THE IRRESISIBLE FLAMES OF MASPORT

INBUILT FRAMING CLEARANCE & GENEVA DV FLUEING INFORMATION 2006

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Masport® Heating

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Revised Zero Clearance Installation Instructions for

Revised Zero Clearance Installation Instructions for Piccolo, Sofia & Madrid Gas Heaters.

These instructions are to be read in conjunction with the standard Piccolo, Sofia & Madrid Owner's and Installation Manual (part no. 590340). They apply only when bearer rails are fitted to the outer steel cabinet.

The Zero Clearance Kit enables the Masport Piccolo, Sofia and Madrid Gasfires to be installed when no conventional masonry chimney is available. Installation of the kit is not difficult, but it is important to follow the sequence suggested below. No special heat resistant hearth (floor protector) is required.

PLEASE NOTE: *A special 'zero clearance' fascia will be required, as the usual fascias are unsuitable. A special Flue Kit is also needed. This has a 100mm-diameter flue surrounded by a 150mm-diameter heat shield. This shield is spaced out from the flue and rests on top of the outer cabinet. Ventilation of the space between the flue and the shield is provided by the clearance hole for the flue in the cabinet top.*

WARNING: The stand-off angles on the sides and rear of the outer cabinet are fitted to ensure a safe clearance to combustible materials. The stand-off angles must not be removed. Additionally, no combustible framing material must be less than 35mm above the top of the outer cabinet.

All Masport heaters are tested to New Zealand and Australian Standards. Clearances are for fire hazard only. For durability of finishes and surfaces you should contact the relevant manufacturer for their specifications. Masport accepts no responsibility for the deterioration of surfaces or finishes.

PROCEDURE FOR INTERNAL INSTALLATIONS:

1. *Inspect the house construction at the proposed installation position to verify that the 150 mm diameter flue shield can pass right up through the ceiling space without requiring the removal of essential roof or ceiling support beams. The flue centreline will be 335mm back from the finished front face of the enclosure. If the heater is to be installed parallel to an existing wall, and if the enclosure is built to its minimum allowable depth, the flue centreline will be 245mm from the wall. If the heater will be parallel to the wall, any heat sensitive side wall must be at least 520mm from the heater centreline. If the enclosure is to be at 45° in the corner of the room, and is built to its minimum allowable depth, the face of the enclosure will be 935mm out from the corner and the flue centreline will be 600mm out from the corner.*
2. *Drop a plumb line from the ceiling to the floor to establish a flue centreline as detailed above, and cut and nog a hole at least 200mm square through the ceiling on this centreline. The ceiling inside the enclosure may be removed entirely, if desired, and it must be removed if it will be less than 1600mm above the top of the outer steel cabinet. (See Step 10).*

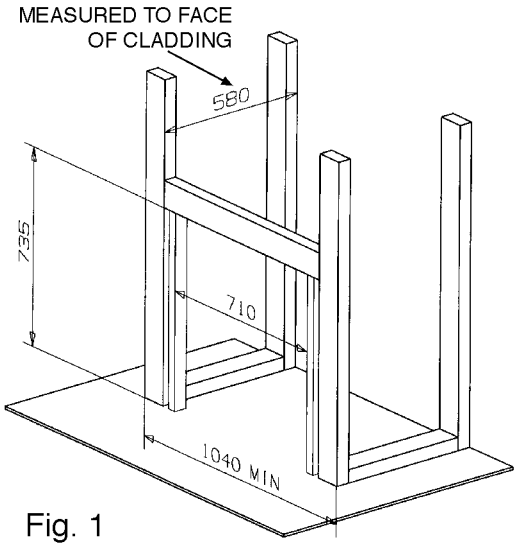


Fig. 1

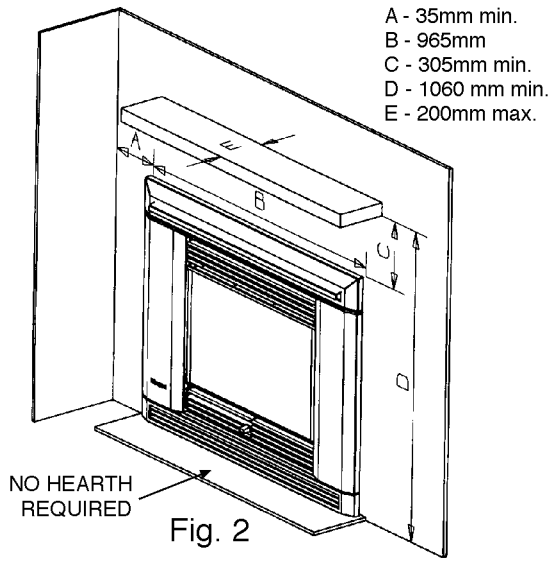
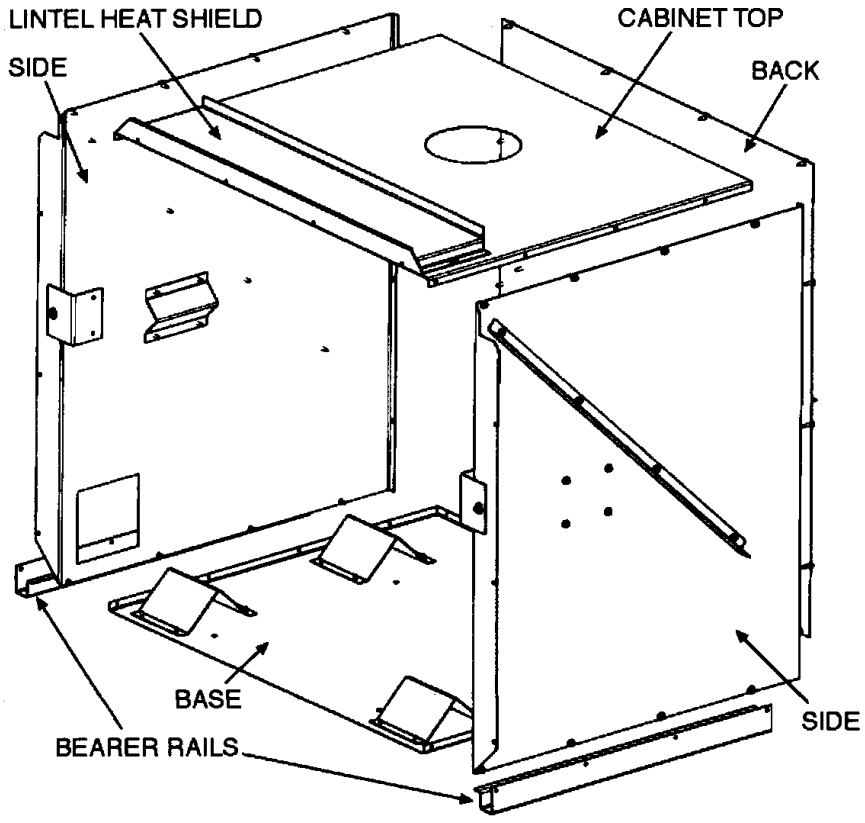


Fig. 2

3. *Frame up the enclosure as shown in Fig. 1. The frame should provide a recess 710mm wide and at least 580mm deep (measured from the face of the cladding material or from any tiles etc. that may be fixed to the cladding material). The overall width of the frame must be not less than 1040mm to accommodate the fascia width and to ensure a safe clearance to any combustible material should there be a room side-wall abutting the enclosure. The opening must have two timber uprights spaced 710mm (between) at the front. The bearer rails on the base of the outer steel cabinet will sit directly on the floor. No insulation is needed on top of the floor in the recess. (See Figs. 1 & 2).*
4. *The floor in front of the heater will not require a hearth or any other heat protection, although a hearth (floor protector) may be provided, if desired, purely for aesthetic reasons.*
5. *The usual three nogs may be fixed at each side of the enclosure. At the front the lowest nog must have its lower face 735mm above the floor. Further nogs can be fitted anywhere above this one.*
6. *Fix the cladding to the sides and front of the framed-up enclosure. Conventional paper-faced wall cladding will be satisfactory on all faces of the enclosure, although a more appropriate material (such as Tile and Slate underlay) may be preferable where tiles etc. are to be fitted.*
7. *If a decorative finish (such as tiles or slate) is to be applied to the face of the enclosure, this should be done next. The decorative finish must extend down to the top of the recess but may stop short of the sides of the recess provided that packing is provided between the uprights of the enclosure and the flanges of the outer steel cabinet to bring the flanges in line with the outer surface of the decorative finish.*
8. *If a mantelshelf is being fitted, it must extend no more than 200 mm, and its undersurface must be at least 1060mm above the floor or at least 305mm above the top of the fascia if the base of the heater is raised above floor level. For raised installations, see Step 2. Please note that the mantelshelf details in the standard manual are NOT valid for zero clearance installations.*
9. *Penetrate the roofing material on the flue centreline, following the instructions accompanying the special Zero Clearance Flue Kit.*
10. ***IMPORTANT. Cover the entire open space surrounding the flue heat shield (at ceiling level) with wire netting with a mesh small enough to prevent the entry of birds or vermin. This will avoid the risk of a fire from nesting inside the enclosure.***



OUTER STEEL CABINET. Fig. 3

11. *Assemble the two sides, the base, the back and the top of the outer steel cabinet. Fix the two fascia support angle strips under the top of the outer cabinet with their flanges up, thus forming a channel with the front flange of the cabinet top. (See Fig. 6). When assembling the sides to the base, fit a bearer rail at each side to raise the base of the outer cabinet 25mm above floor level. Slide the cabinet into the constructed recess. Check that it is centred between the front studs and that the cabinet is ' squared up'. Secure the outer cabinet to the front studs through the six holes in the front flanges of the outer cabinet.*

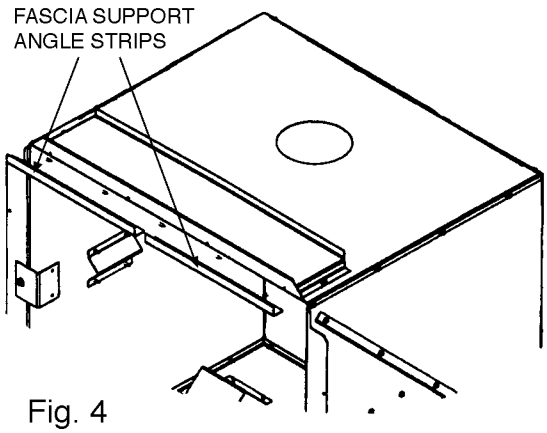


Fig. 4

12. *Assemble sufficient lengths of flue heat shield (150 mm dia.) so that the flue will extend the necessary height above the roof line. (See flue instructions).*
13. *Lower the flue shield down through the roof aperture until it is resting on top of the outer steel case. Check from below that it is centralised on the hole in the cabinet and flash the shield at roof level.*
14. *Fasten a seismic restraint bracket on each side of the firebox cabinet.*

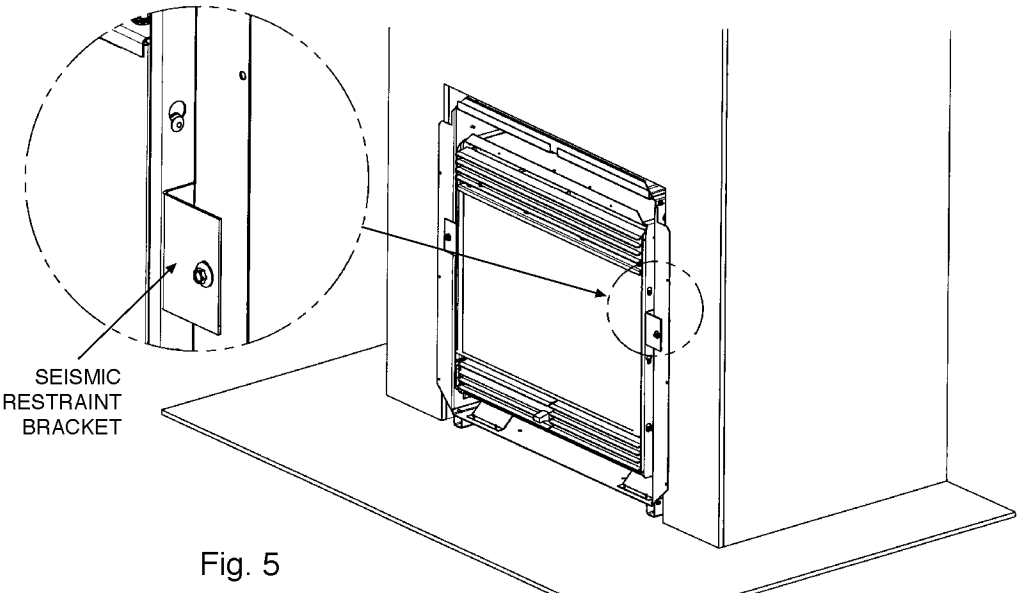


Fig. 5

15. *Slide the firebox cabinet into the outer cabinet and secure the seismic restraint brackets to the cabinet flanges.*
16. *Make the gas connection as detailed in the standard manual.*
17. *Place the 200mm square plate (with the 108mm diameter hole) over the flue spigot on top of the firebox cabinet (not the outer cabinet).*
18. *Assemble the appropriate number of flue lengths and fix flue shield spacers as required (see flue instructions). Lower the assembled flue down through the heat shield in the usual manner and ensure that it engages with the flue socket of the heater. Fit the flue cowl.*
19. *Slide in the top front panel of the firebox cabinet and secure it at each side with a screw.*
20. *Install the insulating blanket on top of the firebox cabinet (not the outer cabinet).*
21. *Assemble the bottom louvred panel of the fascia to the fascia upright panels, sandwiching the stiffener plate between them as shown in Fig. 7, using four screws.*
22. *Offer this assembly into approximately its final position and attach the wiring looms to the switches as detailed in*
23. *Fit the fascia, using two screws each side, into the firebox cabinet.*

24. *Lower the top fascia rail prongs into the fascia uprights, ensuring the assembly is firmly in position and confirming that the top rail engages in the channel (formed in step 11) at the top front of the outer cabinet*

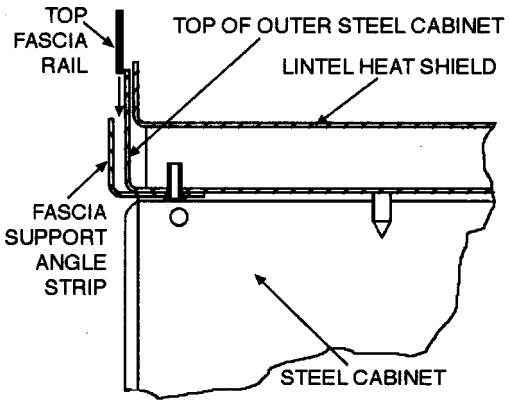
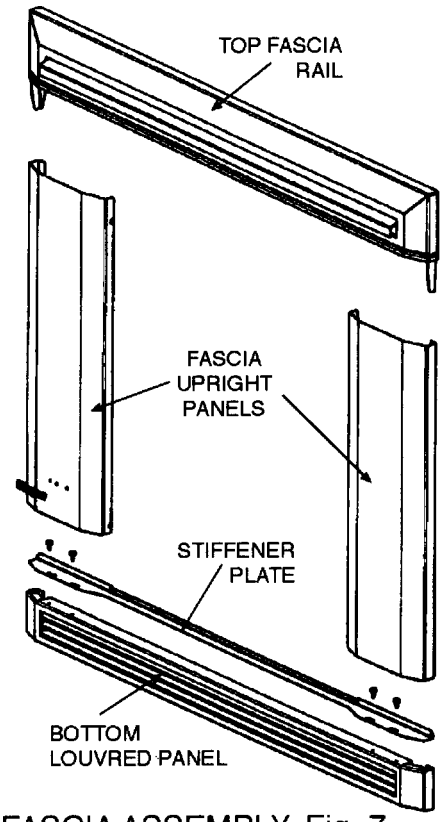
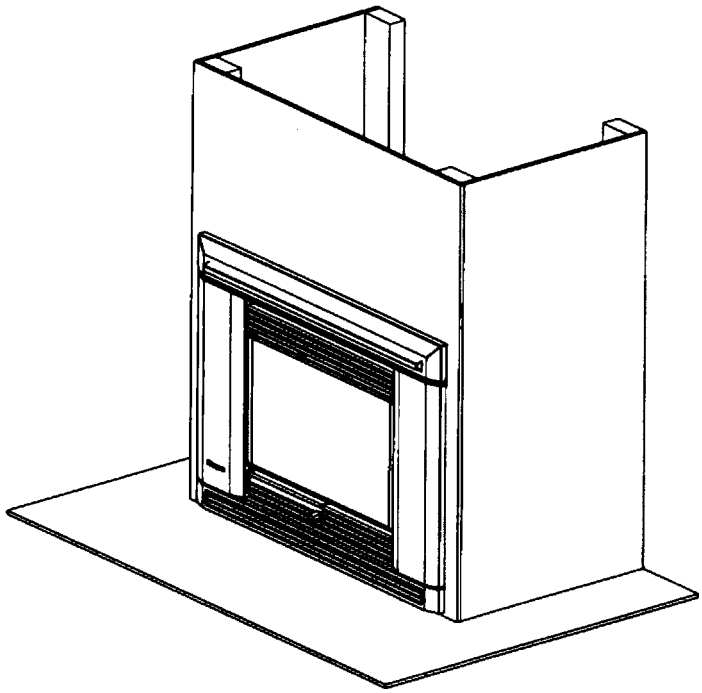


Fig. 6

25. *Fit two screws through the bottom of the top fascia rail into the front upstand of the firebox cabinet.*
26. *Remove the glass and install the embers. (See standard manual). Re-fit the glass.*
27. *Carry out the usual test firing procedure.*



FASCIA ASSEMBLY. Fig. 7


FINISHED INSTALLATION. Fig. 8

EXTERNAL INSTALLATIONS:

In the case where the enclosure is to be erected outside the house, the shielding and flue installation details above will still apply. Suitable foundations will be required to support the weight of the enclosure and the heater, and weatherproofing of the entire assembly will be necessary.

As before, the opening for the appliance in the wall must be 710mm wide and 735mm high with its bottom edge level with the floor of the room. The minimum clearances to nearby side-walls and mantelshelf requirements as detailed in Fig. 2 must be met.

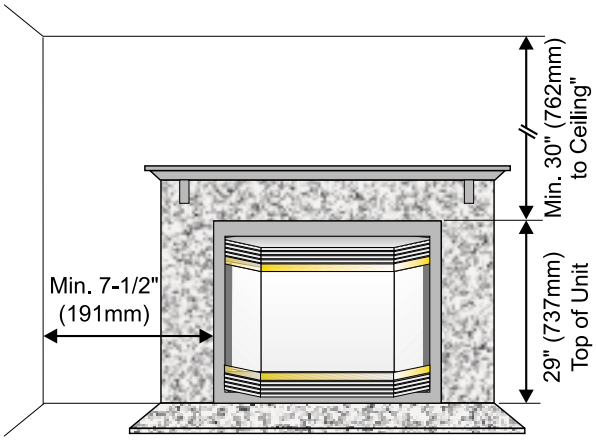
Roma (P33) Framing, Flue & Clearance Information

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 vent system be installed only in accordance with these instructions.

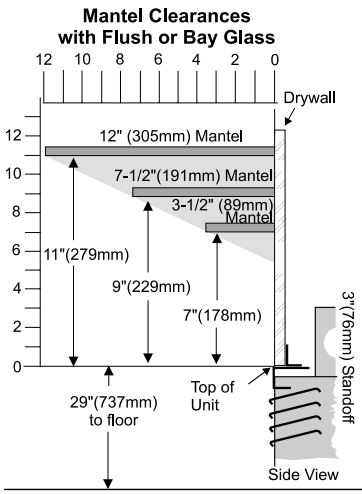
Clearance to combustibles from:	
Back (0mm) **Side** (0mm) **Floor** (0mm) NOTE: The minimum floor clearance must be maintained from the top surface of the carpeting, tile, etc.	Side Wall Clearance **Bay or Flush Front** (191mm) **Vent** (38mm) Flex
Minimum Clearance from Top of Unit to: **Mantel*** min. (177mm) **Ceiling** (762mm) from top of unit. * see mantle clearances below.	**Alcove Clearances:** **Max. Depth** (914mm) **Min. Width** (1219mm) **Min. Height** (1499mm)



WARNING
Fire hazard is an extreme risk if these clearances are not adhered to.

COMBUSTIBLE MATERIALS

Because of the extreme heat this fireplace emits, the mantel clearances are critical. Combustible mantel clearances from top of unit are shown in the diagram below.



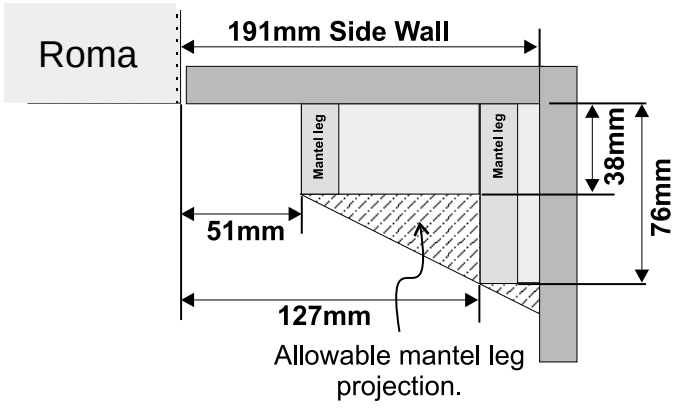
Note: A non-combustible mantel may be installed at a lower height if the framing is made of metal studs covered with a non-combustible board.

This drawing is to scale at 1:6 (one inch = 6 inches). Mantel can be installed anywhere in shaded area or higher using the above scale.

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

MANTEL LEG CLEARANCES

Combustible mantel leg clearances as per diagram below:

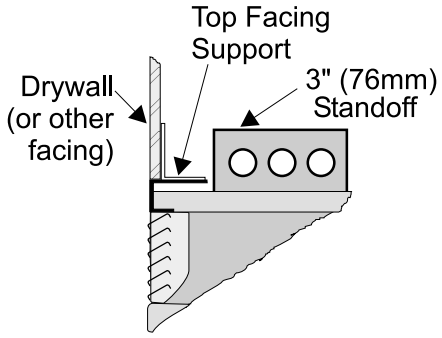


Maximum
1-1/2" projection at 2" minimum clearance.

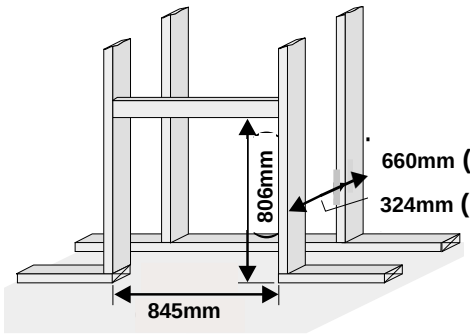
FRAMING AND FINISHING

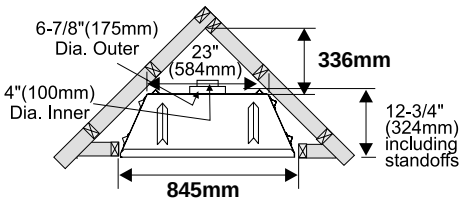
1) Determine the total thickness of facing material (e.g. drywall plus ceramic tiles) to allow the finished surface to be flush with the front of the unit. Total facing thickness can vary from 13mm to 32mm thick.

Install Side Nailing Strips, and Top Facing Support before unit is slipped into position.



2) Frame in the enclosure for the unit with framing material. The framed opening is 806mm high x 838mm wide x 324mm deep.



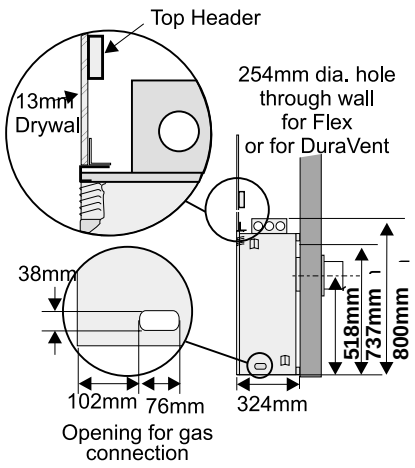


3) For exterior walls, insulate the enclosure to the same degree as the rest of the house, apply vapour barrier and drywall, as per local installation codes. **(Do not insulate the fireplace itself.)**

4) The top of the unit must not be closer than 813mm to the ceiling.

5) Non-combustible material may be brought up to the top and sides of the unit and be covered with ceramic tiles, bricks, rock or other suitable non-combustible finishing materials.

Note: The unit does not have to be completely enclosed in a chase. The clearance on top of the unit is 0mm to the standoffs so combustible building materials can be laid directly on top of the standoffs. You must maintain 40mm clearance from the flue to combustible materials.



6) Use steel studs for framing where the 40mm clearance from the flue to combustible material cannot be maintained.

Note:

These are framing dimensions only NOT finished wall dimensions.

Gas supplied from right hand side and power from left hand side.

Ensure depth of Register and outer wall allows for minimumum horizontal flue length of 203mm.

FLUEING INTRODUCTION

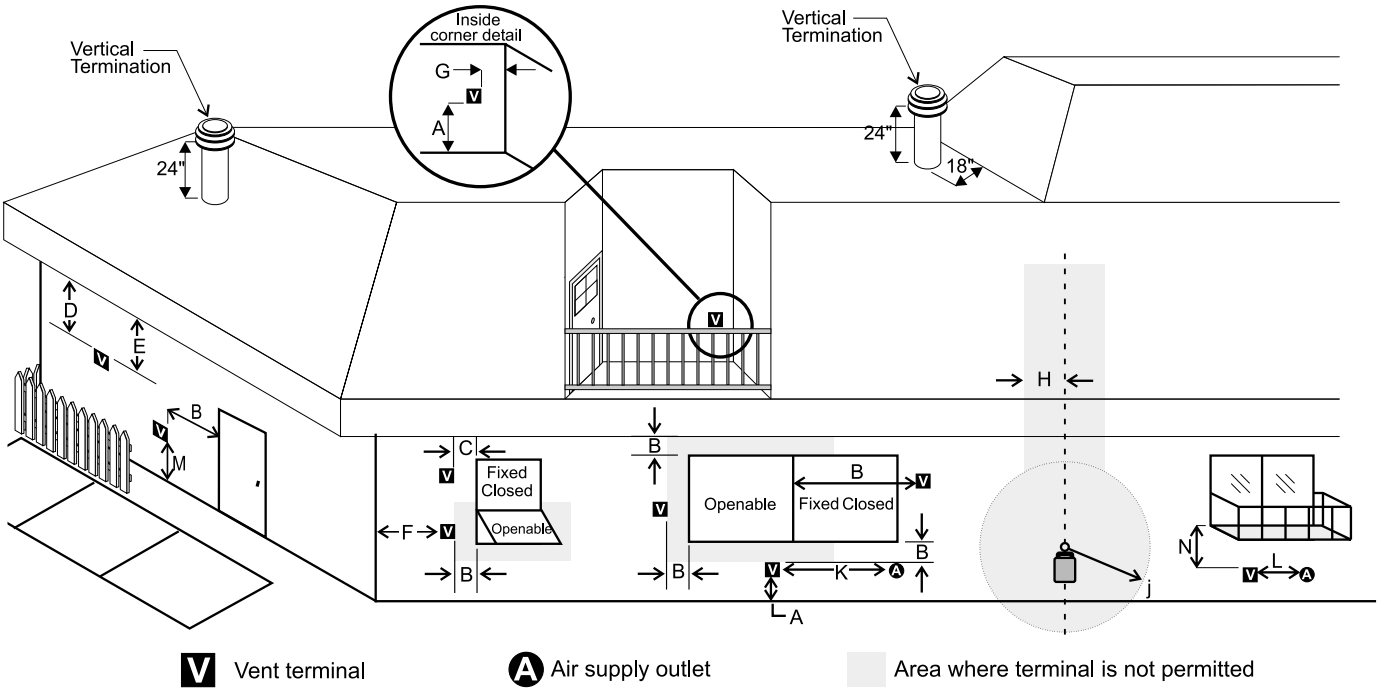
The Masport uses the "balanced flue" technology Co Axial system. The inner liner flues products of combustion to the outside while the outer liner draws outside combustion air into the combustion chamber thereby eliminating the need to use heated room air for combustion and losing warm room air up the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

There are 2 flue systems approved for use with the Roma: the Masport Direct Vent System (Flex) for Horizontal Terminations only, and the Masport System for Vertical Terminations.

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

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

EXTERIOR FLUE TERMINATION LOCATIONS



A= Clearance above grade, veranda, porch, deck, or balcony *(min. 12"/30cm)
B= Clearance to window or door that may be opened *(12"/30cm)
C= Clearance to permanently closed window *(min. 12"/30cm) recommended to prevent condensation on window
D= Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of (24"/60cm) from the centerline of the terminal (min. 18"/46cm) check with local code.
E= Clearance to unventilated soffit (min. 15"/38cm)
F= Clearance to outside corner: with ***AstroCap*** Termination Cap (min 6"/15cm), with Dura-Vent Termination Cap (14"/36cm)
G= Clearance to inside corner: with ***AstroCap*** Termination Cap (min 6"/15cm), with Dura-Vent Termination Cap (12"/30cm)
H= Not to be installed above a meter/regulator assembly within (3'/90cm) horizontally from the centerline of the regulator.
J= Clearance to service regulator vent outlet *(min 36"/90cm)
K= Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance *(12"/30cm)
L= Clearance to a mechanical air supply inlet *(min. 72"/1.8m)
M= Clearance above paved sidewalk or a paved driveway located on public property *(min. 84"/2.1m)
N= Clearance under veranda, porch, deck, or balcony *(min. 12"/30cm)

Note:

- A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.
- Only permitted if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.
- If the vent termination is accessible, a certified guard shall be installed.

