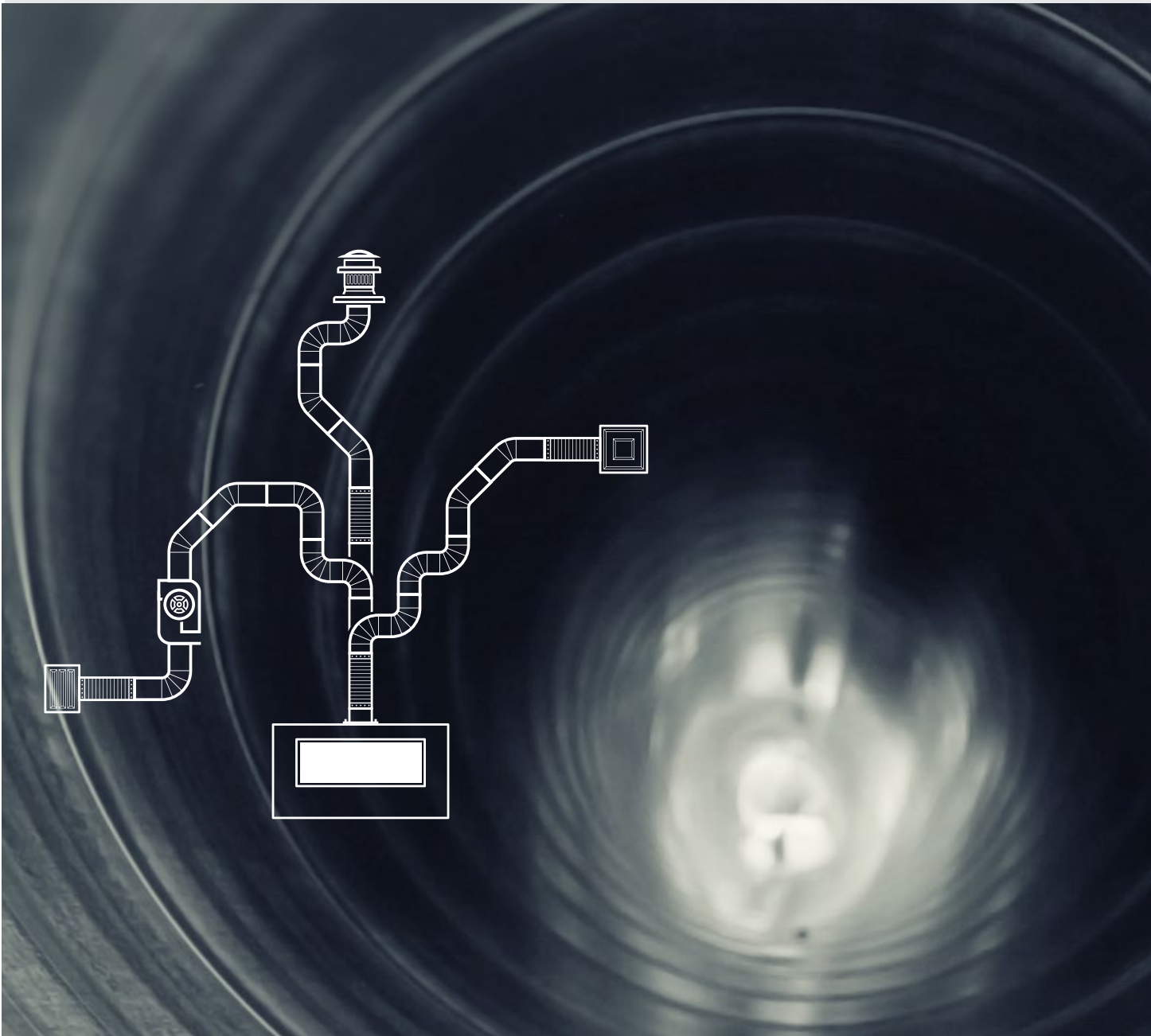


MONTIGO[®]
the art of **fireplaces**

**Power Venting Guide
Commercial Systems**



Venting Guide

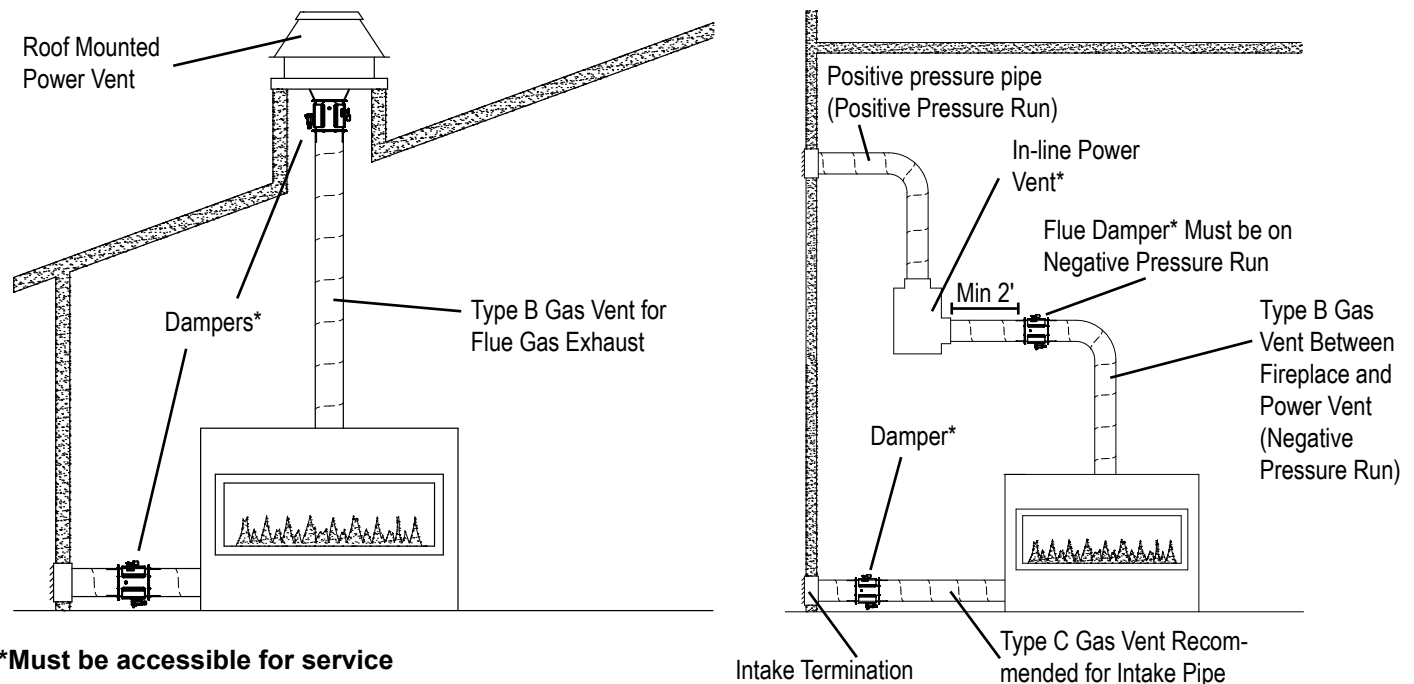
Power Vent Options and Venting Requirements

Overview

Montigo Custom C-View and Prodigy fireplaces are engineered systems including an appropriately sized Power Vent of your chosen style (see Page 3). Our engineers will review your unique vent run and size the Power Vent based on the needs of the particular project. The Montigo supplied Power Vent is the only Power Vent that can be used.

