGURE 12

Vertical Venting Through the Roof

This Lennox gas fireplace is for use only with Lennox approved concentric vent pipe; only rigid vent pipe may be used when vertically venting the fireplace through the roof.

EDT Applications - See figures 16, 17, or 18 for vent length requirements using concentric vent pipe.

EDR Applications - See figures 19, 20, or 21 for vent length requirements using concentric vent pipe.

EDT and EDR Applications -

Figure 15 provides a detail of the vertical vent termination. Figure 22 shows the minimum vent termination height requirements above a flat or sloped roof.

General guidelines for vertical vent installations:

- 1 - Top Flue Applications Only: Install a vent restrictor (provided) in the flue outlet. See figure 13.

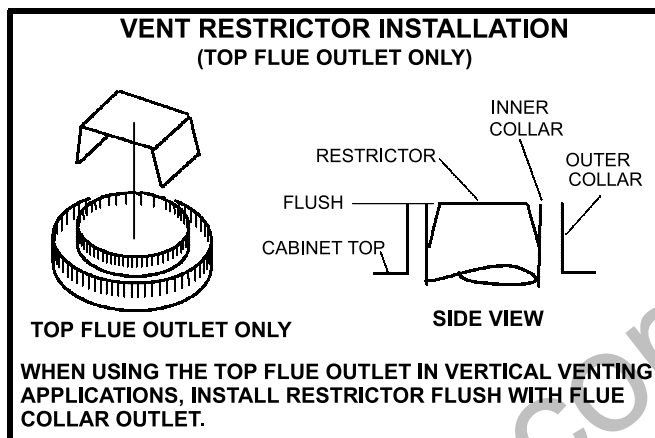


FIGURE 13

- 1 - Provide a firestop / spacer any time vent pipe must pass through a combustible floor, ceiling or wall. See figure 14. Refer to listing on page 22 for catalog numbers of Lennox firestop spacers.

- 2 - Horizontal sections of the vent pipe run should be sloped upward a minimum of 1/4 in. per foot of horizontal vent in the direction away from the fireplace. In addition, horizontal sections of pipe must be supported using metal straps spaced every 2 ft.

- 3 - Maintain proper clearances any time vent pipe must pass through insulated spaces. Use insulation shield when vent pipe passes through any insulation.

- 4 - Two 45° elbows may be used in place of one 90° elbow. This can only occur once in the entire venting system.

One 45° elbow may be substituted for one 90° elbow at any point in the venting system.

The same rise to run ratios as shown in the venting figures must be followed if 45° elbows are used.

