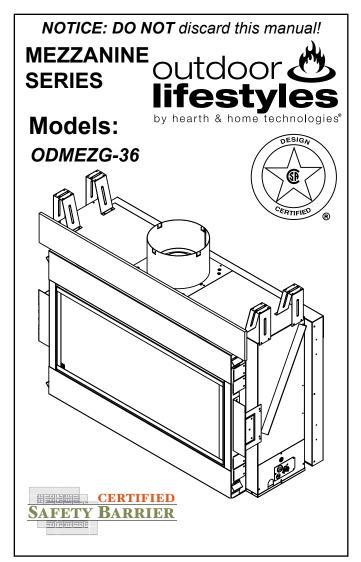
# Installation Manual Installation and Appliance Setup

INSTALLER: Leave this manual with party responsible for use and operation. OWNER: Retain this manual for future reference.



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* in the United States, or the *Standard for Installation in Mobile Homes, CAN/CSA Z240 MH Series,* in Canada.

This appliance is only for use with the type(s) of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

## WARNING:

FIRE OR EXPLOSION HAZARD Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

- **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.
  - Leave the building immediately.
  - 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.



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.

#### A Safety Alert Key:

- DANGER! Indicates a hazardous situation which, if not avoided will result in death or serious injury.
- WARNING! Indicates a hazardous situation which, if not avoided could result in death or serious injury.
- CAUTION! Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
- NOTICE: Used to address practices not related to personal injury.

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## Installation Standard Work Checklist

installation manual. Customer: Lot/Address:	Standard Work Checklist     Istaller in conjunction with, not instead of, the instructions contained in th     Date Installed:     Location of Fireplace:     Installer:     Dealer/Distributor Phone # Serial #:	
Model (circle one): ODMEZG-36		
<b>WARNING! Risk of Fire or Explosion!</b> Failure to in lead to a fire or explosion.	istall appliance acc	ording to these instructions could
Appliance Install Sections 3 and 6 (Pg. 7 & 27) Verified that the chase is insulated and sealed. Required non-combustible board is installed.	YES	IF NO, WHY?
Verified clearances to combustibles. Fireplace is leveled and secured.		
Venting/Chimney Sections 4,5 and 7 (Pg. 11, 23 & 29) Venting configuration complies to vent diagrams. Venting installed, locked, and secured in place with proper clearance Firestops installed. (Section 5) Attic insulation shield installed. Exterior wall/Roof flashing installed and sealed. (Section 7) Terminations installed and sealed. (Section 7)		
<u>Electrical</u> Section 8 (Pg 35) Unswitched power (110-120 VAC) provided to the appliance. Switch wires properly installed.		
<b>Gas Section 9 (Pg 38)</b> Proper appliance for fuel type. Was a conversion performed? Leak check performed and inlet pressure verifi <b>ed</b> . Verified proper air shutter setting for installation type.		
<b>Finishing</b> Section 10 (Pg 41) Combustible materials not installed in non-combustible areas. Verified all clearances meet installation manual requirements. Finishing done correctly using inside fit or overlap fit method. Bottom finishing template and finishing guards removed. Mantels and wall projections comply with installation manual requ	uirements.	
<u>Glass &amp; Stone</u> <u>Section 10 (Pg 60-63)</u> All packaging and protective materials removed (inside & outside of a Refractories and media installed correctly. Glass assembly installed and secured. Accessories installed properly.	ppliance).	
Manual bag and all of its contents are removed from inside/unde the appliance and given to party responsible for use and oper Started appliance and verified no gas leaks exist. Lights work in all switched positions (if so equipped).		
<ul> <li>Hearth &amp; Home Technologies recommends the following:</li> <li>Photographing the installation and copying this checklist for yo</li> <li>That this checklist remain visible at all times on the appliance u</li> <li>Comments: Further description of the issues, who is responsible action needed</li> <li>Comments Communicated to party responsible</li></ul>	intil the installation is	

## A. Appliance Certification

MODEL: ODMEZG-36 LABORATORY: CSA TYPE: Direct Vent Heater STANDARD: ANSI Z21.50-2014/CSA 2.22-2014

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

**NOTICE:** 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.

NOT INTENDED FOR USE AS A PRIMARY HEAT SOURCE. This appliance is tested and approved as either supplemen-

tal room heat or as a decorative appliance. It should not be factored as primary heat in residential heating calculations.

## **B. Glass Specifications**

This appliance is equipped with ceramic glass that is used on the inside glass door frames attached to the firebox. Replace glass only with ceramic glass. The outdoor glass in the black frame screwed to the stainless steel frame is tempered glass. Replace only with tempered glass. Please contact your dealer for replacement glass.

## C. BTU Specifications

Models (U.S. or Canada)		Maximum Input BTU/h	Minimum Input BTU/h	Orifice Size (DMS)
ODMEZG-36 (NG)	(0-4500 FT)	34,000	27,500	Qty. 2 #44
ODMEZG-36 (Propane)	(0-4500 FT)	34,000	27,500	Qty. 2 1.28

## D. High Altitude Installations

**NOTICE:** If the heating value of the gas has been reduced, these rules do not apply. Check with your local gas utility or authorities having jurisdiction.

When installing above 4500 feet elevation: Reduce input rate 4% for each 1000 feet above 4500 feet.

Check with your local gas utility to determine proper orifice size.

### E. Non-Combustible Materials Specification

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 Specification

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 plastered or unplastered shall be considered combustible materials.

## G. Electrical Codes

**NOTICE:** 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**.

• A 110-120 VAC circuit for this product must be protected with ground-fault circuit-interrupter protection, in compliance with the applicable electrical codes, when it is installed in locations such as in bathrooms or near sinks. **Note:** The following requirements reference various Massachusetts and national codes not contained in this document.

#### H. Requirements for the Commonwealth of Massachusetts

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

#### Installation of Carbon Monoxide Detectors

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

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

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

#### **Approved Carbon Monoxide Detectors**

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

#### Signage

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

#### Inspection

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

#### Exemptions

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

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

#### MANUFACTURER REQUIREMENTS

#### **Gas Equipment Venting System Provided**

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

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

#### Gas Equipment Venting System NOT Provided

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

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

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

#### See Gas Connection section for additional Commonwealth of Massachusetts requirements.

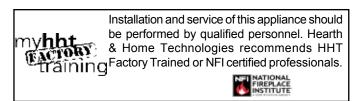
## A. Design and Installation Considerations

Outdoor Lifestyles 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.

Installation MUST comply with local, regional, state and national codes and regulations. Consult insurance carrier, local building inspector, fire officials or authorities having jurisdiction over restrictions, installation inspection and permits.

Before installing, determine the following:

- · Where the appliance is to be installed.
- The vent system configuration to be used.
- · Gas supply piping.
- Electrical wiring requirements.
- · Framing and finishing details.
- Whether optional accessories—devices such as a wall switch or remote control—are desired.



Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. For assistance or additional information, consult a qualified service technician, service agency or your dealer.

## **B. Tools and Supplies Needed**

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

Tape measure	Framing material
Pliers	Non-corrosive leak check solution
Hammer	Phillips screwdriver
Gloves	Framing square
Voltmeter	Electric drill and bits (1/4 in. magnetic)
Plumb line	Safety glasses
Level	Reciprocating saw
Manometer	Flat blade screwdriver
1/2 - 3/4 in. lengt	h, #6 or #8 Self-drilling screws
Caulking materia rating)	I (300°F minimum continuous exposure

#### C. Inspect Appliance and Components

- Carefully remove the appliance and components from the packaging.
- The vent system components and fronts may be shipped in separate packages.
- If packaged separately, the media must be installed.
- 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! Risk of Fire or Explosion!** Damaged parts could impair safe operation. **DO NOT install damaged**, incomplete or substitute components. Keep appliance dry.

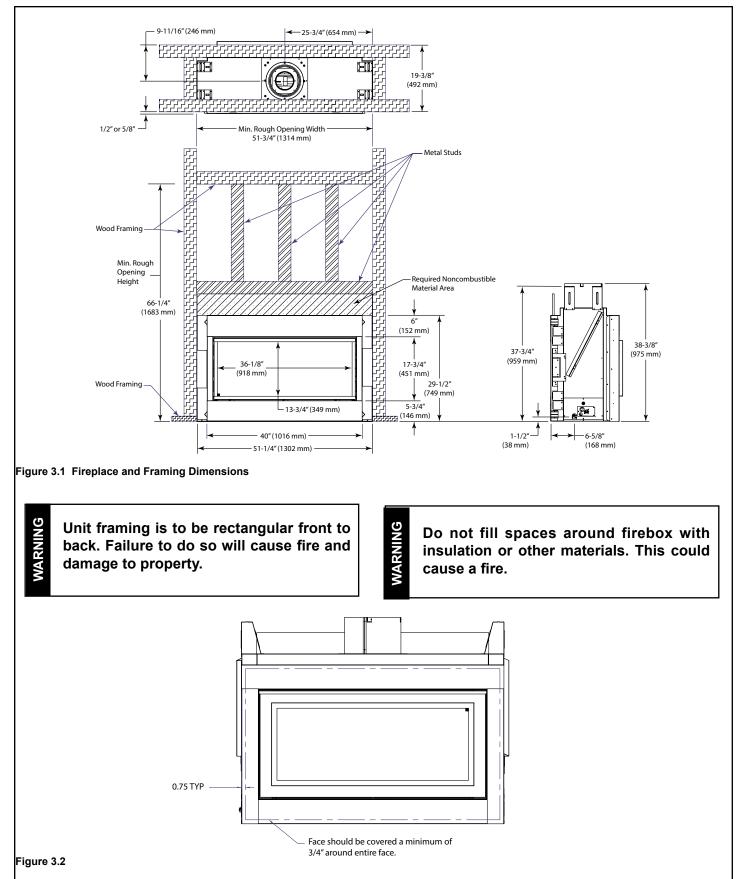
Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- 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.

WARNING! Risk of Fire, Explosion or Electric Shock! DO NOT use this appliance if any part has been under water. Call a qualified service technician to inspect the appliance and to replace any part of the control system and/or gas control which has been under water. Framing and Clearances

#### A. Fireplace and Framing Dimensions



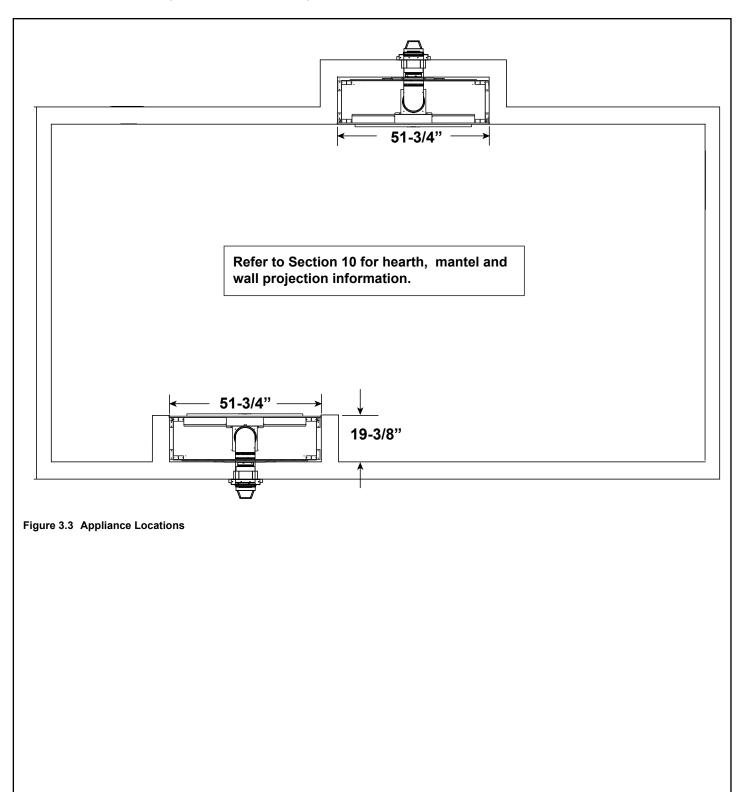
## B. Clearances to Combustibles

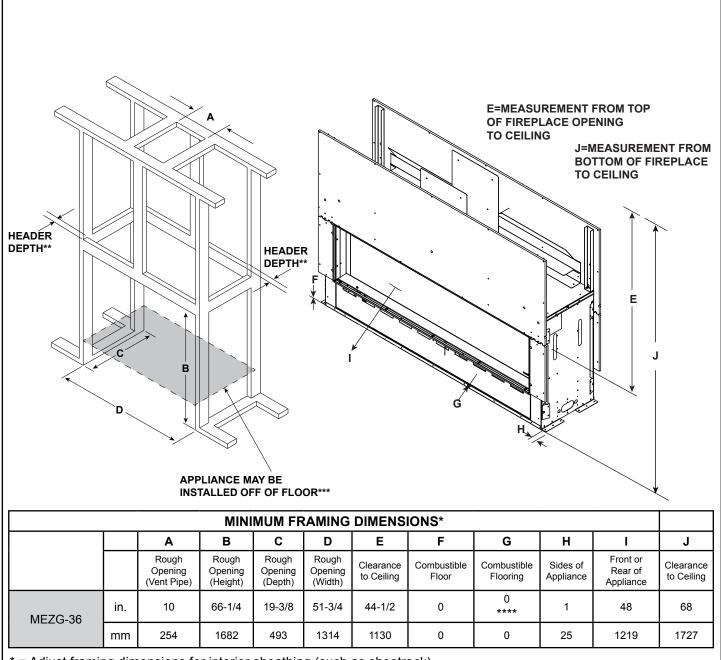
When selecting a location for the appliance it is important to consider the required clearances to walls. See Figure 3.6 and Figure 3.7.

