

Models:
EHS3633, EHS3631
Direct Vent Gas Appliance

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 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.

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 appliance.
- Alert children and adults to hazards of high temperatures.

High temperatures may ignite clothing or other flammable materials.

- Keep clothing, furniture, draperies and other combustibles 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.

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.

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.

Heatilator • Eclipse • 4049-300 Rev H • 11/07

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**Read this manual before installing or operating this appliance.
Please retain this owner's manual for future reference.**

Congratulations

Congratulations on selecting a Heatilator gas appliance—an elegant and clean alternative to wood burning appliances. The Heatilator gas appliance you have selected is designed to provide the utmost in safety, reliability, and efficiency.

As the owner of a new appliance, you'll want to read and carefully follow all of the instructions contained in this owner's manual. Pay special attention to all cautions and warnings.

This owner's manual should be retained for future reference. We suggest you keep it with your other important documents and product manuals.

The information contained in this owner's manual, unless noted otherwise, applies to all models and gas control systems.

Your new Heatilator gas appliance will give you years of durable use and trouble-free enjoyment. Welcome to the Heatilator family of appliance products!

Homeowner Reference Information	<i>We recommend that you record the following pertinent information about your appliance:</i>
Model Name: _____	Date purchased/installed: _____
Serial Number: _____	Location on appliance: _____
Dealership purchased from: _____	Dealer phone: _____
Notes: _____	

Listing Label Information/Location

The model information regarding your specific appliance can be found on the rating plate located in the control area of the appliance.

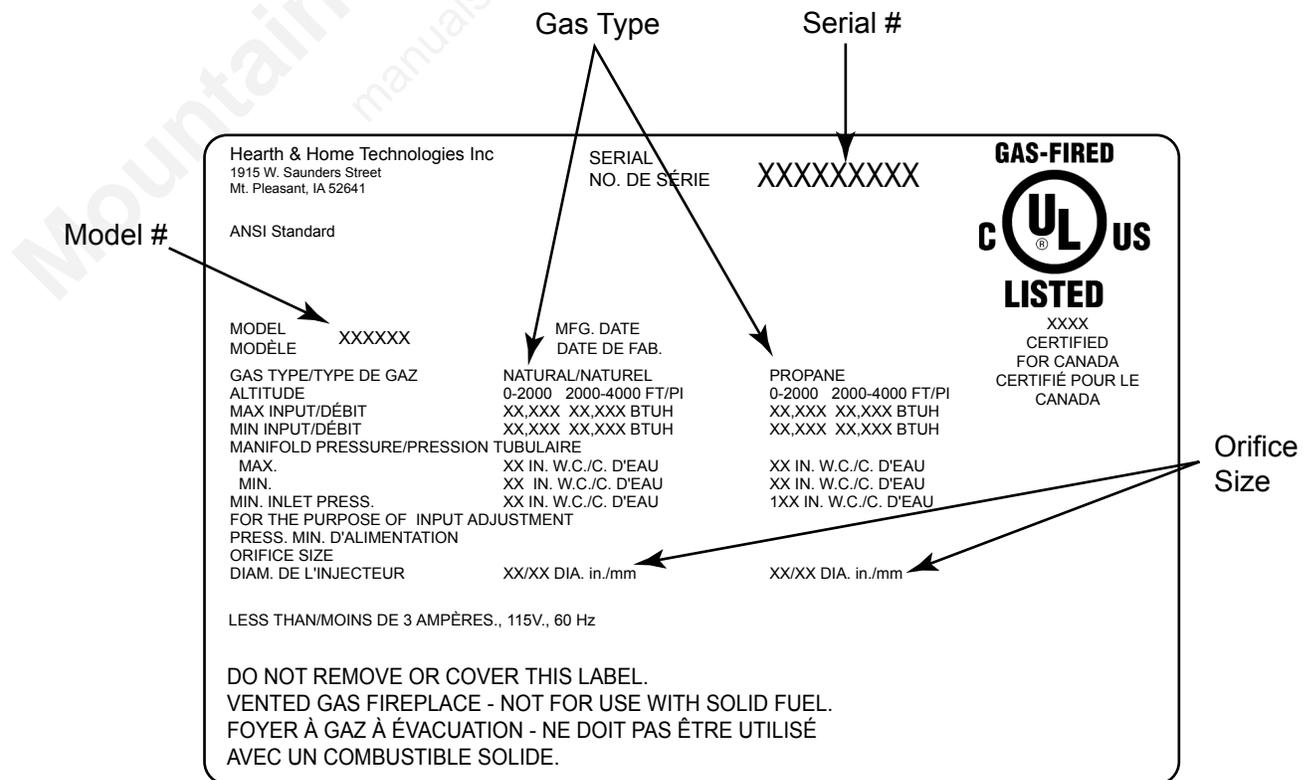


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Note: An arrow (➔) found in the text signifies change in content.

1 Listing and Code Approvals

A. Appliance Certification

MODELS: EHS3633, EHS3633I
LABORATORY: Underwriters Laboratories, Inc. (UL)
TYPE: Direct Vent Gas Appliance
STANDARD: ANSI Z21.88-2005 • CSA2.33-2005 • UL307B

This product is listed to ANSI standards for “Vented Gas Fireplaces” and applicable sections of “Gas Burning Heating Appliances for Manufactured Homes and Recreational Vehicles”, and “Gas Fired Appliances for Use at High Altitudes”.

NOT INTENDED FOR USE AS A PRIMARY HEAT SOURCE. This appliance is tested and approved as either supplemental room heat or as a decorative appliance. It should not be factored as primary heat in residential heating calculations.

B. Glass Specifications

Hearth & Home Technologies appliances manufactured with tempered glass may be installed in hazardous locations such as bathtub enclosures as defined by the Consumer Product Safety Commission (CPSC). The tempered glass has been tested and certified to the requirements of **ANSI Z97.1** 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 **CPSC 16 CFR Section 1201.5** “Certification and labeling requirements” which refers to **15 U.S. Code (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.

Note: This installation must conform with local codes. In the absence of local codes you must comply with the **National Fuel Gas Code, ANSI Z223.1-latest edition** in the U.S.A. and the **CAN/CGA B149 Installation Codes** in Canada.

C. BTU Specifications

EHS3633 Series	SP	IPI
Input Rate (NG)	20,000	20,000
Orifice Size (NG)	0.083	0.083
Input Rate (LP)	20,000	20,000
Orifice Size (LP)	0.053	0.053

D. High Altitude Installations

U.L. Listed gas appliances are tested and approved without requiring changes for elevations from 0 to 2000 feet in the U.S.A. and Canada.

When installing this appliance at an elevation above 2000 ft, 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 ft above a 2000 ft elevation in the U.S.A., or 10% for elevations between 2000 and 4500 ft 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 4500 ft (in Canada), check with local authorities.

WARNING

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

E. Non-Combustible Materials

Material which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or any combination thereof.

Materials that are reported as passing **ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750° C**, shall be considered non-combustible materials.

F. Combustible Materials

Materials made of or surfaced with wood, compressed paper, plant fibers, plastics, or other material that can ignite and burn, whether flame proofed or not, or whether plastered or unplastered shall be considered combustible materials.

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

G. Requirements for the Commonwealth of Massachusetts

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

Installation of Carbon Monoxide Detectors

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

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

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

Approved Carbon Monoxide Detectors

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

Signage

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

A. Design and Installation Considerations

Heatilator 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. No additional outside air source is required.

CAUTION

- Check building codes prior to installation.
- Installation **MUST** comply with local, regional, state and national codes and regulations.
 - Consult insurance carrier, local building, fire officials or authorities having jurisdiction about restrictions, installation inspection, and permits.

When planning an appliance installation, it's necessary to determine the following information before installing:

- Where the appliance is to be installed.
- The vent system configuration to be used.
- Gas supply piping.
- Electrical wiring.
- Framing and finishing details.



WARNING

- Keep appliance dry.
- Mold or rust may cause odors.
 - Water may damage controls.



B. Tools and Supplies Needed

Before beginning the installation be sure that the following tools and building supplies are available.

- | | |
|-----------------------------------|-----------------------------------|
| Reciprocating saw | Framing material |
| Pliers | Hi temp caulking material |
| Hammer | Gloves |
| Phillips screwdriver | Framing square |
| Flat blade screwdriver | Electric drill and bits (1/4 in.) |
| Plumb line | Safety glasses |
| Level | Manometer |
| Voltmeter | Tape measure |
| Non-corrosive leak check solution | |

C. Inspect the Appliance and Components



WARNING

Inspect appliance and components for damage. Damaged parts may impair safe operation.



- Do NOT install damaged components.
- Do NOT install incomplete components.
- Do NOT install substitute components.

Report damaged parts to dealer.

- Carefully remove the appliance and components from the packaging.
- Report to your dealer any parts damaged in shipment, particularly the condition of the glass.
- **Read all of the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.**



WARNING

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged appliance or vent system component.
- Modification of the appliance or vent system.
- Installation other than as instructed by Hearth & Home Technologies.
- Improper positioning of the gas logs or the glass door.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.

Any such action may cause a fire hazard.

3 Framing and Clearances

Note:

- Illustrations reflect typical installations and are FOR DESIGN PURPOSES ONLY.
- Illustrations/diagrams are not drawn to scale.
- Actual installation may vary due to individual design preference.

⚠ WARNING	
	Fire Risk
	Provide adequate clearance:
	<ul style="list-style-type: none">• Around air openings.• For service access. Locate appliance away from traffic areas.

A. Select Appliance Location

When selecting a location for your appliance it is important to consider the required clearances to walls (See Figure 3.1).

Note: For actual appliance dimensions refer to Section 16.

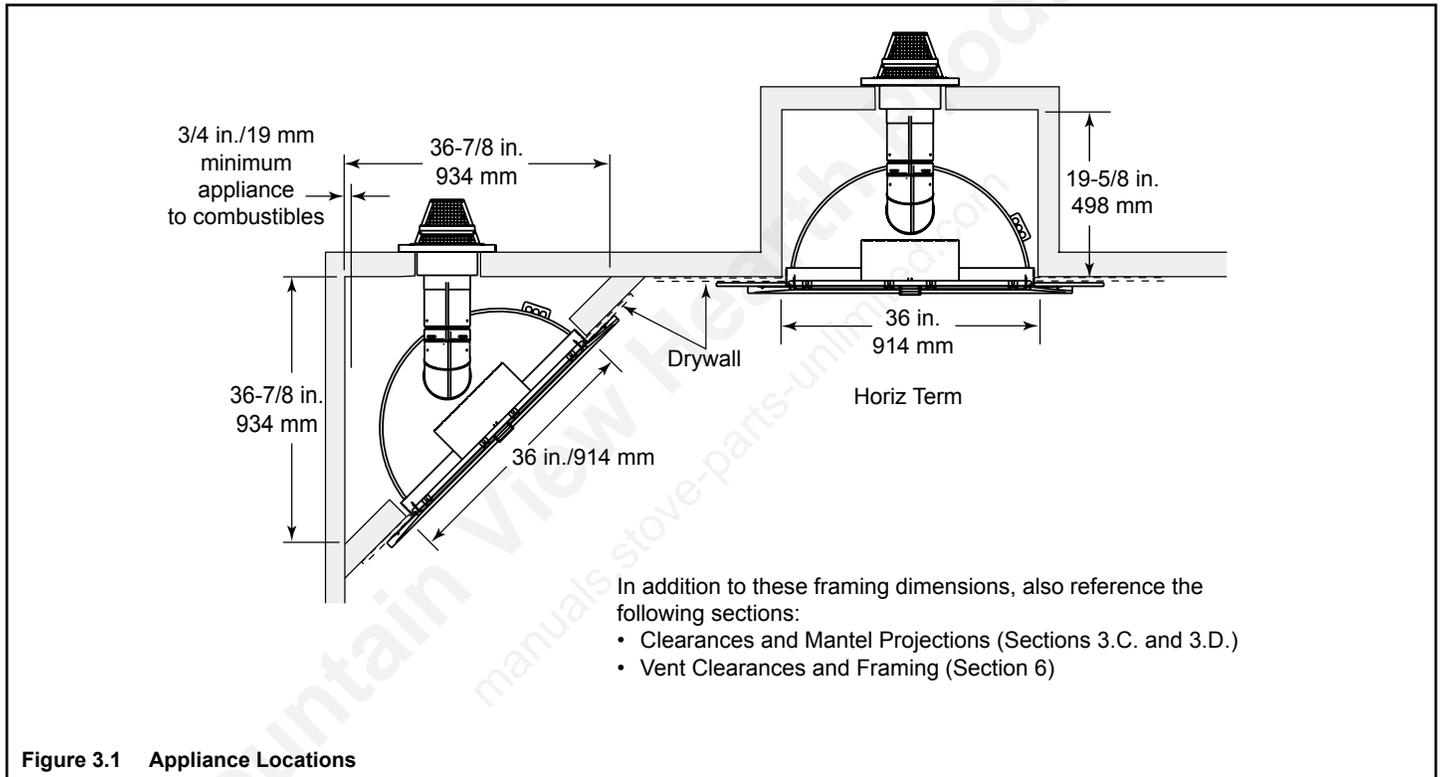


Figure 3.1 Appliance Locations

B. Construct the Appliance Chase

A chase is a vertical boxlike 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.

Construction of the chase may vary with the type of building. These instructions are not substitutes for the requirements of local building codes. Local building codes MUST be checked.

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.

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, in regions where cold air infiltration may be an issue, the inside surfaces should be sheetrocked and taped (or the use of an equivalent method) for maximum air tightness.

To further prevent drafts, the ceiling firestops should be caulked with high temperature caulk to seal gaps. Gas line holes and other openings should be caulked with high temperature caulk or stuffed with unfaced insulation. If the appliance is being installed on a cement slab, a layer of plywood may be placed underneath to prevent conducting cold up into the room.



WARNING

Fire Risk

- Construct chase to all clearance specifications in manual.
- Locate and install appliance to all clearance specifications in manual.

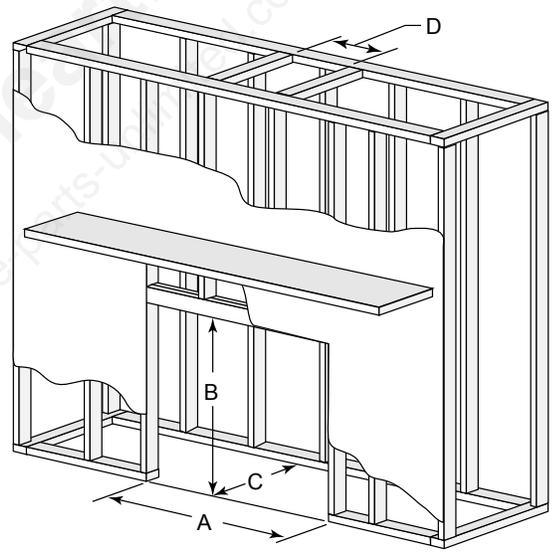
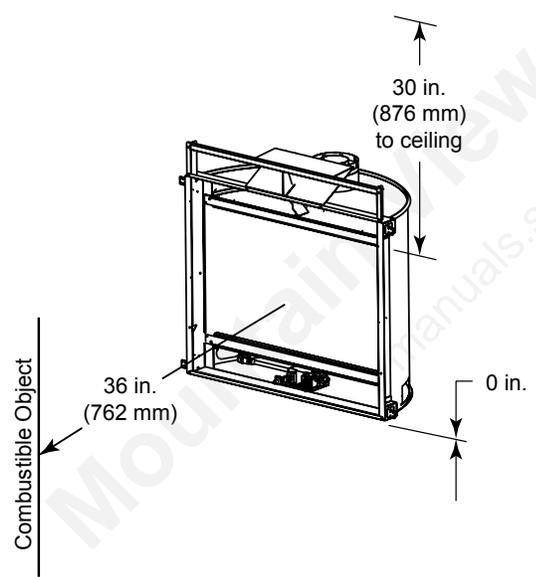
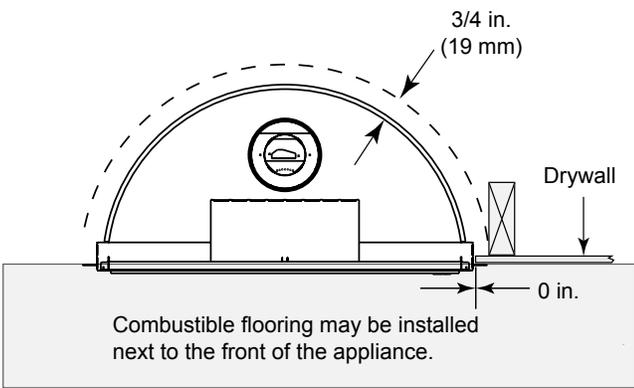
C. Clearances

WARNING

Fire Risk
Odor Risk

- Install appliance on hard metal or wood surfaces extending full width and depth of appliance.
- Do NOT install appliance directly on carpeting, vinyl, tile or any combustible material other than wood.

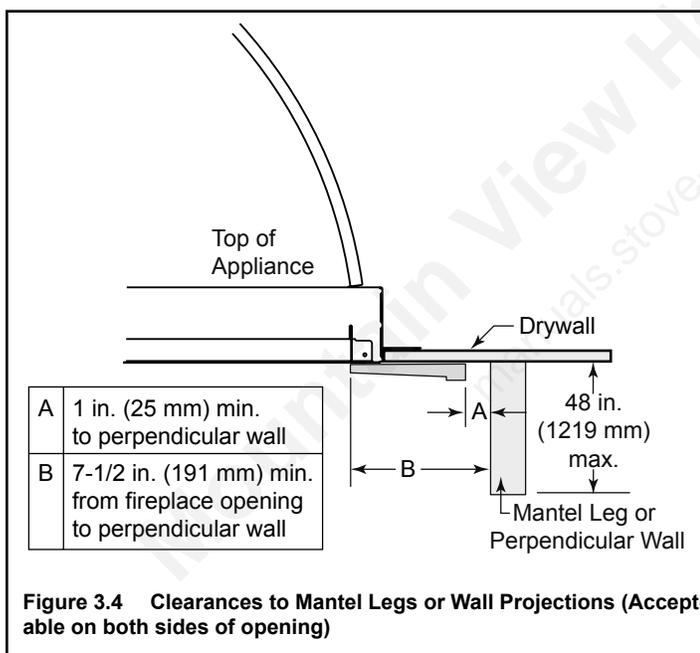
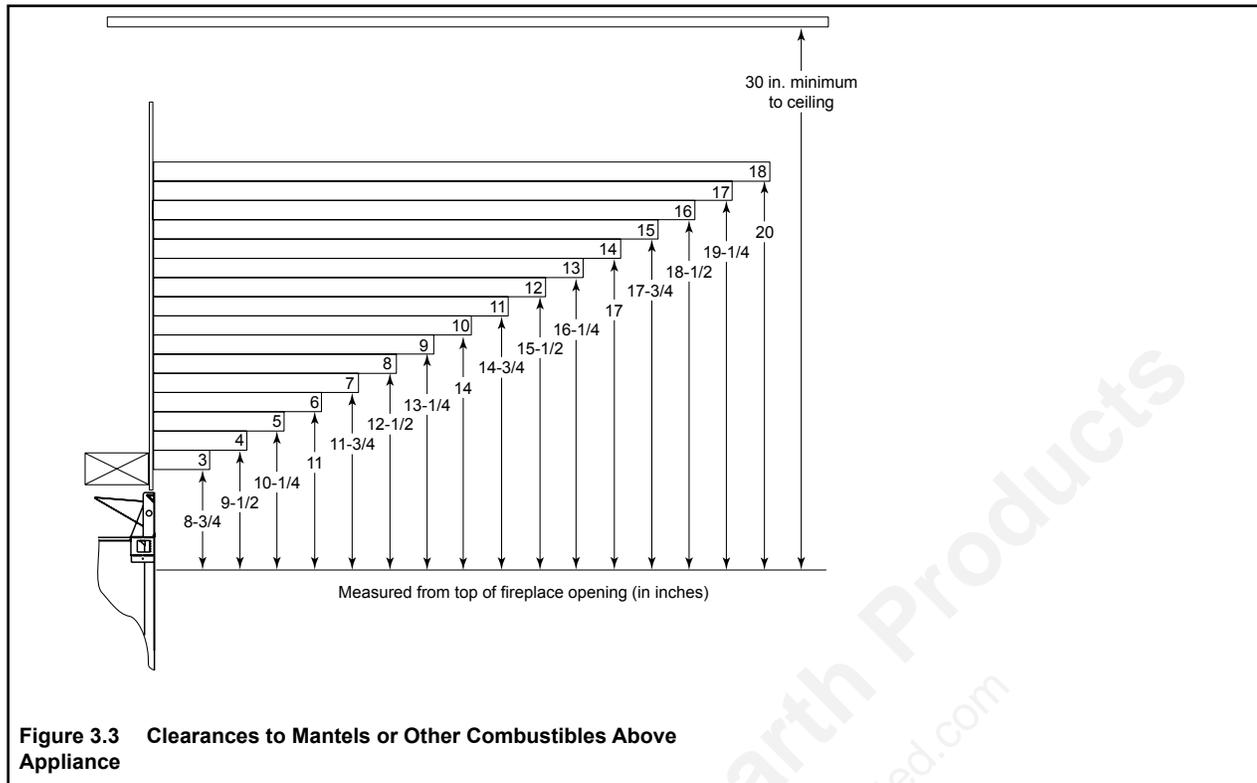
Note: If the inside of the framed cavity is to be finished, the framing dimensions **must** include the finished surface. If drywall is to be attached to the rear wall, the depth must be measured from the drywall surface.



