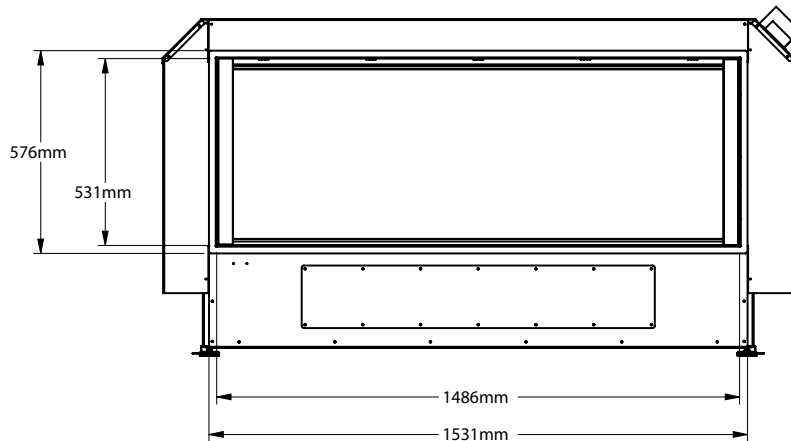
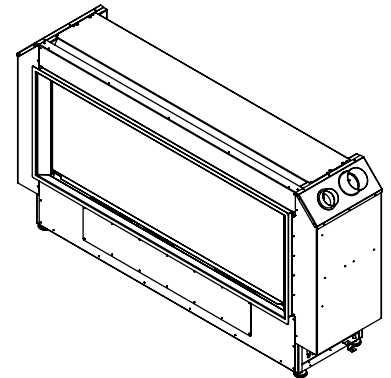
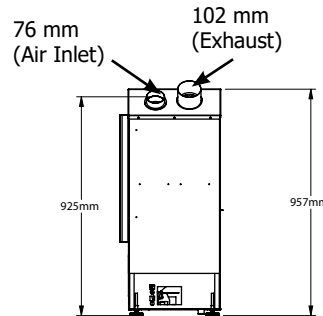
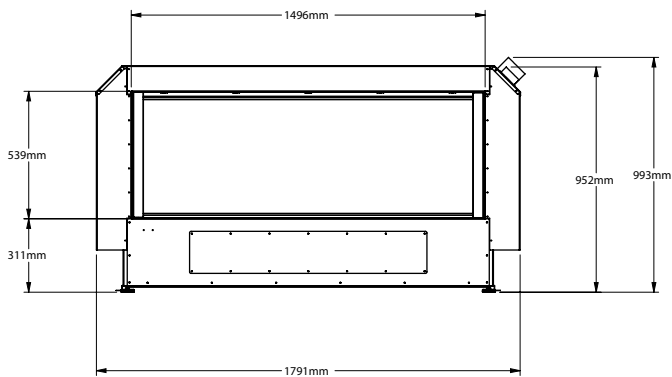
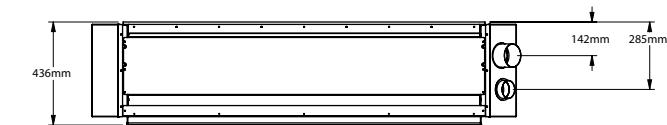


Aspire AS1440 Gas Fireplace

MODEL	AS1440NG	AS1440LP	AS1440ULPG
Fuel Type	Natural Gas	Propane	Universal LPG
Gas Consumption High	50 MJ/h	48 MJ/h	36 MJ/h
Gas Consumption Low	32.2 MJ/h	39.7 MJ/h	30.1 MJ/h
Minimum Supply Pressure	1.13 kPa	2.75 kPa	2.75 kPa
Manifold Pressure High	0.87 kPa	2.58 kPa	2.48 kPa
Manifold Pressure Low	0.39 kPa	1.59 kPa	1.59 kPa
Injector Size	1 x #30 (3.26 mm)	1 x #47 (1.99 mm)	1 x #51 (1.70 mm)



UNIT DIMENSIONS



CLEARANCES

The clearances listed below are minimum distances unless otherwise stated.

A major cause of chimney related fires is failure to maintain required clearances (air space) to combustible materials. It is of the greatest importance that this fireplace and flue system be installed only in accordance with these instructions.

CAUTION The top, back and sides of the fireplace are defined by standoffs. The metal ends of the standoff may NOT be recessed into combustible construction.

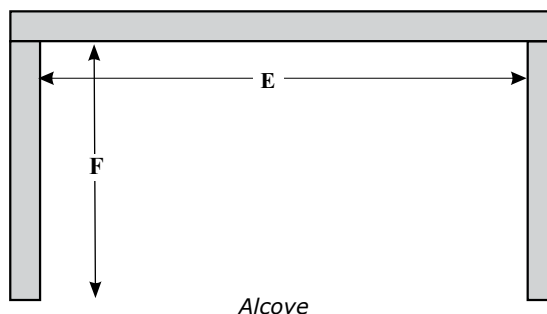
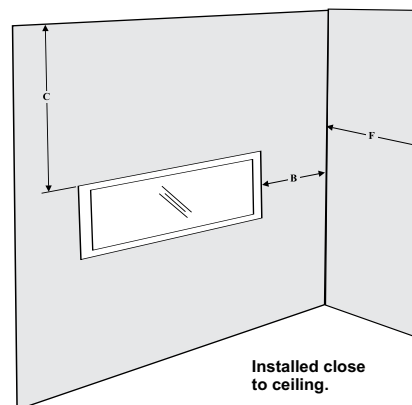
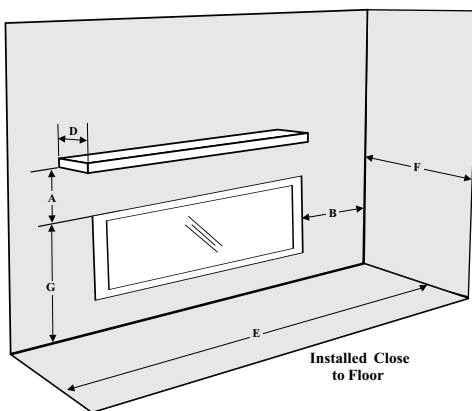
WARNING Fire hazard is an extreme risk. If these clearances (air space) to combustible materials are not adhered to. It is of greatest importance that this fireplace and flue system be installed only in accordance with these instructions.

Clearance:	Dimension	Measured From:
A: Mantel Height (min.)	88 mm	Top of Fireplace Opening (Hot Air Outlet)
B: Sidewall (on one side)	152 mm	Side of Fireplace Opening
C: Ceiling (room and/or alcove)	1283 mm	Top of Fireplace Opening
D: Mantel Depth (max.)	305 mm	381 mm Above Fireplace Opening
E: Alcove Width	2133 mm	Sidewall to Sidewall (Minimum)
F: Alcove Depth	914 mm	Front to Back Wall (Maximum)
G: From Floor	850 mm	Top of Fireplace Opening (Hot Air Outlet)
Note:	0	No hearth required

Flue Clearances to Combustibles	
Horizontal - Top	76mm
Horizontal - Side	51mm
Horizontal - Bottom	51mm
Vertical	51mm

IMPORTANT If installing a television above this appliance, the television must be either fully recessed into the wall above the fireplace and or have a mantle below the television. If the television is left unprotected, the extreme heat being emitted from this appliance will result in damage to the television. See clearance requirements for both mantle and or enclosing the top of the appliance in this manual.

NOTE The unit can be installed onto a combustible base.

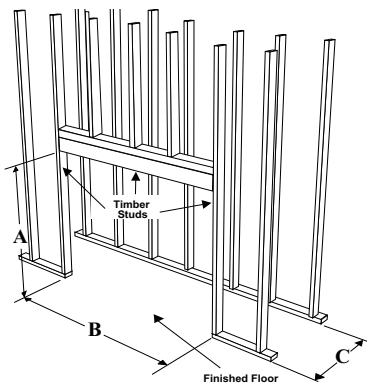


FRAMING DIMENSIONS

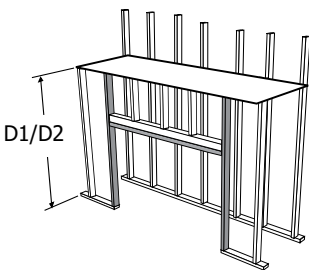
Framing Dimensions	Description	AS1440
A	Framing Height	1055 mm combustible finish
B	Framing Width	1893 mm
C	Framing Depth	439 mm
D1	Minimum Height to Combustibles	1498 mm (power flue in chase)
D2	Minimum Height to Combustibles	1073 mm (power flue outside of chase)
E	Corner Wall Depth	1908 mm
F	Corner Facing Wall Width	2699 mm
G	Flue Centerline Height	1245 mm
I	Gas Connection Opening Height	77 mm
J	Gas Connection Height	98 mm
K	Gas Connection Inset	122 mm
L	Gas Connection Opening Width	102 mm

NOTES

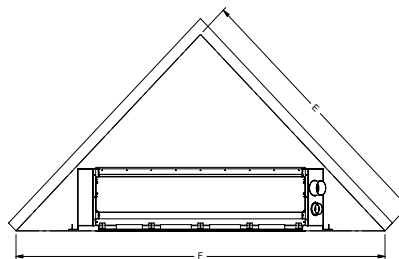
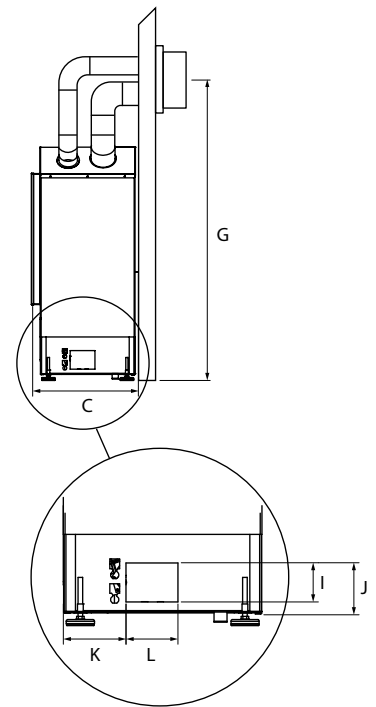
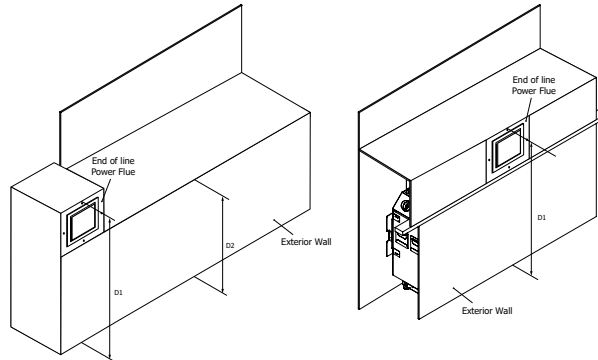
- A minimum thickness of 10 mm - max. 38 mm combustible facing board is required.
- Do not place timber studs below the timber framing studs already in place.
- If raising the unit, then the minimum framing height measurement (A) must be adhered to. For example: Unit raised 300mm then A+ 300 mm = 1355 mm.