**WARNING!** Risk of Fire or Burns! Provide adequate clearance around air openings and for service access. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

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

It is important to follow the framing and finishing instructions step by step to ensure proper placement of fireplace in the surrounding framing/finishing materials.





\* = Adjust framing dimensions for interior sheathing (such as sheetrock)

\*\*= Header depth not to exceed 3-1/2 inches.

\*\*\*= If appliance is installed off of floor, maintain required clearances to combustibles. Construct platform in accordance with local building codes.

\*\*\*\*= Clearances to Combustibles - Follow these instructions carefully to ensure safe installation. Failure to follow instructions exactly can create a fire hazard. The appliance cannot be installed on a carpet, tile or other combustible material other than wood flooring. If installed on carpet or vinyl flooring, the appliance shall be installed on a metal, wood or noncombustible material panel extending full width and depth of the appliance.

Figure 3.4 Clearances to Combustibles

#### C. Constructing the Appliance Chase

A chase is a vertical box-like structure built to enclose the gas appliance and/or its vent system. In cooler climates the vent should be enclosed inside the chase.

**NOTICE:** Treatment of ceiling firestops and wall shield firestops and construction of the chase may vary with the type of building. These instructions are not substitutes for the requirements of local building codes. Therefore, you MUST check local building codes to determine the requirements to these steps.

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 may be sheetrocked and taped (or an equivalent method may be used) to achieve maximum air tightness.

To further prevent drafts, the wall shield and ceiling firestops should be caulked with caulk with a minimum of 300°F continuous exposure rating to seal gaps. Gas line holes and other openings should be caulked with caulk with a minimum of 300°F continuous exposure rating or stuffed with unfaced insulation. If the appliance is being installed on a cement surface, a layer of plywood may be placed underneath to prevent conducting cold up into the room.

**Note:** Figure 3.3 and Figure 3.4, and Figure 3.5 show the fireplace installed on the floor. However, this fireplace can be elevated off the floor provided that the fireplace is properly supported by framing materials and the ceiling clearances are maintained.

## **D. Floor Protection**

**NOTICE:** Install appliance on hard metal or wood surfaces extending full width and depth. **DO NOT** install directly on carpeting, vinyl, tile or any combustible material other than wood.

**WARNING!** Risk of Fire! Maintain specified air space clearances to appliance and vent pipe:

- Insulation and other materials must be secured to prevent accidental contact.
- The chase must be properly blocked to prevent blown insulation or other combustibles from entering and making contact with fireplace or chimney.
- Failure to maintain airspace could cause overheating and fire.

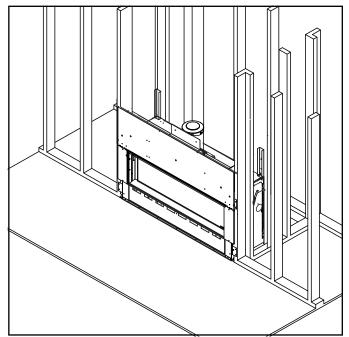


Figure 3.5 Floor Protection



## A. Securing and Leveling the Appliance

WARNING! Risk of Fire! Prevent contact with:

- Sagging or loose insulation
- Insulation backing or plastic
- Framing and other combustible materials

Block openings into the chase to prevent entry of blownin insulation. Make sure insulation and other materials are secured.

**DO NOT** notch the framing around the appliance standoffs. Failure to maintain air space clearance could cause overheating and fire.

To properly position, level, and secure the appliance, see below. Nailing tabs are provided to secure the appliance to the framing members.

- · Bend out the two nailing tabs on each side.
- · Place the appliance into position.
- Keep nailing tabs flush with the framing. See Figure 4.1.
- Level the appliance from side to side and front to back.
- Shim the appliance as necessary. It is acceptable to use wood shims underneath the appliance.
- Secure the appliance to the framing by using nails or screws through the nailing tabs.

Some figures in manual show the fireplace installed on the floor. However, this fireplace can be elevated off the floor provided that the fireplace is properly supported by framing materials and the ceiling clearances are maintained.

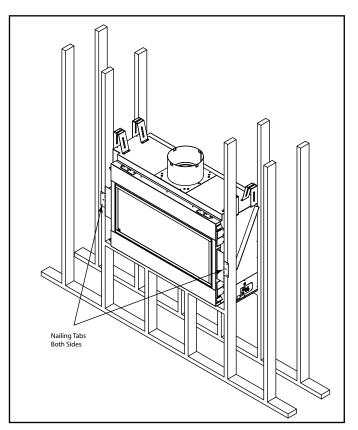


Figure 4.1 Nailing Tab Locations

#### Setting the Fireplace into the Framing

The left and right nailing tabs were designed as a means to ensure the fireplace is mounted flush with the framing materials. See Figures 4.2-4.3.

- Bend out all nailing tabs. The ODMEZG-36 has 6 nailing tabs. 2 on the indoor side in the middle of the unit.
   4 on the outdoor side (shipped in the manual pack). Hand bend these along the perforated bend line and attached to the sides of the outdoor face. These are adjustable to accommodate various finishing methods. Attach each of the outdoor nailing flanges with 2 screws.
- Screw each nailing tab to the adjoining framing material. Ensure that the 1" air space clearance is maintained on the side of the fireplace. See Figures 3.2-3.4 for framing and clearance details.



Figure 4.2 Nailing Tabs Interior Side

Figure 4.3 Nailing Tabs Exterior/Outdoor Side

• Optional: Secure the appliance to the floor by inserting two screws through the pilot holes at the bottom of the appliance.

## B. Installing Non-Combustible Facing Material

#### WARNING! Risk of Fire!

- · Follow these instructions exactly.
- Facing materials must be installed properly to prevent fire.
- No materials may be substituted without authorization by Hearth & Home Technologies.
- Non-Combustible facing material needs to be at least 6" high and the full width of the unit.
- Attach non-combustible facing material to the framing members with regular sheetrock screws.
- Use a wet or dry towel or soft brush to remove dust or dirt from facing material.
- · See Section 10 for finishing materials guidelines.

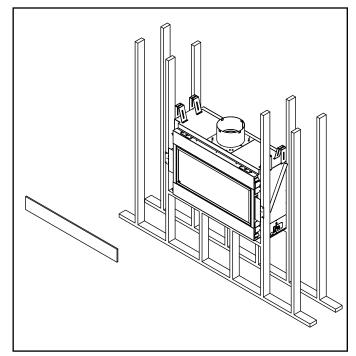


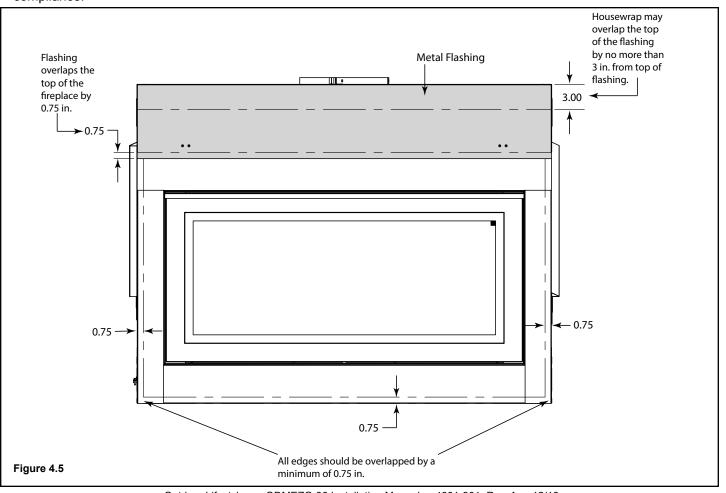
Figure 4.4 Install Non-Combustible Facing Material

## C. Installation Instructions for Outdoor Side

- 1. Hand bend the installation brackets along the perforated bend line and attach with 2 screws each. The installation brackets are adjustable to accommodate various finishing methods.
- 2. Position the fireplace in the final installation location and secure the installation brackets to the wall framing. Install electrical supply, gas supply and venting according to the supplied instructions.
- 3. The exterior side of the unit does not require the use of non-combustible material. Sheathing can be brought down directly to the top of the metal flashing and flush in with the sides of the outer face.
- 4. For placement of combustible housewrap or building paper see Figures 4.5 and 4.6 (Note: Combustible housewrap or building paper MAY extend over the edge of the metal flashing by 3" from the top of the flashing. The sealant materials used beyond 3" from the top of the flashing must be approved to a minimum of 225° F continuous exposure.)

Special care should be taken when choosing building materials for weatherproofing (i.e. building wraps, sealant tapes, liquid sealants, rubberized flashings, etc.). All sealant materials or building wraps installed within 3" of the top of the fireplace flashing must be approved to a minimum temperature of 225°F continuous exposure. Consult the material's manufacturer to ensure product compliance.

- 5. Install facing material to overlap the face of the fireplace by a minimum of %". (Note: Covering the face of the unit completely is permitted as long as it does not interfere with removal of the door cover and lip.)
- 6. Apply high temp weather resistant adhesive sealant along the edge of the finishing material and the face of the unit to ensure the fireplace has a watertight seal to the finishing material. See Figure 4.7.



Outdoor Lifestyles • ODMEZG-36 Installation Manual • 4601-901 Rev. A • 12/16

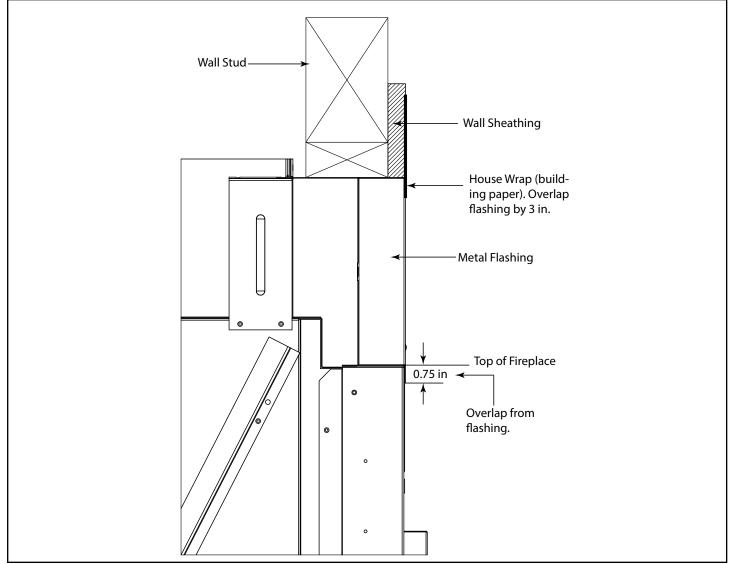


Figure 4.6

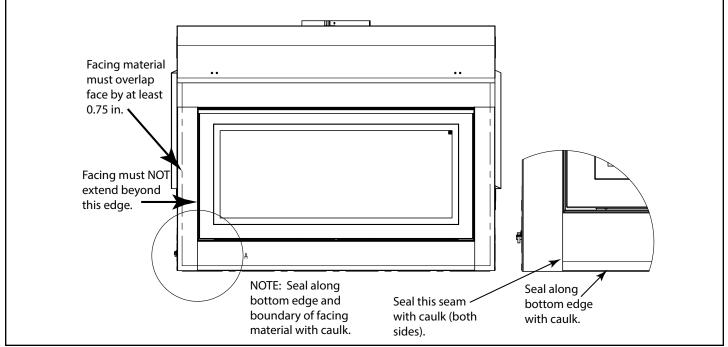


Figure 4.7



## **Termination Location and Vent Information**

#### A. Vent Termination Minimum Clearances

Fire 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 could cause overheating and fire.

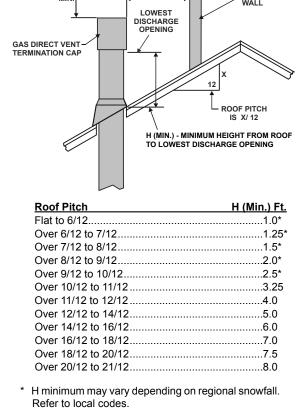
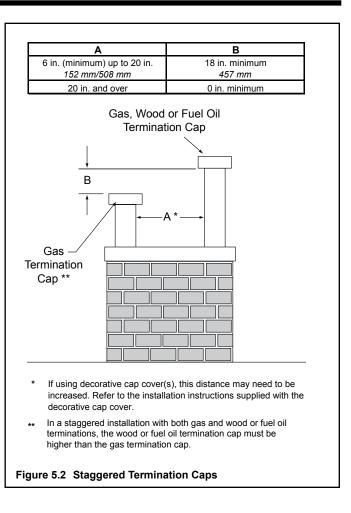
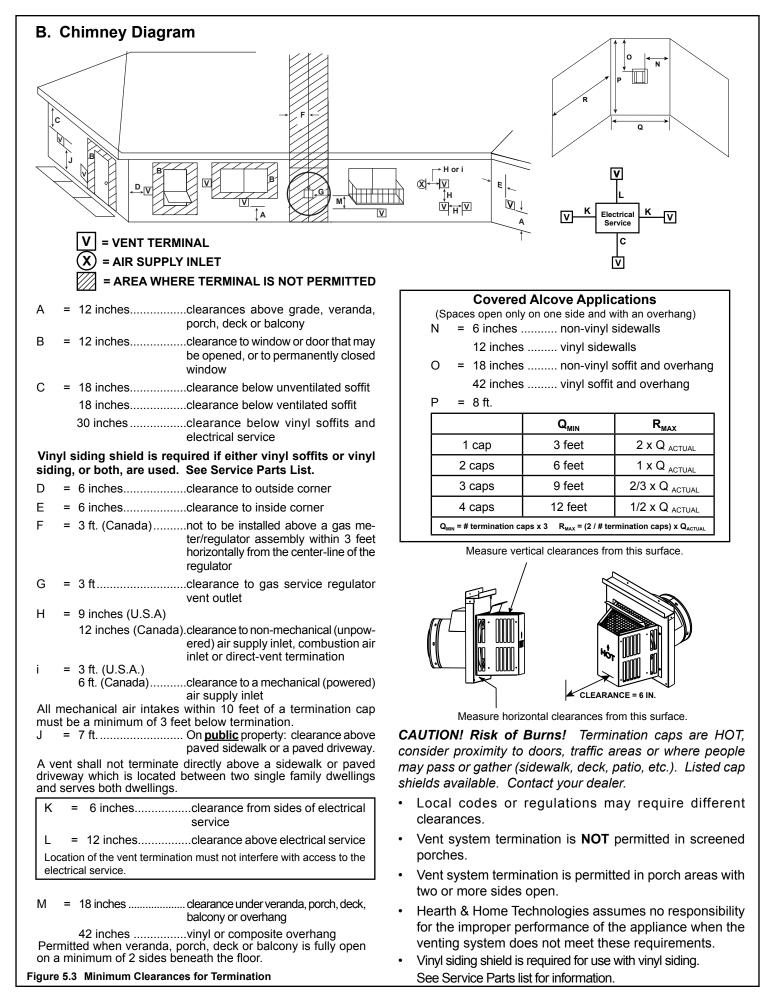


Figure 5.1 Minimum Height From Roof To Lowest Discharge Opening





#### C. How to Use the Vent Graph

The Vent Graph should be read in conjunction with the following vent installation instructions to determine the relationship between the vertical and horizontal dimensions of the vent system.

