

# Installation & Maintenance Manual

**MONTIGO**<sup>®</sup>  
the art of **fireplaces**  
[www.montigo.com](http://www.montigo.com)



## Prodigy Series

### Single Sided & See-Through Frameless Linear Fireplace



## 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

Do not store or use gasoline or any other flammable vapors and liquids in the vicinity of this or any other gas burning appliance. A fire or explosion may occur causing serious injury, property damage or even death.

## DANGER

### 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.

## NOTICE

**Installer:** Leave this manual with the appliance. Do not remove.  
**Consumer:** Retain this manual for maintenance and future reference. Do not Discard.

## NOTICE

Installation and repairs should be done by an authorized gas fireplace service technician. The appliance should be inspected before use and at least annually by a professional. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners and circulating air passageways of the fireplace are kept clean.



# NOTICE

You must read and understand this manual prior to installation, operation or troubleshooting this appliance. Please retain this owner's manual for future reference and maintenance.

## Table of Contents

<b>Introduction</b>	3
<b>Section 1: Unit Overview</b>	4
<b>Section 2: Unit Specifications</b>	5
<b>Section 3: Product Dimensions</b>	6
<b>Section 4: Clearances and Framing</b>	10
<b>Section 5: Finishing</b>	12
<b>Section 6: Power Venting</b>	13
<b>Section 7: Control Panel</b>	18
<b>Section 8: Electrical Connections</b>	19
<b>Section 9: Installing the Gas Line</b>	20
<b>Section 10: Start up</b>	21
<b>Section 11: General Maintenance and Cleaning</b>	25
<b>Section 12: Removing and Installing the Glass</b>	25
<b>Section 13: Installing the Burner Accessories</b>	26
<b>Section 14: Alternate Media Options</b>	27
<b>Section 15: Troubleshooting</b>	28
<b>Appendix</b>	
Warranty	
Dampers	
Power Vent Clearances	

## 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

Addresses practices that are important, but not related to personal injury

## Introduction

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

With over 30 years of experience, Montigo is committed to providing you with a gas fireplace that is not only a beautiful addition to your space, but that is also designed and manufactured to the highest safety, reliability and engineering standards.

We strongly encourage you to read and carefully follow the instructions laid out in this Installation, Operation and Maintenance Manual and retain it for your future reference. Pay special attention to all cautions, warnings, and notices throughout this manual intended to ensure your safety.

This manual covers installation, operation and maintenance. Lighting, operation and care of this fireplace can be easily performed by the end user. All installation and service work should be performed by a qualified or licensed installer, plumber or gas fitter as certified by the state, province, region or governing body where the fireplace is being installed.

This installation, operation and maintenance manual is applicable to the models described below. Refer to your rating plate to verify included options.

### Warranty and Installation Information: (See Appendix A)

The Montigo warranty will be voided by, and Montigo disclaims any responsibility for, the following actions:

- ▶ Modification of the fireplace and/or components including Power Vent Module or glass doors.
- ▶ Use of any component part not manufactured or approved by Montigo in combination with this Montigo fireplace system.
- ▶ Installation other than as instructed in this manual.

Consult your local Gas Inspection Branch on installation requirements for factory-built gas fireplaces. Installation & repairs should be done by a qualified contractor.

Installations in Canada must conform to the current CAN/CGA B-149.1 and .2 Gas Installation Code and local regulations. This appliance must be electrically grounded in accordance with CSA C22.1 Canadian Electrical Code Part 1 and/or Local Codes.

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# Introduction

## Section 1: Unit Overview

Prodigy series fireplaces are supplied as a complete system consisting of the firebox, a power vent termination (roof mount, wall mount, or inline) and an electrical control panel. The venting required for the operation of the system must be field supplied.

### Power vent:

Details on power venting can be found in Section 6.

### Flue Venting:

The flue pipe installed from the firebox to the power vent module is field supplied and must be UL or ULc listed type B vent pipe with an I.D. dimension as shown in Table 2.

*NOTE FOR INLINE POWER VENT INSTALLATION: The flue pipe from the outlet side of the inline power vent to the exterior of the building must be a sealed pressure stack pipe system. The exhaust gases in this portion of the vent system are under a positive pressure during operation; an unsealed vent pipe will allow exhaust gases to enter the living space.*

Should the power vent cease to function or not provide adequate draft at any time during operation of the unit, the flue gas vacuum pressure safety switch will prevent operation of the fireplace.

### Combustion Air:

The combustion air or fresh air supply connections must be piped to ensure no reduction or restriction to the air supply occurs. The amount of air required to safely and efficiently run this unit has been pre-determined and must not be altered without consultation with the factory. A heat sensor switch will turn off the burner if a restricted fresh air intake causes vent temperatures to rise.

Some locations allow for fresh air to be drawn from the room in which the fireplace is installed. This type of installation is acceptable from a functional perspective so long as adequate free air is available in the room, but, local codes may not allow this type of venting. Always check local regulations for venting before installing the fireplace.

### Electrical Control Panel:

Details on system wiring, power requirements and the Montigo Prodigy control panel can be found in Section 7.

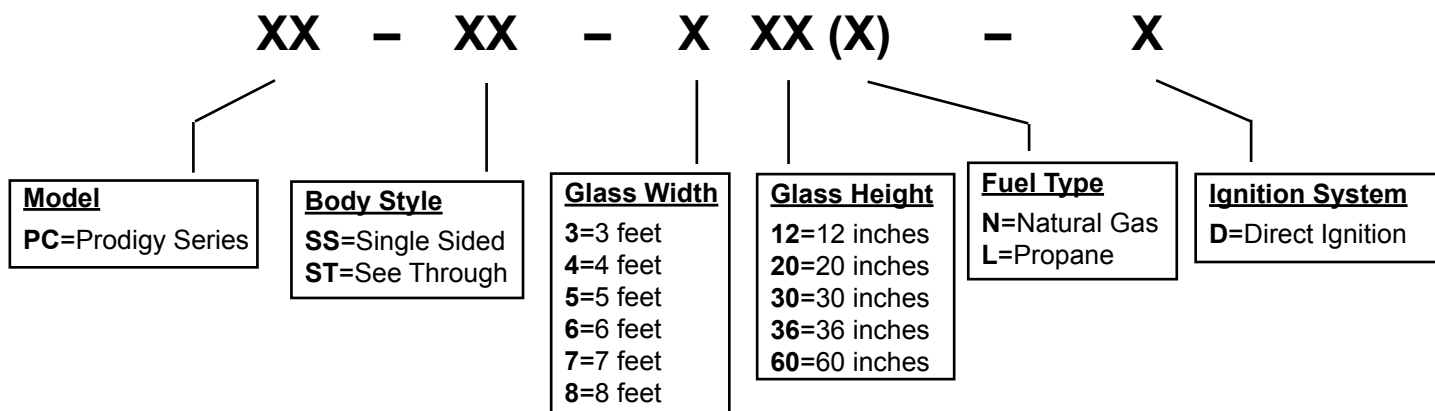
See the overviews of system components and connections in Figures 2-4.

# Introduction

## Section 2: Unit Specifications

The Prodigy fireplace can be configured in a number of ways. The technical specifications of the unit depend primarily on the width of the fireplace, since a wider unit has a larger burner, which uses more fuel and air. See the tables below for specifications.

**Table 1: Model Number Description**



**Table 2: Product Specifications**

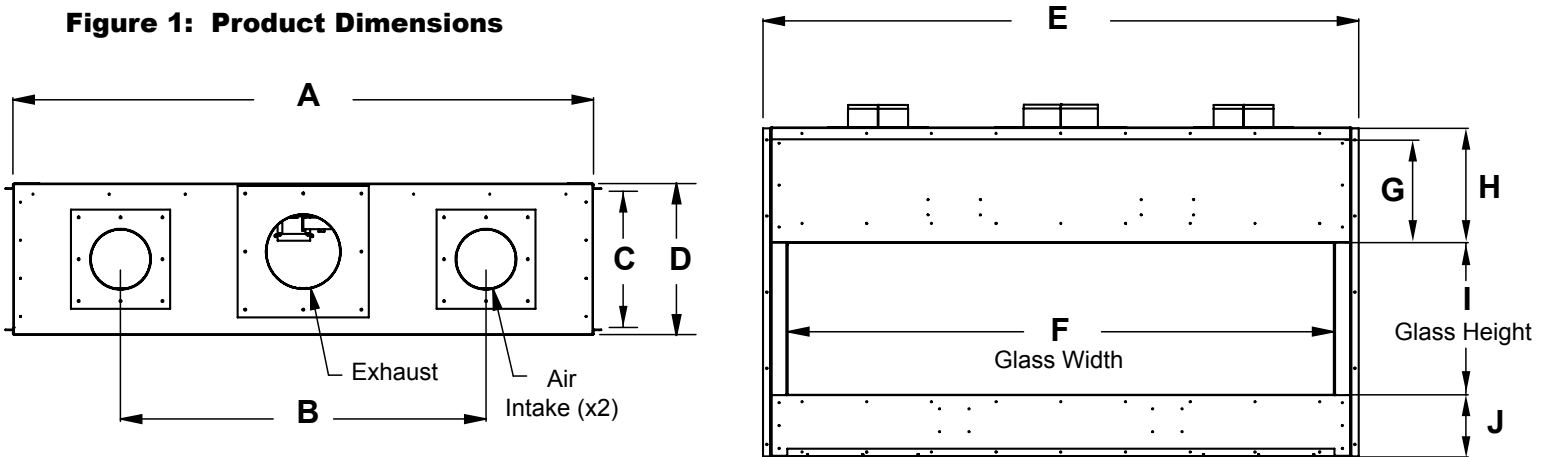
Model Size (glass width)	3 Foot	4 Foot	5 Foot	6 Foot	7 Foot	8 Foot
Configuration	Single Side or See Through	Single Side or See Through	Single Side or See Through	Single Side or See Through	Single Side or See Through	Single Side or See Through
Maximum Input Natural Gas (BTU/HR)	40,000	50,000	75,000	88,000	100,000	112,000
Max Input Propane (BTU/HR)	31,000	52,000	64,000	78,000	105,000	120,000
Required B-Vent	8"	10"	10"	10"	10"	12"
Size of Intakes	2 x 6"	2 x 8"	2 x 8"	2 x 8"	2 x 8"	2 x 10"
Total equivalent free area of intake	56.52 sq.inches	100.48 sq.inches	100.48 sq.inches	100.48 sq.inches	100.48 sq.inches	157 sq. inches
Air Consumption	420 cfm	560 cfm	700 cfm	840 cfm	980 cfm	1120 cfm
Electrical requirements	208 VAC Single Phase 15 Amp	208 VAC Single Phase 15 Amp	208 VAC Single Phase 15 Amp	208 VAC Single Phase 15 Amp	208 VAC Single Phase 15 Amp	208 VAC Single Phase 15 Amp
Control Panel Model Number	PCGCP1-2-05/10-DD	PCGCP1-2-05/10-DD	PCGCP1-2-05/10-DD	PCGCP1-2-05/10-DD	PCGCP1-2-05/10-DD	PCGCP1-2-05/10-DD

# Introduction

## Section 3: Product Dimensions

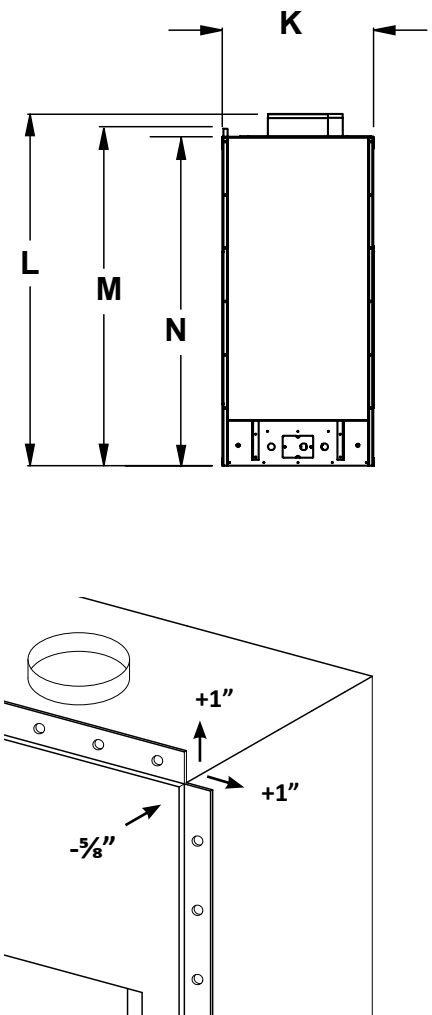
\*Single side model shown. See-through models have identical dimensions, but with rear window in place of rear wall.

