

*Quality People. Building Solutions.*

Comfort Systems USA (Arkansas), Inc.  
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**Date:** 5/23/2023

**Return Request:** 6/2/2023

**Project:** Farm Credit Office

**Supplier:** Godfry Black

**Submittal:** Fire Place & Fire Pit

**Submittal Number:** 22 00 00-03

**Drawing # and Installation:** Plumbing Drawings

**ARCHITECT**

Hight Jackson  
5201 W. Village Parkway, Suite 300  
Rogers, AR 72758  
479-464-4965

**ENGINEER**

HAS Engineering  
7405 Ellis Rd.  
Fort Smith, AR 72916  
479-452-8922

**GENERAL CONTRACTOR**

Nabholz  
612 Garland St.  
Conway, AR 72032  
501-505-5800

**MECHANICAL SUBCONTRACTOR**

Comfort Systems USA (Arkansas), Inc.  
9924 Landers Rd.  
N. Little Rock, AR 72117  
501-834-3320

Notes:

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**CSUSA PROJECT NO.**

**23-1013**

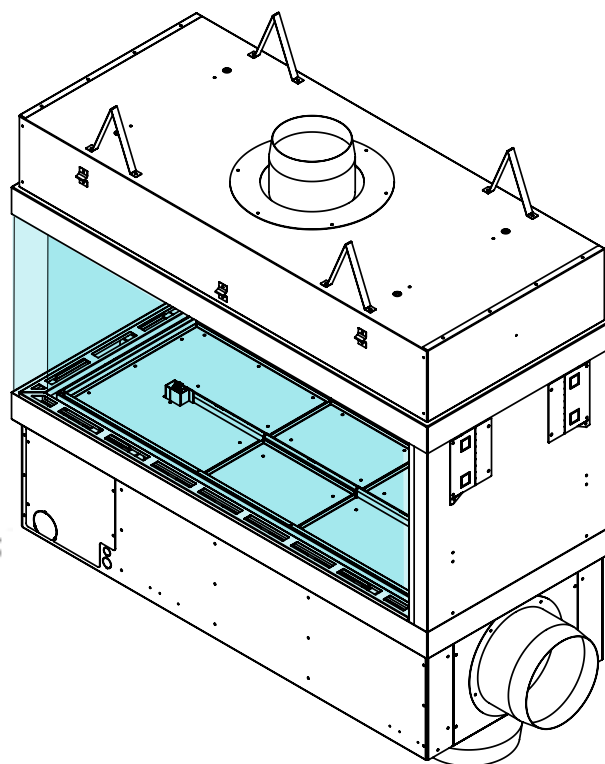
[jon@comfortar.com](mailto:jon@comfortar.com)



stellar.heatnglo.com

## Custom Fireplace Program Co-linear Direct Vent Powervented Gas Fireplaces

### ENLIGHT COLLECTION - PIER Installation and Operating Manual NG & Propane



# DO NOT DISCARD

Installer: Leave this manual with the appliance.  
Consumer: Retain this manual for future reference.

**WARNING:** If the information in these instructions are not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS**
  - Do not try to light any appliance.
  - Do not touch any electrical switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

# DANGER



**HOT GLASS WILL  
CAUSE BURNS.**

**DO NOT TOUCH GLASS  
UNTIL COOLED.**

**NEVER ALLOW CHILDREN  
TO TOUCH GLASS.**

**NATIONAL  
FIREPLACE  
INSTITUTE®**



**CERTIFIED**  
www.nficertified.org

We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute (NFI) as NFI Gas Specialists.

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

***Congratulations on selecting a  
Stellar by Heat & Glo gas fireplace.***

You've selected a model within the Enlight Collection that is crafted to elevate even the most unique spaces. Each of our Enlight Collection's seven configurations sets the stage with the most robust flames in its class, with commercial grade components providing the utmost in safety and reliability.

As the owner of a new fireplace, you'll want to read and carefully follow all of the instructions contained in this owner's manual.

Pay special attention to all cautions and warnings.

**DO NOT DISCARD.**

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

**Installation Team: at the time of install, please record the following pertinent information about the fireplace for the homeowners reference:**

Model Name: \_\_\_\_\_

Serial Number: \_\_\_\_\_ Date Installed: \_\_\_\_\_

Dealer Purchased From: \_\_\_\_\_

Dealer City/State: \_\_\_\_\_ Dealer Phone: \_\_\_\_\_

Notes: \_\_\_\_\_  
\_\_\_\_\_

If your model number has not been filled out above, please contact your dealer the fireplace purchased through directly for assistance identifying your model number by the serial number.



**STELLAR**

**by Heat & Glo**

stellar.heatnglo.com

Stellar by Heat&Glo, a division of Hearth & Home Technologies, Inc.  
22160 Cedar Avenue S.  
Lakeville, MN 55044  
(P) 952-224-4072  
(E) StellarInfo@hearthnhome.com

## UL RATING PLATE LOCATION & MODEL NUMBER IDENTIFICATION

The rating plate is used for multiple designs and multiple collections, and custom fireplaces.

The generic nomenclature listed on the rating plate will not identically match the model of Enlight fireplace you have.

The rating plate must stay with the fireplace and is located below the burner in an area that will only be reachable while servicing.

**STELLAR HEARTH & HOME**  
By Heat & Glo technologies

Verified Gas Fireplace  
Not For Use With Solid Fuel

MH48906

DATE OF MFG:  SERIAL NO.:

Energy Verified  
Rendement Énergétique Vérifié

Tested to: ANSI Z21.50-2019/CSA 2.22-2019 Venting Gas Fireplaces and CAN/CSA P.4.1-15  
This vented gas fireplace is not for use with air filters.  
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 Natural Gas and Propane Installation Codes, CSA B146.1.

This unit is equipped for use with: **NATURAL GAS**

**Model Number, Input and Orifice Specifications - NATURAL GAS**

Model No.	Maximum Input Rating BTU/Hr	Burner Orifice (DMS)	Model No.	Maximum Input Rating BTU/Hr	Burner Orifice (DMS)
<input type="checkbox"/> 2-XX-YY-R	20,000	(1X) #43	<input type="checkbox"/> 9-XX-YY-R	160,000	(8X) #43
<input type="checkbox"/> 2-XX-YY-L	20,000	(1X) #43	<input type="checkbox"/> 9-XX-YY-L	160,000	(8X) #43
<input type="checkbox"/> 3-XX-YY-R	40,000	(2X) #43	<input type="checkbox"/> 9-XX-YY-T	160,000	(15X) #51
<input type="checkbox"/> 3-XX-YY-L	40,000	(2X) #43	<input type="checkbox"/> 10-XX-YY-R	180,000	(9X) #43
<input type="checkbox"/> 3-XX-YY-T	40,000	(3X) #51	<input type="checkbox"/> 10-XX-YY-L	180,000	(9X) #43
<input type="checkbox"/> 4-XX-YY-R	60,000	(3X) #43	<input type="checkbox"/> 10-XX-YY-T	180,000	(17X) #51
<input type="checkbox"/> 4-XX-YY-L	60,000	(3X) #43	<input type="checkbox"/> 11-XX-YY-R	200,000	(10X) #43
<input type="checkbox"/> 4-XX-YY-T	60,000	(5X) #51	<input type="checkbox"/> 11-XX-YY-L	200,000	(10X) #43
<input type="checkbox"/> 5-XX-YY-R	80,000	(4X) #43	<input type="checkbox"/> 11-XX-YY-T	200,000	(19X) #51
<input type="checkbox"/> 5-XX-YY-L	80,000	(4X) #43	<input type="checkbox"/> 12-XX-YY-R	220,000	(11X) #43
<input type="checkbox"/> 5-XX-YY-T	80,000	(7X) #51	<input type="checkbox"/> 12-XX-YY-L	220,000	(11X) #43
<input type="checkbox"/> 6-XX-YY-R	100,000	(5X) #43	<input type="checkbox"/> 12-XX-YY-T	220,000	(21X) #51
<input type="checkbox"/> 6-XX-YY-L	100,000	(5X) #43	<input type="checkbox"/> 13-XX-YY-R	240,000	(12X) #43
<input type="checkbox"/> 6-XX-YY-T	100,000	(9X) #51	<input type="checkbox"/> 13-XX-YY-L	240,000	(12X) #43
<input type="checkbox"/> 7-XX-YY-R	120,000	(6X) #43	<input type="checkbox"/> 13-XX-YY-T	240,000	(23X) #51
<input type="checkbox"/> 7-XX-YY-L	120,000	(6X) #43	<input type="checkbox"/> 14-XX-YY-R	260,000	(13X) #43
<input checked="" type="checkbox"/> 7-XX-YY-T	120,000	(11X) #51	<input type="checkbox"/> 14-XX-YY-L	260,000	(13X) #43
<input type="checkbox"/> 8-XX-YY-R	140,000	(7X) #43	<input type="checkbox"/> 14-XX-YY-T	260,000	(25X) #51
<input type="checkbox"/> 8-XX-YY-L	140,000	(7X) #43	<input type="checkbox"/> 15-XX-YY-R	280,000	(14X) #43
<input type="checkbox"/> 8-XX-YY-T	140,000	(13X) #51	<input type="checkbox"/> 15-XX-YY-L	280,000	(14X) #43
			<input type="checkbox"/> 15-XX-YY-T	280,000	(27X) #51

### → MODEL NUMBER IDENTIFICATION

#### Viewing Width Of The Fireplace (Feet)

3-4-5-6-7-8 = Enlight Model

9-15 = Only Used For Custom Models

#### Viewing Height Of Fireplace (Inches)

20-24-30-36-48-60 = Enlight Models Only

OH = Open Hearth (All Heights)

GL = Glass, Direct Vent (All Heights)

**8-XX-YY-G**

#### Configuration Of The Fireplace

SS = Single Sided

ST = See Through

BY = Bay

PR = Pier

LC = Left Corner

RC = Right Corner

4S = Four Sided (Island)

#### Style Of Burner

G = Enlight Models Only,  
Direct Vent (Ribbon)

R = Ribbon

L = Log Oak (Not Driftwood)

T = Torch



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→ = Contains New Or Updated Information

# 1 - SAFETY INFORMATION

This fireplace complies with ANSI Z21.50-2019/CSA 2.22-2019 Vented Gas Fireplaces and CAN/CSA P.4.1-15.

Installation must conform with local building codes or in the absence of local building codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54 - Current Edition, or the Natural or Propane Installation Code, CSAB149.1

## A. SAFETY ICON DESIGNATIONS

Various safety icons appear throughout this installation manual. Please familiarize yourself with the icons making sure you understand the serious consequences that may occur if ignored or of handling the products inappropriately.



### IMPORTANT NOTE

This indicates additional instructions that you should consider during the installation.



### DO NOT

This indicates something that you must never do.



### RISK OF FIRE

This designates a danger of risk of fire or damage to property.



### HOT GLASS WARNING

This indicates danger of serious bodily injury or property damage if glass is handled while still hot.



### CAUTION

This indicates danger of serious bodily injury or property damage



### STOP!

This indicates notes that may include reviewing warnings on other pages throughout the manual

## B. IMPORTANT SAFETY CONSIDERATIONS

- Installation and repair should be done only by a qualified service person. The appliance should be inspected by a qualified service person before use. Annual inspection by a qualified service person is required to maintain warranty. When drawing room air for combustion more frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulation air passageways of the appliance be kept clean.
  - Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.
  - Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at risk individuals in the house. To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children and other at risk individuals out of the room and away from hot surfaces.
  - Clothing or other flammable material should not be placed on or near the appliance.
  - Adequate accessibility clearances for servicing and proper operation must be maintained.
  - This appliance must not share or be connected to a chimney flue serving any other appliance.
  - Keep area around the appliance clear of combustible materials, gasoline and other flammable vapor and liquids.
  - The flow of combustion and ventilation air must not be obstructed.
  - Due to high temperatures the appliance should be located out of traffic and away from furniture and draperies.
  - The glass front or any part removed for servicing the appliance must be replaced prior to operating the appliance. Work should be done by a qualified service technician.
  - Clean glass only when cool and only with non-abrasive cleansers.
  - Do not operate this appliance with the glass/frame assembly removed, cracked or broken. Replacement of the glass assembly must only be performed by a licensed or qualified service person. **DO NOT SUBSTITUTE MATERIALS.**
  - Do not strike or slam glass assembly.
  - Keep burner and control compartment clean.
  - Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect this appliance and to replace any part of the control system and any gas control which has been under water.
  - **DANGER:** Under no circumstances should any solid fuel (wood, coal, paper or cardboard etc.) be used in this appliance.
  - **STATE OF CA WARNING:** This product and the fuels used to operate this product (liquid propane or natural gas), and the 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 - COMMONWEALTH OF MASSACHUSETTS REQUIREMENTS



**NOTE: THE FOLLOWING REQUIREMENTS REFERENCE VARIOUS MASSACHUSETTS AND NATIONAL CODES NOT CONTAINED IN THIS MANUAL.**

For all sidewall 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 (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 time of installation of side wall horizontally 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 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 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 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 no less the one-half inch (1/2) in size, "GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS".

### INSPECTION

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

### EXEMPTIONS

The following equipment is exempt from 248 CMR 5.08 (2) (a) 1 through 4: The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

### MANUFACTURES 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.

### MANUFACTURES REQUIREMENTS GAS EQUIPMENT VENTING SYSTEM NOT PROVIDED

When the manufacturer of Product Approved side wall horizontally vented gas 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 systems" 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.

### 3 - SPECIFICATIONS

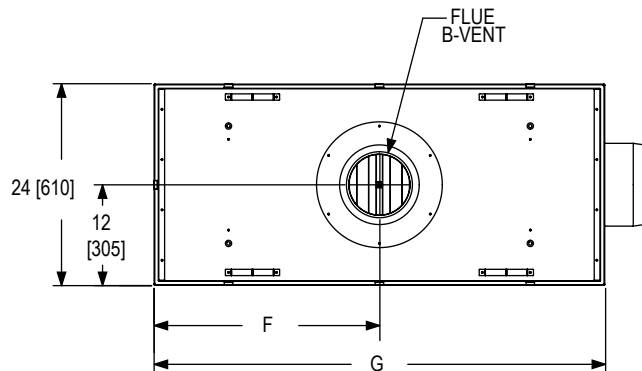
	B-VENT	AIR INTAKE	Finishing Width - Front	Finishing Height	Finishing Width-End	Height To Trim Top	Overall Height	Center Of Vent	Overall Width	Unit Weight
	The dimensions in green are the allowable finishing width and height required to fit the glass into the fireplace; must not overlap onto glass.									
MODEL #	Ø	Ø	A	B	C	D	E	F	G	LBS [KG]
3-PR-20-G	8"	10"	39-31/32 [1,015]	20 [508]	NA	38 [1,067]	46 [1,168]	20-7/8 [530]	41-3/4 [1,065]	371 [168]
4-PR-20-G	8"	10"	51-31/32 [1,320]	20 [508]	NA	38 [1,067]	46 [1,168]	26-7/8 [683]	53-3/4 [1,365]	453 [205]
5-PR-20-G	8"	10"	63-31/32 [1,625]	20 [508]	NA	38 [1,067]	46 [1,168]	32-7/8 [835]	65-3/4 [1,670]	534 [242]
6-PR-20-G	10"	10"	75-31/32 [1,930]	20 [508]	NA	38 [1,067]	46 [1,168]	38-7/8 [987]	77-3/4 [1,975]	619 [281]
7-PR-20-G	10"	10"	87-31/32 [2,234]	20 [508]	NA	38 [1,067]	46 [1,168]	44-7/8 [1,140]	89-3/4 [2,280]	700 [318]
8-PR-20-G	10"	12"	99-22/23 [2,539]	20 [508]	NA	40 [1,016]	52 [1,321]	50-7/8 [1,292]	101-3/4 [2,584]	821 [372]
3-PR-24-G	8"	10"	39-31/32 [1,015]	24 [610]	NA	42 [1,067]	50 [1,270]	20-7/8 [530]	41-3/4 [1,065]	394 [179 ]
4-PR-24-G	8"	10"	51-31/32 [1,320]	24 [610]	NA	42 [1,067]	50 [1,270]	26-7/8 [683]	53-3/4 [1,365]	486 [220]
5-PR-24-G	8"	10"	63-31/32 [1,625]	24 [610]	NA	42 [1,067]	50 [1,270]	32-7/8 [835]	65-3/4 [1,670]	572 [260]
6-PR-24-G	10"	10"	75-31/32 [1,930]	24 [610]	NA	42 [1,067]	50 [1,270]	38-7/8 [987]	77-3/4 [1,975]	660 [300]
7-PR-24-G	10"	10"	87-31/32 [2,234]	24 [610]	NA	42 [1,067]	50 [1,270]	44-7/8 [1,140]	89-3/4 [2,280]	745 [338]
8-PR-24-G	10"	12"	99-22/23 [2,539]	24 [610]	NA	44 [1,118]	56 [1,422]	50-7/8 [1,292]	101-3/4 [2,584]	866 [393]
3-PR-30-G	8"	10"	39-31/32 [1,015]	30 [762]	NA	48 [1,219]	56 [1,422]	20-7/8 [530]	41-3/4 [1,065]	427 [194]
4-PR-30-G	8"	10"	51-31/32 [1,320]	30 [762]	NA	48 [1,219]	56 [1,422]	26-7/8 [683]	53-3/4 [1,365]	521 [236]
5-PR-30-G	8"	10"	63-31/32 [1,625]	30 [762]	NA	48 [1,219]	56 [1,422]	32-7/8 [835]	65-3/4 [1,670]	615 [279]
6-PR-30-G	10"	10"	75-31/32 [1,930]	30 [762]	NA	48 [1,219]	56 [1,422]	38-7/8 [987]	77-3/4 [1,975]	710 [322]
7-PR-30-G	10"	10"	87-31/32 [2,234]	30 [762]	NA	48 [1,219]	56 [1,422]	44-7/8 [1,140]	89-3/4 [2,280]	802 [364]
8-PR-30-G	10"	12"	99-22/23 [2,539]	30 [762]	NA	50 [1,270]	62 [1,574]	50-7/8 [1,292]	101-3/4 [2,584]	933 [423]
3-PR-36-G	8"	10"	39-31/32 [1,015]	36 [914]	NA	54 [1,372]	62 [1,575]	20-7/8 [530]	41-3/4 [1,065]	461 [210]
4-PR-36-G	8"	10"	51-31/32 [1,320]	36 [914]	NA	54 [1,372]	62 [1,575]	26-7/8 [683]	53-3/4 [1,365]	570 [259]
5-PR-36-G	8"	10"	63-31/32 [1,625]	36 [914]	NA	54 [1,372]	62 [1,575]	32-7/8 [835]	65-3/4 [1,670]	670 [304]
6-PR-36-G	10"	10"	75-31/32 [1,930]	36 [914]	NA	54 [1,372]	62 [1,575]	38-7/8 [987]	77-3/4 [1,975]	771 [350]
7-PR-36-G	10"	10"	87-31/32 [2,234]	36 [914]	NA	54 [1,372]	62 [1,575]	44-7/8 [1,140]	89-3/4 [2,280]	870 [395]
8-PR-36-G	10"	12"	99-22/23 [2,539]	36 [914]	NA	56 [1,422]	68 [1,727]	50-7/8 [1,292]	101-3/4 [2,584]	1,002 [455]
3-PR-48-G	8"	10"	39-31/32 [1,015]	48 [1,219]	NA	66 [1,676]	74 [1,880]	20-7/8 [530]	41-3/4 [1,065]	530 [240]
4-PR-48-G	8"	10"	51-31/32 [1,320]	48 [1,219]	NA	66 [1,676]	74 [1,880]	26-7/8 [683]	53-3/4 [1,365]	643 [292]
5-PR-48-G	8"	10"	63-31/32 [1,625]	48 [1,219]	NA	66 [1,676]	74 [1,880]	32-7/8 [835]	65-3/4 [1,670]	755 [343]
6-PR-48-G	10"	10"	75-31/32 [1,930]	48 [1,219]	NA	66 [1,676]	74 [1,880]	38-7/8 [987]	77-3/4 [1,975]	871 [395]
7-PR-48-G	10"	10"	87-31/32 [2,234]	48 [1,219]	NA	66 [1,676]	74 [1,880]	44-7/8 [1,140]	89-3/4 [2,280]	984 [446]
8-PR-48-G	10"	12"	99-22/23 [2,539]	48 [1,219]	NA	68 [1,727]	80 [2,032]	50-7/8 [1,292]	101-3/4 [2,584]	1,137 [516]
3-PR-60-G	8"	10"	39-31/32 [1,015]	60 [1,524]	NA	78 [1,981]	86 [2,184]	20-7/8 [530]	41-3/4 [1,065]	597 [291]
4-PR-60-G	8"	10"	51-31/32 [1,320]	60 [1,524]	NA	78 [1,981]	86 [2,184]	26-7/8 [683]	53-3/4 [1,365]	724 [328]
5-PR-60-G	8"	10"	63-31/32 [1,625]	60 [1,524]	NA	78 [1,981]	86 [2,184]	32-7/8 [835]	65-3/4 [1,670]	850 [386]
6-PR-60-G	10"	10"	75-31/32 [1,930]	60 [1,524]	NA	78 [1,981]	86 [2,184]	38-7/8 [987]	77-3/4 [1,975]	980 [445]
7-PR-60-G	10"	10"	87-31/32 [2,234]	60 [1,524]	NA	78 [1,981]	86 [2,184]	44-7/8 [1,140]	89-3/4 [2,280]	1,107 [502]
8-PR-60-G	10"	12"	99-22/23 [2,539]	60 [1,524]	NA	80 [2,032]	92 [2,336]	50-7/8 [1,292]	101-3/4 [2,584]	1,273 [577]
KEY = INCHES [MM] FOR COLUMNS A-G										
WEIGHT = LBS [KG] Unit weight includes the fireplace, the glass panels and the glass media.										

### 3 - SPECIFICATIONS

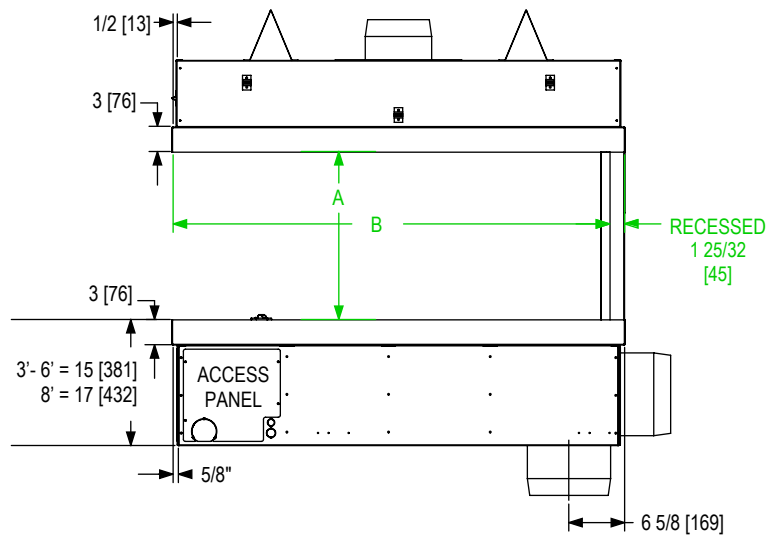
The hood shall be supported at specific locations using 1/4-20 UNC threaded rods.  
For more information, refer to Section 3 (Prepare The Fireplace).

*Model 4-ST-24-G Shown In Example.*  
*The full shop drawing for each width*  
*can be found under the RESOURCES tab*  
*at the [stellar.heatnglo.com](http://stellar.heatnglo.com) website.*

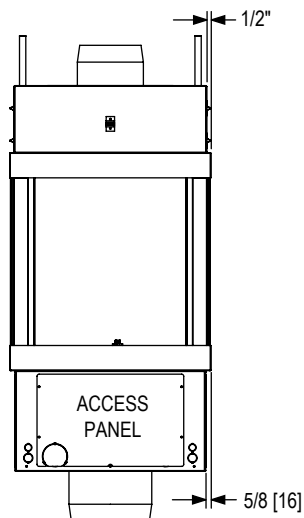
TOP VIEW



FRONT VIEW



GLASS END VIEW



WALL END VIEW

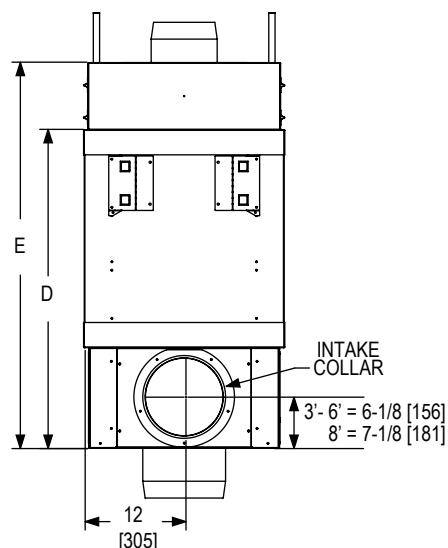


Figure 3A

inches [mm]

## 3 - SPECIFICATIONS

### C. SPECIFICATIONS

Model #	DESCRIPTION	B-VENT	OA	REG PV	IN-LINE PV	BTU'S	NG ORIFICE	Propane ORIFICE
3'	ANY HEIGHT	8"	10"	RS12	RSIF160	40,000	(2X) #43	(2X) #55
4'	ANY HEIGHT	8"	10"	RS12	RSIF160	60,000	(3X) #43	(3X) #55
5'	ANY HEIGHT	8"	10"	RS12	RSIF160	80,000	(4X) #43	(4X) #55
6'	ANY HEIGHT	10"	10"	RS14	RSIF180	100,000	(5X) #43	(5X) #55
7'	ANY HEIGHT	10"	10"	RS14	RSIF180	120,000	(6X) #43	(6X) #55
8'	ANY HEIGHT	10"	12"	RS14	RSIF180	140,000	(7X) #43	(7X) #55



**WARNING: NON-COMBUSTIBLE ZONE: USE ONLY NON-COMBUSTIBLE MATERIAL IN THIS AREA FOR ENTIRE WIDTH OF FIREPLACE. DO NOT USE WOOD, SHEETROCK, ETC., IN THIS ZONE.**



**NOTE: OTHER CLEARANCES APPLY. ALL CLEARANCES MUST BE MAINTAINED.**  
Refer to Section 4 (Framing), Section 5 (Non-combustible Zone) and Section 10 (Finishing) for more information.



**NOTE: The qualified installer should follow the procedure best suited for the installation.**

### D. INSTALLATION OVERVIEW

1. Frame should be built after the fireplace is installed or extra clearance must be planned for at the intake collar. Framing must allow for vent installation.
2. If masonry (optional) will be used, prepare foundation for the masonry load. A lintel is required to support the added weight above the fireplace.
3. Install hearth if desired.
4. Insert fireplace into framing.
5. Double check clearances to combustibles.
6. Complete gas line installation.
7. Complete electrical hook-up.
8. Complete venting installation.
9. Install facing material, mantel or cabinetry.
10. Install glass media/natural stone, and any interior options including mirrors and/or driftwood log set.
11. Verify proper operation of fireplace and all components.

### E. PLACEMENT CLEARANCE REQUIREMENTS

- This fireplace must be installed on a level surface capable of supporting the fireplace and venting.
- Fireplace must be placed directly on wood or non-combustible surface (not linoleum or carpet) extending entire depth and width of fireplace.
- This fireplace may be installed in a bedroom.

#### Non-Combustible Materials Specifications

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.

#### Combustible Materials Specifications

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 shall be considered combustible materials.

## 3 - SPECIFICATIONS

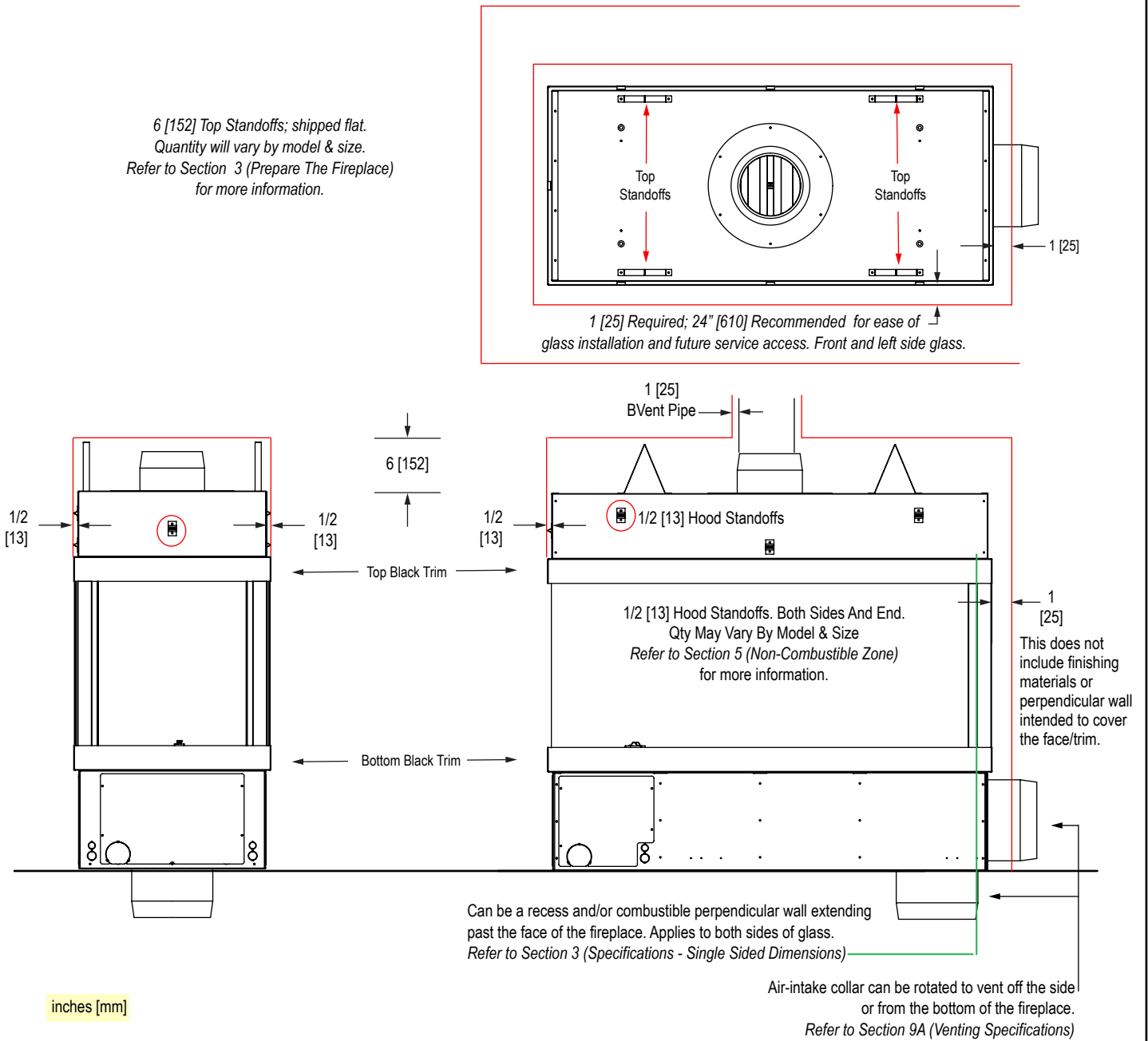
### F. CLEARANCES

From unit left & right sides	1"	25mm
To flooring under fireplace	0	0
Unit top to ceiling	6"	152mm
Unit side to adjacent sidewall	1"	25mm

**Figure 3F**

**CLEARANCES SHOWN ARE MINIMUM TO COMBUSTIBLES.**

NON-COMBUSTIBLE FRAMING AND FINISHING MATERIALS ALLOWED RIGHT UP TO THE FIREPLACE.



Combustible finishing materials may cover the 3 [76] top and bottom black trim. Do not overlap glass.  
Combustible framing allowed right up to the fireplace below the viewing area only.  
A combustible mantel may be placed at the top of the viewing area. Do not overlap glass.  
A combustible hearth extension may be used below the viewing area. Do not overlap glass.  
Do not place on carpet, vinyl or soft surfaces.



## 4- PREPARE THE FIREPLACE

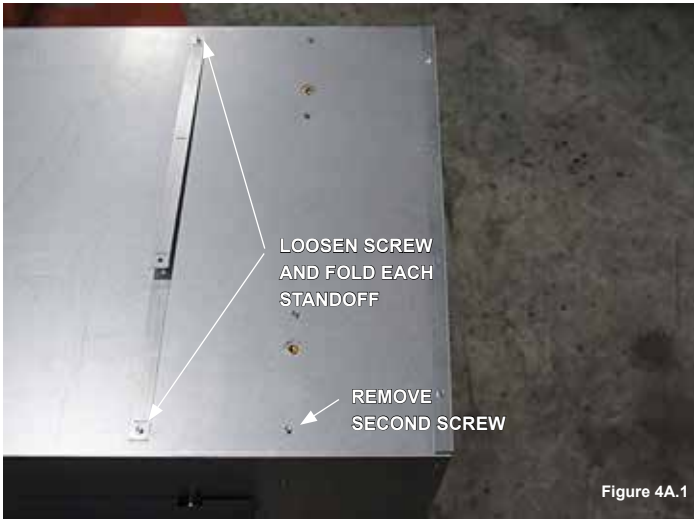


**CAUTION: FIREPLACE IS NOT LOAD-BEARING.**



**NOTE: OTHER CLEARANCES APPLY. ALL CLEARANCES MUST BE MAINTAINED.**

### A. STANDOFF INSTALLATION

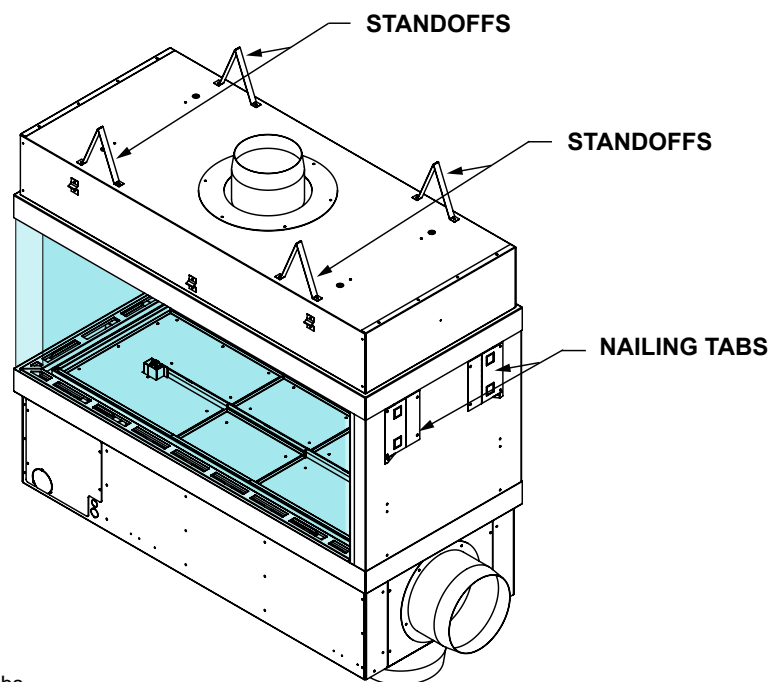


#### STEP 1: Refer to Figure 4A.1

The standoffs will be shipped in a flat state placed on the firebox top. Locate the standoffs and loosen the screws holding them in place.

#### STEP 2: Refer to Figure 4A.2

Fold the center of the standoff up and both ends out at the perforated lines. Using Figure 4A.2 for reference, locate the second pre-installed screw on the firebox top at each standoff location. Remove the screw, pivot the folded standoff into location and re-install the screw to secure the standoff. Tighten up the screw that was loosened in Step 1.



**Figure 4A.3**

Placement of the standoffs and nailing tabs.

## 4 - PREPARE THE FIREPLACE

### B. NAILING TABS



Figure 4B.3

#### STEP 1: Refer to Figure 4B.1

The nailing tabs will be shipped in a flat state placed on the firebox side; four (4) on each side. Locate the nailing tabs and remove the screws holding them in place.



Figure 4B.2

#### STEP 2: Refer to Figure 4B.2

Bend the two (2) small tabs out on each nailing tab at the perforated lines. Using Figure 4A.3 for reference, locate the pre-drilled holes on the firebox side each nailing tab will be placed at.

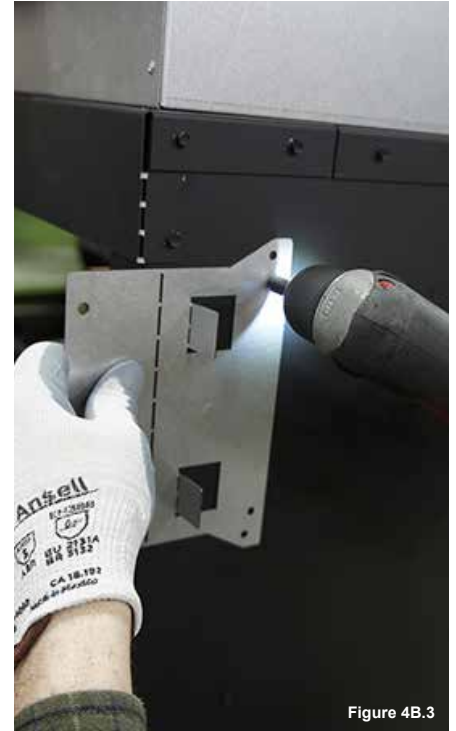


Figure 4B.3

#### STEP 3: Refer to Figure 4B.3 & Figure 4B.4

Set each nailing tab in place and secure using two (2) screws each. Bend the nailing tab out from fireplace at the perforated line.



Figure 4B.4



Figure 4B.5

The nailing tabs will ensure the 1" minimum clearance is kept to combustible framing. Refer to Figure 4B.5

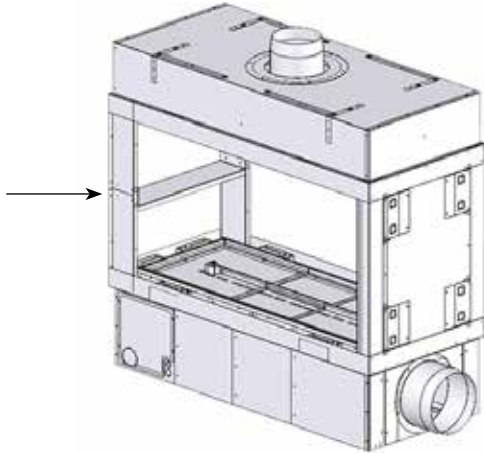
Depending on your installation and how you frame it out, you may not use the provided nailing tabs.

## 4 - PREPARE THE FIREPLACE

### C. SHIPPING SUPPORT BRACKETS

The hood must be supported at specific locations using 1/4-20 UNC threaded rods.

Temporary support brackets are put in place for shipping and installation support and must stay in place until fireplace hood is fully supported.



**Figure 4C**

Temporary Shipping Support Bracket

1. Install the threaded rods in the appropriate locations for A, B & C as noted below in D. THREADED ROS.
2. Level the fireplace.
3. Ensure fireplace is fully supported and leveled and then remove support brackets.

#### **CAUTION! RISK OF INJURY!**

**DO NOT** remove support brackets until fireplace is fully supported and level.

### D. THREADED RODS

The Pier fireplace requires 2 threaded rods to be placed at the glass-to-glass intersections.

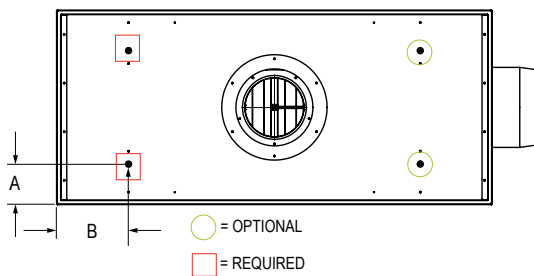
Placement of the required threaded rods is at the A & B intersection at the front left and back left corners notated as REQUIRED A & B locations.

Additional locations are provided if your installation needs more support notated as OPTIONAL A, B & C locations.

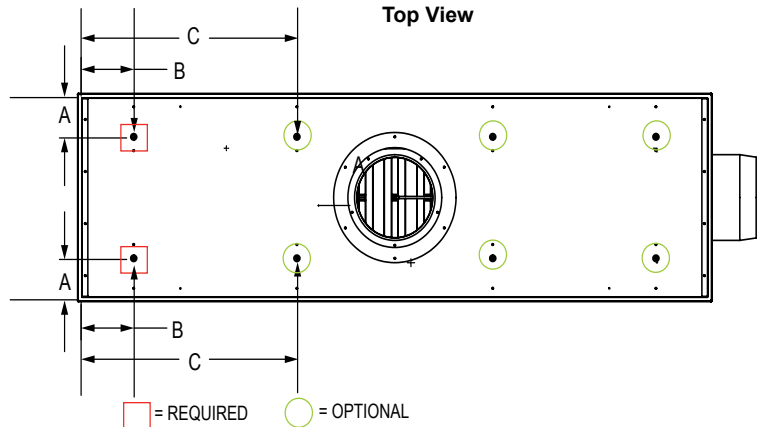
Once the required threaded rods are in place and the the hood fully supported, the temporary support brackets may be taken off.

See next page for threaded rod installation option.

**Figure 4D. 1 - 3', 4' & 5' Models**  
Top View



**Figure 4D.2 - 6', 7' & 8' Models**  
Top View



The hood shall be supported at specific locations using 1/4-20 UNC threaded rods.

Qty 2 threaded rods are required in the front and back left hand corner  
glass-to-glass intersections (A & B)

All other locations are optional if additional support is needed.

MODEL	QTY	Additional		Hood Weight		A		B		C	
		REQ	OPT	LBS [KG]		Inches	mm	Inches	mm	Inches	mm
3' PR	2	2	2	82 [37]		5	127	6-3/8	162	NA	NA
4' PR	2	2	2	101 [46]		5	127	8-7/8	225	NA	NA
5' PR	2	2	2	120 [54]		5	127	11-7/8	302	NA	NA
6' PR	2	6	6	141 [64]		5	127	6-7/8	175	26-7/8	683
7' PR	2	6	6	160 [73]		5	127	6-7/8	175	32-7/8	835
8' PR	2	6	6	205 [93]		5	127	6-7/8	175	38-7/8	987

## 4 - PREPARE THE FIREPLACE

### E. THREADED RODS INSTALLATION (EXAMPLE)

There are several different ways to support the fireplace top and one option is to use a Unistrut installed over the fireplace that is secured to structurally sound framing. Refer to Figure 4B.

For each threaded rod installation you may need:



Super Strut  
or Uni-Strut



Qty 2  
1/4-20  
Eyebolt



Qty 2  
Threaded  
Quick Link



Qty 2  
1/4-20  
Turnbuckle



Qty 2  
1/4-20  
Threaded Rod  
or All Thread

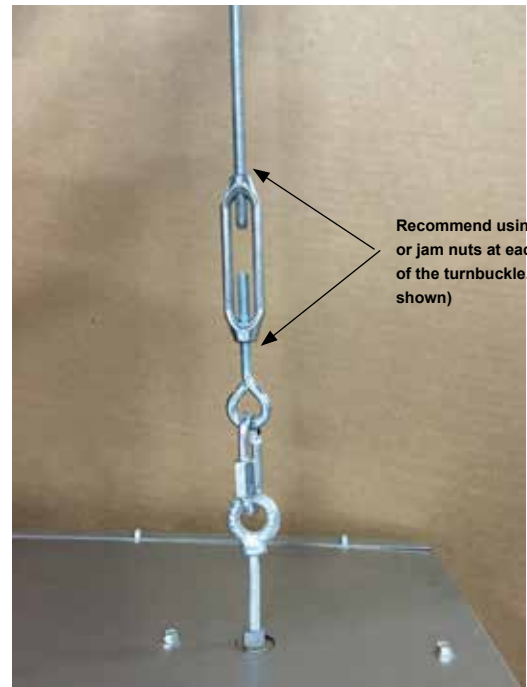


Qty 2  
Fender  
Washer



Up To Qty 6  
1/4-20  
Nut

( Qty Per Threaded Rod Used)



- Install the threaded rod fully into the threaded fastener located on top of the fireplace.
- Insert the threaded rod into a hole in the Unistrut straight above the threaded fastener located on top of the fireplace.
- Use a fender washer and nut on the top end of the threaded rod to adjust the height of the fireplace opening. Make sure the opening dimension is exact all the way around. Use Loctite to secure the nut from loosening (not shown).
- If the top of the threaded rod is to be secured into blind threaded fastener or if there isn't clearance above to adjust the rod, you can use a turnbuckle to adjust the height.
- Install an eyebolt fully into the threaded nut located on top of the fireplace.
- Use a quick link to connect the eye bolt to the reverse thread side of the turnbuckle.
- Thread the threaded rod into the normal side of the turnbuckle.
- Use the locktight or jam nuts to secure the turnbuckle from loosening.



## 5 - FRAMING & MANTEL REQUIREMENTS



**NOTE:** Framing dimensions should allow for wall covering thickness and fireplace facing materials. When using a hearth, adjust rough opening size as necessary to maintain at least minimum clearance requirements.



**CAUTION:** Install fireplace on metal, concrete or hard wood surface extending the full width and depth of fireplace.



**CAUTION:** Vent cap location must be in compliance with guidelines in *Section 8 (Venting)* of this manual.

If masonry is to be used (optional), prepare the necessary foundation for the masonry load. When masonry construction is being used, a lintel must be used over top of fireplace to support the added weight. Build hearth to desired size and height. If a hearth extension is desired, combustible material may be used.



**NOTE:** REFER TO DIMENSIONS SECTION FOR ALLOWABLE FINISHING DIMENSIONS REQUIRED TO FIT THE GLASS PANELS INTO THE FIREPLACE. FINISHING MATERIALS MUST NOT OVERLAP THE DIMENSIONS HIGHLIGHTED IN GREEN IN *SECTION 2 (DIMENSIONS)*. NEVER COVER THE GLASS WITH FINISHING MATERIALS.



**NOTE:** DO NOT PIERCE ANY OF THE BLACK PAINTED SURFACES WITH SCREWS, RIVETS, ETC. THIS INCLUDES THE 3" [76mm] BLACK TOP AND BOTTOM GLASS TRIM AND ANY PAINTED SIDES ADJACENT TO THE GLASS.

### IMPORTANT FRAMING NOTES: inches [mm]

#### THE FIREPLACE IS NOT LOAD-BEARING

FRAMING SHOULD BE BUILT AFTER THE FIREPLACE IS INSTALLED OR EXTRA CLEARANCE MUST BE PLANNED FOR AT THE INTAKE COLLAR AND FOR THE THICKNESS OF MATERIALS USED.

FRAMING DIMENSIONS ASSUMING 1/2" [13] DRYWALL AND NON-COMBUSTIBLE BOARD USED.

THESE DIMENSIONS REPRESENT THE FRAMING DIMENSIONS FOR COMBUSTIBLE MATERIAL.

NON-COMBUSTIBLE FRAMING AND FINISHING MATERIALS MAY BE USED WITHIN THESE DIMENSIONS RIGHT UP TO THE UNIT.

NO COMBUSTIBLE MATERIAL WITHIN 6" [152] OF THE TOP OF THE FIREPLACE.

NO COMBUSTIBLE MATERIAL WITHIN 1" [25] OF THE SIDES, BACK AND FRONT OF THE FIREPLACE.

COMBUSTIBLE MATERIAL SHALL NOT BE PLACED DIRECTLY ON THE FACE OF THE FIREPLACE, TOP AND SIDES.

SEE SECTION 5 (NON-COMBUSTIBLE ZONE) AND SECTION 10 (FINISHING) FOR DETAILS REGARDING 1/2" [25] STANDOFFS.

STEEL SURFACE MAY BE COVERED WITH NON-COMBUSTIBLE FINISHING MATERIAL.

1" CLEARANCE TO THE B-VENT MUST BE MAINTAINED.

## 5 - FRAMING & MANTEL REQUIREMENTS

### A. PIER CORNER FRAMING DIMENSIONS

**Dimensions assume the 1/2" [13] clearance standoffs in place.**

**Refer to Section 5 (Non-combustible Zone) for more information on installations not using the clearance standoffs.**

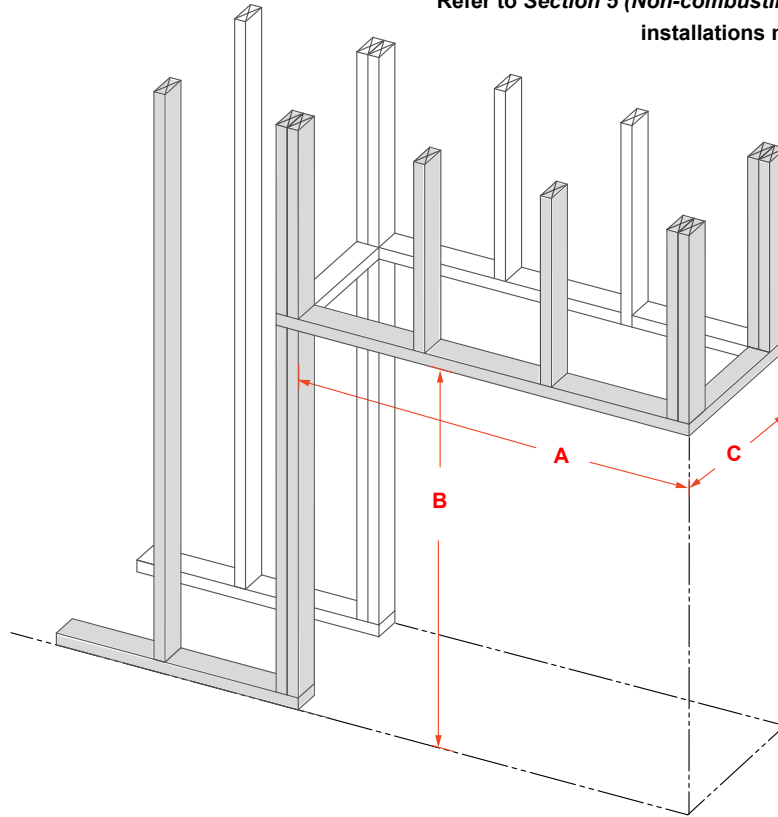


Figure 5A ←

inches [mm]

MODEL	A Width	B Height	C Depth
3-PR-20-G	42-3/4 [1,086]	52 [1,321]	23 [584]
4-PR-20-G	54-3/4 [1,391]	52 [1,321]	23 [584]
5-PR-20-G	66-3/4 [1,695]	52 [1,321]	23 [584]
6-PR-20-G	78-3/4 [2,000]	52 [1,321]	23 [584]
7-PR-20-G	90-3/4 [2,205]	52 [1,321]	23 [584]
8-PR-20-G	102-3/4 [2,610]	58 [1,473]	23 [584]
3-PR-24-G	42-3/4 [1,086]	56 [1,422]	23 [584]
4-PR-24-G	54-3/4 [1,391]	56 [1,422]	23 [584]
5-PR-24-G	66-3/4 [1,695]	56 [1,422]	23 [584]
6-PR-24-G	78-3/4 [2,000]	56 [1,422]	23 [584]
7-PR-24-G	90-3/4 [2,205]	56 [1,422]	23 [584]
8-PR-24-G	102-3/4 [2,610]	62 [1,574]	23 [584]
3-PR-30-G	42-3/4 [1,086]	62 [1,574]	23 [584]
4-PR-30-G	54-3/4 [1,391]	62 [1,574]	23 [584]
5-PR-30-G	66-3/4 [1,695]	62 [1,574]	23 [584]
6-PR-30-G	78-3/4 [2,000]	62 [1,574]	23 [584]
7-PR-30-G	90-3/4 [2,205]	62 [1,574]	23 [584]
8-PR-30-G	102-3/4 [2,610]	68 [1,727]	23 [584]

MODEL	A Width	B Height	C Depth
3-PR-36-G	42-3/4 [1,086]	68 [1,727]	23 [584]
4-PR-36-G	54-3/4 [1,391]	68 [1,727]	23 [584]
5-PR-36-G	66-3/4 [1,695]	68 [1,727]	23 [584]
6-PR-36-G	78-3/4 [2,000]	68 [1,727]	23 [584]
7-PR-36-G	90-3/4 [2,205]	68 [1,727]	23 [584]
8-PR-36-G	102-3/4 [2,610]	74 [1,880]	23 [584]
3-PR-48-G	42-3/4 [1,086]	80 [2,032]	23 [584]
4-PR-48-G	54-3/4 [1,391]	80 [2,032]	23 [584]
5-PR-48-G	66-3/4 [1,695]	80 [2,032]	23 [584]
6-PR-48-G	78-3/4 [2,000]	80 [2,032]	23 [584]
7-PR-48-G	90-3/4 [2,205]	80 [2,032]	23 [584]
8-PR-48-G	102-3/4 [2,610]	86 [2,184]	23 [584]
3-PR-60-G	42-3/4 [1,086]	92 [2,336]	23 [584]
4-PR-60-G	54-3/4 [1,391]	92 [2,336]	23 [584]
5-PR-60-G	66-3/4 [1,695]	92 [2,336]	23 [584]
6-PR-60-G	78-3/4 [2,000]	92 [2,336]	23 [584]
7-PR-60-G	90-3/4 [2,205]	92 [2,336]	23 [584]
8-PR-60-G	102-3/4 [2,610]	98 [2,489]	23 [584]



## 5 - FRAMING & MANTEL REQUIREMENTS

### B. PIER FRAMING DIMENSIONS - RECESS



**NOTE: IT IS RECOMMENDED TO SET THE FIREPLACE IN TO PLACE PRIOR TO INSTALLING THE FRAMING.**  
Framing dimensions noted are minimum framing dimensions to combustible materials only, and it is the responsibility of the installer for determining framing dimensions that allow for wall covering thickness and fireplace facing materials for each individual installation.

