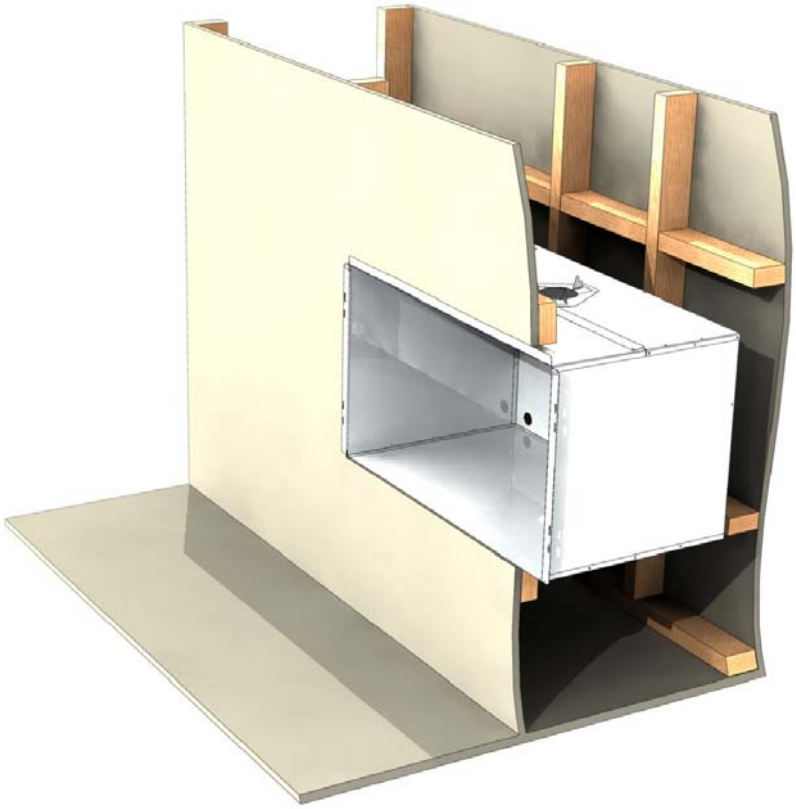
escea.

Outer Skin Kit & Flue:
IB600, IB850, IB1100

Installation Manual



Please see IB series product installation guide for details of installing the gas fire into this pre-formed metal cavity.

Important:

The appliance shall be installed in accordance with;

- This installation instruction booklet
- Local gas fitting regulations
- Municipal building codes
- Electrical wiring regulations
- AS 5601, *Gas installations* / NZ5261 *Gas Installation*
- Any other relevant statutory regulations.
- Must be installed by a qualified person

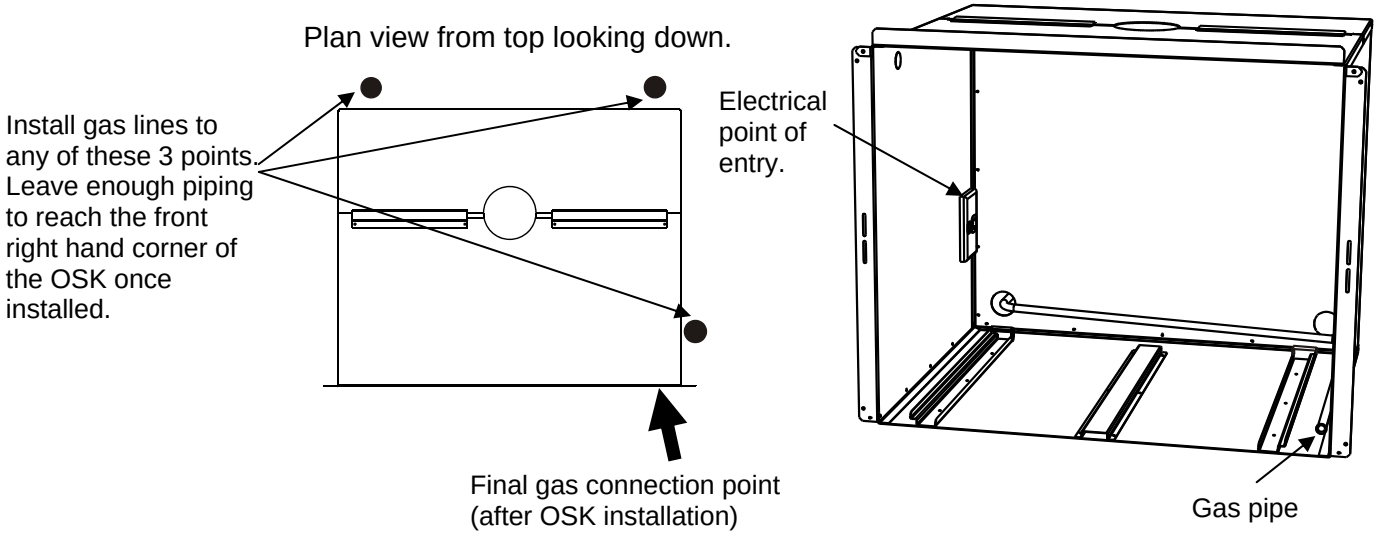
Manufactured by:
Escea Ltd, PO Box 5277 Dunedin NZ, Ph: +64 3 478 8220, email: **info@escea.co.nz** or **info@escea.com.au**
For contact details of your local escea distributor or dealer please visit **www.escea.co.nz** or **www.escea.com.au**

Note:

THERE ARE TWO MAIN THINGS TO CONSIDER BEFORE INSTALLATION

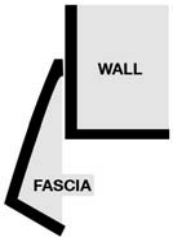
- You will need to get 230/240 Volt power supply to the back left corner of the cavity
- You will need to get gas pipe to one of the three corners of the cavity by removing a knock out

Plan view from top looking down.



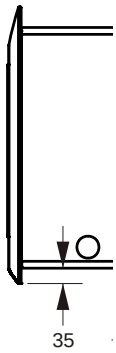
It is important that you know which type of fascia is to be used on the fireplace when installing the Outer Skin Kit. Please take note of the following information which relates to your fascia type:

IF THE FIREPLACE WILL BE USING A 'BEVELLED' STYLE FASCIA:



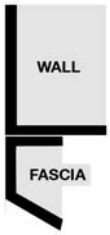
Location of hearth:
If you intend on using a 4-sided Bevelled fascia, any Hearth or horizontal surface below the fire must be a minimum of 35mm from the base of the Outer Skin Kit.

This is due to the fascia extending down this distance as shown to the right.

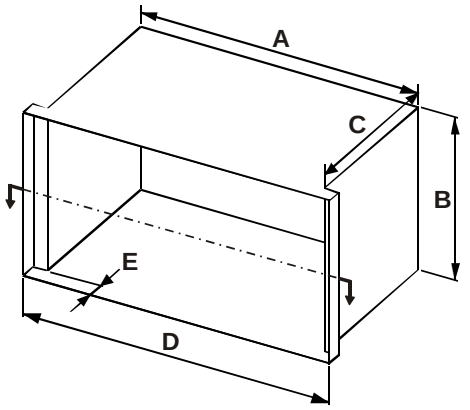


If you are using a 3-sided Bevelled fascia, any Hearths or horizontal surfaces can be level with the base of the Outer Skin Kit and/or Cavity.

IF THE FIREPLACE WILL BE USING AN 'INSET' STYLE FASCIA:

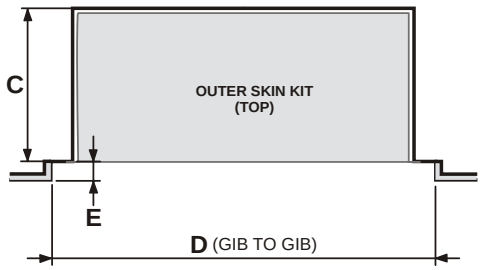


Creating the Cavity:
The dimensioned drawing to the right shows the minimum size of opening that must be created to keep combustible materials the required distance from the heater. The wall board that lines the outside of this opening can be normal dry wall (Gib Board) and does not need to be non-combustible providing that it does not come any closer to the fire than the dimensions below show.

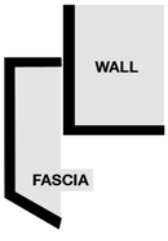


Internal Cavity & Product Dimensions:
(mm)

	IB850	IB1100
A	965	1265
B	565	565
C	565	565
D	995	1295
E	36 minimum	36 minimum

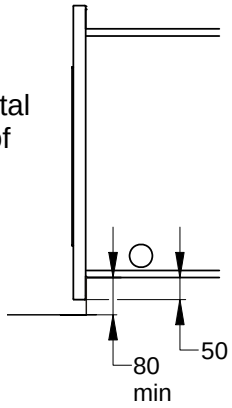


IF THE FIREPLACE WILL BE USING A 'SQUARED' STYLE FASCIA:



Location of hearth:
If you intend on using a Squared style fascia, any Hearth or horizontal surface below the fire must be a minimum of 80mm from the base of the Outer Skin Kit.

This is due to the Squared fascia extending 50mm down below the base of the Outer Skin Kit, and the fire requiring 30mm below this for ventilation.