- 1. Determine the height of the center of the horizontal vent pipe exiting through the outer wall. Using this dimension on the Sidewall Vent Graph below, locate the point intersecting with the slanted graph line.
- 2. From the point of this intersection, draw a vertical line to the bottom of the graph.
- 3. Select the indicated dimension, and position the fireplace in accordance with same.

Example: If the vertical dimension from the floor of the fireplace is 11' (3.4 m) the horizontal run to the face of the outer wall must not exceed 16' (4.9 m).

Sidewall Vent Graph showing the relationship between vertical and horizontal dimensions for a Direct Vent flue system.

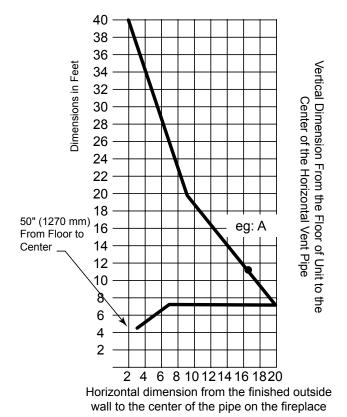


Figure 5.4 Rear Wall Venting Graph (No Horizontal Elbows)

## D. Vertrical/Horizontal Termination Configurations

Since it is very important that the venting system maintain its balance between the combustion air intake and the flue gas exhaust, certain limitations as to vent configurations apply and must be strictly adhered to.

The Vent Graph, showing the relationship between vertical and horizontal side wall venting, will help to determine the various dimensions allowable. Figure 5.4

**NOTE:** Horizontal and vertical sections of this vent system require a minimum of 1" clearance to combustibles at the top, sides and bottom.

When vent exits through foundations less than 20" (508 mm) below outcrop, the termination must be flush up with outcropped wall above.

It is best to locate the fireplace in such a way that minimizes the number of offsets and horizontal vent length.

The horizontal vent run refers to the total length of vent pipe from the flue collar of the fireplace (or the top of the Transition Elbow) to the face of the finished outside wall.

- The maximum number of 90° elbows per side wall installation is three (3).
- A minimum of 12" (305 mm) is required before a 90° elbow. If a 90° elbow is fitted directly after 12" (305 mm) vertical section mounted to the top of the fireplace, the maximum horizontal vent run before the termination or a vertical rise is 36" (914 mm).

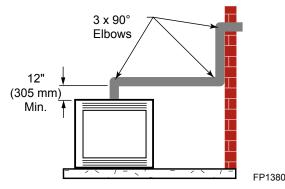
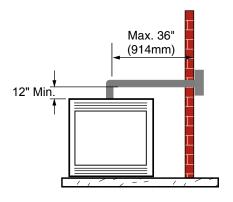


Figure 5.5 Maximum Three (3) 90° Elbows Per Installation

If a 90° elbow is used in the horizontal vent run (level height maintained) the horizontal vent length is reduced by 36" (914 mm). *Figures 16 and 17.* This does not apply if the 90° elbows are used to increase or redirect a vertical rise.

**Example:** According to the vent graph (Page 13) the maximum horizontal vent length in a system with a 10' vertical rise is  $17\frac{1}{2}$ ' (5.3 m) and if a 90° elbow is required in the horizontal vent it must be reduced to  $14\frac{1}{2}$ ' (4.4 m).



FP1381

Figure 5.6 - Maximum Horizontal Run with No Rise

In Figures 4.6 and 4.7 dimension A plus B must not be greater than 17' (5.2 m).

- For each 45° elbow installed in the horizontal run, the length of the horizontal run MUST be reduced by 18" (45 cm). This does not apply if the 45° elbows are installed on the vertical part of the vent system.
- The maximum number of elbow degrees in a system is 270°. Figure 5.8.

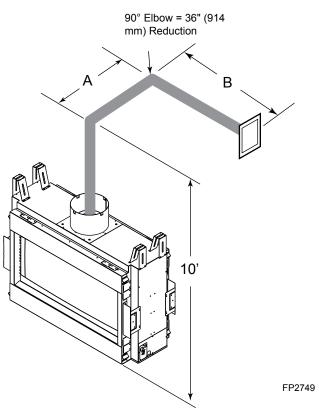


Figure 5.7 - Horizontal Run Reduction

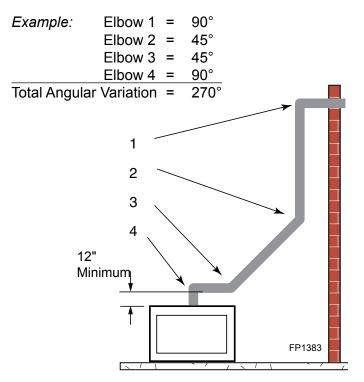


Figure 5.8 - Maximum Elbow Usage

#### E. Below Grade Installations

When it is not possible to meet the required vent terminal clearances of 12" above grade level, a snorkel kit is recommended. It allows installation depth down to 7" (178 mm) below grade level. The 7" (178 mm) is measured from the center of the horizontal vent pipe as it penetrates through the wall.

#### Ensure that sidewall venting clearances are observed. If venting system is installed below ground, we recommend a window well with adequate and proper drainage to be installed around the termination area.

If installing a snorkel, a minimum 12" vertical rise is necessary. The maximum horizontal run with the 12" vertical pipe is 36". This measurement is taken from the collar of the fireplace (or transition elbow) to the face of the exterior wall. See the Sidewall Venting Graph for extended horizontal run if the vertical exceeds 12".

- 1. Establish vent hole through the wall.
- Remove soil to a depth of approximately 16" below base of snorkel. Install drain pipe. Install window well (not supplied). Refill hole with 12" of coarse gravel leaving a clearance of approximately 4" below snorkel. Figure 5.9.
- 3. Install vent system.
- 4. Ensure a watertight seal is made around the vent pipe coming through the wall.
- 5. Apply high temperature sealant caulking (supplied) around the 5" and 8" snorkel collars.

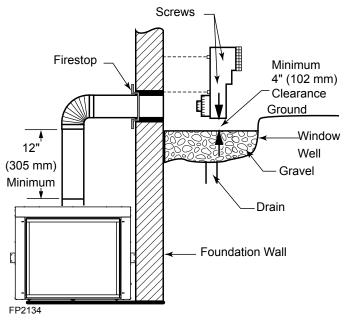


Figure 5.9 - Below Grade Installation

- 6. Slide the snorkel into the vent pipes and secure to the wall.
- 7. Level the soil so as to maintain a 4" clearance below snorkel. Figure 5.9.

If the foundation is recessed, use recess brackets (not supplied) for securing lower portion of the snorkel. Fasten brackets to wall first, then secure to snorkel with self drilling #8 x  $\frac{1}{2}$ " sheet metal screws. It will be necessary to extend vent pipes out as far as the protruding wall face. Figure 5.10

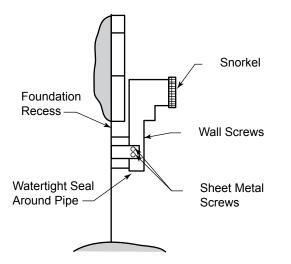


Figure 5.10 - Snorkel Installation, Recessed Foundation

- Do not back fill around snorkel.
- A clearance of at least 4" must be maintained between the snorkel and the soil.

## F. Vertical (thru-the-roof) Applications

This gas fireplace has been approved for,

 Vertical installations up to 40' (12 m) in height. Up to a 10' (3 m) horizontal vent run can be installed within the vent system using a maximum of two 90° elbows. Figure 5.11

**NOTE:** Horizontal and vertical sections of this vent system require a minimum 3" clearance to combustibles at the top, and a 1" clearance to combustibles at the side and bottom.

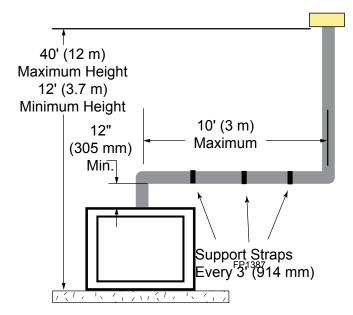


Figure 5.11 - Support Straps for Horizontal Runs

 Up to two 45° elbows may be used within the horizontal run. For each 45° elbow used on the horizontal plane, the maximum horizontal length must be reduced by 18" (450 mm).

Example: Maximum horizontal length No elbows = 10' (3 m) 1x45° elbows = 8.5' (2.6 m) 2x45° elbows = 7' (2.1 m)

- A minimum of an 12' (3.6 m) vertical rise is required.
- Two sets of 45° elbows offsets may be used within the vertical sections. From 0 to a maximum of 8' (2.5 m) of vent pipe can be used between elbows. Figure 5.12
- The maximum angular variation allowed in the system is 270°. Figure 5.12

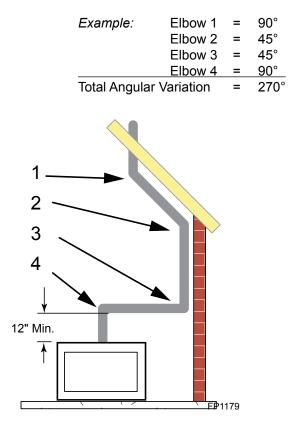


Figure 5.12 - Maximum Elbow Usage

## G. Approved Pipe

This appliance is approved for use with Hearth & Home Technologies DVP venting systems. Refer to Section 12.A for vent component information and dimensions.

**DO NOT** mix pipe, fittings or joining methods from different manufacturers.

The pipe is tested to be run inside an enclosed wall. There is no requirement for inspection openings at each joint within the wall.

**WARNING!** Risk of Fire or Asphyxiation. This appliance requires a separate vent. DO NOT vent to a pipe serving a separate solid fuel burning appliance.

#### H. Use of Elbows

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 5.13.

Two 45° elbows may be used in place of one 90° elbow. On 45° runs, one foot of diagonal is equal to 8-1/2 in. (216 mm) horizontal run and 8-1/2 in. (216 mm) vertical run. A length of straight pipe is allowed between two 45° elbows. See Figure 5.13.

Figure 5.14 shows the vertical and horizontal offsets for DVP or SLP elbows.

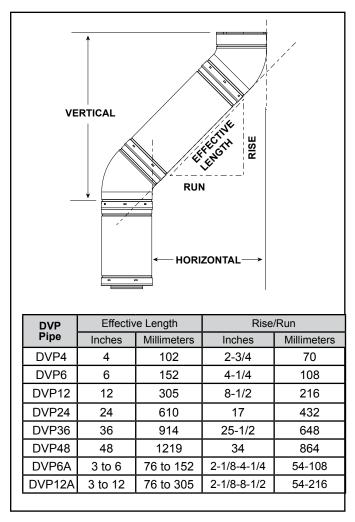


Figure 5.13

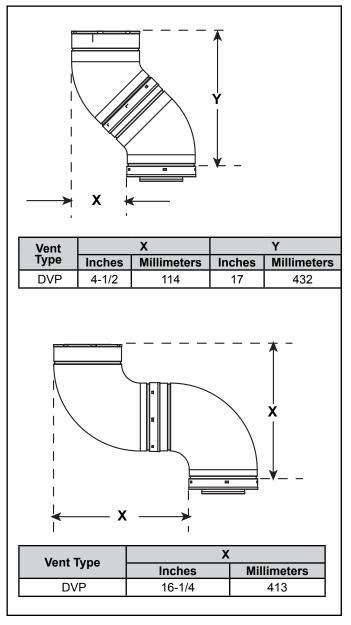


Figure 5.14 Vertical and Horizontal Offset for DVP and SLP Elbows

#### I. 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 Section 11.A for information on effective length of pipe components.
- Horizontal terminations are measured to the outside mounting surface (flange of termination cap) (see Figure 5.15).
- Vertical terminations are measured to top of last section of pipe. See Figure 5.16.
- Horizontal pipe installed level with no rise.