**Figure 1: Product Dimensions**



**Table 3: Product Dimensions**

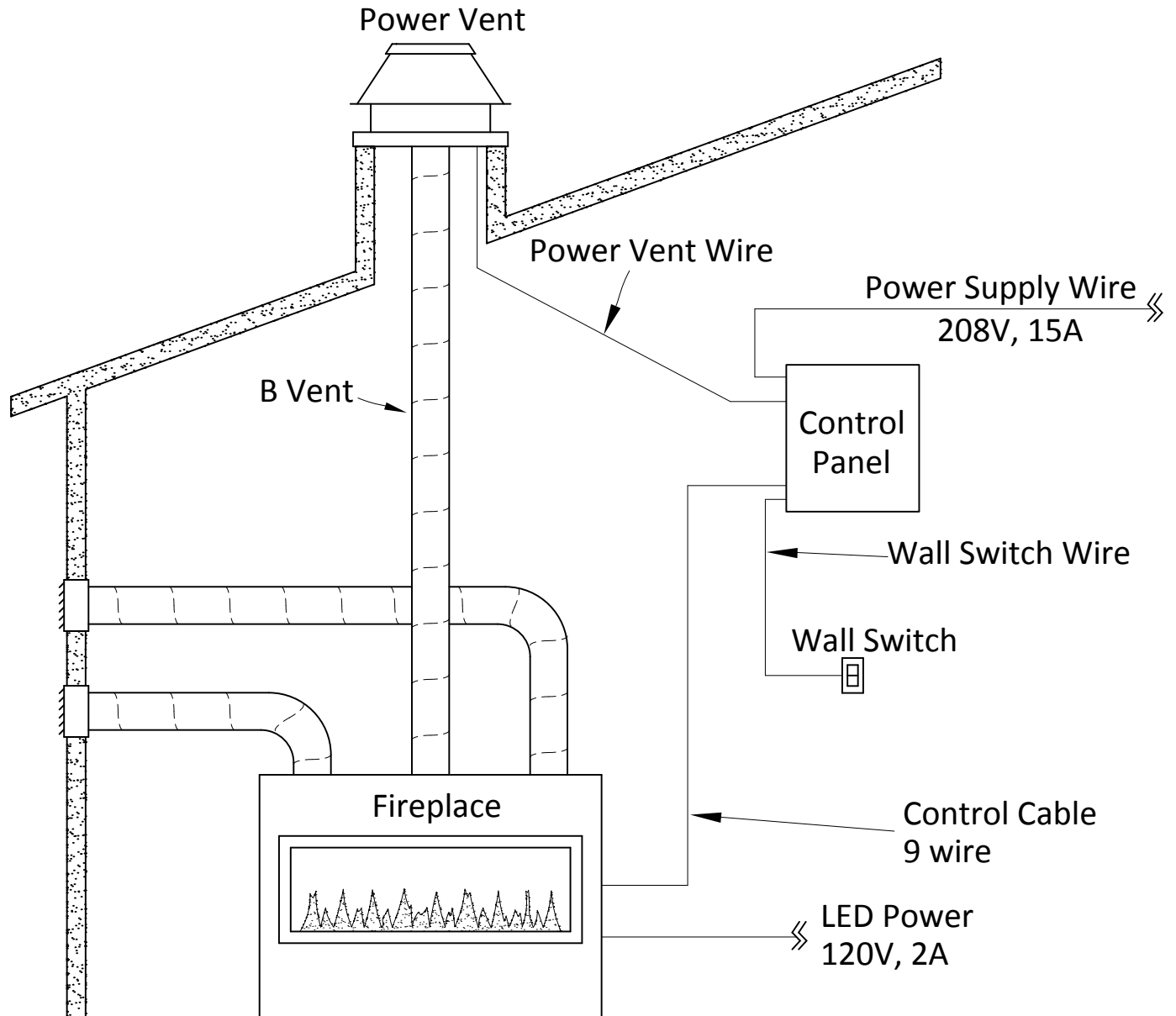
Model Size	3 Foot	4 Foot	5 Foot	6 Foot	7 Foot	8 Foot
Air Intake	2 x 6"	2 x 8"				2 x 10"
Exhaust	8"	10"				12"
A	40 1/4"	52 1/4"	64 1/4"	76 1/4"	88 1/4"	100 1/4"
B	24"	32"	40"	48"	56"	60"
C	18 5/8"					
D	19 7/8"					
E	42 1/4"	54 1/4"	66 1/4"	78 1/4"	90 1/4"	102 1/4"
F	36"	48"	60"	72"	84"	96"
G	15 1/8"					
H	16 1/8"					
I Glass Height	12", 20", 30", 36", 60"					
J	8 1/8"					
K	19 7/8"					
L	26 3/16" + Glass Height					
M	24 1/4" + Glass Height					
N	23 1/4" + Glass Height					



There are framing brackets built into the face of the Prodigy fireplace. These brackets extend 1" outwards from the body, and are recessed 5/8" to allow for installation of cement board around the fireplace.

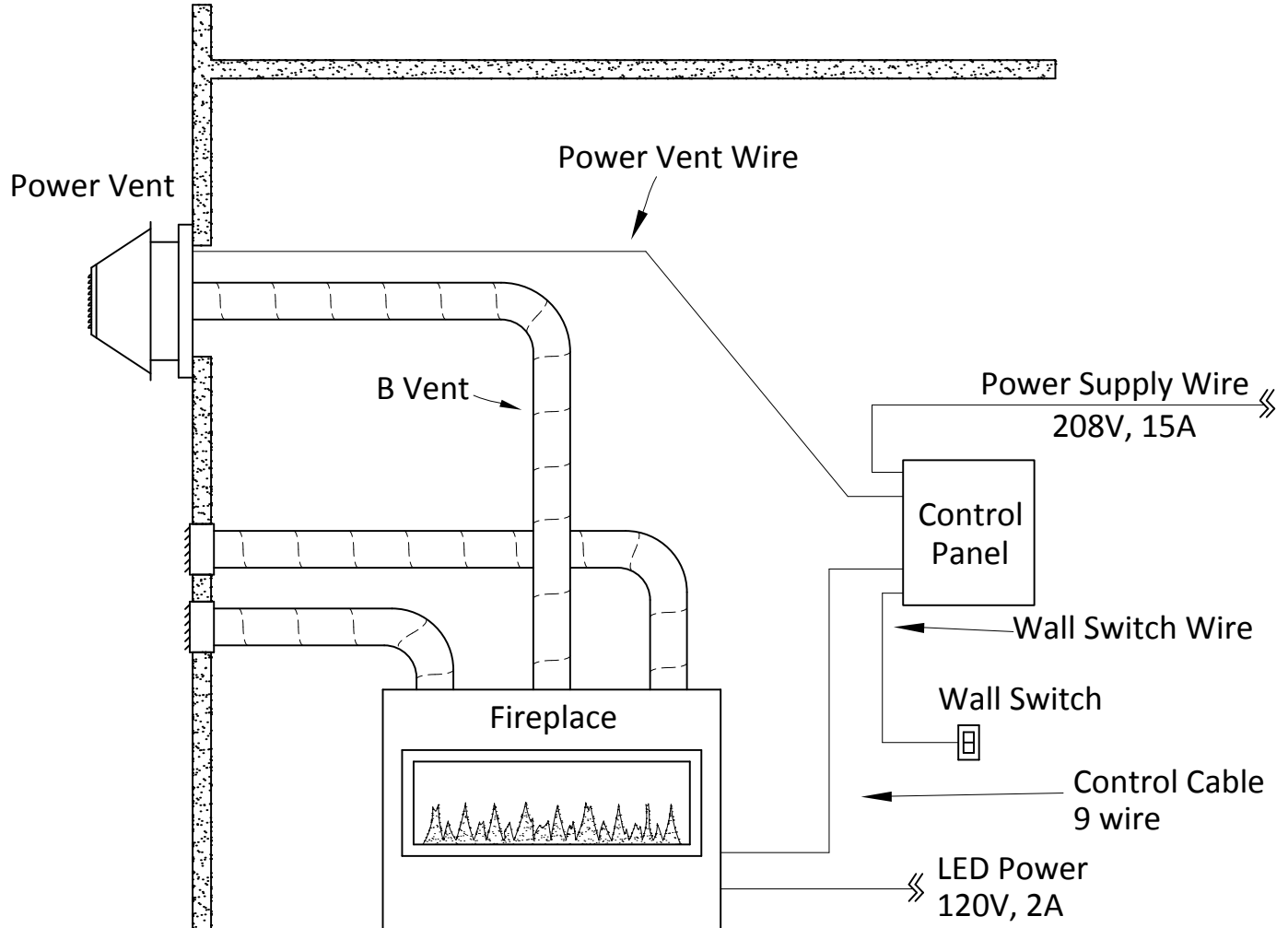
# Introduction

Figure 2: System Overview - Roof Mount Power Vent



# Introduction

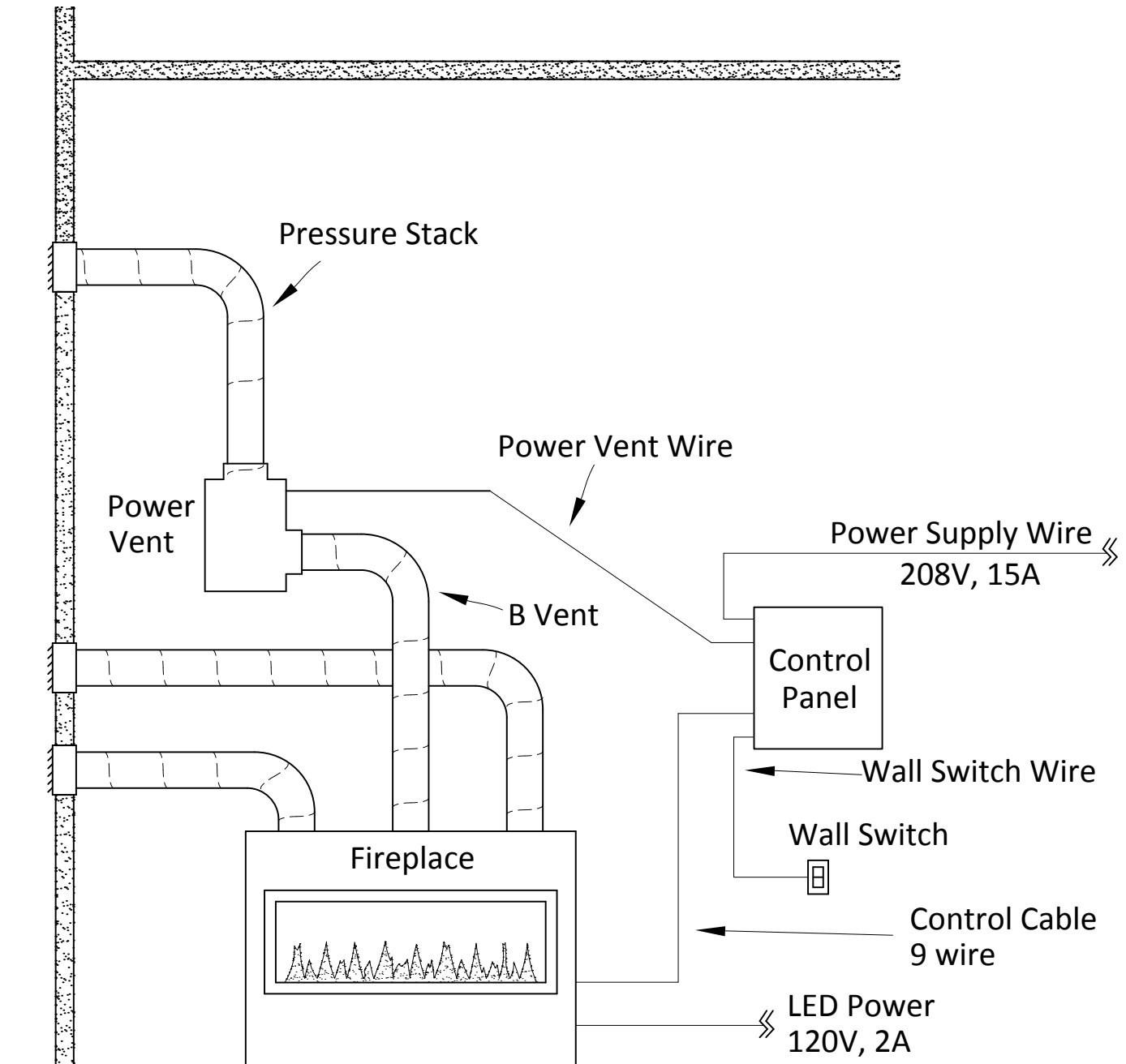
Figure 3: System Overview - Wall Mount Power Vent





# Introduction

Figure 4: System Overview - Inline Power Vent



# Installation

## Section 4: Clearances and Framing

### CLEARANCES:

The fireplace may be installed in any location that maintains proper clearances to air conditioning ducts, electrical wiring and plumbing.

The Montigo Prodigy Fireplace is a zero clearance appliance

**Table 4: Product Clearances**

Clearances to Combustibles	
Sides	0"
Back	0"
Glass / Opening *	1/8"
Top	0"
Floor	0"

**NOTES:**

\* Distance from the edge of the finished materials to ensure removal of glass is possible for future cleaning and service

\*\*Type B vent pipe clearances must meet the B Vent manufacturer's recommendation.

### FRAMING:

Montigo recommends that framing is performed once the unit is on site using the overall unit dimensions shown in Table 3. If the framing must be built in advance, the opening for the fireplace should be increased by 5" in each direction so that the fireplace can be manoeuvred into position

The illustrations on this page are of a single sided unit, though the procedure for framing single sided and see-through units is the same. See the page 11 for see through illustrations.

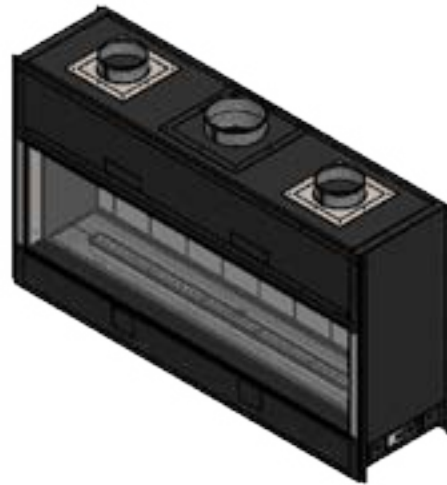
STEP 1: Frame the opening shown in Figure 6 for the unit based on the dimensions shown in Table 3. Ensure access is left for connections of gas, electrical and venting as required.