Venting for a specific fireplace must be dedicated – you **CANNOT** combine the fireplace's venting with other venting in the building even if the venting is for another fireplace. You also cannot tie the fireplace's intakes into some other equipment's intake/louver. **If you have a unique venting requirement please contact Montigo to discuss the options.**

Please see below for an overview of the general venting requirements for two common installations, a Roof Mounted Power Vent and an In-line Mounted Power Vent including the recommended intake and exhaust dampers:



Vent Run Location

Fireplace → Power Vent

In-line Power Vent → Exhaust Termination

Intake Termination → Fireplace

Type of Vent Pipe

= Type B Gas Vent Required

= UL Listed positive pressure rated Pipe Required

= Type C Gas Vent Recommended

In-Line Flue Gas Piping Requirements

If using an in-line style Power Vent you will require UL listed Positive pressure rated pipe from the outlet of the power vent to the termination on the outside of the building. This is in addition to the UL or ULc certified Type B Gas Vent that runs from the fireplace to the In-line Power Vent.

For this vent run between the power vent and the termination Montigo supplies positive pressure pipe called VPIF that can be ordered along with the fireplace. Please note that VPIF is only rated for a maximum run of 30 feet.

Venting Guide

Power Vent Options and Venting Requirements

Combustion Air Intakes (Fresh Air Intakes)

The fireplace needs fresh air for combustion - whether that comes from outside or inside the building doesn't matter as long as there is enough air available. Best practice is to draw fresh air from outside through a dedicated vent where building pressure won't have an effect on the fireplace's intake. If the building is under negative pressure and the fireplace tries to draw conditioned air from the installation space, there is a chance the appliance will be starved and not function.

Please note that some jurisdictions do not allow for combustion air to be drawn from the inside of a building – always check with your local regulatory agency.

If it is permissible to draw combustion air from inside the building, the fireplace intakes can be directly ducted to the room, or they can be left open (not connected to a duct) so that the fireplace is drawing air from the wall cavity. In this instance, a louver is often placed along the wall near the fireplace to allow conditioned air from the building to flow into the cavity and into the fireplace's intake. Regardless of where an intake louver is installed, it is ultimately providing fresh air to the fireplace.

Please see *Figure A, B, or C* depending on the type of Power Vent chosen for placement of Air Intake Terminations.

Dampers

Montigo recommends that dampers are installed on all fireplaces. Dampers are required in venting in order to help isolate the building from the weather especially in cold climates.

Dampers are placed in-line in the vent run generally, however built-in dampers are available for Roof Mounted Power Vents and Combustion Air Intake Boxes. These built-in options allow access to the dampers for servicing from the outside. **Built-in dampers are available on C-View ONLY.**

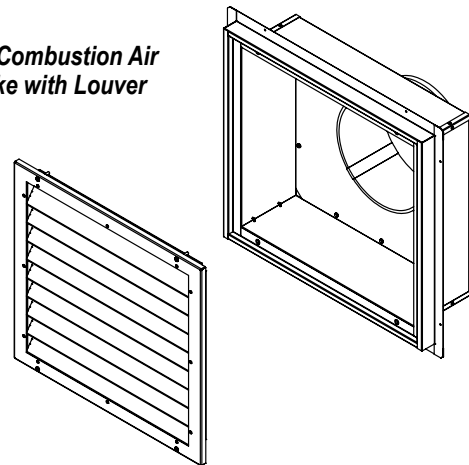
Flue gas dampers used with INPV In-line Power Vents must be placed between the fireplace and the power vent.

Montigo Louvered Termination

Montigo supplies louvered terminations for intake and exhaust (in-line PV only) vent runs. We offer the terminations in every intake and in-line exhaust size that we manufacture. You can request terminations when you order your fireplace and we will provide the appropriately sized termination boxes for your unit.

You may use alternate (non-Montigo) terminations as long as the amount of free air is maintained throughout the entire vent run (including through the louvers). If using alternate terminations please make sure that the total free air is not reduced (see chart below).