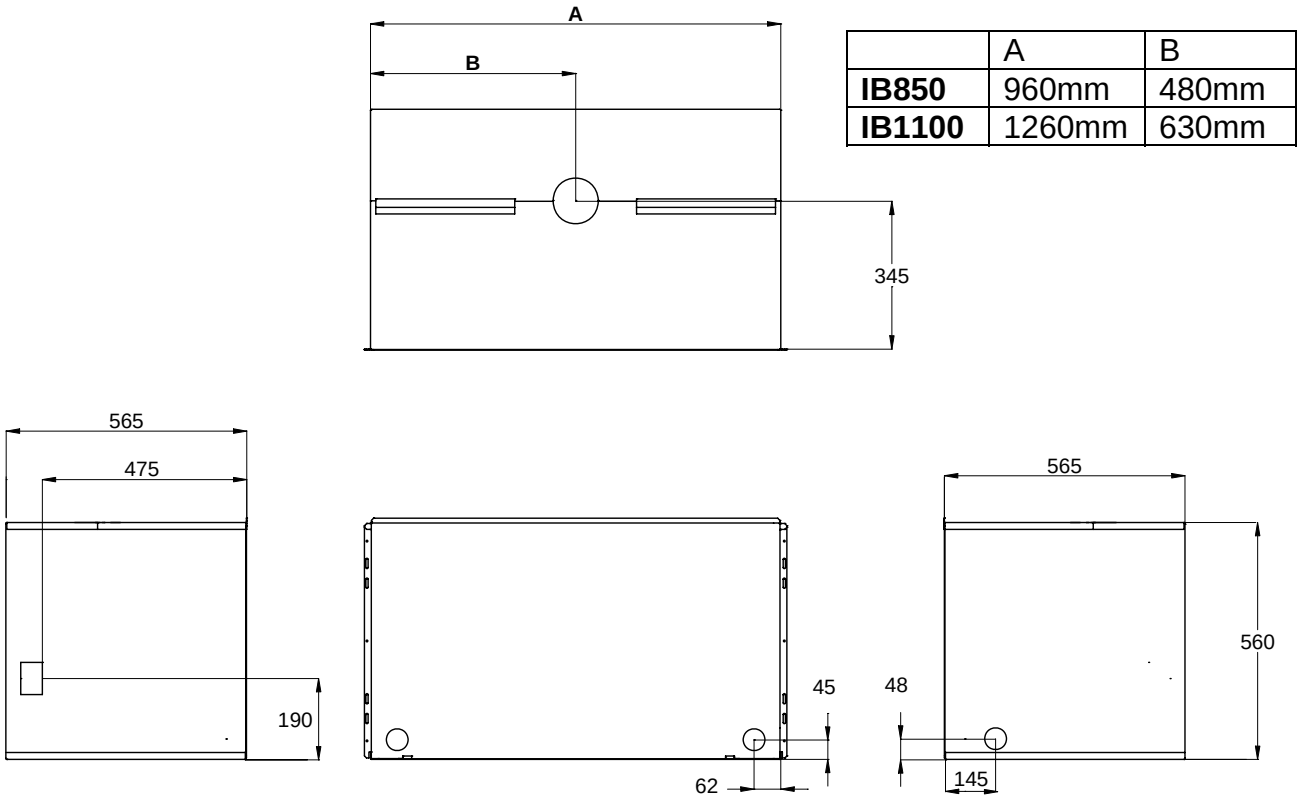
Contents: Section:

1.0 **Product Description:**

The Escea IB600 Outer Skin Kit (New Zealand only), IB850 Outer Skin Kit and IB1100 Outer Skin Kit are to be used for all installations. They seal the cavity and isolate the fire from air pressure changes within the cavity.
The only instance that the OSK might **not** be fitted is in a New Zealand installation within a full masonry chimney that is not open to any other building space. If the top of the chimney is not present and the cavity is open to the roof space then an OSK must be used.

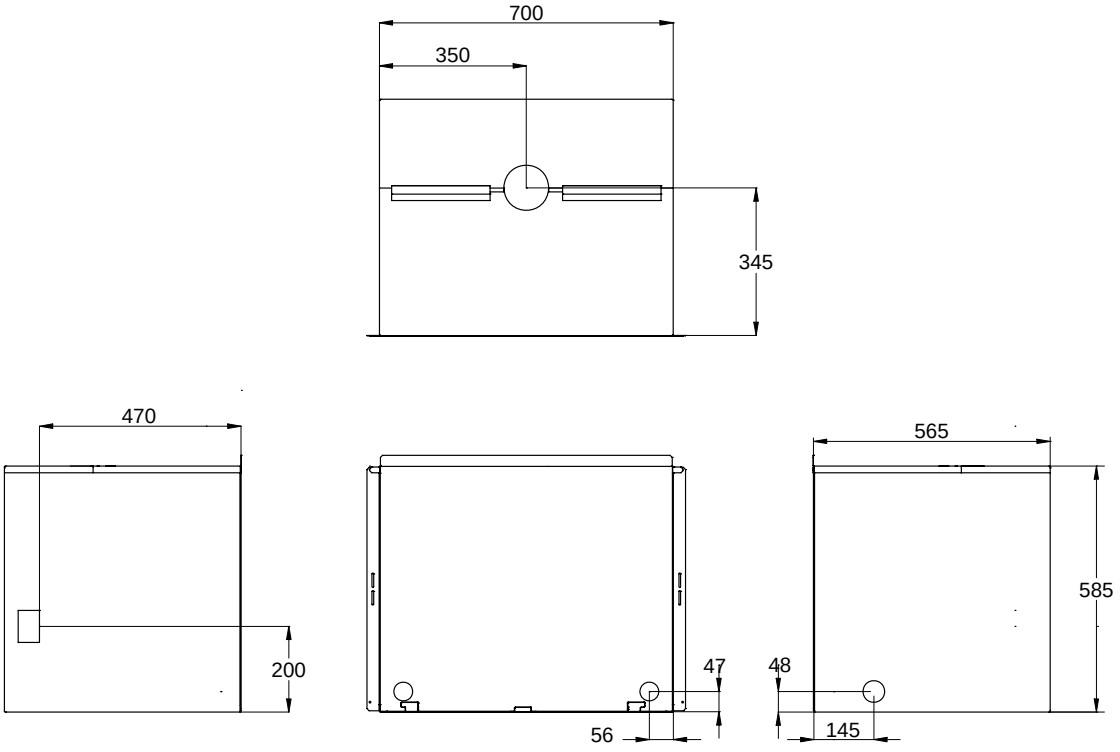
1.1 Outer Skin Kit (OSK) Dimensions:

IB850 & IB1100



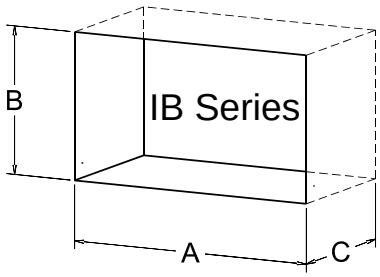
	A	B
IB850	960mm	480mm
IB1100	1260mm	630mm

IB600



2.0 **Creating the Cavity:**
NOTE: When using designer series fascia options the fire cavity dimensions are different. Check individual fascia instructions for more details.
The dimensioned drawing below shows the size of opening that must be created to fit the Outer Skin Kit.

Note: It is not necessary to line the cavity.



Ideal Cavity Dimensions:
All dimensions in millimetres

	A	B	C
IB600	700	585	565
IB850	960	560	565
IB1100	1260	560	565

2.1 Where possible, it is recommended that cavity is made slightly larger than the above dimensions to give the installer the maximum amount of space to work in.

3.0 **Hearth (NZ Only):**
If this fire is being installed at floor level a hearth made from non-combustible material must extend *no less than 300mm from the front of the fire*. This hearth should be at least as wide as the fire's outer fascia and no less than 10mm thick. Raised hearths can be any size but must also be constructed from non combustible materials.

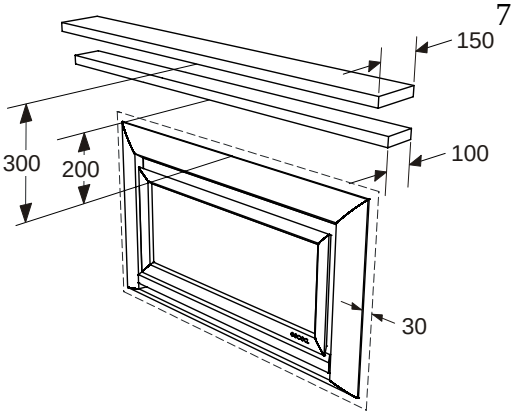
3.1 The floor in front of this hearth will still get warm so if floor covering is vinyl, nylon carpet or other heat sensitive material then we recommend extending the hearth to 450mm from the fire.

3.2 **Hearth (Australia Only):**
This fire must be installed at a minimum of **100mm** off the floor. A raised hearth can be of any size but must be constructed from non combustible materials.

3.3 **NOTE (NZ & Australia):** If the hearth is to be covered with tiles or some other veneer then the fire must be installed so that the base of the 'Outer Skin Kit' is level with the finished top surface of the hearth.

4.0 **Raised Installations Up a Wall:**
If the fire is being located in such a way that the bottom of the cavity is any more than **100mm** up off the ground no hearth is required. Escea recommend that if a heater is being mounted more than 100mm up a blank wall and no hearth is being used, then a **four sided fascia** is used (available from your Escea dealer).

5.0 **Wall Linings:** The front mounting flanges of the 'Outer Skin Kit' **MUST** be on top of the **FINISHED** wall surface in order for the fascia panels to mount properly. Take into account any plaster board, tiles or any other finishing surface that may be intended for the finished wall surface. Wall finishing materials must not encroach upon the minimum cavity clearances given in section 1.0. The wall board that lines the outside of this opening can be normal dry wall (plaster board) and does not need to be non-combustible providing that it does not come any closer to the fire than the dimensions shown in section 2.0.
Note: The temperature of the wall lining directly above the heater does get warm and hence may discolour paint finishes that are susceptible to temperature damage or distort vinyl wall coverings. For durability of finishes and surfaces you should contact the relevant manufacturer for their specification.

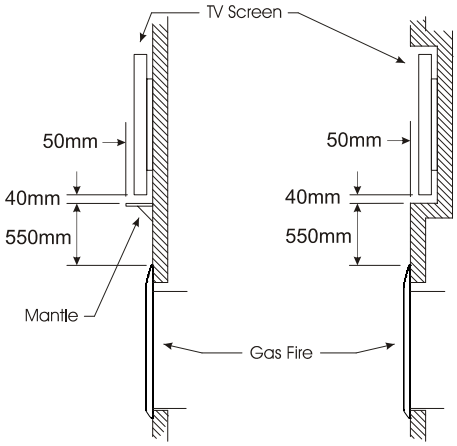


6.0 **Mantle Clearance:**

Please refer to the diagram to the right. Mantles or protruding ledges mounted above the heater that are made from **combustible materials**, must not extend from the wall outside of the dimensions shown.

6.1 Television Clearances:

The following are the recommended minimum clearances for the location of any electrical equipment (such as Plasma TV, LCD TV or home theatre) above an escea IB Series gas fire. Use either a shelf or mantle below your TV screen or alternatively you can construct a recess to mount your TV screen into.