**RECESS NOTE:** To bring the wall on either side of the fireplace more flush with the back wall of the fireplace, the walls may be framed out. 1-7/8 [48] of the fireplace may be covered in combustible material, add the 1 [25] of clearance from the back wall to the frame wall to get a 2-7/8 [73] build-out.

The wall finishing material must be subtracted from that number.

Finishing material must never overlap the glass.

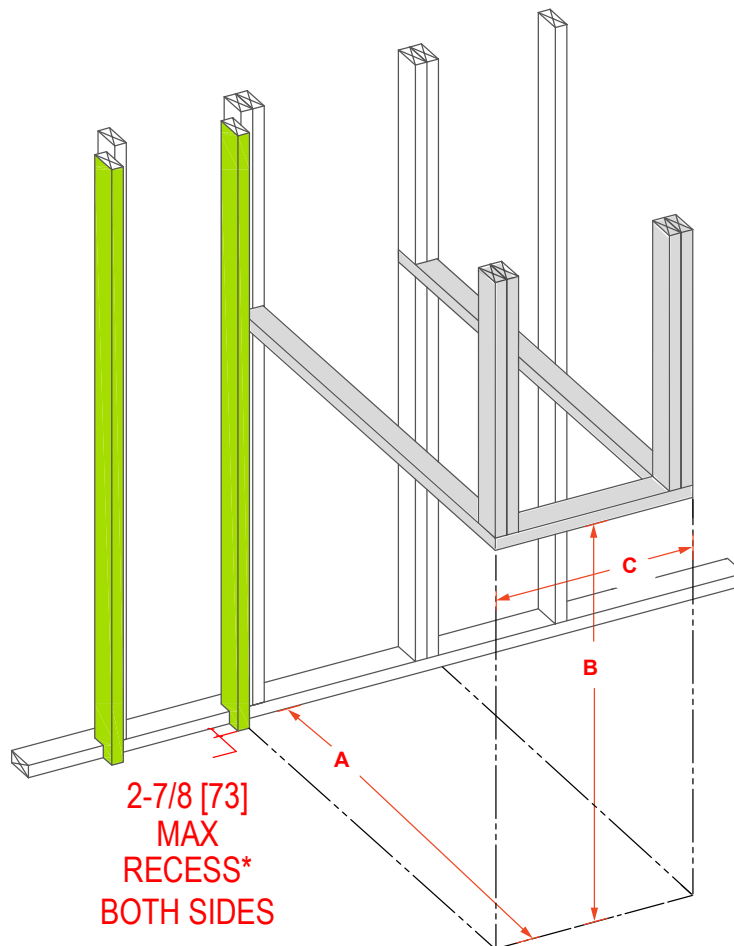


Figure 5B ←

inches [mm]



## 5 - FRAMING & MANTEL REQUIREMENTS

### C.1 NON-COMBUSTIBLE ZONE - USING THE PROVIDED 1/2" STANDOFFS

The fireplace has standoffs installed on the front of the fireplace standard from the factory. They are located on the upper left, center and right front of the fireplace and are to ensure that the 1/2 [13] required clearance to combustibles on the surface of the fireplace is maintained.

If the standoffs are removed, only non-combustible material can be installed against the surface of the fireplace such as a non-combustible backer cement board. 1/2 [13] minimum thickness must be used in the space\* between the top of the 3 [76] trim to the combustible framing the full width of the fireplace. The space\* includes a 7 [178] minimum above the top of the fireplace that is recommended for ease of attachment. \*= 15 [381] for 3'-7" units and 19 [483] for 8' units.

Refer to Figure 5C.1 below for a standard installation using the provided 1/2 [13] standoffs.

Refer to Figure 5C.2 for requirements when not using the provided 1/2 [13] standoffs.

inches [mm]



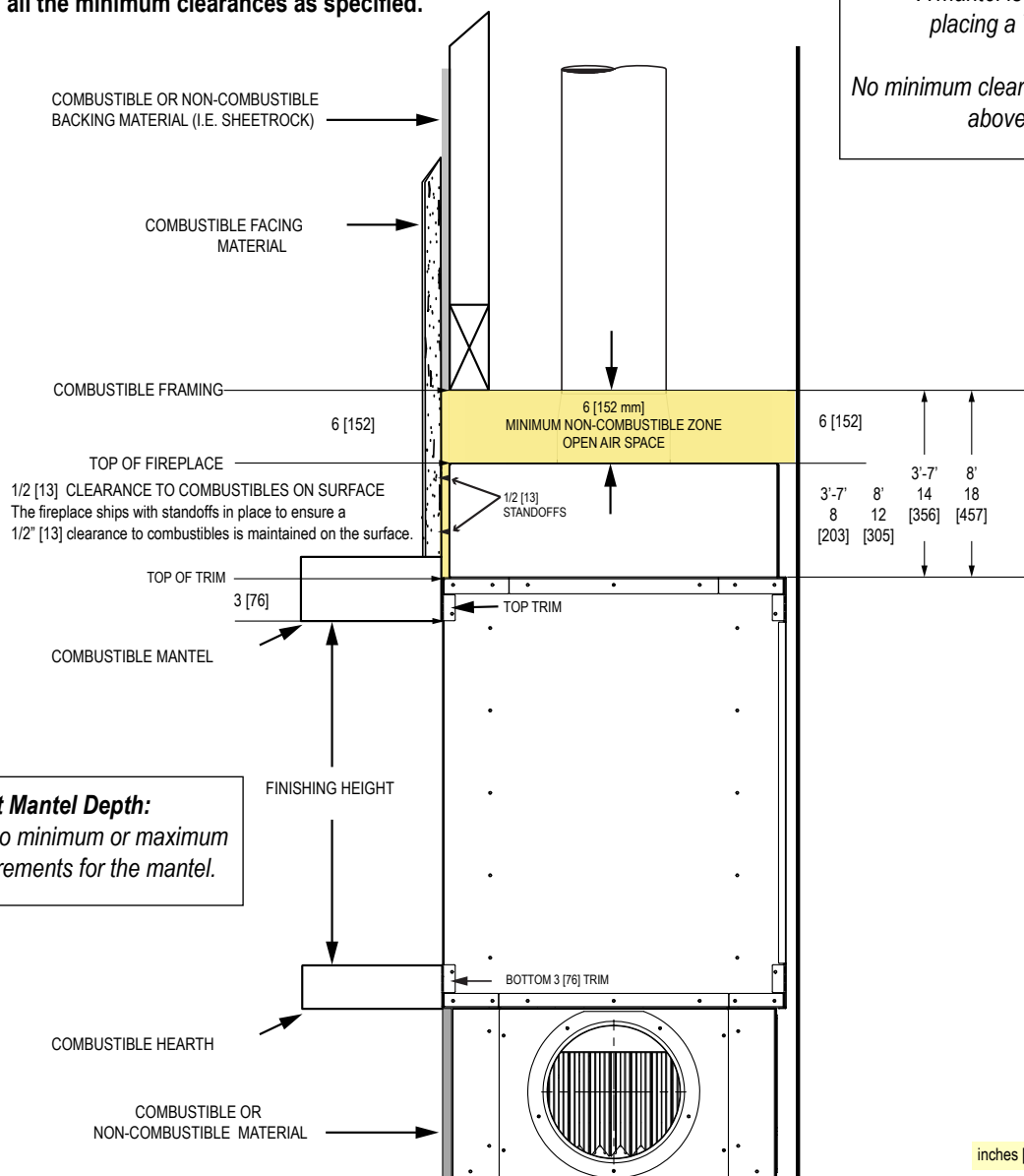
1/2 [13] Standoff

**WARNING! Risk of Fire**  
Comply with all the minimum clearances as specified.

#### Notes About TV Placement:

A mantel is not required if you are placing a TV above the opening.

No minimum clearance required for a TV above the fireplace opening.



inches [mm]

#### Note About Mantel Depth:

There are no minimum or maximum depth requirements for the mantel.

SINGLE SIDED EXAMPLE: RIGHT SIDE VIEW  
APPLIES TO BOTH SIDES AND ENDS IF USING A MULTI-SIDED FIREPLACE

NOTE: Refer to Section 11 - Finishing The Wall (A.1) for more information.

Figure 5C.1

## 5 - FRAMING & MANTEL REQUIREMENTS

### C.2 NON-COMBUSTIBLE ZONE - **NOT** USING THE PROVIDED 1/2" STANDOFFS

The fireplace has standoffs installed on the front of the fireplace standard from the factory. They are located on the left, center and right front hood of the fireplace and are to ensure that the 1/2[13] required clearance to combustibles on the surface of the fireplace is maintained.

If the standoffs are removed, only non-combustible material can be installed against the surface of the fireplace such as a non-combustible backer cement board. 1/2 [13] minimum thickness must be used in the space\* between the top of the 3 [76] trim to the combustible framing the full width of the fireplace. The space\* includes a 7 [178] minimum above the top of the fireplace that is recommended for ease of attachment. \*= 15 [381] for 3'-7" units and 19 [483] for 8' units.

Refer to Figure 5C.2 below for requirements when not using the provided 1/2 [13] standoffs.

Refer to Figure 5C.1 for a standard installation using the provided 1/2 [13] standoffs.

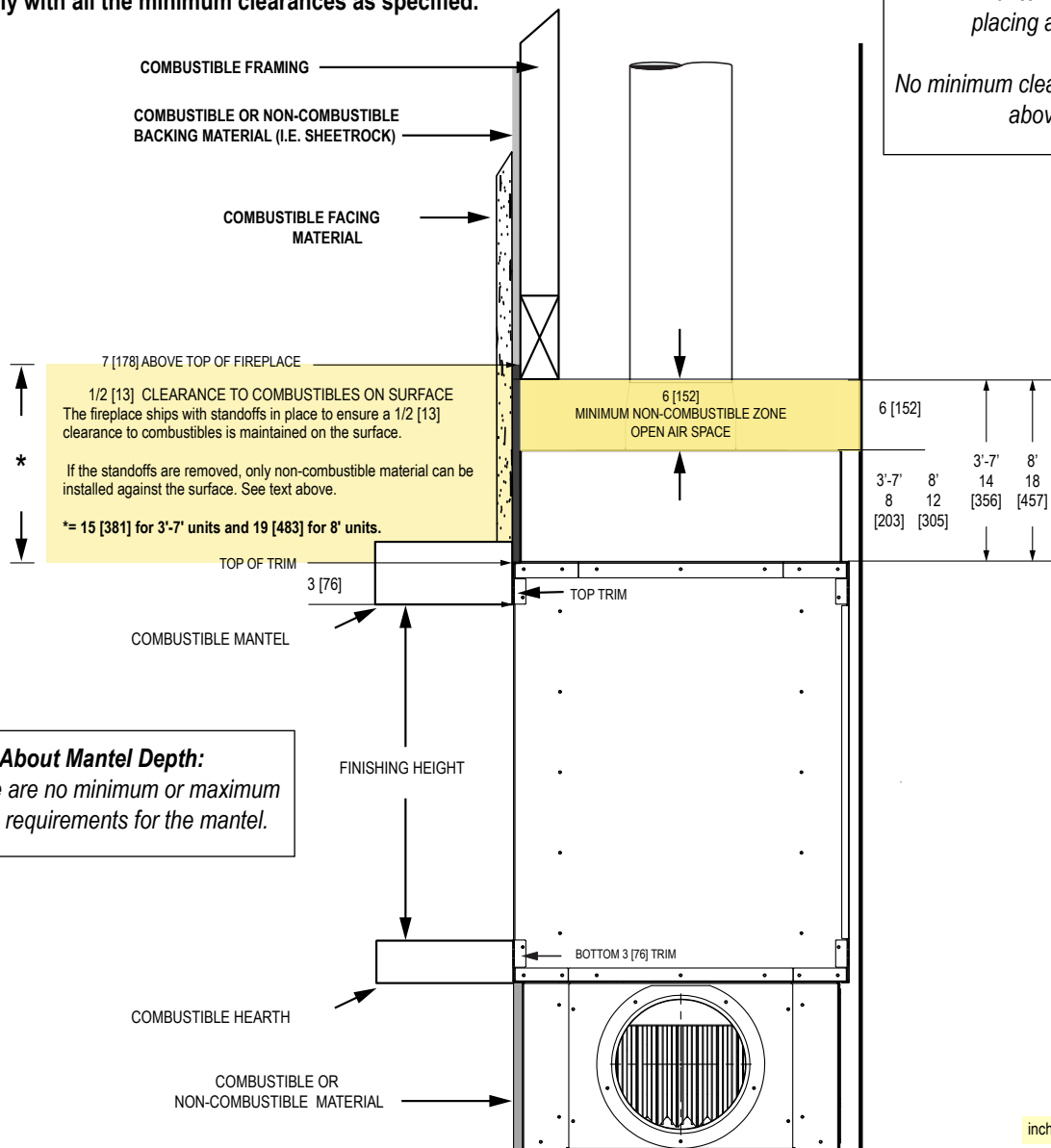
inches [mm]



1/2 [13] Standoff

#### **WARNING! Risk of Fire**

Comply with all the minimum clearances as specified.



#### **Notes About TV Placement:**

A mantel is not required if you are placing a TV above the opening.

No minimum clearance required for a TV above the fireplace opening.

#### **Note About Mantel Depth:**

There are no minimum or maximum depth requirements for the mantel.

inches [mm]

SINGLE SIDED EXAMPLE: RIGHT SIDE VIEW  
APPLIES TO BOTH SIDES AND ENDS IF USING A MULTI-SIDED FIREPLACE

**NOTE: Refer to Section 11 - Finishing The Wall (A.2) for more information.**

Figure 5C.2

## 6 - GLASS FRAME ASSEMBLY

### A. GLASS FRAME ASSEMBLY IDENTIFICATION

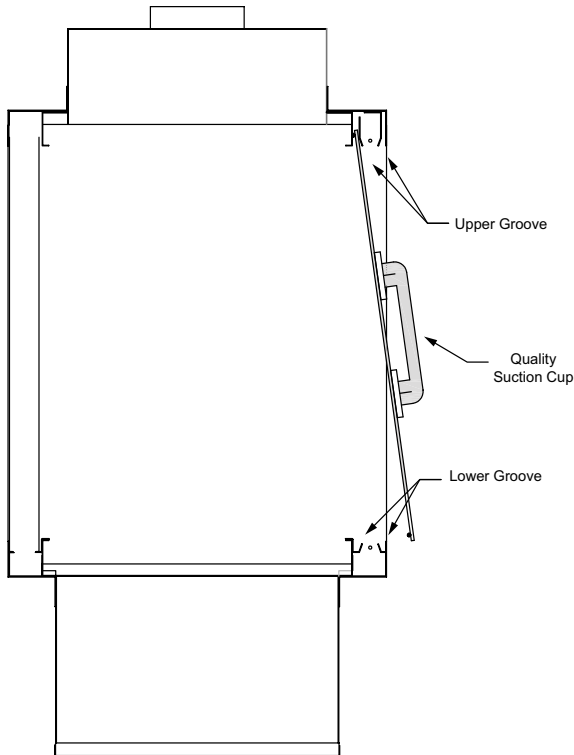


Figure 6A

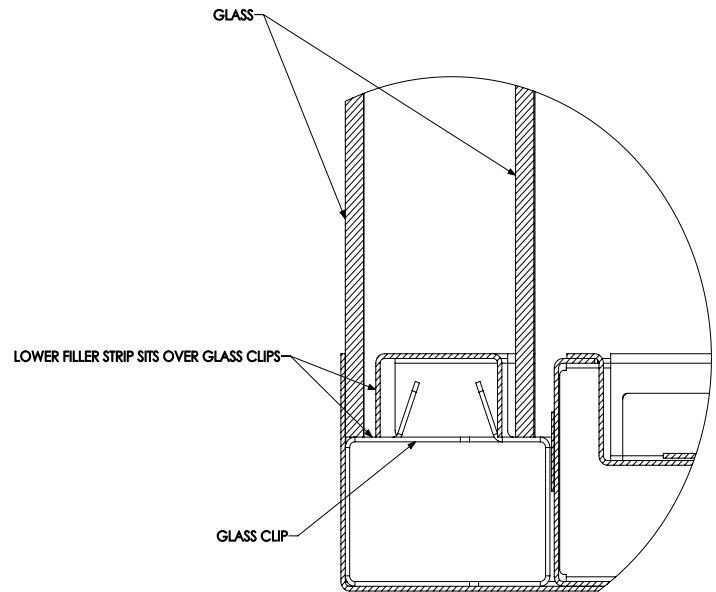


Figure 6B.1



**CAUTION:** TO PREVENT GLASS FRAME ASSEMBLY FROM FALLING FROM FIREPLACE AND BECOMING DAMAGED, FOLLOW THE INSTRUCTIONS EXACTLY WHEN REMOVING AND INSTALLING GLASS FRAME ASSEMBLY.



**STOP:** DO NOT OPERATE THIS FIREPLACE WITH THE GLASS REMOVED, CRACKED OR BROKEN. REPLACEMENT OF GLASS ASSEMBLY SHOULD BE DONE BY A LICENSED OR QUALIFIED SERVICE PERSON.



**WARNING:** DO NOT REMOVE GLASS ASSEMBLY WHEN HOT!!!!



**NOTE:** GLASS REMOVAL AND INSTALLATION MUST BE PERFORMED WITH TWO PEOPLE.



**NOTE:** Glass must be removed using quality suction cups. DO NOT attempt to remove the glass without using proper suction cups.



**NOTE:** IN CASE OF CHIPPED OR BROKEN GLASS, due to the size and sensitivity of shipping the glass separately it is best to have the replacement glass cut locally if needed.

**REFER TO SECTION 16 - REPLACEMENT PARTS FOR THE GLASS SIZE CHART FOR DIMENSIONS AND SPECIFICATIONS.**

## 6 - GLASS FRAME ASSEMBLY

Refer to Section 6 (Glass Frame Assembly Identification Figures 6A & 6B.1) when installing and removing the glass frame assembly.

### B. INSTALL GLASS FRAME ASSEMBLY



Figure 6B.2 - Outer Glass Edge Protector



Figure 6B.3 - Vertical Trim Piece



Figure 6B.4 - Horizontal Trim Piece

#### **IMPORTANT: PLASTIC GLASS EDGE PROTECTORS**

*The fireplace is shipped with a plastic edge protector on the outer pane of glass only.*

See Figure 6B.2

#### **Inner Glass**

1. Unwrap the panes of glass carefully making sure to protect the edges.
2. Apply the suction cups to the inner glass assembly, following instructions included with the suction cups.
3. Lift the glass into place. The top edge slips into the top groove (the glass will be behind the glass clip and against the gasketing); lift into the groove until the bottom is clear of the bottom trim. Make sure the glass is behind all the glass clips and slide the glass down into the inner bottom groove. Gently push the glass tightly into the gasketing. See Figure 6A
4. Push vertical glass trim into place on each side. Once into place, slide the vertical glass trim all the way down so the top is almost even with the top viewing area. See Figure 6B.3
5. Place the long horizontal trim piece between the lower glass clips. Slide back against the inner glass. See Figure 6B.3 and Figure 6B.4.

#### **Outer Glass**

6. Apply the suction cups to the outer glass and lift it into place in the same manner as the inner glass.



#### **WARNING: RISK OF INJURY!**

**DO NOT** remove glass until unit is cooled to room temperature. Glass breakage could occur.

### C. REMOVE GLASS FRAME ASSEMBLY

1. Apply the suction cups to the outer glass panel following the instructions included with the suction cups.
2. Gently lift the glass until the bottom edge is clear of the groove it sits in.
3. Bring the bottom edge of the glass towards you while lowering it to disengage it from the top groove.
4. Sit the glass on a padded surface to protect it. **IMPORTANT:** Protect the glass's edges.
5. Remove the lower trim piece that sits between the layer of glass.
6. Remove the inner trim vertical pieces.
7. Using the suction cups, remove the inner glass in the same manner.

## 7 - GAS LINE SPECIFICATIONS

**This fireplace is manufactured for use with Natural Gas or Propane.**



**CAUTION:** Installation of the gas line must only be done by a qualified person in accordance with local building codes, if any. If not, follow ANSI Z223.1.



**NOTE:** The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at pressures in excess of ½ psi.



**NOTE:** The appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas line at test pressures equal to or less than ½ psi (3.5 kPa).



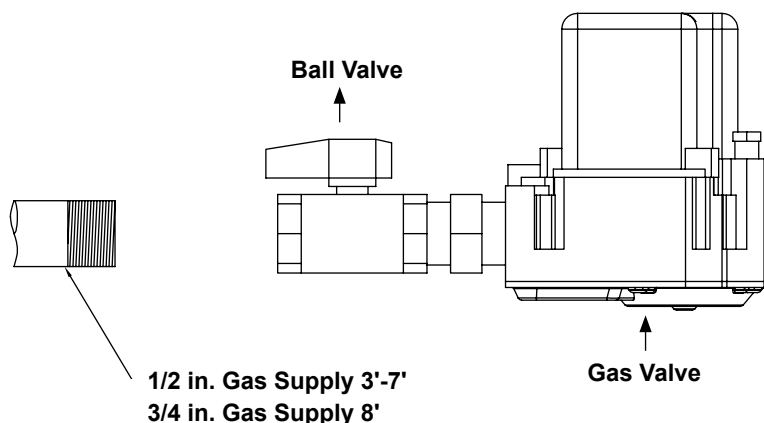
**NOTE:** For high altitude installations, consult Stellar by Heat&Glo directly for proper rating methods.

A. GAS LINE CONNECTION	Propane	NG
MINIMUM INLET GAS PRESSURE	11.0 inches W.C. (recommended)	7.0 inches W.C. (recommended)
MAXIMUM INLET GAS PRESSURE	14.0 inches W.C.	10.0 inches W.C.
MANIFOLD PRESSURE (HI)	10.0 inches W.C.	3.5 inches W.C.
ORIFICE SIZE	See Specifications Chart in Section 3.C	See Specifications Chart in Section 3.C
INPUT BTU/HR	See Specifications Chart in Section 3.C	See Specifications Chart in Section 3.C

**NOTE:** Have the gas supply line installed in accordance with local codes. If not, follow ANSI Z223.1. 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. or 3/4 in. T-handle manual shut-off ball valve is connected to the 1/2 in. or 3/4 in. control valve inlet.

**Figure 7**



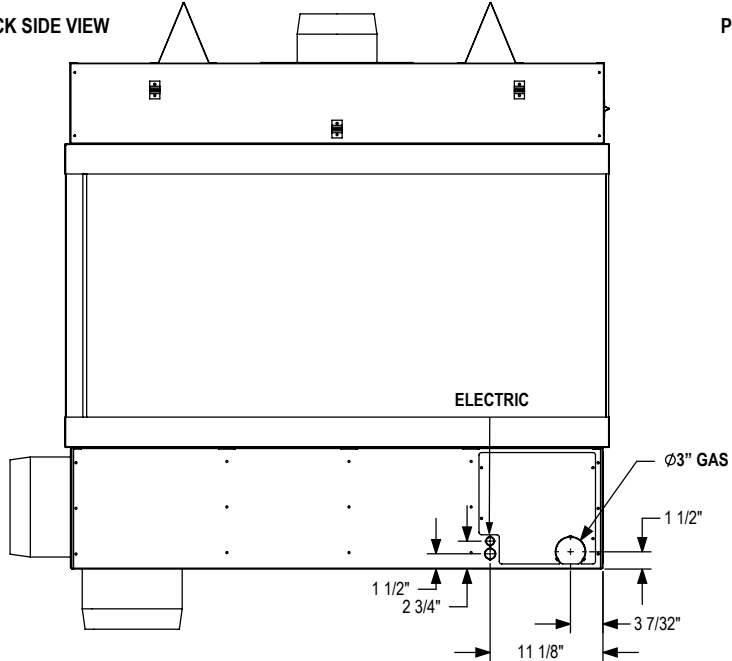
**ADDITIONAL INFORMATION  
IN SECTION 2.B (GAS & ELECTRIC ACCESS LOCATIONS)**

## 7 - GAS LINE SPECIFICATIONS

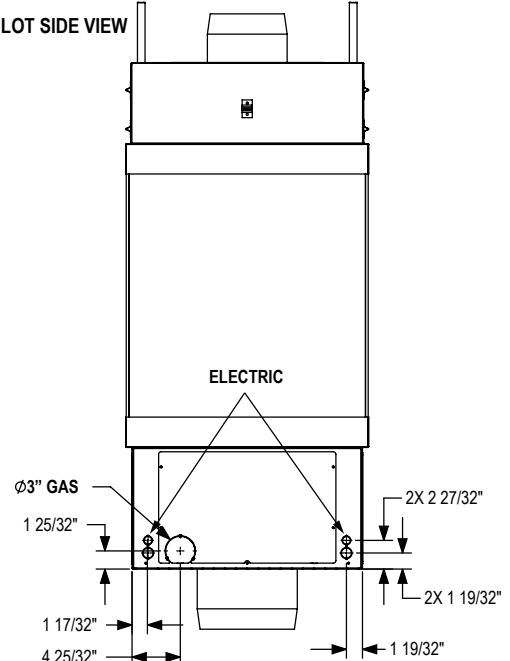
### B. GAS & ELECTRIC ACCESS LOCATIONS

4' shown in example. Locations/dimensions are the same on all models and all sizes.

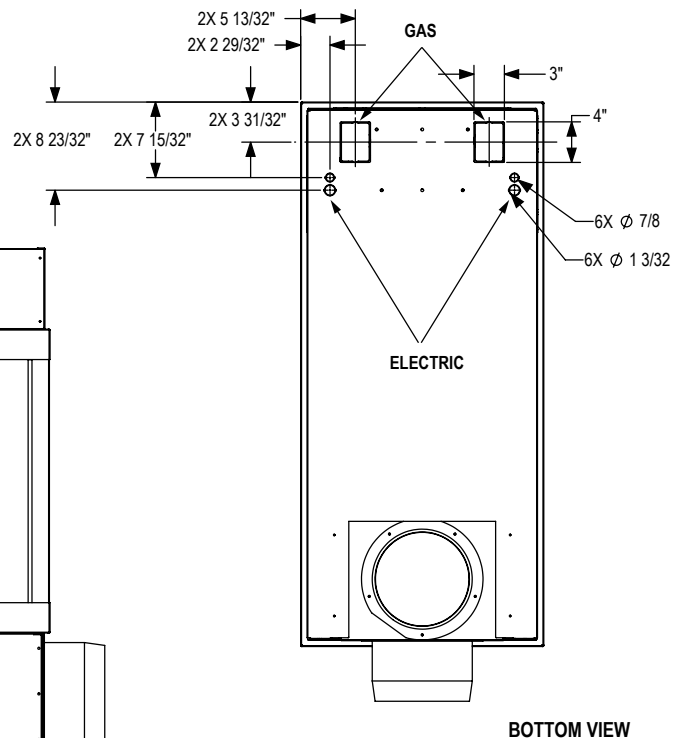
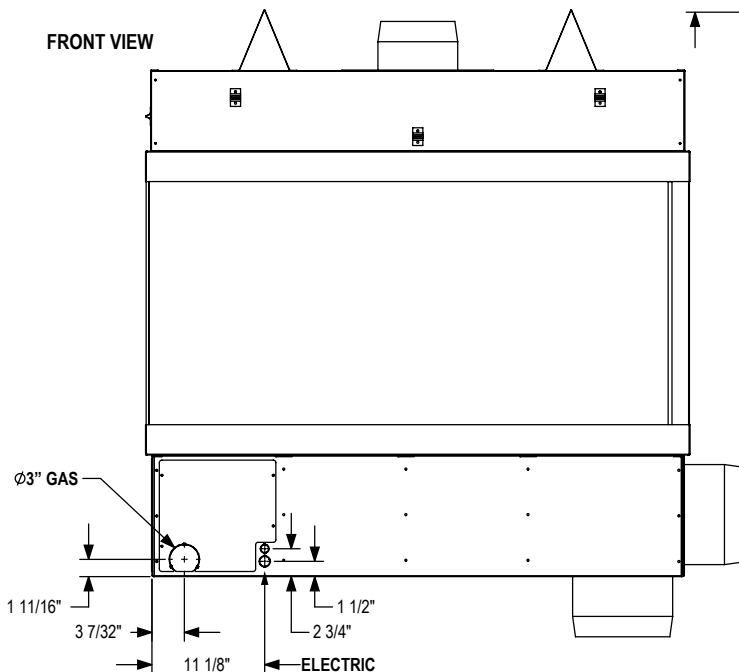
BACK SIDE VIEW



PILOT SIDE VIEW



FRONT VIEW



BOTTOM VIEW

## 8 - VENTING



**CAUTION:** Consult the local and national installation codes to assure adequate combustion and ventilation air is available.



**NOTE:** Flame height and appearance will vary depending upon venting configuration and type of fuel used. Venting requirements apply to both Natural and Propane gas.



**STOP: MAINTAIN ALL CLEARANCES AS STATED IN THIS INSTALLATION MANUAL.**

### A. APPROVED VENTING

Model #	DESCRIPTION	B-VENT Ø	OUTSIDE AIR Ø	STANDARD POWERVERT	IN-LINE POWERVERT
3'	ANY HEIGHT	8"	10"	RS12	RSIF160
4'	ANY HEIGHT	8"	10"	RS12	RSIF160
5'	ANY HEIGHT	8"	10"	RS12	RSIF160
6'	ANY HEIGHT	10"	10"	RS14	RSIF180
7'	ANY HEIGHT	10"	10"	RS14	RSIF180
8'	ANY HEIGHT	10"	12"	RS14	RSIF180

\*Amperage listed is the maximum required for the appliance with all options.

### B.1 SYSTEM SUPPLY VOLTAGE

POWERVERT MODEL NUMBER	VAC	AMPS
RS12 (3', 4', & 5' Models)	120	3.2
RS14 (6', 7' & 8' Models)	120	3.4
RSIF160 (3', 4', & 5' Models)	120	4.9
RSIF180 (6', 7' & 8' Models)	120	7.3

### B.2 POWERVERT SUPPLY VOLTAGE

POWERVERT MODEL NUMBER	VAC	AMP	H/P
RS12 (3', 4', & 5' Models)	120	1.2	1/9
RS14 (6', 7' & 8' Models)	120	1.4	1/7
RSIF160 (3', 4', & 5' Models)	120	2.9	3/7
RSIF180 (6', 7' & 8' Models)	120	5.3	13/16

**Important:** Be sure to do your own calculations based on the center line dimension given from the pipe manufacture you are using for your installation.

Refer to the vent systems manufacturer's installation manual for complete installation instructions.

Installation must conform with the venting requirements and restrictions as outlined in this manual. SEE CHART ABOVE FOR SIZE diameter B-Type Venting that must be used. UL/CSA approved B-Vent only. **DO NOT** decrease the vent size.

Vent runs are approved for up to 110 feet with quantity of eleven 90 degree elbows.

**Vent runs may also contain a downward component.** The downward component may be a maximum of 6 feet plus the distance to the center line of the elbow. See Figure 8A.1.

This will be about 87" for 8" diameter pipe and 92" for 10" diameter pipe.

Due to natural buoyancy of flue gas products, venting downward increases restriction.

Every inch of vertical drop counts as triple inches subtracted off the total vent run.

Example: a maximum drop of 92" means the total allowed vent run is decreased by 276" (23')

**Once a downward component has been utilized, the vent cannot go upwards again.**

**Moisture may get trapped in the vent pipe.**

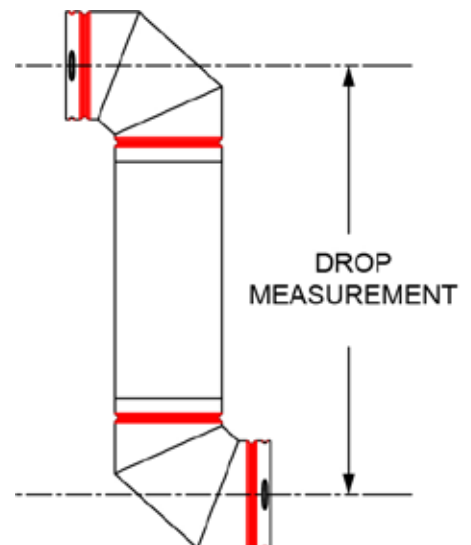


**ANOTE:** All pipe and elbow joints must be sealed. This includes the longitudinal seam on the pipe. High Temp RTV Silicone and/or foil tape **MUST** be used on each joint/seam. Failure to do so may cause lack of vacuum and may not trigger the vacuum switch.



**ATTIC INSTALLATIONS:** Use an attic shield to maintain the required 1 [25] clearance to insulation.

Figure 8B



## 8 - VENTING

### C. RS SERIES POWERVENT SPECIFICATIONS

#### Available Power Venting

A power vent (RS12 & RS14) is approved for use with this appliance. It is crucial that all B-Vent pipe and elbow joints, and the longitudinal seam are sealed using a high temperature RTV Silicone and/or foil tape.

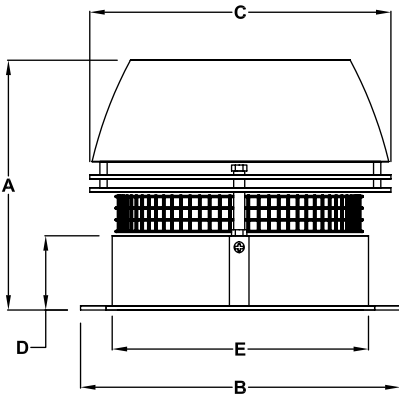


Figure 8C

MODEL	RS12	RS14
Fan Type	Axial Vane	Axial Vane
Motor Type	Totally enclosed, variable speed, Class F	Totally enclosed, variable speed, Class F
Voltage (VAC)	1 x 120	1 x 120
RPM	1600	1600
CFM	950	1400
Amperage (Amps)	1.2	1.4
Motor Output HP (kW)	1/9 (0.08)	1/7 (0.1)
Weight lbs (kg)	37 (17)	47 (21)
Dimension A in. (mm)	11.5 (292)	13.1 (334)
Dimension B x B in.(mm)	14.3 (364)	16.6 (422)
Dimension C in. (mm)	13.5 (344)	15.5 (395)
Dimension D in. (mm)	3.3 (85)	3.9 (100)
Dimension E in. (mm)	11.6 (294)	13.5 (342)
Temperature Rating-Intermittent	575 °F / 300 °C	575 °F / 300 °C
Temperature Rating-Continuous	482 °F / 250 °C	482 °F / 250 °C

### D. CHIMNEY COLLAR DIMENSIONS

#### Chimney Collar Dimensions

A chimney collar is included for use with the RS12 and RS14. The chimney collar is used to attach the RS power vent.

Figures 8D.1 and 8D.2 show the dimensions of the chimney collar.

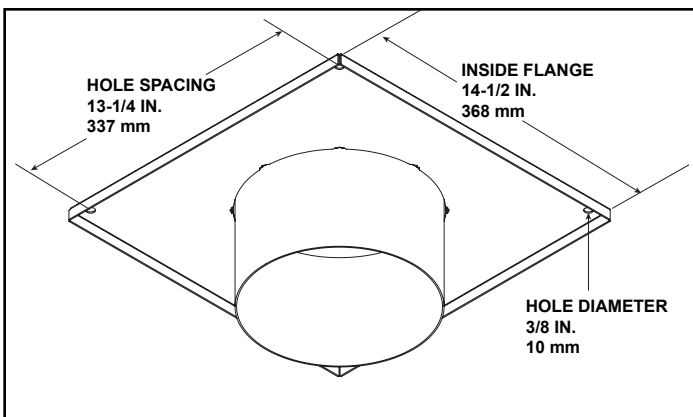


Figure 8D.1 8 Inch Chimney Collar Dimensions (RS12)

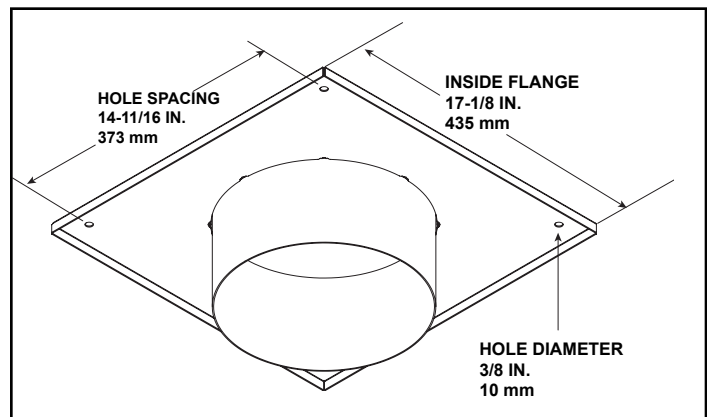


Figure 8D.2 10 Inch Chimney Collar Dimensions (RS14)



## 8 - VENTING

### E. RSIF SERIES POWERVENT SPECIFICATIONS

#### Available In-Line Power Venting

An in-line power vent (RSIF160 or RSIF180 is approved for use with this appliance. It is crucial that all B-Vent pipe and elbow joints, and the longitudinal seam are sealed using a high temperature RTV Silicone and/or foil tape.

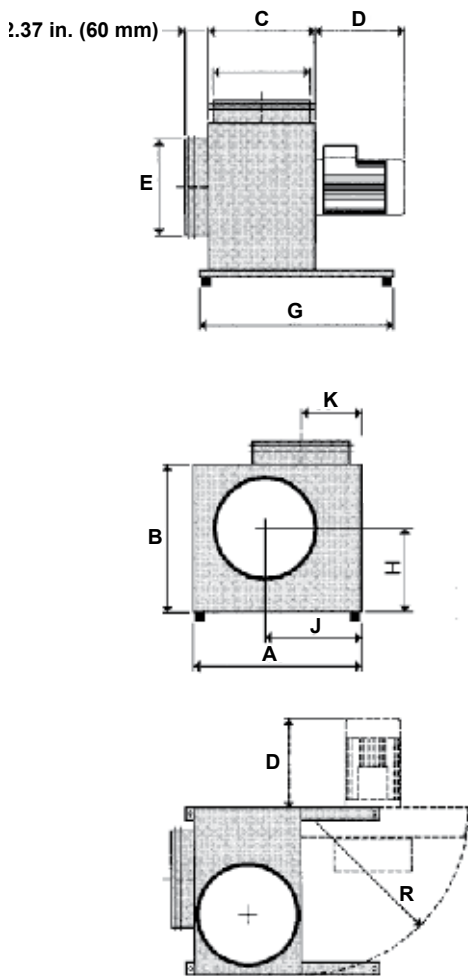


Figure 8F.5

MODEL		RSIF160	RSIF180
Fan Type		Centrifugal Impeller (F-Wheel)	Centrifugal Impeller (F-Wheel)
Motor Type		TEFC	TEFC
Voltage (VAC)		1 x 120	1 x 120
Amperage	Amps	2.9	5.3
Motor Output	hp (kW)	3/7 (.32)	13/16 (.61)
RPM		1600	1600
Weight	lbs (kg)	38 (17)	60 (27)
Duct Connection (E) in. (mm)		8 ( 203)	8 (203)
Dimension A	in. (mm)	14.57 (370)	16.15 (410)
Dimension B	in. (mm)	12.60 (320)	13.98 (355)
Dimension C	in. (mm)	9.26 (235)	9.26 (235)
Dimension D	in. (mm)	5.52 (140)	7.68 (195)
Dimension E	in. (mm)	7.9 (200)	7.9 (200)
Dimension G	in. (mm)	15.75 (400)	15.75 (400)
Dimension H	in. (mm)	7.10 (180)	7.88 (200)
Dimension J	in. (mm)	8.27 (210)	9.26 (235)
Dimension K	in. (mm)	5.12 (130)	5.12 (130)
Dimension R	in. (mm)	14.57 (370)	16.15 (410)

Optional Universal Exhaust and Outdoor Air-Intake Louver information found in *Section 9 - Venting Options (B)*.

## 8 - VENTING

### F. IN-LINE POWERVENT PREPARATIONS- RSIF 180

Perform the following steps when installing the RSIF180 on 6', 7' & 8' models.

1. Attach the provided 10 inch B-Vent collar to the intake side of the powervent. The intake side is located opposite the fan motor as shown in Figure 8F.1. The 10 inch B-Vent collar is packaged separately from the powervent. See Figure 8F.2.
2. Note the silhouette circle printed on the intake side of the powervent. The pre-drilled screw holes within the circle will be matched with the holes on the intake collar of the base plate. See Figure 8F.3.
3. Place the intake collar base plate onto the silhouette, matching up the holes as shown in Figure 8F.4. Fasten the base plate to the silhouette using five self-tapping screws.
4. Add the rope gasket included with the kit to the outlet side of the inline powervent.
5. An adapter to increase from eight inch pipe to ten inch pipe is required on the outlet side of the in-line powervent. The adapter is included in the RSIF180 kit. See Figure 8F.5. Connect the adapter directly to the eight inch outlet collar of the in-line powervent. Connect the ten inch exhaust B-Vent to the collar and continue the vent run.



Figure 8F.3 Silhouette Circle on Intake

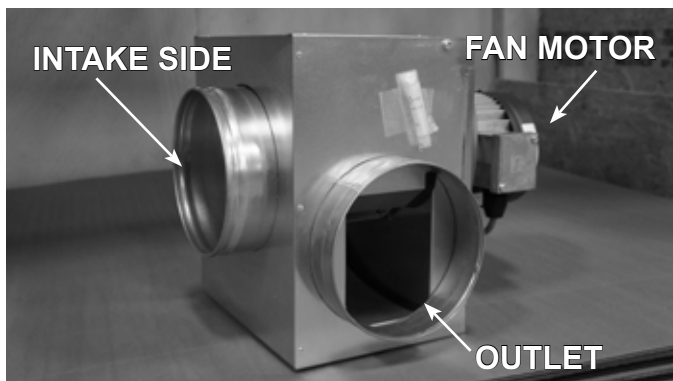


Figure 8F.1 In-Line Powervent (RSIF180)

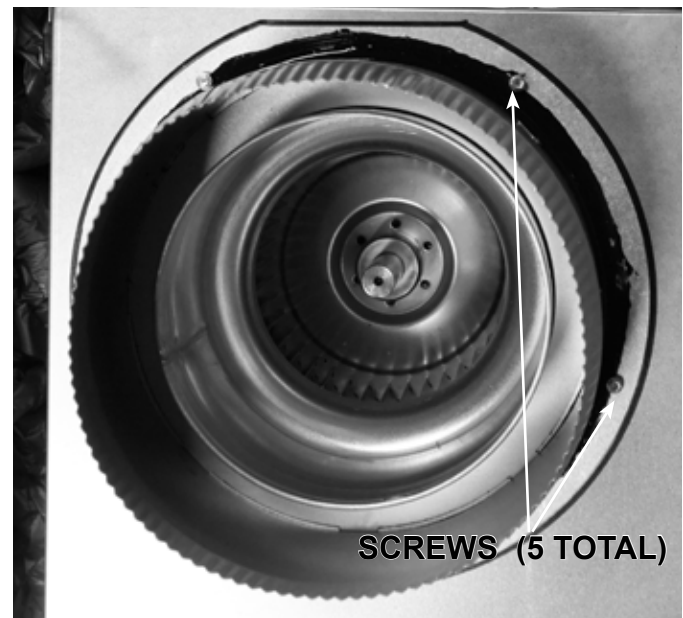


Figure 8F.4 Base Plate Fastened to Intake

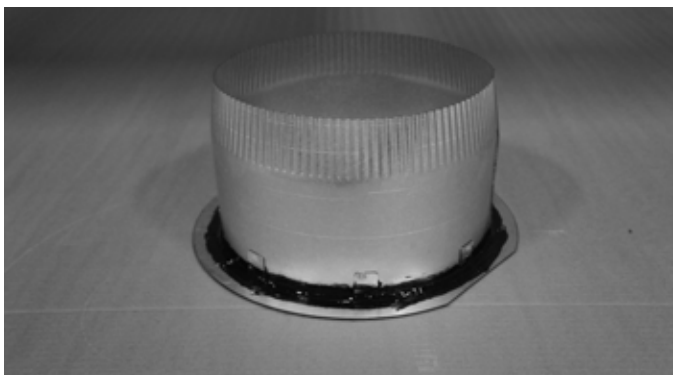


Figure 8F.2 Ten Inch B-Vent Collar



Figure 8F.5

## 8 - VENTING

### G. HORIZONTAL VENT SYSTEM CLEARANCES

ALL APPROVED VENTING	TOP	BOTTOM	SIDES
HORIZONTAL	1 [25]	1 [25]	1 [25]

inches [mm]

### H. WALL PASS-THROUGH - Follow all local codes for requirement of firestops.

## 8 - VENTING

### I. PITOT TUBE INFORMATION

There is a 1/4" pitot tube mounted in the center of the flue collar and is connected to the pressure switch. (Figure 8I)  
This monitors the pressure in the flue and is necessary for proper operation.  
Take care to keep the end of the tube clean.

