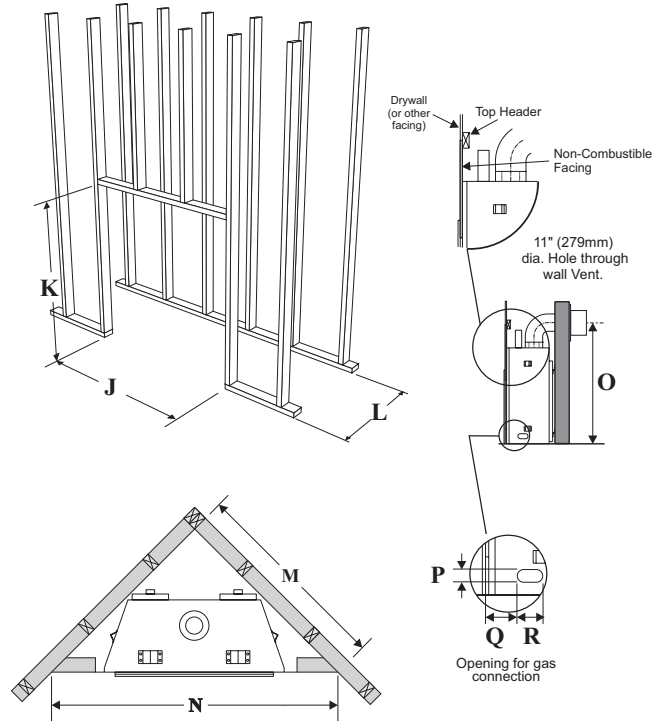
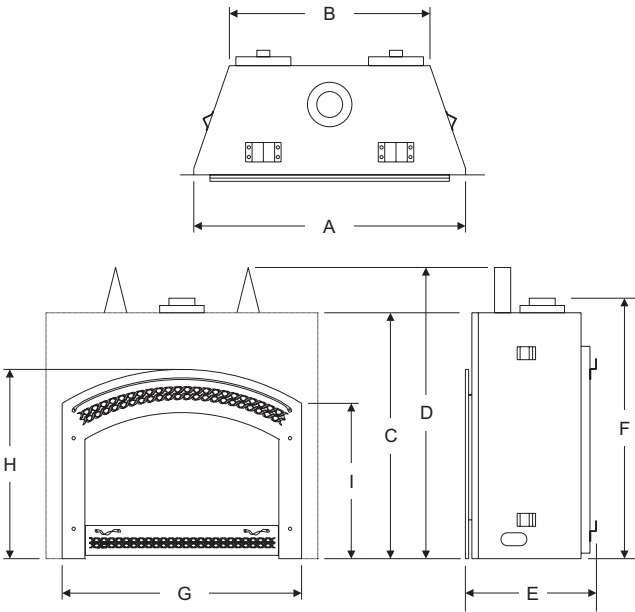


P90 Zero Clearance Direct Vent Gas Fireplace

Model	P90-NG1	P90-LP1
Fuel Type	Natural Gas	Propane
Minimum Supply Pressure	5" W.C. (1.25 kPa)	12" W.C. (3.00 kPa)
Manifold Pressure - High	3.8" W.C. (0.95 kPa)	11" W.C. (2.74 kPa)
Manifold Pressure - Low	1.1" W.C. (0.27 kPa)	3.3" W.C. (0.82 kPa)
Orifice Size	#34 DMS	#51 DMS - 0-2000ft #52 DMS - 2000-4500ft
Minimum Input Altitude 0-2000 ft. (0-610m)	18,200 BTU/h (5.42 kW)	17,950 BTU/h (5.26 kW)
Minimum Input Altitude 2000-4500 ft. (610-1372m)		15,500 BTU/h (4.54 kW)
Maximum Input Altitude 0-2000 ft. (0-610m)	35,000 BTU/h (10.26 kW)	35,000 BTU/h (10.26 kW)
Maximum Input Altitude 2000-4500 ft. (610-1372m)		31,000 BTU/h (9.08 kW)
Vent Sizing	4" Inner / 6 5/8" Outer	4" Inner / 6 5/8" Outer

Approved Venting Systems	
Flex Vent Systems:	FPI AstroCap™ Flex Vent
Rigid Pipe Vent Systems:	Simpson Dura-Vent® Direct Vent GS American Metal Products Ameri Vent Security Secure Vent® Selkirk Direct-Temp.