Combustible flush finishing Framing



Chase Heights:
 D1 - with End of Line inside chase enclosure
 D2 - with End of Line outside of chase enclosure



COMBUSTIBLE FINISHING UNIT ASSEMBLY / FINISHING / MANTEL CLEARANCES + MANTEL LEG CLEARANCES

UNIT ASSEMBLY PRIOR TO INSTALLATION

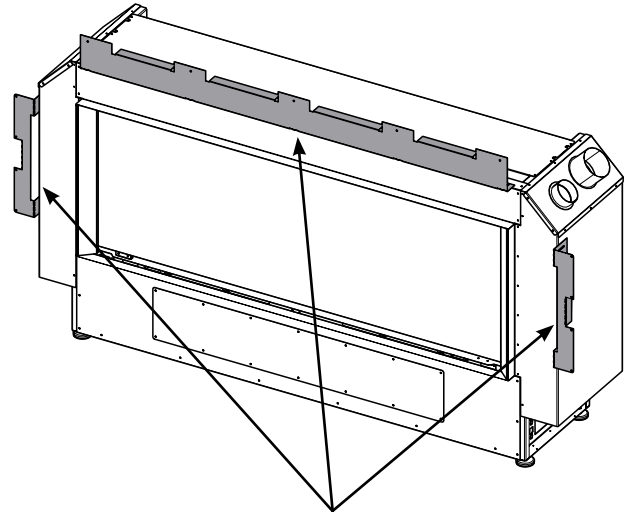
The nailing strips must be correctly positioned and attached before unit is slid into position.

NAILING STRIPS-COMBUSTIBLE FINISHING

The nailing strips come attached to the unit. There is 1 plate on each side, 1 on the top. The top and side nailing strips are secured to the framing.

NOTE The side and top standoffs/nailing strips are shipped in a flat position. These must be bent into 90 degrees and secured to the appliance with the screws supplied.

IMPORTANT Framing depth measurement is noted with the nailing strips set as far forward on the firebox as possible. The nailing strips can be adjusted back up to 38mm to allow for varying thicknesses in finishing material & wall finishes.



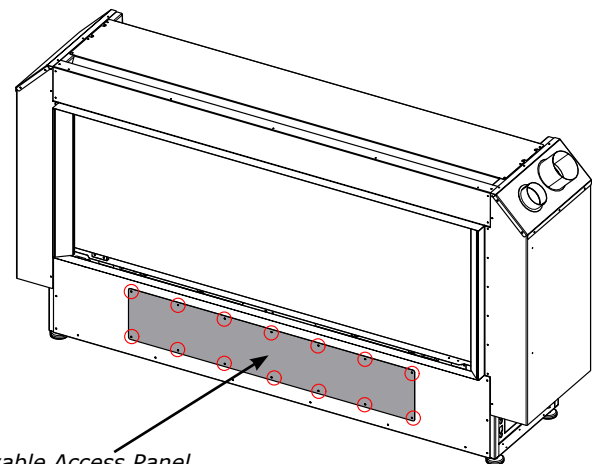
Nailing Strips/Standoffs
(DO NOT REMOVE NAILING STRIPS WHEN USING COMBUSTIBLE FINISHING)

INSTALLATION OF ACCESS PANEL

The unit is equipped with a removable access panel for pre-finish installation of optional components—this panel is located on the lower front face.

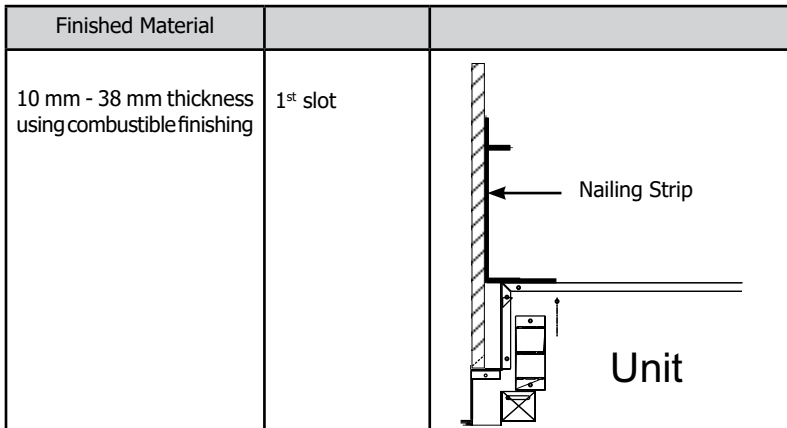
1. Remove 14 screws to remove access panel.
2. Easier access to gas connection with panel removed.
3. Install any optional components with access panel removed.
4. Reinstall access panel and secure in place with 14 screws.

NOTE Access panel is no longer usable/accessible once facing material installed.



Removable Access Panel

FRAMING & FINISHING (COMBUSTIBLE)



***Finishing Trim can be used with combustible finishing.**

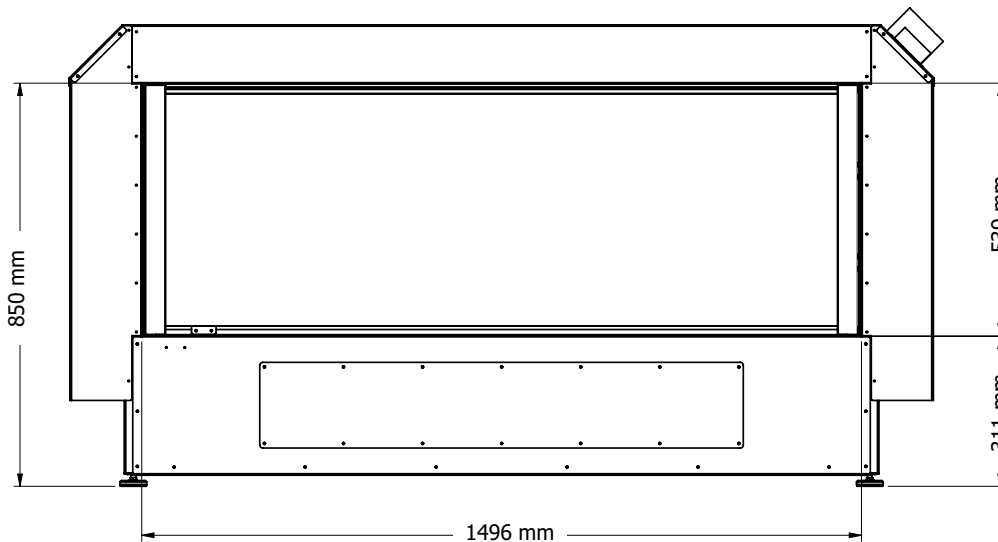
Finishing material cannot be thicker than 38 mm and must be flush with the front edge of the flange.

Depending on the material used for finishing, the nailing strips must be set accordingly so that the finished material is always be flush with the edge of the flange.

NOTES

- The siding nailing strips are factory set at 10 mm. The top nailing strip is fixed during transit to the rear of the appliance.
- Do not place any reinforcement in front of header and behind finishing material.
- The top nailing strip must be used. It is fixed during transit to the rear of the unit.

COMBUSTIBLE REQUIREMENTS



NOTES

The appliance must be installed on a flat, solid, continuous surface. For example a timber, metal or concrete floor. In a raised (on the wall) application the appliance must be installed on a metal or timber panel extending the full width and depth of the appliance.

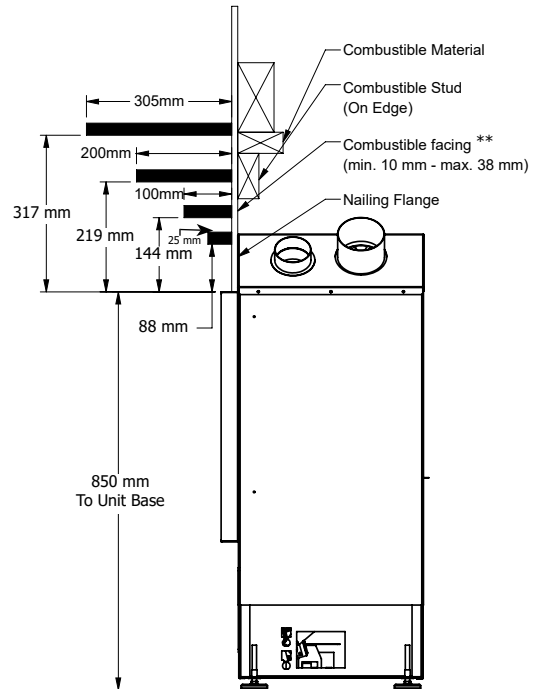
CLEARANCES FOR COMBUSTIBLE FINISHING WITH MANTEL

Due to the extreme heat this fireplace emits, the mantel clearances are critical.

Combustible finishing and mantel clearances are shown in the diagram on the right.

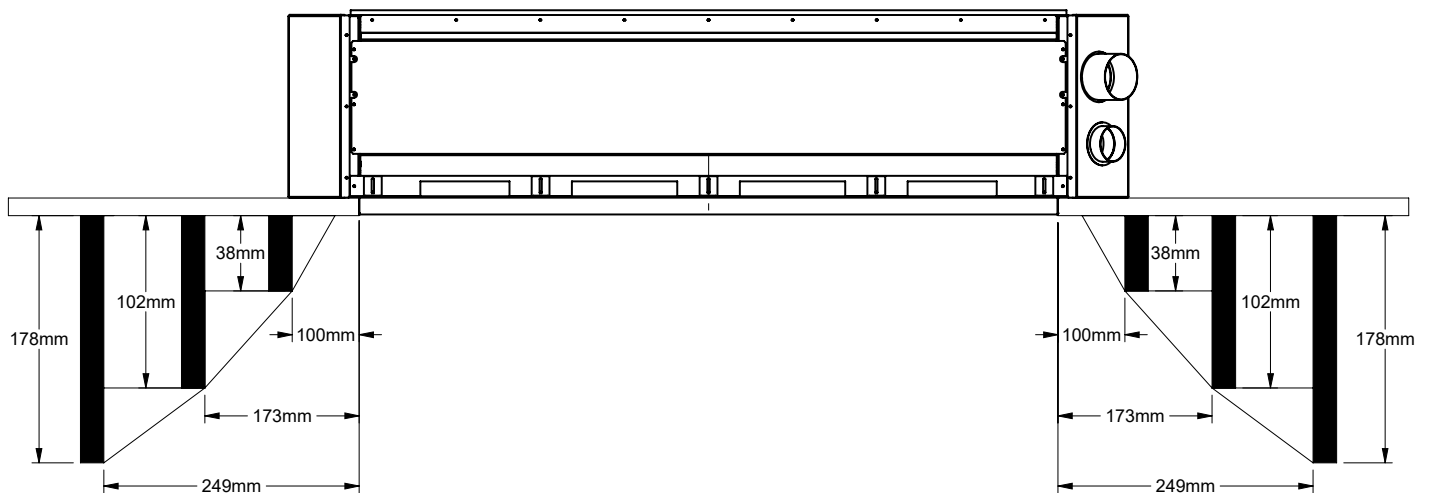
NOTES

- Maximum finishing material thickness is 38 mm measured from the front of the fireplace opening.**
- Ensure the paint that is used on the mantel and the facing is "high quality" or the paint may discolour.
- Combustible mantel starts at 938 mm (850 mm + 88 mm) from unit base.