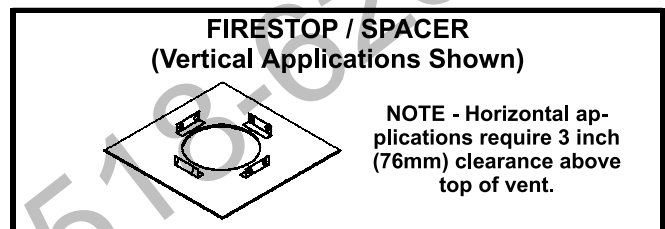


FIGURE 14

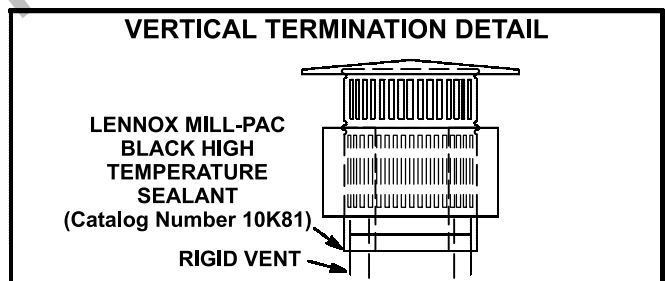


FIGURE 15

EDT VERTICAL VENTING FIGURES

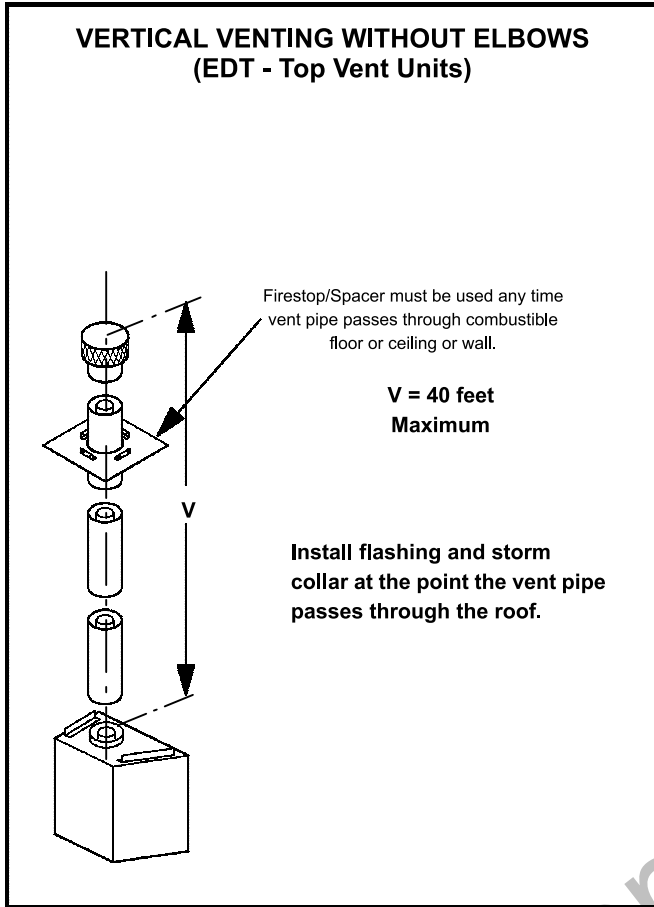


FIGURE 16

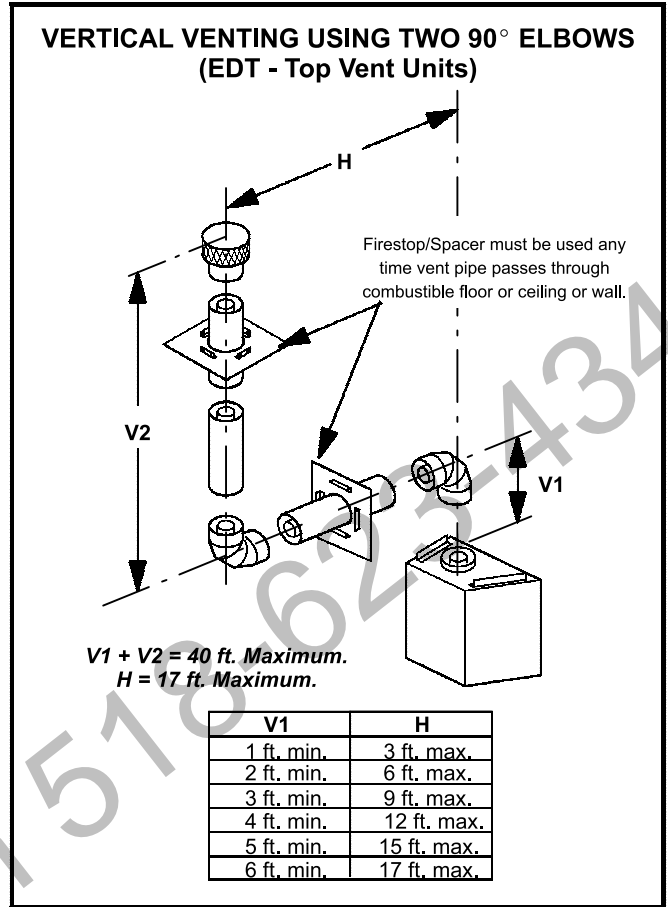


FIGURE 17

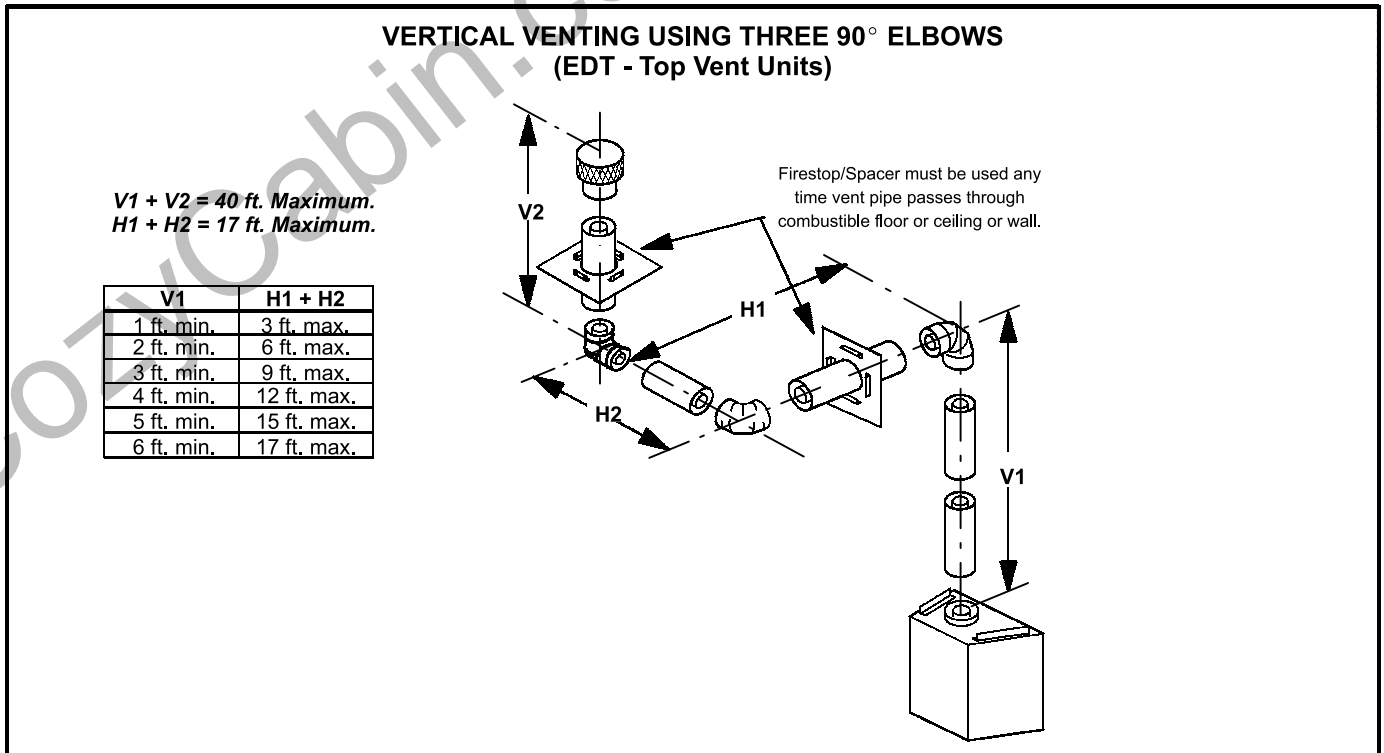


FIGURE 18

EDR VERTICAL VENTING FIGURES

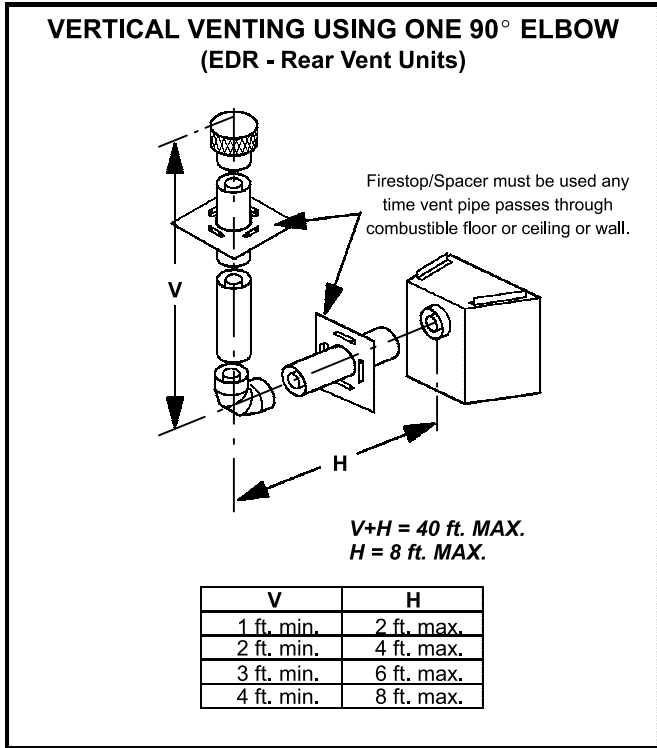


FIGURE 19

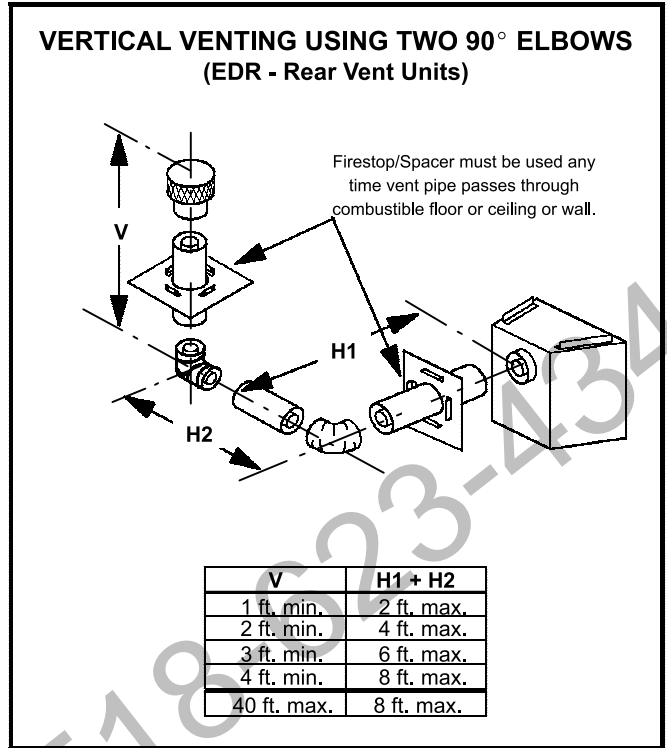


FIGURE 20

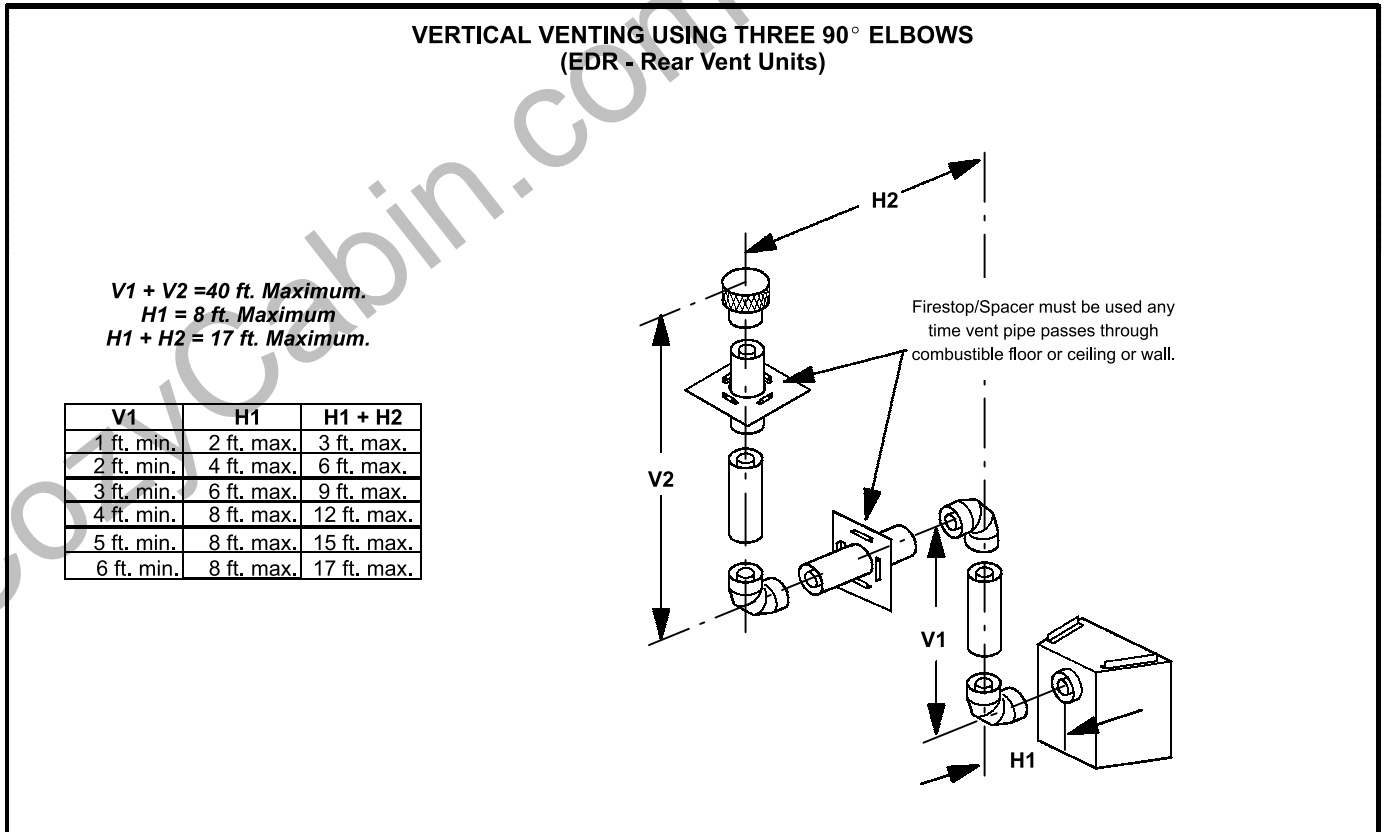


FIGURE 21

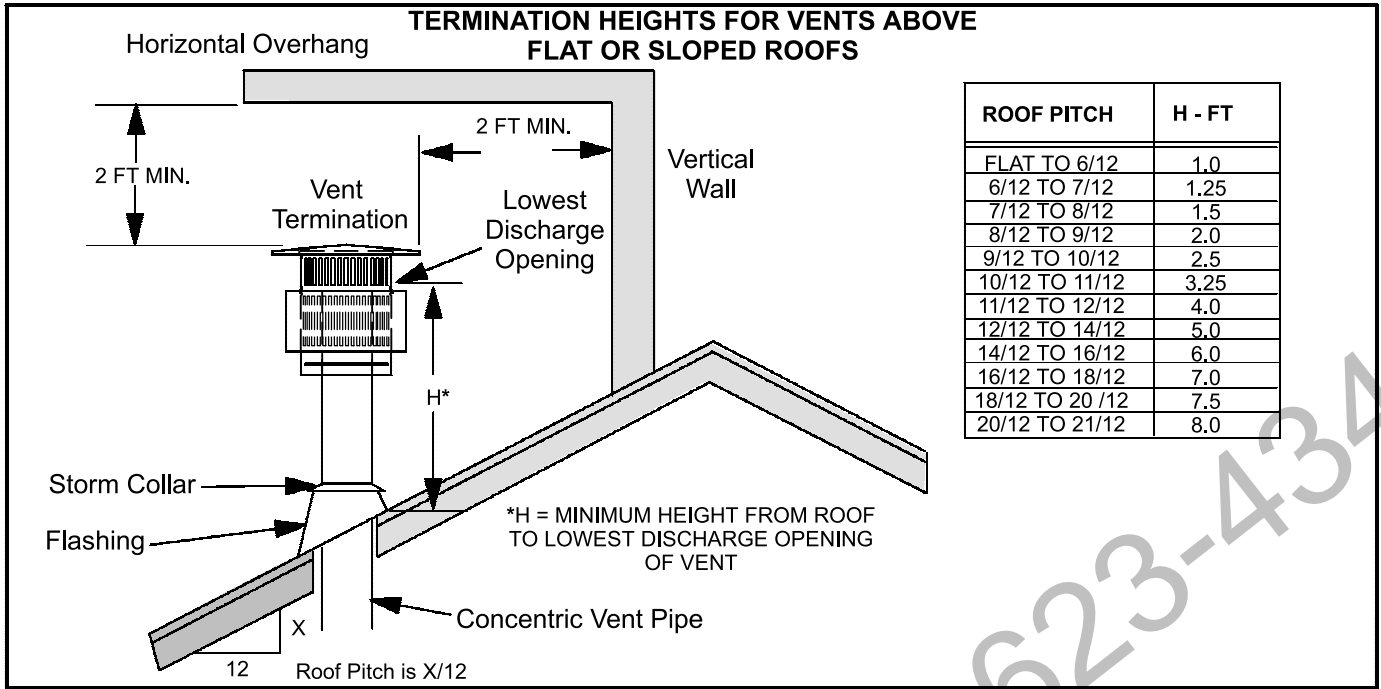


FIGURE22

Detailed steps for installation of the vertical vent at and above the roof:

- 1 - Determine the location of the vent's penetration of the roof.
- 2 - Cover the openings of the concentric vent and cut the hole in the roof large enough in order to provide a minimum of one inch (25.4mm) clearance to roof combustible material.
- 3 - Frame the vent hole (with material of at least the same dimensions as the roof rafters) in order to provide adequate nailing support for the roof-to-vent flashing. (Note - Vent assembly above the roof may be subjected to high winds).
- 4 - Install the remaining vent sections and the vent termination. See figure 22 for minimum allowable termination heights above the roof and minimum allowable clearances to obstacles above the roof.
- 5 - Use both flashing and a storm collar at the point where the vent pipe exits the roof. Seal flashing to roof, and storm collar to vent with non-hardening caulking compound.

Horizontal Venting Through a Side Wall

This Lennox gas fireplace is for use only with Lennox approved concentric vent pipe; either rigid or flexible vent pipe may be used when horizontally venting the fireplace through a side wall.