Model		A Rough Opening (Width)	B Rough Opening (Height)	C Rough Opening (Depth)	D Rough Opening (SL Pipe)
EHS3633	inches	36	34	19-5/8	10
	mm	914	864	498	254

Figure 3.2 Clearances to Combustibles

D. Mantel Projections



WARNING



Fire Risk

- Comply with all minimum clearances to combustibles as specified.
 - Framing or finishing material used on the front of, or in front of, the appliance closer than the minimums listed, must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc.).
- Failure to comply may cause fire.

4 Termination Locations

A. Vent Termination Minimum Clearances

	WARNING
	Fire Risk
	Explosion Risk
	Inspect external vent cap regularly.
	<ul style="list-style-type: none">• Ensure no debris blocks cap.• Combustible materials blocking cap may ignite.• restricted air flow affects burner operation.

	WARNING
	Fire Risk
	Explosion Risk
	Maintain vent clearance to combustibles as specified.
	<ul style="list-style-type: none">• Do not pack air space with insulation or other materials.
	Failure to keep insulation or other materials away from vent pipe may cause fire.

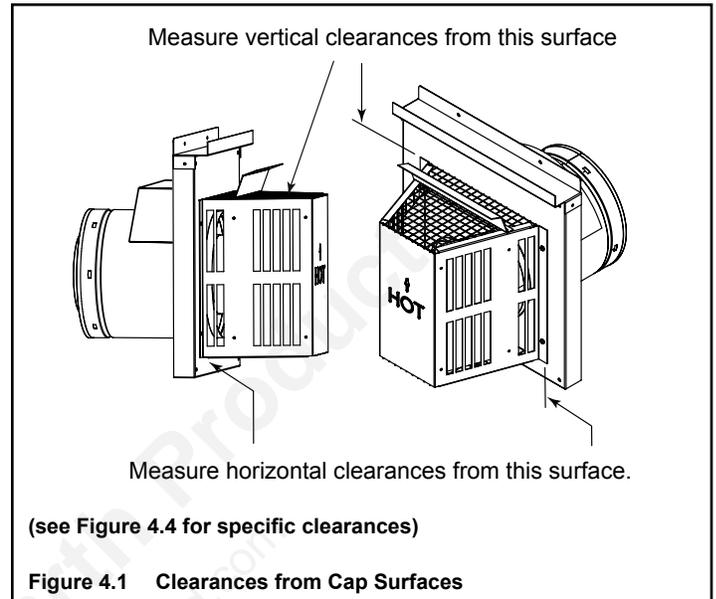


Figure 4.2 specifies minimum vent heights for various pitched roofs.

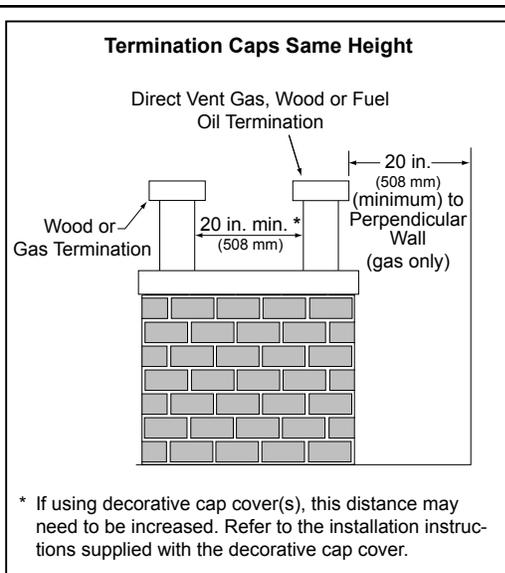
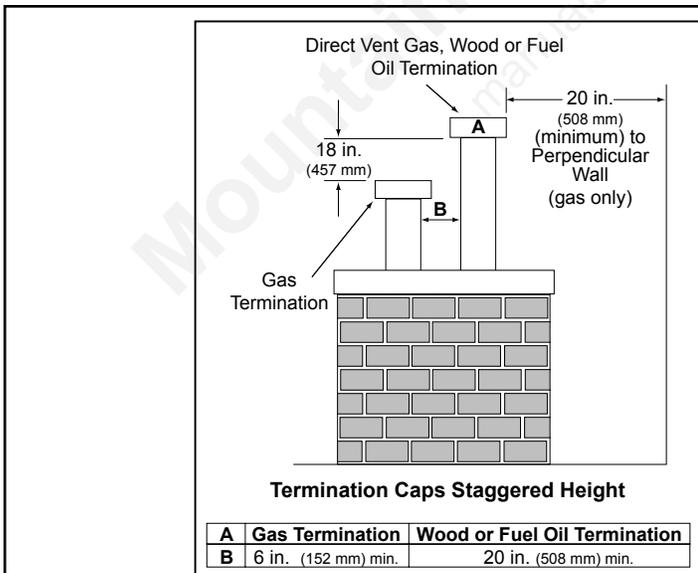
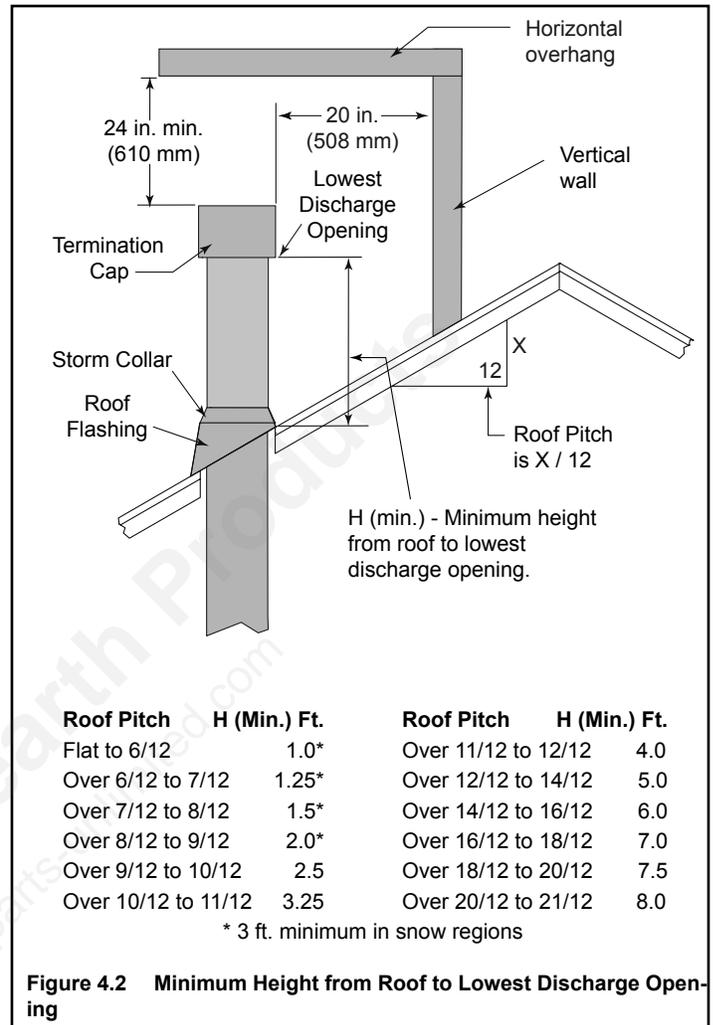
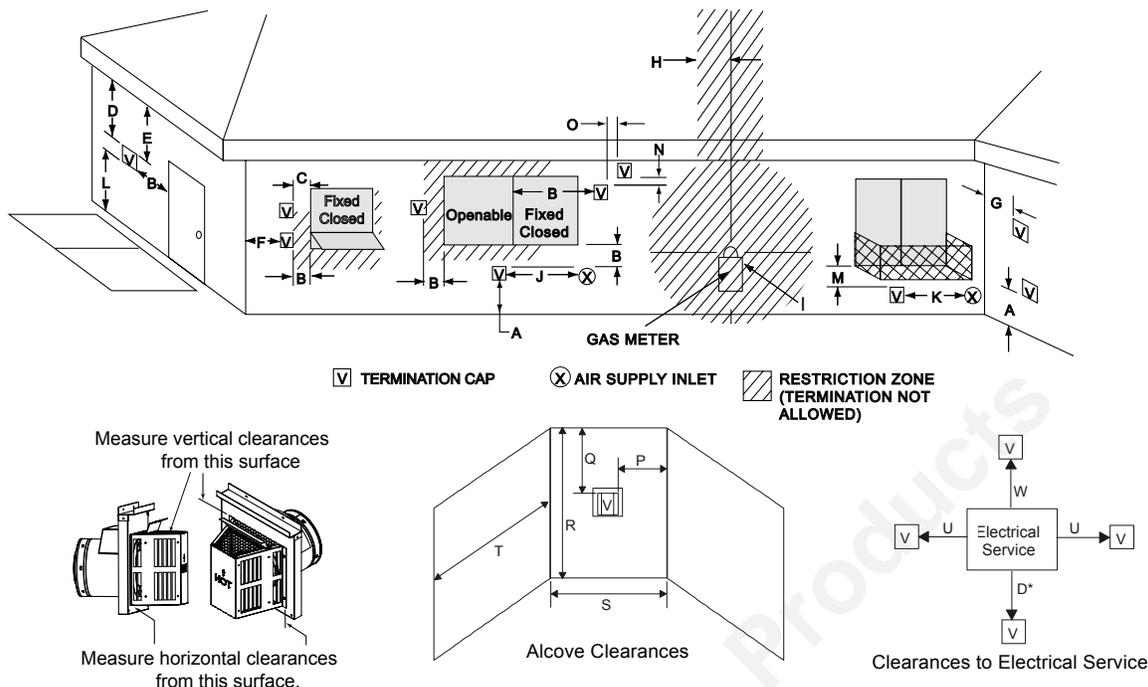


Figure 4.3 Multiple Vertical Termination



Dimension Descriptions

- A Clearance above the ground, a veranda, porch, deck or balcony - 12 in. (30 cm) minimum. *
- B Clearance to window or door that may be opened – 10,000 BTUs or less, 6 in. (15 cm) minimum; 10,000-50,000 BTUs, 9 in. (23 cm) minimum; over 50,000 BTUs, 12 in. (30 cm) minimum. *
- C Clearance to permanently closed window – 12 in. (30 cm) minimum - recommended to prevent condensation on window.
- D Vertical clearance to ventilated soffit located above the termination within a horizontal distance of 2 ft (60 cm) from the centerline of the termination – 18 in. (46 cm) minimum. **
- E Vertical clearance to unventilated soffit - 12 in. (30 cm) minimum. **
- F Clearance to outside corner - 6 in. (15 cm) minimum.
- G Clearance to inside corner - 6 in. (15 cm) minimum.
- H Not to be installed above a meter/regulator assembly within 3 ft (90 cm) horizontally* from the center line of the regulator (Canada only)
- I Clearance to service regulator vent outlet – 3 ft (.91 m) U.S. minimum and 3 ft (.91 m) Canada minimum. *
- J Clearance to non-mechanical air supply inlet into building or the combustion air inlet to any other appliance – 9" (23 cm) U.S. minimum and 12 in. (30 cm) Canada minimum. *
- K Clearance to mechanical air supply inlet - 3 ft (.91 m) U.S. minimum and 6 ft (1.8 m) Canada minimum. *
- L Clearance above a paved sidewalk or paved driveway located on public property - 7 ft (2.1 m) minimum.
A vent may not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.
- M Clearance under veranda, porch, deck or balcony - 12 in. (30 cm) minimum. * Recommended 30 in. (76 cm) for vinyl or plastic.
Only permitted if veranda, porch, deck or balcony is fully open on a minimum of 2 sides beneath the floor. *
- N Vertical clearance between two horizontal termination caps – 12 in. (30 cm) minimum.
- O Horizontal clearance between two horizontal termination caps – 12 in. (30 cm) minimum.

- P 6" - Non-vinyl sidewalls
12" – Vinyl sidewalls
- Q 18" – Non-vinyl soffit and overhang
42" – Vinyl soffit and overhang
- R 8 ft.

	S_{min}	T_{max}
1 cap	3 ft	2 x S actual
2 caps	6 ft	1 x S actual
3 caps	9 ft	2/3 x S actual
4 caps	12 ft	1/2 x S actual
S _{min} = # term caps x 3		T _{max} = (2/# term caps) x S (actual)

- U 6" min. – Clearance from sides of electrical service.
- W 12" min. – Clearance above electrical service.

* As specified in CGA B149 Installation Codes

Note: Local codes or regulations may require different clearances.

** Clearance required to vinyl soffit material – 30 in. (76 cm) minimum.

Note: 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 wall, overhang and ground clearances as stated in the instructions.

Hearth & Home Technologies assumes no responsibility for the improper performance of the appliance when the venting system does not meet these requirements.

Figure 4.4 Minimum Clearances for Terminations

5 Vent Information and Diagrams

A. Vent Table Key

The abbreviations listed in this vent table key are used in the vent diagrams.

Symbol	Description
V ₁	First section (closest to appliance) of vertical length
V ₂	Second section of vertical length
H ₁	First section (closest to appliance) of horizontal length
H ₂	Second section of horizontal length


WARNING



Fire Risk



Explosion Risk



Asphyxiation Risk

Do NOT connect this gas appliance to a chimney flue serving a separate solid-fuel or gas burning appliance.

- Vent this appliance directly outside.
- Use separate vent system for this appliance.

May impair safe operation of this appliance or other appliances connected to the flue.

B. Use of Elbows

CAUTION

ALL vent configuration specifications MUST be followed.

- This product is tested and listed to these specifications.
- Appliance performance will suffer if specifications are not followed.

Diagonal runs have both vertical and horizontal vent aspects when calculating the effects. Use the rise for the vertical aspect and the run for the horizontal aspect (see Figure 5.1).

Two 45° elbows may be used in place of one 90° elbow. On 45° runs, 1 ft of diagonal is equal to 8-1/2 in. horizontal run and 8-1/2 in. vertical run. A length of straight pipe is allowed between two 45° elbows (see Figure 5.1).

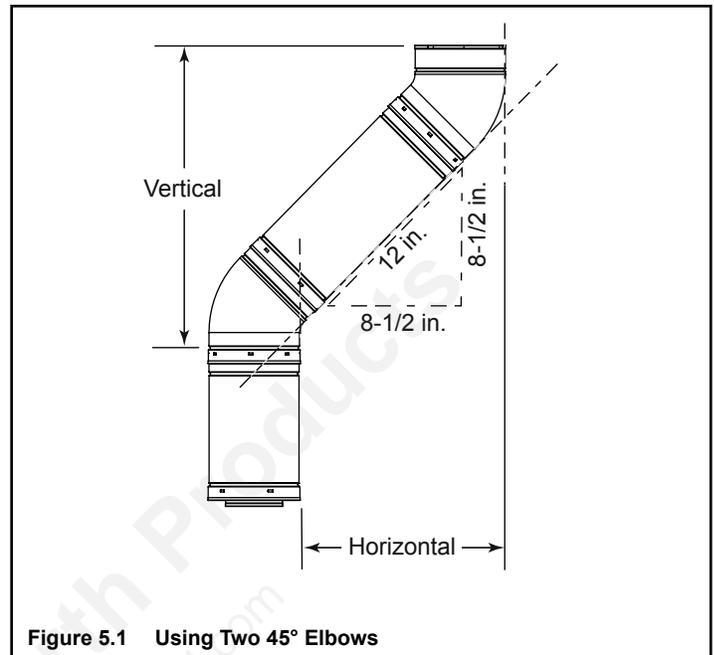


Figure 5.1 Using Two 45° Elbows

C. Measuring Standards

Vertical and horizontal measurements listed in the vent diagrams were made using the following standards.

- Pipe measurements are shown using the effective length of pipe (see Figure 5.2).
- Measurements are made from the appliance outer wrap, not from the standoffs.
- Horizontal terminations are measured to the outside mounting surface (flange of termination cap) (see Figure 4.1).
- Vertical terminations are measured to top of last pipe before termination cap.
- Horizontal pipe installed level with no rise.

Pipe	Effective Length/Height
SL-06D	5-3/4 in.
SL-09D	8-3/4 in.
SL-12D	11-3/4 in.
SL-12/17D	11-3/4 to 16-3/4 in.
SL-17/24D	16-3/4 to 23-3/4 in.
SL-24D	23-3/4 in.
SL-36D	35-3/4 in.
SL-48D	47-3/4 in.

Figure 5.2 SL Pipe Effective Length

D. Vent Diagrams

⚠ WARNING	
 	Fire Risk Explosion Risk Do NOT pack insulation or other combustibles between firestops.
	<ul style="list-style-type: none"> • ALWAYS maintain specified clearances around venting and firestop systems. • Install wall shield firestops and ceiling firestops as specified. Failure to keep insulation or other material away from vent pipe may cause fire.

The first 90° elbow MUST be a starter elbow (supplied with appliance).

To replace the first starter elbow with two 45° elbows, refer to Figure 5.4 All other 90° elbows can be replaced with two 45° elbows.

General Rules:

- SUBTRACT 3 ft (914 mm) from the total H measurement for each 90° elbow installed horizontally.
SUBTRACT 1-1/2 ft (457 mm) from the total H measurement for each 45° elbow installed horizontally.
- A maximum of three 90° elbows (or six 45° elbows) may be used in any vent configuration. Some elbows may be installed horizontally. See Figure 5.6.
- Elbows may be placed back to back anywhere in the system as long as the first 90° elbow is a starter elbow except as shown in Figure 5.4.
- When penetrating a combustible wall, a wall shield firestop must be installed.
- When penetrating a combustible ceiling, a ceiling firestop must be installed.

Top Vent—Horizontal Termination—One Elbow

Table 5.1

V ₁ min.	V ₁ max.	H ₁ max.
0*	-	20 in./508 mm
6 in./152 mm	-	6 ft/1.83 m
1 ft/305 mm	-	11 ft/3.35 m
1-1/2 ft/457 mm	-	18 ft/5.49 m
2 ft/610 mm	-	25 ft/7.62 m
-	25 ft/7.62 m	25 ft/7.62 m

* You may install the elbow directly on top of the appliance

Note: The first elbow used in the system must be a starter elbow (supplied with the appliance).

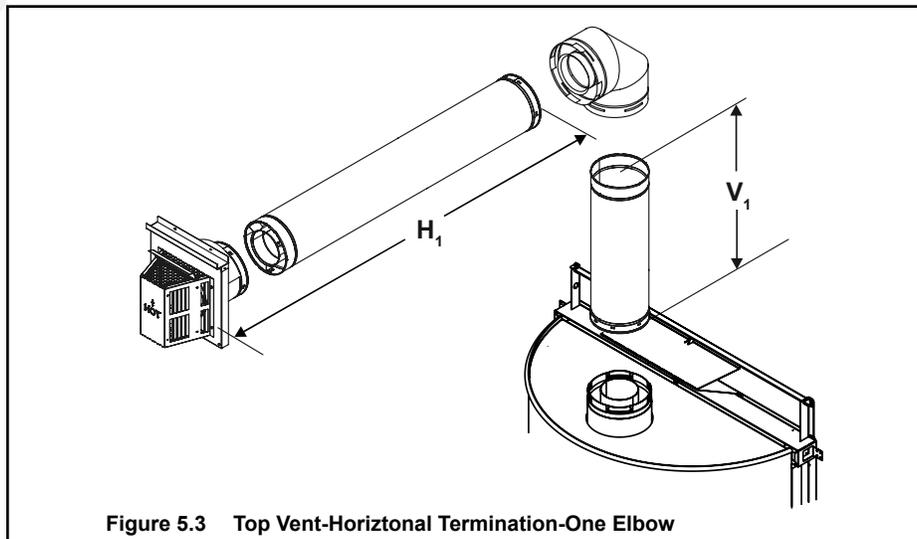


Figure 5.3 Top Vent-Horizontal Termination-One Elbow

Top Vent—Horizontal Termination—Two 45° Elbows

Installation requirements to replace the first 90° elbow with two 45° elbows:

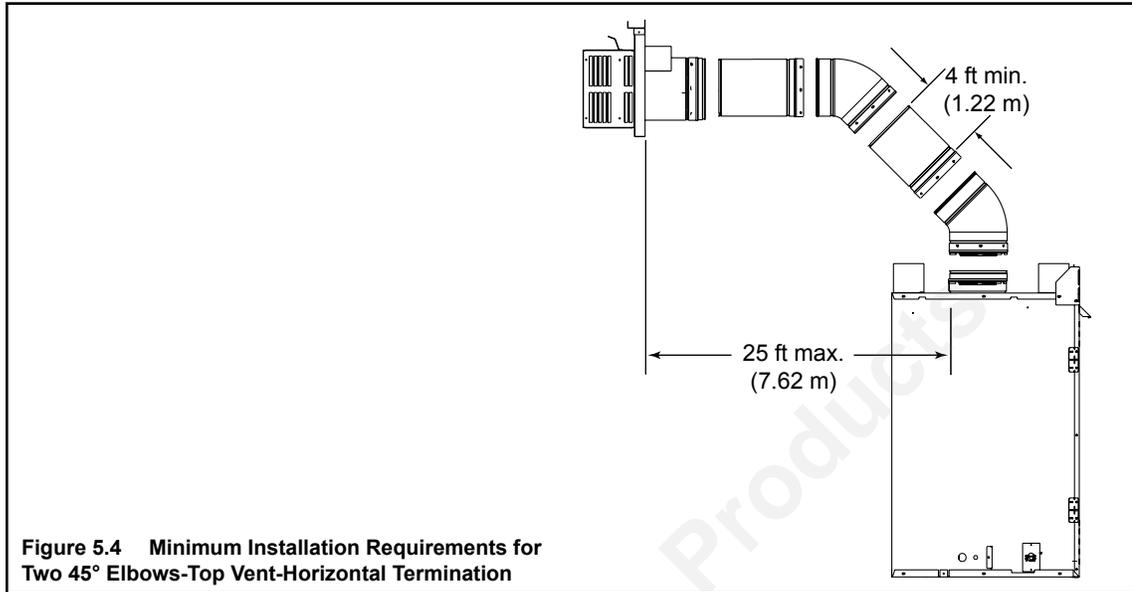


Figure 5.4 Minimum Installation Requirements for Two 45° Elbows-Top Vent-Horizontal Termination

Top Vent—Horizontal Termination—Three Vertical Elbows

See Figure 5.6 for information about installing elbows horizontally.