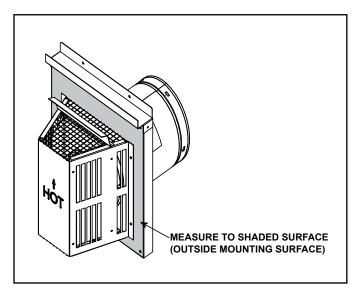


Figure 5.15 Measure to Outside Mounting Surface



General Rules:

- When penetrating a combustible wall, a wall shield firestop must be installed.
- When penetrating a combustible ceiling, a ceiling firestop must be installed.
- Horizontal runs of vent do not require vertical rise; horizontal runs may be level.
- Horizontal termination cap should have a 1/4 inch downward slant to allow any moisture in cap to be released. See Figure 5.17.

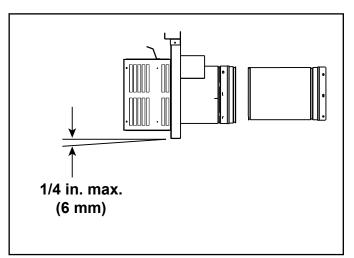


Figure 5.17

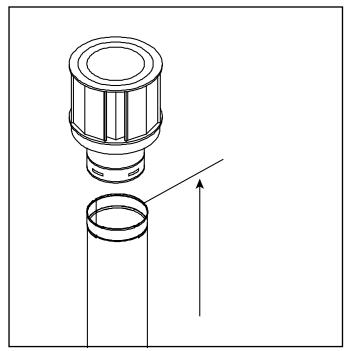


Figure 5.16 Measure to Top of Last Section of Pipe

## A WARNING

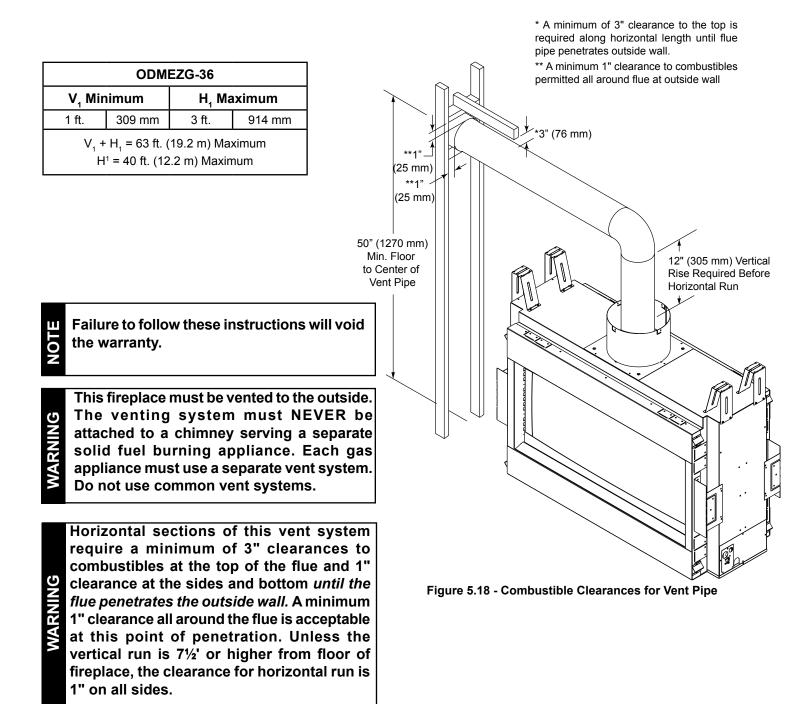


Fire Risk. Explosion Risk.

- Do NOT pack insulation or other combustibles between ceiling firestops.
- ALWAYS maintain specified clearances around venting and firestop systems.
- Install wall shield and ceiling firestops as specified.
- Failure to keep insulation or other material away from vent pipe could cause fire.



## **Top Vent - Horizontal Termination Venting with 1 elbow**



## V = 3 ft Min. (1m), 40 ft. Max. (13.3 m)

**Note:** If installing a vertical vent/termination off the top of the appliance, the optional exhaust restrictor may be needed.

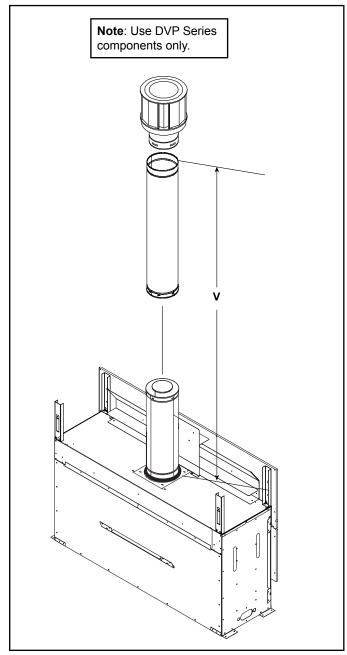


Figure 5.19 Vertical Vent Maximum

## Top Vent - Vertical Termination Venting with 2 elbows

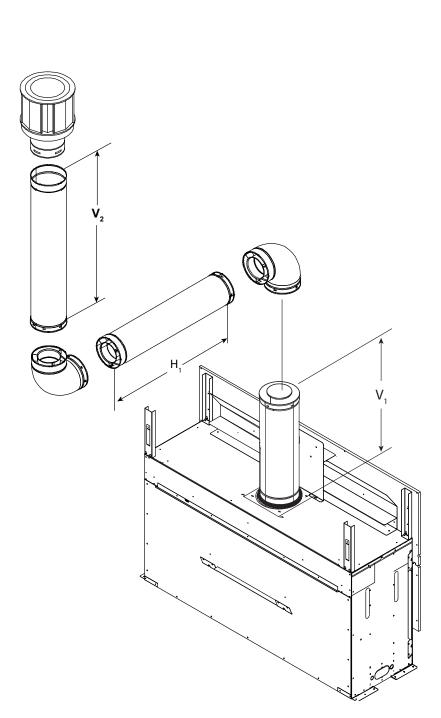
#### WARNING! Risk of Fire!

#### DO NOT attach elbow directly to the appliance.

• The ODMEZG-36 requires a minimum of 12 inches of vertical venting before attaching any elbow to the appliance.

ODMEZG-36				
$V_1 + V_2 N$	$V_1 + V_2$ Minimum		$H_1 + H_2 Maximum$	
1 ft.	309 mm	3 ft.	2.7 m	
2 ft.	610 mm	5 ft.	1.5 m	
3 ft.	914 mm	6 ft.	2.8 m	
4 ft.	1.2 m	12 ft.	3.6 m	
5 ft.	1.5 m	15 ft.	4.5 m	
		ft. (19.2 m) 7.1 m) Maxii		

Note: Use DVP Series components only.



## Top Vent - Vertical Termination Venting with 3 elbows

WARNING! Risk of Fire!

#### DO NOT attach elbow directly to the appliance.

• The ODMEZG-36 requires a minimum of 12 inches of vertical venting before attaching any elbow to the appliance.

ODMEZG-36			
$V_1 + V_2$ Minimum		$H_1 + H_2$ Maximum	
1 ft.	309 mm	3 ft.	2.7 m
2 ft.	610 mm	5 ft.	1.5 m
3 ft.	914 mm	6 ft.	2.8 m
4 ft.	1.2 m	12 ft.	3.6 m
5 ft.	1.5 m	15 ft.	4.5 m
$V_1 + V_2 + H_1 + H_2 = 63$ ft. (19.2 m) Maximum H <sub>1</sub> + H <sub>2</sub> = 23 ft. (7.1 m) Maximum			

**Note**: Use DVP Series components only.

INSTALLED HORIZONTALLY



#### A. Pipe Clearances to Combustibles

**WARNING!** Risk of Fire! Maintain air space clearance to vent. **DO NOT** pack insulation or other combustibles:

- Between ceiling firestops
- Between wall shield firestops
- Around vent system

Failure to keep insulation or other material away from vent pipe could cause overheating and fire.

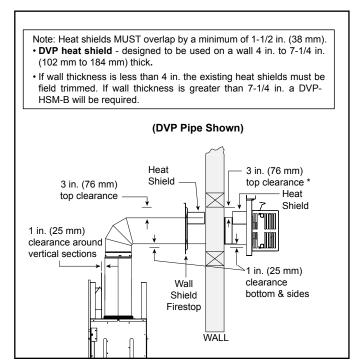


Figure 6.1 Horizontal Venting Clearances To Combustible Materials

#### **B. Wall Penetration Framing/Firestops**

#### **Combustible Wall Penetration**

Whenever a combustible wall is penetrated, you must frame a hole for the wall shield firestop(s). The wall shield firestop maintains minimum clearances and prevents cold air infiltration.

- The opening must be framed on all four sides using the same size framing materials as those used in the wall construction.
- DVP pipe A wall shield firestop must be placed on each side of an interior wall. A minimum 1-1/2 in. (38 mm) overlap of attached heat shields must be maintained.
- See Section 7.F. for information for regarding the installation of a horizontal termination cap.

#### **Non-Combustible Wall Penetration**

If the hole being penetrated is surrounded by non-combustible materials such as concrete, a hole with diameter one inch greater than the pipe is acceptable.

Note: Do not pack the gap with insulation.

Whenever a non-combustible wall is penetrated, the wall shield firestop is only required on one side and no heat shield is necessary.

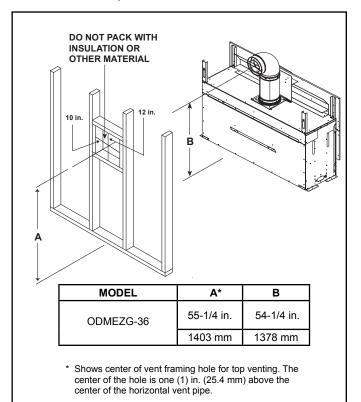


Figure 6.2 Wall Penetration

## C. Install the Ceiling Firestop

A ceiling firestop **MUST** be used between floors and attics.

- **DVP pipe only** Frame an opening 10 in. by 10 in. (254 mm by 254 mm) whenever the vent penetrates a ceiling/floor. See Figure 6.3.
- Frame the area with the same sized lumber as used in ceiling/floor joist.
- The ceiling firestop may be installed above or below the ceiling joists when installed with an attic insulation shield. It must be under joists between floors that are not insulated. Refer to Figure 6.4.
- Secure with two fasteners on each side.

WARNING! Risk of Fire! DO NOT pack insulation around the vent. Insulation must be kept back from the pipe to prevent overheating.

## D. Install Attic Insulation Shield

**WARNING! Fire Risk. DO NOT** allow loose materials or insulation to touch vent. Hearth & Home Technologies requires the use of an attic shield.

The International Fuel Gas Code requires an attic shield constructed of 26 gauge minimum steel that extends at least 2 in. (51 mm) above insulation.

- Attic insulation shields must meet specified clearances to combustible materials and be secured in place.
- An attic insulation shield kit is available from Hearth & Home Technologies. Contact your dealer to order. Install attic insulation shield according to instructions included with kit.

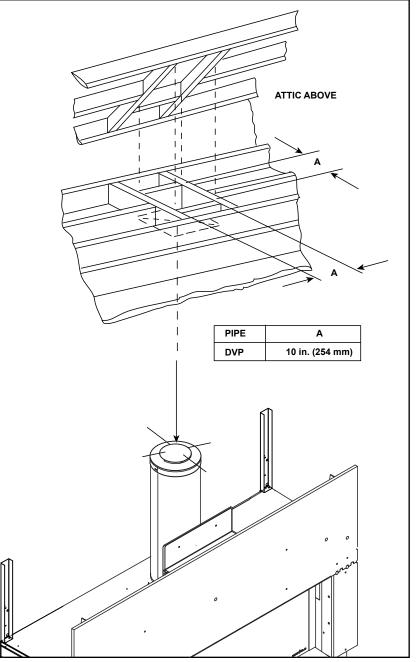


Figure 6.3 Installing Ceiling Firestop

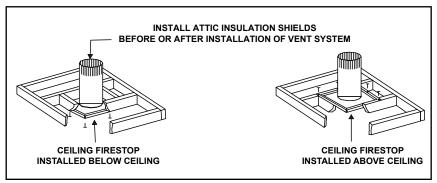


Figure 6.4 Installing the Attic Shield

## E. Flex Vent Installation

- Flexible UL1777 listed venting may be used in any venting application where rigid direct vent components can be used. All restrictions, clearances and allowances that pertain to the rigid piping apply to the flexible venting. Flex kits may not be modified. Flex kits may be added to the end of a vent run made of rigid vent sections using pipe manufacturer's approved flex to pipe adapters. This may occur only if doing so does not violate any of the venting length, height, routing, horizontal to vertical ratio requirements or clearance considerations detailed in this manual.
- The flex adapter starter kit (DVFF8A/8) is used to attach flex venting to the appliance starting collar. It includes 5" inner and 8" outer adapter rings. See Figure 6.5.
  - The inner and outer adapter rings are required to start all flex runs.
  - Never install damaged or torn flexible venting.
  - Over tightening clamps may rip, tear, or otherwise damage flexible venting.
  - The adapter kit does not include individual pipe sections which may be purchased separately. (UL1777 listed type venting only.)
- 3. Start the flexible vent as follows:
  - A. Installing the inner flex adapter and pipe. See Figure 6.5.