COMBUSTIBLE MANTEL LEG CLEARANCES

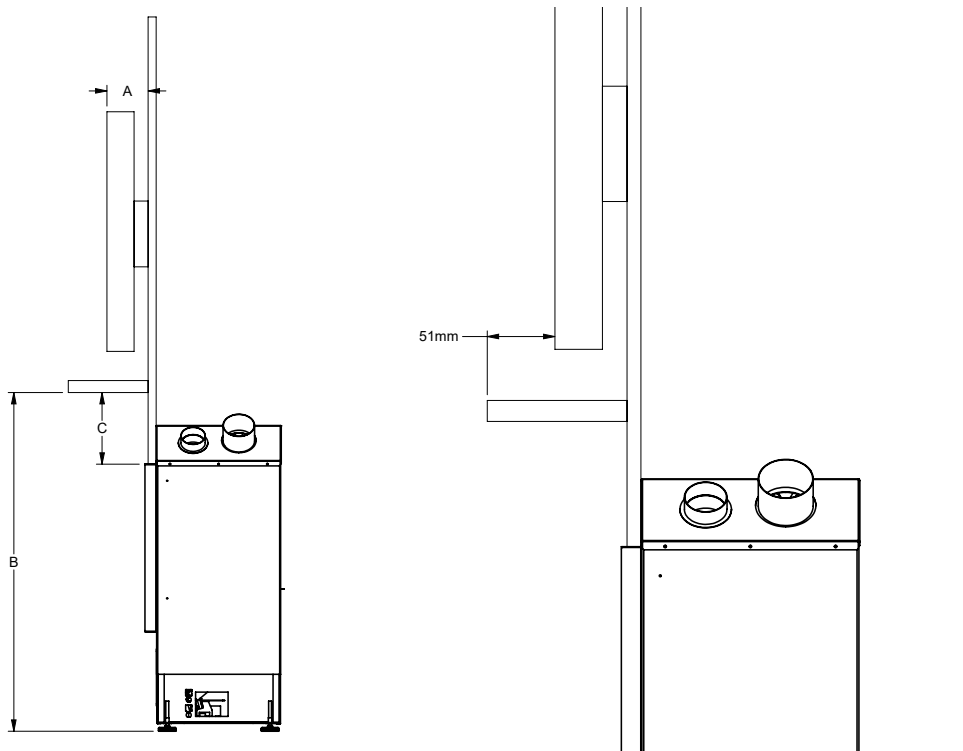
Mantel leg & combustible finishing clearances as per diagram:



INSTALLING A TV / ARTWORK FLUSH WITH THE UNIT

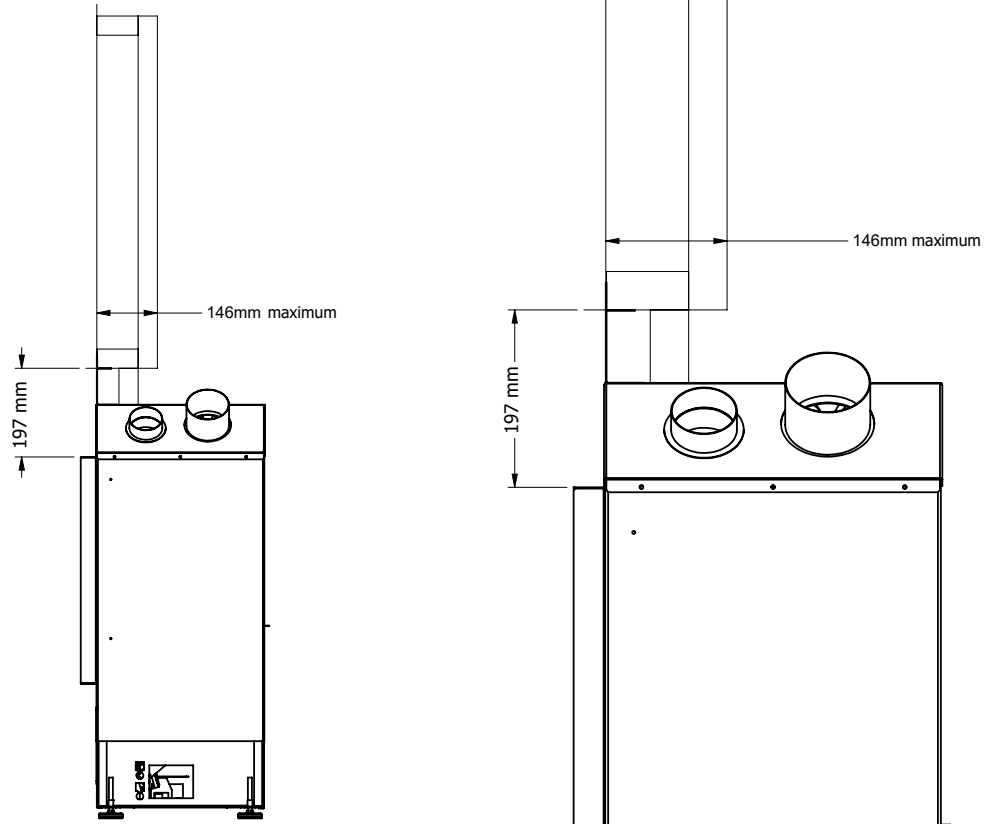
Note: All wiring should stay free and clear of the flue system to avoid damage due to heat, if located directly in front of the flue system. Ensure wiring is secured without any sag. Heat deflector must overhang front of TV by 51mm. Follow mantel clearance chart for install height and heat deflector depth. The heat shield may be made of combustible material.

A —Depth of TV & Mounting Bracket	B —Height From Base of Unit	C —Distance From Top of Fireplace Opening
127 mm	1053 mm	203 mm
153 mm	1073 mm	223 mm
178 mm	1096 mm	246 mm
203 mm	1120 mm	270 mm
229 mm	1144 mm	294 mm



INSTALLING A TV / ARTWORK ABOVE THE UNIT

Maximum recess "depth" is 146mm.
Minimum height is 197 mm from top lip.



FRAMING & FINISHING

1. Frame in the enclosure for the unit with framing material.

IMPORTANT

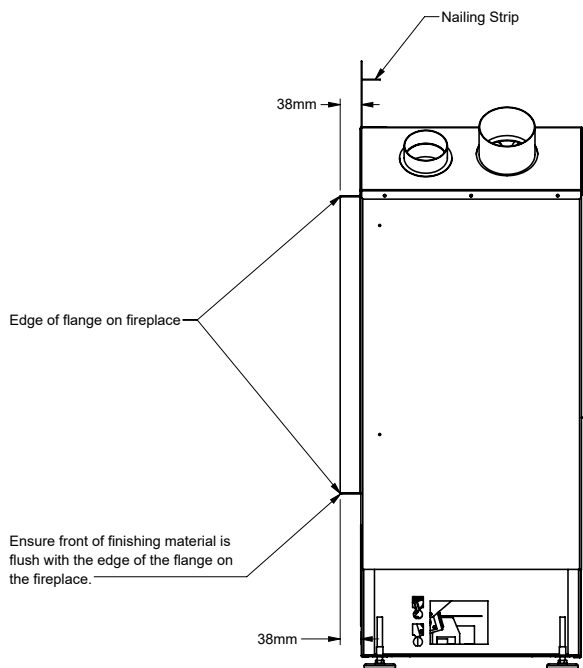
When constructing the framed opening, please ensure there is access to install the gas lines when the unit is installed.

2. For exterior walls, insulate the enclosure to the same degree as the rest of the house, apply vapour barrier and drywall, as per local installation codes. **(Do not insulate the fireplace itself and/or the flueing. Clearances must be maintained as per this manual.)**

WARNING

Failure to insulate and add vapor barriers to the inside of the exterior wall will result in operational and performance problems including, but not limited to: excessive condensation on glass doors, poor flame package, carbon, blue flames etc. These are not product related issues.

3. The unit does not have to be completely enclosed in a chase. You must maintain clearances from the flue to combustible materials: See "Clearances" section. Combustible materials can be laid against the side and back standoffs and the appliance base.
4. Non-combustible material (ie. tile, slate, etc) may be brought up to and overlap the unit (top and bottom) ensuring that the maximum thickness does not go beyond the 38mm as shown in the diagram below.



FLUEING INTRODUCTION (INLINE POWER FLUE)

The AS1440 uses the "powered flue" technology Co-Axial to Co-linear system. The inner liner flues products of combustion to the outside while the outer liner draws outside combustion air into the combustion chamber thereby eliminating the need to use heated room air for combustion and losing warm room air up the chimney.

Note: These flue pipes must not be connected to any other appliance.

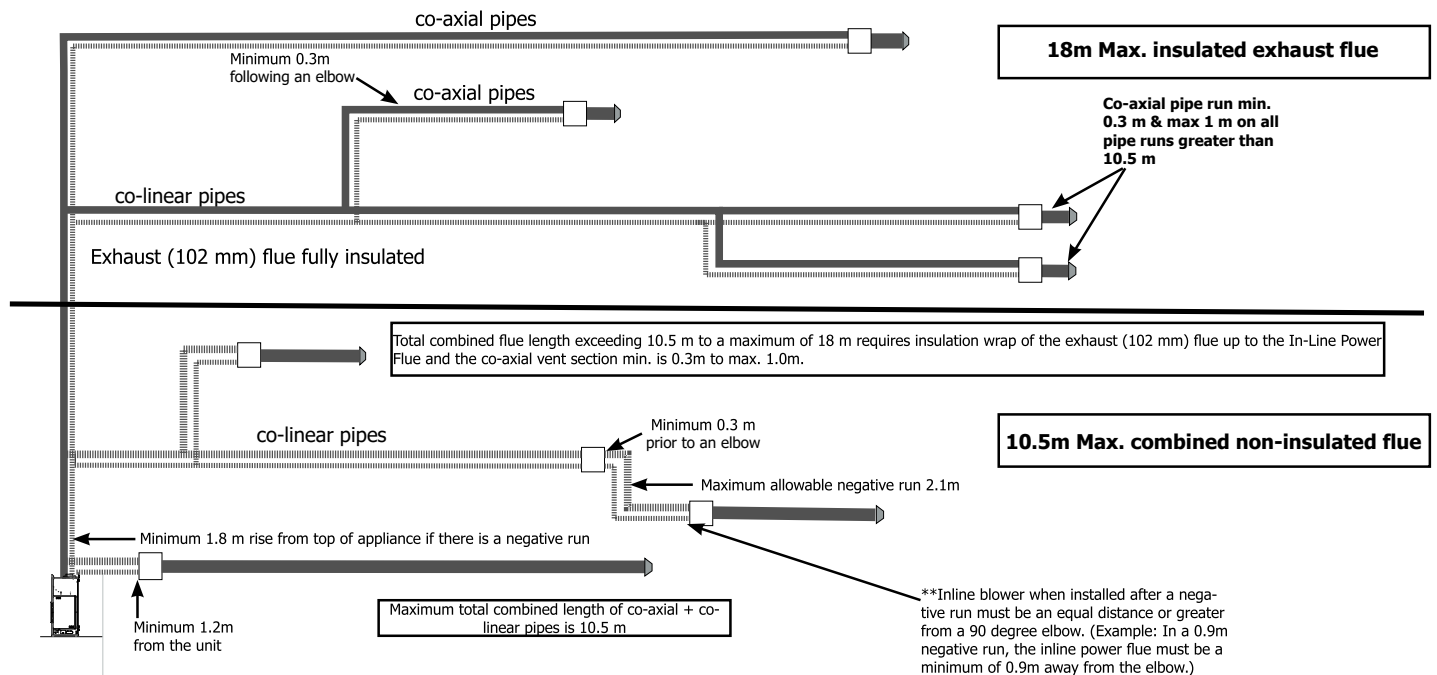
The gas appliance and flue system must be vented directly to the outside of the building, and never be attached to a chimney serving a separate solid fuel or gas burning appliance. Each direct vent gas appliance must use it's own separate flue system. Common flue systems are prohibited.