**IMPORTANT: THIS TUBE MUST NOT BE BENT, CLOGGED, REMOVED, OR ALTERED IN ANY WAY.**

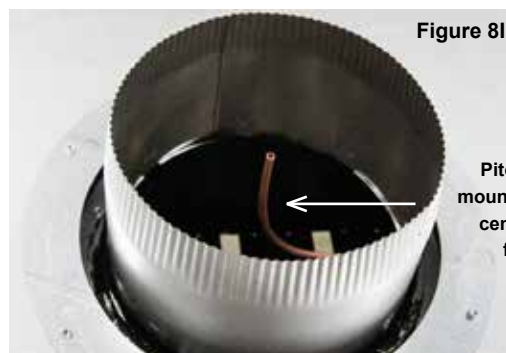


Figure 8I

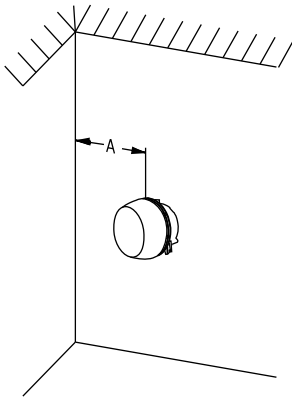
Pitot Tube is mounted in the center of the flue collar



## 8 - VENTING

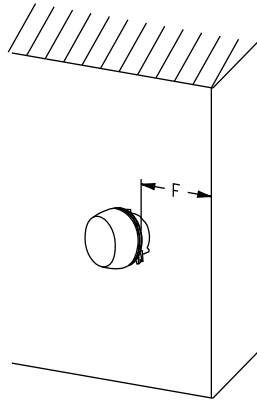
### L. HORIZONTAL TERMINATION VENT CAP LOCATION & CLEARANCES

Inside Corner



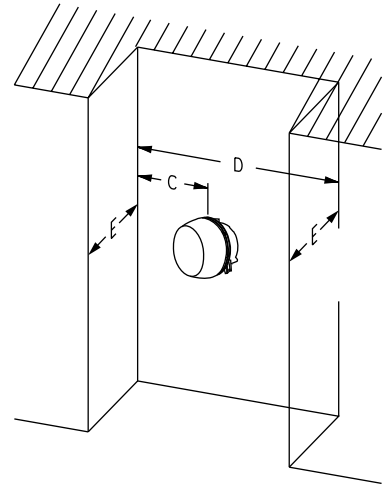
A = Combustible 24" (609.6mm)  
= Non-combustible 12" (304.8mm)

Outside Corner



F = Combustible 6" (152mm)  
= Non-combustible 6" (152mm)

Recessed Location

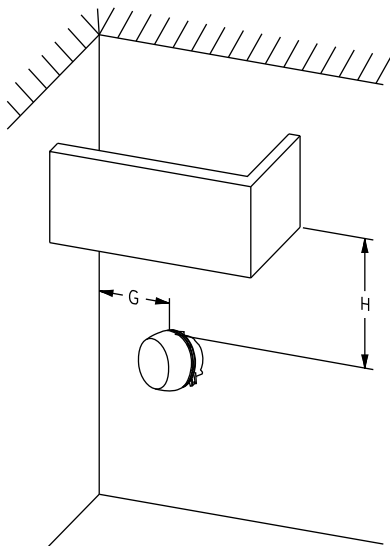


C = Clearance from corner in recessed location  
= Combustible 24" (609.6mm)  
= Non-combustible 12" (304.8mm)

D = Minimum width for back wall of a recessed location  
= Combustible 64" (1,625.6mm)  
= Non-combustible 40" (1,016mm)

E = Maximum depth of 48" (1,219mm) for recessed location

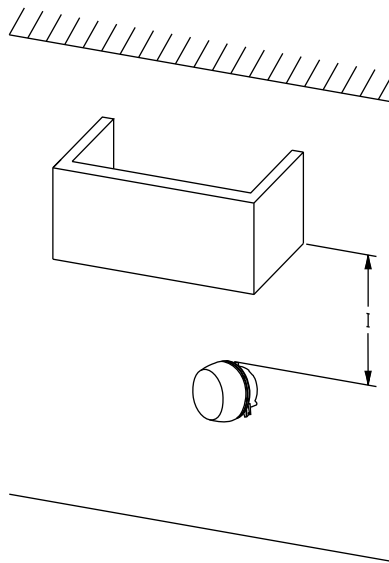
Balcony with perpendicular side wall



G = Combustible 24" (609.6mm)  
= Non-combustible 12" (304.8mm)

H = Combustible 24" (609.6mm)  
= Non-combustible 12" (304.8mm)

Balcony with no side wall



I = Combustible 24" (609.6mm)  
= Non-combustible 12" (305mm)

**IMPORTANT:**  
All dimensions are from the edge of the cap.

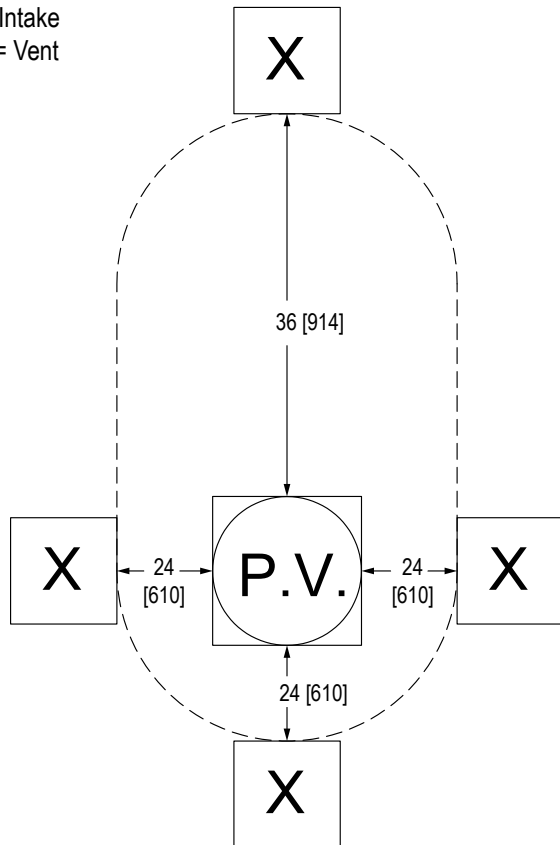
Figure 8L

## 8 - VENTING

### M. HORIZONTAL POWERVENT AND AIR-INTAKE PLACEMENT CLEARANCES

#### M.1 - RS SERIES POWERVENT

X = Intake  
PV = Vent



inches [mm]

Minimum Clearance Using a RS Series Powervent

Intake Placed Above Vent = 36 [914]

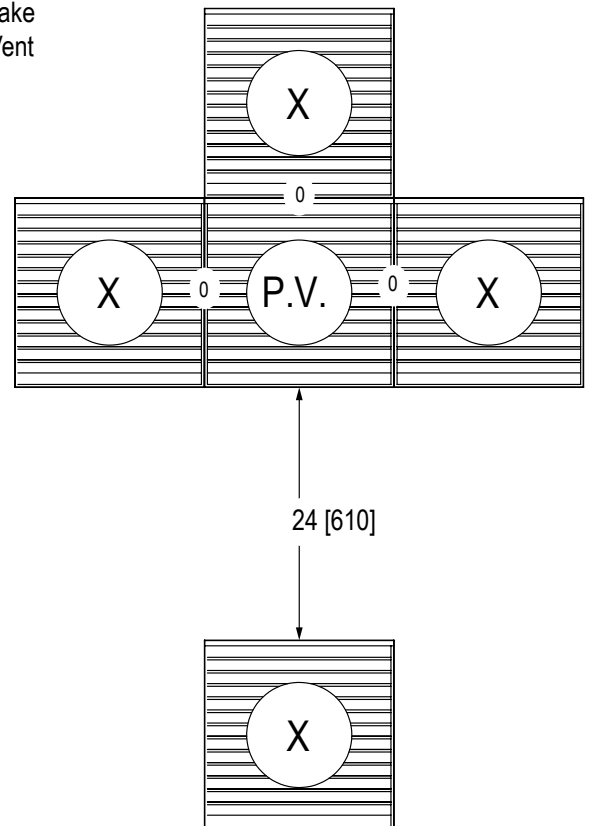
Intake Place To Left Side, Right Side or Below Vent\* = 24 [610]

\*Left/Right/Below With A Non-Combustible Divider Between = 12 [305]

Figure 8M.1 ←

#### M.2 - IN-LINE POWERVENT (LOUVER 8/10)

X = Intake  
PV = Vent



inches [mm]

Minimum Clearance Using an In-Line Powervent

Intake Placed Below Vent = 24 [610]

Intake Place To Left Side, Right Side or Above Vent = 0

Figure 8M.2 ←

## 8 - VENTING

### N. VERTICAL VENT CAP LOCATION AND CLEARANCES

ROOF PITCH	H (Min.) Ft.	H (Min.) M.
FLAT TO 6/12	1.0*	0.30
OVER 6/12 TO 7/12	1.25*	0.38
OVER 7/12 TO 8/12	1.5*	0.46
OVER 8/12 TO 9/12	2.0*	0.61
OVER 9/12 TO 10/12	2.5*	0.76
OVER 10/12 TO 11/12	3.25*	0.99
OVER 11/12 TO 12/12	4.0	1.22
OVER 12/12 TO 14/12	5.0	1.52
OVER 14/12 TO 16/12	6.0	1.83
OVER 16/12 TO 18/12	7.0	2.13
OVER 18/12 TO 20/12	7.5	2.27
OVER 20/12 TO 21/12	8.0	2.44

\* = 3 foot minimum in snowy regions

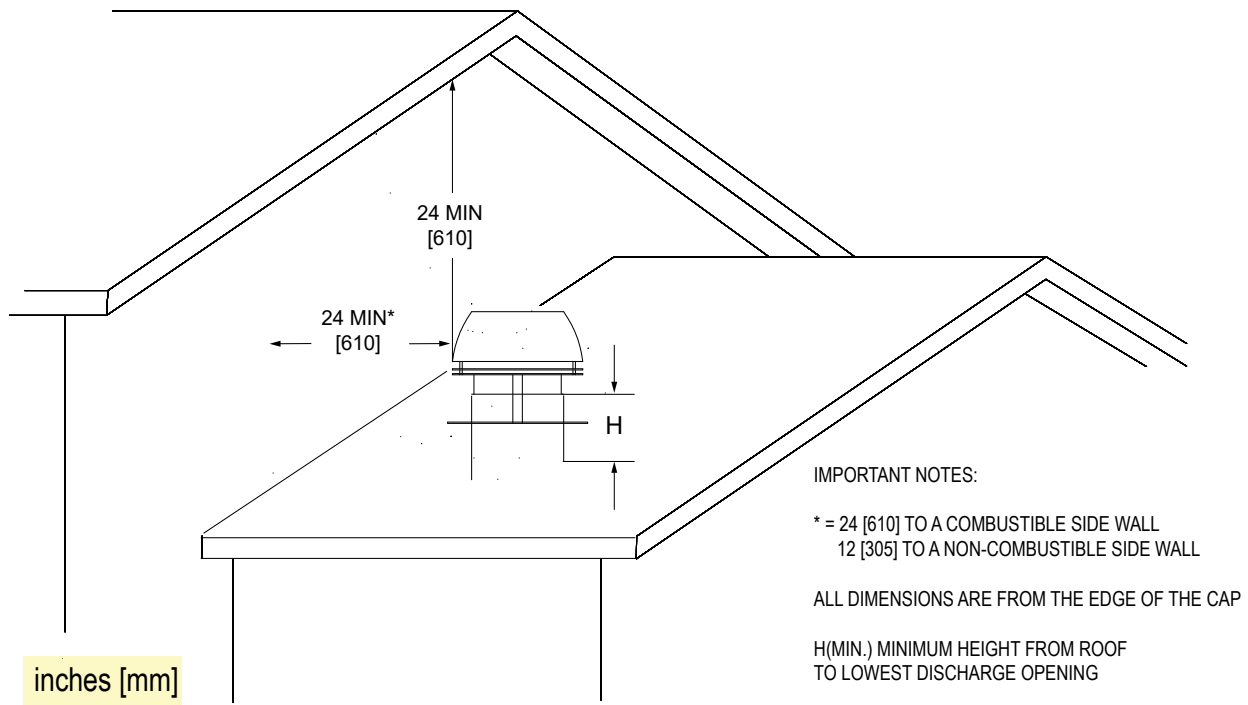
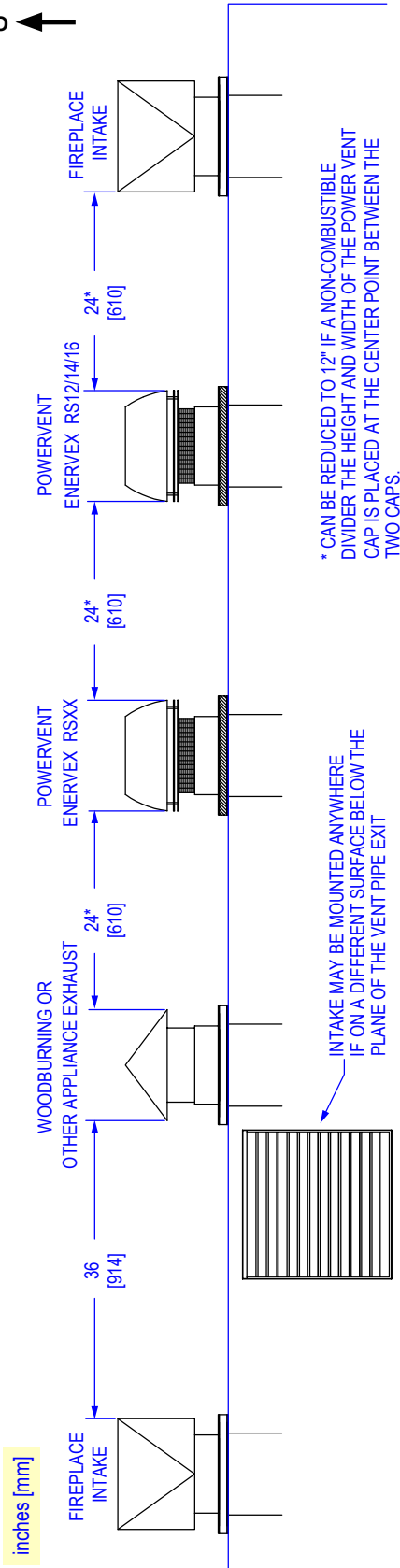


Figure 8N

## 8 - VENTING

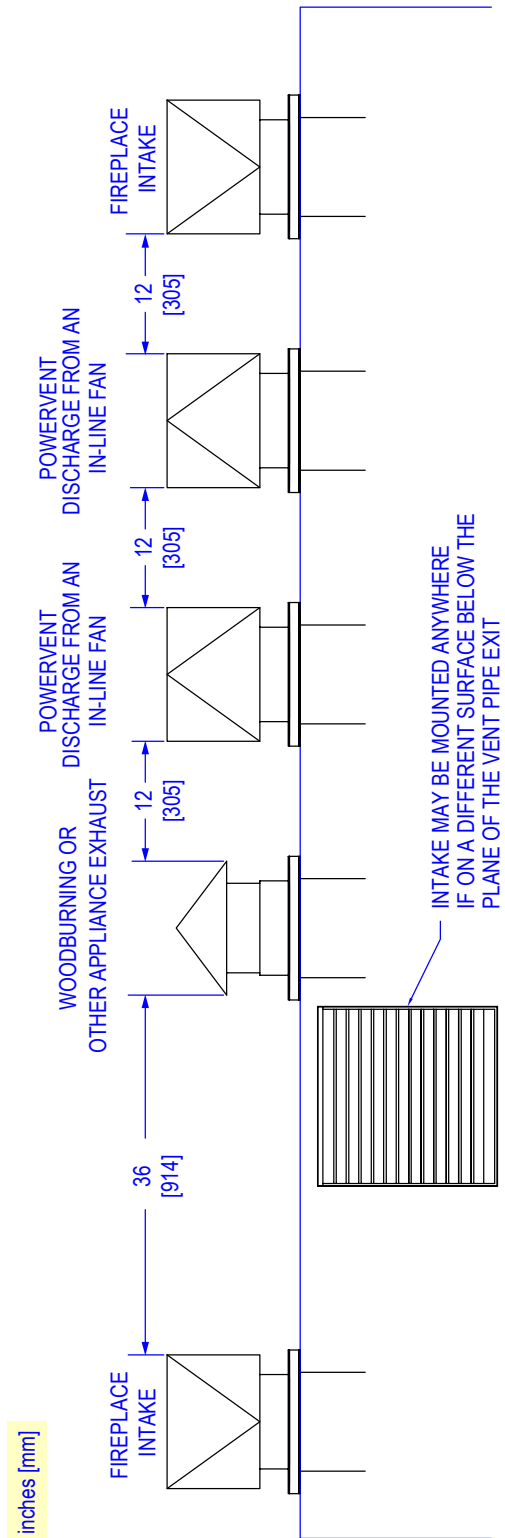
### O. VERTICAL -CLEARANCES - RS12/14/16

Figure 8O



### P. VERTICAL -CLEARANCES -RSIF160-180

Figure 8P





## 8 - VENTING

### Q. WALL TERMINATION - WITH AND WITHOUT DAMPER

#### Wall Termination Without Optional Mechanical Damper

FRAMING:

8" = 11-3/4 [298] W X 11-3/4 [298] H

10" = 13-1/4 [337] W X 13-1/4 [337] H

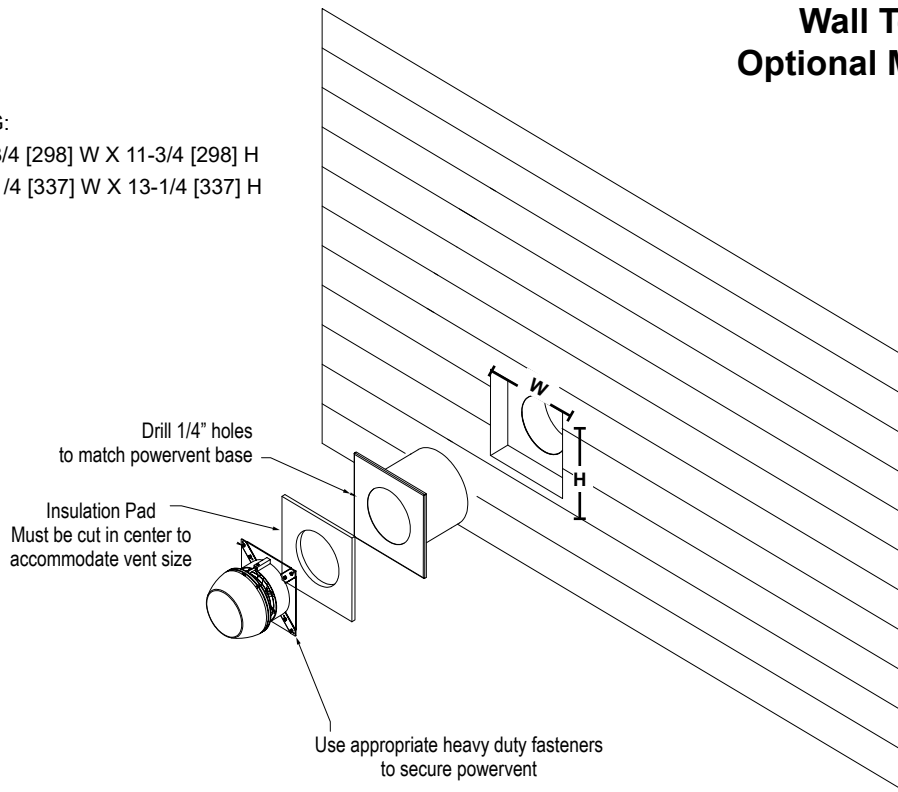


Figure 8Q.1

#### Wall Termination With Optional Mechanical Damper

**OPTIONAL**

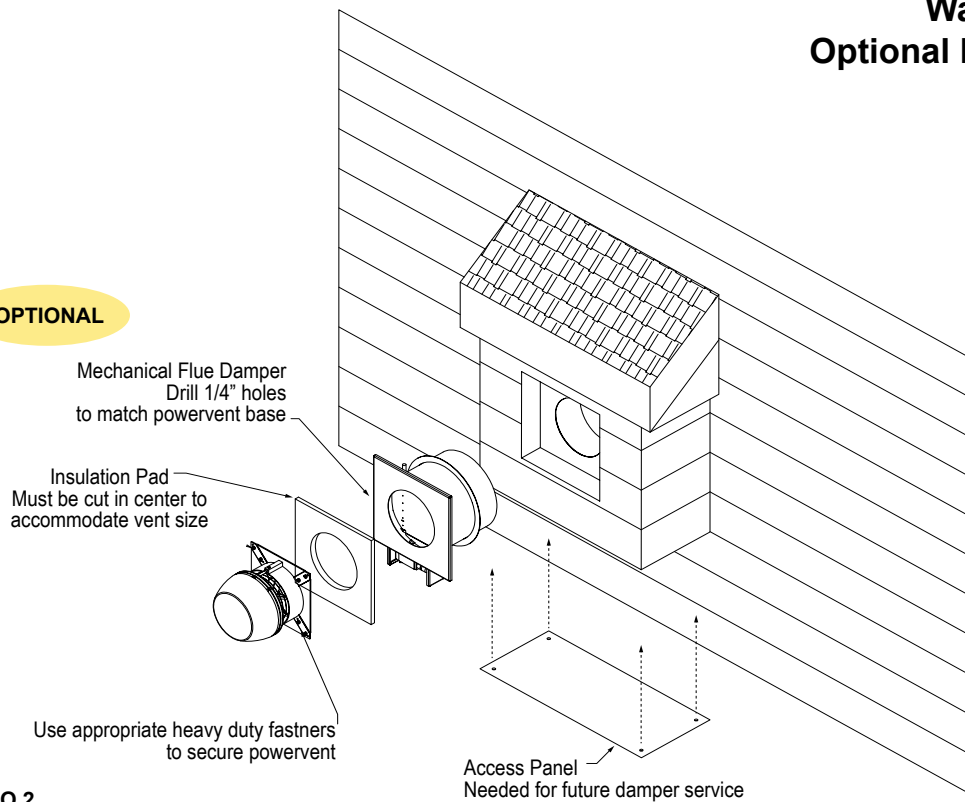


Figure 8Q.2

## 8 - VENTING

### R. ROOF TERMINATION CAP INSTALLATION - WITH AND WITHOUT DAMPER

#### Roof Termination Without Optional Mechanical Damper

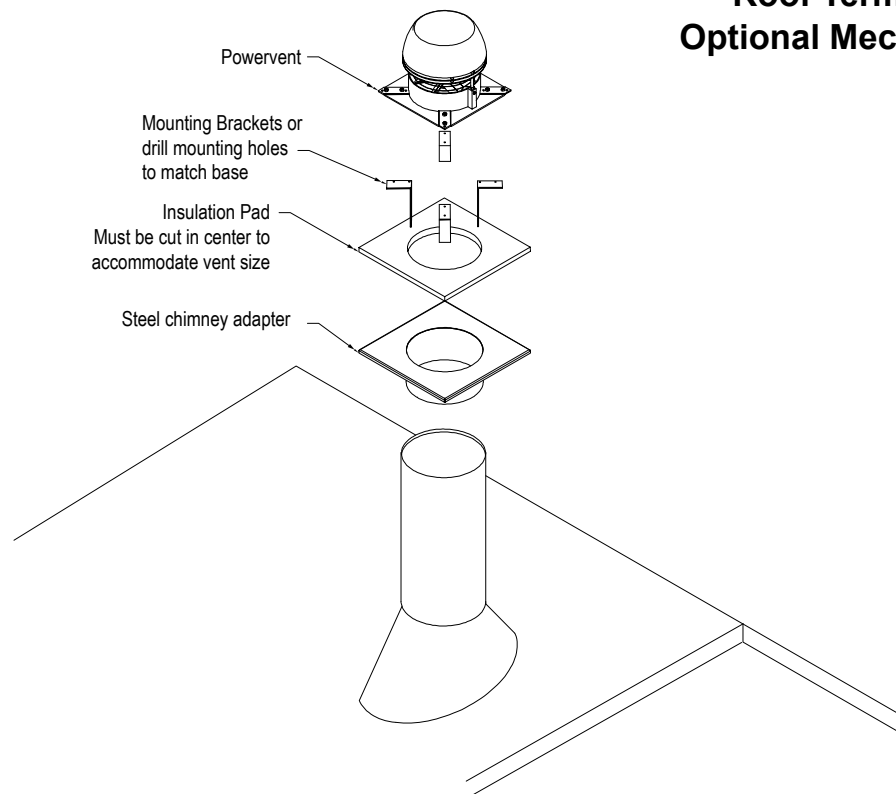


Figure 8R.1

#### Roof Termination With Optional Mechanical Damper

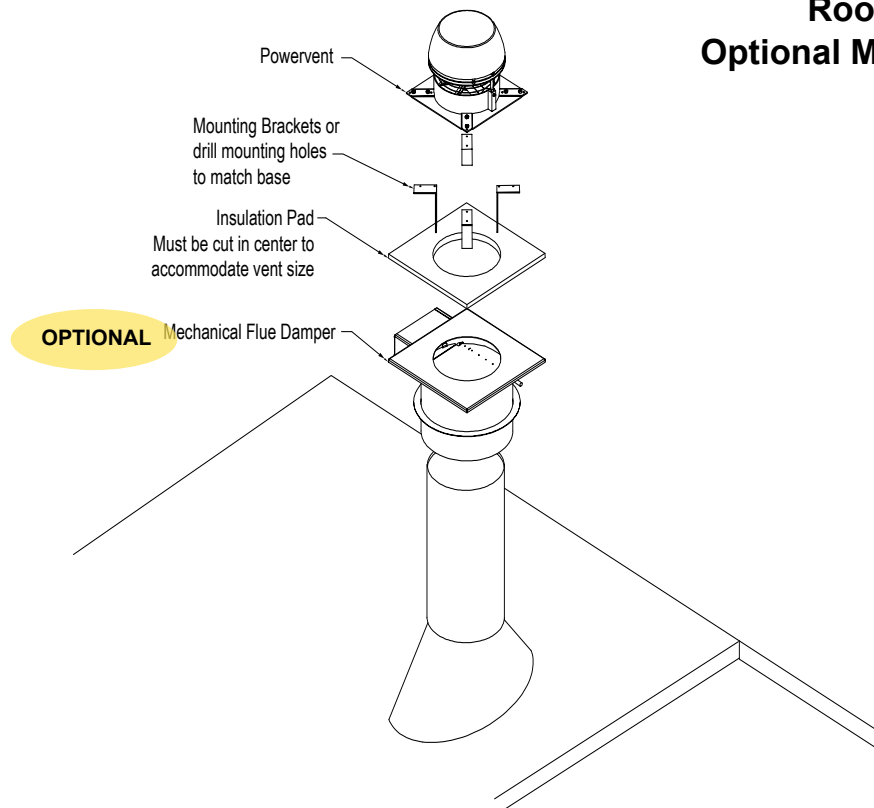


Figure 8R.2

## 8 - VENTING

### S. CHASE TOP CAP INSTALLATION - WITH AND WITHOUT DAMPER

#### Roof Termination Without Optional Mechanical Damper

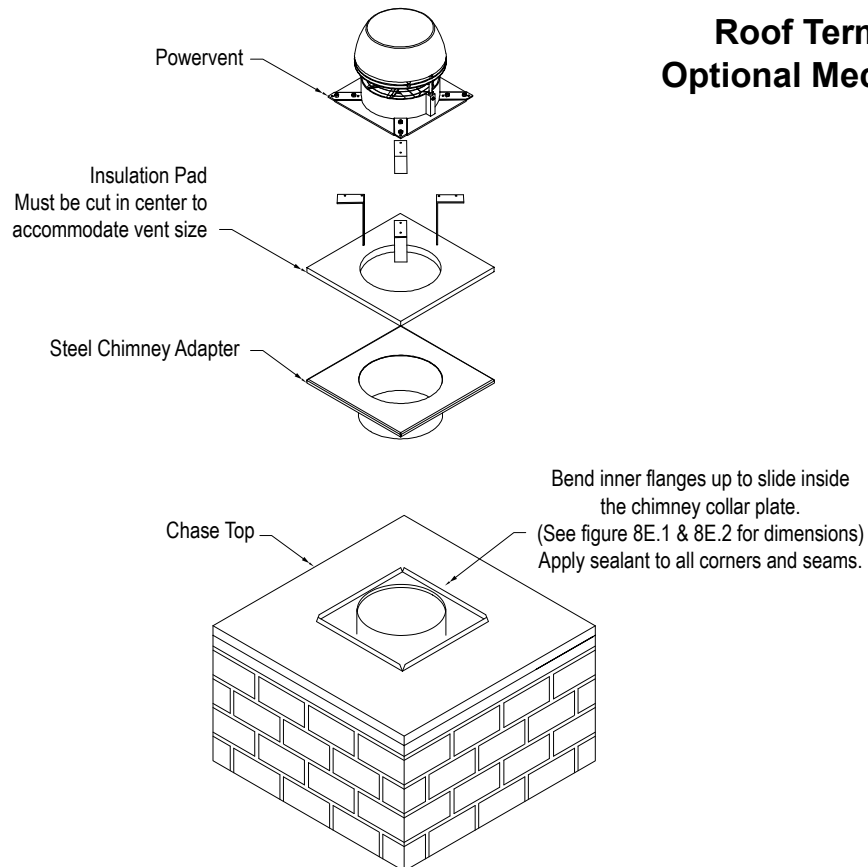


Figure 8S.1 ←

#### Roof Termination With Optional Mechanical Damper

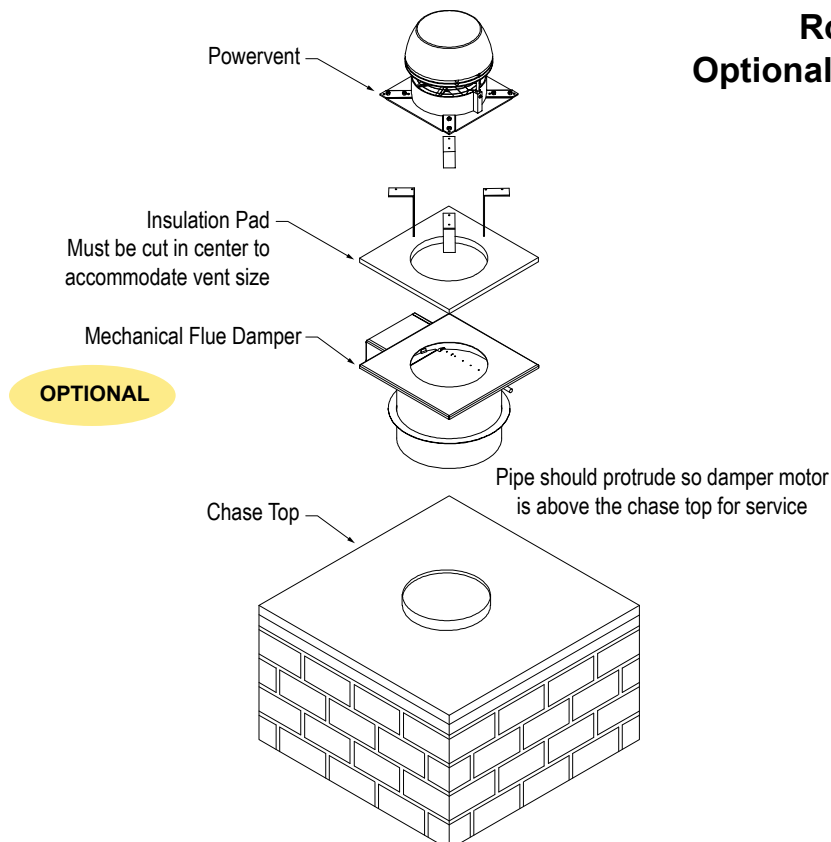


Figure 8S.2 ←

## 8 - VENTING

### T. CHIMNEY SHROUD TYPES AND SPECIFICATIONS

NON-COMBUSTIBLE CONSTRUCTION ONLY ALLOWED

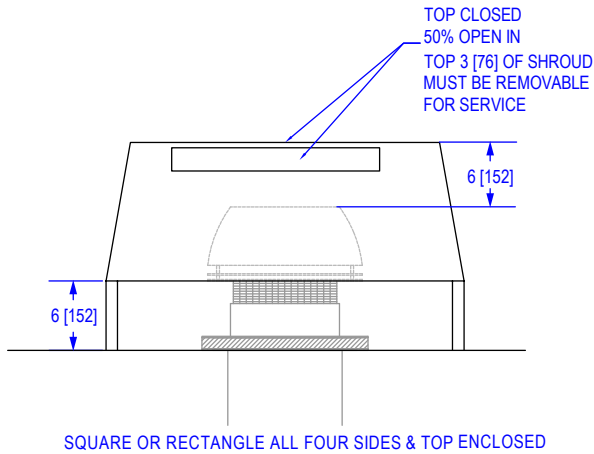


Figure 8T.1 ←

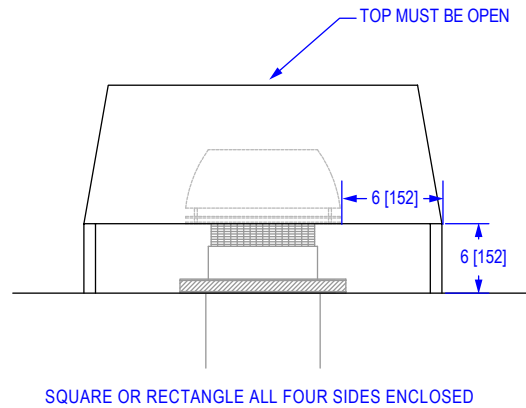


Figure 8T.2 ←

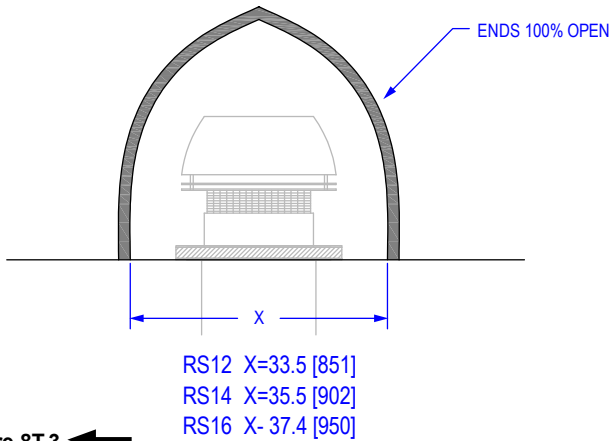


Figure 8T.3 ←

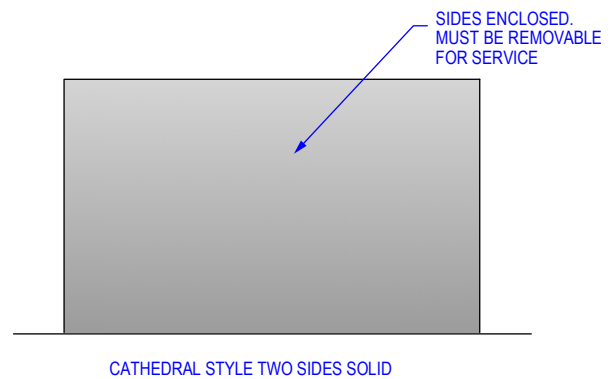


Figure 8T.4 (Side View) ←

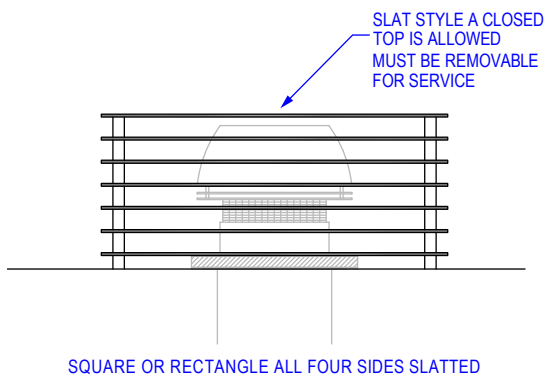


Figure 8T.5 ←  
(Front View)

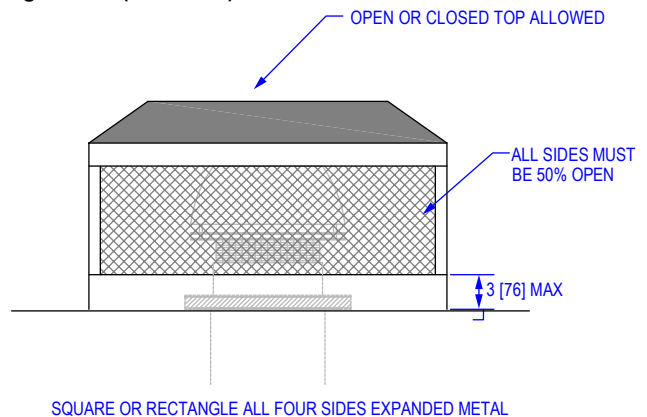


Figure 8T.6 ←

inches [mm]

## 8 - VENTING

### U. OUTDOOR AIR INTAKE

This fireplace has the options of air intake connections on the side or the bottom of the fireplace.

***This fireplace is approved for use with 10 inch rigid metal pipe or UL approved 10 inch Class 0 or Class 1 flex for intake air.***

Use Table 8U.1 for venting requirements if using UL approved 10 inch flex for intake air.

Vent runs utilizing 10 inch rigid metal pipe may be 110 feet with 11 elbows. We recommend insulating the intake air duct or using UL approved Class 1 insulated flex in hot, humid or cold climates.

If not using our LOUVER10/12 intake cap, the intake cap must maintain the square inches stated in table 8U.2. This usually means the intake cap will need to be sized larger than the intake pipe to account for bird/ insect screens.

Example: 10 inch intake will require 12 inch intake cape connected via duct reducer. Failure to do so will result in higher operating temperatures.

The fireplace may also take room air for combustion. Intake screen/vent must be sized appropriately. You must plan for the replacement air that is consumed from the room by the fireplace. Do not draw intake air from a crawl space or an attic (ventilated or not ventilated).

**WARNING! Risk of Fire! DO NOT draw intake air from an attic or crawl space. Appliance could overheat.**

Use Table 8U.2 for reference on CFM replacement air if drawing intake air from inside the house and open air requirements for intake screen/vent or consult Hearth & Home Technologies for more information.

Figure 8U.1							
UL Approved Class 1, 10 Inch Insulated Flex Intake Air Venting Requirements							
Fireplace Size	Length Of Run	Number of Offsets FEET [METERS]					
		0-3	4	5	6	7	8
3'	Feet [Meters]	100 [30.5]	90 [27.4]	80 [24.4]	70 [21.3]	60 [18.2]	50 [15.2]
4'		100 [30.5]	90 [27.4]	80 [24.4]	70 [21.3]	60 [18.2]	50 [15.2]
5'		70 [21.3]	60 [18.2]	50 [15.2]	40 [12.2]	30 [9.1]	20 [6.1]
6'		45 [13.7]	35 [10.7]	25 [7.6]	15 [4.6]	5 [1.5]	N/A
7'		32 [9.8]	20 [6.1]	15 [4.6]	10 [3.05]	---	---
8'	12" Flex	70 [21.3]	60 [18.2]	50 [15.2]	40 [12.2]	30 [9.1]	20 [6.1]

Figure 8U.2		
CFM Replacement Air		
Fireplace Size	Required CFM	Open Air Requirement
3'	320 CFM	78 Sq. Inches
4'	480 CFM	78 Sq. Inches
5'	640 CFM	78 Sq. Inches
6'	800 CFM	78 Sq. Inches
7'	960 CFM	78 Sq. Inches
8'	1,120 CFM	113 Sq. Inches

#### NOTE: GLASS TEMPERATURES

Stellar fireplaces use large amount of outside air for combustion and to cool the viewing glass. When operating the fireplace in the summer, the incoming air will be warmer therefore the glass will be warmer. When operating the fireplace in the winter, the glass will be cooler. This is not a safety concern, but something to note.

#### POWERVERT AND AIR-INTAKE CAP PLACEMENT CLEARANCES

For horizontal installation clearances refer to *Section 8 - Venting (K, L & M)*.  
For vertical installation clearances refer to *Section 8 - Venting (J, N, O & P)*.

## 8 - VENTING

### V. CHANGING FROM OUTSIDE SIDE INTAKE AIR TO BOTTOM INTAKE AIR

Step 1: Remove 4 screws that hold collar plate in place.  
Refer to Figure 8V.1

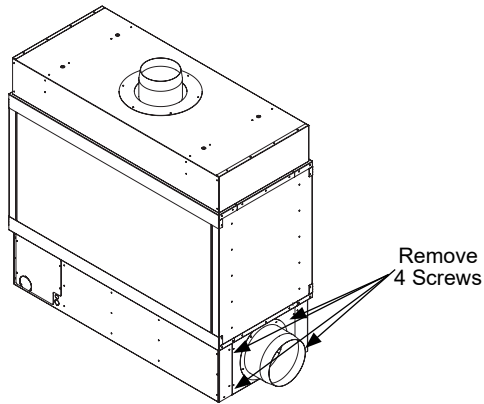


Figure 8V1

Step 2: Slide collar plate off fireplace.  
Refer to Figure 8V.2

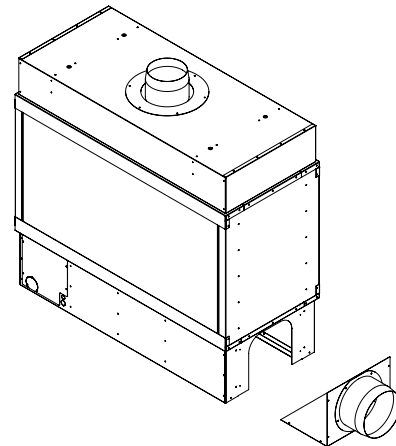


Figure 8V.2

Step 3: Turn plate so collar is facing down, slide plate into slots on each side. Refer to Figure 8V.3A and Figure 8V.3B

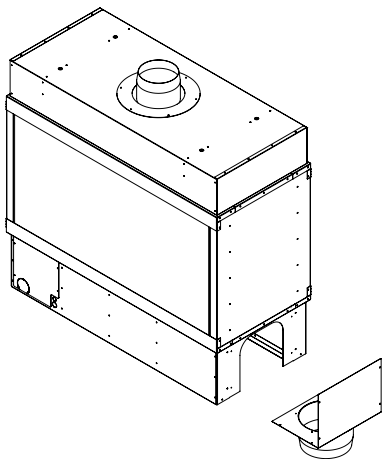


Figure 8V3A

Step 4: Re-attach the plate with four screws.  
Refer to Figure 8V.4

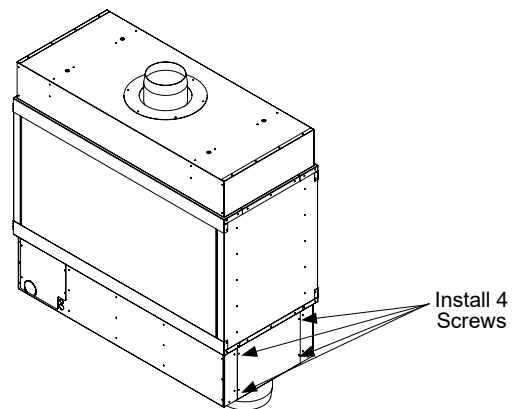


Figure 8V4

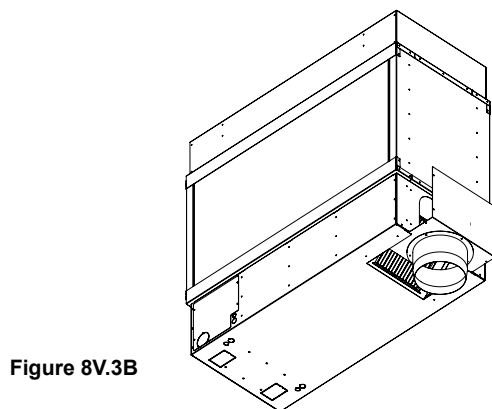


Figure 8V.3B

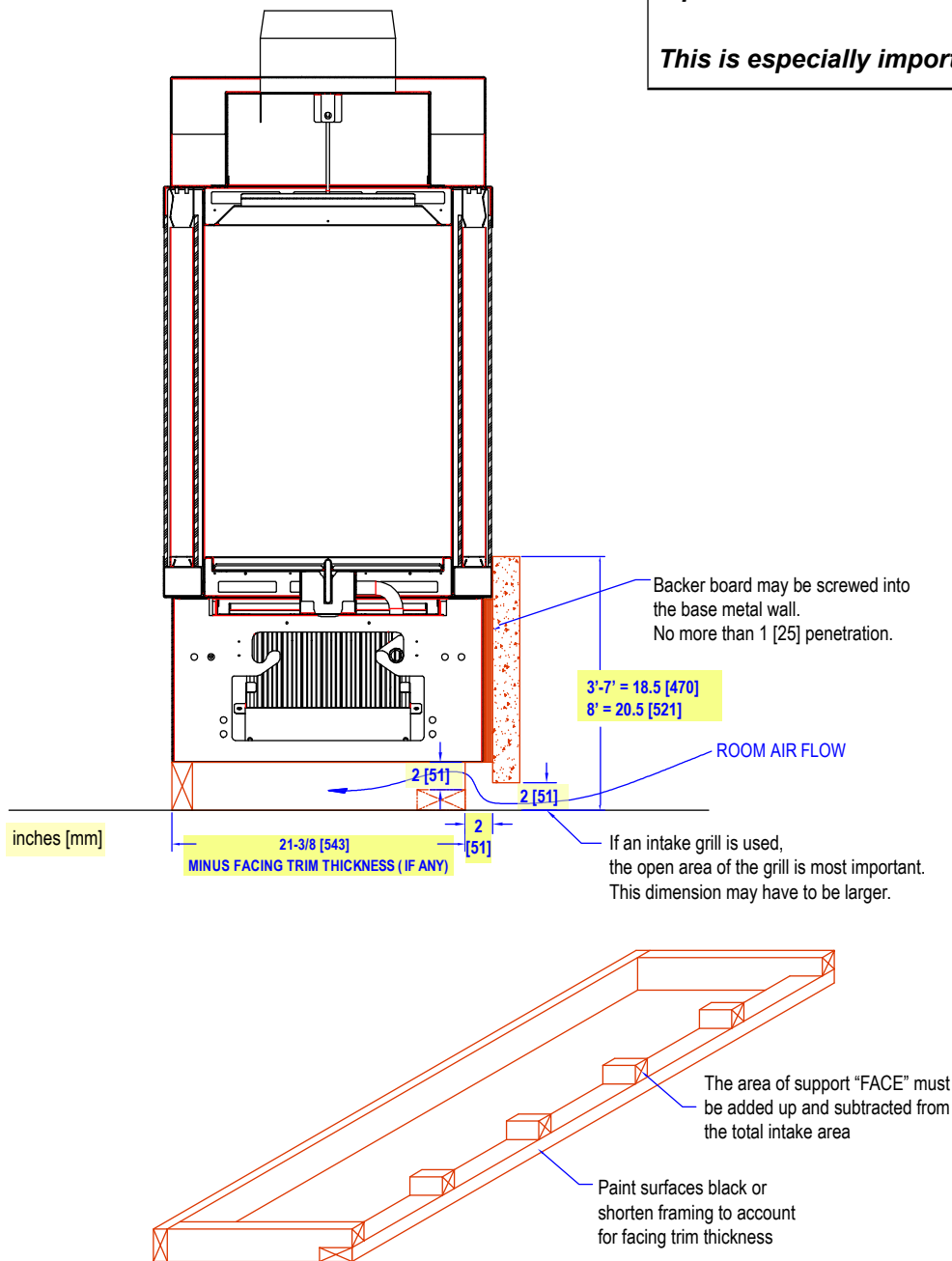
## 8 - VENTING

### W. ROOM AIR FOR COMBUSTION - TOE KICK EXAMPLE WITHOUT HEARTH

#### SINGLE SIDE INTAKE WITHOUT HEARTH EXTENSION

*If drawing air from the room, the appropriate amount of make-up air must be introduced to replace the air taken from the room.*

*This is especially important in small volume rooms.*



#### FIREPLACE BASE SUPPORT

Total required open area is 78 SQIN for 3'-7' fireplaces and 113 SQIN for 8' fireplaces.

Custom fireplace's open area must be 1.5 X the total area of the exhaust flue(s).

Any grill work must take into account these opening minimums.

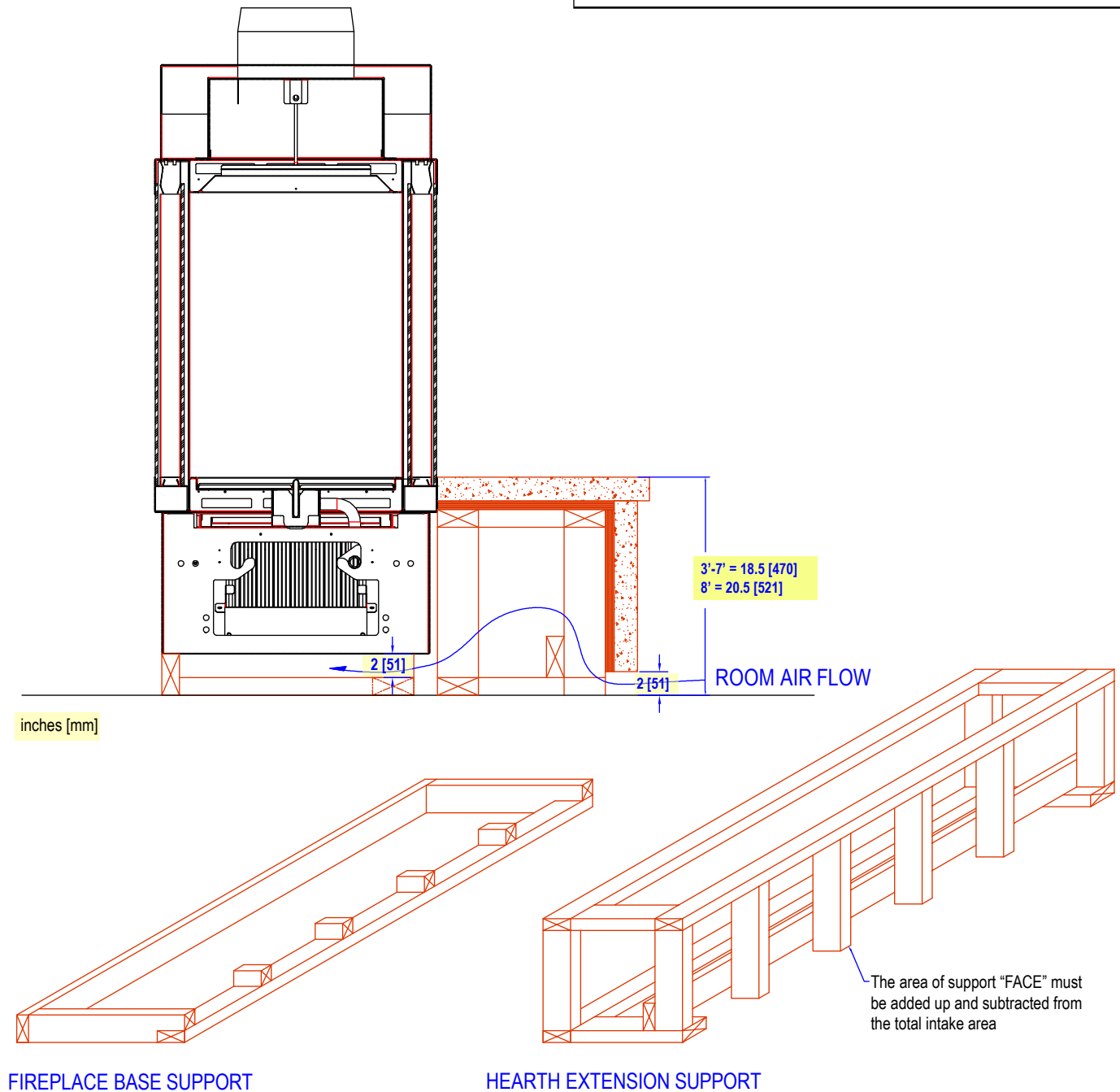
Figure 8W ←

## 8 - VENTING

**X ROOM AIR FOR COMBUSTION - TOE KICK EXAMPLE WITH HEARTH**

## SINGLE SIDE INTAKE WITH HEARTH EXTENSION

***Follow this template on at least one long side of multiside units.***



Total required open area is 78 SQIN for 3'-7' fireplaces and 113 SQIN for 8' fireplaces.  
Custom fireplace's open area must be 1.5 X the total area of the exhaust flue(s).  
Any grill work must take into account these opening minimums.

**Figure 8X** ←



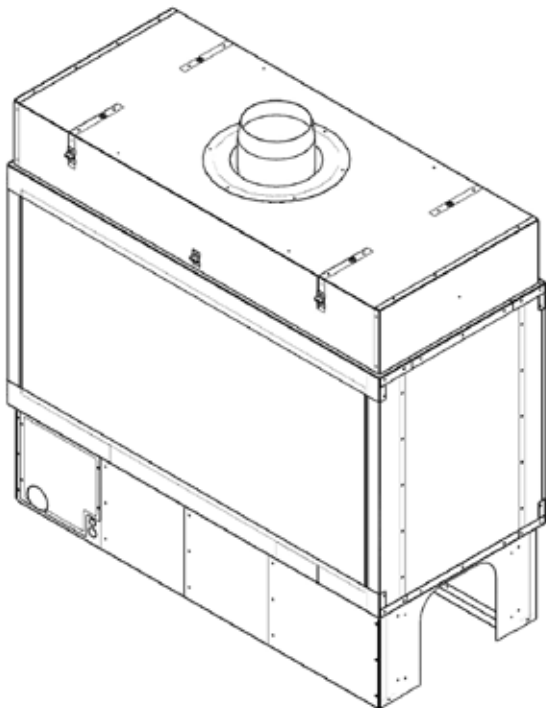
## 9- VENTING OPTIONS

**NOTE: CANNOT USE ON BAY OR FOUR SIDED DESIGNS**

### A. OPTIONAL VERTICAL AIR-INTAKE SIDE CHUTE

Use of the optional Outdoor Air-Intake Side Chute may be used with vertical runs where space is limited on the side of the fireplace.

inches [mm]		WIDTH	DEPTH	HEIGHT	COLLAR DIAMETER
Side Chute Part Number	DESCRIPTION - (FP WIDTH)	A	B	C	D
VIC20	Vertical Air-intake Chute for 20" High Enlight (3/4/5/6/7)	8-9/32 [210]	14-21/32 [372]	54-29/32 [1,395]	10 [254]
VIC24	Vertical Air-intake Chute for 24" High Enlight (3/4/5/6/7)	8-9/32 [210]	14-21/32 [372]	58-29/32 [1,496]	10 [254]
VIC30	Vertical Air-intake Chute for 30" High Enlight (3/4/5/6/7)	8-9/32 [210]	14-21/32 [372]	64-29/32 [1,649]	10 [254]
VIC36	Vertical Air-intake Chute for 36" High Enlight (3/4/5/6/7)	8-9/32 [210]	14-21/32 [372]	70-29/32 [1,801]	10 [254]
VIC48	Vertical Air-intake Chute for 48" High Enlight (3/4/5/6/7)	8-9/32 [210]	14-21/32 [372]	82-29/32 [2,108]	10 [254]
VIC60	Vertical Air-intake Chute for 60" High Enlight (3/4/5/6/7)	8-9/32 [210]	14-21/32 [372]	94-29/32 [2,387]	10 [254]
VIC20-8	Vertical Air-intake Chute for 20" High Enlight (8)	11-9/32 [287]	14-21/32 [372]	60-29/32 [1,547]	12 [305]
VIC24-8	Vertical Air-intake Chute for 24" High Enlight (8)	11-9/32 [287]	14-21/32 [372]	64-29/32 [1,649]	12 [305]
VIC30-8	Vertical Air-intake Chute for 30" High Enlight (8)	11-9/32 [287]	14-21/32 [372]	70-29/32 [1,801]	12 [305]
VIC36-8	Vertical Air-intake Chute for 36" High Enlight (8)	11-9/32 [287]	14-21/32 [372]	76-29/32 [1,953]	12 [305]
VIC48-8	Vertical Air-intake Chute for 48" High Enlight (8)	11-9/32 [287]	14-21/32 [372]	88-29/32 [2,260]	12 [305]
VIC60-8	Vertical Air-intake Chute for 60" High Enlight (8)	11-9/32 [287]	14-21/32 [372]	100-29/32 [2,565]	12 [305]



- Order at same time as the fireplace to ensure fireplace is built with the VIC attached during production.
- VIC fits inside of framing.