Table 5.2

V_1 min.	V_1+V_2 max.	H_1+H_2 max.
1 ft 305 mm	24 ft 7.32 m	19 ft 5.79 m

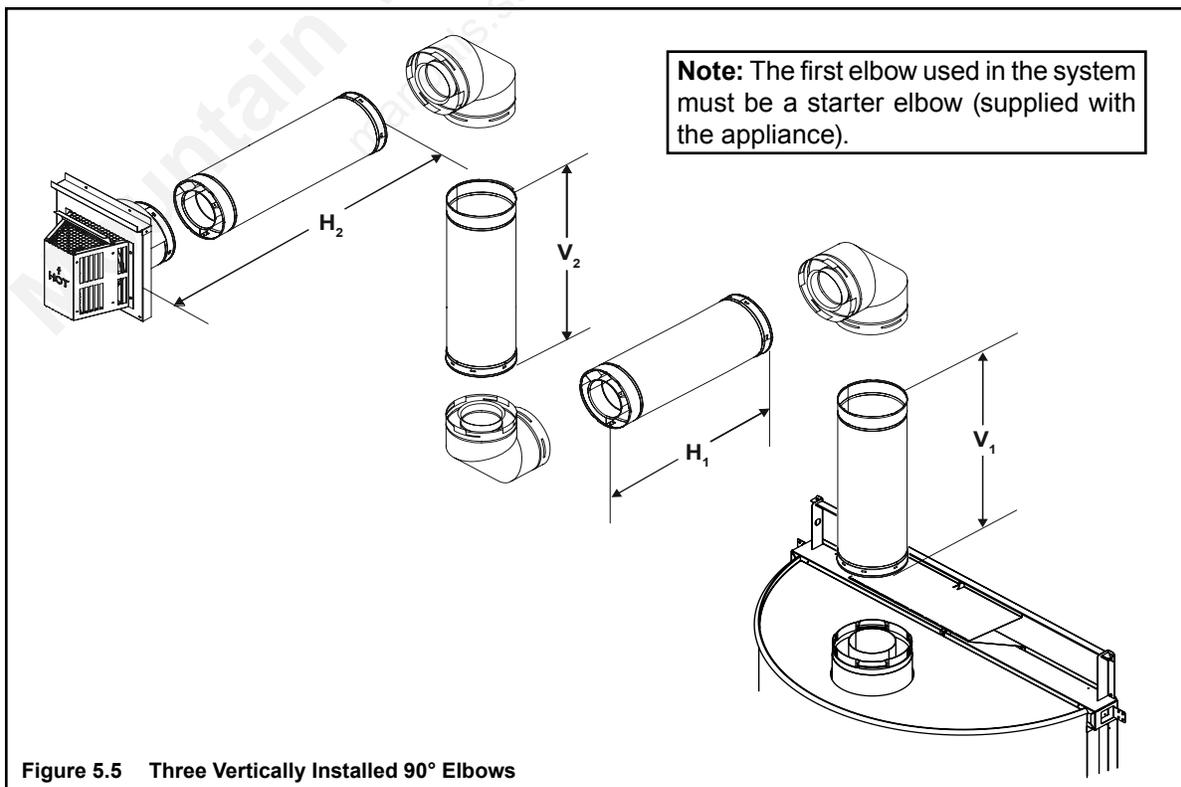


Figure 5.5 Three Vertically Installed 90° Elbows

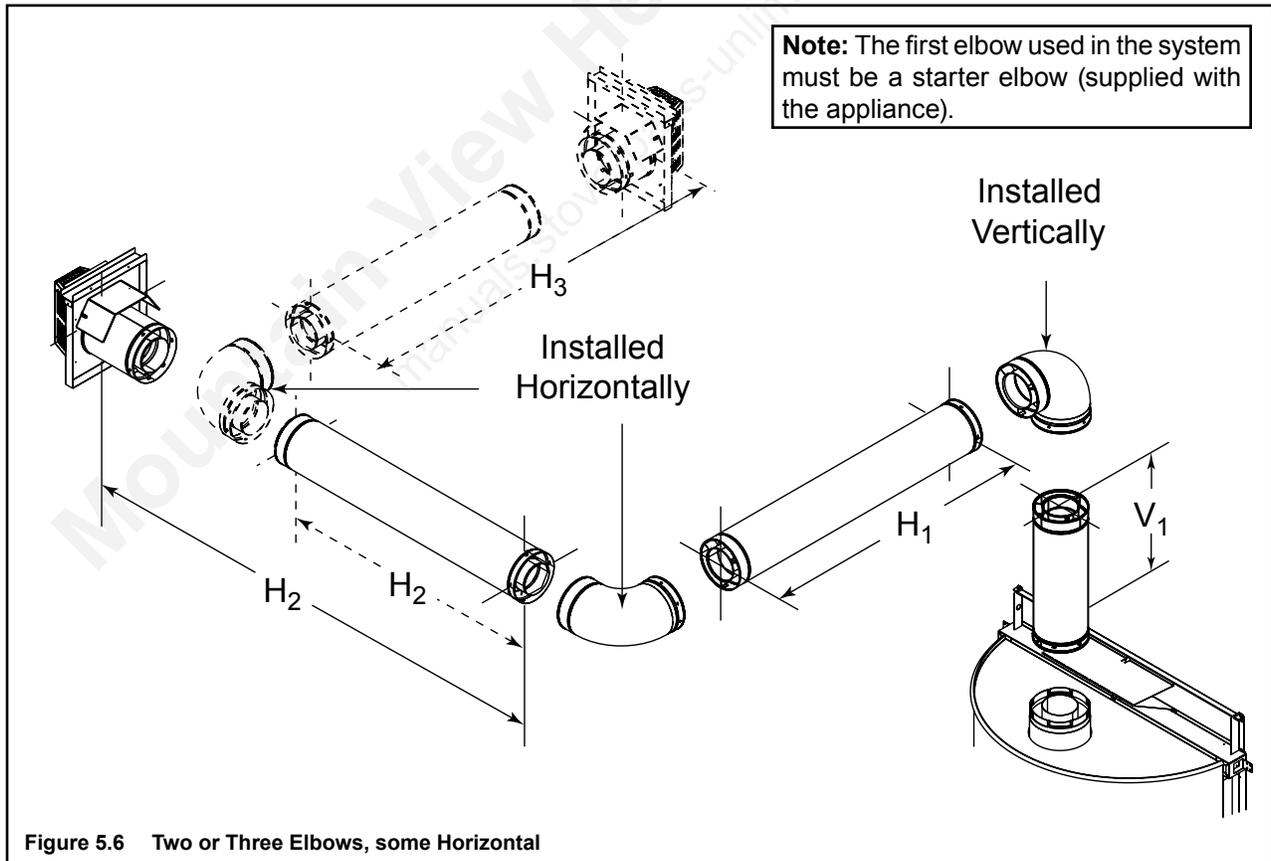
Top Vent—Horizontal Termination—Two or Three Elbows

You may use a maximum of three 90° elbows (or six 45° elbows) in any vent configuration, Some may be installed horizontally.

Note: Subtract 3 ft (914 mm) from the total horizontal measurement for each 90° elbow installed horizontally. Subtract 1-1/2 ft (457 mm) from the total horizontal measurement for each 45° elbow installed horizontally.

Table 5.3

V ₁ min.	V ₁ max.	H ₁ +H ₂ max.	H ₁ +H ₂ +H ₃ max.
6 in. 152 mm	x	6 ft 1.83 m	x
1 ft 305 mm	x	11 ft 3.35 m	11 ft 3.35 m
1-1/2 ft 457 mm	x	18 ft 5.49 m	18 ft 5.49 m
2 ft 610 mm	x	25 ft 7.62 m	25 ft 7.62 m
x	25 ft 7.62 m	25 ft 7.62 m	25 ft 7.62 m



Top Vent—Vertical Termination—No Elbows

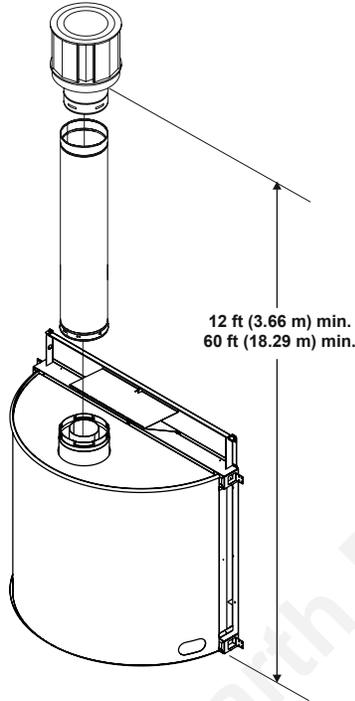


Figure 5.7 Vertical Termination - No Elbows

Top Vent—Vertical Termination—Two Elbows

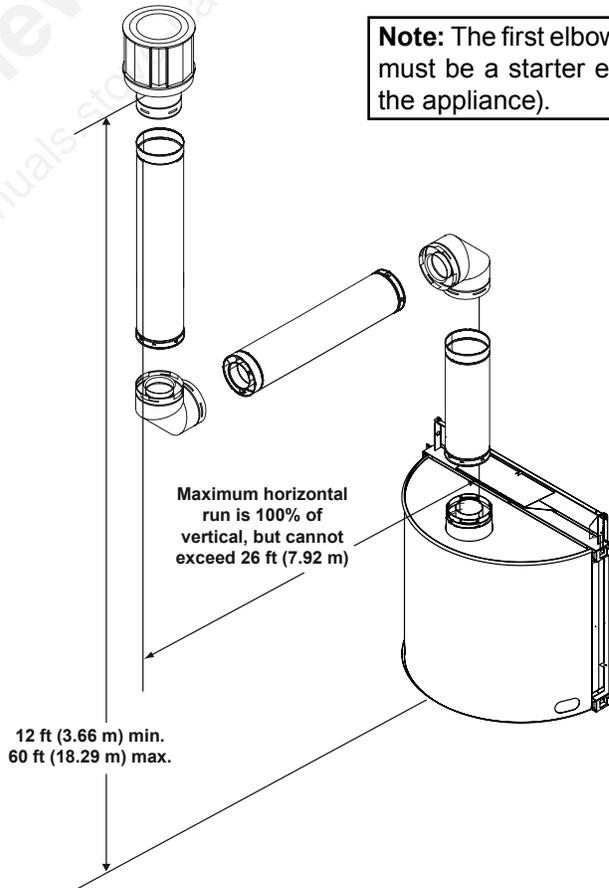
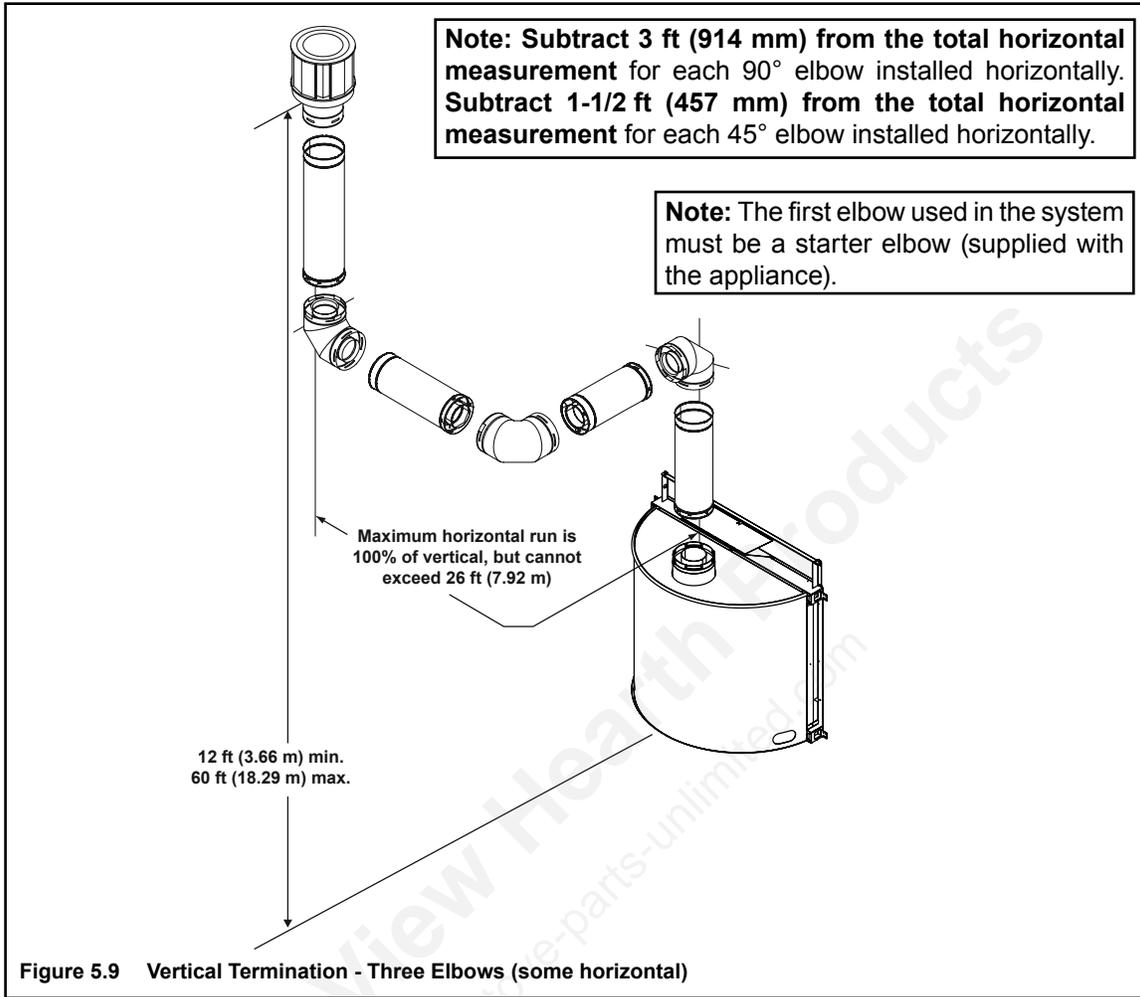


Figure 5.8 Vertical Termination - Two Elbows

Top Vent—Vertical Termination—Three Elbows



6 Vent Clearances and Framing

A. Pipe Clearances to Combustibles

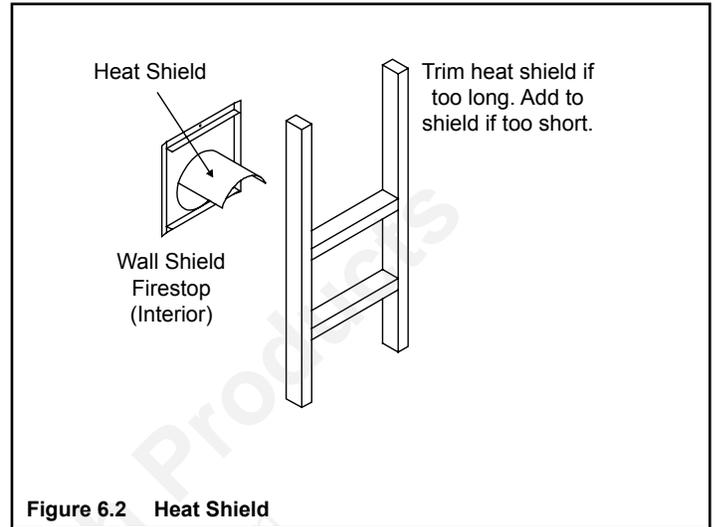
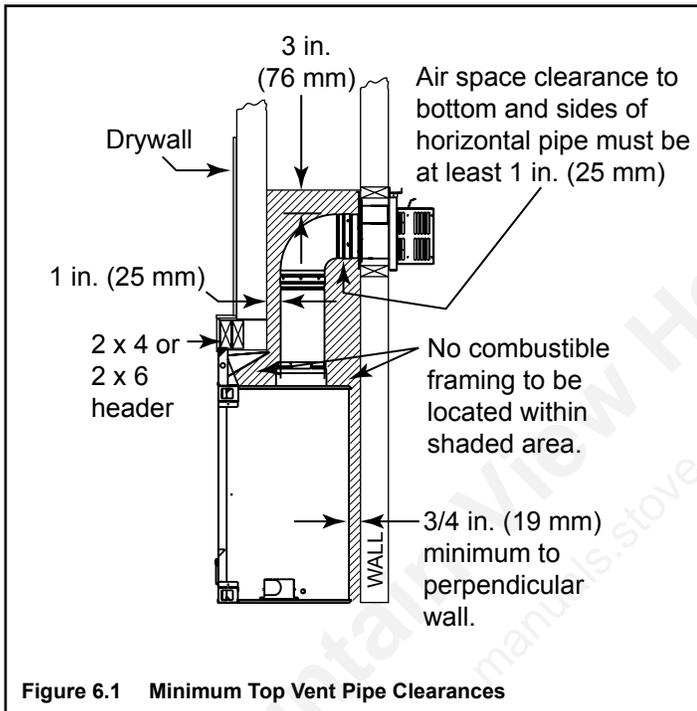
WARNING

Fire Risk
Explosion Risk

Maintain vent clearance to combustibles as specified.

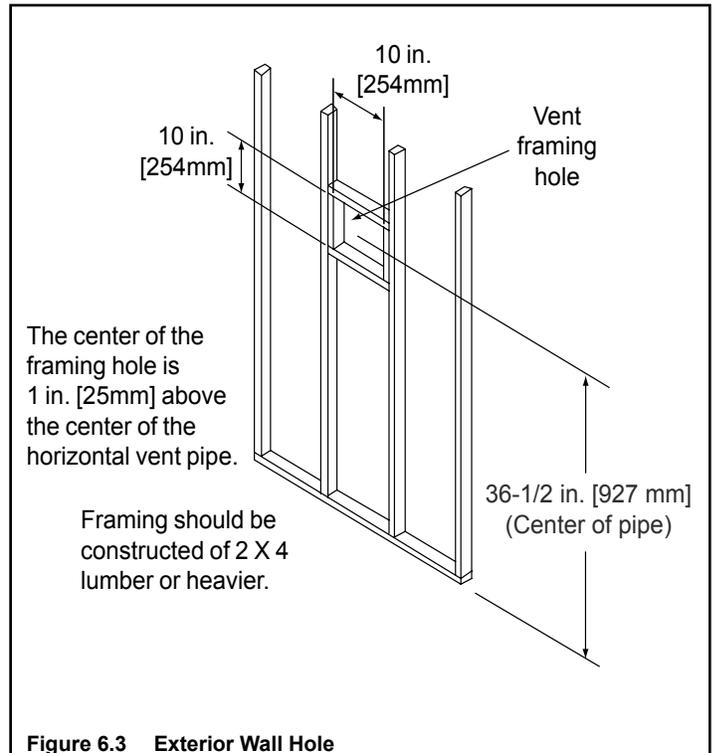
- Do not pack air space with insulation or other materials.

Failure to keep insulation or other materials away from vent pipe may cause fire.



B. Wall Penetration Framing

- Wherever a combustible wall is penetrated, the hole must be framed with a wall shield firestop. This shield maintains minimum clearances and restricts cold air infiltration.
- If the wall being penetrated is of noncombustible materials (material which will not ignite or burn, or has a UL fire rating of zero), a 8 in. (203 mm) diameter hole is acceptable.
- Whenever a wall is penetrated the wall shield firestop is only required on one side and no heat shield is necessary.
- If your local inspector requires the wall shield firestop on both sides of the wall, then both wall shield firestops must have a heat shield attached to them.



C. Install the Ceiling Firestop



⚠ WARNING

Fire Risk

Keep loose materials or blown insulation from touching the vent pipe.

- National building codes recommend using attic shield to keep loose materials/blown insulation from contacting vent.
- Hearth & Home Technologies requires the use of an attic shield.

- Frame an opening 10 in. by 10 in. whenever the vent system penetrates a ceiling/floor (see Figure 6.4).
- Frame the area with the same sized lumber as used in ceiling/floor joist.
- When installing a top vent vertical termination appliance the hole should be directly above the appliance, unless the flue is offset.
- Do not pack insulation around the vent. Insulation must be kept away from the pipe.

Note: An additional ceiling firestop is not required if attic insulation shield is used.

D. Install Attic Insulation Shield

- Frame opening for attic insulation shield.
- Attic insulation shield may be installed above or below ceiling (see Figure 6.5).
- Secure with three fasteners on each side.
- Fold tabs at top of attic shield in toward vent pipe. Tabs must keep vent pipe centered within shield.
- Field construct additional shield height if insulation is deeper than height of attic shield.