IMPORTANT: The inline power flue must be installed within the confines of the home/structure and must be accessible for future servicing. An access hole as noted in this manual or an attic space would be suitable.

Flueing Arrangements for Horizontal Terminations - Inline Horizontal Flue Chart - 10.5 m

IMPORTANT

- Combined total flue runs equal to or less than 10.5 m do not require insulation of the 102 mm exhaust pipe.
- Flex runs exceeding 10.5 m up to max. 18 m requires full insulation of the 102 mm exhaust & co-axial section must be min. 0.3 m to max 1.0 m.



Important:

Maximum total combined length of co-linear + co-axial pipes = 10.5 m with six 90° elbows.

One 90° elbow = two 45° elbows.

Maximum total negative flue length = 2.1 m.

Do not run positive flueing after a negative run.

Inline power flue location restrictions:

Minimum 1.2 m from the unit

Minimum 0.3 m prior to an elbow.

Minimum 0.3 m following an elbow.

Minimum 0.3 m prior to a termination cap.

When the inline blower is installed after a negative run, for every foot of negative run the inline blower must be an equal distance or greater from the 90-degree elbow. See example above.

Flue Restrictor Position

Inline Power Flue Bypass Setting:

Fully Closed

Burner Aeration Setting:

NG: 14 mm

Propane: 17 mm

ULPG: 17 mm

NOTE: Ensure aeration is set to correct configuration.

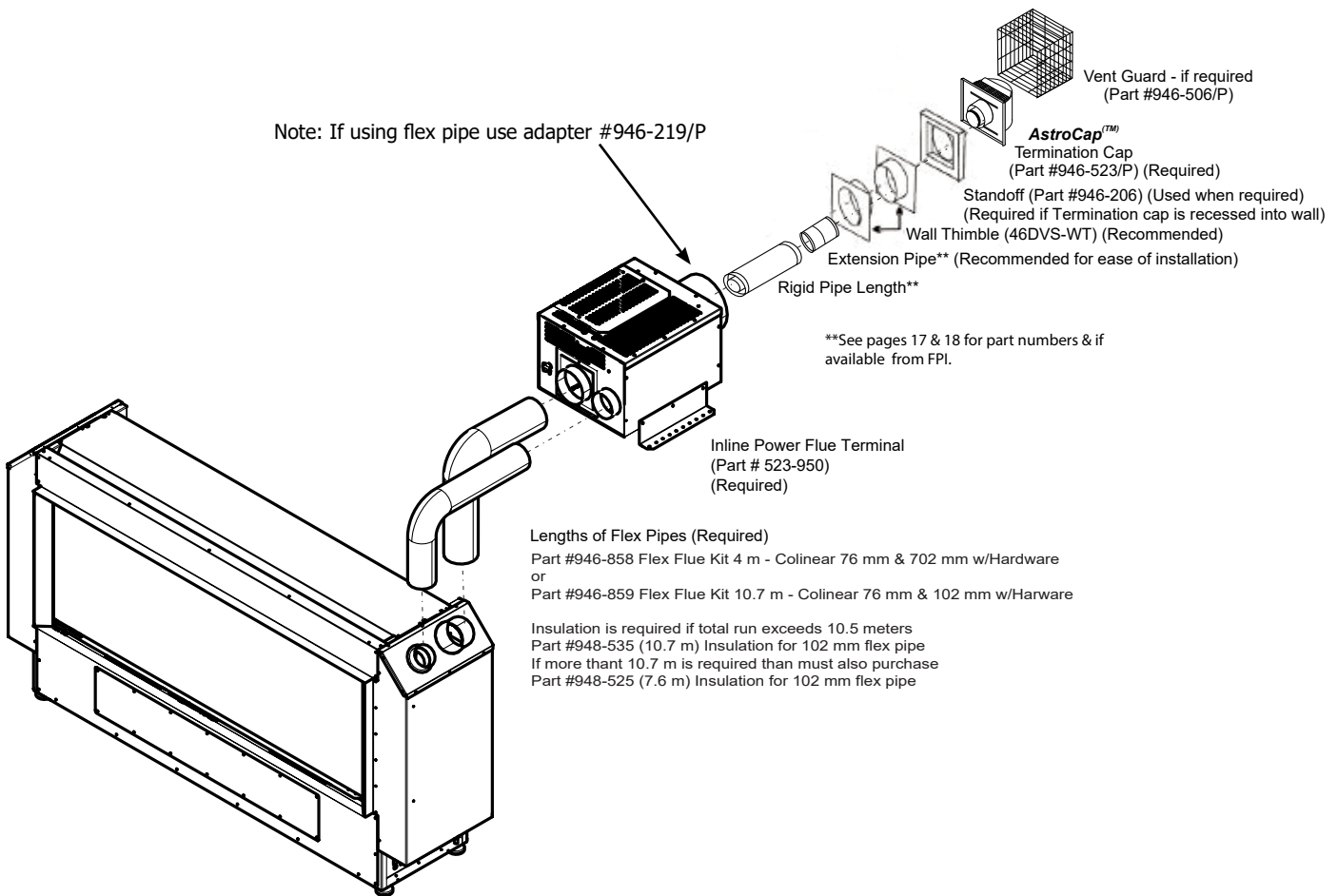
HORIZONTAL TERMINATIONS - INLINE POWER FLUE - RIGID PIPE 102 MM X 168 MM

The minimum components required for a basic horizontal termination are:

- 1 Horizontal Termination Cap
- 1 Inline Power Flue Kit
- 1 Length of 76 mm diameter pipe
- 1 Length of 102 mm diameter pipe
- 1 Length of rigid pipe to suit wall thickness and total flue run (see table 1 on next page)
- Adjustable pipe lengths/extensions
- 1 Length of insulation (if total run greater than 10.5 m)

IMPORTANT

The inline power flue must be installed within the confines of the home/structure and must be accessible for future servicing. An access hole as noted in this manual or an attic space would be suitable.



Wall thickness is measured from the back standoffs to the inside mounting surface of termination cap. Create a level surface to mount the vent terminal. The Terminal must not be recessed into siding. Measure the wall thickness.

Flat Wall Installation	
Wall Thickness (mm)	Flue Length Required (mm)
102mm - 140mm	152mm
178mm - 216mm	229mm
254mm - 292mm	305mm
229mm - 368mm	279mm - 371mm Adj. Pipe
381mm - 597mm	432mm - 610mm Adj. Pipe

Table 1

Important:

Maximum total flue length = 18m with a maximum of six 90° elbows. One 90° elbow = two 45° elbows.

Maximum total negative flue length = 2.1m.

Insulation must be used if flue length is greater than 10.5 m.

Note: Maximum length of 18m is based on overall length of combined chimney components.

Do not run positive flueing after a negative run.

Inline power flue location restrictions:

Minimum 1.2 m from the unit

Minimum 0.3 m prior to an elbow.

Minimum 0.3 m following an elbow.

Minimum 0.3 m prior to a termination cap.

Minimum 1.8 m rise from top of unit if there is a negative run.

Inline Horizontal Power Flue Kit (Part 523-950)			
	Amount required for install	102 mm x 168 mm Twist Lock Rigid Pipe Or Simpson Duravent	Sold separately
	946-858 or 946-859	Flex Flue Kit 4 meters - CoLinear 76 mm & 102 mm W/Hardware	Sold separately
		Flex Flue Kit 10.7 meters - CoLinear 76 mm & 102 mm W/Hardware	Sold separately
1	523-950	Inline Power Flue Kit	Included w/ Power Flue Kit
1	946-523/P	AstroCap Termination	Sold separately
1	46DVA-WT	Wall Thimble	Sold separately
1	946-506/P	Vent Guard	Sold separately
1	946-206	Astro Cap Standoff	Sold separately
1	948-535	(10.7 m) Insulation for 102 mm flex pipe	Sold separately
1	*948-525	(7.6 m) Insulation for 102 mm flex pipe	Sold separately
1	946-774	Adaptor Pipe 76 mm & 102 mm Kit	Sold separately
* Must be purchased if more than 10.7 m of insulation is required. Note: If 10.7 meters or more are required both the 946-859 & 946-858 flex flue kits would need to be purchased along with the 946-774 Adaptor pipe 76 mm & 102 mm kit. The 946-774 adaptor pipes join the 2 kits.			

UNIT INSTALLATION WITH HORIZONTAL TERMINATION (INLINE POWER FLUE) 102MM X 168MM FLUEING (RIGID FLUE SYSTEMS)

Minimum Flue Clearances to Combustibles

* Clearances noted below must be maintained; except when passing through a wall, ceiling or at the termination where the use of a firestop or wall thimble reduces clearance to 38mm.

Horizontal Top*	76mm*
Horizontal Side	51mm
Horizontal Bottom	51mm
Vertical Flue	51mm

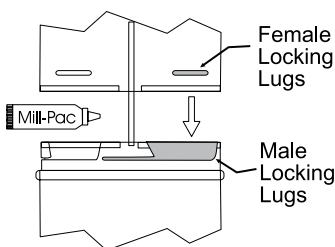
Below are the recommended framing dimensions (inside measurements) for the 102mm X 168mm rigid flue terminations - for use with a wall thimble.

Recommended Framed Opening Size	
Flue Size	Framing Size
102mm x 168mm	254mm x 254mm

Refer to "flueing" diagram for inline power flue restrictions.

Install the flue system according to the manufacturer's instructions included with the components.

1. Set the unit in its desired location. Check to determine if wall studs or roof rafters are in the way when the flueing system is attached. If this is the case, you may want to adjust the location of the unit. Rough in the gas preferably on the right side of the unit and the electrical (junction block is on the left side) on the left.
2. Simpson Dura Vent Flue pipe and fittings are designed with special twist-lock connections to connect the flueing system to the appliance flue outlet. A twist-lock appliance adaptor is required.
3. In conjunction with the Simpson Direct Vent Pro system, install the adaptor after the unit is set in its desired location. Put a bead of Mill Pac inside the outer section of the adapter and a bead of Mill Pac on the inner collar. Slip the adapter over the existing inner and outer flue collar. Fasten to the outer collar only with the 3 supplied screws (drilling pilot holes will make this easier).
4. Level the fireplace and fasten it to the framing using nails or screws through the top and side nailing strips.



5. Assemble the desired combination of pipe and elbows to the appliance flue outlets and secure. Horizontal runs of flue must be supported every 0.9 metres. Wall straps are available for this purpose.

NOTE For best results and optimum performance with each approved flueing system, it is highly recommended to apply Mill-Pac sealant to every inner pipe connection. Failure to do so may result in drafting or performance issues not covered under warranty.

6. Mark the wall for a square hole.-see chart to left for size. The center of the square hole should line up with the center-line of the horizontal pipe. Cut and frame the square hole in the exterior wall where the flue will be terminated. See diagram 2 for center line requirements.

If the wall being penetrated is constructed of non-combustible material, i.e. masonry block or concrete, an 203mm diameter hole is acceptable.

NOTES

- The horizontal run of flue must have a 6mm rise for every 305mm of run towards the termination. Never allow the flue to run downward. This could cause high temperatures and may present the possibility of a fire.
- The location of the horizontal flue termination on an exterior wall must meet all local and national building codes.