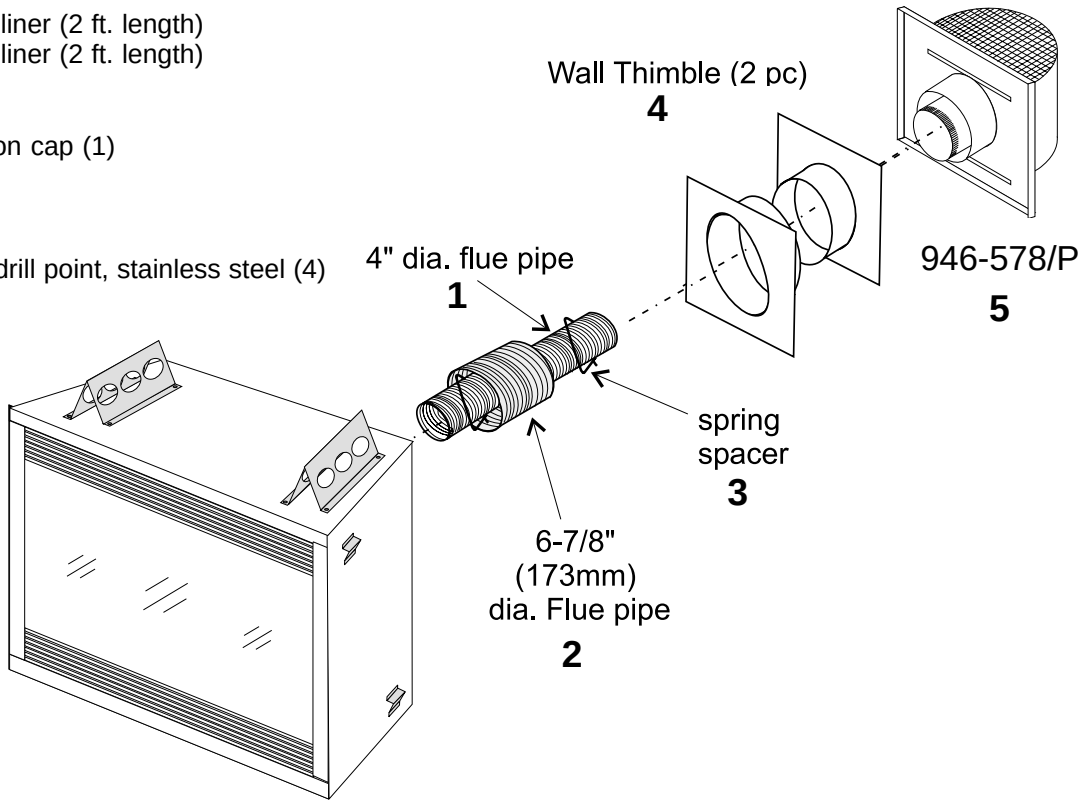
* As specified in CGA B149 Installation Code. Note: Local codes or regulations may require different clearances.

MASPORT DIRECT VENT SYSTEM (FLEX)
HORIZONTAL TERMINATIONS ONLY

This flueing system, in combination with the Roma Room Sealed Gas Fireplace, have been tested and listed as a room sealed heater system by Warnock Hersey. The location of the termination cap must conform to the requirements in the flue terminal Locations diagram.

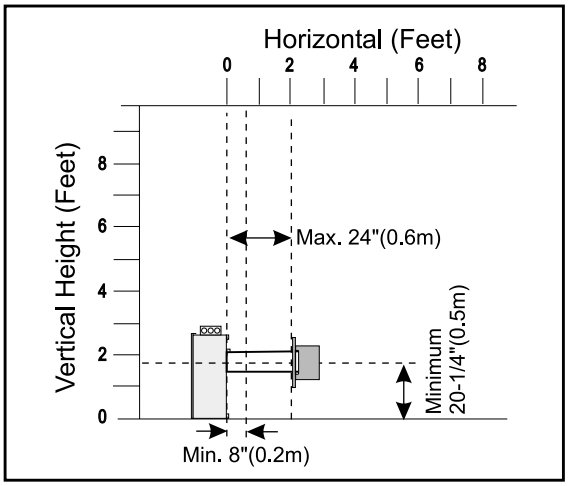
Masport Direct Vent (Flex) System Termination Kit (Part # 946-513) includes all the parts needed to install the Roma with a maximum run of 2 feet.

1) 178mm dia. flexible liner (2 ft. length)
2) 100mm dia. flexible liner (2 ft. length)
3) Spring spacers (3)
4) Thimble (2)
5) ***AstroCap*** termination cap (1)
6) Screws (12)
7) Tube of Mill Pac (1)
8) Plated screws (8)
9) Screws #8 x 1-1/2" drill point, stainless steel (4)



Note:

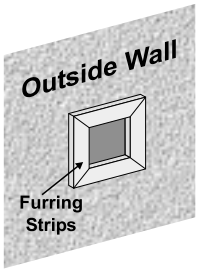
1) **Liner sections should be continuous without any joints or seams.**
2) **Only Flex pipe purchased from Masport may be used for Flex installations.**
3) **All joints must be sealed with Mil-Pac.**



INSTALLATION PROCEDURES

for Masport Direct Vent System (Flex)

1) Locate the unit in the framing, 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. Locate the centerline of the termination and mark wall accordingly. Cut a 254mm hole in the wall (inside dimension).



Note: To make the installation more aesthetically pleasing, we recommend framing out a square to mount the terminal to.

Note: A 40mm clearance around the liner must be maintained except that only a 25mm clearance is needed at the termination end. We recommend framing a 254mm x 254mm (inside dimensions) hole to give structural rigidity for mounting the termination.

2) Level the fireplace and fasten it to the framing using nails or screws through the nailing strips.

3) Assemble the flue assembly by applying Mill Pac to the 100mm inner collar of the termination and slipping the 100mm liner over it at least 35mm. Fasten with the 3 screws (drilling pilot holes will make this easier). Apply Mill Pac or high temperature silicone to the 175mm flex pipe and slip it over the 175mm outer collar of the flue terminal at least 35mm and fasten with the 3 screws.

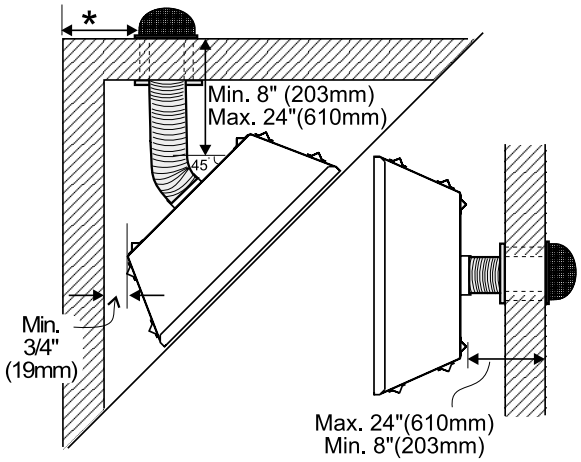
4) Separate the 2 halves of the wall thimble and securely fasten the one with the tabs to the outside wall making sure that the tabs are on top and bottom. Fasten the other thimble half to the inside wall. The thimble halves slip inside each other and can be adjusted for 2 x 4 or 2 x 6 walls. ***The liners must slip over the collars a minimum of 35mm.***

5) Slip the assembled liner and termination assembly through the thimble making sure the termination cap faces up (there are markings on the cap that show which way is up). This will position the termination cap with proper down slope for draining water. Fasten the cap to the outer wall with the 4 supplied screws.

6) Pull the centre 100mm liner and outer 175mm liner out enough to slip over the flue collars of the fireplace.

7) Apply Mill Pac over the fireplace inner collar and slip the 100mm liner down over it and attach with 3 supplied screws.

*****If this is an outside corner, the minimum distance between the flue and the outside corner is 150mm with ***AstroCap*** termination cap or 300mm with alternate termination cap (556310).

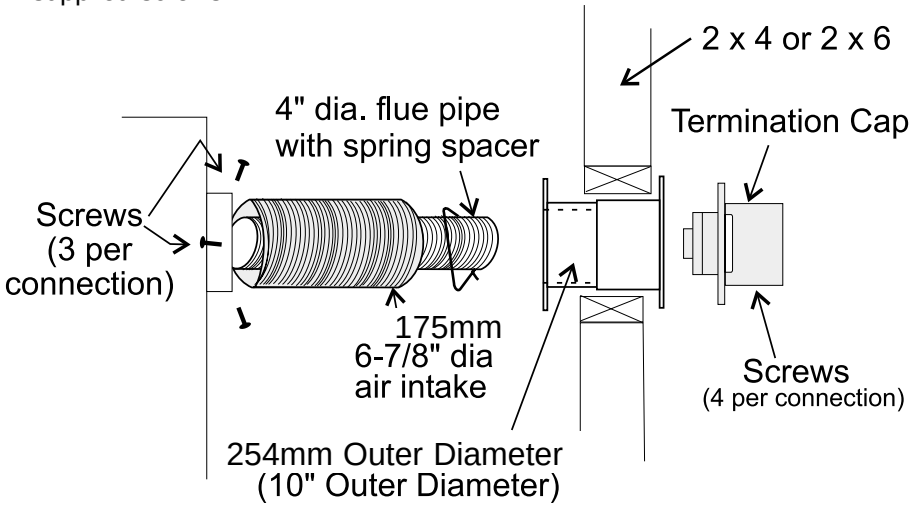


Minimum and Maximum Flue Clearances

8) Do the same with the 175mm liner.

9) Apply a bead of silicone between the thimble and termination and around the outer edge of the terminal at the wall in order to keep the water out.

IMPORTANT: Do not locate Cowl where excessive wind may occur.



FLUEING ARRANGEMENTS - HORIZONTAL TERMINATIONS

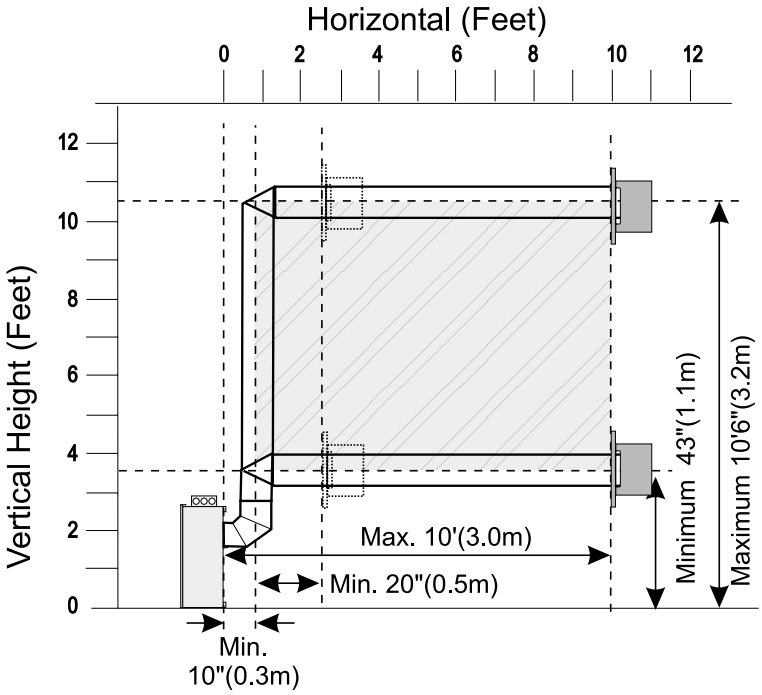
or Masport Direct Vent (Flex) for Horizontal Terminations

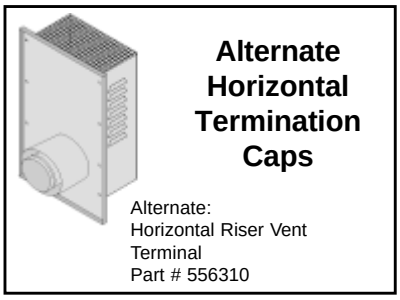
The diagram shows all allowable combinations of vertical runs with horizontal terminations, using two 90° elbows (two 45° elbows equal one 90° elbow).

A flue guard should be used whenever the termination is lower than the specified minimum or as per local codes.

- **Maintain a 40mm clearance to combustibles.**
- **Horizontal flue must be supported every 3 feet.**

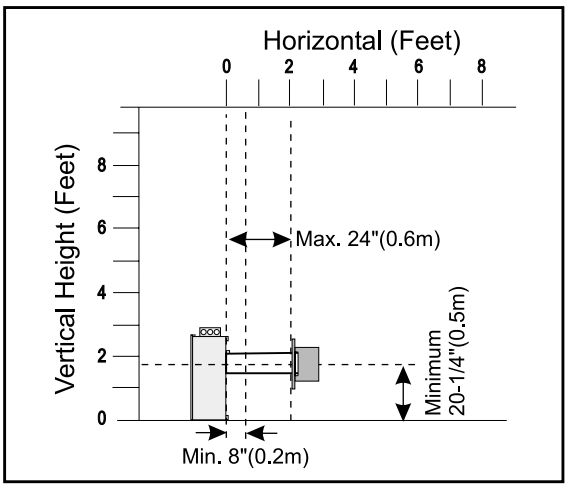
NOTE: Only the *AstroCap* (Part #: 946-578/P) and the Riser Flue (Part #: 556310) are approved for Horizontal Termination installations.





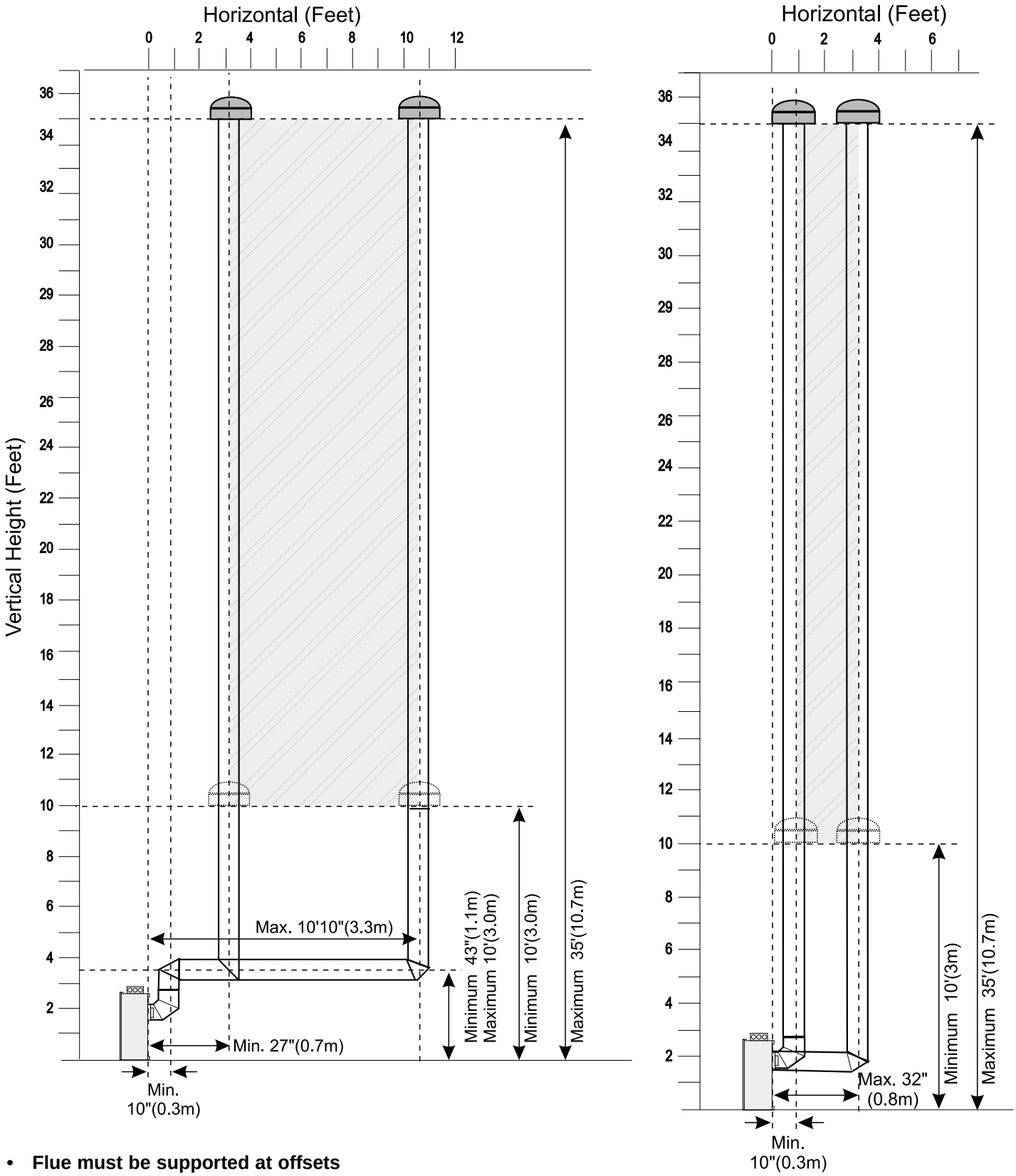
Notes:

1) **Liner sections should be continuous without any joints or seams.**
2) **Only Flex pipe purchased from Masport may be used for Flex installations.**



FLUEING ARRANGEMENTS - VERTICAL TERMINATIONS

The shaded area in the diagram shows all allowable combinations of straight vertical and offset to vertical terminations , using three 90° elbows (two 45° elbows equal one 90° elbow).



- **Flue must be supported at offsets**
- **Firestops are required at each floor level and whenever passing through a wall.**
- **Maintain a <u>40mm</u> clearance to combustibles**

HORIZONTAL INSTALLATIONS

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) Assemble the desired combination of pipe and elbows to the appliance and ensure seal wil Mil-Pac.

Note: Apply sealant "Mill-Pac" to inner pipe and high temperature silicone sealant to outer pipe on every joint.

b) Horizontal runs of flue must be supported every three feet. Wall straps are available for this purpose.

3) Mark the wall for a 254mm x 254mm square hole. The center of the square hole should line up with the centerline of the horizontal pipe. Cut and frame the 254mm square hole in the exterior wall where the flue will be terminated. If the wall being penetrated is constructed of non-combustible material, i.e. masonry block or concrete, a 178mm diameter (191mm dia. for flex) hole is acceptable.

See Horizontal Termination diagram on page 13.

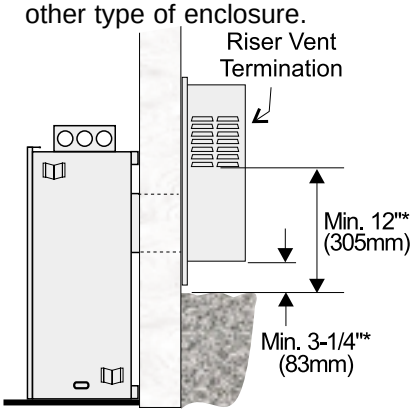
Note:

a) The horizontal run of flue must be level, or have a 6mm for every 300mm 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.

b) The location of the horizontal flue termination on an exterior wall must meet all local and national building codes, and must not be blocked or obstructed. For External Flue Terminal Locations. See diagram on Page 10.

c) Snorkel Terminations:
For installations requiring a vertical rise on the exterior of the building, 355mm Riser Flue as shown in Dia. 2a. Follow the same installation procedures as used for standard Horizontal Termination. NEVER install the snorkel upside down.

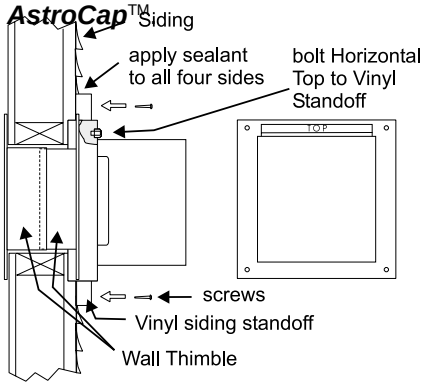
Do not attempt to enclose the Snorkel within the wall, or any other type of enclosure.



Dia. 2a

*As specified in CGA B149 Installation Code. Local codes or regulations may require different clearances.

4) The arrow on the flue cap should be pointing up. Insure that the 40mm clearances to combustible materials are maintained (Dia. 3). Install the termination cap. ***AstroCap***™.



Dia. 3

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 vinyl siding standoff or furring strips must be used to ensure that the termination is not recessed into the siding.

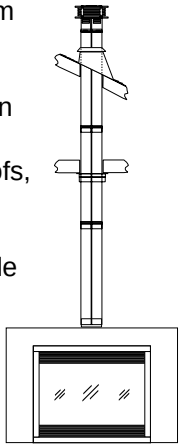
5) Before connecting the horizontal run of flue pipe to the flue termination, slide the Wall Thimble over the flue pipe.

6) 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 with 3 sheet metal screws.

WARNING:
When installing in a high wind situation, common sense must prevail. Choose a sheltered side of the house.
A non-combustible water ingress shelf will need to be fitted 200mm above the terminal to prevent water ingress in extreme conditions or where no sofit shelters the terminal.

VERTICAL TERMINATION

1) Maintain the 40mm clearances (air spaces) to combustibles when passing through ceilings, walls, roofs, enclosures, attic rafter, or other nearby combustible surfaces. Do not pack air spaces with insulation.



Dia. 1

2) Set the gas appliance in its desired location. Drop a plumb bob down from the ceiling to the position of the appliance flue exit, and mark the location 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 previously drilled in the ceiling, and mark the spot where the flue will penetrate the roof.

4) Assemble the desired lengths of pipe and elbows. Ensure that all pipes and elbow connections are fully sealed.

5) Cut a hole in the roof centered on the small drilled hole placed in the roof in Step 2. The hole should be of sufficient size to meet the minimum requirements for clearance to combustibles of 40mm. Slip the flashing under the shingles (shingles should overlap half the flashing) as per Dia. 3.

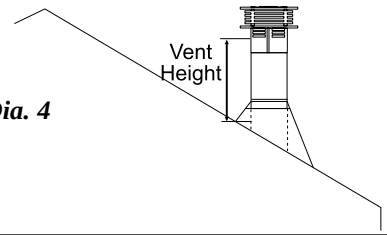
Note: Apply sealant "Mill-Pac" to inner pipe and high temperature silicone sealant to outer pipe on every joint.

6) Continue to assemble pipe lengths.

Note: If an offset is necessary in the attic to avoid obstructions, it is important to support the flue pipe every 900mm, to avoid excessive stress on the elbows, and possible separation. Wall straps are available for this purpose.

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 Dia. 4 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 flue height may solve the problem.

7) Ensure flue is vertical and secure the base of the flashing to the roof with roofing rails, slide storm collar over the pipe section and seal with a mastic.



Dia. 4

Roof Pitch	Minimum Flue Height	
	Feet	Meters
flat to 7/12	2	0.61
over 7/12 to 8/12	2	0.61
over 8/12 to 9/12	2	0.61
over 9/12 to 10/12	2.5	0.76
over 10/12 to 11/12	3.25	0.99
over 11/12 to 12/12	4	1.22
over 12/12 to 14/12	5	1.52
over 14/12 to 16/12	6	1.83
over 16/12 to 18/12	7	2.13
over 18/12 to 20/12	7.5	2.29
over 20/12 to 21/12	8	2.44

8) Install the vertical termination cap.

Note: Any closets or storage spaces, which the flue passes through must be enclosed.

Follow the current AG 601 and NZS 5262 standards.

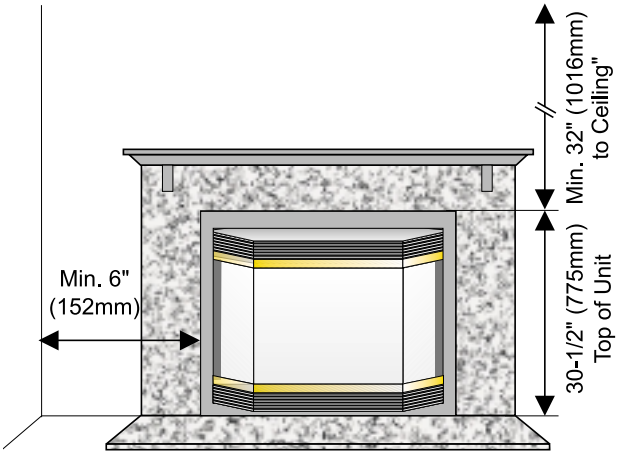
Grenada / Calais (P36-2) Framing, Flue & Clearance Information

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 vent system be installed only in accordance with these instructions.

Clearance to combustibles from:	
Back (0mm) **Side** (0mm) **Floor** (0mm) NOTE: The minimum floor clearance must be maintained from the top surface of the carpeting, tile, etc.	Side Wall Clearance **Bay or Flush Front** (152mm) **Vent** (38mm) Flex
Minimum Clearance from Top of Unit to: **Mantel*** min. (177mm) **Ceiling** (1016mm) from top of unit. **Horizontal Clearances** Top (51mm) Side (40mm) Bottom (40mm)	**Alcove Clearances:** **Max. Depth** (914mm) **Min. Width** (1219mm) **Min. Height** (1499mm)



Clearances for Bay or Flush Front

WARNING
Fire hazard is an extreme risk if these clearances are not adhered to.

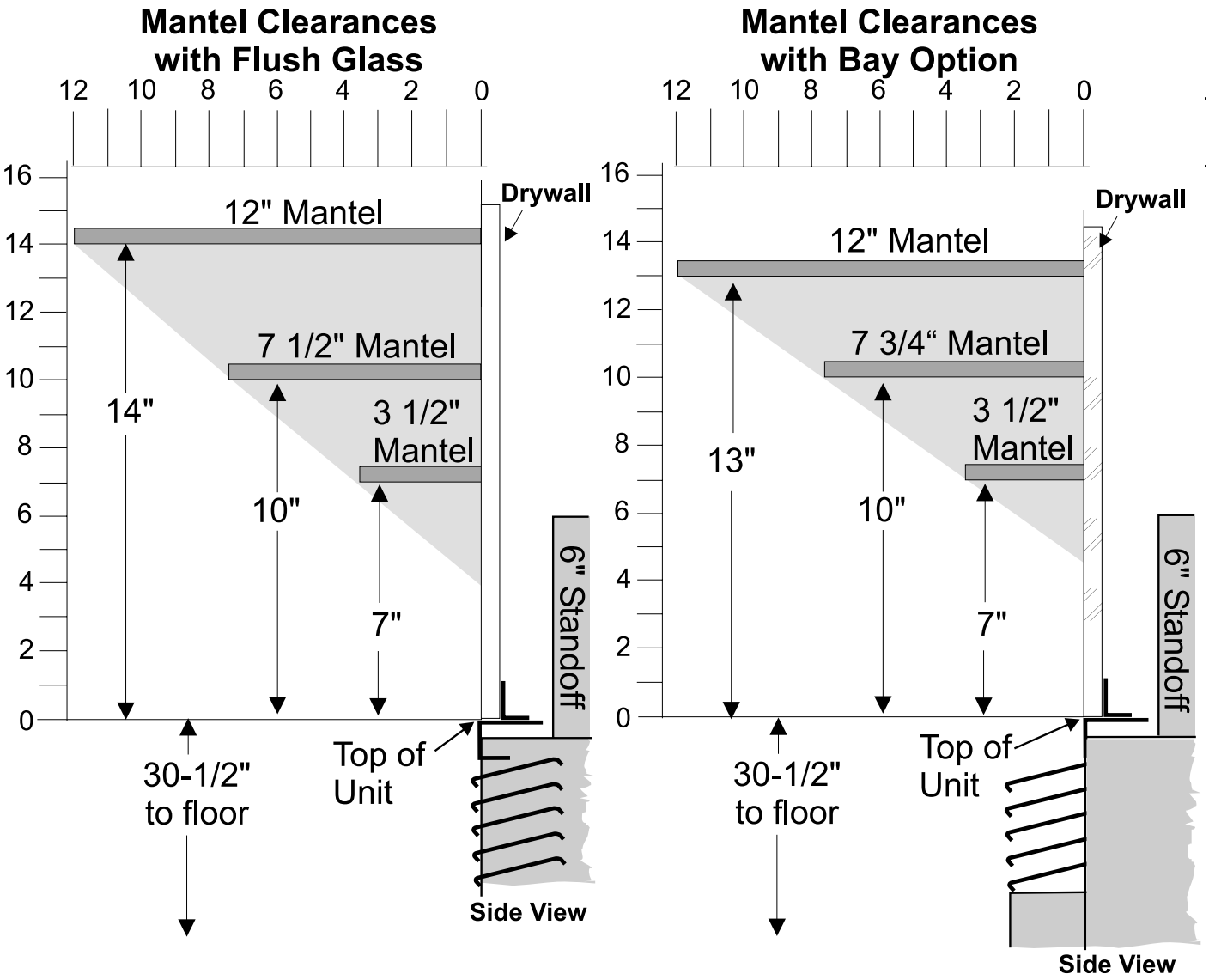
Note:
Gas supply from right hand side and power from left hand side

COMBUSTIBLE MANTELS

Because of the extreme heat this fireplace emits, the mantel clearances are critical.

Note:

A non-combustible mantel may be installed at a lower height if the framing is made of metal studs covered with a non-combustible board.



These drawings are to scale at 1:6 (one inch = 6 inches)
Mantel can be installed anywhere in shaded area or higher using the above scale.

Note:

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

LOCATING YOUR GAS FIRE

1) When selecting a location for your fire, ensure that the clearances outlined on this page are met.

2) Provide adequate clearances for servicing.

3) The appliance must be installed on a flat, solid, continuous surface (e.g. wood, metal, concrete). This may be the floor, or raised up on a platform to enhance its visual impact. If the appliance is going to be installed on carpeting, combustible linoleum tile or other combustible material other than wood flooring, the appliance must be installed on a metal or wood panel extending the full width and depth of the appliance.

4) The Grenada/Calais Co Axial Flue Gas Fireplace can be installed in a recessed position or framed out into the room as in A, B, C, D. See Diagram 1.

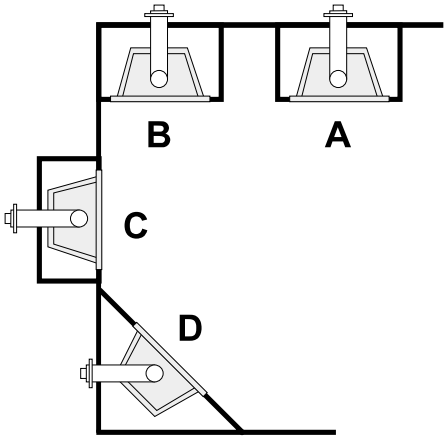


Diagram 1

A) Flat on Wall
B) Flat on Wall Corner
C) Recessed into Wall/Alcove
D) Corner

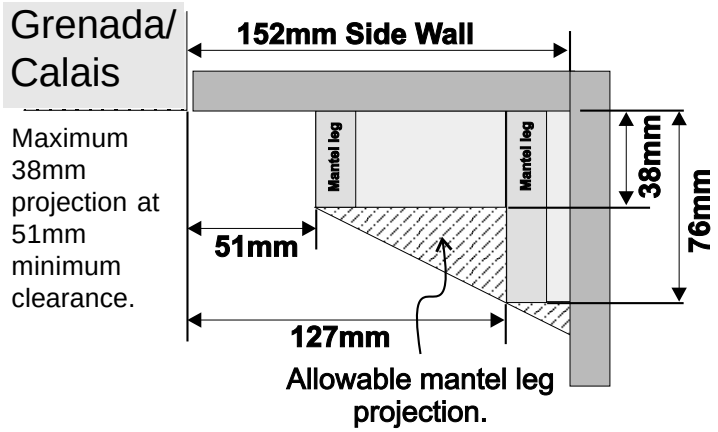
5) This appliance is lsted for bedroom installations when used with a listed millivolt thermostat. Some areas may have further requirements, check local codes before installation.

6) The Grenada/Calais Co Axial Flue Gas Fireplace is approved for alcove installations, which meet the clearances listed on this page.

7) We recommend that you plan your installation on paper using exact measurements for clearances and floor protection before actually installing this appliance. Have an authorized inspector, dealer, or installer review your plans before installation.

