

# Installation & Maintenance Manual



**MONTIGO**<sup>®</sup>  
the art of **fireplaces**

**PVW47**

**4/7 FLUSH WALL MOUNT POWER VENT**



- The installation of this fireplace must be done by a qualified and certified gas appliance installer.
- Check local codes and read all instructions prior to installation.

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

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS
  - Do not try to light any appliance.
  - Do not touch any electrical switch; do not use any phone in your building.
  - Leave the building immediately.
  - Immediately call your gas supplier from a neighbour'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 fitter.

## NOTICE

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

## ⚠ CAUTION

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

## ⚠ DANGER

Read and understand this manual. Improper installation, adjustment, alteration, service or maintenance can cause serious injury, property damage or even death. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

## ⚠ WARNING

Some materials used in the manufacturing process of this product can expose you to Benzene which is known in the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65warnings.ca.gov](http://www.P65warnings.ca.gov)

## Safety Alert Key

### **DANGER**

Indicates a hazardous situation which, if not avoided, **WILL** result in death or serious injury or property damage.

### **WARNING**

Indicates a hazardous situation which, if not avoided, **COULD** result in death or serious injury or property damage.

### **CAUTION**

Indicates a hazardous situation which, if not avoided, **WILL** result in minor or moderate injury.

### **NOTICE**

Indicates practices that are important, but not related to personal injury.

## Introduction

### **Congratulations on your purchase of a Montigo Fireplace.**

This system is designed to allow installation of gas fireplaces that cannot be done with a standard Direct Vent gas fireplace installation.

**ONLY USE WITH APPROVED FIREPLACES** - see fireplace installation manual.

Read through the fireplace's installation & maintenance manual, as it must also be adhered to.

#### **Power Cord Harnesses:**

- EPVH10 - 10 foot power cord and harness
- EPVH20 - 20 foot power cord and harness
- EPVH40 - 40 foot power cord and harness
- EPVH50 - 50 foot power cord and harness
- EPVH60 - 60 foot power cord and harness
- EPVH80 - 80 foot power cord and harness
- EPVH100 - 100 foot power cord and harness

#### **Power vent specifications**

Voltage: ..... 120VAC 60HZ

Current: ..... 0.8A

RPM: ..... 2300

CFM: ..... 80

- Maintenance-free ball bearings
- Motor insulation class H

**Figure 1** PV Specifications

### **IMPORTANT:**

For vent configurations and power vent locations, refer to fireplace manual.

## Section A: Before You Begin

### IMPORTANT MESSAGE: SAVE THESE INSTRUCTIONS

The unit must be installed in accordance with these instructions. Carefully read all the instructions in this manual first. Consult the Local Gas Branch to determine the need for a permit prior to starting the installation. It is the responsibility of the installer to ensure this fireplace is installed in compliance with the manufacturers instructions and all applicable codes.

### NOTICE

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

### NOTICE

Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition

### CAUTION

When cold air enters the warmer building interior, primarily at the air intake end, condensation may occur on the exterior of the flex pipe. To limit this condensation, install insulation over the last twenty feet of flex pipe. Also, by sloping the last 20'-0" feet of flex pipe downward toward the exterior of the building, elimination of most of the condensation problems should occur. Ensure the termination is securely fastened, and sealed to the flex pipe. Fasten the termination to exterior of the building with water tight sealant and the appropriate fasteners.

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## Power Vent Compatibility

	HARNES/HARNES+ BOARD REQUIRED	REDUCER REQUIRED
DRL3613NI	PVBWH-SIT	NO
DRL3613NI-2	PVWH-SIT	NO
DRL4813NI	PVBWH-SIT	NO
DRL4813NI-2	PVWH-SIT	NO
DRL6013NI	PVBWH-SIT	NO
DRL6013NI-2	PVWH-SIT	NO
DRSQ34NI	PVBWH-SIT	NO
DRSQ34NI-2	PVWH-SIT	NO
DRSQ38NI-2	PVWH-SIT	PVA5487
DRSQ38NI	PVBWH-SIT	PVA5487
DRSQ42NI-2	PVWH-SIT	PVA5487
DRSQ42NI	PVBWH-SIT	PVA5487
DRSQ46NI-2	PVWH-SIT	PVA5487
DRSQ46NI	PVBWH-SIT	PVA5487
D3615NI-2	PVWH-SIT	PVA5487
D4815NI-2	PVWH-SIT	PVA5487
D6315NI-2	PVWH-SIT	PVA5487
D7215NI-2	PVWH-SIT	PVA5487
D3615STNI-2	PVWH-SIT	PVA5487
D4815STNI-2	PVWH-SIT	PVA5487
D6315STNI-2	PVWH-SIT	PVA5487
D7215STNI-2	PVWH-SIT	PVA5487
H38FSD*	-	-
H38FSD*I	PVBWH-SIT	PVA5487
H42FSD*	-	-
H42FSD*I	PVBWH-SIT	PVA5487
H38PF*I-2	PVWH-SIT	PVA5487
HL38PF*I-2	PVWH-SIT	PVA5487
H38CL*I-2	PVWH-SIT	PVA5487
H38CR*I-2	PVWH-SIT	PVA5487
HL38CL*I-2	PVWH-SIT	PVA5487
HL38CR*I-2	PVWH-SIT	PVA5487

	HARNES/HARNES+ BOARD REQUIRED	REDUCER REQUIRED
R320*	NO	NO
R420*	NO	NO
R520*	NO	NO
R720*	NO	NO
R820*	NO	NO
R320ST*	NO	NO
R420ST*	NO	NO
R520ST*	NO	NO
R620ST*	NO	NO
RP620*	NO	NO
RP424PF*	NO	NO
R324STIO*	-	-
P38DF*I-2	PVWH-SIT	PVA5487
P42DF*I-2	PVWH-SIT	PVA5487
P52DF*I-2	PVWH-SIT	LVA54107
PL38DF*I-2	PVBWH-SIT	PVA5487
PL42DF*I-2	PVBWH-SIT	PVA5487
PL52DF*I-2	PVBWH-SIT	LVA54107
L38FSD*	-	-
L38FSD*I	PVWH-SIT	PVA5487
L42FSD*	-	-
L42FSD*I	PVWH-SIT	PVA5487
L52FSD*	-	-
L52FSD*I	PVWH-SIT	PVA5487
30FID*IS-01	-	-
34FID*IS-01	-	-

## Required Components

### 1 Power Vent

- Power vent
- **PVW47**

### 2 Harness Kit

#### **PVBWH-SIT**

- IFC Control board
  - SIT PN: 0.584.665
  - Montigo PN: GC3104
- Wiring Harness

This kit is designed to power vent fireplaces that were shipped with a Proflame 2 BASIC control board. The PVBWH-SIT kit contains a full load board as well as a power vent wiring harness.

#### **PVWH-SIT**

- Wiring Harness

This kit is designed to power vent fireplaces that already have a Proflame 2 control board. The PVWH-SIT kit contains a power vent wiring harness and requires the removal of the power vent jumper from the existing control board.

### 3 Reducer (IF UNIT IS NOT 4/7)

#### **PVA5487**

- For reducing 5/8 venting to 4/7

#### **LVA54107**

- For reducing 5/10 venting to 4/7

The PVW47 and the 200 series power vents use 4/7 venting, therefore fireplaces that use 5/8 or 5/10 venting must be reduced.

#### **3/5 CVS Venting**

- Permitted on Montigo 4/7 fireplaces

The fireplace manual may reference additional approved alternate venting manufacturers, though these are NOT all approved for power vent runs.

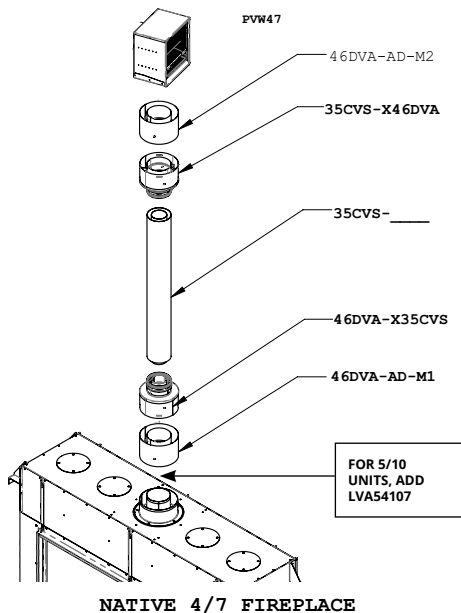
The CVS run should follow the clearance and requirements as listed in the CVS specification sheet and manual.

5/10 fireplaces like the Phenom P/PL52 can use this setup by adding the LVA54107 at the fireplace collar.

### 4 Power Cord

- Power Vent system power cord
  - EPVH-10
  - EPVH-20
  - EPVH-40
  - EPVH-60
  - EPVH-80
  - EPVH-100

## 3/5 CVS Venting

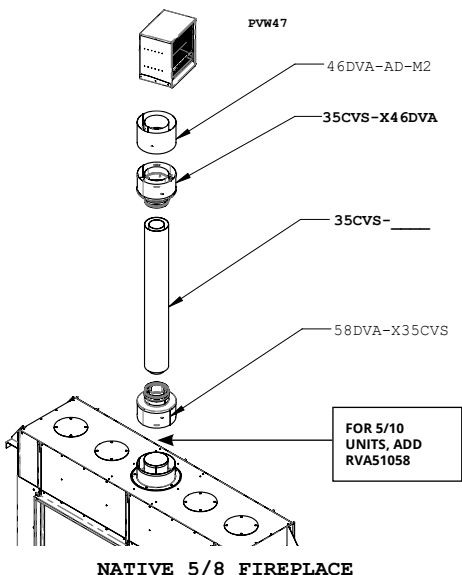


### 3/5 CVS venting from a native 4/7 fireplace, to power vent

- **46DVA-AD-M1** (MONTIGO SUPPLIED)  
CONVERTS MONTIGO 4/7 TO DURAVENT 4/7
- **46DVA-X35CVS** (LOCALLY SOURCED OR MONTIGO SUPPLIED)  
CONVERTS DURAVENT 4/7 TO DURAVENT 3/5 CVS
- **(CVS VENT RUN)** (LOCALLY SOURCED)
- **35CVS-X46DVA** (LOCALLY SOURCED OR MONTIGO SUPPLIED)  
3/5 INCREASER TO 4/6
- **46DVA-AD-M2** (MONTIGO SUPPLIED)  
CONVERTS DURAVENT 4/7 TO MONTIGO 4/7
- **(POWER VENT)** (MONTIGO SUPPLIED)

The fireplace manual may reference additional approved alternate venting manufacturers, though these are NOT all approved for power vent runs. The CVS run should follow the clearance and requirements as listed in the CVS specification sheet and manual.

5/10 fireplaces like the Phenom P/PL52 can use this setup by adding the LVA54107 at the fireplace collar.



### 3/5 CVS venting from a native 5/8 fireplace, to power vent

- **58DVA-X35CVS** (LOCALLY SOURCED OR MONTIGO SUPPLIED)  
CONVERTS 5/8 TO DURAVENT 3/5 CVS
- **(CVS VENT RUN)** (LOCALLY SOURCED)
- **35CVS-X46DVA** (LOCALLY SOURCED OR MONTIGO SUPPLIED)  
3/5 INCREASER TO 4/6
- **46DVA-AD-M2** (MONTIGO SUPPLIED)  
CONVERTS DURAVENT 4/7 TO MONTIGO 4/7
- **(POWER VENT)** (MONTIGO SUPPLIED)

The fireplace manual may reference additional approved alternate venting manufacturers, though these are NOT all approved for power vent runs. The CVS run should follow the clearance and requirements as listed in the CVS specification sheet and manual.

5/10 fireplaces like the Phenom P/PL52 can use this setup by adding the RVA51058 at the fireplace collar.

# Installation

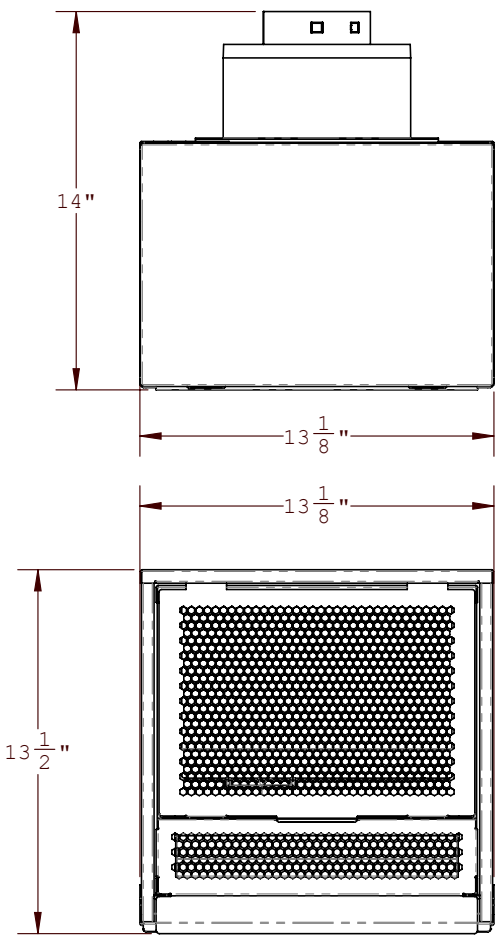
The following venting components are approved for use with Montigo products. Please contact your local Montigo dealer for further information.