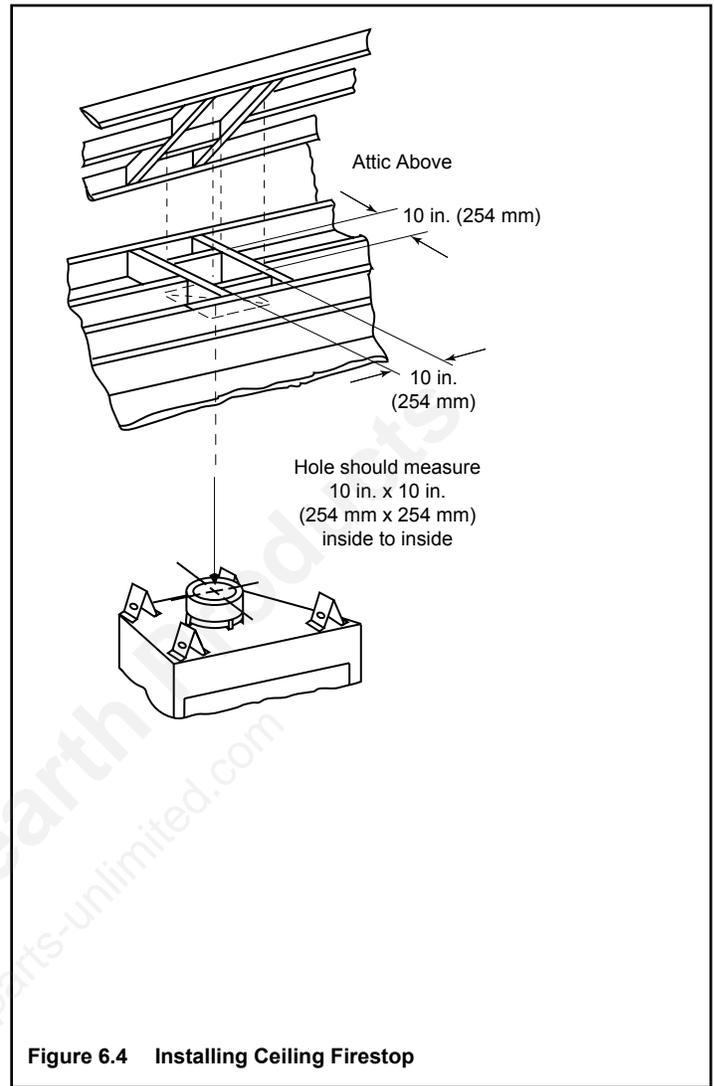


Figure 6.4 Installing Ceiling Firestop

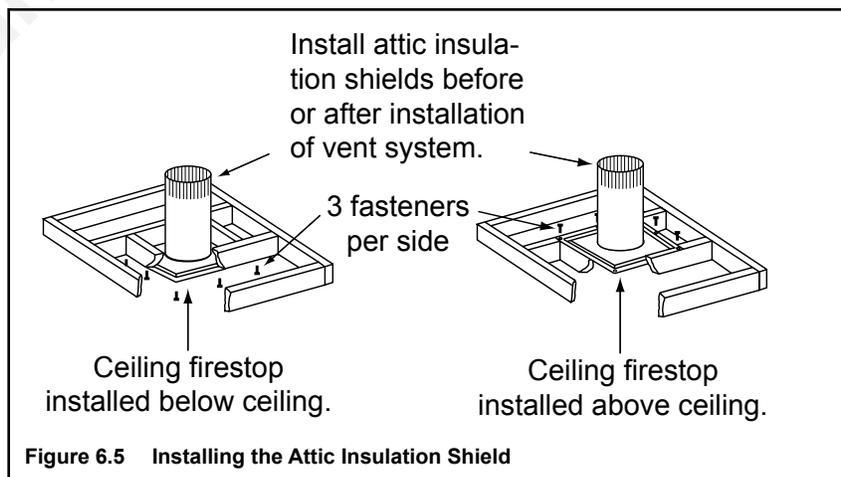


Figure 6.5 Installing the Attic Insulation Shield

7 Appliance Preparation

	CAUTION	
<p>Sharp Edges</p> <ul style="list-style-type: none">• Wear protective gloves and safety glasses during installation.		

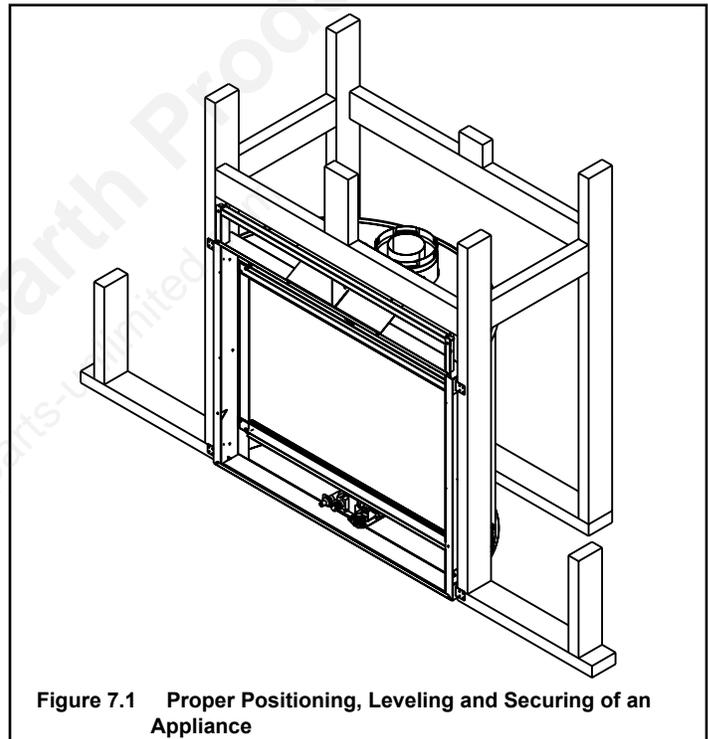
A. Securing and Leveling the Appliance

	WARNING
<p>Fire Risk!</p> <ul style="list-style-type: none">• Prevent contact with sagging, loose insulation.• Do NOT install against combustible materials such as exposed insulation, insulation backer or plastic.	

The diagram shows how to properly position, level, and secure the appliance (see Figure 7.1). Nailing tabs are provided to secure the appliance to the framing members.

- Place the appliance into position.
- Level the appliance from side to side and front to back.
- Shim the appliance as necessary. It is acceptable to use wood shims.
- Bend out nailing tabs on each side.
- Keep nailing tabs flush with the framing.
- Secure the appliance to the framing by using nails or screws through the nailing tabs.

	WARNING
<p>Fire Risk</p> <ul style="list-style-type: none">• ALWAYS maintain specified clearances around the appliance.• Do NOT notch into the framing around the appliance spacers. <p>Failure to keep insulation or other materials away from vent pipe may cause fire.</p>	



CAUTION
<p>Do NOT notch into the framing around the appliance spacers.</p>

B. Installing Floor Surround Trim

IMPORTANT: The floor surround trim or optional hearth must be installed prior to finish floor being laid and surround mounted to appliance to ensure proper finished floor fitup.

- If the optional hearth is being used, do NOT install metal floor surround trim.
- To install metal floor surround trim: Bend hand brakes and place over front lip of appliance front. See Figure 7.2.

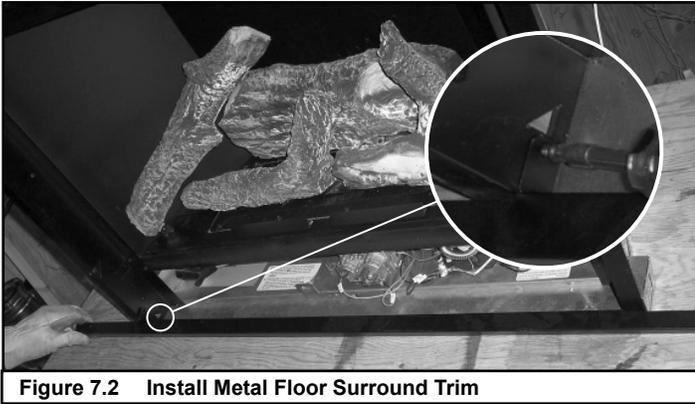


Figure 7.2 Install Metal Floor Surround Trim

- Fasten with two screws. Finished flooring can be installed up to this piece.

C. Installing Optional Hearth

- Unpack stone hearth.
- Place hearth against appliance and center to fireplace opening.
- Trace the outline of the hearth on the floor.
- Turn the hearth over. Apply 1 in. (25mm) diameter 1/4 in. (6 mm) thick pads of construction adhesive on 3 in. (76 mm) centers across the entire back side of the hearth. See Figure 7.3.

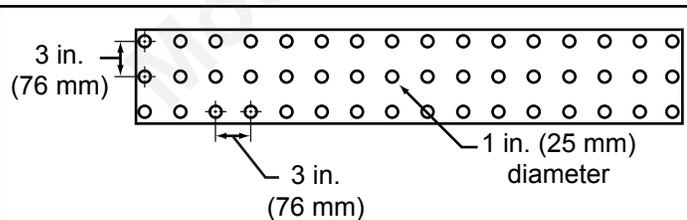


Figure 7.3 Apply Construction Adhesive to Back of Hearth

- Flip hearth carefully and locate within the outline marked on the floor.
- Press hearth to floor making sure hearth does not exceed 3/4 in. (19 mm) in total height. See Figure 7.4

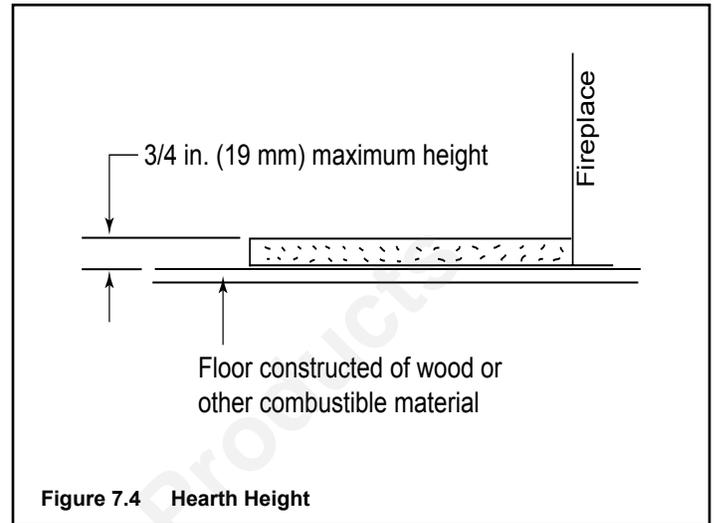


Figure 7.4 Hearth Height

- Finish flooring can be installed up to the hearth edge.

⚠ WARNING

Shock Risk

Fire Risk

Use **ONLY** optional accessories approved for this appliance.

- Using non-listed accessories voids warranty.
- Using non-listed accessories may result in a safety hazard.
- Only Hearth & Home Technologies approved accessories may be used safely.

8 Installing Vent Pipe

A. Assembly of Vent Sections

	WARNING	
Fire Risk Explosion Risk.		
Do not mix pipe, fittings or joining methods from different manufacturers		

	WARNING	
Fire Risk Exhaust Fumes Risk Impaired Performance of Appliance		
<ul style="list-style-type: none">• Ensure vent components are locked together correctly.• Pipe may separate if not properly joined.		

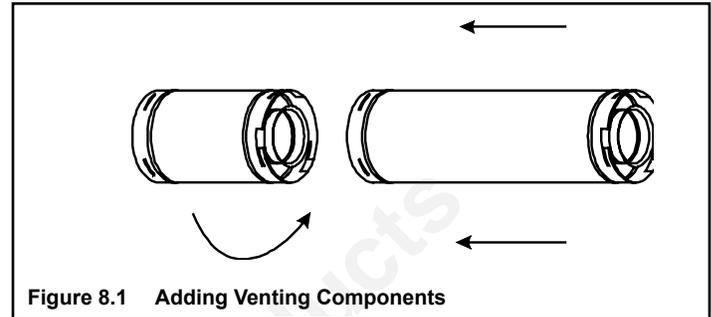
Attach the First Vent Component to Starting Collars

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

- Lock the vent components into place by sliding the concentric pipe sections with four (4) equally spaced interior beads into the appliance collar or previously installed component end with four (4) equally spaced indented sections.
- When the internal beads of each outer pipe line up, rotate the pipe section clockwise about one-quarter (1/4) turn (see Figure 8.1). The vent pipe is now locked together.
- Slide the ceramic fiber pad over the first vent section and place it flush to the appliance. This will prevent cold air infiltration. High temp caulk may be used to hold the part in place. Continue to add vent components.

Continue Adding Vent Components

- 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.
- 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.



Install Support Brackets

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

To install support brackets for horizontal runs:

- Place the pipe supports around the vent pipe.
- Nail the pipe supports to the framing members.

For Vertical Runs - The vent system must be supported every eight (8) feet (2.4m) above the appliance flue outlet by wall brackets. To install support brackets for vertical runs:

- Attach wall brackets to the vent pipe and secure the wall bracket to the framing members with nails or screws.

WARNING	
	Fire Risk. Explosion Risk. Combustion Fume Risk.
	Use vent run supports per installation instructions. Connect vent sections per installation instructions. <ul style="list-style-type: none">• Maintain all clearances to combustibles.• Do NOT allow vent to sag below connection point to appliance.• Maintain specified slope (if required).
Improper support may allow vent to sag or separate.	

B. Installing Wall Shield Firestops and Horizontal Termination Cap

	⚠ WARNING	
<p>Fire Risk Exhaust Fumes Risk Impaired Performance of Appliance</p> <ul style="list-style-type: none"> • Ensure vent components are locked together correctly. • Pipe may separate if not properly joined. 		

For Horizontal Runs - Wall shield firestops are **REQUIRED** on both sides of a combustible wall through which the vent passes.

NOTE: Model SLK-01TRD does not need an exterior wall shield firestop on an exterior combustible wall.

To install wall shield firestops for horizontal runs that pass through either interior or exterior walls:

Cut a 10 in. x 10 in. (254mm x 254mm) hole for SL-D-series pipe. The center of the framing hole is one (1) inch (25.4mm) above the center of the horizontal vent pipe.

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

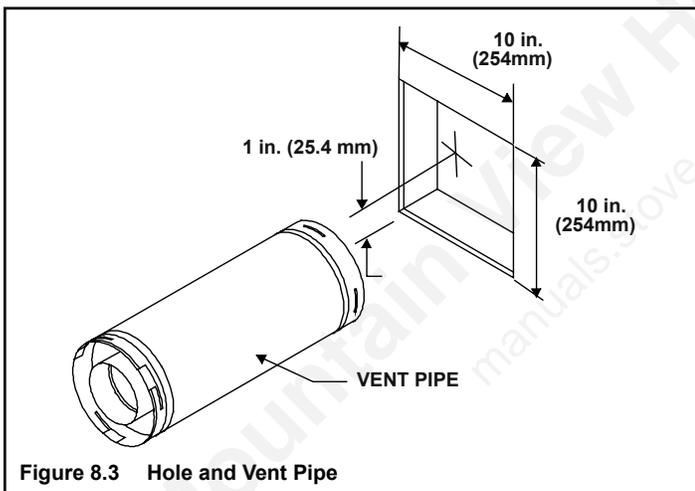


Figure 8.3 Hole and Vent Pipe

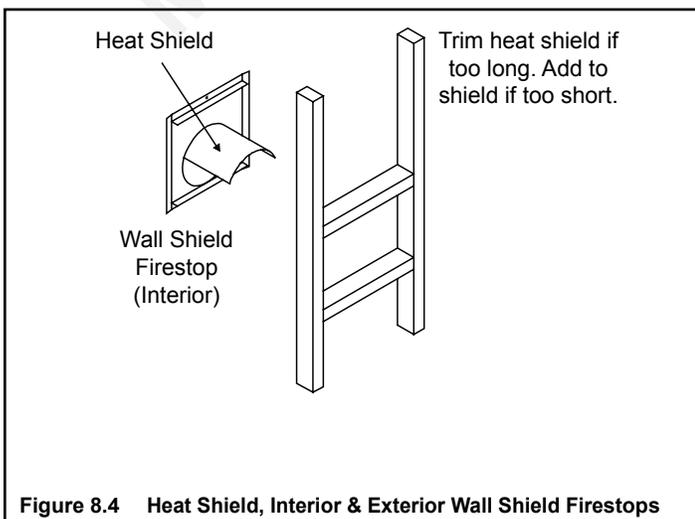


Figure 8.4 Heat Shield, Interior & Exterior Wall Shield Firestops

	⚠ WARNING	
<p>Fire Risk. Explosion Risk.</p> <p>Do NOT pack insulation or other combustibles between firestops.</p> <ul style="list-style-type: none"> • ALWAYS maintain specified clearances around venting and firestop systems. • Install firestops as specified. <p>Failure to keep insulation or other material away from vent pipe may cause fire.</p>		

Installing the Horizontal Termination Cap

Vent termination must not be recessed in the wall. Siding may be brought to the edge of the cap base.

Flash and seal as appropriate for siding material at outside edges of cap.

When installing a horizontal termination cap, follow the cap location guidelines as prescribed by current **ANSI Z223.1** and **CAN/CGA-B149** installation codes.

⚠ WARNING
 <p>Burn Risk</p> <ul style="list-style-type: none"> • Local codes may require installation of a cap shield to prevent anything or anyone from touching the hot cap.

⚠ WARNING
<p>Do NOT connect a pipe section to a termination cap without using the telescoping flue section found on the termination cap.</p>

NOTE: Where required, an exterior wall flashing is available.

When penetrating a brick wall, a brick extension kit is available for framing the brick.

C. Installing Roof Flashing, Storm Collar and Vertical Termination Cap



CAUTION



Sharp Edges

- Wear protective gloves and safety glasses during installation.

- Install roof flashing. Refer to Figure 8.13.
- Caulk between the pipe and the top of the roof flashing and around flashing at roof. See Figure 8.14.
- Slide the storm collar down the pipe section until it rests on the roof flashing.
- Caulk around the top of the storm collar. See Figure 8.15.
- Attach the vertical termination cap: Slide the inner collar of the cap into the inner flue of the pipe section and place the outer collar of the cap over the outer flue of the pipe section. Twist to lock.

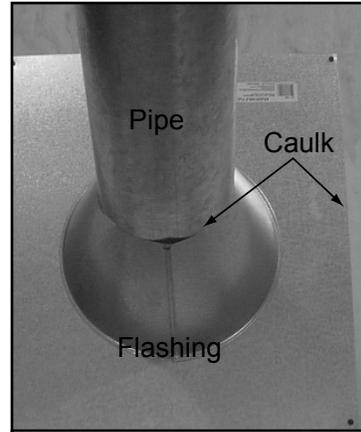


Figure 8.14

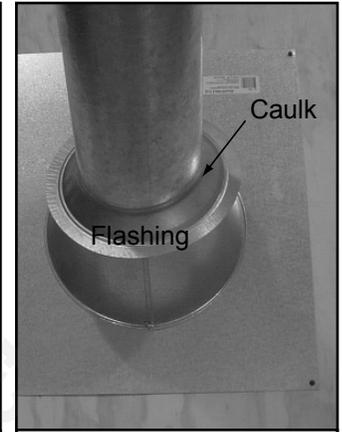
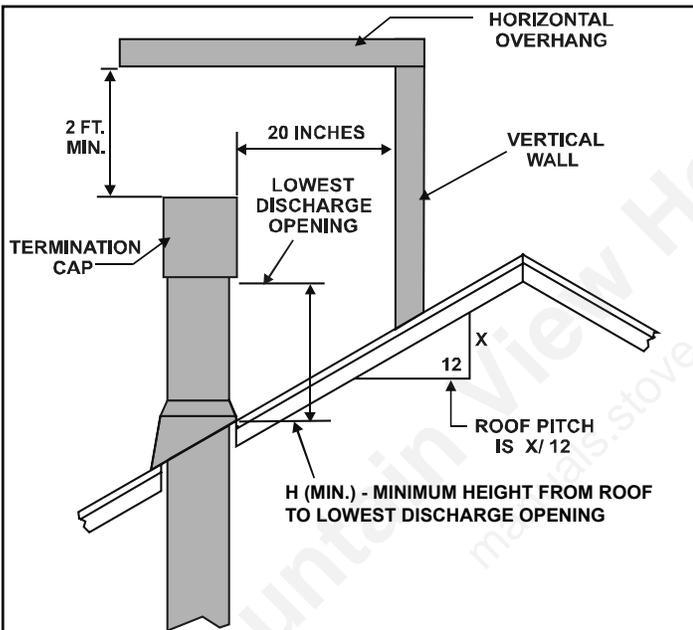


Figure 8.15



<u>Roof Pitch</u>	<u>H (Min.) Ft.</u>
-------------------	---------------------

Flat to 6/12.....	1.0*
Over 6/12 to 7/12.....	1.25*
Over 7/12 to 8/12.....	1.5*
Over 8/12 to 9/12.....	2.0*
Over 9/12 to 10/12.....	2.5
Over 10/12 to 11/12.....	3.25
Over 11/12 to 12/12.....	4.0
Over 12/12 to 14/12.....	5.0
Over 14/12 to 16/12.....	6.0
Over 16/12 to 18/12.....	7.0
Over 18/12 to 20/12.....	7.5
Over 20/12 to 21/12.....	8.0

* 3 foot minimum in snow regions

Figure 8.13 Minimum Height from Roof to Lowest Discharge Opening



WARNING



Fire Risk.
Explosion Risk.
Inspect external vent cap regularly.

- Ensure no debris blocks cap.
- Combustible materials blocking cap may ignite.
- Restricted air flow affects burner operation.



Figure 8.16 Finished installation

9 Gas Information

A. Fuel Conversion

Before making gas connections ensure appliance being installed is compatible with the available gas type.

Any natural or propane gas conversions necessary to meet the appliance and locality needs must be made by a qualified technician using Hearth & Home Technologies specified and approved parts.

B. Gas Pressure

Proper input pressures are required for optimum appliance performance. Gas line sizing requirements need to be made following **NFPA51**.

 **WARNING**



Fire Risk
Explosion Risk

High pressure will damage valve.

- Disconnect gas supply piping **BEFORE** pressure testing gas line at test pressures above 1/2 psig.
- Close the manual shutoff valve **BEFORE** pressure testing gas line at test pressures equal to or less than 1/2 psig.

 **WARNING**



Fire Risk
Explosion Risk

Verify inlet pressures.

- High pressure may cause overfire condition.
- Low pressure may cause explosion.
- Verify minimum pressures when other household gas appliances are operating.