EDT Applications - See figures 23, 24, or 25 for vent length requirements using concentric vent pipe.

EDR Applications - See figures 26, 27, or 28 for vent length requirements using concentric vent pipe.

Also, see figure 4 for venting in a corner installation.

General guidelines for horizontal vent installations:

- 1 - Provide a firestop / spacer any time vent pipe must pass through a combustible floor, ceiling or wall. See figure 14. Refer to listing on page 22 for catalog numbers of Lennox firestop spacers.
- 2 - **Horizontal sections of the vent pipe run should be sloped upward a minimum of 1/4 in. per foot of horizontal vent in the direction away from the fireplace. In addition, horizontal sections of pipe must be supported using metal straps spaced every 2 ft.**
- 3 - Maintain proper clearances any time vent pipe must pass through insulated spaces. Use insulation shield when vent pipe passes through any insulation.
- 4 - Two 45° elbows may be used in place of one 90° elbow. This can only occur once in the entire venting system.
One 45° elbow may be substituted for one 90° elbow at any point in the venting system.
The same rise to run ratios as shown in the venting figures must be followed if 45° elbows are used.
- 5 - The longest length of flexible vent pipe available is 48 inches, measured when in its compressed form. Flexible vent pipe may not be applicable in every venting configuration depicted in figures 23, 24, 25, 27, and 28, depending on the total vent length required.

⚠ IMPORTANT

Under no circumstances, may separate sections of concentric flexible vent pipe be joined together.