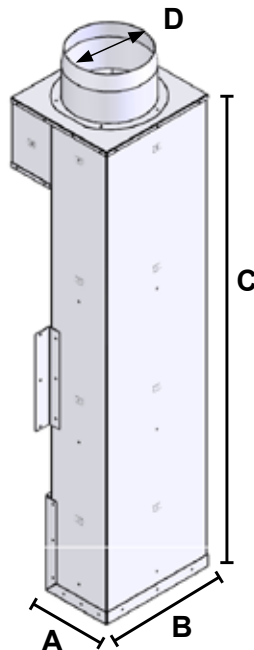


Figure 9A

## 9- VENTING OPTIONS

### B. OPTIONAL UNIVERSAL EXHAUST IN AIR-INTAKE LOUVER

MODEL	UNITS	USE
LOUVER-8	3', 4' & 5'	Exhaust Only
LOUVER-10	3', 4' & 5'	Air-Intake
LOUVER-10	6', 7'	Exhaust and Air-Intake
LOUVER-10	8'	Exhaust Only
LOUVER-12	8'	Air-Intake ONLY

- This kit is an optional method of terminating the fresh air and/or exhaust for the appliance.
- Exhaust terminations must be installed with an inline powervent.
- Follow the complete installation instructions provided with the louver kit.



Figure 9B.1

#### LOUVER-8 & LOUVER-10

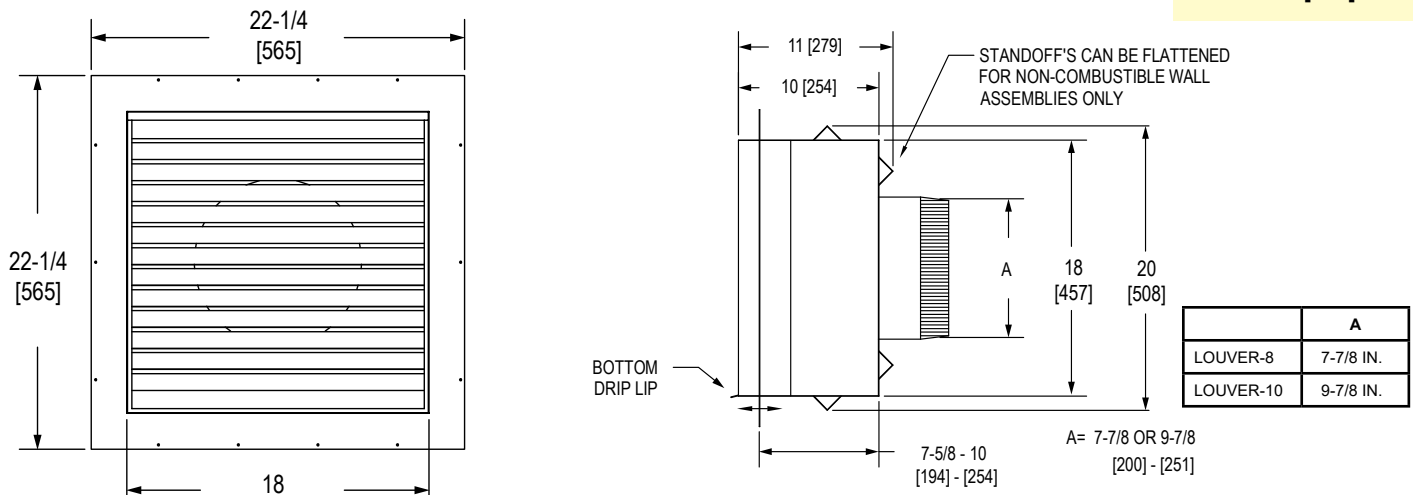


Figure 9B.2

#### LOUVER-12

##### AIR-INTAKE ONLY

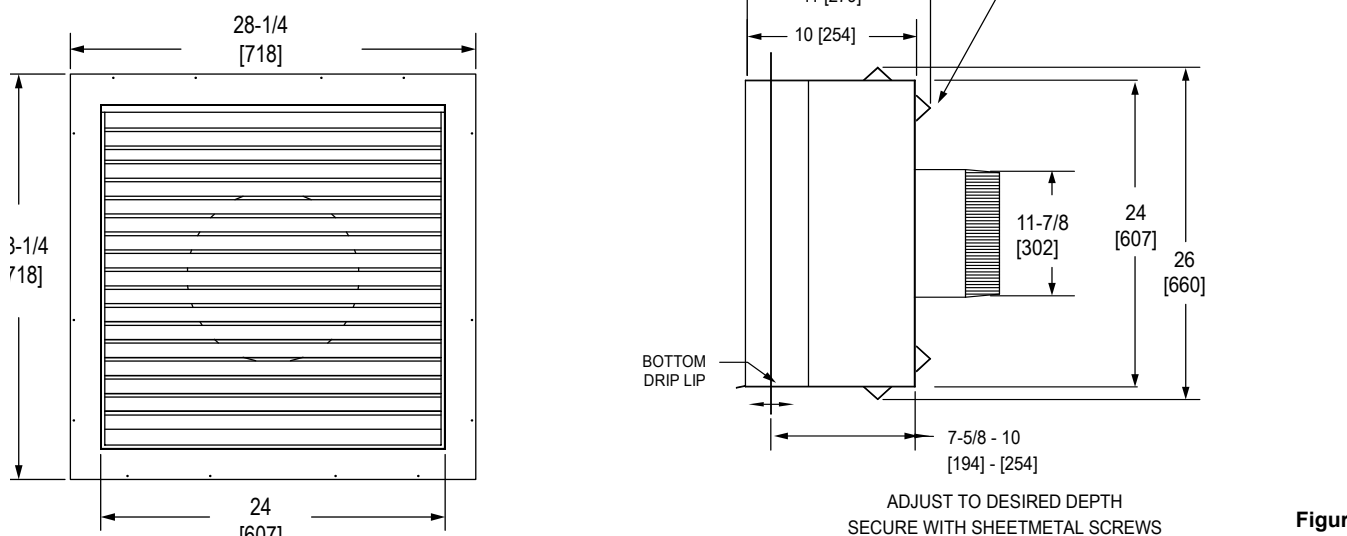


Figure 9B.3

# 10 - ELECTRIC



*For Tethered Control Panel Refer To Section 10 (D, E.1 & E.2)*

## A. ELECTRICAL INSTALLATION OVERVIEW

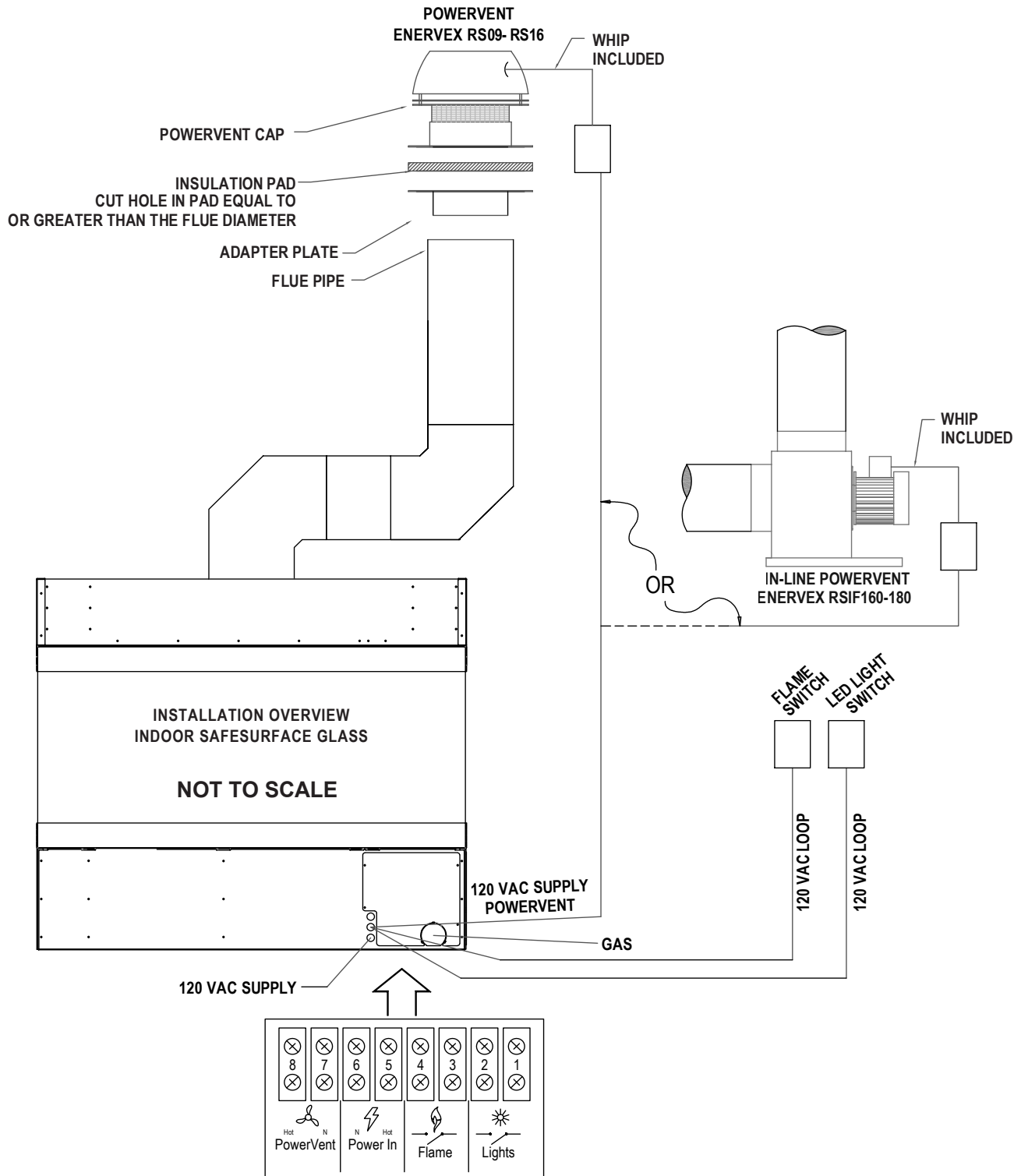


Figure 10A



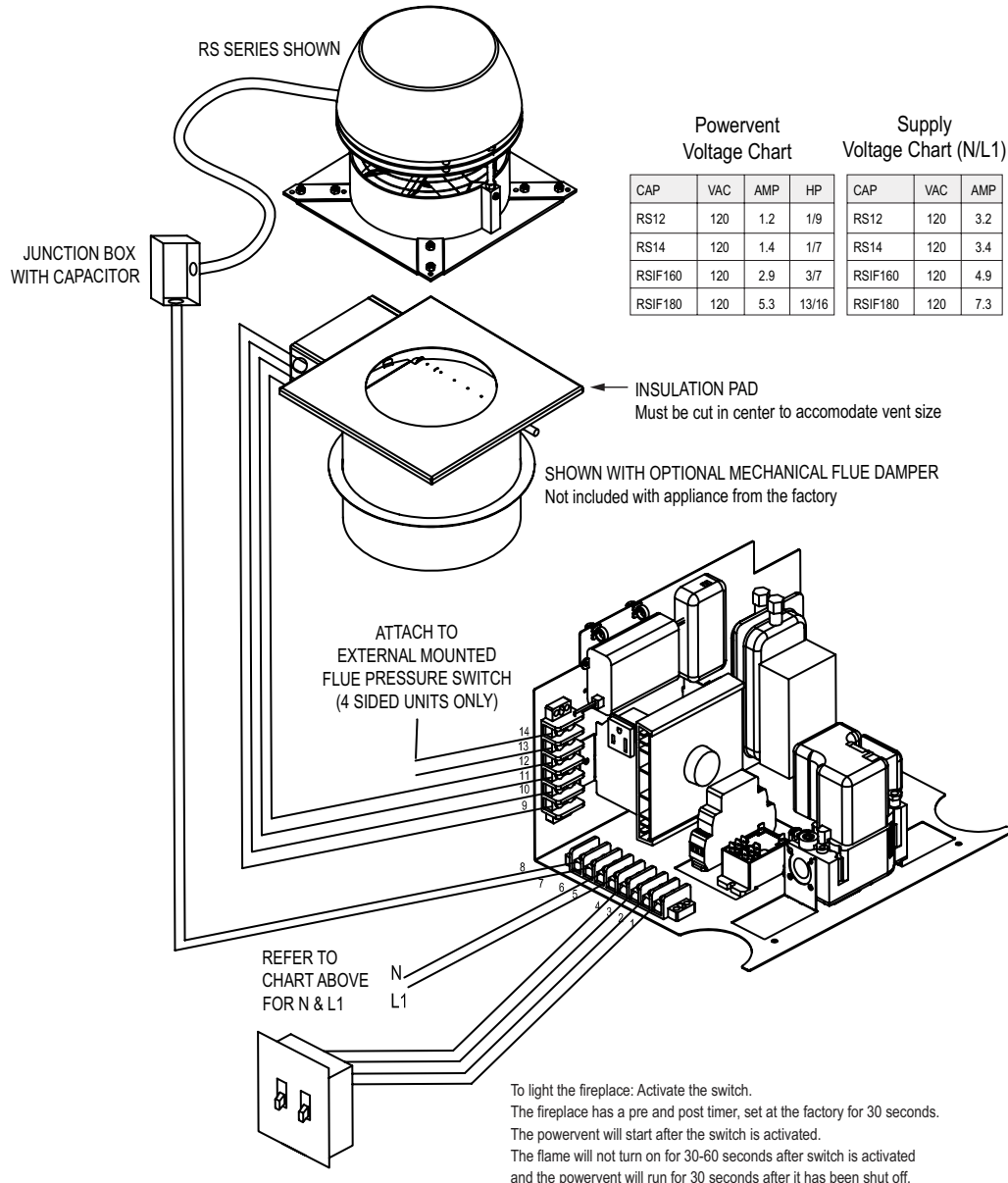
**NOTE FOR THE ELECTRICIAN: FIELD WIRING SHOULD BE LABELED FOR EASY IDENTIFICATION.**



# 10 - ELECTRIC

## B.2 ELECTRICAL WIRING SCHEMATIC - FIELD

**WIRE THE FIREPLACE TO A 15 AMP MIN DEDICATED CIRCUIT. SEE TERMINALS #5 & #6.**



#	FUNCTION	NOTES:
1	120 VAC SW2 LIGHTS (IF EQUIPPED)	120 VOLT LOOP
2	120VAC SW2 LIGHTS (IF EQUIPPED)	120 VOLT LOOP
3	120VAC SW1 MAIN FLAME	120 VOLT LOOP
4	120 VAC SW1 MAIN FLAME	120 VOLT LOOP
5	120 VAC SUPPLY	CONNECT TO CONSTANT POWER SOURCE
6	NEUTRAL	CONNECT TO CONSTANT POWER SOURCE
7	NEUTRAL POWERVENT	DO NOT SHARE NEUTRAL
8	120VAC POWERVENT	FROM SPEED CONTROL
9	24VAC FLUE DAMPER POWER	OPTIONAL
10	24VAC FLUE DAMPER NEUTRAL	OPTIONAL
11	SW3 FLUE DAMPER PROVE	OPTIONAL. USE PURPLE AND WHITE, NOT RED
12	SW3 DAMPER PROVE	OPTIONAL. USE PURPLE AND WHITE, NOT RED
13	CONNECTION FOR EXTERNAL FLUE PRESSURE SWITCH (4 SIDED ONLY)	FACTORY WIRED
14	CONNECTION FOR EXTERNAL FLUE PRESSURE SWITCH (4 SIDED ONLY)	FACTORY WIRED

SYSTEM A - LIGHTS

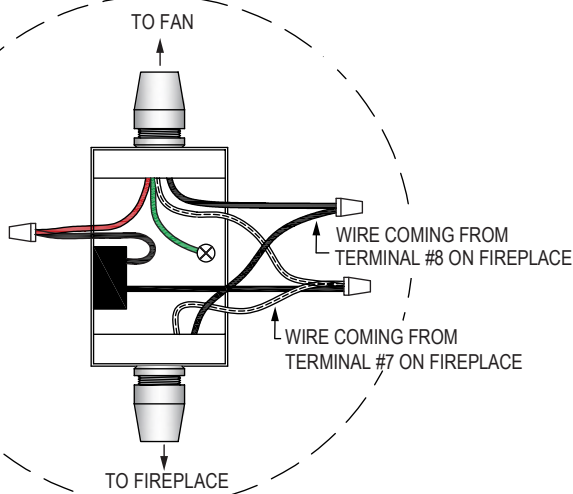
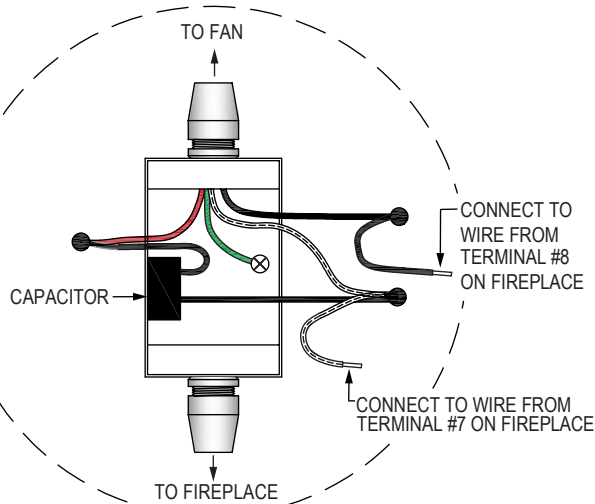
Figure 10B.2

# 10 - ELECTRIC

## B.3 JUNCTION BOX & CAPACITOR

**DO NOT DISCARD  
JUNCTION BOX - CAPACITOR INSIDE**

**JUNCTION BOX  
PRE-WIRED FROM STELLAR**



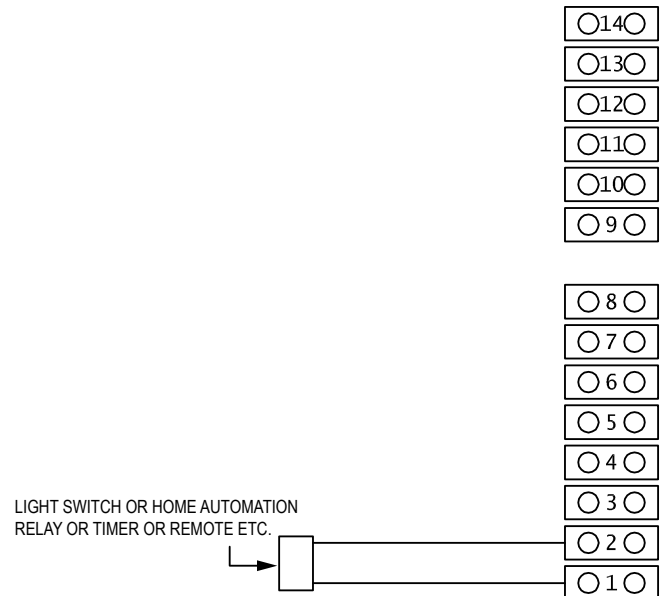
**JUNCTION BOX  
WIRING FROM ENERVEX**

Figure 10B.3 ←

## C.1 TERMINALS 1 & 2 - LED LIGHTING

### TERMINAL 1 & 2: LED LIGHTING

TERMINAL #2	HAS 120VAC POWER TO SUPPLY A SWITCH, RELAY, TIMER, REMOTE, ETC.
TERMINAL #1	RETURNS 120VAC POWER TO ACTIVATE THE LED DRIVER.



→ Figure 10C.1

**NOTE FOR THE ELECTRICIAN:  
FIELD WIRING SHOULD BE LABELED  
FOR EASY IDENTIFICATION.**

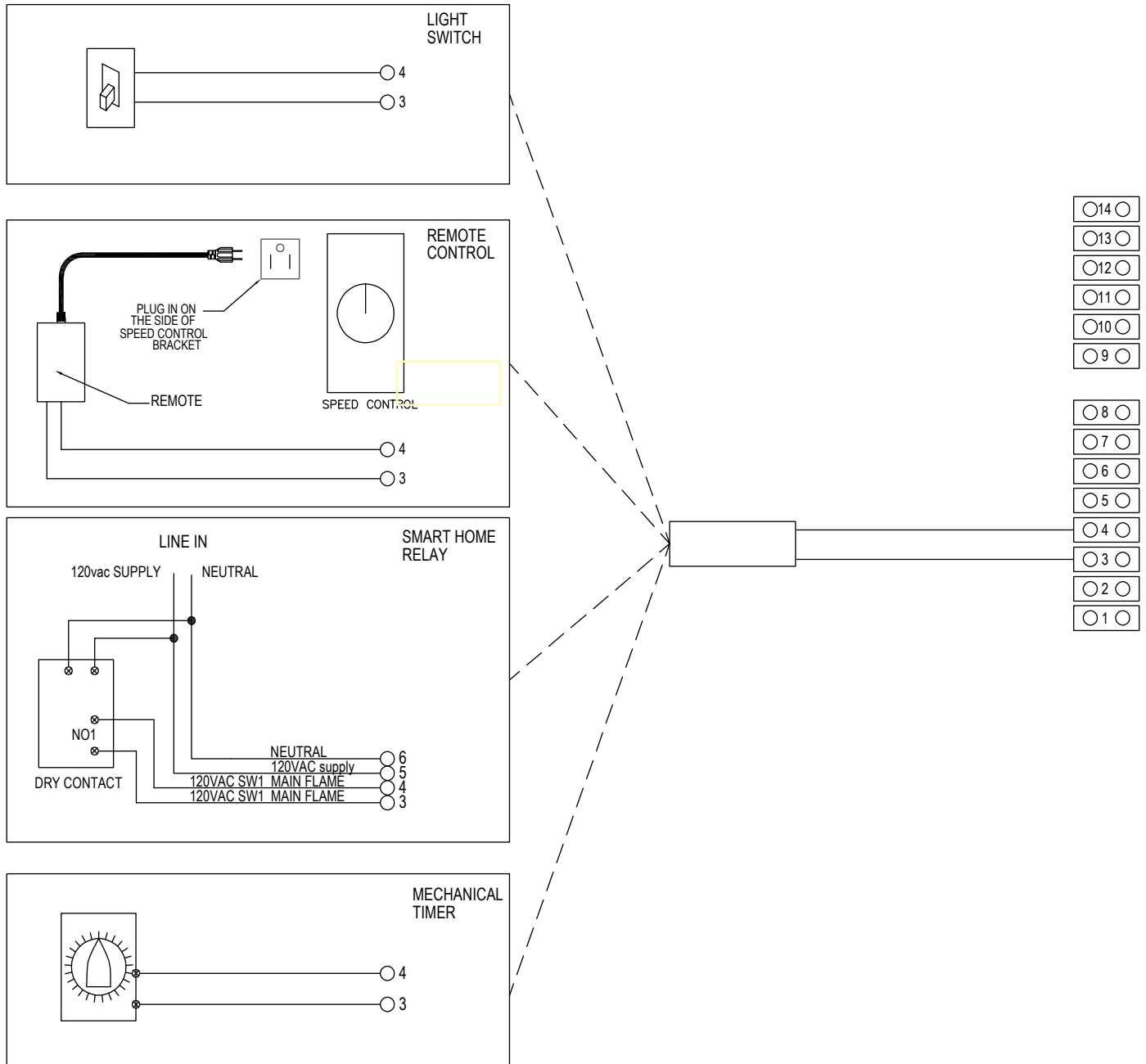
# 10 - ELECTRIC

## C.2 TERMINALS 3 & 4 - MAIN FLAME

### TERMINAL 3 & 4 : MAIN FLAME

TERMINAL #4	TERMINAL #4 HAS 120VAC POWER TO SUPPLY A SWITCH, RELAY, TIMER,
TERMINAL #3	REMOTE, ETC. TERMINAL #3 RETURNS 120VAC POWER TO ACTIVATE TO MAIN FLAMES.

IF USING STANDARD ROMEX, CONNECT BLACK TO TERMINAL #4 AND WHITE TO TERMINAL #3.  
SINCE 120 VOLTS WILL TRAVEL ON WHITE, MARK THE WHITE WIRE ACCORDING TO CODE.



→ Figure 10C.2

**SMART HOME RELAY NOTE: Generic diagram, follow specific relay manufactures instructions.**

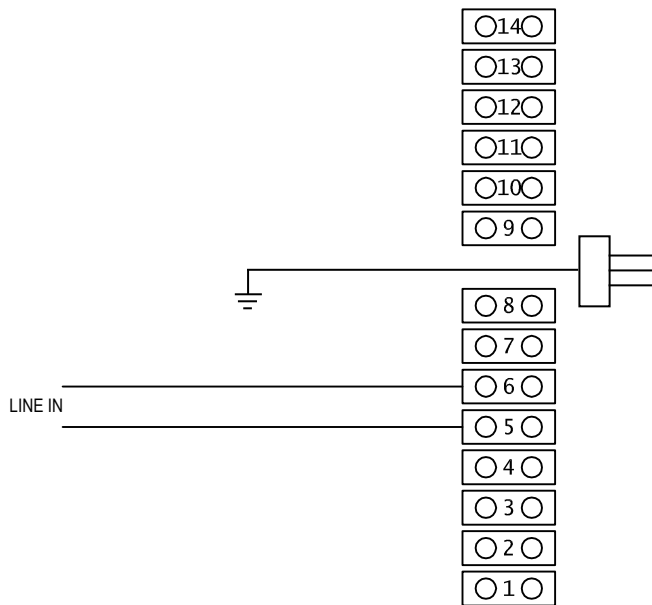
# 10 - ELECTRIC

## C.3 - TERMINALS 5 & 6 FIREPLACE POWER

### TERMINAL 5 & 6: FIREPLACE POWER

GROUND - LOCATE THE GREEN WIRE CLUSTER  
CONNECT THE GREEN WIRE TAIL TO BUILDING GROUND

TERMINAL #5	IS THE 120VAC POWER SUPPLY FOR THE FIREPLACE. THIS IS A CONSTANT POWER SUPPLY AND SHOULD NOT BE SWITCHED. A SERVICE DISCONNECT MAY BE DESIRED.
TERMINAL #6	IS THE NEUTRAL CONNECTION



→ Figure 10C.3

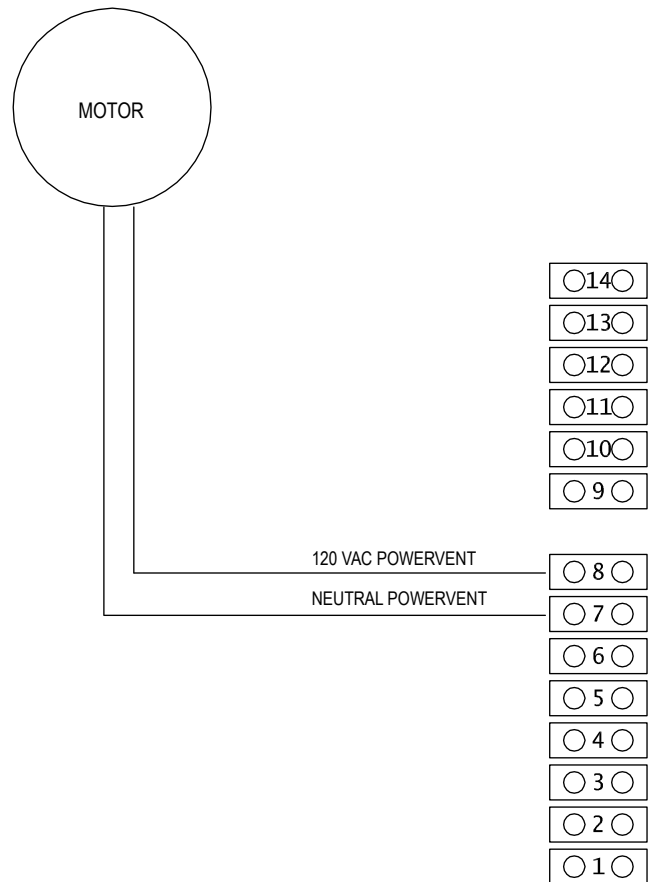
**WIRE THE FIREPLACE TO A 15 AMP MIN  
DEDICATED CIRCUIT.**

## C. 4 - TERMINALS 7 & 8 POWERVERT MOTOR

### TERMINAL 7 & 8: POWERVERT CONNECTION

POWERVERT POWER MUST COME FROM THE TERMINAL BLOCK AND  
NOT ANY OTHER POWER SOURCE.

TERMINAL #8	IS THE HOT CONNECTION FOR THE POWERVERT MOTOR FROM THE SPEED CONTROL.
TERMINAL #7	IS THE NEUTRAL CONNECTION FOR THE POWERVERT MOTOR.



→ Figure 10C.4



# 10 - ELECTRIC

## C.5 - TERMINALS 9 & 10 FLUE DAMPER CONNECTION

### TERMINALS 9 & 10: FLUE DAMPER CONNECTION

THIS IS LOW VOLTAGE AND EXTERNAL POWER MUST NOT BE APPLIED

TERMINAL #9	IS THE NEUTRAL CONNECTION FOR THE DAMPER MOTOR. BLACK WIRE.
TERMINAL #10	IS THE HOT CONNECTION FOR THE DAMPER MOTOR. RED WIRE.

NOTE: THIS IS OPTIONAL.  
IF A DAMPER IS NOT USED DO NOT CONNECT ANYTHING TO TERMINALS 9 & 10.

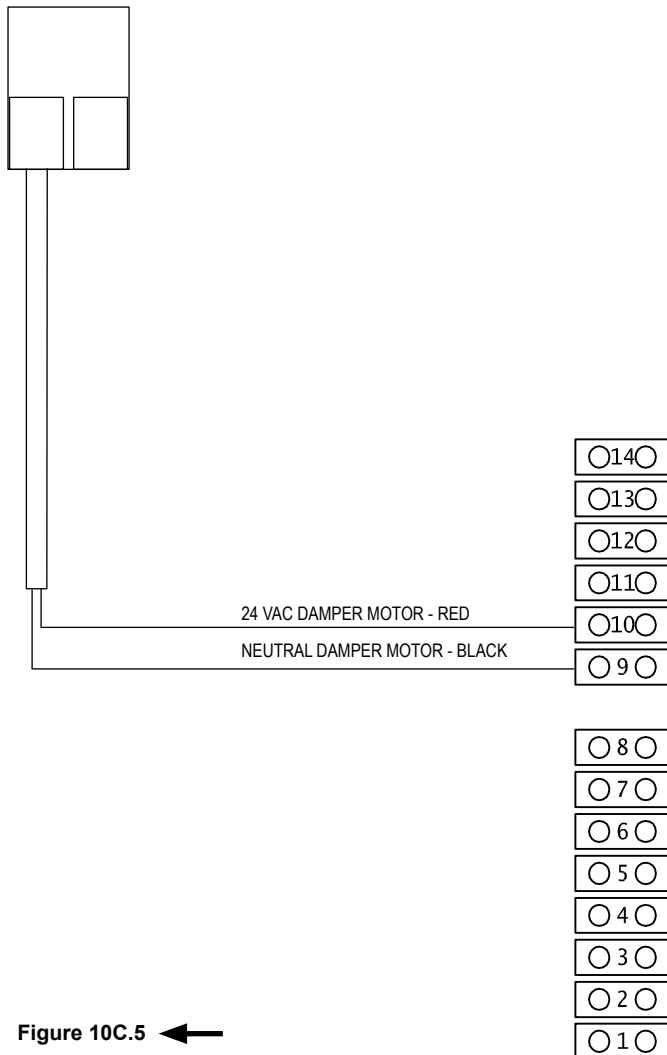


Figure 10C.5

## C. 6 - TERMINALS 11 & 12 FLUE DAMPER PROVE

### TERMINALS 11 & 12: FLUE DAMPER PROVE

THIS IS LOW VOLTAGE AND EXTERNAL POWER MUST NOT BE APPLIED

TERMINAL #11	CONNECTS TO THE WHITE WIRE FROM THE TRIPLE WIRE LEAD ON THE DAMPER MOTOR.
TERMINAL #12	CONNECTS TO THE PURPLE WIRE FROM THE TRIPLE WIRE LEAD ON THE DAMPER MOTOR.

NOTE: THIS IS OPTIONAL.  
IF A DAMPER IS NOT USED TERMINALS 11 & 12 HAVE A JUMPER ACROSS THEM

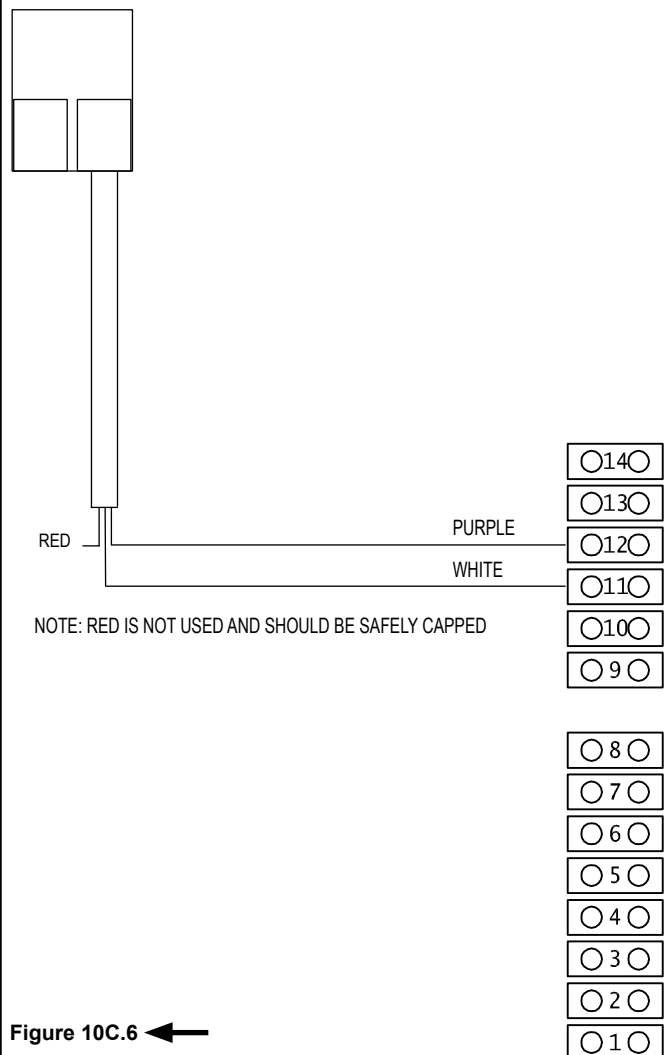


Figure 10C.6

### → Low Voltage Wire Gauge - Max Length

Feet [Meters]

Transformer Output	12 awg	14 awg	16 awg	18 awg
40VA(W)	453 [138]	285 [86.9]	179 [54.56]	113 [34.4]

Use a minimum of 18 awg wire

# 10 - ELECTRIC

For Standard Electric Installation Refer To Section 10 (A.1 - C.6)

## D. TETHERED CONTROL PANEL INSTALLATION OVERVIEW

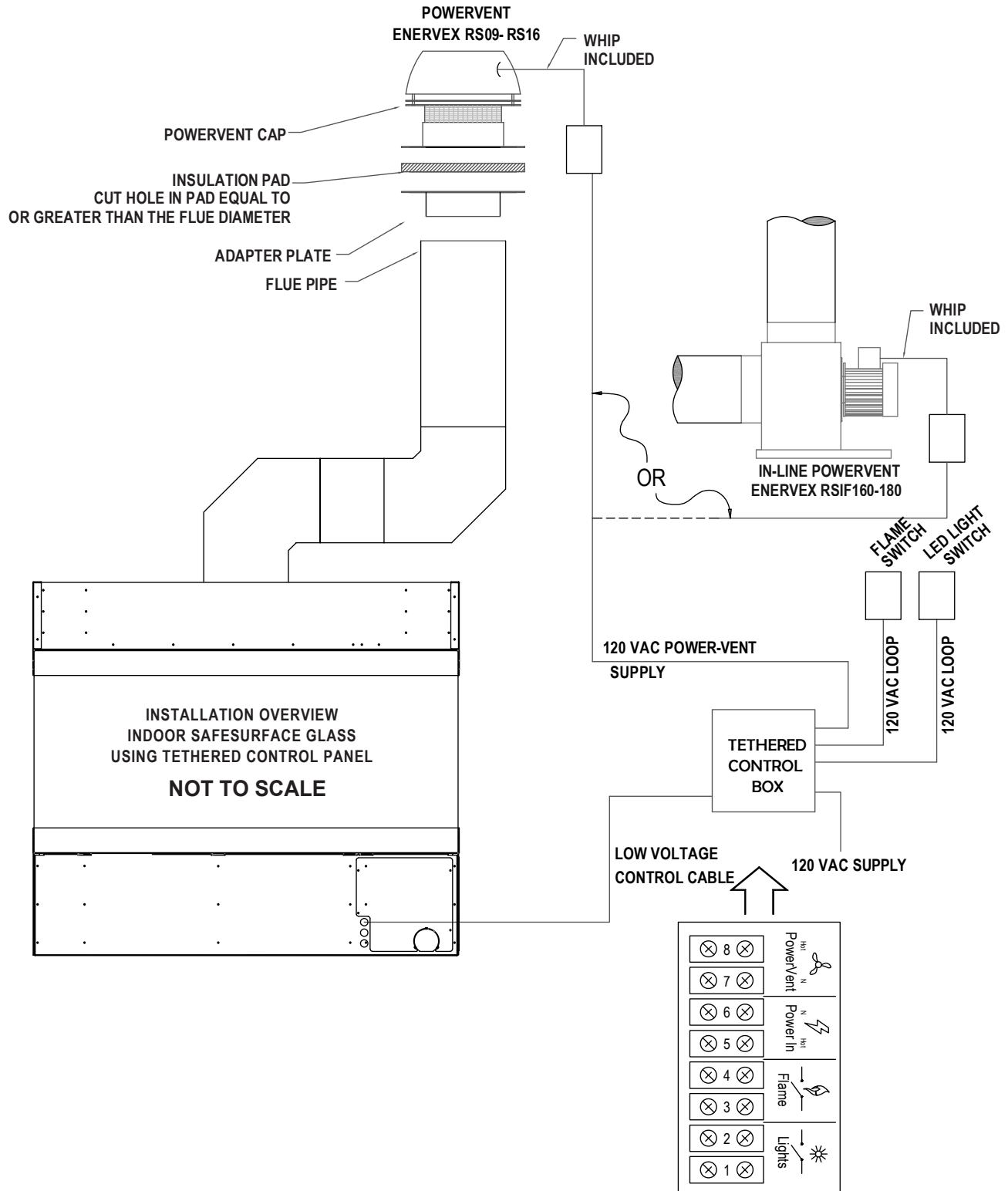
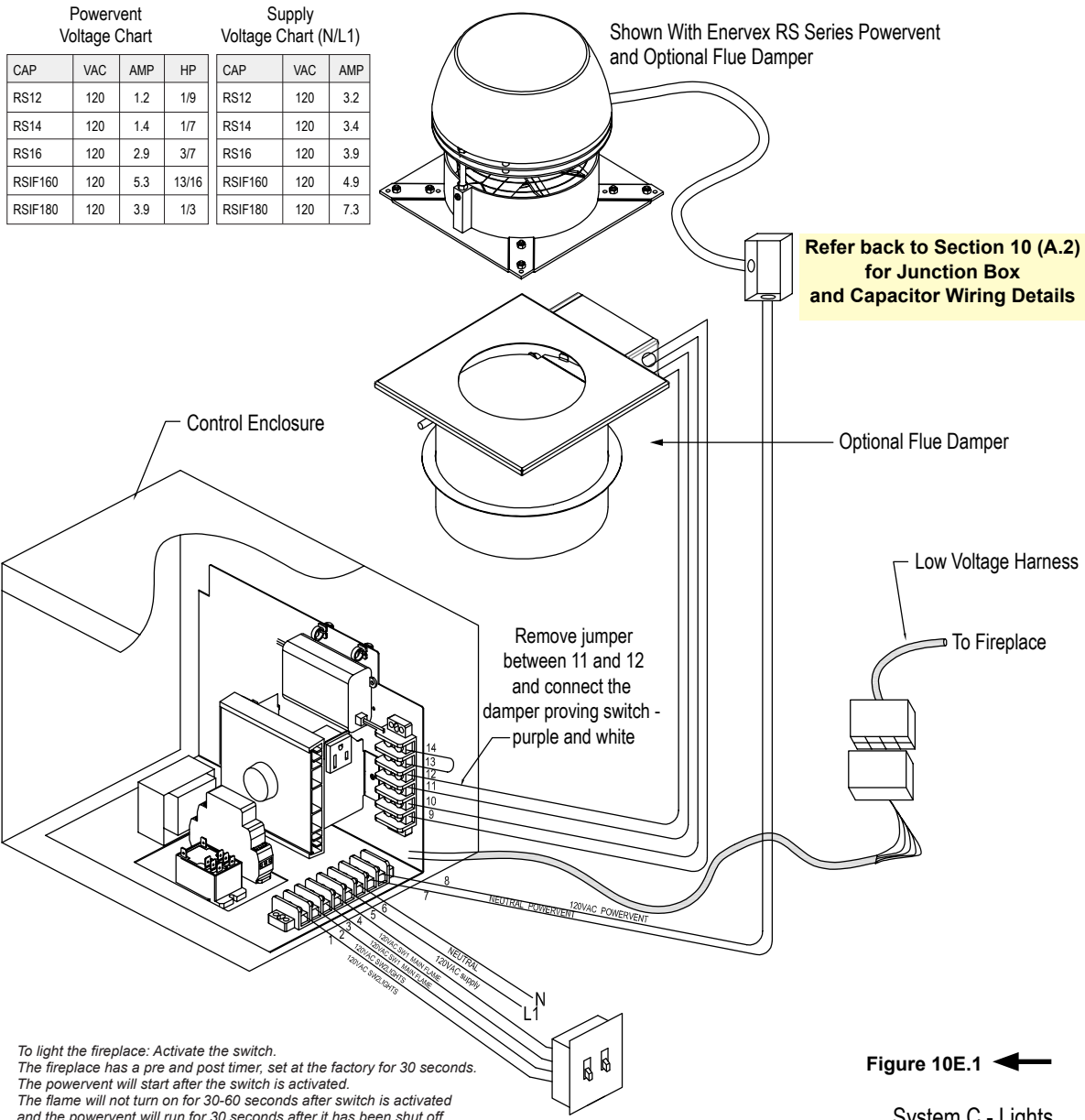


Figure 10 D

# 10 - ELECTRIC

## E.1 ELECTRICAL WIRING SCHEMATIC - FIELD WIRING

**WIRE THE FIREPLACE TO A 15 AMP MIN DEDICATED CIRCUIT. SEE TERMINALS #5 & #6.**



**Figure 10E.1** ←

System C - Lights

#	FUNCTION	NOTES:
1	120 VAC SW2 LIGHTING - IF EQUIPPED	120 VOLT LOOP
2	120 VAC SW2 LIGHTING - IF EQUIPPED	120 VOLT LOOP
3	120VAC SW1 MAIN FLAME	120 VOLT LOOP
4	120 VAC SW1 MAIN FLAME	120 VOLT LOOP
5	120 VAC SUPPLY	CONNECT TO CONSTANT POWER SOURCE
6	NEUTRAL	CONNECT TO CONSTANT POWER SOURCE
7	NEUTRAL POWERVENT	DO NOT SHARE NEUTRAL
8	120VAC POWERVENT	FROM SPEED CONTROL
9	24VAC FLUE DAMPER POWER	OPTIONAL
10	24VAC FLUE DAMPER NEUTRAL	OPTIONAL
11	SW3 FLUE DAMPER PROVE	OPTIONAL. USE PURPLE AND WHITE, NOT RED
12	SW3 DAMPER PROVE	OPTIONAL. USE PURPLE AND WHITE, NOT RED
13	CONNECTION FOR EXTERNAL FLUE PRESSURE SWITCH (4 SIDED ONLY)	FACTORY WIRED
14	CONNECTION FOR EXTERNAL FLUE PRESSURE SWITCH (4 SIDED ONLY)	FACTORY WIRED

# 10 - ELECTRIC

## E.2 ELECTRICAL WIRING SCHEMATIC - TROUBLESHOOTING

SYSTEM: TB1B111SYS

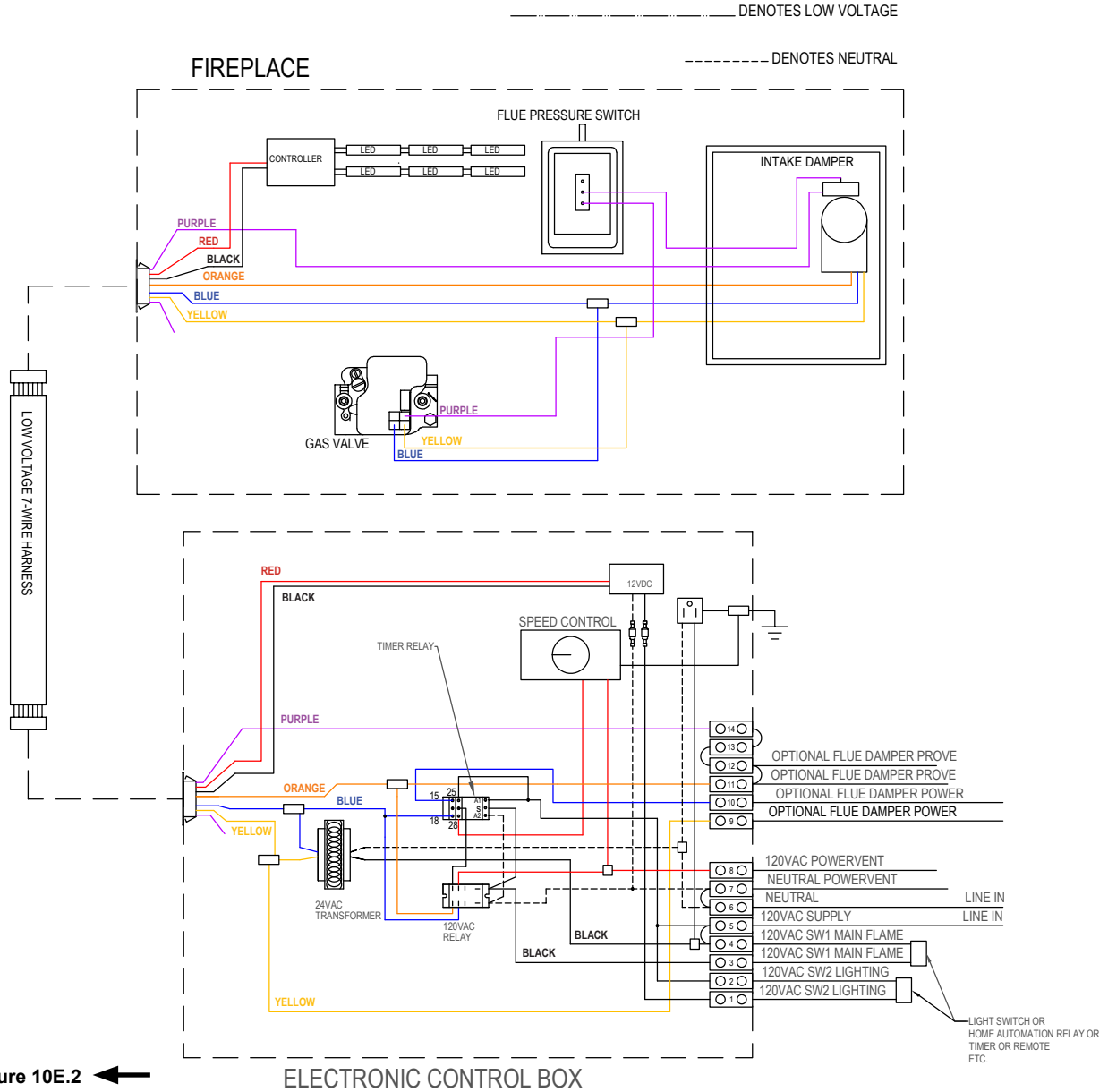
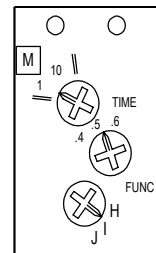


Figure 10E.2

#	FUNCTION	NOTES
1	SW2 LIGHTS (IF EQUIPPED) 120VAC LOOP	120 VOLT LOOP
2	SW2 LIGHTS (IF EQUIPPED) 120VAC LOOP	120 VOLT LOOP
3	SW1 MAIN FLAME- 120VAC LOOP	120 VOLT LOOP
4	SW1 MAIN FLAME- 120VAC LOOP	120 VOLT LOOP
5	120VAC SUPPLY	120vac 15amp MIN DEDICATED CIRCUIT
6	NEUTRAL	120vac 15amp MIN DEDICATED CIRCUIT
7	NEUTRAL TO POWERVENT	
8	120VAC TO POWERVENT	
9	24VAC FLUE DAMPER POWER (IF EQUIPPED)	BLACK WIRE IN PAIR
10	24VAC FLUE DAMPER NEUTRAL( IF EQUIPPED)	RED WIRE IN PAIR
11	SW3 FLUE DAMPER PROVE (ONLY IF DAMPER IS USED)	USE PURPLE AND WHITE, NOT RED
12	SW3 FLUE DAMPER PROVE (ONLY IF DAMPER IS USED)	USE PURPLE AND WHITE, NOT RED
13	FLUE PRESSURE SWITCH	FACTORY
14	FLUE PRESSURE SWITCH	FACTORY



RELAY TOP;  
FIRST DIAL-SET TO "1"  
SECOND DIAL-SET TO ".5"  
THIRD DIAL - SET TO "I"

LED STATUS: GREEN =POWER APPLIED, POWERVENT OFF  
RED FLASHING= TIMING PERIOD, PRE OR POST PURGE  
RED SOLID= CLOSED STATE, POWERVENT ON

**REFER BACK TO STANDARD ELECTRIC TERMINAL SCHEMATICS IN SECTION 10 (C.1-C.6).**

# 11 - FINISHING

## A.1 FINISHING THE WALL - USING THE PROVIDED 1/2" STANDOFFS



**NOTE: REFER TO DIMENSIONS SECTION FOR ALLOWABLE FINISHING DIMENSIONS REQUIRED TO FIT THE GLASS PANELS INTO THE FIREPLACE. FINISHING MATERIALS MUST NOT OVERLAP THE DIMENSIONS HIGHLIGHTED IN GREEN ON PAGE 5. NEVER COVER THE GLASS WITH FINISHING MATERIALS.**

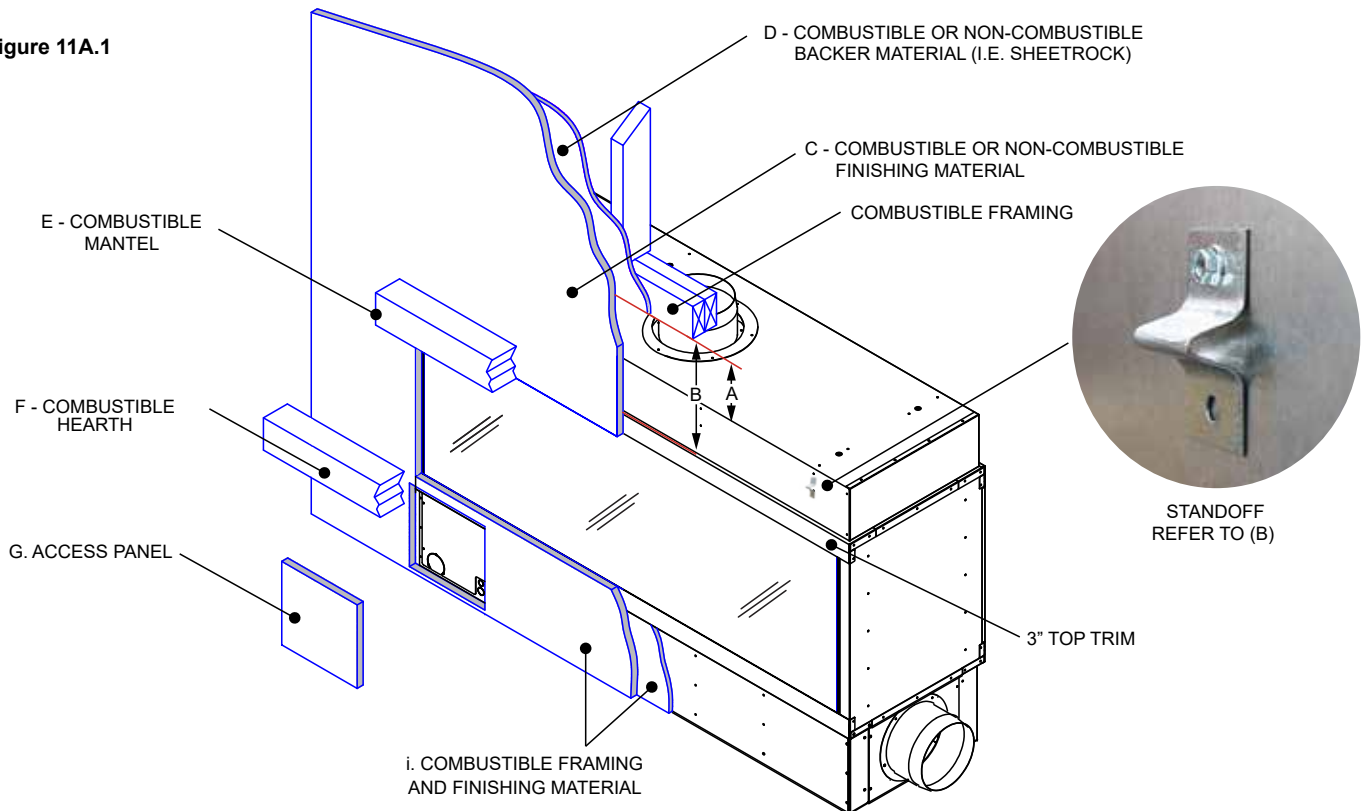


**NOTE: DO NOT PIERCE ANY OF THE BLACK PAINTED SURFACES WITH SCREWS, RIVETS, ETC. THIS INCLUDES THE 3" [76mm] BLACK TOP AND BOTTOM GLASS TRIM AND ANY PAINTED SIDES ADJACENT TO THE GLASS.**



**NOTE: REFER TO MANTEL REQUIREMENTS: NON-COMBUSTIBLE ZONE USING PROVIDED 1/2" [13mm] STANDOFFS FOR MORE INFORMATION.**

Figure 11A.1



inches [mm]

A. No combustible materials may be within 6 [152] of the top of the fireplace.

B. 1/2 [13] CLEARANCE TO COMBUSTIBLES ON SURFACE.

The fireplace ships with hood standoffs in place to ensure a 1/2 [13] clearance to combustibles is maintained on the surface. See Figure 10A.1. If the standoffs are removed, only non-combustible material can be installed against the surface of the fireplace such as a non-combustible backer cement board. 1/2 [13] minimum thickness must be used in the space\* between the top of the 3 [76] trim to the combustible framing the full width of the fireplace. The space\* includes a 7 [178] minimum above the top of the fireplace that is recommended for ease of attachment.