MANTEL LEG CLEARANCES

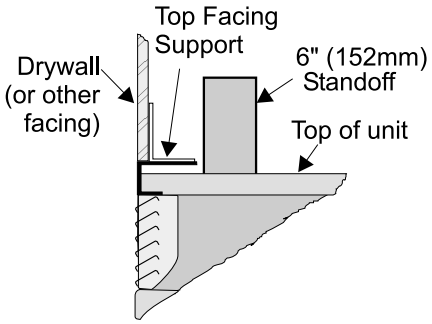
Combustible mantel leg clearances as per diagram below:



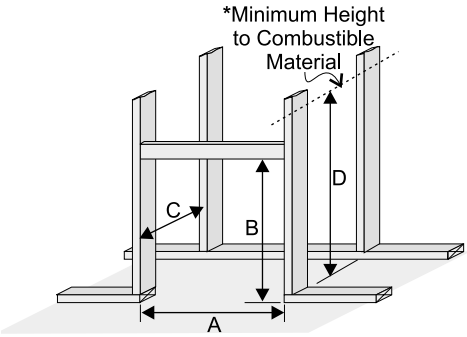
FRAMING AND FINISHING

1) Determine the total thickness of facing material (e.g. drywall plus ceramic tiles) to allow the finished surface to be flush with the front of the unit. Total facing thickness can vary from 13mm to 32mm thick.

Install Side Nailing Strips, Top Facing Support, and Top Standoffs before unit is slipped into position.



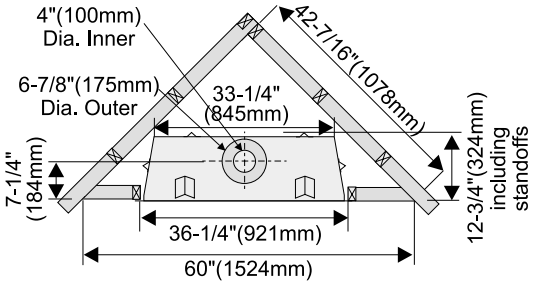
2) Frame in the enclosure for the unit with framing material. The framed opening is 921mm high x 921mm wide x 324mm deep.



Framing Dimensions			
A	B	C	D
921mm	921mm	324mm	1168mm*

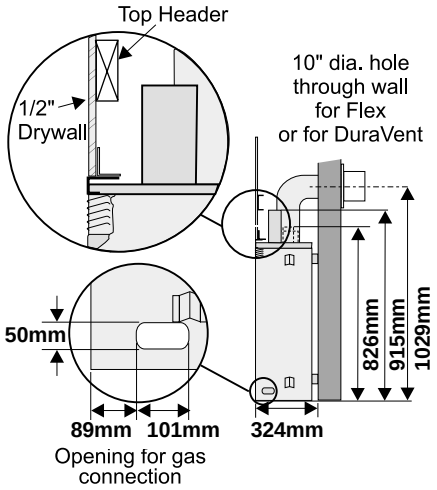
* 'D' is Minimum height to combustible materials including the Minimum 2" (51mm) Top clearance to the Horizontal Flue.

Note:
Above are framing dimension NOT finished wall dimensions



3) 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.)**

4) The top of the unit must not be closer than 813mm to the ceiling.



Note: 1029mm is the minimum height for flex termination flueing.

Note: The unit does not have to be completely enclosed in a chase. The clearance on top of the unit is 0mm to the standoffs so combustible building materials can be laid directly on top of the standoffs. You must maintain 40mm clearance from the flue to combustible materials for flex).

6) Use steel studs for framing where the 40mm clearance from the flue to combustible material cannot be maintained, e.g. front top header.

FLUEING INTRODUCTION

The Grenada/Calais uses the "balanced flue" technology Co Axial 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.

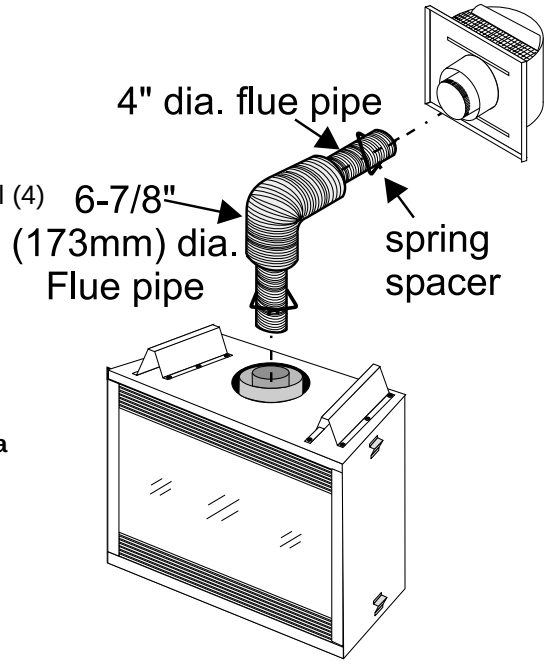
Note: These flue pipes must not be connected to any other appliance.

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

This flueing system has been tested and listed as a room sealed heater system by Warnock Hersey. The location of the termination cap must conform to the requirements in the flue terminal Locations diagram.

Masport Direct Vent (Flex) System Termination Kit (Part # 946-125) includes all the parts needed to install the Grenada/Calais with a maximum run of 4 feet.

1) 6-7/8" dia. flexible liner (2 ft. length)
2) 4" dia. flexible liner (2 ft. length)
3) Spring spacers (3)
4) Thimble (2)
5) ***AstroCap*** termination cap (1)
6) Screws (12)
7) Tube of Mill Pac (1)
8) Plated screws (8)
9) Screws #8 x 1-1/2" drill point, stainless steel (4)



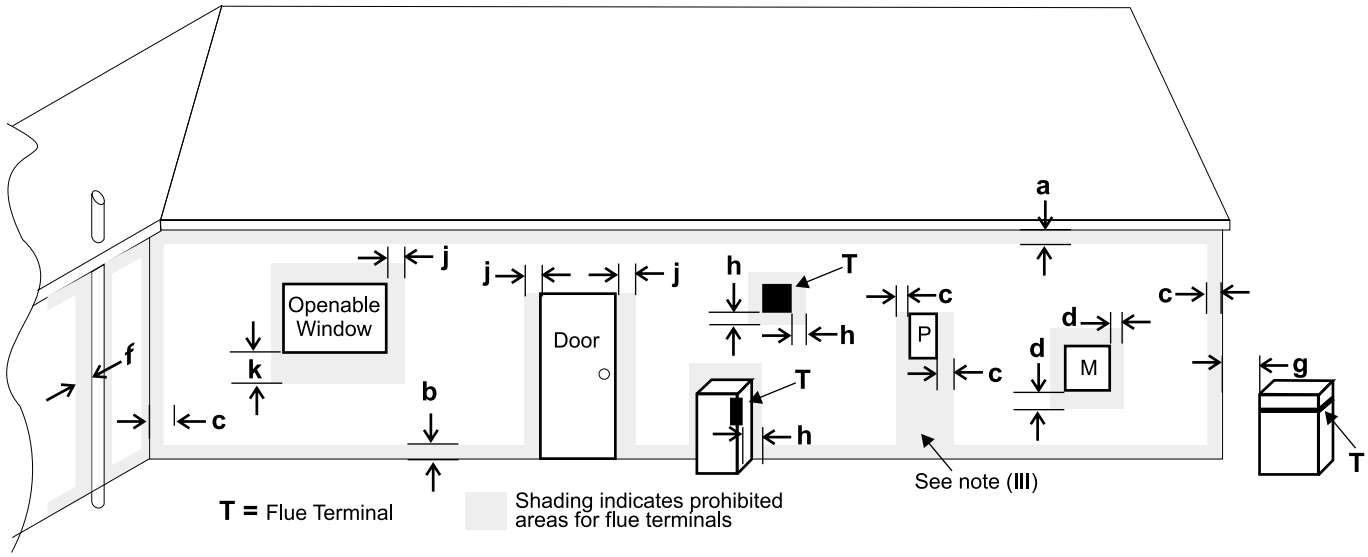
AstroCap
946-578/P

Notes:

1) **Liner sections should be continuous without any joints or seams.**
2) **Only Flex pipe purchased from Masport may be used for Flex installations.**
3) **If you are installing the Grenada/Calais into a Masport Mantel Kit, use the minimum horizontal vent height (centreline of 1029mm). Remember to include the mantel base in your calculations and to maintain the 32mm clearance (51mm with Flex) to the underside of the mantel top.**

INSTALLATION

EXTERIOR FLUE TERMINATION LOCATIONS



Minimum clearances required for balanced flue terminals or the flue terminals of outdoor appliances according to AG 601 (AGA gas installation code) or NZS 5262 (New Zealand)

		Minimum Clearance (mm)
a	Below eaves, balconies or other projections:	
	- Appliances up to 50 MJ/h input	300
	- Appliances over 50 MJ/h input	500
b	From the ground or above a balcony	500
c	From a return wall or external corner	500
d	From a gas meter (M)	1000
e	From an electricity meter or fuse box (P)	500
f	From a drain or soil pipe	150
g	Horizontal from any building structure (unless appliance is approved for closer installation) or obstruction facing a terminal	500
h	From any other flue terminal, cowl or combustion air intake	500
j	Horizontally from an openable window, door, or non-mechanical air inlet, or any other opening into a building, with the exception of sub-floor ventilation (see also Note (I)):	
	- Appliances up to 150 MJ/h input	500
	- Appliances over 150 MJ/h input	1500
k	Vertically below an openable window, door, or non-mechanical air inlet, or any other opening into a building, with the exception of sub-floor ventilation (see also Note (I)): see table below	

Clerances ‘k’ in mm			
Space Heaters		All Other Alppliances	
Up to 50 MJ/h Input	Up to 50 MJ/h Input	Over 50MJ/h input to 50 MJ/h inut	Over 50MJ/h input
150	500	1000	1500

NOTES:

(I) For mechanical air inlets, including spa blowers, the clearance 'j' and 'k' shall be 1500 mm in all cases.

(II) All distances shall be measured vertically or horizontally along the wall to a point in line with the nearest par to of the terminal.

(III) Prohibited area below electricity meter or fuse box extends to ground level.

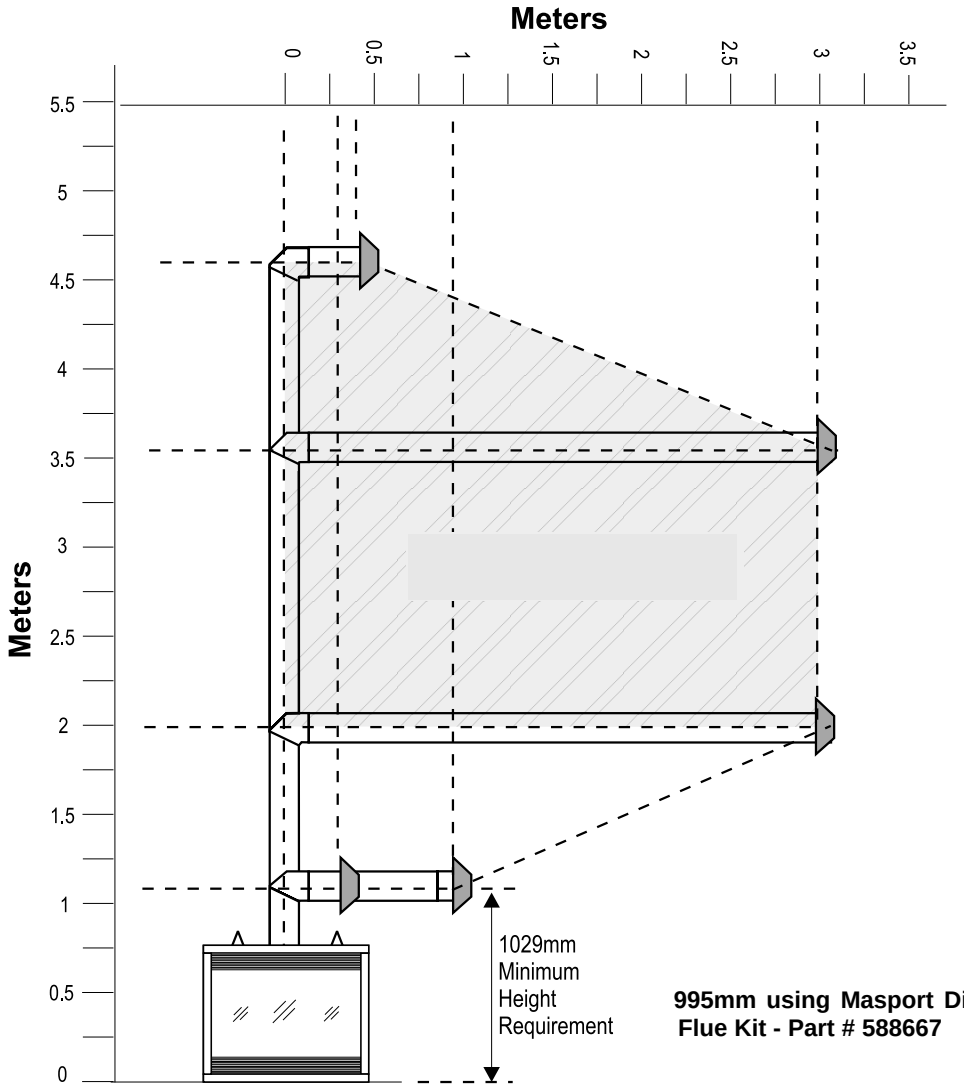
(IV) A flue terminal of this type shall not be located under a roofed area unless the roofed area is fully open on at least two sides and a free flow of air at the appliance is achieved.

FLUEING ARRANGEMENTS - HORIZONTAL TERMINATIONS

MASPORT DIRECT FLUE SYSTEM (FLEX)

(Propane & Natural Gas)

The diagram shows all allowable combinations of vertical runs with horizontal terminations, using one 90° elbow (two 45° elbows equal one 90° elbow).



A flue guard should be used whenever the termination is lower than the specified minimum or as per local codes.

Note: Flexi Direct Vent system is only approved for horizontal terminations.

995mm using Masport Direct Vent Flue Kit - Part # 588667

- **Maintain clearances to combustibles.**
- **Horizontal flue must be supported every 1 metre.**

NOTE: If you are installing the Grenada/Calais into a Masport Mantel Kit, use the minimum horizontal flue height (centreline of 1029mm. Remember to include the mantel base in your calculations and to maintain the 40mm clearance with rigid pipe systems (51mm with flex) to the underside of the mantel top.

ALL INNER FLUE JOINTS MUST BE SEALED WITH MIL-PAC SEALANT

WARNING:

When installing in a high wind situation, common sense must prevail. Choose a sheltered side of the house.

A non-combustible water ingress shelf will need to be fitted 200mm above the terminal to prevent water ingress in extreme conditions or where no sofit shelters the terminal.

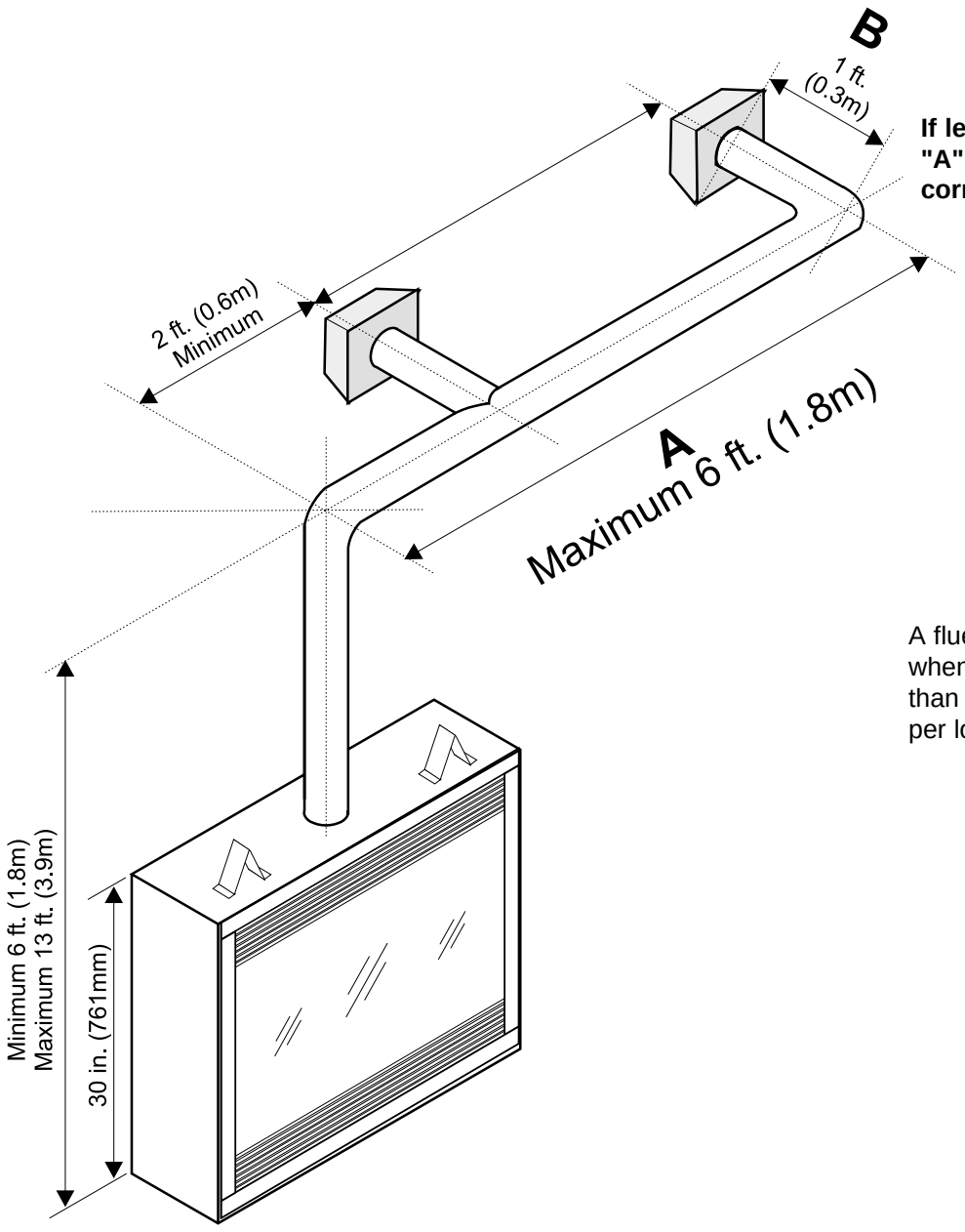
FLUEING ARRANGEMENTS - HORIZONTAL TERMINATIONS

MASPORT CO AXIAL FLUE SYSTEM (FLEX)

(Propane & Natural Gas)

The diagram below shows examples of horizontal termination arrangements using two 90° elbows (two 45° elbows equal one 90° elbow).

Note: 1) A maximum of two 90° elbows are permitted.
2) A minimum of 1.8m vertical from base of unit is required if two 90° elbows are used.
3) Minimum distance between elbows is 600mm.
4) Determine the permitted range of horizontal termination arrangements by using chart on page 12 and deducting 1 metre from the maximum horizontal distance for the second 90° elbow.



If length "B" is increased, length "A" must be decreased by a corresponding amount.

A flue guard should be used whenever the termination is lower than the specified minimum or as per local codes.

- **Maintain clearances to combustibles.**
- **Horizontal flue must be supported every 1 metre.**

FLUEING ARRANGEMENTS - VERTICAL TERMINATIONS

The Grenada/Calais is approved for a 23 ft. (7.0m) vertical, with a maximum 12 ft. (3.7m) horizontal offset using two 90° elbows (two 45° elbows equal one 90° elbow)

The Grenada/Calais is approved for a 37 ft. (11.3m straight vertical, including a 510mm horizontal offset using two 90° elbow (two 45° elbows equal one 90° elbow)

- **Flue must be supported at offsets**
- **Maintain clearances to combustibles as listed.**

Note: Flexi Direct Vent System is only approved for horizontal terminations.

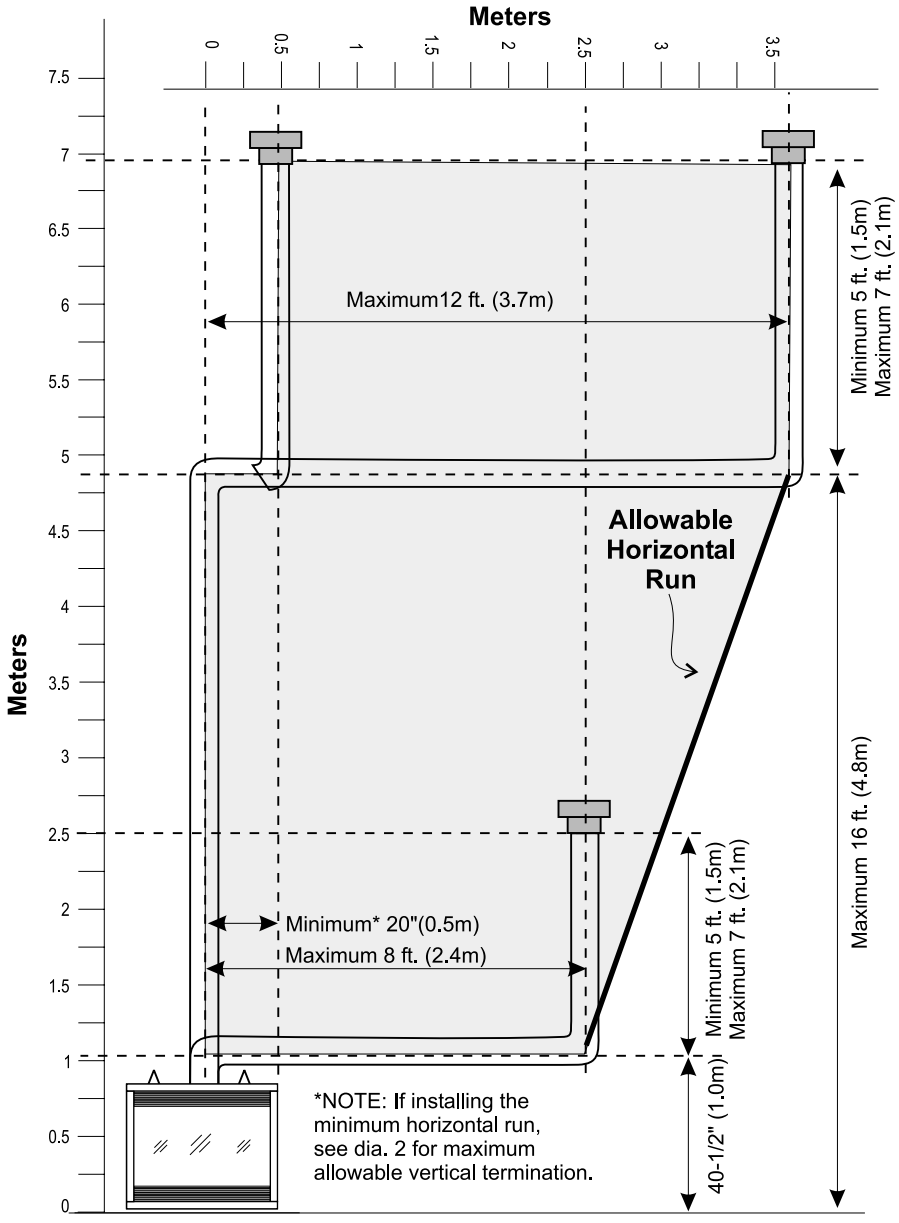


Diagram 1

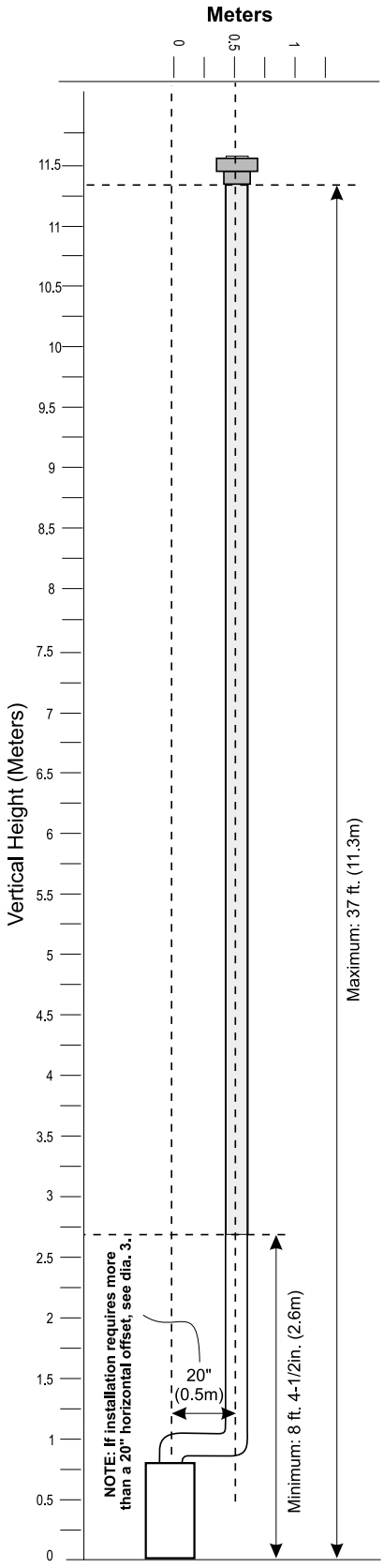


Diagram 2

The Grenada/Calais is approved for a 37 ft. (11.3m) straight vertical.

The shaded area in the diagram 3 shows all allowable combinations of straight vertical and offset to vertical terminations. Maximum two 45° elbows allowed.

- **Flue must be supported at offsets**
- **Maintain clearances to combustibles.**

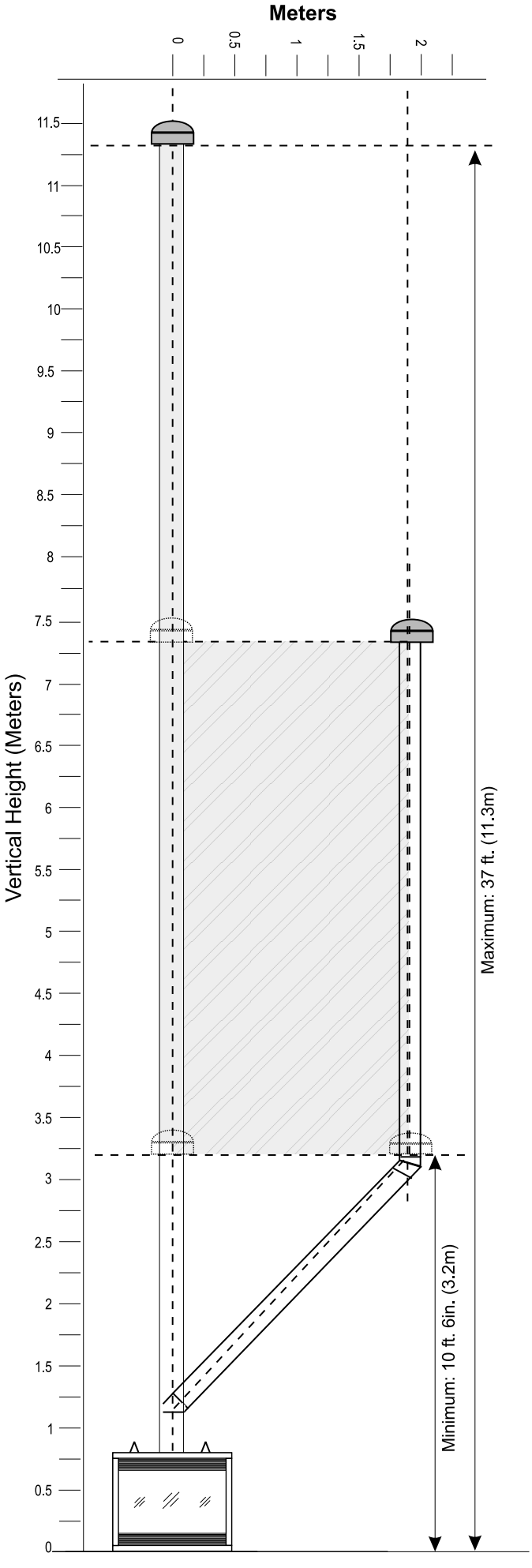


Diagram 3

HORIZONTAL INSTALLATIONS

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.

Note: Apply sealant "Mill-Pac" to inner pipe and high temperature silicone sealant to outer pipe on every joint.

a) Horizontal runs of flue must be supported every three feet.

2) Mark the wall for a 254mm x 254mm square hole. The centre of the square hole should line up with the centreline of the horizontal pipe. Cut and frame the 254mm square hole in the exterior wall where the flue will be terminated. If the wall being penetrated is constructed of non-combustible material, i.e. masonry block or concrete, a (178mm dia. 191mm dia. for flex) hole is acceptable.

Note:

a) The horizontal run of flue must have a 6mm rise for every 305mm run towards the termination. Never allow the flue to run downward. This could cause high temperatures and may present the possibility of a fire.

b) The location of the horizontal flue termination on an exterior wall must meet all local and national building codes, and must not be blocked or obstructed. For External Flue Terminal Locations.

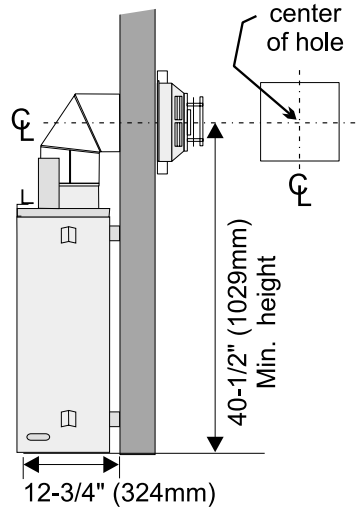


Diagram 2

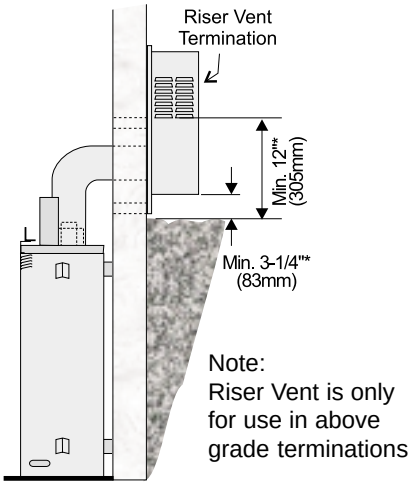


Diagram 3a

3) The arrow on the flue cap should be pointing up. Insure that the 40mm clearances to combustible materials are maintained. Install the termination cap, diagram 5.

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 vinyl siding standoff or furring strips must be used to ensure that the termination is not recessed into the siding.

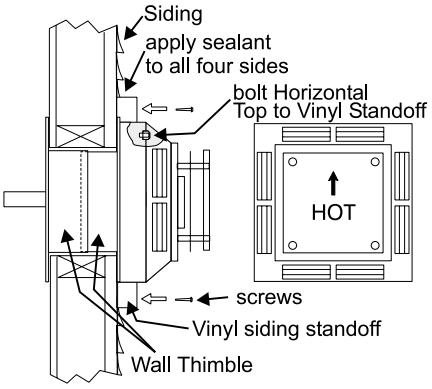


Diagram 3

4) Before connecting the horizontal run of flue pipe to the flue termination, slide the Wall Thimble over the flue pipe.