Unit Dimensions	Description	P90
A	Front Firebox Width	42" (1067mm)
B	Rear Firebox Width	31" (787mm)
C	Front Firebox Height	38" (965mm)
D	Height w/ Standoff	45" (1143mm)
E	Unit Depth	19-1/4" (489mm)
F	Height to Vent	40-1/4" (1022mm)
G	Faceplate Width	37" (940mm)
H	Faceplate Height (center)	29-1/4" (743mm)
I	Faceplate Height (edge)	24" (610mm)

Framing Dimensions	Description	P90
J	Framing Width	46-1/2" (1181mm)
K***	Framing Height***	46-3/8" (1168mm)***
L	Framing Depth	19 1/2" (495mm)
M	Corner Wall Length	49-7/8" (1267mm)
N	Corner Facing Wall Width	70-1/2" (1791mm)
O	Vent Centerline Height	48" (762mm)
P	Gas Connection Height	1 1/2" (38mm)
Q	Gas Connection Inset	4" (102mm)
R	Gas Connection Width	3" (76mm)

***Important: Framing height requires consideration of the hearth depth. Dimension H = H + the thickness of installed hearth.

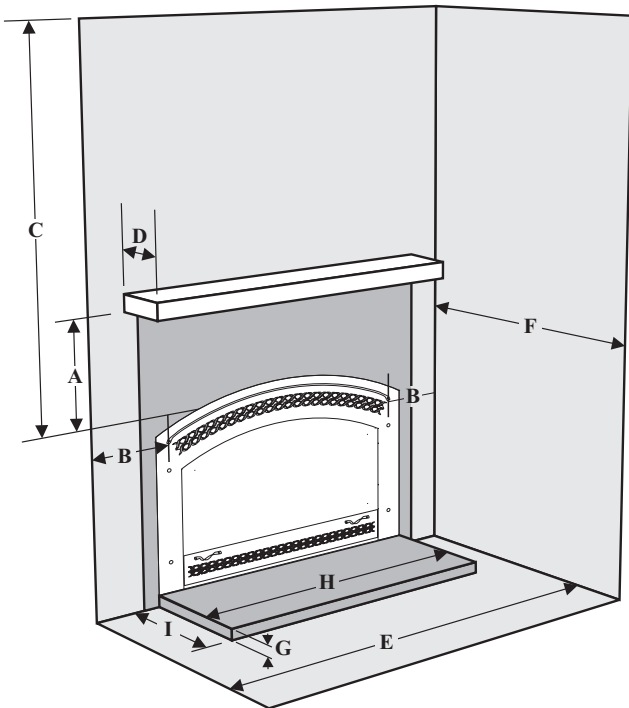
Please refer to Page 11 (Exterior Vent Terminations) for additional guidelines on vent locations.

P90 Gas Fireplace

Framing and Finishing

- 1) Frame in the enclosure for the unit with framing material.
- 2) For exterior walls, insulate the enclosure to the same degree as the rest of the house, apply vapor barrier and drywall, as per local installation codes. **(Do not insulate the fireplace itself.)**
- 3) The top of the fireplace opening must not be closer than 44-1/4" (1124mm) to the ceiling.
- 4) **You must maintain proper clearances from the vent to combustible materials (Top Right).**
- 5) Use metal studs for framing where the minimum clearance from the vent to combustible material cannot be maintained.
- 6) Install the side nailing strips, top facing support, and the two standoffs before the unit is slipped into position.
- 7) Finishing the P90 requires the use of a non-combustible facing as detailed below.