\*= 15 [381] for 3'-7' units and 19 [483] for 8' units. See Figure 10A.2

C. Combustible material may cover the non-combustible area mentioned in B.

D. Combustible finishing materials allowed.

E. Combustible mantel may be placed above the top of the glass viewing area. There are no restrictions on mantel depth.

F. Combustible hearth may be placed below the bottom of the glass viewing area.

G. Flat covers will cover the components access. Gas and electric inlets are located behind this panel. There are four access panel options all located on the pilot side of the fireplace; front (shown above), side, back and inside behind the glass.

Please take consideration of which option will be used to access the components for service later during planning.

I. Combustible framing and finishing materials allowed.

# 11 - FINISHING

## A.2 FINISHING THE WALL - **NOT** USING THE PROVIDED 1/2" STANDOFFS



**NOTE: REFER TO DIMENSIONS SECTION FOR ALLOWABLE FINISHING DIMENSIONS REQUIRED TO FIT THE GLASS PANELS INTO THE FIREPLACE. FINISHING MATERIALS MUST NOT OVERLAP THE DIMENSIONS HIGHLIGHTED IN GREEN ON PAGE 5. NEVER COVER THE GLASS WITH FINISHING MATERIALS.**

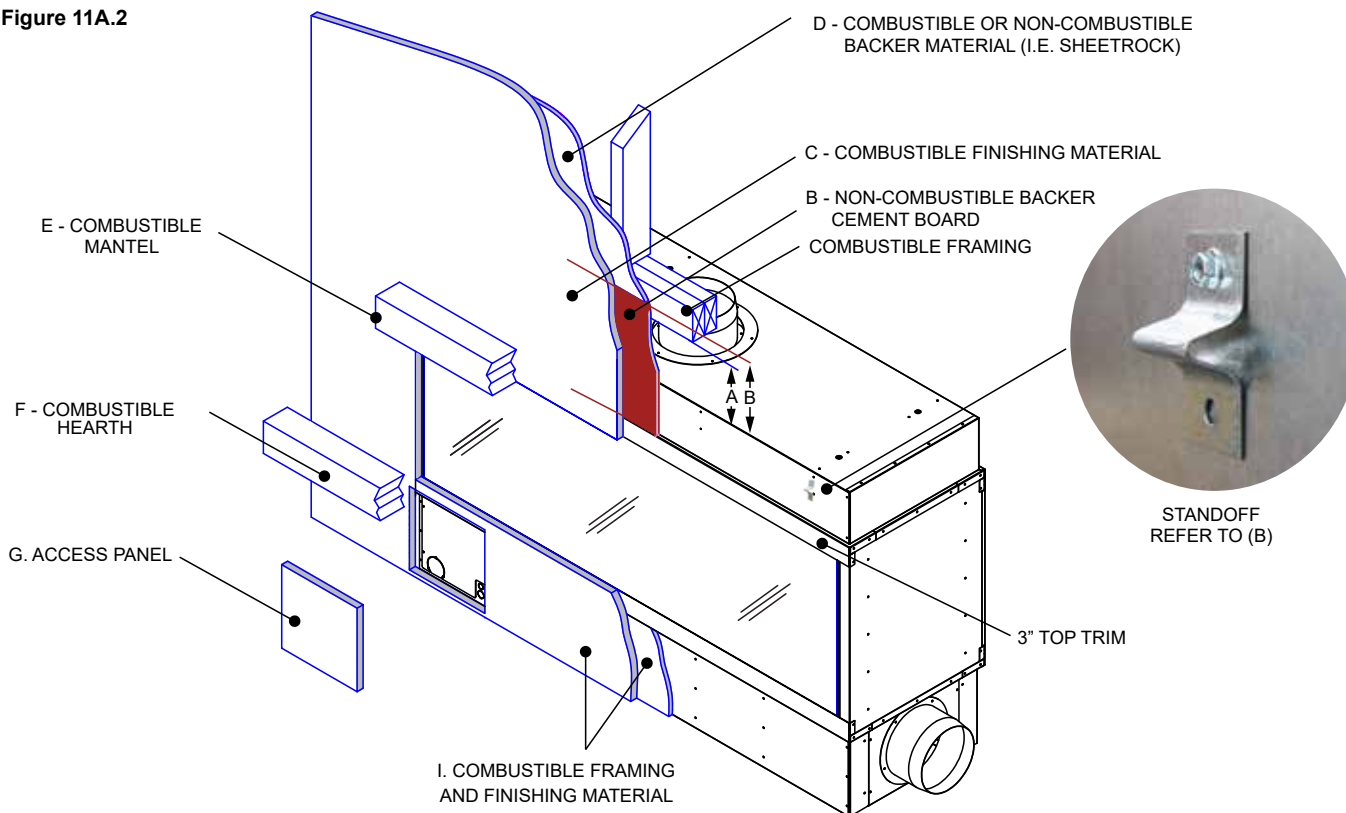


**NOTE: DO NOT PIERCE ANY OF THE BLACK PAINTED SURFACES WITH SCREWS, RIVETS, ETC. THIS INCLUDES THE 3" [76mm] BLACK TOP AND BOTTOM GLASS TRIM AND ANY PAINTED SIDES ADJACENT TO THE GLASS.**



**NOTE: REFER TO MANTEL REQUIREMENTS: NON-COMBUSTIBLE ZONE USING PROVIDED 1/2" [13mm] STANDOFFS FOR MORE INFORMATION.**

Figure 11A.2



inches [mm]

A. No combustible materials may be within 6 [152] of the top of the fireplace.

B. 1/2 [13] CLEARANCE TO COMBUSTIBLES ON SURFACE.

The fireplace ships with hood standoffs in place to ensure a 1/2 [13] clearance to combustibles is maintained on the surface. See Figure 10A.1. If the standoffs are removed, only non-combustible material can be installed against the surface of the fireplace such as a non-combustible backer cement board. 1/2 [13] minimum thickness must be used in the space\* between the top of the 3 [76] trim to the combustible framing the full width of the fireplace. The space\* includes a 7 [178] minimum above the top of the fireplace that is recommended for ease of attachment. \*= 15 [381] for 3'-7" units and 19 [483] for 8' units. See Figure 10A.2

C. Combustible material may cover the non-combustible area mentioned in B.

D. Combustible finishing materials allowed.

E. Combustible mantel may be placed above the top of the glass viewing area. There are no restrictions on mantel depth.

F. Combustible hearth may be placed below the bottom of the glass viewing area.

G. Flat covers will cover the components access. Gas and electric inlets are located behind this panel. There are four access panel options all located on the pilot side of the fireplace; front (shown above), side, back and inside behind the glass.

Please take consideration of which option will be used to access the components for service later during planning.

I. Combustible framing and finishing materials allowed.

## 12 - LIGHTING & SHUTDOWN

### FOR YOUR SAFETY - READ BEFORE LIGHTING



**STOP: IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT, CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.**

**DUE TO HIGH SURFACE TEMPERATURES, KEEP CHILDREN, CLOTHING AND FURNITURE AWAY.**

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air. It is important to make sure the termination cap remains unobstructed at all times from snow, ice, leaves or other debris.

- This fireplace is equipped with an ignition device which automatically lights the pilot and main burner. The pilot and burner light automatically with the wall switch. **DO NOT** try to light the pilot by hand. Before lighting this fireplace, follow these instructions exactly.
- **BEFORE LIGHTING**, smell all around the appliance for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- 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 which has been under water.

#### **WHAT TO DO IF YOU SMELL GAS:**

- Do not touch any electrical switches
- Do not try to light any appliance
- Do not use the 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

**DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE**



**NOTE: A PAINT SMELL WILL OCCUR DURING THE FIRST FEW HOURS OF BURNING.**



**NOTE: THIS FIREPLACE MAY PRODUCE NOISES OF VARYING DEGREE AS IT HEATS AND COOLS DUE TO METAL EXPANSION AND CONTRACTION. THIS IS NORMAL AND DOES NOT AFFECT THE PERFORMANCE OR LONGEVITY OF THE FIREPLACE.**

### A. LIGHTING THE FIREPLACE

To light the fireplace:

Activate the switch.

The fireplace has a pre and post timer, set at the factory for 30 seconds.

The powervent will start after the switch is activated.

The flame will not turn on for 30-60 seconds after switch is activated.

The powervent will run for 30 seconds after the fireplace has been shut off.

## 12 - LIGHTING & SHUTDOWN



**STOP!** Read safety information on previous page and front cover of this manual before continuing.



**NOTE:** This fireplace is equipped with an ignition device which automatically lights the pilot. **DO NOT** try to light the pilot by hand.

### B. IF THE FIREPLACE DOES NOT LIGHT

1. Turn off the fireplace at switch.
2. Turn off all electrical power to fireplace.
3. Wait five (5) minutes to allow any gas that may have accumulated inside firebox to escape. If you then smell gas, STOP! Follow safety information on front cover and on previous page of the installation manual. If you don't smell gas, go to next step.
4. Turn ON all electrical power to fireplace.
5. Turn fireplace on at switch.

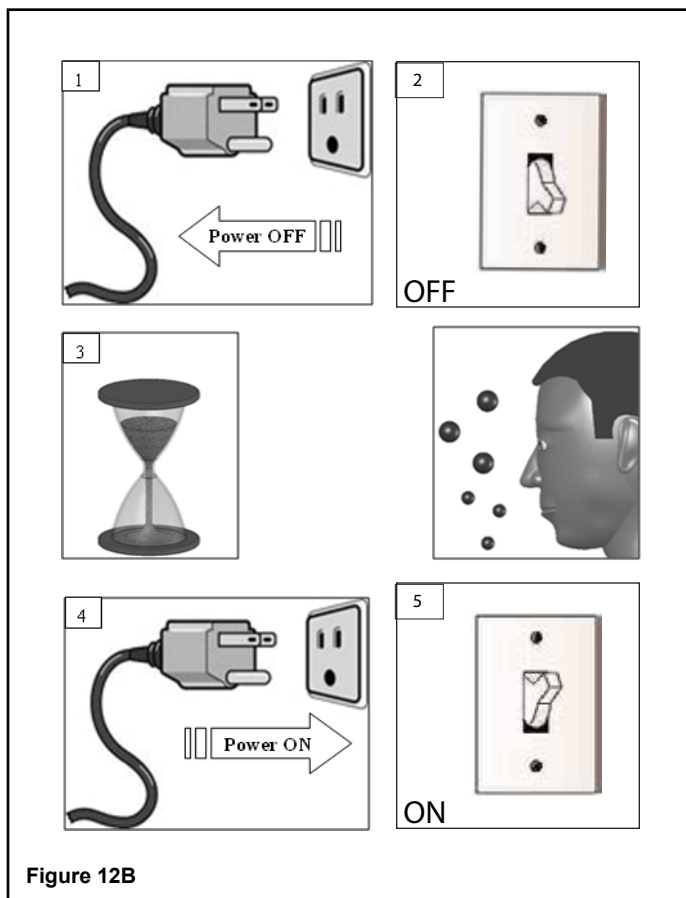


Figure 12B



**CAUTION:** If fireplace will not operate, follow instructions **TURNING OFF GAS TO FIREPLACE** and call your service technician or the gas supplier.



**NOTE:** When fireplace is initially lit, condensation may appear on the glass; this is normal in all gas fireplaces and will disappear after several minutes.



## 13 - PRESSURE TESTING



**NOTE:** The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at pressures in excess of ½ psi.



**NOTE:** The appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas line at test pressures equal to or less than ½ psi (3.5 kPa).

### INLET PRESSURE TEST

1. The valve has an Allen-plug on the inlet and outlet.
2. Install a barb fitting on the tap you want to measure.
3. Light the fireplace, check the pressure.
4. Turn off fireplace; reinstall plug.
5. Check for leaks.



**CAUTION:** A LOW PRESSURE READING CAN CAUSE DELAYED IGNITION



**NOTE:** If inlet pressure reading is too high or too low, contact the gas company. Only a qualified gas service technician should adjust incoming gas pressure.

## 14 - FINALIZING THE INSTALLATION

### A. INSTALLING THE MEDIA

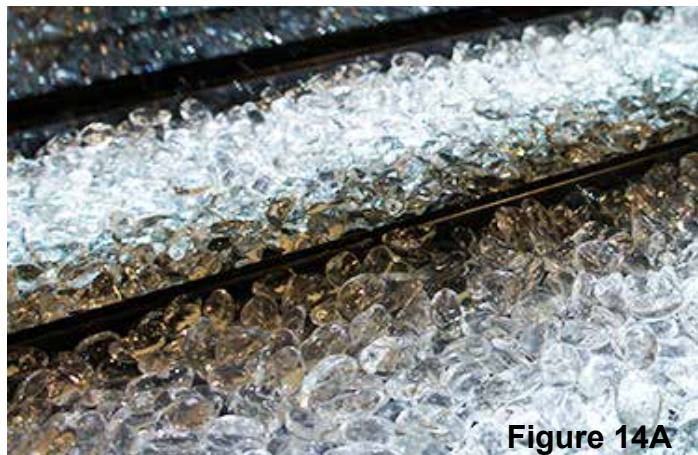
**Figure 14A**

Place the supplied glass media into the base tray.  
Cover the base evenly. Do not use more than the supplied amount.

Do not get any glass media into the pilot area; a hazardous condition could result!

You should be able to see the top line of the burner through the media.

**DO NOT COVER THE BURNERS;  
POOR FLAME APPEARANCE WILL RESULT.**



**Figure 14A**

**NOTE: DO NOT SUBSTITUTE THE SUPPLIED MEDIA WITH ANY OTHER KIND OF MEDIA WITHOUT WRITTEN APPROVAL OF Stellar by Heat&Glo.**

### B. FLAME APPEARANCE

Flame appearance is affected by several factors including altitude, venting configuration and fuel quality. Although the venturi setting has been factory set, adjustments may be necessary for optimal performance and visual aesthetics.

When fireplace is first lit, the flames will be blue. Flames will gradually turn yellowish-orange during first 15 minutes of operation. If flames remain blue, or become dark orange with evidence of sooting (black tips), the burner tube venturi may need adjustment. Contact Stellar Hearth.

## 15 - MAINTENANCE

The appliance is required to be inspected at least once a year by a professional service person. The compartment below firebox (behind lower access panel) must be cleaned at least once a year, more frequent cleaning may be required due to excessive lint from carpeting, bedding materials, or other fibrous materials. It is imperative that the burner be cleaned once a year.

### VALVE AND ELECTRICAL ACCESS

There is an access panel under the floor of the firebox should more extensive service be needed. Remove the inner and outer glass panels. Remove the glass media on the end with the pilot. The end floor lifts out; remove the screws and lift it out. If the LED's are mounted on a "U" shaped steel bracket, loosen the bracket and flip the LED's over the burner. There is a panel covering the valve area. Remove the screws and lift the panel up and out to expose the valve area.



**NOTE:** INSTALLATION AND REPAIR SHOULD BE DONE ONLY BY QUALIFIED SERVICE PERSON. THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND ANNUALLY BY A QUALIFIED SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIALS, ETC. IT IS IMPERATIVE THAT CONTROL COMPARTMENTS, BURNERS AND CIRCULATION AIR PASSAGEWAYS OF THE APPLIANCE BE KEPT CLEAN.

### A. VENT SYSTEM

- Annual examination of venting system by a qualified agency is required.
- IF VENT-AIR INTAKE SYSTEM IS DISASSEMBLED FOR ANY REASON, RE-INSTALL PER INSTRUCTIONS PROVIDED WITH INITIAL INSTALLATION.
- The flow of combustion air must not be obstructed.

### B. GLASS CLEANING & REPLACEMENT



**WARNING! RISK OF INJURY!** DO NOT remove glass until it is cooled to room temperature. Glass breakage could occur. See Section 6 for glass installation and removal instructions.

- Clean glass only when cool and only with non-abrasive cleansers.
- Do not operate this fireplace with glass/frame assembly removed, cracked or broken.
- The glass assembly shall only be replaced as a complete unit.
- Replacement of glass & frame assembly, must only be performed by a licensed or qualified service person.
- DO NOT SUBSTITUTE MATERIALS.
- Do not strike or slam glass door assembly.



**NOTE: IN CASE OF CHIPPED OR BROKEN GLASS**  
Due to the size and sensitivity of shipping the glass separately, it is best to have the replacement glass cut locally if needed. Refer to Section 16- Replacement Parts for more information.



**CAUTION:** LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. VERIFY PROPER OPERATION AFTER SERVICING. KEEP APPLIANCE AREA CLEAR OF COMBUSTIBLE MATERIALS, SUCH AS GASOLINE AND OTHER FLAMMABLE VAPORS AND LIQUIDS.

## 16 - REPLACEMENT PARTS

### IMPORTANT: REPLACEMENT PARTS

Parts must be ordered from a dealer or distributor.

Hearth & Home Technologies does not sell directly to consumers.

Provide model number and serial number when requesting service parts from your dealer or distributor.

### A. REPLACEMENT PARTS LIST

PART	PART NUMBER
Gas Valve - 3' - 7' Units	SV9501
Gas Valve - 8' Units	SV9601
Pilot Assembly	112-5000
Pilot Tube	16400-2851
Replacement Ignitor	B13M-1D643C
Orifice, NG #43	16400-2043
Orifice, Propane #55	16400-2055
Vacuum Switch	112-5003
Transformer, 24 VAC	112-5002
Timer Relay	112-5014
Solid State Relay	112-5009
Speed Control, 10 AMP	16400-4000

PART	QUANTITY
Ships standard with <b>Crystal Clear</b> unless otherwise specified. See your dealer for other glass media or natural stone options.	<u>Varies by model size</u> 3' = 40 lbs 4' = 50 lbs 5' = 60 lbs 6' = 70 lbs 7' = 80 lbs 8' = 90 lbs

PART	PART NUMBER
Natural Gas to Propane Gas Conversion Kit - All Sizes	NG2LP
Propane Gas to Natural Gas Conversion Kit - All Sizes	LP2NG

PART	PART NUMBER
Energex Chimney Fan used for 3' - 5' units	RS12
Energex Chimney Fan used for 6' - 8' units	RS14
Energex In-line Chimney Fan used for 3' - 5' units	RSIF160
Energex In-line Chimney Fan used for 6' - 8' units	RSIF180

PART	PART NUMBER
8 Inch Exhaust Collar - 3'-5' Units	16400-1450
10 Inch Intake/Exhaust Collar - 6'-7' Units	16400-1550
12 Inch Intake Collar - 8' Units	16800-1550
LED Controller	16400-1901
LED Remote Control	16400-1901R
LED Transformer, 12VDC	16400-1900
Switch, 15 Amp Toggle	16400-3013
2-Gang Electrical Box	16400-3014
White Nylon 2-Gang Plate	16400-3015
Suction Cup	675-9605
8 Inch Powervent Chimney Collar	117-001
10 Inch Powervent Chimney Collar	117-002

PART	PART NUMBER
Replacement Capacitor - RS12	601.0400.0064
Replacement Capacitor - RS14	604.0400.0064
Replacement Capacitor - RSIF160	604.0600.0064
Replacement Capacitor -RSIF180	604.0800.0064

## 16 - REPLACEMENT PARTS

### B. GLASS SIZE AND SPECIFICATIONS - FRONT (LONG PANEL)

#### NOTE: IN CASE OF CHIPPED OR BROKEN GLASS

Due to the size and sensitivity of shipping the glass separately, it is best to have the replacement glass cut locally if needed using the specifications listed here or have your local dealer assist you with contacting Stellar by Heat&Glo directly for more information.

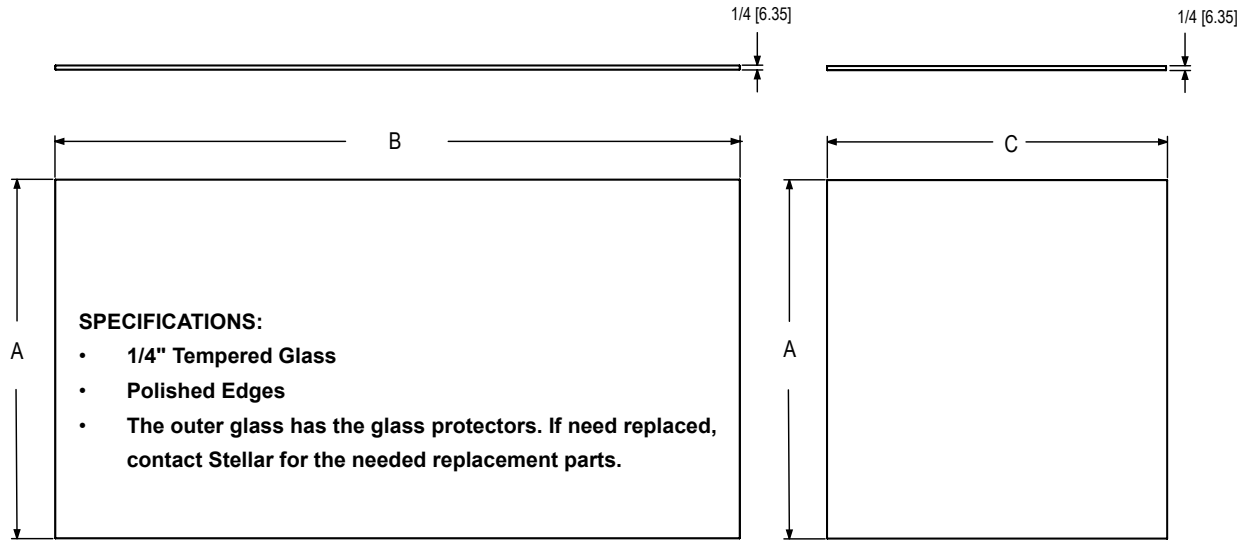


Figure 16B

MODEL	LONG - FRONT PANELS				SHORT - END PANEL			
	B.	QTY	B.	QTY	C.	QTY	C.	QTY
	OUTER WIDTH		INNER WIDTH		OUTER WIDTH		INNER WIDTH	
3'	39-1/4 [997]	2	37-1/16 [941]	2	23-5/16 [592]	1	18-15/16 [481]	1
4'	51-1/4 [1,302]	2	49-1/16 [1,246]	2	23-5/16 [592]	1	18-15/16 [481]	1
5'	63-1/4 [1,607]	2	61-1/16 [1,551]	2	23-5/16 [592]	1	18-15/16 [481]	1
6'	75-1/4 [1,911]	2	73-1/16 [1856]	2	23-5/16 [592]	1	18-15/16 [481]	1
7'	87-1/4 [2,216]	2	85-1/6 [2,161]	2	23-5/16 [592]	1	18-15/16 [481]	1
8'	99-1/4 [2,521]	2	97-1/16 [2,465]	2	23-5/16 [592]	1	18-15/16 [481]	1

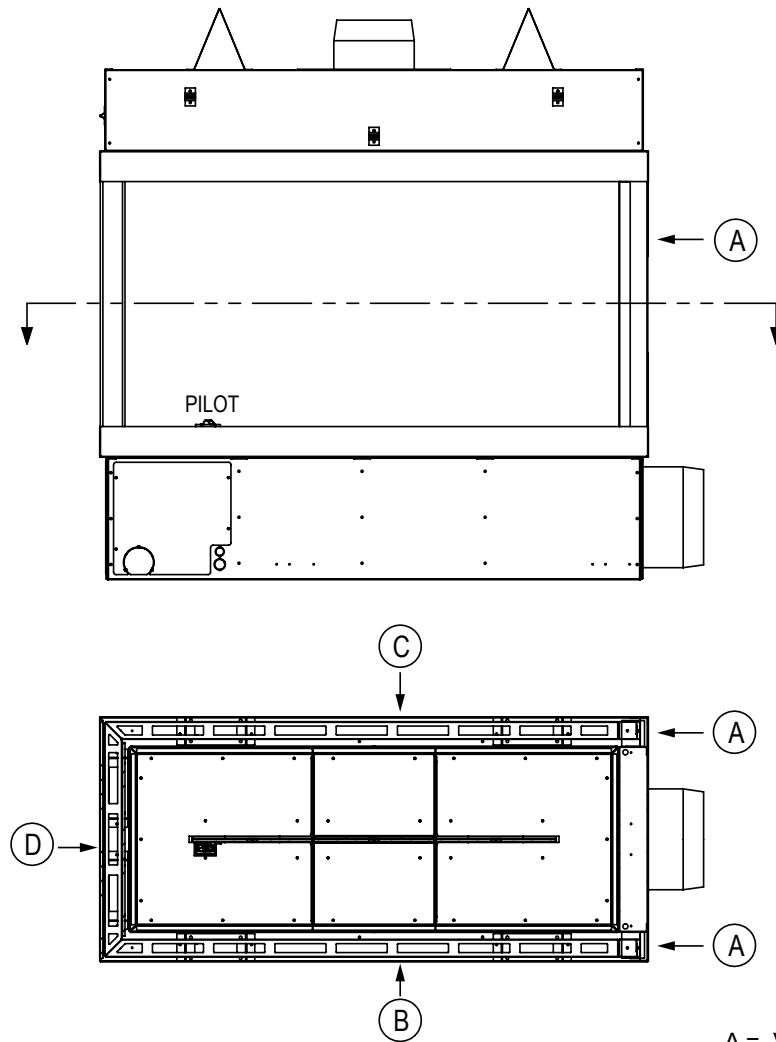
INNER & OUTER GLASS BOTH	
Model Height	A. HEIGHT
20"	21-5/8 [549]
24"	25-5/8 [651]
30"	31-5/8 [803]
36"	37-5/8 [956]
48"	49-5/8 [1,260]
60"	61-5/8 [1,565]

inches [mm]

→ Figure 16B

# 16- REPLACEMENT PARTS

## C. GLASS TRIM PIECES IDENTIFICATION



A = Vertical Trim Pieces  
 B = Horizontal Trim Piece - Right Side  
 C = Horizontal Trim Piece - Left Side  
 D = Horizontal Trim Piece - End

Figure 16.C

Model Height	A. Vertical Trim		Model Height	Horizontal Trim Pieces B. RIGHT SIDE		Horizontal Trim Pieces C. LEFT SIDE		Horizontal Trim Pieces D. Between Glass - End	
				Looking At From The Short End Of Fireplace					
	Part #	Qty		Part #	Qty	PART #	Qty	Part #	Qty
3PR-20GL	SRV16400-1433	2	3'	SRV16300-1344	1	SRV16300-1244	1	SRV16400-1045	1
3PR-24GL	SRV16400-1033	2	4'	SRV16400-1344	1	SRV16400-1244	1	SRV16400-1045	1
3PR-30GL	SRV16400-1633	2	5'	SRV16500-1344	1	SRV16500-1244	1	SRV16400-1045	1
3PR-36GL	SRV16400-1833	2	6'	SRV16600-1344	1	SRV16600-1244	1	SRV16400-1045	1
3PR-48GL	SRV16400-1533	2	7'	SRV16700-1344	1	SRV16700-1244	1	SRV16400-1045	1
3PR-60GL	SRV16400-1933	2	8'	SRV16800-1344	1	SRV16800-1244	1	SRV16400-1045	1
8PR-60GL	SRV16400-1933	2							

## 17 - SERVICE & MAINTENANCE HISTORY

[illegible]

➔ **Figure 17**

# TROUBLE SHOOTING

## Turn on Stellar fireplace

For new installations, double and triple check that the wiring is correct. Fireplace must be wired exactly as noted in the manual.

Fireplace will attempt to light two times. Then it will lock out for 5 minutes. Power must be cycled to release from lock mode before 5 minutes

When power is applied to the fireplace, the green light on the timer relay will be lit. It does not matter if the switch is 'ON' or 'OFF'. When main flame switch is flipped 'ON', red light on timer will blink for 30 seconds, then go solid red.

Do not wire a switch into the main power supply (5&6) for turning the flames on and off. Switch must be looped between 3 & 4.

Check the gas supply. Purge the line if need be.

Verify correct circuit/power supply

If power is present here, check power vent. The power vent uses a run capacitor, and it must be wired to the neutral line. Without the capacitor, the power vent will not work. Without correct wiring, the power vent will not work. Voltage across black and white must be the same as terminals #7 and #8

Check for power to the timer relay. Touch one side of your multimeter to a neutral wire (6 or 7) and the other to the captive screws in the timer relay. You should see 24 or 120vac depending on the screw being tested. After the timer period the relay coil is energized, and power is sent to the speed control. If power is going to the speed control but not going from speed control to terminal #8, then speed control may be faulty.

Check power at #7 & #8. It should be between 50-120vac

No power present

Remove from power, then check that wiring is connected cleanly and snugly throughout. If no loose connections are found, call Stellar by Heat & Glo for troubleshooting help.

Transformer outputting 24 VAC

Check the Transformer output voltage at #9 & #10

A. Does the igniter glow?

No

B. Is there power to the fireplace at terminals #5 & #6?

Yes

C. Does the power vent turn on immediately?

Yes

D. Is there power to the gas valve? Check for 24VAC on wire harness connected to "CONTROL"

No

Does it turn on after 30 second delay?

No

No

No

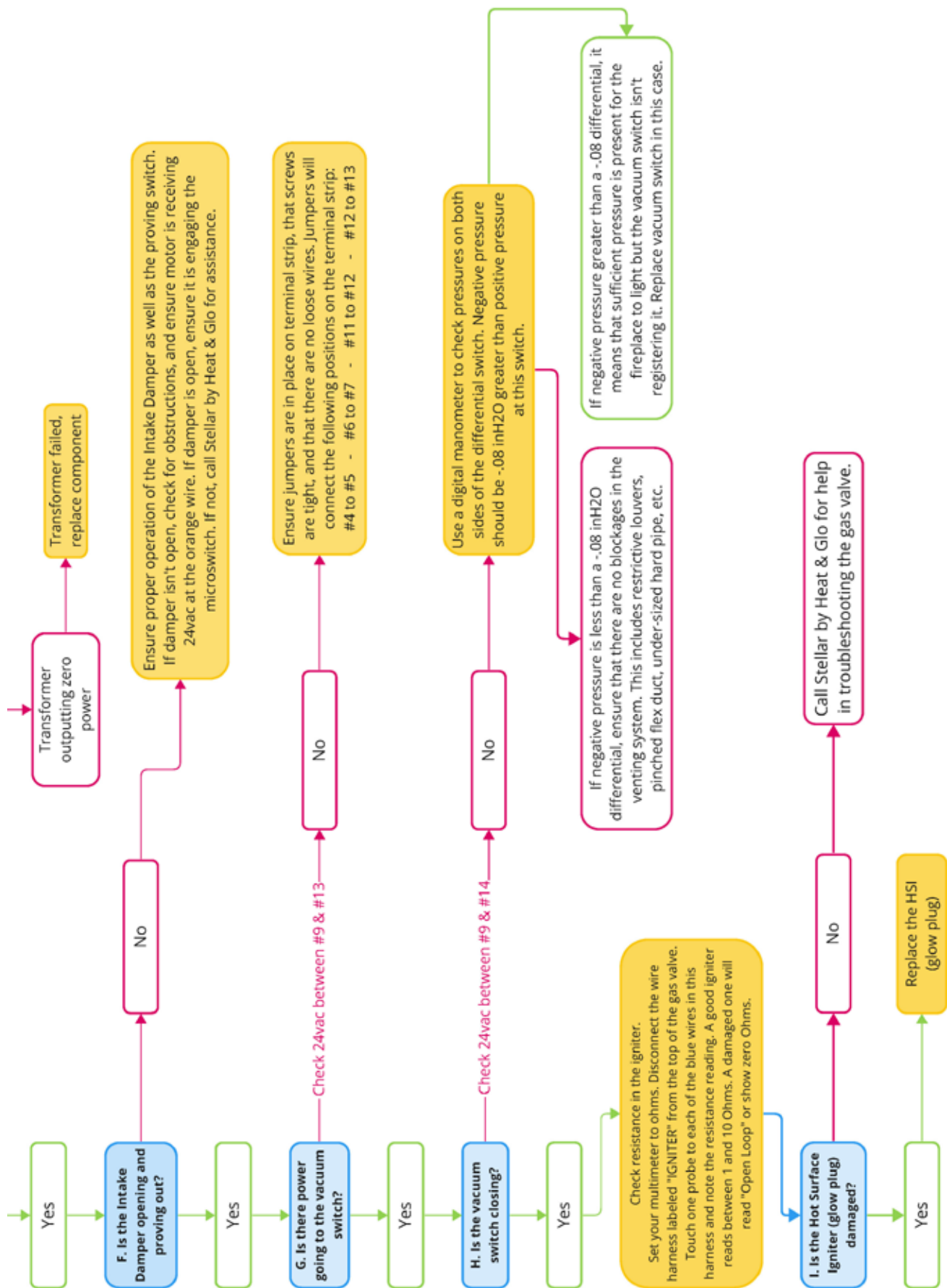
Check the Transformer output voltage at #9 & #10

Transformer outputting 24 VAC

Check power at #7 & #8. It should be between 50-120vac

No power present

Remove from power, then check that wiring is connected cleanly and snugly throughout. If no loose connections are found, call Stellar by Heat & Glo for troubleshooting help.





## **3 in 1 LED Controller ( 2.4G )**

### **Instruction Manual**

## **Contents**

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<u>Set up output mode</u> .....	3
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<u>2.4G RF remote control instruction</u> .....	4-7
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<u>Dynamic mode table selection</u> .....	5
<u>PWM frequency switching</u> .....	6
<u>“Do Not Disturb” mode is activated and shut down</u> .....	7
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## Product features

Made by new 2.4GHz wireless transmitting technology with low power consumption, strong ability to build network automatically and anti-interference. with MiBoxer 2.4GHz gateway to get wireless dimming color, remote control, timing control, group control, music rhythm function. Support 2.4G RF remote control.



16 Millions of colors to choose



Color temperature adjustable



Dim brightness / Saturation



2.4G RF wireless transmission technology



Remote control distance 30m



Auto-transmitting & Synchronization



Support Smartphone app control (2.4GHz gateway is needed)



Support third party voice control (2.4GHz gateway is needed)



DMX512 controllable  
(Only for RGB+CCT output mode DMX512 LED transmitter is needed)

## Set up output mode

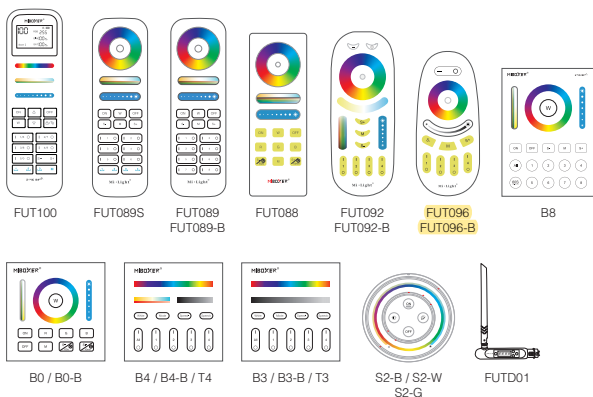
Set up correct output mode based on the feature of lights

Setting method: Press "SET" button continuously to switch output mode (attention: it will log out without operation within 3 seconds)

Output mode sheet ( confirm output mode based on color of indicator)

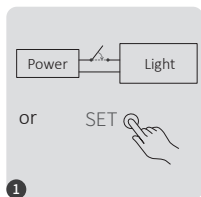
Indicator color	Red Light	Green Light	Blue Light
Output	RGB	RGBW	RGB+CCT

## Compatible with these 2.4G RF remote controls (Purchased separately)



## 2.4G RF Remote control instruction

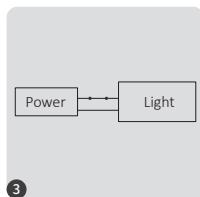
### 1). Linking Code Instructions



Power off 10 seconds and power on again or short press "SET" one time.



Short press " I " button 3 times within 3 seconds.

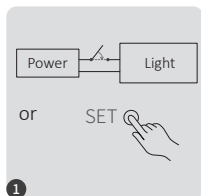


Lights blink 3 times slowly means linking is done successfully.



Linking failed if light is not blinking slowly, Please follow above steps again.  
(Note: Light that have linked can't link again)

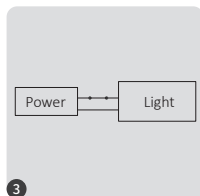
### 2). Unlinking Code Instructions



Power off 10 seconds and power on again or short press "SET" one time.



Short press " I " button 5 times within 3 seconds.



Lights blink 10 times quickly means unlinking is done successfully.



Unlinking failed if light is not blinking quickly, Please follow above steps again.  
(Note: Light haven't linked that don't need to unlink)

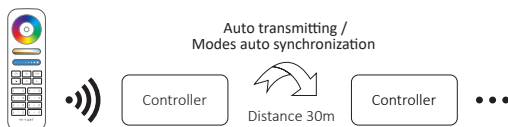
### 3). Auto transmitting & Synchronization (only for remote control)

#### Remote signal auto transmitting

One light can transmit the signals from the remote control to another light within 30m, as long as there is a light within 30m, the remote control distance can be limitless.

#### Dynamic modes auto synchronization

Multi lights can synchronize if they are in same dynamic mode and linked with same remote (distance between each light is within 30m)



### 4). Dynamic mode table selection (only for remote control)

#### Select dynamic mode table 1:

While the light is in static mode, short press “S+” button 5 times quickly until blue light flashes 3 times slowly, static mode is activated successfully.

#### Select dynamic mode table 2:

While the light is in static mode, short press “S-” button 5 times quickly until yellow light flashes 3 times slowly, static mode is activated successfully.

### Dynamic mode table 1 (default)

Number	Dynamic Mode	Brightness / Saturation / Speed
1	Mardi Gras	Adjustable
2	Automatic color change	
3	Sam	
4	Gemstone	
5	Twilight	
6	American	
7	Fat Tuesday	
8	Party	
9	Slow Color Splash	

## Dynamic mode table 2 (need to switch manually)

Number	Dynamic Mode	Brightness / Saturation / Speed
1	Seven colors gradual change	Adjustable
2	White light Gradual change	
3	RGB gradual change	
4	Seven colors jump to change	
5	Jump to change randomly	
6	Red light gradual change +Flash 3 times	
7	Green light gradual change +Flash 3 times	
8	Blue light gradual change +Flash 3 times	
9	White light gradual change +Flash 3 times	

## 5). PWM high frequency / low frequency switching (only for remote control)

### Switch to high frequency (16KHz):

Press **"OFF"** button 1 time within three seconds and press **"ON"** button 5 times, Activated successfully once led light flashes 2 times quickly.

### Switch to low frequency (250Hz):

Press **"ON"** button 1 time within three seconds and press **"OFF"** button 5 times, Activated successfully once led light flashes 2 times slowly.

## 6). "Do Not Disturb" mode is activated and shut down (default activated)

Turn on "Do Not Disturb" mode (wide using in the area which have power failure frequently to save energy)

### 2.4G RF Remote turn on and turn off instruction

#### Turn on "Do Not Disturb" mode:

Press "OFF" button three times within three seconds and press "ON" button three times, Activated successfully once led light flashes four times quickly.

#### **Attention:** Do not disturb mode is activated

1. When the light is OFF status (For example: Use app or remote to turn off light)  
The light is OFF status once you turn off power and turn on again.

**(User must turn off and turn on power twice times to activate light or use APP / remote to activate light)**

2. When the light is ON status  
The light is ON status once you turn off and turn on power one time.

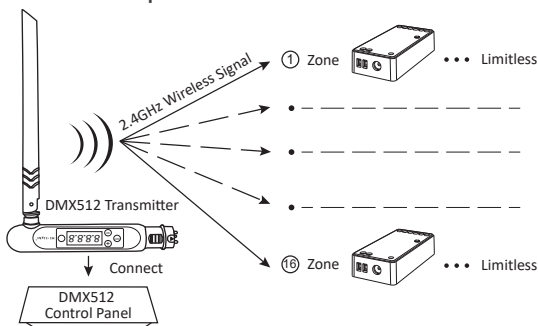
#### Turn off "Do Not Disturb" mode:

Press "ON" button three times within three seconds and press "OFF" button three times, closed successfully once led light flashes four times slowly.

**Attention:** The light will be always "ON" status if you turn on and turn off power once user closed "Do Not Disturb" mode.

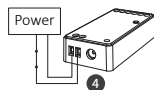
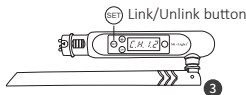
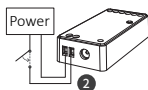
## DMX512 LED Transmitter Control (Purchased separately)

Only for RGB+CCT output mode



### DMX512 LED Transmitter Link/Unlink

- 1 Follow instruction of DMX512 transmitter (FUTD01), Choose the zone for the light by pressing “+” or “-” (e.g. “CH12” means zone 12)



#### Link

The controller is powered off for 10 seconds and then powered on, or press “SET” button 1 time.

Short press “SET” 3 times within 3 seconds while the indicator of controller is ON

Link is done once indicator of controller flashes 3 times slowly

#### Unlink

The controller is powered off for 10 seconds and then powered on, or press “SET” button 1 time.

Short press “SET” 5 times within 3 seconds while the indicator of controller is ON

Unlink is done once indicator of controller flashes 10 times quickly



If the link or unlink failed, please follow the above steps again.



## Attention

1. Please turn off power supply before installation.
2. Please ensure input voltage to be same as requirements from device.
3. Don't disassemble device if you are not expert, otherwise it will damage it.
4. Please do not use the light in the place with widely range metal area or strong electromagnetic wave nearby, otherwise, the remote distance will be seriously affected.



Scan QR code to watch 2.4GHz series video instruction Or  
enter into following link directly

[https://miboxer.com/light/video/1pc\\_remote.html](https://miboxer.com/light/video/1pc_remote.html)



Made in China

**Hearth & Home Technologies LLC**  
**LIMITED LIFETIME WARRANTY**

Hearth & Home Technologies LLC (“HHT”) extends the following warranty for HHT gas, wood, pellet and electric hearth appliances (each a “Product” and collectively, the “Product(s)”) and certain component parts set forth in the table below (“Component Part(s)”) that are purchased from a HHT authorized dealer or distributor.

**WARRANTY COVERAGE:**

HHT warrants that the Products and their Component Parts will be free from defects in materials and workmanship for the applicable period of Warranty coverage set forth in the table below (“Warranty Period”). If a Product or Component Parts are found to be defective in materials or workmanship during the applicable Warranty Period, HHT will, at its option, repair the applicable Component Part(s), replace the applicable Component Part(s), or refund the purchase price of the applicable Product(s). The maximum amount recoverable under this Warranty is limited to the purchase price of the Product. This Warranty is transferable from the original purchaser to subsequent owners, but the Warranty Period will not be extended in duration or expanded in coverage for any such transfer. This Warranty is subject to conditions, exclusions, and limitations as described below.

**WARRANTY PERIOD:**

Warranty coverage begins at the date of installation. In the case of new home constructions, Warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the Product(s) by an independent, authorized HHT dealer or distributor, whichever occurs earlier. However, the Warranty coverage shall commence no later than 24 months following the date of Product shipment from HHT, regardless of the installation or occupancy date.

The term “Lifetime” in the table below is defined as: 20 years from the beginning date of warranty coverage for gas appliances, 10 years from the beginning date of warranty coverage for wood and pellet appliances, and 5 years from the beginning of warranty coverage for standalone gas log sets. These time periods reflect the minimum expected useful lives of the designated Component Parts under normal operating conditions.

Warranty Period		HHT Manufactured Appliances and Venting					
Component Parts	Labor	Gas	Pellet	Wood	Electric	Venting	Component Parts Covered by this Warranty
1 Year		X	X	X		X	All parts including handles, external enameled components and other material except as covered by Warranty Conditions, Warranty Exclusions, and Warranty Limitations listed
2 Years					X		All parts except as covered by Warranty Conditions, Warranty Exclusions, and Warranty Limitations listed
2 years			X	X			Igniters, Auger Motors, Electronic Components, and Glass
		X					Electrical components limited to modules, remotes/wall switches, valves, pilots, blowers, junction boxes, wire harnesses, transformers and lights (excluding light bulbs)
		X		X			Molded Refractory Panels, Glass Liners
3 years			X				Firepots, burnpots, mechanical feeders/auger assemblies
5 years		X					Burners and logs for standalone gas log sets (Vented and Vent Free gas log sets not sold as components of the fireplace or stove)
5 years	1 year	X					Vent Free Burners and Vent Free Log components of HHT manufactured fireplaces or stoves
			X	X			Castings, Medallions and Baffles
6 years	3 years			X			Catalysts
7 years	3 years		X	X			Manifold tubes, HHT Chimney and Terminations
10 years	1 year	X					Burners, logs and refractory components of HHT manufactured fireplaces or stoves
Limited Lifetime	3 years	X	X	X			Firebox and heat exchanger, FlexBurn® System (engine, inner cover, access cover and fireback)
1 Year	None	X	X	X	X	X	All purchased replacement parts

## **WARRANTY CONDITIONS:**

- Because HHT cannot control the quality of any Products sold by unauthorized sellers, this Warranty only covers Products that are purchased through an HHT authorized dealer or distributor unless otherwise prohibited by law; a list of HHT authorized dealers is available on the HHT branded websites.
- This Warranty is only valid while the applicable Product remains at the site of original installation.
- This Warranty is only valid in the country in which the HHT authorized dealer or distributor that sold the applicable Product is authorized to sell applicable Product.
- Contact your installing distributor or dealer for Warranty service. If the installing dealer or distributor is unable to provide necessary parts, contact the nearest HHT authorized dealer or supplier. Additional service fees may apply if you are seeking Warranty service from a dealer other than the dealer from whom you originally purchased the applicable Product.
- No HHT consumer should bear cost of warranty service or costs incurred while servicing warranty claims (i.e., travel, gas, or mileage) when the service is performed within the terms of this Warranty. Check with your dealer or distributor in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this Warranty.

## **WARRANTY EXCLUSIONS:**

This Warranty does not cover the following:

- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur. This is not a flaw and is not covered under the Warranty.
- Damage to printed, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the Warranty Period are not covered. These parts include: paint, wood and pellet gaskets, firebricks, grates, flame guides, batteries and the discoloration of glass.
- Minor expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to this noise are not covered by this Warranty.
- Damages resulting from: (1) failure to install, operate, or maintain the applicable Product in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the applicable Product; (2) failure to install the applicable Product in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/incorrectly performed repairs; (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operation instructions; (7) installation or use of components not supplied with the applicable Product or any other components not expressly authorized and approved by HHT; (8) modification of the appliance not expressly authorized and approved by HHT in writing; and/or (9) interruptions or fluctuations of electrical power supply to the applicable Product.
- Non-HHT venting components, hearth connections or other accessories used in conjunction with the applicable Product.
- Any part of a pre-existing fireplace system in which an insert or a decorative gas applicable Product is installed.
- HHT's obligation under this Warranty does not extend to the Product's capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper Product for the application. Consideration must be given to the Product location and configuration, environmental conditions, insulation and air tightness of the structure.

### **This warranty is void if:**

- The applicable Product has been over-fired, operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, deformation/warping of interior cast iron structure or components, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The applicable Product is subjected to prolonged periods of dampness or condensation.
- There is any damage to the applicable Product due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

## **LIMITATIONS OF REMEDIES AND LIABILITY:**

- **EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. The owner's exclusive remedy and HHT's sole obligation under this Warranty or in contract, tort or otherwise, shall be limited to replacement of the Component Part(s), repair of the Component Part(s), or refund of the original purchase price of the applicable Product(s), as specified above; provided, however, that (i) if HHT is unable to provide replacement of the Component Part(s) and repair of the Component Part(s) is not commercially practicable or cannot be timely made, or (ii) the customer is willing to accept a refund of the purchase price of the applicable Product(s), HHT may discharge all such obligations by refunding the purchase price of the applicable Product. In no event will HHT be liable for any incidental or consequential damages caused by defects in the applicable Product. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights and you may also have other rights which vary from State to State. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE FOR THE APPLICABLE PRODUCT. Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.**

Available on the  
**App Store**



ANDROID APP ON  
**Google play**



# ELECTRONIC IGNITION FIRE PIT INSERT



TOR-PENTA25EI



TOR-36X14SSEI

## El Series On/Off Models

### Installation & Operation Instructions

*Install Confidence.™*



**FIRE INSPIRED™**

Hearth Products Controls  
**Fire-inspired since 1975.**

860-EI ON/OFF



C US





**This is a Safety Alert Symbol**

When you see this symbol on the fire pit insert, or in this manual, look for one of the following signal word panels alerting you to the potential for personal injury, death, or major property damage.



**WARNING: For Outdoor Use Only.**

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



**WARNING**

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

**An LP-cylinder not connected for use shall not be stored in the vicinity of this or any other appliance.**



**DANGER**

**FIRE OR EXPLOSION HAZARD**

**If you smell gas:**

- **Shut off gas to the appliance.**
- **Extinguish an open flame.**
- **If odor continues, leave the area immediately.**
- **After leaving the area, call your gas supplier or fire department.**

**Failure to follow these instructions could result in fire or explosion, which could cause property damage, personal injury, or death.**



**DANGER**

**CARBON MONOXIDE HAZARD**

**This appliance can produce carbon monoxide which has no odor.**

**Using it in an enclosed space can kill you.**

**Never use this appliance in an enclosed space such as a camper, tent, car, or home.**



**INSTALLER: Leave this manual with the appliance.**

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



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

# Table of Contents

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# 1 Important Safety Information

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- Hearth Products Controls Company recommends that our products are installed by professionals locally licensed by the authority having jurisdiction in gas piping. All installation instructions must be followed to ensure proper performance and safety. Hearth Products Controls Company assumes no responsibility for problems relating to the installation.
- To qualify for warranty, all instructions must be strictly followed. Otherwise, warranty may be void. Never alter product or configuration in any way.
- Annual servicing should be handled by professionals certified in the US by the National Fireplace Institute (NFI) as NFI Gas Specialists or in Canada by WETT (Wood Energy Technical Training).
- It is the installer's responsibility to ensure a safe installation and to educate the end-user regarding the features, safety recommendations and proper operation of this product.
- Please reference page 1 for all warnings.