5) 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 by attaching the two sheet metal strips extending from the flue cap assembly into the outer wall of the flue pipe. Use the two sheet metal screws provided to connect the strips to the pipe section. See Diagram 4.

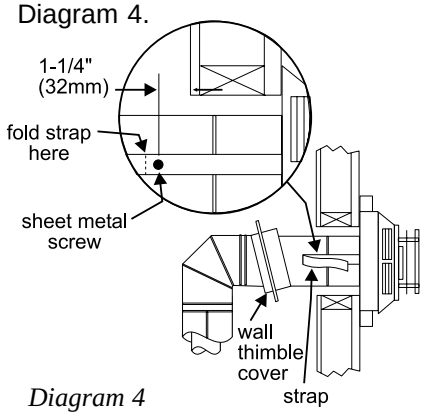


Diagram 4

6) Install wall thimble in the center of the 254mm square and attach with wood screws (Diagram 5).

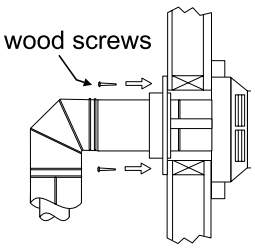


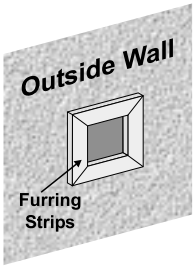
Diagram 5

INSTALLATION PROCEDURES

for Masport Direct Vent System (Flex)

1) Locate the unit in the framing, 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. Locate the centerline of the termination and mark wall accordingly. Cut a 254mm hole in the wall (inside dimension).

Note: A 40mm clearance around the liner must be maintained except that only a 25mm clearance is needed at the termination end. We recommend framing a 254mm x 254mm (inside dimensions) hole to give structural rigidity for mounting the termination.

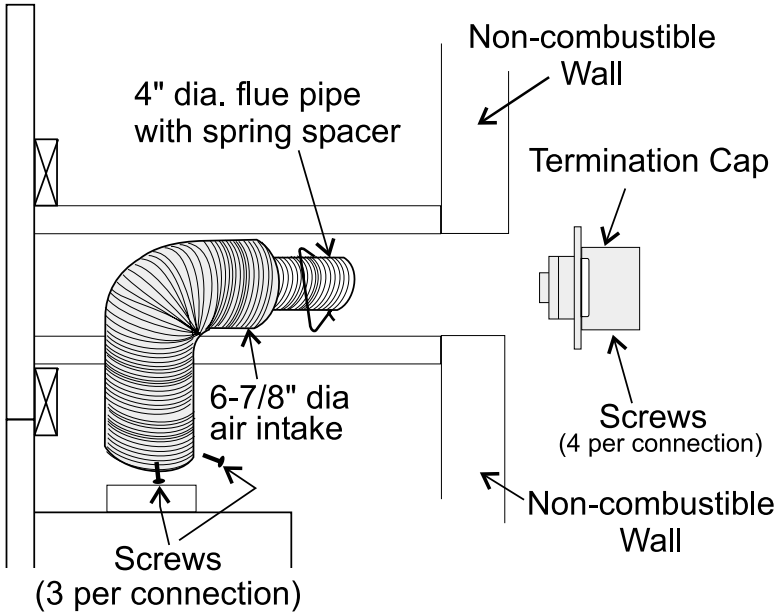


Note: To make the installation more aesthically pleasing, we recommend framing out a square to mount the terminal to.

2) Level the fireplace and fasten it to the framing using nails or screws through the nailing strips.

3) Assemble the vent assembly by applying Mill Pac to the 100mm inner collar of the termination and slipping the 100mm) liner over it at least 35mm). Fasten with he 3 screws (drilling pilot holes will make this easier). Apply Mill-Pac or high temperature silicone to the 175mm flex pipe and slip it over the 175mm outer collar of the vent terminal at least 35mm) and asten with the 3 screws.

NOTE: Horizontal sections must be supported at intervals not exceeding 1 metre. (Flame picture and performance will be affected by sags in the liner).



4) Separate the 2 halves of the wall thimble and securely fasten the one with the tabs to the outside wall making sure that the tabs are on top and bottom. Fasten the other thimble half to the inside wall. The thimble halves slip inside each other and can be adjusted for 2 x 4 or 2 x 6 walls. ***The liners must slip over the collars a minimum of 35mm.***

5) Slip the assembled liner and termination assembly through the thimble making sure the termination cap faces up (there are markings on the cap that show which way s up). This will position the termination cap with proper down slope for draining water. Fasten the cap to the outer wall with the 4 supplied screws.

6) Pull the centre 100mm) liner and outer 175mm liner out enough to slip over the flue collars of the fireplace. (You may wish to cut the liner shorter to make it more workable.) Do not bend liner more than 90°.

7) Apply Mill Pac over the fireplace inner collar and slip the 100mm liner down over it and attach with 3 supplied screws.

8) Do the same with the 175mm liner.

9) Apply a bead of silicone between the thimble and termination and around the outer edge of the terminal at the wall in order to keep the water out.

NOTE: Installation and annual service must be performed by a qualified installer, service agency or the gas supplier to validate warranty. The information in this manual is subject to change without notice. Always refer to the information in the Installation Manual that is included with each unit.

VERTICAL TERMINATIONS

1) Maintain the 40mm clearances (air spaces) to combustibles when passing through ceilings, walls, roofs, enclosures, attic rafter, or other nearby combustible surfaces. Do not pack air spaces with insulation.

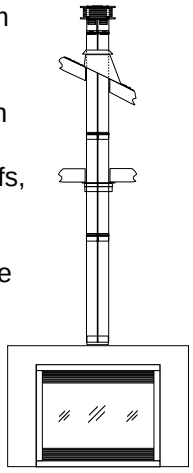


Diagram 1

2) Set the gas appliance in its desired location. Drop a plumb bob down from the ceiling to the position of the appliance flue exit, and mark the location 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 previously drilled in the ceiling, and mark the spot where the flue will penetrate the roof. Determine if 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.

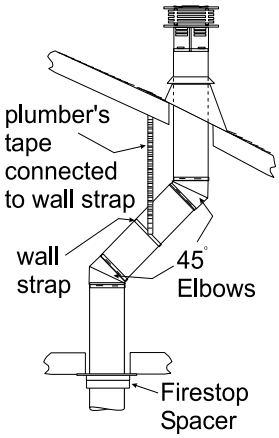
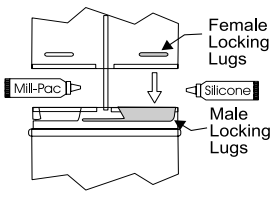


Diagram 2



Note: Apply sealant "Mill-Pac" to inner pipe and high temperature silicone sealant to outer pipe on every joint.

3) A ceiling plate must be installed in the floor or ceiling of every level.

4) Assemble the desired lengths of pipe and elbows. Ensure that all pipes and elbow connections are fully sealed.

5) Cut a hole in the roof centred on the small drilled hole placed in the roof in Step 2. The hole should be of sufficient size to meet the minimum requirements for clearance to combustibles of 40mm. Slip the flashing under the shingles (shingles should overlap half the flashing) as per Diagram 4.

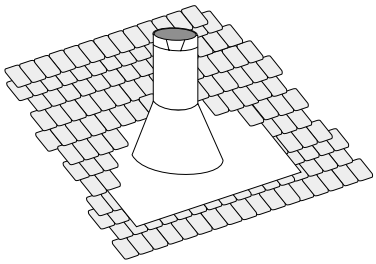


Diagram 4: The upper half of the flashing is installed under the roofing material and not nailed down until the chimney is installed. This allows for small adjustments.

6) Continue to assemble pipe lengths.

Note: If an offset is necessary in the attic to avoid obstructions, it is important to support the flue pipe every 900mm, 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. 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.

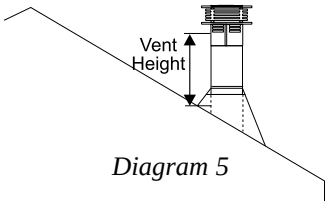


Diagram 5

Roof Pitch	Minimum Flue Height	
	Feet	Metres
flat to 7/12	2	0.61
over 7/12 to 8/12	2	0.61
over 8/12 to 9/12	2	0.61
over 9/12 to 10/12	2.5	0.76
over 10/12 to 11/12	3.25	0.99
over 11/12 to 12/12	4	1.22
over 12/12 to 14/12	5	1.52
over 14/12 to 16/12	6	1.83
over 16/12 to 18/12	7	2.13
over 18/12 to 20/12	7.5	2.29
over 20/12 to 21/12	8	2.44

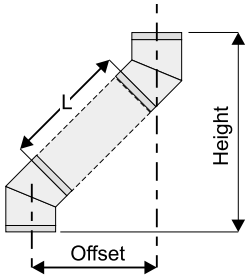
7) Ensure flue is vertical and secure the base of the flashing to the roof with roofing rails, slide storm collar over the pipe section and seal with a mastic.

8) Install the vertical termination cap by twist-locking it.

Note: Any closets or storage spaces, which the flue passes through must be enclosed.

Offset Chart

GS 6"(152mm) Nominal Diameter ID					
Offset		Pipe Length (L)		Height	
inches	mm	inches	mm	inches	mm
4 ¾	121	0	0	13 1/4	337
9	229	6	152	17 1/2	445
11 1/4	286	9	229	19 1/2	495
13 1/4	337	12	305	21 3/4	552
21 3/4	552	24	610	30 1/4	768
30 1/4	768	36	914	39	991
38	965	48	1219	47	1194



Newport (P121) / Newport Pier (P131) Framing, Flue & Clearance Information

CLEARANCES

The clearances listed below are minimum distances unless otherwise stated.

Clearance to combustibles from:

Back	(0mm)
Side	(0mm)
Floor	(0mm)

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

Determine the total thickness of the finished floor (eg. tile, carpet, slate) to allow the finished surface to be flush with the base of the unit.

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.

Ceiling Height from Floor (1829mm)

Mantel Height from Base of Unit:
(991mm)

Horizontal Flue Clearances:

Top	(64mm)
Side	(40mm)
Bottom	(40mm)

Vertical Flue Clearances (40mm)

COMBUSTIBLE MANTELS

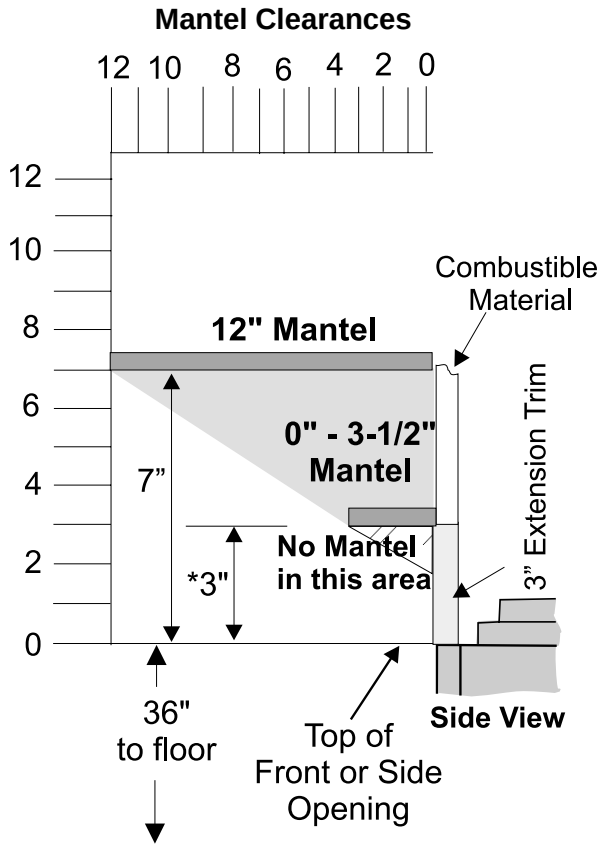
Because of the extreme heat this fireplace emits, the mantel clearances are critical. Combustible mantel clearances from top of unit are shown in Diagram to the right.

Note: A non-combustible mantel may be installed at a lower height if the framing is made of metal studs covered with a non-combustible board.

This drawing is to scale at 1:6 (one inch = 6 inches)
Mantel can be installed anywhere in shaded area or higher using this scale.

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

* If the 3" metal extension trim is removed it must be replaced with a 3" non-combustible material.



FRAMING AND FINISHING

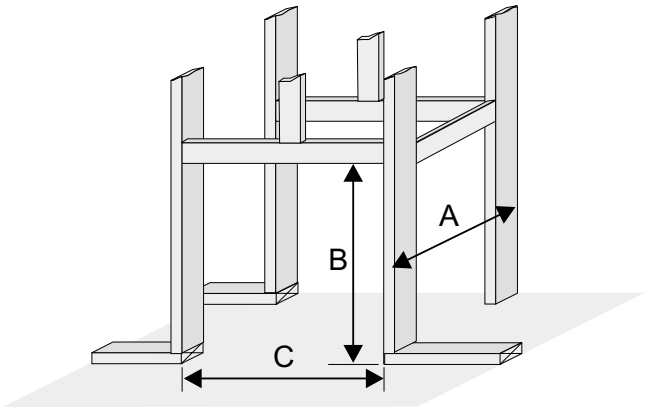
1) For ease of installation, frame your fireplace after it is positioned and the flue system is installed. Remember to install the top standoffs.

   CAUTION: Verify your fireplace dimensions, framing methods and finished wall facing details before framing. Determine the total thickness of facing material - drywall plus ceramic tiles, slate, etc. Allow the finish surface to be flush with the front or side of the unit. Total facing thickness can vary from 13mm to 32mm thick.

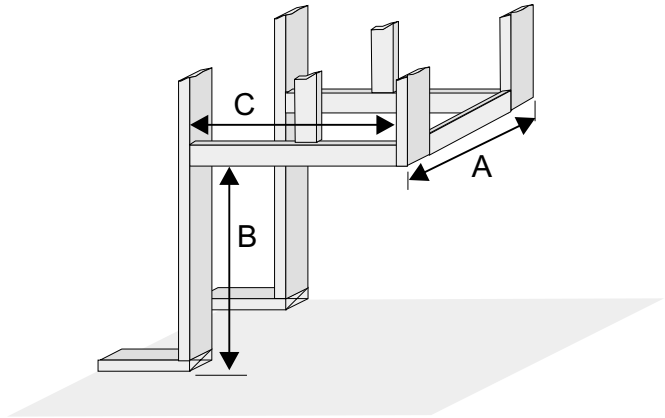
2) When locating your appliance on an exterior wall or in a chase, apply a vapour barrier and drywall, as per local building codes. **DO NOT INSULATE THE FIREPLACE ITSELF.**

   CAUTION: The unit does not have to be completely enclosed in a chase. The clearance on top of the unit is 0mm to the standoffs so combustible building materials can be laid directly on top of the standoffs. You must maintain clearance from the flue to combustible materials for both rigid and flex.

P121 - See Thru



P131 - Pier



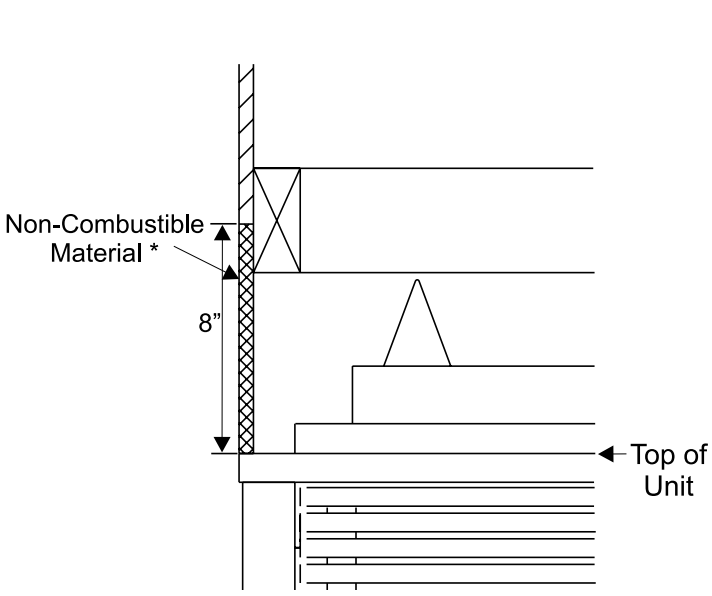
Note: These units are non-load bearing.

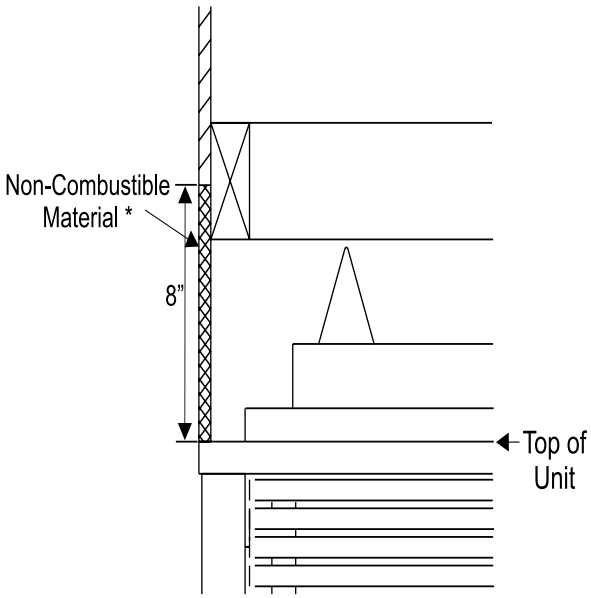
Framing Dimensions		
	P121 (See Thru)	**P131 (Pier)**
A	25"(635mm) minus two times the finishing material thickness*	25"(635mm) minus two times the finishing material thickness*
B	42-1/2"(1080mm)	42-1/2"(1080mm)
C	46-3/4"(1187mm)	45" (1143mm) minus one time the finishing material thickness*

* Finish material thickness includes: drywall, ceramic tile, slate, etc.

FACING & FINISHING REQUIREMENTS

This fireplace is supplied with a 76mm metal extension trim above the fireplace. The extension trim may be replaced if the framing is faced with a non-combustible material placed flush with the front and side face of the unit and extending from the top of the unit. (ie. tile, slate, etc.)

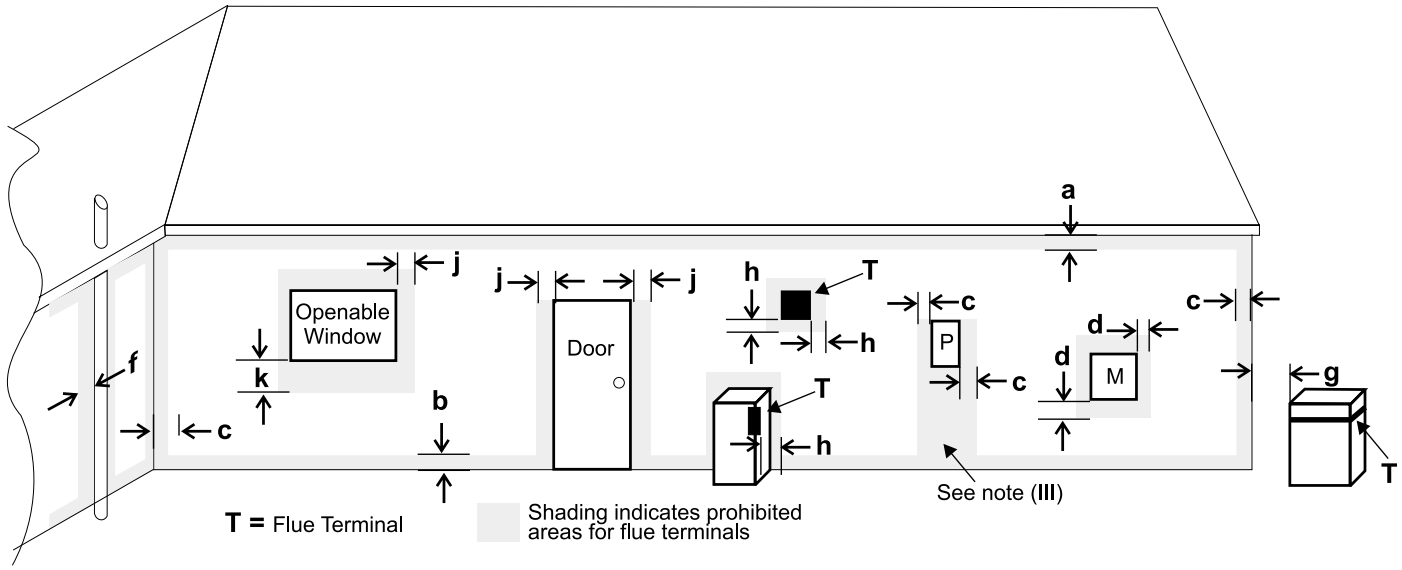




NOTE:

Installation and annual service must be performed by a qualified installer, service agency or the gas supplier to validate warranty. The information in this manual is subject to change without notice. Always refer to the information in the Installation Manual that is included with each unit.

EXTERIOR FLUE TERMINATION LOCATIONS



Minimum clearances required for balanced flue terminals or the flue terminals of outdoor appliances According to AG 601 (AGA gas installation code) or NZS 5261 (New Zealand)

		Minimum Clearance (mm)
a	Below eaves, balconies or other projections:	
	- Appliances up to 50 MJ/h input	300
	- Appliances over 50 MJ/h input	500
b	From the ground or above a balcony	500
c	From a return wall or external corner	500
d	From a gas meter (M)	1000
e	From an electricity meter or fuse box (P)	500
f	From a drain or soil pipe	150
g	Horizontal from any building structure (unless appliance is approved for closer installation) or obstruction facing a terminal	500
h	From any other flue terminal, cowl or combustion air intake	500
j	Horizontally from an openable window, door, or non-mechanical air inlet, or any other opening into a building, with the exception of sub-floor ventilation (see also Note (I)):	
	- Appliances up to 150 MJ/h input	500
	- Appliances over 150 MJ/h input	1500
k	Vertically below an openable window, door, or non-mechanical air inlet, or any other opening into a building, with the exception of sub-floor ventilation (see also Note (I)): see table below	

Clearance 'k' in mm			
Space heaters		All other appliances	
Up to 50 MJ/h input	Up to 50 MJ/h input	Over 50 MJ/h input to 150 MJ/h input	Over 150 MJ/h input
150	500	1000	1500

NOTES:

(I) For mechanical air inlets, including spa blowers, the clearance 'j' and 'k' shall be 1500 mm in all cases.

(II) All distances shall be measured vertically or horizontally along the wall to a point in line with the nearest par to of the terminal.

(III) Prohibited area below electricity meter or fuse box extends to ground level.

(IV) A flue terminal of this type shall not be located under a roofed area unless the roofed area is fully open on at least two sides and a free flow of air at the appliance is achieved.

FLUEING INFORMATION FOR NEWPORT/NEWPORT PIER

The Newport/Newport Pier uses the “balanced flue” technology Co Axial system. The inner liner vents 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 vent 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 vent system. Common vent systems are prohibited.

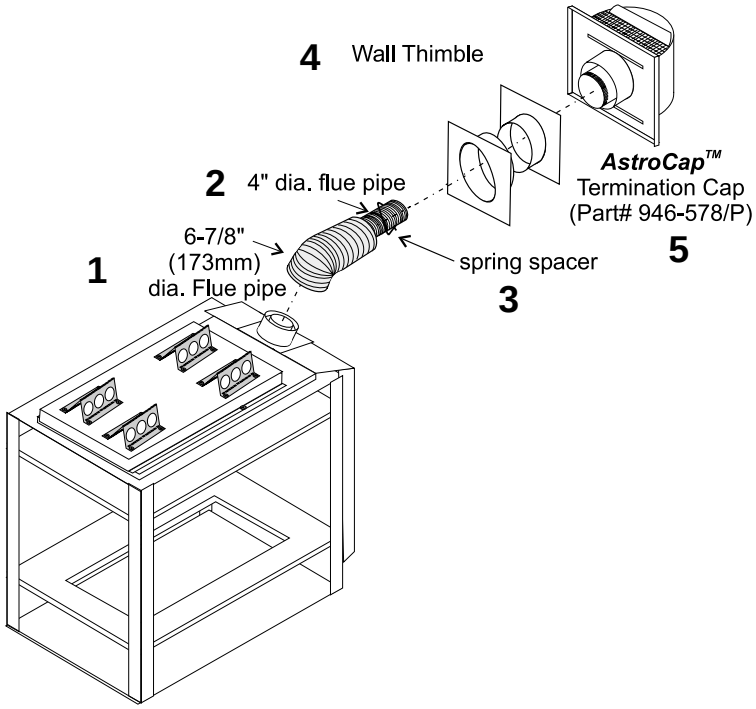
FLUEING ARRANGEMENT - HORIZONTAL TERMINATIONS

Masport Direct Vent System (Flex) Horizontal Terminations Only

These flueing systems, in combination with the Newport/Newport Pier Direct Vent Gas Fireplace, have been tested and listed as a direct flue heater system by Warnock Hersey. The location of the termination cap must conform to the requirements in the Vent Terminal Locations diagram.

Masport Direct Vent (Flex) System Termination Kit (Part# 946-513) includes all the parts needed to install the Newport/Newport Pier with a maximum run of 610mm.

1) 178mm dia. flexible liner (2 ft. length)
2) 100mm dia. flexible liner (2 ft. length)
3) Spring spacers (3)
4) Thimble (2)
5) ***AstroCap*** termination cap (1)
6) Screws (12)
7) Tube of Mill Pac (1)
8) Plated screws (8)
9) Screws #8 x 1-1/2" drill point, stainless steel (4)



Notes:

1) Liner sections should be continuous without any joints or seams.

2) Only Flex pipe purchased from Masport may be used for Flex installations.

3) Masport Direct Vent System (Flex) is only ap proved for horizontal terminations.

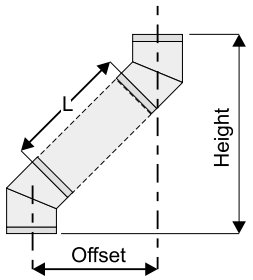
WARNING

When installing in a possible highwind situation common sence must prevail. Choose sheltered side of the house.

Note:
Any closets or storage spaces, which the flue passes through must be enclosed.

Offset Chart

GS 6"(152mm) Nominal Diameter ID					
Offset		Pipe Length (L)		Height	
inches	mm	inches	mm	inches	mm
4 ¾	121	0	0	13 1/4	337
9	229	6	152	17 1/2	445
11 1/4	286	9	229	19 1/2	495
13 1/4	337	12	305	21 3/4	552
21 3/4	552	24	610	30 1/4	768
30 1/4	768	36	914	39	991
38	965	48	1219	47	1194



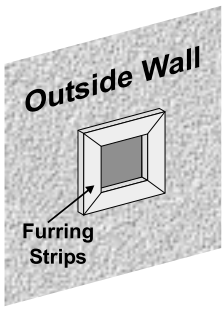
INSTALLATION PROCEDURES

for Masport AstroCap™ Direct Flue System (Flex)

1) Locate the unit in the framing, rough in the gas. Locate the centerline of the termination and mark wall accordingly. Cut a 254mm hole in the wall (inside dimension).

Note: A 40mm clearance around the liner must be maintained except that only a 25mm clearance is needed at the termination end. We recommend framing a 254mm x 254mm (inside dimensions) hole to give structural rigidity for mounting the termination.

Note: To make the installation more aesthetically pleasing, we recommend framing out a square to mount the terminal to.



2) Level the fireplace and fasten it to the framing using nails or screws through the nailing strips.

3) Assemble the flue assembly by applying Mill Pac to the 100mm inner collar of the termination and slipping the 100mm liner over it at least 35mm. Fasten with the 3 screws (drilling pilot holes will make this easier). Apply Mill Pac or high temperature silicone to the 175mm flex pipe and slip it over the 175mm outer collar of the flue terminal at least 35mm and fasten with the 3 screws.

NOTE: Horizontal sections must be supported at intervals not exceeding 900mm). (Flame picture and performance will be affected by sags in the liner).

4) Separate the 2 halves of the wall thimble and securely fasten the one with the tabs to the outside wall making sure that the tabs are on top and bottom. Fasten the other thimble half to the inside wall. The thimble halves slip inside each other and can be adjusted for 2 x 4 or 2 x 6 walls. ***The liners must slip over the collars a minimum of 35mm.***

5) Slip the assembled liner and termination assembly through the thimble making sure the termination cap faces up (there are markings on the cap that show which way is up). This will position the termination cap with proper down slope for draining water. Fasten the cap to the outer wall with the 4 supplied screws.

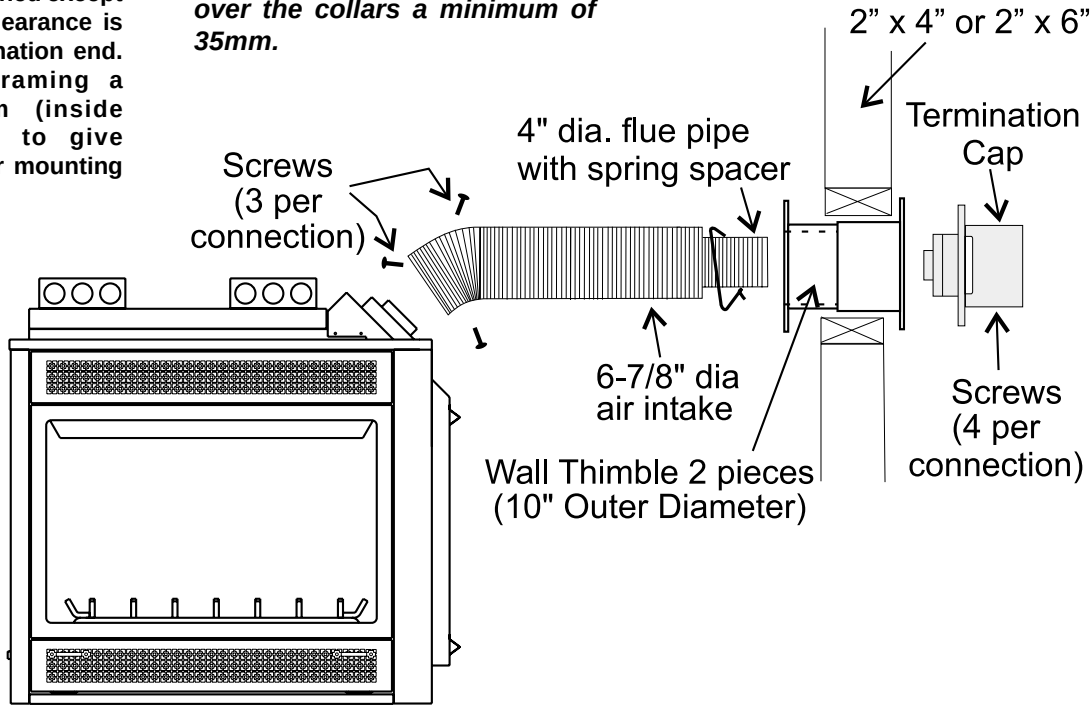
6) Pull the centre 100mm liner and outer 175mm liner out enough to slip over the flue collars of the fireplace. (You may wish to cut the liner shorter to make it more workable.) Do not bend liner more than 45°.