EDT HORIZONTAL VENTING FIGURES

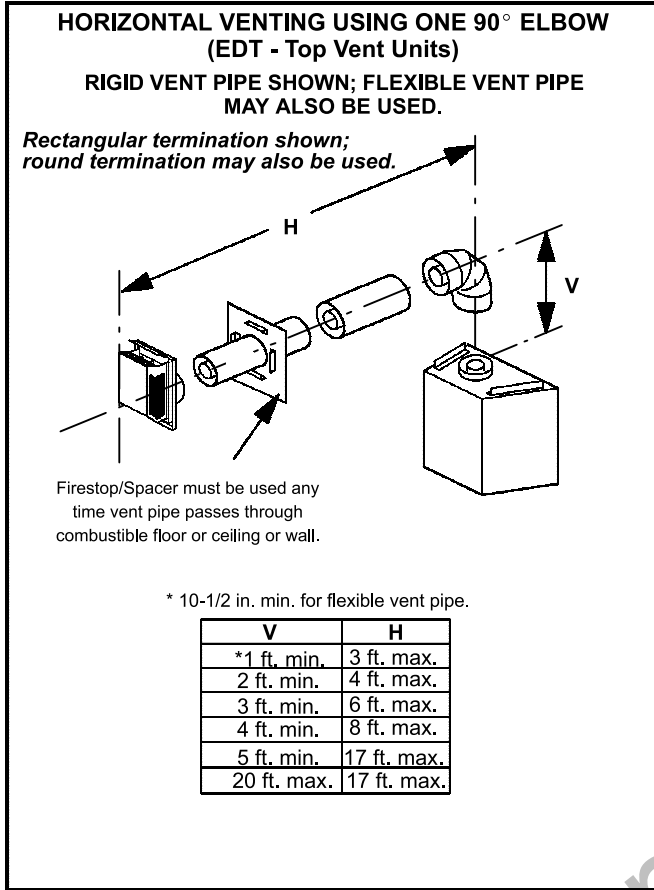


FIGURE 23

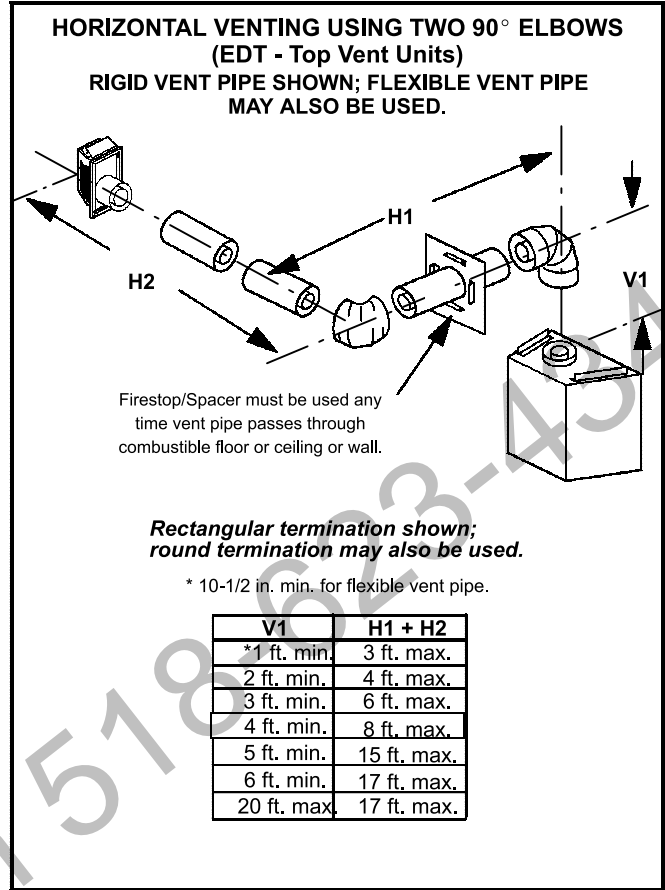


FIGURE 24

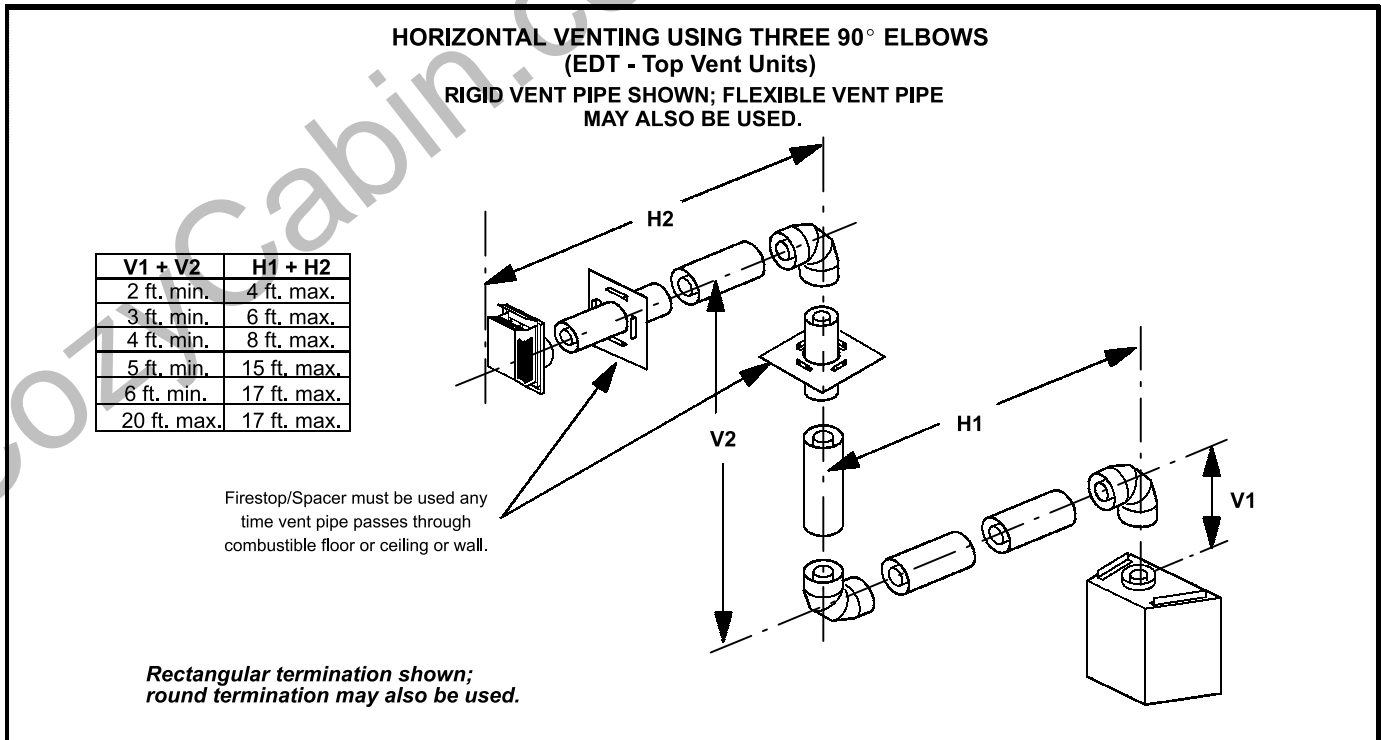


FIGURE 25

EDR HORIZONTAL VENTING FIGURES

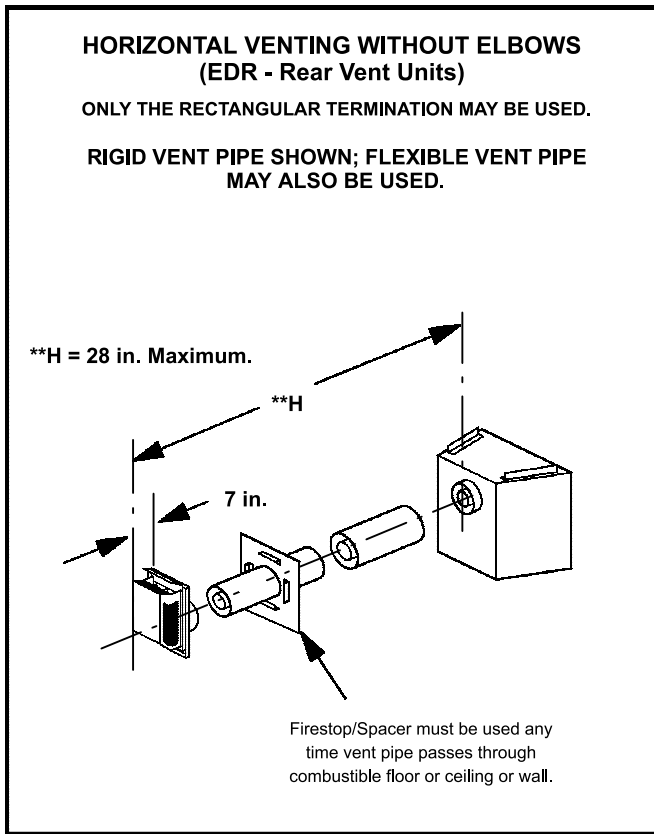


FIGURE 26

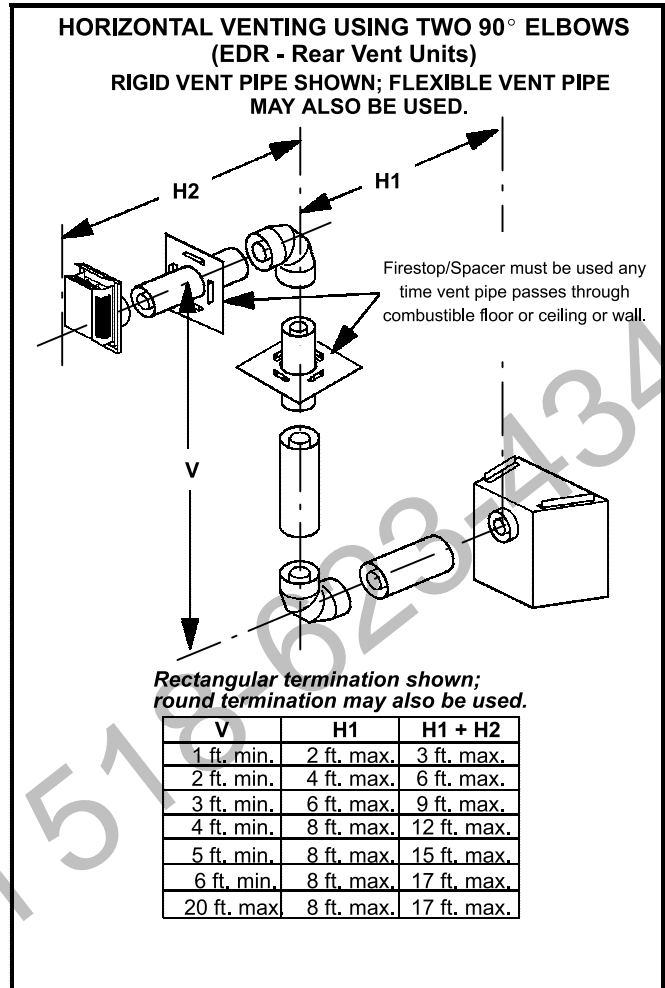


FIGURE 27

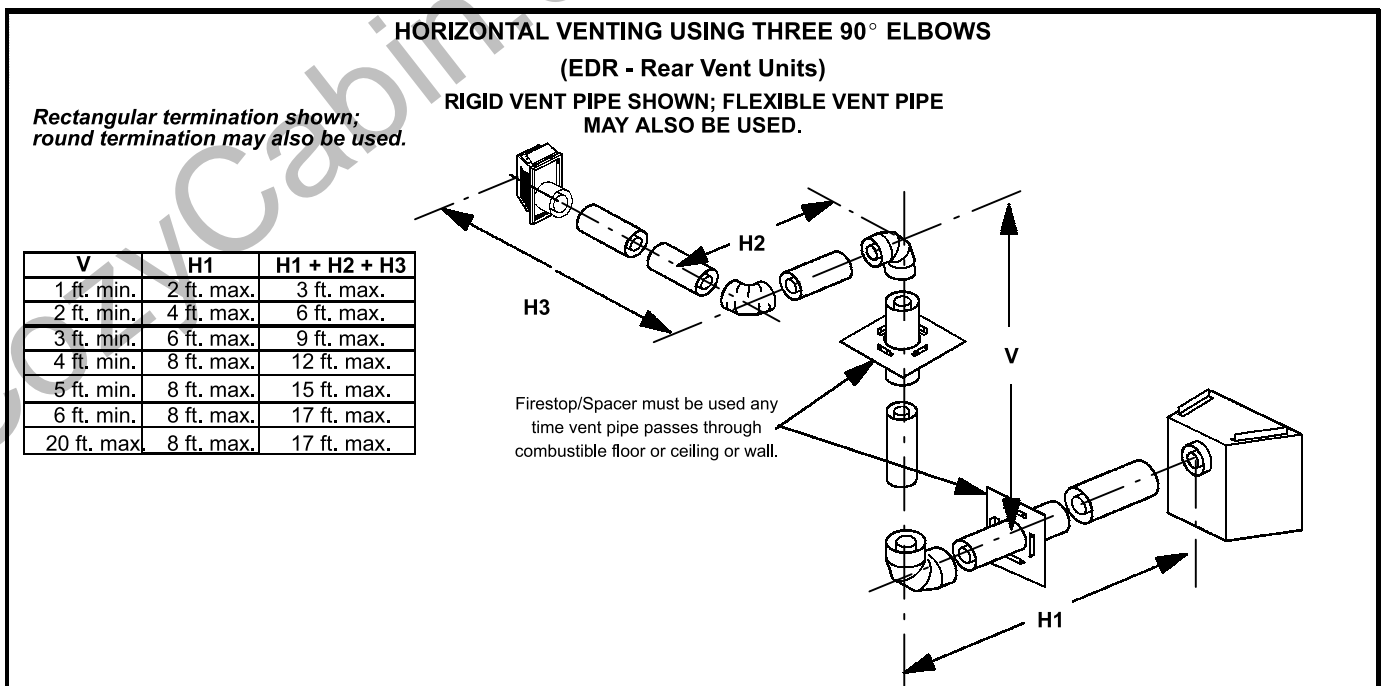


FIGURE 28

Horizontal Vent Terminations

In the United States, refer to local codes, ANSI Z223.1, and the vent clearances chart indicated in figure 31 for horizontal vent termination requirements. In Canada, refer to local codes, CAN / CGA B149.1 or .2, and the vent clearances chart indicated in figure 31.