10" Combustion Air Intake with Louver



Minimum Volume of Free Air Flow Required

| Vent Diameter | Quantity of Vents | | | |
|---------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | x1 | x2 | x3 | x4 |
| 6" | 28.3 in ² | 56.6 in ² | 84.9 in ² | 113.1 in ² |
| 7" | 38.5 in ² | 77.0 in ² | 115.5 in ² | 154.0 in ² |
| 8" | 50.3 in ² | 100.6 in ² | 150.8 in ² | 201.1 in ² |
| 10" | 78.6 in ² | 157.1 in ² | 235.7 in ² | 314.2 in ² |
| 12" | 113.1 in ² | 226.2 in ² | 339.3 in ² | 452.4 in ² |
| 14" | 154.0 in ² | 307.9 in ² | 461.9 in ² | 615.8 in ² |
| 16" | 201.1 in ² | 402.2 in ² | 603.2 in ² | 804.3 in ² |

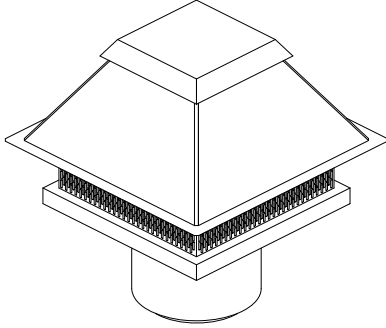


You can paint or powder coat the louvers of our vent boxes a different colour. Bear in mind that the appropriate type of paint will need to be selected if painting an exhaust vent as the air coming out of the flue gas box is extremely hot. Use paint rated for 350-400° F.

Venting Guide

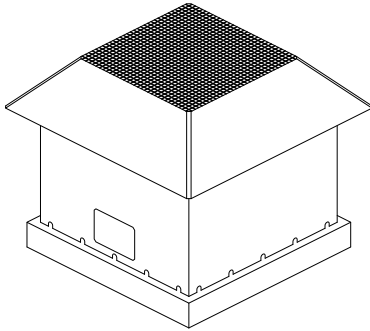
Power Vent Options and Venting Requirements

Power Vent Types



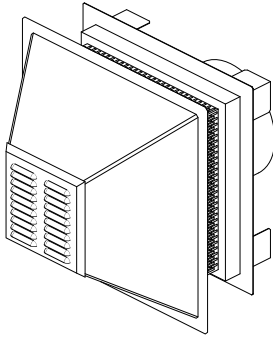
Roof Mounted Power Vent (SBFPV-R)

- Positioned on the roof and blows flue gas out horizontally around the power vent (see **Figure A** for placement requirements)



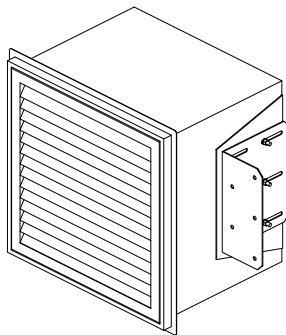
Roof Mounted Updraft Power Vent (BFUDPV) *C-View ONLY

- Positioned on the roof and blows flue gas out vertically up from the vent (see **Figure C** for placement requirements)



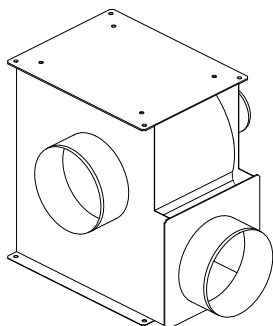
Wall Mounted Power Vent (SBFPV-W)

- Positioned on the outside of the building wall, this vent protrudes from the wall and blows flue gas perpendicular to the wall (see **Figure A** for placement requirements)



Flush Wall Mounted Power Vent (FMPVL-W) *C-View ONLY

- Mounted flush on the outside of the building wall, this is a discreet option provided you have the clearances required (see **Figure B** for placement requirements)