Install regulator upstream of valve if line pressure is greater than 1/2 psig.

Pressure requirements for appliance are shown in table below. Minimum pressures must be met when other household gas appliances are operating.

Pressure	Natural Gas	Propane
Minimum Inlet Pressure	5.0 in. w.c.	11.0 in. w.c.
Maximum Inlet Pressure	7.0 in. w.c.	14.0 in. w.c.
Manifold Pressure	3.5 in. w.c.	10.0 in. w.c.

C. Gas Connection

Note: Have the gas supply line installed in accordance with local building codes, if any. If not, follow **ANSI 223.1**. Installation should be done by a qualified installer approved and/or licensed as required by the locality. (In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter.)

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

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

Refer to Reference Section 16 for location of gas line access in appliance.

Note: Gas line may be run from either side of appliance using one of the knockouts provided. Hole in outer shell NOT to exceed 2-1/2 in. and should never penetrate the firebox.

 **WARNING**



Gas Leak Risk

- Support control when attaching pipe to prevent bending gas line.

Note: The gap between supply piping and gas access hole may be caulked with high temperature caulk or stuffed with non-combustible, unfaced insulation to prevent cold air infiltration.

- Ensure that gas line does not come in contact with outer wrap of appliance. Follow local codes.
- Incoming gas line should be piped into the valve compartment and connected to the 1/2 in. connection on the manual shutoff valve.

	WARNING
 	<p>Fire Risk Explosion Risk</p> <ul style="list-style-type: none"> • Gas build-up during line purge may ignite. • Purge should be performed by qualified technician. • Ensure adequate ventilation. • Ensure there are no ignition sources such as sparks or open flames.

- A small amount of air will be in the gas supply lines. When first lighting appliance it will take a short time for air to purge from lines. When purging is complete the appliance will light and operate normally.

	WARNING
  	<p>CHECK FOR GAS LEAKS Fire Risk Explosion Risk Asphyxiation Risk</p> <ul style="list-style-type: none"> • Check all fittings and connections. • Do not use open flame. • 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. <p>Fittings and connections may have loosened during shipping and handling.</p>

	WARNING
	<p>Fire Risk</p> <p>Do NOT change the valve settings.</p> <ul style="list-style-type: none"> • This valve has been preset at the factory. • Changing valve settings may result in fire hazard or bodily injury.

D. High Altitude Installations

U.L. listed gas appliances are tested and approved without requiring changes for elevations from 0 to 2000 ft in the USA and Canada.

When installing this appliance at an elevation above 2000 ft, 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 ft above a 2000 ft elevation in the U.S.A., or 10% for elevations between 2000 and 4500 ft 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 4500 ft (in Canada), check with local authorities.

10 Electrical Information

A. Recommendation for Wire

This appliance requires 110-120 VAC to be wired to the junction box for proper operation of the appliance (Intellifire ignition). Refer to Figure 10.1 to determine if the appliance uses an Intellifire ignition system or standing pilot ignition system.

Open the control access panel to view wiring system and gas valve. If this appliance has a red or black ignitor button (as noted in Figure 10.1) this appliance has a standing pilot ignition system. If there is no red or black ignitor button, this appliance has an Intellifire ignition system.

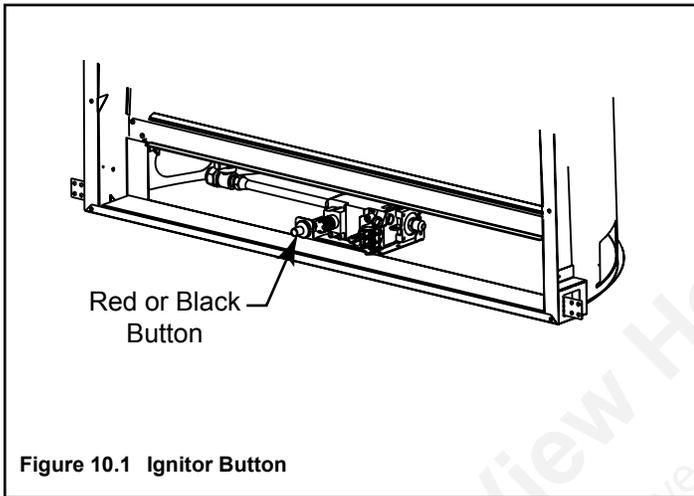


Figure 10.1 Ignitor Button

Note: This appliance must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with **National Electric Code ANSI/NFPA 70-latest edition** or the **Canadian Electric Code CSA C22.1**.

	WARNING
	Shock Risk Explosion Risk Do NOT wire 110V to valve. Do NOT wire 110V to wall switch
	<ul style="list-style-type: none">• Incorrect wiring will damage millivolt values.• Incorrect wiring will override IPI safety lockout and may cause explosion.

B. Connecting to the Appliance

- This appliance is supplied with a factory wired switch.
- Low voltage and 110 VAC voltage cannot be shared within the same wall box.

C. Intellifire Ignition System Wiring

This appliance requires a 110 VAC supply to the appliance junction box for operation. A wiring diagram is shown in Figure 10.2.

This appliance is equipped with an Intellifire control valve which operates on a 3 volt system.

This appliance is supplied with a battery pack and a 3 volt AC transformer, which requires the installation of the supplied junction box. It is highly recommended that the junction box be installed at this time to avoid reconstruction.

The battery pack requires two D cell batteries (not included). Batteries cannot be placed in the battery pack while using the 3 volt AC transformer. Conversely, the transformer must be unplugged if the battery pack is used.

CAUTION

Battery polarity must be correct or module damage will occur.

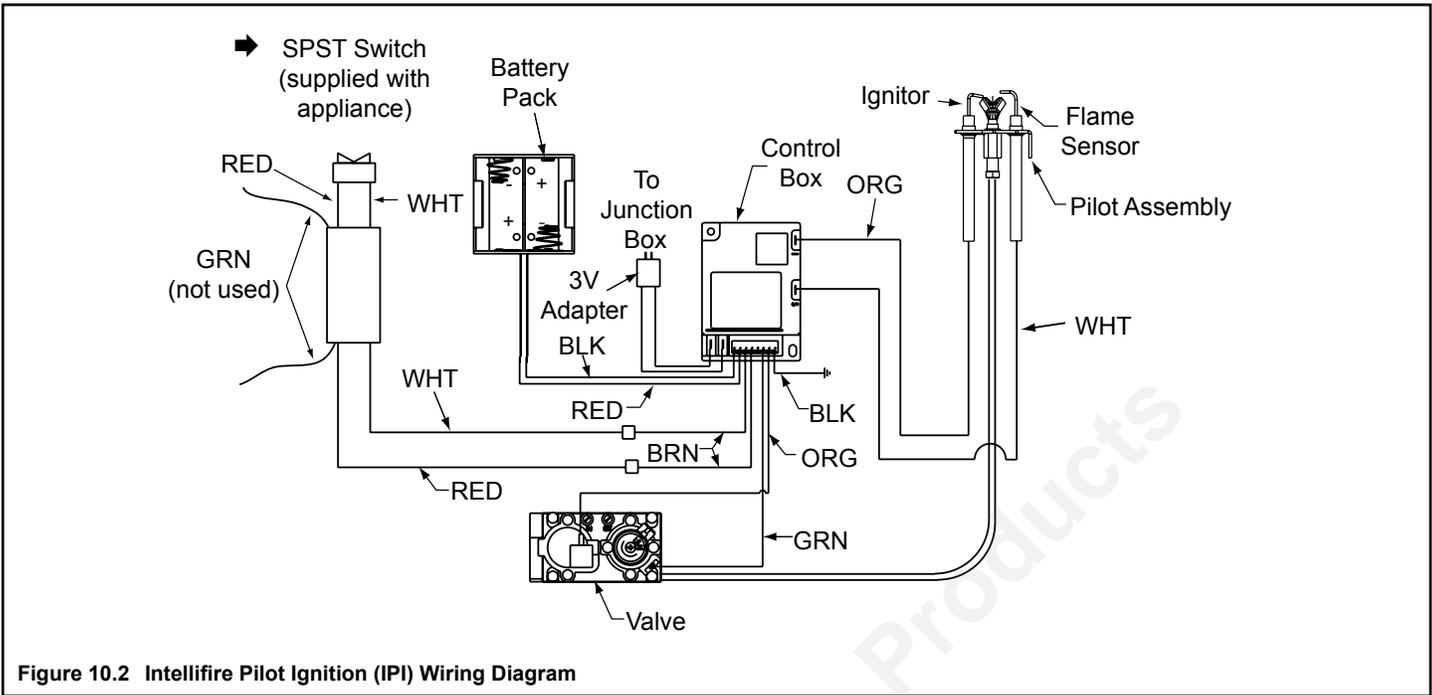


Figure 10.2 Intellifire Pilot Ignition (IPI) Wiring Diagram

D. Standing Pilot Ignition System Wiring

- This standing pilot ignition system wiring does not require a 110 VAC supply to operate.

Note: Do not wire 110V to the millivolt valve (standing pilot)! This will damage the valve.

CAUTION

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

WARNING

Shock Risk

- Replace damaged wire with type 105° C rated wire.
- Wire must have high temperature insulation.

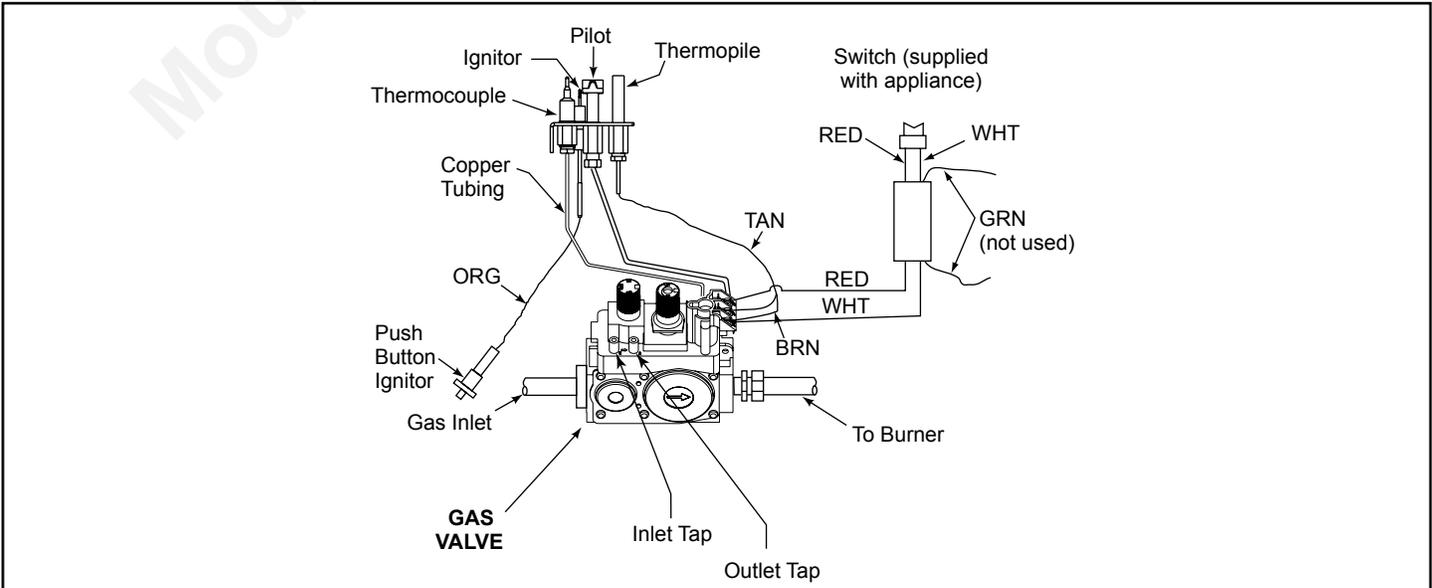
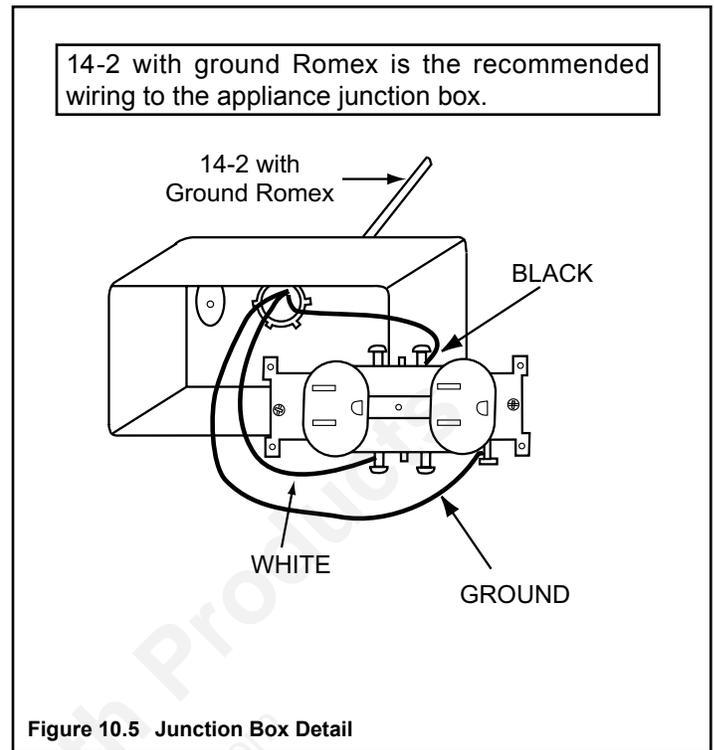
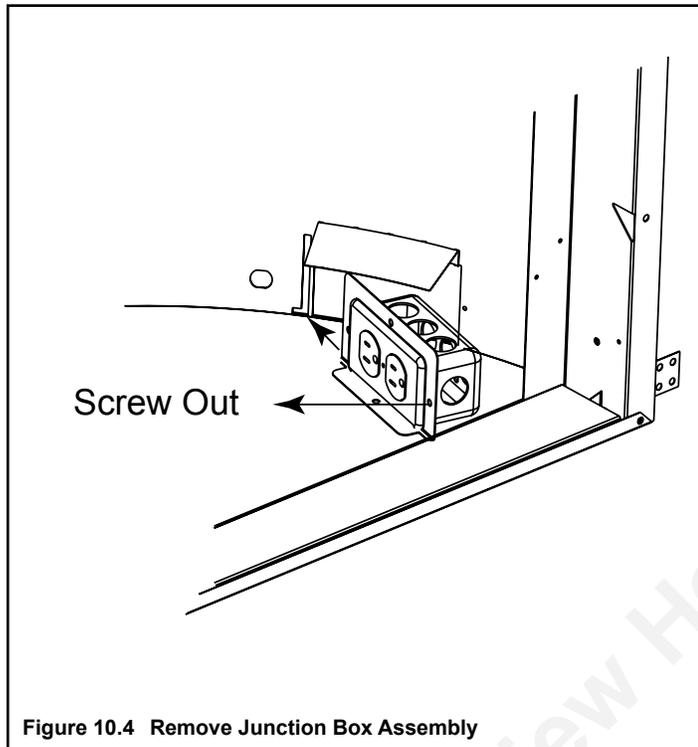


Figure 10.3 Standing Pilot Ignition Wiring Diagram

E. Junction Box Installation

- Remove the junction box assembly from the valve compartment by removing the one screw securing the assembly to the outer shell.
- Rotate the front of the assembly in while sliding the rear of the assembly forward and out of the retaining slot. See Figure 10.4.

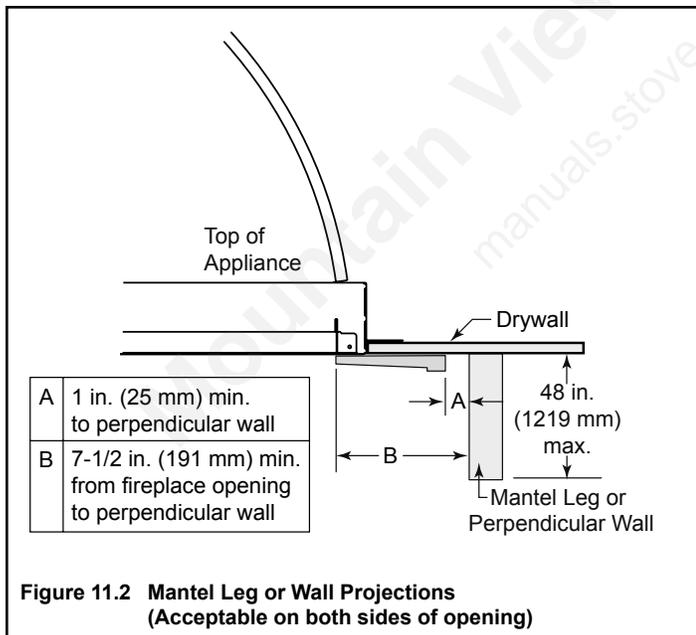
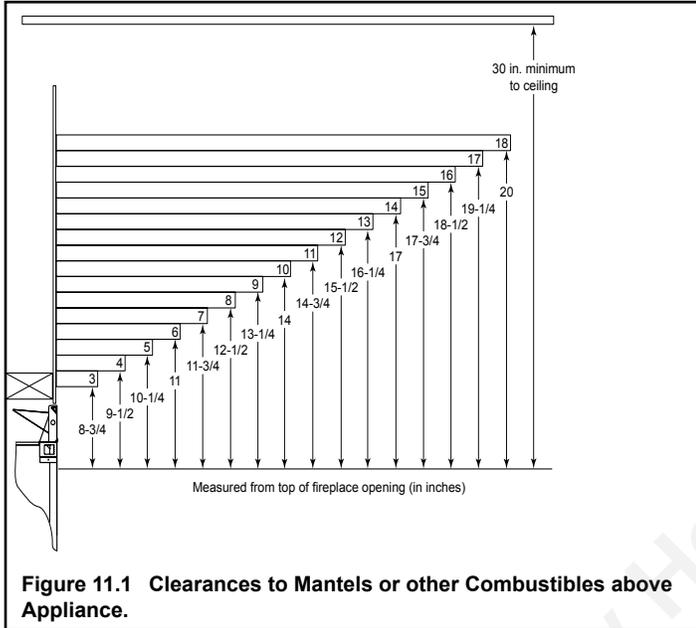


- Pull wire through hole that junction box mounts in on outer shell.
- Knock out appropriate hole in junction box and install Romex connector.
- Feed the necessary length of wire through the connector.
- Make all necessary wire connections to the receptacle and assemble the receptacle and cover to the junction box.
- Reattach the junction box.

11 Finishing

A. Mantel Projections

Figure 11.1 shows the minimum vertical and corresponding maximum horizontal dimensions of appliance mantels or other combustible projections above the top front edge of the appliance.



B. Facing Material

WARNING

Fire Risk

Do NOT obstruct air inlet or outlet grilles.
Do NOT modify grilles.

- Modifying or covering grilles could cause temperature rise and fire hazard.

Finishing materials must not interfere with:

- Air flow through grilles or louvers.
- Operation of louvers or doors.
- Access for service.

WARNING

Fire Risk

Finish all edges and fronts to clearances and specifications listed in manual.

- Metal appliance front may be covered with non-combustible material only.
- Do NOT overlap combustible materials onto appliance front.
- Install combustible materials up to specified clearances on top, front and sides only.
- Seal joints between the finished wall and appliance top and sides using only a 300° F minimum sealant.

WARNING

Fire Risk
Explosion Risk

- Facing and/or finishing materials must never overhang into the glass opening.
- Overhanging materials may ignite.
- May interfere with proper operation of glass assembly.

12 Appliance Setup

A. Remove Packed Materials

Remove the two cartons containing from surround and front face assembly.

- Remove top strap by removing the two screws holding the strap to the face of the unit. Discard strap, set top carton aside.
- Remove bottom strap in the same manner and discard. Set bottom carton aside. See Figure 12.1.

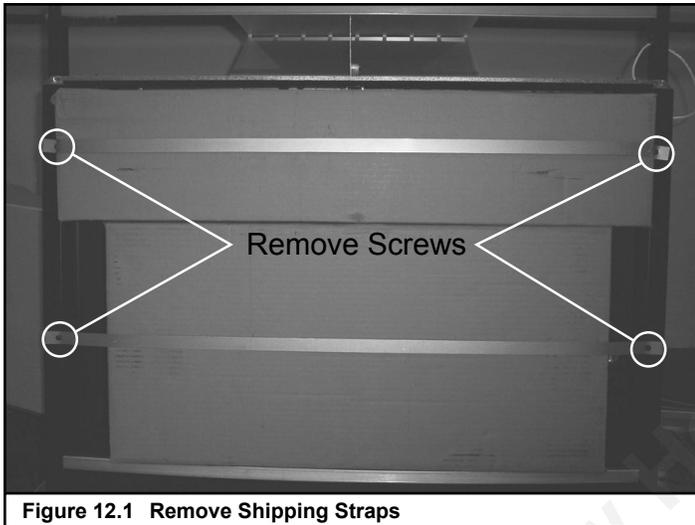


Figure 12.1 Remove Shipping Straps

- Remove the two screws holding the bottom support bar to the front face. Slide the bar to the left, pull the right side out and slide left side out of slot and discard. See Figure 12.2.



Figure 12.2 Remove Bottom Support Bar

B. Remove Glass Assembly



WARNING

Handle glass doors with care.

- Inspect the gasket to ensure it is undamaged.
- Inspect the glass for cracks, chips or scratches.
- Do NOT strike, slam or scratch glass.
- Do NOT operate appliance with glass door removed, cracked, broken or scratched.
- Replace glass door assembly as a complete assembly.