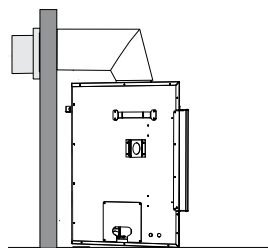


Diagram 1

"THIS UNIT MUST ALWAYS TERMINATE / FLUE DIRECTLY TO THE OUTDOORS."

7. Ensure that the pipe clearances to combustible materials are maintained (Diagram 2). Install the termination cap.

The four wood screws provided should be replaced with appropriate fasteners for stucco, brick, concrete, or other types of sidings.

NOTE If installing termination on a siding covered wall, a siding standoff or furring strips must be used to ensure that the termination is not recessed into the siding.

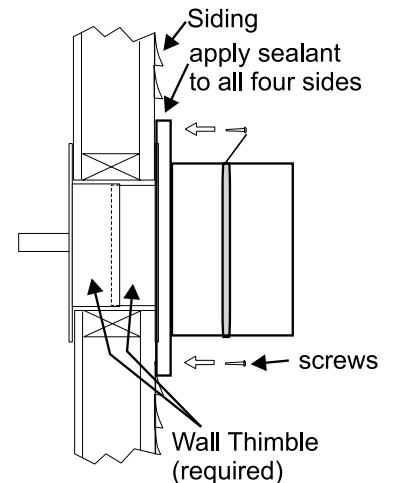


Diagram 2

8. Before connecting the horizontal run of flue pipe to the flue termination, slide the wall thimble over the flue pipe. The wall thimble is required for all horizontal terminations.
9. Slide the appliance and flue assembly towards the wall carefully inserting the flue pipe into the flue cap assembly. It is important that the flue pipe extends into the flue cap sufficient distance so as to result in a minimum pipe overlap of 32mm. Secure the connection between the flue pipe and the flue cap.
10. Install wall thimble in the center of the framed hole and attach with wood screws (Diagram 3).

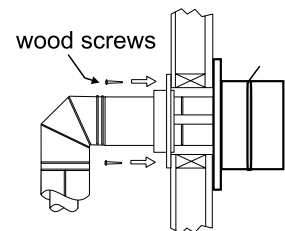


Diagram 3

NOTE NOT INTENDED FOR MASONRY INSERT. DO NOT INSTALL IN A MASONRY FIREPLACE.

FLUEING ARRANGEMENT FOR VERTICAL TERMINATIONS - INLINE POWER FLUE - VERTICAL FLUEING WITH STRAIGHT VERTICAL FLUEING AND OR WITH A MAX. OF SIX (6) 90° ELBOWS (1 - 90° = 2 - 45°) (MAX. 18 M)

Note:

Max. total run of 18 m (insulation not required if combined run is less than 10.5 m)

- co-linear exhaust (102 mm) flue must be fully insulated from the unit to the inline power flue if total combined run exceeds 10.5 m.
- co-axial flue section min. 0.3 m to max. 1.0 m

- Two 45° elbows equal to one 90° elbow.
- Vent must be supported at offsets.
- Minimum distance between elbows is 1 ft. (305 mm).
- Maintain clearances to combustibles as listed in the "Clearances" section.
- Horizontal vent must be supported every 3 feet.
- Firestops are required at each floor level and whenever passing through a wall.

Inline power vent location restrictions:

- Minimum 1.2 m from the unit.
- Minimum 0.3 m prior to an elbow.
- Minimum 0.3 m following an elbow.
- Minimum 0.6 m prior to a termination cap.
- Minimum 0.6 m from inline power flue to termination cap.
- Minimum 1.2 m from top of unit to inline power flue.
- Max. of 18 m, using up to six 90° elbows
- (Note: example shows two 90° elbows).
- No negative runs.

****IMPORTANT:** The inline power flue must be installed within the confines of the home/structure and **must** be accessible for future servicing. An access hole as noted in this manual or an attic space would be suitable.

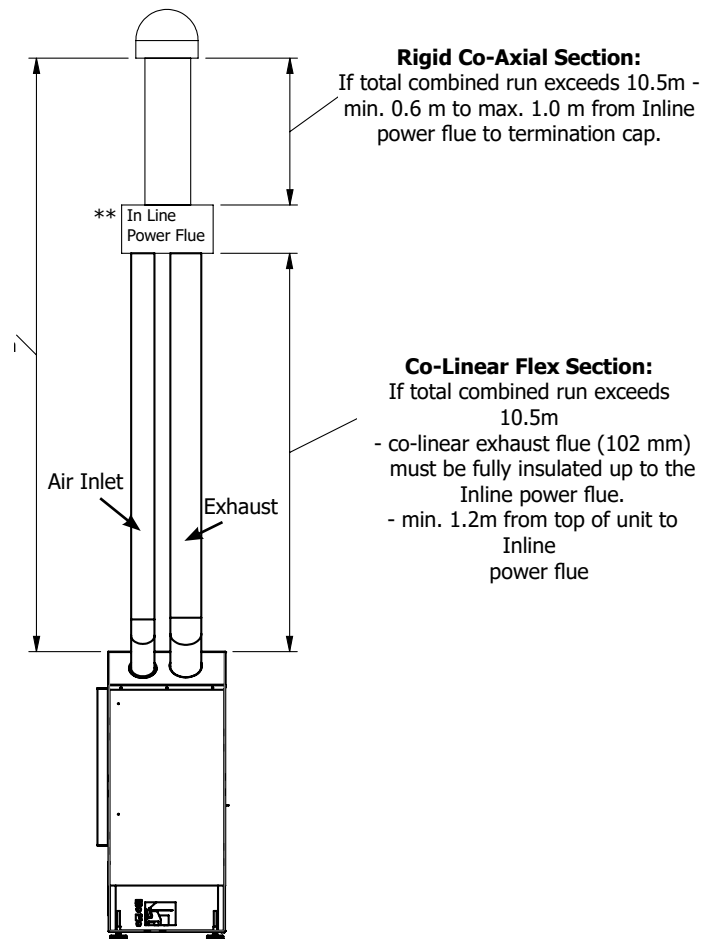
Inline Power Flue Bypass Setting: Full Closed

Burner Aeration Setting:

NG: 14 mm

Propane: 17 mm

ULPG: 17 mm



CO-AXIAL FLUE REQUIREMENTS (INLINE POWER FLUE) (102 MM X 168 MM RIGID FLUEING)

Minimum Flue Clearances to Combustibles

* Clearances noted below must be maintained; except when passing through a wall, ceiling or at the termination where the use of a firestop or wall thimble reduces clearance to 38mm.

Horizontal Top*	76mm*
Horizontal Side	51mm
Horizontal Bottom	51mm
Vertical Flue	51mm

Below are the recommended framing dimensions (inside measurements) for the 102mm x 168mm rigid flue terminations - for use with a firestop or wall thimble.

Recommended Framed Opening Size	
Flue Size	Framing Size
102mm x 168mm	254mm x 254mm

Install the flue system according to the manufacturer's instructions included with the components.

1. Set the unit in its desired location. Check to determine if wall studs or roof rafters are in the way when the flueing system is attached. If this is the case, you may want to adjust the location of the unit. Rough in the gas preferably on the right side of the unit and the electrical (junction block is on the left side) on the left.
2. Co-axial vent pipe and fittings are designed with special twist-lock connections to connect the flueing system to the power flue.
3. Level the fireplace and fasten it to the framing using nails or screws through the top and side nailing strips.)
4. Connect the co-axial portion of the flue system to the power flue..

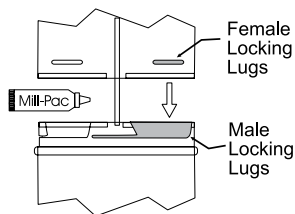


Diagram 1

5. Assemble the desired combination of pipe and elbows to the Inline Power Flue adaptor and twist-lock for a solid connection.

NOTES	<ul style="list-style-type: none"> • For best results and optimum performance with each approved flueing system, it is a minimum to apply Mill-Pac sealant (supplied) to every inner pipe connection. Failure to do so may result in drafting or performance issues not covered under warranty. • Horizontal runs of flue must be supported every 0.9 m. Wall straps are available for this purpose.
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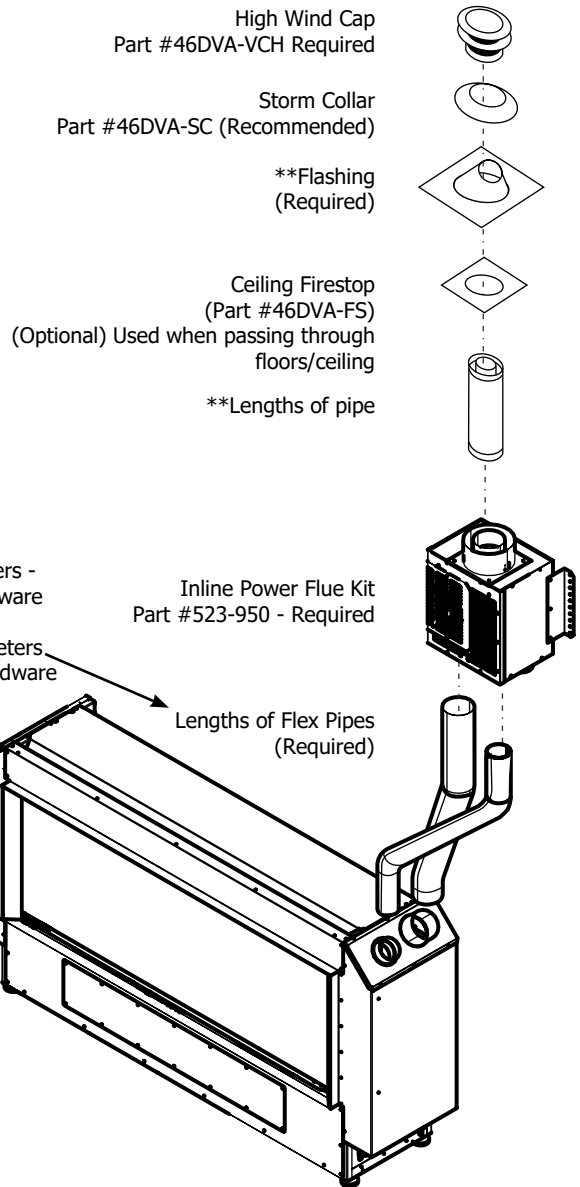
6. Mark the wall for a square hole - see chart to left for size. The center of the square hole should line up with the center-line of the horizontal pipe. Cut and frame the square hole in the exterior wall where the flue will be terminated.

VERTICAL INLINE POWER FLUE TERMINATIONS

The minimum components required when using inline power vent are:

- 1 High Wind Cap
- 1 Flashing
- 1 Lengths of pipe to suit wall thickness & vent run (see chart)
- 1 Inline Power Flue Kit
- 1 Length of 76 mm flex pipe
- 1 Length of 102 mm flex pipe
- 1 Length of insulation (if total run greater than 10.5 m)*

Galvanized pipe is desirable above the roofline due to its higher corrosion resistance. Continue to add pipe sections through the flashing until the height of the vent cap meets the minimum height requirements specified in table below or local codes. Note that for steep roof pitches, the vertical height must be increased. A poor draft, or down drafting can result from high wind conditions near big trees or adjoining roof lines, in these cases, increasing the vent height may solve the problem.