1. Insert the long side of the 5" inner ring into exhaust pipe, gently tap to seat into place, and secure with screws.

- 2. Slide the small gear clamp over the inner flexible vent pipe, and push out of the way.
- 3. Pull and extend the inner flexible vent.
- Slide the inner vent onto the adapter collar, for a minimum 1<sup>3</sup>/<sub>4</sub>" overlap.
- 5. Locate the clamp at approximately <sup>3</sup>/<sub>4</sub>" from the flex end and tighten.
- 6. Secure the clamped inner section with three selftapping screws, drilled equidistant, just above the clamp perimeter.
- B. Installing the outer flex pipe. Figure 6.5
  - 1. Firmly insert the 8" outer adapter ring into the outer appliance starting collar and secure with screws.
  - 2. Slide the large gear clamp over the outer flexible vent pipe, and push out of the way.
  - 3. Pull and extend the outer flexible vent.
  - 4. Slide the outer vent onto the appliance collar outer adapter for a minimum 1<sup>3</sup>/<sub>4</sub>" overlap.
  - 5. Locate the clamp at approximately 3/4" from the

Flex vent pipe spacers: Refer to manufacturer's specifications for correct positioning of the spacer springs to maintain proper distance between inside and outside pipe.

NOTI

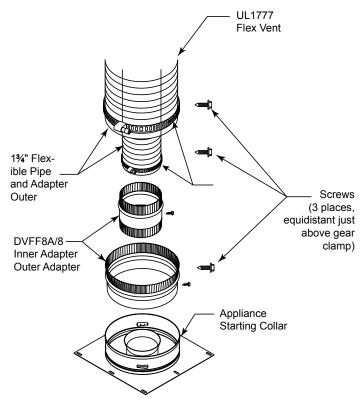
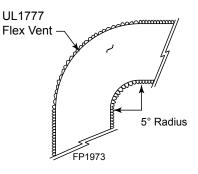
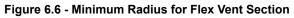


Figure 6.5 - Typical Appliance Connection





flex end and tighten.

- 6. Secure the clamped outer section with three selftapping screws, drilled equidistant, just above the clamp perimeter.
- C. Routing UL1777 flex pipe.
  - 1. Always maintain the required clearance when routing the flex vent assembly.
  - 2. Install firestop spacers, Figure 6.7, when penetrating ceiling, attic spaces, or walls.
  - Do not allow the flexible vent to bend in radius tighter than 5°. Figure 6.6
  - 4. Horizontal runs of flexible vent shall be supported at maximum 2 foot intervals; vertical runs, five feet

intervals. Metal strapping, properly secured, is an acceptable means to support the flexible vent.

- 5. Flexible vent spacers are to be installed at intervals prescribed by the flexible vent manufacturer; and in such a way as to maintain concentric inner and outer vent spacing.
- D. Attaching flexible venting to vertical termination assemblies.
  - When using Simpson pipe, a Vermont Castings Group flex-to-pipe adapter (FPA) and/or rigid pipe section(s) is required to connect the flexible vent assembly to the vertical termination by using three self-penetrating screws.
  - 2. Review Figure 6.8 and corresponding instructions for proper overlap, clamp and screw placement.
  - 3. Three each self-penetrating screws are drilled opposite one another and below the gear clamp.
  - 4. Use only listed and approved terminations and accessories, installed per the installation instructions and Figure 6.7.
  - E. Installing flexible venting to horizontal termination

assemblies.

- 1. Connect the 5" flexible vent to the horizontal termination as in Figure 6.9.
- 2. Connect the 8" flexible vent to the termination ring as in Figure 6.9.
- 3. ReviewFigure 6.9 for proper overlap and clamp placement.
- 4. Three each self-penetrating screws are drilled opposite one another and below the gear lamp.
- 5. Use only listed an approved terminations and accessories, installed per the termination instructionsand Figure 6.9.

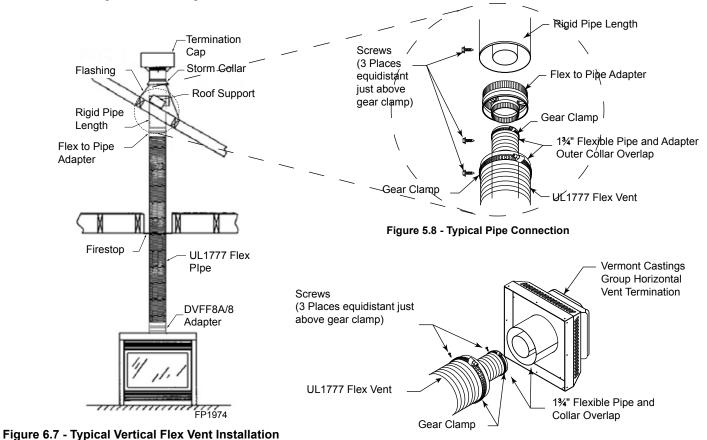


Figure 6.9 - Typical Horizontal Flex Vent Installation

## Venting and Chimneys

## A. Assemble Vent Sections

#### Attach Vent to the Firebox Assembly

**Note:** The end of the pipe sections with the lanced tabs will face toward the appliance.

- Attach the first pipe section to the starting collar:
- Lanced pipe end of the starting collar.
- Inner pipe over inner collar.
- Push the pipe section until all lanced tabs snap in place.
- Lightly tug on pipe to confirm it has locked.

## Required Commercial, Multi-family (Multi-level exceeding two stories), or High-Rise Applications

All outer pipe joints must be sealed with high temperature silicone (300° F minimum continuous exposure rating), including the slip section that connects directly to the horizontal termination cap.

 Apply a bead of silicone sealant (300° F minimum continuous exposure rating) inside the female outer pipe joint prior to joining sections. See Figure 7.1. <u>OR</u>

Apply a bead of silicone sealant (300° F minimum continuous exposure rating) to the outside of connecting joint after joining sections  $\underline{OR}$ 

Apply aluminum foil tape (300° F minimum continuous exposure rating) to the outside of connecting joint after joining sections. On horizontal pipe runs, it is recommended that the tape seam is positioned on the bottom side of the vent pipe.

• Only outer pipes need to be sealed. All unit collar, pipe, slip section, elbow and cap outer flues shall be sealed in this manner, unless otherwise stated.

**WARNING! Risk of Fire or Explosion! DO NOT** break silicone seals on slip sections. Use care when removing termination cap from slip pipe. If slip section seals are broken during removal of the termination cap, vent could leak.

#### **Assemble Pipe Sections**

Per Figure 7.2:

- Start the inner pipe on the lanced end of section A into the flared end of section B.
- Start the outer pipe of section A over the outer pipe of section B.
- Once both vents sections are started, push firmly until all lanced tabs lock into place.

• Lightly tug on the pipe to confirm the tabs have locked. It is acceptable to use screws no longer than 1/2 in. (13 mm) to hold outer pipe sections together. If predrilling holes, **DO NOT** penetrate inner pipe.

For 90° and 45° elbows that are changing the vent direction from horizontal to vertical, one screw minimum should be put in the outer flue at the horizontal elbow joint to prevent the elbow from rotating. Use screws no longer than 1/2 in. (13 mm). If predrilling screw holes, **DO NOT** penetrate inner pipe.



Figure 7.1 High Temperature Silicone Sealant

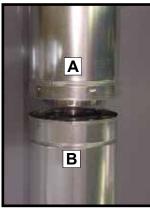




Figure 7.2

Figure 7.3

<image>

Figure 7.4 Seams

## **B. Assemble Slip Sections**

- Slide the inner flue of the slip section into the inner flue of the pipe section and the outer flue of the slip section over the outer flue of the pipe section. See Figure 7.5.
- Slide together to the desired length.

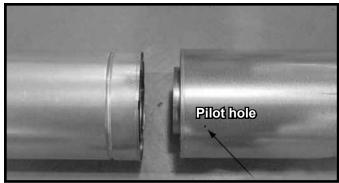


Figure 7.5 Slip Section Pilot Holes

- Maintain a 1-1/2 in. (38 mm) overlap between the slip section and the pipe section.
- Secure the pipe and slip section with two screws no longer than 1/2 in. (13 mm), using the pilot holes in the slip section. See Figure 7.6.

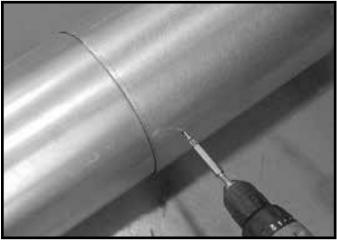


Figure 7.6 Screws into Slip Section

• Continue adding pipe as necessary following instructions in "Assembling Pipe Sections."

**NOTICE:** If slip section is too long, the inner and outer flues of the slip section can be cut to the desired length.

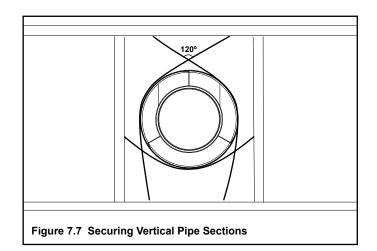
**NOTICE:** When installing a vent system with an HRC termination cap, all pipe system joints shall be sealed using a silicone sealant with a minimum of 300°F continuous exposure rating.

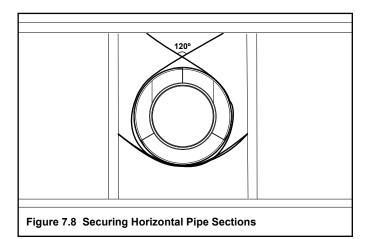
- Apply a bead of silicone sealant inside the female outer pipe joint prior to joining sections.
- Only outer pipes are sealed, sealing the inner flue is not required.
- All unit collar, pipe, slip section, elbow and cap outer flues shall be sealed.

## C. Secure The Vent Sections

- Vertical runs originating off the top of the appliance, with no offsets, must be supported every 8 ft. (2.44 m) after the maximum allowed 25 ft. (7.62 m) of unsupported rise.
- Vertical runs, after any elbow, must be supported every 5 ft. (1.52 m).
- Horizontal runs must be supported every 5 feet (1.52 m).
- Vent supports or plumbers strap (spaced 120° apart) may be used to support. See figures 7.7 and 7.8.
- Wall shield firestops may be used to provide horizontal support.
- Ceiling firestops have tabs that may be used to provide vertical support.

**WARNING!** Risk of Fire, Explosion or Asphyxiation! Improper support could allow vent to sag and separate. Use vent run supports and connect vent sections per installation instructions. **DO NOT** allow vent to sag below connection point to appliance.





## **D.** Disassemble Vent Sections

- Rotate either section (see Figure 7.9) so the seams on both pipe sections are aligned as shown in Figure 7.10
- Pull carefully to separate the pieces of pipe.

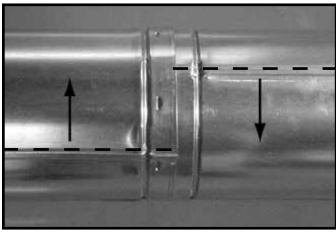


Figure 7.9 Rotate Seams for Disassembly

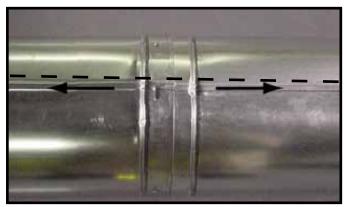
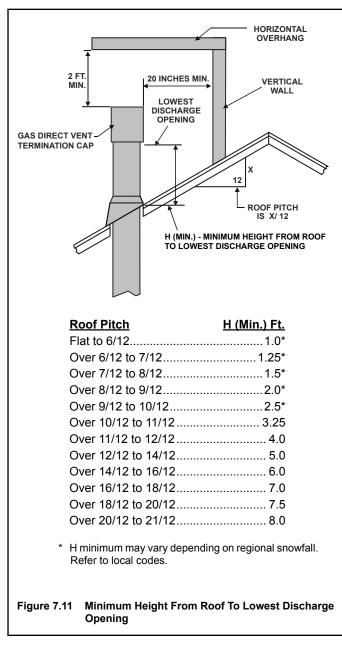


Figure 7.10 Align and Disassemble Vent Sections

## E. Vertical Termination Requirements

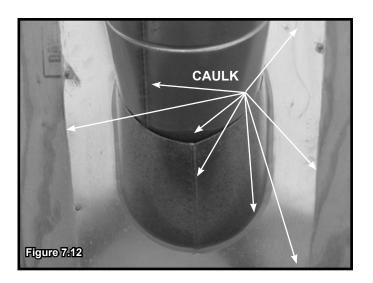
## Install Metal Roof Flashing

- See minimum vent heights for various pitched roofs (Figure 7.11) to determine the length of pipe to extend through the roof.
- Slide the roof flashing over the pipe sections extending through the roof as shown in Figure 7.12.



**NOTICE:** Failure to properly caulk the roof flashing and pipe seams could permit entry of water.

- Caulk the gap between the roof flashing and the outside diameter of the pipe.
- Caulk the perimeter of the flashing where it contacts the roof surface. See Figure 7.12.
- Caulk the overlap seam of any exposed pipe sections that are located above the roof line.



## Assemble and Install Storm Collar

**CAUTION! Risk of Cuts, Abrasions or Flying Debris.** Wear protective gloves and safety glasses during installation. Sheet metal edges are sharp.

- Slide the storm collar onto the exposed pipe section and align brackets.
- Insert a bolt (provided) through the brackets and install nut. Do not completely tighten. See Figure 7.13.



- Slide the assembled storm collar down the pipe section until it rests on the roof flashing (see Figure 7.14).
- Tighten nut and make sure the collar is tight against the pipe section.
- Caulk around the top of the storm collar. See Figure 7.14.

#### **Install Vertical Termination Cap**

- Attach the vertical termination cap by sliding the inner collar of the cap into the inner flue of the pipe section while placing the outer collar of the cap over the outer flue of the pipe section.
- Secure the cap by driving three self-tapping screws (supplied) through the pilot holes in the outer collar of the cap into the outer flue of the pipe. See Figure 7.14.



## F. Horizontal Termination Requirements

# Heat Shield Requirements for Horizontal Termination

**WARNING!** Risk of Fire! To prevent overheating and fire, heat shields must extend through the entire wall thickness.

- **DO NOT** remove the heat shields attached to the wall shield firestop and the horizontal termination cap (shown in Figure 7.15).
- Heat shields must overlap 1-1/2 in. (38 mm) minimum.