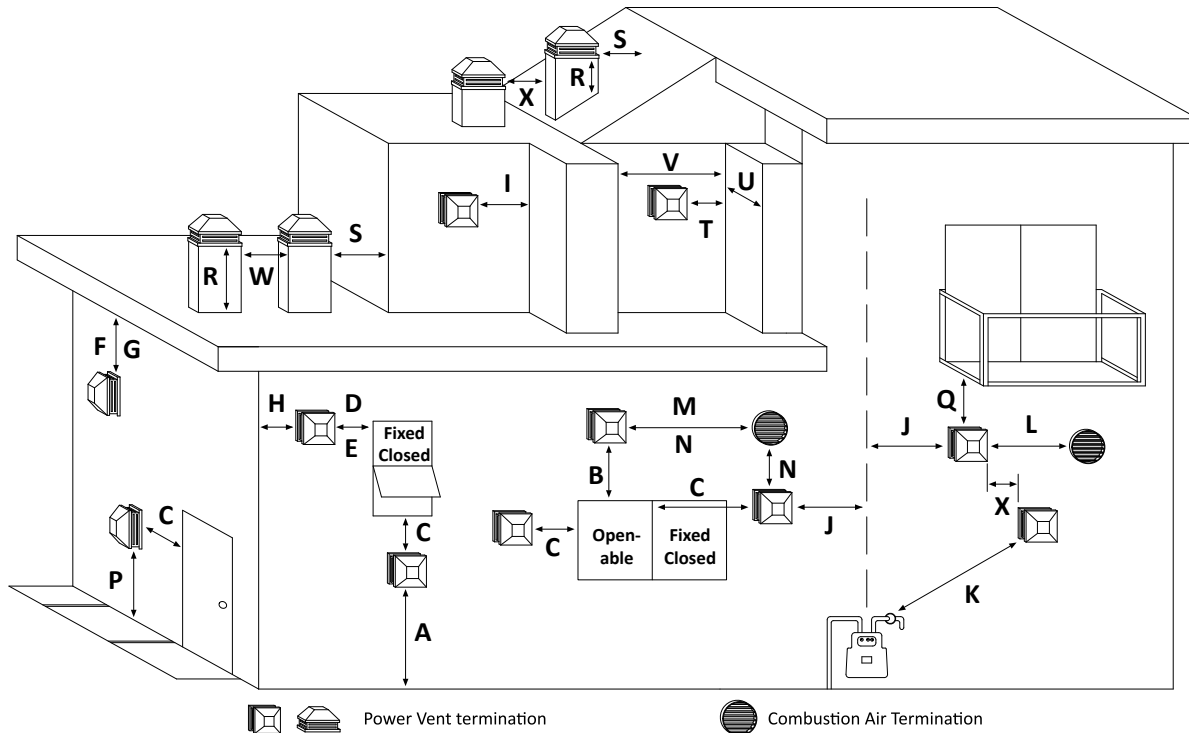


In-line Mounted Power Vent (INPV [*C-View Only] & INGPV)

- Mounted in-line to your flue gas vent run and inside the building when an external power vent is not a viable option. Should be placed as close to the termination as possible and in an area where noise is not a concern (see **Figure B** for exhaust placement requirements)

Figure A

Roof and Wall Mounted Power Vents - Clearances for Placement of 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 | 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 | 4 feet |
| | | for other appliance ≥ 100,000 BTU/H (30KW) | 6 feet | 4 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 | 30 inches |
| | | for combustion termination above exhaust vent | 3 feet | 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.