STEP 2: Place the unit. Complete all connections

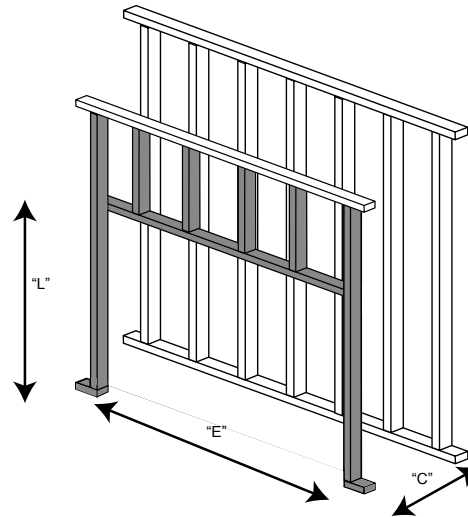
STEP 3: Backframe the unit with framing materials followed by finishing materials. Ensure access for service as required.

STEP 4: Refer to Section 5: Finishing.

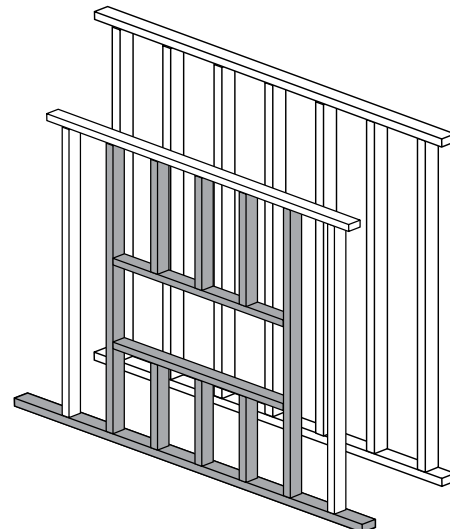
**Figure 5: Single Sided Unit Model**



**Figure 6: Framing**



**Figure 7: Back-Framing**

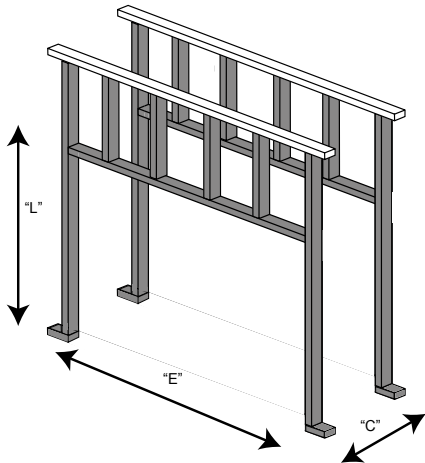


# Installation

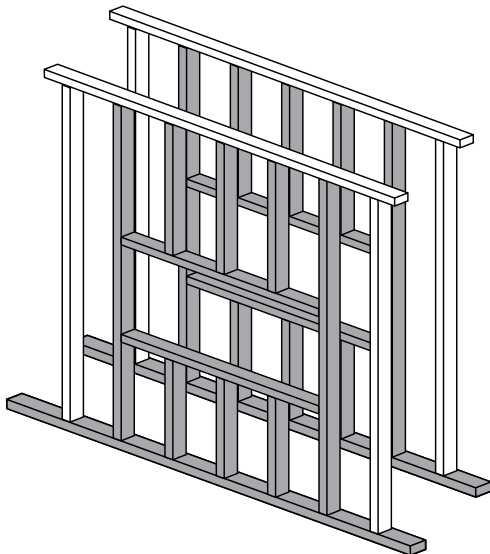
**Figure 8: See Through Unit Model**



**Figure 9: Framing (ST)**

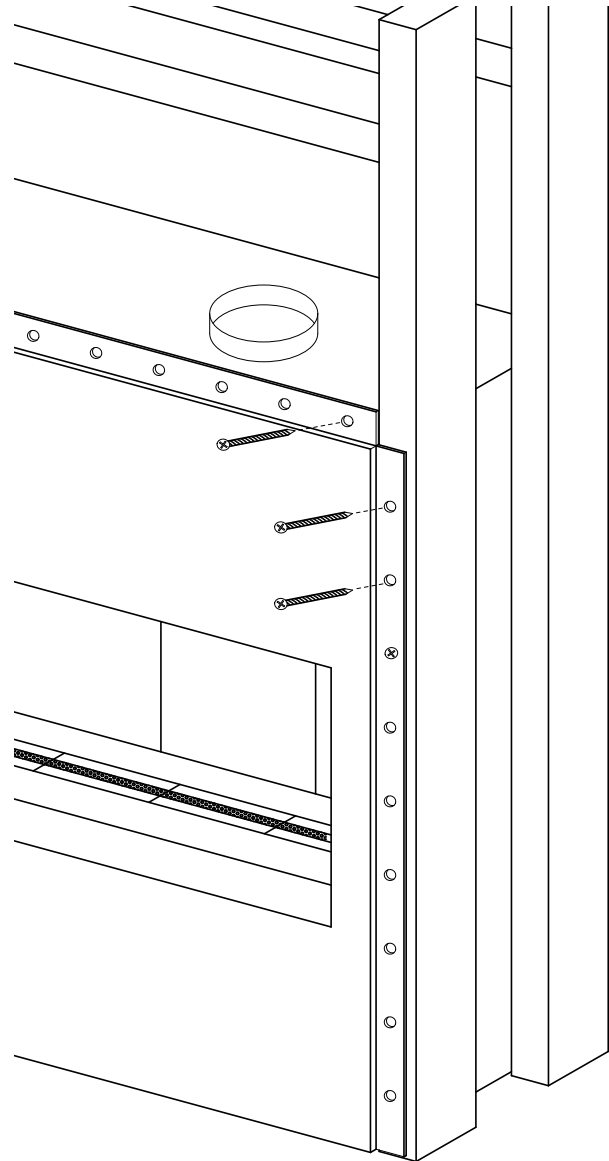


**Figure 10: Back-Framing (ST)**



**Figure 11: Framing Flanges**

There are flanges on the outer edges of the Prodigy series fireplace that may be used to install framing around the fireplace. The use of these flanges is entirely optional; they are provided to simplify installation, and if they are not needed, they may be ignored.

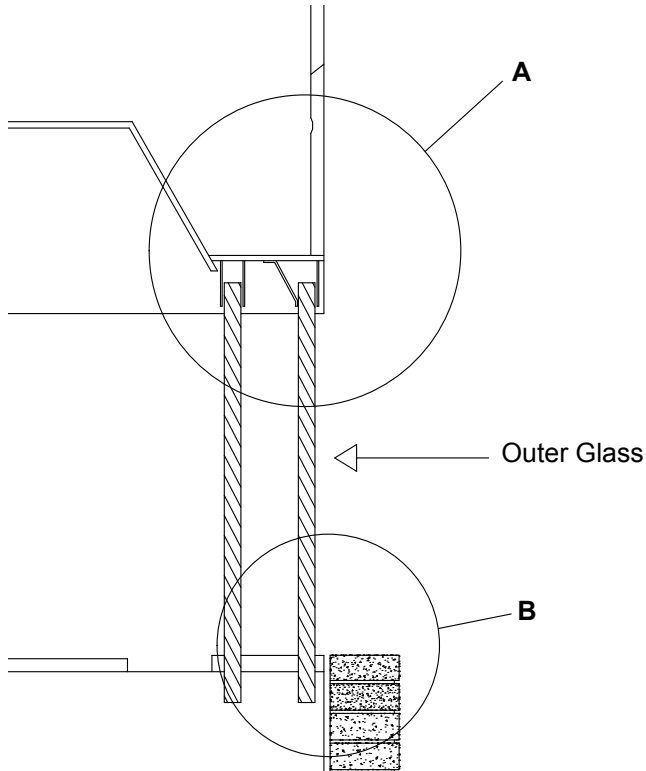


# Installation

## Section 5: Finishing

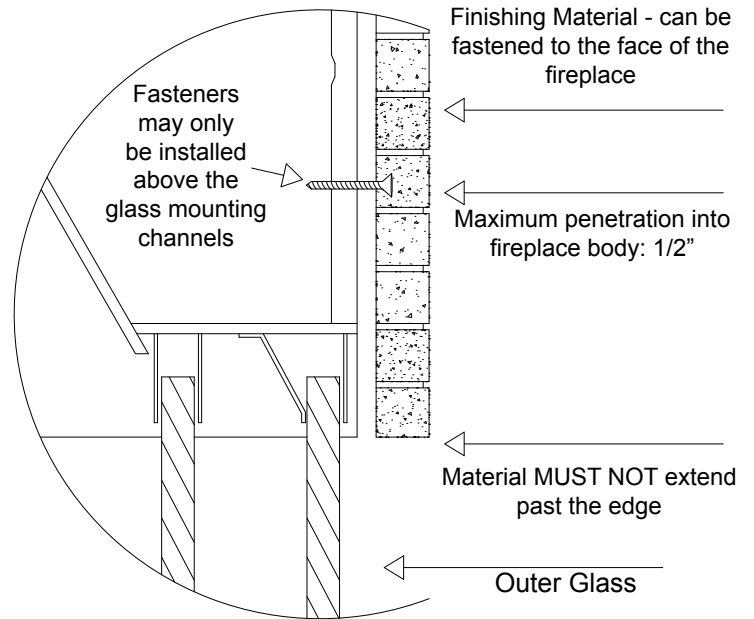
### Finishing Around the Fireplace

The following illustrates the suggested finishing method for the Prodigy fireplace

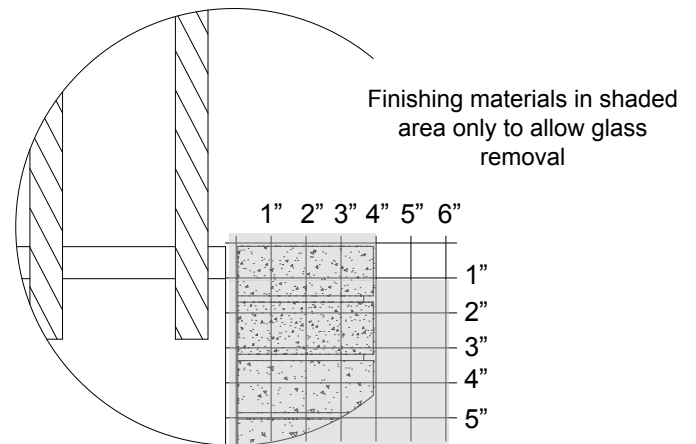


**FIGURE 12:** Typical Cross Section. See following figures for enlarged finishing details

The Prodigy fireplace is designed for zero clearance installation. That is, combustible finishing materials may be installed directly against the fireplace body. These materials can be fastened directly to the fireplace provided the fasteners do not penetrate further than 1/2" into the unit or impede glass installation as shown in Figure 13.

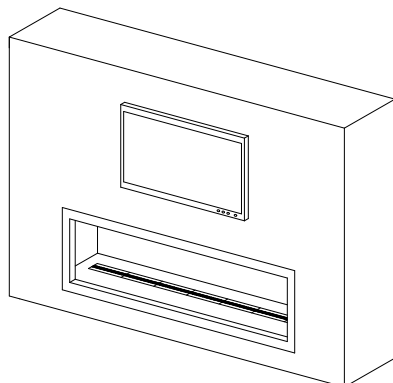


**FIGURE 13:** Detail A - Finishing Suggestion



**FIGURE 14:** Detail B - Finishing Requirement

To ensure glass can be safely removed for cleaning, it is recommended that flush finishing materials not extend more than 4" from the fireplace. See Figure 14 for details.



### Television Installation

Montigo does not require any special clearances to be maintained between a wall mounted television and the fireplace glass. Check the TV owner's manual for any manufacturer's required clearances.

# Installation

## Section 6: Power Venting

### Roof or Wall Mount Power Vent Installation

- Prodigy series fireplaces are certified for use with any UL listed type B venting components. Use of other non-certified parts will void the Montigo warranty, and may impede the operation of the fireplace.
- The vent run should not exceed distances described in Table 4. If your vent run does not meet these requirements please contact your local Montigo representative.
- Install components and fittings using the clearances specified by the B-Vent manufacturer.
- All joints must be secured as per the instructions provided by the B-Vent manufacturer.
- The exhaust portion of a vent termination must not be recessed in a wall cavity.
- Horizontal runs must be supported by a minimum of three supports per 10 feet of venting.
- It is important that the location of the power vent motor is not exposed to a downfall of water in excess of the standard rain fall.
- Before installing the termination or venting, check to ensure the planned termination location is acceptable.

### Installing the Power Vent Termination

- Frame the chase for the Power Vent Termination to the dimensions shown in Figures 13-15.
- Secure the termination and its frame using appropriately rated fasteners.

**Table 5: Allowable Exhaust Vent Runs**

Min Vent Run	Max Vent Run	Elbows
3'	80' (including 7 elbows)	7 @ 90°

If more than 7 elbows are required, the maximum allowable vent run must be decreased by 20' for each additional elbow. For example, a vent run with 9x 90° elbows has a maximum vent run distance of 40 feet.

Should your vent run fall outside of the parameters shown, please contact a Montigo representative to discuss other options.

