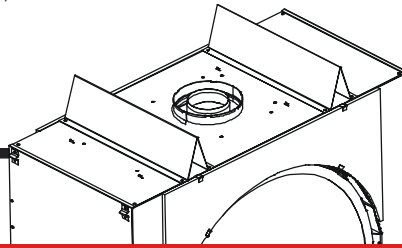


Model:
Passage

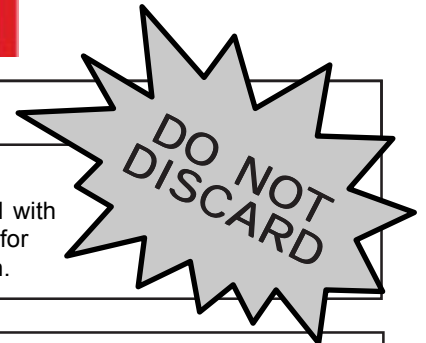


**This appliance has been retired.
Service parts pages within have been removed.
For replacement parts, please refer to the individual
service parts list located on the brand websites.**

GAS-FIRED



CAUTION



DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.

⚠ 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.

This appliance may be installed as an OEM installation in manufactured home (USA only) or mobile home and must be installed in accordance with the manufacturer's instructions and the manufactured home construction and safety standard, *Title 24 CFR, Part 3280* or *Standard for Installation in Mobile Homes, CAN/CSA Z240MH*.

This appliance is only for use with the type(s) of gas indicated on the rating plate.

⚠ WARNING



HOT SURFACES!

Glass and other surfaces are hot during operation AND cool down.

Hot glass will cause burns.

- **DO NOT** touch glass until it is cooled
- NEVER allow children to touch glass
- Keep children away
- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures.

High temperatures may ignite clothing or other flammable materials.

- Keep clothing, furniture, draperies and other flammable materials away.

This appliance has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. DO NOT operate the appliance with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.


In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter.


See Table of Contents for location of additional Commonwealth of Massachusetts requirements.




Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies suggests NFI certified or factory-trained professionals, or technicians supervised by an NFI certified professional.


SAFETY AND WARNING INFORMATION


 **READ** and **UNDERSTAND** all instructions carefully before starting the installation. **FAILURE TO FOLLOW** these installation instructions may result in a possible fire hazard and will void the warranty.


 Prior to the first firing of the appliance, **READ** the Using Your Fireplace section of the *Owners Guide*.


 **DO NOT USE** this appliance if any part has been under water. Immediately **CALL** a qualified service technician to inspect the unit and to replace any part of the control system and any gas control which has been under water.


 **THIS UNIT IS NOT FOR USE WITH SOLID FUEL.**


 Installation and repair should be **PERFORMED** by a qualified service person. The appliance and venting system should be **INSPECTED** before initial use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is **IMPERATIVE** that the unit's control compartment, burners, and circulating air passageways **BE KEPT CLEAN** to provide for adequate combustion and ventilation air.


 Always **KEEP** the appliance clear and free from combustible materials, gasoline, and other flammable vapors and liquids.


 **NEVER OBSTRUCT** the flow of combustion and ventilation air. Keep the front of the appliance **CLEAR** of all obstacles and materials for servicing and proper operations.


 Due to the high temperature, the appliance should be **LOCATED** out of traffic areas and away from furniture and draperies. Clothing or flammable material **SHOULD NOT BE PLACED** on or near the appliance.


 Children and adults should be **ALERTED** to the hazards of high surface temperature and should **STAY AWAY** to avoid burns or clothing ignition. Young children should be **CAREFULLY SUPERVISED** when they are in the same room as the appliance.


 These units **MUST** use one of the vent systems described in the Installing the Fireplace section of the *Installers Guide*. **NO OTHER** vent systems or components **MAY BE USED**.


 This gas appliance and vent assembly **MUST** be vented directly to the outside and **MUST NEVER** be attached to a chimney serving a separate solid fuel burning appliance. Each gas appliance **MUST USE** a separate vent system. Common vent systems are **PROHIBITED**.


 **INSPECT** the external vent cap on a regular basis to make sure that no debris is interfering with the air flow.


 The glass door assembly **MUST** be in place and sealed, and the trim door assembly **MUST** be in place on the appliance before the unit can be placed into safe operation.

 **WARNING: DO NOT OPERATE** this appliance with the glass door removed, cracked, or broken. Broken glass may be sharp to the touch, use caution when removing. Replacement of the glass door should be performed by a licensed or qualified service person. **DO NOT** strike or slam the glass door.

 The glass door assembly **SHALL ONLY** be replaced as a complete unit, as supplied by the gas appliance manufacturer. **NO SUBSTITUTE** material may be used.

 **DO NOT USE** abrasive cleaners on the glass door assembly. **DO NOT ATTEMPT** to clean the glass door when it is hot.

 Turn off the gas before servicing this appliance. It is recommended that a qualified service technician perform an appliance checkup at the beginning of each heating season.

 Any safety screen or guard removed for servicing must be replaced before operating this appliance.


 **DO NOT** place furniture or any other combustible household objects within 36 inches of the appliance front.

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→ = Contains updated information.

1

Approvals and Codes

Appliance Certification

The Heat & Glo appliance model discussed in this *Installers Guide* have been tested to certification standards and listed by the applicable laboratories.

Certification

MODEL: PASSAGE

LABORATORY: Underwriters Laboratories

TYPE: Vented Gas Fireplace

STANDARD: ANSI Z21.50b-2000•CSA2.22b-2000

Installation Codes

The appliance installation must conform to local codes. Before installing the appliance, consult the local building code agency to ensure that you are in compliance with all applicable codes, including permits and inspections.

In the absence of local codes, the appliance installation must conform to the National Fuel Gas Code ANSI Z223.1 (in the United States) or the CAN/CGA-B149 Installation Codes (in Canada). The appliance must be electrically grounded in accordance with local codes or, in the absence of local codes with the National Electric Code ANSI/NFPA No. 70 (in the United States), or to the CSA C22.1 Canadian Electric Code (in Canada).

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

High Altitude Installations

U.L. Listed gas appliances are tested and approved without requiring changes for elevations from 0 to 2,000 feet in the U. S. A. and in Canada.

When installing this appliance at an elevation above 2,000 feet, it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Input rate should be reduced by 4% for each 1000 feet above a 2000 foot elevation in the U.S.A. or 10% for elevations between 2000 and 4500 feet in Canada. If the heating value of the gas has been reduced, these rules do not apply. To identify the proper orifice size, check with the local gas utility.

If installing this appliance at an elevation above 4,500 feet (in Canada), check with local authorities.



Heat & Glo Quality
Systems registered
by SGS ICS

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

Requirements for the Commonwealth of Massachusetts

For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

Installation of Carbon Monoxide Detectors

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

In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

Approved Carbon Monoxide Detectors

Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

Signage

A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, **“GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS”**.

Inspection

The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.

Exemptions

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

- The equipment listed in Chapter 10 entitled “Equipment Not Required To Be Vented” in the most current edition of NFPA 54 as adopted by the Board; and
- Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

MANUFACTURER REQUIREMENTS

Gas Equipment Venting System Provided

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

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

Gas Equipment Venting System NOT Provided

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

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

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

See Gas Connection section for additional Commonwealth of Massachusetts requirements.

2

Getting Started

Introducing the Heat & Glo Gas Appliances

Heat & Glo direct vent gas appliances are designed to operate with all combustion air siphoned from outside of the building and all exhaust gases expelled to the outside.

The information contained in this *Installers Guide*, unless noted otherwise, applies to all models and gas control systems. Gas appliance diagrams, including the dimensions, are shown in this section.

Pre-install Preparation

This gas appliance and its components are tested and safe when installed in accordance with this *Installers Guide*. Report to your dealer any parts damaged in shipment, particularly the condition of the glass. **Do not install any unit with damaged, incomplete, or substitute parts.**

The vent system components and trim doors are shipped in separate packages. The gas logs may be packaged separately and must be field installed.

Read all of the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit. Failure to follow these instructions will void the owner's warranty and may present a fire hazard.

When planning a appliance installation, it's necessary to determine:

- Where the unit is to be installed.
- The vent system configuration to be used.
- Gas supply piping.
- Electrical wiring.
- Framing and finishing details.
- Where to install wall switch.
- Whether an optional remote control is desired.

If the appliance is to be installed on carpeting or tile, or on any combustible material other than wood flooring, the appliance should be installed on a metal or wood panel that extends the full width and depth of the appliance.

Warranty

The Heat & Glo Warranty will be voided by, and Heat & Glo disclaims any responsibility for, the following actions:

- Installation of any damaged appliance or vent system component.
- Modification of the appliance or direct vent system.
- Installation other than as instructed by Heat & Glo.
- Improper positioning of the gas logs or the glass door.
- Installation and/or use of any component part not manufactured and approved by Heat & Glo, not withstanding any independent testing laboratory or other party approval of such component part or accessory.

ANY SUCH ACTION MAY POSSIBLY CAUSE A FIRE HAZARD.

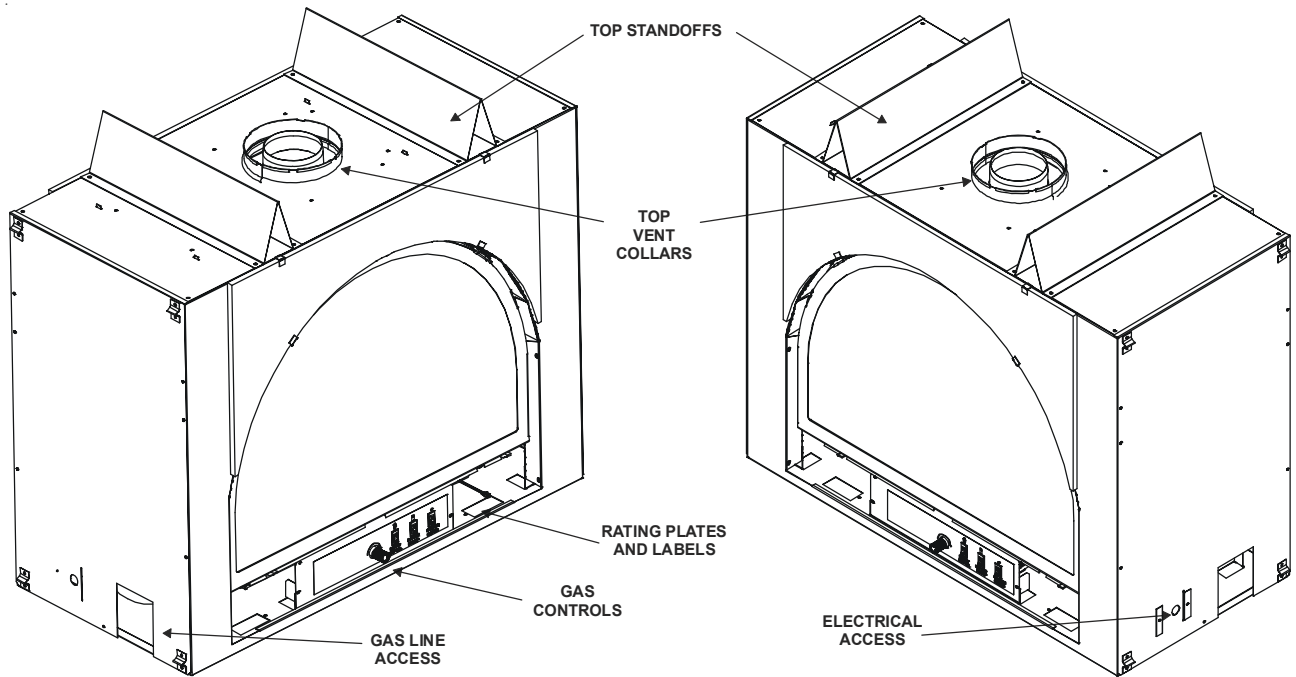
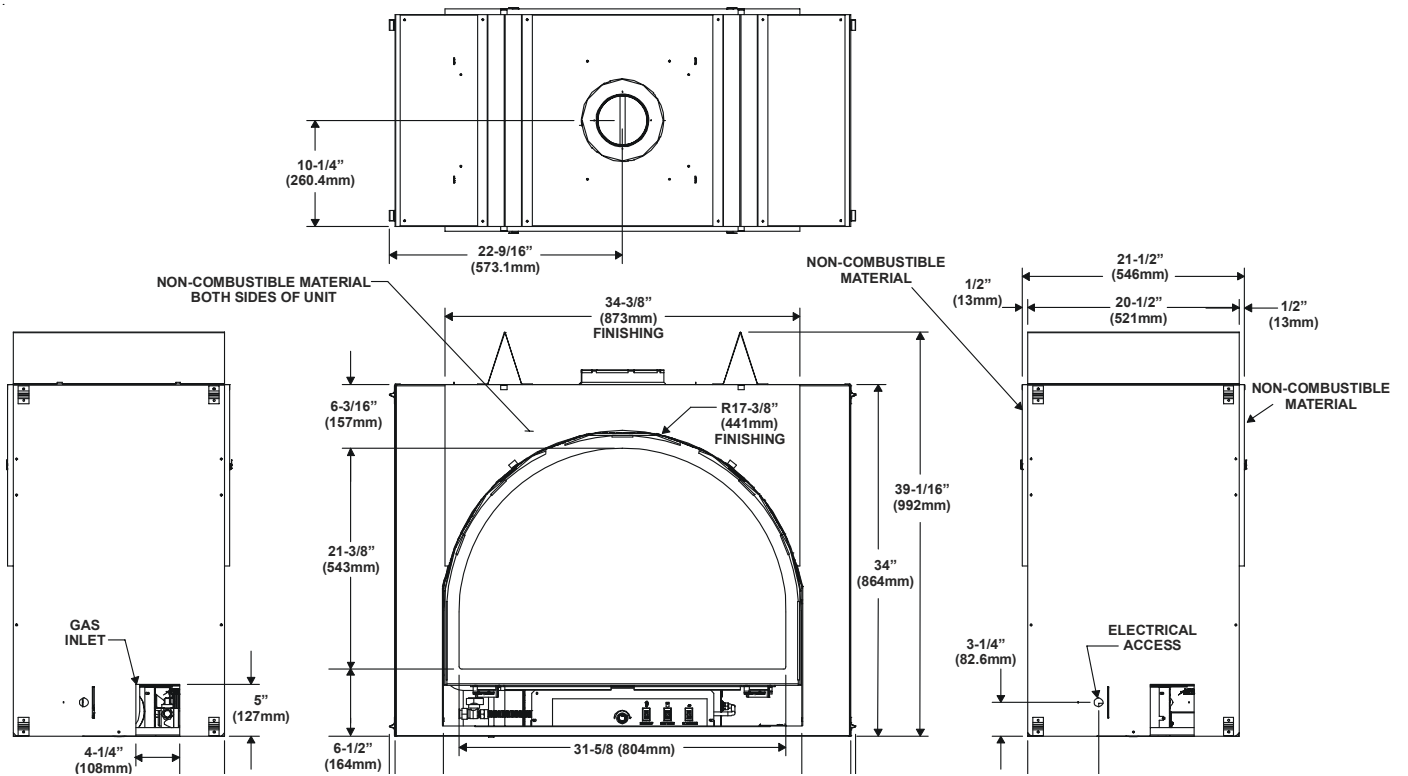