- Pull the four glass assembly latches out of the groove on the glass frame. See Figure 12.3

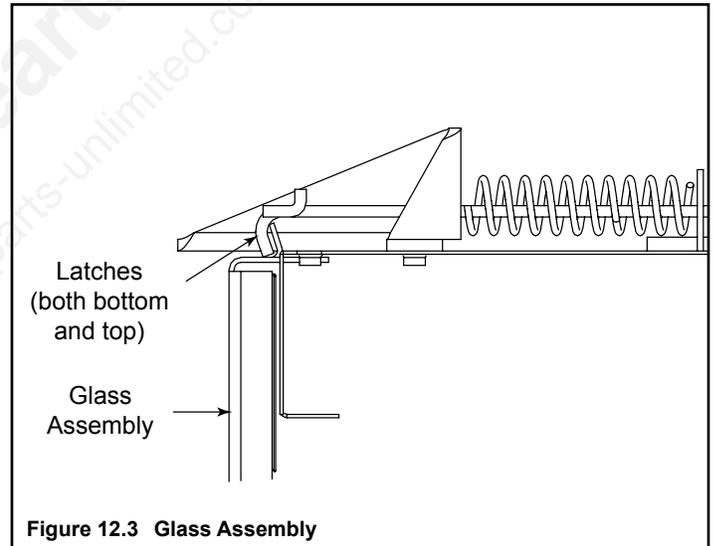


Figure 12.3 Glass Assembly

- Remove the glass panel from the appliance.
- Lay aside on a nonabrasive surface.

C. Logs

Logs are factory installed.



Figure 12.4 Log Set

D. Place Lava Rock, Rockwool

 **WARNING**

Explosion Risk

- Follow rockwool placement instructions in this manual.
- Do NOT place rockwool directly over burner ports.
- Replace rockwool material annually.

Improperly placed rockwool interferes with proper burner operation.

- Place the lava rock in front of air slots and to the areas left and right of burner pan. See Figure 12.5.



Figure 12.5 Placement of Lava Rock

- Place a small amount of 1/2 in. (13 mm) diameter pieces (dime-size) of rockwool on the burner pan so that the rockwool touches but does not cover the holes in the burner pan. This will provide the “glowing embers” look. It is not necessary to use the entire bag. Save the remaining rockwool for future use. See Figure 12.6.

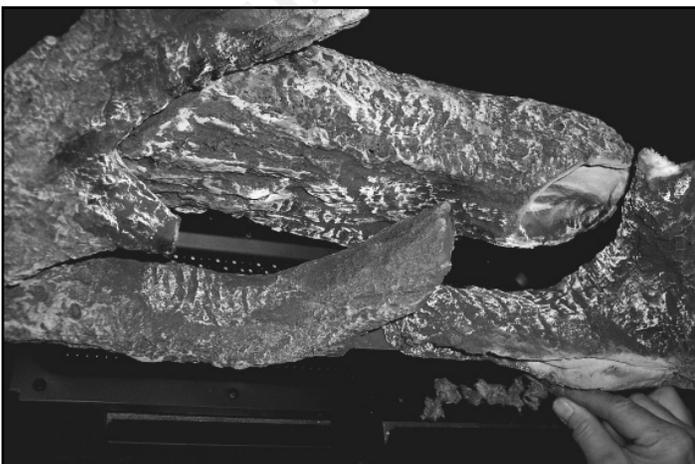


Figure 12.6 Placement of Rockwool

E. Replace Glass

- Replace the glass assembly on the lower access latches and rotate the upper portion of the glass assembly into place. Engage the top access latches. Engage lower access latches.

F. Install Surround Legs

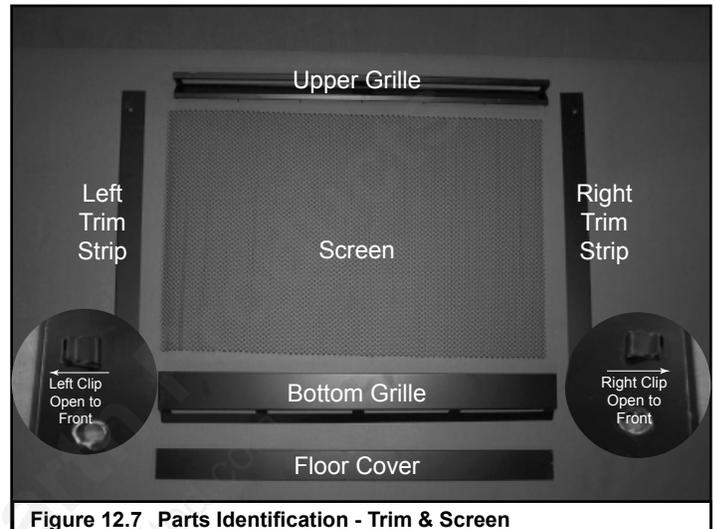


Figure 12.7 Parts Identification - Trim & Screen

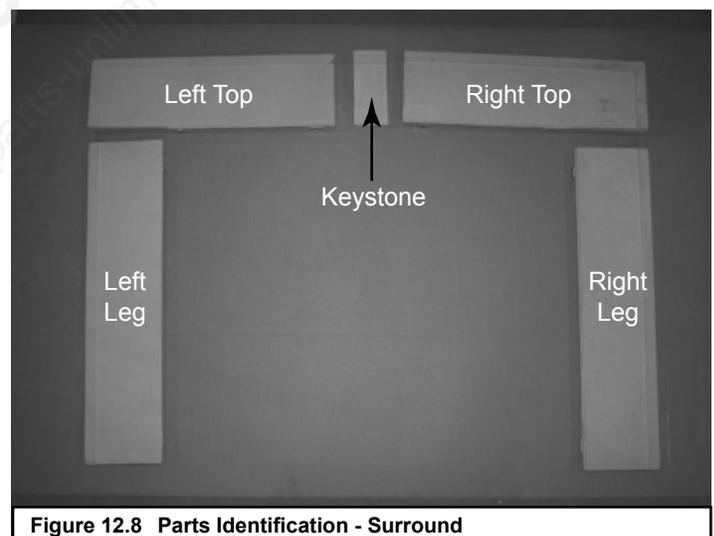


Figure 12.8 Parts Identification - Surround

- Locate and attach left and right trim strips (see Figure 12.7 for parts identification) using four #10 x 1 in. screws from fastener pack. See Figure 12.9.



Figure 12.9 Attach Side Trim Strips

- Engage screws only a few threads; trim strips must remain loose at this time.
- Wipe any dust from backs of surround pieces and wall around appliance opening with a clean cloth.
- Apply a 1/4 in. diameter bead of high temperature, silicone caulking approximately 1 in. from the outside edge of the surround piece, on top and side flanges of appliance. See Figure 12.10

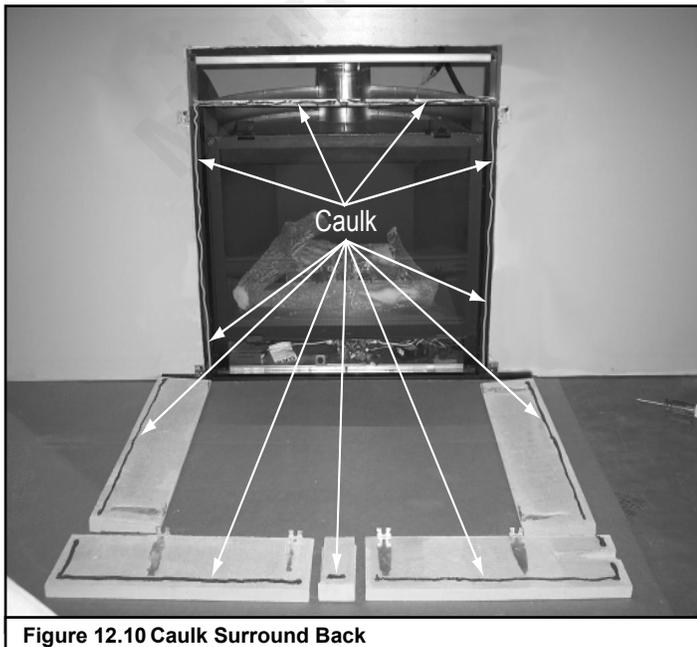


Figure 12.10 Caulk Surround Back

- Mount left leg to appliance by holding back trim strips and engaging tabs in surround brackets with screws holding trim strips. See Figure 12.11

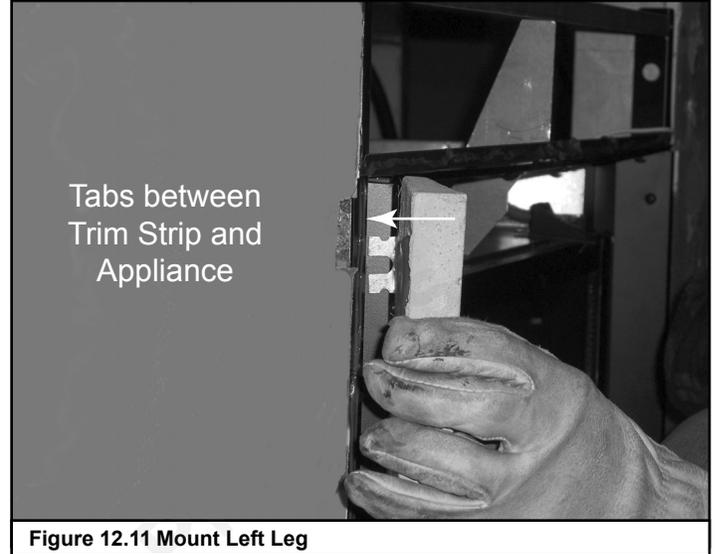


Figure 12.11 Mount Left Leg

- Gently press surround against wall. Adjust trim strip so edge is in the groove in the surround edge.
- Tighten screws holding trim strip. See Figure 12.12.

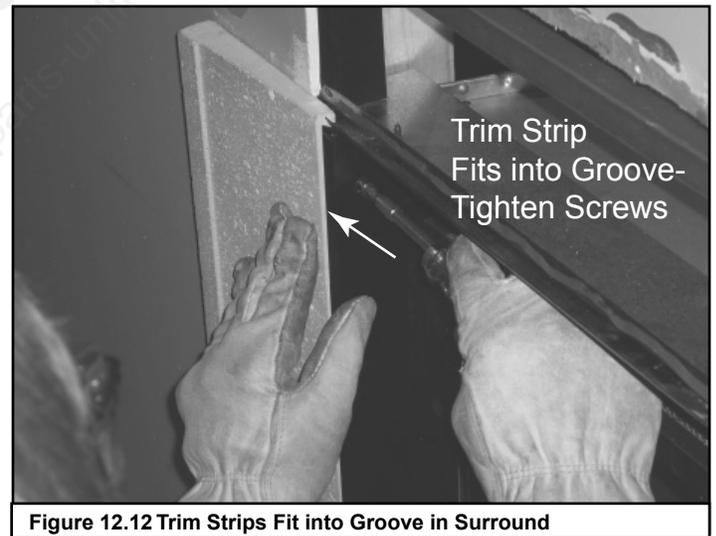


Figure 12.12 Trim Strips Fit into Groove in Surround

- Repeat with right leg.

G. Install Surround Top

- Apply 1/4 in bead of high temperature silicone caulking approximately 1 in. from the outside edge of both top surround pieces. Refer to Figure 12.10. Do not get caulking in switch channel of right top surround.
- Mount left top surround by engaging slots in brackets with screws holding top trim strip.
- Gently press surround against wall while aligning edge of top surround with edge of surround leg.
- Adjust trim strip so edge is in the groove in surround edge.
- Tighten only the outside screw to temporarily hold surround in place. Edges on surround top and surround leg may not match up at this time, adjustments will be made later.
- Hold right surround top close to appliance and snap off/on switch in slot on back side of surround. Run switch wire down to end of channel and hold in place with a piece of heat resistant tape (not provided). See Figures 12.13 and 12.14.

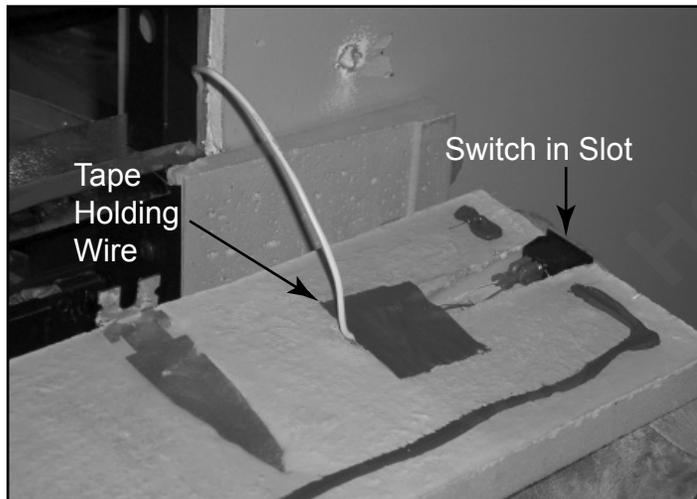


Figure 12.13 Place Switch in Slot, Tape on Wire

- Mount right top surround to appliance in the same matter as left top surround, aligning outside edges of the surround top and leg.
- Gently press surround to wall and tighten both outside and inside screws of both top surround pieces.
- Dry fit the keystone piece. If it fits, proceed to the next stop. If it does not, minor adjustments can be made by loosening screws on surround pieces and gently adjusting them in or out, left or right until all edges match and keystone fits. Apply 1/4 in. diameter bead of high temperature silicone caulking to backside of keystone approximately 1 in. from the top edge and gently place keystone in place.

H. Install Floor Cover

Place floor cover (painted side up) as shown in Figure 12.14.



Figure 12.14 Place Floor Cover

I. Grilles and Screen

- Lay top grille face down so the thin tabs are pointing up.
- Spread screen out next to the tab side of the grille.
- Starting with one corner of the screen, thread the first loop of the screen over the first tab on top grille and continue threading the screen over tabs along edge of top grille. Adjust screen so it lays evenly (not bunched or too tight between tabs).

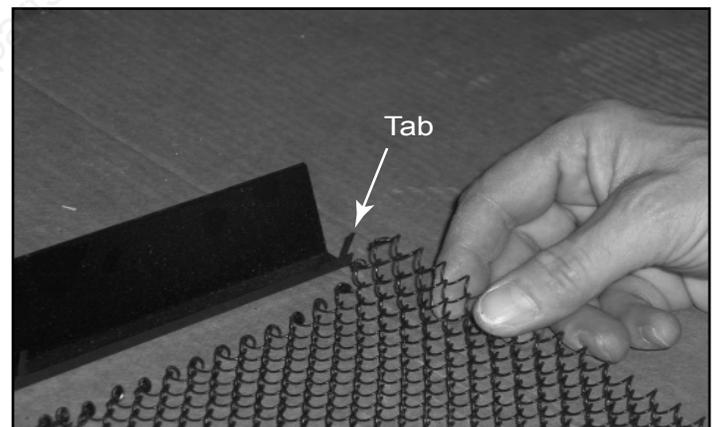


Figure 12.15 Lay Out Screen

- Bend tabs 90 degrees away from the screen with needle nose pliers to secure the screen to top grille. See Figure 12.16.

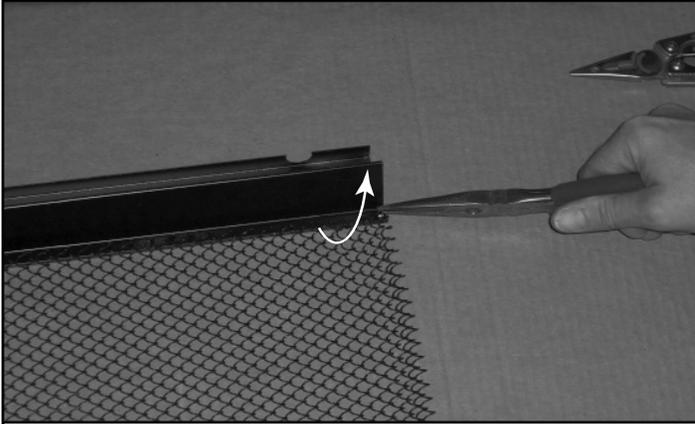


Figure 12.16 Bend Tabs to Hold Screen

- Slip the top lip of top grille into the four formed clips on the top surround trim piece. See Figure 12.17.



Figure 12.17 Attach Top Grille

- Attach the bottom grille by aligning slots of bottom grille with the formed clips on surround trim strips. See Figure 12.18. Push in on grille to engage clips.

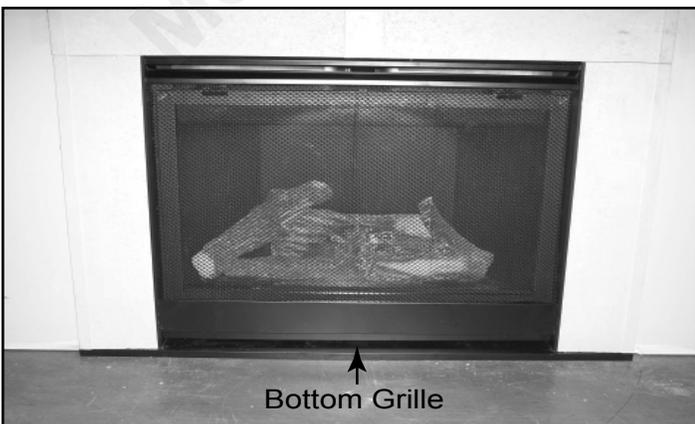


Figure 12.18 Attach Bottom Grille

J. Air Shutter Setting

This appliance has an adjustable air shutter (which controls the primary air) that can be accessed under the valve compartment located under the firebox assembly (Figure 12.19). The air shutter is factory set for the minimum vertical vent run. If your installation has more than the minimum required vertical vent length, adjustment of the air shutter may be necessary to obtain optimal flame appearance. **This should be adjusted by a qualified installer at the time of installation.**



Figure 12.19 Air Shutter

Note: Do not force thumb screw - air shutter slide could be damaged!

In the event of soot accumulation inside your appliance, the air shutter should be opened further. When the shutter adjustment handle is all the way **down**, the air shutter is in the open position. When the shutter adjustment handle is all the way **up**, the air shutter is in the fully closed position.

13 Operating Instructions

A. Before Lighting Appliance

Before lighting this appliance, determine if it has a standing pilot or Intellifire ignition system by opening the control access panel to view wiring system and gas valve. If this appliance has a red or black ignitor button (See Figure 10.1) this appliance has a standing pilot ignition system. If there is no red or black ignitor button, this appliance has an Intellifire ignition system.

CAUTION

If installing Intellifire Ignition battery backup:

- Do not install batteries if the backup mode may not be used for extended time.
- Batteries may leak.
- Install batteries only when needed for power outage.

Before operating this appliance, have a qualified technician:

- Verify all shipping materials have been removed from inside and/or underneath the firebox.
- Review proper placement of logs, rockwool, lava rock and vermiculite.
- Check the wiring.
- Check the air shutter adjustment.
- Ensure that there are no gas leaks.
- Ensure that the glass is sealed and in the proper position.
- Ensure that the flow of combustion and ventilation air is not obstructed (front grilles and vent caps).



WARNING

Fire Risk Asphyxiation Risk

Glass door **MUST** be in place when appliance is operating. Do NOT operate appliance with glass door removed.

- Open viewing glass for servicing only.
- Glass door **MUST** be in place and sealed before operating appliance.
- Only use glass doors certified for use with the appliance.
- Glass replacement should be done by qualified technician.



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 appliance.
 - Alert children and adults to hazards of high temperatures.
- High temperatures may ignite clothing or other flammable materials.**
- Keep clothing, furniture, draperies and other combustibles 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.

WARNING

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

WARNING

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

B. Lighting the Appliance

Intellifire Ignition



FOR YOUR SAFETY READ BEFORE LIGHTING

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

- A. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
- B. 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.
- WHAT TO DO IF YOU SMELL GAS**
- Do not try to light any appliance.
 - Do not touch any electric 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.
- C. If you cannot reach your gas supplier, call the fire department.
- D. Use only your hand to push in and move the gas control valve or turn the gas control knob. Never use tools. If the lever or knob will not move by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- E. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above on this label.
2. Turn wall switch to the "OFF" position or thermostat to the lowest setting.
3. Turn off all electric power to the appliance.
4. This appliance is equipped with an ignition device which automatically lights the pilot. Do NOT try to light the pilot by hand.
5. Wait five minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
6. To turn on the burner, turn on all electric power to this appliance and turn on the wall switch or set the thermostat to the desired setting.
7. If the appliance will not operate, follow the instructions "TO TURN OFF GAS TO APPLIANCE" and call your service technician or gas supplier.

TO TURN OFF GAS TO APPLIANCE

1. Turn off wall switch or set thermostat to lowest setting.
2. Turn off all electric power to the appliance if service is to be performed.
3. Push the gas control lever in and move to the "OFF" position or push the gas control lever to the "OFF" position. Do not force.
4. Replace the control access panel.

Due to high surface temperatures, keep children, clothing and furniture away.
Keep burner and control compartment clean. See installation and operating instructions accompanying the appliance.

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

This appliance must be installed in accordance with local codes, if any; if not, follow ANSI Z223.1 or, in Canada, current CAN/CGA-B149.

This appliance must be properly connected to a venting system in accordance with the manufacturer's installation instructions.

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with the appliance. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

CAUTION: Hot while in operation. Do not touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.

WARNING RISK OF FIRE

This appliance is intended to burn a specified gas fuel only. Do not attempt to use with solid wood fuel or another type of fuel. Do not attempt to modify or use any other type of gas burner system.

WARNING: Disconnect the electric power before servicing. If for any reason the original wire supplied with the appliance must be replaced, it must be replaced with 105° C or its equivalent.

For use with natural gas or propane. A conversion kit as supplied by the manufacturer shall be used to convert this appliance to the alternative fuel.

- * Also certified for installation in a bedroom or a bed-sitting room.
- * For U.S. only!