7) Apply Mill Pac over the fireplace inner collar and slip the 100mm liner down over it and attach with 3 supplied screws.

8) Do the same with the 175mm liner.

9) Apply a bead of silicone between the thimble and termination and around the outer edge of the terminal at the wall in order to keep the water out.

IMPORTANT:
Do not locate termination hood where excessive wind may occur.



Horizontal Flueing with Two (2) 90° Elbows

Option	V	H + H1
A)	1' (305mm) Minimum	2' (610mm) Maximum
B)	2' (610mm) Minimum	5' (1.5m) Maximum
C)	3' (914mm) Minimum	8' (2.4m) Maximum
D)	4' (1.22m) Minimum	11' (3.35m) Maximum
E)	5' (1.5m) Minimum	14' (4.27m) Maximum
F)	6' (1.86m) Minimum	15' (4.5m) Maximum

With the above options, maximum total pipe length if 37 feet with minimum of 6 feet total vertical and maximum 15 feet total horizontal.
Please note minimum 300mm between 90° elbows is required.

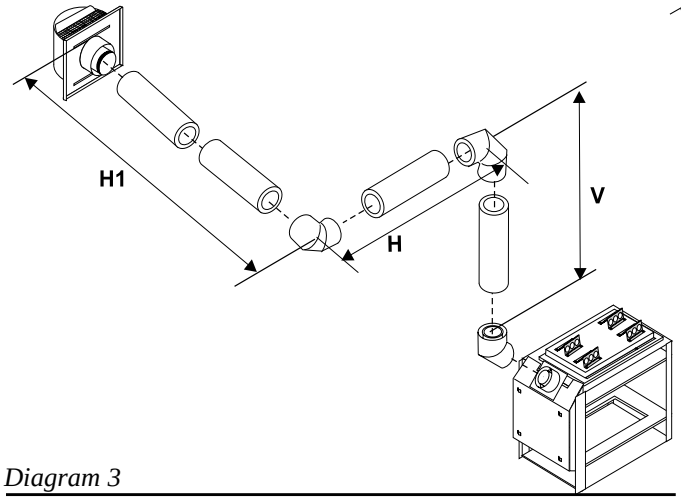


Diagram 3

Horizontal Flueing with Two (2) 90° Elbows

Option	V	H	H + H1
A)	1' (305mm) Min.	1' (305mm) Max.	3' (914mm) Max.
B)	2' (610mm) Min.	3' (0.91m) Max.	6' (1.86m) Max.
C)	3' (914mm) Min.	5' (1.5m) Max.	9' (2.7m) Max.
D)	5' (1.5m) Min.	8' (2.4m) Max.	12' (3.6m) Max.

With the above options, maximum total pipe length if 37 feet with minimum of 5 feet total vertical and maximum 12 feet total horizontal.
Please note minimum 305mm between 90° elbows is required.

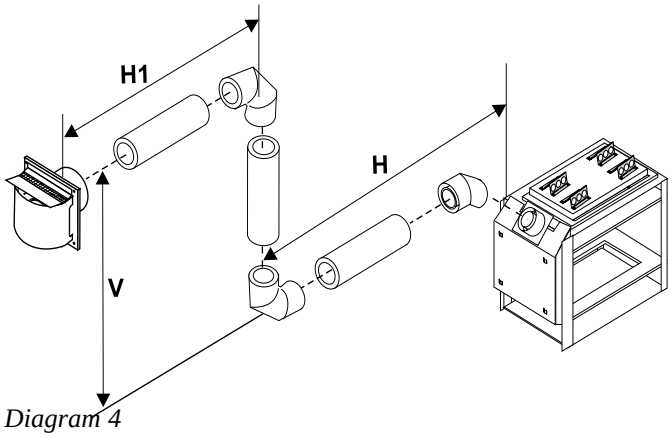


Diagram 4

Horizontal Flueing with Three (3) 90° Elbows

Option	V	H	H + H1 + H2
A)	2' (610mm) Min.	1' (305mm) Max.	3' (914mm Max.
B)	3' (914mm) Min.	3' (914mm) Max.	6' (1.86m) Max.
C)	4' (1.22mm) Min.	5' (1.5m) Max.	9' (2.7m) Max.
D)	5' (1.5m) Min.	7' (2.13m) Max.	12' (3.6m) Max.

With the above options, maximum total pipe length if 37 feet with minimum of 5 feet total vertical and maximum 12 feet total horizontal.
Please note minimum 305mm between 90° elbows is required.

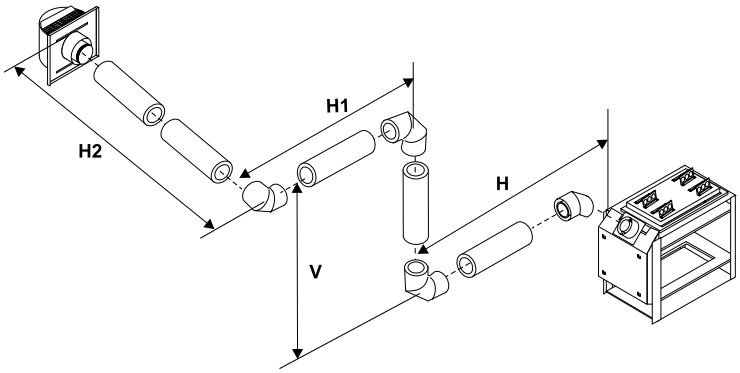


Diagram 5

Horizontal Flueing with Three (3) 90° Elbows

Option	V + V1	H + H1
A)	2' (610mm) Minimum	3' (914mm) Maximum
B)	3' (914mm) Minimum	6' (1.86m) Maximum
C)	4' (1.22m) Minimum	9' (2.7m) Maximum
D)	5' (1.5m) Minimum	12' (3.6m) Maximum

With the above options, maximum total pipe length if 37 feet with minimum of 5 feet total vertical and maximum 12 feet total horizontal.
Please note minimum 305mm between 90° elbows is required.

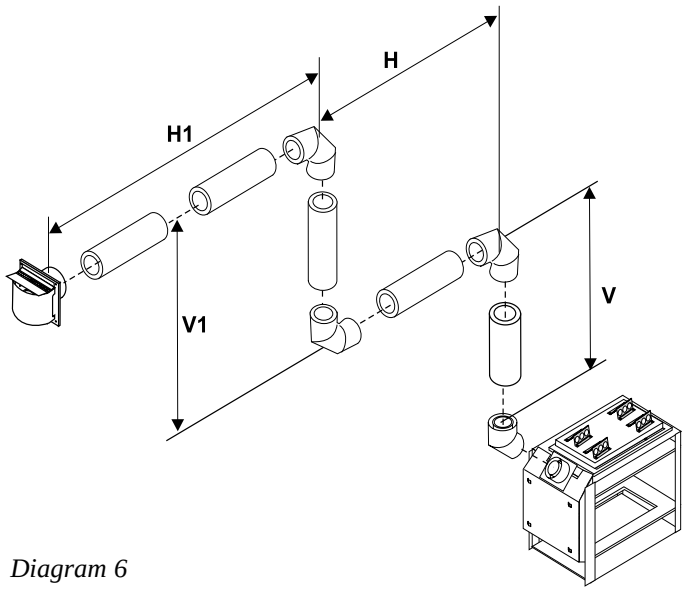


Diagram 6

FLUEING ARRANGEMENTS - VERTICAL TERMINATIONS

- **Flue must be supported at offsets**
- **Maintain clearances to combustibles.**

The Newport/Newport Pier is approved for a maximum 35 ft. (10.7m) straight vertical flue systems for Propane and Natural Gas, as per diagram 7 below.

Straight Up Vertical Flueing

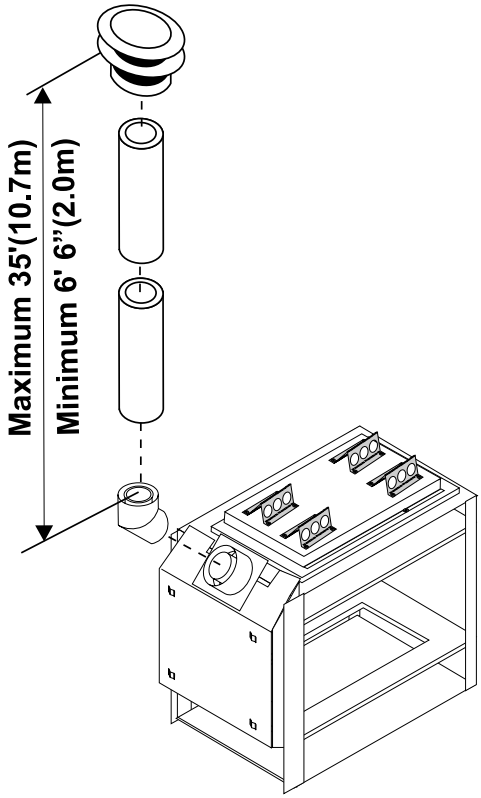


Diagram 7

Vertical Flueing with One (1) 90° Elbow

Option	V	H
A)	1' (305mm) Minimum	2' (610mm) Maximum
B)	2' (610mm) Minimum	4' (1.22m) Maximum
C)	3' (914mm) Minimum	6' (1.86m) Maximum
D)	4' (1.22m) Minimum	8' (2.4m) Maximum

With the above options, maximum total pipe length if 37 feet with minimum of 4 feet total vertical and maximum 8 feet total horizontal.
Please note minimum 305mm between 90° elbows is required.

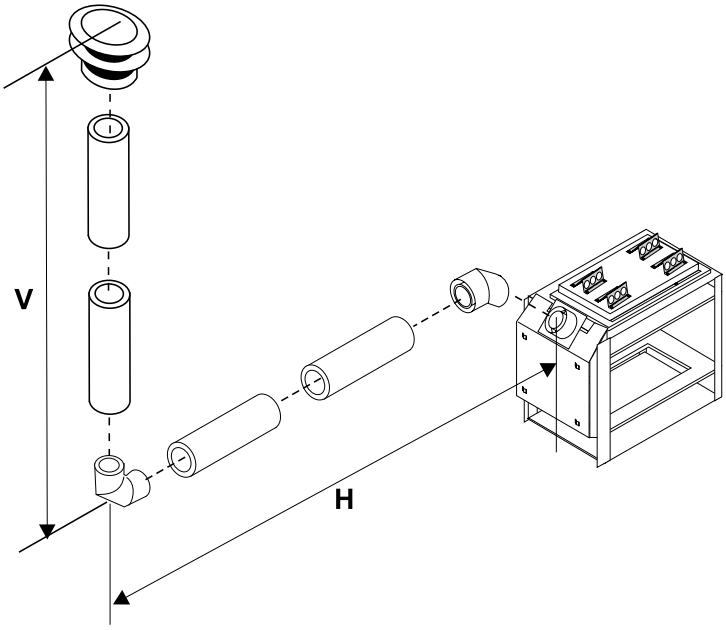


Diagram 8

Vertical Flueing with Two (2) 90° Elbows

Option	V	H
A)	1' (305mm) Minimum	4' (1.22m) Maximum
B)	2' (610mm) Minimum	6' (1.86m) Maximum
C)	3' (914mm) Minimum	9' (2.7m) Maximum
D)	4' (1.22m) Minimum	12' (3.6m) Maximum
E)	5' (1.5m) Minimum	15' (4.5m) Maximum
F)	6' (1.86m) Minimum	17' (5.1m) Maximum

With the above options, maximum total pipe length if 37 feet with minimum of 6 feet total vertical and maximum 17 feet total horizontal.
Please note minimum 305mm between 90° elbows is required.

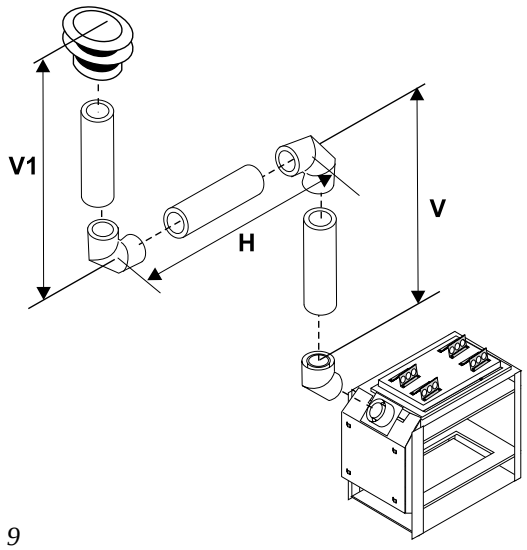


Diagram 9

Vertical Flueing with Two (2) 90° Elbows

Option	V	H + H1
A)	1' (305mm) Minimum	2' (610mm) Maximum
B)	2' (610mm) Minimum	4' (1.22m) Maximum
C)	3' (914mm) Minimum	6' (1.86m) Maximum
D)	4' (1.22m) Minimum	8' (2.4m) Maximum

With the above options, maximum total pipe length if 37 feet with minimum of 4 feet total vertical and maximum 8 feet total horizontal.
Please note minimum 305mm between 90° elbows is required.

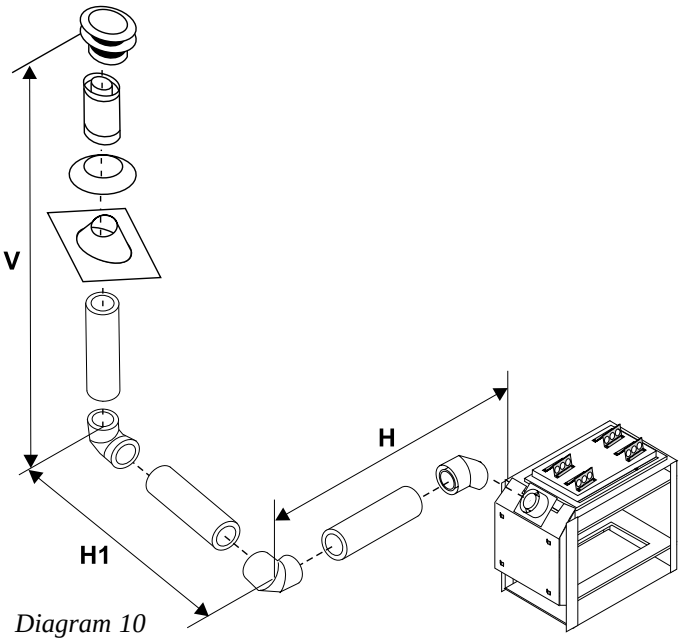


Diagram 10

Vertical Flueing with Three (3) 90° Elbows

Option	V + V1	H	H + H1
A)	2' (610mm) Min.	1' (305mm) Max.	2' (610mm) Max.
B)	3' (914mm) Min.	4' (1.22m) Max.	5' (1.5m) Max.
C)	4' (1.22mm) Min.	6' (1.86m) Max.	8' (2.4m) Max.
D)	5' (1.5m) Min.	8' (2.4m) Max.	12' (3.6m) Max.

With the above options, maximum total pipe length is 37 feet with minimum of 5 feet total vertical and maximum 12 feet total horizontal.
Please note minimum 305mm between 90° elbows is required.

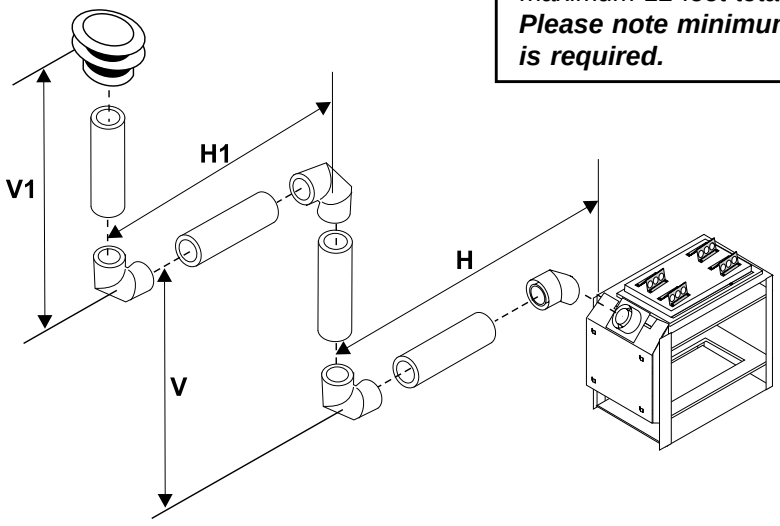


Diagram 11

Geneva Direct Vent Rear & Top Exit Venting Information

COMBUSTION AND VENTILATION AIR

The combustion air from this appliance is drawn from outside the building through the outer flue.

Extra provision for combustion air inside the room is not required.

IMPORTANT

Read all instructions carefully before starting the installation. Failure to follow these instructions may create a fire or other safety hazard, and will void the warranty. Be sure to check the venting and clearance to combustible requirements. Consult your local building codes before beginning installation.

The location of the termination cap must conform to the requirements in the Exterior Vent Terminal Locations diagram on page 40.

VENTING INSTALLATION PRECAUTIONS

NOT ALLOWED ARE:

1) Installation of any damaged Direct Vent component
2) Unauthorized modification of the Direct Vent System
3) Installation of any component part not manufactured or approved by Masport Ltd.
4) Installation other than as instructed by Masport Ltd.

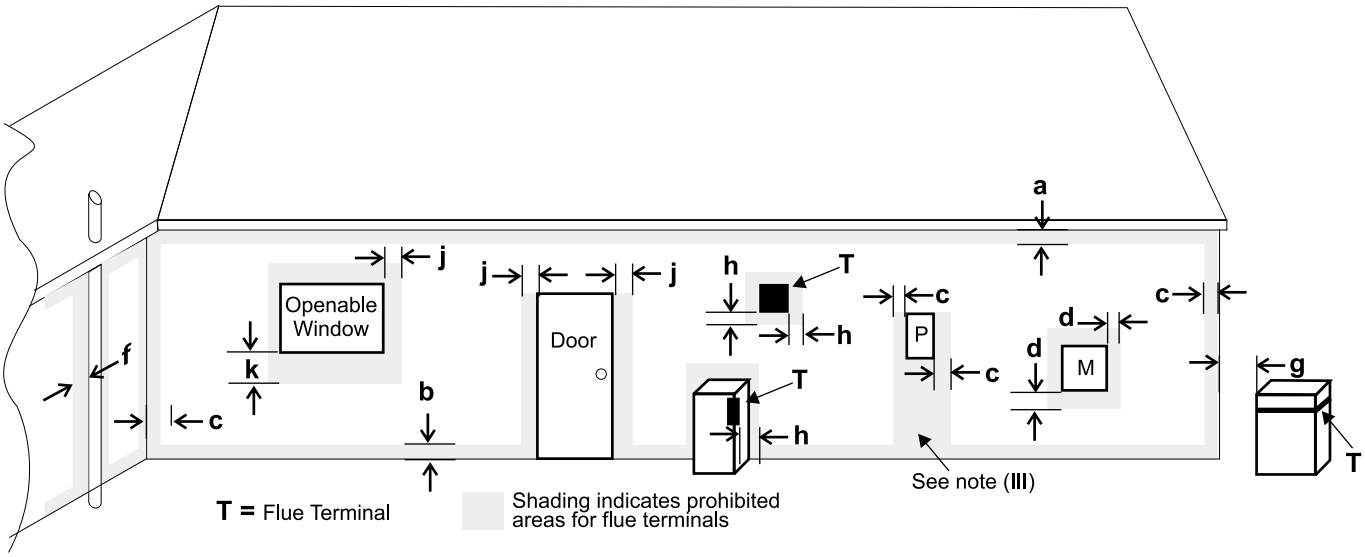
Warning: Always maintain required clearances (air spaces) to nearby combustibles to prevent a fire hazard. Do not fill air spaces with insulation.

The minimum clearance requirements between the outer wall of the vent pipe and nearby combustible surfaces is 40mm. Be sure to check the vent termination clearance requirements from decks, windows, soffits, gas regulators, air supply inlets and public walkways as specified in your local building codes.

The gas appliance and vent 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 its own separate vent system. Common vent systems are prohibited.

EXTERIOR FLUE TERMINATION LOCATIONS



Minimum clearances required for balanced flue terminals or the flue terminals of outdoor appliances according to AG 601 (AGA gas installation code) or NZS 5262 (New Zealand)

		Minimum Clearance (mm)
a	Below eaves, balconies or other projections:	
	- Appliances up to 50 MJ/h input	300
	- Appliances over 50 MJ/h input	500
b	From the ground or above a balcony	500
c	From a return wall or external corner	500
d	From a gas meter (M)	1000
e	From an electricity meter or fuse box (P)	500
f	From a drain or soil pipe	150
g	Horizontal from any building structure (unless appliance is approved for closer installation) or obstruction facing a terminal	500
h	From any other flue terminal, cowl or combustion air intake	500
j	Horizontally from an openable window, door, or non-mechanical air inlet, or any other opening into a building, with the exception of sub-floor ventilation (see also Note (I)):	
	- Appliances up to 150 MJ/h input	500
	- Appliances over 150 MJ/h input	1500
k	Vertically below an openable window, door, or non-mechanical air inlet, or any other opening into a building, with the exception of sub-floor ventilation (see also Note (I)): see table below	

Clearance 'k' in mm			
Space heaters		All other appliances	
Up to 50 MJ/h input	Up to 50 MJ/h input	Over 50 MJ/h to 150 MJ/h input	Over 150 MJ/h input
150	500	1000	1500

NOTES:

(I) For mechanical air inlets, including spa blowers, the clearance 'j' and 'k' shall be 1500 mm in all cases.

(II) All distances shall be measured vertically or horizontally along the wall to a point in line with the nearest par to of the terminal.

(III) Prohibited area below electricity meter or fuse box extends to ground level.

(IV) A flue terminal of this type shall not be located under a roofed area unless the roofed area is fully open on at least two sides and a free flow of air at the appliance is achieved.

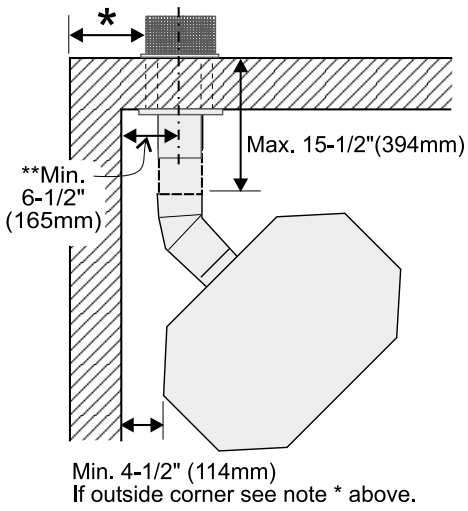
PLANNING YOUR FLUING INSTALLATION

When planning your installation, it will be necessary to select the proper length of flue pipe for your particular requirements. Determine the minimum clearance to combustibles from the rear of the unit to the wall. It is also important to note the wall thickness.

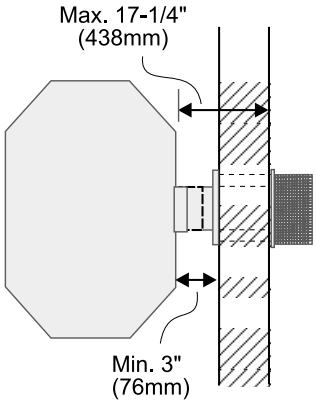
Before cutting the flue hole through the wall ensure that ALL flue and termination clearances will be met.

*****If this is an outside corner, the minimum distance between the flue and the outside corner is 500mm.

NOTE: Ensure compliance with the outside flue terminal location before cutting hole as both dimensions must be met.



For corner installation, Restrictor must be set at 32mm open.



For straight rear installation, Restrictor must be set at 29mm open.

HORIZONTAL INSTALLATIONS

1) Set the unit in its desired location. Check to determine if wall studs are in the way when the fluing system is attached. If this is the case, you may want to adjust the location of the unit.

2) Assemble the desired combination of pipe and elbow to the appliance. Seal with Mil-Pac.

3) With the pipe attached to the stove, slide the stove into its correct location, and mark the wall for a 241mm (inside dimensions) round hole. The centre of the round hole should line up with the centreline of the horizontal pipe, as shown in diagram 1. Cut and frame the 241mm round hole in the exterior wall where the flue will be terminated. If the wall being penetrated is constructed of non-combustible material, i.e. masonry block or concrete, a 178mm diametre hole is acceptable.

Note:

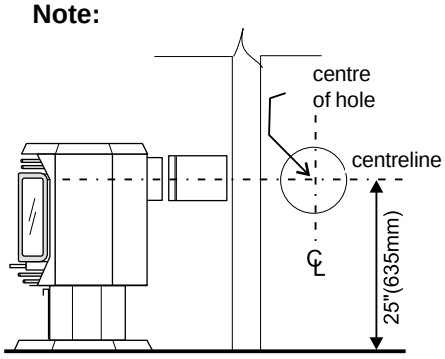


Diagram 1

a) The horizontal run of flue should 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.

b) The location of the horizontal flue termination on an exterior wall must meet all local and national building codes, and must not be blocked or obstructed.

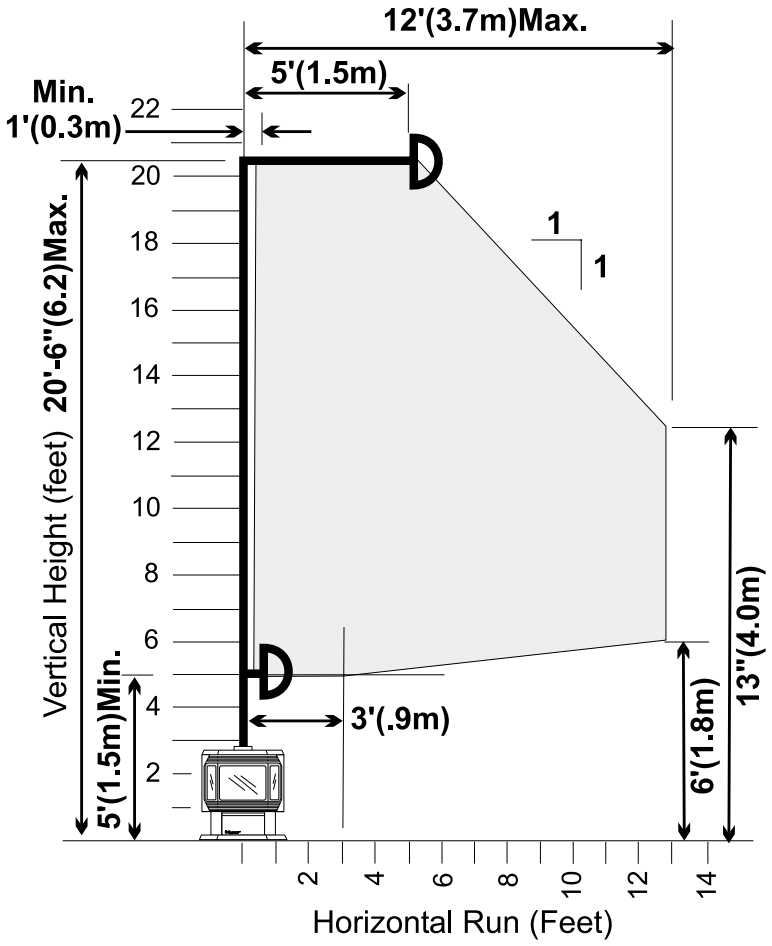
NOTE: Installation and annual service must be performed by a qualified installer, service agency or the gas supplier to validate warranty. The information in this manual is subject to change without notice. Always refer to the information in the installation manual that is supplied with each unit.

Always check for high wind conditions before installing Direct Vent systems. Mil-Pac sealant must be used to seal inner pipe.

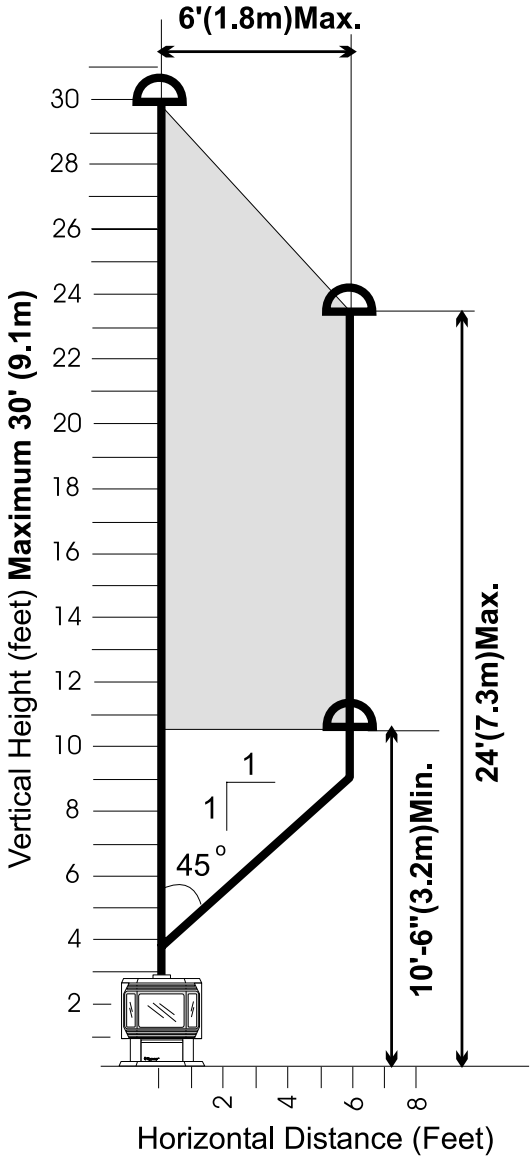
VENTING ARRANGEMENTS

Horizontal Terminations for All Venting Systems

The shaded areas in the diagram below show all allowable combinations of vertical runs with horizontal terminations. Maximum one 90° elbow (two 45° elbows equal one 90° elbow).



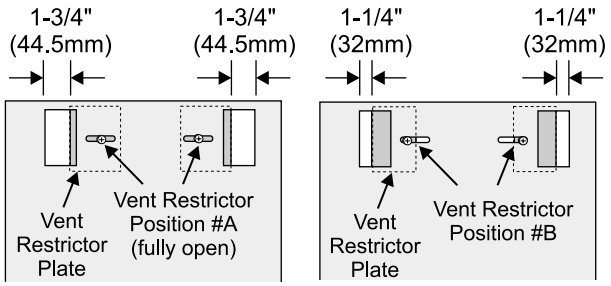
The shaded area in the diagram below shows all allowable combinations of straight vertical and offset to vertical runs with vertical terminations. Maximum two 45° elbows.
If the vent is ENCLOSED in a chase (min. size 229mm x 229mm) maintain a 40mm clearance to combustibles.



Vent Restrictor Position

To set the Vent restriction as indicated in the diagram, simply loosen the screws and push the vent restrictor plate to the correct position.