## **INSTALLER:**

Leave this manual with the appliance.

## **END USER:**

Retain this manual for future reference.

## **SELECT MODELS**

**Certified to**

**ANSI Z21.97-2014**

**CSA 2.41-2014**



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## Technical Support

For information and support contact your Hearth Products Controls dealer.



# 1 Important Safety Information

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## Symbol Legend



### This is a Safety Alert Symbol

When you see this symbol on the fire pit insert, or in this manual, look for one of the following signal word panels alerting you to the potential for personal injury, death, or major property damage.

**IMPORTANT**

Necessary instructions



# 1 Important Safety Information

---

***Please reference page 1 for all warnings.***

## Important Safety Information for Installers

Leave this manual with the end-user and instruct them to retain it for future reference. Instructions and product updates are also available at **www.hpcfire.com** under the Support tab.

Installers must carefully follow the instructions in this manual to prevent personal injury or property loss. These instructions contain information critical to the safe installation and operation of the fire pit.

- Instructions are updated as needed. It is the responsibility of the installers to check for product updates and installation manual updates at **www.hpcfire.com/ support.html** prior to installation.
- It is the responsibility of the installer to follow:
  - The National Fuel Gas Code, ANSI Z223.1/NFPA 54 or International Fuel Gas Code.
  - Natural Gas and Propane Installation Code CSA B149.1 or CSA B149.2.
  - The National Electrical Code, ANSI/NFPA 70. In Canada, Canadian Electrical Code CSA22.1.
  - Local codes
- **Control options:** Use of wall switch is required for safety shutoff with optional remote control (#578-C), automatic shutoff timer or whole house system.

## Gas

- Only use the gas/fuel type specified for this fire pit, refer to the label on the fire pit control box. Never use an alternative fuel to include biofuel, ethanol, lighter fluid, or any other fuel.
- Gas pressure and type should be checked prior to use and installation.
  - **Natural Gas Fire Pit:** Supply Pressure: Minimum: 3.5 inches W.C.; Maximum: 7.0 inches W.C.
  - **LP Gas:** Supply Pressure: Minimum: 8.0 inches W.C.; Maximum: 11.0 inches W.C.

### IMPORTANT

**If pressure is low, this will reduce flame height on HIGH setting, resulting in little to no flame variation.**

# 1 Important Safety Information

---

- If not using supplied flex line, ensure any flex line that may be used from the permanent main fuel supply to the product is rated to the stated max BTU of the product and certified to ANSI Z21.75\*CSA 6.27.
- The EI Series is not for use with small LP Tanks and must utilize permanent fixed piping for fuel supply.

## Electrical

- Verify correct 120 VAC – 1 amp or 24, 12 VAC – 4-amp power supply. Only use the type specified for this fire pit. Refer to the label on the fire pit control box. All electronic applications should utilize a GFCI-protected circuit.
  - If removing power cord plug and hard wiring within junction box, use only a certified Electrician and must follow the National Electrical Code (NEC), NFPA 70 and all local codes.

### IMPORTANT

#### **24 and 12 VAC powered fire pit inserts:**

- Fire Pit will not perform properly if power supply rating is below 100W, or wire size is too small.
- HPC highly recommends using our HPC/Sebco 24 and 12 VAC 100W power supply series
  - 24 VACS (311-PS1, 311-PS3, 311-PS5 Models)
  - 12 VACS (313-PS1, 313-PS3, 313-PS5 Models)

A Class II 24 and 12 VACS, 4-amp, 100 W transformer must be used to power the fire pit and be able to be switched on and off from a remote location to allow for easy access or emergency.

- Wire sizing: Wire lengths 75 ft or less: 14 gauge
- Wire lengths 76 ft or more: 12 gauge

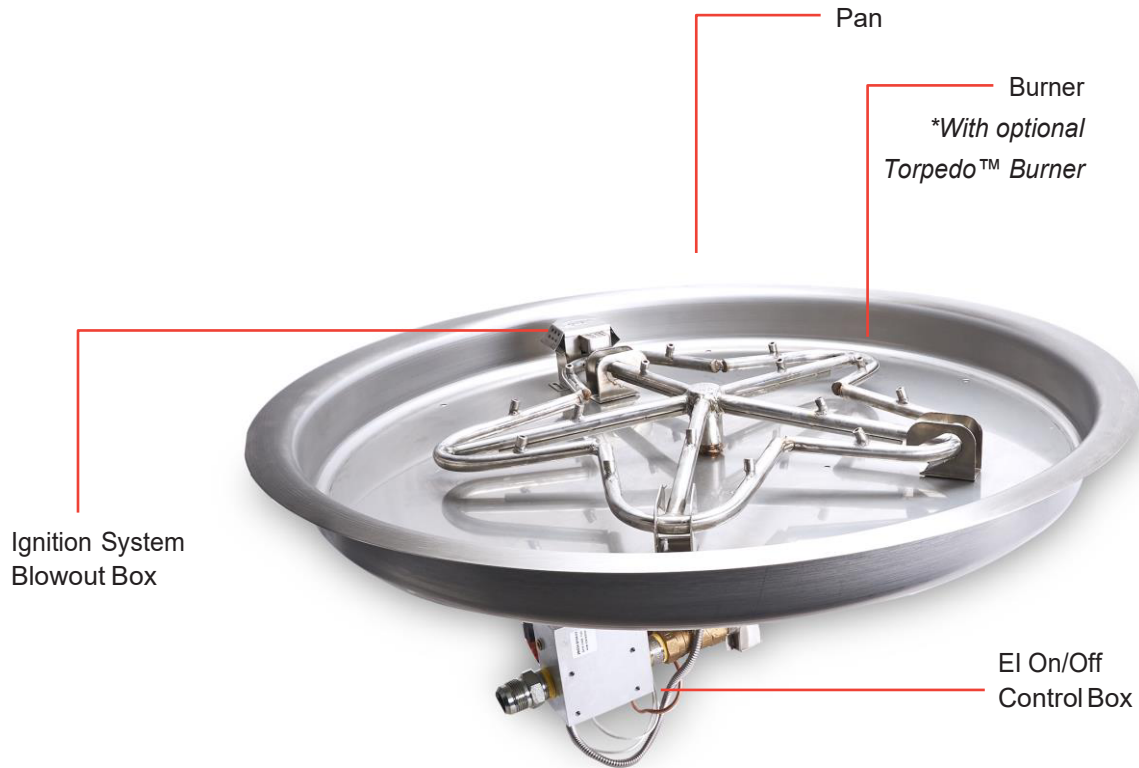
## Important Safety Information for End-Users

- Never leave an operating fire pit unattended or with someone not familiar with its operation or emergency shut-off locations.
- Both children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns and clothing ignition.
- Young children should be carefully supervised when they are in fire pit.
- Keep the appliance area clear and free from combustible materials, gasoline, and other flammable vapors and liquids.

## 2 Product Features and Parts List

---

### Product Features



### Parts List

- FirePit Insert
- Gas Input Flex Line – 24"
- Installation and Operation Instructions

### 3 Selecting the Fire Pit Location

**NOTE:** All fire pits and systems are designed and intended for outdoor use only.

#### IMPORTANT

It is recommended that material such as granite, marble or other dense stone be kept away from heat and especially flame due to risk of cracking. HPC is not responsible for damage resulting from failure to follow these recommendations.

- Select a location that
  - ensures above-grade installation of the fire pit.
  - offers good drainage.
  - allows easy access for installation and maintenance of the fire pit.
  - provides sufficient horizontal room to enjoy the fire pit while allowing a safe distance from the heat and flame.

#### IMPORTANT

**Deck installation —** If installing fire pit on a wood or composite deck, it is required to use the Deck Insulation Kit(s) and locally bought paver stones. Kit includes basalt material and instructions.

**#FPI-DECK39SQ; #FPI-DECK20SQ. Also refer to drawing- Deck Insulation Kit- Install.**

- Fire pits create extremely elevated temperatures. For clearances refer to table 3.1. Clothing or other flammable materials should not be placed on or near fire pit.

### Clearances around Fire Pit

Fire Pit Clearances	Up to 200k BTU	201k ~ 400k BTU
Under Valve Box when applicable for drainage	2"	2"
Sides surrounding fire pit from structure or combustibles	36" (12" for noncombustible)	48" (24" for noncombustible)
Overhead clearance above product	84"	Non-combustible screen only

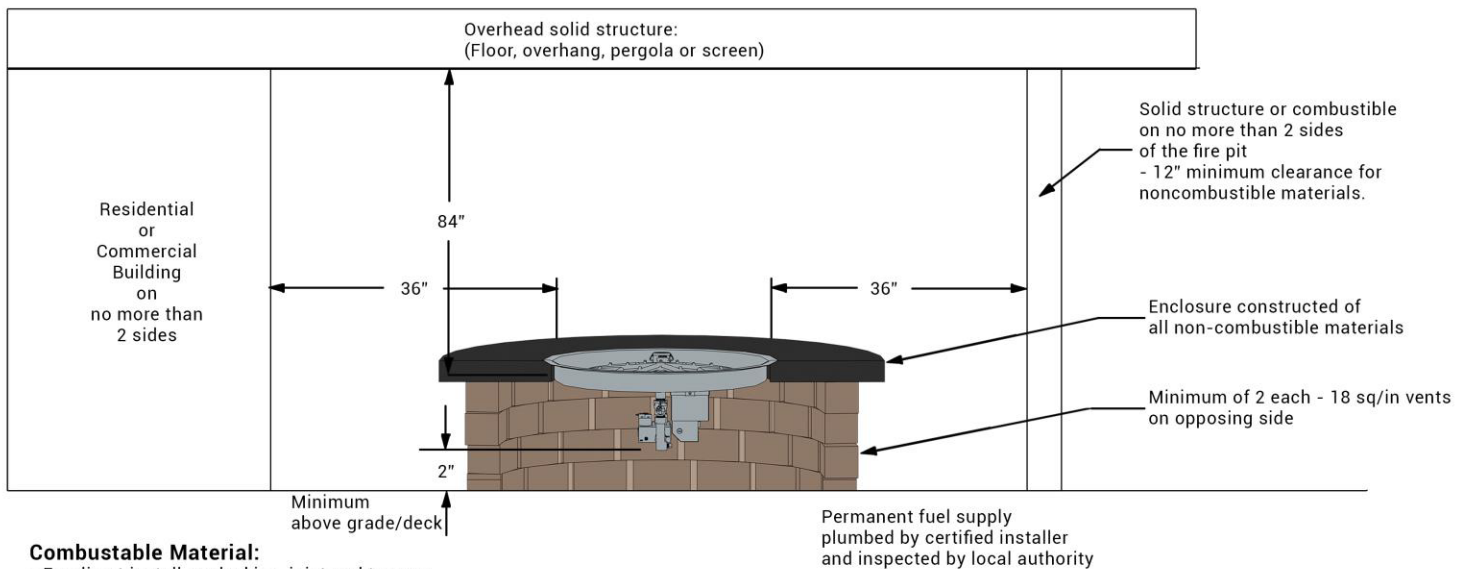
Table 3.1 – Fire Pit Clearances

## 4 Overhead Structures and Sidewall Clearance Requirements

It is important to review the clearance requirements below for any type of overhead structure such as pergola, roof, overhang, screens, arbor, etc. or a sidewall to ensure that the distances are met. Figures 4.1 and 4.2.

**Figure 1 - Up to 200k BTU  
For outdoor Use Only**

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



**Combustable Material:**

- For direct install on decking, joist and trusses see Deck InstallationKit Drawing and instructions


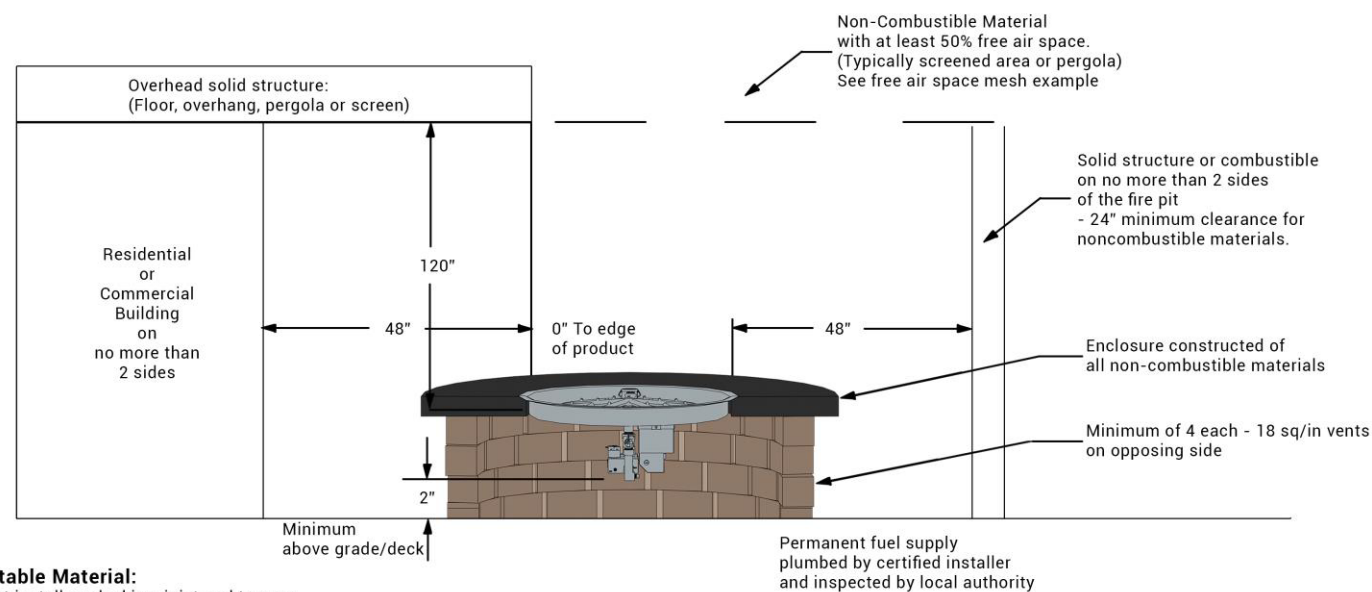
Diagram illustrates common clearance questions, Clearance from overhead structure Clearance from structure/combustible All items may or may not apply to your project Clearance's apply to any and all sides of the project. Read and follow all instructions and local codes	DRAWN	DATE	<b>Clearance's - Standard Fire Pit Up to 200k btu</b> 			
	CHECKED	8/18/2022				
	QA					
	MFG		SIZE <b>A</b>	FSCM NO.	DWG NO	REV
	APPROVED		SCALE		SHEET	

Table 4.1 – Clearances for standard fire pit up to 200k BTU

# 4 Overhead Structures and Sidewall Clearance Requirements

Figure 2 - 201k - 400k BTU  
For outdoor Use Only



**Combustable Material:**  
- For direct install on decking, joist and trusses see Deck InstallationKit Drawing and instructions

**Free Air Space Mesh Example**  
3:1 Scale of 20x20x.013

**Note:**  
-50% free air space minimum. HPC is not responsible for screen that melts  
-For non-combustible screening a 20x20x .013 wire mesh thickness or courser. (More open space)  
-For all other non-combustible covering an on-site estimate of free air space will be necessary

Diagram illustrates common clearance questions,  Clearance from overhead structure Clearance from structure/combustible  All items may or may not apply to your project Clearance's apply to any and all sides of the project. Read and follow all instructions and local codes	DRAWN	DATE 8/18/2022	Clearance's - Standard Fire Pit Up to 400k btu			
	CHECKED					
	QA					
	MFG		SIZE <b>A</b>	FSCM NO.	DWG NO	REV
	APPROVED		SCALE			SHEET

Table 4.2 – Clearances for standard fire pit up to 201k to 400k BTU



## 5 Fire Pit Enclosures Requirements

---

### Location and design

- The enclosure must be installed above-grade and allow for drainage to prevent water damage to fire pit.
- Refer to cut sheets on our website for important dimensional information for your fire pit. Visit [www.hpcfire.com](http://www.hpcfire.com)
- The fire pit assembly should be recessed a minimum of two inches from the top of the enclosure to protect flame from being blown out.
- It is recommended that material such as granite, marble or other dense stone be kept away from heat and especially flame due to risk of cracking. Manufacturer is not responsible for damage.
- The enclosure must be constructed on a stable surface and be level. HPC recommends the use of the installation collar (optional) that may be mortared into or sandwiched between layers of the enclosure.
- The weight of the fire pit must be supported by the pan and not by any control/valve box.
- HPC recommends that the pan lip is recessed on a trough (linear), and large round enclosures, Figure 5.1.

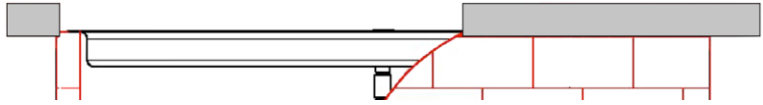


Figure 5.1 – Pan lip recessed on a trough.

**NOTE: HPC cannot guarantee the lip on all our products will be perfectly flat and will not warp due to heat.**

- There must be a minimum of 2 inches under the valve box for proper ventilation and drainage, see clearance drawings on page 9 and 10.
- The product must be accessible for service.

### Gas

- The supply line must have a gas shutoff on the exterior of the enclosure to allow for emergency shut off and maintenance. The gas shutoff should NOT be used to adjust flame height.
- Fuel line sizing is the responsibility of the installer and must be able to supply the stated maximum BTU for the product – refer to product label on fire pit.



## 5 Fire Pit Enclosures Requirements

---

### Construction materials

- Use non-combustible materials and construction for gas supply, power, and enclosure.
- The interior void space of the enclosure surrounding the valve box cannot be filled with any material (gravel, crushed rock, concrete, etc.).

### Venting

- The enclosure must incorporate at least two vents to allow heat and or residual fuel to escape. Failure to properly vent the enclosure may result in the fire pit overheating or explosion.
- Some enclosures may require more ventilation based on material, size, and extended use.
- The vent may also work as a drain when installed at bottom sidewall to prevent water build up.
- Vent specifications:
  - A minimum of two vents (18 square inches for each vent) on opposing sides of the enclosure totaling 36 inches of free area are required (example: 3-inch x 6-inch or larger). Or multiple vents uniformly made throughout the enclosure totaling 36 square inches or more of free area are acceptable for large units to prevent overtemps to the electronics.
  - Ventilation along the bottom of the enclosure allows for a full open design is acceptable as well. HPC unfinished enclosures reflect this ventilation.
  - Installation of vents in the mid-to-lower area of the enclosure is recommended.
- Failure to properly vent the enclosure may result in the fire pit overheating or explosion. Continuous overheating could lead to heat damage to internal components.
- When installing insert inside a non-HPC copper or concrete bowl, ventilation should be below the bowl. If bowl is mounted on top of a column, a 6" hole is recommended to allow gas supply, electrical and water plumbing to clear.
- **OVERHEATING:** the fire pit will automatically close the gas valve if the temperature exceeds 190°F inside the valve box to prevent component damage. Turn main power to the fire pit off and on to reset. To correct overheating, ensure enclosure has adequate ventilation per the guidelines in this section.

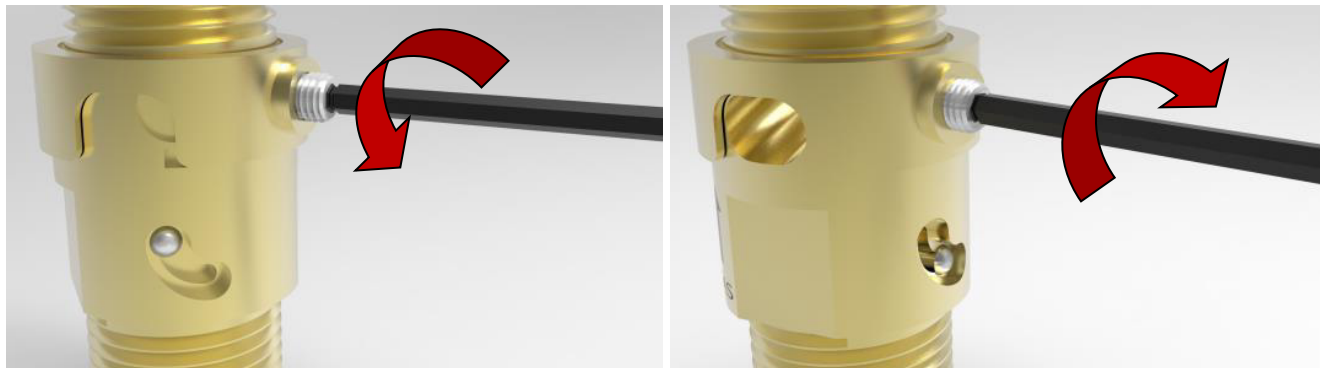
## 6 Installing the Fire Pit

### IMPORTANT

Ensure unit is set to proper gas type before installing fire pit into enclosure. If gas type is incorrect, follow steps below before continuing to Installation Steps:

#### UGO™ Orifice Gas Style Setting:

1. Using a 2.5mm hex driver to loosen set screw on the back side of orifice and rotate collar. Once set lightly snug the set screw to lock down the collar but do not over tighten. (For NG, venture holes should be closed. For LP, venture holes should be open.)



1. On the front side of orifice, use a #2 flat head screwdriver to rotate orifice from either NG to LP or LP to NG depending on proper gas type. Always ensure that the colors for the orifice and collar are aligned.



### WARNING

ORIFICE AND ALL FITTINGS MUST BE GAS LEAK CHECKED ANNUALLY BY AN NFI CERTIFIED TECHNICIAN. SEE SECTION "9 MAINTAINING THE FIREPIT" ON PAGE 20 FOR ROUTINE MAINTENANCE.



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

## 6 Installing the Fire Pit

---

### Fuel line

- Fire pit must have a gas shutoff on the outside of the exterior of the fire pit to allow for emergency shut off and maintenance. The gas shutoff should not be used to adjust flame height.
- The installer is responsible for using the correct fuel line sizing that can supply the stated maximum BTU for the product – refer to product label on the fire pit for specifications.

#### INSTALLATION

We suggest that our products be installed by professionals that are locally licensed by the authority having jurisdiction in gas piping.

- Perform all leak tests with leak detector or leak reactant.

#### IMPORTANT

**To prevent damage, unhook the fire pit from the gas supply for pressure leak tests of the supply line.**

#### IMPORTANT

***Burn Testing:*** It is the responsibility of the qualified installer to test for gas leaks at all connections.

#### IMPORTANT

***Gas Plumbing Connections:*** Use joint compound or tape that is resistant to all gases. Apply joint compound only to all male pipe fittings. ***DO NOT use thread sealant on flare fittings.*** Be sure to tighten every joint securely.

#### Installation Steps:

1. Set fire pit in properly constructed enclosure, read **Section 5 – Fire Pit Enclosure Requirements**.
2. Position fire pit following safety recommendations with access to all gas connections for testing. Read **Section 3 – Selecting the Fire Pit Location** for more details.
3. Shut off gas supply to fire pit.
4. Connect proper 120 VAC, 24 VAC or 12VAC electrical power following all local codes.
5. Connect fire pit to main gas supply. Warning: avoid sharp bends with flex line to prevent whistling.

## 6 Installing the Fire Pit

---

6. Turn on gas supply, purge gas lines of air and perform leak test on all inlet connections. Repair as needed.
7. Initial Start-up after install:  
Several "ON/OFF" cycles may be necessary to purge air in gas lines after system installation.
  1. Turn "ON" gas to fire pit.
  2. Remove Blowout Box lid to allow viewing of hot surface igniter
  3. Turn "ON" electrical power to fire pit via wall switch or breaker.
  4. Hot surface igniter should begin to glow within 10 seconds.
  5. Pilot flame will eventually igniter. NOTE: This may take several cycles due to air in the gas line. Unit will lockout after 15 cycles- to reset, please turn "OFF" electrical power using wall switch or breaker then turn "ON", repeat step 4.
  6. Main burner will igniter.
8. Once fire pit is lit, perform leak test on all gas connections. Repair as needed.

### IMPORTANT

**For Penta Burner inserts, flame will be smaller with no media on the burner.**

9. Turn off fire pit and allow it to cool.
10. Apply media as described in **Section 7, Adding Approved Media**. When filling the pan with lava rock and/or decorative glass, the instructions in Section 7 must be followed.
11. Turn on fire pit again and perform leak test with media correctly installed. If gas leak is detected verify correct media application and repair as needed.
12. Verify correct operation and lighting.
13. Review safety manual with end-user. Instruct end-user that fire pit or media must not be changed or modified.
14. Leave manual with end user.
15. Apply the Start Up and Shutdown decal next to control box in an obvious and highly visible position.

## 7 Adding Approved Media

---



### WARNING

FOR GLASS MEDIA USAGE WITH LP GAS - WHEN USING APPROVED DECORATIVE GLASS TO COVER BURNER APPLY ONLY ENOUGH TO HIDE BURNER. APPLYING OVER 1/2" MAY CREATE BACK PRESSURE AND GAS LEAKAGE FROM AIR MIXER RESULTING IN LP POOLING UNDER FIRE PIT.



### WARNING

FOR GLASS MEDIA USAGE WITH LP GAS - THE UNIT MUST BE TESTED WITH MEDIA OVER BURNER FOR CONFIRMATION OF NO BACK PRESSURE CREATING GAS TO LEAK OUT OF AIR MIXER VENTURI HOLES. THIS MAY HAVE TO BE DONE PRIOR TO PLACING IN ENCLOSURE IF NO ACCESS DOOR.



### WARNING

Never use any material that is non-porous or holds moisture such as gravel, pebbles, river rock, etc. When heated, non-porous material will not allow heated steam to readily escape which can break and cause personal injury or damage. Material that holds moisture can boil and fracture unexpectedly when exposed to heat.

### IMPORTANT

The fire pit is designed to use approved media correctly installed over the burner to achieve proper combustion.

- Never install a mesh or screen under the media.
- Media affects flame pattern. It is possible to create an unusual flame pattern that could damage your enclosure. Enclosure damage from an open flame fire feature is not covered under any warranty.

## 7 Adding Approved Media

### Application of Approved Media

Please follow the instructions below to add the final addition to your fire pit.

Particular attention needs to be on the pilot assembly area.

Incorrect media installation will cause the pilot flame to suffocate and turn off pit or delay main burner ignition.

#### Lava Rock Only Application

- 1) Install your fire pit per instructions.



- 2) Apply lava rock ONLY deep enough to cover ring.



- 3) Blowout Box: Leave vents open. Do not cover vents with lava rock or allow any rock to block flame opening. Incorrect media installation will cause the pilot flame to suffocate and turn off pit or delay main burner ignition.



Do not cover box vents!

#### Decorative Glass Application

- 1) Install your fire pit per instructions.



- 2) Fill pan with media. Cover burner with 1/4 to 1/2 inches of glass. Do not overfill pan with glass. All LP installations must be checked for back pressure with media installed. Failure to do so may result in personal injury or property damage.



- 3) Blowout Box: Do not cover blowout box vents or opening with glass. Incorrect media installation will cause the pilot flame to suffocate and turn off pit or delay main burner ignition.



Do not cover box vents!

## 8 Operating the Fire Pit

---

- Before use, be sure to test all gas connections for leaks. Do not use fire pit if there is any evidence of leaking gas. If leaking gas suspected, turn off the main gas supply and repair immediately.
- Do not use the enclosure as a seating area. Wind and gusty conditions will affect the flame in an unpredictable manner. If conditions exist that are not safe for patrons, turn off the fire pit.
- The hose should be inspected before each use of the fire pit and replaced prior to use if there is evidence of excessive abrasion or wear or if the hose is damaged. The replacement hose assembly shall be that specified by the manufacturer.
- Do not use the fire pit if any part has been under water. Immediately call a qualified service technician to inspect the fire pit and to replace any part of the control system and any gas control that has been under water.
- Never use any material that is non-porous and holds moisture such as gravel, pebbles, river rock, etc. This material, when heated will cause the trapped moisture to boil and fracture unexpectedly. This material is not sufficiently porous to allow heated steam to readily escape which can break and cause personal injury or damage.
- Solid fuels shall not be burned in the fire pit.
- Leaves, sticks, wood, paper, clothing, food material, should be kept away from the fire pit. Clothing or other flammable materials should not be hung from the appliance or placed on or near the appliance. Keep the appliance area free from gasoline, and other flammable vapors and liquids.
- Fire pit is not for cooking.
- Make sure that there is no vegetation or other objects over the top or sides of the fire pit that could interfere with safe operation. See clearances in **Section 3 – Selecting the Fire Pit Location**.
- If lava rock is wet, allow the fire pit to burn for 45 minutes prior to coming within 15 feet of the fire pit.
- When the fire pit is not in operation, turn off gas valve.
- When not in use, the fire pit must be always covered.

## 8 Operating the Fire Pit

### Start-up

**Initial Start-up:** Several “ON/OFF” cycles may be necessary to purge air in gas lines after system installation. Fire pit will lockout after 15 attempts to light pilot, please power OFF then ON to restart.

#### Sequence of Operation:

1. The igniter will be powered (glow red) for five seconds before pilot valve opens.
2. The igniter will only be powered the initial 15 seconds of the 30-second pilot cycle. This sequence will repeat up to 15 times (approximately 15 minutes) before going into lockout. To reset, turn “OFF” power then back “ON” again.
3. Pilot flame will ignite and warm thermocouple; it may take 30 seconds at times for thermocouple to get hot. If thermocouple is not hot in 60 seconds, system will shut down. If this occurs, go back to Step 1.
4. Once thermocouple is hot, main valve will open allowing main burner to ignite.
5. If pilot flame is blown out at any time, system will shut down, and then automatically restart (Step 1).



### DANGER

#### If you smell gas:

- 1) Shut off gas to appliance.
- 2) Extinguish any open flame.
- 3) If odor continues, keep away from appliance and immediately call gas supplier or fire department.

### El Fire Pit Start Up

1. **STOP! Read the safety information on “What to Do If Smell Gas” (Pg. 1).**
2. Confirm there is no debris in the fire pit (as mentioned in warnings) including water.
3. Turn “ON” electrical power and gas to fire pit.
4. Using wall switch to turn “ON” fire pit - this may take several cycles to purge any air.
5. To reset after lockout, power unit down, wait 5 minutes, then restart.
6. Once the fire pit has ignited **DO NOT** leave unattended.

**This product is not for use with small tanks.**

### El Fire Pit Shutdown

1. Turn “OFF” fire pit using remote, wall switch or app.

#### IMPORTANT

**FOR REMOTE CONTROL USE, YOU MUST ALSO TURN OFF POWER TO ELECTRICAL OUTLET OR GAS TO FIRE PIT TO PREVENT ACCIDENTAL START.**

2. Once fire pit is cooled, use appropriate cover to protect fire pit.



## 9 Maintaining the Fire Pit

- Any guard or protective device removed for servicing must be replaced prior to operating the fire pit.
- We suggest that our products be serviced annually by a professional certified in the US by the National Fireplace Institute (NFI) as NFI Gas Specialists.
- Ensure gas is shut off and fire pit is cool before servicing.
- Keep fire pit always covered when not in use and free of debris.
- In some areas of the country, spiders or insects have been known to build nests and/or lay eggs in the venturi holes of the air-mixer for LP units. This can cause fuel to fill the fire feature cavity and result in personal injury or property damage. Periodic inspection by a qualified service technician of the air-mixer is required to ensure your fire feature performs properly, Figure 9.1.
- **Burner Cleaning: One time a year.** If flames exhibit any abnormal shapes or behavior, or if burner fails to ignite properly, then the burner holes may require cleaning. The appliance can be cleaned by carefully removing the logs and media to allow access to burner. Use a brush to carefully remove dust, spider webs, and loose particles from base, logs, and fire ring itself. If evidence of damage, fire ring must be replaced with fire ring specified by the manufacturer.
- **Thermocouple cleaning of soot: Once every six months or as needed.** Remove lava rock & glass around pilot, then the blowout box lid. Clean thermocouple of any soot using soft brush. Be careful not to damage hot wire element. Place lava rock or glass back as explained in **Section 7 – Adding Approved Media**.
- Always ensure that the union fitting is tight. If loose, torque until there is no leak (recommended torque value of 80 ft lb.).
- **Visually inspect the pilot.** The pilot flame should cover 3/8 inch to 1/2 inch of the thermocouple, Figure 9.2. Cleaning of the pilot orifice may be required by removing pilot hood counterclockwise and removing orifice, Figure 9.3.

### Service



We suggest that our products be serviced by a professional certified in the US by the National Fireplace Institute (NFI) as NFI Gas Specialists.



Figure 9.1 – Locating orifice for cleaning



Figure 9.2 – Pilot flame coverage of thermocouple.



Figure 9.3 – Cleaning pilot orifice

# 10 Troubleshooting

Table 10.1 and 10.2, below indicates some potential causes and countermeasures to the symptoms indicated in bold type. **Please contact your retailer or certified technician for service and repair.**

- The error number and description are shown by the number of LED blinks on the module inside of the valve box.

## Service



We suggest that our products be serviced by a professional certified in the US by the National Fireplace Institute (NFI) as NFI Gas Specialists.

## 120v and 24v units only

Error Number & Description	Problem	Possible Causes	Solution
<b>1</b> Igniter failure <b>6</b> Igniter open	<b>Pilot Will Not Light</b>	Air in gas line	New install – May take several attempts
		No gas flow – Gas not ON or line obstruction	Confirm gas is ON upstream
		Pilot orifice dirty or clogged	Debris in line – insulation, dirt, plastic, etc.
		Gas pressure improper	Remove orifice and clean (Section 9)
		Igniter element damaged	Confirm proper gas pressure (Section 1)
		Damaged wires	Change igniter element
<b>3</b> Thermocouple error <b>4</b> Hardware fault pilot/main valve <b>5</b> Flame at startup	<b>No Main Burner (Pilot Flame Present)</b>	Loose thermocouple at the valve box	Inspect wires to igniter. Confirm insulation is in good condition and connections are tight
		Thermocouple cracked/broke under pilot assembly	Tighten down connection at valve box. Should be tightly snug.
		Gas pressure improper	Replace thermocouple
		Small pilot flame	Confirm proper gas pressure (Section 1)
		Dirty thermocouple	Remove pilot head and clean orifice (Section 9)
		Fire ring obstructed	Clean using soft brush
		Improperly applied media	Confirm no debris or water in ring
		Pilot flame present always	See Section 7.
	<b>Main Burner Turning Off/On Frequently</b>	Small pilot flame	Debris inside valve
		Improperly applied media	Remove pilot head and clean orifice (Section 9)
		Gas pressure improper	See Section 7.
		Thermocouple defective	Gas pressure too low (Section 1)
<b>2</b> Over temperature  <b>10</b> Internal control fault or Over temperature	<b>No Power or Response from Unit</b>	No power to unit	Change thermocouple
		Remote not working	Confirm breaker, wall switch and remote are on
		Has power to unit but will not cycle	Change batteries
			Re-sync remote (High/Low models only)
			Check external fuse (5A)
		Over temperature	Check voltage to unit
			Module sensing wrong voltage. Replace module and transformer
			Inadequate venting. See proper venting in Section 5. Power OFF then back ON to reset

Table 10.1 – Troubleshooting

# 10 Troubleshooting

12v units only

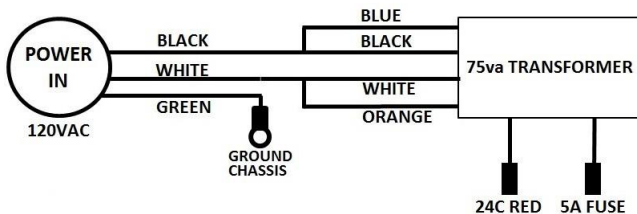
Error Number & Description	Problem	Possible Causes	Solution
<b>2</b> Igniter failure	<b>Pilot Will Not Light</b>	Air in gas line	New install – May take several attempts
		No gas flow – Gas not ON or line obstruction	Confirm gas is ON upstream Debris in line – insulation, dirt, plastic, etc.
		Pilot orifice dirty or clogged	Remove orifice and clean (Section 9)
		Gas pressure improper	Confirm proper gas pressure (Section 1)
		Igniter element damaged	Change igniter element
		Damaged wires	Inspect wires to igniter. Confirm insulation is in good condition and connections are tight
<b>3</b> Thermocouple error <b>4</b> Flame at startup <b>5</b> Hardware fault pilot/main valve	<b>No Main Burner (Pilot Flame Present)</b>	Loose thermocouple at the valve box	Tighten down connection at valve box. Should be tightly snug.
		Thermocouple cracked/broke under pilot assembly	Replace thermocouple
		Gas pressure improper	Confirm proper gas pressure (Section 1)
		Small pilot flame	Remove pilot head and clean orifice (Section 9)
		Dirty thermocouple	Clean using soft brush
		Fire ring obstructed	Confirm no debris or water in ring
		Improperly applied media	See Section 7.
<b>Slow Flash</b>	<b>Thermocouple hot at start-up and delay to prove absence of flame</b>	Pilot flame present always	Debris inside valve
		Thermocouple still hot	Let cool down and unit will recycle
<b>Fast Flash</b>	<b>Safety Shutdown</b>	Over temperature	Inadequate venting see proper venting in Section 5. Power OFF then back ON to reset
		Has power to unit but will not cycle	Check external fuse (5A)
			Check voltage to unit Module sensing wrong voltage. Replace module and transformer

Table 10.2 – Troubleshooting

# 11 Wiring Diagram

## 120VAC Models:

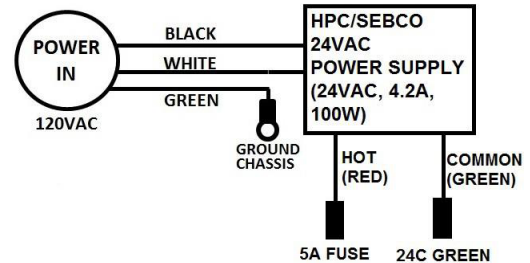
(Included in fire pit control box)



## 24VAC Models:

(Power supply sold separately)

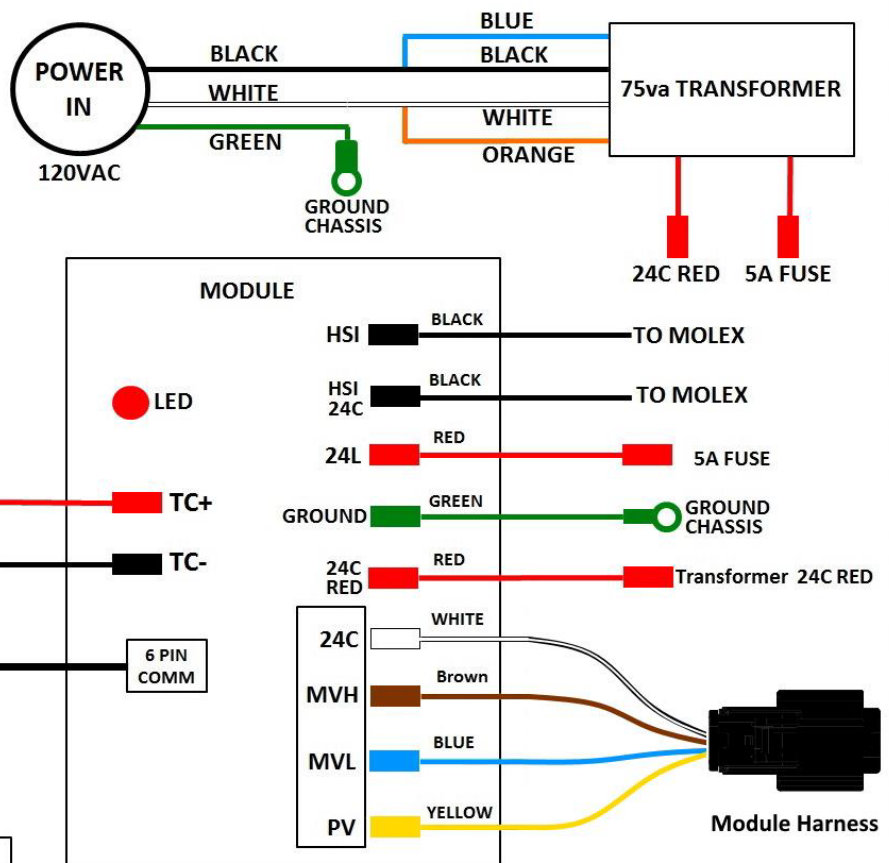
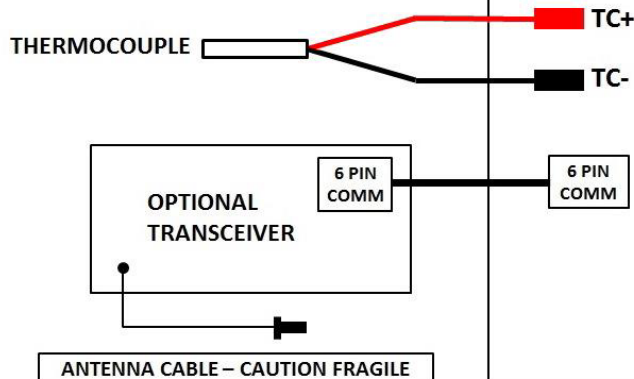
311-PSI, 311-PS3, 311-PS5



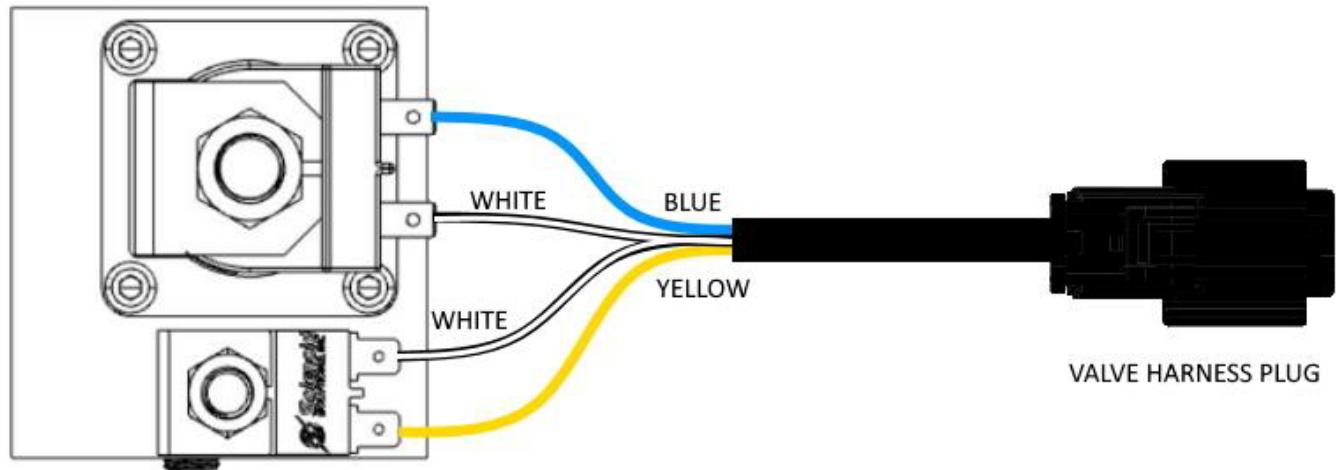
NOTE: 100W Output Required

All wire - 18 AWG, °200C, 600V  
1/4" fully insulated female spade terminal, 22-16 AWG 250a, x 11 (color red)  
#6 Ringlet Terminal 22-16 AWG  
Zip tie - Nylon 66 UV stable miniature, 3" length

HPC EI WIRE DIAGRAM  
120VAC / 24v



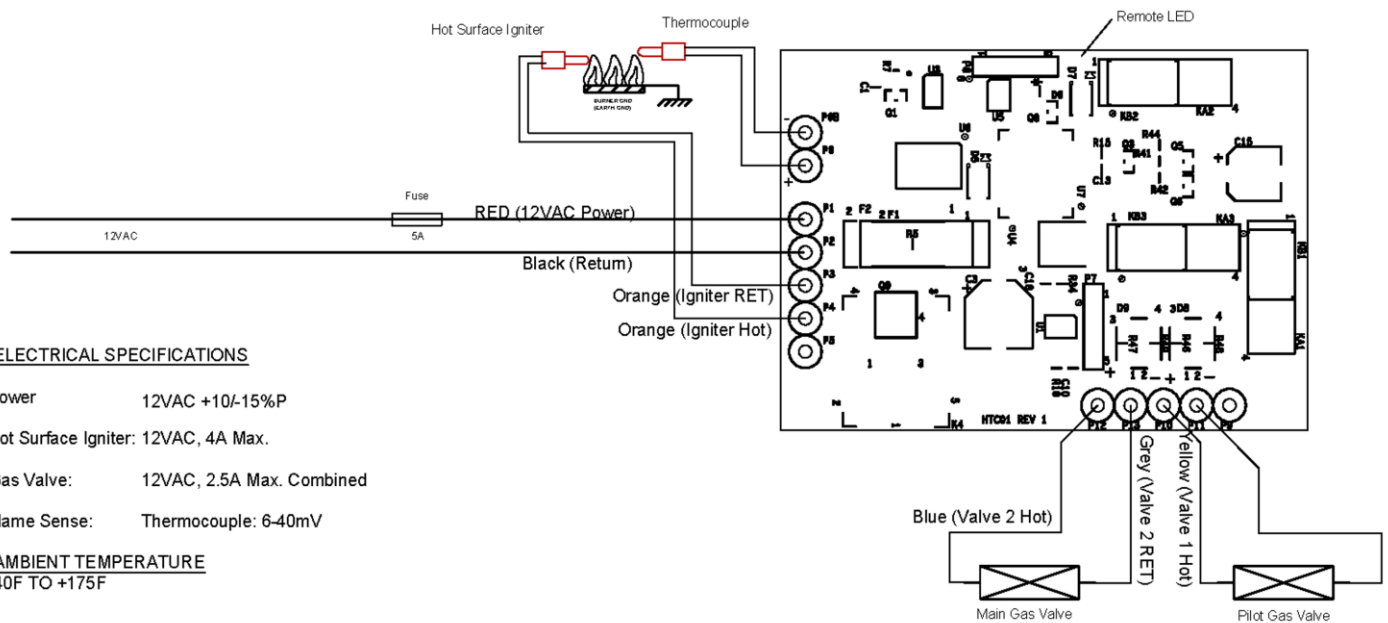
# 11 Wiring Diagram



## 12VAC Models:

(Power supply sold separately)

313-PSI, 313-PS3, 313-PS5



### ELECTRICAL SPECIFICATIONS

Power 12VAC +10/-15%P

Hot Surface Igniter: 12VAC, 4A Max.

Gas Valve: 12VAC, 2.5A Max. Combined

Flame Sense: Thermocouple: 6-40mV

AMBIENT TEMPERATURE  
-40F TO +175F

## 12 Compatible Accessories

- **Fire pit cover** – Hearth Products Controls has decorative copper covers and heavy-duty vinyl covers for your fire pit that will protect it from rain, snow, and moisture. See Figure 12.1.

For a complete list of accessories, visit [www.hpcfire.com](http://www.hpcfire.com)



Figure 12.1 – Fire pit cover

## 13 Replacement Parts

Please contact your dealer for parts – if unsure please contact HPC or visit our website at [www.hpcfire.com](http://www.hpcfire.com) and we will be happy to help you.

### EI Series Replacement Components

Part Number	Item
311-T/C	Thermocouple
312-IGNITER	24v Hot Surface Igniter
313-IGNITER	12v Hot Surface Igniter
312-EIMOD	24v Control Module
313-EIMOD-R	12v Module
210-EI415	24v Gas Valve
313-EI-PILOT/12V	12v Pilot Gas Valve
313-EI-MAIN/12V	12v Main Gas Valve
576-75VA	Transformer
579	120VAC Power Cord
Please Buy Local	Fuse (5A) – common fast acting

### Pilot Assembly

Part Number	Fire Pit Size	Gas
HSIP-36SS	50k ~ 275k BTU	NG
HSIP-36SS-300NG	300k BTU	NG
HSIP-36SS-400NG	400k BTU	NG
HSIP-36SS-50/225LP	50k ~ 225k BTU	LP
HSIP-36SS-250 / 400LP	250k ~ 400k BTU	LP
<b>12v Pilot Assembly</b>		
HSIP12V-36SS	50k ~ 275k BTU	NG
HSIP12V-36SS-LP/LOW	50k ~ 275k BTU	LP

## 14 Warranty

---

### Warranty

Hearth Products Controls Co. (HPC) warrants fire pits against manufacturing defects that prevent safe and correct function as follows:

#### 1) **Stainless Steel Fire Pit and Outdoor Fireplace Burners - Lifetime Warranty**

Limited Warranty:

- 2) Electronics, Gas Valve: Commercial-1 year; Residential-3 year.
- 3) Pilot Assembly: Commercial-1 year; Residential-2 year.
- 4) Stainless Steel Pan, Valve Box: Commercial-1 year; Residential-5 years

Warranty commences from the date of original sale / shipment from HPC FOB Dayton, Ohio. This warranty is for parts and in-house (HPC) labor. The defective product must be sent back to HPC with a Return Merchandise Authorization (RMA) issued by HPC for that specific product and any other additional information for the nature of the defect or warranty claim. The warranty does not cover items that have been damaged by overheating, modification, abuse, or improper storage. Also, any labor involving installation or maintenance with the unit is not covered. This warranty excludes claims for consequential, indirect-collateral expenses arising from product defects or warranty recovery.

Rev.0 5/8/2019



**FIRE INSPIRED™**

**Hearth Products Controls**

**Fire-inspired since 1975.**

2225 Lyons Road

Miamisburg, Ohio 45342

For detailed product information, go to [www.hpcfire.com](http://www.hpcfire.com)





**Project Name:** Farm Credit  
**Project Number:** 02-23-2720  
**Subcontractor:** Comfort Systems  
**Specification:** 10 30 00 - Fire Place/Pit  
**Submittal Number:** #103000-1

---

### Construction Manager:

NABHOLZ CONSTRUCTION SERVICES	
<input type="checkbox"/>	Revise & Resubmit
<input type="checkbox"/>	Reviewed & Amend As Noted
<input checked="" type="checkbox"/>	Reviewed
By: <u>William Ray</u> Date: <u>08/10/2023</u>	

☒ **APPROVED**  
☐ **APPROVED AS CORRECTED**  
☐ **REVIEWED BY CONSULTANT**

☐ **REVISE AND RESUBMIT**  
☐ **NOT APPROVED**  
☐ **SUPPLEMENTAL HJ COMMENTS**

Checking is only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents. Contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains solely to the fabrication process or to the techniques of construction; and for coordination of the work of all trades.