Both round (figure 29) and rectangular (figure 30) vent terminations are available for use in horizontal applications. However, the rectangular termination detailed in figure 30 is the only one approved for use in applications without elbows as detailed in figure 26 or in corner installations as shown in figure 4.

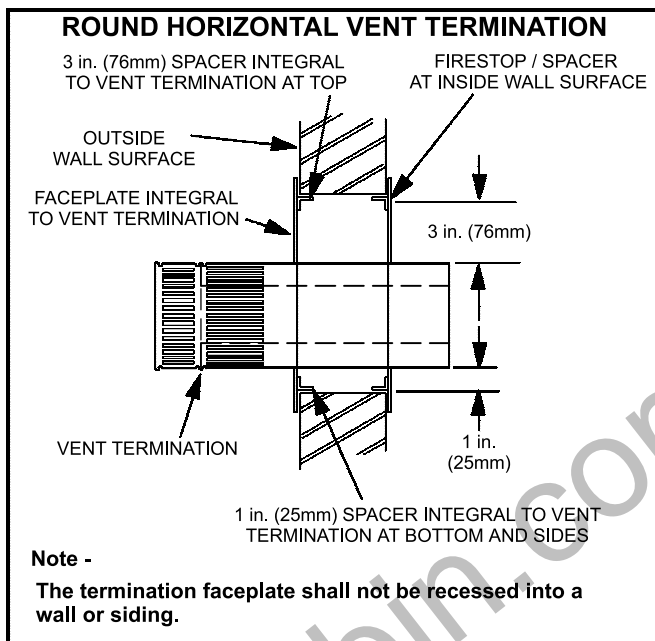


FIGURE 29

The rectangular vent termination may be installed directly on the fireplace vent collar. The termination can be adjusted to accommodate wall thicknesses from 5 in. (127mm) to 9 in. (229mm). In applications with wall thicknesses ranging from 9 in. (229mm) to 13 in. (330mm), use extension JVEXT4 (Catalog Number 12L01) between fireplace vent collar and termination.