Vent Restrictor is located inside fire at top of firebox

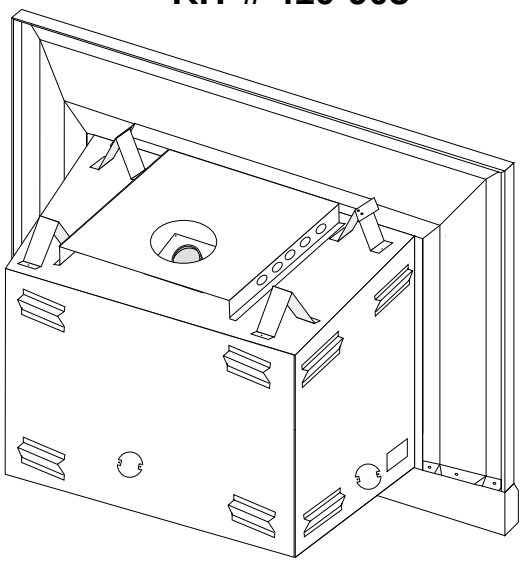


Masport®

Owners & Installation Manual

U31/I31 GAS INSERT ZERO CLEARANCE KIT

KIT # 410-905



PLEASE KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE

WARNING:
Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult an authorized installer, service agency or the gas supplier.

FOR YOUR SAFETY
Do not store or use gasoline or other flammable vapours and liquids in the vicinity of this or any other appliance.

Installation and service must be performed by an authorized installer, service agency or the gas supplier.

FOR YOUR SAFETY
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.**

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Tested by:
Warnock Hersey
& Australian Gas
Assoc.

Warnock Hersey C US

TABLE OF CONTENTS

GAS INSERT ZERO CLEARANCE KIT

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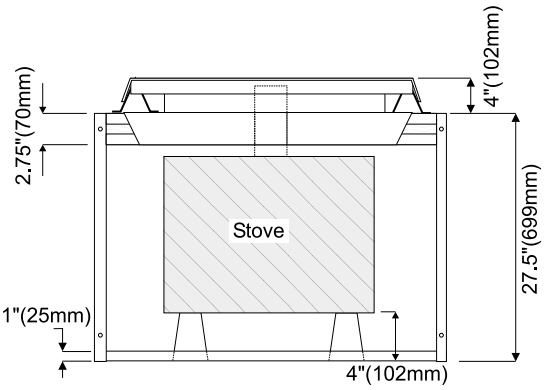
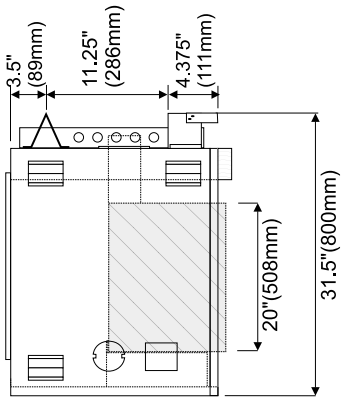
INSTALLATION INSTRUCTIONS

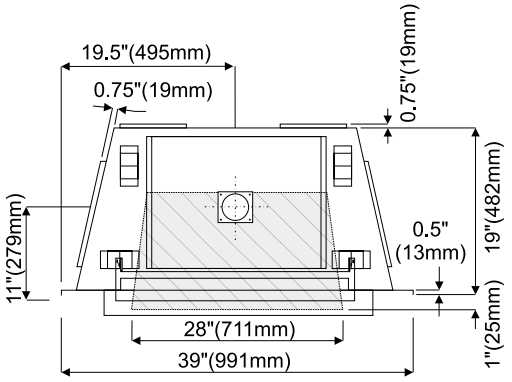
LISTINGS AND CODE APPROVALS

This gas component has been tested in accordance with National Safety Standards, and has been certified by Warnock Hersey for installation and operation in the United States and Canada as described in these Installation and Operating Instructions. This gas component has also been tested in accordance with AG103 and certified in Australia by the Australian Gas Association for installation in Australia, and New Zealand. Install according to AG 103 and as described in these installation and operating instructions.

Check with your local building code agency before you begin your installation to ensure compliance with local codes, including the need for "permits" and follow-up inspections. If any problems are encountered regarding code approvals, or if you wish clarification on any of the instructions contained here, contact your local dealer.







Specifications

GENERAL INFORMATION

This kit consists of factory built parts that require minimal assembly to form the Zero Clearance enclosure for the U31/I31 Gas Insert. The enclosure can then be fixed into a framed combustible construction, and a standard
"B-vent" (Australia/New Zealand: an approved twin skin flue) installed on the assembly for the required venting (flueing). The insert can be installed later.

The faceplate will normally overlap on top of the finished wall.Using Kit# 410-905 you can convert the U31/I31 Gas Insert models into highly efficient heat producing Zero Clearance Fireplaces.

PARTS

Included with Kit:

1 (410-905) Main Body Assembly

Sold Separately: (Rq)=Required (Op)=Optional

(Rq) 1 (410-906) Zero Clearance Faceplate
44" W x 32"H (1117mm W x 813mm H) includes 4"(102mm) Hearth Trim and faceplate trim

(Op) 1 (410-920) Ash Lip

INSTALLATION INSTRUCTIONS

CLEARANCES TO COMBUSTIBLES

The clearances for the Zero Clearance Kit are 0" to combustibles (back, side and floor) but when planning your installation review the clearances required for the Insert (see below) after it is installed in the Zero Clearance Kit. The Zero Clearance Kit must be installed on a flat, solid, continuous surface (e.g. wood, metal, concrete). This may be the floor, or raised up on a platform to enhance its visual impact.

NOTE: The specified '0' inch floor clearance means that the top surface of the flooring material, i.e. carpeting, tile, etc., must not extend above the bottom edge of the 4" Hearth Trim.

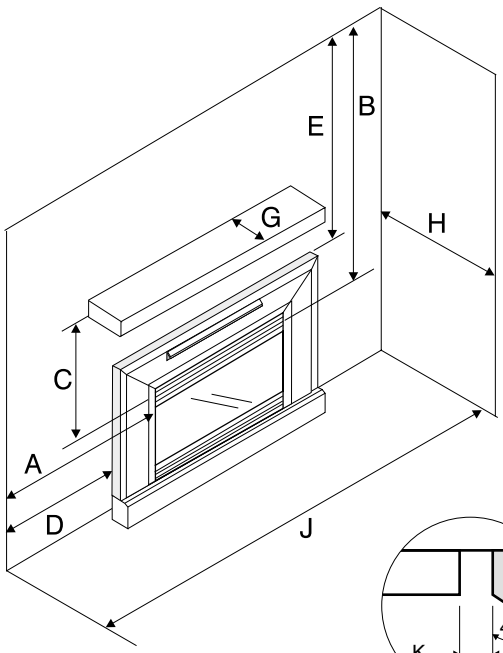
Clearances to Combustibles for Insert

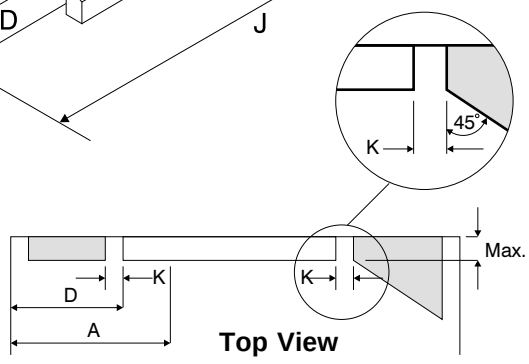
From Unit

Sides	**A**	10" / 250 mm
Drop Ceiling	**B**	47.5" / 1207 mm
Mantel*	**C(My)**	22" / 555 mm

From Surround

Sides	**D**	2" / 50 mm
Drop Ceiling	**E**	37.75" / 945 mm
Mantel Depth*	**G(Mx)**	11.5" / 290 mm
Max. Alcove Depth	**H**	36" / 882mm
Min. Alcove Width	**J**	48" / 1200 mm
Facing (Mantel Leg)		
Side**	**K**	1" / 25 mm
Top	**L**	1" / 25 mm



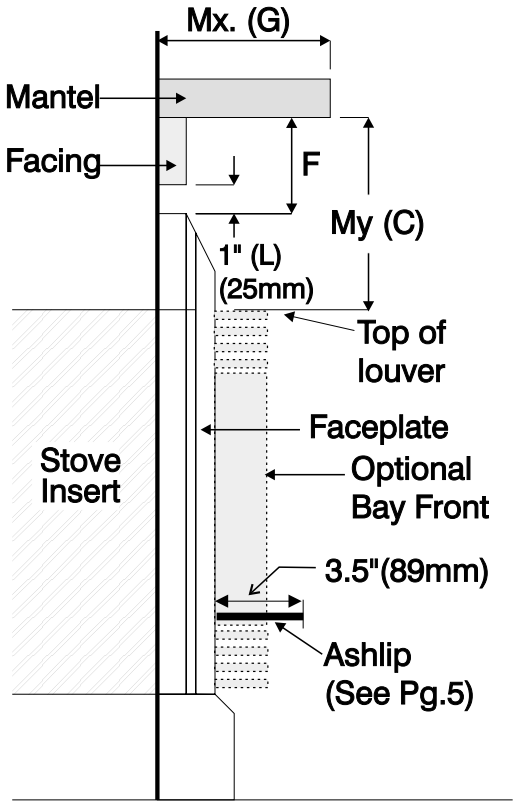


Top View

Side View

*** Mantel clearances vary with the width of the mantel see the chart "Combustible Mantel Clearances" on this page.**

Note: A non-combustible mantel may be installed at a lower height if the framing is made of metal studs covered with a non-combustible board.



***Combustible Mantel Clearances**

Depth (Mx)		Clearance (My)	
(inches)	**(mm)**	**(inches)**	**(mm)**
0" to 3.5"	0mm to 89mm	20"	508mm
to 5.5"	to 140mm	21"	533mm
to 11.5"	to 292mm	22"	559mm

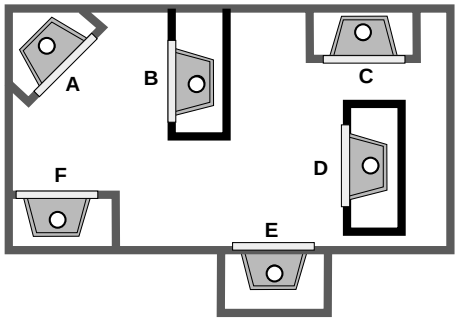
**Max. width of 1"(25mm) at 1"(25mm) from surround, calculate depth at 45° as shown in the diagram.

LOCATING YOUR U31/I31 FIREPLACE

Due to high temperatures the Insert should be located out of traffic and away from furniture and draperies. Provide a minimum of 48" (1220mm) front clearance to the unit.

This appliance is Listed for bedroom installations when used with a Listed Millivolt Thermostat. Some areas may have further requirements, check local codes before installation.

This unit is not approved for installation into a mobile home.



a) Cross Corner
b) Room Divider
c) Flat on wall
d) Island
e) Flush with Wall
f) Flat on Wall Corner

ASH LIP FOR FLUSH INSTALLATION

a) An ashlip is mandatory on a U31/I31 flush (flat window) Insert when installed less than 6" (152mm), (including the 4"(102mm) hearth trim) to a combustible floor (see Figure 1). For detailed installation see Faceplate and Trim Installation.

Note: If the ashlip is required with the flush front installed, the bottom gold trim will NOT fit and cannot be installed.

b) No ashlip is required when U31/I31 insert is raised by 2"(51mm). See figure 2.

c) No ashlip is required on a U31/I31 insert with a bay window and/or bay louvres. See figure 3.

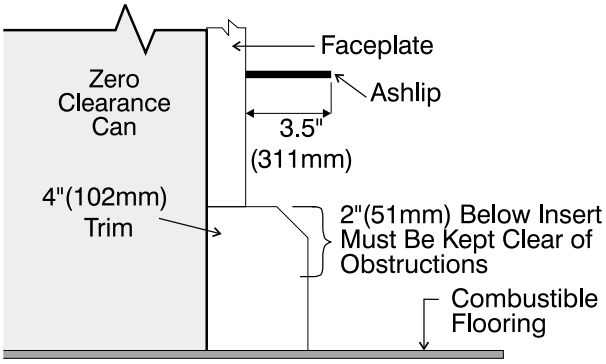


Figure 1

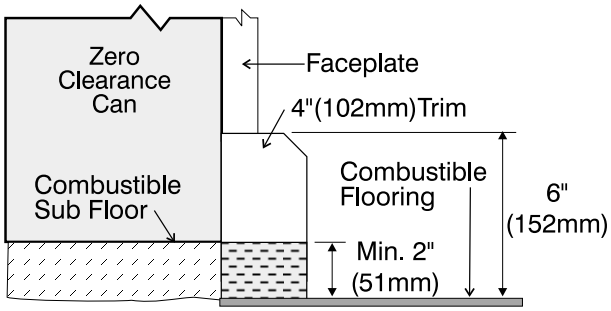


Figure 2

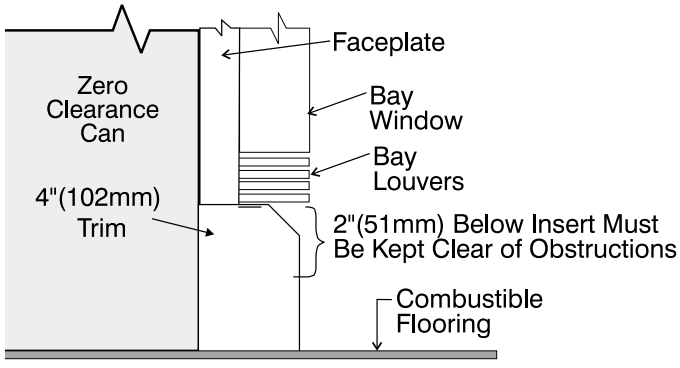


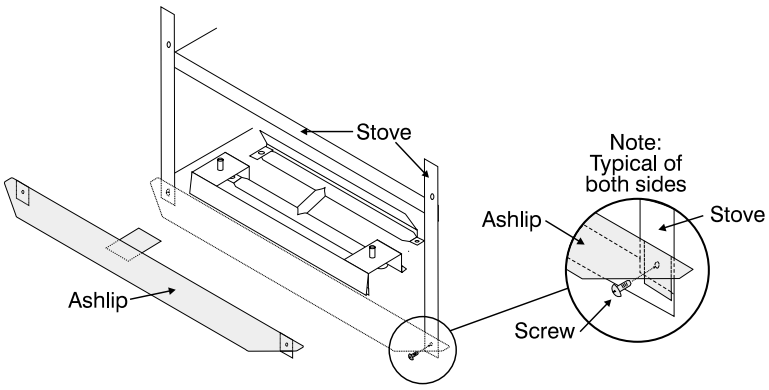
Figure 3

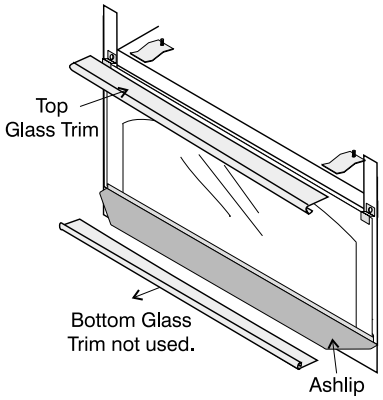
INSTALLATION INSTRUCTIONS

ASHLIP INSTALLATION

1) Line up the two holes in the ashlip with the bottom 2 holes in the front of the stove.

2) Screw into position with the two screws provided with the ashlip.





NOTE: The bottom gold trim does not go onto the unit when the ashlip is installed.

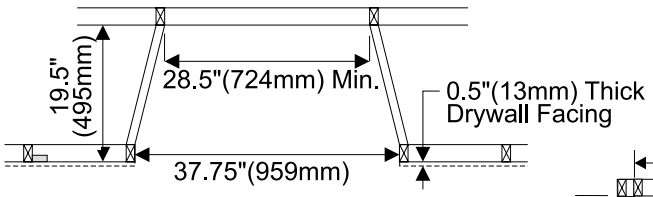
FRAMING

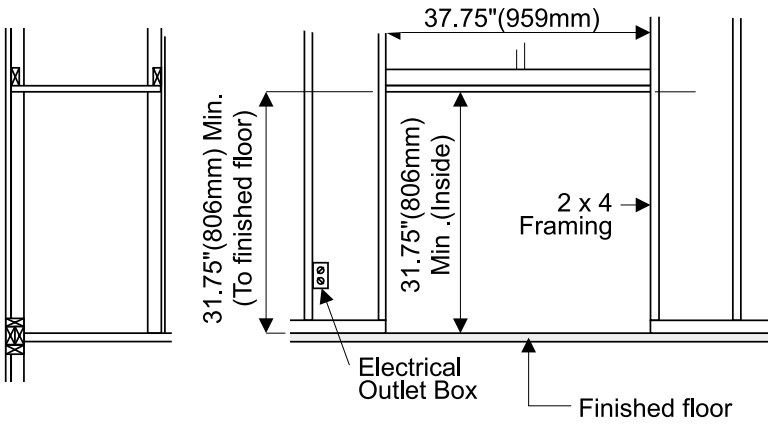
1) The trim kit allows for 1/2" (13 mm) of finish facing material. The kit may be installed directly on and/or against standard combustible building materials.

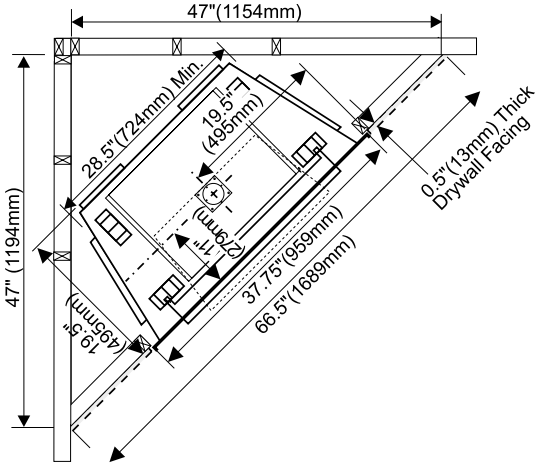
2) Frame in the enclosure for the Kit with framing material. The framed opening for the assembled kit is 31.75" (806mm) high x 37.75" (959mm) wide x 19.5" (495mm) *(20" (508mm) including drywall)* deep. See diagram below.

3) For exterior walls, vapour barrier and insulate the enclosure to the same degree as the rest of the house, or according to local installation codes.

4) The appliance must be enclosed with non-combustible material above the standoffs on the cabinet but the clearances stated on the "B-vent" chimney must be maintained.







INSTALLATION INSTRUCTIONS

KIT ASSEMBLY

1) Using the screws provided, attach left and right sides to the rear panel. Side flanges go on the outside. See diagram 1.

2) Install floor. All floor flanges go on the inside. See diagram 1.

3) Install top assembly. Make sure top rear flange is on the outside of the back panel. Top side flanges go on the inside.

4) Install top front standoff assembly, with the drywall standoff angle facing forward. See diagram 1.

5) Move Zero Clearance Assembly into final position and attach to framing. See diagram 3.

6) Attach 4"(100mm) - "B" vent adapter. See Venting.

Note: Top insulation protrudes about 1"(25mm) in order to assure a tight seal when faceplate is installed. Leakage in this area will result in possible overheating of the finishing material immediately above the frame. See diagram 1.

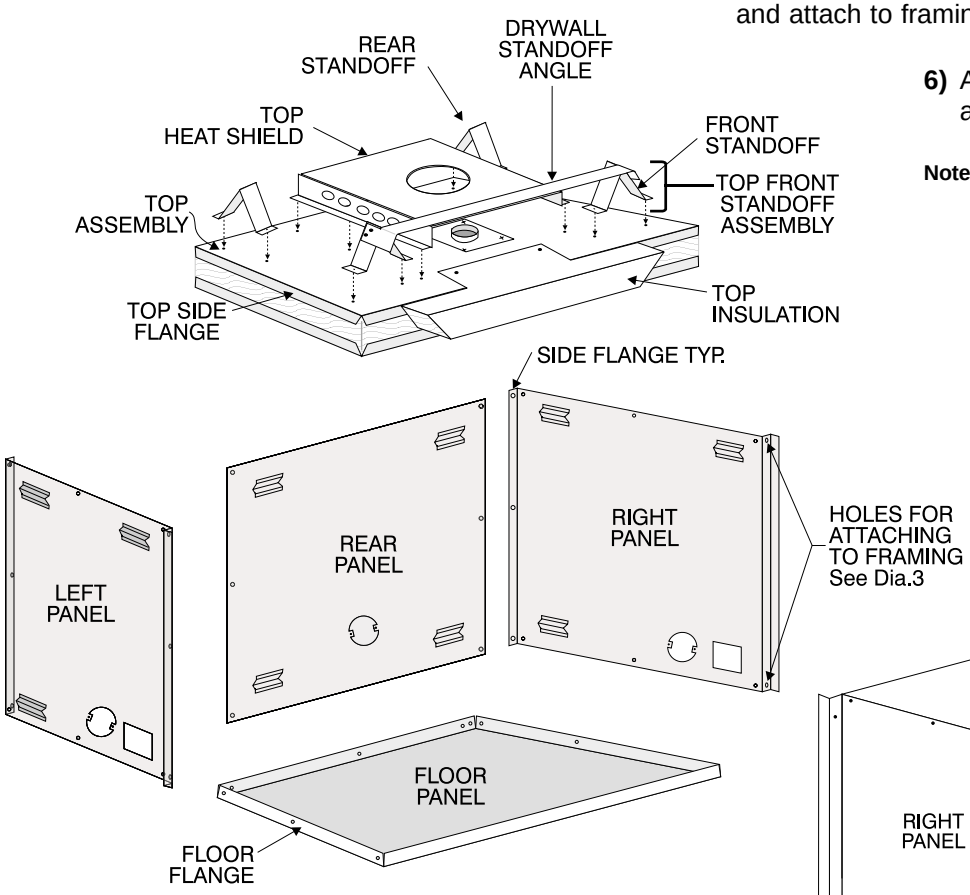


Diagram 1

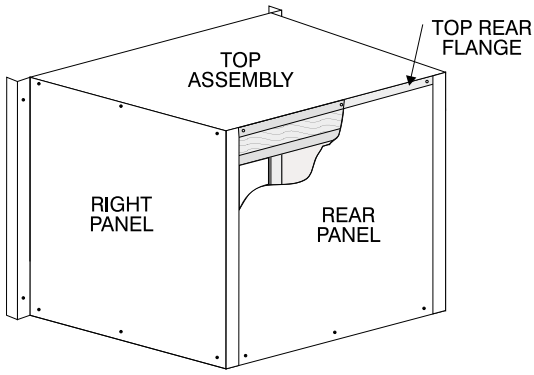


Diagram 2

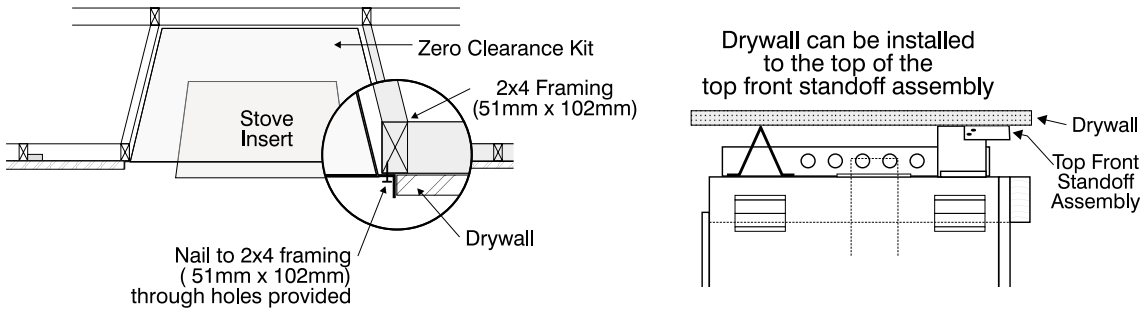


Diagram 3

INSTALLATION INSTRUCTIONS

VENTING (FLUEING)

1) This fireplace must be vented (flued) with a 4" (100mm) diameter Class “B” vent (Australia/New Zealand: twin skin flue). The installation of the venting (flueing) system must conform and be in accordance with the natural gas installation code CAN/CGA - B149 (Canada), ANSI Z223.1 (U.S.A.), AG 601 (Australia), and NZS 5261 (New Zealand). Minimum chimney height from base of fireplace must be at least 12 feet (3.6m).

2) Masonry Chimney Installation:
This application can be connected to a masonry chimney flue. Make sure the masonry chimney is clean and in good working order. When an existing masonry chimney is unlined and local experience indicates that gas condensation may be a problem or if local codes dictate, an approved liner should be installed. Use “B” Vent (flue) to bridge the gap between the fireplace and the masonry chimney. To ensure proper flue sizing and operation it is recommended that the masonry chimney be lined with an approved aluminium chimney liner of the same diameter as the “B” Vent (flue). Make sure connection between “B” Vent (flue) and masonry is completely sealed. Flue pipe exposed to cold air should be insulated in a chase. If condensation occurs, a trap should be installed at the bottom of the flue.

A chimney register plate is required above the heater in large type registers to assist with down drafting and heat loss problems.

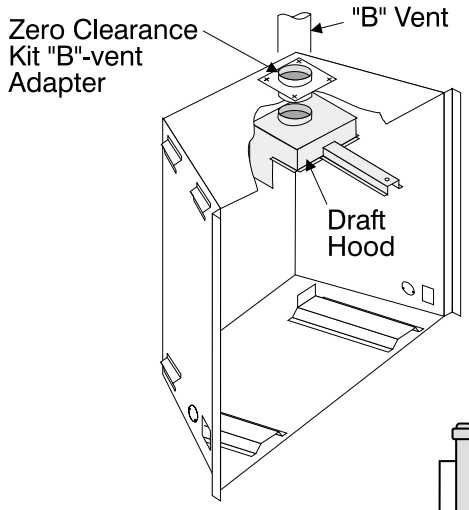
Use a maximum of two offsets; four 45° elbows, or two 90° elbows for example. Slope horizontal pipe at least 1/4" (6.4 mm) rise per foot of run. Horizontal runs should not exceed the vertical rise. Keep horizontal runs to a minimum. See chart below.

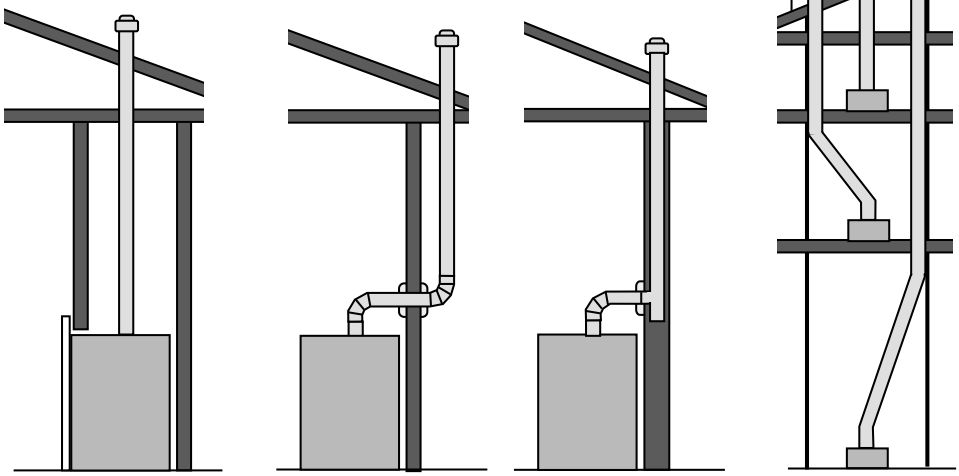
NOTE: Cold Climate Installation

When this appliance is to be installed against a non-insulated wall or in a chase, fibreglass insulation should be installed around the body of the fireplace.

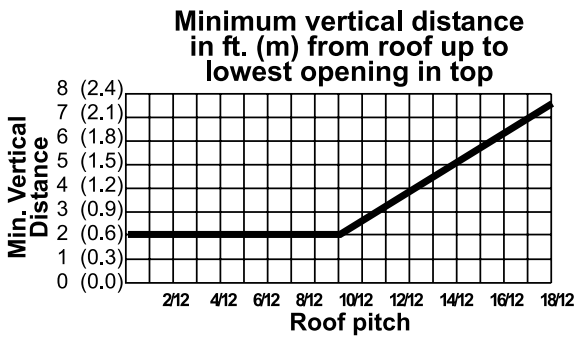
Note: The draft hood must be installed parallel to the fireplace opening, as shown below. See Instructions in U31/I31 Installation Manual.

Install stove insert as per U31/I31 Installation Manual.





Variable Chimney Routes



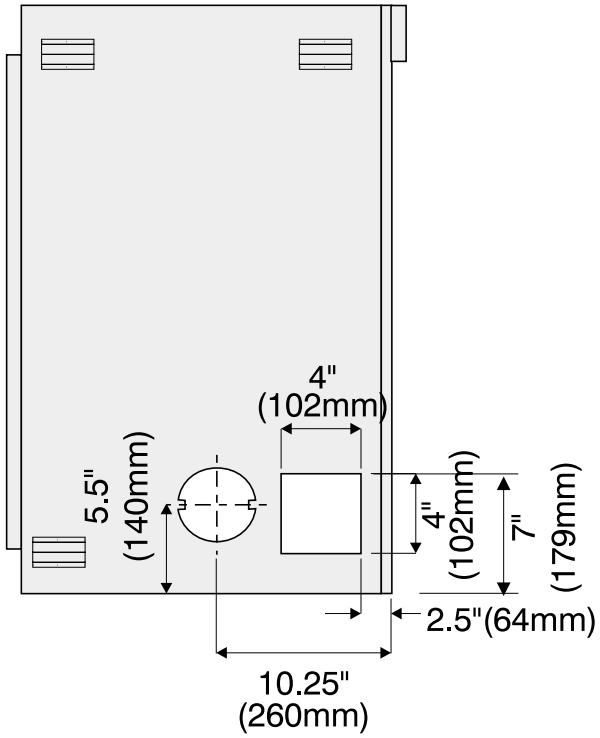
OPTIONAL OUTSIDE COMBUSTION AIR SUPPLY

A 4" (100 mm) dia. aluminum flex pipe or equivalent may be installed from the outside (with a proper exterior cover) to the Zero Clearance cabinet. There are outside holes provided on three sides of the kit. Use only the one that is most suitable for your installation. This will provide adequate outside combustion air supply to the heater.