### Inline Power Vent Installation

#### Installation from Fireplace to Power Vent (negative pressure system):

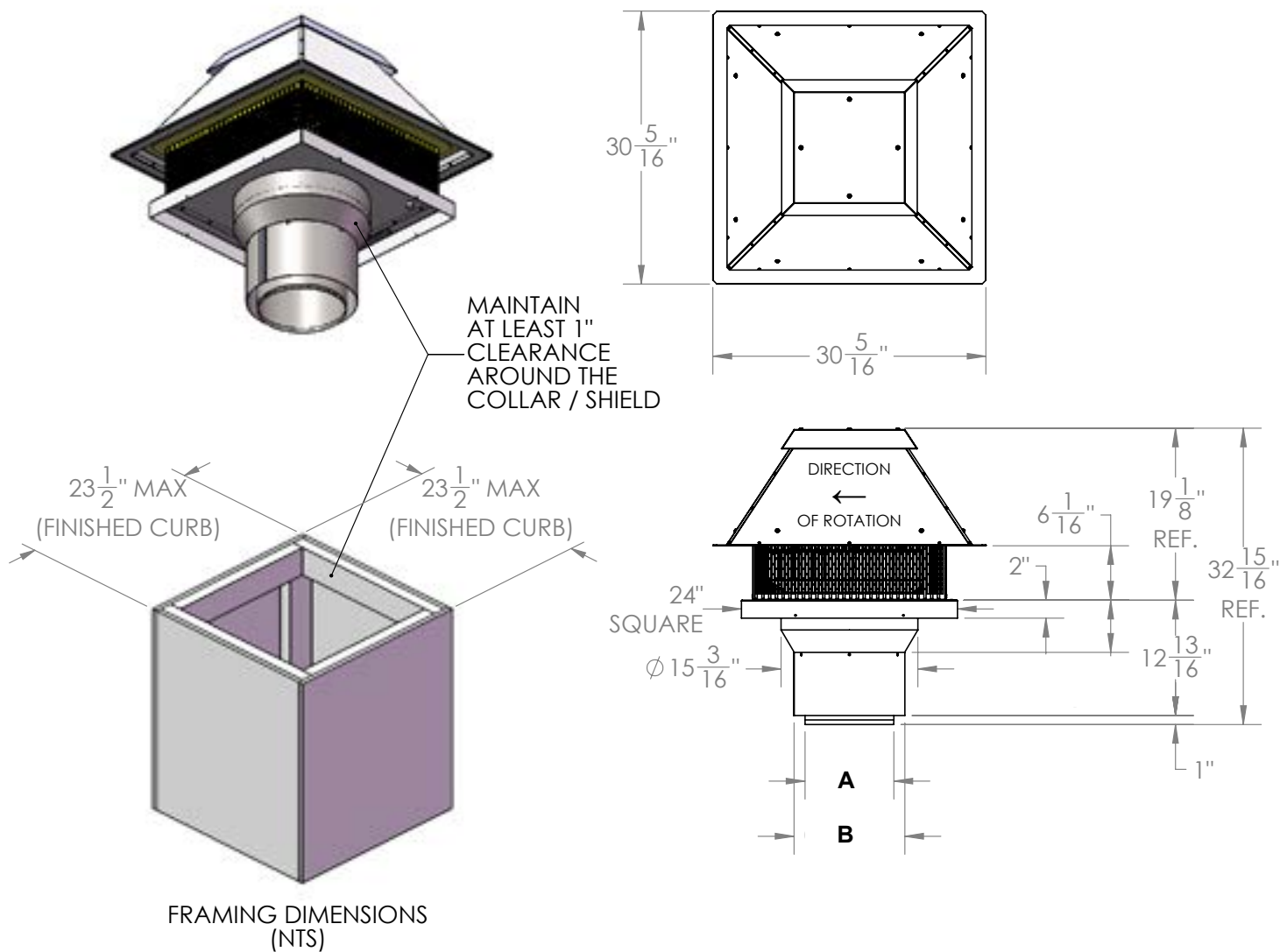
- Prodigy series fireplaces are certified for use with any approved UL certified type B venting components. Use of other non-certified parts will void the Montigo warranty, and may impede the operation of the fireplace.
- The vent run should not exceed distances described in Table 4. If your vent run does not meet these requirements please contact your local Montigo representative.
- Install components and fittings using the clearances specified by the B-Vent manufacturer.
- All joints must be secured as per the instructions provided by the B-Vent manufacturer.
- Horizontal runs must be supported by a minimum of three supports per 10 feet of venting.
- Select a location for the power vent that will permit an access panel for future maintenance work.
- Ensure access panel is large enough for the motor to be accessed in case it ever must be removed.
- The power vent can be mounted to any solid non-combustible surface.
- Anchoring bolts for the power vent should be rated for a minimum of 300 lbs each and be 1/4".
- If suspending the power vent, some bracing mechanism should be designed to prevent any lateral movement of the equipment.

#### Installation from the Power Vent to exterior of the building (positive pressure system):

- Beyond the inline power vent, piping must be pressure stack rated with all joints sealed.
- For runs up to 30', use Montigo VPIF piping. For runs over 30' Use a UL listed sealed pipe system.
- The exhaust portion of a vent termination must not be recessed in a wall cavity.
- Horizontal runs must be supported by a minimum of three supports per 10 feet of venting.
- The flue gas outlet should be a louver box or termination that has equivalent free air in square inches as that of the flue collar.

# Installation

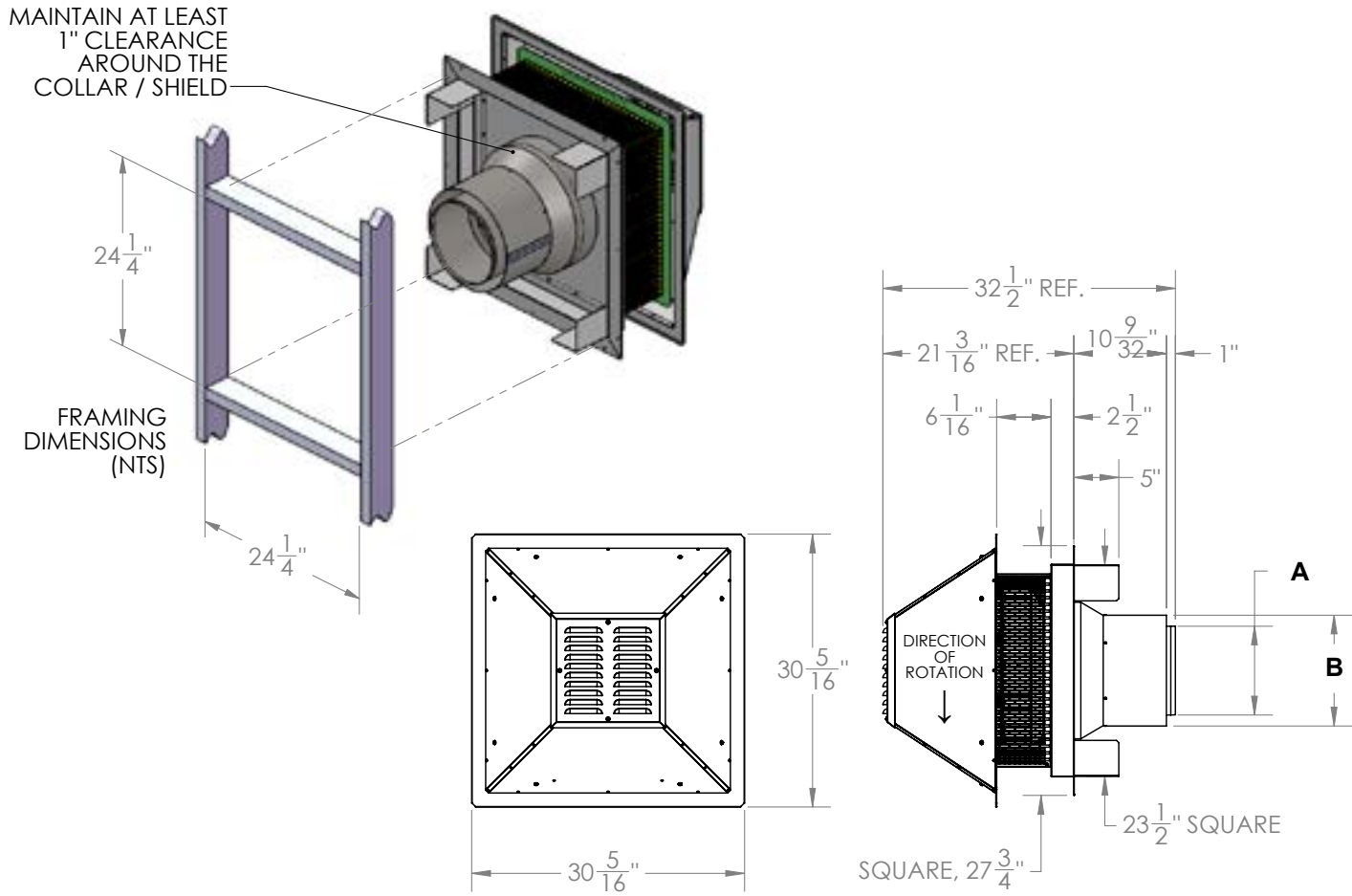
**Figure 15: Roof Mount Power Vent**



Model Size	3 Foot	4 Foot	5 Foot	6 Foot	7 Foot	8 Foot
Dimension 'A'	7 7/8"	9 7/8"	9 7/8"	9 7/8"	9 7/8"	11 7/8"
Dimension 'B'	10 5/16 "	12 5/16 "	12 5/16 "	12 5/16 "	12 5/16 "	14 5/16 "

# Installation

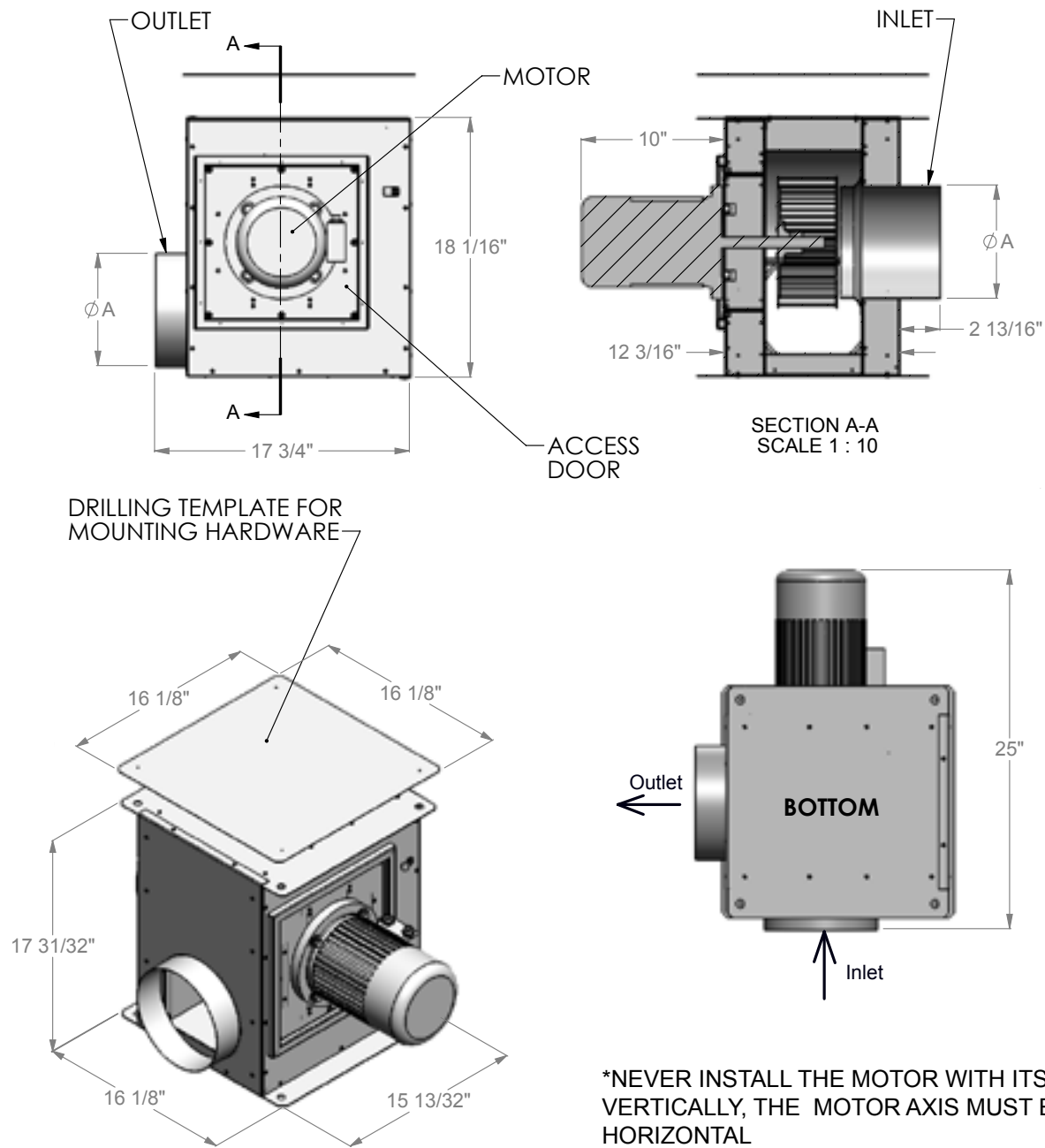
**Figure 16: Wall Mount Power Vent**



Model Number	3 Foot	4 Foot	5 Foot	6 Foot	7 Foot	8 Foot
Dimension 'A'	7 7/8"	9 7/8"	9 7/8"	9 7/8"	9 7/8"	11 7/8"
Dimension 'B'	10 5/16 "	12 5/16 "	12 5/16 "	12 5/16 "	12 5/16 "	14 5/16 "