## Alternate venting table

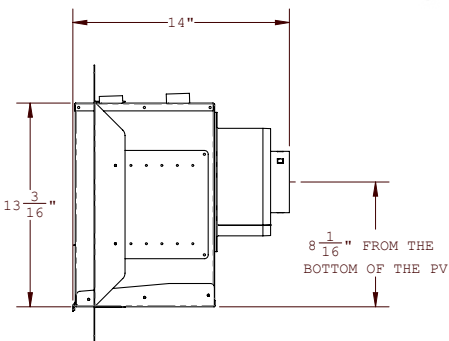
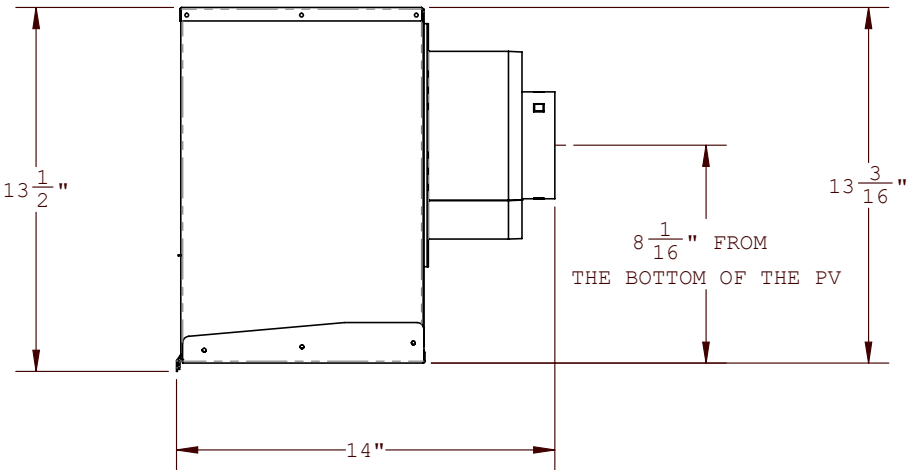
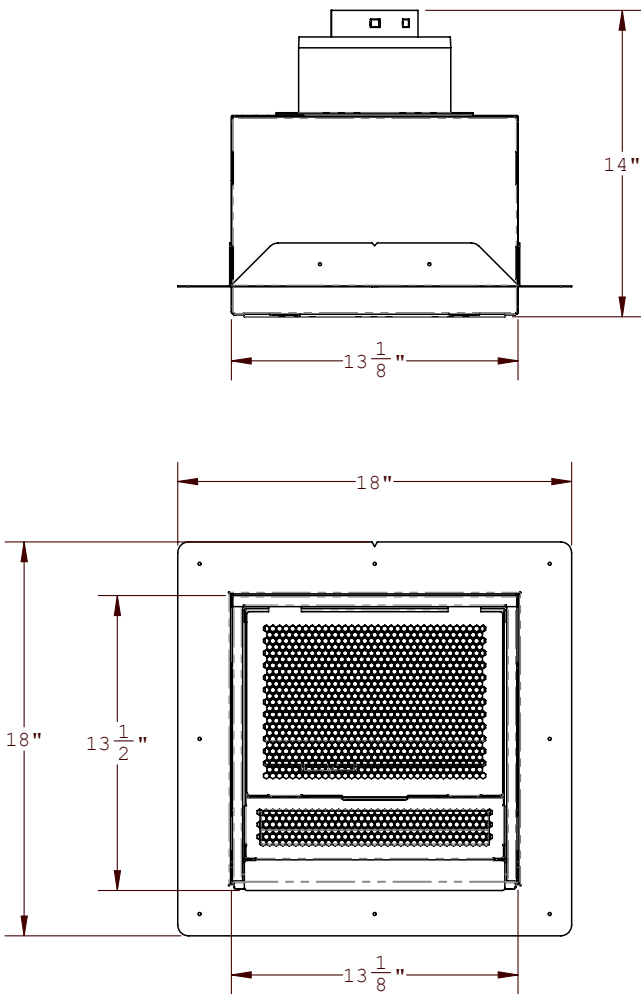
Component	Duravent P/N	Description	Notes
<b>Adaptors</b>	46DVA-AD-M1 46DVA-AD-M2 58DVA-AD-M1 46DVA-X35CVS 35CVS-X46DVA 58DVA-X35CVS	Montigo 4/7 to Duravent 4/6% at fireplace Duravent 4/6% to Montigo 4/7 at termination Montigo 5/8 to Duravent 5/8 at fireplace Duravent 4/6% reducer to 3/5 at fireplace 3/5 increaser to 4/6% at termination 5/8 reducer to 3/5 at fireplace	Also used on Inline PV downstream Also used on Inline PV upstream  Also used on Inline PV downstream Also used on Inline PV upstream
<b>Termination Inline PV</b>	46DVA-HC 46DVA-VCH 35CVS-HCR 35CVS-VC	Duravent wall termination Duravent roof high wind termination 3/5 round wall termination 3/5 Roof termination	Requires 35CVS-X46DVA 3/5 to 4/6% increaser Requires 35CVS-X46DVA 3/5 to 4/6% increaser
<b>Rigid Pipe</b>	35CVS-06 35CVS-12 35CVS-24 35CVS-36	3/5 Diameter 6" Pipe Length 3/5 Diameter 12" Pipe Length 3/5 Diameter 24" Pipe Length 3/5 Diameter 36" Pipe Length	
<b>Telescoping Pipe</b>	35CVS-12TA 35CVS-18TA	3/5 Diameter Adjustable Pipe 9"-12" 3/5 Diameter Adjustable Pipe 12"-18"	
<b>Elbows</b>	35CVS-E45 35CVS-E90	3/5 Diameter 45° Elbow 3/5 Diameter 90° Elbow	
<b>Wall Thimble</b>	35CVS-WT 35CVS-WTP	3/5 Wall Thimble 3/5 Wall Thimble with insulation ring	
<b>Support ring</b>	35CVS-RS 35CVS-WS	3/5 Roof Support 3/5 Wall Strap	
<b>Firestop</b>	35CVS-FS	3/5 Firestop with support clamp	
<b>Roof Flashing</b>	35CVS-F 35CVS-DSA	3/5 adjustable roof flashing 0/12 to 12/12 pitch 3/5 DSA Roof Flashing, up to 7/12 pitch	
<b>Storm collar</b>	35CVS-SC	3/5 Roof storm collar	

Section 1: Dimensions

PVW47 Product Dimensions



PVW47 Mounting Flange Dimensions





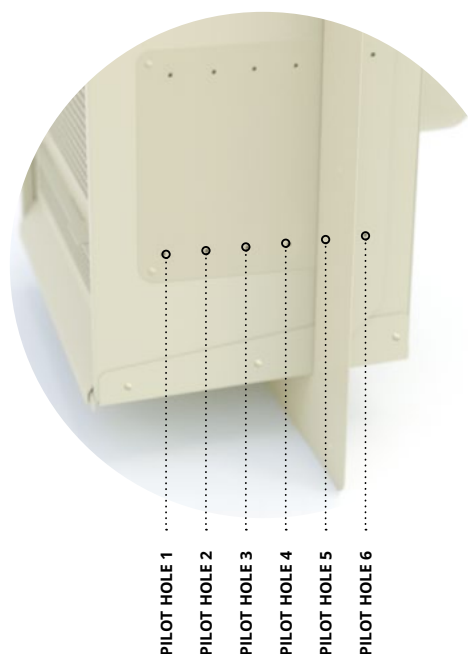
## Section 2: Preparing the power vent

Pilot Hole Setting	PV sticking out from wall	2x6 stud and ¾" board	PV sticking out from stud
Pilot Hole 1	1¼"		1½"
Pilot Hole 2	2¼"		½"
Pilot Hole 3	3¼"		-½"
Pilot Hole 4	4¼"		-1½"
Pilot Hole 5	5¼"		-2½"
Pilot Hole 6	6¼"		-3½"
Pilot Hole 6 (Flipped)	9"		-6½"

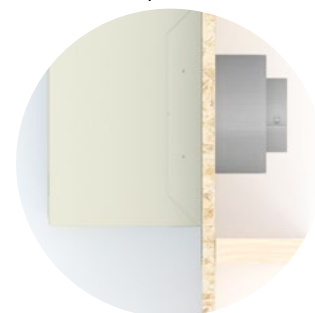
### Flange setting notes

The PVW47 is designed to work with an adjustable flange that can adapt to different finishing depths. Use the chart shown to plan out what setting you should have your flange set.

- **PV sticking out from wall dimension** - This dimension should be related to whatever finishing material will eventually be applied to the OSB board. Silicone behind the power vent flange may increase this measurement up to ¼". Materials such as house wrap and furring strips underneath the final finishing will also factor into the final "finish depth".
- **2x6 stud and ¾" board dimension** - The chart assumes using a 2"x 6" stud and ¾" board. If your jurisdiction has finishing requirements different from this, then adjust your depths in relation to the chart accordingly.
- **PV sticking out from stud dimension** - The chart assumes using a 2"x 6" stud and ¾" board. If your jurisdiction has finishing requirements different from this, then adjust your depths in relation to the chart accordingly.



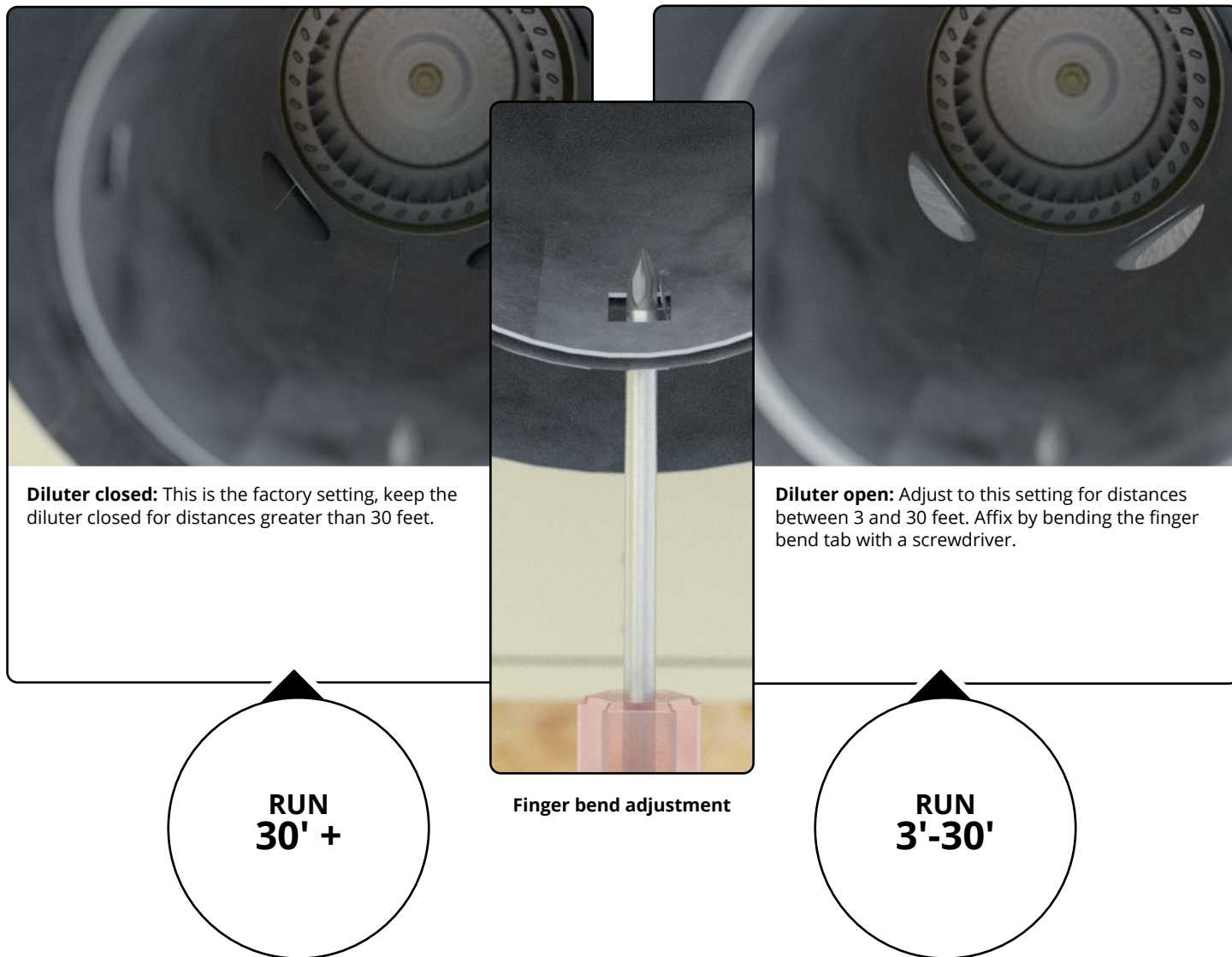
**NOTE:** The flange can be flipped and affixed to Pilot Hole 6 to allow for up to a 9" deep finish.



### IMPORTANT

This adjustment must be done BEFORE installation. Changes to the air diluter CANNOT be made after the power vent is installed and the vent run is connected.