(Part # 946-858 Flex Flue Kit 4 meters - CoLinear 76 mm & 102 mm W/Hardware
Or

Part # 946-859 Flex Flue Kit 10.7 meters - CoLinear 76 mm & 102 mm W/Hardware

**See pages 17 & 18 for part numbers & if available from FPI.

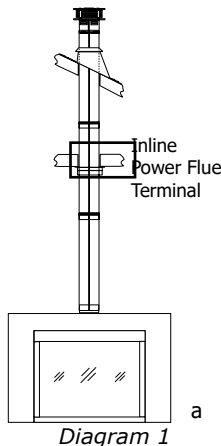
*Insulation is required if total run exceeds 10.5 meters
Part # 948-535 (10.7 m) Insulation for 102 mm flex pipe
If more than 10.7 m is required than must also purchase
Part # 948-525 (7.6 m) Insulation for 102 mm flex pipe

VERTICAL INLINE POWER FLUE TERMINATIONS - RIGID PIPE 102MM X 168MM

NOTE

A top clearance of 76mm and side bottom clearance of 51mm must be maintained, except when passing through a wall or ceiling, or at the termination where a firestop or wall thimble reduces the required clearance to 38mm. We recommend framing a 279mm x 279mm (inside dimensions) hole to give structural rigidity for mounting the termination.

1. Maintain the 51mm clearances (air spaces) to combustibles when passing through ceilings, walls, roofs, enclosures, attic rafters, or other nearby combustible surfaces, ensuring a firestop or wall thimble is used as noted above. Do not pack air spaces with insulation. Check the "Flueing" section for the maximum vertical rise of the flueing system and the maximum horizontal offset.



2. Set the gas appliance in its desired location. Drop plumb bob from the ceiling to the appliance flue exit and mark where the flue will penetrate the ceiling. Drill a small hole at this point. Next, drop a plumb bob from the roof to the hole drilled in the ceiling and mark where the flue will penetrate the roof. Determine whether ceiling joists, roof rafters, or other framing will obstruct the flueing system. You may wish to relocate the appliance or to offset as shown in Diagram 2 to avoid cutting load bearing members.

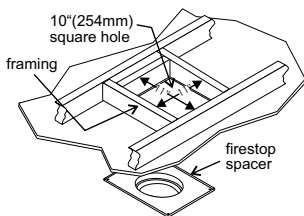
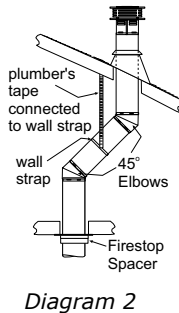


Diagram 3

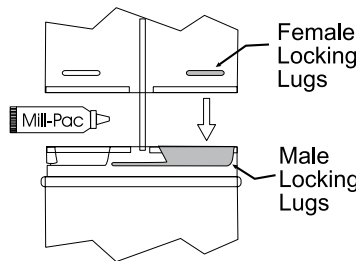
NOTE All vertical terminations are flued using 102mm x 168mm flueing and Simpson Duravent only.

A minimum of 101mm is required between the unit and the inline power flue. Determine the overall height of the chimney from the top side of the inline power flue to the underside of the flashing.

3. A firestop spacer is to be installed in accordance with local building codes.
4. Assemble the desired pipes and elbows. Ensure all pipes and elbow connections are twist-locked and sealed.

NOTE

For best results and optimum performance with each approved flueing system, "Mill-Pac" sealant is strongly recommended at every inner pipe connection. Failure to use Mill-Pac may result in drafting or performance issues not covered under warranty.



5. Cut a hole in the roof centered on the small hole drilled in Step 2. The hole should be sized to meet the minimum requirement of 38mm clearance to combustibles. Slip the flashing under the shingles (shingles should overlap half the flashing) as per Diagram 4.

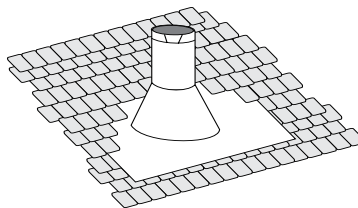


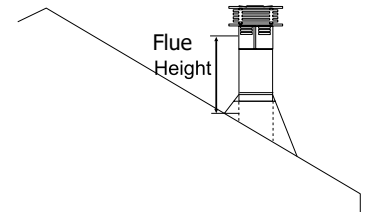
Diagram 4 - The upper half of the flashing is installed under the roofing material and not nailed down until the chimney is installed, to allow for small adjustments.

6. Continue to assemble pipe lengths. Support the inline power flue to avoid excessive stress on the pipe and elbows. The inline power flue can be screwed onto existing studs for support.

NOTE

If an offset is needed in the roof space, it is important to support the flue pipe at every 0.9 meter to avoid excessive stress on the elbows and possible separation. Wall straps are available for this purpose (Diagram 2).

Galvanized pipe is desirable above the roofline due to its higher corrosion resistance. Continue to add pipe sections through the flashing until the height of the flue cap meets the minimum height requirements specified in Diagram 5 or local codes. Note that for steep roof pitches, the vertical height must be increased.



Roof Pitch	Minimum Flue Height
	Meters
flat to 30.26°	0.61
over 30.26° to 33.69°	0.61
over 33.69° to 36.37°	0.61
over 36.37° to 39.81°	0.76
over 39.81° to 42.51°	0.99
over 42.51° to 45.00°	1.22
over 45.00° to 49.40°	1.52
over 49.40° to 53.13°	1.83
over 53.13° to 56.31°	2.13
over 56.31° to 59.04°	2.29
over 59.04° to 60.26°	2.44

A poor draft, or down drafting, can result from high wind conditions near big trees or adjoining roof lines. In these cases, increasing the flue height may solve the problem.

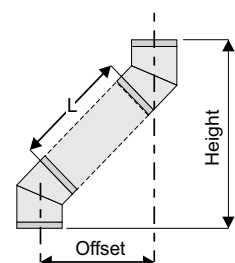
7. Ensure flue is vertical and secure the base of the flashing to the roof with roofing nails. Slide the storm collar over the pipe section and seal with a mastic.
8. Install and twist-lock the vertical termination cap.

NOTE

Any closets or storage spaces that the flue passes through must be enclosed.

OFFSET CHART

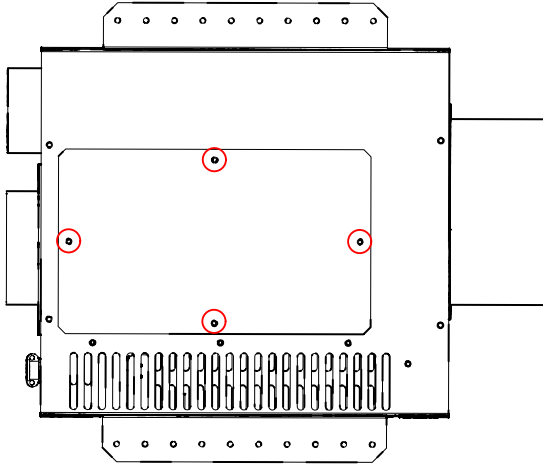
Offset mm	Pipe Length (L) mm	Height mm
121	0	337
229	152	445
286	229	495
337	305	552
552	610	768
768	914	991
965	1219	1194



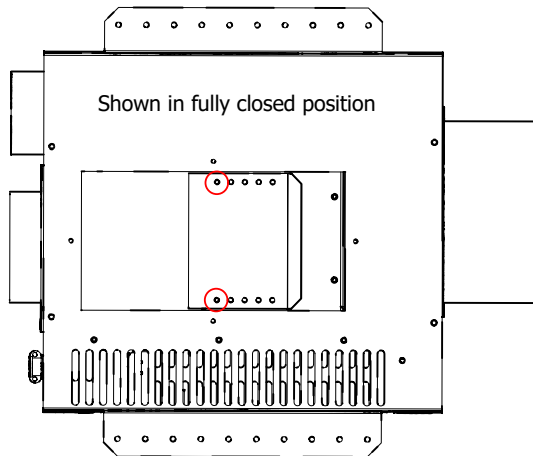
BYPASS ADJUSTMENT (INLINE POWER FLUE)

IMPORTANT: Ensure bypass is set to the closed position.

1. Remove the four screws on the bottom access panel to expose the bypass.

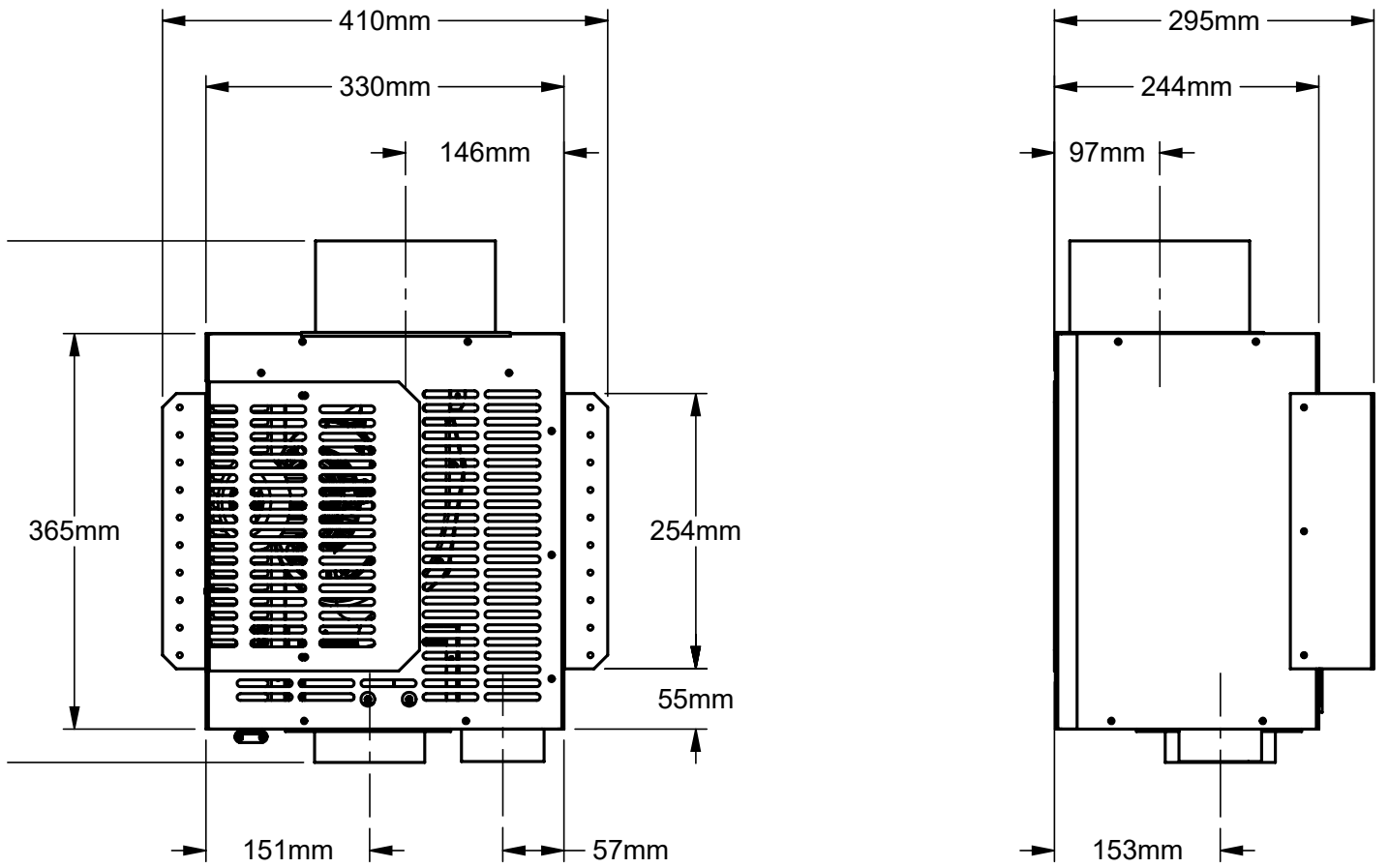


2. Ensure the bypass is in the full closed position with screws and plate as highlighted below.



3. Once confirmed, re-install bottom access panel removed in step 1.

INLINE POWER FLUE DIMENSIONS



GAS POWER FLUE INSTALLATION - FRAMING - INLINE POWER FLUE TERMINATIONS

- The inline power vent can be mounted directly onto a wall, ceiling, stud or truss. Additional supports can be built to support the power vent if needed.
- The inline power vent can be oriented in any way if the access panel is accessible.