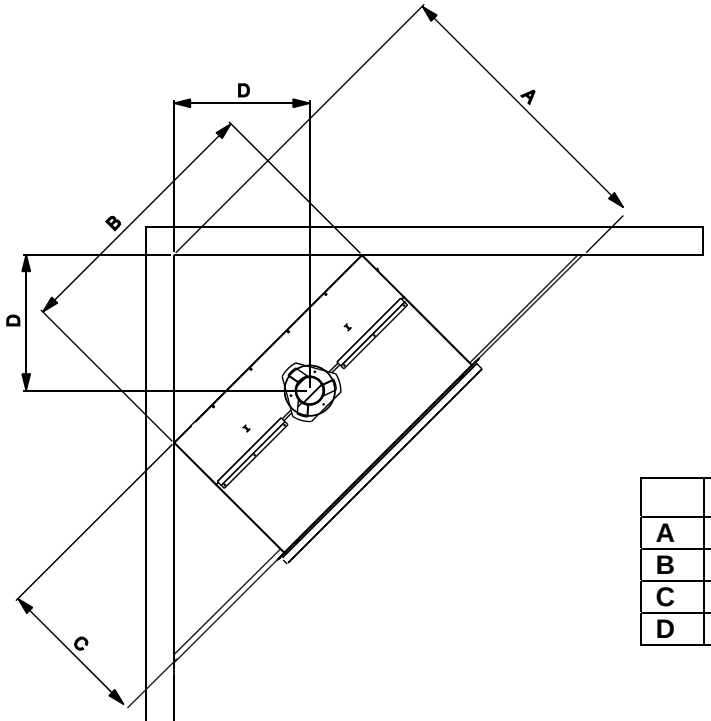


Note: The above television clearance recommendations are to be treated as a suggestion of a suitable installation only. It is the responsibility of the end user to check the installation instructions of their electrical appliances to ensure that the location in relation to the gas fire, is suitable. Escea in no way guarantees or takes responsibility that the above installation suggestion will be suitable for all electrical or home entertainment appliances.

7.0 **Corner Installations:**

If a cavity is to be created in a corner, the following drawings give the minimum sized interior wall and resultant flue position.

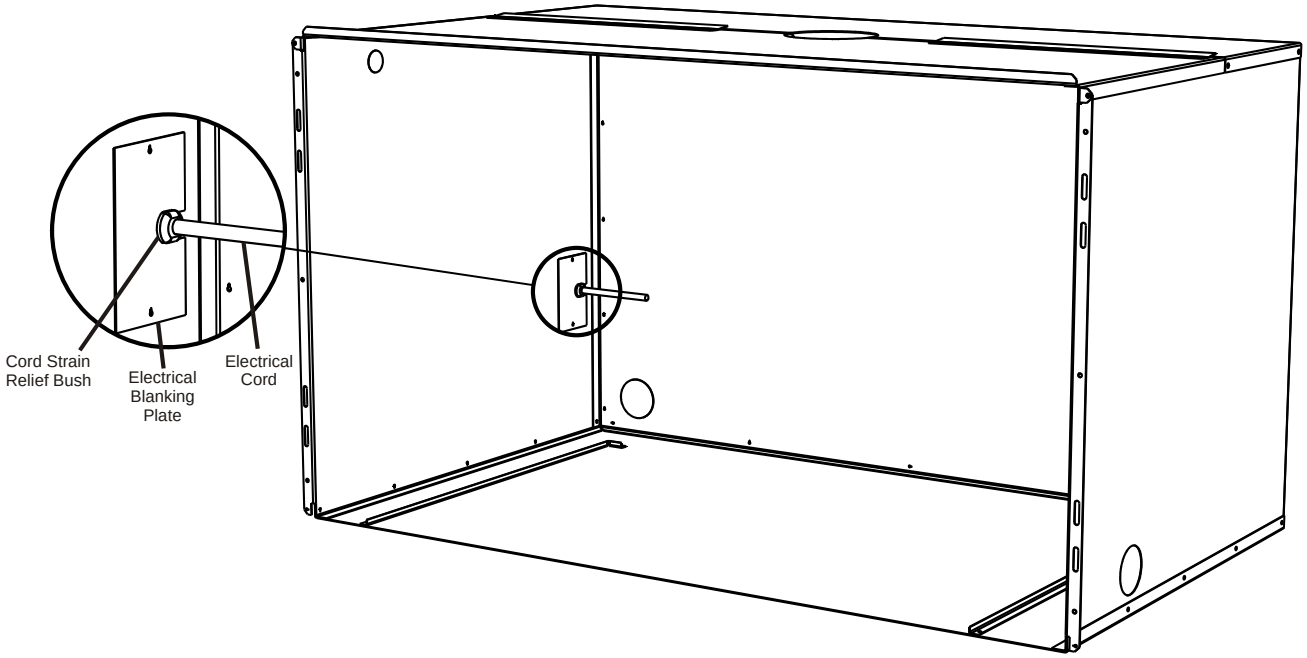
7.1 Minimum Corner Install Dimensions:



	IB1100	IB850	IB600
A	1195	1045	915
B	1260	960	700
C	565	565	565
D	600	495	405

8.0 **Power Supply:**

The electrical cord (either of the fire, or an extension cord) should pass through the 'Outer Skin Kit' as shown, through the supplied 'Cord Strain Relief Bush'. Alternately an electrical outlet can be fitted directly to the Outer Skin Kit. This can be done by not using the electrical blanking plate and fitting the socket in the rectangular hole.



Locating the power outlet within the cavity makes the installation very neat but the provision **MUST** be made to be able to switch the power supply off and on (electrical isolation switch) and **MUST** be accessible after the heater has been installed. This is normally done by means of a separate switch located outside of the cavity and wired to the plug. This will allow service technicians to isolate the power supply before performing service work on the appliance.

8.1 This appliance will draw a maximum of 2 Amps from a 240V supply.
No additional power or telephone wiring is needed for the i-con phone switch, or powerflue (optional extras in New Zealand only).

9.0 Installing the Flue System NZ ONLY:

Non-Masonry Timber Frame Cavity:
The heater must be flued to the outside via a 100mm diameter stainless steel flue that is covered by a 150mm diameter liner. This must be installed in accordance with the requirements of AS5601 / NZ5261.
The minimum flue length = 3.6m vertical height

It is important to check that you have all the necessary flue parts before beginning your installation.

We recommend that a standard timber flue installation should include the following components:

3 x 100 x 1200mm Flue

2 x 150 x 1200mm Galv Flue Liner

1 x 150 x 1040mm Galv Flue Liner

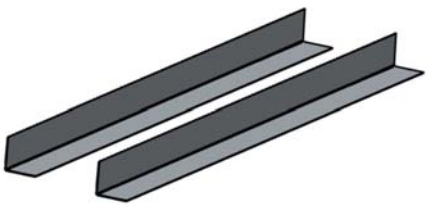
1 x Flue Cowl

1 x Flue Liner Joiner

2 x Flue Liner Spacer Bracket

3 x Spider Bracket

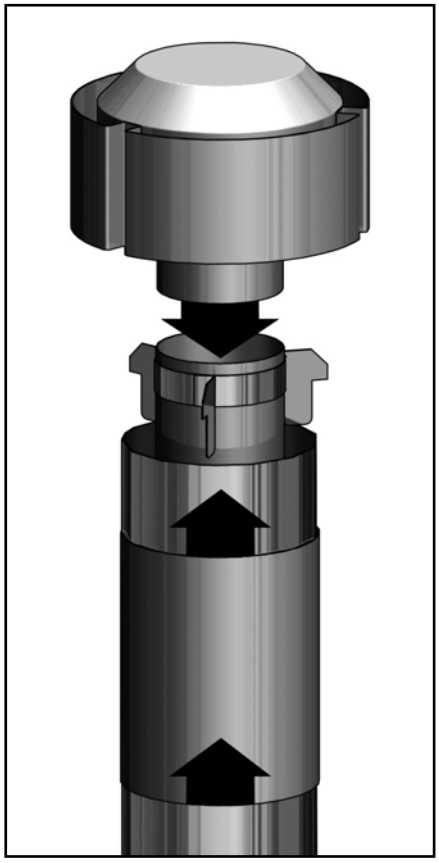
1 x 180mm Flue Sleeve



Angle 50x50x900 Flue Bracing

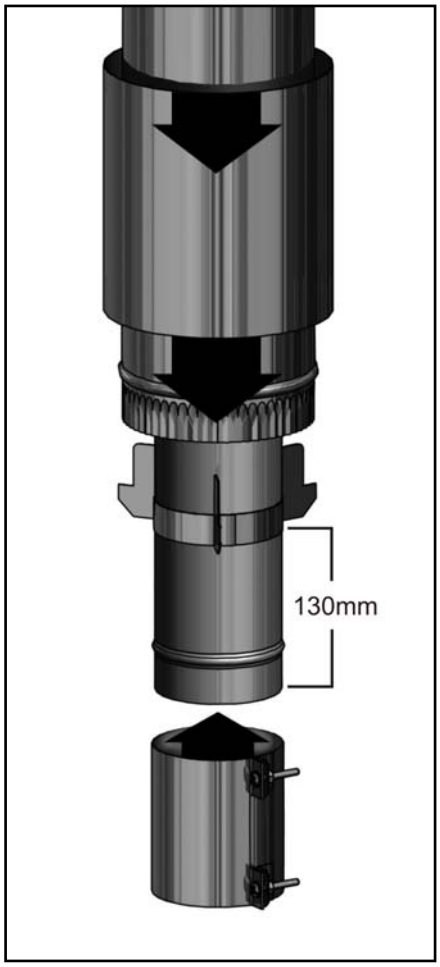
1 x 100mm Clamping Flue Sleeve

10.0 **Flue Assembly** **NZ ONLY**



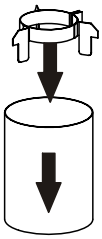
Secure the Flue spacer bracket to the top section of 100mm Flue and insert the cowl, this can be riveted or held in place with screws (see 10.1 Installing the Flue Terminal). Now slide the 150mm flue onto the bracket.

For each section of flue a Spider bracket will be required. These act as spacers for the 150mm flue and should be attached half way along each section of flue.

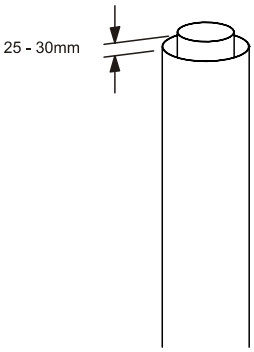


The bottom section is similar to the top assembly. The flue spacer bracket must be secured 130mm from the end of the 100mm flue, this will give clearance to slide the flue sleeve up the flue when installing the Fireplace. Once the installation is complete the 180mm flue sleeve can be slid down to cover and protect the lower assembly.