Clearance Requirements



Clearance:	Dimension	Measured From:
A: Mantel Height	18-1/4" (464mm)	Minimum (Additional on next page)
B: Sidewall	6-1/2" (165mm)	Side of finished opening
C: Ceiling	44-1/4" (1124mm)	Top of finished opening
D: Mantel Depth	8" (203mm)	Maximum (Additional on this page)
E: Alcove Width	48" (1219mm)	Sidewall to Sidewall (Minimum)
F: Alcove Depth	36" (914mm)	Front to back wall (Maximum)
G: Hearth Height	3/4" (19mm)	Floor to Top of Hearth (Minimum)
H: Hearth Width	36" (914mm)	Edge to Edge of Hearth (Minimum)
I: Hearth Depth	36" (914mm)	Front of Hearth to Wall (Minimum)

Vent Clearances	Clearance Dimension
Horizontal - Top	2-1/2" (64mm)
Horizontal - Side	1-1/2" (38mm)
Horizontal - Bottom	1-1/2" (38mm)
Vertical (Flex or Rigid)	1-1/4" (32mm)

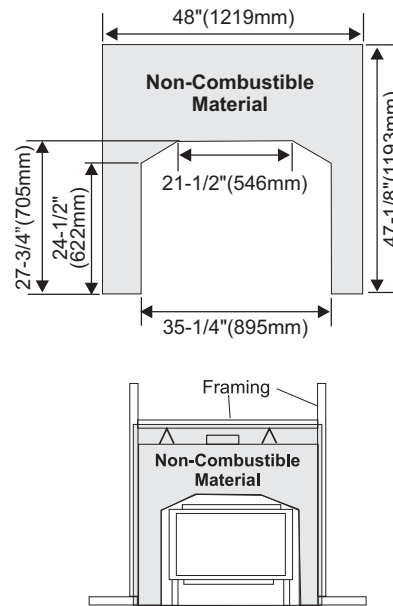
WARNING

Failure to maintain required clearances is a major cause of chimney related fires. Installation of this fireplace must comply with these clearances.

Facing Requirement

This fireplace requires a non-combustible facing material extending from the framing header and sides. A facing material template is provided on the unit box.

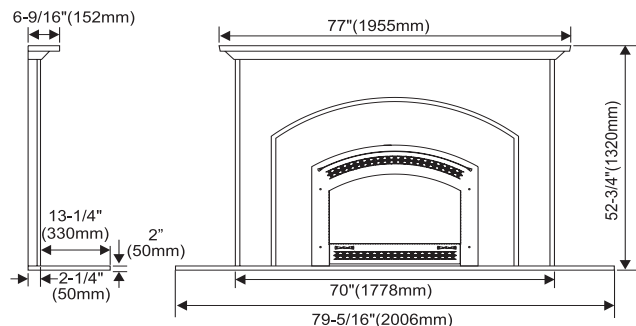
The flanges on the front face of the fireplace are for a facing thickness of 1" (25mm).



*Please note that all vertical measurements are taken from the base of the unit **excluding** risers or bottom stand-offs.*

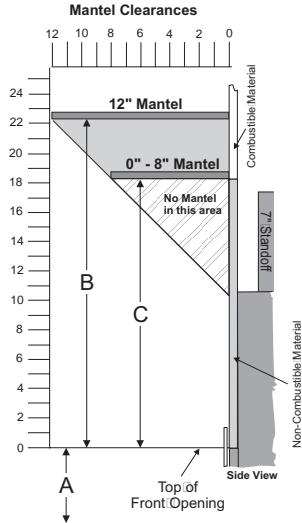
P90 Flat Wall Surround and Tile Kit

The P90 Flat Wall Surround, Hearth Pad and Tile Kit cannot be modified in any way. It must be installed as manufactured.



Combustible Mantels

Because of the extreme heat this fireplace emits, the mantel clearances are critical. Combustible mantel clearances from top of the louvers are shown in the diagram below. Mantel may be installed anywhere in the shaded area or higher.



Mantel Clearances	A	B	C
Front Opening	27-1/2" (699mm)***	22-1/4" (565mm)	18-1/4" (464mm)

*** Measured from the base of the Unit.

Note: If desired a non-combustible mantel may be installed at a lower height.

Note: Ensure the paint that is used on the mantel and the facing is "heat resistant" or the paint may discolour.