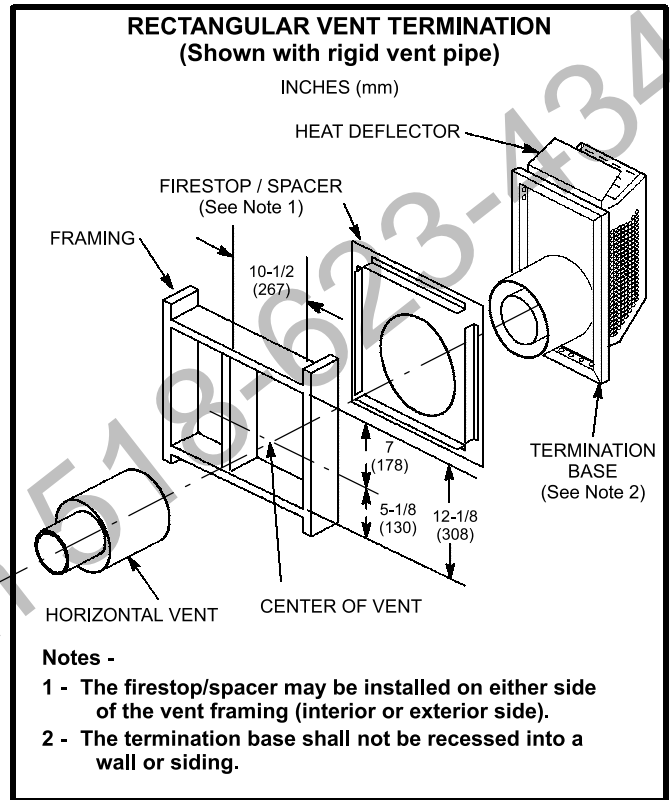
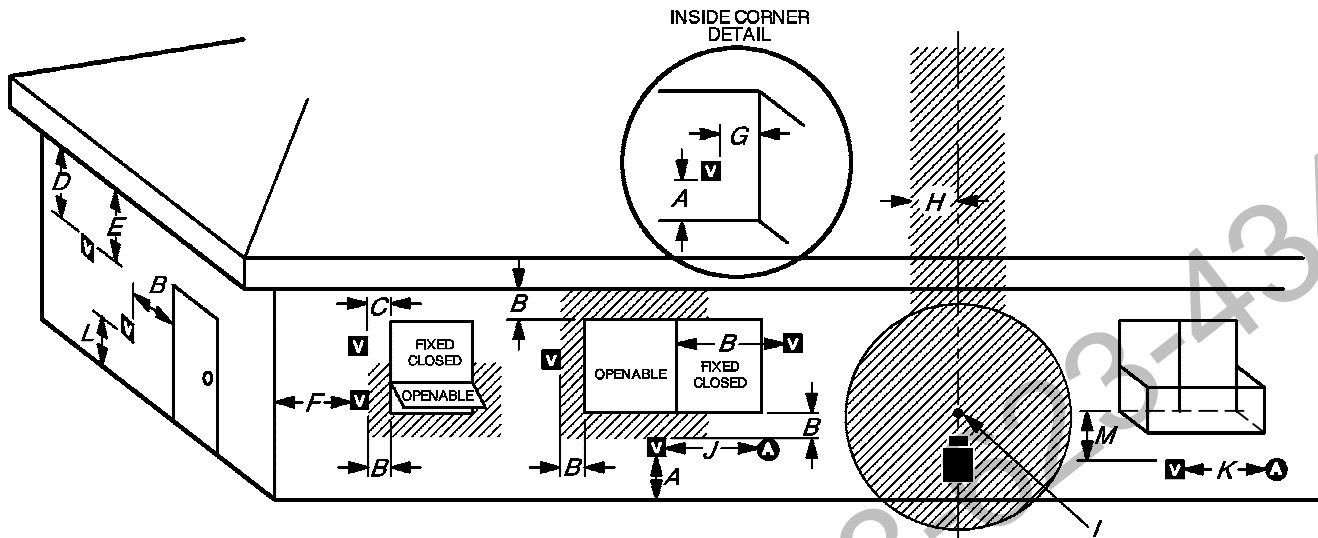


FIGURE 30

EXTERIOR HORIZONTAL VENT TERMINATION CLEARANCES



- A - Clearance above grade, veranda, porch, deck, or balcony -- *12 in. (305mm) minimum.
- B - Clearance to openable window or door -- *12 in. (305mm) minimum.
- C - Clearance to permanently closed window -- minimum 9 in. (228mm) in the United States and 12 in. (305mm) in Canada recommended to prevent condensation on window.
- D - Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 18 in. (457mm) from the center line of the terminal -- 18 in. (457mm) minimum.
- E - Clearance to unventilated soffit -- 12 in. (305mm) minimum.
- F - Clearance to outside corner -- 5 in. (127mm) minimum.
- G - Clearance to inside corner -- 6 in. (152mm) minimum).

- H - *Not to be installed above a meter / regulator assembly within 3 ft. (.9m) horizontally from the center line of the regulator.
- I - Clearance to service regulator vent outlet -- 3 ft. (915mm) in the United States and *6 ft. (1.8m) in Canada minimum.
- J - Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance -- 9 in. (228mm) in the United States and *12 in. (305mm) in Canada minimum.
- K - Clearance to mechanical air supply inlet -- 3 ft. (915mm) in the United States and *6 ft. (1.8m) in Canada minimum.
- L - †Clearance above paved sidewalk or a paved driveway located on public property -- *7 ft. (2.1m) minimum.
- M - ‡Clearance under veranda, porch, deck, or balcony -- 18 in. (457mm) minimum. In addition, if balcony has a perpendicular side wall, vent must be a minimum of 24 in. (610mm) from side wall.
- N - Vent termination must not be located in a recessed area.

†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 of two sides beneath the floor.*

*As specified in CAN/CGA B149 Installation Codes.

NOTE - Local codes or regulations may require different clearances.

FIGURE 31

Gas Piping

In the U.S. and Canada, both flexible and rigid gas pipe are approved for use with these appliances. Consult local codes for gas piping practices.

- 1 - Lennox gas fireplaces are shipped standard for left or right side or bottom installation of gas piping. Simply connect gas supply to gas valve. Gas valve connection is 3/8 in. A gas flex connector is provided with the unit as an aid in connecting the unit to the gas supply line. The gas flex line can only be used where local codes permit.
- 2 - When connecting gas supply, factors such as length of run, number of fittings and furnace rating (if applicable) must be considered to avoid excessive pressure drop.
- 3 - Gas piping must not run in or through air ducts, clothes chutes, chimneys or gas vents, dumb waiters or elevator shafts.
- 4 - Piping should be sloped 1/4 inch per 15 feet upward toward the meter from the appliance. The piping must be supported at proper intervals (every 8 to 10 feet) using suitable hangers or straps.
- 5 - In some localities, codes may require installation of an equipment shut-off valve (furnished) and union (furnished by installer) external to the unit. Union must be of the ground joint type. See figure 32.

⚠ IMPORTANT

Compounds used on threaded joints of gas piping must be resistant to the actions of liquified petroleum gases.

NOTE - In case emergency shutoff is required, close equipment shut-off valve and disconnect main power to unit. These devices should be properly labeled by the installer.

The appliance must be isolated from the gas supply system by closing its equipment shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.48 kPa).

The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of the gas supply system at test pressures in excess of 1/2 psig (3.48 kPa). See figure 32.

LEAK CHECK

After gas piping is completed, carefully check all piping connections (factory and field) for gas leaks. Use a leak detecting solution or other preferred means.

⚠ CAUTION

Some soaps used for leak detection are corrosive to certain metals. Carefully rinse piping thoroughly after leak test has been completed. Do not use matches, candles, flame or other sources of ignition to check for gas leaks.

⚠ IMPORTANT

Appliance gas valves can be damaged if subjected to more than 1/2 psig (3.48 kPa) pressure. Therefore, when pressure testing the gas supply piping system in this pressure range, the appliance gas valve must be disconnected and isolated.

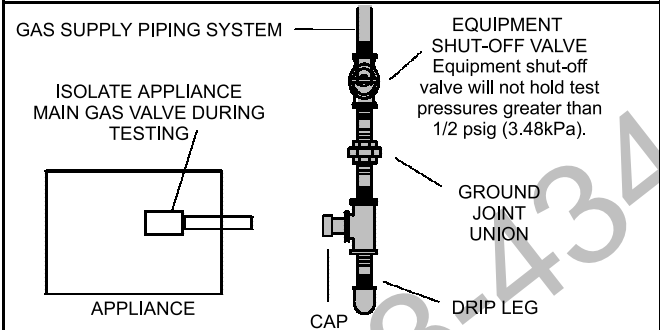


FIGURE 32

Unit Start-up

FOR YOUR SAFETY READ BEFORE LIGHTING

⚠ WARNING

Do not use this appliance if any part has been underwater. Immediately call a qualified service technician to inspect the fireplace and to replace any part of the control system and any gas control which has been under water.