NATURAL GAS

Standing Pilot Ignition

○ FOR YOUR SAFETY READ BEFORE LIGHTING

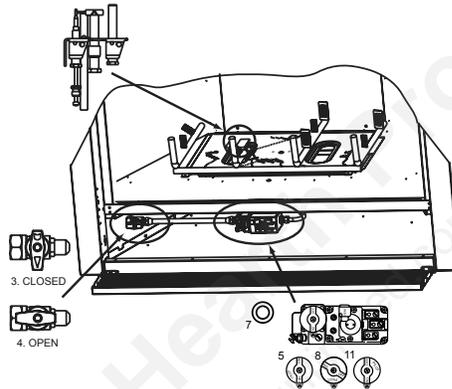
WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. BEFORE LIGHTING smell 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.
 - WHAT TO DO IF YOU SMELL GAS
 - Do not try to light any appliance.
 - Do not touch any electric 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.
- C. Use only your hand to push in or turn knob. Never use tools. If the manual gas valve will not push in or turn by hand, don't try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

Stop! Read the safety information above on this label.

1. Turn wall switch to the "OFF" position or thermostat to the lowest setting.
 2. Remove control access panel.
 3. Turn manual gas valve to CLOSED. Wait five [5] minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to next step.
 4. Turn gas line to "OPEN".
 5. Turn pilot knob clockwise to "OFF". (Knob may have to be depressed to pass "PILOT" position.)
 6. Locate pilot assembly inside appliance.
 7. Locate red ignitor button.
 8. Turn pilot knob to "PILOT" and push in.
 9. Continue to hold in pilot knob and push the red ignitor button 12-15 times until small blue pilot flame appears.
 10. Continue to hold in pilot knob for approximately one minute. Pilot should remain lit. If pilot goes out, wait 5 minutes and repeat Steps 3-9.
 11. Release and turn knob counterclockwise to "ON".
 12. If appliance will not operate, follow the instructions "TO TURN OFF GAS TO APPLIANCE" and call your service technician or gas supplier.
- NOTE: To light main burner, turn wall switch to "ON". Do not light by hand.



TO TURN OFF GAS TO APPLIANCE

1. Turn off wall switch or set thermostat to lowest setting.
2. Remove control access panel.
3. Turn manual gas valve to "CLOSED" position. Do not force.
4. Replace control access panel.

Due to high surface temperatures, keep children, clothing and furniture away. Keep burner and control compartment clean. See installation and operating instructions accompanying the appliance.

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This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

This appliance must be installed in accordance with local codes, if any; if not, follow ANSI Z223.1 or, in Canada, current CAN/CGA-B149.

This appliance must be properly connected to a venting system in accordance with the manufacturer's installation instructions.

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with the appliance. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

CAUTION: Hot while in operation. Do not touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.

WARNING RISK OF FIRE

This appliance is intended to burn a specified gas fuel only. Do not attempt to use with solid wood fuel or another type of fuel. Do not attempt to modify or use any other type of gas burner system.

WARNING: Disconnect the electric power before servicing. If for any reason the original wire supplied with the appliance must be replaced, it must be replaced with 105° C or its equivalent.

For use with natural gas or propane. A conversion kit as supplied by the manufacturer shall be used to convert this appliance to the alternative fuel.

- * Also certified for installation in a bedroom or a bed-sitting room.
- * For U.S. only!

NATURAL GAS

C. After the Appliance is Lit

Initial Break-in Procedure

When you light the appliance, you may notice that it produces heat which does have an associated odor or smell. If you feel this odor is excessive it may require the initial three to four hour continuous burn followed by a second burn up to 12 hours to fully drive off any odor from paint and lubricants used in the manufacturing process. Condensation of the glass is normal

Note: This appliance should be run three to four 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 12 hours. This will help 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.

CAUTION

- Prevent accidental appliance operation when not attended.
- Unplug or remove batteries from remote control if absent or if appliance will not be used for an extended period of time.
- Property damage possible from elevated temperatures.

CAUTION

Smoke and odors are released during initial operation.

- Open windows for air circulation.
- Leave room during initial operation.
- Smoke may set off smoke detectors.

Smoke and odors may be irritating to sensitive individuals.



WARNING

Fire Risk High Temperatures

Keep combustible household items away from appliance.

Do NOT obstruct combustion and ventilation air.

- Do NOT place combustible items on top of or in front of appliance.
- Keep furniture, draperies away from appliance.



WARNING

Fire Risk

Keep combustible materials, gasoline and other flammable vapors and liquids clear of appliance.

- Do NOT store flammable materials in the vicinity of the appliance.
- Do NOT use gasoline, lantern fuel, kerosene, charcoal lighter fluid or similar liquids in this appliance.

Combustible materials may ignite.

D. Frequently Asked Questions

Issue	Solutions
1. Condensation on the glass.	1. This is a result of gas combustion and temperature variations. As the appliance warms, this condensation should disappear.
2. Blue flames.	2. This is a result of normal operation and the flames will begin to yellow as the appliance is allowed to burn for 20-40 minutes.
3. Odor from appliance.	3. When first operated, this appliance may release an odor for the first several hours. This is caused by the curing of the paint and the burning off any oils remaining from manufacturing.
4. Film on the glass.	4. This is a normal result of the curing process of the paint and logs. Glass should be cleaned within 3-4 hours of initial burning to remove deposits left by oils from the manufacturing process. A non-abrasive cleaner such as a gas fireplace glass cleaner may be necessary. See your dealer.
5. Metallic noise.	5. Noise is caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of the appliance.
6. Is it normal to see the pilot flame burn continually?	6. In an Intellifire ignition system it is normal to see the pilot flame, but it should turn off when ON/OFF switch is turned off. In a standing pilot system the pilot will always stay on.

14 Troubleshooting

With proper installation, operation and maintenance your gas appliance will provide years of trouble-free service. If you do experience a problem, this troubleshooting guide will assist a qualified service person in the diagnosis of a problem and the corrective action to be taken. This troubleshooting guide can only be used by a qualified service technician.

A. Standing Pilot Ignition System

Symptom		Possible Causes		Corrective Actions
1.	After repeated triggering of the red or black piezo ignitor button, the spark ignitor will not light the pilot.	A.	Defective ignitor.	Check the spark at the electrode and pilot. If there is no spark and the electrode wire is properly connected, replace the ignitor.
		B.	Defective pilot or misaligned electrode (spark at electrode).	Using a match, light the pilot. If the pilot lights, turn off the pilot and trigger the red piezo ignitor button again. If the pilot lights, an improper gas/air mixture or black caused the bad lighting and a longer purge period is recommended. If the pilot will not light, ensure the gap at the electrode and pilot is 1/8 in. to have a strong spark. If the gap is OK, replace the pilot.
		C.	No gas or low gas pressure.	Check the remote shut-off valves from the appliance. There is usually a valve near the gas main. There can be more than one valve between the appliance and the main.
		D.	No LP in tank.	Check the LP (propane) tank. You may be out of fuel.
2.	The pilot will not stay lit after carefully following the lighting instructions	A.	Defective thermocouple.	Check that the pilot flame impinges on the thermocouple. Clean and/or adjust the pilot for maximum flame impingement. Ensure that the thermocouple connection at the gas valve is fully inserted and tight (hand tighten plus 1/4 turn). Disconnect the thermocouple from the valve, place one millivolt meter lead wire on the tip of the thermocouple and the other meter lead wire on the thermocouple copper lead. Start the pilot and hold the valve knob in. If the millivolt reading is less than 15mV, replace the thermocouple.
		B.	Defective valve.	If the thermocouple is producing more than 15 millivolts, replace faulty valve.
3.	The pilot is burning, there is no gas burning, the valve knob is in the ON position, and the ON/OFF switch is in the ON position.	A.	ON/OFF switch or wires are defective.	Check the ON/OFF switch and wires for proper connections. Place the jumper wires across the terminals at the switch. If the burner comes on, replace the defective switch. If the switch is OK, place the jumper wires across the switch wires at the gas valve. If the burner comes on, the wires are faulty or connections are bad.
		B.	Thermopile may not be generating sufficient millivoltage.	If the pilot flame is not close enough physically to the thermopile, adjust the pilot flame. Be sure the wire connections from the thermopile at the gas valve terminals are tight and that the thermopile is fully inserted into the pilot bracket. Check the thermopile with a millivolt meter. Take the reading at TH-TP&TP terminals of the gas valve. The meter should read 325 millivolts minimum while holding the valve knob depressed in the pilot position, with the pilot lit, and the ON/OFF switch in the OFF position. Replace the faulty thermopile if the reading is below the specified minimum. With the pilot in the ON position, disconnect the thermopile leads from the valve. Take a reading at the thermopile leads. The reading should be 325 millivolts minimum. Replace the thermopile if the reading is below the minimum.
		C.	Defective valve.	Turn the valve knob to the ON position. Place the ON/OFF switch in the ON position. Check the millivolt meter at the thermopile terminals. The millivolt meter should read greater than 125mV. If the reading is acceptable, and if the burner does not come on, replace the gas valve.
		D.	Plugged burner orifice.	Check the burner orifice for stoppage. Remove stoppage.
		E.	Wall switch or wires are defective.	Follow the corrective action in Symptom and Possible Cause 1.A. above. Check the switch and wiring. Replace where defective.

Symptom		Possible Causes		Corrective Actions
4.	Frequent pilot outage problem.	A.	Pilot flame may be too high, too low, or blowing (high), causing pilot safety to drop out.	Clean and adjust the pilot flame for maximum flame impingement on thermocouple. Follow lighting instructions carefully.
5.	The pilot and main burner extinguish while in operation.	A.	No LP in the tank.	Check the LP (propane) tank. Refill the fuel tank.
		B.	Inner vent pipe is leaking exhaust gases back into the system.	Check venting system for damage. Replace/repair improperly assembled pipe sections.
		C.	Glass is too loose and air tight packet leaks in corners after usage.	Replace glass panel assembly.
		D.	Bad thermopile or thermocouple.	Replace if necessary.
		E.	Improper vent cap installation.	Check for proper installation and freedom from debris or blockage.
6.	Glass soots.	A.	Flame impingement.	Adjust the log set so that the flame does not excessively impinge on it.
		B.	Improper air shutter setting.	Adjust the air shutter located on the control panel.
		C.	Debris around air shutter.	Inspect the opening at the base of the burner. NO MATERIAL SHOULD BE PLACED IN THIS OPENING.
7.	Flame burns blue and lifts off burner.	A.	Insufficient oxygen being supplied.	Ensure that the vent cap is installed properly and free of debris. Ensure that the vent system joints are tight and have no leaks. Ensure that no debris has been placed at the base of, or in the area of the air holes in the center of, the base pan beneath the burner. Ensure that the glass is tightened properly on the appliance, particularly on top corners.

B. Intellifire Ignition System

Symptom		Possible Causes		Corrective Actions
1.	The ignitor/module makes noise, but no spark.	A.	Incorrect wiring.	Verify "S" wire (white) for sensor and "I" wire (orange) for ignitor are connected to the correct terminals on the module and the pilot assembly. Reversed wires at the module may cause the system to make a sparking noise, but the spark may not be present at pilot hood.
		B.	Loose connections or electrical shorts in the wiring.	Verify there are no loose connections or electrical shorts in wiring from module to pilot assembly. The rod closest to the pilot hood should be ignitor. Verify connections underneath pilot assembly are tight; also verify the connections are not grounding out to the metal chassis, pilot burner, pilot enclosure, mesh screen if present, or any other metal object.
		C.	Ignitor gap is too large.	Verify gap of ignitor to pilot hood. The gap should be approximately .17 in. or 1/8 in.
		D.	Faulty module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place ON/OFF rocker switch or wall switch in ON position. Hold ground wire about 3/16 in. away from "I" terminal on module. If there is no spark at "I" terminal, module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode.
2.	Pilots won't light, there is no noise or spark.	A.	Transformer installed incorrectly.	Verify that transformer is installed and plugged into module. Check voltage of transformer under load at space connection on module with ON/OFF switch in ON position. Acceptable readings of a good transformer are between 3.2 and 2.8 volts AC.
		B.	A shorted or loose connection in wiring configuration or wiring harness.	Remove and reinstall the wiring harness that plugs into module. Verify there is a tight fit. Verify pilot assembly wiring to module. Remove and verify continuity of each wire in wiring harness.
		C.	Improper wall switch wiring.	Verify wall switch is wired correctly.
		D.	Module not grounded.	Verify black ground wire from module wire harness is grounded to metal chassis of appliance.
		E.	Faulty module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place ON/OFF rocker switch or wall switch in ON position. Hold ground wire about 3/16 in. away from "I" terminal on module. If there is no spark at "I" terminal, module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode.
3.	Pilot lights but continues to spark, and main burner will not ignite. (If the pilot continues to spark after the pilot flame has been lit, flame rectification has not occurred.)	A.	A shorted or loose connection in sensor rod.	Verify all connections to wiring diagram in manual. Verify connections underneath pilot assembly are tight. Verify connections are not grounding out to metal chassis, pilot burner, pilot bracket/enclosure or screen if present, or any other metal object.
		B.	Poor flame rectification or contaminated sensor rod.	Verify flame is engulfing sensor rod. If the pilot assembly does not have a ground strap, consider installing one to increase flame rectification. Verify correct pilot orifice is installed and inlet gas specifications are met. Flame carries rectification current, not the gas. If flame lifts from pilot hood, the circuit is broken. A wrong orifice or too high an inlet pressure can cause pilot flame to lift. The sensor rod may be contaminated. Clean sensor rod with emery cloth.
		C.	Module is not grounded.	Verify that module is securely grounded to metal chassis of appliance. Verify that the wire harness is firmly connected to module.
		D.	Damaged pilot assembly or dirty sensor rod.	Verify that ceramic insulator around the sensor rod is not cracked, damaged, or loose. Verify connection from sensor rod to white sensor wire. Clean sensor rod with emery cloth to remove any contaminants that may have accumulated on sensor rod. Verify continuity with a multimeter with ohms set at lowest range.
		E.	Faulty module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place ON/OFF rocker switch or wall switch in ON position. Hold ground wire about 3/16 in. away from "I" terminal on module. If there is no spark at "I" terminal, module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode.

Symptom		Possible Causes		Corrective Actions
4.	Pilot sparks, but pilot will not light.	A.	Correct gas supply.	Verify that incoming gas line ball valve is "open". Verify that inlet pressure reading is within acceptable limits, inlet pressure must not exceed 14 in. w.c.
		B.	Ignitor gap is too large.	Verify that spark gap from ignitor to pilot hood is .17 in. or 1/8 in.
		C.	Module is not grounded.	Verify module is securely grounded to metal chassis of appliance.
		D.	Module voltage output/valve/pilot solenoid ohms readings.	Replace module.

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15 Maintaining and Servicing the Appliance

Although the frequency of appliance servicing and maintenance will depend on use and the type of installation, a qualified service technician should perform an appliance check-up at the beginning of each heating season.

WARNING

Risk of injury or property damage

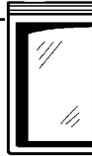
Before servicing:

- Turn off gas.
- Turn off electricity to appliance.
- Disable remote control, if one is present.
- Ensure appliance is completely cooled.

After Servicing:

- Replace any screen or barrier that was removed.
- Reseal and reinstall any venting removed for servicing.

CAUTION



Handle glass assembly with care.

Note: Clean glass after initial 3-4 hours operation. **Longer operation without cleaning glass may cause a permanent white film on glass.**

When cleaning glass door:

- Avoid striking, scratching or slamming doors.
 - Do NOT use abrasive cleaners.
 - Use a hard water deposit glass cleaner on white film.
 - Do NOT clean glass when it is hot.
 - Turn off appliance after 3-4 hours of operation and ALLOW TO COOL.
 - Remove and clean glass assembly.
 - Replace glass assembly and operate appliance for an additional 12 hours.
- Refer to maintenance instructions.

WARNING



Annual inspection by qualified technician recommended.

Check:

- Condition of doors, surrounds and fronts.
- Condition of glass, glass assembly and glass seal.
- Obstructions of combustion and ventilation air.
- Condition of logs.
- Condition of firebox.
- Burner ignition and operation.
- Burner air shutter adjustment.
- Gas connections and fittings.
- Obstructions of termination cap.

Clean:

- Glass.
- Air passageways, grilles, control compartment.
- Burner, burner ports.

Risk of:

- Fire
- Delayed ignition or explosion
- Exposure to combustion fumes
- Odors



WARNING



Fire Risk

Explosion Risk

Inspect external vent cap regularly.

- Ensure no debris blocks cap.
- Combustible materials blocking cap may ignite.
- Restricted air flow affects burner operation.



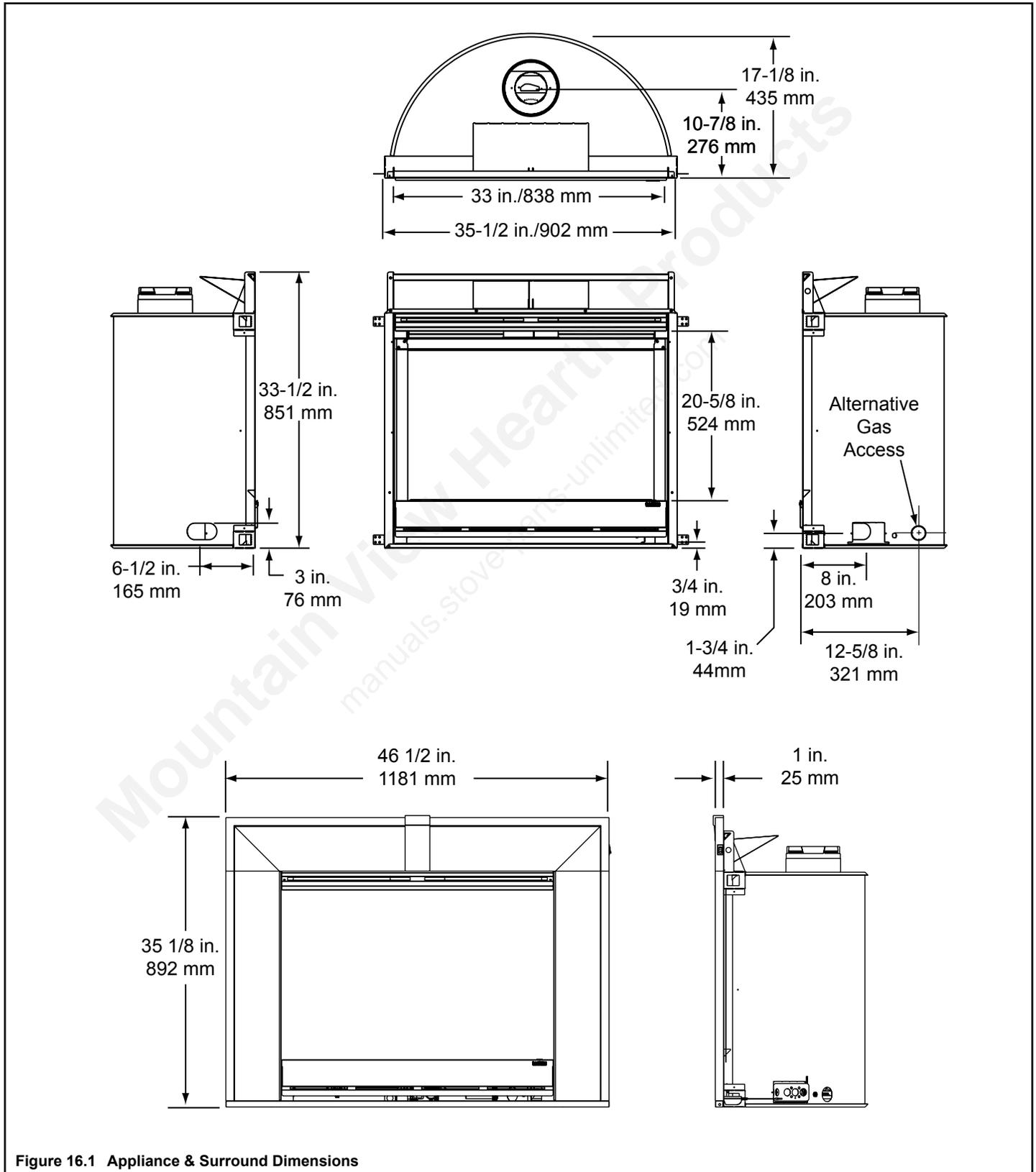
Maintenance and Service Tasks:

Inspect	Maintenance Tasks
Doors, surrounds and fronts	<ol style="list-style-type: none"> 1. Access condition of screen and replace as necessary. Recommend addition of screen if one is not present. 2. Inspect for scratches, dents or other damage and repair as necessary. 3. Verify no obstructions to airflow through the louvers. 4. Verify proper clearance to combustible household objects is maintained.
Gasket seal, glass assembly and glass	<ol style="list-style-type: none"> 1. Inspect gasket seal and its condition. 2. Inspect glass panels for scratches and nicks that can lead to breakage when exposed to heat. 3. Confirm there is no damage to glass or glass frame. Replace as necessary. 4. Verify that latches engage properly, clip studs are not stripped, and glass attachment components are intact and operating properly. Replace as necessary. 5. Clean glass using a nonabrasive cleaner such as Brasso®. Replace glass assembly if severely coated with silicate deposits that cannot be removed.
Valve compartment and firebox top	<ol style="list-style-type: none"> 1. Vacuum and wipe out dust, cobwebs, debris or pet hair. Use caution when cleaning these areas. Screw tips that have penetrated the sheet metal are sharp and should be avoided. 2. Remove any foreign objects. 3. Verify unobstructed air circulation.
Logs	<ol style="list-style-type: none"> 1. Inspect for broken, damaged, or missing logs. Replace as necessary. 2. Verify correct log placement and no flame impingement causing sooting. Correct as necessary.
Firebox	<ol style="list-style-type: none"> 1. Inspect for paint condition, warpage, corrosion or perforation. Sand and repaint as necessary. 2. Replace appliance if firebox has been perforated.
Burner ignition and operation	<ol style="list-style-type: none"> 1. Verify burner is properly secured and aligned with pilot or ignitor. 2. Clean off burner top, inspect for plugged ports, corrosion or deterioration. Replace burner if necessary. 3. Replace rockwool with new dime-sized and shaped pieces. Do not block ports or obstruct lighting paths. 4. Check for smooth lighting and ignition carryover to all ports. Verify there is no ignition delay. 5. Inspect for lifting or other flame problems. 6. Verify air shutter is clear of dust and debris. 7. Inspect orifice for soot, dirt or corrosion. 8. Verify manifold and inlet pressures. Adjust regulator as required. 9. Inspect pilot flame strength. Clean or replace orifice as necessary. 10. Inspect thermocouple/thermopile or IPI sensor rod for soot, corrosion and deterioration. Clean with emery cloth or replace as required. 11. Verify millivolt output. Replace as necessary.
Venting	<ol style="list-style-type: none"> 1. Inspect venting for blockage or obstruction such as birds' nests, leaves, etc. 2. Confirm that termination cap remains clear and unobstructed by plants, etc. 3. Verify that termination cap clearance to subsequent construction (building additions, decks, fences or sheds) has been maintained. 4. Inspect for corrosion or separation. 5. Verify weather stripping sealing and flashing remain intact. 6. Inspect draft shield to verify it is not bent, damaged or missing.
Remote controls	<ol style="list-style-type: none"> 1. Verify operation of remote. 2. Replace batteries in remote transmitters and battery-powered receivers. 3. Verify batteries have been removed from battery back-up in IPI systems to prevent premature battery failure or leaking.