# Installation

**Figure 17: Inline Mounted Power Vent**



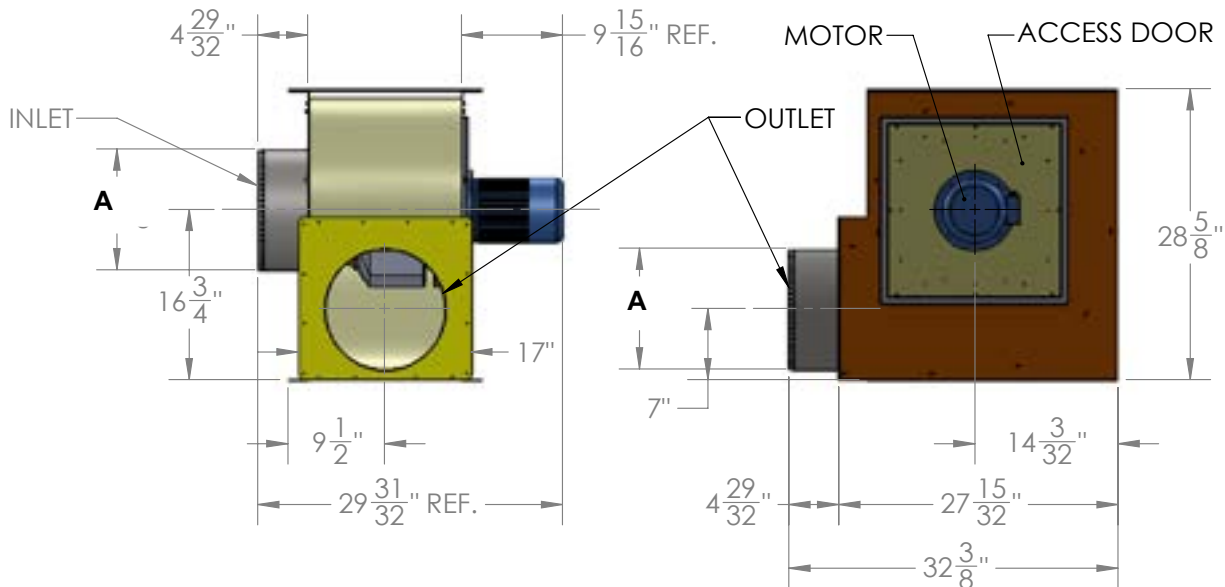
\*NEVER INSTALL THE MOTOR WITH ITS SHAFT VERTICALLY, THE MOTOR AXIS MUST BE HORIZONTAL  
 \*\* ENSURE ACCESS DOOR CAN OPEN AT LEAST 80 DEGREES

Model Number	3 Foot	4 Foot	5 Foot	6 Foot	7 Foot	8 Foot
Dimension 'A'	7 7/8"	9 7/8"	9 7/8"	9 7/8"	9 7/8"	N/A

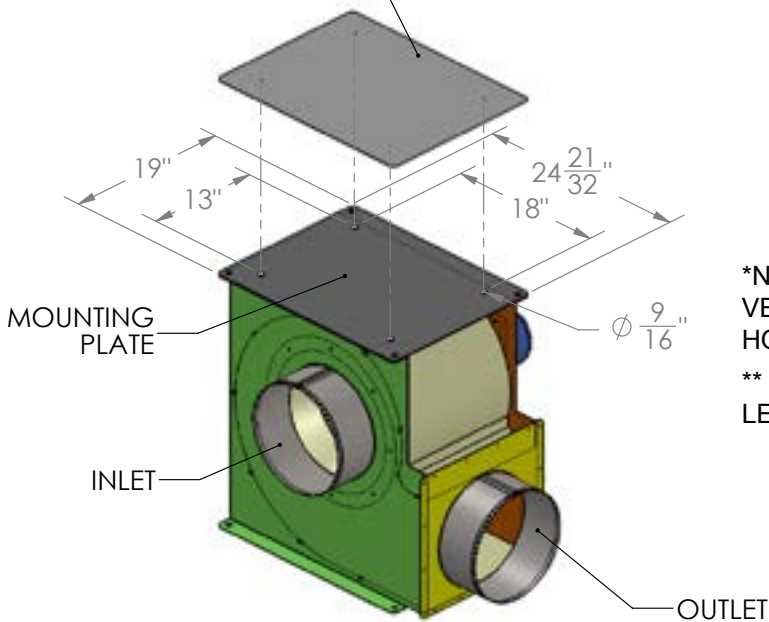


# Installation

**Figure 17a: Inline Mounted Power Vent**



DRILLING TEMPLATE FOR MOUNTING HARDWARE



\*NEVER INSTALL THE MOTOR WITH ITS SHAFT VERTICALLY, THE MOTOR AXIS MUST BE HORIZONTAL

\*\* ENSURE ACCESS DOOR CAN OPEN AT LEAST 80 DEGREES

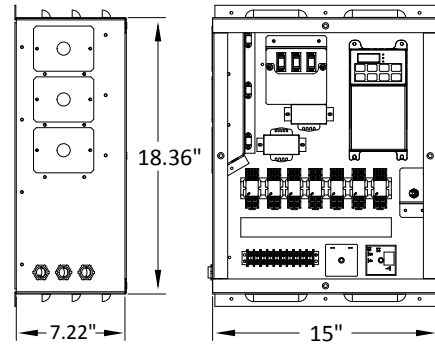
Model Number	3 Foot	4 Foot	5 Foot	6 Foot	7 Foot	8 Foot
Dimension 'A'	N/A	N/A	N/A	N/A	N/A	11 7/8"

# Installation

## Section 7: Control Panel

### Control Panel Installation

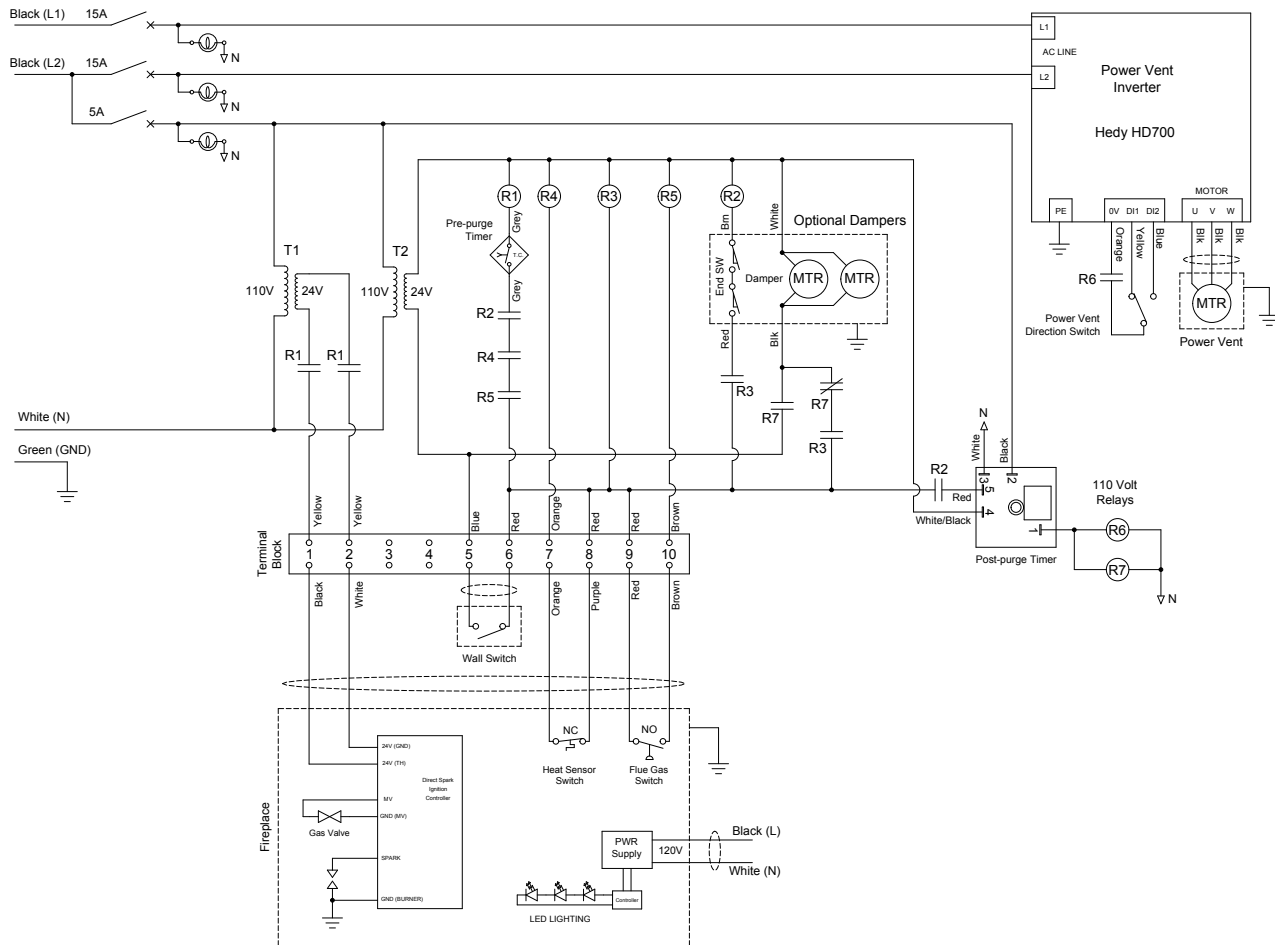
The control panel should be installed in a location that is accessible for start up and future service. The panel's electronic components can produce a whining sound, this should be considered when selecting the panel location. If noise from the panel is a concern, the panel should be placed in a room that can be sound proofed. It is not necessary for the panel to be in a line of sight from the fireplace, however, this can be helpful for servicing.



Panels must be surface mounted with a minimum 2" clearance on all sides of the panel to ensure adequate ventilation.

**Figure 18: Electrical Schematic and Panel Specifications**

- |                                   |  |
|-----------------------------------|--|
| Material:                         | 16 Gauge satin coated steel                                  |
| Power Supply:                     | Single Phase 200–240VAC + Neutral, 15 Amp, dedicated circuit |
| Circuit Breakers in Panel:        | 15 Amps (Qty 2), 5 Amps (Qty 1)                              |
| Power Output to Power Vent Motor: | 0.5 hp – 3 Phase, 220 Volts, 2.8 Amps                        |
| Pre-purge:                        | 60 seconds   |
| Post-purge:                       | 3 minutes  |
| Damper Power Supply:              | 24VAC, 40VA  |



# Installation

## Section 8: Electrical Connections

Inverter breaker size: 15 Amps (Qty 2).  
Control breaker size: 5 Amps (Qty 1).

The circuit breakers will illuminate when switched on; the inverter's display will also illuminate when powered.

### ELECTRICAL CONNECTION DIRECTIONS



Connecting power to the panel before all the wiring is connected may damage the panel

#### Connection Step 1

Connect the power vent module to the connection box labeled **POWER VENT CONNECTION** (second box from the top of the panel's left side). This is a three phase system that requires the installer to supply three hot wires and ground from the control panel to the power vent module.



Incorrect wiring may damage the motor and the fireplace will not function properly

#### Connection Step 2

The control panel is supplied with 25 feet of 18 AWG/2 conductor low voltage wire that is coiled up on the side of the control panel. Connect these wires to a standard single pole wall switch. **Do not apply any power to these wires.** This wire may be replaced with a longer wire of the same gauge, type, and quality to a length of up to 1,000 feet.

#### Connection Step 3

Connect power to the wires in the connection box labeled **POWER SUPPLY 208V, 15 AMP** (first box from the top of the panel's left side). This is a four wire system with two blacks (L1 and L2), white (neutral), and green (ground).

#### Connection Step 4

Connect 120V power to the base of the fireplace to power the LED lighting inside the unit. This is a two wire connection consisting of a black (hot) and white (neutral) wire.

### OPTIONAL DAMPER CONNECTIONS

The control panel is wired for use with dampers, but comes from the factory with this wiring bypassed for non-damper operation. If dampers are installed, connect them to the control panel as follows:

#### Connection Step 1

Open up the damper connection box on the side of the control panel to access the 5 wires for damper control. The red and brown wires must be disconnected from one another to be wired into the damper cable.

#### Connection Step 2

The white and black wires supply 24 VAC to the damper motor. Connect the black damper wire to the black connection box wire, and the white damper wire to the white connection box wire. For multiple dampers, connect power in parallel.

The red and brown wires connect to an end switch that will close when the damper has opened. Connect the brown damper wire to the connection box brown wire, and the red damper wire to the connection box red wire. For multiple dampers, connect the end switches in series.

The green wire is a ground connection and is used to bond the damper cable to the control panel.

# Installation

## Section 9: Installing the Gas Line

The gas connection (1/2" NPT) is located on the lower portion of the fireplace body. The manufacturer requires a service shut off valve located in an accessible location to isolate the gas supply. The gas line must be installed and tested for leaks before finishing the Prodigy Fireplace. The gas valve has a provision to remove a plug so that a hose barb fitting can be installed to check pressure.

**Natural Gas** requires a minimum inlet gas supply pressure of 5.5" W.C. and a manifold pressure of 3.5" W.C.

**Propane** requires a minimum inlet gas supply pressure of 11" W.C. and a manifold pressure of 10" W.C.

Maximum allowable inlet pressure for NG and Propane is 1/2 PSI.

**Note:** After gas line is connected, **each appliance connection, valve and valve train** must be checked while under normal operating pressure with either a liquid solution, or leak detection device, to locate any source of leakage. Tighten any areas where bubbling appears or leak is detected until bubbling stops completely or leak is no longer detected. **DO NOT use a flame of any kind to test for leaks.**

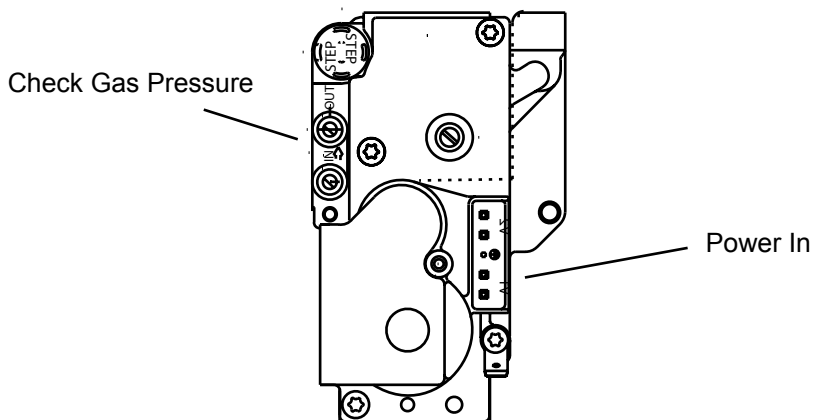


FIGURE 19 : Gas Valve



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

### For Your Safety - READ BEFORE LIGHTING:

- A. This appliance is equipped with an ignition system that lights the pilot burner automatically. **Do not attempt to light the pilot by hand.**
- B. **BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
  - What To Do If You Smell Gas:**
    - Do not try to light any appliance.
    - Do not touch any electrical switch; do not use any phone in your building.
    - 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.
- C. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system, and any gas control which has been under water.