Figure 1. Diagram of the PASSAGE

3

Installing the Appliance

Constructing the Chase

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

CAUTION: TREATMENT OF FIRESTOP SPACERS AND CONSTRUCTION OF THE CHASE MAY VARY WITH THE TYPE OF BUILDING. THESE INSTRUCTIONS ARE NOT SUBSTITUTES FOR THE REQUIREMENTS OF LOCAL BUILDING CODES. THEREFORE, YOUR LOCAL BUILDING CODES **MUST** BE CHECKED TO DETERMINE THE REQUIREMENTS FOR THESE STEPS.

Factory-built appliance chases should be constructed in the manner of all outside walls of the home to prevent cold air drafting problems. The chase should not break the outside building envelope in any manner.

This means that the walls, ceiling, base plate and cantilever floor of the chase should be insulated. Vapor and air infiltration barriers should be installed in the chase as per regional codes for the rest of the home. Additionally, the inside surfaces may be sheetrocked and taped for maximum air tightness.

To further prevent drafts, the firestops should be caulked to seal gaps. Gas line holes and other openings should be caulked or stuffed with insulation. If the unit is being installed on a cement slab, a layer of plywood may be placed underneath to prevent conducting cold up into the room. Be sure to include spark arrestors for woodburning units if they are required.

THE CHASE SHOULD BE CONSTRUCTED SO THAT ALL CLEARANCES TO THE APPLIANCE ARE MAINTAINED AS SPECIFIED WITHIN THIS INSTALLERS GUIDE.

Step 1. Locating the Appliance

Space and clearance requirements for locating a appliance within a room (see Figure 2).

Clearance Requirements

The top, back, front and sides of the appliance are defined by stand-offs. The minimum clearance to a perpendicular wall extending past the face of the appliance is 4 inches (102mm).

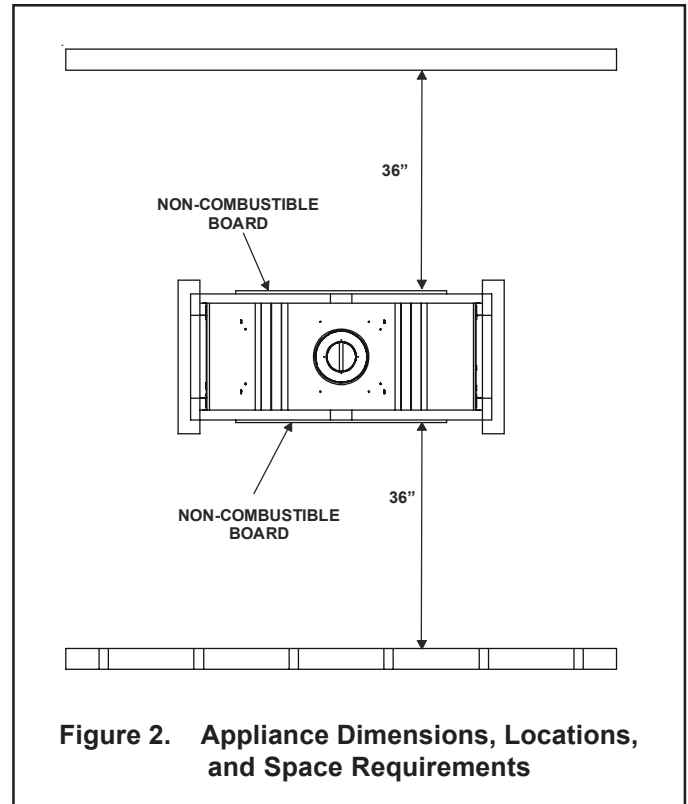


Figure 2. Appliance Dimensions, Locations, and Space Requirements

Minimum Clearances from the Appliance to Combustible Materials		
	<u>Inches</u>	<u>mm</u>
Glass Sides	36	914
Front	1/2	13
Floor	0	0
Sides	1/2	13
Top	5	127
Ceiling*	36	914

* The clearance to the ceiling is measured from the top of the unit, excluding the stand-offs and collar. See Figure 25 for further details.

Minimum Clearances from the Vent Pipe to Combustible Materials		
	<u>Inches</u>	<u>mm</u>
Vertical Sections	1	25
Horizontal Sections		
Top	3	75
Bottom	1	25
Sides	1	25
At Wall Firestops		
Top	2 1/2	64
Bottom	1/2	13
Sides	1	25

The distance from the unit to combustible construction is to be measured from the unit outer wrap surface to the combustible construction, **NOT** from the screw heads that secure the unit together.

Step 2. Framing the Appliance

Appliance framing can be built before or after the appliance is set in place. Framing should be positioned to accommodate wall coverings and appliance facing material. The diagram below shows framing reference dimensions.

CAUTION: MEASURE APPLIANCE DIMENSIONS AND VERIFY FRAMING METHODS AND WALL COVERING DETAILS BEFORE FRAMING.

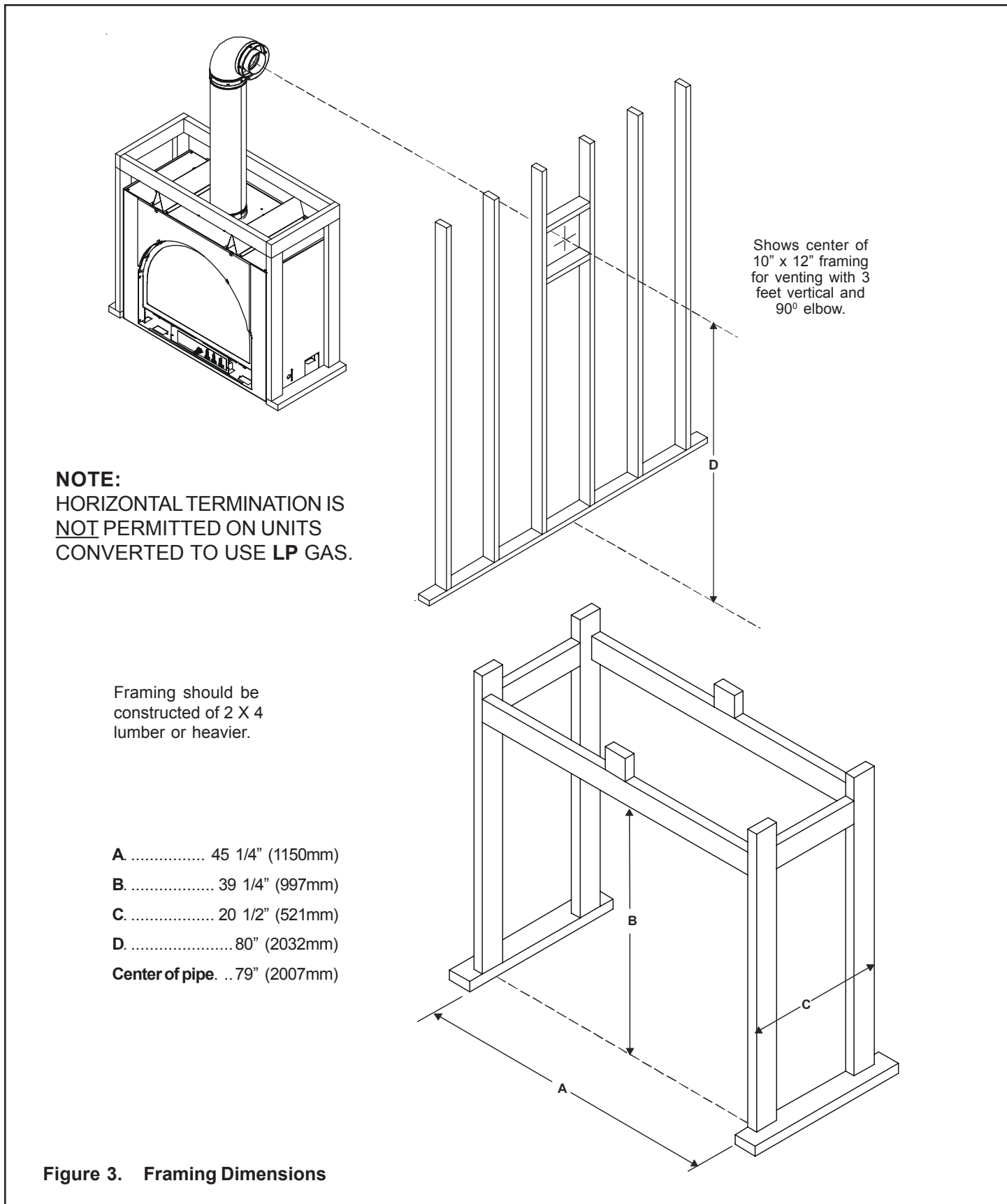


Figure 3. Framing Dimensions

Step 3. Installing the Vent System

A. Vent System Approvals

These models are approved to use DVP-series direct vent pipe components and terminations (see Figures 4 and 5). Approved vent system components are labeled for identification. This pipe is tested and listed as an approved component of the appliance. The pipe is tested to be run inside an enclosed wall. There is no requirement for inspection openings at each joint within the wall. There is no required pitch for horizontal vent runs. **NO OTHER VENTING SYSTEMS OR COMPONENTS MAY BE USED.**

Detailed installation instructions are included with each vent termination kit and should be used in conjunction with this *Installers Guide*.

The flame and ember appearance may vary based on the type of fuel burned and the venting configuration used.

Identifying Vent Components

The vent systems installed on this gas appliance may include one, two, or three 90° elbow assemblies. The relationships of vertical rise to horizontal run in vent configurations using 90° elbows **MUST BE** strictly adhered to. The rise to run relationships are shown in the venting drawings and tables. Refer to the diagrams on the next several pages.

NOTE: Two 45° elbows may be used in place of one 90° elbow. Rise to run ratios in the vent system **must** be followed if 45° elbows are used.

