

# Installation Manual

## Installation and Appliance Setup

**INSTALLER:** Leave this manual with party responsible for use and operation.

**OWNER:** Retain this manual for future reference.

**NOTICE:** DO NOT discard this manual!

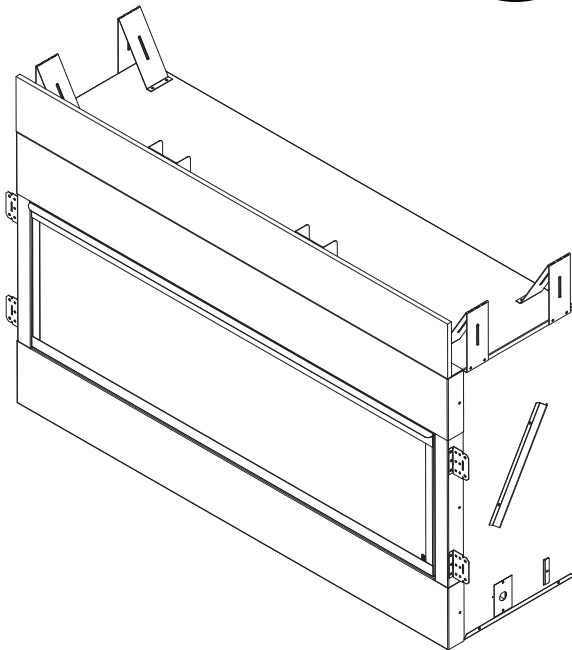
**ARTISAN  
SERIES**



**Models:**

**AVFL60NIP**

**AVFL60PIP**



This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to Page 6.

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.

### **⚠ 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.

**DO NOT** install this unit in a bedroom or bathroom. Please refer to page 6 Section F for proper unit placement.

## ▲ 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

### ATTENTION INSTALLER: *Follow this Standard Work Checklist*

This standard work checklist is to be used by the installer in conjunction with, not instead of, the instructions contained in this installation manual.

Customer: \_\_\_\_\_

Lot/Address: \_\_\_\_\_

Model (circle one): AVFL60NIP, AVFL60PIP

Date Installed: \_\_\_\_\_

Location of Fireplace: \_\_\_\_\_

Installer: \_\_\_\_\_

Dealer/Distributor Phone # \_\_\_\_\_

Serial #: \_\_\_\_\_



**WARNING! Risk of Fire or Explosion!** Failure to install appliance according to these instructions could lead to a fire or explosion.

#### **Appliance Install Sections 2 and 4 (Pg. 5 & 12)**

Verified that the chase is insulated and sealed.

Required non-combustible board is installed.

Verified clearances to combustibles.

Fireplace is leveled and secured.

Adequate provisions for combustion and ventilation air have been verified.

YES

☐☐☐☐☐

IF NO, WHY?

#### **Gas Section 5 (Pg 14)**

Proper appliance for fuel type.

Leak check performed and inlet pressure verified.

Verified proper air shutter setting for installation type.

☐☐☐

#### **Electrical Section 6 (Pg 19)**

Unswitched power (110-120 VAC) provided to the appliance.

Switch wires properly installed.

☐☐

#### **Media & Logs Section 7 (Pg 22-25)**

All packaging and protective materials removed (inside & outside of appliance).

Media installed correctly.

Accessories installed properly.

☐☐☐

#### **Finishing Section 8 (Pg 27)**

Verified all clearances meet installation manual requirements.

Mantels and wall projections comply with installation manual requirements.

☐☐

Manual bag and all of its contents are removed from inside/  
under the appliance and given to party responsible for use and  
operation. Started appliance and verified no gas leaks exist.

☐☐

#### **Hearth & Home Technologies recommends the following:**

- Photographing the installation and copying this checklist for your file.
- That this checklist remain visible at all times on the appliance until the installation is complete.

**Comments:** Further description of the issues, who is responsible (Installer/ Builder/ Other Trades, etc) and corrective action needed \_\_\_\_\_

Comments Communicated to party responsible \_\_\_\_\_ by \_\_\_\_\_ on \_\_\_\_\_  
(Builder / Gen. Contractor/) (Installer) (Date)

➔ = Contains updated information.

# 1 Product Specific and Important Safety Information

## A. Appliance Certification

**MODEL:** AVFL60NIP, AVFL60PIP  
**LABORATORY:** CSA  
**TYPE:** Unvented Room Heaters  
**STANDARD:** ANSI Z21.11.2.2013

This product is listed to ANSI standards for "Unvented Room Heaters" and applicable sections of "Gas Burning Heating Appliances for Manufactured Homes" and "Gas Fired Appliances for Use at High Altitude."

**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.

**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. BTU Specifications

Models		Maximum Input BTU/h	Minimum Input BTU/h	Orifice Size (DMS)
AVFL60NIP	(0-4500 FT)	38,000	25,000	#44
AVFL60PIP	(0-4500 FT)	37,000	29,000	#54

**NOTE:** For LP models an external regulator is required to reduce supply pressure to a maximum of 13" w.c.

## GAS PRESSURES

	NATURAL	PROPANE (LP)
Inlet Minimum	5.0" w.c.	11.0" w.c.
Inlet Maximum	10.5" w.c.	13.0" w.c.
Regulator Pressure Setting	3.5" w.c.	10" w.c.
Pilot Regulator	3.5" w.c.	—

## C. 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.

## D. 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.

## E. 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.

## F. 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.



**WARNING:** This product and the fuels used to operate this product (liquid propane or natural gas), and the products of combustion of such fuels, can expose you to chemicals including benzene, which is known to the State of California to cause cancer and reproductive harm. For more information go to: [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).


## 2 Getting Started

### A. Design and Installation Considerations


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.
- Gas supply piping.
- Electrical wiring requirements.
- Framing and finishing details.
- Whether optional accessories—devices such as a wall switch or remote control—are desired.



Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies recommends HHT Factory Trained or NFI certified professionals.



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
- Pliers
- Hammer
- Gloves
- Voltmeter
- Level
- Manometer
- Framing material
- Phillips screwdriver
- Framing square
- Plumb line
- Safety glasses
- Reciprocating saw
- Flat blade screwdriver
- 1/2 - 3/4 in. length, #6 or #8 Self-drilling screws
- Non-corrosive leak check solution
- Electric drill and bits (1/4 in. magnetic)
- External regulator (for propane/LPG only)
- Piping which complies with local codes
- Pipe sealant approved for use with propane/LPG (Resistant to sulfur compounds)
- Manual shutoff valve
- Sediment trap
- Tee joint
- Pipe wrench

### C. Inspect Appliance and Components

- Carefully remove the appliance and components from the packaging.
- **NOTE: Remove rear packaging bracket before installing unit. See Figure 2.1.**
- The accessories and fronts may be shipped in separate packages.
- Media may be packaged separately.
- 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.**

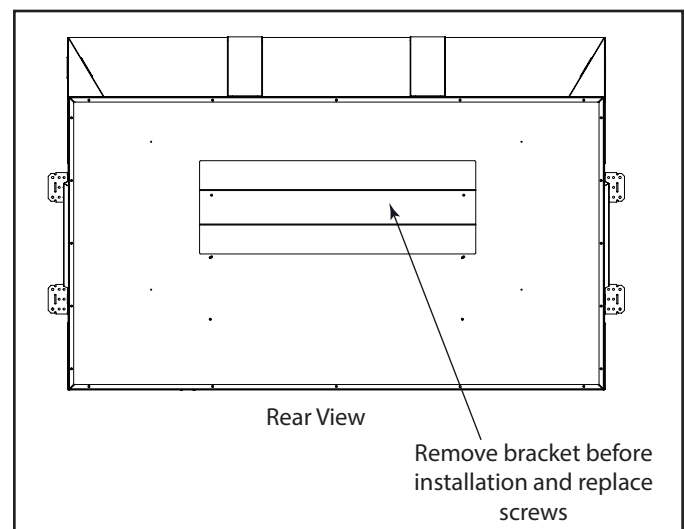
**WARNING! Risk of Fire or Explosion! Damaged parts could impair safe operation. DO NOT install damaged, incomplete or substitute components. Keep appliance dry.**

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

- Installation and use of any damaged appliance.
- Modification of the appliance.
- Installation other than as instructed by Hearth & Home Technologies.
- 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.**



**Figure 2.1 Bracket Removal**

## D. Getting Started

Verify that all listed parts have been received. You should have the following:

- Unvented gas heater
- Two (2) anchoring screws
- Installation and Owner's instructions
- 6" non-combustible board
- Deflector glass
- Five (5) bags fireglass
- Two (2) 90 watt bulbs
- RC300 remote control

Carefully inspect the contents for shipping damage. If any parts are missing or damaged, immediately inform the dealer from whom you purchased the appliance. **Do not attempt to install any part of the appliance unless you have all parts in good condition.**

### WARNING

**Do not install the heater:**

- **Where curtains, furniture, clothing, or other flammable objects are less than 36" from the front of the heater.**
- **In high traffic areas.**
- **In windy or drafty areas.**

### WARNING

**Gloves are recommended when handling ceramic fiber logs to prevent skin irritation from loose fibers. Logs are fragile—handle with care.**

## E. Planning the Installation

When planning the installation of the fireplace it is necessary to determine where the unit is to be installed and whether optional accessories are desired. Gas supply piping should also be planned. The following steps represent the normal sequence of installation. Each installation is unique, however, and might require a different sequence.

1. Position fireplace in desired location. Refer to the *Fireplace Location* (page 8, Figure 3.2) and *Clearances and Height Requirements* (page 9, Figures 3.4 and 3.5) sections and *Fireplace and Framing Dimensions* (page 8, Figure 3.2) illustration found in this manual.

**NOTE:** Be sure all packing material has been removed from under and behind the unit.

2. Install following the instructions found in this manual.
3. Field wire main power supply to junction box. Refer to the *Electrical Installation* section (page 19). (Electrical connections should only be performed by an experienced, licensed certified service person).

4. Plumb gas line. Gas line may be run either through bottom of unit or left side. There is no right side access. Refer to the *Connect the Gas* (page 16, Figure 5.4) section found in this manual. (Gas connections should only be performed by an experienced, licensed/certified service person).
5. Complete finish wall material and/or surround.

## F. Adequate Combustion Ventilation Air

This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.

The National Fuel Gas Code, (ANSI Z223.1/NFPA54), defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 BTU per hour (4.8m<sup>3</sup> per kw) of the aggregate input rating of all appliances installed in that space, and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 BTU per hour (4.8 m<sup>3</sup> per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of a confined space.

Unusually tight construction is defined as construction where:

- a. Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of 1 perm (6 x 10<sup>-11</sup> kg per pa/sec-m<sup>2</sup>) or less with openings gasketed or sealed, and
- b. Weather stripping has been added to windows and doors, and
- c. Caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines and other openings.

The following formula can be used to determine the maximum heater rating per the definition of unconfined space:

$$\text{BTU/Hr} = \frac{(L_1 + L_2) \text{ Ft} \times (W) \text{ Ft} \times (H) \text{ Ft}}{50}$$

Consider two connecting rooms with an open area between, with the following dimensions:

$$L_1 = 15\frac{1}{2} \text{ Ft.}, L_2 = 12 \text{ Ft.}, W = 12 \text{ Ft.}, H = 8 \text{ Ft.}$$

$$\text{BTU/Hr} = \frac{(15\frac{1}{2} + 12) \times (12) \times (8)}{50}$$

If there were a door between the two rooms the calculation would be based only on the room with the heater.

$$\text{BTU/Hr} = \frac{(15\frac{1}{2}) \times (12) \times (8)}{50}$$



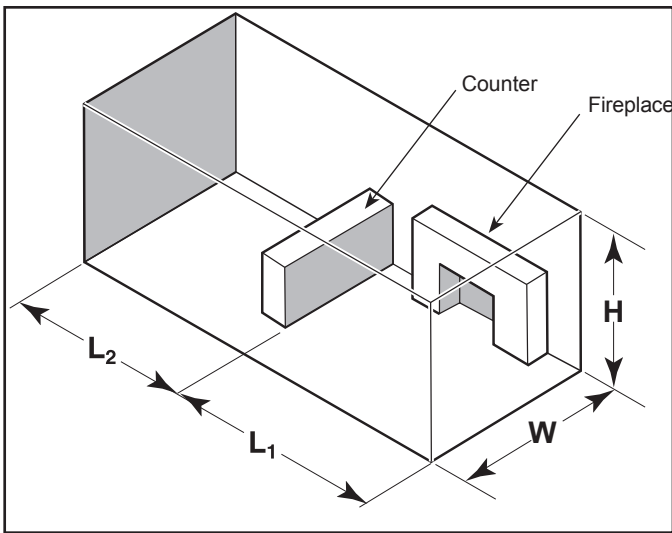


Figure 2.12

### ⚠ WARNING

If the area in which the heater may be operated does not meet the required volume for indoor combustion air, combustion and ventilation air shall be provided by one of the methods described in the *National Fuel Gas Code, ANSI Z223.1/NFPA 54*, the *International Fuel Gas Code* or applicable local codes.

## FIREPLACE LOCATION

This unvented gas heater requires no outside venting and burns cleanly and efficiently. As a zero-clearance unvented gas heater, it can be installed against (or recessed into) any wall that is accessible to a gas line.

Carefully select the best location for installation of your unvented fireplace. The following factors should be taken into consideration.

- Clearance to side wall, ceiling, woodwork and window or other combustibles. Refer to *Clearance and Height Requirements* section on Page 9. Minimum clearances to combustibles **must be maintained**.
- Location must not be affected by drafts caused by kitchen exhaust fans, ceiling fans, return air registers for forced air furnaces / air conditioners, windows or doors.
- Installation must provide adequate ventilation and combustion air.
- **DO NOT INSTALL THIS MODEL IN A BEDROOM OR BATHROOM.**
- Location should be out of high traffic areas and away from furniture and draperies due to heat from firebox.