GAS SUPPLY LINE

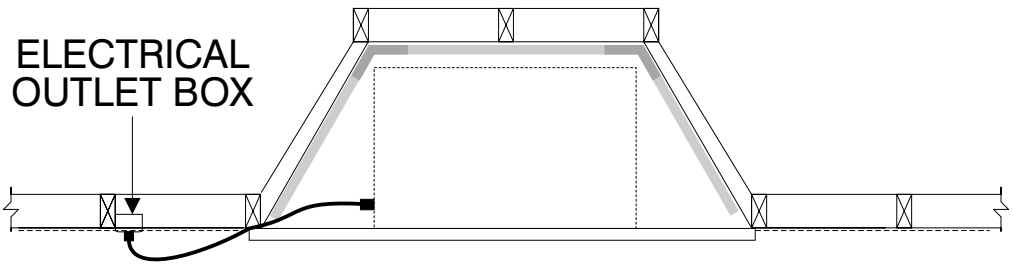
An authorized service person should install the gas line in accordance with all local building codes. If codes permit, flex gas line or coiled copper tubing may be used as gas supply line. The suggested way to install the gas supply line is as follows: run 1/2" (9.5 mm) NPT gas line to the left side of the framed opening. (See U31/I31 installation instructions for additional information).

	Specifications	
	Min. Inlet Gas Pressure	Input Rating
Natural Gas	5" w.c. 1.13 kPa	30,000 Btu/h 31 mj/h
Propane	12" w.c. 2.75 kPa	27,500 Btu/h 28.5 mj/h



ELECTRICAL SUPPLY

Provide 120 VAC, 60 Hz (in Australia and New Zealand: 240 VAC, 50 Hzin) receptacle within 24"(610mm) of the left side of the appliance (not inside the Zero Clearance Cabinet). Plug the cord on the appliance into the receptacle.



INSTALLATION INSTRUCTIONS

FACEPLATE & TRIM INSTALLATION

1) Lay the faceplate panels flat, facedown on something soft so they don't scratch.

2) a) Take the top faceplate and align the holes in it with the holes in the side panels. Using the screws provided, attach from the top of the panel (holes in the top panel are slightly larger than the holes in the side panel to facilitate easier installation). See diagram 1.

b) 4"(102mm) Hearth Trim. Attach the Hearth Trim to the bottom of the faceplate side panels with the screws provided. See diagram 1.

Hint: *Don't tighten the screws down completely at this point, do a trial fit to the unit.* Make any necessary adjustments and when it fits properly then tighten down the screws.

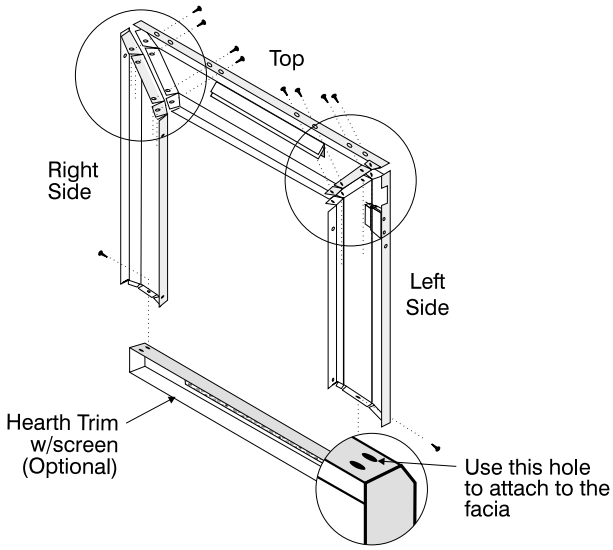


Diagram 1: Faceplate Assembly

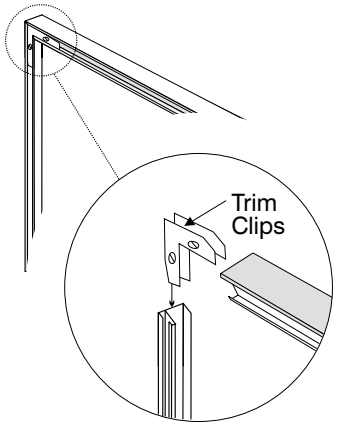


Diagram 2: Trim Assembly

3) Using the trim clips provided, join the left side trim (with the ON/OFF switch) to the top trim. See diagram 2. Connect the right side trim to the top trim.

4) Place the trim on the assembled faceplate panels, aligning the wire connections from the switches with the notch on the left side panel.

5) Connect the fan switch wires by taking the black and red wires with the male ends (in the grey harness) and connect them with the wire connectors from the fan speed control.

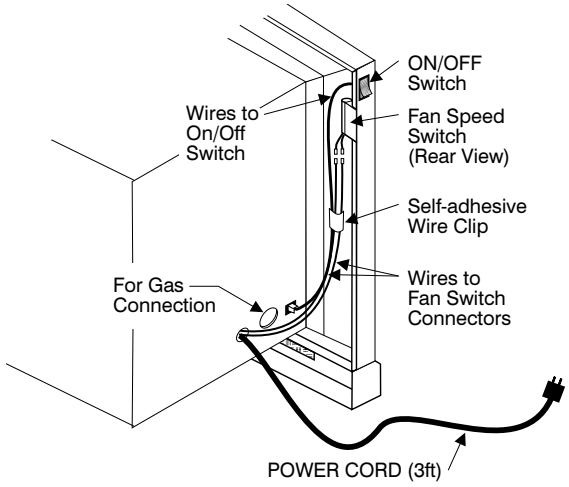


Diagram 3

6) Connect the ON/OFF switch wires by taking the black and red wires with the female ends and connect them to the ON/OFF switch.

7) Install these wires in the clips on the left faceplate to ensure they dont touch the insert. See diagram 3.

8) The power cord should be run behind the faceplate panel from the U31/I31 to electrical outlet box.

10) Attach the brass trim to the faceplate by drilling a 1/8" (3mm) hole through the faceplate using the hole in the trim as a guide. Fasten the trim to the faceplate panels using the plated screws. #10 x1/2". See diagram 6 detail 'C'.

11) Attach the faceplate panels to the insert body using the 4 remaining black screws.
See diagram 6 detail 'A'.

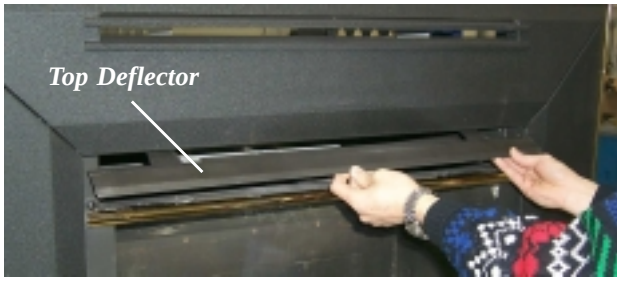
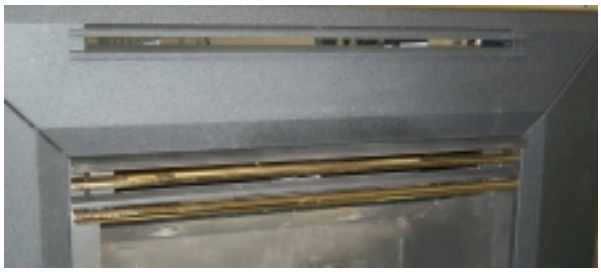


Diagram 7: Slide Top Deflector into brackets.



After Deflector is installed

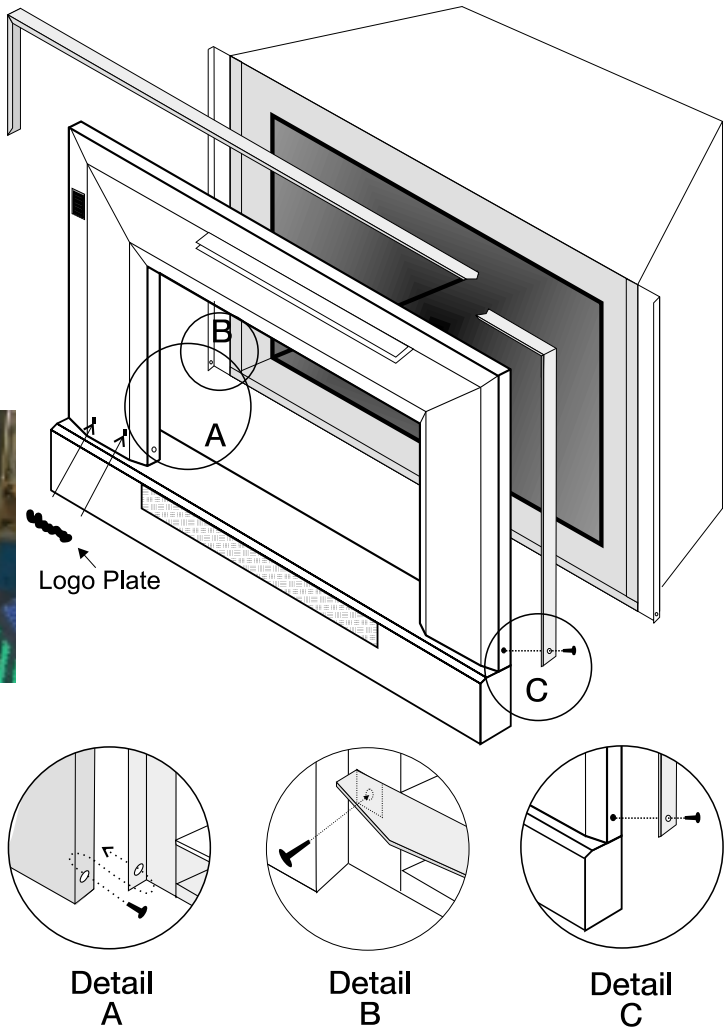


Diagram 6

12) Slide the Top Deflector into the two brackets under the fireplace body top. Diagram 7.

13) Push the logo plate into the two holes in the bottom left corner of the faceplate.

Note: If ashlip is required for safety clearance (see pg. 5) then attach to stove unit using the 2 lower screw holes on the face of the stove unit (see diagram 6 detail 'B').

Note: This faceplate with Hearth Trim Assembly replaces the standard Assembly as shown in the U31/I31 Installation Manual.

FINISHED FACING NOTES

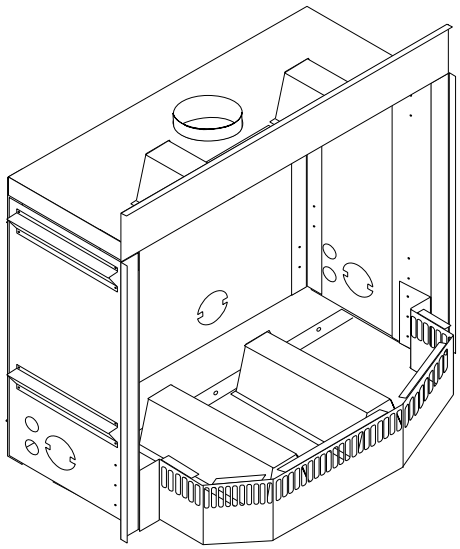
Install finished facing surface of 1/2"(13mm) thickness on framing. Drywall 1/2" (13 mm) thick can extend flush with the appliance on all three sides of the front face. The height at which the mantel must be installed above the top louver depends on the depth of the mantel. If the mantel is to be painted, use a heat resistant paint to prevent discolouration.

Masport®

Owners & Installation Manual

U41/I41 GAS INSERT ZERO CLEARANCE KIT

KIT # 660-900



PLEASE KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE

WARNING: **Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult an authorized installer, service agency or the gas supplier.**	**FOR YOUR SAFETY** **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.**
FOR YOUR SAFETY **Do not store or use gasoline or other flammable vapours and liquids in the vicinity of this or any other appliance.**	
Installation and service must be performed by an authorized installer, service agency or the gas supplier.	

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Fax. 1800 035 594

Masport - New Zealand
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Auckland 6.
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Fax. 0508 570 570

Tested by: Warnock Hersey:

Warnock Hersey C US

908-427

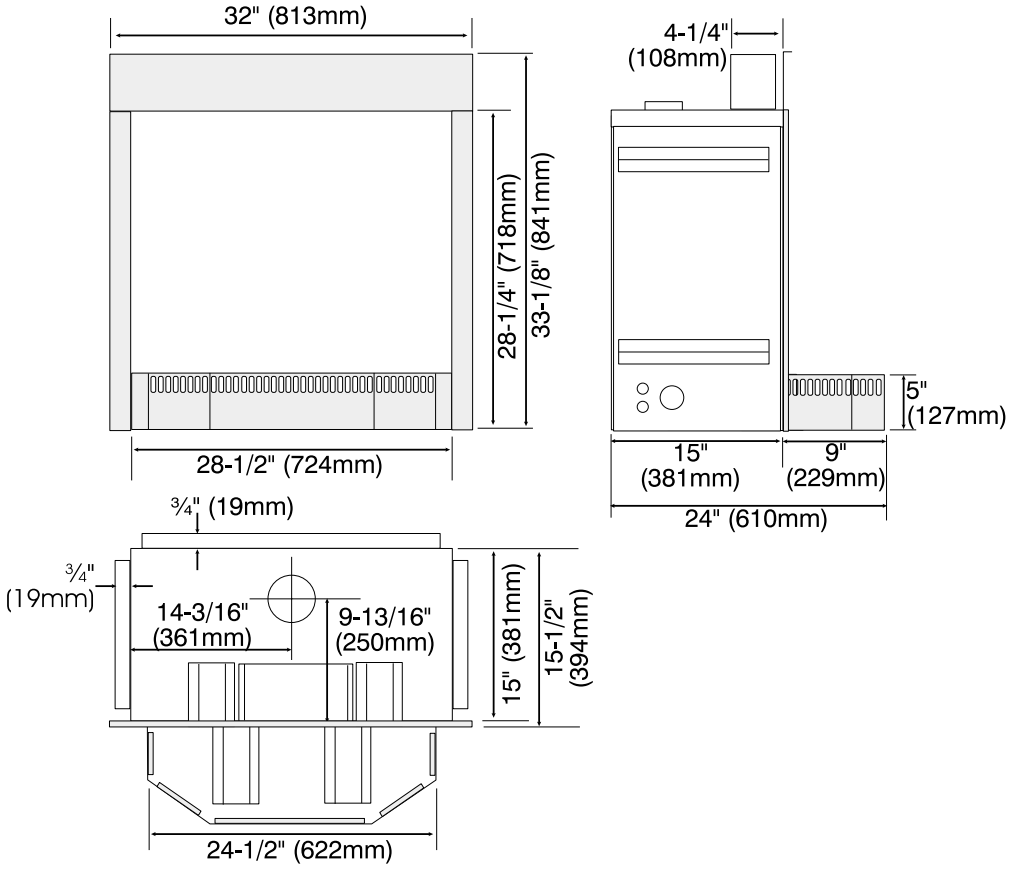
01/13/03

LISTINGS AND CODE APPROVALS

This gas component has been tested in accordance with National Safety Standards, and has been certified by Warnock Hersey for installation and operation in the United States, Canada, Australia, and New Zealand as described in these Installation and Operating Instructions.

Check with your local building code agency before you begin your installation to ensure compliance with local codes, including the need for "permits" and follow-up inspections. If any problems are encountered regarding code approvals, or if you wish clarification on any of the instructions contained here, contact your local dealer.

U41/I41 Zero Clearance Kit Specifications



Using Kit# 660-900 you can convert the Gas Insert models U41 and I41 into highly efficient heat producing Zero Clearance Fireplaces.

REQUIRED PARTS

Included with Kit:
1 660-908 Main Body Assembly
1 660-906 Front Base Assembly

Sold Separately:
1 660-911 Zero Clearance Faceplate
44-3/8"(1127mm) W x 33-5/16"(846mm) H

GENERAL INFORMATION

This kit consists of factory built parts that require minimal assembly to form the Zero Clearance enclosure for the U41/I41 Gas Insert. The enclosure can then be fixed into a framed combustible construction, and a standard "B-vent" installed on the assembly for the required venting. The insert can be installed later.

The faceplate will normally overlap on top of the finished wall. The base of the Zero Clearance Kit can be installed directly on carpeting, tile or any flooring material; however, the hearth if installed in front of the unit requires special protection as described in the "Hearth" section on page 4.

INSTALLATION INSTRUCTIONS

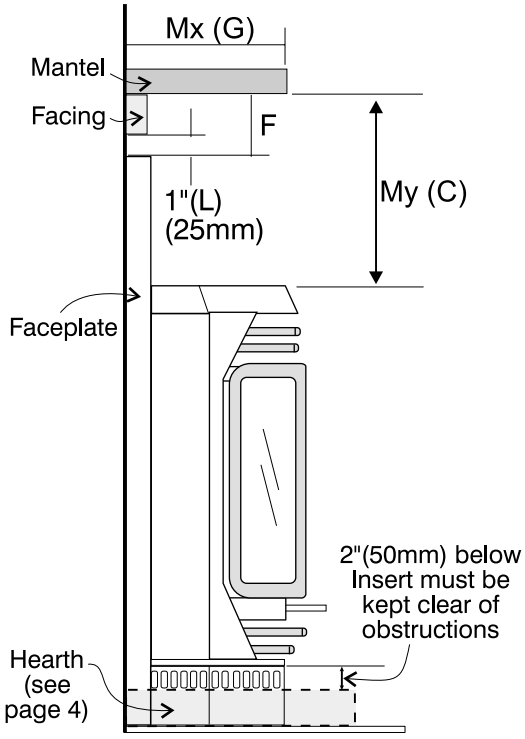
CLEARANCES TO COMBUSTIBLES

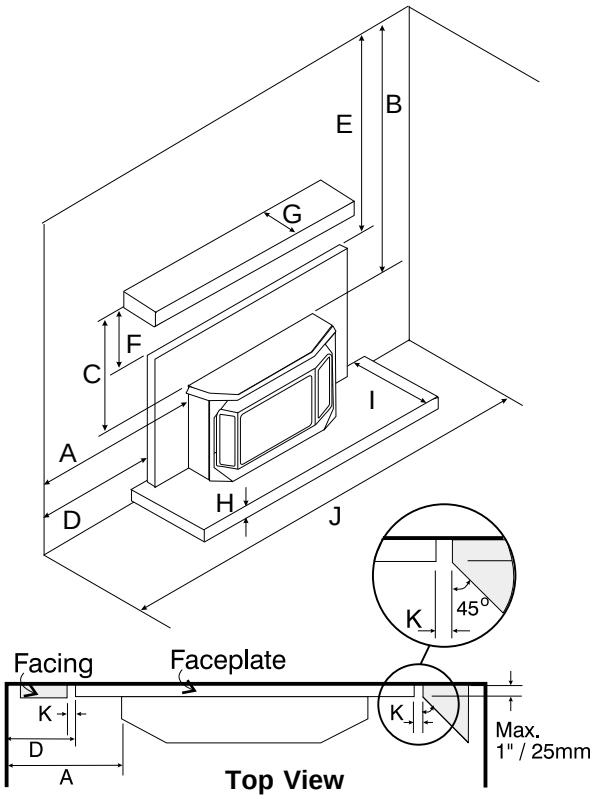
The clearances for the Zero Clearance Kit are 0" to combustibles (back, side and floor) but when planning your installation review the clearances required for the Insert (see below) after it is installed in the Zero Clearance Kit.

The Zero Clearance Kit must be installed on a flat, solid, continuous surface (e.g. wood, metal, concrete). This may be the floor, or raised up on a platform to enhance its visual impact.

Clearances to Combustibles for U41/I41 Insert

	From Unit	
Sides	**A**	9.5" / 241 mm
Drop Ceiling	**B**	35" / 890 mm
Mantel	**C(My)**	12.5 / 320 mm
	From Surround	
Sides	**D**	2" / 50 mm
Drop Ceiling	**E**	25.5" / 650 mm
Mantel	**F**	3" / 75 mm
Mantel Depth	**G(Mx)**	7.5" / 190 mm
Min. Alcove Width	**J**	48" / 1120 mm
Facing (Mantel Leg)		
Side*	**K**	1" / 25 mm
Top	**L**	1" / 25 mm





Combustible Mantel Clearances			
Depth (MX)		**Clearance (MY)**	
(inches)	**(mm)**	**(inches)**	**(mm)**
0" to 5.5"	0mm to 140mm	11"	280mm
6.0”	153mm	11-3/8"	289mm
6.5”	165mm	11-3/4"	299mm
7.0”	178mm	12-1/4"	312mm
7.5”	191mm	12-1/2"	318mm
8.0”	203mm	12-5/8"	321mm
8.5”	216mm	12-3/4"	324mm
9.0”	229mm	12-7/8"	327mm
9.5”	242mm	13"	330mm

*Max. width of 1"(25mm) at 1"(25mm) from surround, calculate depth at 45° as shown in the diagram.

Note: A non-combustible mantel may be installed at a lower height if the framing is made of metal studs covered with a non-combustible board.

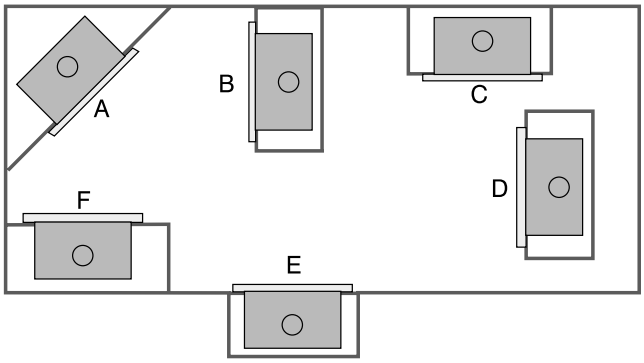
INSTALLATION INSTRUCTIONS

LOCATING YOUR U41/I41 FIREPLACE

Due to high temperatures the Insert should be located out of traffic and away from furniture and draperies. Provide a minimum of 48" (1220 mm) front clearance to the unit.

This appliance is listed for bedroom installations when used with a listed millivolt thermostat. Some areas may have further requirements, check local codes before installation.

This unit is not approved for installation into a mobile home.



a) Cross Corner **d)** Island
b) Room Divider **e)** Flush with Wall
c) Flat on wall **f)** Flat on Wall Corner

HEARTH

A hearth is not mandatory, but is recommended for aesthetics and for added safety, and if a hearth is installed follow the requirements listed below. We recommend a non-combustible hearth which comes out a minimum of 12" (305 mm) in front of this appliance. The Zero Clearance Kit allows for a hearth up to 3" (75 mm) thick above the base to be installed in front of the unit, **the ventilation holes must not be blocked**. Note: if the hearth is built up, the faceplates sides will need to be field trimmed to fit, the insulation behind the faceplate **must not** be removed.

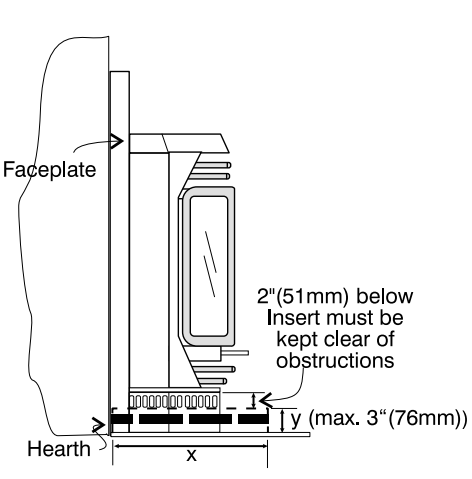
Non-Combustible Hearth Material

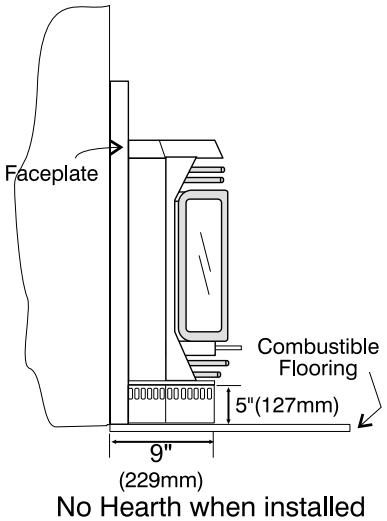
a) non-combustible floor board meeting ASTM E-136 or E-108 or CAN 4-S114 or the equivalent, and offering a thermal resistance (k factor) of 0.45 or greater.

b) suitable materials include but are not limited to: Wonderboard, Durock, Micor, Hardibacker, Capeboard, etc.

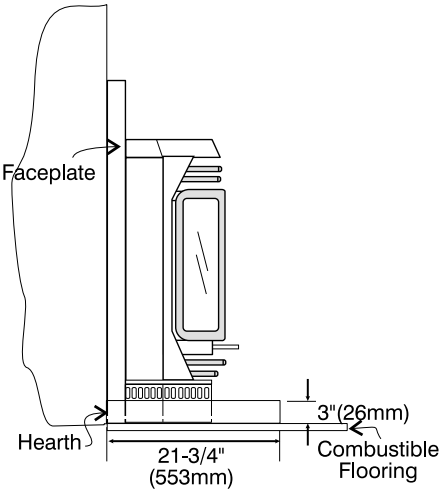
c) 1"(25mm) thickness of brick.

Non-combustible Hearth			
Height (y)		Depth (x)	
(inches)	(mm)	(inches)	(mm)
3"	76mm	21-3/4"	553mm
2-5/8"	67mm	21"	534mm
2-1/4"	57mm	20"	508mm
1-7/8"	48mm	19"	483mm
1-1/2"	38mm	18"	457mm
1-1/4"	32mm	17"	432mm
1"	26mm	16"	407mm
7/8"	22mm	15"	381mm
5/8"	16mm	13"	330mm
1/4"	7mm	11"	280mm
0"	0mm	9"	229mm





No Hearth when installed on 5"(127mm) Base Assembly



Maximum Hearth

INSTALLATION INSTRUCTIONS

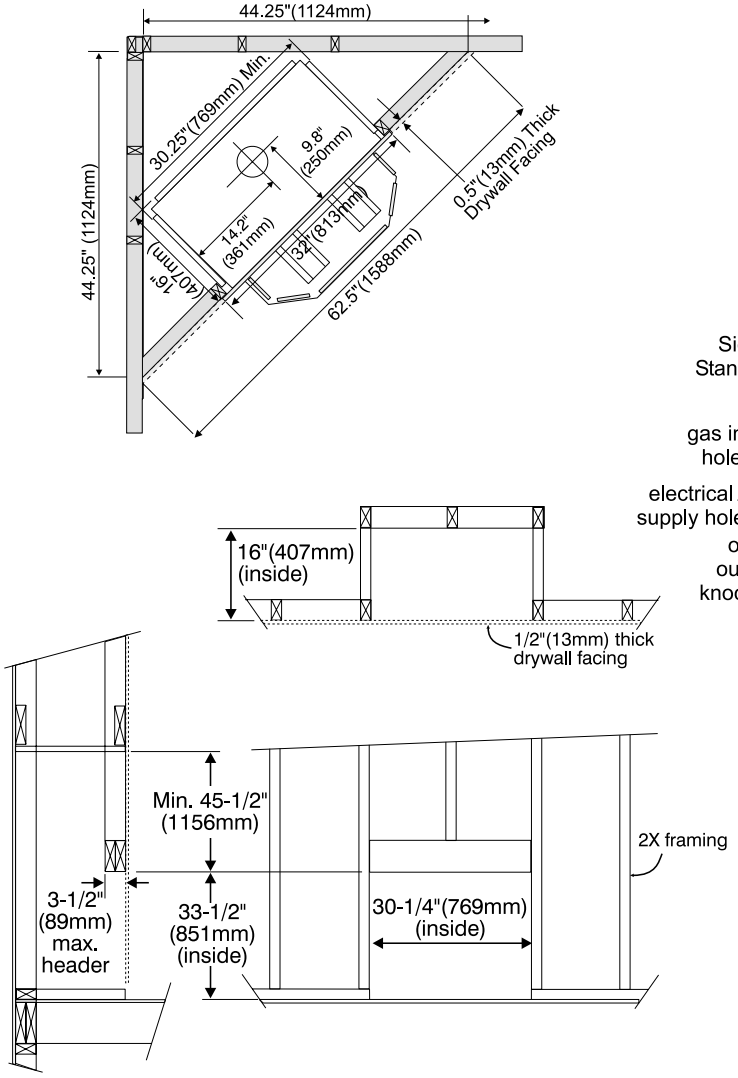
1) The Trime kit allows for a 1/2” (13mm) of finish facing material. The kit may be installed directly on and/or against combustible building materials.

2) Frame in the enclosure for the Kit with framing material. The framed opening for the assembled kit is 33-1/2" (850 mm) high x 30-1/4" (769 mm) wide x 16" (407mm) deep. See diagram.

3) For exterior walls vapour barrier and insulate the enclosure to the same degree as the rest of the house, or according to local installation codes. In colder climates, if the heater is to be installed against an exterior wall or chase, insulate the exterior walls according to local installation codes.

4) Extend the vent chase to a minimum ceiling height of 79" (2007 mm) at the same width and depth mentioned above. Keep this area above the unit clear of combustible construction except for the framing header.

ZERO CLEARANCE KIT ASSEMBLY



Warning: Combustible materials must not extend inside the stand-offs on the side, top and rear supports. For safety reasons do not modify or alter any components of the 660-900 Kit.

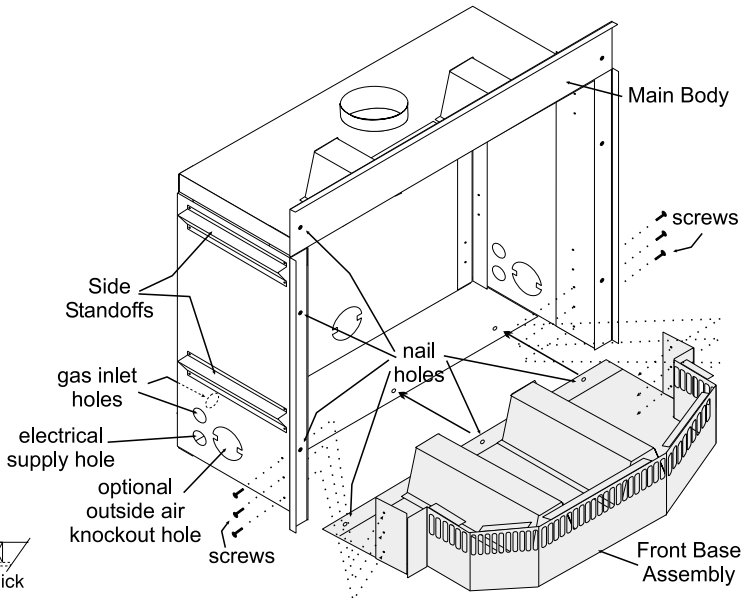
1) Slide the front base assembly into position on the main body assembly as shown in the diagram. Align the screw holes with the 3 holes on the front side supports. Align the nail holes on the front base assembly base with the base of the main body assembly.

2) Use the 3 screws (on each side) to tighten the main body and front base assembly. Base must be at same elevation as the main body assembly.

3) Nail the Zero Clearance Kit to the framing, there are 6 predrilled holes in the front face of the kit (3 per side) and 3 predrilled holes in the front base assembly. It is recommended that the front base assembly and Main body base be nailed to the floor.

