

**IMPORTANT:** There are new false cavity framing requirements that must be adhered to (refer to section B1).

**IMPORTANT:** The flueing has been significantly changed for the DF990 (refer to section C2).

**IMPORTANT:** The fascia and secondary glass are critical components of the fire and must be properly fastened prior to running the fire (refer to sections D2 and F1).

## Installation / Service Instructions

**DF 990**  
Gas Fireplace

**Important:**

The appliance shall be installed in accordance with;

- This installation instruction booklet
- Local gas fitting regulations
- Municipal building codes
- Electrical wiring regulations
- Any other relevant statutory regulations.
- AS/NZS 5601.1 Gas Installations

**WARNING:**

This appliance must be installed by a qualified person. Replacement of the appliance mains supply cord should only be made by the manufacturer, its service agent, or a similarly qualified person.

Do not modify this appliance.

This appliance is not intended for use by young children or infirm persons unless they have been adequately supervised by a responsible person to ensure that they can use the appliance safely.

Young children should be supervised to ensure that they do not play with the appliance.

Failure to follow these instructions could cause a malfunction of the heater, which could result in death, serious bodily injury, and/or property damage. Failure to follow these instructions may also void your fire insurance and/or warranty.

**Who can install this product:**

Installation must be carried out by a registered installer who, on completion of the installation, must issue a:

AUS: Certificate of Compliance

NZ: Certificates that comply with the latest legislation in accordance with national and/or local codes. If these are not issued then the Escea warranty may be void.

**Warranty Repair and Annual Servicing:**

Please contact Escea if you require warranty work. Warranty repair work must be carried out by a recognised gas fire technician. It is recommended that recognised Escea Gas Fire Technicians are also used to carry out annual servicing requirements (particularly during the warranty period). For contact details of recognised Escea Gas Fire Technicians in your area, or for replacement parts, please contact the retailer from whom the appliance was purchased or visit our website.

The heater must be installed according to these instructions and in compliance with all relevant building, gas fitting, electrical and other statutory regulations (eg. AS/NZS 5601). Any shortcomings in the appliance and flue installation will be the responsibility of the installer, and Escea will not be accountable for any such failings or their consequences.

Manufactured by: Escea Ltd, PO Box 5277 Dunedin NZ, Ph: +64 3 478 8220.

For contact details of your local Escea distributor or dealer in New Zealand, please visit: [www.escea.com](http://www.escea.com) or email: [info@escea.com](mailto:info@escea.com). From Australia, please visit [www.escea.com.au](http://www.escea.com.au), call AU: 1800 460 832 or WA: 1800 730 140, or email us at [info@escea.com](mailto:info@escea.com)

# DF990 PRODUCT SPECIFICATION

MODEL NAME		DF990		
Description of Appliance		Powerflued Gas Fire Heater		
Star Rating		5.1 stars		
Max. Heat Output		8.5kW		
A/NZ Approval No.		AS/NZS 5263.1.3		
Gas Type		<b>Natural</b>	<b>Propane</b>	<b>ULPG</b>
Gas input	High	35 MJ/hr	30 MJ/hr	30 MJ/hr
	Low	16 MJ/hr	12 MJ/hr	12 MJ/hr
Inlet Pressure	Max	5.0 kPa	5.0 kPa	5.0 kPa
	Min	1.13 kPa	2.75 kPa	2.75 kPa
Operating Pressure on High		1.0 kPa	2.3 kPa	2.3 kPa
Operating Pressure @ Front Burner Jet on High		0.94 kPa	2.2 kPa	2.2 kPa
Burner Jet Size		Front: 2.1mm Rear: 1.8mm	Front: 1.2mm Rear: 1.02mm	Front: 1.2mm Rear: 1.02mm
Aeration Collar Hole Size for Logs & Embers/ Flakes		2 holes @ Ø7.5mm	Spacer (no restriction)	Spacer (no restriction)
Aeration Collar Hole Size for Coals		2 holes @ Ø7.5mm	Spacer (no restriction)	Spacer (no restriction)
Pilot injector		#42	#27	#27
Appliance Dimensions (mm)	Width	943.0 mm		
	Height	884.0 mm		
	Depth	402.0 mm		
Weight	Kg	90 kg		
Ignition System		Electronic Ignition to pilot system Escea PCB		
Ignition Activation		7 secs (approx)		
Flame Safeguard		Flame Rectification		
Consumption		84W @ 0.35A 230V		
Remote controls		Yes		
Timers		Yes		
Clock		Yes		
Function lock / child		Yes		
Temperature control		Yes		
Connections	Electric	230V AC		
	Gas	1/2" BSPP female lower right of fireplace chassis		
	Flue Type	4" and 3" Flexi Flue		
	Spigot Location	Rear and centre		
Data badge location		On Chassis Base		