- Never obstruct the front opening of the unvented fireplace or restrict the flow of combustion and ventilation air.
- Minimize modifications to existing construction. Refer to Figure 2.2 below for location suggestions.
- Do not install in the vicinity where gasoline or other flammable liquids may be stored. The unvented firebox must be kept clear and free from the combustible materials.

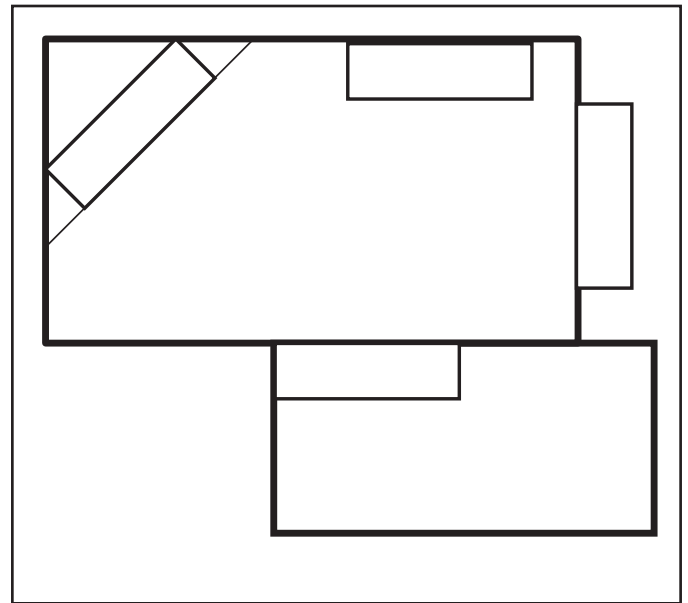


Figure 2.3

**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.

# 3 Framing and Clearances

## A. Fireplace and Framing Dimensions

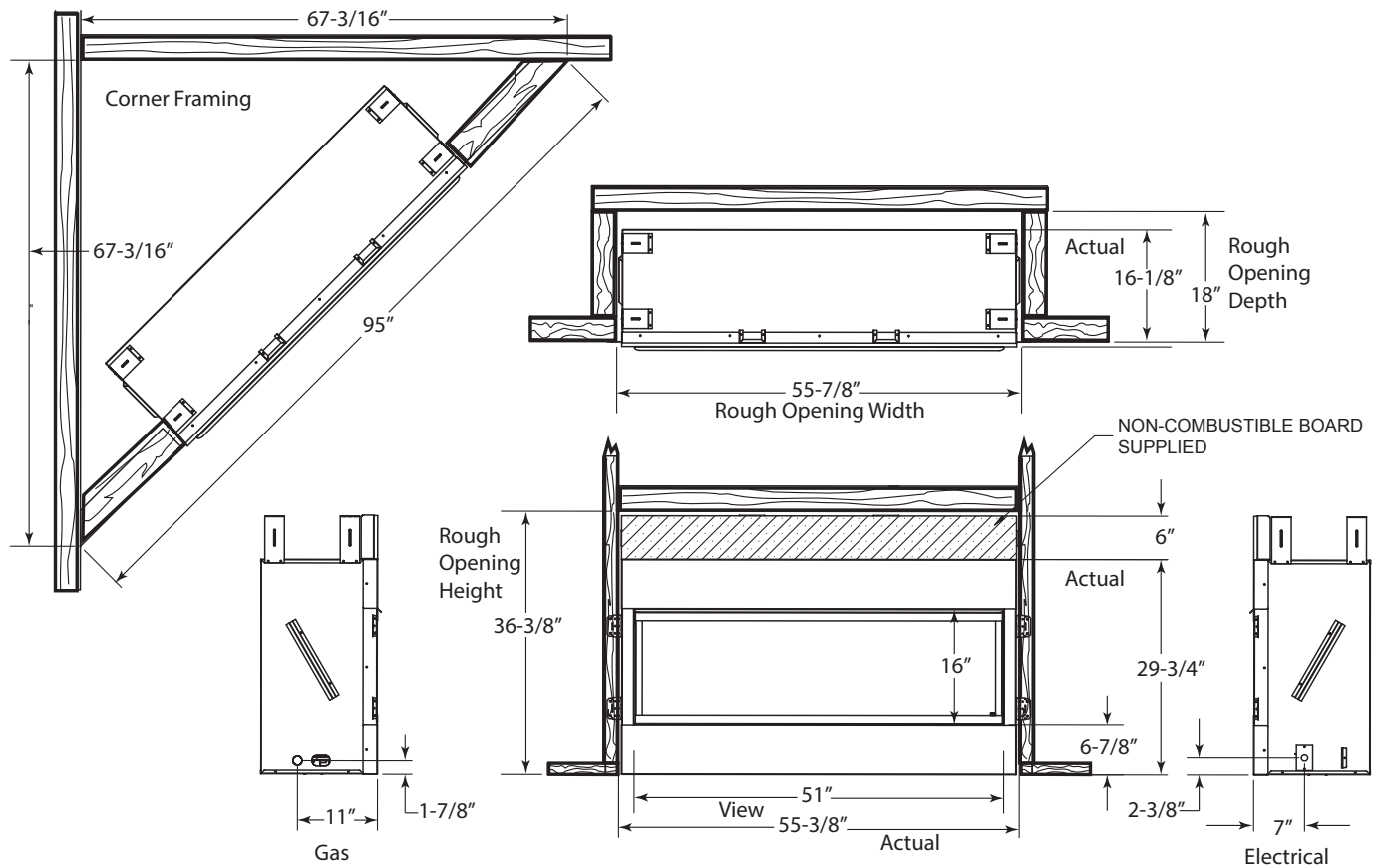


Figure 3.1 Fireplace and Framing Dimensions

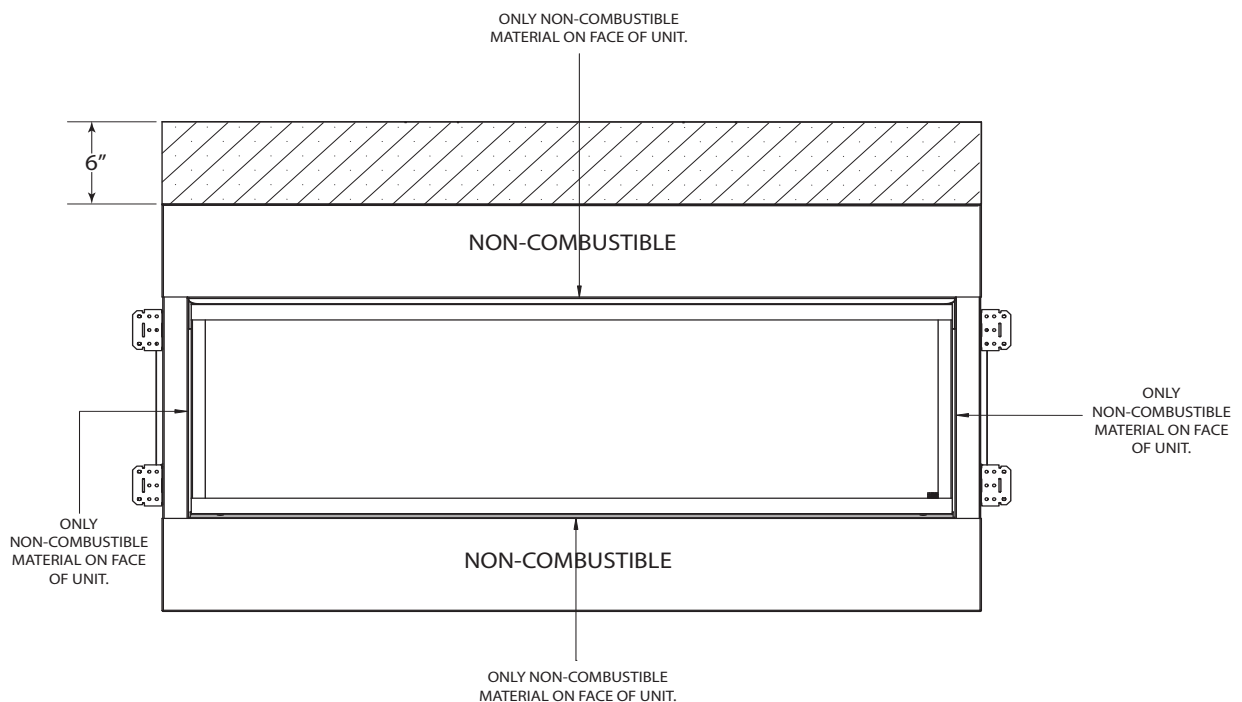


Figure 3.2 - Optional Facing Installation



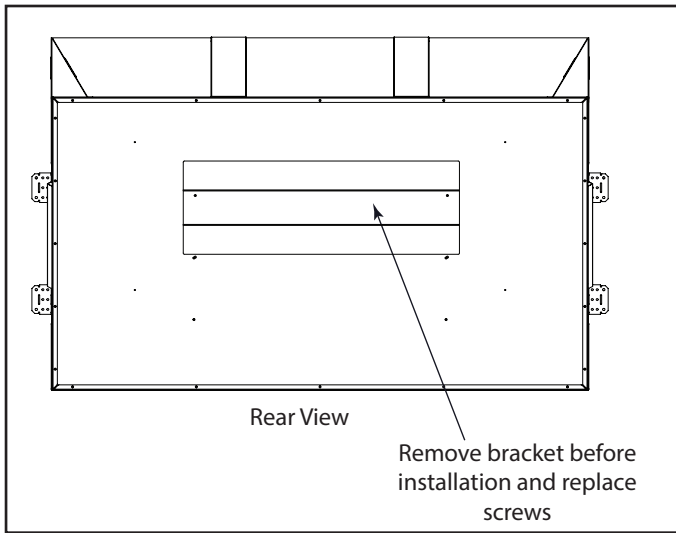


Figure 3.3 Bracket Removal

## B. Clearances and Height Requirements

Ensure that minimum clearances shown in Figures 3.4 and 3.5 are maintained. Left and right clearances are determined when facing the front of the firebox.

Follow these instructions carefully to ensure safe installation. Failure to follow these requirements may create a fire hazard.

**Sidewall Clearances** — The clearance from the inside of the appliance to any combustible adjacent wall should not be less than 6". Figure 3.4.

**Ceiling Clearance** — The ceiling or any other combustible material must be at least 36" from the firebox opening. Figure 3.4

**Back Wall Clearance** — The appliance may be placed against a combustible back wall.

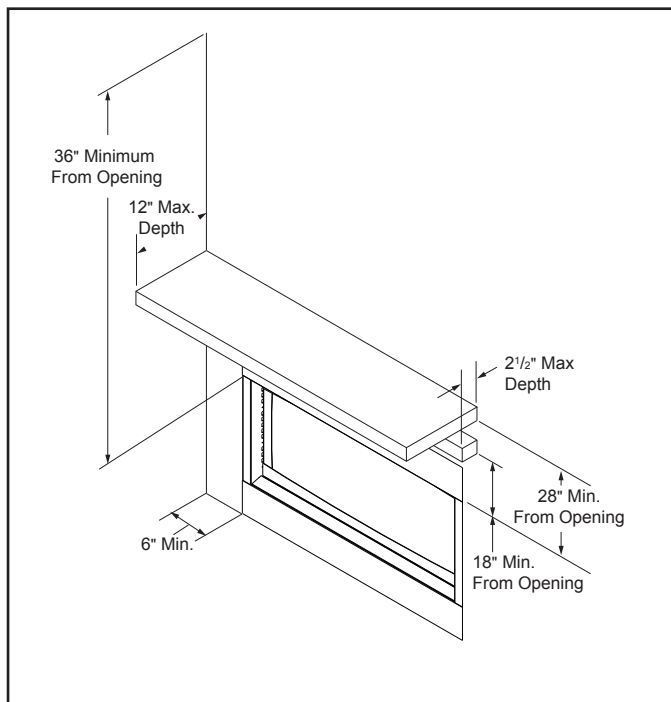


Figure 3.4 Sidewall and Ceiling Clearances

## ⚠ WARNING

The dimensions shown in Figures 3.4 and 3.5 are minimum clearances to maintain when installing this heater. Left and right clearances are determined when facing the front of the heater.

Follow these instructions carefully to ensure safe installation. Failure to follow instructions exactly can create a fire hazard.

**Floor Clearance** — The fireplace may be installed directly on a combustible floor or a raised platform of an appropriate height. Do not place fireplace on carpeting, vinyl, tile or other soft floor coverings. It may, however, be placed on flat wood, plywood, particle board or other hard surfaces. Be sure fireplace rests on a solid continuous floor or platform with appropriate framing for support so that no cold air can enter from under the firebox.