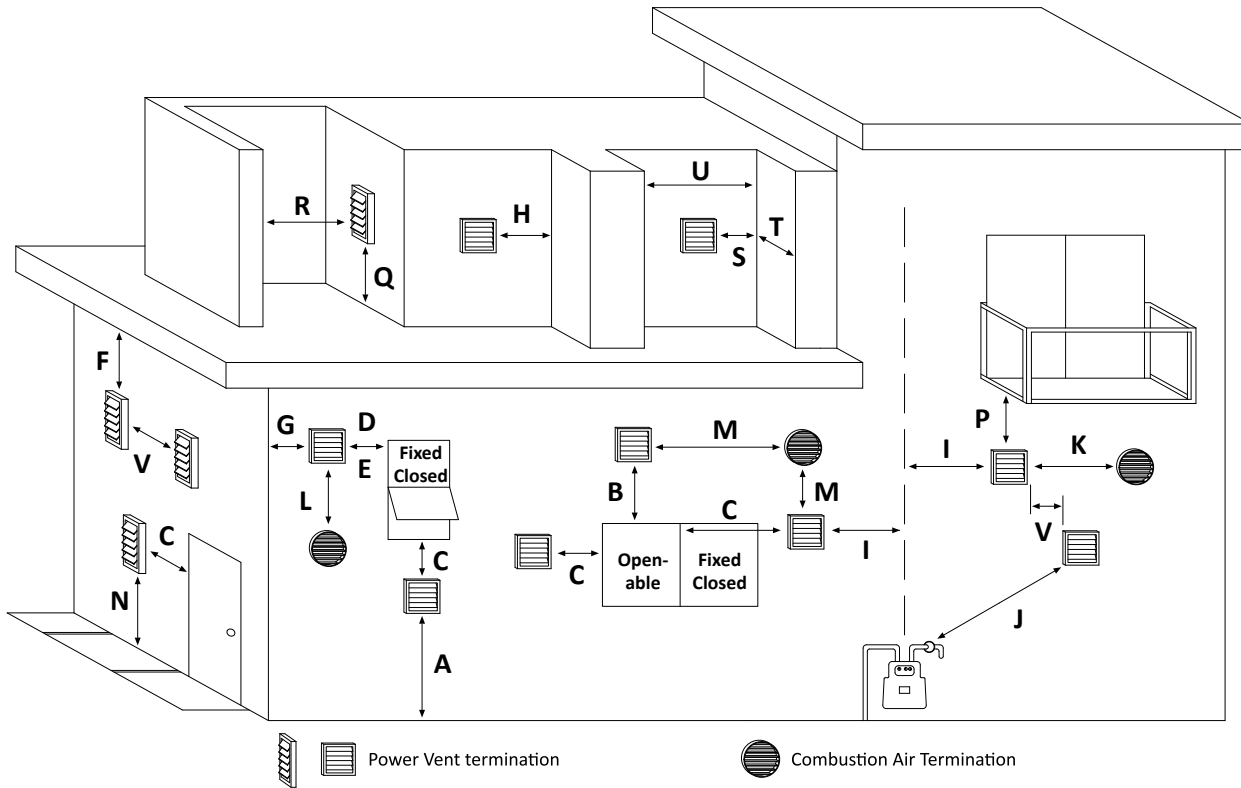
**Based on ANSI Z223.1/NFPA 54 National Fuel Gas Code. Local codes may vary, please check with local regulatory agency.

+ 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.

Figure B

In-line and Flush Mounted Power Vents - Clearances for Placement of 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.