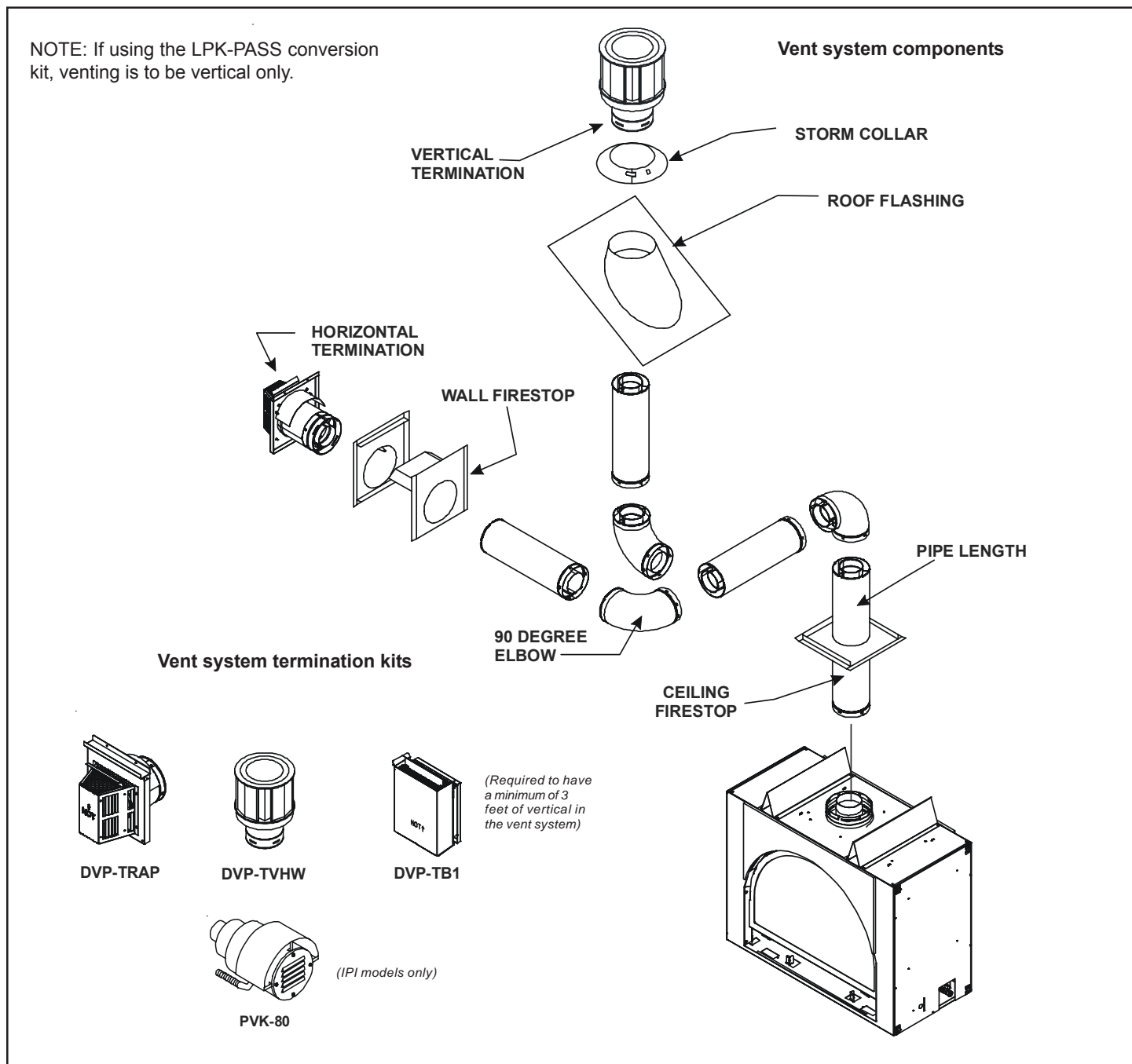


Figure 4. Vent Components and Terminations

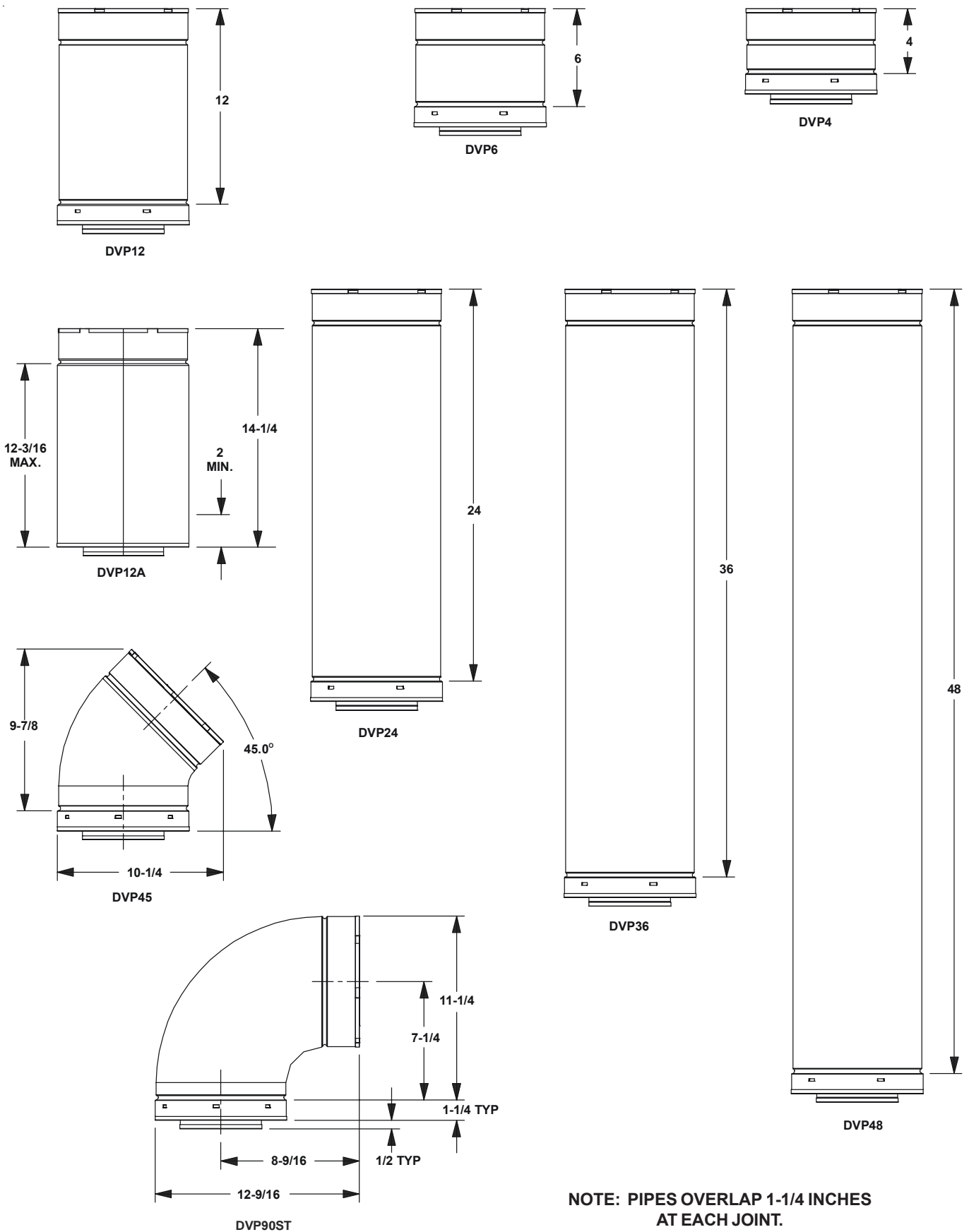


Figure 6. DVP-Series Direct Vent Component Specifications (5-inch inner pipe / 8-inch outer pipe)

**STRAIGHT UP
VERTICAL VENTING**

V (FT.)

46' MAX. (14M)

LP ONLY

V (MIN.)

8' MIN. (203MM)

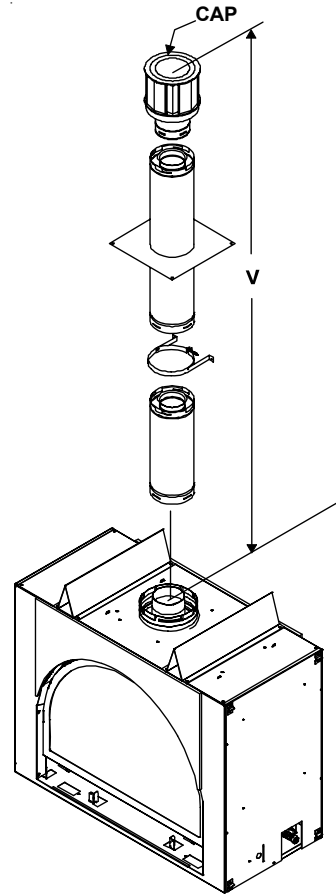


Figure 6. Straight Up Vertical Venting

VENTING WITH ONE (1) 90° ELBOW

V	H
3.5' MIN. (1.1m)	12' MAX. (3.66m)
4' MIN. (1.22m)	16' MAX. (4.88m)
5' MIN. (1.52m)	20' MAX. (6.1m)

V+H= 40' MAX. (12.2MM) H = 20' MAX. (6.1m)

NOTE: When venting with (1) elbow, a straight section of venting (3 feet minimum) **MUST** be attached directly to starting collars on unit.

NOTE: Horizontal termination is not permitted on units converted to use LP gas.