### Air diluter adjustment



## Section 1: Determine the power vent run

### Venting Installation

**THIS POWER VENT CAN BE ROUTED IN ANY PATH AS LONG AS IT MEETS THE FOLLOWING REQUIREMENTS:**

- Maximum vertical distance above Fireplace floor= 60'
- Maximum effective length with 1 elbow = 125 ft.
- Maximum effective length with 8 elbows = 104 ft.
- Minimum venting is 3' with one 90° elbow.
- Maximum 8-90° elbows or 16-45° elbows
- Maximum drop of 12 ft from highest point in run.
- If vent pipe runs downward it cannot turn back upward.

### NOTICE

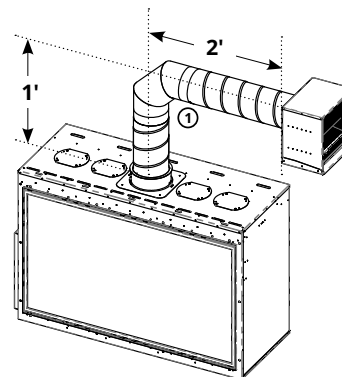
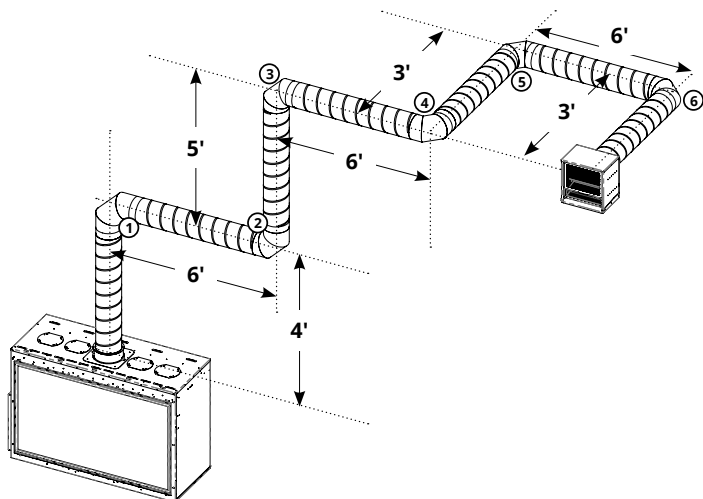
For short vent runs, ensure the diluter is open. Adjust to this setting for distances between 3 and 30 feet. Affix by bending the finger bend tab with a screwdriver.

### Minimum Venting

Minimum venting is 3' with one 90° elbow.

### Example Installation

Multi-elbow installations are possible up to a maximum of eight 90° elbows. Two 45° elbows classify as 1 90° elbow

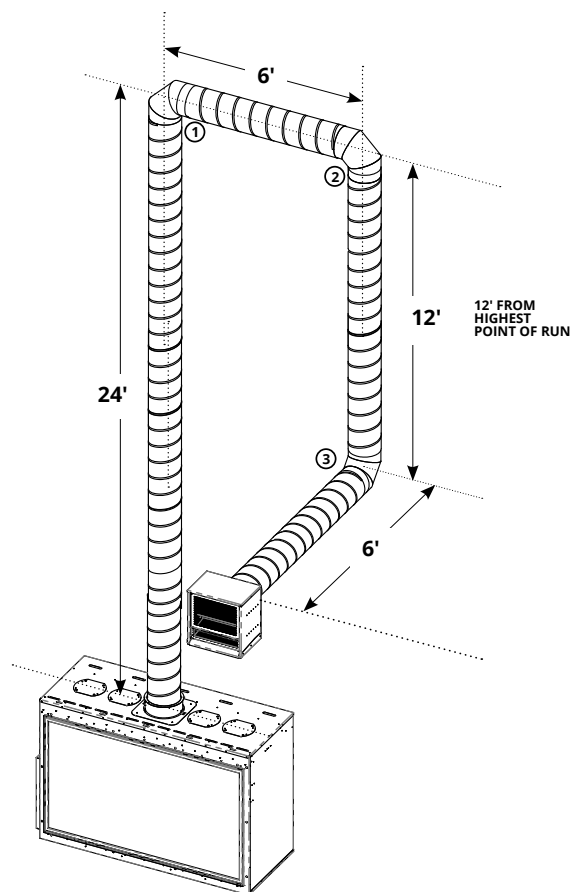


**Adjust the diluter to fully open** for distances between 3 and 30 feet. Affix by bending the finger bend tab with a screwdriver. Restrictor may need to be adjusted at fireplace to get the best looking flame

ELBOW #	MAX VENTING RUN
1 ELBOW	125
2 ELBOW	122
3 ELBOW	119
4 ELBOW	116
5 ELBOW	113
6 ELBOW	110
7 ELBOW	107
8 ELBOW	104

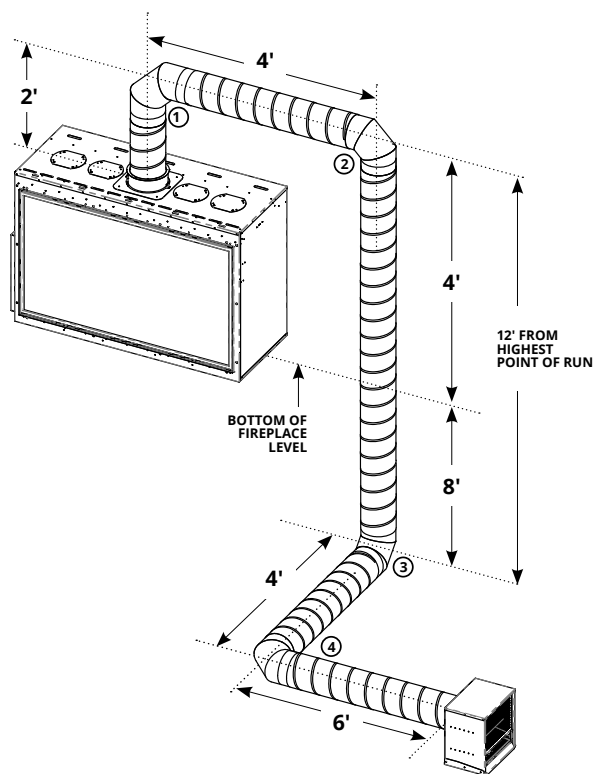
## Example with downward venting

Maximum downward drop is 12ft from highest point of run. No rise is permitted after the downward section. Maximum 4 elbows.



## Example with downward venting and power vent below fireplace level

Maximum downward drop is 12ft from highest point of run. No rise is permitted after the downward section. Power vent can be installed 8ft below fireplace, but maximum effective run must be reduced to 56ft including 4 elbows.



DOWNWARD VENTING TABLE (POWER VENT BELOW FIREPLACE LEVEL)

ELBOW #	1' DOWN	2' DOWN	3' DOWN	4' DOWN	5' DOWN	6' DOWN	7' DOWN	8' DOWN	9' DOWN	10' DOWN	11' DOWN	12' DOWN
3 ELBOW	114	109	104	99	94	89	84	79	74	69	64	59
4 ELBOW	111	106	101	96	91	86	81	76	71	66	61	56
5 ELBOW	54	49	44	39	34	29	NA	NA	NA	NA	NA	NA
6 ELBOW	51	46	41	36	31	26	NA	NA	NA	NA	NA	NA
7 ELBOW	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8 ELBOW	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## NOTICE

The following steps are good faith instructions written and designed to result in the best possible performance for the power vent, as well as minimize the impact on the building envelope. Diverting from these instructions due to local code, or other reasons should be done with common sense and standard building knowledge in mind.

## Installation

### Installing the Power Vent (new construction)



**Step 1:** Using a level and square, ensure the opening is square and the correct dimensions as noted in the previous section. The power vent is zero clearance to combustibles, so wood framing is permitted.

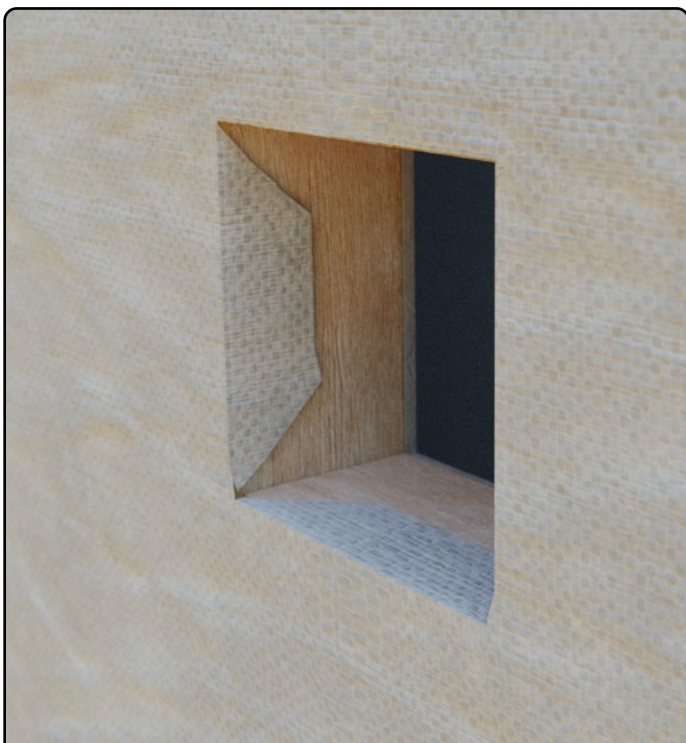


**Step 2:** Standard construction OSB can be used to finish the exterior wall around the power vent. Ensure the board is flush with the opening with no gaps.

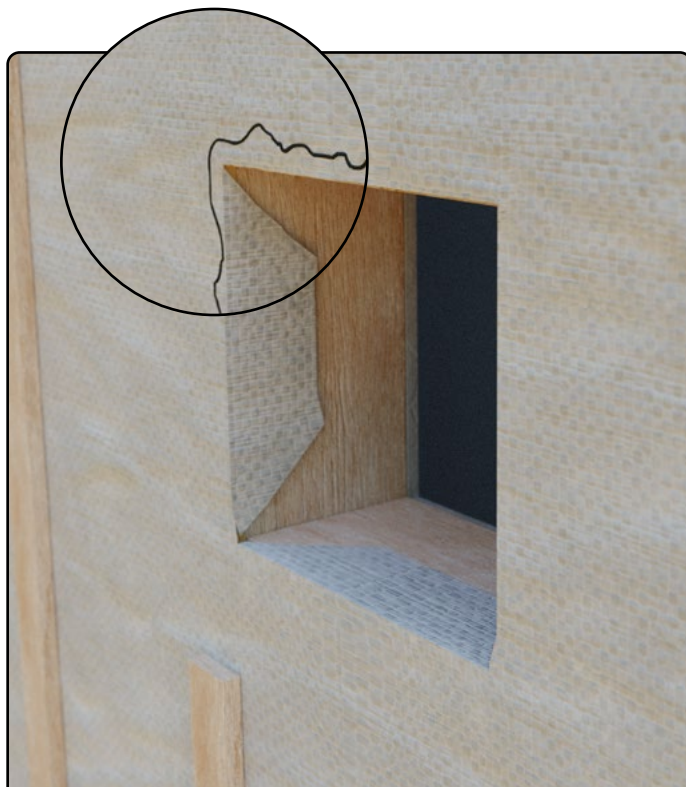


## FINAL STEP BEFORE INSTALLING THE POWER VENT:

Silicone Rubber Sealant should be applied around the perimeter of the opening right before installing the power vent.



**Step 3:** Homewrap can then be applied to the exterior side of the OSB. Using a utility knife, cut out the opening for the power vent and fold the wrap into the cavity. Tape or tack this down to prevent movement, then re-enforce the folded edge with flashing tape.



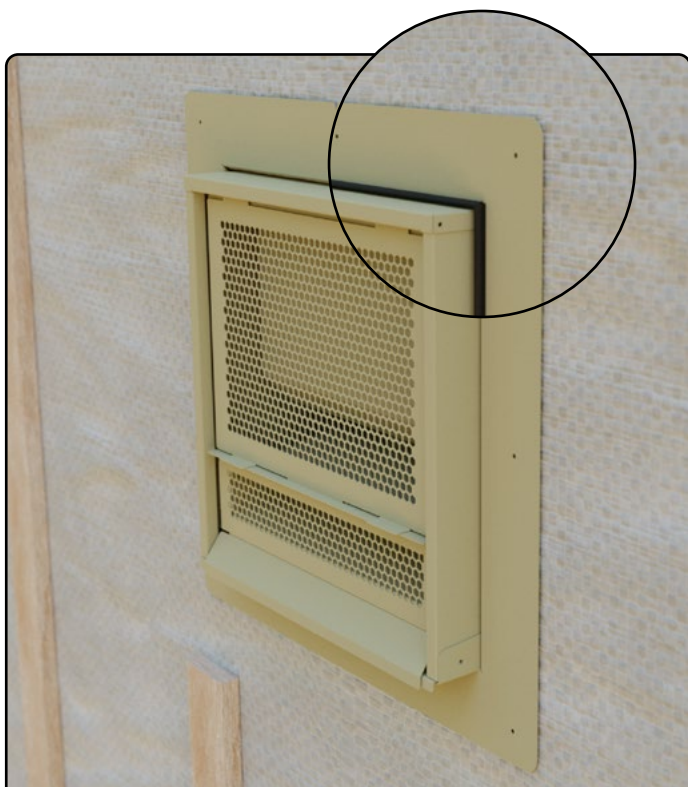
**Step 4:** Furring strips are attached the exterior wall (ensure these are attached to the studs underneath the OSB, and not just into the board.) Furring strips should be cut well short of the PV opening, as the power vent flange will protrude well around the perimeter of the opening.