NOTE The inline power vent will have a directional arrow which must be pointed away from the appliance.

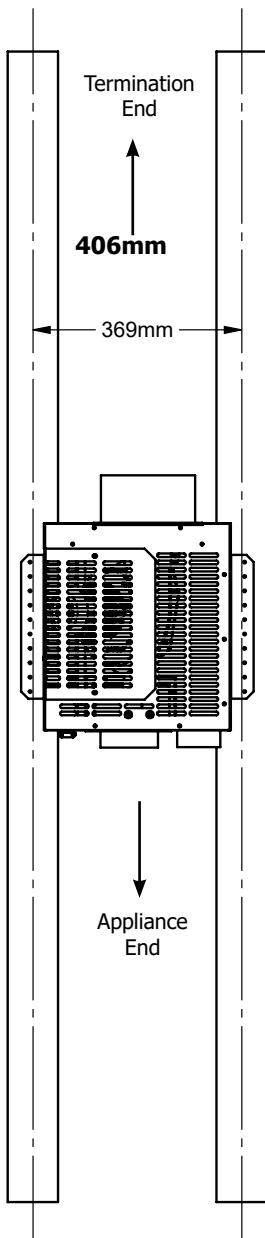


Diagram 1: Inset view of inline power vent oriented vertically

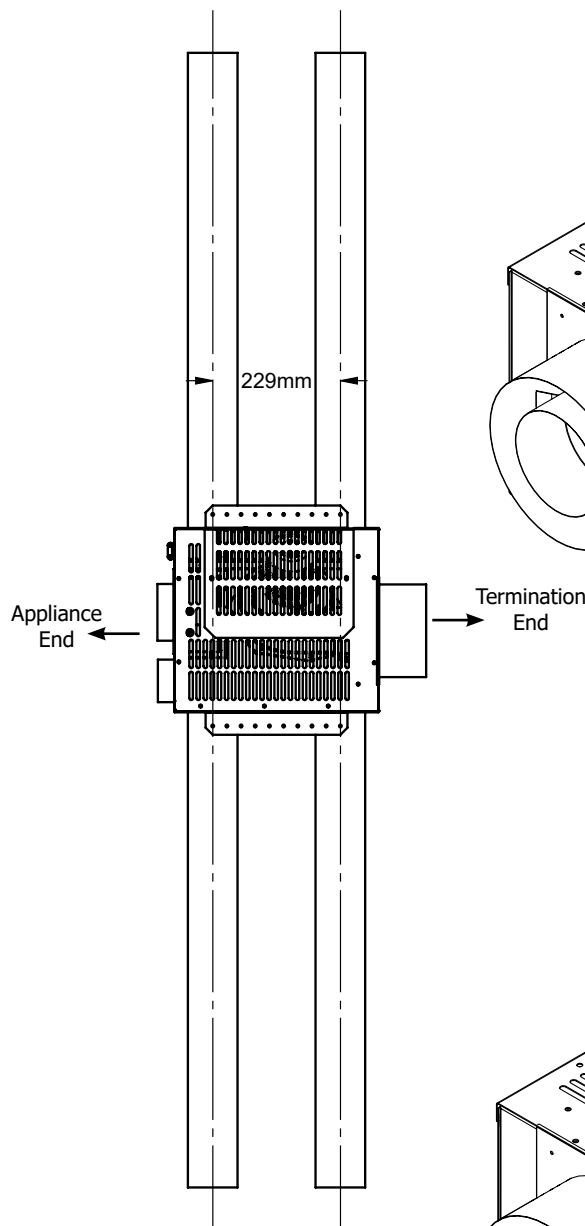
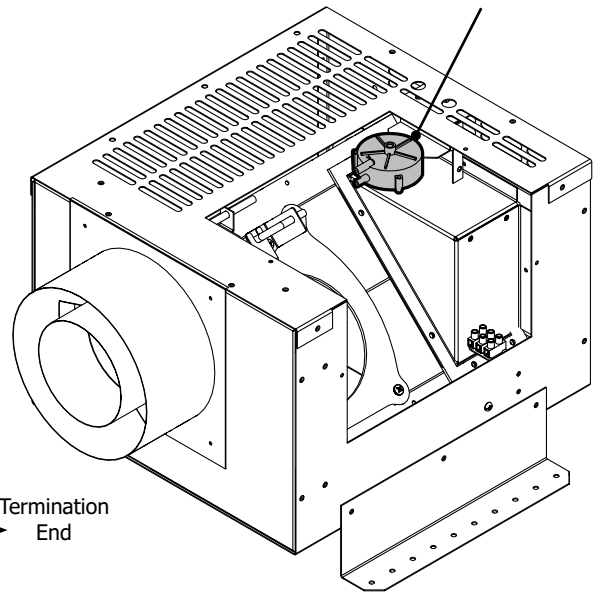
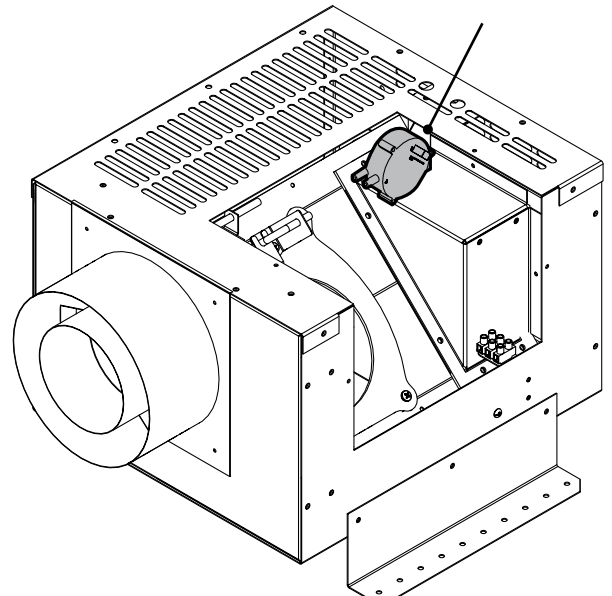


Diagram 2: Inset view of inline power vent oriented horizontally

Pressure switch in **INCORRECT** position. Flat face of pressure switch must not be positioned horizontally.



Pressure switch in **CORRECT** position. Flat face of pressure switch must be positioned vertically regardless of Power Flue orientation.



NOTE If the power vent is terminated vertically, no action is required for the pressure switch. If in a horizontal position, the pressure switch will need to be rotated. See instructions on next page.

POWER FLUE TERMINAL INSTALLATION - INLINE POWER FLUE TERMINATIONS

IMPORTANT

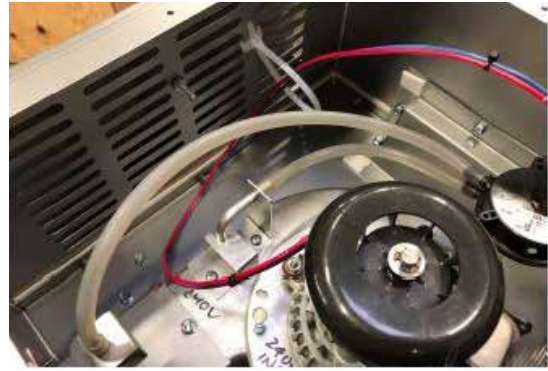
- Pressure switch (Part # 911-112) must always be oriented vertically inside the inline power flue.
- The longer silicone tube is connected to the pressure switch side labelled "P" and the shorter silicone tube is connected to the side labelled "V".



Pressure switch
side "P"



Pressure switch
side "V"



Pressure switch installed

To rotate the pressure switch in a horizontal position, follow the steps below:

1. Remove the 2 screws connecting the pressure switch mount to the mounting bracket.



2. Turn the mounting bracket 90 degrees, line up the holes and screw the bracket back onto the mount.

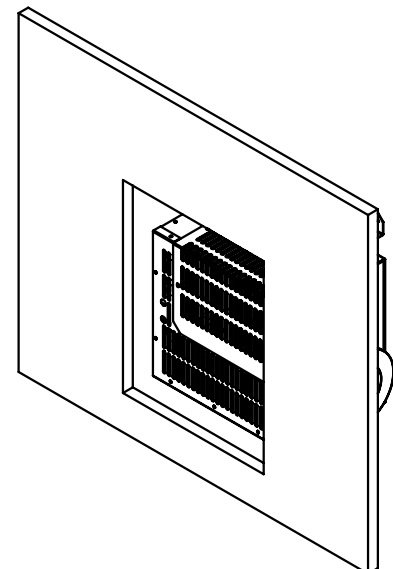
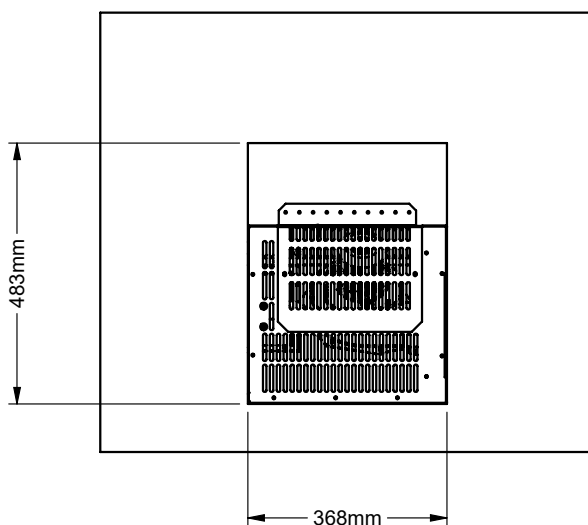
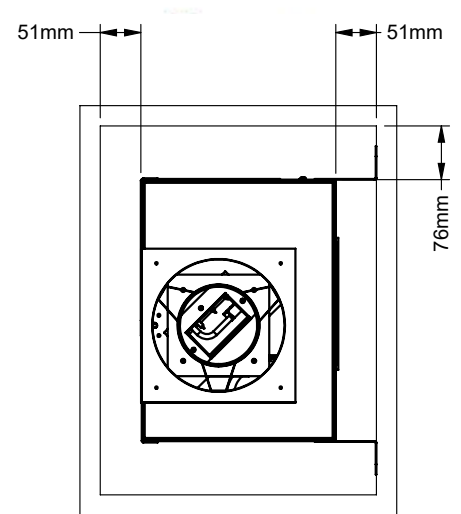
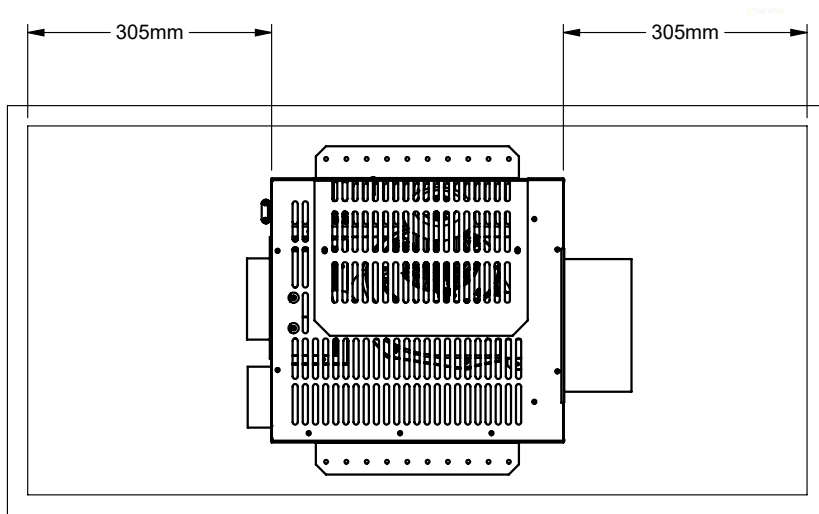