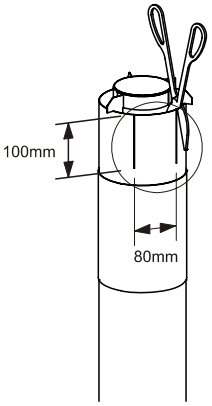
10.1 Installing the Flue Terminal **NZ ONLY**



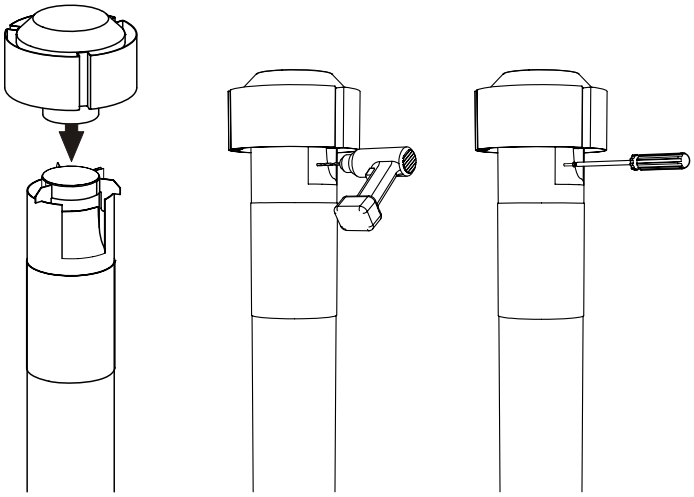
Cut the flue termination to the height specified on the attached “Flue position” diagrams and leave a vertical offset of 20 - 30mm between the inner and outer as shown. Slide the flue liner sleeve over the liner and push it down about 150mm out of the way. Fit the flue spacer bracket between the flue and flue liner.



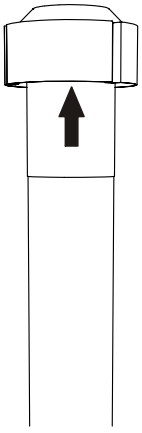
Cut & bend an 80mm by 100mm flap and bend towards the inner flue as shown below.



Fit cowl and drill trough the flap, flue and cowl stem. Using approximately a 1" stainless steel self tapping screw fix the cowl in place.



Slide the liner sleeve piece up under the cowl until it hits the flue spacer bracket. Around the bottom of the sleeve drill and rivet in three places.

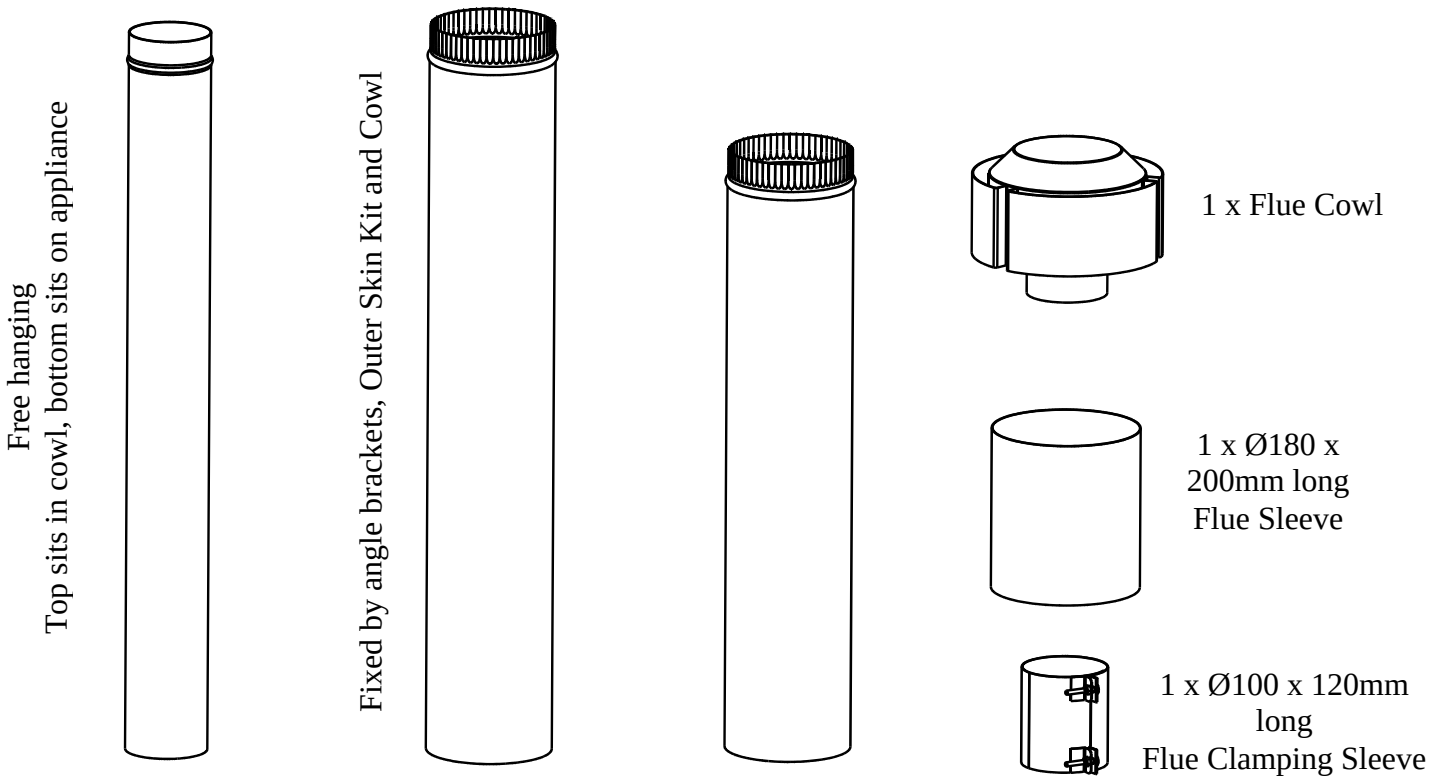


10.2 Flue Systems **AUSTRALIA ONLY**

Non-Masonry Timber Frame Cavity:
The heater must be flued to the outside via a 100mm diameter stainless steel flue that is covered by a 150mm diameter liner. This must be installed in accordance with the requirements of AS5601 and local codes.
The minimum flue length = 3.6m vertical height

It is important to check that you have all the necessary flue parts before beginning your installation.

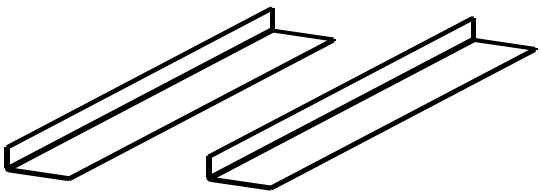
It is recommended that a standard timber flue installation should include the following components:



4 x Ø100 x 900mm long Inner Flue

3 x Ø150 x 900mm long Galvanised Flue Liner

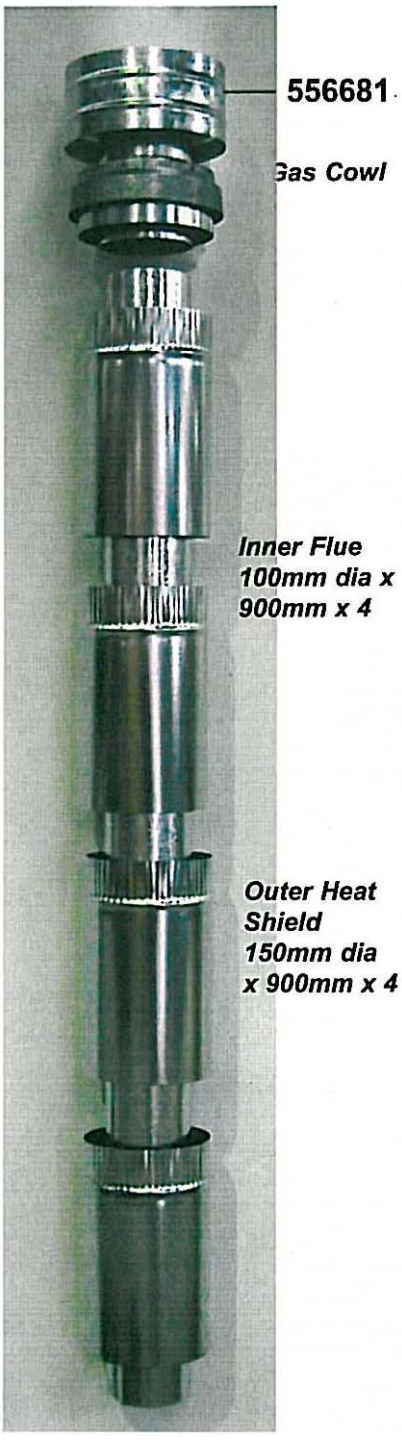
1 x Ø150 x 740mm long Galvanised Flue Liner



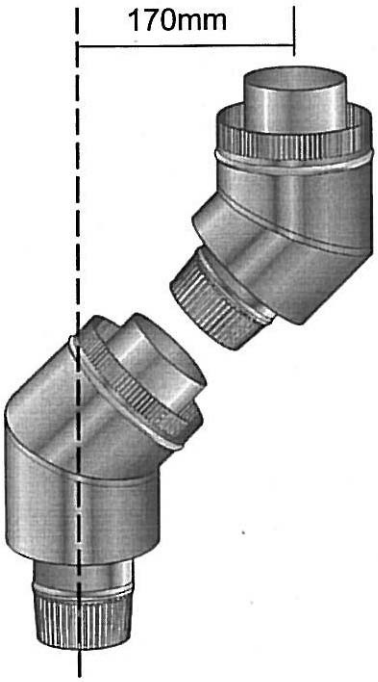
Angle Bracing
25mm x 75mm x 600mm long

10.3 **Other Flue Kits AUSTRALIA ONLY**: (Glen Dimplex kits only shown. Check with local distributor for availability)

552327 Standard Flue Kit



552332 Offset Flue Kit Black
552333 Offset Flue Kit Galvanised



552330 900mm Flue Extension Kit Black
552331 900mm Flue Extension Kit Galvanised

10.4 **Installing the Flue System AUSTRALIA ONLY:**

Non-Masonry Timber Frame Cavity:
The heater must be flued to the outside via a 100mm diameter inner flue that is covered by a 150mm diameter liner. This must be installed in accordance with the requirements of AS5601 and local codes.
The minimum flue length = 3.6m vertical height

10.5 **AUSTRALIA ONLY** Consult the installation instructions that come with your flue kit. To ensure safety the flue kit must be installed according to those instructions. An overview is provided below. Ensure all clearances to combustibles are maintained as per specifications earlier in this manual.