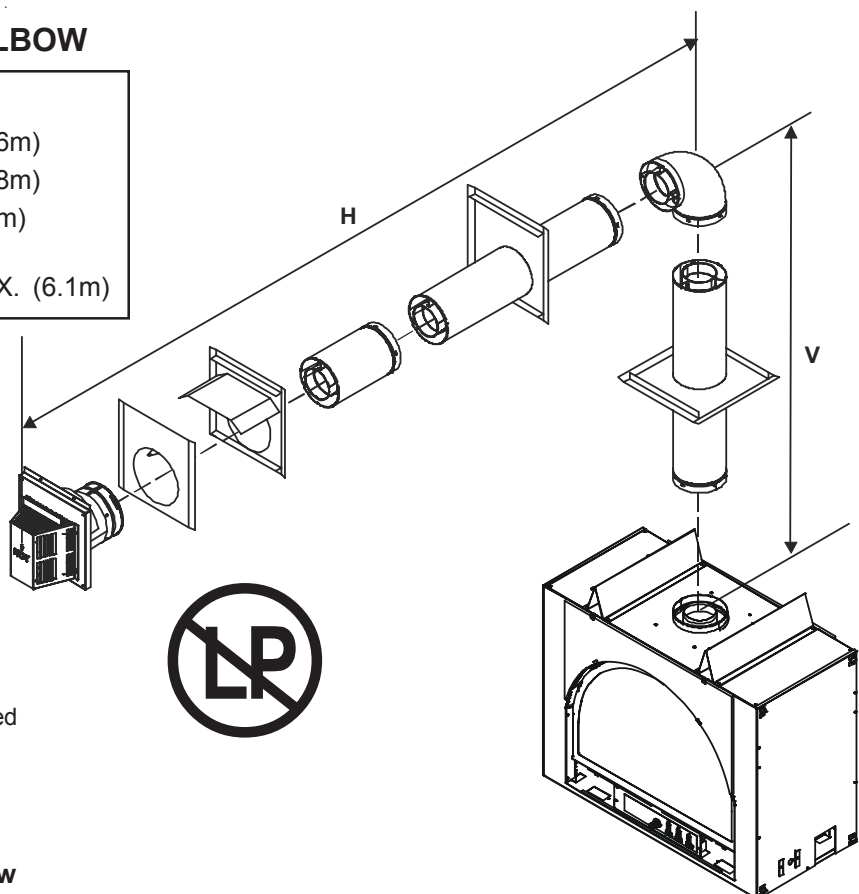


Figure 7. Venting with One 90° Elbow

VENTING WITH TWO (2) 90° ELBOWS

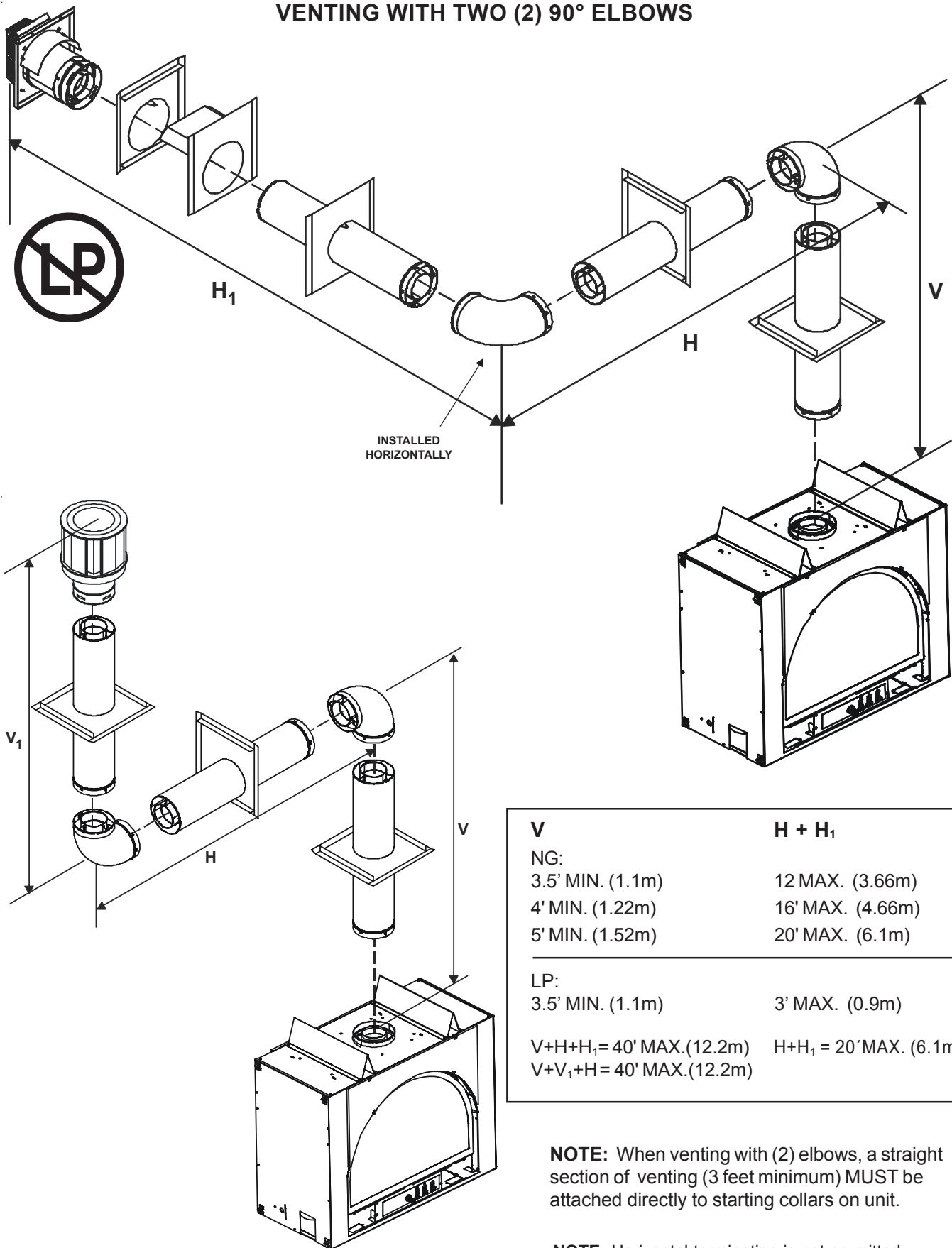


Figure 8. Venting with Two 90° Elbows

VENTING WITH THREE (3) 90° ELBOWS

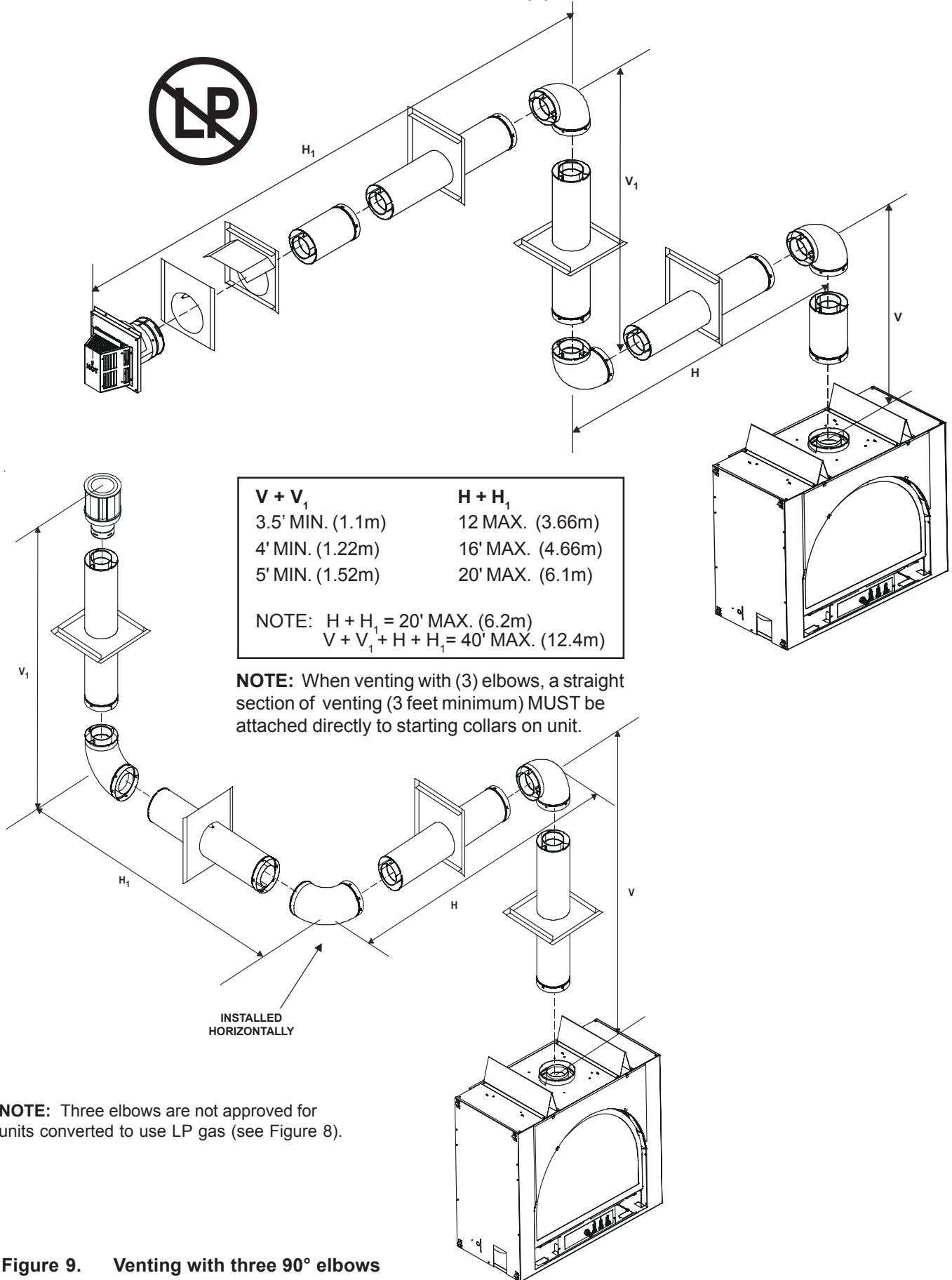


Figure 9. Venting with three 90° elbows

B. Installing Vent Components

If your vertical vent component is over 8 feet and you are using natural gas, you will need to install the included vertical baffle to improve flame appearance. The vertical baffle (700-180) is located in the bag containing the instruction manual. To install the baffle, remove two screws from opposite sides of the exhaust collar inside the firebox. Position the baffle with the larger holes over the remaining two screws. Use the screws that were previously removed to attach the baffle.

With vent runs of 30 feet or more without elbows, a different baffle (700-181) is to be used. This is a service part and is to be purchased separately. Part number 700-181 includes two notches in the outer circle to separate it from the 700-180.

If the unit has been converted to LP, do NOT use the vent baffles.

1. Attach the First Vent Component to the Starting Collars

To attach the first vent component to the starting collars of the appliance:

NOTE: The first vent component attached to the unit must be a minimum of 36 inches straight pipe, or 3.5 feet from the unit top to the center of the elbow.

- Slide the first vent component onto the appliance and push in until components snap lock into position.
- Secure vent component to unit starting collars with two screws.
- Refer to Cinch Pipe and Termination Cap installation instructions.

2. Continue Adding Vent Components

WARNING: INSTALLATION OF THIS APPLIANCE REQUIRES THE USE OF TWO HEAT SHIELDS (385-290) ABOVE THE FIRST 90° ELBOW IN THE VENTING SYSTEM.

To Install the Heat Shield:

1. Determine if the heat shields are required. Do so by measuring the vertical distance between the top horizontal surface of the elbow to any combustible surface above. If the distance is more than 4 inches, the heat shields are **NOT** required. If it is 4 inches or less, the heat shields **ARE REQUIRED**. Install per the following steps. See Figure 10.

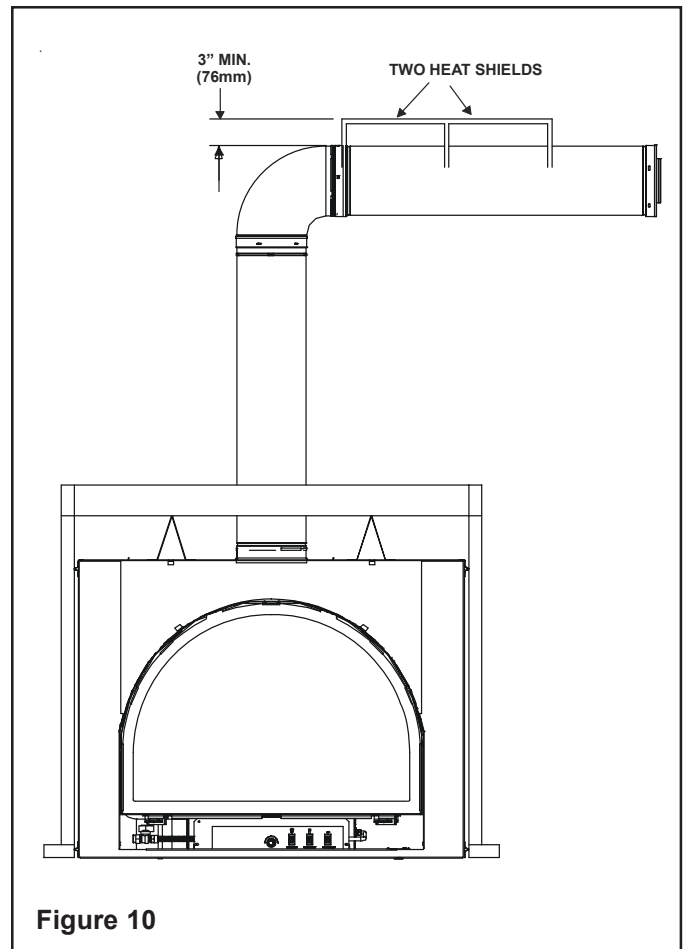


Figure 10

2. Fasten the shields in place using the four pilot holes provided in the part. The shields should be oriented such that the 13 1/8 inch dimension (longest dimension) is running in the same direction the elbow is pointing. The shields should be centered directly above the elbow, and positioned so that it creates a 1/2 inch airspace between the shields and the combustible surface. See Figure 11.

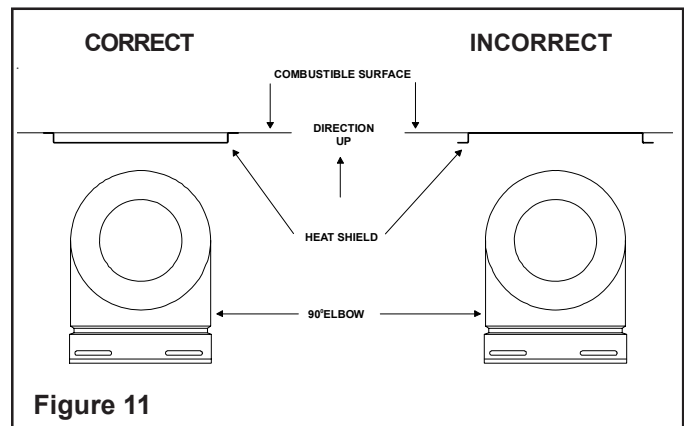
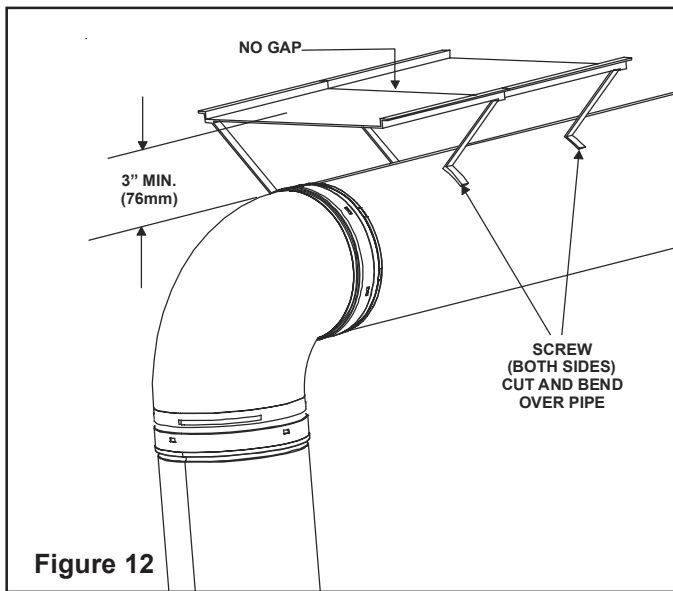


Figure 11

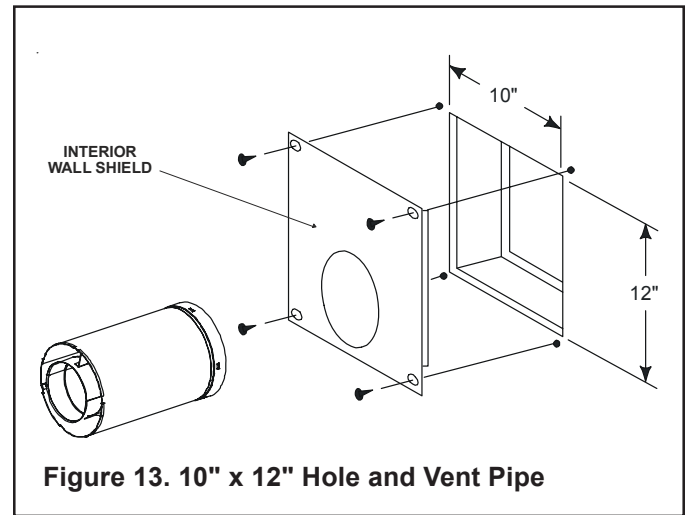
- If the combustible materials are not in place at the time of install the elbow heat shields may be screwed to the exhaust pipe (see Figure 12). Cut the tabs as shown and bend down. Using the screws found in the manual bag secure the heat shields to the pipe maintaining 3" to 4" between the pipe and shield.



Note: The center of the hole is one (1) inch (25.4mm) above the center of the horizontal vent pipe.

- Position the firestops on both sides of the hole previously cut and secure the firestops with nails or screws.
- The heat shields of the firestops **MUST BE** placed towards the top of the hole.
- Continue the vent run through the firestops.

NOTE: There must be **NO INSULATION** or other combustibles inside the framed firestop opening.



- Refer to Cinch Pipe and Termination Cap installation instructions.
- Continue adding vent components, locking each succeeding component into place.
- Ensure that each succeeding vent component is securely fitted and locked into the preceding component in the vent system. Securing pipe with a maximum of two screws is recommended.
- 90° elbows may be installed and rotated to any point around the preceding component's vertical axis. If an elbow does not end up in a locked position with the preceding component, attach with a minimum of two (2) sheet metal screws.