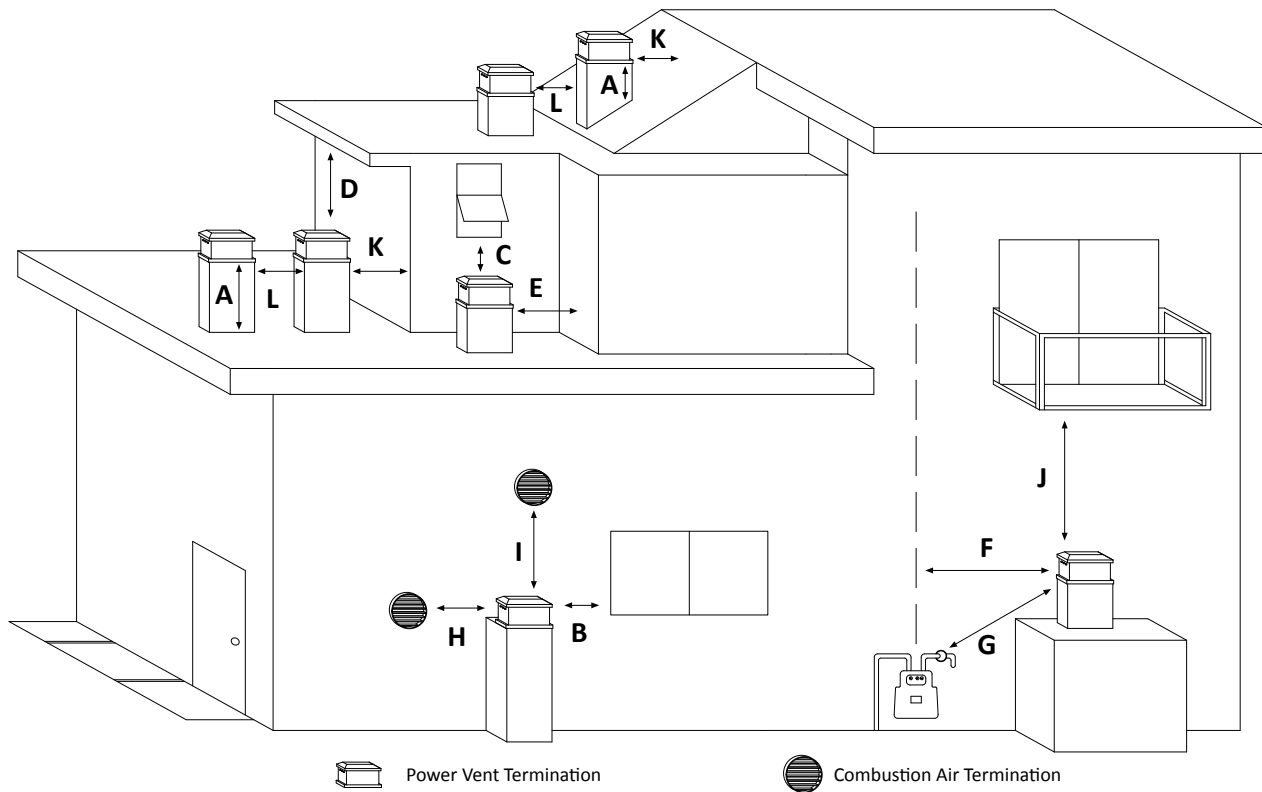
**Based on ANSI Z223.1/NFPA 54 National Fuel Gas Code. Local codes may vary, please check with local regulatory agency.

+ 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.

Figure C

Roof Mounted Updraft Power Vents - Clearances for Placement of Terminations



| | Location | Canada* | USA** |
|----|---|-----------|-------------|
| A+ | Clearance above grade, veranda, roof, porch, or balcony | 0 | 0 |
| B | Clearance to top or sides of doors or operable windows | 24 inches | 24 inches |
| B | Clearance to permanently closed window when installed with approved gas penetration termination | 0 | 0 |
| B | Recommended clearance to permanently closed window to prevent condensation | 30 inches | 30 inches |
| C | Clearance to bottom of operable doors or windows | 6 feet | 6 feet |
| D | Clearance to overhang or ventilated soffit located within 24 inches of termination | 36 inches | 36 inches |
| E | Clearance to inside corner | 4 inches | 4 inches |
| F | Clearance to the vertical centerline of a meter or regulatory assembly to a max vertical distance of 15 feet | 3 feet | 3 feet |
| G | Clearance to service regulator vent outlet | 3 feet | 3 feet |
| H | Clearance to sides or top of non-mechanical air supply inlet to building or combustion air inlet for an appliance | 30 inches | 30 inches |
| I | Clearance to bottom of forced air supply inlet or Montigo combustion air termination | 6 feet | Not allowed |
| J+ | Clearance under veranda, porch, deck, or balcony | 6 feet | 6 feet |
| K | Clearance to adjacent walls and neighbouring buildings | 4 inches | 4 inches |
| L | 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.

+ Ensure power vent is installed at a height above average snow load or pooling rain water.

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