⚠ WARNING

If overheating occurs or if gas supply fails to shut off, close the manual shut-off valve to the appliance before shutting off electrical supply.

⚠ CAUTION

Before attempting to perform any service or maintenance, turn the electrical power to appliance OFF at disconnect switch.

⚠ WARNING

Do not operate appliance unless glass frame is properly installed. Glass must not be broken or cracked.

BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

Use only your hand to turn the gas control knob. Never use tools. If the knob will not turn by hand, do not try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

⚠ WARNING

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

PLACING FIREPLACE INTO OPERATION (Millivolt Valves with Piezo Ignitor)

Fireplaces which include a millivolt valve are equipped with a pilot which must be lit by a Piezo ignitor (red ignitor button). When lighting the pilot, follow these instructions exactly.

GAS VALVE OPERATION - Millivolt Valve (Figure 33)

- 1 - **STOP!** Read the safety information at the beginning of this section.
- 2 - In applications using an optional wall-mounted switch or optional thermostat - Turn **OFF** appliance-mounted switch and leave **OFF**. Turn **OFF** wall-mounted switch or set thermostat to lowest setting.
In applications using only an appliance-mounted switch - Turn **OFF** appliance-mounted switch.
- 3 - Turn off all electrical power to appliance.
- 4 - Open the bottom panel. Push in gas control knob slightly and turn clockwise to **OFF**.
*NOTE - Knob cannot be turned from **PILOT** to **OFF** unless knob is pushed in slightly. Do not force.*
- 5 - Wait five (5) minutes to clear out any gas. If you then smell gas, **STOP!** Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions. If you do not smell gas go to next step.
- 6 - Press partially and turn gas valve knob counterclockwise to **PILOT**.

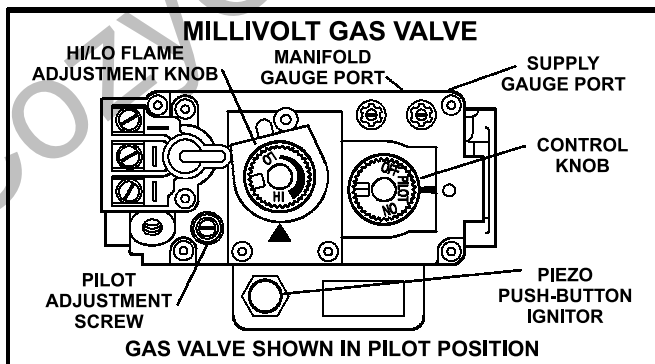


FIGURE 33

- 7 - Push control knob in until it stops and hold knob in this position. Immediately light the pilot by pushing the red Piezo ignitor button. Continue to press control knob for 25 seconds after the pilot is lit. Release knob. It should pop back up. Pilot should remain lit. If pilot goes out, repeat steps 5 through 10.
- 8 - Press partially and turn gas valve knob counterclockwise to **ON**.
- 9 - Restore electrical power to appliance (if applicable).
- 10- In applications using an optional wall-mounted switch or optional thermostat - Turn **ON** wall-mounted switch or set thermostat to desired setting.
In applications using only an appliance-mounted switch - Turn **ON** appliance-mounted switch.
- 11- Close the bottom panel.

*NOTE - If gas valve is turned to **OFF** from **ON** or **PILOT** while appliance is in operation, gas valve will latch in **OFF** position for 25 seconds.*

- 12- If the appliance will not operate, follow the instructions "Turning Off Gas to Unit" and call your service technician or gas supplier.

TURNING OFF GAS TO UNIT

- 1 - Turn **OFF** appliance-mounted switch, and in addition, if wall-mounted switch or thermostat is used, turn **OFF** wall-mounted switch or set thermostat to lowest setting.
- 2 - Turn off all electrical power to appliance.
- 3 - Open the bottom panel.
- 4 - Push in gas control knob slightly and turn clockwise to **OFF**. Do not force.
- 5 - Close the bottom panel.

Adjustments

NOTE - The air shutter for the burner primary air opening is factory-set. Do not adjust the factory-set position.

GAS FLOW

This burner / log set has been adjusted for the proper gas flow at the factory. No adjustment is necessary other than the pilot flame. See pilot flame adjustment section.

GAS PRESSURE

Check gas inlet pressure with the appliance firing at the maximum rate. A minimum of 4.5 in. w.c. (1.12 kPa) and maximum of 7.0 in. w.c. (1.74 kPa) for natural gas should be maintained. When LP/Propane gas is used, a minimum of 11.0 in. w.c. (2.74 kPa) and a maximum of 13.0 in. w.c. (3.23 kPa) must be maintained.

Maximum manifold pressure is 3.5 in. w.c. (0.87 kPa) for natural gas and 10 in. w.c. (2.49 kPa) for LP/Propane gas.

HIGH ALTITUDE INSTALLATION

Installations in the USA -

Units are tested and approved for elevations of 0-2000 feet (0-610 meters).

When installing this unit at an elevation above 2000 feet (610 meters), decrease the input rate by changing the existing burner orifice to a smaller size. Input rate should be reduced 4 percent for each 1000 feet (305 meters) of elevation above sea level. For assistance in determining the proper orifice size, check with the local gas utility or consult the latest edition of the National Fuel Gas Code (ANSI Z223.1, appendix F).

Installations in Canada -

Units are tested and approved for elevations of 0-4500 feet (0-1372 meters).

When installing this unit at an elevation above 4500 feet (1372 meters), consult the local authorities having jurisdiction.

ELECTRICAL

NOTE - These checks are necessary only if optional blower kit has been applied.

- 1 - Check all wiring for loose connections.
- 2 - Check for correct voltage at unit (unit operating).

PILOT FLAME ADJUSTMENT

To ensure proper gas valve operation, the pilot flame should impinge upon both the thermopile and the low mass thermocouple. See figure 34. The pilot flame adjustment screw is shown in figure 33.

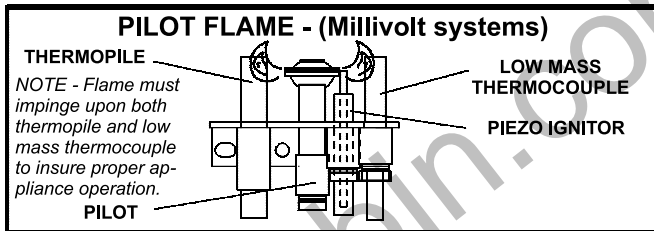


FIGURE 34

BURNER FLAME ADJUSTMENT

The burner flame may be adjusted by turning the HI/LO knob on the gas valve to obtain the required heating output and flame appearance. See figure 33. The burner flame should be inspected at the beginning of each heating season and burners should be cleaned by a qualified service technician. The flame color will stabilize after 15 minutes of operation.

FAILURE TO OPERATE

If unit fails to operate check the following:

- 1 - Is thermostat calling for heat, if applicable?
- 2 - Is ON/OFF wall switch in **ON** position, if applicable?
- 3 - Is pilot lit, if applicable?
- 4 - Is gas turned **ON** at meter?
- 5 - Is gas valve in **ON** position (millivolt units)?
- 6 - Is gas turned **ON** at the appliance shut-off valve?
- 7 - Is electrical power turned **ON** to the appliance (if applicable)?

Service

⚠ WARNING

Disconnect power before servicing unit.

Service should be performed by a qualified technician.

Control compartment, burners and circulating air passageways must be kept clean. The appliance should be inspected annually; however, more frequent cleaning may be necessary due to excessive amounts of lint or dust.

At the beginning of each heating season, service items A to C as described below:

A - BLOWERS (If applicable)

Check and clean blower wheels for any debris. Blower motors are prelubricated for extended bearing life. No further lubrication is needed.

B - VENT TERMINATION

Make sure there is no blockage at the vent termination.

C - PILOT AND BURNERS

Inspect pilot and burner flames. If necessary, lightly brush burner ports to dislodge any obstructions.