VENTING

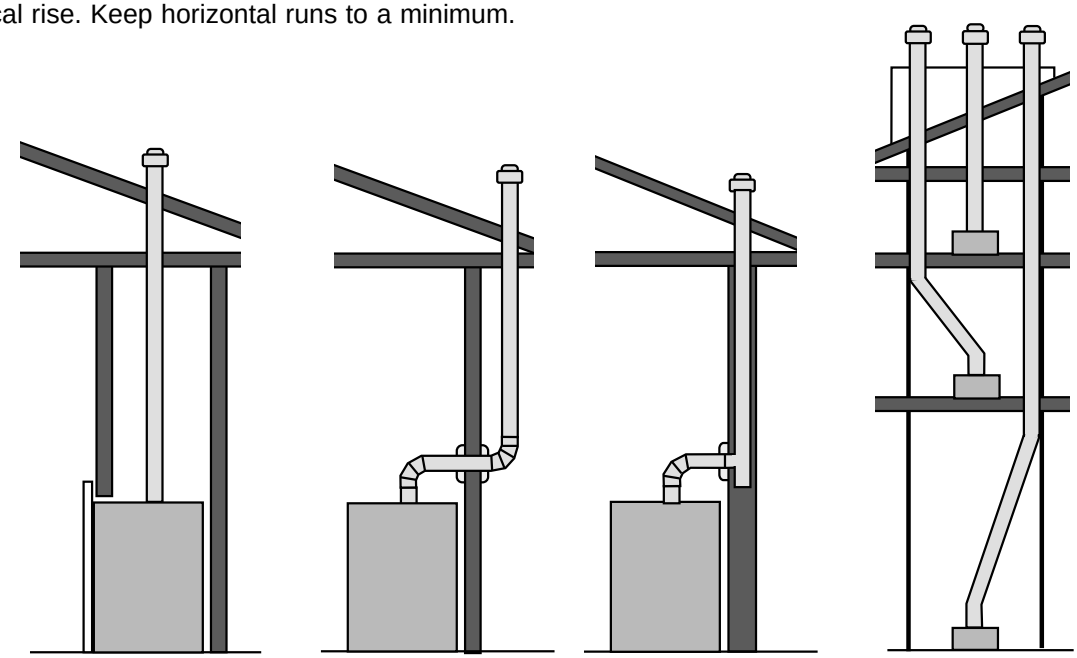
This fireplace must be vented with a 4"(102mm) diameter Class “B” vent



INSTALLATION INSTRUCTIONS

(not supplied). The installation of the venting system must conform and be in accordance with the natural gas installation code CAN/CGA - B149(Canada), ANSI Z223.1 (U.S.A.), AG 601 (Australia), NZS 5261 (New Zealand) and any applicable national or local codes. Minimum chimney height from base of fireplace must be at least 12 feet (3.6 M).

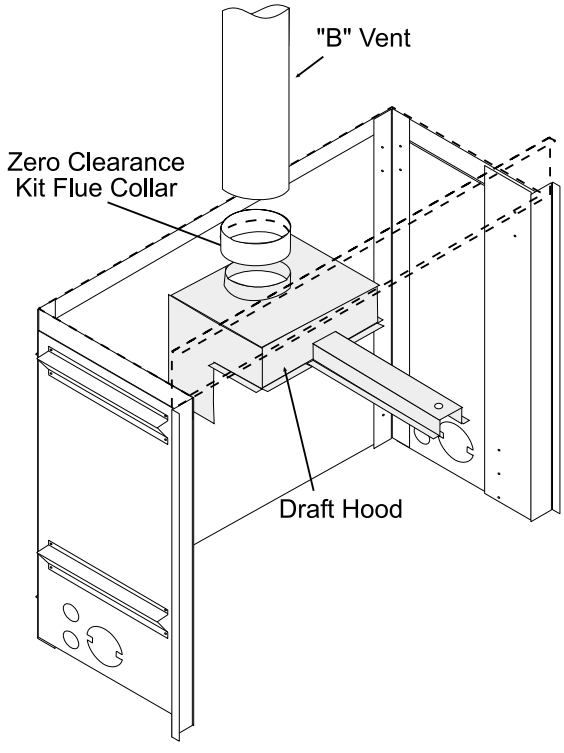
Use a maximum of two offsets; four 45° elbows, or two 90° elbows for example. Slope horizontal pipe at least 1/4" (6.4 mm) rise per 12" (305mm) of run. Horizontal runs should not exceed the vertical rise. Keep horizontal runs to a minimum.



Variable Chimney Routes

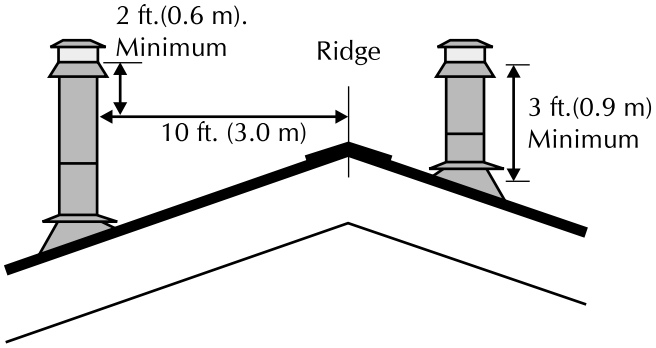
Flue Vent Termination:

There must be at least 3 ft.(0.9m) of chimney above the roof level. Stack the pipe onto your finish support to a minimum height of 3 ft.(0.9m) above the roof penetration, or 2 ft.(0.6m) above any point within 10 ft. (3m) measured horizontally.



NOTE: Cold Climate Installation

Do not install against a non-insulated wall or in a chase.



OPTIONAL OUTSIDE COMBUSTION AIR SUPPLY INSTALLATION

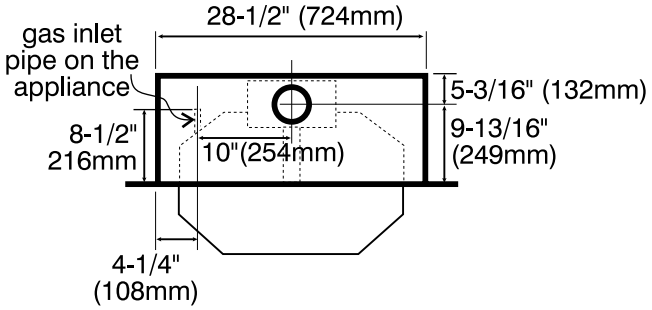
INSTALLATION INSTRUCTIONS

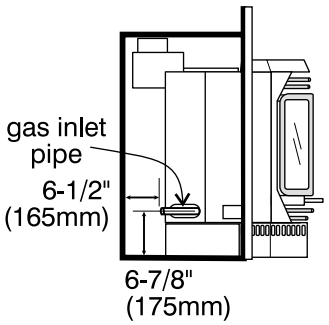
A 4" (100 mm) dia. aluminum flex pipe or equivalent may be installed from the outside (with a proper exterior cover) to the Zero Clearance cabinet. There are outside air knock-out holes provided on three sides of the kit. Use only the one that is most suitable for your installation. This will provide adequate outside combustion air supply to the heater.

GAS SUPPLY LINE

An authorised service person should install the gas line in accordance with all local building codes. If codes permit, flex gas line or coiled copper tubing may be used as gas supply line. The suggested way to install the gas supply line is as follows: run 1/2" (9.5 mm) NPT gas line to the left side of the framed opening.

Specifications	U41		I41	
	Natural Gas	LPG	Natural Gas	LPG
Min. Inlet Gas Pressure	5.0" w.c.	11.0" w.c.	1.25 kPa	2.75 kPa
BTU Input Rating	38,000 BTU/hr	38,000 BTU/hr	42,000 BTU/hr	38,000 BTU/hr





WIRING

Install an electrical outlet box in the lower left rear corner, no higher than 4-1/2" (114 mm) above the bottom and connect 120 VAC (240V in Australia & New Zealand) to the receptacle. The heater fan power cord will be plugged into this outlet box, or into any receptacle near the appliance.

FINISHED FACING NOTES

Install finished facing surface of 1/2"(13mm) thickness on framing. Drywall 1/2" (13 mm) thick can extend flush with the appliance on all three sides of the front face. The height at which the mantel must be installed above the top louver depends on the depth of the mantel. If the mantel is to be painted, use a heat resistant paint to prevent discolouration.

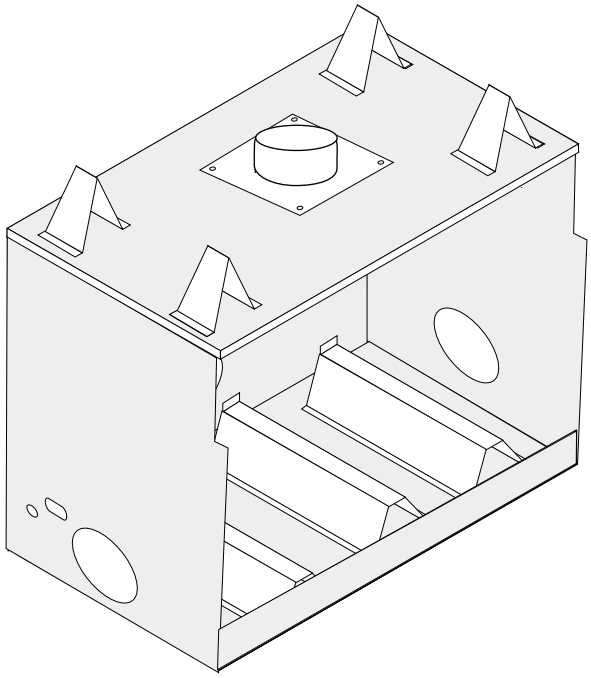
Faceplate and trim installation instructions are in the U41/I41 Insert manual. **NOTE:** the top faceplate assembly has insulation installed for safety reasons and **must not** be removed.

Masport®

Owners & Installation Manual

G51 ZERO CLEARANCE KIT

KIT # 390-900



PLEASE KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE

WARNING:
Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult an authorized installer, service agency or the gas supplier.

FOR YOUR SAFETY
Do not store or use gasoline or other flammable vapours and liquids in the vicinity of this or any other appliance.

Installation and service must be performed by an authorized installer, service agency or the gas supplier.

FOR YOUR SAFETY
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.**

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1-37 Mt Wellington Hwy.Panmure,
P.O. Box 14 349
Auckland 6.

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G51 ZERO CLEARANCE KIT

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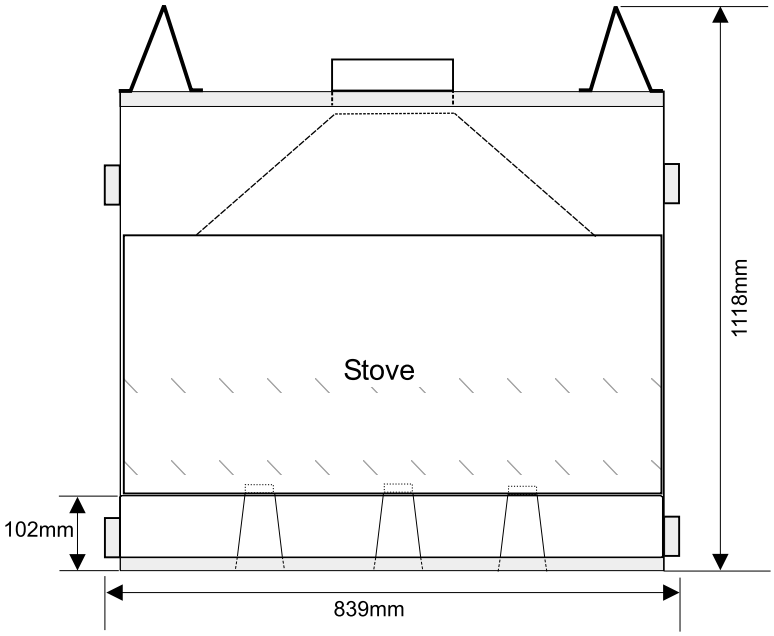
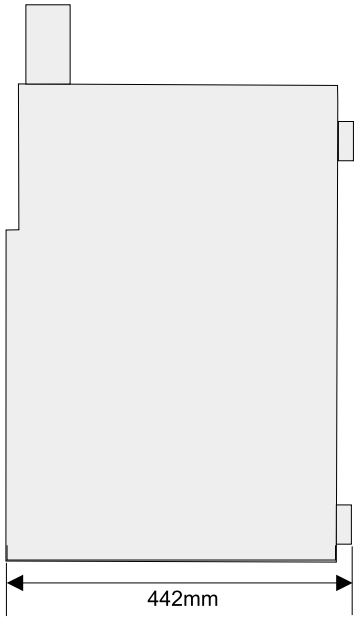
LISTINGS AND CODE APPROVALS

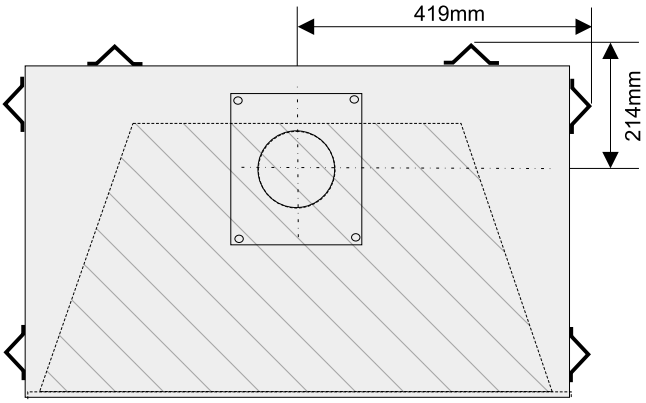
This gas component has been tested in accordance with National Safety Standards, and has been certified for installation and operation in Australia and New Zealand as described in these Installation and Operating Instructions.

Check with your local building code agency before you begin your installation to ensure compliance with local codes, including the need for "permits" and follow-up inspections. If any problems are encountered regarding code approvals, or if you wish clarification on any of the instructions contained here, contact your local dealer.

Specifications







INSTALLATION

GENERAL INFORMATION

This kit consists of factory built parts that require minimal assembly to form the Zero Clearance box for the G51 Gas Insert. The Zero Clearance box can then be fixed into a framed combustible construction, and a standard "B-vent" installed on the assembly for the required venting. The insert can be installed later. The faceplate will normally overlap on top of the finished wall. You can convert the G51 Gas Insert model into highly efficient heat producing Zero Clearance Fireplaces.

PARTS

Included with Kit:

1 Main Body Assembly
1 Faceplate Top Insulation
1 Zero Clearance Top Louver Assembly

CLEARANCES TO COMBUSTIBLES

The clearances for the Zero Clearance Kit are 0" to combustibles (back, side and floor) but when planning your installation review the clearances required (see below) after it is installed in the Zero Clearance Kit.

The Zero Clearance Kit must be installed on a flat, solid, continuous surface (e.g. wood, metal, concrete). This may be the floor, or raised up on a platform to enhance its visual impact.

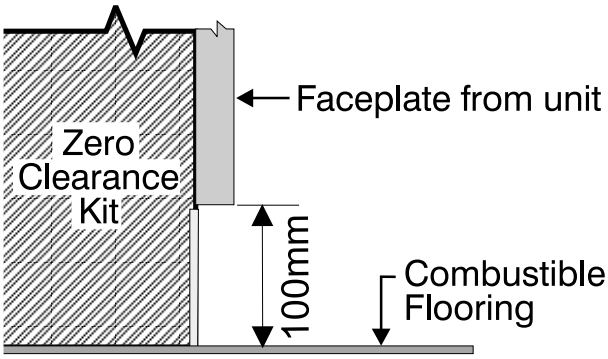
Note: Ensure the paint that is used on the mantel and the facing is "heat resistant" or the paint may discolour.

Clearances to Combustibles

Refer to fire installation manual for clearances.

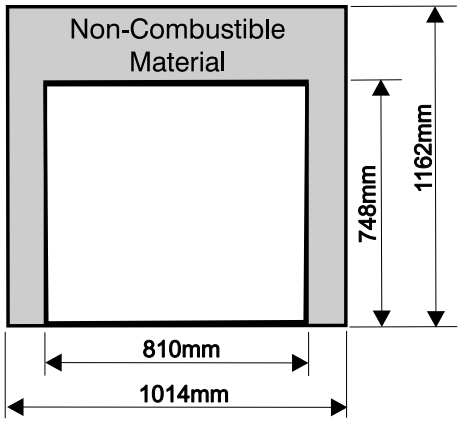
Combustible Mantel Clearances

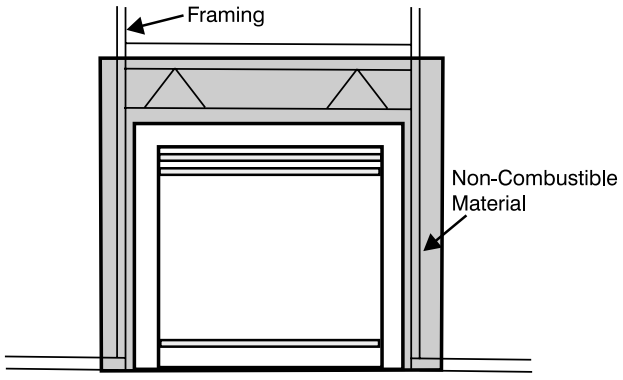
Refer to installation instructions on page 7 of the fire fire manual for clearances.



Facing Requirements

The fireplace requires a non-combustible material extending to the framing header and sides.

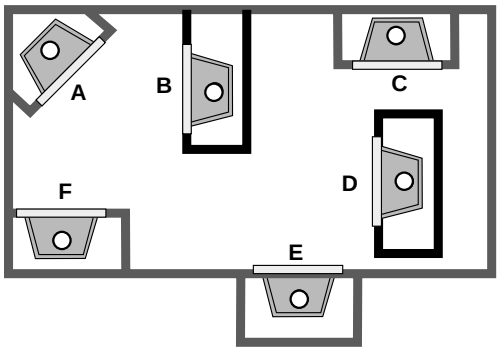




LOCATING YOUR G51 FIREPLACE

Due to high temperatures the Insert should be located out of traffic and away from furniture and draperies. Provide a minimum of 48" (1220mm) front clearance to the unit.

This appliance is Listed for Alcove installations, maintain minimum Alcove clearances as follows, minimum ceiling height of 65.5"(1666mm), minimum width of 56.5" (1435 mm) and a maximum depth of 36"
(915 mm).



This unit is not approved for installation into a mobile home.

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a) Cross Corner **d)** Island
b) Room Divider **e)** Flush with Wall
c) Flat on wall **f)** Flat on Wall Corner

FRAMING

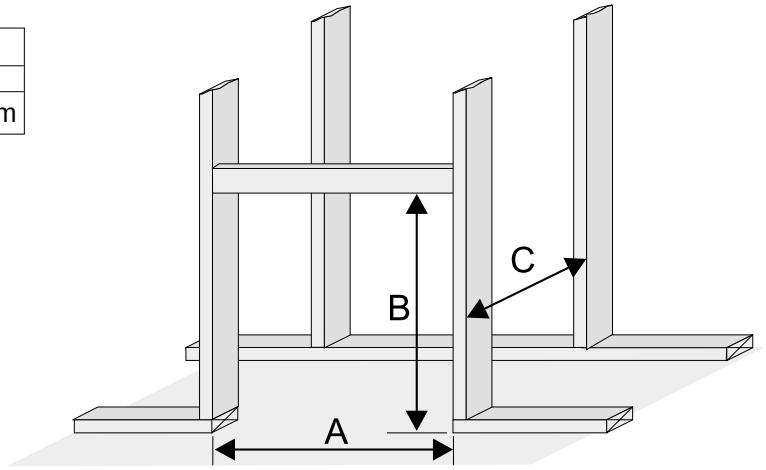
1) The trim kit allows for 1/2" (13 mm) of finish non-combustible facing material. The kit may be installed directly on and/or against standard combustible building materials.

2) Frame in the Zero Clearance box for the Kit with framing material.

3) For exterior walls, vapour barrier and insulate the Zero Clearance box to the same degree as the rest of the house, or according to local installation codes.

4) The appliance may be enclosed above the standoffs on the cabinet but the clearances stated on the b-vent chimney must be maintained.

Framing Dimensions		
A	B	C
839mm	1118mm	428mm



Warning: Combustible materials must not extend inside the stand-offs on the side, top and rear supports. For safety reasons do not modify or alter any components of the 390-900 kit.

INSTALLATION

KIT ASSEMBLY

Parts

1) Top Assembly
2) Base Assembly
3) Back Panel
4) Left Side Panel
5) Right Side Panel
6) Front Panel

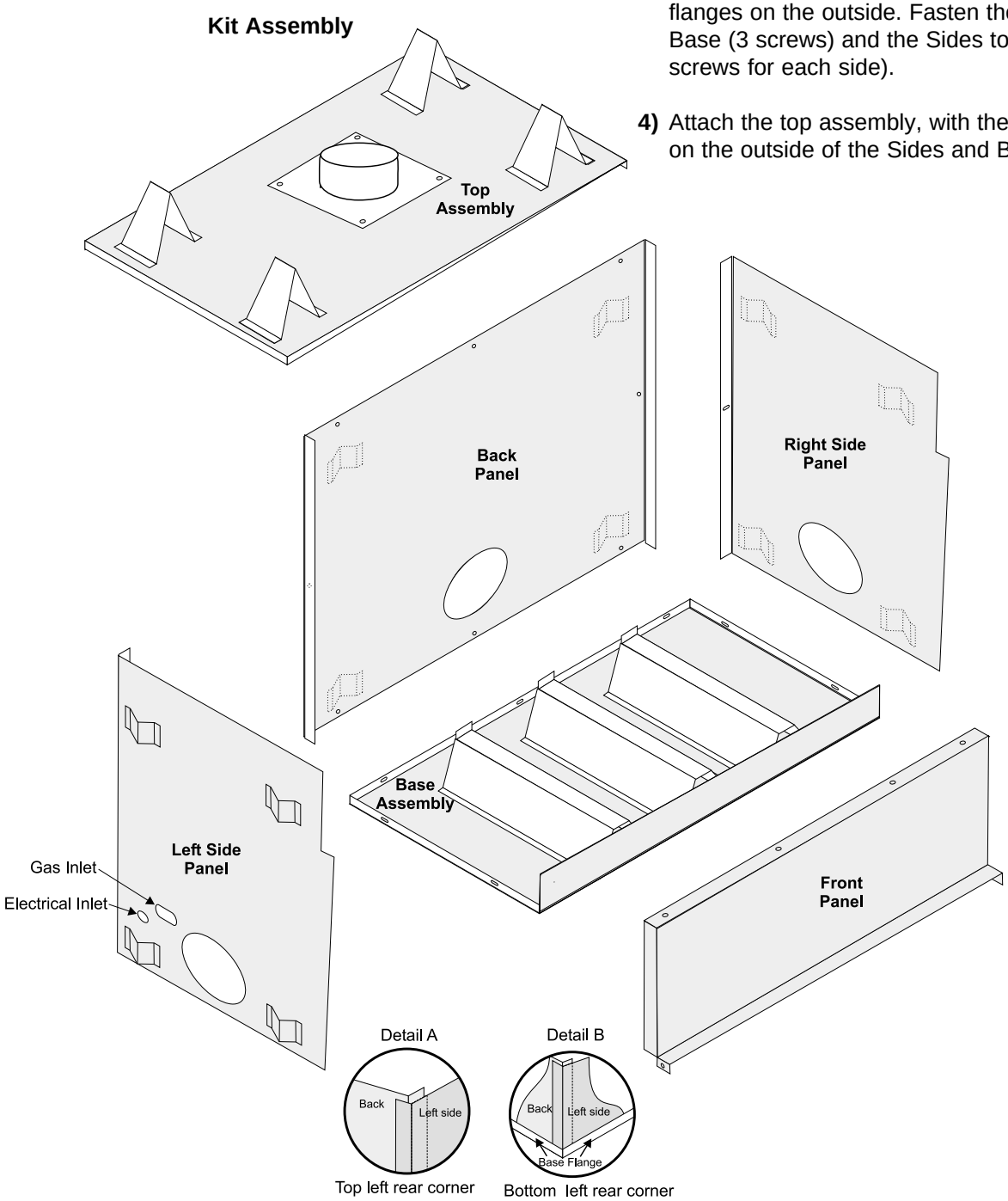
1) Lay the Base Assembly on a flat surface.

2) Attach the Left and Right Side panels to the Back panel (one screw each side).
NOTE: The side flanges are on the outside, back flanges are on the inside.

3) Lift the Back/Side Assembly onto the Base, position as shown in the diagram. The Back and Sides rest on the Base with the Base flanges on the outside. Fasten the Back to the Base (3 screws) and the Sides to the Base (2 screws for each side).

4) Attach the top assembly, with the top flanges on the outside of the Sides and Back panels.

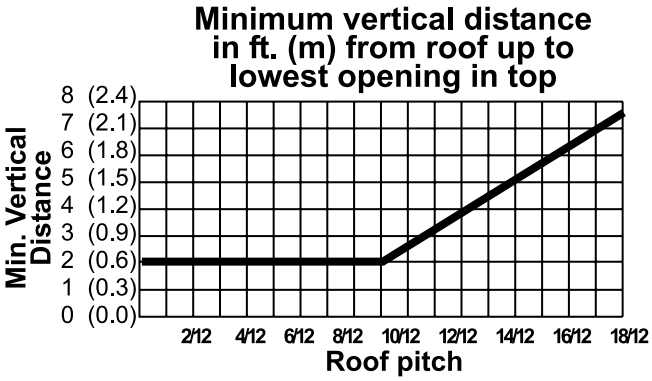
Kit Assembly

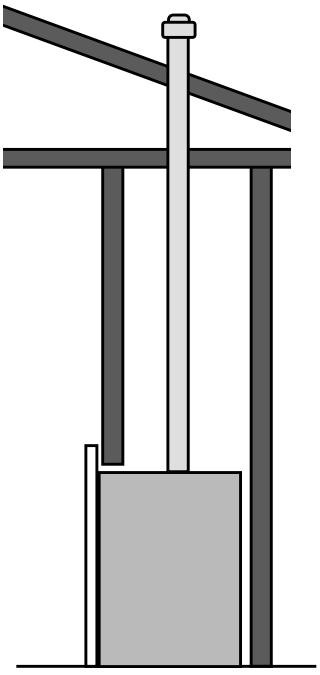


VENTING

1) This fireplace must be vented with a 8" (200mm) diameter Class “B” vent. The installation of the venting system must conform and be in accordance with the natural gas installation code CAN/CGA - B149 (Canada), ANSI Z223.1 (U.S.A.), AG 601 (Australia), and NZS 5261 (New Zealand). Minimum chimney height from base of fireplace must be at least 12 feet (3.7m).

2) Masonry Chimney Installation:
This application can be connected to a masonry chimney flue. Make sure the masonry chimney is clean and in good working order. When an existing masonry chimney is unlined and local experience indicates that gas condensation may be a problem or if local codes dictate, an approved liner should be installed. Use “B” Vent to bridge the gap between the fireplace and the masonry chimney. To ensure proper flue sizing and operation it is recommended that the masonry chimney be lined with an approved aluminium chimney liner of the same diameter as the “B” Vent. Make sure connection between “B” Vent and masonry is completely sealed. Flue pipe exposed to cold air should be insulated in a chase. If condensation occurs, a trap should be installed at bottom of flue.





Chimney Routes

INSTALLATION

ZERO CLEARANCE BOX INSTALLATION

1) Assemble Zero Clearance box as per instructions on page 6. DOT NOT INSTALL FRONT PLATE.

2) Place the unit on the stand-offs in the Zero Clearance box.

3) Slide the unit in all the way back.

4) Run required gas and electrical connections to the Zero Clearance box, both are located on the left hand side of the unit. See "Gas Supply Line" on page 9 and "Electrical Supply" on page 9.

5) Attach flue collar to the top assembly. Align with holes in Zero Clearance box and secure with 4 screws.

6) Install front panel of zero clearance box, secure using 6 screws.

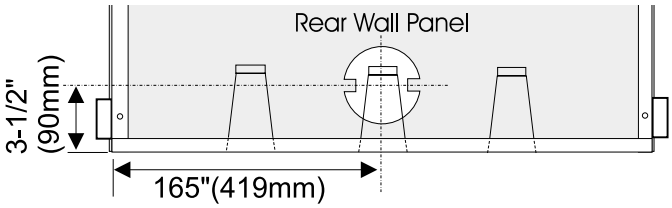
7) Make the final gas and electrical connections as per the instruction manual.

Zero Clearance Box assembled.

Zero Clearance Box with unit in place.

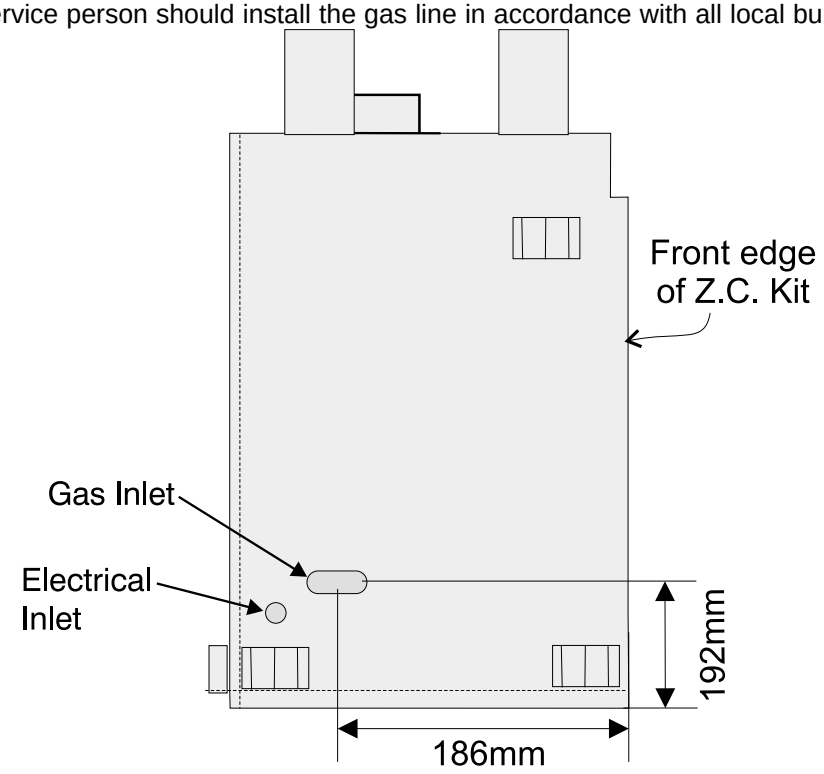
OPTIONAL OUTSIDE COMBUSTION AIR SUPPLY INSTALLATION

A 4" (100 mm) dia. aluminum flex pipe or equivalent may be installed from the outside (with a proper exterior cover) to the Zero Clearance cabinet. There is an outside hole provided on the rear wall of the kit. This will provide adequate outside combustion air supply to the heater.



GAS SUPPLY LINE

An authorized service person should install the gas line in accordance with all local building codes. If codes permit, flex gas line or coiled copper tubing may be used as gas supply line.



ELECTRICAL SUPPLY

Provide 120 VAC, 60 Hz (in Australia and New Zealand: 240 VAC, 50 Hz) receptacle within 24"(610mm) of the left side of the appliance (not inside the Zero Clearance Cabinet). Plug the cord on the appliance into the receptacle.