3. Install Support Brackets

The vent system must be supported every five (5) feet of horizontal run by a horizontal pipe support.

Refer to Cinch Pipe and Termination Cap installation instructions.

4. Install Firestops

For Horizontal Runs - Firestops are REQUIRED on both sides of a combustible wall through which the vent passes.

NOTE: Model DVP-TRAP does not need an exterior firestop on an exterior combustible wall.

- Cut a 10-inch by 12-inch (254mm X 305mm) hole through the wall.

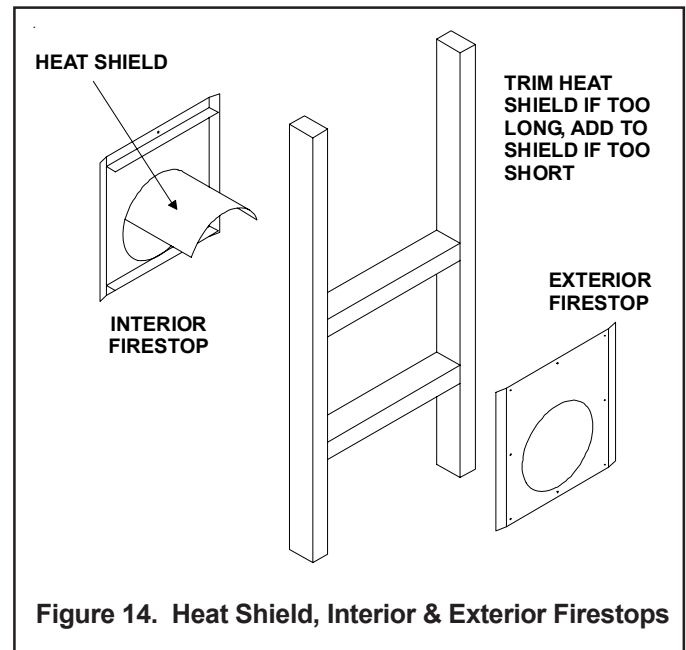


Figure 14. Heat Shield, Interior & Exterior Firestops

For Vertical Runs - One ceiling firestop is **REQUIRED** at the hole in each ceiling through which the vent passes.

To install firestops for vertical runs that pass through ceilings:

- Position a plumb bob directly over the center of the vertical vent component.
- Mark the ceiling to establish the centerpoint of the vent.
- Drill a hole or drive a nail through this centerpoint.
- Check the floor above for any obstructions, such as wiring or plumbing runs.
- Reposition the appliance and vent system, if necessary, to accommodate the ceiling joists and/or obstructions.
- Cut an 10-inch x 10-inch (254mm x 254mm) hole through the ceiling, using the centerpoint previously marked.
- Frame the hole with framing lumber the same size as the ceiling joists.

NOTE: There must be NO INSULATION or other combustibles inside the framed firestop opening.

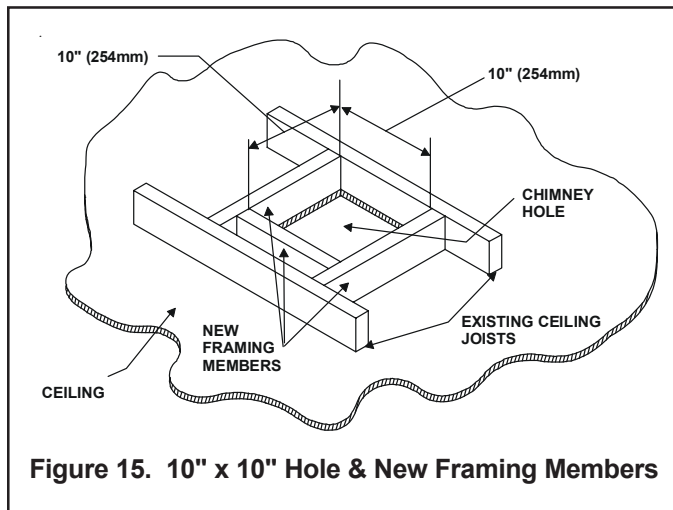


Figure 15. 10" x 10" Hole & New Framing Members

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

This shows a ceiling installation.

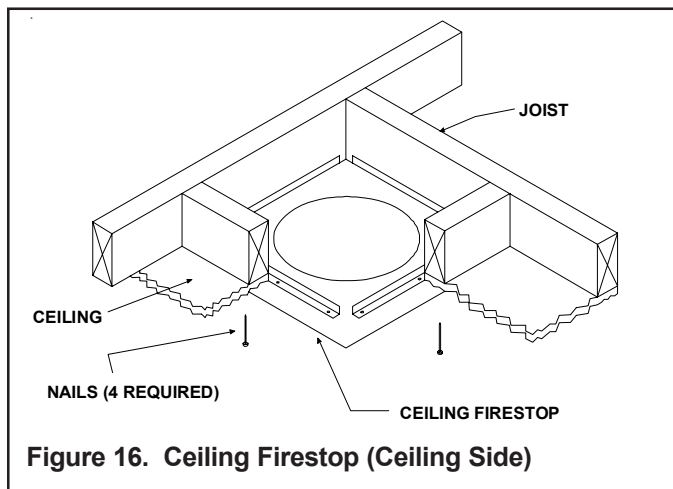


Figure 16. Ceiling Firestop (Ceiling Side)

If the area above the ceiling **IS** an attic, position and secure the firestop on top of the previously framed hole.

This shows an attic installation. Keep insulation away from the vent pipe at least 1 inch (25mm).

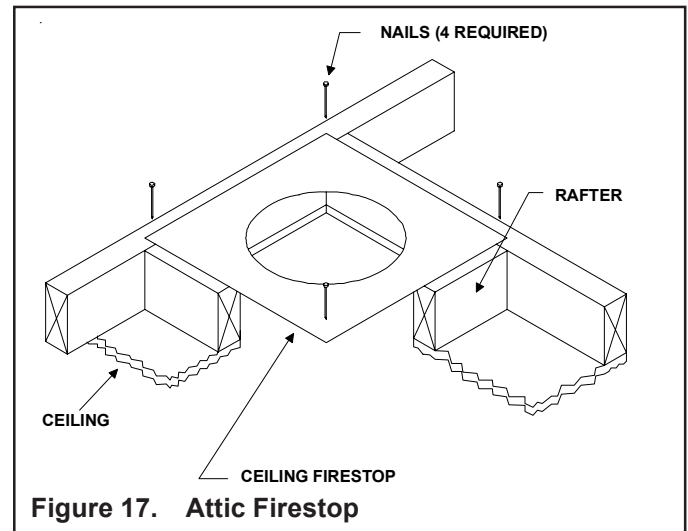


Figure 17. Attic Firestop

C. Vent Termination

For Horizontal Terminations - To attach and secure the termination to the last section of horizontal vent:

- Rotate and interlock the ends as described at the beginning of the Installing Vent Components section.
- The termination kit should pass through the wall firestops from the exterior of the building.
- Adjust the termination cap to its final exterior position on the building.

WARNING: THE TERMINATION CAP MUST BE POSITIONED SO THAT THE ARROW IS POINTING UP.

For trapezoidal cap termination kits:

- Screw the cap to the exterior wall through the flanges in the cap.
- Seal the joint between the pipe and the exterior firestop.

WARNING: VENTING TERMINALS SHALL NOT BE RECESSED INTO A WALL OR SIDING. VENT TERMINATION CLEARANCES MUST BE FOLLOWED TO AVOID FIRE DANGER. SEE VENT TERMINATION MINIMUM CLEARANCES DIAGRAM ON FOLLOWING PAGE.

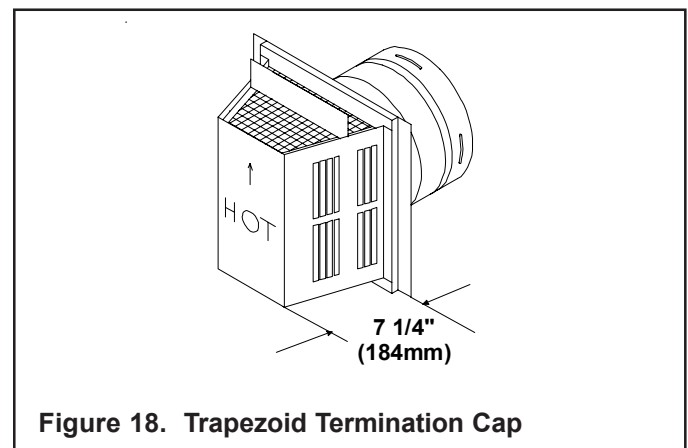
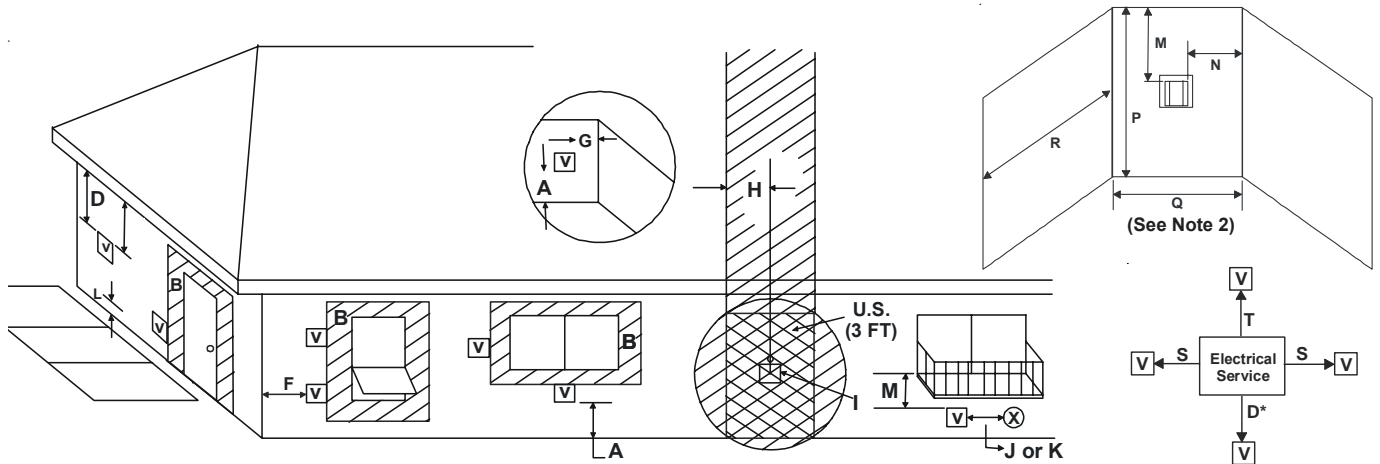


Figure 18. Trapezoid Termination Cap



V = VENT TERMINAL

X = AIR SUPPLY INLET

▨ = AREA WHERE TERMINAL IS NOT PERMITTED

- A = 12" clearances above grade, veranda, porch, deck or balcony
(See Note 1)
- B = 12" clearances to window or door that may be opened, or to permanently closed window.
- D* = 24" vertical clearance to unventilated soffit or to ventilated soffit located above the terminal
*60" for vinyl clad soffits and below electrical service
- F = 9" clearance to outside corner
- G = 6" clearance to inside corner
- H = 3 ft. (Canada) not to be installed above a gas meter/regulator assembly within 3 feet (90cm) horizontally from the center-line of the regulator
- I = 3 ft. (U.S.A.) clearance to gas service regulator vent outlet
- J = 9" (U.S.A.)
12" (Canada) clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance

- K = 3 ft. (U.S.A.)
6 ft. (Canada) clearance to a mechanical air supply inlet
- L** = 7 ft. clearance above paved sidewalk or a paved driveway located on **public** property
(See Note 1)
- M*** = 24" clearance under veranda, porch, deck, balcony or overhang
42" vinyl
- N = 6" non-vinyl sidewalls
12" vinyl sidewalls
- P = 8 ft.

	Q_{MIN}	R_{MAX}
1 cap	3 feet	2 x Q _{ACTUAL}
2 caps	6 feet	1 x Q _{ACTUAL}
3 caps	9 feet	2/3 x Q _{ACTUAL}
4 caps	12 feet	1/2 x Q _{ACTUAL}
Q_{MIN} = # termination caps x 3		R_{MAX} = (2 / # termination caps) x Q_{ACTUAL}

- S = 6" clearance from sides of electrical service
(See Note 5)
- T = 12" clearance above electrical service
(See Note 5)

** 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 2 sides beneath the floor, or meets Note 2.

NOTE 1: On private property where termination is less than 7 feet above a sidewalk, driveway, deck, porch, veranda or balcony, use of a listed cap shield is suggested.

NOTE 2: Termination in an alcove space (spaces open only on one side and with an overhang) are permitted with the dimensions specified for vinyl or non-vinyl siding and soffits. **1.** There must be 3 feet minimum between termination caps. **2.** All mechanical air intakes within 10 feet of a termination cap must be a minimum of 3 feet below the termination cap. **3.** All gravity air intakes within 3 feet of a termination cap must be a minimum of 1 foot below the termination cap.

Figure 19. Vent Termination Minimum Clearances

NOTE 3: Local codes or regulations may require different clearances.

NOTE 4: Termination caps may be hot. Consider their proximity to doors or other traffic areas.

NOTE 5: Location of the vent termination must not interfere with access to the electrical service.