## NOTICE

These instructions specifically apply to jurisdictions that require a ventilated rain screen or "air gap" Adjust your installation for codes in your area.

## SEALING THE POWER VENT:

Silicone Rubber Sealant should be applied to the gap between the power vent and the trim AFTER installing. This is to prevent the seal breaking during install.



**Step 5:** At this point the power vent should have its trim kit attached as described in the previous section. Carefully maneuver the power vent into the opening and ensure that the unit is square to the opening. Using the included screws, attach the trim into the wall (ensure that the screws are penetrating into the studs and not just the OSB.)



**Step 6:** Flashing tape should be applied around the perimeter of the flange. Ensure the edges are flush against both the homewrap and the flange to ensure that water intrusion will not occur.

## NOTICE

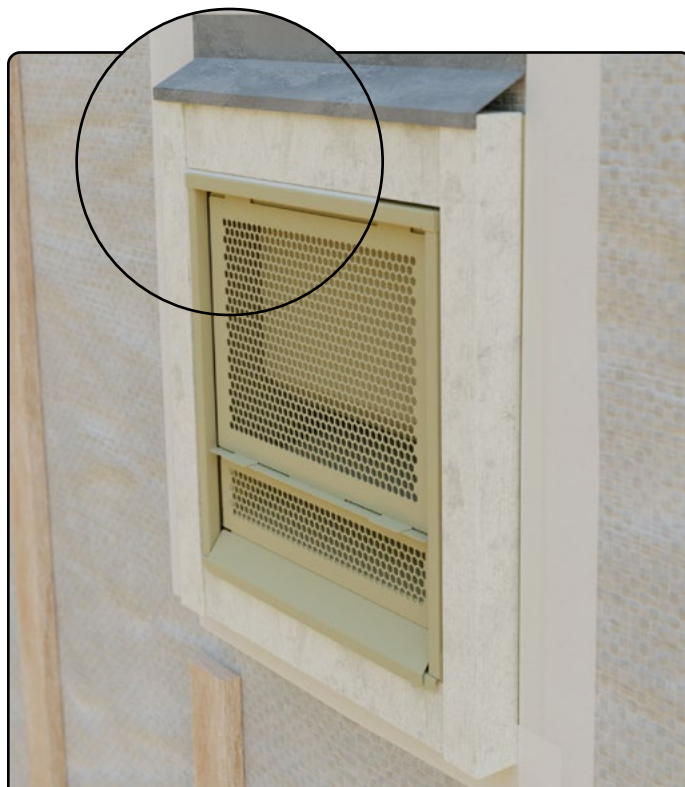
Paint can be applied to the power vent before installation. Ensure you use a high temperature paint. Touch ups may be required after installation is completed.

## SEALING THE TRIM BOX:

Silicone Rubber Sealant should can be applied to the gap between the power vent and the trim box at this stage.



**Step 7:** A trim box around the perimeter of the power vent is recommended to ensure a tight seal against weather. This can be done in a similar fashion to a window or door trim box.



**Step 8:** Rain flashing must be attached above the power vent (or trim box.) This must be sealed and taped as well.

## POWER VENT WATER DRAINAGE LIP:

The power vent is designed to be internally water tight, and therefore includes a lip to allow for drainage. Ensure that this lip not obstructed by the trim box or siding.





## FINAL SEALING:

Silicone Rubber Sealant should can be applied to the gap between the siding and the trim box at this stage.

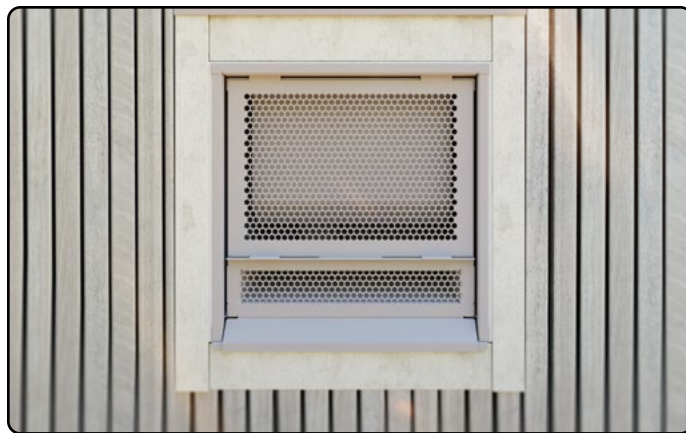


**Step 9:** Final siding can be attached at this time as per the manufacturers specifications.



## FINAL INSPECTION:

Silicone Rubber Sealant should cover the gaps between the power vent and trim box, as well as between the siding and trim box.



## PAINTING:

Paint can be applied to the power vent before or after installation. Ensure you use a high temperature paint. Touch ups may be required after installation is completed.

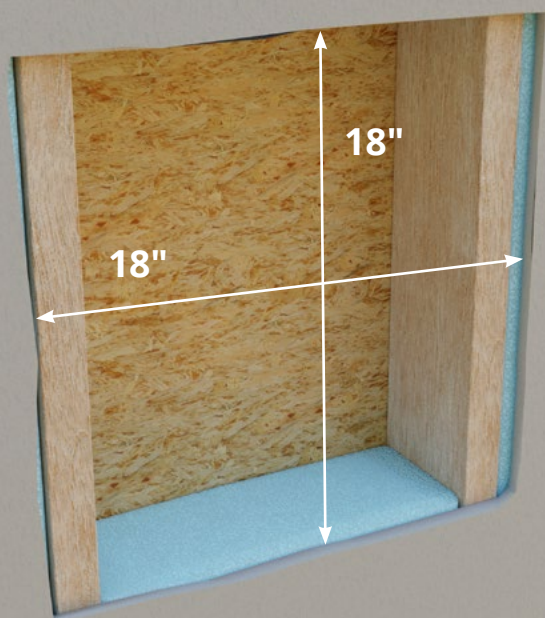
## NOTICE

The following steps are good faith instructions written and designed to result in the best possible performance for the power vent, as well as minimize the impact on the building envelope. Diverting from these instructions due to local code, or other reasons should be done with common sense and standard building knowledge in mind.

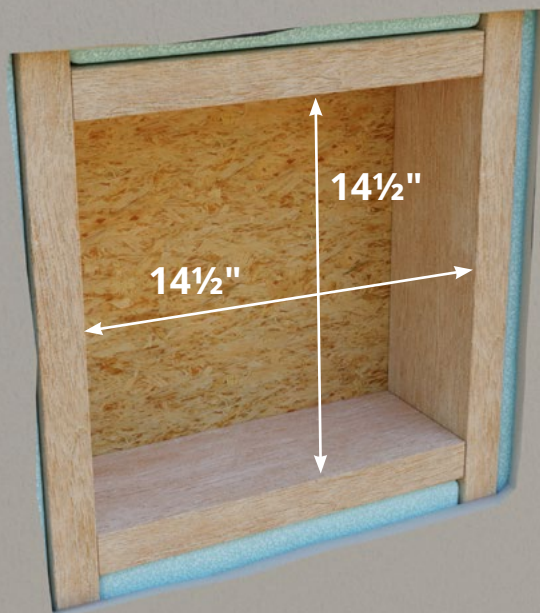
## Installation

### Installing the Power Vent (retrofit installation)

#### INSIDE WALL



**Step 1:** Using a utility knife or similar tool, cut out an 18" x 18" perimeter in order to fit the powervent frame onto the studs. Additionally, remove any insulation and vapor barrier that exists within this space.

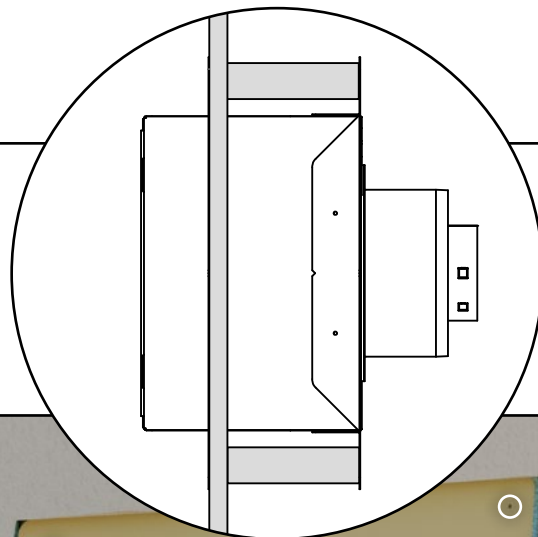


**Step 2:** Add a header and sill in order to properly support the power vent. Using a square and tape measure, ensure the inner dimensions are 14½" x 14½".

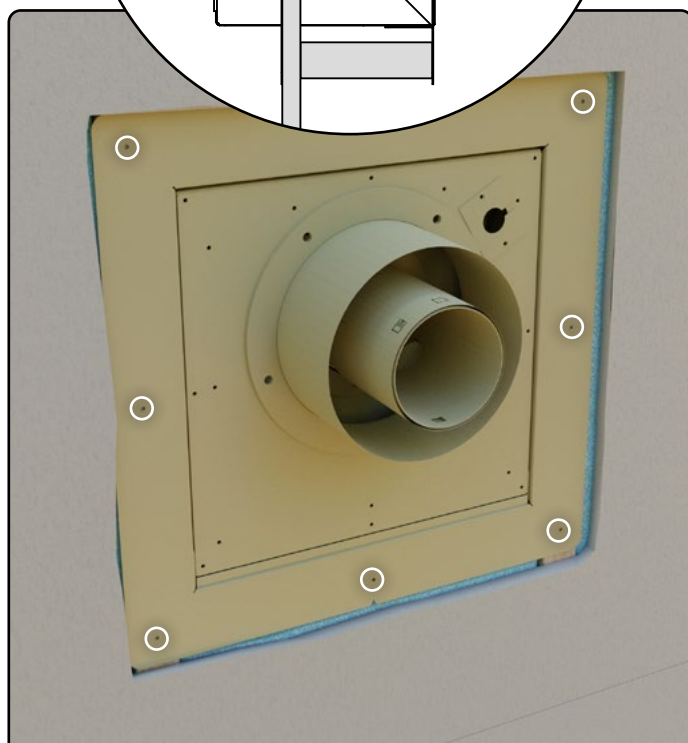
## Installation

### TOP VIEW:

Trim kit is flipped and attached to the inside stud edge.



**Step 3:** Using a sawsall or similar tool, carefully cut out the perimeter created by the header, studs, and sill.



**Step 4:** At this point the power vent should have its trim kit attached as described above. Carefully manoeuvre the power vent into the opening and ensure that the unit is square to the opening. Using the included screws, attach the trim into the wall studs.

## OUTSIDE WALL



**Step 5:** Seal the perimeter of the power vent with the siding as per local codes.

### **RAIN FLASHING:**

Rain flashing must be attached above the power vent (or trim box.) This must be sealed and taped as well.