There are two sections of the heat shield. One section is factory-attached to the wall shield firestop. The other section is factory-attached to the cap. See Figure 7.15.

If the wall thickness does not allow the required 1-1/2 in. (38 mm) heat shield overlap when installed, an extended heat shield must be used.

- If the wall thickness is less than 4 in./102 mm, the heat shields on the cap and wall shield firestop must be trimmed. A minimum 1-1/2 in. (38 mm) overlap MUST be maintained.
- Use an extended heat shield if the finished wall thickness is greater than 7-1/4 in. (184 mm).
- The extended heat shield may need to be cut to length maintaining sufficient length for a 1-1/2 in. (38 mm) overlap between heat shields.
- Attach the extended heat shield to either of the existing heat shields using the screws supplied with the extended heat shield. Refer to vent components diagrams in the back of this manual.
- Rest the small leg on the extended heat shield on top of the pipe section to properly space it from the pipe section.

Important Notice: Heat shields may not be field constructed.

#### Install Horizontal Termination Cap

**WARNING!** Risk of Fire! The telescoping flue section of the termination cap MUST be used when connecting vent.

 1-1/2 (38 mm) minimum overlap of flue telescoping section is required.

Failure to maintain overlap could cause overheating and fire.

- 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 and refer to Section 4 of this manual.

**CAUTION!** Risk of Burns! Local codes may require installation of a cap shield to prevent anything or anyone from touching the hot cap.

**NOTICE:** For certain exposures which require superior resistance to wind-driven rain penetration, a flashing kit and HRC caps are available. When penetrating a brick wall, a brick extension kit is available for framing the brick.

**Note:** When using termination caps with factory-supplied heat shield attached, no additional wall shield firestop is required on the exterior side of a combustible wall.

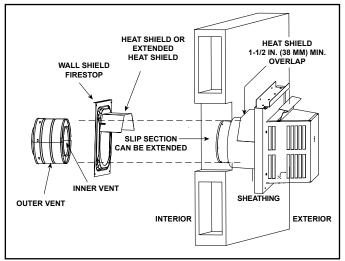


Figure 7.15 Venting Through the Wall

**Electrical Information** 

#### A. General Information

**WARNING! Risk of Shock or Explosion! DO NOT** wire 110-120 VAC to the valve or to the appliance wall switch. Incorrect wiring will damage controls.

**NOTICE:** 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**.

- Wire the appliance junction box to unswitched 110-120 VAC. This is required for proper operation of the appliance.
- A 110-120 VAC circuit for this product must be protected with ground-fault circuit-interrupter protection, in compliance with the applicable electrical codes, when it is installed in locations such as in bathrooms or near sinks.
- Low voltage and 110/120 VAC voltage cannot be shared within the same wall box.

#### **Electrical Service and Repair**

**WARNING!** Risk of Shock! Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

**WARNING! Risk of Shock!** Replace damaged wire with type 105° C rated wire. Wire must have high temperature insulation.

#### **Accessories Requirements**

• This appliance may be used with a wall switch, wall mounted thermostat and/or a remote control.

Wiring for optional Hearth & Home Technologies approved accessories should be done now to avoid reconstruction. Follow instructions that come with those accessories.

#### **Junction Box Installation**

**WARNING! Risk of Shock!** Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

**WARNING! Risk of Shock!** Replace damaged wire with type 105° C rated wire. Wire must have high temperature insulation.

## **Junction Box Wiring**

- 1. This should be done before framing the fireplace. Wire the receptacle into an electrical circuit.
- 2. Remove the external junction box cover by removing the screw from the side of the outside firebox wall. Junction box was installed at the factory. See Figure 8.1.

3. The junction box cover has a factory installed "romex" style strain relief connector. After connecting the wires, route the wire leads through this connector. Refer to the wiring diagram in Figure 8.2.

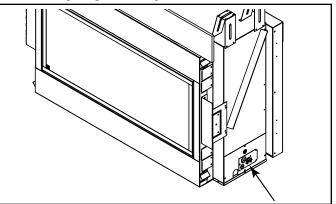


Figure 8.1 Bottom Panel Location

WARNING	Electrical connections should only be performed by a qualified, licensed electrician. Main power must be off when connecting to main electrical power supply or performing service. All wiring shall be in compliance with all local, city and state codes. The appliance, when installed, must be electrically grounded in accordance with local codes or in the absence of local codes, with the National Electrical Code ANSI/NFPA 70 (latest edition) and Canadian Electrical Code, CSA C22.1.
CAUTION	Label all wires before disconnecting when servicing controls. Wiring errors can cause improper and dangerous operation.
RNING	Do not connect wall switch to 110 V circuit.

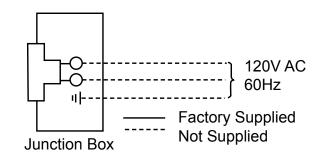


Figure 8.2 - Junction Box Wiring Diagram

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## **B. Wiring Requirements**

## Intellifire<sup>™</sup> Touch Ignition System Wiring

• Wire the appliance junction box to 110-120 VAC for proper operation of the appliance.

**WARNING!** Risk of Shock or Explosion! DO NOT wire IFT controlled appliance junction box to a switched circuit. Incorrect wiring will override IFT safety lockout.

- Refer to Figure 8.3 or 8.4, IFT Wiring Diagram.
- This appliance is equipped with an Intellifire<sup>™</sup> Touch control valve which operates on a 6 volt/1.5 AMP system.
- Plug the 6 volt transformer plug into the appliance junction box to supply power to the unit OR install 4 AA cell batteries (not included) into the battery pack before use.

**NOTICE:** Batteries should only be used as a power source in the event of an emergency power outage. Batteries should not be used as a primary long-term power source. Battery polarity must be correct when installing batteries. When using batteries as a power source, the 6-volt transformer must be unplugged from the receptacle.

Do not store batteries in the battery pack when the appliance is powered by the 6 volt transformer connected to permanent electrical service.

#### **Accessories Requirements**

• This appliance ships standard with a remote control.

Wiring for optional Hearth & Home Technologies approved accessories should be done now to avoid reconstruction. Follow instructions that come with those accessories.

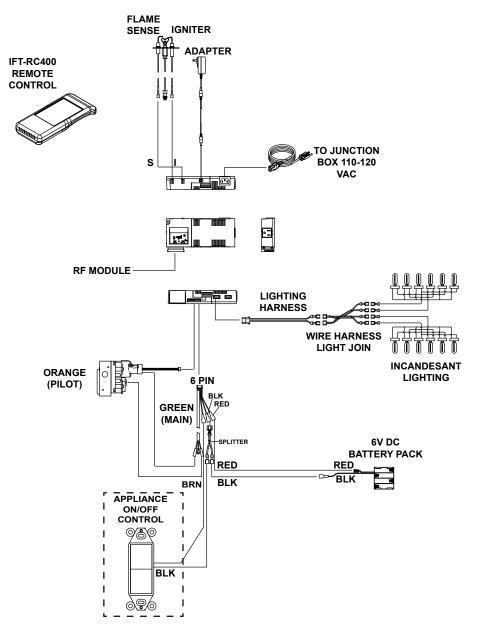


Figure 8.3 IntelliFire™ Touch Wiring Diagram without Power Vent

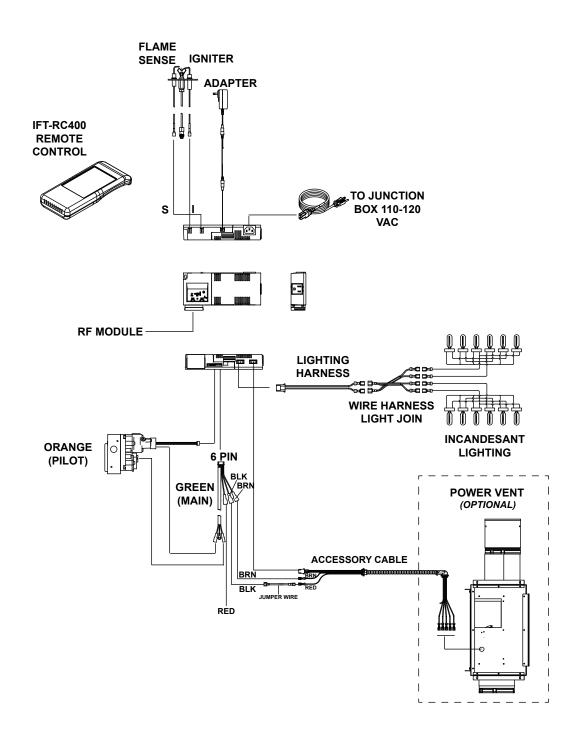


Figure 8.4 IntelliFire™ Touch Wiring Diagram withPower Vent

Gas Information

## A. Fuel Conversion

- Make sure the appliance is compatible with available gas types.
- Conversions must be made by a qualified service technician using Hearth & Home Technologies specified and approved parts.

## B. Gas Pressure

- Optimum appliance performance requires proper input pressures.
- Gas line sizing requirements will be determined in ANSI Z223.1 National Fuel Gas Code in the USA and CAN/ CGA B149 in Canada.
- · Pressure requirements are:

Gas Pressure	Natural Gas	Propane
Minimum inlet pressure	5.0 in. w.c.	11.0 in. w.c.
Maximum inlet pressure	10.0 in. w.c.	13.0 in. w.c.
Manifold pressure	3.5 in. w.c.	10.0 in. w.c.

**WARNING!** Risk of Fire or Explosion! High pressure will damage valve. Low pressure could cause explosion.

- Verify inlet pressures. Verify minimum pressures when other household gas appliances are operating.
- Install regulator upstream of valve if line pressure is greater than 1/2 psig.
- Valve pressure taps are accessible by removing the barrier screen. See Figures 9.1 & 9.2.

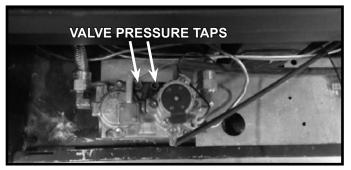


Figure 9.1. Valve Pressure Taps.

## A WARNING

Fire Risk. Explosion Hazard.

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.

**Note:** Have the gas supply line installed in accordance with local 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.

## C. Gas Service Access

**Note:** This appliance does include a manual gas shutoff valve that is located in the valve compartment. This manual gas shutoff valve is accessible for service by removing the barrier screen. See Figure 9.2. The valve is most accessible if it is located forward in the control cavity of the appliance.

Depending upon local code, an additional manual gas shutoff, in a readily accessible area may be required and located upstream from the appliance.

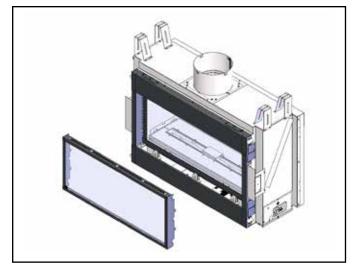


Figure 9.2 Gas and Electrical Access - Remove Glass Window

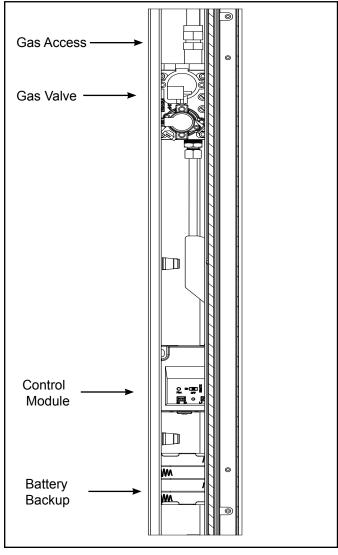


Figure 9.3 Gas Fitting Access with Bottom Glass Shield Removed

## **D. Gas Connection**

- Refer to Figure 9.3 for location of gas line access in appliance.
- · Gas line may be run through the left side of appliance.
- The gap between supply piping and gas access hole may be caulked with caulk with a minimum of 300°F continuous exposure rating or stuffed with noncombustible, unfaced insulation to prevent cold air infiltration.
- Ensure that gas line does not come in contact with outer wrap of the appliance. Follow local codes.
- · Pipe incoming gas line into valve compartment.
- Connect incoming gas line to the 1/2 in. (13 mm) connection on manual shutoff valve.

**WARNING! Risk of Fire or Explosion!** Support control when attaching pipe to prevent bending gas line.

· A small amount of air will be in the gas supply lines.

**WARNING!** Risk of Fire or Explosion! Gas build-up during line purge could ignite.

- *Purge should be performed by* qualified service technician.
- Ensure adequate ventilation.
- Ensure there are no ignition sources such as sparks or open flames.

Light the 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! Risk of Fire, Explosion or Asphyxiation!** Check all fittings and connections with a non-corrosive commercially available leak-check solution. **DO NOT** use open flame. Fittings and connections could have loosened during shipping and handling.

**WARNING! Risk of Fire! DO NOT** change valve settings. This valve has been preset at the factory.

## E. High Altitude Installations

**NOTICE:** If the heating value of the gas has been reduced, these rules do not apply. Check with your local gas utility or authorities having jurisdiction.

When installing above 4500 feet elevation reduce input 4% for each 1000 feet above 4500 feet.

Check with your local gas utility to determine proper orifice size.

## F. Air Shutter Setting

Air shutter settings may be adjusted by a qualified installer at the time of installation. The air shutter is set at the factory for minimum vertical vent run. Adjust air shutter for longer vertical runs. See Figure 9.4.

- Refer to Gas Service Access instructions in Section 9.C to access the air shutter.
- · Loosen the Philips screw.