FPI Direct Vent System (Flex)

Horizontal Terminations Only

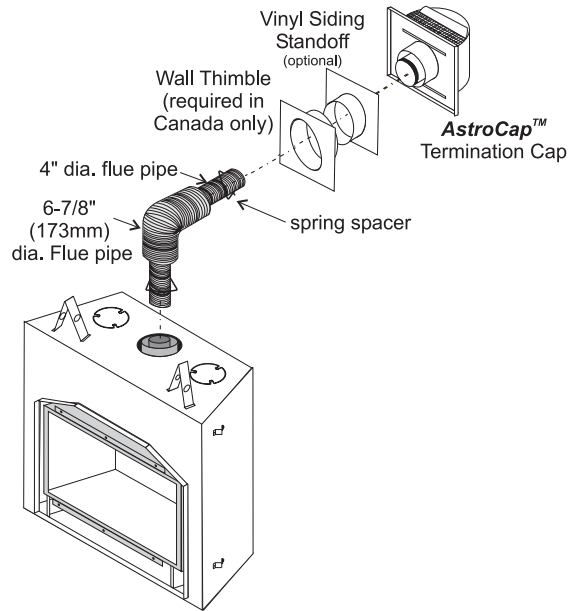
This venting system, in combination with the P90 Direct Vent Gas Fireplace, have been tested and listed as a direct vent heater system by Warnock Hersey. The location of the termination cap must conform to the requirements in the Vent Terminal Locations diagram, see manual.

FPI Direct Vent (Flex) System Termination Kits include all the parts needed to install the P90 using a flexible vent.

FPI Kit #	Length	Contains:
#946-515	4 Feet	<ol style="list-style-type: none"> 6-5/8" flexible liner (Kit length) 4" flexible liner (Kit length) spring spacers (3) thimble (2)
#946-516	10 Feet	<ol style="list-style-type: none"> AstroCap termination cap (1) screws (12) tube of Mill Pac (1) plated screws (8) S.S. screws #8 x 1-1/2" drill point, (4)

Notes:

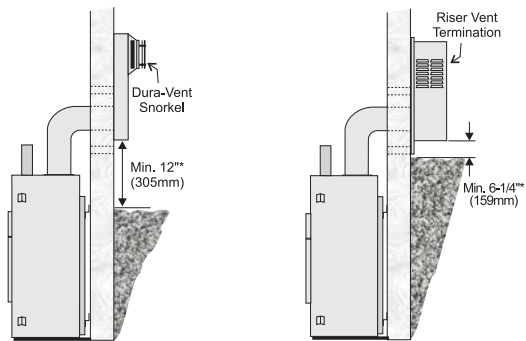
- Liner sections should be continuous without any joints or seams.
- Only Flex pipe purchased from Excalibur may be used for Flex installations.
- Horizontal sections must be supported every 3 feet.



Snorkel Terminations

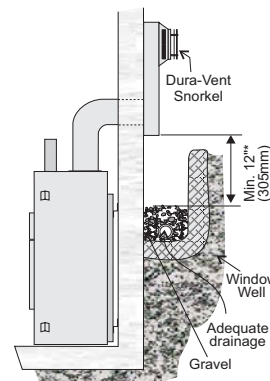
Snorkel Terminations:

For installations requiring a vertical rise on the exterior of the building, 14-inch and 36-inch tall Snorkel Terminations and the Riser Vents are available. Follow the same installation procedures as used for standard Horizontal Termination. NEVER install the snorkel upside down.