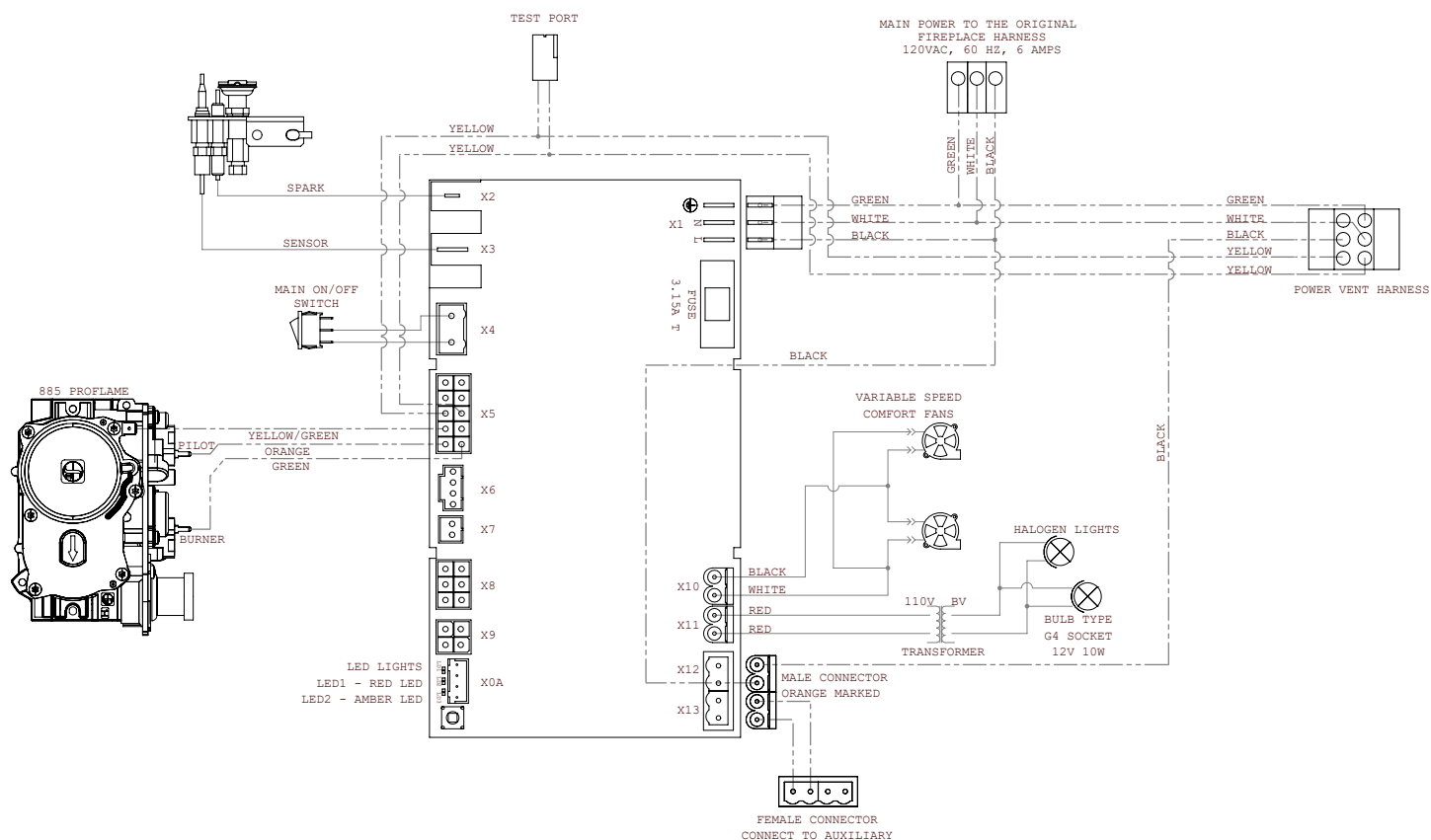
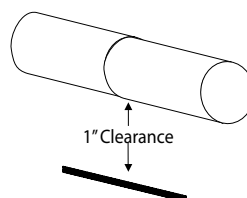
### **POWER VENT WATER DRAINAGE LIP:**

The power vent is designed to be internally water tight, and therefore includes a lip to allow for drainage. Ensure that this lip not obstructed by the trim box or siding.

## Wiring Installation

Connect the wiring to the external power vent termination as outlined in the previous section, and connect the wiring to the fireplace as outlined in the schematic below. Ensure that the proper clearances are maintained for the wiring and conduit.

- When installing the wiring it must never run above the vent run and it must be at least 1" clear of all venting.



## WARNING

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



## NOTICE

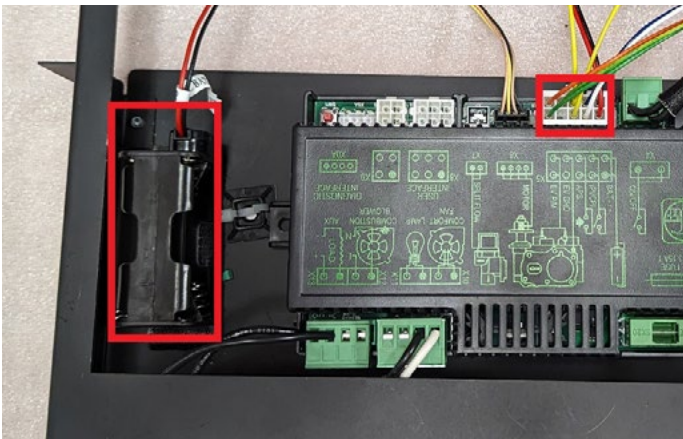
Below are the instructions for the PVWH-SIT, designed **for full load units with an existing Proflame 2 full load control board**. For instructions on the PVBWH-SIT, please refer to PVBWH-SIT section of this manual.

### PVWH-SIT Installation

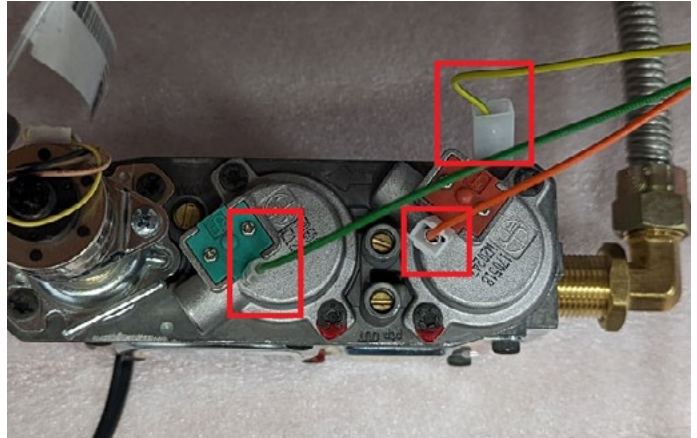
- 1** Shut off the power to the fireplace before starting.  
Locate control board inside the fireplace. It might be attached to the bottom of fireplace or on the tray. Control board is secured with two Velcro strips.  
  
Pull out control box/tray from fireplace so all connections are clearly visible, if needed cut zipties on wiring harness to get extra slack.



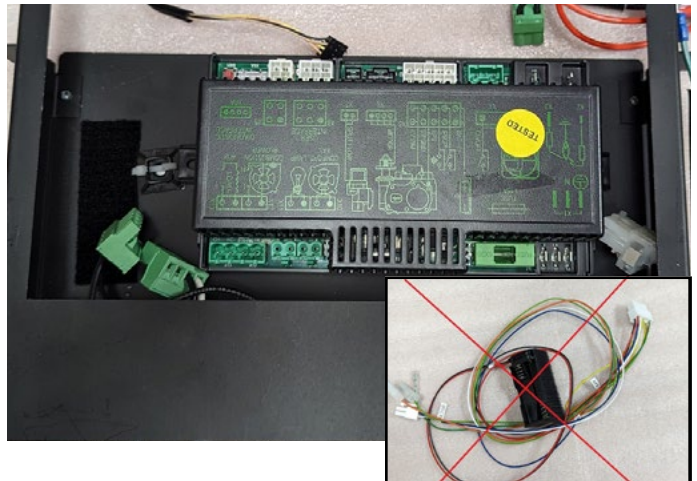
- 2** Unplug valve control harness from X5 plug on control board and remove battery backup (held with Velcro)



- 3** Locate combination gas valve and unplug connectors from green and red solenoid valve and yellow ground from valve body.

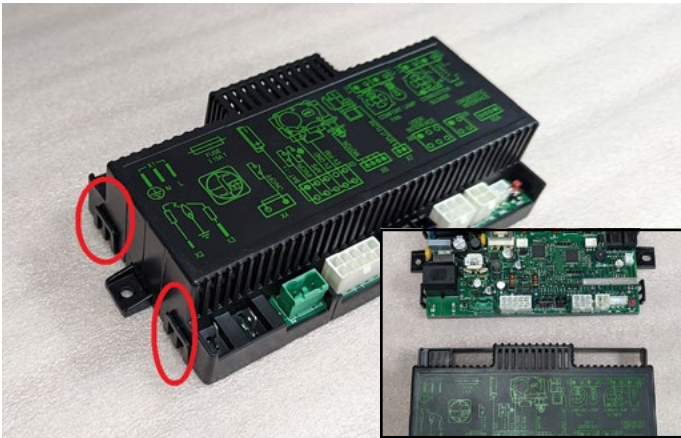


- 4** Unplug the rest of the connections from control board. Its recommended to take a photo of connections before unplugging. Note: do not discard any wiring (except valve control harness).



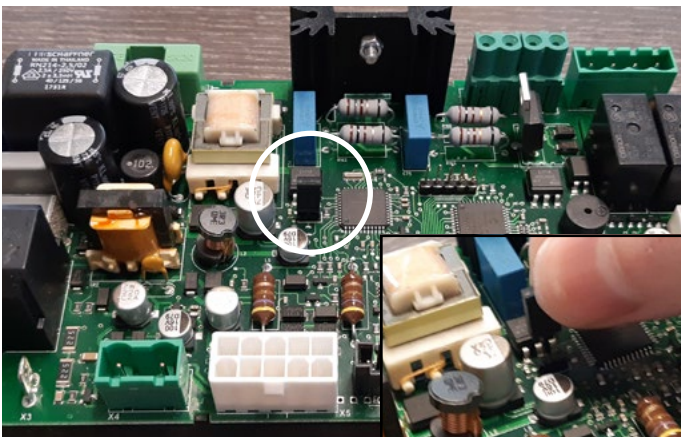
Discard valve control wiring harness

- 5** Remove control board lid by gently prying tabs on all 4 corners with screwdriver



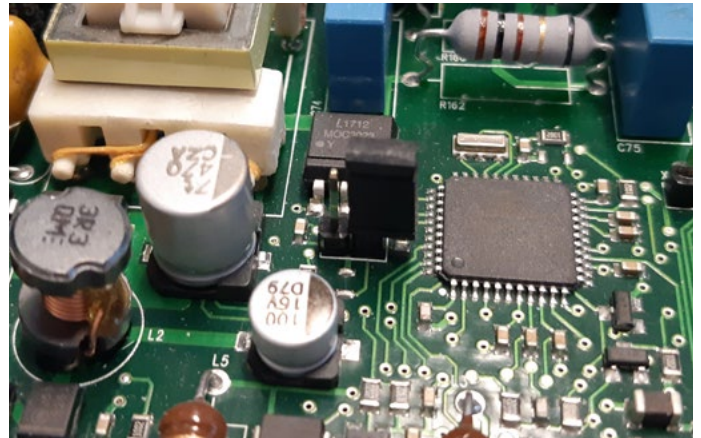
Lid removed

- 6** Locate jumper pin on control board



Removing jumper

- 7** Discard jumper OR place jumper on only one terminal for storage. Once complete, re-attach module cover.

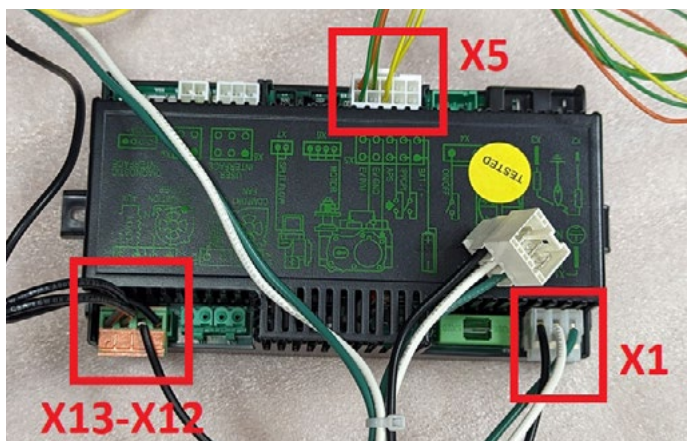




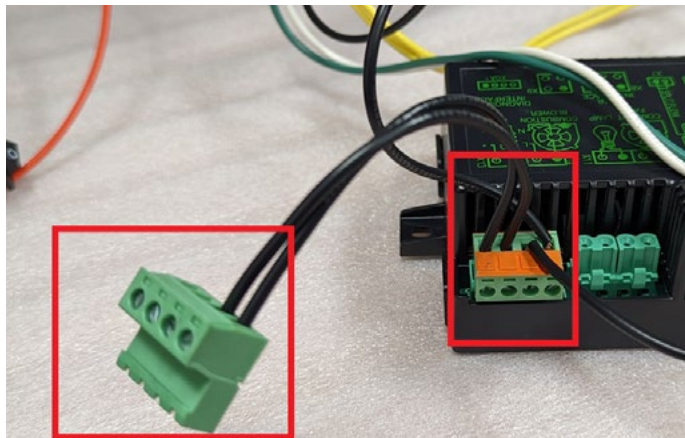
- 8** Unpackage universal power vent harness.



- 9** Connect following PV wiring harness connectors to the control board: female power plug to X1, valve harness to X5, ORANGE MARKED male moxex to X13-X12:

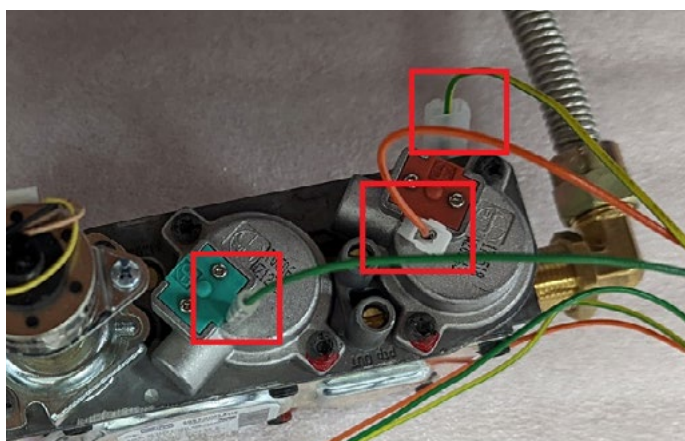


- 10** **ATTENTION!** ORANGE MARKED plug connects to the control board (X13-X12). Do not plug pigtail female moxex to the board.