It is important to check that you have all the necessary flue parts before beginning your installation.

1. Locate the Outer Skin Kit in the cavity as per the instructions in section 15 of this manual. Mark the point for penetration that is directly above the centre of the flue outlet on the gas fireplace. Check that the location ensures that the flue outer liner maintains a 25mm clearance to all combustibles and timber framing.

2. Cut a 200mm square hole where the penetration is required using the mark created in step 1 as a guide. Fit non-combustible nogs in the ceiling space if required.

3. Measure the overall flue length required. Remember to allow for all necessary clearances to neighbouring structures (including a minimum of 600mm clearance above the nearest point on any part of the roof). It is recommended that extending the flue above the ridgeline will assist with down draught issues. Consult AS5601 2002 for further information.

4. Assemble all the outer liner lengths and fix together with pop rivets or self tapping screws. Lower the assembled outer liner through the roof (or false chimney) and secure to the fixed part of the Outer Skin Kit. Fix as necessary to inner framing where possible (see section 12.4).

5. Assemble the Ø100mm inner flue lengths using pop rivets or self tapping screws. It is recommended that *all* flue joints are sealed. Lower the Ø100mm inner flue assembly from the roof through the centre of the outer liner and locate onto the gas fireplace spigot. Ensure that the top of the Ø100mm inner flue is at the correct height at the top of the outer liner.

6. Fix an appropriate weather shielding to the outer liner at the penetration and seal to the roof or chimney using an appropriate sealer.

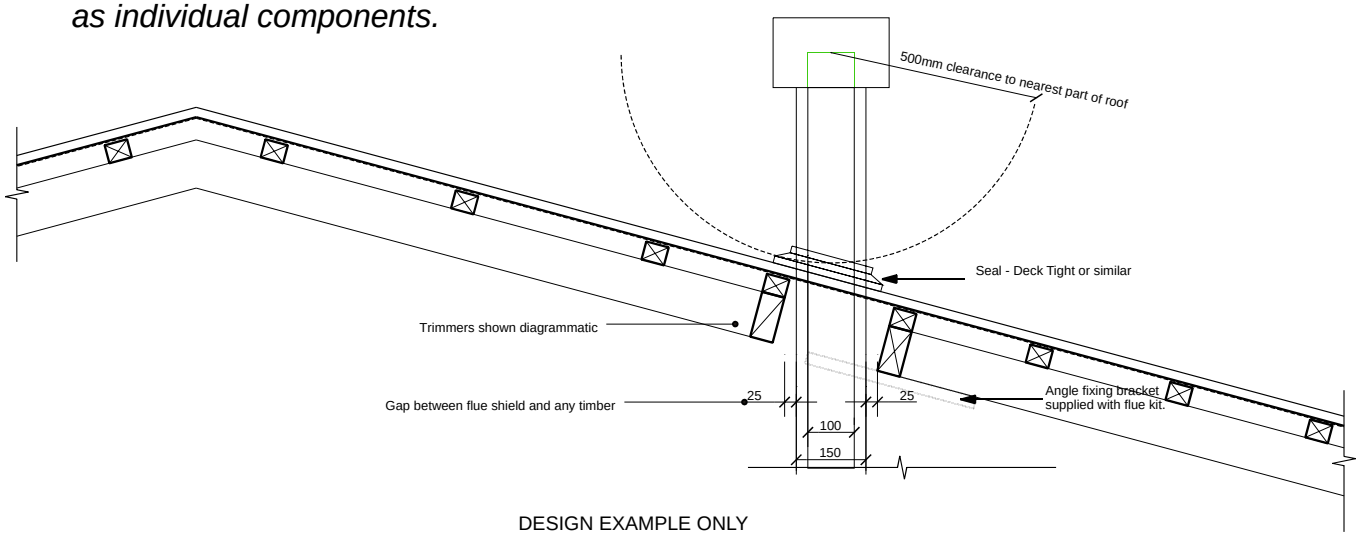
7. Fit the gas cowl.

8. Once gas fireplace is operational check the installation for flue spill where possible

9. Note: It is the installer's responsibility to ensure the installation complies with AS5601 2002 and all relevant local codes.

10.6 The top of the flue must be capped with an appropriate and approved anti down draft cowl.

All the required flue components are available from your escea dealer in both kitset form and as individual components.

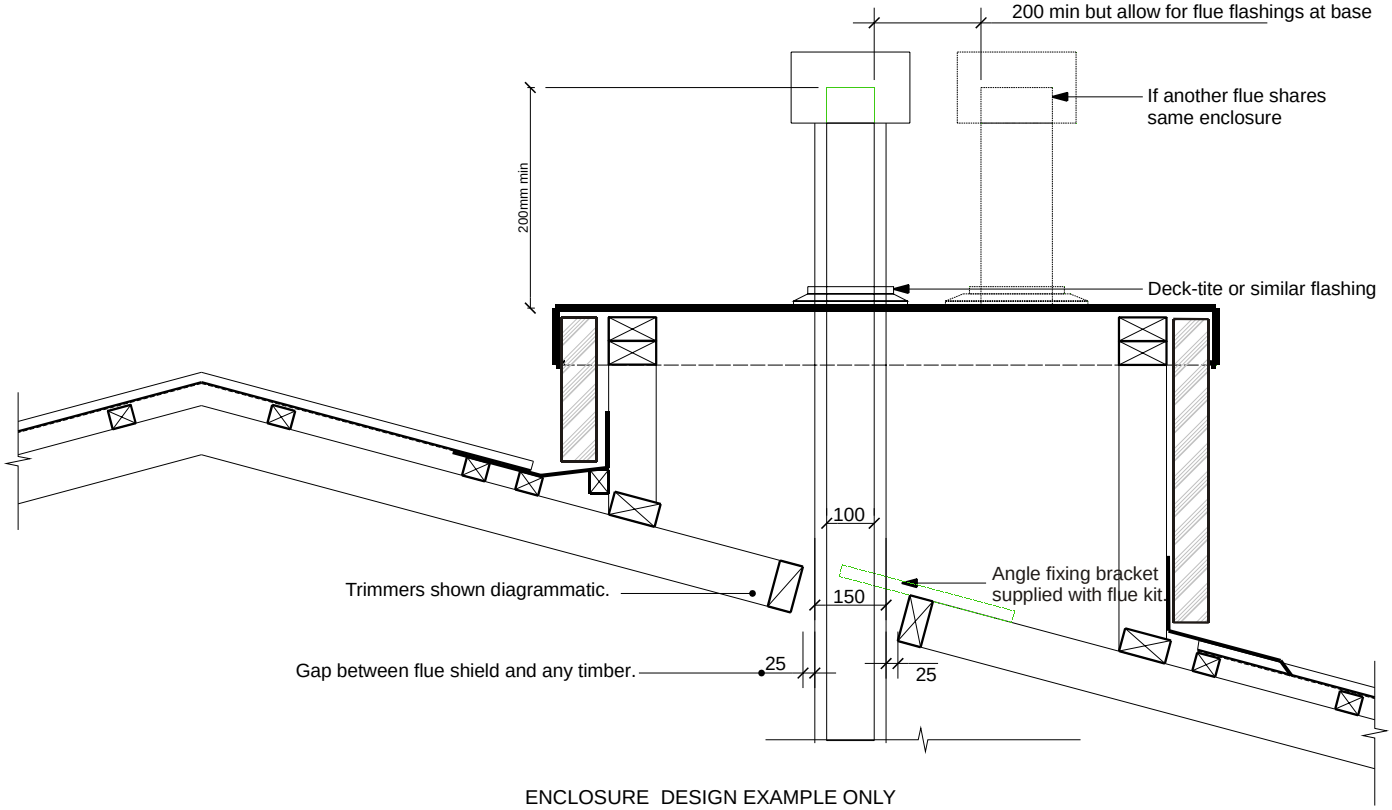


DESIGN EXAMPLE ONLY

LONG SECTION THROUGH FLUE ENCLOSURE

Scale: 1:10

GENERAL CONSTRUCTION AND CLADDING SHOWN AND IS INDICATIVE ONLY



ENCLOSURE DESIGN EXAMPLE ONLY

LONG SECTION THROUGH FLUE ENCLOSURE

Scale: 1:10

GENERAL CONSTRUCTION AND CLADDING SHOWN INDICATIVE ONLY

FROM AS5601, please ensure compliance to all other relevant sections of this code.

2.6.13 FLUE TERMINALS

2.6.13.1 Location

The termination point of a flue shall be located in relation to any associated building and to neighboring
structures so that wind from any direction is not likely to create a downdraught in the flue or chimney.

Except where 2.6.13.3 applies, a flue terminal shall:
(a) Be at least 1m horizontally from a neighboring structure; or
(b) If less than 1m horizontally from a neighboring structure, be at least 500mm above that structure;
(c) Be at least 1.5m from any opening into a building; and
(d) Be at least 200mm from another flue terminal.

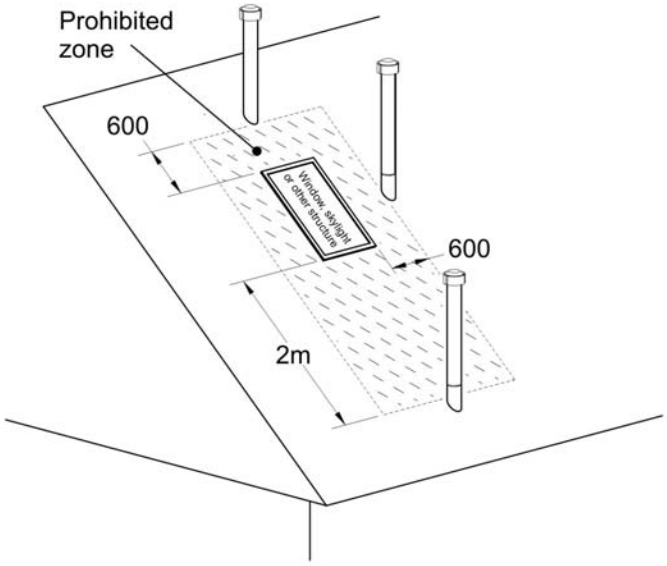
2.6.13.2 Terminating a flue above a roof
Where a flue is to terminate above:
(a) A roof; the end of the flue shall be at least 500mm from the nearest part of the roof;
(b) A trafficable roof designed for personal or public use, the end of the flue shall be at least 2m above the roof level and at least 500mm above any surrounding parapet; or
(c) A chimney, the end of the flue shall be at least 200mm from the nearest part of the chimney.