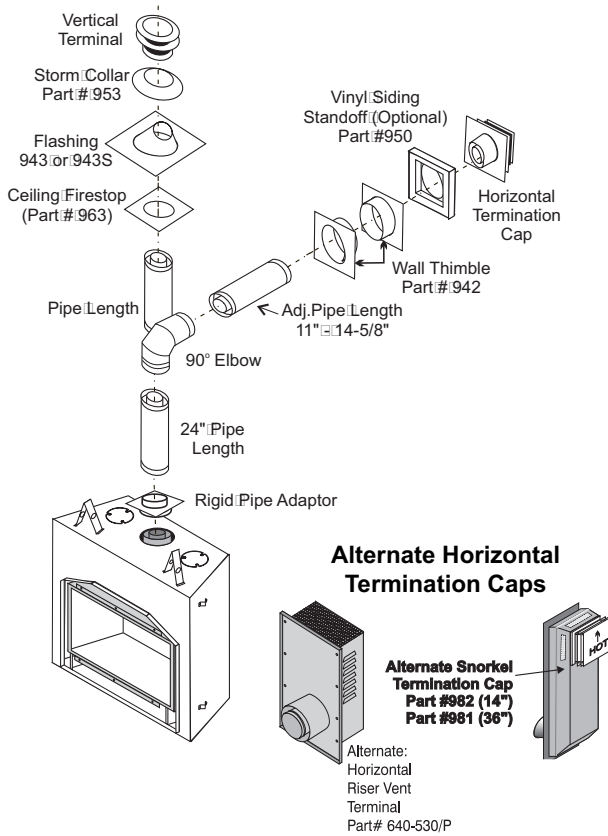
Below Grade Snorkel Installation

If the Snorkel Termination must be installed below grade, i.e. basement application, proper drainage must be provided to prevent water from entering the Snorkel Termination. Refer to Rigid Pipe Installation instructions for details. Do not attempt to enclose the Snorkel within the wall, or any other type of enclosure.



P90 Gas Fireplace

Rigid Pipe Venting Horizontal or Vertical Terminations



If required by the external termination location the listed alternate termination caps may be used. (Refer to Page 11)

Venting Arrangements - Vertical Terminations

Rigid Pipe System (Propane & Natural Gas)

The P90 is approved for a maximum 40 ft. straight vertical, with **Rigid Pipe** vent systems for Propane and Natural Gas.

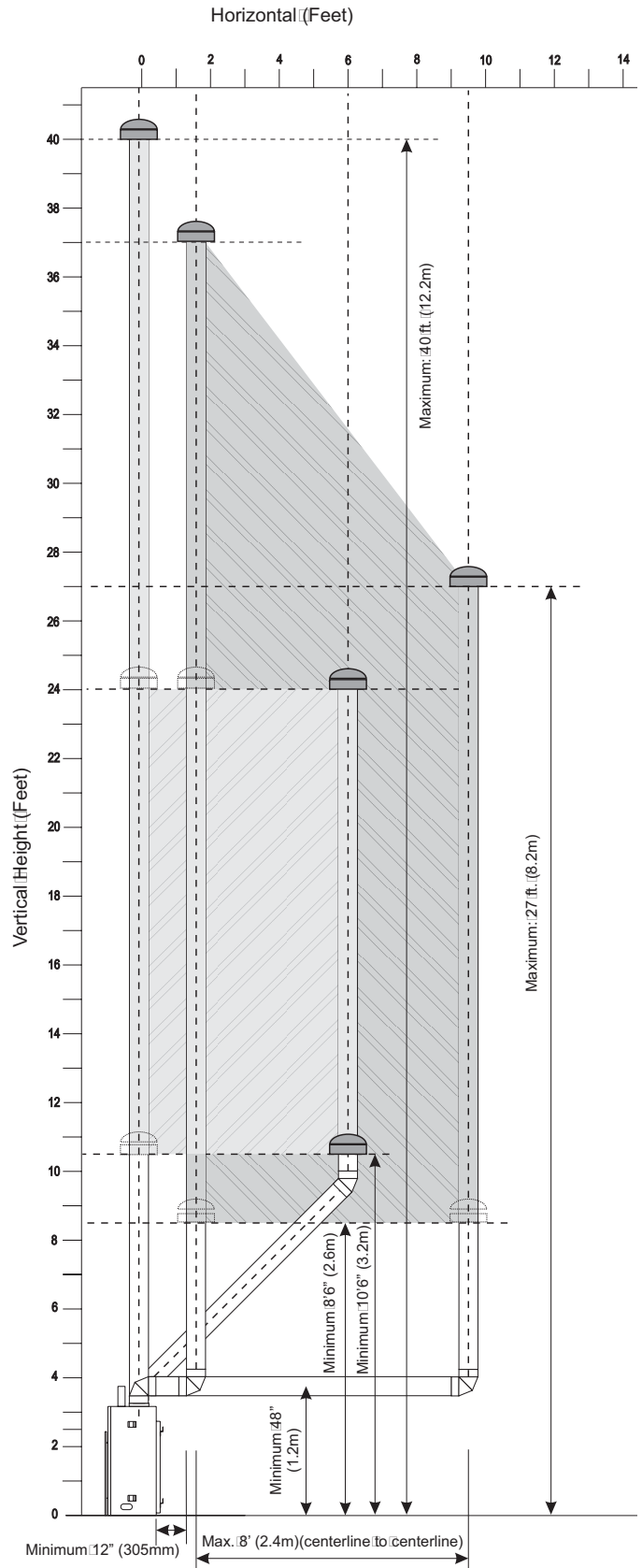
The lightly shaded area, in the diagram shows allowable venting configurations with a maximum two 45° elbows.