# Operation

## Section 10: Start Up



Make sure that all air is purged from the gas lines

There are **7 Relays** in this panel that have a red LED in the bottom left corner of the transparent cube enclosure. When the red LED is illuminated, the relay is **ON**.

<b>R1</b> (Ignition System)	– Indicates the <b>ignition system</b> is <b>POWERED</b>
<b>R2</b> (End Switch)	– Indicates the <b>end switch</b> is <b>CLOSED</b> (damper open)
<b>R3</b> (Wall Switch)	– Indicates the <b>wall switch</b> is turned <b>ON</b>
<b>R4</b> (Heat Sensor)	– Indicates the <b>heat sensor switch</b> is <b>CLOSED</b>
<b>R5</b> (Flue Gas)	– Indicates the <b>flue gas proving switch</b> is <b>CLOSED</b> (adequate draft in flue)
<b>R6</b> (Inverter to Power Vent)	– Indicates the inverter has received a signal to power up the power vent motor
<b>R7</b> (Damper Open)	– Indicates the damper is being held open during post-purge cycle



**R6** and **R7** are 110V relays and are not interchangeable with 24V relays

1. Ensure that all connections are made as per instructions.
2. Turn on the panel's circuit breakers.
3. The red lights in the breakers and the inverter display will illuminate.
4. Turn the wall switch **ON**.
5. The **Wall Switch Relay** and **Heat Sensor Relay** will light up, and the damper (optional) will start to open.
6. When the damper is open, the **End Switch Relay** will light and signal the inverter to start. If dampers are not installed, the End Switch Relay will light when the wall switch is turned on.
7. The inverter will ramp from 0 to its set speed, and the green **RUN** LED will illuminate.
8. Check the rotation of the **Power Vent**; there is an arrow on the power vent's housing that indicates the proper rotational direction.
9. If the power vent is spinning the wrong way, throw the reverse direction switch.
  - **Reversing the Power Vent Motor**
  - Flip the Reverse Direction switch, regardless of current position.
  - The inverter will display the decreasing speed of the motor until it reaches 0.
  - The inverter will pause for 15 seconds.
  - The inverter will ramp from 0 to the last used speed, but in the reverse direction (indicated by a negative sign).
10. The **Flue Gas Relay** is activated within 10 to 15 seconds of the **Power Vent** running at an adequate speed. If the **Flue Gas Relay** is not activated after 30 seconds, increase the speed of the power vent.
11. The **Ignition System Relay** will power up after the pre-purge time (60 seconds).
12. The **Ignition System Relay** will supply power to the ignition module, which will simultaneously open the valve and start the spark igniter. Once the burner lights, the spark igniter will stop. If the burner doesn't light within 20 seconds, the ignition module will lockout. If the air movement of the system is too erratic and the flames aren't in contact with the igniter, the module will also lockout. To reset the module, cycle the wall switch.

# Operation

## LED LIGHTING OPERATION

Montigo’s series fireplaces have integrated LED lighting installed beneath the burner tray. The LEDs are controlled by the included remote. The fireplace burner does not need to be lit for the LEDs to function.

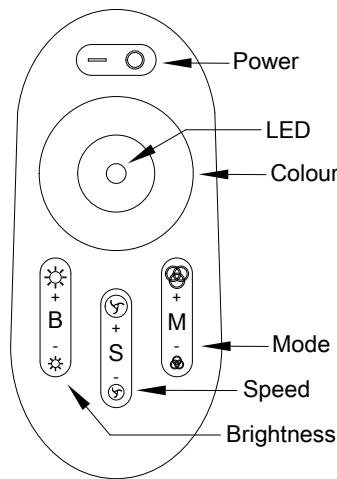
The LEDs can be set to any solid colour using the colour wheel on the remote control, or to any of the 20 patterns listed below. The speed and brightness of the various functions can also be adjusted by the remote.

**⚠ ATTENTION ⚠**  
Do not hold down remote control buttons while installing batteries or erratic operation may result

### LED Patterns

Program	Function
1	Solid White
2	Fading White
3	Multi-Colour Fade
4	Red-Green-Blue Fade
5	7 Colour Flash
6	Red-Green-Blue Flash
7	Red-Green Flash
8	Red-Blue Flash
9	Blue-Green Flash
10	White Flash
11	White Blink
12	Red Flash
13	Red Blink
14	Green Flash
15	Green Blink
16	Blue Flash
17	Blue Blink
18	Yellow Flash
19	Yellow Blink
20	Cycle All Patterns

### Remote Control



### LED Specifications

Remote Batteries Required	AAA x2
Remote Radio Frequency	2400-2483.5 MHz
Remote Control Range	20 Meters
LED Type	5050 RGB, 24V
LED Standby Power Consumption	0.5W

### LED Part Numbers

EC1448	LED Power Supply
EC1449	RF Controller
EC1451	LED Strip

### TROUBLESHOOTING

The LEDs are pre-wired inside the control panel and fireplace; ensure that all wiring is connected before troubleshooting the LEDs.

If the LEDs are lit but cannot be controlled by the remote, first change the remote’s batteries. If the remote still can’t control the LED lighting, you may need to pair the remote with the controller.

If the LEDs will not light, measure the voltage on the power supply’s output (underneath burner tray), the output should be 24VDC.

If a portion of the LED strip displays a single colour only, the LEDs must be replaced.

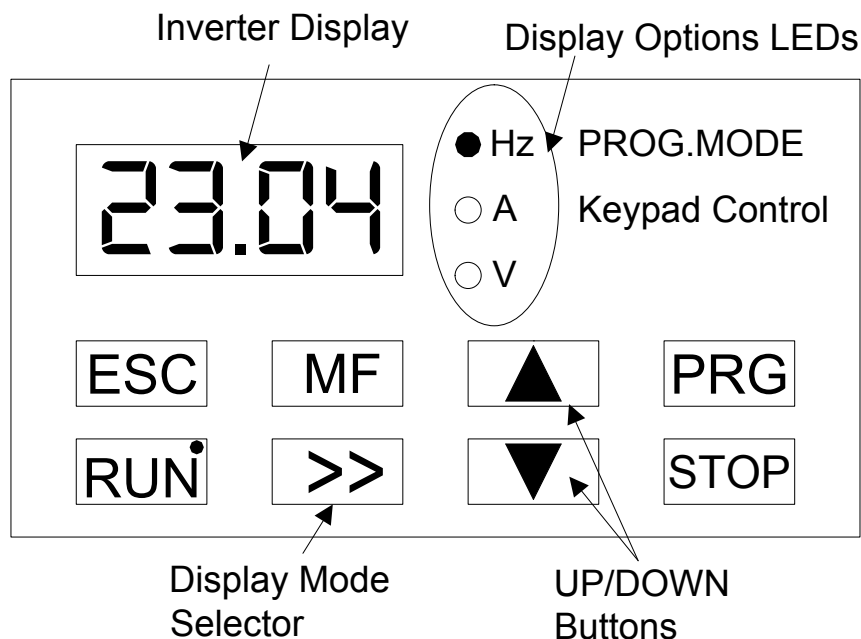
### PAIRING REMOTE CONTROLS

Montigo ships the fireplace with a functional LED system, but, if you need to pair an alternate remote, follows these steps:

1. Disconnect power from the fireplace (shut off breaker) and wait 5 seconds.
2. Reconnect power to the fireplace.
3. Within 3 seconds, press the remote’s speed+ button; the fireplace LEDs will flash 3 times to indicate successful pairing.
4. To clear a remote’s pairing, follow the same procedure, but hold the remote’s speed+ button until the fireplace LEDs flash 9 times.

## Operation

### INVERTER OPERATION



#### ⚠ CAUTION ⚠

Inverters should only be controlled by the wall switch and UP/DOWN buttons, the use of other inverter keypad buttons may cause unwanted or incorrect operation

### INVERTER DISPLAY

The inverter's 4 digit display is used to communicate the drive's settings to the user. It is preset by the factory to display set speed.

### DISPLAY OPTIONS LEDs

These 3 LEDs indicate what value is being shown on the inverter's display. The **Hz** setting will display the unit's speed, the **A** setting will display the unit's current, and the **V** setting will display the unit's voltage. For ease of operation, the displayed value should be left on the **Hz** setting.

### RUN AND STOP BUTTONS

The wall switch performs the same function as these buttons. When the drive is running, the integrated RUN LED will be illuminated.

### UP/DOWN BUTTONS

These buttons are used to control the speed of the power vent and cool pack fans. The inverter's speed is preset, but will need to be adjusted during installation.

### DISPLAY MODE SELECTOR

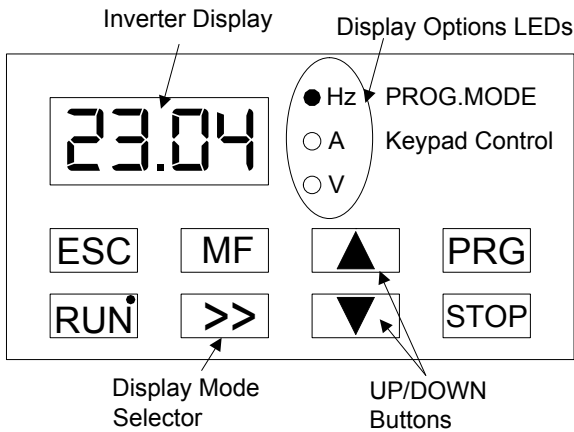
This button selects which option is shown on the display (**Hz**, **A**, **V**). For ease of operation, leave the display mode on factory settings.

### PRG BUTTON

This button is locked by default, as it is used to program the inverter. Modification of the inverter's programming could cause unwanted or unsafe operation of the drives and fans, as well as cause damage to electrical components.

# Operation

## INVERTER DISPLAY



The inverter's display will illuminate when power is supplied to the unit. The inverter's RUN LED will illuminate whenever the drive is running.

Drive Operating Condition	Inverter Display
Normal Operation	Current Speed Setting
Overload Fault (trip)	F010
Current Limit (output too high)	H001
Overload Alarm (output too high)	H002
Short Circuit	F001 or F017
Output Phase Loss	F005
Undervoltage	F003
Overvoltage	F002
Stop	Last Speed Setting

## INTERMITTENT PROBLEMS

If the fireplace turns **OFF** after burning for 10-20 minutes, the control panel relays will indicate which safety has tripped.

If the **Flue Gas Relay** turns **OFF**, increase the speed on the inverter. The power vent blades are less effective when the air is hot. Also ensure that the unit's combustion air supply has not been blocked or restricted.

If the **Heat Sensor Relay** turns **OFF**, the cause is overheating. Increase the power vent's speed to increase cooling, and the fireplace will automatically restart once the unit's temperature reaches a safe level.

If the inverter display shows either a current limit alarm (**H001**), or an overload alarm (**H002**), it could mean that the unit's output is set too high. Lower the inverter's speed until the alarm disappears.

If an error code other than those listed above is shown on the inverter's display, power the fireplace down, and wait for all LEDs in the panel to turn **OFF**, then de-energize the panel. After the inverter has powered down, turn the panel's power back on and then turn on the fireplace. If the inverter error code persists, **Contact MONTIGO for assistance.**

If the igniter is sparking around its porcelain base instead of on the burner face, adjust the igniter's position, or replace the igniter.

## IGNITION SYSTEM ERROR CODES

There is a multi-coloured LED on the ignition system module located inside the fireplace body. The light's colour and flash sequence will indicate the condition of the ignition system.

Colour	Flash Sequence	Running Condition
Green	1/2 sec on, 1/2 sec off	System purge
Green	Rapid blink	Ignition trial
Green	Solid on	Flame detected, valve open

Colour	Flash Sequence	Error Condition	Error Result
Red	1 flash, then pause	No flame during trial	Lockout
Red	2 flashes, then pause	Flame sense stuck on	Lockout
Red	3 flashes, then pause	Pilot/Main relay failure	Lockout
Red	4 flashes, then pause	Repetitive flame loss	Lockout
Red	7 flashes, then pause	Internal control error	Lockout
Red	Solid on	Line voltage error	Standby

## IGNITION SYSTEM OVERVIEW

This system both lights the main burner and monitors it for flame failure. Take care not to touch the spark electrode during ignition as it operates with high voltage.

There is a multi-coloured LED on the ignition system module located inside the fireplace body. The light's colour and flash rate indicate the status of the ignition system.



## Maintenance

### Section 11: General Maintenance and Cleaning



#### CAUTION!

Fireplace gas control must be in the "OFF" position and all burners extinguished when cleaning appliance.  
Doors can get very hot. Handle only when cool.

### General

- Have the fireplace installation inspected yearly, including a visual check of the vent system, the burner and the pilot flame. For your convenience a 1/8" manifold pressure tap is supplied on the gas valve for a test gauge connection.
- For **Natural Gas** this appliance requires a minimum inlet pressure of 5.5" wc, and a manifold pressure of 3.5" wc.
- For **Propane** this appliance requires a minimum inlet pressure of 11" wc, and a manifold pressure of 10" wc.
- Always keep the fireplace area clear and free of combustible materials, as well as gasoline and other flammable vapours and liquids.
- Do not use this appliance if *any part has been under water*. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

### Cleaning

When the fireplace is first used, there may be some smoking and a visible film may be left on the glass. This is a normal condition, and is the result of burning of protective coatings on new metal.