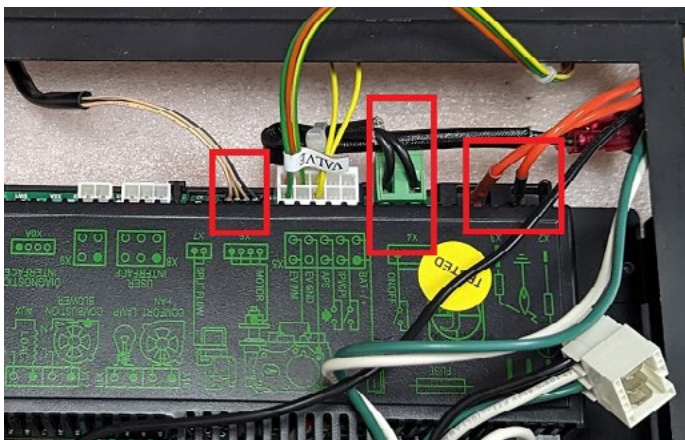
- 11** Bring control board and PV wiring harness combo to the fireplace so its in the reach of fireplace wiring harness. If applicable mount control board back to the tray

Connect valve control harness wires to the valve.

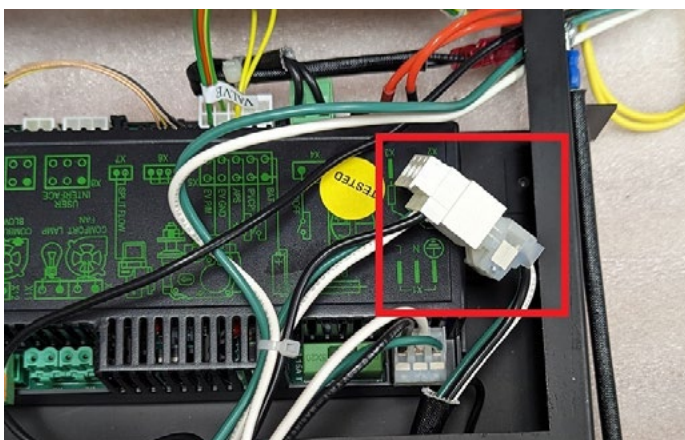




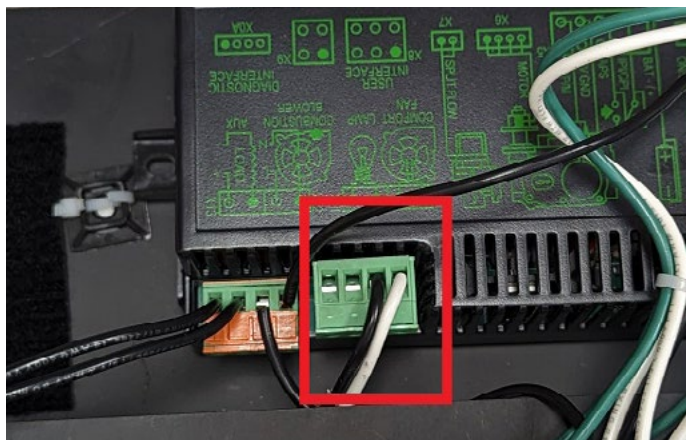
- 12** Connect pilot wiring to control board (X2 & X3), connect override On/Off switch to X4, connect stepper motor (if applicable) to X6.



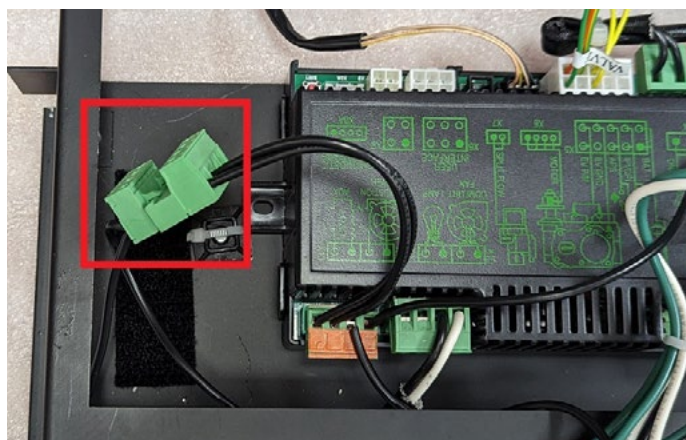
- 13** Connect transparent female power plug (from fireplace) to white inverted male power plug (PV harness).



- 14** Plug female molex connector from fireplace to control board X11-X10 slot.



- 15** Connect male molex from fireplace (if applicable) to pigtail PV female molex.

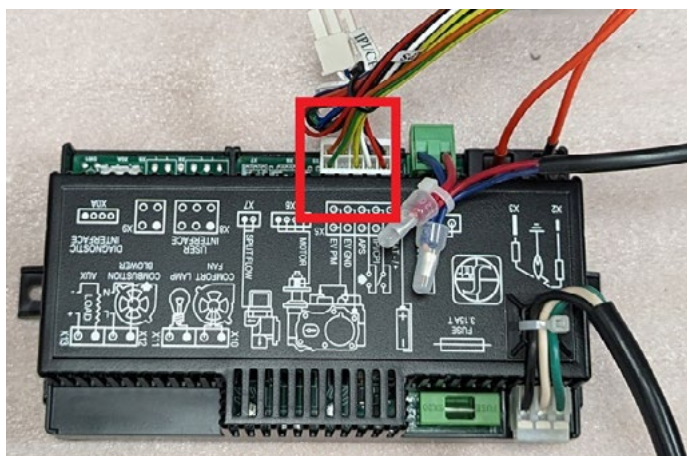


## NOTICE

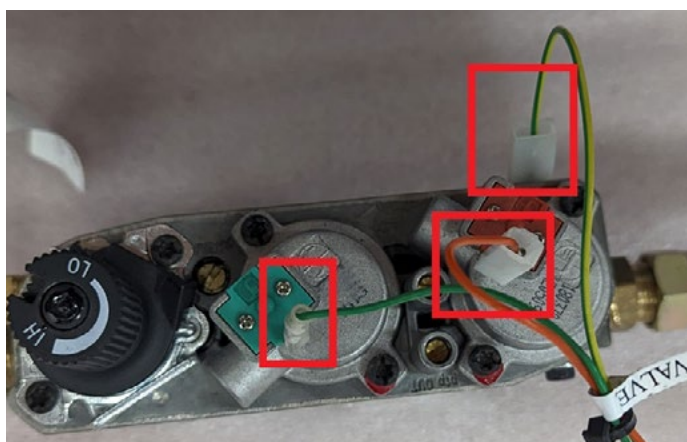
Below are the instructions for the PVBWH-SIT, designed **for basic units without an existing Proflame 2 full load control board**. For instructions on the PVWH-SIT, please refer to PVWH-SIT section of this manual.

### PVBWH-SIT Installation

- 1 Shut off the power to the fireplace before starting.  
Locate control board inside the fireplace. It might be attached to the bottom of fireplace or on the tray. Control board is secured with two Velcro strips.  
  
Pull out control box/tray from fireplace so all connections are clearly visible, if needed cut zipties on wiring harness to get extra slack

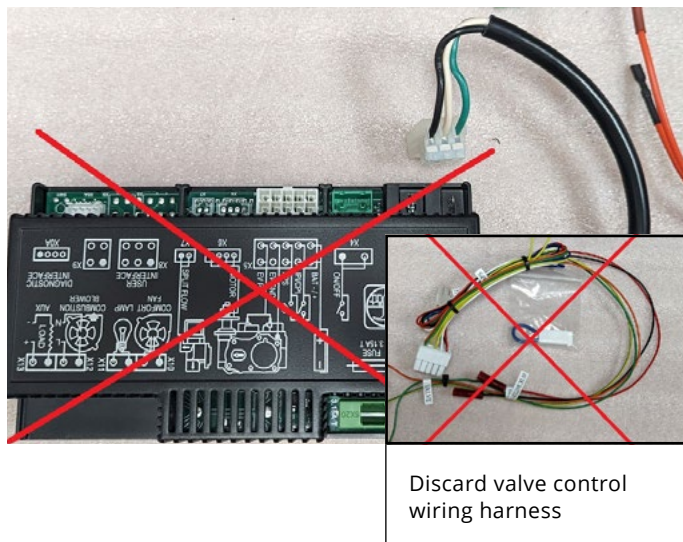


- 2 Locate combination gas valve and unplug connectors from green and red solenoid valve and ground from valve body.

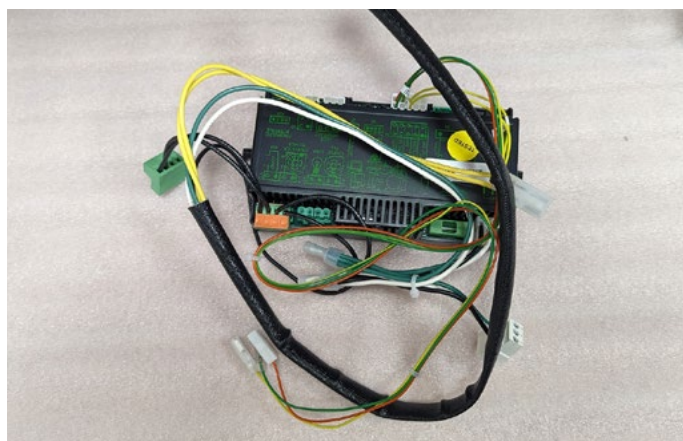


- 3 Unplug rest of connections from control board. Discard control board.

Note: Do not discard wiring in the fireplace.



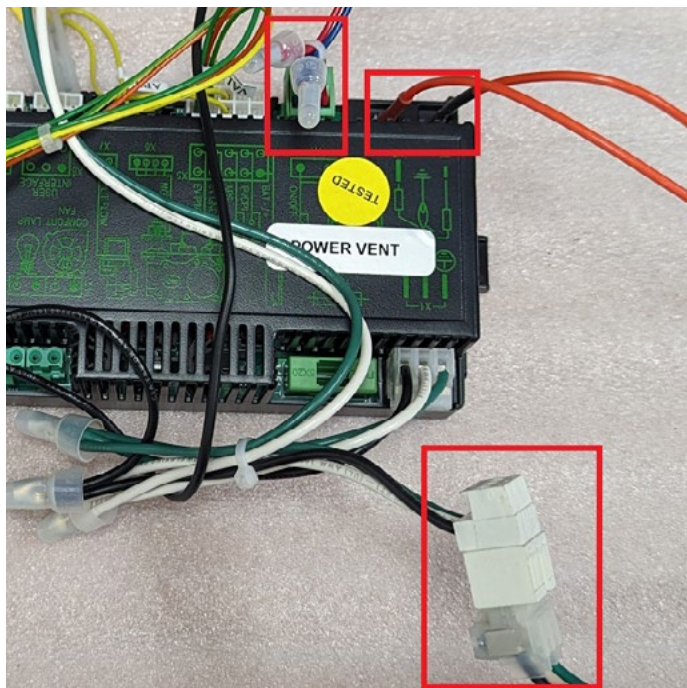
- 4 Unpack control board and wiring combo from PVBWH-SIT kit and bring to the fireplace so its in the reach of fireplace wiring harness. If applicable mount control board back to the tray.





**5**

Connect pilot wiring to control board (X2 & X3), connect LVT wiring (wall switch) to X4, Connect transparent female power plug (from fireplace) to white inverted male power plug (PV harness)



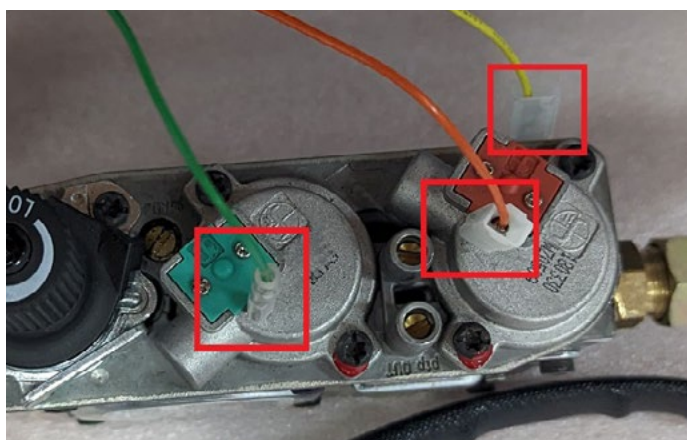
**7**

Connect the board harness to the PV cable (EPVH-XX):