**Mantel clearances** — Must meet the clearance requirements detailed in Figures 3.4 and 3.5.

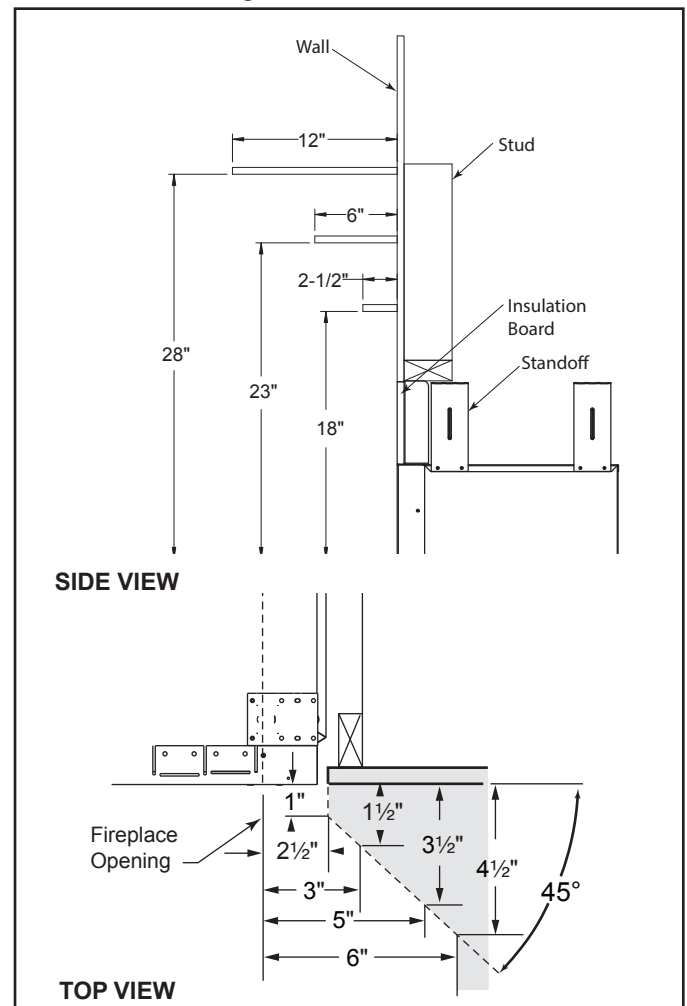
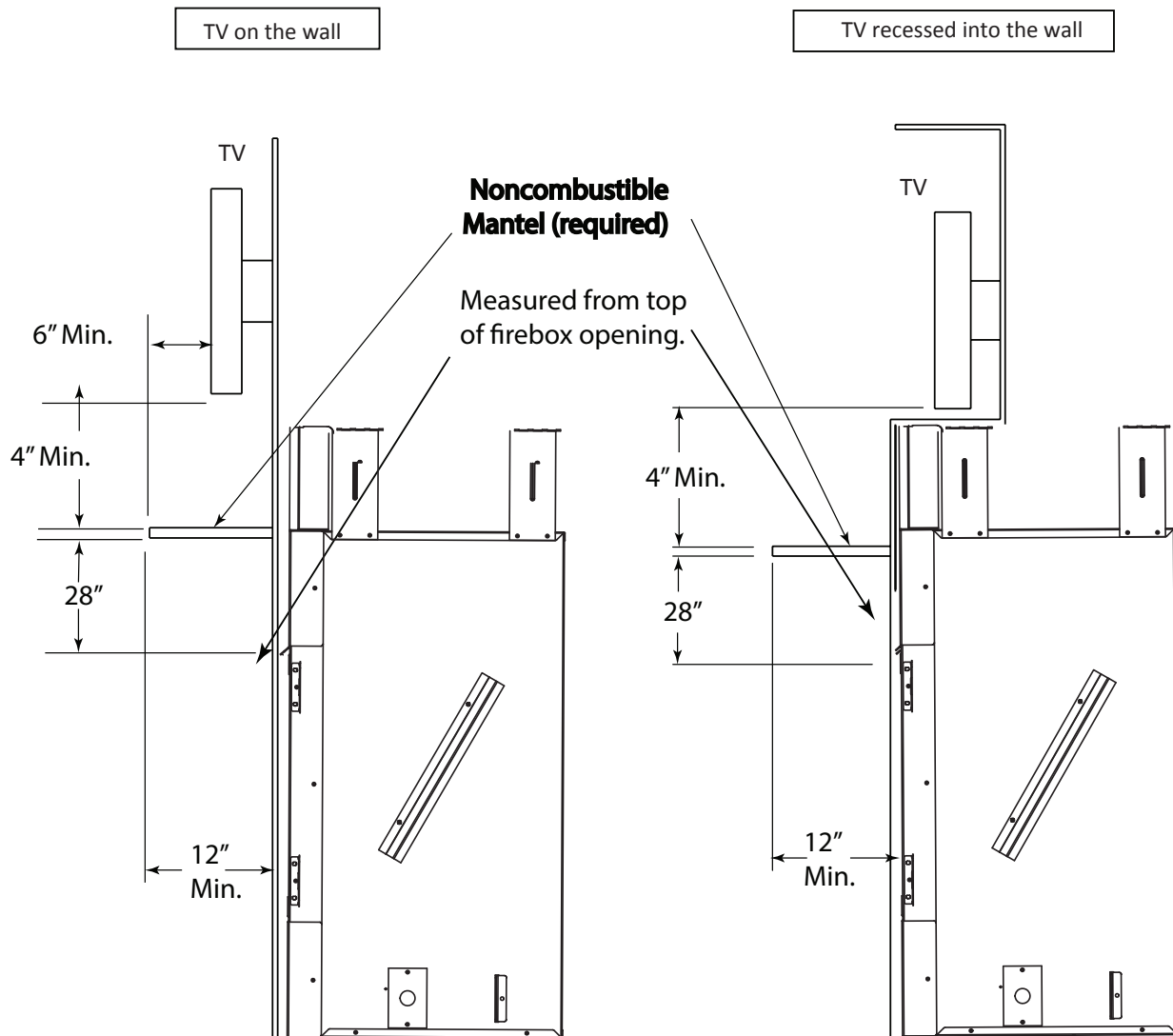


Figure 3.5 – Mantel Clearances

See Good Faith Guidelines for TV Installations on page 10, Figure 3.6.

## C. Good Faith Wall Surface TV Guidelines

### Good Faith Guidelines for TV Installations above a Typical Gas Fireplace



#### Notes:

1. TV installation as shown requires the mantel be constructed **entirely of noncombustible material** as it is below the allowable height for a combustible mantel.
2. These are good faith recommended clearances only and not a guarantee of compliance with all TV manufacturers' maximum allowable operating temperatures.
3. Since every home has unique air flow characteristics and maximum allowable operating temperatures can vary from manufacturer to manufacturer and from model to model, actual TV temperatures should be validated at the time of each installation. TVs should not be used in situations where the actual TV temperature exceeds the manufacturers' maximum allowable operating temperatures identified in the TV's technical specifications. Contact the TV's manufacturer directly if you cannot locate this information or have questions regarding the information.

Figure 3.6 Good Faith TV Guidelines

## D. Constructing the Appliance Chase

A chase is a vertical box-like structure built to enclose the gas appliance.

**NOTICE:** 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 sheet rocked and taped (or an equivalent method may be used) to achieve maximum air tightness.

To further prevent drafts, the wall shield and ceiling fire-stops 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 3.4 and Figure 3.5, and Figure 3.7 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.

## E. 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.

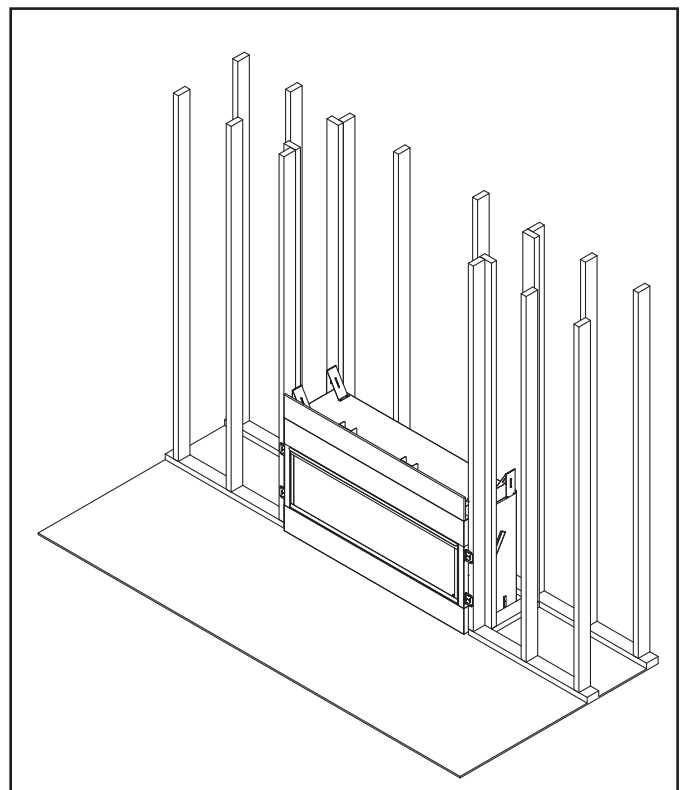


Figure 3.7 Floor Protection

# 4 Appliance Preparation

## 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 blown-in 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 4.2.
- 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.

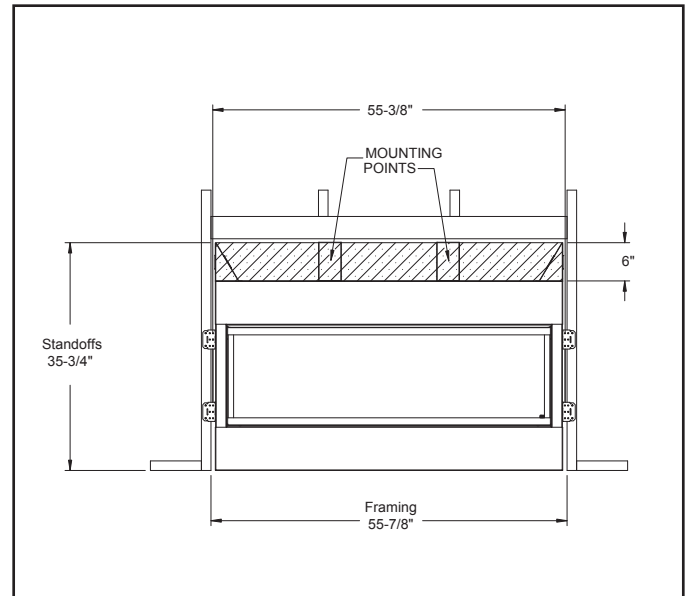


Figure 4.1 Non-combustible Facing Installation

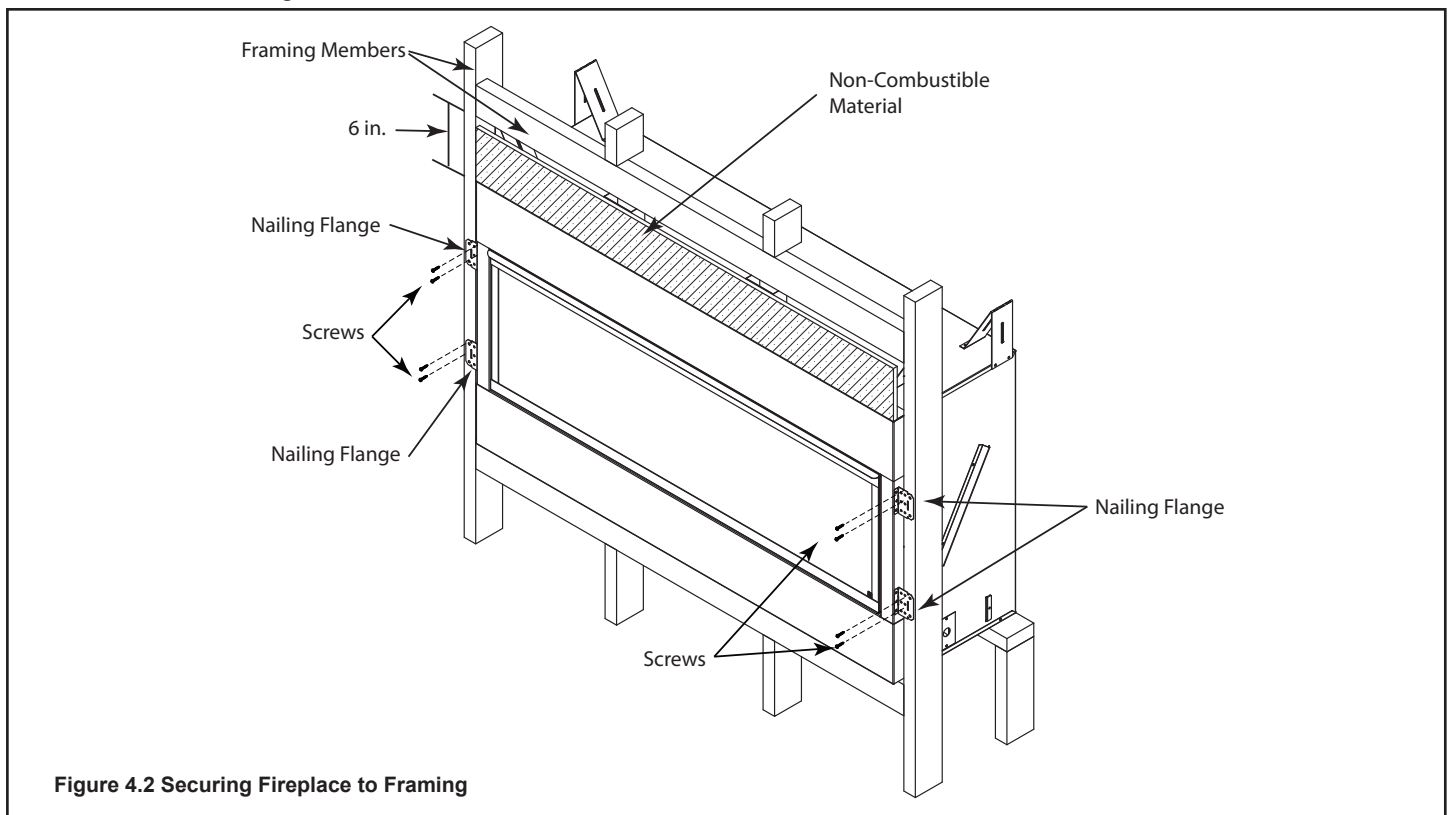


Figure 4.2 Securing Fireplace to Framing

## 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 and 4.3.

1. Bend out all nailing tabs. The AVFL60 has four nailing tabs, two on each side in the middle of the unit.
2. Screw each nailing tab to the adjoining framing material. See Figures 3.1-3.7 for framing and clearance details.