### Design Review Comments:

**BY:** Jorge Andrade  
**DATE:** 9/12/2023

Hight Jackson  
ASSOCIATES

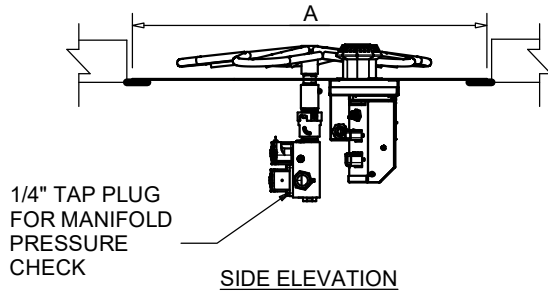




**FIRE INSPIRED<sup>®</sup>**

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FOR COMMERCIAL AND RESIDENTIAL USE**

**HEARTH PRODUCTS CONTROLS**  
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MIAMISBURG, OH 45342  
TOLL FREE: 877.585.9800  
PHONE: 937.436.9800  
www.hpcfire.com



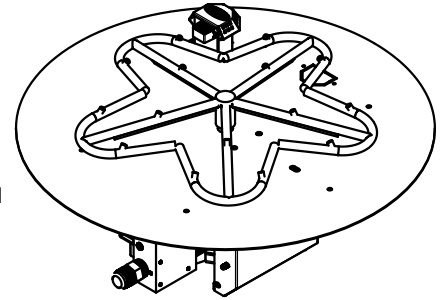
AVAILABLE IN:

- 120VAC OR 24VAC
- ON/OFF OR HI/LO

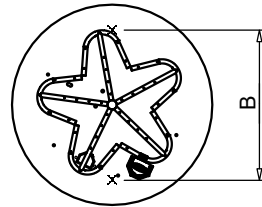
MATERIAL: 304 STAINLESS STEEL

HI/LO MODELS HAVE A 40% REDUCTION IN BTU ON LOW SETTING

EXAMPLE:  
TOR-PENTA24EI



ISOMETRIC VIEW

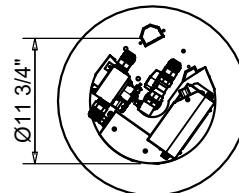
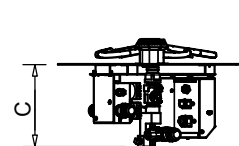


TOP VIEW

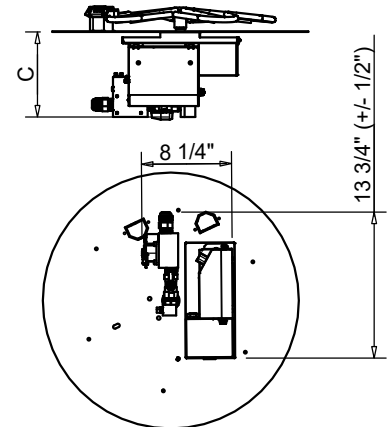
PENTA BURNER							
PART NUMBER*		BTU		DIMENSION CHART			
		PENTA	TORPEDO	A"	B"	C" (+/- 1/2")	
						PENTA	TORPEDO
TOR-	PENTA18EI	65K	90k	18	12	7-3/4	7-3/4
TOR-	PENTA24EI	125K	140k	24	18	9-3/4	7-3/4
TOR-	PENTA30EI	200K	225k	30	24	9-3/4	7-3/4
TOR-	PENTA36EI	250K	275k	36	30	10-3/4	7-3/4
TOR-	PENTA42EI	400K	375K	42	36	11-3/4	7-3/4
TOR-	PENTA54EI	400K	400K	54	48	11-3/4	7-3/4

\*FOR TORPEDO BURNERS ADD TOR-

ROUND BURNER				
PART NUMBER	BTU	DIMENSION CHART		
		A"	B"	C" (+/- 1/2")
14SSEI	90K	14	12	7-3/4



PENTA18EI AND 14SSEI  
CONTROLS CONFIGURATION



PENTA24EI AND LARGER  
CONTROLS CONFIGURATION

**NOTES:**

**1. PROPER VENTING**

• ENCLOSURES:

- For Fire Pit Inserts upto 200K BTU: Required 2 vents, 18 sq.in. each on opposing sides.
- For Fire Pit Inserts 200K to 400K BTU: Required 4 vents, 18 sq.in. each on opposing sides.

- BOWLS (Copper, concrete or metal) - Bowl to be raised above mounting surface minimum of 3/4" gap; Bowl to have a minimum of 6" diameter hole in bottom

**2. GAS SUPPLY - FOR USE WITH FIXED PIPING SYSTEMS ONLY - NOT FOR USE WITH SMALL TANKS.**

- Natural Gas: Supply Pressure: Minimum: 3.5" W.C; Maximum: 7.0" W.C.
- LP Gas: Supply Pressure: Minimum: 8" W.C.; Maximum: 11.0" W.C.

**IMPORTANT:** Ensure any flex line that may be used from the permanent main fuel supply to the product is rated to the stated max btu of the product and certified to ANSI Z21.75\*CSA 6.27.

**3. MODIFICATION OF PRODUCT WILL VOID ANY CERTIFICATION AND WARRANTY.**

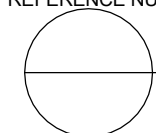
**4. FOLLOW ALL MANUFACTURER'S INSTALLATION INSTRUCTIONS AND LOCAL CODES.**

**5. ALL DIMENSIONS ARE CONSIDERED TRUE AND REFLECT MANUFACTURER'S SPECIFICATIONS AS OF THE REVISION DATE.**

**6. DO NOT SCALE DRAWING.**

**7. THESE DRAWINGS ARE FOR SIZING AND PLANNING PURPOSES. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT. THE MANUFACTURER IS RESPONSIBLE FOR THE ACCURACY OF THE DRAWING.**

**8. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT [www.CADdetails.com/info](http://www.CADdetails.com/info)**



**ELECTRONIC IGNITION**

**EI ROUND FLAT PAN**

**FLAME SENSING WITH ELECTRONIC HOT SURFACE IGNITION**

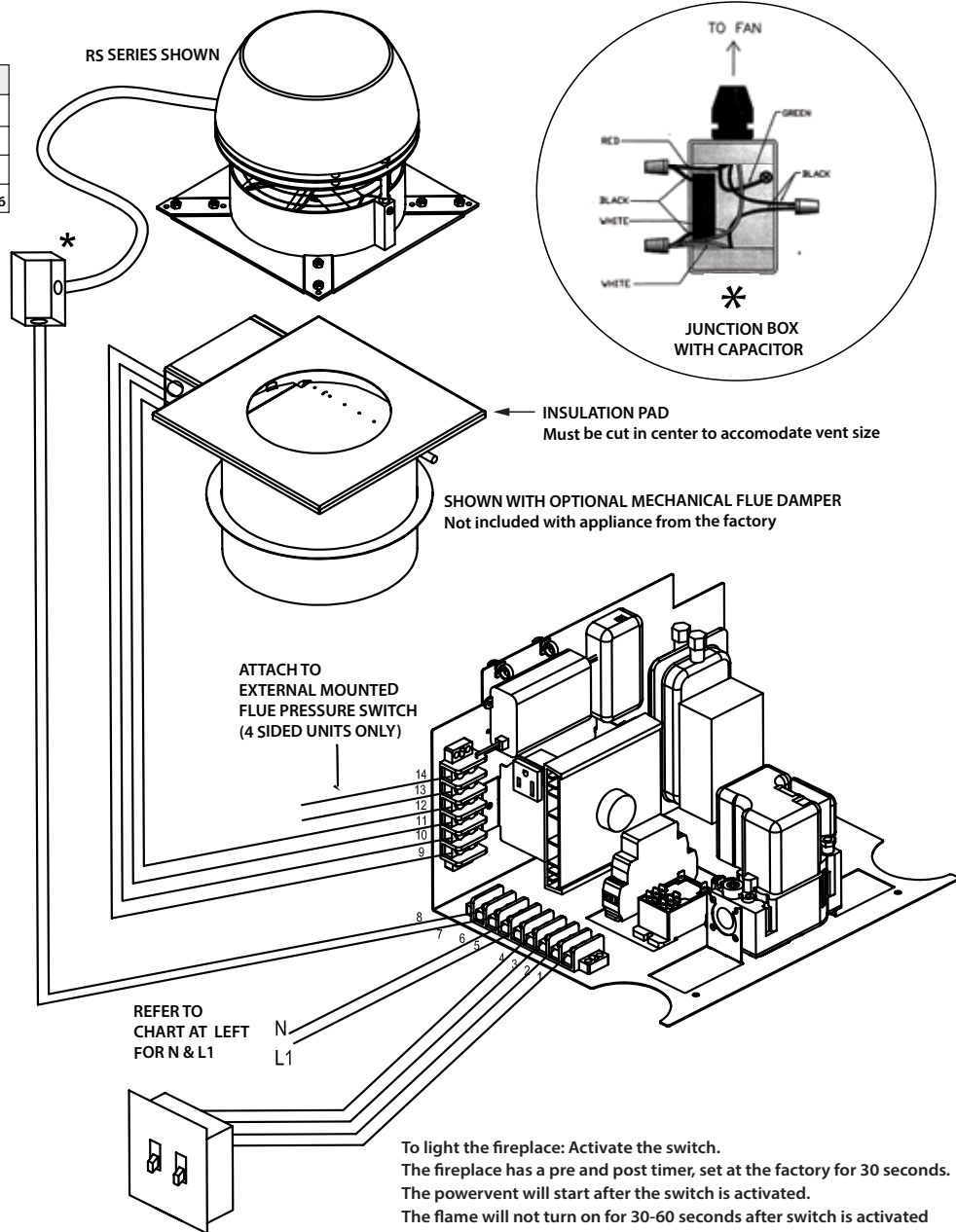


# 10 - ELECTRIC

## A. ELECTRIC - AT INSTALL

**Figure 10A** Powervent  
Voltage Chart

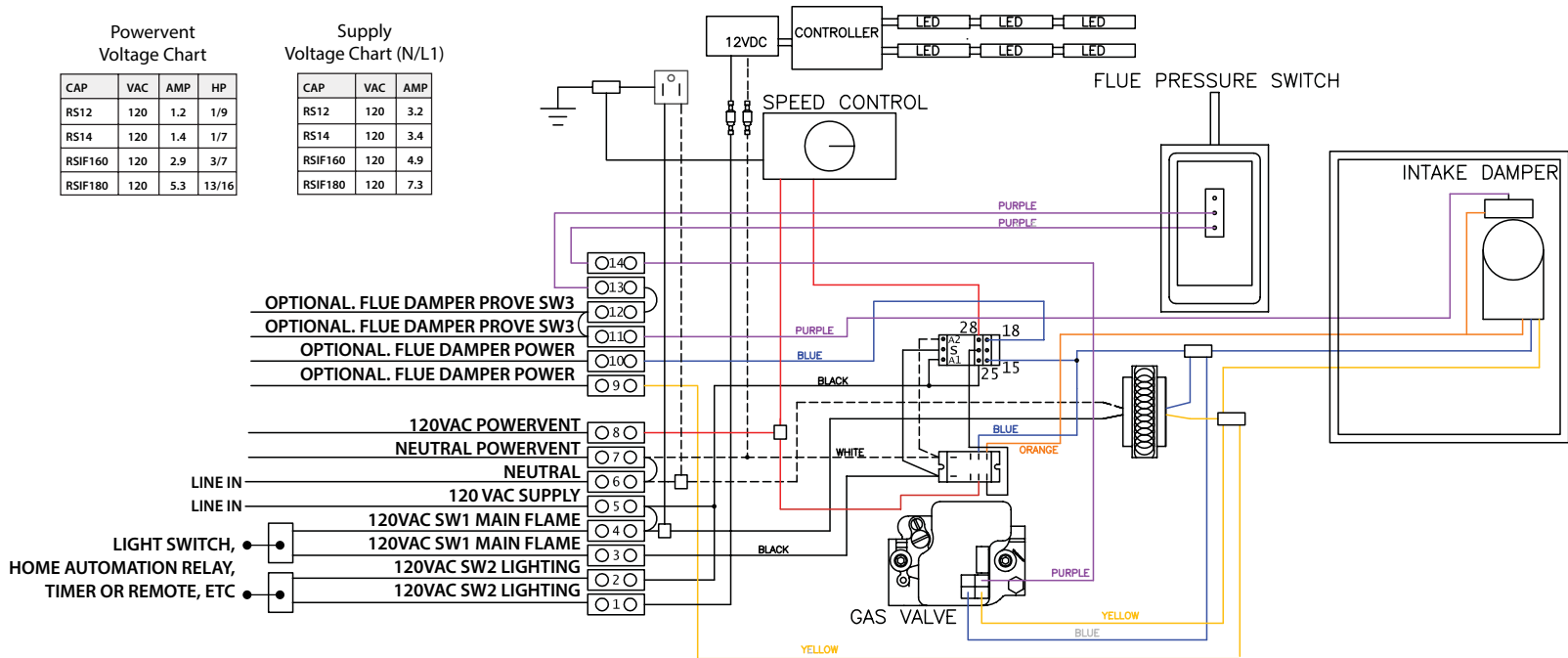
CAP	VAC	AMP	HP
RS12	120	1.2	1/9
RS14	120	1.4	1/7
RSIF160	120	2.9	3/7
RSIF180	120	5.3	13/16



#	FUNCTION	NOTES:
1	120 VAC SW2 LIGHTS	120 VOLT LOOP
2	120VAC SW2 LIGHTS	120 VOLT LOOP
3	120VAC SW1 MAIN FLAME	120 VOLT LOOP
4	120 VAC SW1 MAIN FLAME	120 VOLT LOOP
5	120 VAC SUPPLY	CONNECT TO CONSTANT POWER SOURCE
6	NEUTRAL	CONNECT TO CONSTANT POWER SOURCE
7	NEUTRAL POWERVENT	DO NOT SHARE NEUTRAL
8	120VAC POWERVENT	FROM SPEED CONTROL
9	24VAC FLUE DAMPER POWER	OPTIONAL
10	24VAC FLUE DAMPER NEUTRAL	OPTIONAL
11	SW3 FLUE DAMPER PROVE	OPTIONAL. USE PURPLE AND WHITE, NOT RED
12	SW3 DAMPER PROVE	OPTIONAL. USE PURPLE AND WHITE, NOT RED
13	CONNECTION FOR EXTERNAL FLUE PRESSURE SWITCH (4 SIDED ONLY)	FOUR SIDED ONLY
14	CONNECTION FOR EXTERNAL FLUE PRESSURE SWITCH (4 SIDED ONLY)	FOUR SIDED ONLY

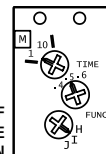
SYSTEM A - LIGHTS

Figure 10B



#	FUNCTION	NOTES:
1	120VAC SW2 LIGHTS (IF EQUIPPED)	120 VOLT LOOP
2	120VAC SW2 LIGHTING (IF EQUIPPED)	120 VOLT LOOP
3	120VAC SW1 MAIN FLAME	120 VOLT LOOP
4	120 VAC SW1 MAIN FLAME	120 VOLT LOOP
5	120 VAC SUPPLY	120VAC 15AMP MIN DEDICATED CIRCUIT
6	NEUTRAL	120VAC 15AMP MIN DEDICATED CIRCUIT
7	NEUTRAL POWERVENT	DO NOT SHARE NEUTRAL
8	120VAC POWERVENT	FROM SPEED CONTROL
9	24VAC FLUE DAMPER POWER (IF EQUIPPED)	OPTIONAL. BLACK WIRE IN PAIR.
10	24VAC FLUE DAMPER NEUTRAL (IF EQUIPPED)	OPTIONAL. RED WIRE IN PAIR.
11	SW3 FLUE DAMPER PROVE (ONLY IF DAMPER IS USED)	OPTIONAL. USE PURPLE AND WHITE, NOT RED
12	SW3 DAMPER PROVE (ONLY IF DAMPER IS USED)	OPTIONAL. USE PURPLE AND WHITE, NOT RED
13	CONNECTION FOR EXTERNAL FLUE PRESSURE SWITCH (4 SIDED ONLY)	FOUR SIDED ONLY
14	CONNECTION FOR EXTERNAL FLUE PRESSURE SWITCH (4 SIDED ONLY)	FOUR SIDED ONLY

TIMER RELAY SETTINGS



RELAY TOP;  
FIRST DIAL - SET TO "1"  
SECOND DIAL - SET TO "5"  
THIRD DIAL - SET TO "1"

LED STATUS: GREEN = POWER APPLIED. POWERVENT OFF  
RED FLASHING= TIMING PERIOD, PRE OR POST PURGE  
RED SOLID= CLOSED STATE, POWERVENT ON

To light the fireplace: Activate the switch.  
The fireplace has a pre and post timer, set at the factory for 30 seconds.  
The powervent will start after the switch is activated.  
The flame will not turn on for 30-60 seconds after switch is activated  
and the powervent will run for 30 seconds after it has been shut off.

SYSTEM FB1B111SYS (1BL)

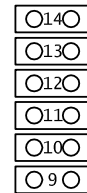
## 10 - ELECTRIC

### C.1 TERMINALS 1 & 2 - LED Lights

#### TERMINALS 1 AND 2 LED LIGHTING

TERMINAL #2 HAS 120VAC POWER  
TO SUPPLY A SWITCH, RELAY, TIMER,  
REMOTE, ETC.

TERMINAL #1 RETURNS 120VAC POWER  
TO ACTIVATE THE LED DRIVER.



LIGHT SWITCH OR  
HOME AUTOMATION RELAY OR  
TIMER OR REMOTE  
ETC.

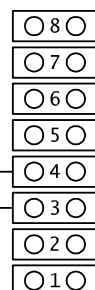
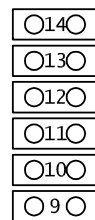
Figure 10C.1 Terminals 1 & 2

### C.2 TERMINALS 3 & 4 - Main Flame

#### TERMINALS 3 AND 4 MAIN FLAME

TERMINAL #4 HAS 120VAC POWER  
TO SUPPLY A SWITCH, RELAY, TIMER,  
REMOTE, ETC.

TERMINAL #3 RETURNS 120VAC POWER  
TO ACTIVATE THE MAIN FLAMES.



LIGHT SWITCH OR  
HOME AUTOMATION RELAY OR  
TIMER OR REMOTE  
ETC.

Figure 910C.2 Terminals 3 & 4

## 10 - ELECTRIC

### C.3 TERMINALS 5 & 6 - Fireplace Power

#### TERMINALS 5 AND 6 FIREPLACE POWER

TERMINAL #5 IS THE 120VAC POWER SUPPLY FOR THE FIREPLACE. THIS IS A CONSTANT POWER SUPPLY AND SHOULD NOT BE SWITCHED. A SERVICE DISCONNECT MAY BE DESIRED.

TERMINAL #6 IS THE NEUTRAL CONNECTION.

GROUND - LOCATE THE GREEN WIRE CLUSTER  
CONNECT THE GREEN WIRE TAIL TO BUILDING GROUND

LINE IN

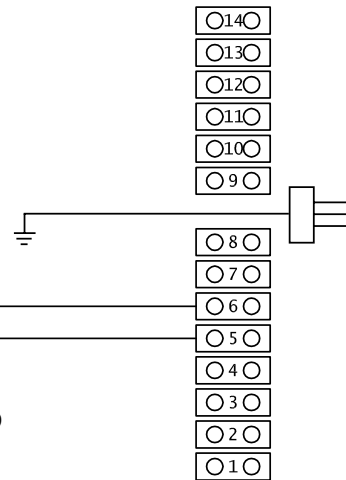


Figure 10C.3  
Terminals 5 & 6

### C.4 TERMINALS 7 & 8 - Powervent Connection

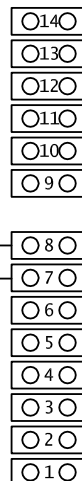
MOTOR

TERMINAL #7 IS THE NEUTRAL CONNECTION FOR THE POWERVENT MOTOR.

TERMINAL #8 IS THE HOT CONNECTION FOR THE POWERVENT MOTOR FROM THE SPEED CONTROL.

POWERVENT POWER MUST COME FROM THE TERMINAL BLOCK AND NOT ANY OTHER POWER SOURCE.

120VAC POWERVENT  
NEUTRAL POWERVENT



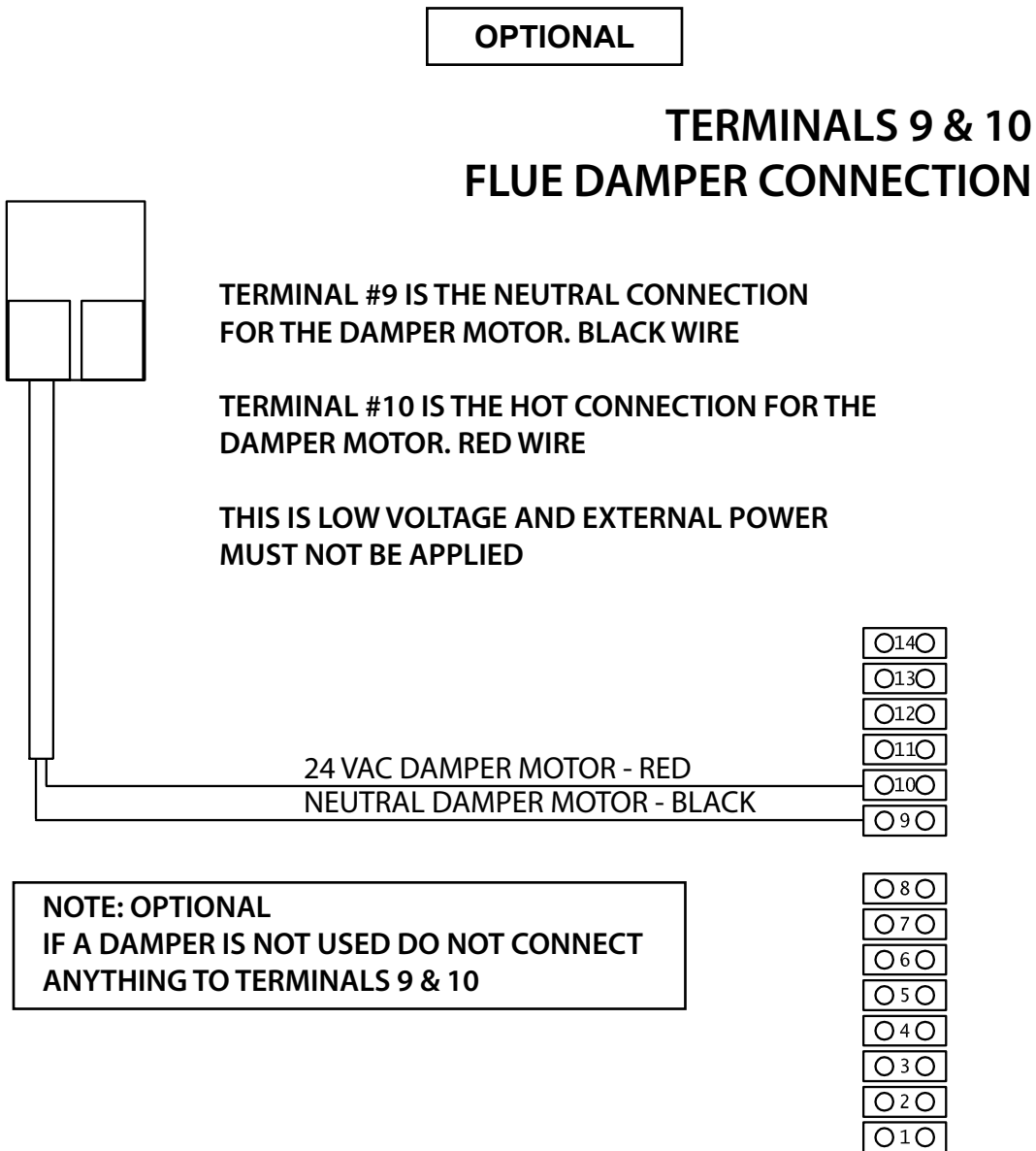
#### TERMINALS 7 AND 8 POWERVENT CONNECTION

Figure 10C.4  
Terminals 7 & 8

## 10 - ELECTRIC

### C.5 TERMINALS 9 & 10 - **OPTIONAL** Flue Damper Connection

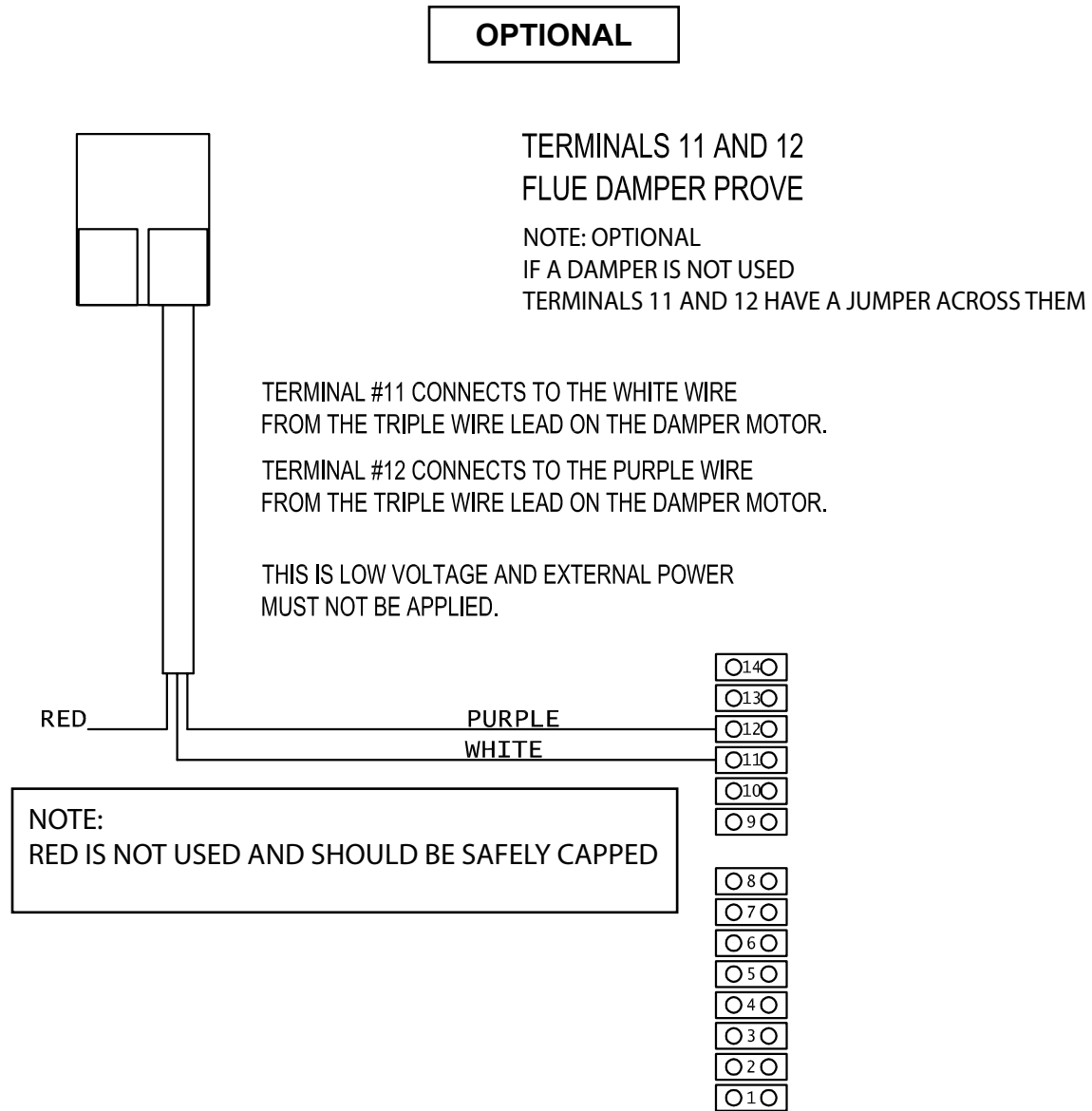
Figure 10C.5 Terminals 9 & 10



## 10 - ELECTRIC

### C.6 TERMINALS 11 & 12 - **OPTIONAL** Flue Damper Connection

Figure 10c.6 Terminals 11 & 12



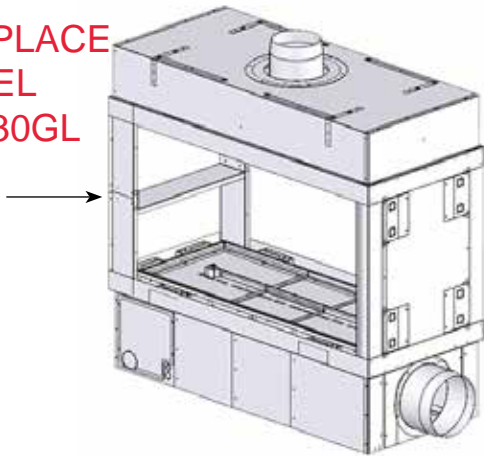
## 4 - PREPARE THE FIREPLACE

### C. SHIPPING SUPPORT BRACKETS

The hood must be supported at specific locations using 1/4-20 UNC threaded rods.

Temporary support brackets are put in place for shipping and installation support and must stay in place until fireplace hood is fully supported.

**FIREPLACE  
MODEL  
7PR-30GL**



**Figure 3C**

Temporary Shipping Support Bracket

1. Install the threaded rods in the appropriate locations for I, J & K as noted below in Framing - A.
2. Level the fireplace.
3. Ensure fireplace is fully supported and leveled and then remove support brackets.

#### **CAUTION! RISK OF INJURY!**

**DO NOT** remove support brackets until fireplace is fully supported and level.

### D. THREADED RODS

The Pier fireplace requires 2 threaded rods to be placed at the glass-to-glass intersections.

Placement of the required threaded rods is at the I & J intersection at the front left and back left corners notated as REQUIRED I & J locations.

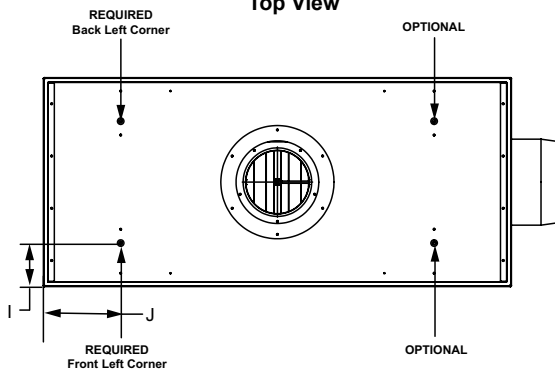
Additional locations are provided if your installation needs more support notated as OPTIONAL I, J & K locations.

Once the required threaded rods are in place and the the hood fully supported, the temporary support brackets may be taken off.

See next page for threaded rod installation option.

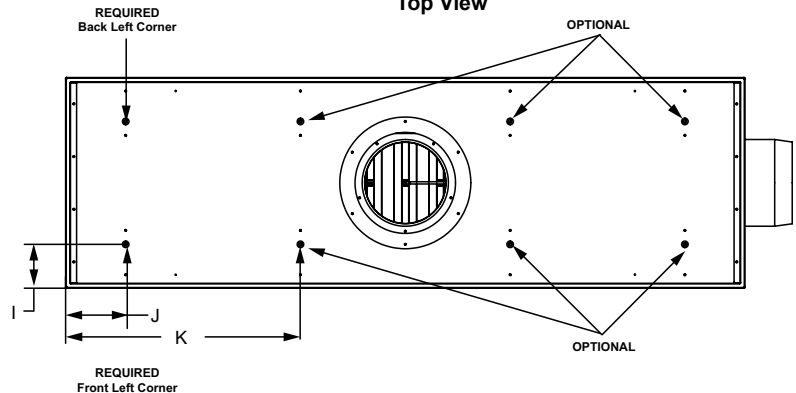
**Figure 3D. 1 - 3', 4' & 5' Models**

**Top View**



**Figure 3D.2 - 6', 7' & 8' Models**

**Top View**



The hood shall be supported at specific locations using 1/4-20 UNC threaded rods.

Qty 2 threaded rods are required in the front and back left hand corner glass-to-glass intersections (I & J)

All other locations are optional if additional support is needed.

MODEL	QTY	Additional	I		J		K	
	REQ	OPT	INCHES	MM	INCHES	MM	INCHES	MM
3' PR	2	2	5	127	6-3/8	162	NA	NA
4' PR	2	2	5	127	8-7/8	225	NA	NA
5' PR	2	2	5	127	11-7/8	302	NA	NA
6' PR	2	6	5	127	6-7/8	175	26-7/8	683
7' PR	2	6	5	127	6-7/8	175	32-7/8	835
8' PR	2	6	5	127	6-7/8	175	38-7/8	987



## 4 - PREPARE THE FIREPLACE

### E. THREADED RODS INSTALLATION (EXAMPLE)

There are several different ways to support the fireplace top and one option is to use a Unistrut installed over the fireplace that is secured to structurally sound framing. Refer to Figure 4B.

For each threaded rod installation you may need:



Super Strut  
or Uni-Strut



Qty 2  
1/4-20  
Eyebolt



Qty 2  
Threaded  
Quick Link



Qty 2  
1/4-20  
Turnbuckle



Qty 2  
1/4-20  
Threaded Rod  
or All Thread

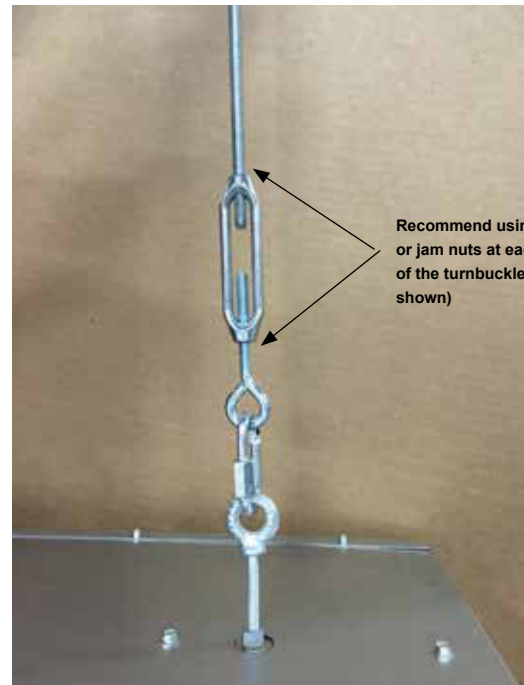


Qty 2  
Fender  
Washer



Up To Qty 6  
1/4-20  
Nut

( Qty Per Threaded Rod Used)



- Install the threaded rod fully into the threaded fastener located on top of the fireplace.
- Insert the threaded rod into a hole in the Unistrut straight above the threaded fastener located on top of the fireplace.
- Use a fender washer and nut on the top end of the threaded rod to adjust the height of the fireplace opening. Make sure the opening dimension is exact all the way around. Use Loctite to secure the nut from loosening (not shown).
- If the top of the threaded rod is to be secured into blind threaded fastener or if there isn't clearance above to adjust the rod, you can use a turnbuckle to adjust the height.
- Install an eyebolt fully into the threaded nut located on top of the fireplace.
- Use a quick link to connect the eye bolt to the reverse thread side of the turnbuckle.
- Thread the threaded rod into the normal side of the turnbuckle.
- Use the locktight or jam nuts to secure the turnbuckle from loosening.

## 5 - FRAMING & MANTEL REQUIREMENTS



**NOTE:** Framing dimensions should allow for wall covering thickness and fireplace facing materials. When using a hearth, adjust rough opening size as necessary to maintain at least minimum clearance requirements.



**CAUTION:** Install fireplace on metal, concrete or hard wood surface extending the full width and depth of fireplace.



**CAUTION:** Vent cap location must be in compliance with guidelines in *Section 8 (Venting)* of this manual.

If masonry is to be used (optional), prepare the necessary foundation for the masonry load. When masonry construction is being used, a lintel must be used over top of fireplace to support the added weight. Build hearth to desired size and height. If a hearth extension is desired, combustible material may be used.



**NOTE:** REFER TO DIMENSIONS SECTION FOR ALLOWABLE FINISHING DIMENSIONS REQUIRED TO FIT THE GLASS PANELS INTO THE FIREPLACE. FINISHING MATERIALS MUST NOT OVERLAP THE DIMENSIONS HIGHLIGHTED IN GREEN IN *SECTION 2 (DIMENSIONS)*. NEVER COVER THE GLASS WITH FINISHING MATERIALS.



**NOTE:** DO NOT PIERCE ANY OF THE BLACK PAINTED SURFACES WITH SCREWS, RIVETS, ETC. THIS INCLUDES THE 3" [76] BLACK TOP AND BOTTOM GLASS TRIM AND ANY PAINTED SIDES ADJACENT TO THE GLASS.

### IMPORTANT FRAMING NOTES:

#### THE FIREPLACE IS NOT LOAD-BEARING

FRAMING SHOULD BE BUILT AFTER THE FIREPLACE IS INSTALLED OR EXTRA CLEARANCE MUST BE PLANNED FOR AT THE INTAKE COLLAR AND FOR THE THICKNESS OF MATERIALS USED.

FRAMING DIMENSIONS ASSUMING 1/2" [13] DRYWALL AND NON-COMBUSTIBLE BOARD USED.

THESE DIMENSIONS REPRESENT THE FRAMING DIMENSIONS FOR COMBUSTIBLE MATERIAL.

NON-COMBUSTIBLE FRAMING AND FINISHING MATERIALS MAY BE USED WITHIN THESE DIMENSIONS RIGHT UP TO THE UNIT.

NO COMBUSTIBLE MATERIAL WITHIN 6" [152] OF THE TOP OF THE FIREPLACE.

NO COMBUSTIBLE MATERIAL WITHIN 1" [25] OF THE SIDES, BACK AND FRONT OF THE FIREPLACE.

COMBUSTIBLE MATERIAL SHALL NOT BE PLACED DIRECTLY ON THE FACE OF THE FIREPLACE, TOP AND SIDES.

SEE SECTION 5 (NON-COMBUSTIBLE ZONE) AND SECTION 10 (FINISHING) FOR DETAILS REGARDING 1/2" [25] STANDOFFS.

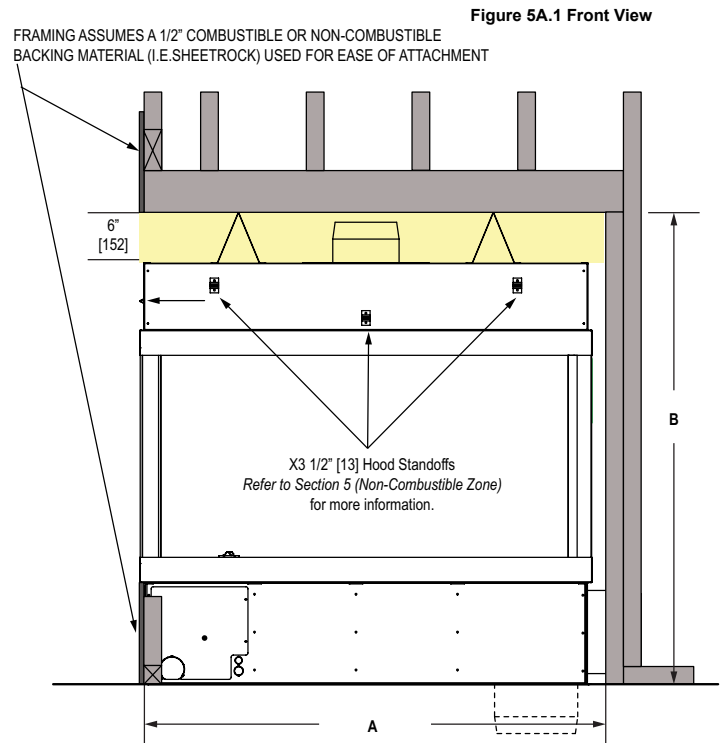
STEEL SURFACE MAY BE COVERED WITH NON-COMBUSTIBLE FINISHING MATERIAL.

1" CLEARANCE TO THE B-VENT MUST BE MAINTAINED.

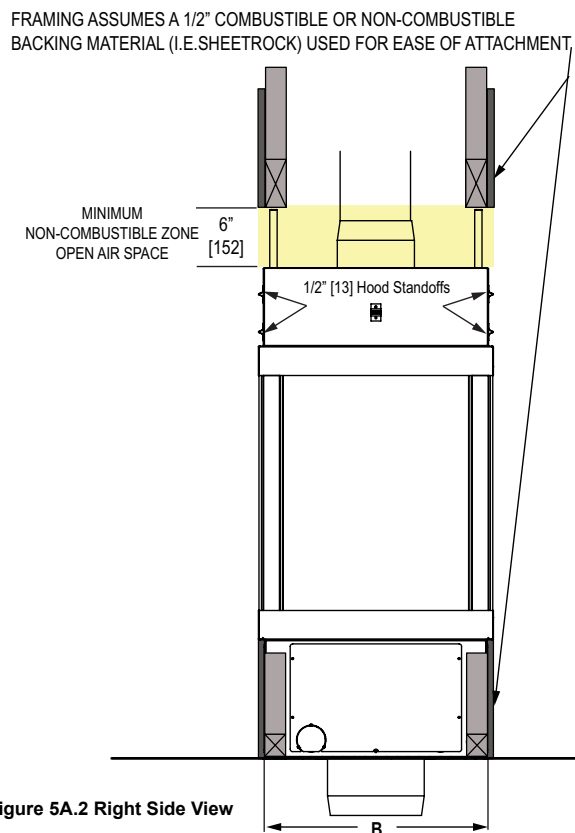
## 5 - FRAMING & MANTEL REQUIREMENTS

### A. FRAMING DIMENSIONS

	Framing Width	Framing Height	Framing Depth
MODEL	A	B	C
3PR-20GL	42-3/4 [1,086]	52 [1,321]	23 [584]
4PR-20GL	54-3/4 [1,391]	52 [1,321]	23 [584]
5PR-20GL	66-3/4 [1,695]	52 [1,321]	23 [584]
6PR-20GL	78-3/4 [2,000]	52 [1,321]	23 [584]
7PR-20GL	90-3/4 [2,205]	52 [1,321]	23 [584]
8PR-20GL	102-3/4 [2,610]	58 [1,473]	23 [584]
3PR-24GL	42-3/4 [1,086]	56 [1,422]	23 [584]
4PR-24GL	54-3/4 [1,391]	56 [1,422]	23 [584]
5PR-24GL	66-3/4 [1,695]	56 [1,422]	23 [584]
6PR-24GL	78-3/4 [2,000]	56 [1,422]	23 [584]
7PR-24GL	90-3/4 [2,205]	56 [1,422]	23 [584]
8PR-24GL	102-3/4 [2,610]	62 [1,574]	23 [584]
3PR-30GL	42-3/4 [1,086]	62 [1,574]	23 [584]
4PR-30GL	54-3/4 [1,391]	62 [1,574]	23 [584]
5PR-30GL	66-3/4 [1,695]	62 [1,574]	23 [584]
6PR-30GL	78-3/4 [2,000]	62 [1,574]	23 [584]
7PR-30GL	90-3/4 [2,205]	62 [1,574]	23 [584]
8PR-30GL	102-3/4 [2,610]	68 [1,727]	23 [584]
3PR-36GL	42-3/4 [1,086]	68 [1,727]	23 [584]
4PR-36GL	54-3/4 [1,391]	68 [1,727]	23 [584]
5PR-36GL	66-3/4 [1,695]	68 [1,727]	23 [584]
6PR-36GL	78-3/4 [2,000]	68 [1,727]	23 [584]
7PR-36GL	90-3/4 [2,205]	68 [1,727]	23 [584]
8PR-36GL	102-3/4 [2,610]	74 [1,880]	23 [584]
3PR-48GL	42-3/4 [1,086]	80 [2,032]	23 [584]
4PR-48GL	54-3/4 [1,391]	80 [2,032]	23 [584]
5PR-48GL	66-3/4 [1,695]	80 [2,032]	23 [584]
6PR-48GL	78-3/4 [2,000]	80 [2,032]	23 [584]
7PR-48GL	90-3/4 [2,205]	80 [2,032]	23 [584]
8PR-48GL	102-3/4 [2,610]	86 [2,184]	23 [584]
3PR-60GL	42-3/4 [1,086]	92 [2,337]	23 [584]
4PR-60GL	54-3/4 [1,391]	92 [2,337]	23 [584]
5PR-60GL	66-3/4 [1,695]	92 [2,337]	23 [584]
6PR-60GL	78-3/4 [2,000]	92 [2,337]	23 [584]
7PR-60GL	90-3/4 [2,205]	92 [2,337]	23 [584]
8PR-60GL	102-3/4 [2,610]	98 [2,489]	23 [584]



**Refer to Section 5 (Non-combustible Zone) for more information on the 1/2" [13] clearance standoffs.**



**Figure 5A.2 Right Side View**

## 5 - FRAMING & MANTEL REQUIREMENTS

### B.1 NON-COMBUSTIBLE ZONE - USING THE PROVIDED 1/2" STANDOFFS

The fireplace has standoffs installed on the front of the fireplace standard from the factory. They are located on the upper left, center and right front of the fireplace and are to ensure that the 1/2" [12.7mm] required clearance to combustibles on the surface of the fireplace is maintained.

If the standoffs are removed, only non-combustible material can be installed against the surface of the fireplace such as a non-combustible backer cement board. 1/2" [12.7mm] minimum thickness must be used in the space\* between the top of the 3" trim to the combustible framing the full width of the fireplace. The space\* includes a 7" [178mm] minimum above the top of the fireplace that is recommended for ease of attachment. \*= 15" [381] for 3'-7" units and 19" [483] for 8' units.

Refer to Figure 5B.1 below for a standard installation using the provided 1/2" standoffs.  
Refer to Figure 5B.2 for requirements when not using the provided 1/2" standoffs.



1/2" [12.7mm] Standoff

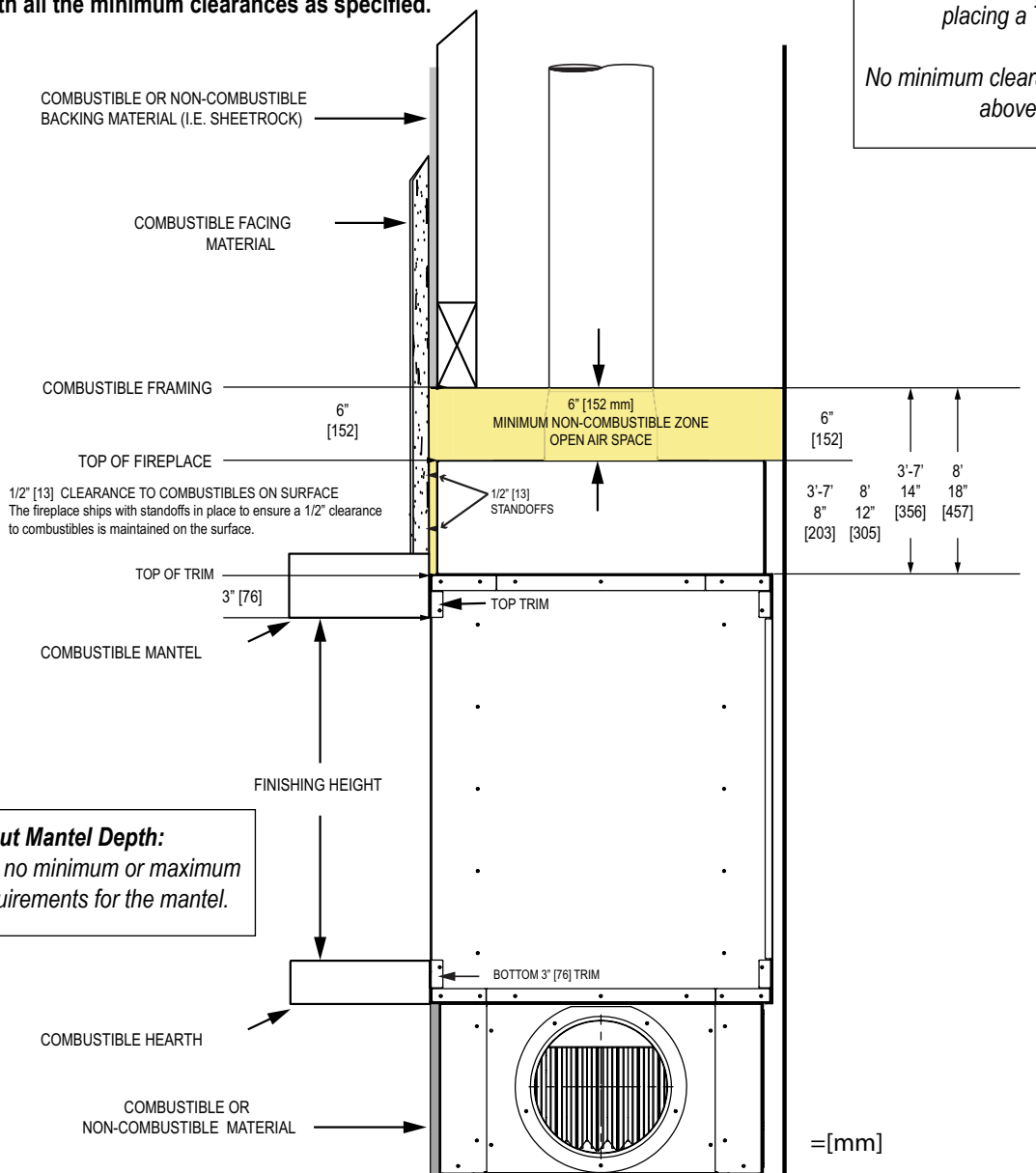
#### **WARNING! Risk of Fire**

Comply with all the minimum clearances as specified.

#### **Notes About TV Placement:**

A mantel is not required if you are placing a TV above the opening.

No minimum clearance required for a TV above the fireplace opening.



#### **Note About Mantel Depth:**

There are no minimum or maximum depth requirements for the mantel.

SINGLE SIDED EXAMPLE: RIGHT SIDE VIEW  
APPLIES TO BOTH SIDES AND ENDS IF USING A MULTI-SIDED FIREPLACE

**NOTE:** Refer to Section 11 (Finishing The Wall) for more information.

Figure 5B.1

## 5 - FRAMING & MANTEL REQUIREMENTS

### B.2 NON-COMBUSTIBLE ZONE - **NOT** USING THE PROVIDED 1/2" STANDOFFS

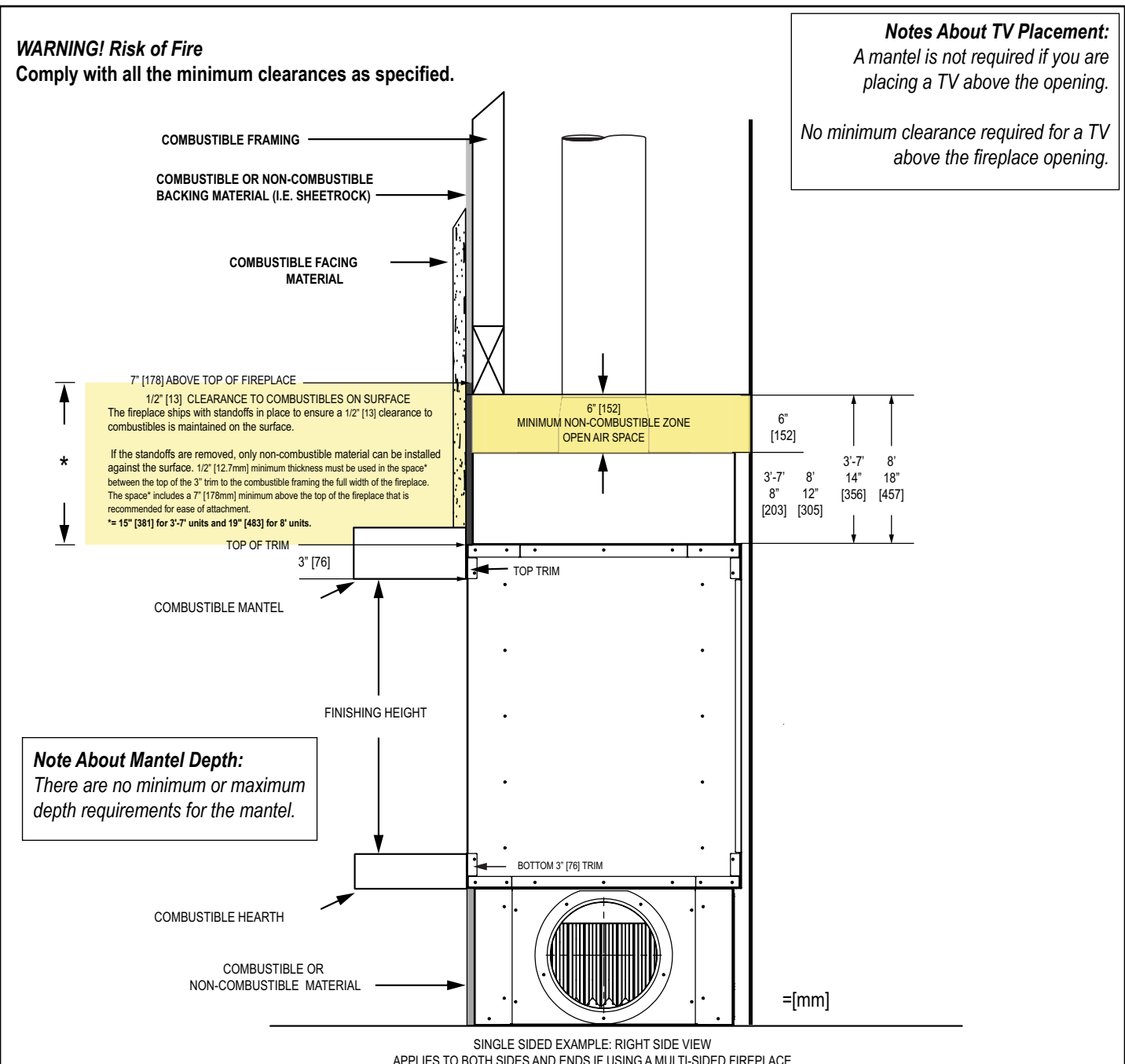
The fireplace has standoffs installed on the front of the fireplace standard from the factory. They are located on the left, center and right front hood of the fireplace and are to ensure that the 1/2" [12.7mm] required clearance to combustibles on the surface of the fireplace is maintained.