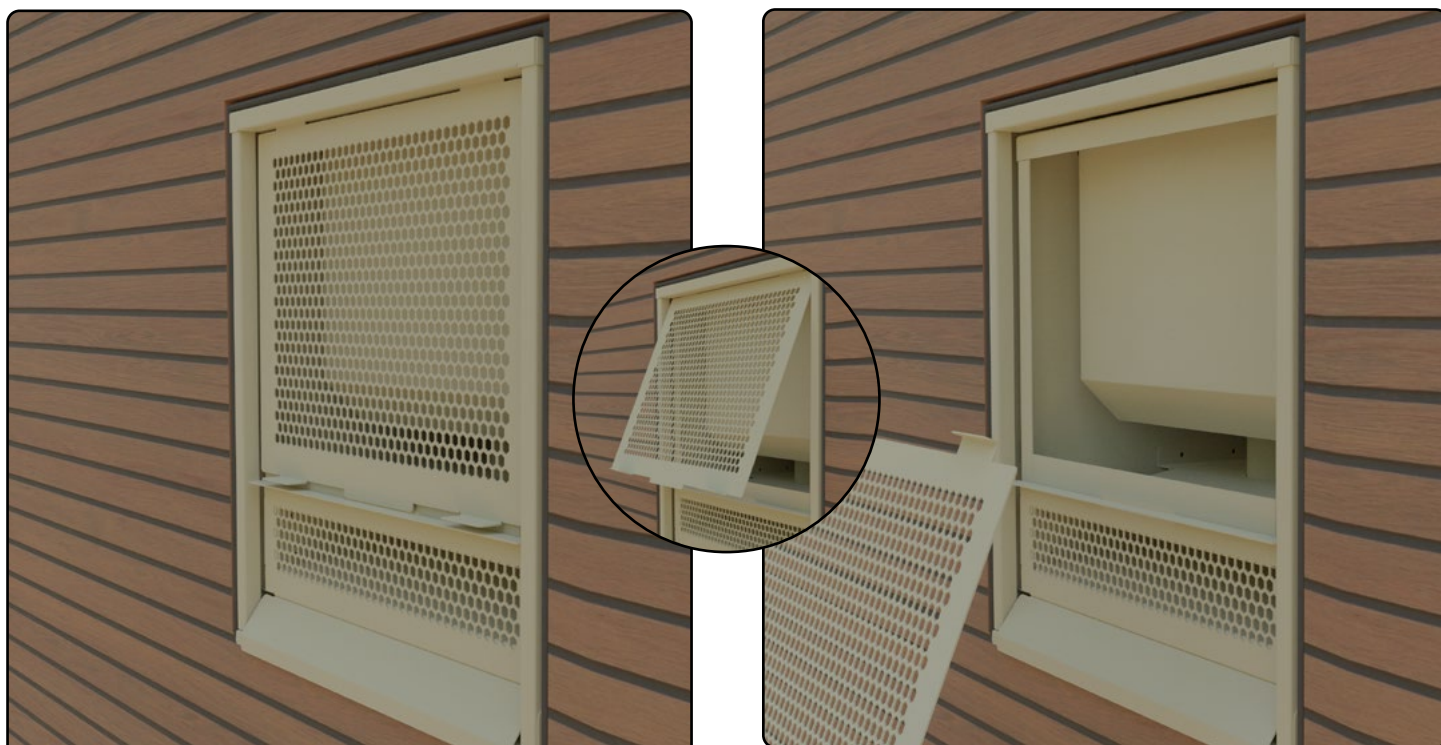


**6**

Connect valve control harness wires to the valve:



### Removing the cover screen



**Removal:** Pull up the screen by lifting by the tabs at the base of the screen, you can then tilt at the top of the screen and pull away. Store the screen somewhere safe from damage.

## Attaching the EPVH-XX Power vent cord

- 1** Remove the front cover as described in the previous section.
- 2** Remove the 3 screws holding on the inner block plate.



- 3** Remove wire harness plate from the powervent and connect to the cord



- 4** Apply silicone to between the insulation sleeve of the power vent cable and the wire harness plate



- 5** Reattach the wire harness plate now complete with the siliconed EPVH cable

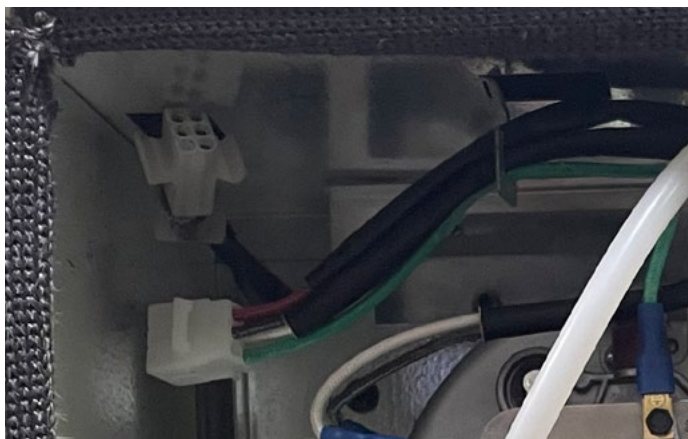


- 6** Apply silicone to the outside of the wire harness plate, spread to ensure coverage of all seams and gaps

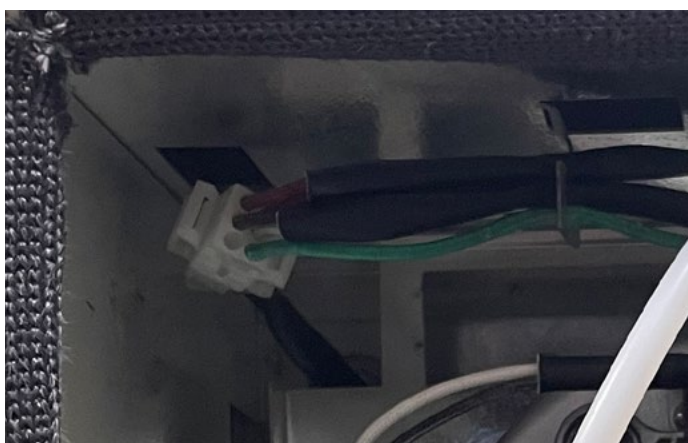




- 7** INSIDE OF PV: Attach the EPVH-XX of the hook located in the upper left side.



- 8** Connect the Power vent motor harness to the EPVH cable.



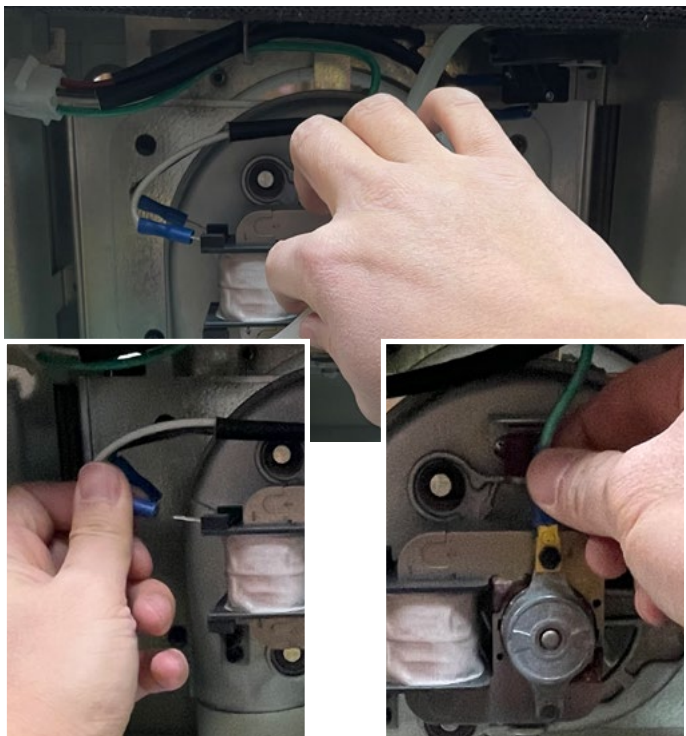
- 9** Re-attach the inner block plate and front cover.

## PVW47 Motor Replacement

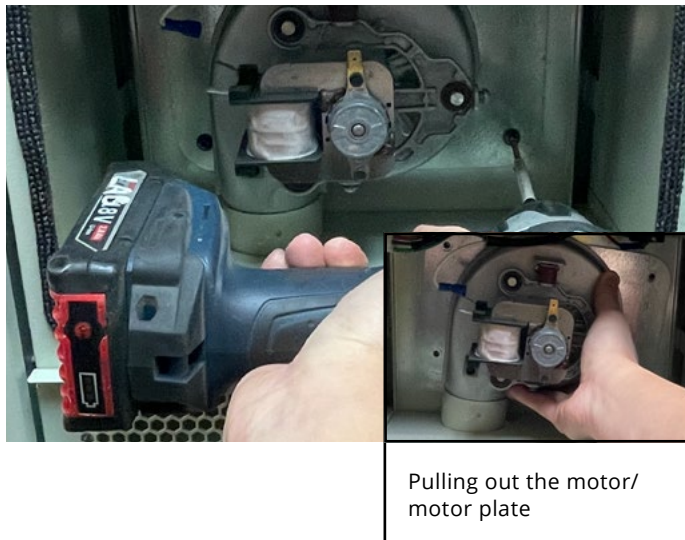
- 1** Remove the front cover as described in the previous section.
- 2** Remove the 3 screws holding on the inner block plate.



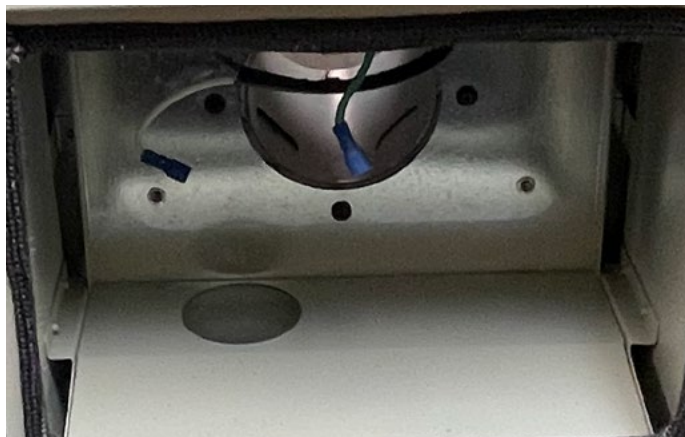
- 3** Remove the tube and 3 x wires from the fan blower (green, white and black)



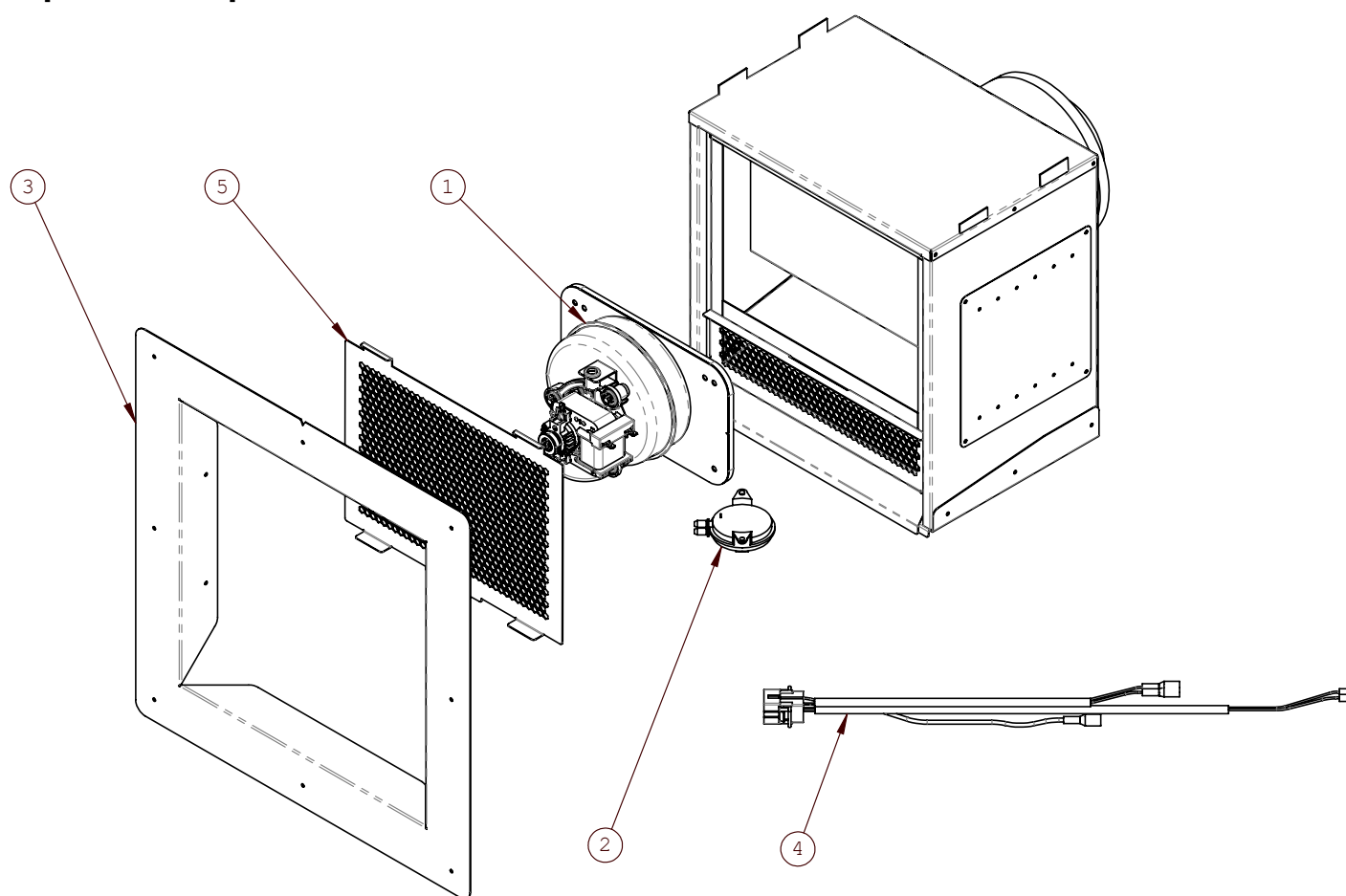
- 4** Remove the motor plate by unscrewing the 4 screws attaching it to the powervent box.