The darker shaded area, in the diagram shows allowable venting configurations using a maximum of two 90° elbows.

- Vent must be supported at offsets.
- Horizontal sections must be supported every 3 feet.
- Firestops are required at each floor level and whenever passing through a wall.
- Maintain clearances to combustible materials.
- Minimum of 1' pipe section between and elbows.

Note: Must use optional rigid pipe adapter when using Rigid Pipe (Part # 510-994).

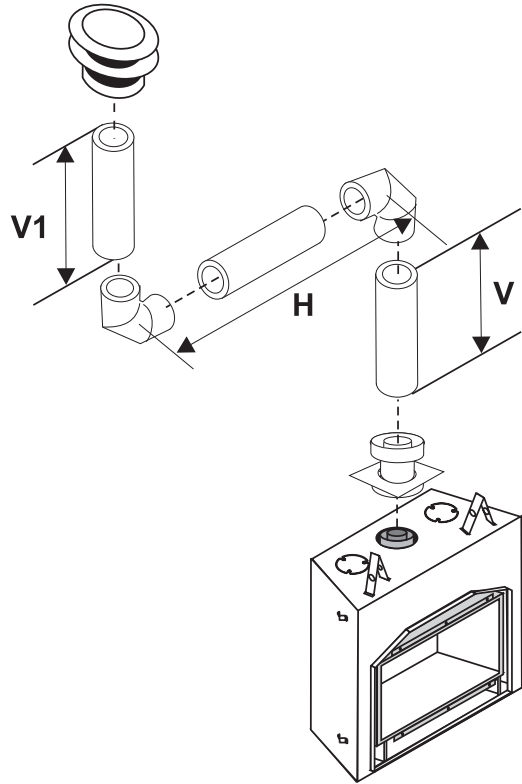
Note: All Rigid Pipe sizes 5" x 8" must use FPI increaser starter collar (Part # 946-605) at the beginning of the vent run.



Vertical Venting with Two (2) 90° Elbows

Two 45° elbows = One 90° elbow

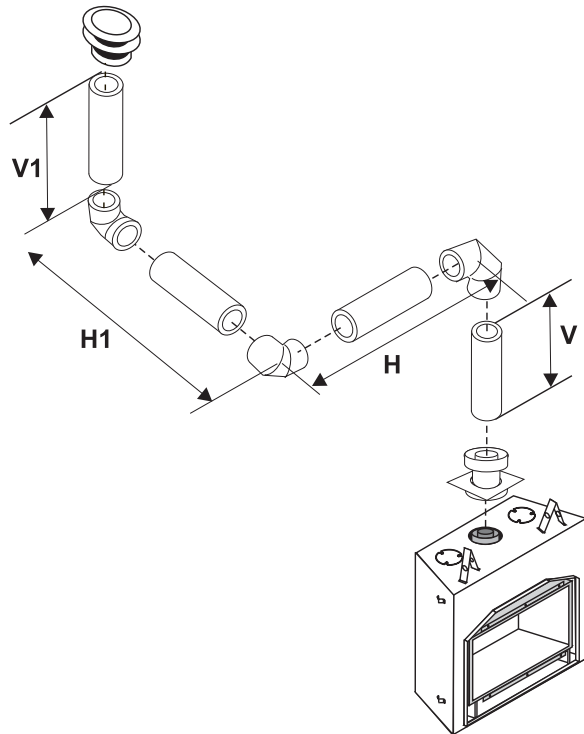
Option	V	H	V + V1	Maximum total pipe: length, of all sections, must not exceed 30 feet. Total horizontal sections must not exceed 8 feet. Minimum of 1 foot between 90° elbows is required.
A)	0' Min.	2' Max.	1' Max.	
B)	1' Min.	4' Max.	2' Max.	
C)	2' Min.	5' Max.	3' Max.	
D)	3' Min.	6' Max.	4' Max.	
F)	5' Min.	8' Max.	6' Max.	