If the standoffs are removed, only non-combustible material can be installed against the surface of the fireplace such as a non-combustible backer cement board. 1/2" [12.7mm] minimum thickness must be used in the space\* between the top of the 3" trim to the combustible framing the full width of the fireplace. The space\* includes a 7" [178mm] minimum above the top of the fireplace that is recommended for ease of attachment. \*= 15" [381] for 3'-7" units and 19" [483] for 8' units.



1/2" [12.7mm] Standoff

Refer to Figure 5B.2 below for requirements when not using the provided 1/2" standoffs.  
Refer to Figure 5B.1 for a standard installation using the provided 1/2" standoffs.



**NOTE:** Refer to Section 11 (Finishing The Wall) for more information.

Figure 5B.2

## 7 - GAS LINE SPECIFICATIONS

**This fireplace is manufactured for use with Natural Gas or Propane.**



**CAUTION:** Installation of the gas line must only be done by a qualified person in accordance with local building codes, if any. If not, follow ANSI Z223.1.



**NOTE:** The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at pressures in excess of ½ psi.



**NOTE:** The appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas line at test pressures equal to or less than ½ psi (3.5 kPa).



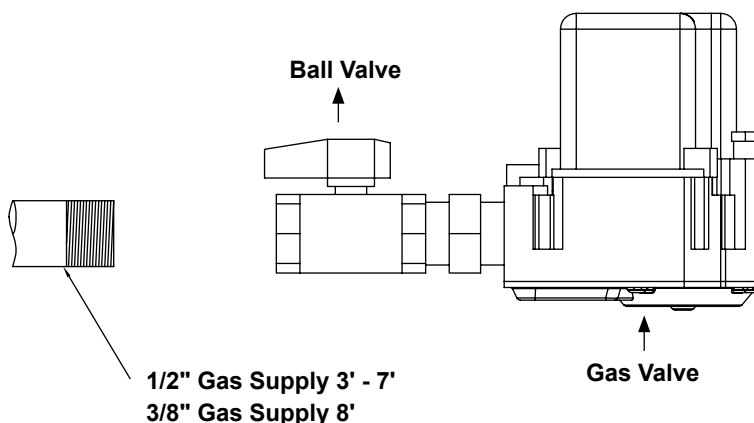
**NOTE:** For high altitude installations, consult Stellar Hearth Products directly for proper rating methods.

GAS LINE CONNECTION	Propane	NG
MINIMUM INLET GAS PRESSURE	11.0 inches W.C. (recommended)	7.0 inches W.C. (recommended)
MAXIMUM INLET GAS PRESSURE	14.0 inches W.C.	10.0 inches W.C.
MANIFOLD PRESSURE (HI)	10.0 inches W.C.	3.5 inches W.C.
ORIFICE SIZE	See Specifications Chart in Section 3.C	See Specifications Chart in Section 3.C
INPUT BTU/HR	See Specifications Chart in Section 3.C	See Specifications Chart in Section 3.C

**NOTE:** Have the gas supply line installed in accordance with local codes. If not, follow ANSI Z223.1. 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] T-handle manual shut-off ball valve and flexible connector are connected to the 1/2" [13] control valve inlet.

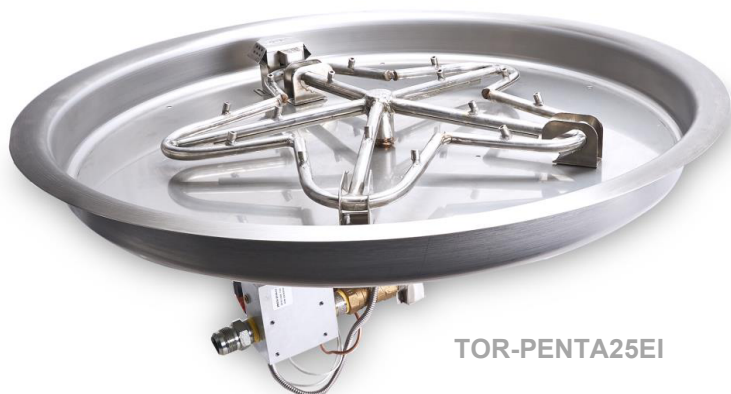
**Figure 7**



**ADDITIONAL INFORMATION  
IN SECTION 3B (GAS & ELECTRIC ACCESS LOCATIONS)**



# ELECTRONIC IGNITION FIRE PIT INSERT



TOR-PENTA25EI



TOR-36X14SSEI

---

## El Series

On/Off Models

Installation & Operation Instructions



C US



**FIRE INSPIRED™**  
Hearth Products Controls  
**Fire-inspired since 1975.**

860-EI ON/OFF







**This is a Safety Alert Symbol**

When you see this symbol on the fire pit insert, or in this manual, look for one of the following signal word panels alerting you to the potential for personal injury, death, or major property damage.



**WARNING: For Outdoor Use Only.**

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



**WARNING**

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

**An LP-cylinder not connected for use shall not be stored in the vicinity of this or any other appliance.**



**DANGER**

**FIRE OR EXPLOSION HAZARD**

**If you smell gas:**

- **Shut off gas to the appliance.**
- **Extinguish an open flame.**
- **If odor continues, leave the area immediately.**
- **After leaving the area, call your gas supplier or fire department.**

**Failure to follow these instructions could result in fire or explosion, which could cause property damage, personal injury, or death.**



**DANGER**

**CARBON MONOXIDE HAZARD**

**This appliance can produce carbon monoxide which has no odor.**

**Using it in an enclosed space can kill you.**

**Never use this appliance in an enclosed space such as a camper, tent, car, or home.**



**INSTALLER: Leave this manual with the appliance.**

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



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



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# 1 Important Safety Information

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- Hearth Products Controls Company recommends that our products are installed by professionals locally licensed by the authority having jurisdiction in gas piping. All installation instructions must be followed to ensure proper performance and safety. Hearth Products Controls Company assumes no responsibility for problems relating to the installation.
- To qualify for warranty, all instructions must be strictly followed. Otherwise, warranty may be void. Never alter product or configuration in any way.
- Annual servicing should be handled by professionals certified in the US by the National Fireplace Institute (NFI) as NFI Gas Specialists or in Canada by WETT (Wood Energy Technical Training).
- It is the installer's responsibility to ensure a safe installation and to educate the end-user regarding the features, safety recommendations and proper operation of this product.
- Please reference page 1 for all warnings.

**INSTALLER:**

Leave this manual with the appliance.

**END USER:**

Retain this manual for future reference.

**SELECT MODELS**

**Certified to**  
**ANSI Z21.97-2014**  
**CSA 2.41-2014**



---

## Technical Support

For information and support contact your Hearth Products Controls dealer.

# 1 Important Safety Information

---

## Symbol Legend



### This is a Safety Alert Symbol

When you see this symbol on the fire pit insert, or in this manual, look for one of the following signal word panels alerting you to the potential for personal injury, death, or major property damage.

**IMPORTANT**

Necessary instructions



# 1 Important Safety Information

---

***Please reference page 1 for all warnings.***

## Important Safety Information for Installers

Leave this manual with the end-user and instruct them to retain it for future reference. Instructions and product updates are also available at **[www.hpcfire.com](http://www.hpcfire.com)** under the Support tab.

Installers must carefully follow the instructions in this manual to prevent personal injury or property loss. These instructions contain information critical to the safe installation and operation of the fire pit.

- Instructions are updated as needed. It is the responsibility of the installers to check for product updates and installation manual updates at **[www.hpcfire.com/ support.html](http://www.hpcfire.com/support.html)** prior to installation.
- It is the responsibility of the installer to follow:
  - The National Fuel Gas Code, ANSI Z223.1/NFPA 54 or International Fuel Gas Code.
  - Natural Gas and Propane Installation Code CSA B149.1 or CSA B149.2.
  - The National Electrical Code, ANSI/NFPA 70. In Canada, Canadian Electrical Code CSA22.1.
  - Local codes
- **Control options:** Use of wall switch, optional remote control (#578-C), automatic shut-off timer or whole house system.

## Gas

- Only use the gas/fuel type specified for this fire pit, refer to the label on the fire pit control box. Never use an alternative fuel to include biofuel, ethanol, lighter fluid, or any other fuel.
- Gas pressure and type should be checked prior to use and installation.
  - **Natural Gas Fire Pit:** Supply Pressure: Minimum: 3.5 inches W.C.; Maximum: 7.0 inches W.C.
  - **LP Gas:** Supply Pressure: Minimum: 8.0 inches W.C.; Maximum: 11.0 inches W.C.

### IMPORTANT

**If pressure is low, this will reduce flame height on HIGH setting, resulting in little to no flame variation.**

# 1 Important Safety Information

---

- If not using supplied flex line, ensure any flex line that may be used from the permanent main fuel supply to the product is rated to the stated max BTU of the product and certified to ANSI Z21.75\*CSA 6.27.
- The EI Series is not for use with small LP Tanks and must utilize permanent fixed piping for fuel supply.

## Electrical

- Verify correct 120 VAC – 1 amp or 24, 12 VAC – 4-amp power supply. Only use the type specified for this fire pit. Refer to the label on the fire pit control box. All electronic applications should utilize a GFCI-protected circuit.
- If removing power cord plug and hard wiring within junction box, use only a certified Electrician and must follow the National Electrical Code (NEC), NFPA 70 and all local codes.

### IMPORTANT

#### **24 and 12 VAC powered fire pit inserts:**

- Fire Pit will not perform properly if power supply rating is below 100W, or wire size is too small.
- HPC highly recommends using our HPC/Sebco 24 and 12 VAC 100W power supply series
  - 24 VACS (311-PS1, 311-PS3, 311-PS5 Models)
  - 12 VACS (313-PS1, 313-PS3, 313-PS5 Models)
- HPC recommends that both 24 and 12 VAC fire pits when being wired to not be daisy chained in line. Each fire pit should have its own dedicated line.

A Class II 24 and 12 VACS, 4-amp, 100 W transformer must be used to power the fire pit and be able to be switched on and off from a remote location to allow for easy access or emergency.

- Wire sizing: Wire lengths 75 ft or less: 14 gauge
- Wire lengths 76 ft or more: 12 gauge

## Important Safety Information for End-Users

- Never leave an operating fire pit unattended or with someone not familiar with its operation or emergency shut-off locations.
- Both children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns and clothing ignition.
- Young children should be carefully supervised when they are in fire pit.
- Keep the appliance area clear and free from combustible materials, gasoline, and other flammable vapors and liquids.



## 2 Product Features and Parts List

---

### Product Features



### Parts List

- Fire Pit Insert
- Gas Input Flex Line – 24"
- Installation and Operation Instructions

### 3 Selecting the Fire Pit Location

**NOTE:** All fire pits and systems are designed and intended for outdoor use only.

#### IMPORTANT

It is recommended that material such as granite, marble or other dense stone be kept away from heat and especially flame due to risk of cracking. HPC is not responsible for damage resulting from failure to follow these recommendations.

- Select a location that
  - ensures above-grade installation of the fire pit.
  - offers good drainage.
  - allows easy access for installation and maintenance of the fire pit.
  - provides sufficient horizontal room to enjoy the fire pit while allowing a safe distance from the heat and flame.

#### IMPORTANT

**Deck installation —** If installing fire pit on a wood or composite deck, it is required to use the Deck Insulation Kit(s) and locally bought paver stones. Kit includes basalt material and instructions.

**#FPI-DECK39SQ; #FPI-DECK20SQ. Also refer to drawing- Deck Insulation Kit- Install.**

- Fire pits create extremely elevated temperatures. For clearances refer to table 3.1. Clothing or other flammable materials should not be placed on or near fire pit.

### Clearances around Fire Pit

Fire Pit Clearances	Up to 200k BTU	201k ~ 400k BTU
Under Valve Box when applicable for drainage	2"	2"
Sides surrounding fire pit from structure or combustibles	36" (12" for non-	48" (24" for noncombustible)
Overhead clearance above product	84"	Non-combustible screen only

Table 3.1 – Fire Pit Clearances

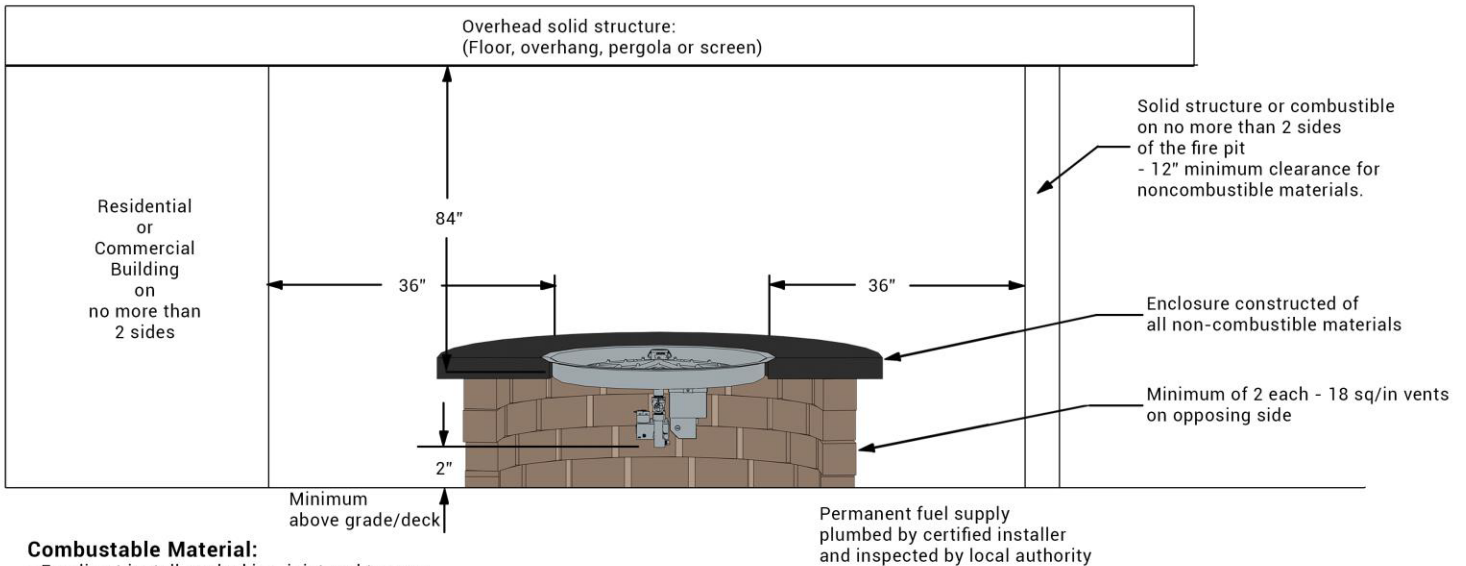


## 4 Overhead Structures and Sidewall Clearance Requirements

It is important to review the clearance requirements below for any type of overhead structure such as pergola, roof, overhang, screens, arbor, etc. or a sidewall to ensure that the distances are met. Figures 4.1 and 4.2.

**Figure 1 - Up to 200k BTU  
For outdoor Use Only**

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



**Combustable Material:**

- For direct install on decking, joist and trusses see Deck InstallationKit Drawing and instructions


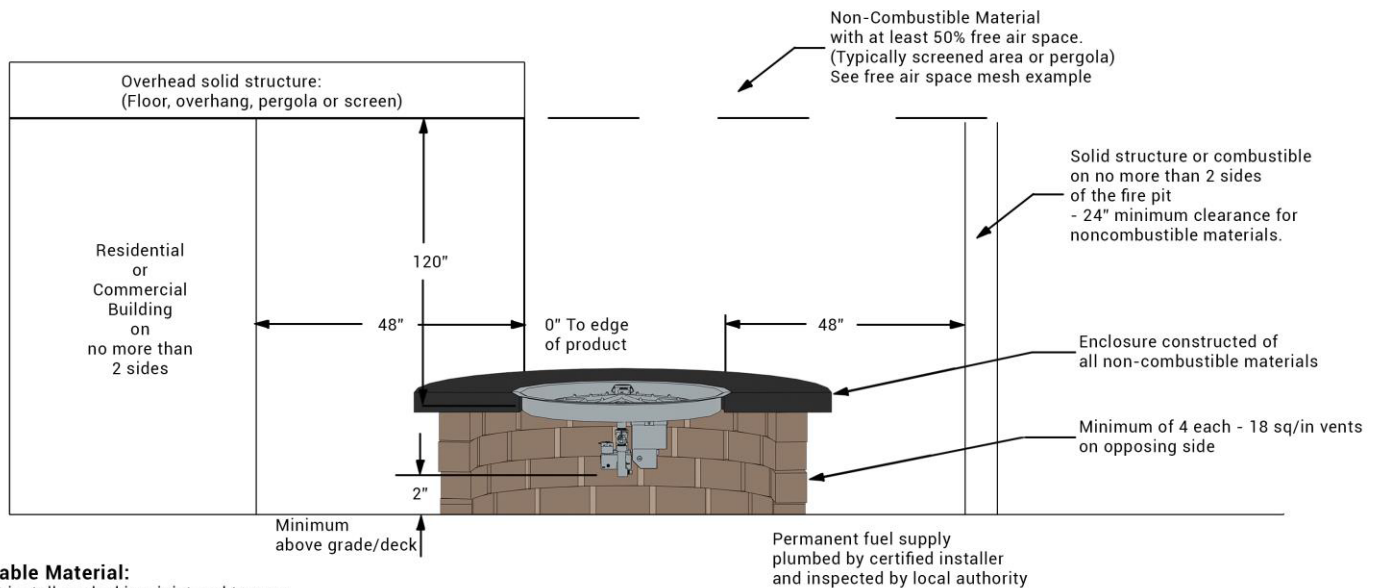
Diagram illustrates common clearance questions, Clearance from overhead structure Clearance from structure/combustible  All items may or may not apply to your project Clearance's apply to any and all sides of the project. Read and follow all instructions and local codes	DRAWN	DATE 8/18/2022	<b>Clearance's - Standard Fire Pit Up to 200k btu</b> 			
	CHECKED					
	QA					
	MFG		SIZE <b>A</b>	FSCM NO.	DWG NO	REV
	APPROVED		SCALE		SHEET	

Table 4.1 – Clearances for standard fire pit up to 200k BTU

## 4 Overhead Structures and Sidewall Clearance Requirements

**Figure 2 - 201k - 400k BTU**  
**For outdoor Use Only**

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



**Combustible Material:**


- For direct install on decking, joist and trusses  
see Deck InstallationKit Drawing and instructions

**Free Air Space Mesh Example**

3:1 Scale of 20x20x.013

**Note:**

-50% free air space minimum. HPC is not responsible for screen that melts  
-For non-combustible screening a 20x20x .013 wire mesh thickness or courser. (More open space)  
-For all other non-combustible covering an on-site estimate of free air space will be necessary

Diagram illustrates common clearance questions,  Clearance from overhead structure Clearance from structure/combustible  All items may or may not apply to your project  Clearance's apply to any and all sides of the project.  Read and follow all instructions and local codes	DRAWN	DATE	<b>Clearance's - Standard Fire Pit Up to 400k btu</b>			
	CHECKED	8/18/2022				
	QA					
	MFG					
	APPROVED		SIZE <b>A</b>	FSCM NO.	DWG NO	REV
			SCALE	SHEET		

## 5 Fire Pit Enclosures Requirements

---

### Location and design

- The enclosure must be installed above-grade and allow for drainage to prevent water damage to fire pit.
- Refer to cut sheets on our website for important dimensional information for your fire pit. Visit [www.hpcfire.com](http://www.hpcfire.com)
- The fire pit assembly should be recessed a minimum of two inches from the top of the enclosure to protect flame from being blown out.
- It is recommended that material such as granite, marble or other dense stone be kept away from heat and especially flame due to risk of cracking. Manufacturer is not responsible for damage.
- The enclosure must be constructed on a stable surface and be level. HPC recommends the use of the installation collar (optional) that may be mortared into or sandwiched between layers of the enclosure.
- The weight of the fire pit must be supported by the pan and not by any control/valve box.
- HPC recommends that the pan lip is recessed on a trough (linear), and large round enclosures, Figure 5.1.

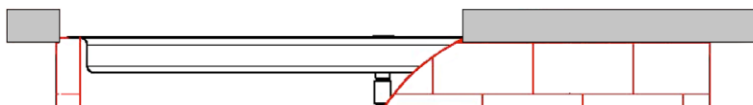


Figure 5.1 – Pan lip recessed on a trough.

**NOTE: HPC cannot guarantee the lip on all our products will be perfectly flat and will not warp due to heat.**

- There must be a minimum of 2 inches under the valve box for proper ventilation and drainage, see clearance drawings on page 9 and 10.
- The product must be accessible for service.

### Gas

- Fire pit must have a gas shutoff on the exterior of the fire pit to allow for emergency shut off and maintenance. The gas shutoff should NOT be used to adjust flame height.
- Fuel line sizing is the responsibility of the installer and must be able to supply the stated maximum BTU for the product – refer to product label on fire pit.

## 5 Fire Pit Enclosures Requirements

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### Construction materials

- Use non-combustible materials and construction for gas supply, power, and enclosure.
- The interior void space of the enclosure surrounding the valve box cannot be filled with any material (gravel, crushed rock, concrete, etc.).

### Venting

- The enclosure must incorporate at least two vents to allow heat and or residual fuel to escape. Failure to properly vent the enclosure may result in the fire pit overheating or explosion.
- Some enclosures may require more ventilation based on material, size, and extended use.
- The vent may also work as a drain when installed at bottom sidewall to prevent water build up.
- Vent specifications:
  - A minimum of two vents (18 square inches for each vent) on opposing sides of the enclosure totaling 36 inches of free area are required (example: 3-inch x 6-inch or larger). Or multiple vents uniformly made throughout the enclosure totaling 36 square inches or more of free area are acceptable.
  - We recommend 4 vents total to reduce the risk of thermal shutdown.
  - Installation of the vents in the mid-to-lower area of the enclosure is recommended.
- Failure to properly vent the enclosure may result in the fire pit overheating or explosion. Continuous overheating could lead to heat damage to internal components.
- When installing insert inside a non-HPC copper or concrete bowl, ventilation should be below the bowl. If bowl is mounted on top of a column, a 6" hole is recommended to allow gas supply, electrical and water plumbing to clear.
- **OVERHEATING:** the fire pit will automatically close the gas valve if the temperature exceeds 190°F inside the valve box to prevent component damage. Turn main power to the fire pit off and on to reset. To correct overheating, ensure enclosure has adequate ventilation per the guidelines in this section.

## 6 Installing the Fire Pit

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### Fuel line

- Fire pit must have a gas shutoff on the outside of the exterior of the fire pit to allow for emergency shut off and maintenance. The gas shutoff should not be used to adjust flame height.
- The installer is responsible for using the correct fuel line sizing that can supply the stated maximum BTU for the product – refer to product label on the fire pit for specifications.

#### INSTALLATION

We suggest that our products be installed by professionals that are locally licensed by the authority having jurisdiction in gas piping.

- Perform all leak tests with leak detector or leak reactant.

#### IMPORTANT

To prevent damage, unhook the fire pit from the gas supply for pressure leak tests of the supply line.

#### IMPORTANT

**Burn Testing:** It is the responsibility of the qualified installer to test for gas leaks at all connections.

#### IMPORTANT

**Gas Plumbing Connections:** Use joint compound or tape that is resistant to all gases. Apply joint compound only to all male pipe fittings. **DO NOT use on flex line flared fittings.** Be sure to tighten every joint securely.

#### Installation Steps:

1. Set fire pit in properly constructed enclosure, read **Section 5 – Fire Pit Enclosure Requirements**.
2. Position fire pit following safety recommendations with access to all gas connections for testing. Read **Section 3 – Selecting the Fire Pit Location** for more details.
3. Shut off gas supply to fire pit.
4. Connect proper 120 VAC, 24 VAC or 12VAC electrical power following all local codes.
5. Connect fire pit to main gas supply. Warning: avoid sharp bends with flex line to prevent whistling.

## 6 Installing the Fire Pit

---

6. Turn on gas supply, purge gas lines of air and perform leak test on all inlet connections. Repair as needed.
7. Initial Start-up after install:  
Several "ON/OFF" cycles may be necessary to purge air in gas lines after system installation.
  1. Turn "ON" gas to fire pit.
  2. Remove Blowout Box lid to allow viewing of hot surface igniter
  3. Turn "ON" electrical power to fire pit via wall switch or breaker.
  4. Hot surface igniter should begin to glow within 10 seconds.
  5. Pilot flame will eventually ignite. NOTE: This may take several cycles due to air in the gas line. Unit will lockout after 15 cycles- to reset, please turn "OFF" electrical power using wall switch or breaker then turn "ON", repeat step 4.
  6. Main burner will ignite.
8. Once fire pit is lit, perform leak test on all gas connections. Repair as needed.

### IMPORTANT

**For Penta Burner inserts, flame will be smaller with no media on the burner.**

9. Turn off fire pit and allow it to cool.
10. Apply media as described in **Section 7, Adding Approved Media**. When filling the pan with lava rock and/or decorative glass, the instructions in Section 7 must be followed.
11. Turn on fire pit again and perform leak test with media correctly installed. If gas leak is detected verify correct media application and repair as needed.
12. Verify correct operation and lighting.
13. Review safety manual with end-user. Instruct end-user that fire pit or media must not be changed or modified.
14. Leave manual with end user.
15. Apply the Start Up and Shutdown decal next to control box in an obvious and highly visible position.

## 7 Adding Approved Media

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### WARNING

FOR GLASS MEDIA USAGE WITH LP GAS - WHEN USING APPROVED DECORATIVE GLASS TO COVER BURNER APPLY ONLY ENOUGH TO HIDE BURNER. APPLYING OVER 1/2" MAY CREATE BACK PRESSURE AND GAS LEAKAGE FROM AIR MIXER RESULTING IN LP POOLING UNDER FIRE PIT.

### WARNING

FOR GLASS MEDIA USAGE WITH LP GAS - THE UNIT MUST BE TESTED WITH MEDIA OVER BURNER FOR CONFIRMATION OF NO BACK PRESSURE CREATING GAS TO LEAK OUT OF AIR MIXER VENTURI HOLES. THIS MAY HAVE TO BE DONE PRIOR TO PLACING IN ENCLOSURE IF NO ACCESS DOOR.

### WARNING

Never use any material that is non-porous or holds moisture such as gravel, pebbles, river rock, etc. When heated, non-porous material will not allow heated steam to readily escape which can break and cause personal injury or damage. Material that holds moisture can boil and fracture unexpectedly when exposed to heat.

### IMPORTANT

The fire pit is designed to use approved media correctly installed over the burner to achieve proper combustion.

- Never install a mesh or screen under the media.
- Media affects flame pattern. It is possible to create an unusual flame pattern that could damage your enclosure. Enclosure damage from an open flame fire feature is not covered under any warranty.



## 7 Adding Approved Media

### Application of Approved Media

Please follow the instructions below to add the final addition to your fire pit.

Particular attention needs to be on the pilot assembly area.

Incorrect media installation will cause the pilot flame to suffocate and turn off pit or delay main burner ignition.

#### Lava Rock Only Application

- 1) Install your fire pit per instructions.



- 2) Apply lava rock ONLY deep enough to cover ring.



- 3) Blowout Box: Leave vents open. Do not cover vents with lava rock or allow any rock to block flame opening. Incorrect media installation will cause the pilot flame to suffocate and turn off pit or delay main burner ignition.



Do not cover box vents!

#### Decorative Glass Application

- 1) Install your fire pit per instructions.



- 2) Fill pan with media. Cover burner with 1/4 to 1/2 inches of glass. Do not overfill pan with glass. All LP installations must be checked for back pressure with media installed. Failure to do so may result in personal injury or property damage.



- 3) Blowout Box: Do not cover blowout box vents or opening with glass. Incorrect media installation will cause the pilot flame to suffocate and turn off pit or delay main burner ignition.



Do not cover box vents!



## 8 Operating the Fire Pit

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- Before use, be sure to test all gas connections for leaks. Do not use fire pit if there is any evidence of leaking gas. If leaking gas suspected, turn off the main gas supply and repair immediately.
- Do not use the enclosure as a seating area. Wind and gusty conditions will affect the flame in an unpredictable manner. If conditions exist that are not safe for patrons, turn off the fire pit.
- The hose should be inspected before each use of the fire pit and replaced prior to use if there is evidence of excessive abrasion or wear or if the hose is damaged. The replacement hose assembly shall be that specified by the manufacturer.
- Do not use the fire pit if any part has been under water. Immediately call a qualified service technician to inspect the fire pit and to replace any part of the control system and any gas control that has been under water.
- Never use any material that is non-porous and holds moisture such as gravel, pebbles, river rock, etc. This material, when heated will cause the trapped moisture to boil and fracture unexpectedly. This material is not sufficiently porous to allow heated steam to readily escape which can break and cause personal injury or damage.
- Solid fuels shall not be burned in the fire pit.
- Leaves, sticks, wood, paper, clothing, food material, should be kept away from the fire pit. Clothing or other flammable materials should not be hung from the appliance or placed on or near the appliance. Keep the appliance area free from gasoline, and other flammable vapors and liquids.
- Fire pit is not for cooking.
- Make sure that there is no vegetation or other objects over the top or sides of the fire pit that could interfere with safe operation. See clearances in **Section 3 – Selecting the Fire Pit Location**.
- If lava rock is wet, allow the fire pit to burn for 45 minutes prior to coming within 15 feet of the fire pit.
- When the fire pit is not in operation, turn off gas valve.
- When not in use, the fire pit must be always covered.

## 8 Operating the Fire Pit

### Start-up

**Initial Start-up:** Several “ON/OFF” cycles may be necessary to purge air in gas lines after system installation. Fire pit will lockout after 15 attempts to light pilot, please power OFF then ON to restart.

#### Sequence of Operation:

1. The igniter will be powered (glow red) for five seconds before pilot valve opens.
2. The igniter will only be powered the initial 15 seconds of the 30-second pilot cycle. This sequence will repeat up to 15 times (approximately 15 minutes) before going into lockout. To reset, turn “OFF” power then back “ON” again.
3. Pilot flame will ignite and warm thermocouple; it may take 30 seconds at times for thermocouple to get hot. If thermocouple is not hot in 60 seconds, system will shut down. If this occurs, go back to Step 1.
4. Once thermocouple is hot, main valve will open allowing main burner to ignite.
5. If pilot flame is blown out at any time, system will shut down, and then automatically restart (Step 1).



### DANGER

#### If you smell gas:

- 1) Shut off gas to appliance.
- 2) Extinguish any open flame.
- 3) If odor continues, keep away from appliance and immediately call gas supplier or fire department.

### El Fire Pit Start Up

1. **STOP! Read the safety information on “What to Do If Smell Gas” (Pg. 1).**
2. Confirm there is no debris in the fire pit (as mentioned in warnings) including water.
3. Turn “ON” electrical power and gas to fire pit.
4. Using wall switch to turn “ON” fire pit - this may take several cycles to purge any air.
5. To reset after lockout, power unit down, wait 5 minutes, then restart.
6. Once the fire pit has ignited **DO NOT** leave unattended.

**This product is not for use with small tanks.**

### El Fire Pit Shutdown

1. Turn “OFF” fire pit using remote, wall switch or app.

#### IMPORTANT

**FOR REMOTE CONTROL USE, YOU MUST ALSO TURN OFF POWER TO ELECTRICAL OUTLET OR GAS TO FIRE PIT TO PREVENT ACCIDENTAL START.**

2. Once fire pit is cooled, use appropriate cover to protect fire pit.

## 9 Maintaining the Fire Pit

- Any guard or protective device removed for servicing must be replaced prior to operating the fire pit.
- We suggest that our products be serviced annually by a professional certified in the US by the National Fireplace Institute (NFI) as NFI Gas Specialists.
- Ensure gas is shut off and fire pit is cool before servicing.
- Keep fire pit always covered when not in use and free of debris.
- In some areas of the country, spiders or insects have been known to build nests and/or lay eggs in the venturi holes of the air-mixer for LP units. This can cause fuel to fill the fire feature cavity and result in personal injury or property damage. Periodic inspection by a qualified service technician of the air-mixer is required to ensure your fire feature performs properly, Figure 9.1.
- **Burner Cleaning: One time a year.** If flames exhibit any abnormal shapes or behavior, or if burner fails to ignite properly, then the burner holes may require cleaning. The appliance can be cleaned by carefully removing the logs and media to allow access to burner. Use a brush to carefully remove dust, spider webs, and loose particles from base, logs, and fire ring itself. If evidence of damage, fire ring must be replaced with fire ring specified by the manufacturer.
- **Thermocouple cleaning of soot: Once every six months or as needed.** Remove lava rock & glass around pilot, then the blowout box lid. Clean thermocouple of any soot using soft brush. Be careful not to damage hot wire element. Place lava rock or glass back as explained in **Section 7 – Adding Approved Media**.
- Always ensure that the union fitting is tight. If loose, torque until there is no leak (recommended torque value of 80 ft lb.).
- **Visually inspect the pilot.** The pilot flame should cover 3/8 inch to 1/2 inch of the thermocouple, Figure 9.2. Cleaning of the pilot orifice may be required by removing pilot hood counterclockwise and removing orifice, Figure 9.3.

### Service



We suggest that our products be serviced by a professional certified in the US by the National Fireplace Institute (NFI) as NFI Gas Specialists.



Figure 9.1 – Locating orifice for cleaning



Figure 9.2 – Pilot flame coverage of thermocouple.



Figure 9.3 – Cleaning pilot orifice

## 10 Troubleshooting

Table 10.1 and 10.2, below indicates some potential causes and countermeasures to the symptoms indicated in bold type. **Please contact your retailer or certified technician for service and repair.**

- The error number and description are shown by the number of LED blinks on the module inside of the valve box.

### Service



We suggest that our products be serviced by a professional certified in the US by the National Fireplace Institute (NFI) as NFI Gas Specialists.

### 120v and 24v units only

Error Number & Description	Problem	Possible Causes	Solution
<b>1</b> Igniter failure <b>6</b> Igniter open	<b>Pilot Will Not Light</b>	Air in gas line	New install – May take several attempts
		No gas flow – Gas not ON or line obstruction	Confirm gas is ON upstream
		Pilot orifice dirty or clogged	Debris in line – insulation, dirt, plastic, etc.
		Gas pressure improper	Remove orifice and clean (Section 9)
		Igniter element damaged	Confirm proper gas pressure (Section 1)
		Damaged wires	Change igniter element
<b>3</b> Thermocouple error <b>4</b> Hardware fault pilot/main valve <b>5</b> Flame at startup	<b>No Main Burner (Pilot Flame Present)</b>	Loose thermocouple at the valve box	Inspect wires to igniter. Confirm insulation is in good condition and connections are tight
		Thermocouple cracked/broke under pilot assembly	Tighten down connection at valve box. Should be tightly snug.
		Gas pressure improper	Replace thermocouple
		Small pilot flame	Confirm proper gas pressure (Section 1)
		Dirty thermocouple	Remove pilot head and clean orifice (Section 9)
		Fire ring obstructed	Clean using soft brush
		Improperly applied media	Confirm no debris or water in ring
		Pilot flame present always	See Section 7.
	<b>Main Burner Turning Off/On Frequently</b>	Small pilot flame	Debris inside valve
		Improperly applied media	Remove pilot head and clean orifice (Section 9)
		Gas pressure improper	See Section 7.
		Thermocouple defective	Gas pressure too low (Section 1)
<b>2</b> Over temperature  <b>10</b> Internal control fault or Over temperature	<b>No Power or Response from Unit</b>	No power to unit	Change thermocouple
		Remote not working	Confirm breaker, wall switch and remote are on
		Has power to unit but will not cycle	Change batteries
			Re-sync remote (High/Low models only)
			Check external fuse (5A)
		Over temperature	Check voltage to unit
			Module sensing wrong voltage. Replace module and transformer
			Inadequate venting. See proper venting in Section 5. Power OFF then back ON to reset

Table 10.1 – Troubleshooting

# 10 Troubleshooting

12v units only

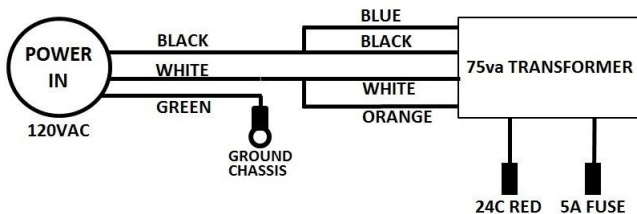
Error Number & Description	Problem	Possible Causes	Solution
<b>2</b> Igniter failure	<b>Pilot Will Not Light</b>	Air in gas line	New install – May take several attempts
		No gas flow – Gas not ON or line obstruction	Confirm gas is ON upstream Debris in line – insulation, dirt, plastic, etc.
		Pilot orifice dirty or clogged	Remove orifice and clean (Section 9)
		Gas pressure improper	Confirm proper gas pressure (Section 1)
		Igniter element damaged	Change igniter element
		Damaged wires	Inspect wires to igniter. Confirm insulation is in good condition and connections are tight
<b>3</b> Thermocouple error <b>4</b> Flame at startup <b>5</b> Hardware fault pilot/main valve	<b>No Main Burner (Pilot Flame Present)</b>	Loose thermocouple at the valve box	Tighten down connection at valve box. Should be tightly snug.
		Thermocouple cracked/broke under pilot assembly	Replace thermocouple
		Gas pressure improper	Confirm proper gas pressure (Section 1)
		Small pilot flame	Remove pilot head and clean orifice (Section 9)
		Dirty thermocouple	Clean using soft brush
		Fire ring obstructed	Confirm no debris or water in ring
		Improperly applied media	See Section 7.
<b>Slow Flash</b>	<b>Thermocouple hot at start-up and delay to prove absence of flame</b>	Pilot flame present always	Debris inside valve
		Thermocouple still hot	Let cool down and unit will recycle
<b>Fast Flash</b>	<b>Safety Shutdown</b>	Over temperature	Inadequate venting see proper venting in Section 5. Power OFF then back ON to reset
		Has power to unit but will not cycle	Check external fuse (5A)
			Check voltage to unit Module sensing wrong voltage. Replace module and transformer

Table 10.2 – Troubleshooting

# 11 Wiring Diagram

## 120VAC Models:

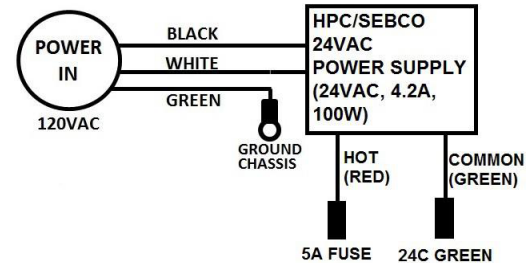
(Included in fire pit control box)



## 24VAC Models:

(Power supply sold separately)

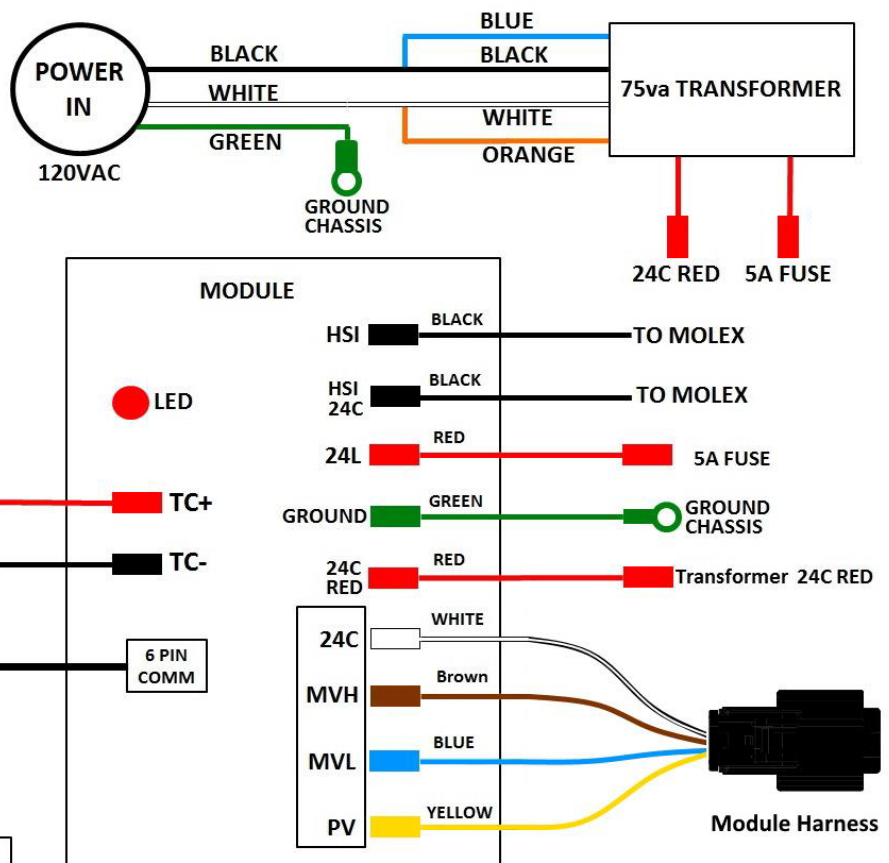
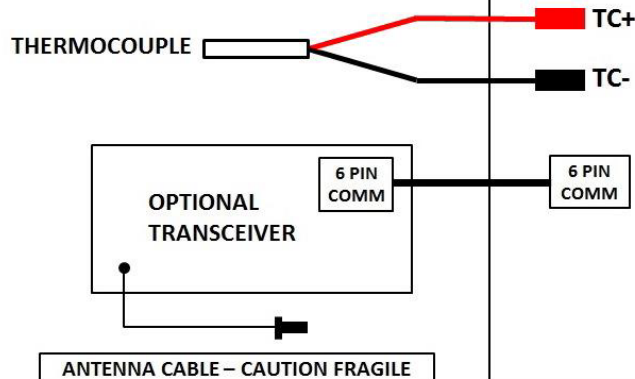
311-PSI, 311-PS3, 311-PS5



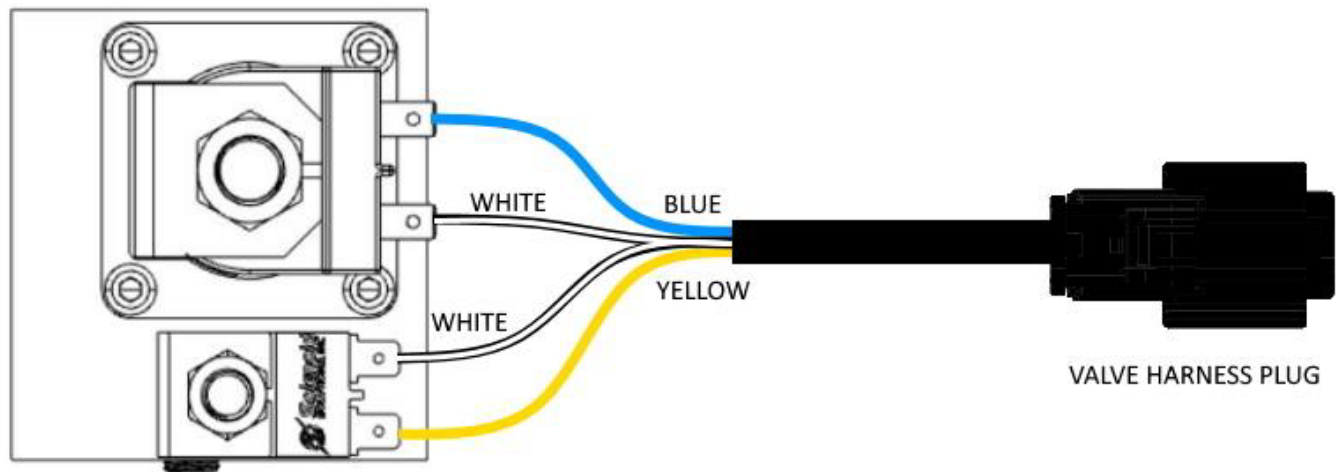
NOTE: 100W Output Required

All wire - 18 AWG, °200C, 600V  
1/4" fully insulated female spade terminal, 22-16 AWG 250a, x 11 (color red)  
#6 Ringlet Terminal 22-16 AWG  
Zip tie - Nylon 66 UV stable miniature, 3" length

HPC EI WIRE DIAGRAM  
120VAC / 24v



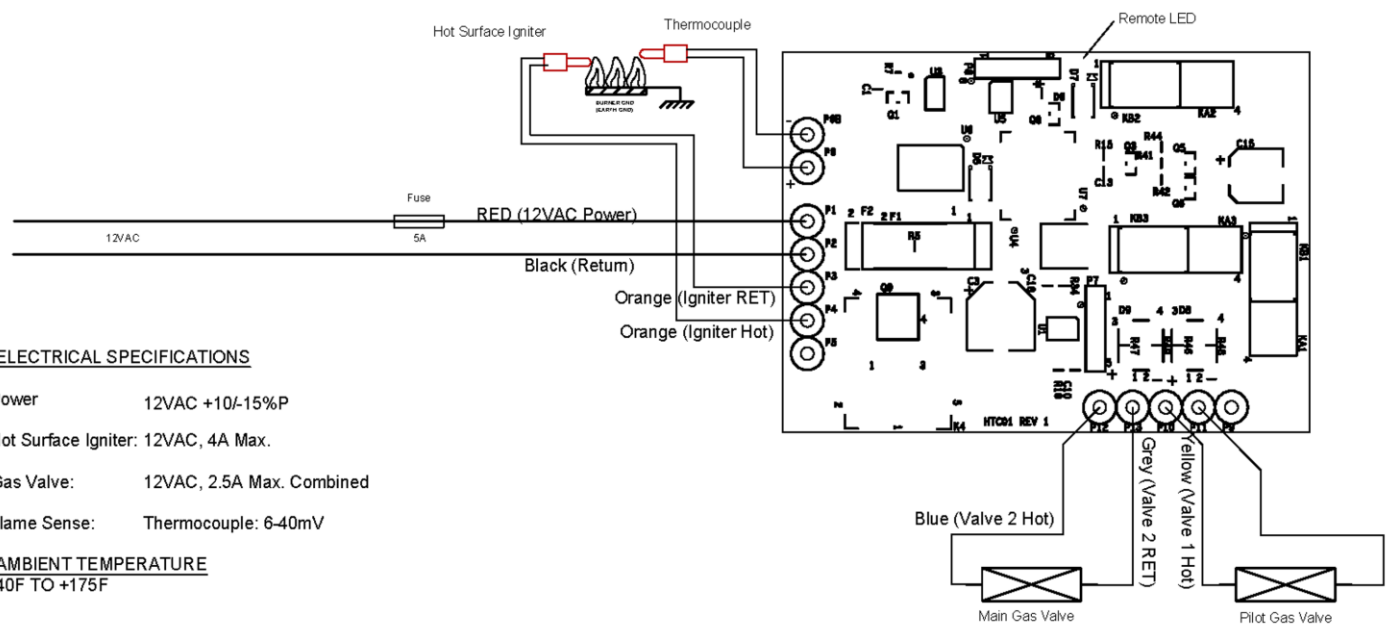
# 11 Wiring Diagram



## 12VAC Models:

(Power supply sold separately)

313-PS1, 313-PS3, 313-PS5



### ELECTRICAL SPECIFICATIONS

Power 12VAC +10/-15%P

Hot Surface Igniter: 12VAC, 4A Max.

Gas Valve: 12VAC, 2.5A Max. Combined

Flame Sense: Thermocouple: 6-40mV

AMBIENT TEMPERATURE  
-40F TO +175F



## 12 Compatible Accessories

- **Fire pit cover** – Hearth Products Controls has decorative copper covers and heavy-duty vinyl covers for your fire pit that will protect it from rain, snow, and moisture. See Figure 12.1.

For a complete list of accessories, visit [www.hpcfire.com](http://www.hpcfire.com)



Figure 12.1 – Fire pit cover

## 13 Replacement Parts

Please contact your dealer for parts – if unsure please contact HPC or visit our website at [www.hpcfire.com](http://www.hpcfire.com) and we will be happy to help you.

### El Series Replacement Components

Part Number	Item
311-T/C	Thermocouple
312-IGNITER	24v Hot Surface Igniter
313-IGNITER	12v Hot Surface Igniter
312-EIMOD	24v Control Module
313-EIMOD-R	12v Module
210-EI415	24v Gas Valve
313-EI-PILOT/12V	12v Pilot Gas Valve
313-EI-MAIN/12V	12v Main Gas Valve
576-75VA	Transformer
579	120VAC Power Cord
Please Buy Local	Fuse (5A) – common fast acting

### Pilot Assembly

Part Number	Fire Pit Size	Gas
HSIP-36SS	50k ~ 275k BTU	NG
HSIP-36SS-300NG	300k BTU	NG
HSIP-36SS-400NG	400k BTU	NG
HSIP-36SS-50/225LP	50k ~ 225k BTU	LP
HSIP-36SS-250 / 400LP	250k ~ 400k BTU	LP
<b>12v Pilot Assembly</b>		
HSIP12V-36SS	50k ~ 275k BTU	NG
HSIP12V-36SS-LP/LOW	50k ~ 275k BTU	LP



## 14 Warranty

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### Warranty

Hearth Products Controls Co. (HPC) warrants fire pits against manufacturing defects that prevent safe and correct function as follows:

#### 1) **Stainless Steel Fire Pit and Outdoor Fireplace Burners - Lifetime Warranty**

Limited Warranty:

- 2) Electronics, Gas Valve: Commercial-1 year; Residential-3 year.
- 3) Pilot Assembly: Commercial-1 year; Residential-2 year.
- 4) Stainless Steel Pan, Valve Box: Commercial-1 year; Residential-5 years

Warranty commences from the date of original sale / shipment from HPC FOB Dayton, Ohio. This warranty is for parts and in-house (HPC) labor. The defective product must be sent back to HPC with a Return Merchandise Authorization (RMA) issued by HPC for that specific product and any other additional information for the nature of the defect or warranty claim. The warranty does not cover items that have been damaged by overheating, modification, abuse, or improper storage. Also, any labor involving installation or maintenance with the unit is not covered. This warranty excludes claims for consequential, indirect-collateral expenses arising from product defects or warranty recovery.

Rev.0 5/8/2019



**FIRE INSPIRED™**

**Hearth Products Controls**

**Fire-inspired since 1975.**

2225 Lyons Road

Miamisburg, Ohio 45342

For detailed product information, go to [www.hpcfire.com](http://www.hpcfire.com)