- 5** Replace with new powervent fan blower. Ensure that all wires and tubes that were removed are re-attached.



## Replacement parts



#	Item	SKU
1	REPLACEMENT BLOWER MOTOR AND PLATE	RBM-PVW47
2	SWITCH, VACUUM, 0.20"	REC1226
3	REPLACEMENT PV MOUNTING TRIM	RMT-PVW47
4	HARNESS, POWER VENT (PVW47)	RECA146
5	REPLACEMENT FRONT COVER	RFC-PVW47

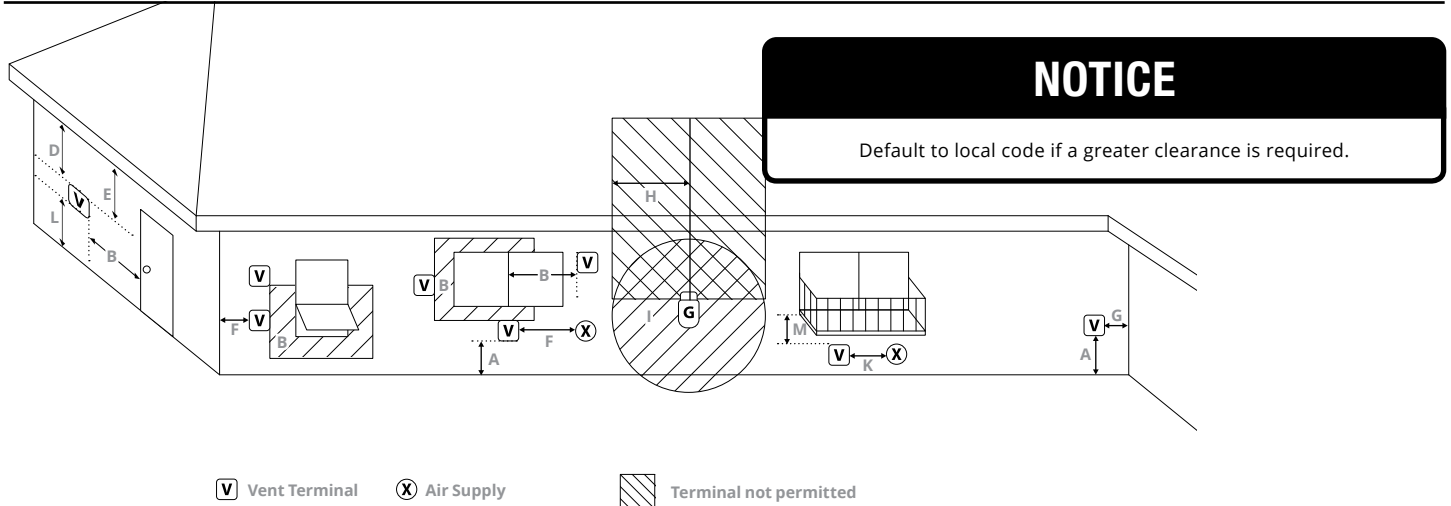


# NOTICE

All clearance measurements from the side/edge of powervent frame

# Appendix

## Appendix A: Powervent Terminations



	Location	Canada*	USA**
A	Clearances above grade, veranda, porch, deck, or balcony	12 inches	12 inches
B	Clearance beside or below a window or door that may be opened.	12 inches (30 cm) for appliances ≤ 100,000 BTU, 36 inches (91cm) for appliances > 100,000 BTU.	9 inches for appliances > 10,000 BTU and ≤ 50,000 BTU *12 inches for appliances > 50,000 BTU.
C	Clearance to permanently closed window recommended to prevent condensation on window.	12 inches	12 inches
D	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet from the center line of the terminal.	2 inches	2 inches
E	Clearance to unventilated soffit from the center line of the terminal.	2 inches	2 inches
F	Clearance to outside corner	6 inches	6 inches
G	Clearance to inside corner from the center line of the terminal.	6 inches	6 inches
H	Clearance to each side of center line extended above meter/regulator assembly.	3 feet (90 cm) min. within a height of 15ft (4.5m) above the meter or regulator assembly	**
I	Clearance to service regulator vent outlet.	3 ft.	**
J	Clearance to non mechanical air supply inlet to building or the combustion air inlet to any other appliance.	12 inches (30 cm) ≤ 100,000 BTU, 36 inches (91) cm > 100,000 BTU	19 inches for appliances > 10,000 BTU and ≤ 50,000 BTU. 12 inches for appliances > 50,000 BTU.
K	Clearance to a mechanical air supply inlet.	6 ft.	3 feet (90cm) min. above if within 10ft (3m) horizontally
L	Clearance above paved side-walk or a paved driveway located on public property	^ 7 feet (2.1 m) min.	**
M	Clearance under veranda, porch, deck, or balcony	± 2 inches (5 cm) min.	± 2 inches min.

1 In accordance with the current CSA B149.1 Natural Gas and Propane Installation Code.

2 USA - In accordance with the current ANSI Z223.1/NFPA 54, National Fuel Gas Code,

\*\* Clearance in accordance with local installation codes and the requirements of the gas supplier

^ A vent shall not terminate directly above a side-walk or paved driveway which is located between two single family dwellings and serves both dwellings\*

± Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.

## Appendix B: Warranty

### MONTIGO RESIDENTIAL WARRANTY PROGRAM

Empire Comfort Systems, Inc. and/or Empire Comfort Systems Canada, Inc. (collectively referred to herein as "The Companies"), warrants the Montigo gas appliance (referred to herein as 'the appliance') to be free from defects in materials and workmanship at the time of manufacture. The gas appliance and related components are further subject to the terms and conditions set forth below.

**This warranty covers the following Montigo product series: Distinction, H, I, L, Linear P and PL, R, RP, Mahana and DelRay**

Component	Coverage Period	Labor Coverage
Firebox, heat exchanger	15 years	1 year
Main burner	15 years	1 year
Gas control valve and related control components (pilot assembly, spark electrode flame sensors, thermopile)	1 year	1 year
Electrical components (internal blowers, ignition control module, wiring, switches, remote control systems, blower control module, accent bulbs)	1 year	1 year
Firebox media (logset, glass beads, river rocks)	1 year	1 year
Glass (thermal breakage)	1 year	1 year
Plated, painted finishes (including interior reflective glass)*	1 year	1 year
Refractory lining	1 year	1 year
Mesh/Glass safety barriers	1 year	1 year
Power Vent Control box	1 year	1 year
Montigo Venting (excluding terminations)	15 years	1 year

\* Exterior painted surfaces exempt

### QUALIFICATIONS TO THE WARRANTY

This Warranty only covers gas appliances installed in the United States or Canada.

To receive the benefits of this warranty, the appliance must be purchased, installed and serviced annually by a dealer authorized by The Companies for the warranty to be valid.

The gas appliance must be installed by a licensed professional in accordance with The Companies' installation instructions and local building codes. The warranty on the appliance covers only components manufactured by The Companies. The use of components manufactured or supplied by other manufacturers and used in conjunction with the appliance could create serious safety hazards, may result in the denial of certification by recognized national safety agencies and could violate local building codes. Such use may untimely void this warranty. This warranty does not cover any damages occurring from the use of any components not manufactured or supplied by The Companies.

The appliance must be subjected to normal use. The appliance is designed to burn natural gas (NG) or liquefied petroleum (LP) only. Burning conventional fireplace fuels such as wood, coal or any other solid fuel will cause damage to the appliance, produce excessive temperatures will result in a fire hazard and void all

warranties. This warranty is transferable. The appliance must remain in its original place of installation to be valid.

If the components of the appliance covered by this warranty are found to be defective within the time frame stated (see The Companies investigation of claims), The Companies will, at its option, replace or repair defective components of the appliance manufactured by The Companies at no charge and will also pay for labor costs (in accordance with schedule) incurred in replacing or repairing components. If repair or replacement is not commercially practical, The Companies will, at its sole discretion, fully discharge all obligations under the warranty by refunding the verified dealer purchase price of the appliance, excluding the cost of labor unless the labor is covered by the terms of the warranty.

This warranty covers only parts and labor as provided above. In no case shall the companies be responsible for materials, components or construction, which are not manufactured or supplied by The Companies, or for the labor necessary to install, repair or remove such materials, components or construction. All replacement or repair components will be shipped F.O.B. from the nearest Company factory.

### LIMITATION ON LIABILITY

It is agreed and understood that The Companies sole obligation, and purchaser's exclusive remedy under this warranty, under any other warranty, expressed or implied, or in contract, tort or otherwise, shall be limited to repair, replacement or refund as specified above. The opinion of The Companies with respect to these matters shall be final.

In no event shall The Companies be responsible for any incidental or consequential damages caused by (but not limited to) improper installation, installation by an unqualified or unauthorized installer, accident, lack of regular maintenance, user error, abuse, misuse, Acts of God, power surges, floods, natural disasters, force majeure, defects in its appliance whether such damage occurs or is discovered before or after replacement or repair, and whether or not such damage is caused by The Companies negligence. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. The duration of any implied warranty with respect to the appliance is limited to the duration of the foregoing warranty. Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation or exclusion may not apply to you.

## Appendix B: Warranty Continued

### EXCLUSIONS TO WARRANTY

Corrosion or rust of any kind due to a lack of maintenance, inadequate combustion air or improper venting and corrosive chemicals/environments, expansion and contraction of metals or minor movements of components causing noise are not covered by this warranty.

Willful misconduct (i.e. use of the appliance with problems known to the purchaser and causing further damages), including unauthorized or self-performed 'fixing' or exploration of the appliance's internal workings will void the warranty.

Appliances on which the serial number has been altered, defaced, removed or made illegible will void the warranty.

Costs incurred for diagnosis, service work, shipping and handling of defective or replacement parts are not covered under this warranty.

The published warranties are not applicable for any equipment manufactured by The Companies that has been sold direct to the consumer via internet or auction websites. The Companies do not endorse, approve or certify any online sale of its products through auction websites, online retailers or any other method of online sales direct to consumers.

### INVESTIGATION OF CLAIMS AGAINST WARRANTY

The Companies reserve the right to investigate any and all claims against this warranty and decide upon method of settlement.

The Companies are not responsible for work done without written consent of The Companies.

The Companies shall in no event be responsible for any warranty work done without first obtaining the Companies written consent.

The Companies employees and dealers have no authority to make any warranties to neither alter this warranty nor authorize any remedies in addition to or inconsistent with those stated within this warranty.

### IF WARRANTY SERVICE IS NEEDED

To make a claim under this warranty, contact your installing dealer or contractor. The installing dealer is responsible for providing service and will contact the companies to initiate warranted parts replacements. In the event the installing dealer is unavailable, contact your nearest authorized Montigo dealer ([www.Montigo.com](http://www.Montigo.com)) or contact Montigo direct at [techsupport@montigo.com](mailto:techsupport@montigo.com). Ensure you have your sales receipt and the model and serial number of your appliance.

### DO NOT ATTEMPT TO DO ANY SERVICE WORK YOURSELF

If you cannot locate the installing dealer, or nearest dealer/distributor, you must notify The Companies in writing.

### USA Offices

6955 Salashan Parkway  
Ferndale WA, 98248  
[techsupport@montigo.com](mailto:techsupport@montigo.com)

### Canadian Offices

27342 Gloucester Way  
Langley, BC V4W 4A1  
[techsupport@montigo.com](mailto:techsupport@montigo.com)

The terms and conditions of this warranty may be altered or amended from time to time without prior notice.

**WARRANTY PERIOD:** Warranty coverage begins on the date of original purchase. In the case of new construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the product by an independent, authorized Company dealer/ distributor, whichever occurs earlier.

## Appendix C: Amendment

(Gas Fireplace / Equipment sold in the State of Massachusetts)

### 5.08: Modifications to NFPA-54, Chapter 10

- (1) Revise NFPA-54 section 10.5.4.2 by adding a second exception as follows:

Existing chimneys shall be permitted to have their use continued when a gas conversion burner is installed, and shall be equipped with a manually reset device that will automatically shut off the gas to the burner in the event of a sustained back-draft.

- (2) Revise 10.8.3 by adding the following additional requirements:

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

1. **INSTALLATION OF CARBON MONOXIDE DETECTORS.** At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gas fitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors
  - a. In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.
  - b. 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.
2. **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 2042 listed and IAS certified.
3. **SIGNAGE.** A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, "GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS".

4. **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.

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

1. 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
  2. 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.
- (c) **MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM PROVIDED.** When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:
1. Detailed instructions for the installation of the venting system design or the venting system components; and
  2. A complete parts list for the venting system design or venting system.
- (d) **MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM NOT PROVIDED.** When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:
1. The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and
  2. 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.
- (e) 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) After NFPA-54 section 10.10.4.2 add a new section 10.10.4.3 as follows:

When more than four gas appliances are to be vented through a common gas vent or common horizontal vent manifold, a plan of the proposed vent installation shall be submitted to the Inspector and the serving gas supplier for review and approval.

Extraction from: Massachusetts Rules and Regulations

5.00: Amendments To 2002 Edition Of ANSI Z223.1-NFPA-54

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