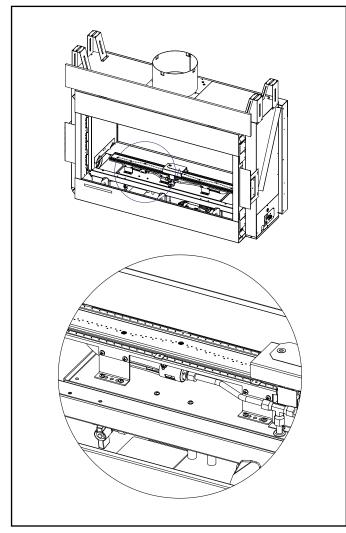


Figure 9.4 Air Shutter Location

- Twist shutter to adjust.
- Shutter may be open for longer horizontal vent runs.
- Do not close the air shutter more than 1/16 in. for NG or 1/4 in. for propane.
- Tighten the screw.

**NOTICE:** If sooting occurs, provide more air by opening the air shutter.

#### **Air Shutter Settings**

	NG	Propane
ODMEZG-36	1/4 IN.	No Cap



## A. Facing and Finishing Instructions

**WARNING!** Risk of Fire! Comply with all minimum clearances to combustibles as specified. Framing closer than the minimums listed must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc.).

#### **Finishing Instructions**

It is important to follow the framing and finishing instructions to ensure proper placement of fireplace into the surrounding framing/finishing materials.

Wall sheathing materials 1/2 in. thick are specified in this installation manual to properly align with the non-combustible material.

**WARNING! Risk of Fire!** Non-combustible board MUST be installed. DO NOT remove or cover it with combustible material, such as:

- Drywall (gypsum board)
- Plywood
- Materials that do not meet the ASTM E 136 Non-combustibility standard (below).

Removal of installed, non-combustible board and/or use of materials not meeting the ASTM E 136 standard could cause fire.

#### **Non-Combustible Materials Specification**

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.

WARNING! Risk of Fire! Maintain specified air space clearances to combustibles. Inadequate air space could

#### **Finishing Materials**

**NOTICE:** The maximum finishing material not only includes the decorative finish materials (marble, tile, slate, etc) but also the thin set, lath, and adhesive used to attach the decorative finish material.

**NOTICE:** Surface temperatures around the appliance will become warm while the appliance is in operation. Ensure finishing materials used for all surfaces (floor, walls, mantels, etc.) will withstand temperatures up to 190°F.

This section discusses installation details associated with the Inside and Overlap Fit methods and specifies additional non-combustible materials required.

When finishing the wall around the fireplace, it is critical that wall sheathing be fastened properly. Wall sheathing fasteners, such as screws or nails, are not permitted in some locations. See Figure 10.1.

It is acceptable to pre-drill holes and use self-tapped screws in the non-combustible board which may be used to lathe (a backer for tile, marble, etc.). Screws being installed through the installed non-combustible board should be self-tapping type with a maximum length of 2 inches. See Figure 10.1.

When installing finish material on the lower cover panel, DO NOT drill or install screws longer than 3/4 of an inch. Screws longer than 3/4 of an inch could penetrate the lower cover panel causing damage to components or penetrate the gas line. See Figure 10.1.

cause overheating and fire.

**WARNING!** Risk of Fire! DO NOT use screws longer than two inches when attaching finishing materials to installed non-combustible material. Screws longer than two inches will compromise clearance and could cause overheating and fire.

WARNING! Risk of Fire, Explosion or Asphyxiation! DO NOT use screws more than 3/4 of an inch long on lower cover panel. Longer screws may penetrate gas line or damage valve or electrical components.

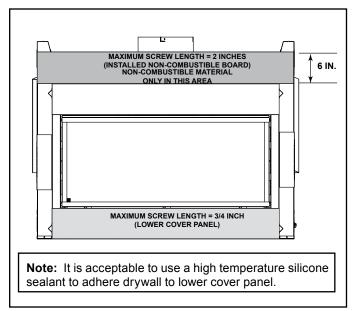


Figure 10.1 Screw Length Requirements

The appliance is designed to mate with 1/2 in. wall sheathing materials such as drywall, plywood, wood composites, or non-combustible materials.

#### **Finish and Sealing Joints**

All joints between the finished wall sheathing and the appliance must be sealed with non-combustible materials. Sealants, such as caulk or mastic used to seal the gap between the wall and the fireplace, should be rated at a minimum continuous exposure to 300°F.

#### Finishing Around Opening with Gypsum Wallboard

Gypsum wallboard (drywall) joints adjacent to the fireplace opening, including the non-combustible board on the appliance, require special attention to minimize cracking. When installing gypsum wallboard around the fireplace, install the hole for the fireplace opening in a single wallboard sheet, if possible. This will minimize the joints adjacent to the fireplace opening.

Tape wall board joints around the fireplace opening with fiberglass-mesh tape. It will provide a more crack-resistant joint than paper tape. Fill, smooth and finish wall joints with chemically setting-type joint compound. It will provide a more crack-resistant joint than air-drying lightweight compound.

#### Painting

If desired finishing includes a painted wall, 100% acrylic latex with compatible primer is recommended around this appliance. Oil-based or standard acrylic paints may discolor due to heat exposure.

In extreme cases, lab tests have shown yellow pigments fading out of paints over time due to heat. Vent run and installation location will have an effect on wall temperature and fading. If fading occurs, consider avoiding paint that contains yellow pigment.

In regards to the sheetrock mud, apply a smooth, even layer, covering a wide area of the wall for the best results. For best results, follow the tips below.

To Reduce the	Risk of Sheetrock Cracking: DO
Use all purpose joint compound.	
Use eggshell paint (100% acrylic latex p	paint, gloss or semi-gloss).
To Avoid	Sheetrock Cracking:

DO NOT	
Use a quick set or light weight joint compound.	
Use flat paint.	

**WARNING! Risk of Fire! DO NOT** apply combustible materials beyond the minimum clearances. Comply with all minimum clearances to combustibles as specified in this manual. Overlapping materials could ignite and will interfere with proper operation of doors and louvers.

**WARNING! Risk of Fire! DO NOT** install drywall or other combustible materials directly onto the installed non-combustible board. Overlapping materials could ignite.

#### **Facing Material**

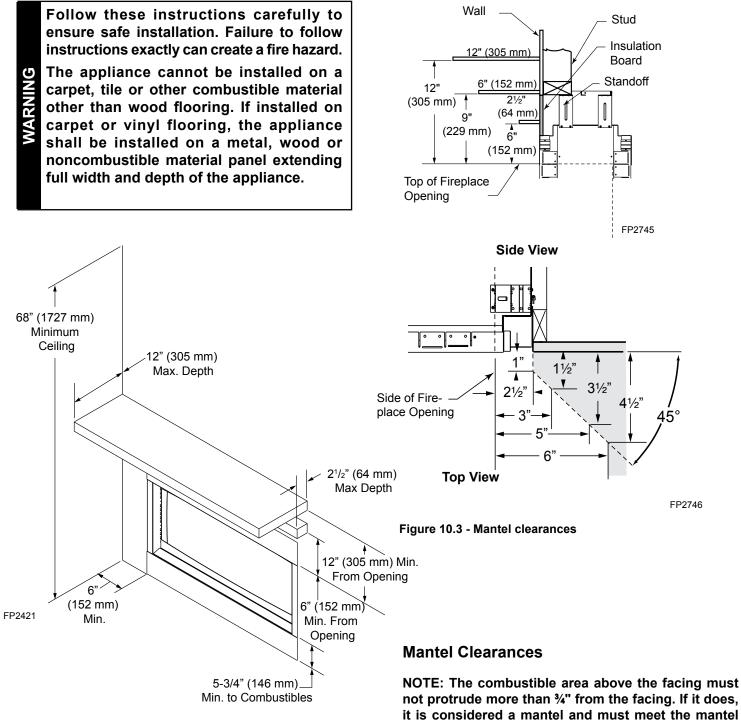
- Facing and/or finishing materials must not interfere with air flow through louvers or decorative fronts.
- Facing and/or finishing materials must never overhang into the glass opening.
- Observe all clearances when applying combustible materials.

#### **Finishing - Hearth**

See Inside Fit or Overlap Method sections to determine the necessary requirements for installation of a noncombustible hearth for this model. Only hearths made of non-combustible materials are allowed.

Refer to Section 1.E and 1.F of this manual for definitions and qualifications of non-combustible and combustible materials.

#### B. Clearance to Combustibles

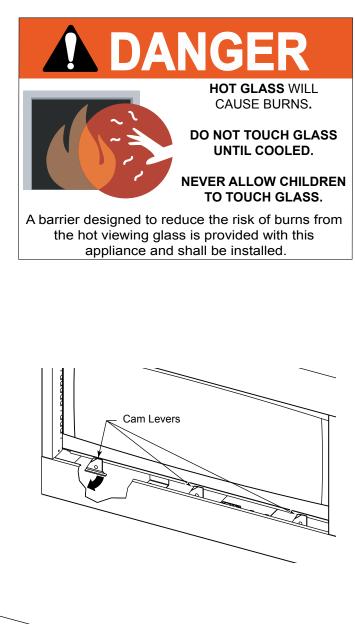


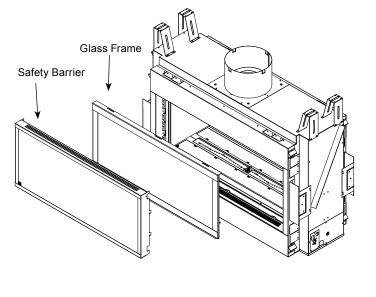
#### Figure 10.2 - Ceiling and Sidewall Clearances for Both Sides of Fireplace

not protrude more than <sup>3</sup>/<sub>4</sub>" from the facing. If it does, it is considered a mantel and must meet the mantel requirements listed in this manual.

## C. Glass Frame Removal

- **NOTE:** If the safety barrier is in place, you must first remove it before you remove the glass frame. To remove the barrier, simply lift up and pull out until the tabs are clear of their corresponding slots on the firebox. Then proceed to remove the glass frame by following the steps below.
- 1. Rotate the three (3) cam levers in the lower access area 90° clockwise.
- 2. Tilt glass away from unit. Lift glass frame up and away from unit.





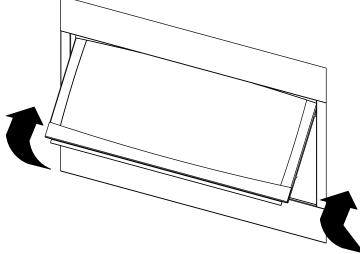


Figure 10.4 - Remove Glass Frame

## D. Light Installation

- 1. Remove the front floor screen frame by unfastening the eight (8) screws securing the front and sides.
- 2. Install the six (6) halogen light bulbs provided. Do not touch light bulbs directly with fingers.
- 3. Replace the front floor screen frame. Be sure wires do not get pinched below the light channel.
- 4. Repeat procedure for lights on opposite side.

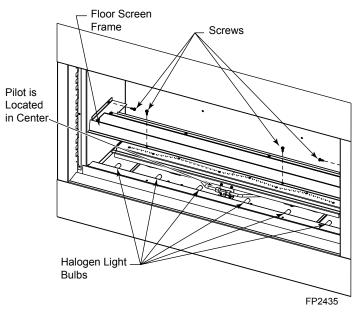
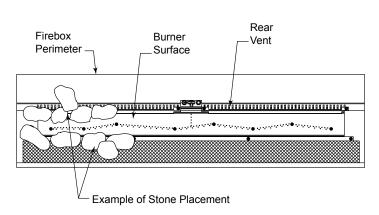


Figure 10.5 - Install Light Bulbs

## E. Glass Only Placement

**NOTE:** Three (3) bags of glass are supplied with the fireplaces. It is not necessary to use the entire 3rd bag of glass provided. Too much glass can cut off the proper amount of air the burner needs to burn clean. This may cause sooting.

- 1. Spread glass evenly in one layer over the entire floor and burner. It is important to not have the glass too heavy on ported area (single layer only).
- 2. Turn burner on and adjust glass over ported areas to achieve a clean flame.
- 3. Replace glass frame and access door in reverse order of removal.







# SAFETY BARRIER INSTALLATION INSTRUCTIONS

**NOTE:** A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at risk individuals. If the barrier becomes damaged, the barrier shall be replaced with the manufacturer's barrier for this appliance.\* Any safety screen, guard, or barrier removed for servicing the appliance must be replaced prior to operating the appliance.

\* See parts list for model number.

- 1. Remove screen from packaging.
- 2. Align the four tabs on the sides of the screen frame (two top, two bottom) Figure 10.7 with the corresponding slots on the firebox. Figure 10.8
- 3. Slide the screen down into the slots until it fits securely in place.

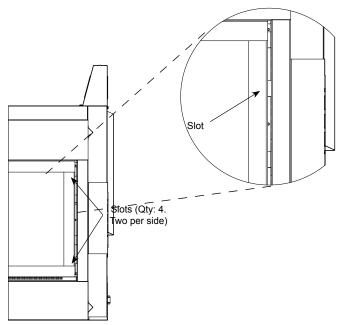
**NOTICE**: It is the responsibility of the installer to ensure the barrier is affixed to the fireplace at the time of installation.



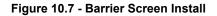
WARNING: The safety screen barrier must be installed after the glass front is in place. It is NOT a replacement for the glass and the unit must NOT be operated without the glass in place.