Vertical Venting with Three (3) 90° Elbows

Two 45° elbows = One 90° elbow


Option	V	H + H1	V+ V1	Maximum total pipe: length, of all sections, must not exceed 30 feet. Total horizontal sections must not exceed 7 feet. Minimum of 1 foot between 90° elbows is required.
A)	6" Min.	2' Max.	3' Min.	
B)	1' Min.	2' Max.	3' Min.	
C)	2' Min.	3' Max.	4' Min.	
D)	3' Min.	4' Max.	6' Min.	
E)	4' Min.	5' Max.	7' Min.	
F)	5' Min.	6' Max.	8' Min.	
G)	6' Min.	7' Max.	9' Min.	
H)	7' Min.	8' Max.	10' Min.	




P90 Gas Fireplace

Venting Arrangements - Horizontal Terminations

The P90 is approved for a maximum 20 ft. straight horizontal, with **Rigid Pipe** vent systems for Propane and Natural Gas.

The lightly shaded area, , in the diagram shows allowable venting configurations of either Flex or Rigid piping in sizes 4" x 6-5/8" using a maximum of one 90° elbow.

The darker shaded area, , in the diagram shows allowable venting configurations of Rigid piping in sizes 5" x 8" using a maximum of one 90° elbow.

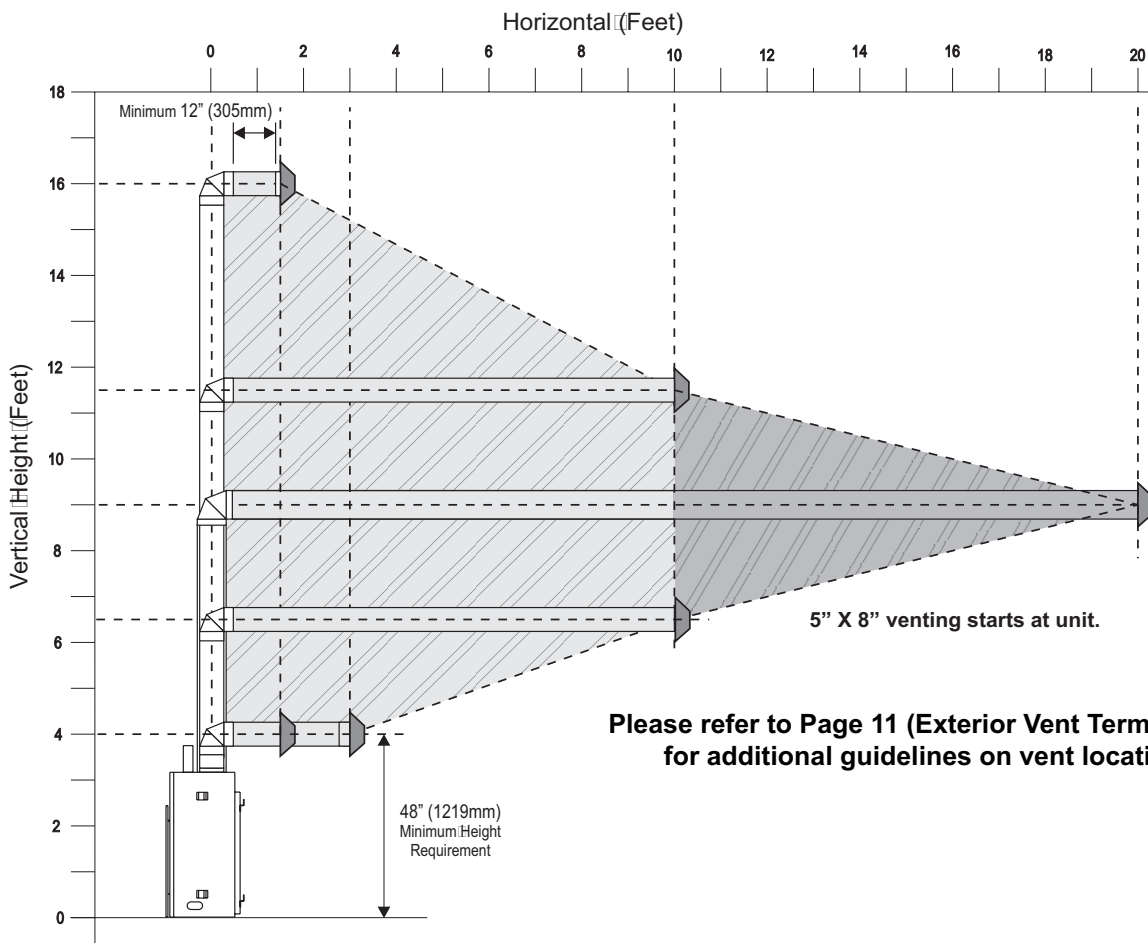
Note: Must use optional rigid pipe adapter (Part # 510-994) when using Rigid Pipe.