Fan (Part # 911-305)

GAS POWER FLUE INSTALLATION CLEARANCE REQUIREMENTS - INLINE POWER FLUE TERMINATIONS

Confined spaces (chase, closet, attic, behind a wall):

- 76mm clearance is required on top of the power flue in a horizontal configuration (Diagram 2).
- 51mm clearance is required on the sides and bottom in a horizontal configuration (Diagram 2).
- 305mm clearance is required from the ends of the power flue in a horizontal configuration (Diagram 1).
- 51mm clearance is required on sides in a vertical configuration (Diagram 2).
- 305mm clearance is required on ends in a vertical configuration (Diagram 1).
- A framed access hole with dimensions of 305mm x 406mm is required to access the access panel if the inline power flue is placed behind a wall (Diagram 3).
- The access hole can be covered with an open-air louver cover which allows 50% open air.
- The power flue must be installed where it can be easily accessed for servicing. An access hole as noted below, or an attic space, would be suitable.



FLUEING INTRODUCTION (END OF LINE POWER FLUE) (PART # 523-948)

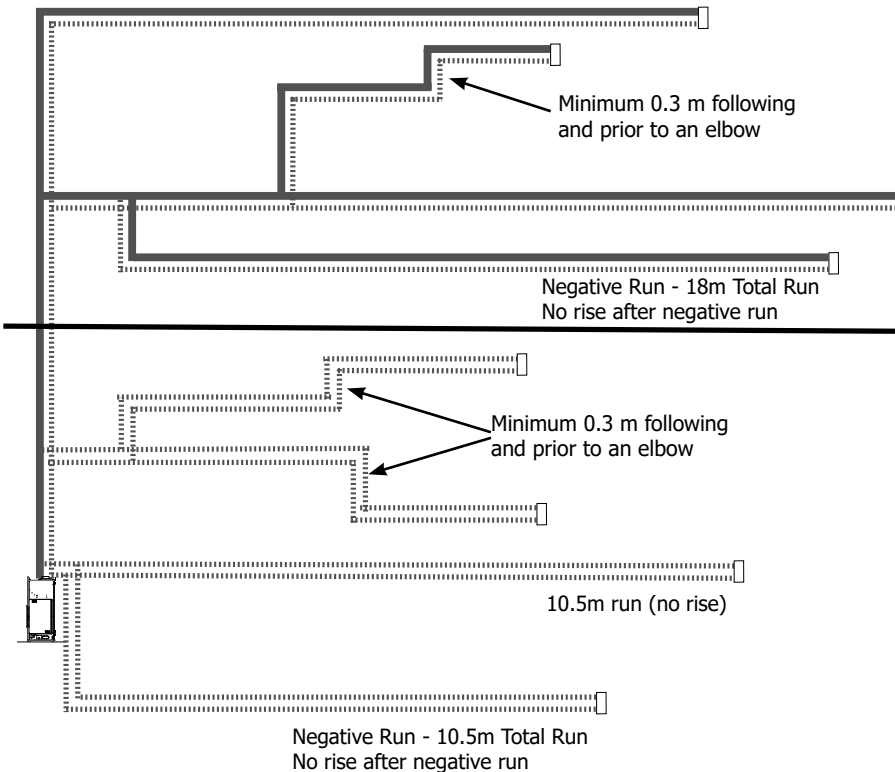
The AS1440 uses the "powered flue" technology Co-linear system. The 102 mm liner flues products of combustion to the outside while the 76 mm liner draws outside combustion air into the combustion chamber thereby eliminating the need to use heated room air for combustion and losing warm room air up the chimney.

FLUEING ARRANGEMENTS FOR HORIZONTAL TERMINATIONS - END OF LINE HORIZONTAL POWER FLUE CHART - 10.5 M MAX.

NOTES

- End of Line is approved for up to 10.5 m (uninsulated).
- Flue runs exceeding 10.5 m up to max. 18 m requires full insulation of the 102 mm exhaust flue.
- These flue pipes must not be connected to any other appliance.

Must be terminated horizontally. Vertical terminations are not permitted with End of Line Power Flue.



18m Max. w/insulated exhaust flue

IMPORTANT:
102mm exhaust liner must be fully insulated from the unit to the power flue.

10.5m Max. non-insulated exhaust flue

IMPORTANT

- 10.5 m max. (no insulation required).
- 10.5 m to 18 m max. (102 mm exhaust flue must be fully insulated).
- Six 90° elbows max.
- One 90° elbow = two 45° elbows.
- Maximum total negative flue length = 2.1 m.

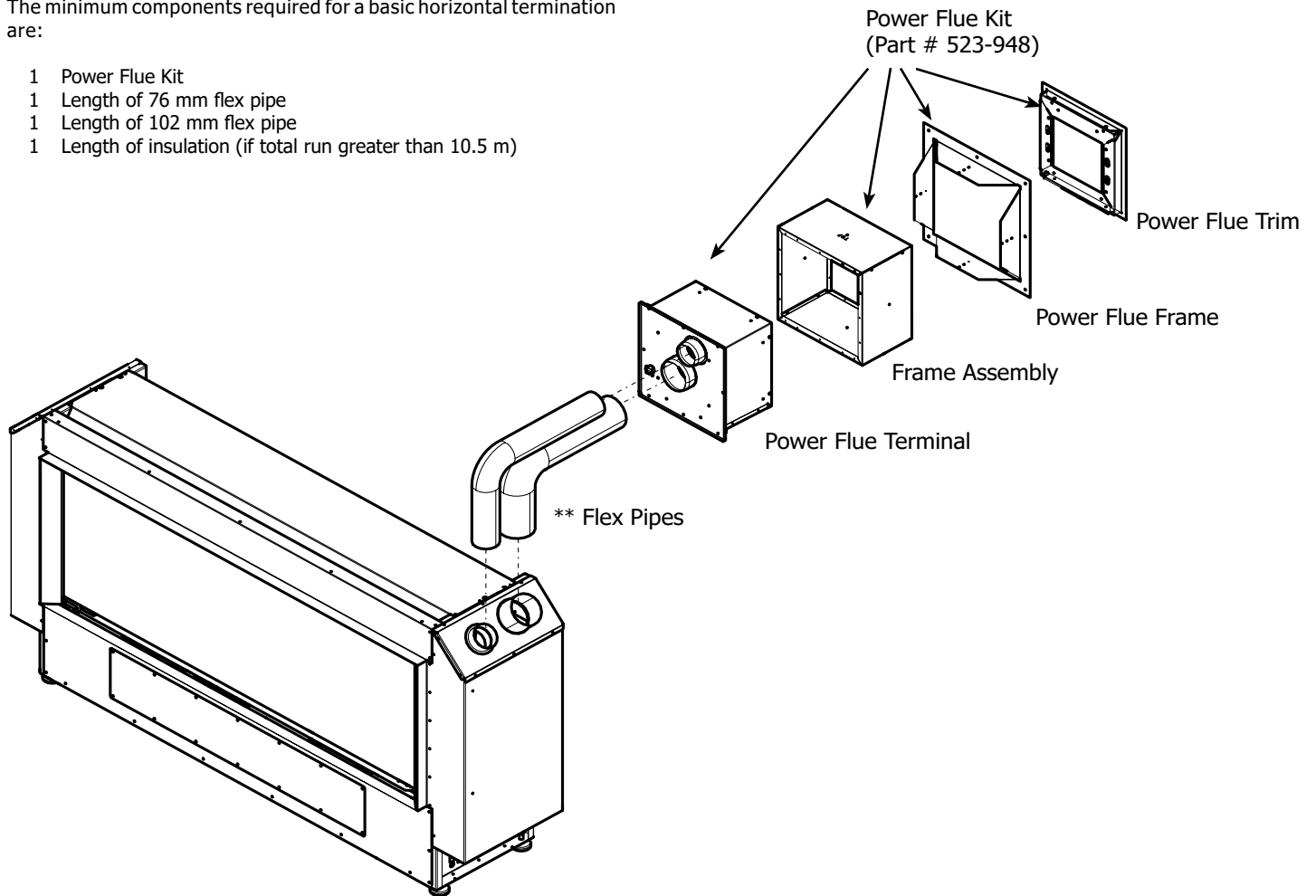
End of Line Power Flue location restrictions:

- Minimum 0.3 m prior to an elbow.
- Minimum 0.3 m following an elbow.

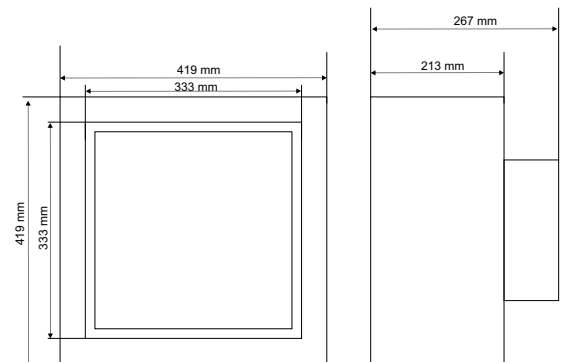
HORIZONTAL TERMINATIONS - END OF LINE POWER FLUE

The minimum components required for a basic horizontal termination are:

- 1 Power Flue Kit
- 1 Length of 76 mm flex pipe
- 1 Length of 102 mm flex pipe
- 1 Length of insulation (if total run greater than 10.5 m)



End of Line Power Flue Kit with Flue Terminal			
1	523-948	Power Flue Kit- includes: Frame, Frame Assembly, FlueTrim, Fan, Terminal and PV Wiring Harness	Sold separately
1	946-858**	Flex Flue Kit 4 m – Colinear 76 mm & 102 mm w/Hardware	Sold separately
1	946-859**	OR Flex Flue Kit 10.7 m – Colinear 76 mm & 102 mm w/Hardware	Sold separately
1	*948-525 (7.6 m) 948-535 (10.7 m)	Insulation for 102 mm Flex Insulation for 102 mm flex	Sold separately Sold separately
1	946-774	Adaptor Pipe 76 mm & 102 mm Kit	Sold separately



*Must be purchased if more than 10.7 m. of insulation is required.
 Note : If 10.7 meters or more are required both the 946-859 & 946-858 flex flue kits would need to be purchased along with the 946-774 Adaptor pipe 76 mm & 102 mm kit.
 The 946-774 adaptor pipes join the 2 kits.