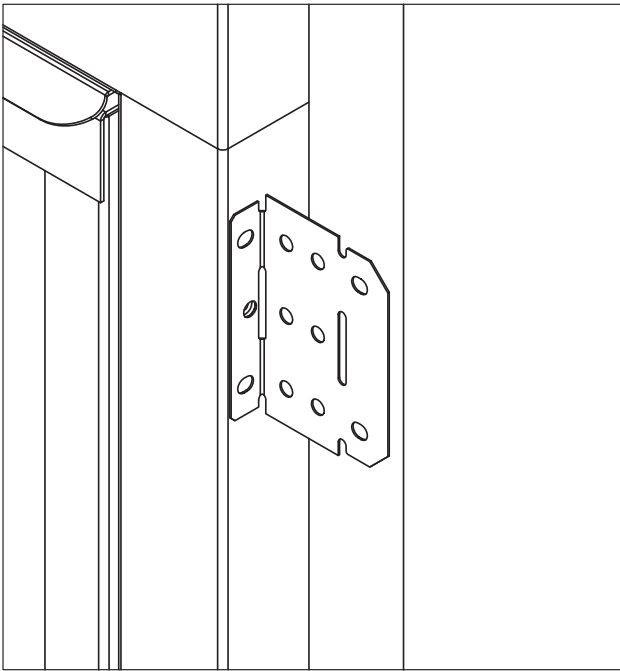


Figure 4.3 Nailing Tabs

## 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 8 for finishing materials guidelines.

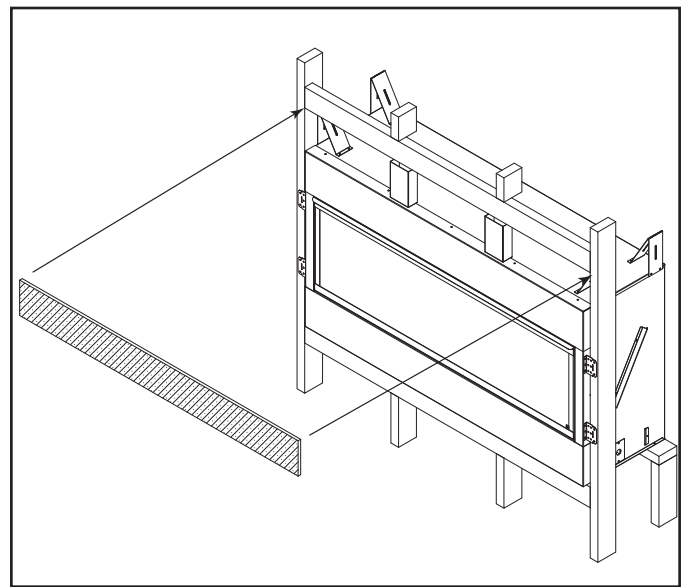


Figure 4.4 Install Non-Combustible Facing Material

# 5 Gas Information

## A. Fuel Type

- This appliance is equipped for either natural or propane gas. **Field conversion is not permitted.**
- Make sure the appliance is compatible with available gas types.

## 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.
- Pressure requirements are:

	NATURAL	PROPANE (LP)
Inlet Minimum	5.0" w.c.	11.0" w.c.
Inlet Maximum	10.5" w.c.	13.0" w.c.
Regulator Pressure Setting	3.5" w.c.	10" w.c.
Pilot Regulator	3.5" 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 control door. See Figures 5.1 & 5.2.

**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

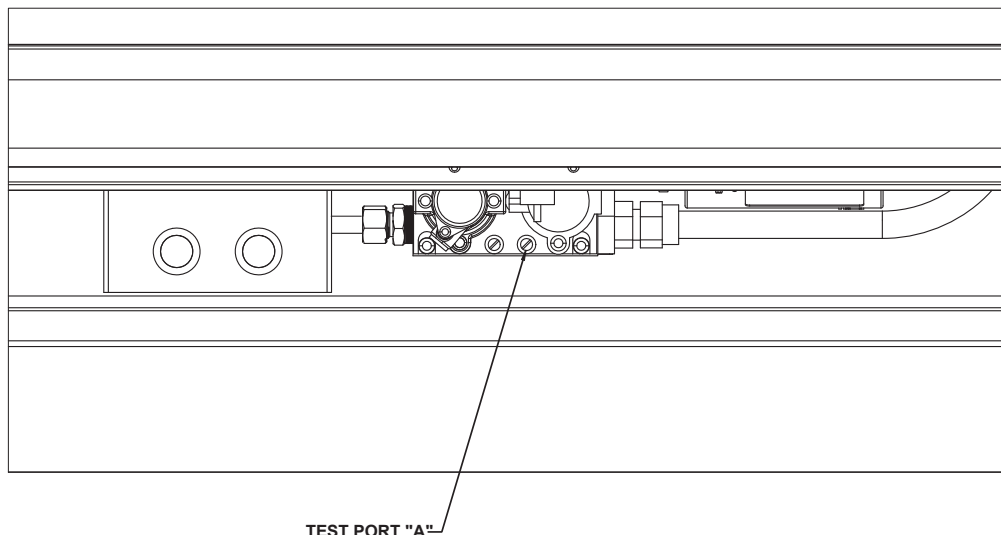
**NOTE:** This appliance does include a manual gas shutoff valve that is located in the valve compartment. This manual gas shutoff valve is accessible for service by removing the control door. See Figure 5.2. The valve is most accessible if it is located forward in the control cavity of the appliance.

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

**WARNING**

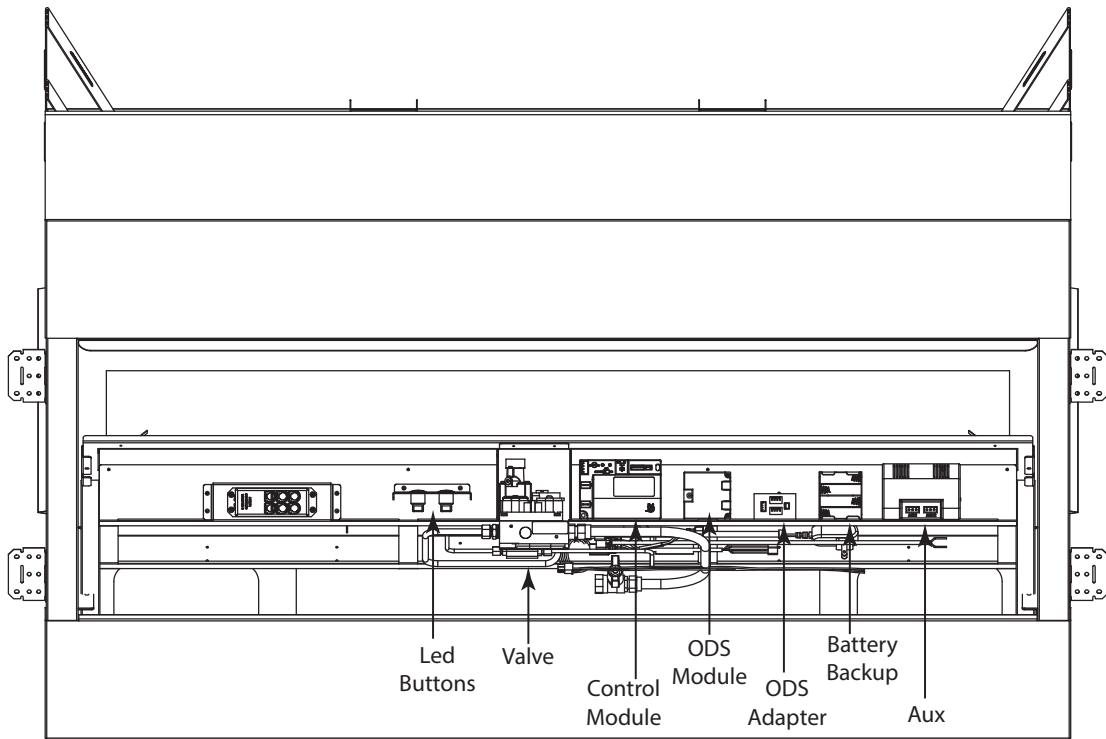
Fire Risk.  
Explosion Hazard.  
High pressure will damage valve.

- 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.



**Figure 5.1. Valve Pressure Tap**





**Figure 5.2 Valve Access**

## D. Connect to Gas

**NOTICE:** A qualified gas appliance installer must connect the heater to the gas supply. Consult all local codes.

### **⚠ WARNING**

**THIS APPLIANCE IS EQUIPPED FOR EITHER NATURAL OR PROPANE GAS. FIELD CONVERSION IS NOT PERMITTED.**

### **⚠ WARNING**

Use new black iron or steel pipe. Internally tinned copper or copper tubing can be used per National Fuel Code, section 2.6.3, providing gas meets hydrogen sulfide limits, and where permitted by local codes. Gas piping system must be sized to provide minimum inlet pressure (Listed on Data Plate) at the maximum flow rate (BTU/hr). Undue pressure loss will occur if the pipe is too small.

A manual shutoff valve must be installed upstream of the appliance. Union tee and plugged  $\frac{1}{8}$ " NPT pressure tapping point should be installed upstream of the appliance. Figure 5.3

A sediment trap should be installed upstream to prevent moisture and contaminants from passing through the pipe to appliance controls and burners. Failure to do so could prevent the appliance from operating reliably. Figure 5.3

When an appliance is connected to a fixed piping system, the installation must conform with local codes, or in the absence of local codes with the **National Fuel Gas Code, ANSI Z223.1/NFPA 54** or **International Fuel Gas Code**.

### **⚠ WARNING**

**CHECK GAS TYPE:** The gas supply must be the same as stated on the heater's rating plate. If the gas supply is different, **DO NOT INSTALL THE HEATER**. Contact your dealer for the correct model.

**IMPORTANT:** Loosen the pipe adapter on the flex tube before installing to the system piping.

Always use an external regulator for all propane/LPG heaters only, to reduce the supply tank pressure to a maximum of 13" w.c. This is in addition to the internal regulator in the heater valve.

When tightening the joint to the valve, hold the valve securely to prevent movement.

Test all gas joints from the gas meter to the heater valve for leaks using a gas analyzer or soap and water solution after completing connection. **DO NOT USE AN OPEN FLAME.**

### **⚠ WARNING**

**Connecting directly to an unregulated propane/LP tank can cause an explosion.**

**DO NOT USE OPEN FLAME TO CHECK FOR GAS LEAKS.**

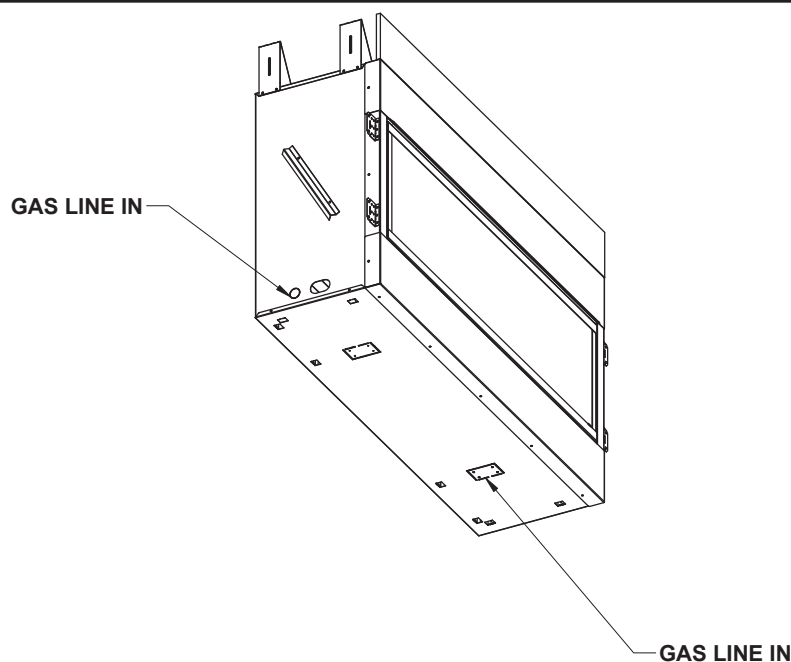


Figure 5.3 Gas Line In

## E. Valve Access

The valve and controls are located in the appliance control box. See Figure 5.4.

The control box and controls can be accessed by lifting engine assembly and shown in Figure 5.4.

- Make sure unit is off and cool.
- Remove media and deflection glass panel from hearth pan.
- Remove two (2) screws securing burner assembly to appliance, set aside.
- Lift the burner assembly and place the two engine supports, provided under the Engine, against lower front space at the bottom of the face, and slide into the slots at the bottom of the engine assembly. See Figure 5.4.
- Locate valve on face of engine assembly.
- Gas line sizing requirements will be determined in ANSI Z233.1 National Fuel Gas Code in the USA.
- Pressure requirements are:

These pressures can be verified by lifting engine and removing control cover to reveal the valve.

When an appliance is connected to a fixed piping system, the installation must conform with local codes, or in the absence of local codes with the **National Fuel Gas Code, ANSI Z223.1/NFPA 54** or **International Fuel Gas Code**.

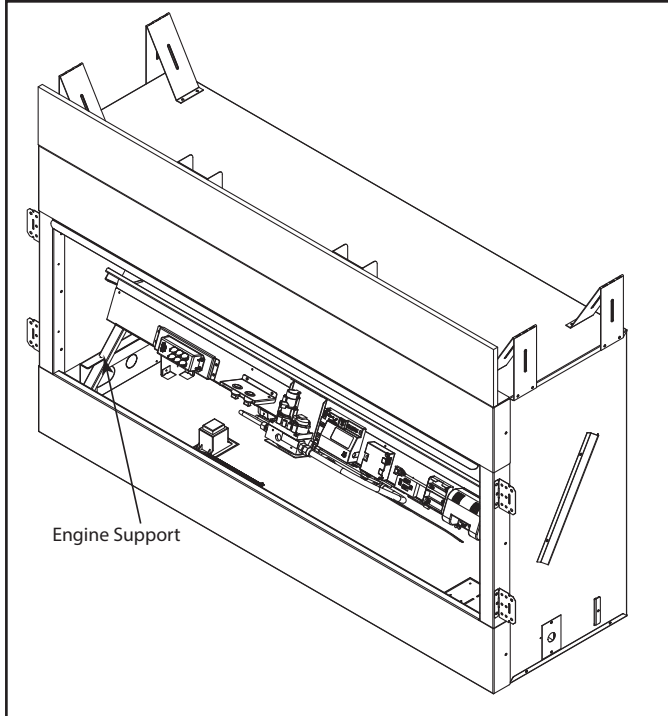


Figure 5.4 Valve Access

## F. Check Gas Pressure

Check the gas pressure with the appliance burning and the control set to **HIGH**.