⚠ WARNING

Some soaps used for leak detection are corrosive to certain metals. Carefully rinse piping thoroughly after leak test has been completed. Do not use matches, candles, flame or other sources of ignition to check for gas leaks.

FIRE BOX

Periodically inspect fire box for corrosion. If necessary, wipe clean using a damp rag or vacuum using brush attachment.

GLASS / FRAME ASSEMBLY

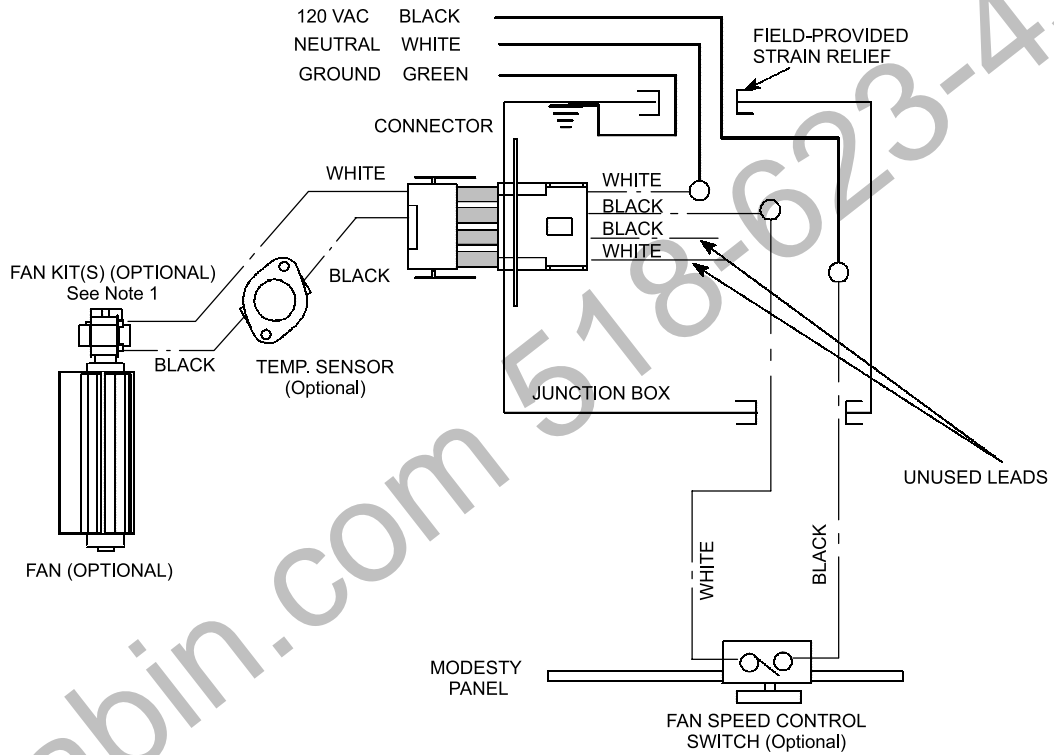
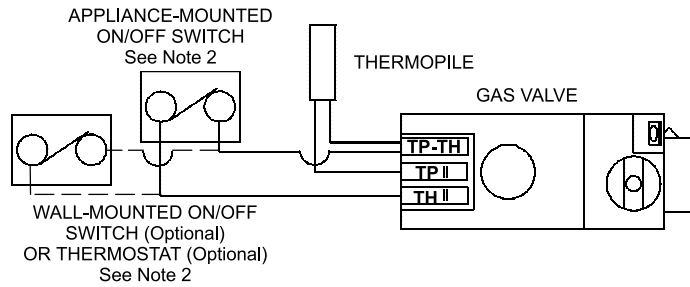
Clean inside and outside glass surfaces using a mild detergent/water solution and a soft cloth. **DO NOT** use abrasive cleansers which might scratch the high-temperature glass surface. **DO NOT** clean glass when surface is hot to the touch. Glass cleaner is available as Lennox part number 19N74.

Glass/frame assembly must be properly reinstalled after service. All three screws must be installed and tightened securely.

⚠ WARNING

Do not operate appliance unless glass frame is properly installed. Glass must not be broken or cracked.

Wiring Diagram - Millivolt Gas Valves



Note 1:

Fan Kit FK1 -

See the wiring diagrams in the installation instructions packaged with this kit for wiring connections.

This kit contains a fan only.
(Fan switch is field-provided.)

Fan Kit FK2 -

Wiring connections are shown in this figure.
This kit contains a Fan, Temperature Sensor, and Fan Speed Control Switch.

- FACTORY-PROVIDED & FIELD-CONNECTED
- FACTORY INSTALLED
- 120V FIELD INSTALLED
- MILLIVOLT FACTORY-PROVIDED & FIELD-CONNECTED

Note 2:

Turn unit-mounted ON/OFF switch to the off position if optional wall-mounted ON/OFF switch or optional thermostat is installed.

Repair Parts List

The following repair parts are available through independent Lennox dealers. **When ordering parts, it is important to include the complete appliance model number listed on the Warnock Hersey rating plate.**

Cabinet Parts

Heating Parts

Pan Burner
Gas manifold

Control Parts

Gas valve
Thermopile
Low mass thermocouple
Piezo push button ignitor
Pilot burner
On/Off switch
Millivolt thermostat

Gas Logs

Venting Kits & Available Components

The following is a list of venting kits and components approved for use with the gas fireplace:

Catalog Number	Description
96K70	12 in. Compressed Flex Termination (Round)
96K71	18 in. Compressed Flex Termination (Round)
96K72	24 in. Compressed Flex Termination (Round)
96K73	36 in. Compressed Flex Termination (Round)
96K74	48 in. Compressed Flex Termination (Round)
98K08	12 in. Compressed Flex Termination (Square)
98K09	18 in. Compressed Flex Termination (Square)
98K10	24 in. Compressed Flex Termination (Square)
98K11	36 in. Compressed Flex Termination (Square)
98K12	48 in. Compressed Flex Termination (Square)
96K80	Firestop Spacer - Horizontal Vent
96K82	1 ft. Coaxial Unitized Rigid Pipe
96K83	2 ft. Coaxial Unitized Rigid Pipe
96K84	3 ft. Coaxial Unitized Rigid Pipe
96K85	5 ft. Coaxial Unitized Rigid Pipe
96K86	1 ft. Coaxial Adjustable Pipe
96K87	Firestop Spacer - Vertical Vent
96K88	90° Elbow
96K89	45° Elbow
96K90	Flat Roof Flashing
96K91	1/12 - 7/12 Pitched Roof Flashing
97K01	Steep Pitch Roof Flashing (8/12 - 12/12)
96K92	Support Plate
96K93	Support Strap
96K94	Attic Insulation Shield

Catalog Number	Description
96K95	Horizontal Term. for Rigid Pipe (Round)
96K96	Vertical Term. for Rigid Pipe (Round)
98K13	Horizontal Term. c/w Slip Section
98K14	Horizontal Term. c/w Gear Clamp - Flex Vent
12L01	JVEXT4 Vent Extension - Rigid pipe
96K13	Circulating Air Fan
96K14	Circ. Air Fan with Temp. Control & Rheostat
96K98	Termination Heat Deflector
96K99	Riser Kit (Flex connections only)
97K00	Wall Termination Heat Guard
10K81	Mill-Pac Black High Temperature Sealant
96K17	35 in. 4-Piece Polished Brass Trim Assembly
96K21	35 in. 3-Piece Polished Brass Trim Assembly
96K31	35 in. Heat Guard
11K97	Free-Standing Heat Guard
96K34	3/8 in. Stainless Steel Flex Connector (12 in.)
96K35	3/8 in. Stainless Steel Flex Connector (24 in.)
26N04	Remote Control
98K99	Remote Control - Deluxe
60P60	White-Rodgers 1E30W-60 Thermostat (F°)
10N64	White-Rodgers 1E30W-60 Thermostat (C°)
81K87	On/Off Wall Switch
96K46	35 in. Polished Brass 2-pc. Bustle w/Side Strips
96K50	35 in. Polished Brass 6-pc. Louvers
96K62	35 in. Polished Brass 2-Pc. Radiant Panel Set
96K67	35 in. Eyebrow Hood