WARNING: In the U.S: Vent system termination is **NOT** permitted in screened porches. You must follow side wall, overhang and ground clearances as stated in the instructions.

In Canada: Vent system termination is **NOT** permitted in screened porches. Vent system termination is permitted in porch areas with two or more sides open. You must follow all side walls, overhang and ground clearances as stated in the instructions.

Heat & Glo assumes no responsibility for the improper performance of the appliance when the venting system does not meet these requirements.

CAUTION: IF EXTERIOR WALLS ARE FINISHED WITH VINYL SIDING, IT IS SUGGESTED THAT A VINYL PROTECTOR KIT BE INSTALLED.

For Vertical Terminations - To locate the vent and install the vent sections:

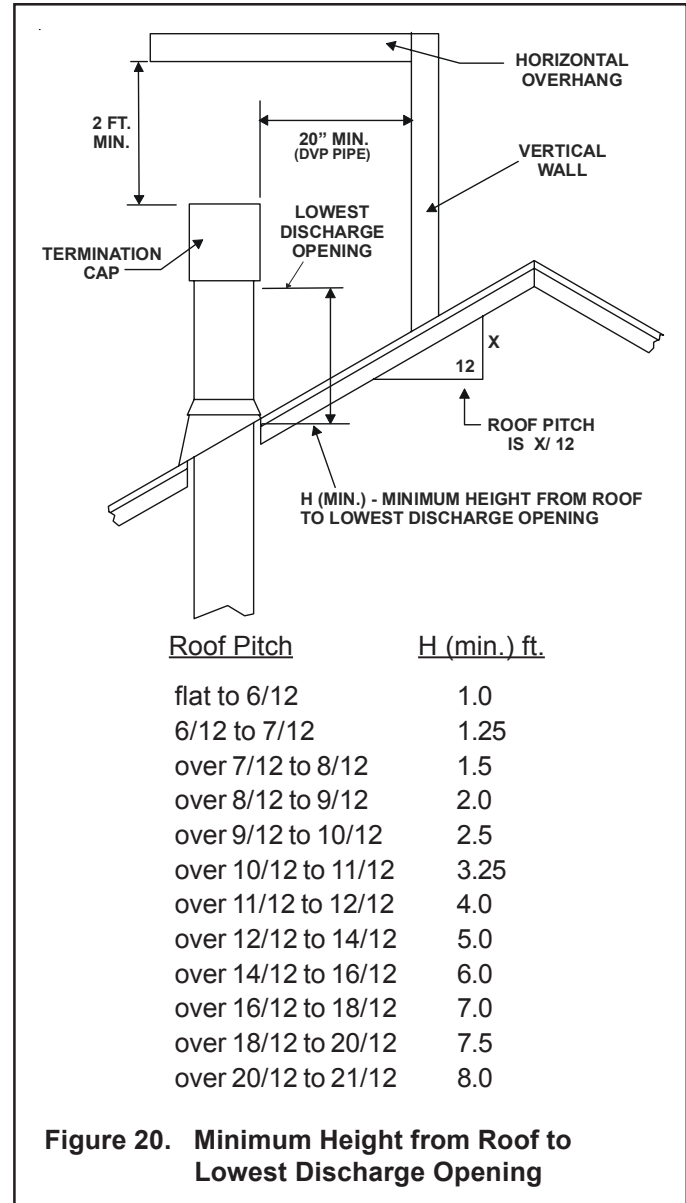
- Locate and mark the vent centerpoint on the underside of the roof, and drive a nail through the centerpoint.
- Make the outline of the roof hole around the centerpoint nail.
- The size of the roof hole framing dimensions depend on the pitch of the roof. There **MUST BE** a 1-inch (25.4mm) clearance from the vertical vent pipe to combustible materials.
- Mark the roof hole accordingly.
- Cover the opening of the installed vent pipes.
- Cut and frame the roof hole.
- Use framing lumber the same size as the roof rafters and install the frame securely. Flashing anchored to the frame must withstand heavy winds.
- Continue to install concentric vent sections up through the roof hole (for inside vent installations) or up past the roof line until you reach the appropriate distance above the roof (for outside terminations).

To seal the roof hole, and to divert rain and snow from the vent system:

- Attach a flashing to the roof using nails, and use a non-hardening mastic around the edges of the flashing base where it meets the roof.
- Attach a storm collar over the flashing joint to form a water-tight seal. Place non-hardening mastic around the joint, between the storm collar and the vertical pipe.
- Slide the termination cap over the end of the vent pipe and snap into place.

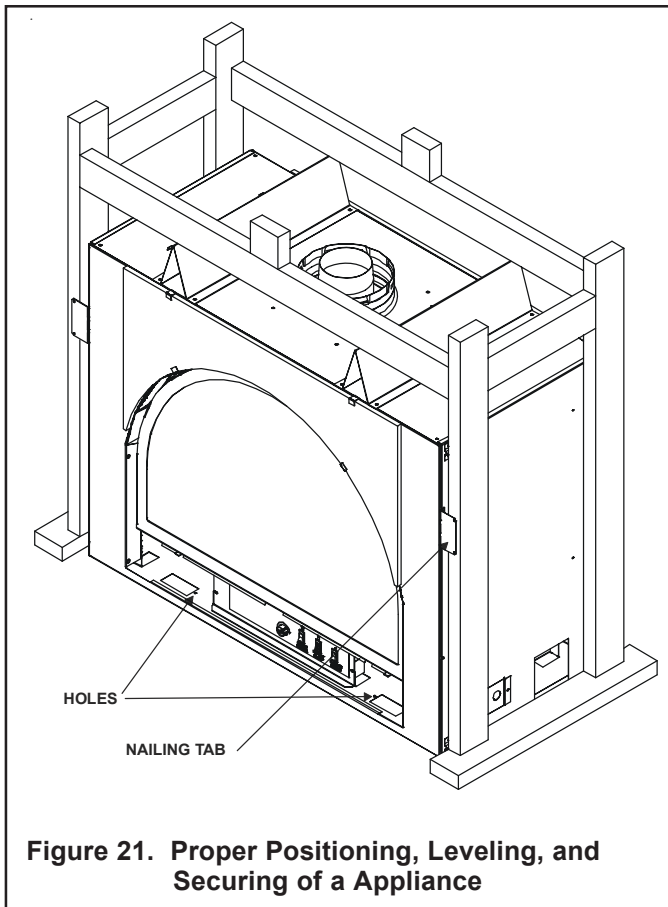
WARNING: MAJOR U.S. BUILDING CODES SPECIFY MINIMUM CHIMNEY AND/OR VENT HEIGHT ABOVE THE ROOF TOP. THESE MINIMUM HEIGHTS ARE NECESSARY IN THE INTEREST OF SAFETY. SEE THE FOLLOWING DIAGRAM FOR MINIMUM HEIGHTS, PROVIDED THE TERMINATION CAP IS AT LEAST 20 INCHES FROM A VERTICAL WALL AND 2-FEET BELOW A HORIZONTAL OVERHANG.

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



Step 4. Positioning, Leveling, and Securing the Appliance

The diagram below shows how to properly position, level, and secure the appliance.



1. Place the appliance into position.
2. Level the appliance from side to side and from front to back.
3. Shim the appliance with non-combustible material, such as sheet metal, as necessary.
4. Secure the appliance to the framing using nails or screws through the nailing tabs. The nailing tabs are located in the manual bag. Holes are provided in the base-pan (inside the hearth) for securing to the floor.

Step 5. The Gas Control Systems



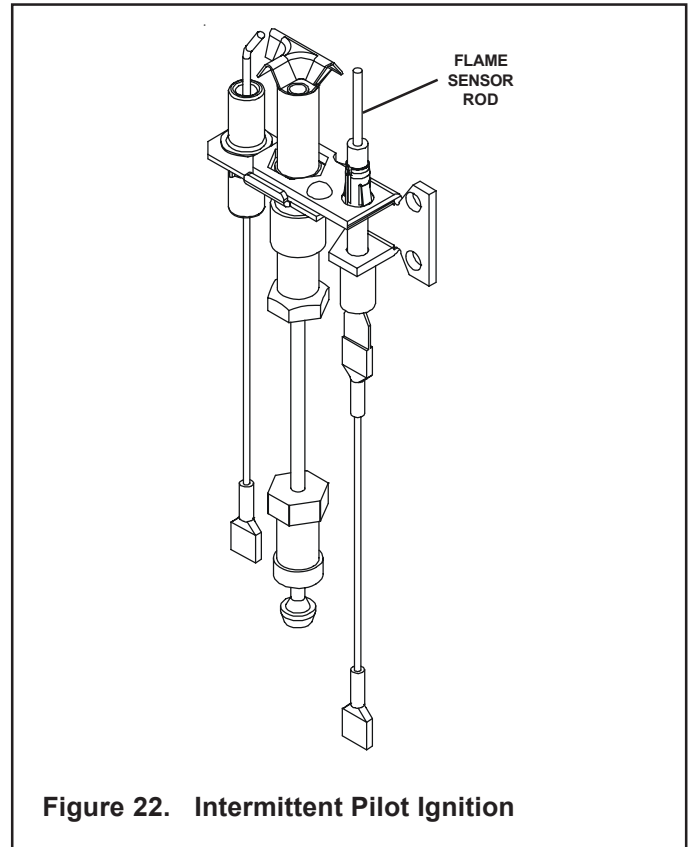
WARNING: THIS UNIT IS NOT FOR USE WITH SOLID FUEL.

Intermittent Pilot Ignition (IPI) System

The gas control system used with this model is *Intermittent Pilot Ignition (IPI)*. This system includes a 3V control valve, electronic module, and intermittent pilot.



WARNING: CONTINUOUS 110-120 VAC SERVICE MUST BE WIRED TO THE APPLIANCE JUNCTION BOX.



Step 6. The Gas Supply Line

NOTE: Have the gas supply line installed in accordance with local 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).

NOTE: Before the first firing of the appliance, the gas supply line should be purged of any trapped air.

NOTE: Consult local building codes to properly size the gas supply line leading to the 1/2 inch (13 mm) hook-up at the unit.

This gas appliance is designed to accept a 1/2 inch (13 mm) gas supply line.

To install the gas supply line:

- A listed (and Commonwealth of Massachusetts approved) 1/2 inch (13mm) tee-handle manual shut-off valve and a listed flexible gas connector are connected to the 1/2 inch (13mm) inlet of the control valve. **NOTE:** If substituting for these components, please consult local codes for compliance.
- Locate the gas line access hole in the outer casing of the appliance.
- The gas line may be run from either side of the appliance provided the hole in the outer wrap does not exceed 2 1/2" in diameter and it does not penetrate the actual firebox.
- The gap between the supply piping and gas access hole can be plugged with non-combustible insulation to prevent cold air infiltration.
- Remove the appliance front, insert the gas supply line through the gas line hole, and connect it to the shut-off valve.
- When attaching the pipe, support the control so that the lines are not bent or torn.
- After the gas line installation is complete, all connections must be tightened and checked for leaks with a commercially-available, non-corrosive leak check solution. Be sure to rinse off all leak check solution following testing.



WARNING: DO NOT USE AN OPEN FLAME TO CHECK FOR GAS LEAKS.

- At the gas line access hole, use insulation to re-pack the space around the gas pipe.
- Insert insulation from the outside of the appliance and pack the insulation tightly to totally seal between the pipe and the outer casing.

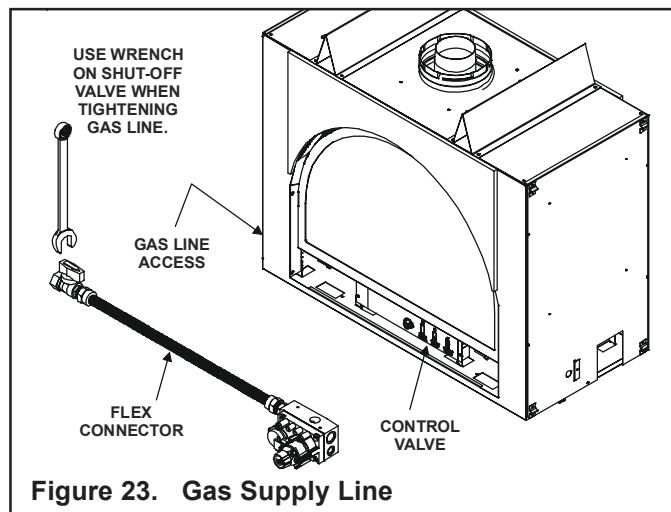


Figure 23. Gas Supply Line

Step 7. Gas Pressure Requirements

Pressure requirements for these gas appliances are shown in the table below.

Pressure	Natural Gas	Propane
Minimum Inlet Pressure	5.0 inches w.c.	11.0 inches w.c.
Maximum Inlet Gas Pressure	14.0 inches w.c.	14.0 inches w.c.
Manifold Pressure	3.5 inches w.c.	10.0 inches w.c.

A one-eighth (1/8) inch (3 mm) N.P.T. plugged tapping is provided on the inlet and outlet side of the gas control for a test gauge connection to measure the manifold pressure. Use a small flat blade screwdriver to crack open the screw in the center of the tap. Position a rubber hose over the tap to obtain the pressure reading.

The appliance and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess of one-half (1/2) psig (3.5 kPa).