- Glass must be cleaned periodically to remove any film (which is a normal by-product of combustion) which may be visible. Film can easily be removed by removing the glass. Handle the glass carefully, and clean it with non-abrasive glass cleaners. One of the most effective products is Kel Kem.
- Use a vacuum cleaner or whisk broom to keep the control compartment, burner, and firebox free from dust and lint.

### Section 12: Installing and Removing the Glass



#### WARNING!

Do not attempt to clean glass when hot.  
Do not clean glass with abrasive materials as any glass etching may cause premature glass failure.

The Prodigy fireplace has 2 layers of glass that must be removed for maintenance and cleaning. Remove the glass as follows:

- 1) Place suction cups on the glass door. Follow the instructions supplied with this product to ensure all safety instructions are observed. Ensure cups are firmly attached, and secured.
- 2) Hold handles firmly and lift the glass panel up and out of the lower track (into the upper track). Tilt the lower edge of the glass outwards. Do not tilt the glass away from the bottom track by more than 1" to avoid putting pressure on the glass in the top track.
- 3) Slide the glass downward carefully until it is free from the upper clips. Store in a safe location until time to replace.
- 4) At each end of the unit between the inner glass and outer glass there is a channel held in place by 2 screws. Remove these screws and the channel and store them in a safe place for re-installation.
- 5) Repeat steps 2 & 3 to remove the inner glass.
- 6) To re-install the glass, use the suction cups to carefully slide the glass into the clips on the upper track with the bottom tilted outward. Carefully lower the bottom of the glass toward the unit until it is in line with the lower track and gently lower onto the rubber stoppers in the bottom of the track.

# Maintenance

## Section 13: Installing the Burner Accessories

### Firestones

The Prodigy fireplace’s standard burner media is glass firestones. Multiple colours of firestone are available, as are imitation stones and logs (see section 14). These media options are specially designed to be used inside of Montigo fireplaces. Do not place non-Montigo accessories inside the fireplace. All Montigo supplied media must be installed as per this instruction manual.

### Installing the Firestones

The Prodigy fireplace with concealed burner is supplied with glass media. Place the firestones overtop of the burner tray as described in **Figure 19 to 19c**.

**Note:** Only cover the burner with one layer of designer firestones.



Figure 20 Installation of the firestones. Ensure ONLY one layer of firestones cover the surface.



Figure 20b Completed firestone installation.



Figure 20a Spread the firestones evenly.



Figure 20c Gas fireplace with firestones surrounding burner tray.

Firestone & Fireglass Recommended Quantity						
Model Size	3 foot	4 foot	5 foot	6 foot	7 foot	8 foot
Quantity (sold in 3lb bags)	9lbs	12lbs	15lbs	18lbs	21lbs	24lbs

Firestone Types	
Colour	Part Number
Clear mix	HW1082
Ebony	HW1091
Opal	HW1106
Diamond Glazier	HW1219B

Fireglass Types	
Colour	Part Number
Black Ice	HW1113
Copper Ice	HW1143
Platinum Ice	HW1144
Star Ice	HW1157

## Maintenance

### Section 14: Alternate Media Options

#### Driftwood & Speckled Stones

Prodigy series fireplaces can be ordered with a driftwood log set and speckled stones in place of the standard glass firestones. The stones must be placed overtop of the entire burner in a single layer only. The logs are then placed on top of the stones. Logs may be installed in a variety of patterns, so long as the logs do not obstruct burner ports or extend into the tips of the flames. Placing logs or stones incorrectly will result in fireplace sooting.



Figure 21 PC820 with speckled stones and driftwood

#### Media Quantities

Driftwood log sets and speckled stones for each fireplace are comprised of multiple smaller log and rock sets. The suggested quantities for each model are listed below. Alternate log sets can be ordered if a particular aesthetic is desired. Media placement guidelines must be followed regardless of media quantities.

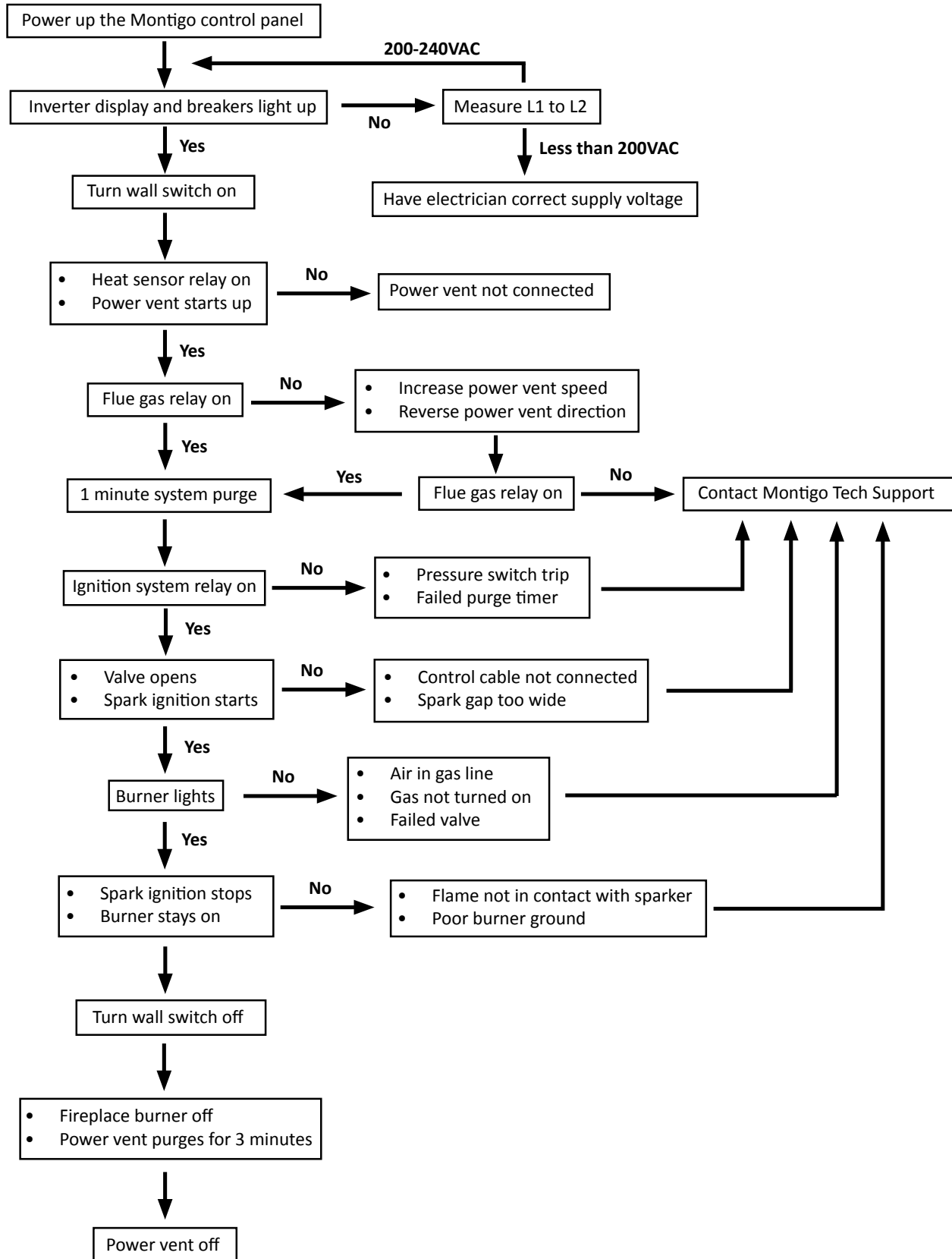
Model Size	3 Foot	4 Foot	5 Foot	6 Foot	7 Foot	8 Foot
<b>Speckled Stones</b>						
Part No. & Quantity	1x RR300SS	1x RR300SS	1x RR300SS	1x RR600SS	1x RR600SS	1x RR600SS
	1x RR50SS	1x RR150SS	1x RR150SS		1x RR50SS	1x RR150SS
			1x RR50SS			
<b>Driftwood Logs</b>						
Part No. & Quantity	1x LGS58	1x LGS58	1x LGS57	1x LGS57	1x LGS57	1x LGS57
	1x LGS59	1x LGS59	1x LGS58	1x LGS58	2x LGS58	2x LGS58
			1x LGS59	1x LGS59	1x LGS59	1x LGS59

### CAUTION!

If the media is not placed on burners properly, excessive sooting will result. The media will get very hot while the fireplace is in operation, and should not be handled until cool.

# Maintenance

## Section 15: Troubleshooting



# Appendix A - Warranty

## The Warranty

The Companies warrants the Montigo Gas Appliance to be free from defects in materials and workmanship at the time of manufacture. On the Montigo, there is a ten-year warranty on the firebox and its components, a five-year warranty on the main burner, and a one-year warranty on the pilot burner, gas control valve and fibre logs. Glass, plated/painted finishes, and refractory lining are exempt.

## Remedy And Exclusions

The coverage of this Warranty is limited to all components of the Gas Appliance manufactured by The Companies.

This Warranty only covers Montigo Gas Appliances installed in the United States or Canada.

If the components of the Gas Appliance covered by this Warranty are found to be defective within the time frame stated (see The Companies right of investigation outlined below). The Companies will, at its option, replace or repair defective components of the Gas Appliance manufactured by The Companies at no charge, and will also pay for reasonable labour costs incurred in replacing or repairing components. If repair or replacement is not commercially practical, The Companies will, at its option, refund the purchase price of the Montigo Gas Appliance.

This Warranty covers only parts and labour 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 labour necessary to install, repair or remove such materials, components or construction. All replacement or repair components will be shipped F.O.B. the nearest The Companies factory.

## Qualifications To The Warranty

The Gas Appliance Warranty outlined above is further subject to the following qualifications:

- (1) The Gas Appliance must be installed in accordance with The Companies installation instructions and local building codes. The Warranty on this Montigo Gas Appliance covers only the component parts manufactured by The Companies. The use of components manufactured by others with this Montigo Gas Appliance could create serious safety hazards, may result in the denial of certification by recognized national safety agencies, and could be in violation of local building codes. This warranty does not cover any damages occurring from the use of any components not manufactured or supplied by The Companies
- (2) The Montigo Gas Appliance must be subjected to normal use. The Gas Appliances are designed to burn gas only. Burning conventional fireplace fuels such as wood, coal or any other solid fuel will cause damage to the Gas Appliance, will produce excessive temperatures and will result in a fire hazard.

## Limitations On Liability

It is expressly 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 replacement, repair, or refund, as specified above.

In no event shall The Companies be responsible for any incidental or consequential damages caused by defects in its products, 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 states 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 this Montigo Gas Appliance is limited to the duration of the foregoing warranty. Some states do not allow limitation on how long an implied warranty lasts, so the above may not apply to you.

## Investigation Of Claims Against Warranty

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

The Companies Are Not Responsible For Work Done Without Written Consent

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

Dealers Have No Authority To Alter This Warranty

The Companies employees and dealers have no authority to make any warranties nor to authorize any remedies in addition to or inconsistent with those stated above.

## How To Register A Claim Against Warranty

In order for any claim under this Warranty to be valid, The Companies must be notified of the claimed defect in writing or by telephone, as soon as reasonably possible after the defect is discovered. Claims against this Warranty in writing should include the date of installation, and a description of the defect.

## Other Rights

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

NOTE: The Companies as stated above refer to - Canadian Heating Products Inc. and/or Montigo Del Ray Corp.

Canadian Heating Products Inc. and/or Montigo DelRay Corp. reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles and products.

# Appendix B - Dampers

Prodigy series fireplaces are available with optional dampers that prevent airflow through the fireplace's ducting when the unit is turned off. Dampers are typically used in cold climates to prevent condensation buildup on the inside of fireplace glass or vent pipes due to the mixing of warm inside and cold outside air. When ordered and installed with a Prodigy fireplace, dampers are electrically integrated into the Montigo control panel so that no additional start-up steps are required. The system with or without dampers is controlled by a single wall switch. The figures below illustrate typical damper options.