Open control access door at bottom front of unit to find valve and regulator referred to below.

The valve regulator controls the burner pressure which should be checked at the pressure test point.

Turn captured screw counterclockwise two or three turns and then place tubing to pressure gauge over test point. Use test point "A" closest to gas inlet. After taking pressure reading, be sure and turn captured screw clockwise firmly to reseal. Do not over torque. Check for gas leaks. See Figure 5.5.

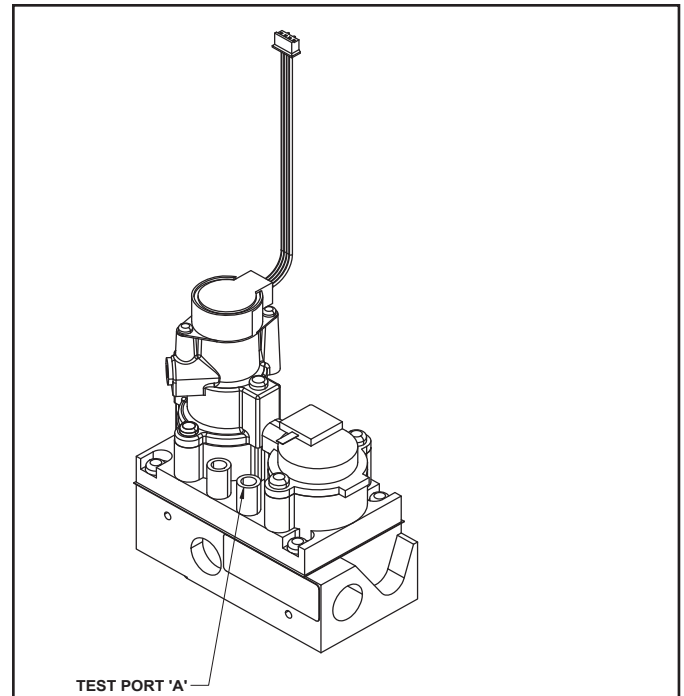


Figure 5.5 Pressure Test Point Location

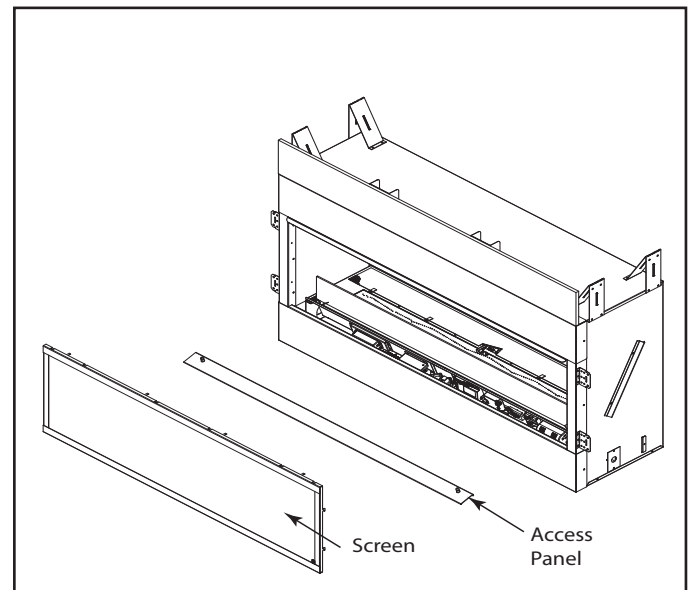


Figure 5.6 Gas and Electrical Access - Remove Screen

## G. Gas Connection

- Refer to Figure 5.7 for location of gas flex line access in appliance.
- Gas line may be run through the left side or right bottom of the appliance. See Figure 5.3.
- 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 non-combustible, 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.

## H. 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.

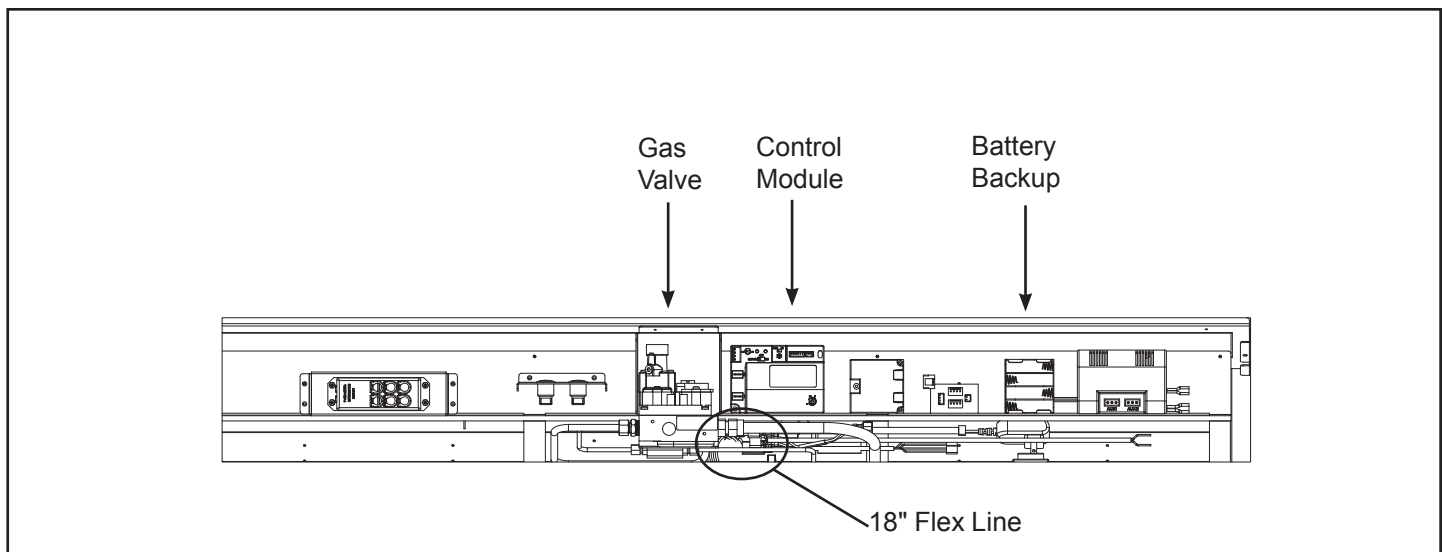


Figure 5.7 Gas Fitting Access

## 6 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**.

- 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, or optional 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. The junction box cover has a Romex style strain relief connector located in the Owner's Manual. After connecting the wires, route the wire leads through this connector. Refer to the wiring diagram in Figure 6.2.

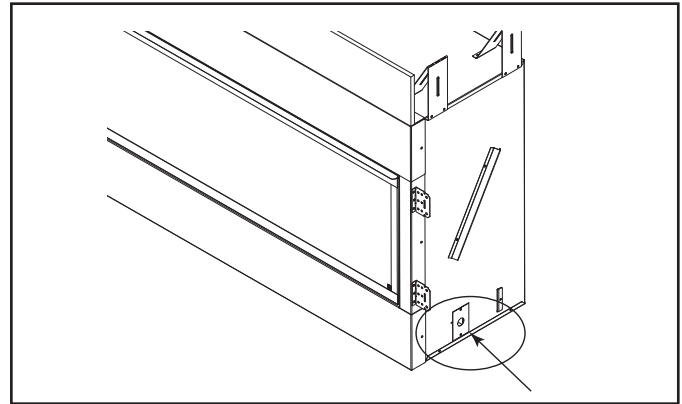


Figure 6.1 Cover Plate for Junction Box

### ⚠ 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.

### ⚠ WARNING

Do not connect wall switch to 110 V circuit.

### CAUTION

Label all wires before disconnecting when servicing controls. Wiring errors can cause improper and dangerous operation.

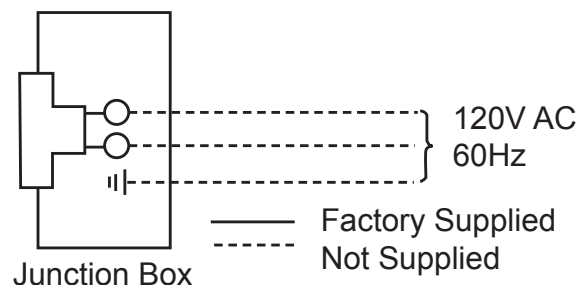


Figure 6.2 - Junction Box Wiring Diagram

## B. Wiring Requirements

### IntelliFire™ Plus ODS 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 IFP ODS controlled appliance junction box to a switched circuit. Incorrect wiring will override IFP ODS safety lock-out.

- Refer to Figure 6.3 or 6.4, IFP ODS Wiring Diagram.
- This appliance is equipped with an IntelliFire™ Plus 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.

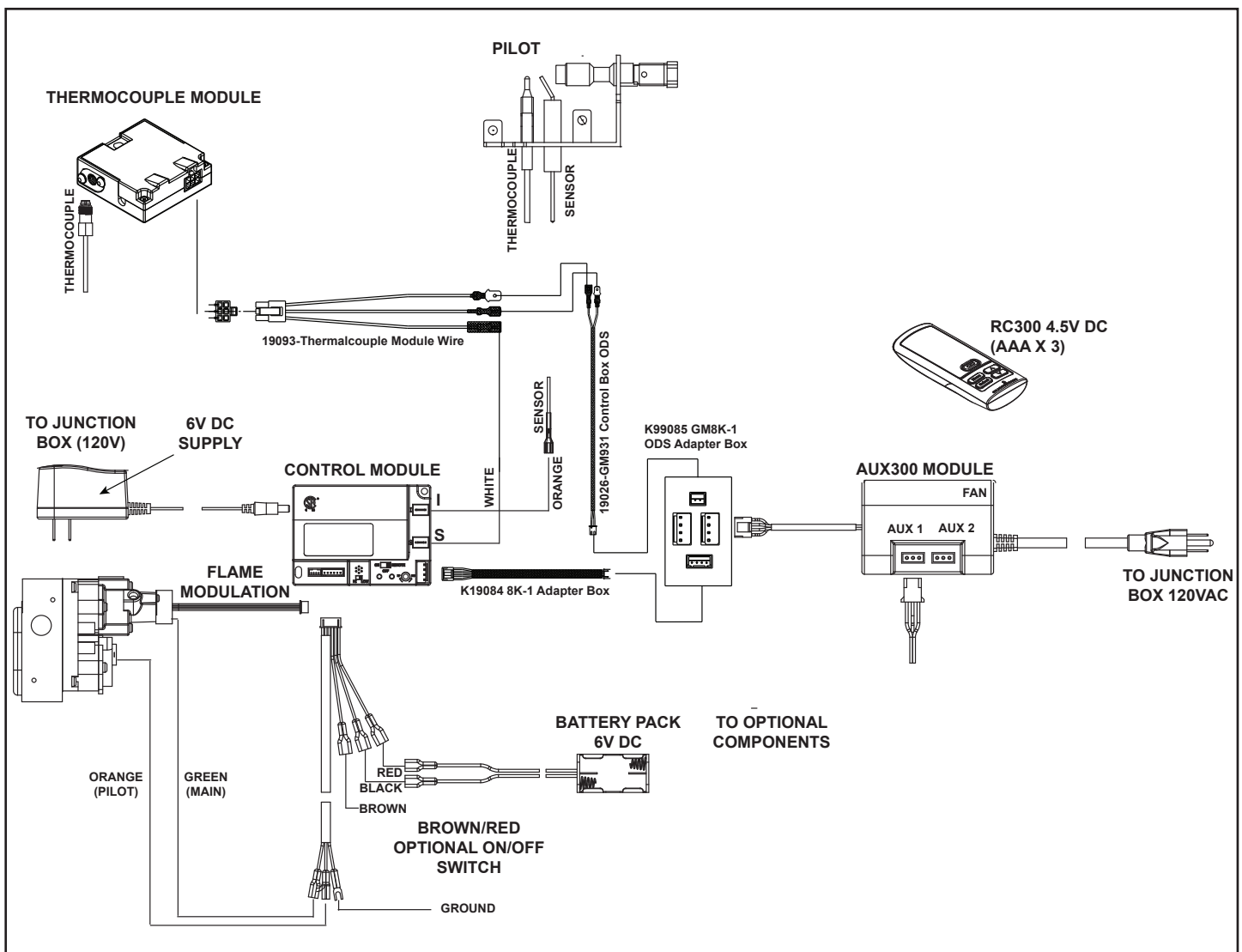
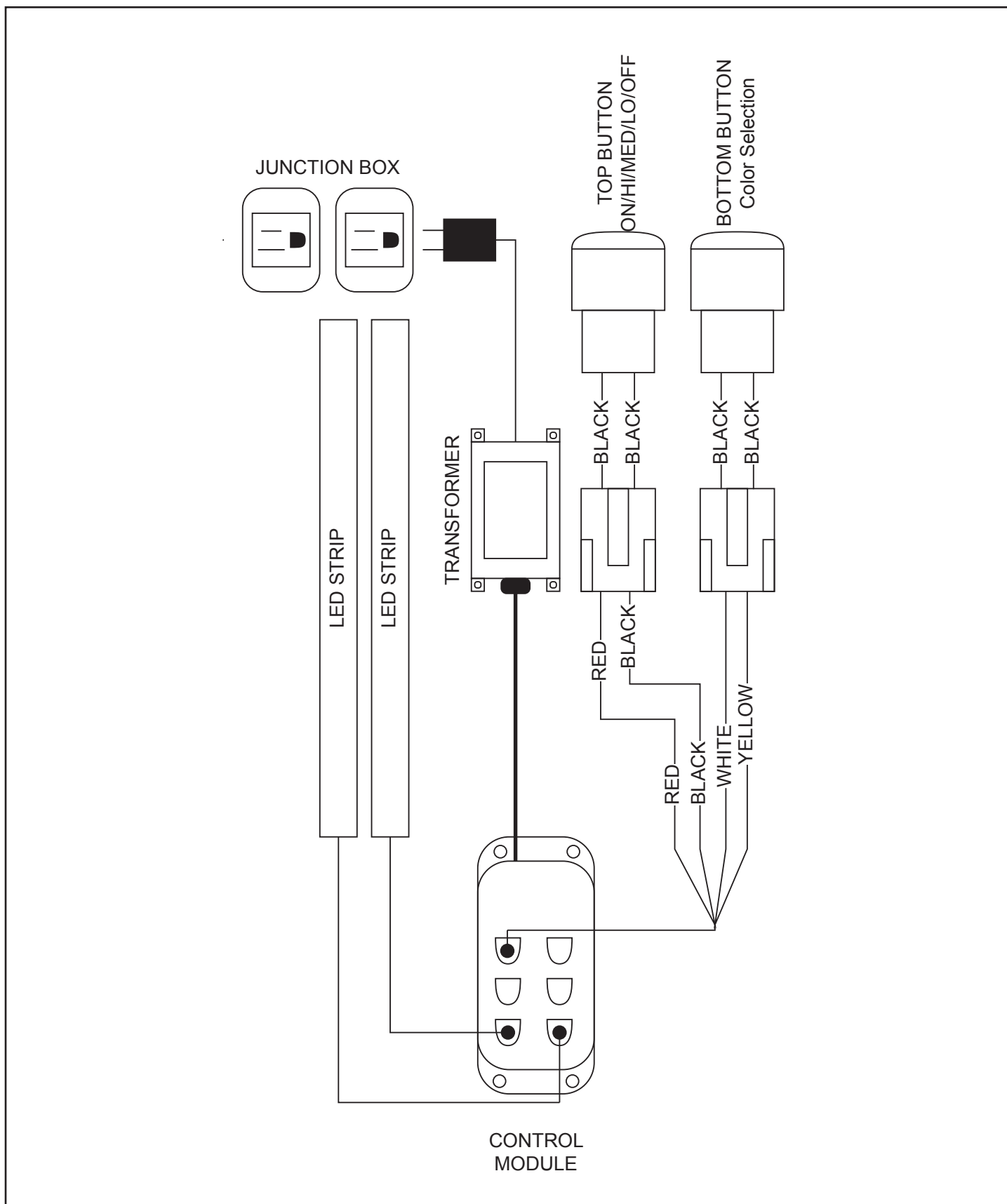