NOTE-
(1) The distance is measured before the cowl is fitted to the end of the flue
(2) (NA)
(3) (NA)

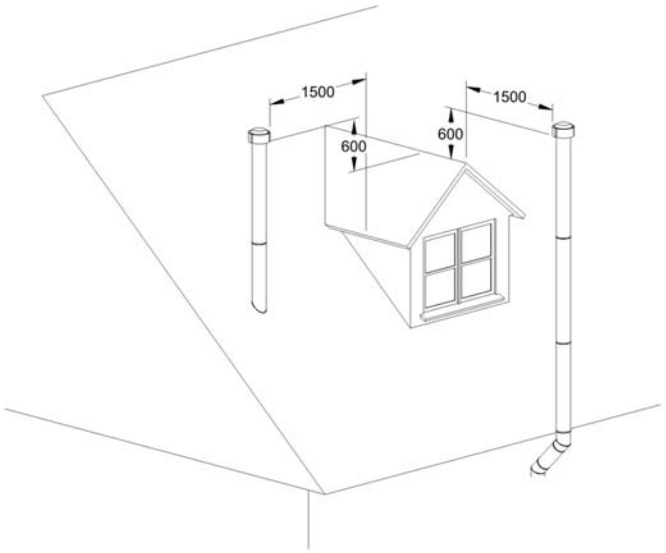
2.6.13.3 Location of a flue terminal other than above a roof
(NA)

10.7 **Flue Clearance:**

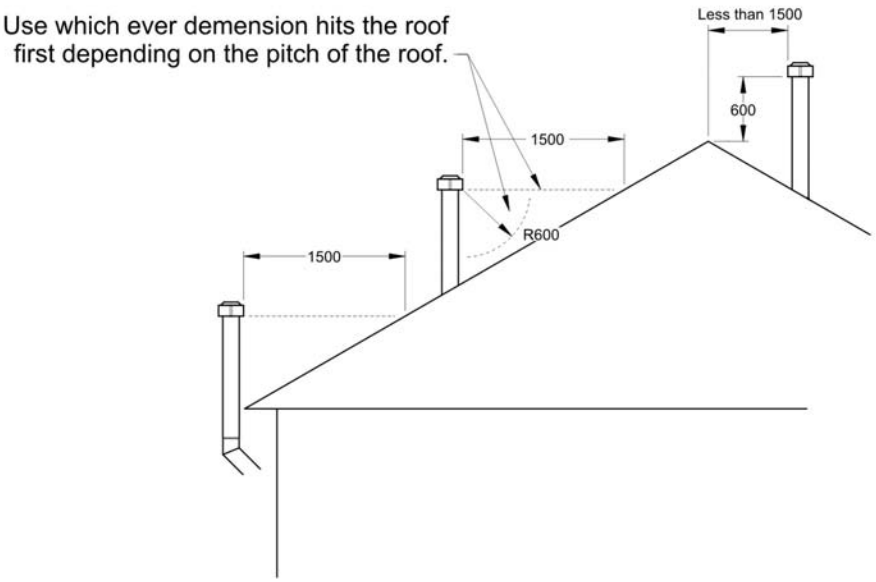
Flue Clearance From Skylight or Similar Structure



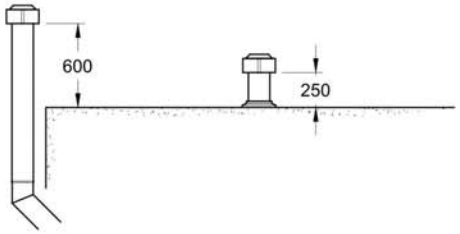
Flue Clearance From Dorma or Similar Structure



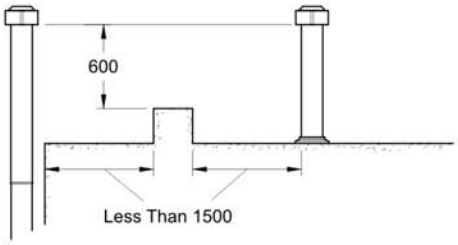
Flue Clearance From Pitched Roofs And Ridges



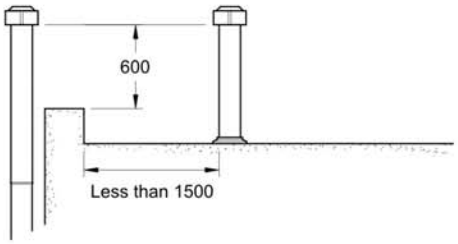
FLAT ROOFS WITH NO PARAPET



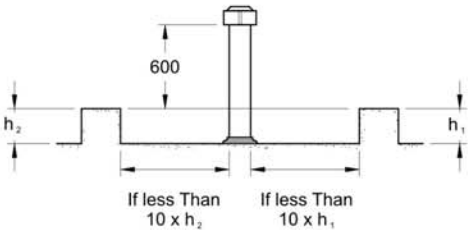
STRUCTURE CLOSE TO FLUE TERMINAL



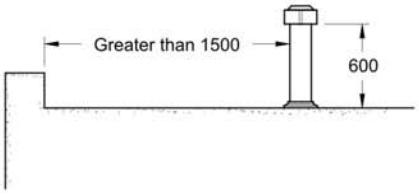
FLUE CLOSE TO PARAPET



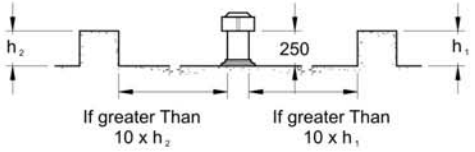
MULTIPLE STRUCTURES (Envelope Method)

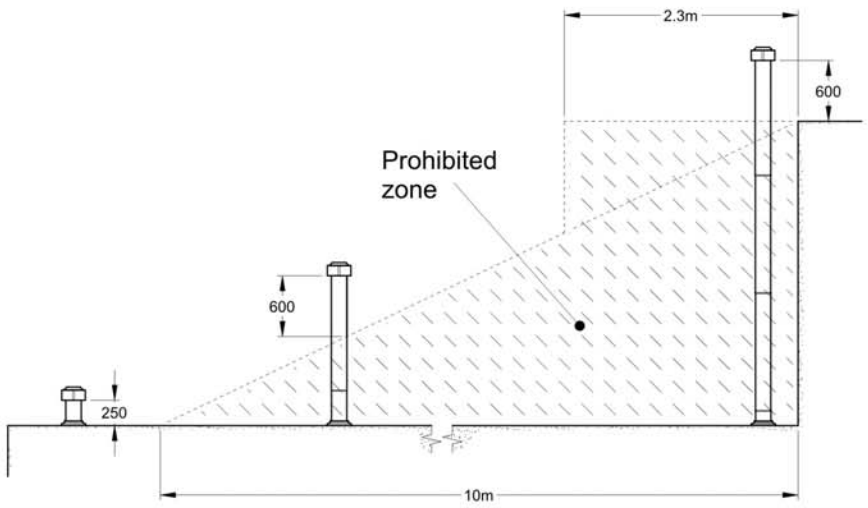


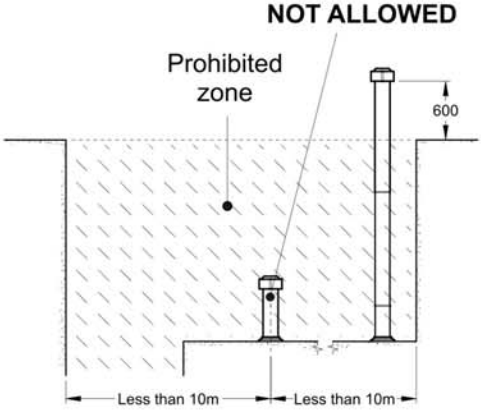
FLUE AWAY FROM PARAPET



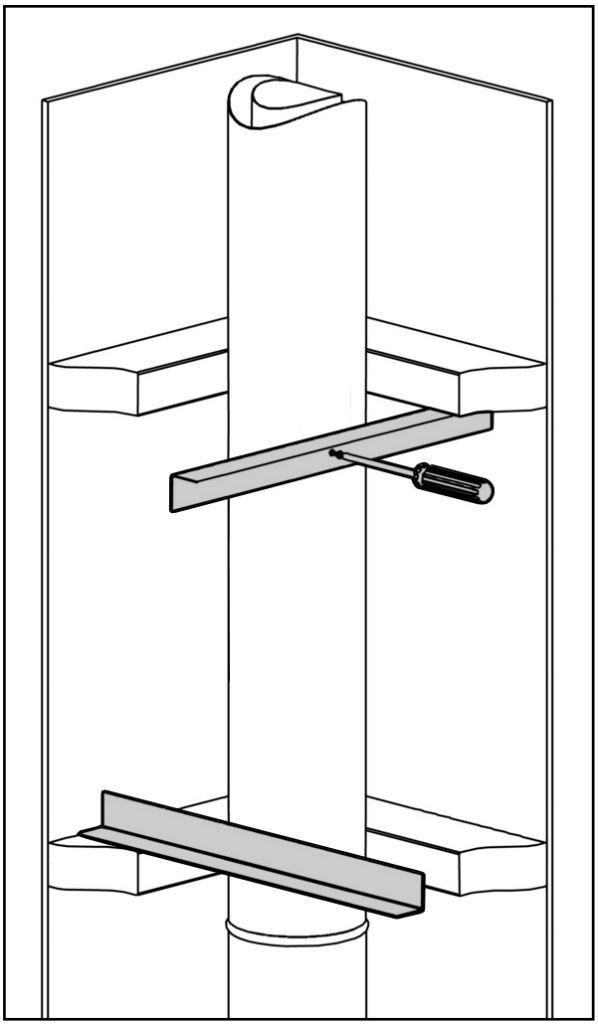
MULTIPLE STRUCTURES AT A DISTANCE



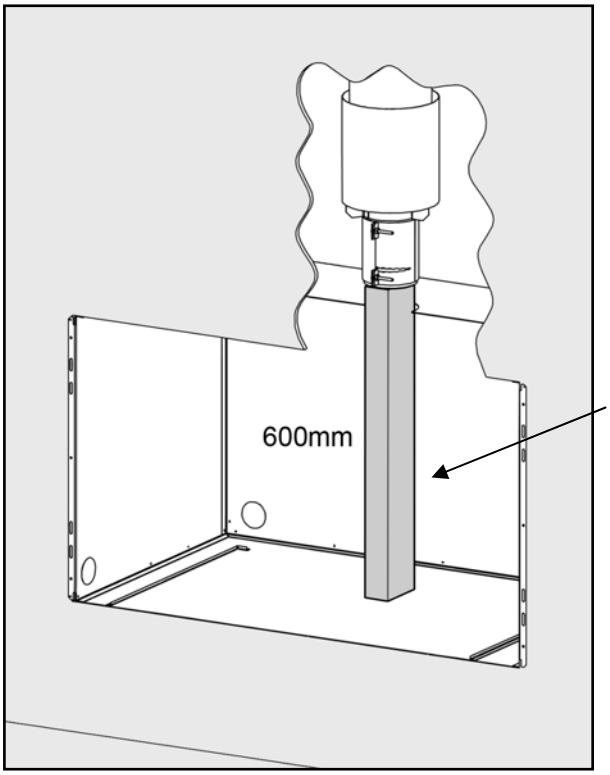




10.8 Fixing the Flue to the Cavity



A length of angle should be attached to the inside of the timber frame cavity to hold the flue in place. Once you have fixed the angle to the inside of the cavity holes must be drilled to secure it to the flue. Screws or rivets can be inserted directly into the 150mm flue to hold it in place.