Note: All Rigid Pipe sizes 5" x 8" must use FPI increaser starter collar (Part # 946-605) at the beginning of the vent run.

- Maintain clearances to combustibles.
- Horizontal vent must be supported every 3 feet.
- Firestops are required at each floor level and whenever passing through a wall.

A vent guard may be required as per local codes, refer to page 11 for "Exterior Vent Termination Locations".

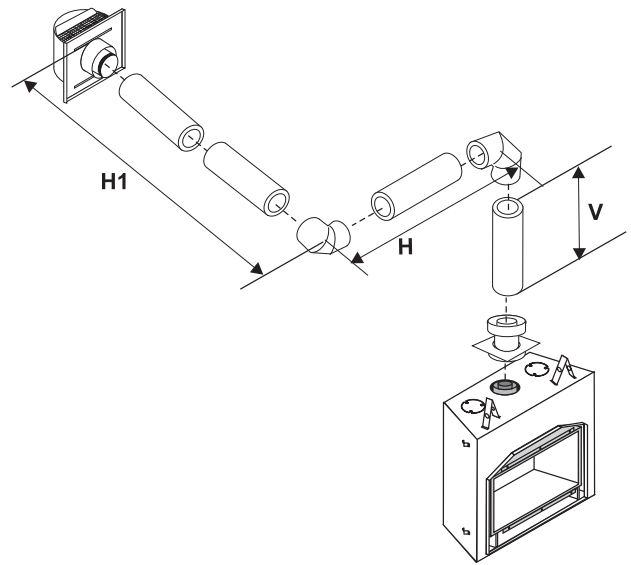
Note: FPI Direct Vent System (Flex) is only approved for horizontal terminations.



Horizontal Venting with Two (2) 90° Elbows

Two 45° elbows = One 90° elbow

Option	V	H+ H1	Maximum total pipe: length, of all sections, must not exceed 30 feet. Total horizontal sections must not exceed 8 feet. Minimum of 1 foot between 90° elbows is required.
A)	6" Min.	2' Max.	
B)	1' Min.	3' Max.	
C)	2' Min.	4' Max.	
D)	3' Min.	5' Max.	
E)	4' Min.	6' Max.	
F)	5' Min.	7' Max.	
G)	6' Min.	8' Max.	



Horizontal Venting with Two (2) 90° Elbows

Two 45° elbows = One 90° elbow

Option	V	H	V + V1	H + H1	Maximum total pipe: length, of all sections, must not exceed 30 feet. Total horizontal sections must not exceed 9 feet. Minimum of 1 foot between 90° elbows is required.
A)	6" Min.	1' Max.	1'6" Min.	2' Max.	
B)	1' Min.	2' Max.	3' Min.	3' Max.	
C)	2' Min.	2' Max.	5' Min.	4' Max.	
D)	3' Min.	2' Max.	7' Min.	5' Max.	
E)	4' Min.	3' Max.	9' Min.	6' Max.	
F)	5' Min.	4' Max.	10' Min.	7' Max.	
G)	6' Min.	5' Max.	11' Min.	8' Max.	
H)	7' Min.	6' Max.	12' Min.	9' Max.	