Figure 6.3 IntelliFire™ Plus ODS Wiring Diagram





➔ Figure 6.4 Wiring Diagram

# 7 Final Installation

## A. Dome Light Bulb Installation

**CAUTION**

Turn OFF the main power supply before performing any service work on the unit, including installing or replacing light bulbs.

**NOTE:** This unit is shipped without bulbs installed to prevent any damage to the bulb filament during transport. This unit is shipped with a total of two (2) 90W bulbs.

### Dome Light Bulb Installation

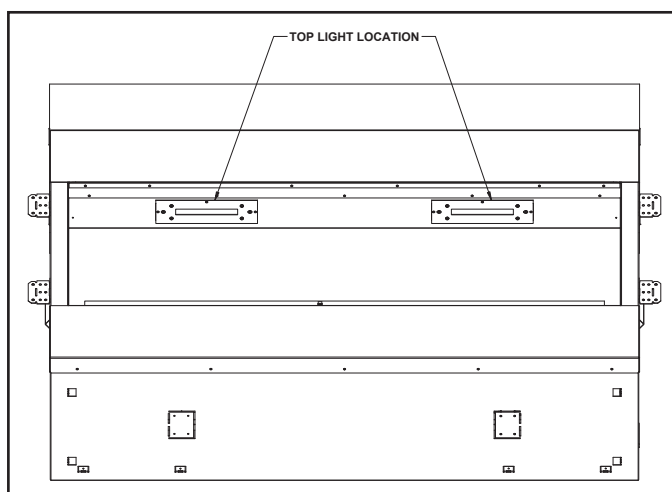


Figure 7.1– Dome Light Position

1. Remove three screws holding the left dome light cover in place. See Figure 7.2.

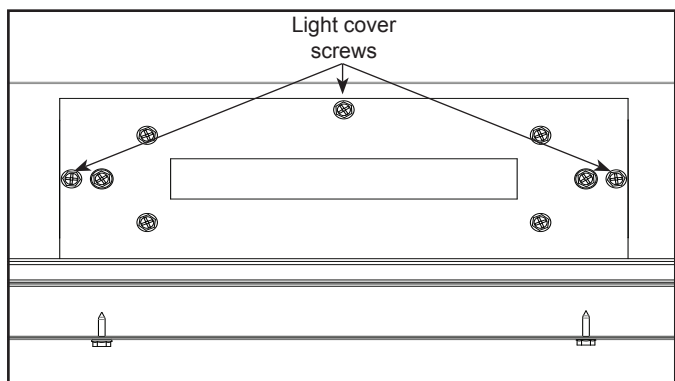


Figure 7.2– Dome Light Screws

2. Insert (1) bulb provided into socket
3. Replace dome light cover with three screws
4. Repeat on right side light cover

## B. Black Magic Glass Installation

The Black Magic Glass liner is packaged and shipped with the unit. Before install, remove the glass panels and place on a flat, clean surface and inspect for damage.

**NOTE:** Before beginning installation remove the two L shaped brackets from the manual pack along with two #8 phillips head screws.

**NOTE:** After gas and electric are connected and the unit has been test fired the glass can be installed.

1. Place the rear glass panel against the rear wall of the firebox, resting on top of the engine base. The dimples in the glass will face the firebox.
2. Place the left side panel between the engine base and firebox, resting on the bottom of the firebox ledge. Secure with supplied L bracket to the top of the firebox with the supplied screw.
3. Repeat step 2 on the right side.

**NOTE:** When removing the black glass from the unit, be cautious of the rear panel falling forward once the side panels are removed.

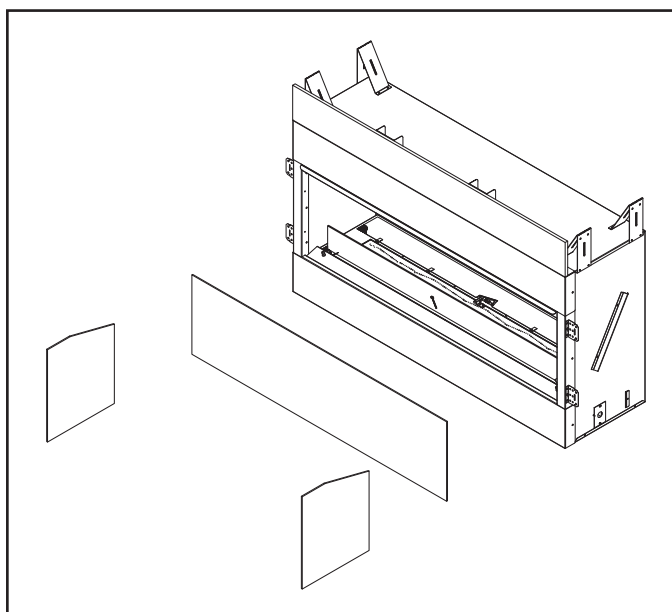


Figure 7.3 Black Magic Glass Installation

## C. Installation of Air Deflection Glass

**NOTE:** If installing optional driftwood logs be sure to install log pin brackets prior to installing air deflection glass or fireglass. See pages 24 and 25 for instructions.

**NOTE:** The air deflection glass must be installed prior to placing any fireglass or stone media on the burner. To install the air deflection glass simply place the edge of the deflection glass into the two position tabs (located at the front of the engine base) and slide into fingers until reaching the bottom of the tab slots, in front of the burner ports. The glass should stand upright, neither leaning forward nor backward.

**NOTE:** The optional stone kit and log kit are to be installed alone and never in combination.

## D. Fireglass Only Placement

**NOTE:** Five (5) bags of fireglass are supplied with the fireplace.

Both bags may be used to cover the entire floor and burner. We advise against using additional fireglass as too much can cut off the proper amount of air the burner needs to burn cleanly. This may cause sooting.

1. Spread fireglass evenly in one layer over the entire floor and burner. It is important to not have the fireglass too thick on ported area (single layer only).
2. Turn burner on and adjust fireglass over ported areas to achieve an even, clean flame.

## E. Glass and Optional Stone Kit Placement

1. For best results, spread fireglass evenly over the entire floor and burner making sure the glass is not too thick over the burner ports (single layer only). See Figure 7.4.
2. Place the stones randomly in front of and behind the burner. **CAUTION: Do not allow stones to sit directly on burner or in flame.** See Figure 7.4 and 7.5.
3. Turn burner on and adjust fireglass over the ported area to achieve an even, clean flame.

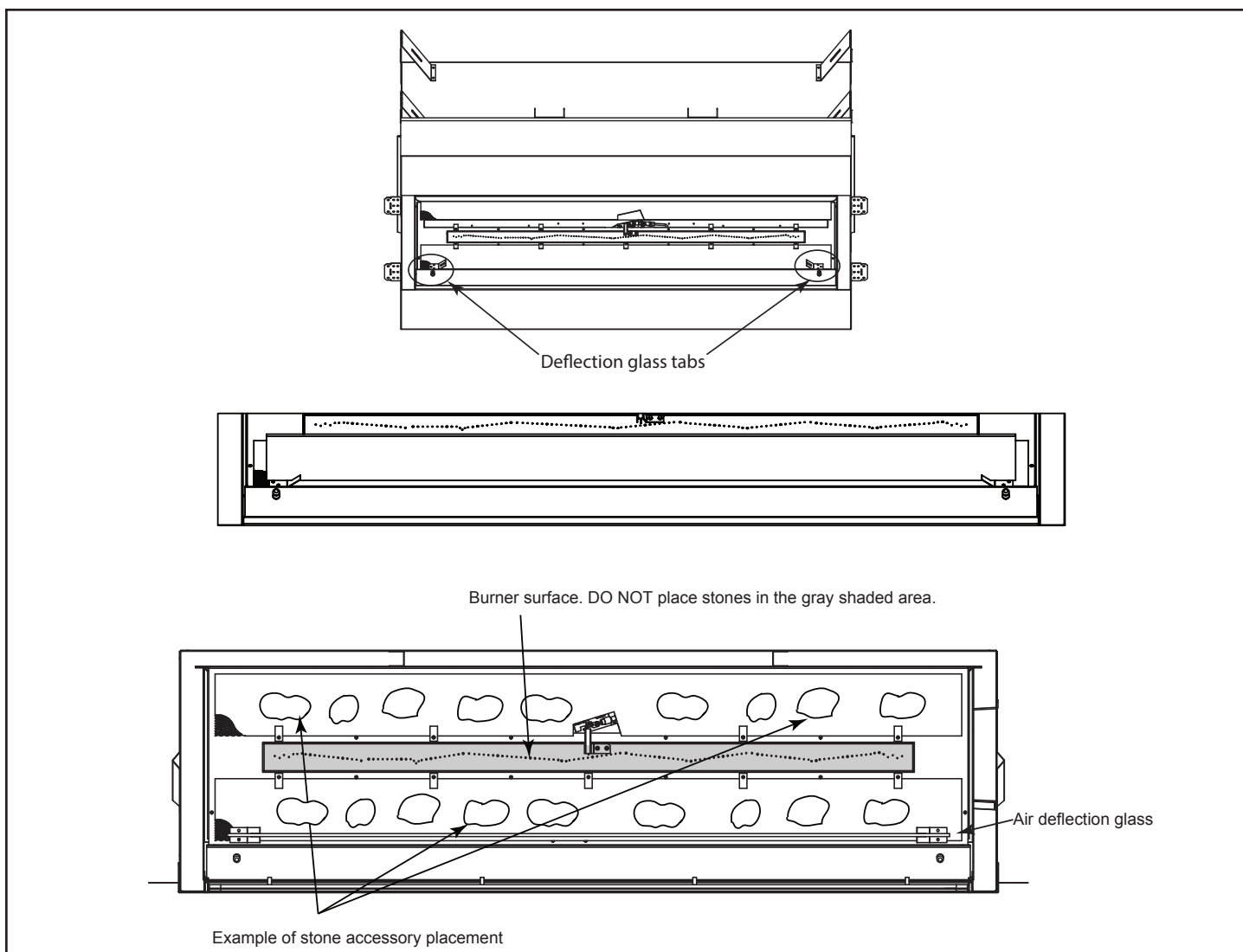


Figure 7.4— Air Deflection Glass and Stone Placement



Figure 7.5— Stone Placement

## F. Placement of Optional Logs

**WARNING:** Turn off fireplace and allow to cool completely before beginning installation.

### Kit Contents:

- Three driftwood logs
- Support pin brackets
- #8 bracket mounting screws

**NOTE** — Do not handle logs with your bare hands. **Always wear gloves to prevent skin irritation from logs.** After handling the logs, wash your hands with soap and water to remove any traces of fibers.