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

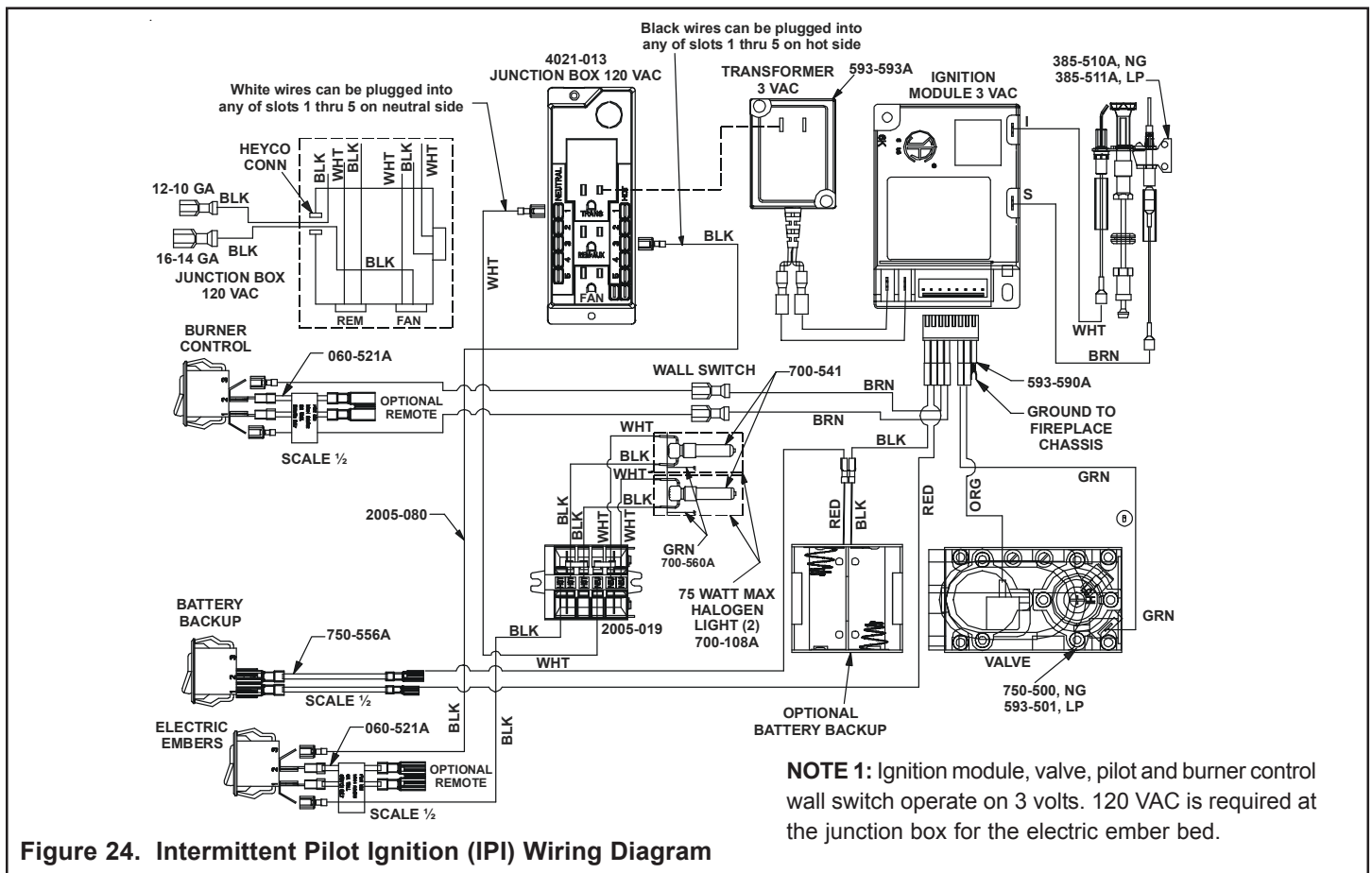


Figure 24. Intermittent Pilot Ignition (IPI) Wiring Diagram

Step 8. Wiring the Appliance

NOTE: Electrical wiring must be installed by a licensed electrician.

CAUTION: DISCONNECT REMOTE CONTROLS IF YOU ARE ABSENT FOR EXTENDED TIME PERIODS. THIS WILL PREVENT ACCIDENTAL APPLIANCE OPERATION.

Intermittent Pilot Ignition (IPI) Wiring Appliance Requirements

This appliance requires that 110-120 VAC be wired to the factory installed junction box. Maintain correct polarity when wiring the junction box.

WARNING

Wire 110V to electrical junction box.
Do NOT wire 110V to valve.
Do NOT wire 110V to wall switch.

- Incorrect wiring will damage millivolt valves.
- Uninterrupted or continuous power is required at all times in IPI system EXCEPT when using battery backup.
- Incorrect wiring will override IPI safety lockout and may cause explosion.

Operation using Battery Power

This appliance has an optional battery operation. The system is fully functional with the use of two “D” size batteries without ordinary 110-120 VAC power. The electric embers and remotes will not function without 110-120 VAC power.

To operate the appliance on battery power, turn the “Battery Backup” switch on the control panel to “ON”. Once power (110 VAC) is restored, turn the battery backup switch to “OFF” to extend battery life.

Installing the Batteries

Remove battery pack which is secured in place adjacent to gas control valve (secured with velcro strip). Orient two “D” size batteries per the diagram on battery pack. Reinstall battery pack in the same location.

Burner Control Wall Switch

A wall switch can be installed to operate the burner for this appliance.

Position the wall switch in the desired position on a wall. Run a maximum of 25 feet (7.8 m) or less length of 18 A.W.G. minimum wire and connect it to the appliance ON/OFF switch pigtails.

Electric Ember Wall Switch

A wall switch is provided. Position the remote wall switch in the desired position on a wall. Run a maximum of 25 feet (7.8m) or less of 16 A.W.G. minimum wire with male ends and connect it to the female ends.

WARNING: ON/OFF SWITCH (WALL SWITCH) CARRIES 110-120 VAC. USE SUITABLE 16 A.W.G. MINIMUM TYPE NM WIRE (ROMEX) WHEN INSTALLING WALL SWITCH.

Optional Accessories

Optional remote control kits require that 110-120 VAC be wired to the factory installed junction box before the appliance is permanently installed.

CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. VERIFY PROPER OPERATION AFTER SERVICING.

Step 9. Finishing

The following diagram shows the minimum vertical and corresponding maximum horizontal dimensions of appliance mantels or other combustible projections above the top front edge of the appliance.

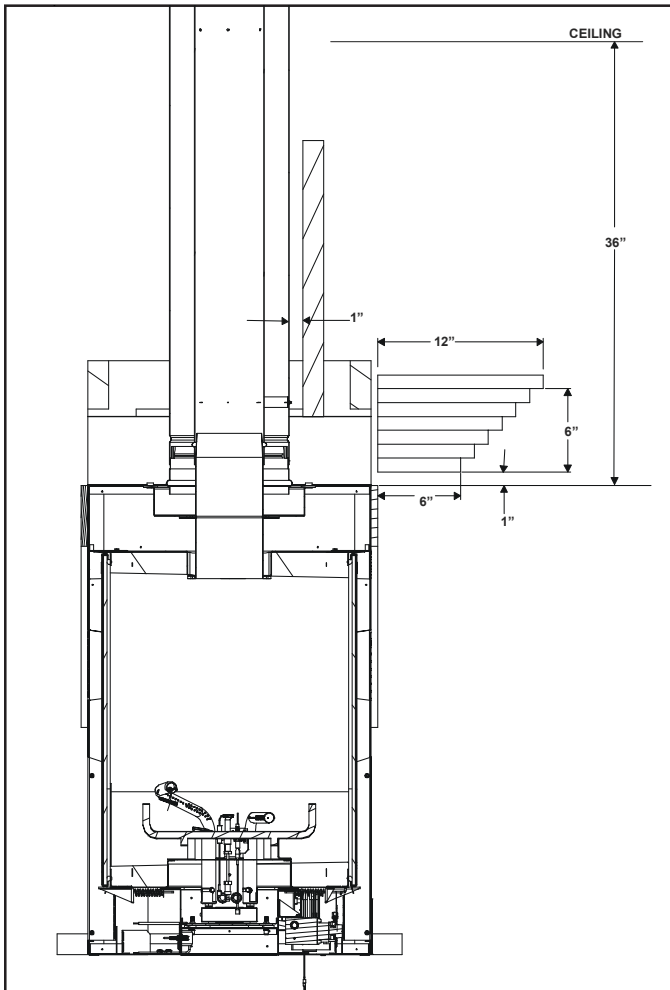


Figure 25.
Minimum Vertical and Maximum Horizontal
Dimensions of Combustibles above Appliance

Important Installation Facts:

- Unit is installed using framing dimensions found in Figure 3, page 11.
- A cardboard template is printed on unit shipping carton and may be used to help cut finishing materials. Simply cut along line and use it as a template.
- Drywall may be finished up to the installed non-combustible board. Non-combustible finishing materials may be finished all the way up to the edge of the appliance face opening, but **MUST NOT** extend inside.



WARNING: FINISHING MATERIALS CUT INSIDE THE PROVIDED TEMPLATE WILL CAUSE THE DOOR NOT TO FIT.

- Finishing materials may be fastened or secured to unit below the glass/front opening.

Step 10. Finishing Strip Instructions

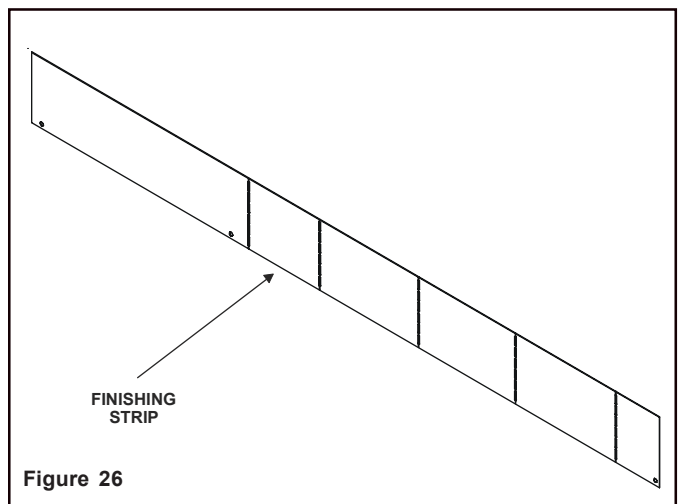
IMPORTANT: Before starting wall construction complete the installation from the section titled “Positioning, Leveling and Securing the Appliance” located in this Installer’s Guide.

Facing Requirements

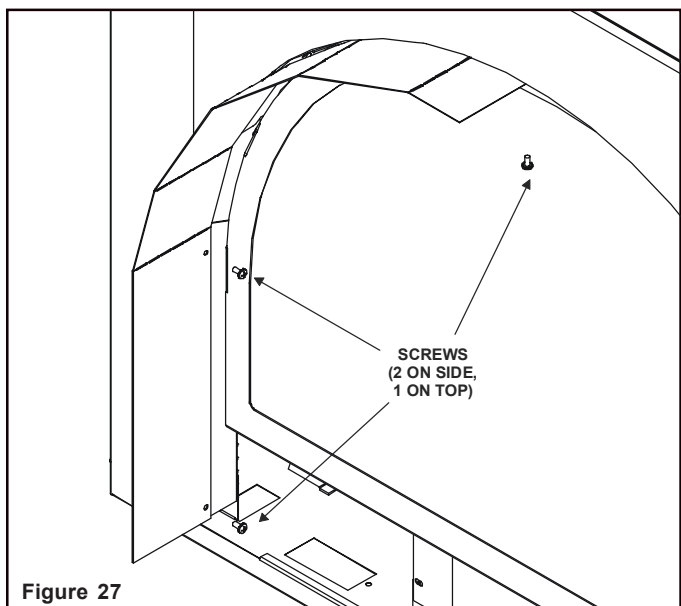
Facing thickness from 1/2 to 1-1/4 inch (outside mounted door)

The doors for the Passage are designed to sit on top of the finishing material, covering the inner edge. The finishing strips that are sent with the unit are designed to aid in the placement of the finishing material. To insure proper operation of the door, the finishing material is to be brought up to, but not beyond, the edge of the opening.

1. Locate the finishing strips inside the original packaging of the appliance. They will be either on top of the unit or on one side or the other (see Figure 26).



2. Use the supplied 10 x 24-1/2 inch screws (2 on side and 1 on top) to attach the strips to the inside of the opening (see Figure 27). Bend the strips to follow the inner edge of the opening. Two strips are needed per side, both sides of unit.



3. Attach finishing material as desired, bringing the edge to the finishing strip, but not beyond. Do not glue, mortar, etc. the finishing material to the strip, as it will need to be removed to install the surround assembly.
4. After the finishing material is set, remove the strip from the opening and follow the instructions for mounting the door included with its packaging.

**Facing thickness greater than 1-1/4 inch
(Inside mounted door)**

For facing material greater than 1-1/4 inch a template should be constructed to provide a guide to leave a 1/8 inch gap between the finishing material and the door. To construct the facing template see Figure 28.