Figure 22: Inline Damper

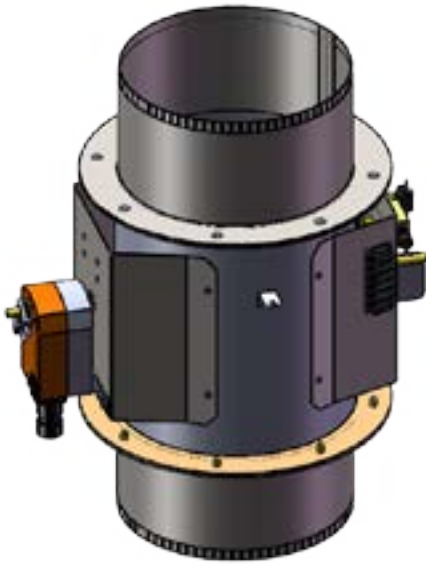


Figure 22a: Power Vent with Damper

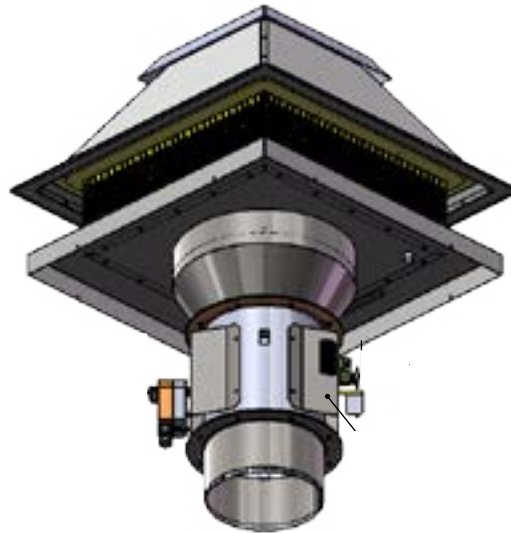
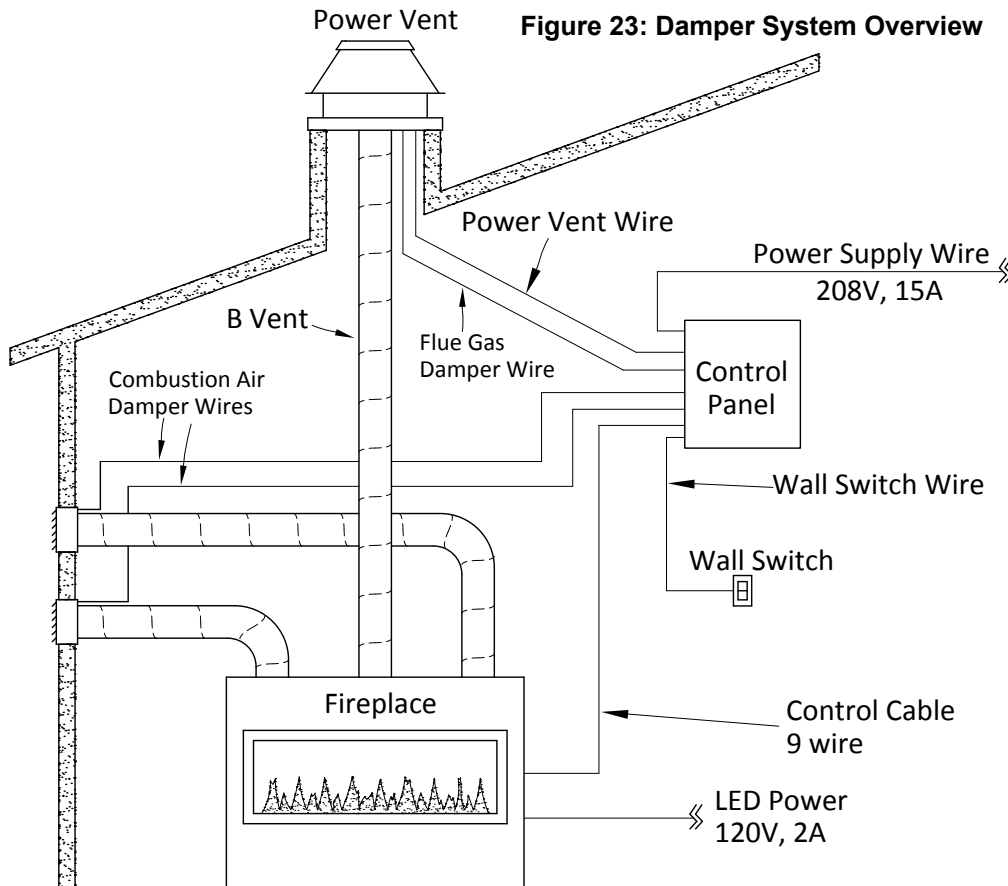


Figure 23: Damper System Overview



## Damper Wiring

Dampers require additional electrical wiring between the control panel and the damper. A five conductor cable is supplied for this connection, and the wire functions are as follows:

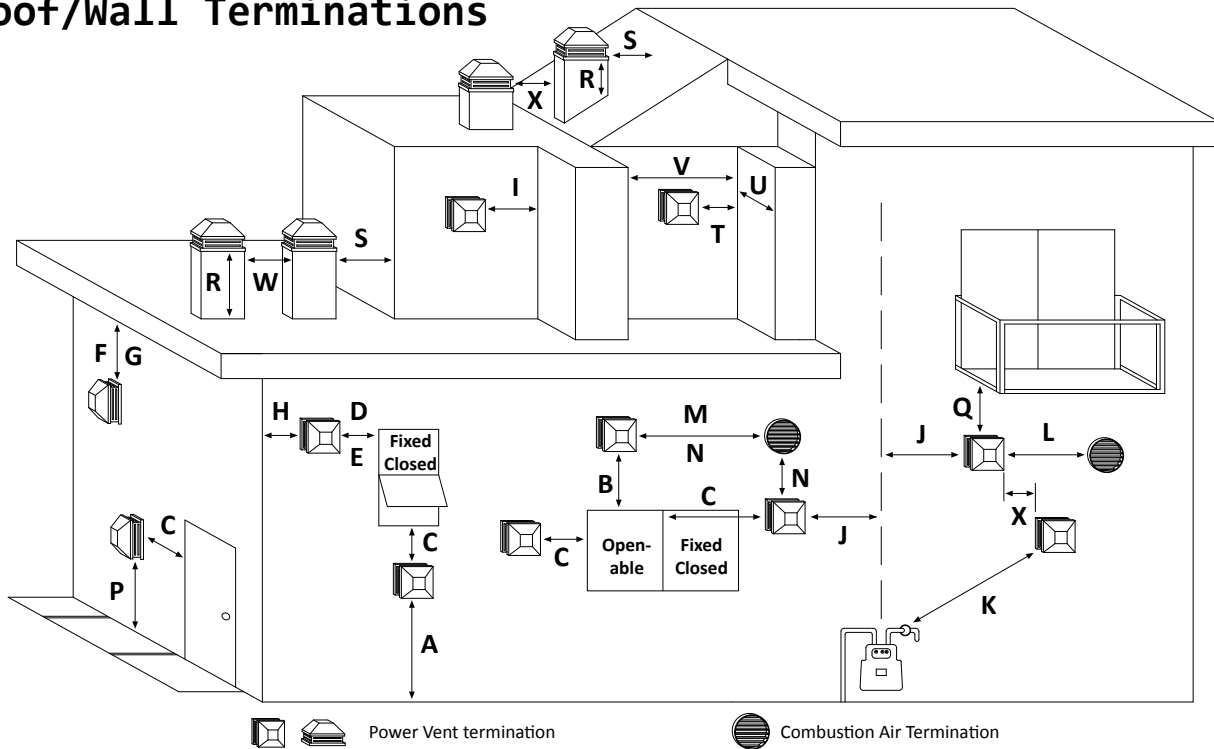
**White and Black:** 24 VAC supply to damper motor

**Red and Brown:** End switch

**Green:** Ground

# Appendix C - Power Vent Clearances

## Roof/Wall Terminations



  Power Vent termination      Combustion Air Termination

	Location	Canada*	USA**
A	Clearance above grade, veranda, porch, or balcony	30 inches	30 inches
B	Clearance to top of doors or operable windows	12 inches	12 inches
C	Clearance to sides or bottom of doors or operable windows	4 feet	4 feet
D	Clearance to permanently closed window when installed with approved gas penetration termination	0	0
E	Recommended clearance to permanently closed window to prevent condensation	30 inches	30 inches
F	Clearance to ventilated soffit located within 24 inches of termination	22 inches	22 inches
G	Clearance to unventilated soffit	30 inches	30 inches
H	Clearance to outside corner	30 inches	30 inches
I	Clearance to inside corner	30 inches	30 inches
J	Clearance to the vertical centerline of a meter or regulatory assembly to a max vertical distance of 15 feet	3 feet	3 feet
K	Clearance to service regulator vent outlet	3 feet	3 feet
L	Clearance to non-mechanical air supply inlet to the building or combustion air inlet for other appliance	for other appliance ≤ 100,000 BTU/H (30KW)	12 inches
		for other appliance ≥ 100,000 BTU/H (30KW)	6 feet
M	Clearance to forced air supply inlet	6 feet	3 feet above inlet
N	Clearance between Montigo combustion and exhaust terminations	for combustion termination beside or below exhaust vent	30 inches
		for combustion termination above exhaust vent	3 feet
P+	Clearance above paved sidewalk or paved driveway located on public property	7 feet	7 feet
Q++	Clearance under veranda, porch, deck, or balcony	30 inches	30 inches
R	Clearance above roof	2 feet	2 feet
S	Clearance to adjacent walls and neighbouring buildings	30 inches	30 inches
T	Clearance from corner in recessed location	30 inches	30 inches
U	Maximum depth of recessed location	48 inches	48 inches
V	Maximum width for back wall of recessed location	60 inches	60 inches
W	Horizontal clearance between two terminations that are level	30 inches	30 inches
X	Horizontal clearance between two terminations that are not level	30 inches	30 inches

\* Based on CGA B149.1 Natural Gas and Propane Installation Code. Local codes may vary, please check with local regulatory agency.

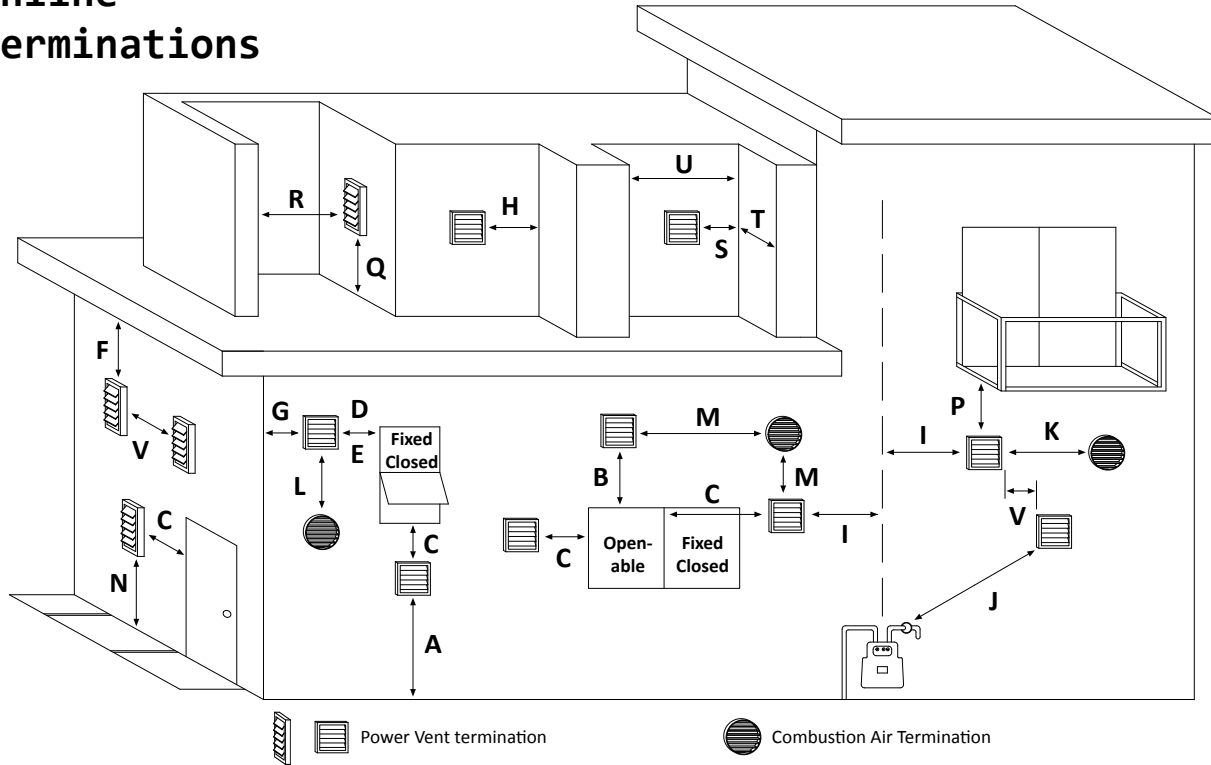
\*\*Based on ANSI Z223.1/NFPA 54 National Fuel Gas Code. Local codes may vary, please check with local regulatory agency.

+ A vent shall not terminate directly above a sidewalk or paved driveway which is located between 2 single family dwellings and serves both dwellings.

++ Permitted only if veranda/porch/deck/balcony is fully open on a minimum of 2 sides beneath the floor.

# Appendix C - Power Vent Clearances

## Inline Terminations



	Location	Canada*	USA**
A	Clearance above grade, veranda, porch, or balcony	30 inches	30 inches
B	Clearance to top of doors or operable windows	4 feet	4 feet
C	Clearance to sides or bottom of doors or operable windows	36 inches	12 inches
D	Clearance to permanently closed window when installed with approved gas penetration termination	Not Required	Not Required
E	Recommended clearance to permanently closed window to prevent condensation	30 inches	30 inches
F	Clearance to soffit	22 inches	22 inches
G	Clearance to outside corner	Not Required	Not Required
H	Clearance to inside corner	6 inches	6 inches
I	Clearance to the vertical centerline of a meter or regulatory assembly to a max vertical distance of 15 feet	3 feet	3 feet
J	Clearance to service regulator vent outlet	3 feet	3 feet
K	Clearance to non-mechanical air supply inlet to the building or combustion air inlet for another appliance	3 feet	3 feet
L	Clearance above forced air supply inlet or Montigo combustion air termination	3 feet	3 feet
M	Clearance to sides or bottom of Montigo combustion air termination	6 inches	6 inches
N	Clearance above paved sidewalk or paved driveway located on public property	7 feet	7 feet
P+	Clearance under veranda, porch, deck, or balcony	12 inches	12 inches
Q++	Clearance above roof	2 feet	2 feet
R	Clearance to adjacent walls and neighbouring buildings	30 inches	30 inches
S	Clearance from corner in recessed location	30 inches	30 inches
T	Maximum depth of recessed location	48 inches	48 inches
U	Maximum width for back wall of recessed location	60 inches	60 inches
V	Horizontal clearance between two terminations	12 inches	12 inches

\* Based on CGA B149.1 Natural Gas and Propane Installation Code. Local codes may vary, please check with local regulatory agency.

\*\*Based on ANSI Z223.1/NFPA 54 National Fuel Gas Code. Local codes may vary, please check with local regulatory agency.

+ A vent shall not terminate directly above a sidewalk or paved driveway which is located between 2 single family dwellings and serves both dwellings.

++ Permitted only if veranda/porch/deck/balcony is fully open on a minimum of 2 sides beneath the floor.



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