**NOTE:** Prior to installing the log set, you must first install the pin brackets on the burner. Fireglass and the air deflection glass should only be installed *after* the pin brackets are in place. The logs must then be placed in the unit after the fireglass and air deflection glass. If the optional logs are added after the air deflection glass and fireglass are in use, move the fireglass away from the areas in Figure 7.6 and install the support brackets, then arrange fireglass evenly across burner again.

## ⚠ WARNING

The positioning of the logs is critical to the safe and clean operation of this heater. Sooting and other problems may result if the logs are not properly and firmly positioned in the appliance. Never add additional logs or embellishments such as pine cones, vermiculite or rock wool to the heater. Only use the logs supplied with the optional log kit (AVFL60DLS).

Failure to position the parts in accordance with diagrams below or to use only parts specifically approved for this heater may result in property damage or personal injury.

1. Mount the four log support pin brackets using mounting holes and screws provided in locations indicated in Figure 7.7.
2. Place the large rear log (#1) by aligning the holes in the bottom of each log with the four pins at the back of the burner. Logs are marked “Rear Left” and “Rear Right” for easy identification.

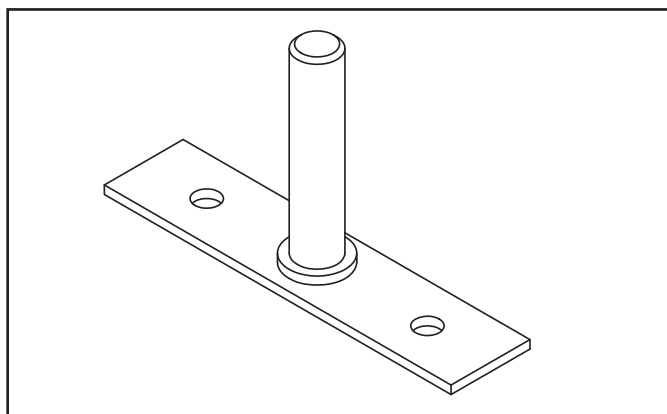


Figure 7.6— Log Pin Assembly

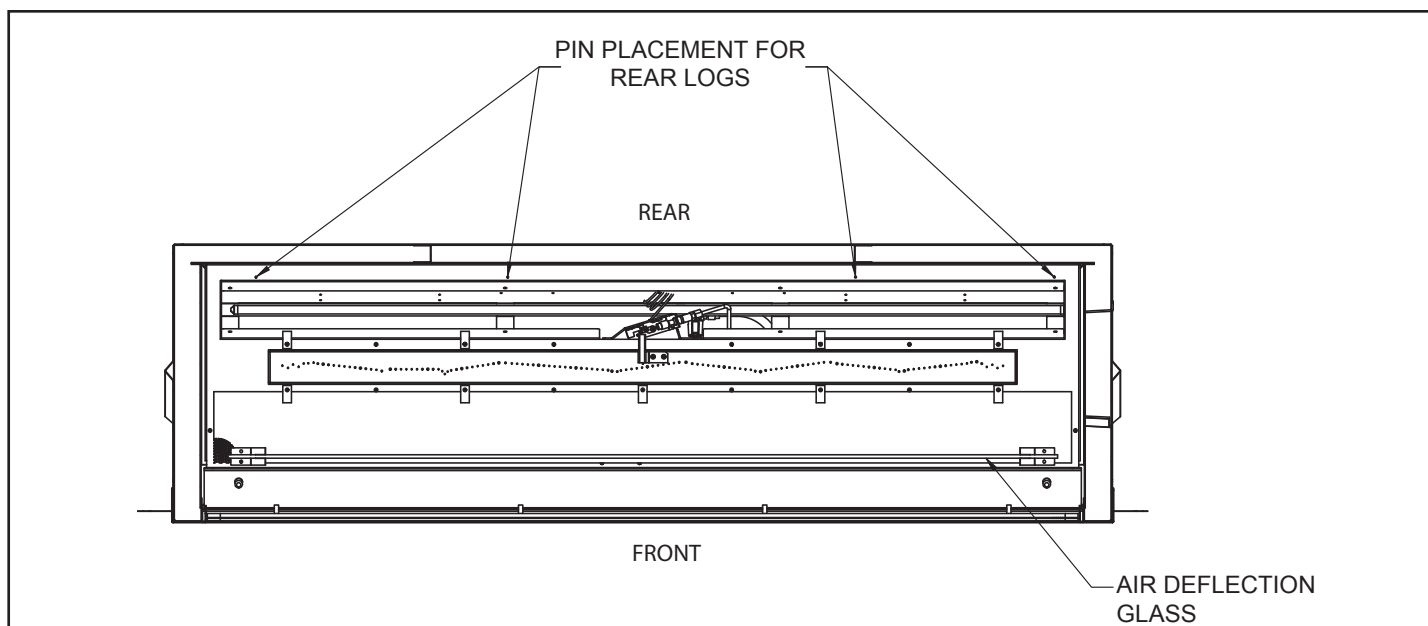


Figure 7.7— Pin Placement for Accessory Logs

3. The front driftwood log does not utilize a pin bracket. This log can be placed behind the front deflection glass with the area marked on the figure below. **THIS LOG CAN ONLY BE PLACED WITHIN THIS AREA.** The log cannot be placed on the burner area. It can be adjusted left to right as desired. See Figure 7.8.

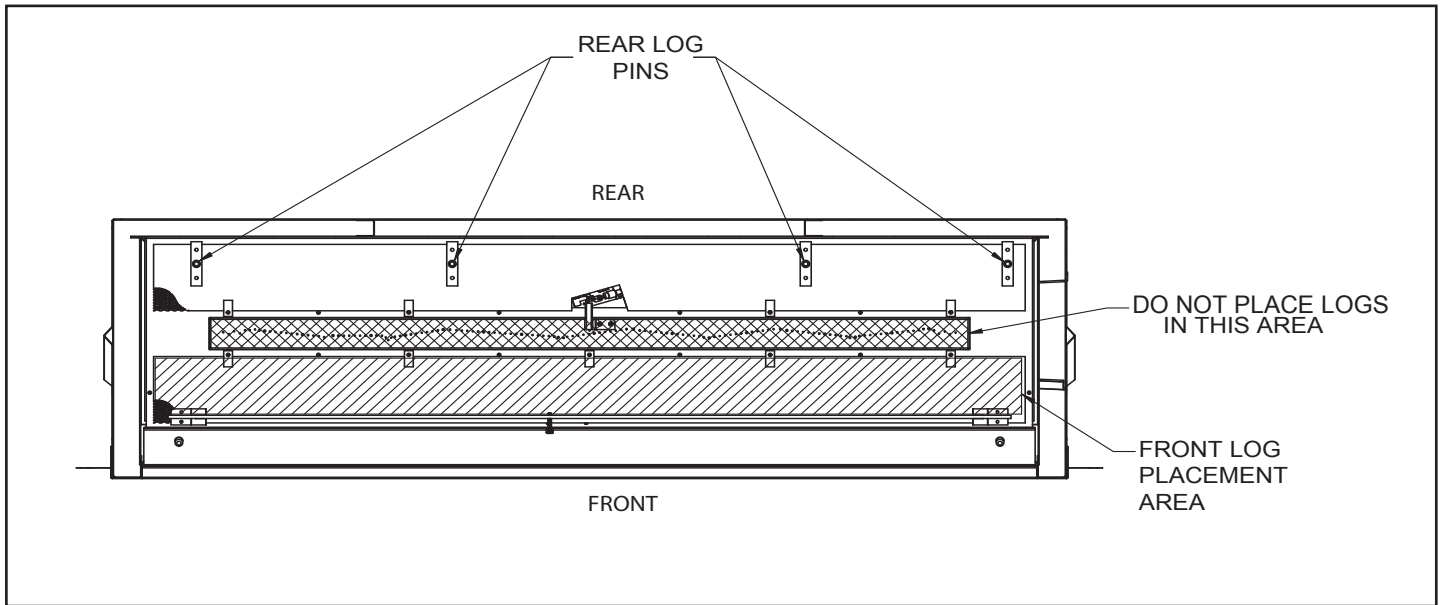


Figure 7.8— Log Placement

## G. Lighting Instructions (IPI)

### FOR YOUR SAFETY READ BEFORE LIGHTING

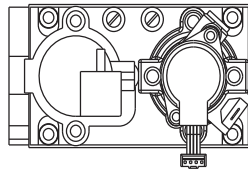
**WARNING:** If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance is equipped with an intermittent pilot ignition (IPI) device which automatically lights the burner. **DO NOT** try to light the burner 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.
  - If you cannot reach your gas supplier, call the fire department.
  - C. **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 (IPI)

1. This appliance is equipped with an ignition device which automatically lights the burner. **DO NOT** try to light the burner by hand.

**GAS  
VALVE**



2. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow "B" in the Safety Information located on the top of this label. If you do not smell gas, go to next step.
3. To light the burner:  
Equipped with wall switch: Turn ON/OFF switch to ON.  
Equipped with remote or wall control: Press ON or FLAME button.  
Equipped with thermostat: Set temperature to desired setting.
4. If the appliance does not light after three tries, call your service technician or gas supplier.

### TO TURN OFF GAS TO APPLIANCE

1. Equipped with wall switch: Turn ON/OFF switch to OFF.  
Equipped with remote or wall control: Press OFF button.  
Equipped with thermostat: Set temperature to lowest setting.
2. Service technician should turn off electric power to the control when performing service.

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## WARNING:

**DO NOT CONNECT LINE VOLTAGE (110/120 VAC OR 220/240 VAC) TO THE CONTROL VALVE.**

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.

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

## CAUTION:

Keep burner and control compartment clean. See installation and operating instructions accompanying appliance.

Hot while in operation. **DO NOT** touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.

### NOT FOR USE WITH SOLID FUEL

This appliance must be installed in accordance with local codes, if any; if none, follow the *National Fuel Gas Code, ANSI Z223.1/ NFPA 54, or the National Gas and Propane Installation code, CSA B149.1.*

For additional information on operating your  
Hearth & Home Technologies fireplace, please refer to [www.fireplaces.com](http://www.fireplaces.com).

4604-201



# 8 Finishing

## 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 non-combustible 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.

Or 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 cause overheating and fire.*

### 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.

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

### • Finishing Around Perimeter of Unit (Install Option #1)

Gypsum wallboard (drywall) joints can be finished up to the perimeter of the left, right and bottom edge of the unit flush with the face. The 6" of supplied non-combustible must be used at the top of the unit where the gypsum board can then be finished to the left, right and top edge of the non-combustible board.

### • Finishing Around Opening of Unit (Install Option #2)

**NOTE:** With this installation option, the unit must be recessed to the depth of the non-combustible being used to ensure finish is flush with surrounding wall. This is the recommended install option for all trim kits such as the AVFL60TKI, AVFL60CFCV, AVFL60CFBT. Refer to Trim Kit instructions for Option #2 installation before starting.

The 6" non-combustible must first be installed above the unit in the same manor as installation option #1, flush with the top face of the unit. In this option, non-combustible is required for all material covering the face of the unit. The non-combustible may be installed up to the firebox opening but must not overlap which would impede the removal of the screen. When installing material around the firebox opening, install the sheet with a pre-cut hole for the firebox opening in a single sheet, if possible. This will minimize joints across the fireplace face and reduce cracking.

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.

### 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.

### 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 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.

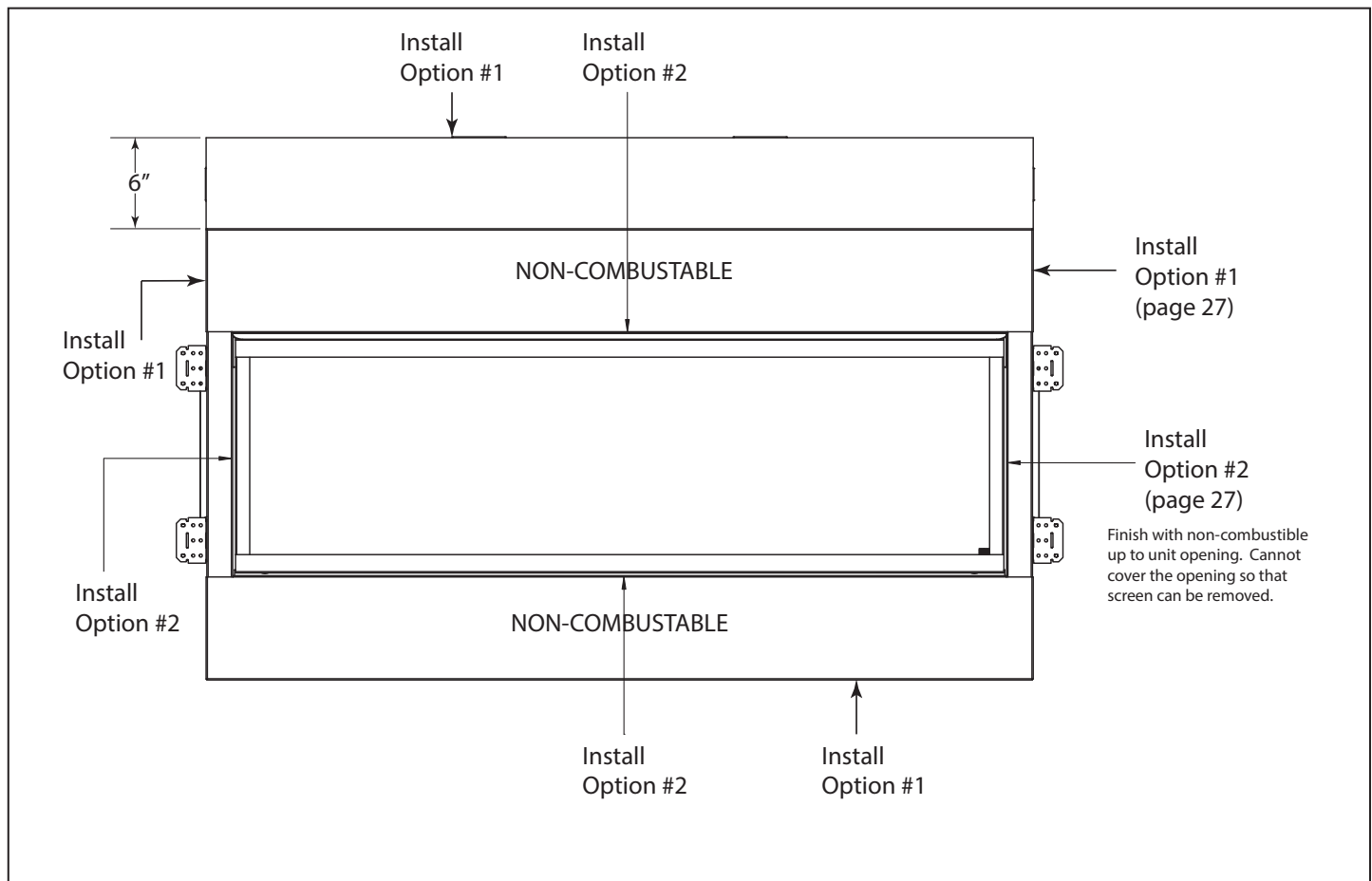


Figure 8.1 - Finishing Around Unit

## B. Operation During A Power Outage

The IntelliFire™ Plus ODS intermittent pilot ignition system comes with a battery backup system that enables the system to operate in a power outage. The system offers seamless transition from household AC power to battery backup. A factory-installed battery pack is located in the control cavity of the appliance. See Figure 8.2. Battery longevity and performance will be affected by long term exposure to the service temperatures of this appliance.