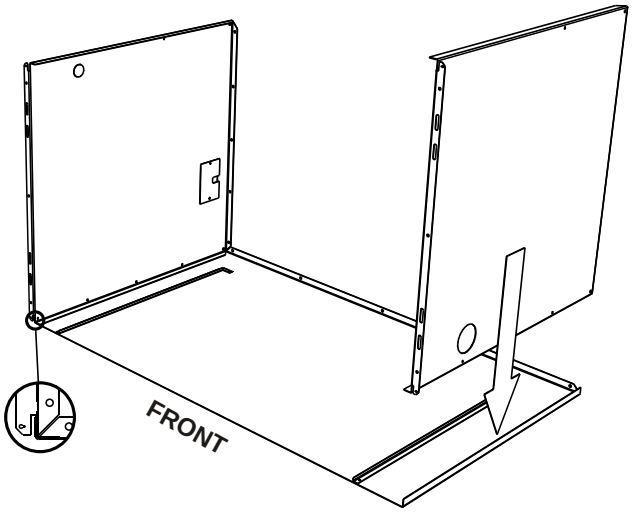
To make sure the flue is installed at the correct height, a piece of timber can be cut to 600mm and between the fire base level and the bottom of the flue. This will ensure the correct height for installation and support the flue assembly.

Timber prop. as temporary support until fireplace is installed.

11.0 **Assembling the Outer Skin Kit:**

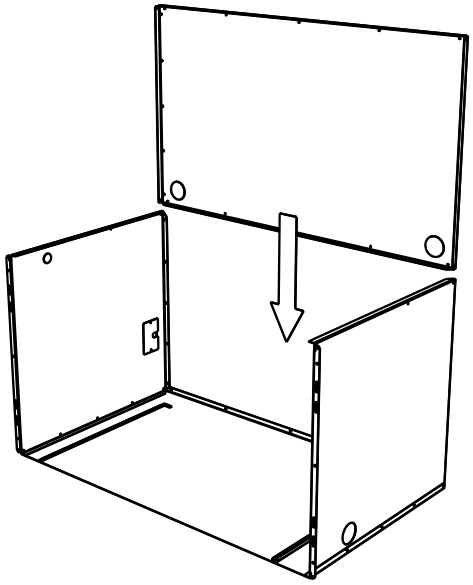
Included in the Outer Skin Kit is:

- 1x Top-Rear panel
- 1x Top-Front panel
- 2x Side panels
- 1x Rear panel
- 1x Base panel

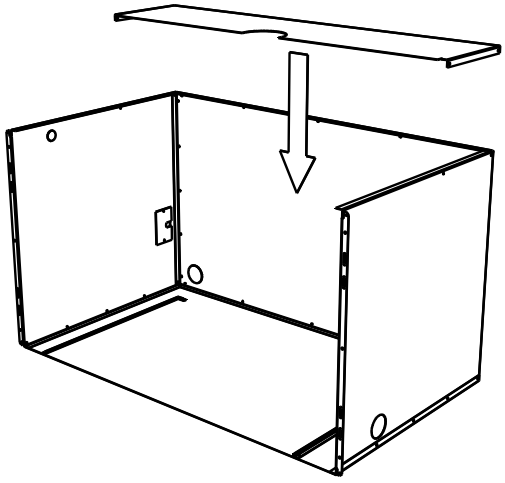


11.1 Attach the Sides to the Base:
Attach Side panels to Base, make sure Base panel flanges are on the outside, and the large flange of the Side panels faces the front.

The Left Side has a rectangular cutout, It is important that this is on the left hand side and that the right hand circular knock-out is at the base of the Outer Skin Kit as pictured.

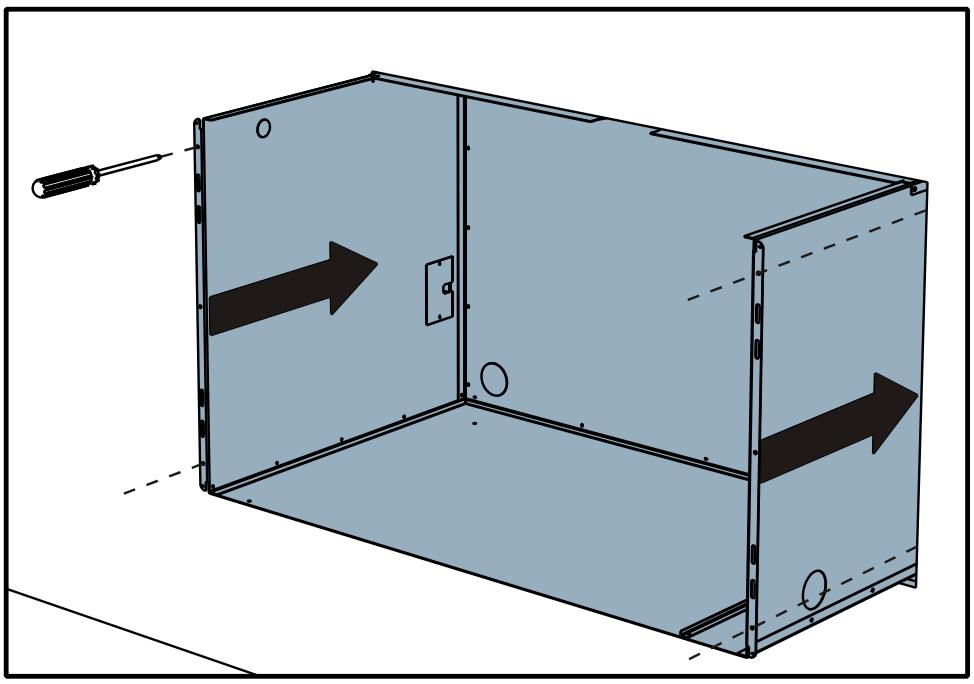


11.2 Attach the Rear to the Sides and Base:
The rear panel fits inside the Side and Base panels, make sure the flanges on the Side and Base panels are on the outside. The two holes on the Rear panel go towards the bottom.



11.3 Attach the Top-Rear:
Attach the top-rear panel to the Sides and Rear panels, with the flanges of the Top-rear panel on the outside. Do not attach Top-Front panel yet, this will be done after the flue has been mated with the fire.

12.0 **Fixing the Outer Skin Kit into the Cavity:**
Slide the Outer Skin Kit into the cavity, and secure it to the wall using screws or other fasteners through the slots at the front of the side panels.



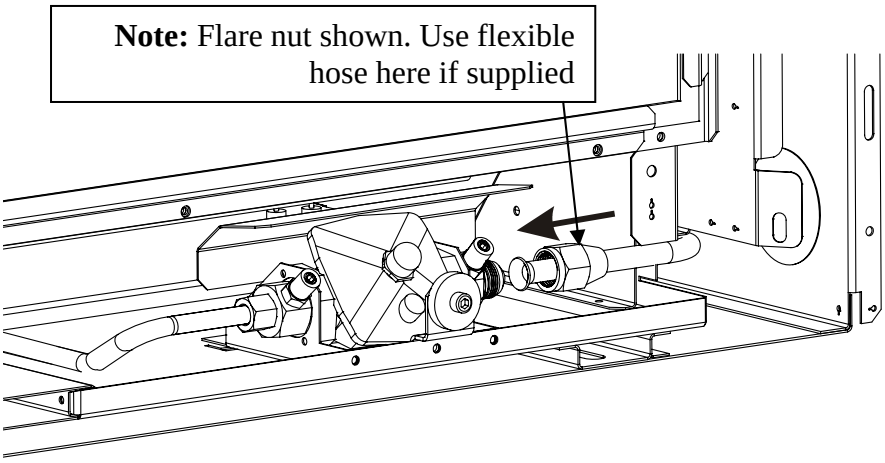
The cavity is now ready for the installation of the Gas Fireplace.