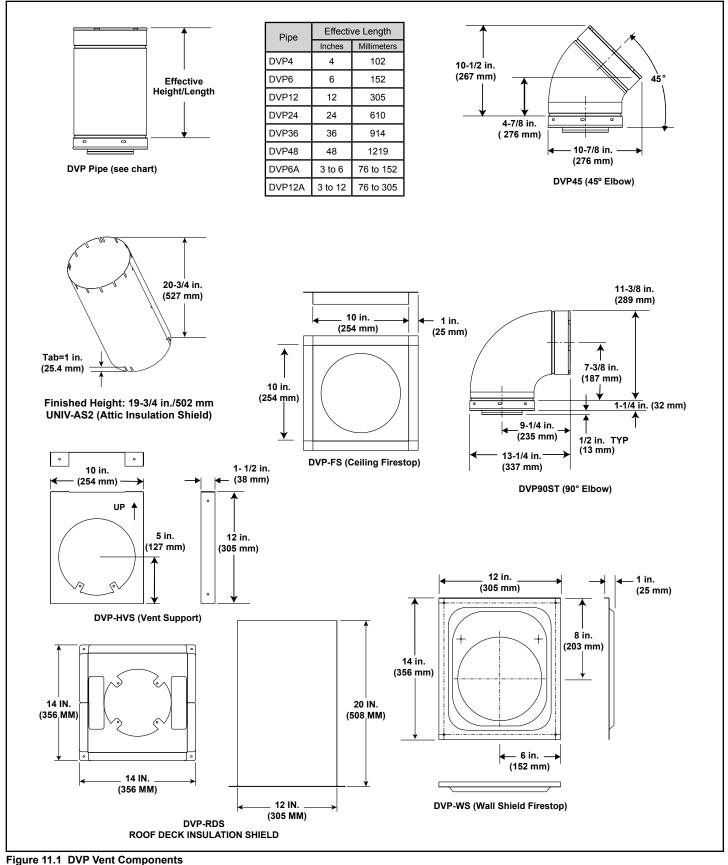
A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed.







## A. Vent Components Diagrams



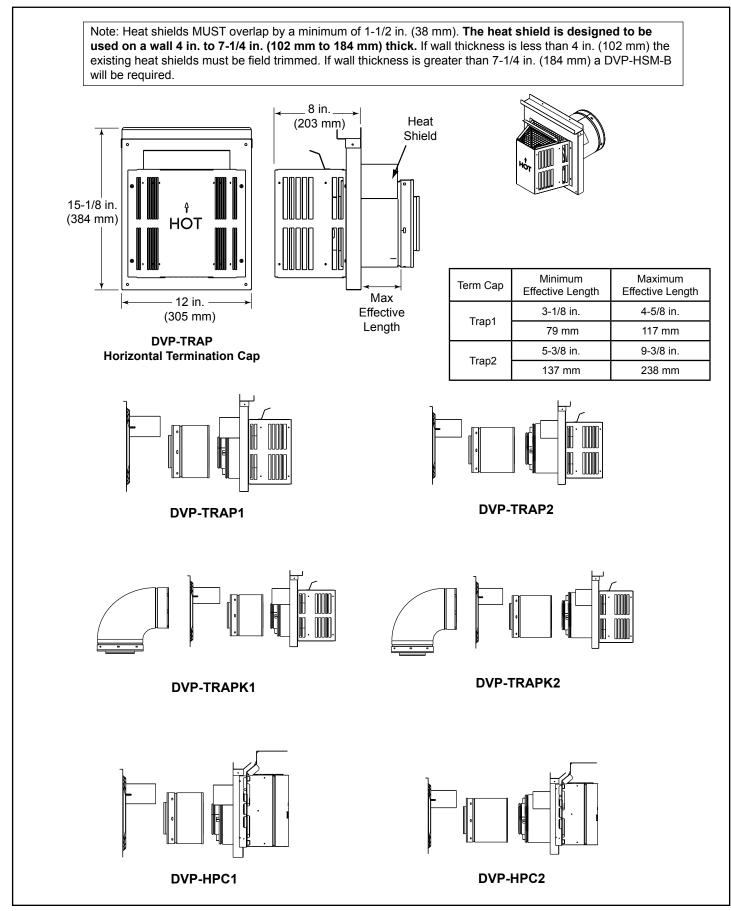


Figure 11.2 DVP Vent Components

## A. Vent Components Diagrams (continued)

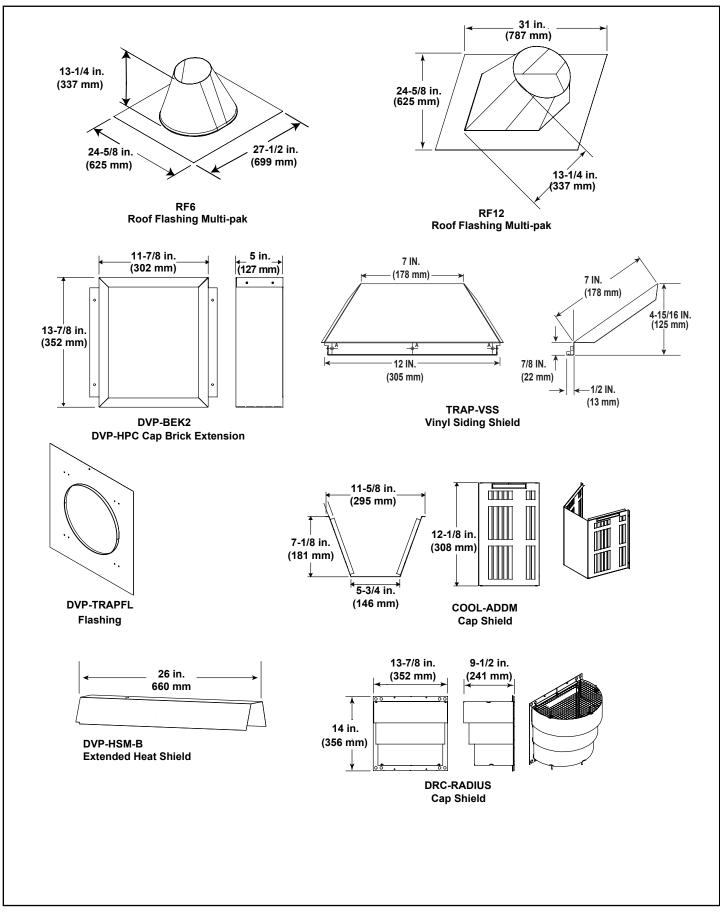


Figure 11.3 DVP Vent Components

## A. Vent Components Diagrams (continued)

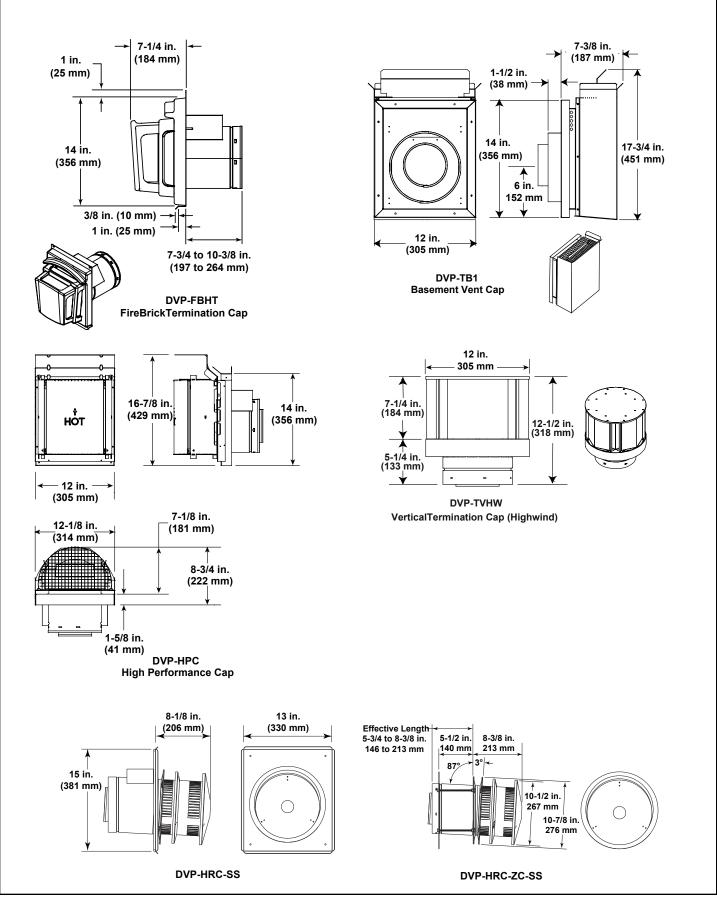
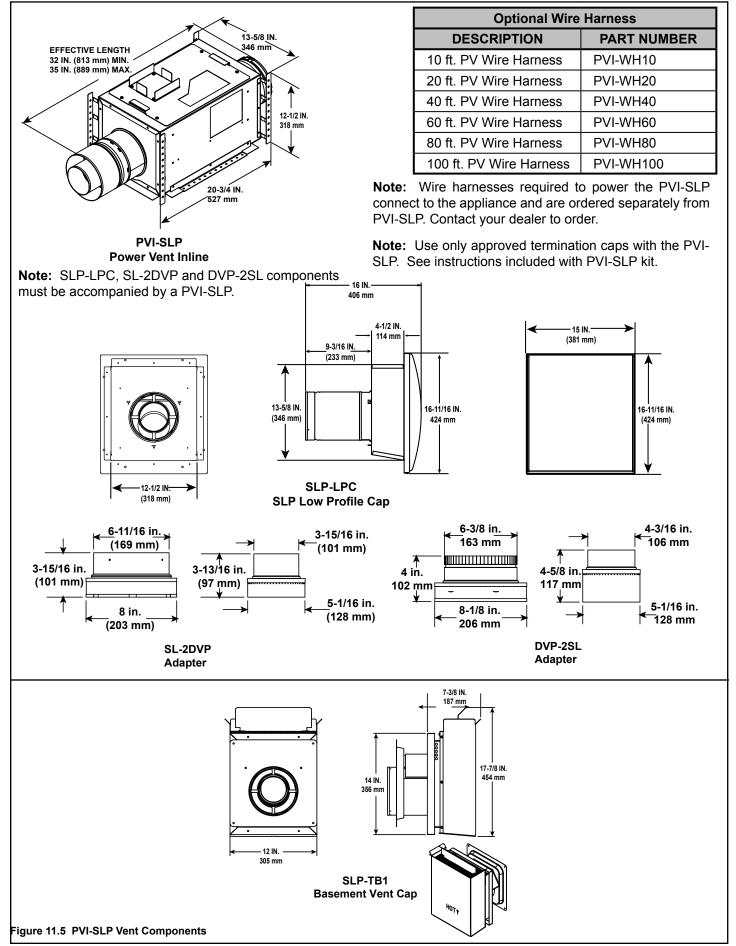
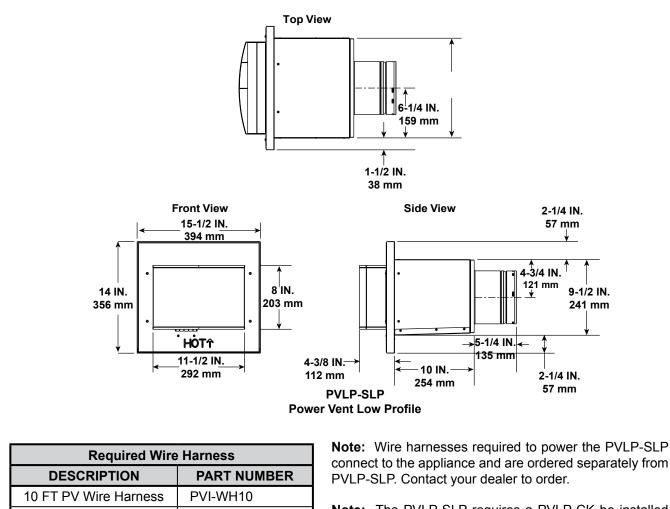


Figure 11.4 DVP Vent Components

## A. Vent Components Diagrams (continued)



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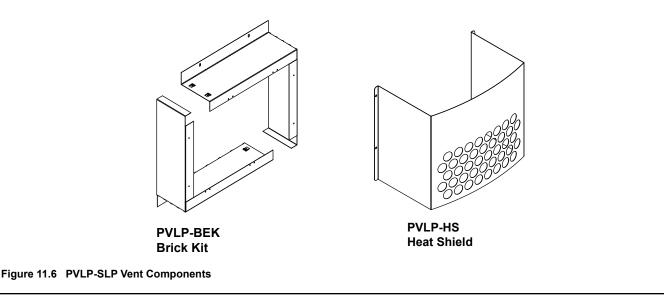


10 FT PV Wire Harness	PVI-WH10
20 FT PV Wire Harness	PVI-WH20
40 FT PV Wire Harness	PVI-WH40
60 FT PV Wire Harness	PVI-WH60
80 FT PV Wire Harness	PVI-WH80
100 FT PV Wire Harness	PVI-WH100

connect to the appliance and are ordered separately from

Note: The PVLP-SLP requires a PVLP-CK be installed on this appliance. The PVLP-CK is ordered separately from the PVLP-SLP. Contact your dealer to order.

Note: A PVLP-HS heat shield is available and sold separately. Use if the PVLP-SLP is installed in a high traffic area.



## **B.** Accessories

## **Remote Controls, Wall Controls and Wall**

## Switches

Follow the instructions supplied with the control installed to operate your fireplace:

For safety:

- Install a switch lock or a wall/remote control with child protection lockout feature.
- · Keep remote controls out of reach of children.

Contact your dealer if you have questions.

Outdoor Lifestyles, a brand of Hearth & Home Technologies 7571 215<sup>th</sup> Street West, Lakeville, MN 55044 www.outdoorlifestylesproducts.com

Please contact your Outdoor Lifestyles dealer with any questions or concerns. For the location of your nearest Outdoor Lifestyles dealer, please visit www.outdoorlifestylesproducts.com.