**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.

### To Operate Fireplace Using Battery Power (DC):

1. Access the control cavity of the appliance. See Figure 8.2 for location. Lift the screen frame off of the appliance and lift the access panel out of the front edge of the unit..
2. Locate the battery tray and insert four AA cell batteries. See Figure 8.2. Battery polarity must be correct or module damage will occur. A complete wiring diagram is included in the Electrical section of the appliance Installation Manual.
3. Turn the appliance on according to the instructions below for the appropriate type of control:

#### Standard Wall Switch or Factory-Installed ON/OFF Switch:

- Toggle the switch as you would under normal circumstances.

#### Wireless Remote:

- Remote receiver is integrated into the ignition module
- Use the remote to turn the appliance on.
- To preserve battery life, do not use the HI/LO flame or THERMOSTAT options.

#### Ignition Module:

- Remove screws on left and right sides of component heat shield and lift it out of the control cavity.
- Locate the ignition module in the control cavity.
- Slide the ON/REMOTE/OFF switch to the ON position.
- Reinstall component heat shield.

**NOTICE:** Some functionality will be lost when using battery backup including remote control, lights, or any other auxiliary functions that require household 110-120 VAC power.

**To Return to Operation Using Electrical (AC) Power**  
**CAUTION! Risk of Overheating!** Component heat shield **MUST** be installed before operating appliance. Electrical components will be damaged.

### Standard Wall Switch or Factory-Installed ON/OFF Switch:

- Remove screws on left and right sides of component heat shield and lift it out of the control cavity.
- Toggle the switch to OFF.
- Remove the batteries from the battery tray.
- Reinstall component heat shield.
- Replace bottom glass shield and decorative front on appliance.

### Wireless Remote:

- Remove screws on left and right sides of component heat shield and lift it out of the control cavity.
- Slide the ON/REMOTE/OFF switch to the REMOTE position.
- Remove the batteries from the battery tray.
- Reinstall component heat shield.
- Replace bottom glass shield and decorative front on appliance.

### Ignition Module:

- Remove screws on left and right sides of component heat shield and lift it out of the control cavity.
- Slide the ON/REMOTE/OFF switch to the REMOTE position.
- Remove the batteries from the battery tray.
- Reinstall component heat shield.
- Replace bottom glass shield and decorative front on appliance.

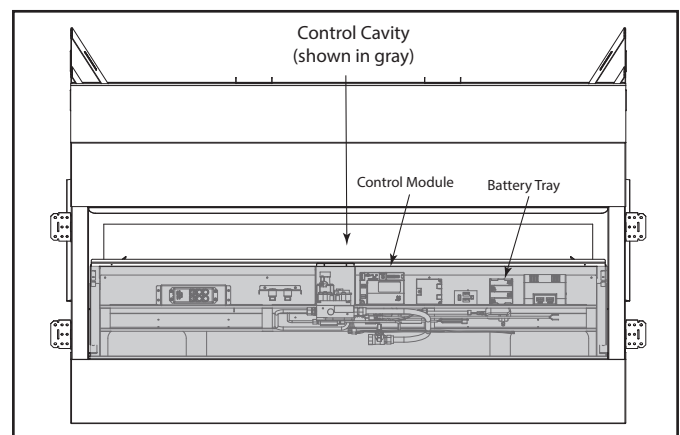


Figure 8.2– Control Cavity Location

## C. Detailed Component Operating Instructions— Intellifire™ Plus ODS

### Control Module Operation

1. The control module has an ON/OFF/REMOTE selector switch that must be set. See Figure 8.3.

**OFF Position:** Appliance will ignore all power inputs and will not respond to any commands from a wall switch or remote. The unit should be in the OFF position during installation, service, battery installation, fuel conversion, and in the event that the control goes into LOCK-OUT mode as a result of an error code.

**ON Position:** Appliance will ignite and run continuously in the HI flame setting, with no adjustment in flame output. This mode of operation is primarily used for initial installation or power outage operation with battery backup.

**REMOTE Position:** Appliance will initiate commands from an optional wired wall switch and/or the wireless remote (RC300).

2. If using a wired wall switch with the module in REMOTE mode, the flame output can be adjusted with the HI/LO selector switch on the module. See Figure 8.3. Note that the flame HI/LO selector switch will become inactive once a remote control (RC300) is programmed to the control module. Note that the control module will always ignite the fireplace on HI and remain so for the initial 10 seconds of operation. If the HI/LO is switched to the LO position, the flame output will automatically drop to the lowest setting after the flame has been established for 10 sec. After this 10 second period, the flame can be adjusted from HI to LO with the switch.
3. The control module has safety feature that automatically shuts down the fireplace after 9 hours of continuous operation without receiving a command from the RC300 remote.
4. If you intend to use both an optional wired wall switch and the RC300 remote control to operate your fireplace, the wall switch will override any commands given by the remote.

### 5. Module Reset

This module may lock-out under certain conditions. When this occurs, the appliance will not ignite or respond to commands. The module will go into lock-out mode by emitting three audible beeps, then continuously displaying a RED/GREEN error code at its status indicator LED.

- Check battery tray. Remove batteries if installed. Batteries should only be installed for use during power outages.
- Locate the module selector switch. (See Figure 8.3).
- Set the module selector switch to the OFF position.
- Wait five (5) minutes to allow possible accumulated gas to clear.
- Set the module selector switch to ON or REMOTE position.
- Start the appliance.

**WARNING! Risk of Explosion! DO NOT** press the module reset switch more than one time within a five minute time period. Gas could accumulate in firebox. Call a qualified service technician.

#### Nine Hour Safety Shutdown Feature

The appliance has a safety feature that automatically shuts down the fireplace after nine hours of continuous operation without receiving a command from the wall switch or optional remote.

### Appliance ON/OFF

Use the IntelliFire™ Plus Remote Control to control the ON/OFF function of the appliance. Follow instructions included with the remote control. If desired, a wall switch may be installed to control the ON/OFF function of the appliance.

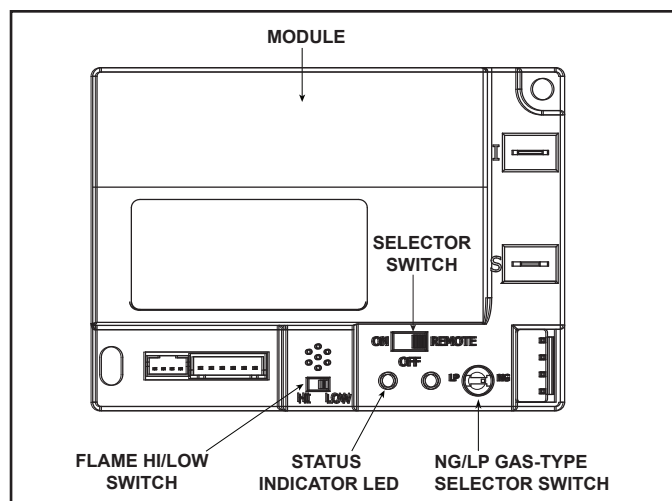


Figure 8.3 Control Module

## D. 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 technician 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. Contact your dealer to arrange a service call by a qualified service technician.

### IntelliFire™ Plus ODS Ignition System

Symptom	Possible Cause	Corrective Action
1. Pilot won't light. 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 correct terminals on module and pilot assembly.
	B. Loose connections or electrical shorts in the wiring.	Verify no loose connections or electrical shorts in wiring from module to pilot assembly. Verify connections underneath pilot assembly are tight; also verify igniter and flame sense wires are not grounding out to metal chassis, pilot burner, pilot enclosure, mesh screen if present, or any other metal object.
	C. Ignitor gap is too large.	Verify gap of igniter to right side of pilot hood. The gap should be approximately .095 in. (2.41 mm) to .135 in. (3.43 mm).
2. Pilot won't light, there is no noise or spark.	A. No power, transformer installed incorrectly, or depleted batteries.	Verify that transformer is installed and plugged into module. Check voltage of transformer at connection to module. Acceptable readings of a good transformer are between 6.4 and 6.6 volts DC. Battery power supply voltage must be at least 4 volts. If less than 4 volts, replace batteries.
	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. Replace any damaged components.
	C. Improper wall switch wiring.	Verify that 110-120 VAC power is "ON" to junction box.
	D. Module not grounded.	Verify black ground wire from module wire harness is grounded to metal chassis of appliance.
3. Pilot sparks, but pilot will not light.	A. Gas supply is off or lacking pressure.	Verify that incoming gas line ball valve is "open." Verify that inlet pressure reading is within acceptable limits.
	B. Ignitor gap is too large.	Verify gap of igniter to right side of pilot hood. The gap should be approximately .095 in. (2.41 mm) to .135 in. (3.43 mm).
	C. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance.
	D. Pilot valve solenoid voltage is out of spec.	Verify that 1.5 to 1.8 VDC is supplied to pilot solenoid from module. If below 1.5 volts, replace module. If 1.5 volts or greater, replace valve.

## Intellifire™ Plus Ignition System - (continued)

Symptom	Possible Cause	Corrective Action
4. 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 flame sensing rod.	Verify all connections to wiring diagram in manual. Verify connections underneath pilot assembly are tight. Verify flame sense or igniter wires are not grounding out to metal chassis, pilot burner, pilot enclosure or screen if present, or any other metal object.
	B. Poor flame rectification or contaminated flame sensing rod.	With fixed glass assembly in place, verify that flame is engulfing flame sensing rod on left side of pilot hood. Flame sensing rod should glow shortly after ignition. With a multi-meter, verify that current in series between module and sense lead is at least 0.14 microamps. Verify correct pilot orifice is installed and gas inlet is set to pressure specifications. Polish flame sensing rod with fine steel wool to remove any contaminants that may have accumulated on flame sensing rod.
	C. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance. Verify that wire harness is firmly connected to the module.
	D. Damaged pilot assembly or contaminated flame sensing rod.	Verify that ceramic insulator around the flame sensing rod is not cracked, damaged, or loose. Verify connection from flame sensing rod to white sensor wire. Polish flame sensing rod with fine steel wool to remove any contaminants that may have accumulated on flame sensing rod. Verify continuity with a multi-meter with ohms set at lowest range. Replace pilot if any damage is detected.
5. Appliance lights and runs for a few minutes and then shuts down and/or appliance cycles on and off.	A. A shorted or loose connection in flame sensing rod.	Verify all connections to wiring diagram in manual. Verify connections underneath pilot assembly are tight. Verify flame sense or igniter wires are not grounding out to metal chassis, pilot burner, pilot enclosure or screen if present, or any other metal object.
	B. Poor flame rectification or contaminated flame sensing rod.	Verify that flame is engulfing flame sensing rod on left side of pilot hood. Flame sensing rod should glow shortly after ignition. With a multi-meter, verify that current in series between module and sense lead is at least 0.14 microamps. Verify correct pilot orifice is installed and gas inlet is set to pressure specifications. Polish flame sensing rod with fine steel wool to remove any contaminants that may have accumulated on flame sensing rod.
	C. Logs are set up incorrectly.	Remove and reinstall logs per the log placement instructions.
	D. Damaged pilot assembly or contaminated flame sensing rod.	Verify that ceramic insulator around the flame sensing rod is not cracked, damaged, or loose. Verify connection from flame sensing rod to white sensor wire. Polish flame sensing rod with fine steel wool to remove any contaminants that may have accumulated on flame sensing rod. Verify continuity with a multi-meter with ohms set at lowest range. Replace pilot if any damage is detected.



## **E. 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.

- **Fireglass Media**

- Diamond
- Bronze
- Onyx
- Sapphire

- **Wall Mount Switch Kit (IPIWK)**

This kit allows the appliance to be turned on and off with a simple rocker switch and provides LED control convenience.

- **Driftwood Log Set (AVFL60DLS)**

This log set adds a new twist to the contemporary look of the AVFL60 with a three piece set.

- **Optional Finish Kits**

The AVFL60 has three optional finish kits that will customize your unit.

- AVFL60TKI - Black textured inside fit trim kit
- AVFL60CFVC - Contemporary variegated copper face
- AVFL60CFBT - Contemporary black textured face

- **Optional Stone Kit (SKAVFL60)**

- The look of water tumbled stones adds interest and appeal to your fireplace.



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Please contact your Monessen dealer with any questions or concerns.  
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