16 Reference Materials

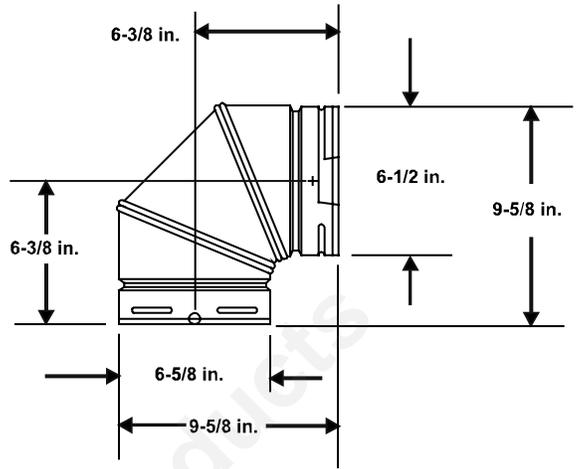
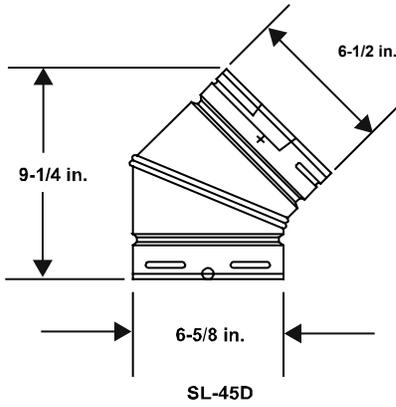
A. Appliance & Surround Dimension Diagram

Dimensions are actual appliance dimensions. Use for reference only. For framing dimensions and clearances refer to Section 3.

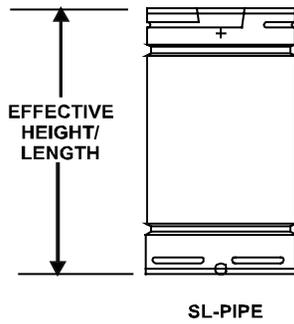


B. Vent Components Diagrams

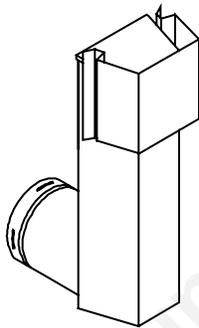
Components	Description
SLK-01TRD	Horizontal Termination Kit (Trapezoid 7 3/4 in.-11 in.) [197mm - 279mm] - Supplied with appliance
SLK-991DA	Vertical Termination Kit
4049-036	Starter Elbow - Supplied with appliance
SL-06D	6 in. [152mm] pipe length
SL-09D	9 in. [229mm] pipe length
SL-12D	12 in. [305mm] pipe length
SL-24D	24 in. [610mm] pipe length
SL-36D	36 in. [914mm] pipe length
SL-48D	48 in. [1219mm] pipe length
SL-12/17D	12 in. - 17 in. [305 - 432mm] Adjustable pipe
SL-17/24D	17 in. - 24 in. [432 - 610mm] Adjustable pipe
SL-45D	45-deg elbow
SL-90D	90-deg elbow
SL-F6D	Roof Flashing 0/12 - 6/12
SL-F12D	Roof Flashing 7/12 - 12/12
SL-FCD	Ceiling Firestop
SL-FWD	Wall Firestop - 1 pair
SL-SCD	Storm Collar
SL-PSD	Pipe Support Strap
SL-WBD	Wall Bracket
SL-HRC-SS	High Rise Termination Cap - unpainted Stainless Steel
SL-HRC-ZC-SS	High Rise Termination Cap - Zero Clearance - unpainted Stainless Steel



SL-90D
4049-036 Starter Elbow



Pipe	Effective Length/Height
SL-06D	5-3/4 in.
SL-09D	8-3/4 in.
SL-12D	11-3/4 in.
SL-12/17D	11-3/4 to 16-3/4 in.
SL-17/24D	16-3/4 to 23-3/4 in.
SL-24D	23-3/4 in.
SL-36D	35-3/4 in.
SL-48D	47-3/4 in.

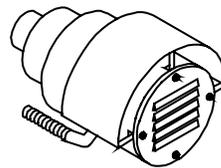


SLK-SNKD
SNORKEL
TERMINATION
CAP*

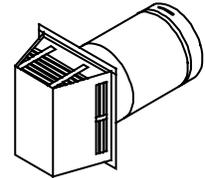
There must be a 25% reduction in total H when using the snorkel cap except when using the simple up and out installation.



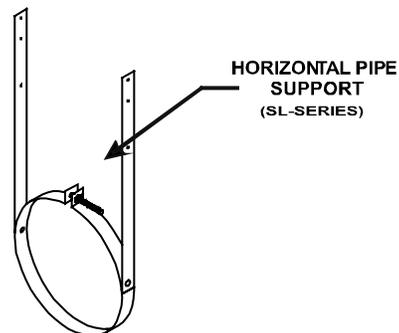
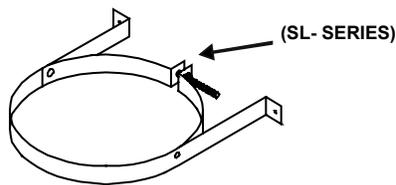
SLK-991DA
VERTICAL
TERMINATION
CAP

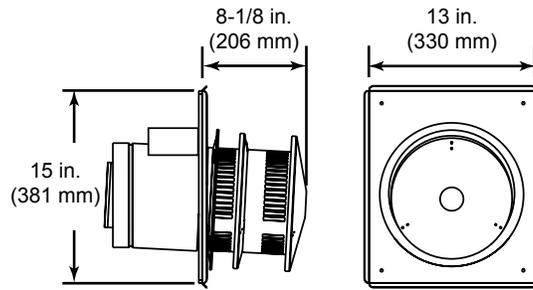


PVK-80
POWER VENT
(For use on Intellifire
appliances only)
(DVP-826 required to use PVK-80
with EHS3633)

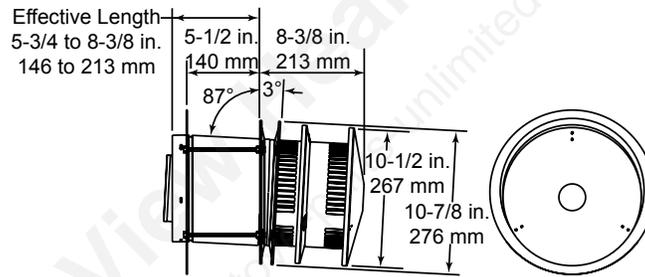


SLK-01TRD
HORIZONTAL
TERMINATION CAP
(Supplied with
appliance)





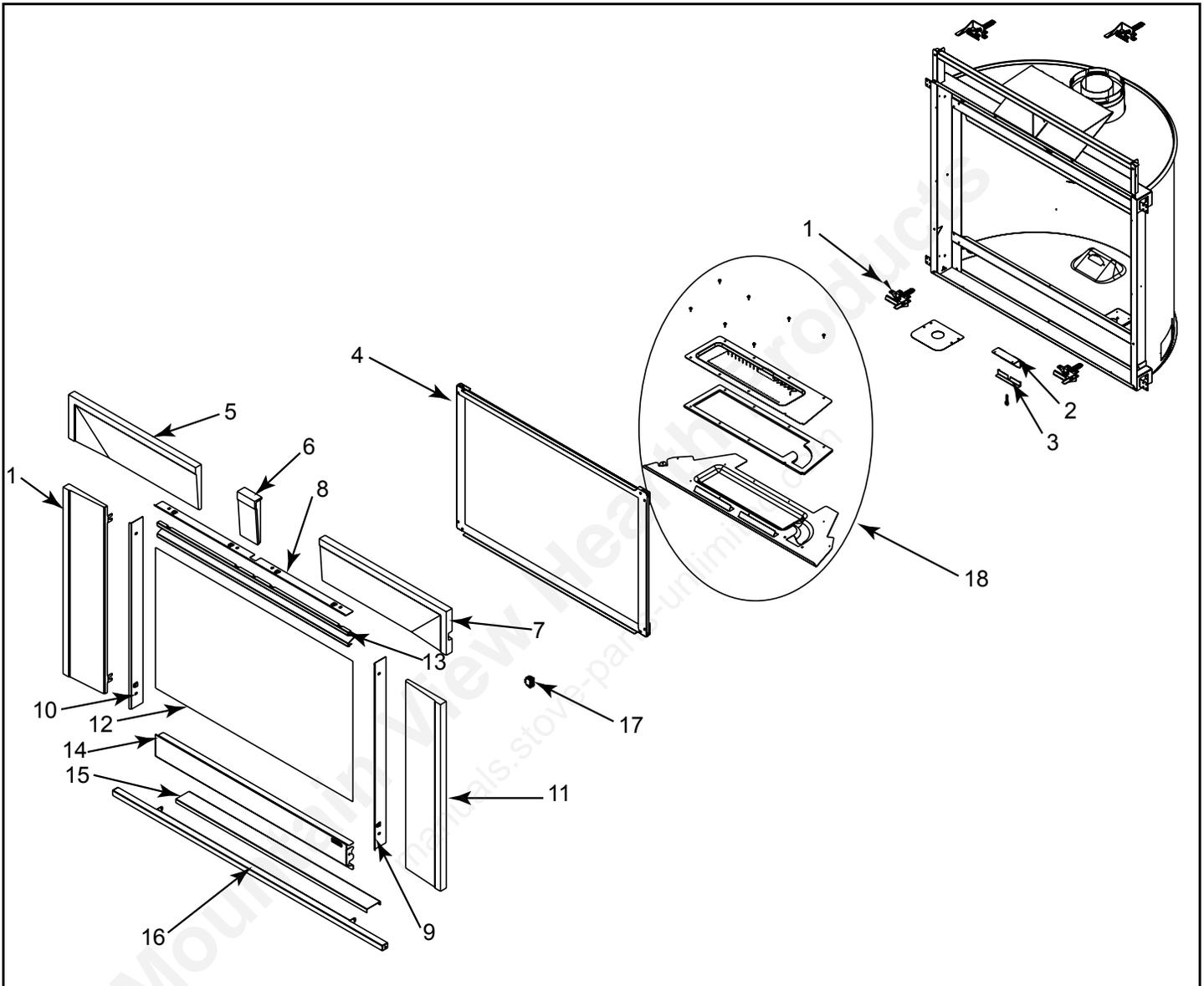
SL-HRC-SS
For use with:
EHS3633, EHS3633I, EHS3633L,
EHS3633IL



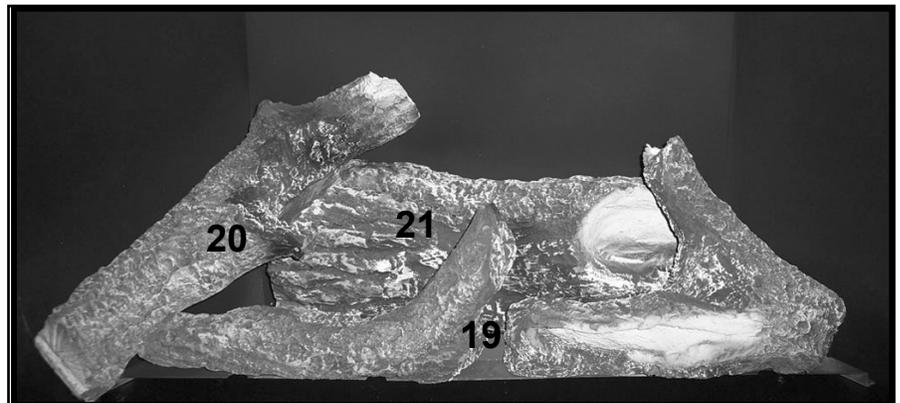
SL-HRC-ZC-SS
For use with:
EHS3633, EHS3633I, EHS3633L,
EHS3633IL

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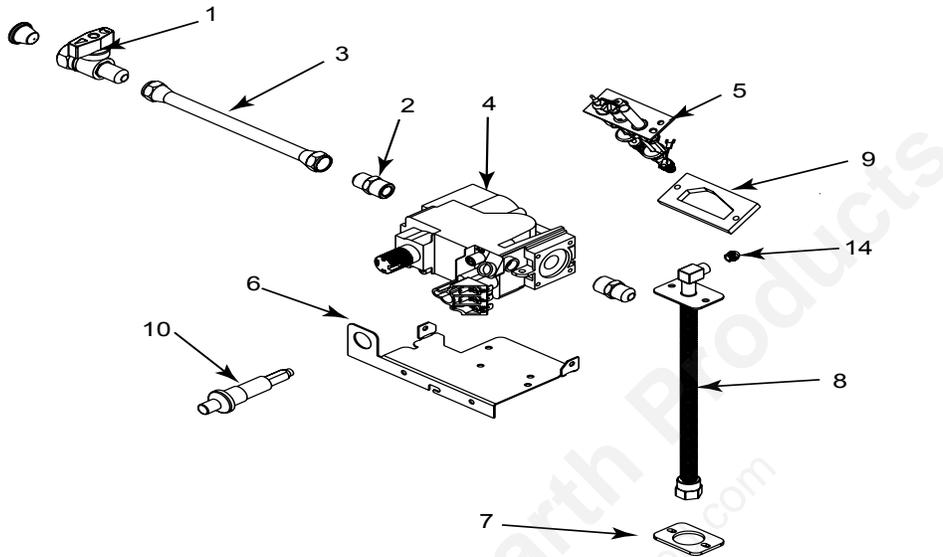
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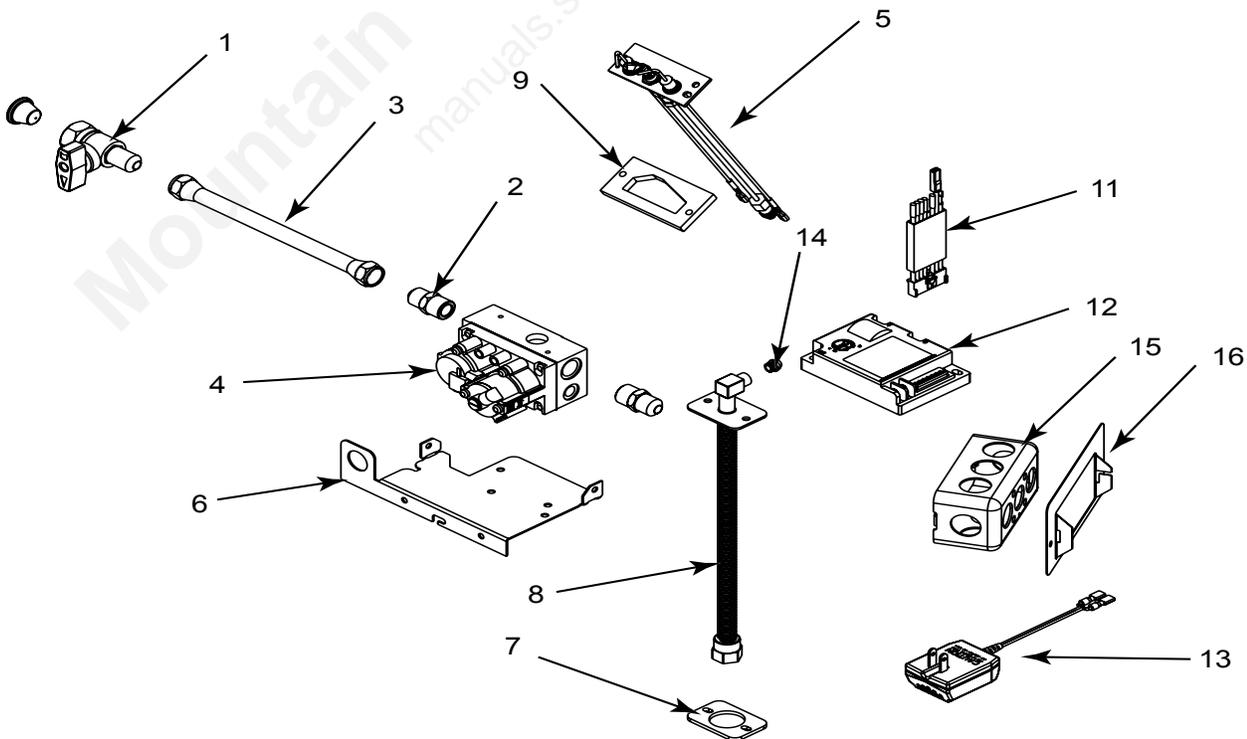
Log Assembly



Standing Pilot Valve Assembly



IPI Valve Assembly



D. Optional Components



Hearth - EHS

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E. Limited Lifetime Warranty



Gas Appliance (Fireplace) Limited Lifetime Warranty

HEARTH & HOME TECHNOLOGIES INC. ("HHT") extends the following warranty for HEATILATOR® gas appliances installed in the United States of America or Canada (the "Appliance"). Dealers and employees of HHT have no authority to make any warranty or authorize any remedies in addition to or inconsistent with the terms of this warranty.

Limited Lifetime Warranty

HHT warrants the Appliance for component failure due to a manufacturing defect of any of the following components: combustion chamber, burner pan, and logs. The Limited Lifetime Warranty specified above is subject to the conditions, exclusions and limitations listed below, is for the period the Appliance is owned by the original homeowner only, and is nontransferable.

1 Year Limited Warranty

HHT warrants the Appliance to be free from failure of any of the following components for a period of one year after installation: valve, flexible gas line connector, glass panel, fan, direct vent chimney components, factory paint, gasket, piezo ignitor, thermopile, thermocouple, junction box, pilot assembly, shutoff valve, high limit switch, refractory liners, transformer, and control box. If the Heatilator Appliance is found to be defective in either material or workmanship within one year of the date of original installation, HHT will provide replacement parts at no charge and pay reasonable labor and freight costs, and is for the period of one year following the date of original installation of the Appliance.

Conditions, Exclusions, & Limitations of Liability

- A. Both the Limited Lifetime and 1 Year Limited Warranties supplied by HHT apply only while the Appliance is in its location of original installation. HHT's obligation under this warranty does not extend to damages resulting from (1) installation, operation or maintenance of the Appliance not in accordance with the Installation Instructions, Operating Instructions, and the Listing Agent Identification Label furnished with the Appliance; (2) installation which does not comply with local building codes; (3) shipping, improper handling, improper operation, abuse, misuse, accident or unworkmanlike repairs; (4) environmental conditions, inadequate ventilation or drafting caused by tight sealing construction of the structure, air handling devices such as exhaust fans or forced air furnaces, or other causes; (5) use of fuels other than those specified in the Operating Instructions; (6) installation or use of components not supplied with the Appliance or any other components not expressly authorized and approved by HHT; and/or (7) modification of the Appliance not expressly authorized and approved by HHT in writing. This warranty is limited to only the component parts manufactured or supplied by HHT.
- B. HHT's liability under both the Limited Lifetime Warranty and the 1 Year Limited Warranty is limited to the replacement and repair of defective components or workmanship during the applicable period. HHT may fully discharge all of its obligations under such warranties by repairing the defective component(s) or at HHT's discretion, providing replacement parts at no charge and paying reasonable labor and freight costs.
- C. **EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE WARRANTY SPECIFIED ABOVE.**
- D. Some states do not allow exclusions or limitations of incidental or consequential damages, so those limitations may not apply to you. This warranty gives you specific rights; you may also have other rights which vary from state to state.

How to Obtain Service

To obtain service under this warranty you must:

1. Send written notice of the claimed condition to Heatilator Technical Service Department, Hearth & Home Technologies, 1915 W. Saunders Street, Mt. Pleasant, Iowa 52641-1563. You may also register your claim online at www.heatilator.com.
2. Provide proof of purchase, model number, serial number, and manufacturing date code to HHT.
3. Provide HHT reasonable opportunity to investigate the claim, including reasonable opportunity to inspect the Appliance prior to any repair or replacement work and before the Appliance or any component of the Appliance has been removed from the place of original installation.
4. Obtain HHT's consent to any warranty work before the work is done.

ADDITIONAL INFORMATION:

If you would like information on current HEATILATOR products or want to locate a dealer in your area, call 1-800-927-6841.

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