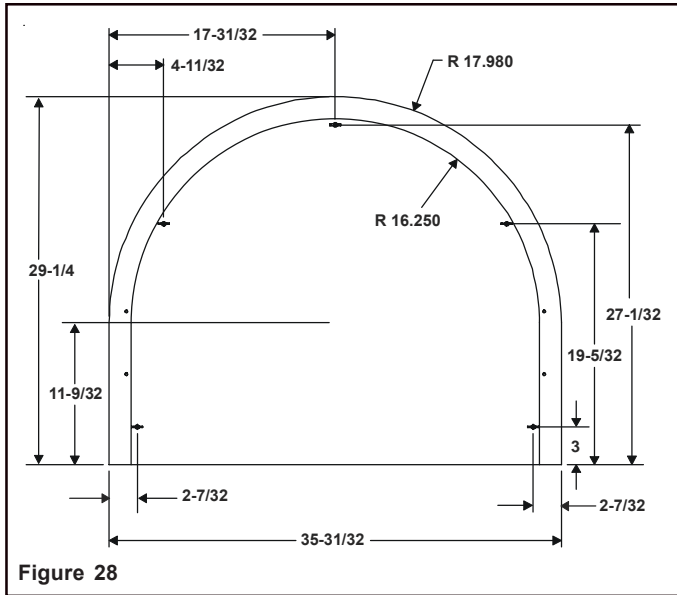


Figure 28

Creating the template

1. The template can be created by cutting along the arch line on shipping box. On the shipping box it **MUST** have text with 'Attention Installers: This template for inside mounted door'. If this is not on your shipping box **DO NOT** use this template.
2. You can order a pre-made template from Heat & Glo called Passage Template. This template is made out of steel.

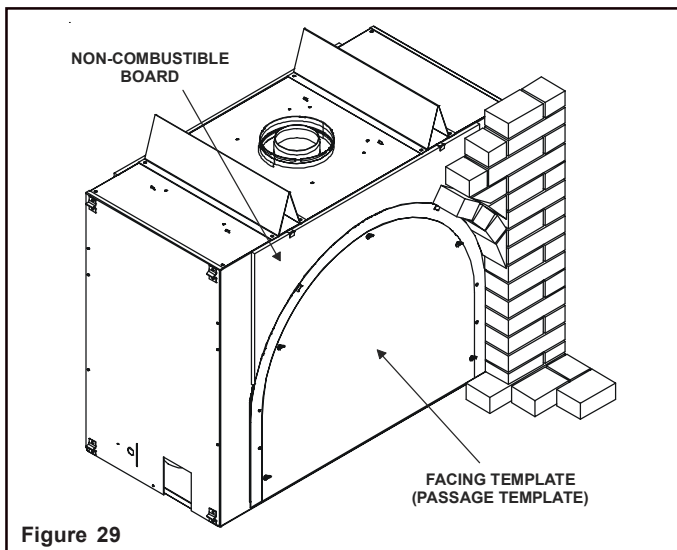


Figure 29

Finishing instructions for the base

IMPORTANT: Before starting wall construction complete the installation from the section titled "Positioning, Leveling and Securing the Appliance" located in this Installer's Guide.

NOTE: Follow the instructions on the previous page to set the finishing strips for the side first.

There are two different options for finishing the base of the Passage as shown in Figure 30 and Figure 31.

Option 1:

If the hearth is to be placed below the unit, finishing material can be brought up to the bottom of the finishing strips. The finishing material used at the base of the unit should be the same thickness as used to finish off the rest of the unit to insure proper alignment of the doors (see Figure 30).

Option 2:

If the hearth is to be at the same level as the unit, finishing material can cover up to 1/2" of the face at the bottom, leaving a 1/2" gap between the bottom of the doors and the extended hearth. This is to insure proper alignment of the doors and allow for them to open (see Figure 31).

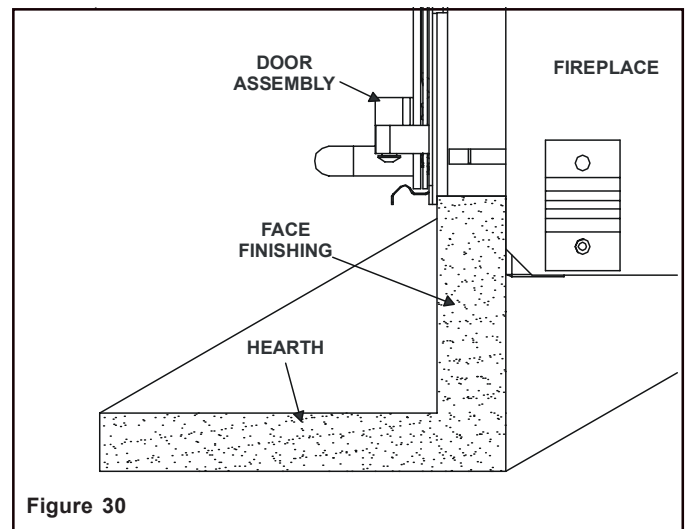


Figure 30

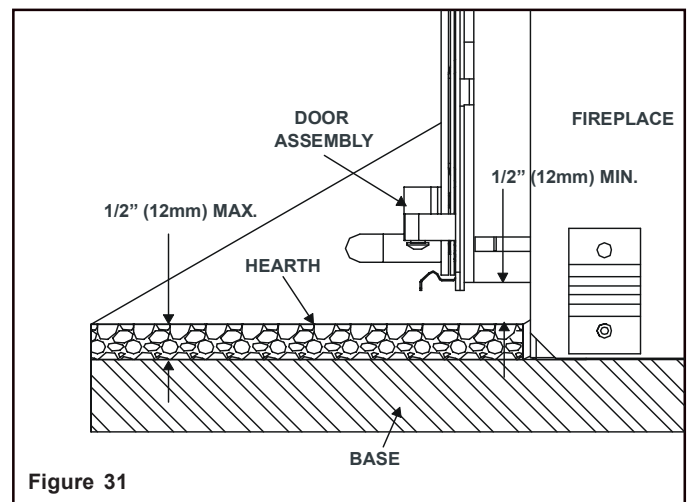


Figure 31

Step 11. Installing Trim and Logs

Installing the Trim

Combustible materials may be brought up to the specified clearances on the side and top front edges of the appliance and up to the edge of the installed non-combustible board. The joints between the finished wall and the appliance top and sides can only be sealed with a 300° F. (149° C) minimum sealant.

Marble, brass, brick, tile, or other non-combustible materials can be used to cover up the gap between the sheet rock and the appliance.

Adjusting the position of the surround

1. Remove the glass from the firebox.
2. Find screws holding the sliding anchors on the appliance in place. The anchors are located at the bottom of the left and right side and the top of the arch.
3. Loosen screws 2 turns - do not remove.
4. Pull sliding anchors out beyond the finishing material.
5. Attach the surround to the sliding anchors. Removing the doors will make this easier.
6. Push surround up tight against the finishing material.
7. Tighten the screws holding down the sliding anchors.
8. Remove the surround and reinstall the glass on the firebox.
9. Attach surround to the appliance on the anchors and check for fit.

Positioning the Logs

If the gas logs have been factory installed they should not need to be positioned. If the logs have been packaged separately, refer to the instructions that accompany the logs. **Save the log instructions with this manual.**

If sooting occurs, the logs might need to be repositioned slightly to avoid excessive flame impingement.

Shutter Settings

	NG	LP
Burner	1/8"	Full Open

Glass Specifications: Tempered

Heat & Glo appliances manufactured with tempered glass may be installed in hazardous locations such as bathtub enclosures as defined by the CPSC. The tempered glass has been tested and certified to the requirements of ANSI Z97.1-1984 and CPSC 16 CFR 1202. (Safety Glazing Certification Council SGCC # 1595 and 1597. Architectural Testing, Inc. Reports 02-31919.01 and 02-31917.01.)

This statement is in compliance with SPCS 16 CFR Section 1201.5 "Certification and labeling requirements" which refers to 15 USC 2063 stating "...Such certificate shall accompany the product or shall otherwise be furnished to any distributor or retailer to whom the product is delivered."

Some local building codes require the use of tempered glass with permanent marking in such locations. Glass meeting this requirement is available from the factory. Please contact your dealer or distributor to order.

Step 12. Before Lighting the Appliance

Before lighting the appliance, be sure to do the following:
Remove all paperwork from underneath the appliance.

Review safety warnings and cautions

- Read the **Safety and Warning Information** section at the beginning of this *Installers Guide*.

Double-check for gas leaks

- Before lighting the appliance, double-check the unit for possible gas leaks.

Double-check vent terminations and front grilles for obstructions.

- Before lighting the appliance, double-check the unit for possible obstructions that could be blocking the vent terminations or the front grilles.

Double-check for faulty components

- Any component that is found to be faulty **MUST BE** replaced with an approved component. Tampering with the appliance components is **DANGEROUS** and voids all warranties.

A small amount of air will be in the gas supply lines. When first lighting the appliance, it will take a few minutes for the lines to purge themselves of this air. Once the purging is complete, the appliance will light and will operate normally.

Subsequent lightings of the appliance will not require this purging of air from the gas supply lines, **unless the gas valve has been turned to the OFF position**, in which case the air would have to be purged.

NOTE: The appliance should be run 3 to 4 hours on the initial start-up. Turn it off and let it cool completely. Remove and clean the glass. Replace the glass and run the appliance for an additional 8 hours. This will help to cure the products used in the paint and logs.

During this break-in period it is recommended that some windows in the house be opened for air circulation. This will help avoid setting off smoke detectors, and help eliminate any odors associated with the appliance's initial burning.

Step 13. Lighting the Appliance

You've reviewed all safety warnings, you've checked the appliance for gas leaks, you know the vent system is unobstructed, and you've checked for faulty components. Now you're ready to light the appliance.



WARNING: PLEASE REFER TO THE USER'S MANUAL FOR ALL CAUTIONS, SAFETY, AND WARNING INFORMATION PERTAINING TO THE LIGHTING AND OPERATION OF THE APPLIANCE.

After the Installation



LEAVE THIS INSTALLATION MANUAL WITH THE APPLIANCE FOR FUTURE REFERENCE.

4

Maintaining and Servicing Your Appliance

Appliance Maintenance

Although the frequency of your appliance servicing and maintenance will depend on use and the type of installation, you should have a qualified service technician perform an appliance check-up at the beginning of each heating season. See the table below for specific guidelines regarding each appliance maintenance task.

IMPORTANT: TURN OFF THE GAS BEFORE SERVICING YOUR APPLIANCE.

Cleaning Burner and Controls

Frequency: Once annually.

By: Qualified service technician.

Task: Brush or vacuum the control compartment, appliance logs and burners inside the logs.

Cleaning Flame Sensor Rod (IPI Systems)

Frequency: Periodically.

By: Qualified service technician.

Task: Make a visual check of the straight flame sensor rod (see Figure 22). Use emery cloth to carefully remove any existing white film or deposits.

Checking Flame Patterns, Flame Height

Frequency: Periodically.

By: Qualified service technician/Home owner.

Task: Make a visual check of your appliance's flame patterns. Make sure the flames are steady - not lifting or floating.

Checking Vent System

Frequency: Before initial use and at least annually thereafter, more frequently if possible.

By: Qualified service technician/Home owner.

Task: Inspect the external vent cap on a regular basis to ensure that no debris is interfering with the flow of air. Inspect entire vent system for proper function.

Cleaning Glass Door

Frequency: After the first 3 to 4 hours of use. As necessary after initial cleaning.

By: Home owner.

Task: Remove and clean glass after the first 3 to 4 hours of use. After the initial cleaning, clean as necessary. Film deposits on the inside of the glass door should be cleaned off using a household glass cleaner. **NOTE: DO NOT handle or attempt to clean the door when it is hot and DO NOT use abrasive cleaners.**

Recommended Bulbs

Frequency: Periodically. Sylvania mini Candelabra 75W Halogen bulbs are recommended for use in the appliance.

By: Home owner

Task: To replace light bulb

1. Turn off appliance and electric embers and allow to cool (min. 6 hrs.).
2. Remove the screws holding the panel in place and pull out bulb housing.
3. Replace bulb. See installation instructions on bulb packaging for details on changing the halogen bulb.
4. Replace bulb housing making sure to not touch the bulb or have the bulb touch the firebox.
5. Tighten the screws to anchor the panel in place.

Contact Information



No one builds a better fire

Heat & Glo, a brand of Hearth & Home Technologies Inc.
20802 Kensington Boulevard, Lakeville, MN 55044
www.heatnglo.com

Please contact your Heat & Glo dealer with any questions or concerns.
For the location of your nearest Heat & Glo dealer,
please visit www.heatnglo.com.

- NOTES -

CAUTION



DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.



This product may be covered by one or more of the following patents: (United States) 4593510, 4686807, 4766876, 4793322, 4811534, 5000162, 5016609, 5076254, 5113843, 5191877, 5218953, 5263471, 5328356, 5341794, 5347983, 5429495, 5452708, 5542407, 5601073, 5613487, 5647340, 5688568, 5762062, 5775408, 5890485, 5931661, 5941237, 5947112, 5996575, 6006743, 6019099, 6048195, 6053165, 6145502, 6170481, 6237588, 6296474, 6374822, 6413079, 6439226, 6484712, 6543698, 6550687, 6601579, 6672860, 6688302B2, 6715724B2, 6729551, 6736133, 6748940, 6748942, 6769426, 6774802, 6796302, 6840261, 6848441, 6863064, 6866205, 6869278, 6875012, 6880275, 6908039, 6919884, D320652, D445174, D462436; (Canada) 1297749, 2195264, 2225408, 2313972; (Australia) 780250, 780403, 1418504 or other U.S. and foreign patents pending.

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