13.0 **Laying Gas Pipe:**
Gas pipe should be sized as per the requirements of AS5601 / NZ5261:2003. The pipe sizing must be sufficient to deliver the following volume of gas to the heater with all other gas appliances in the home running at the same time;

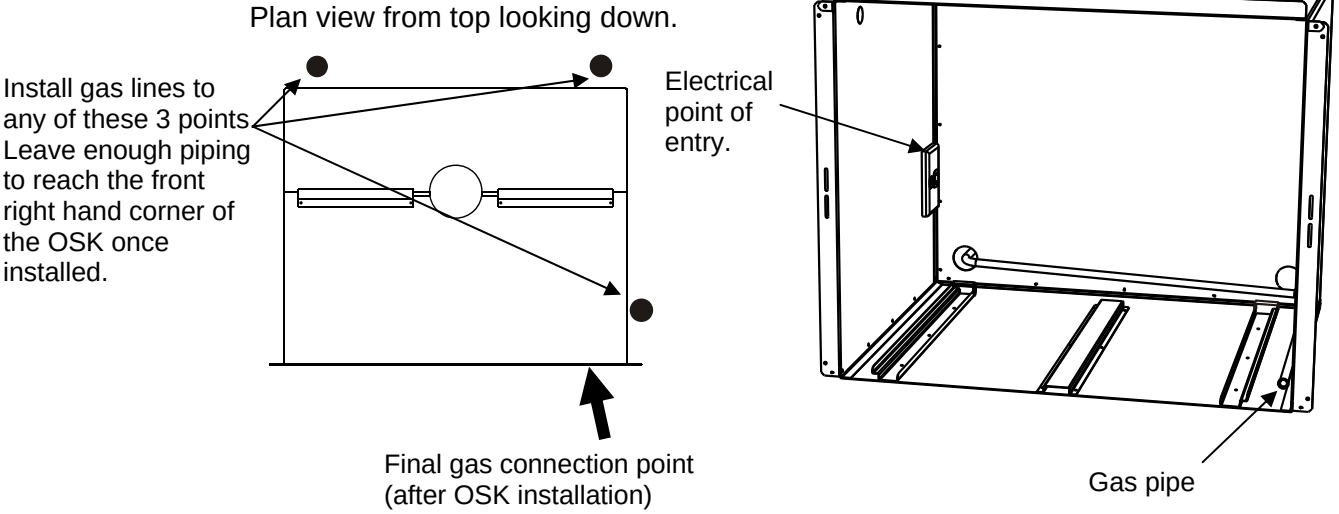
	New Zealand	Australia
IB600	36 MJ/hr	-----
IB850	42 MJ/hr	40 MJ/hr
IB1100	42 MJ/hr	40 MJ/hr

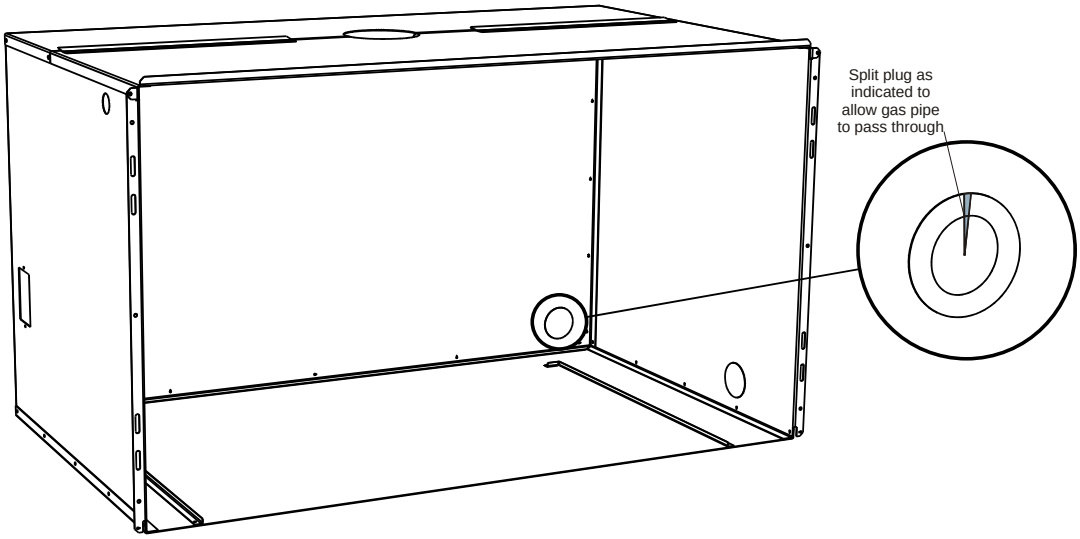
13.1 **Either:** This fire has been supplied with a 300mm long flexible inlet connection to make connecting the gas supply easy and safe. Solid pipe should be run to within 100mm of the front right hand corner of the fire and connected to the end of the supplied flexible hose, which has a specialised adaptor. This connection must be joint tested to ensure gas tightness.

13.2 **Or:** This fire has been supplied with a ½" (Aus) or 3/8" (NZ) flare nut connection to make connecting the gas supply easy and safe. Suitable piping should be run to within 400mm of the front right hand corner of the fire. ½" Copper tubing (Aus) or 3/8" copper tubing (NZ) should form the last section of piping to the regulator. Flare the end of the copper tubing and screw onto the regulator as illustrated in the diagram to the right. This connection must be joint tested to ensure gas tightness.



13.3 The Outer Skin Kit has 3 possible entry points for solid gas pipe, on the two rear corners and the front right. Each is sealed by a 'knock-out'. Remove only the knock-out which you require, and place the supplied rubber plug into the hole. You will need to make a small cut into the rubber plug to allow the gas pipe to pass through, keeping the plug as air-tight as possible.

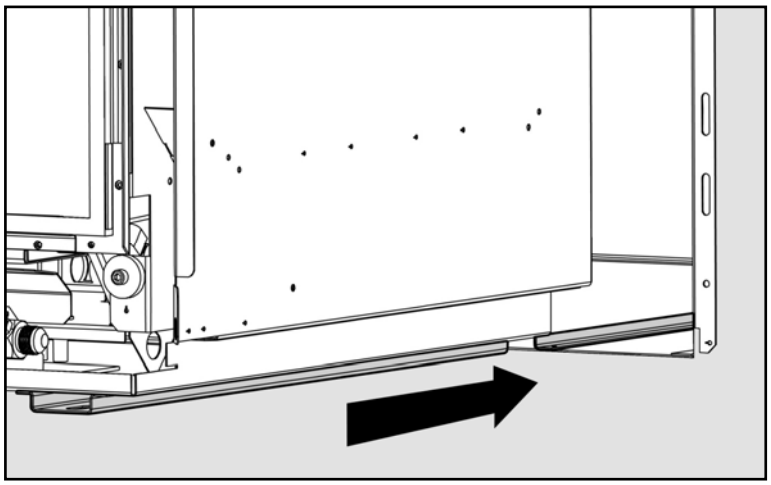




13.4 It is recommended that a gas isolating valve be installed as close to the regulator on the gas inlet side as possible. This will allow for easier servicing in the future.

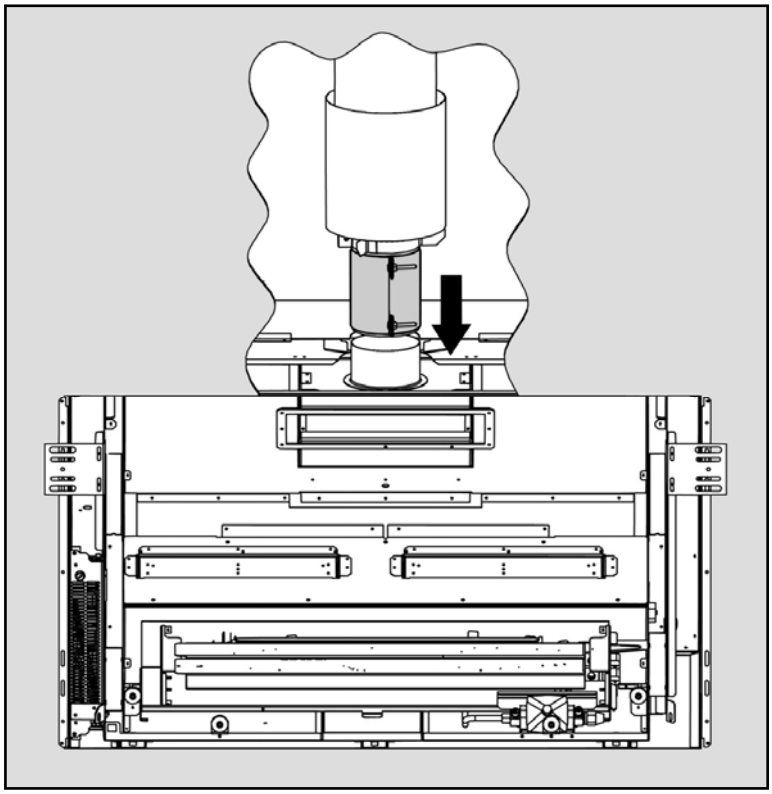
13.5 If the room has not been completed and the wall surfaces are yet to be lined or plastered the fire **must not** be installed into the Outer Skin Kit until such time that there will be no further sanding. This will prevent dust from entering the product. Preferably the Fireplace should be commissioned after the walls have been painted.

14.0 **Gas Fireplace Installation:**



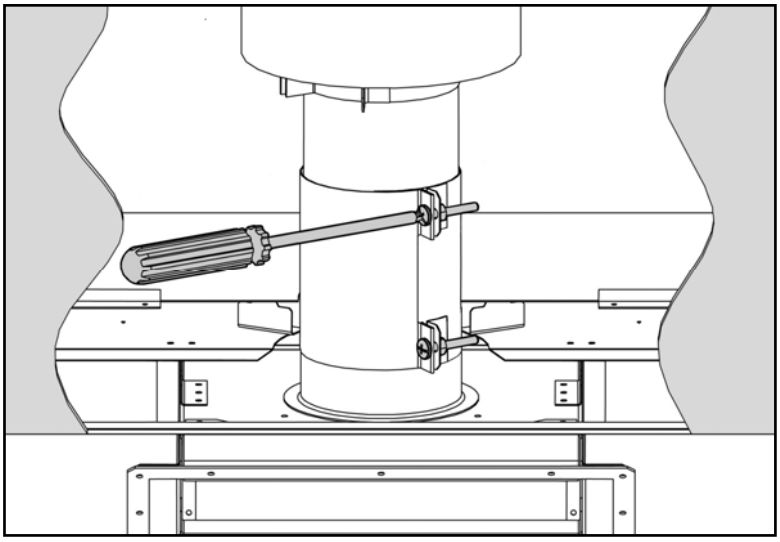
Attached to the base of the Outer Skin Kit are guide rails. The inside edge of these rails will line up with the outside edge of the two outer under base supports. When the parts are lined up, push the fire towards the back of the Outer Skin Kit until it cannot be pushed back any further. The front of the firebox should now be sitting flush with the OSK.

15.0 **Attaching the Flue to the Fireplace Using Flue Sleeve:**



Once the Gas fireplace has been inserted into the OSK, the flue can be attached. To do this line up the 100mm flue with the flue outlet spigot then slide the clamping flue sleeve down onto the spigot.

Note: To increase access through the fire to reach the flue connection, remove firebox and lid.



16.0 Securing the Flue Sleeve:

Tighten the flue sleeve with a screw driver and spanner, ensure a tight and secure seal has been made between the flue assembly and the flue outlet spigot.

16.1 Inserting the OSK Lid:

Once the previous steps have been completed, slide the 180mm flue sleeve down until it rests on the lid of the Outer Skin Kit, this will prevent anything touching the inner flue.

The final step is to attach the front lid to the OSK. This is attached by sliding the lid along the top of the OSK until it locates into the rear lid. Two screws can now be inserted into the side panels to hold it in place.