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# A Product Description and Installation Process

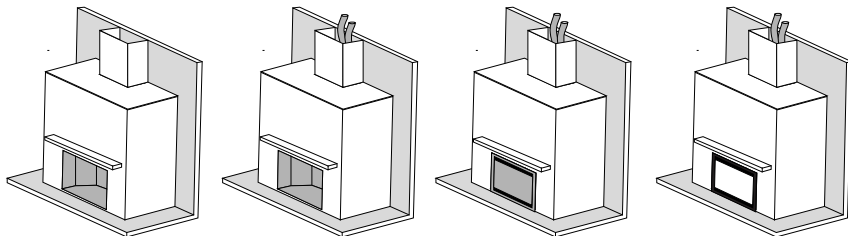
## A1 Product Description

The Escea DF990 gas fire is a room sealed gas appliance designed to be built into a masonry cavity or a false chimney cavity. DF990 is provided with standoffs to ensure adequate clearances to combustible materials. The DF990 is provided with an additional lintel spacer (see section; creating the cavity). These appliances are flued using co-linear flexible aluminum flue (with PolyPro flue extensions for some models) connected to a Power Flue. The user will control their fire with the Radio Frequency (RF) remote that will normally be located in it's wall mount cradle. In addition to the RF remote the appliance has a single auxiliary On/Off button on the unit. When not in operation it is in a standby mode unless it is physically isolated from the mains supply.

## A2 Recommended Install Process

The following diagram illustrates the steps required to install your gas fire. The sequence in which you choose to do these tasks will vary depending on your individual scenario. Please read these instructions fully before proceeding with the installation.

### Masonry Installation



**Modifying the cavity to suit**

Section B

**Install electrical / gas connections and flue system**

Section C, D

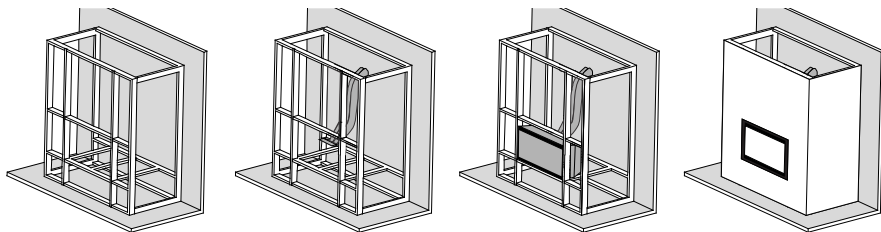
**Install appliance and finish cavity**

Section E

**Finish installation, fit fascia and test appliance**

Section F

### False Cavity Installation



**Create The Framed-Cavity**

Section B

**Install electrical / gas connections and flue system**

Section C, D

**Install appliance and finish cavity**

Section E

**Finish installation, fit fascia, test appliance and clad the cavity**

Section F

**Important:** Installations that are not specifically outlined in this manual should be referred to the Escea Architectural Advisory Team.

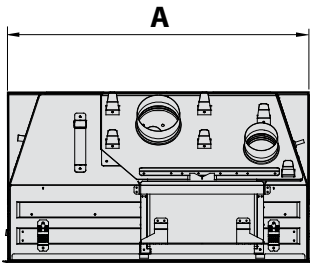
Please email [aa@escea.com](mailto:aa@escea.com)

- i.e. Hutch, under bench, recessed, and joinery enclosed installations.
- i.e. Use of heat sensitive materials such as resin stone or laminated timber.
- i.e. DF flue installations over 4 metres.

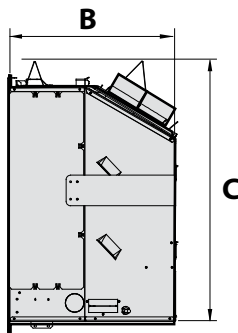
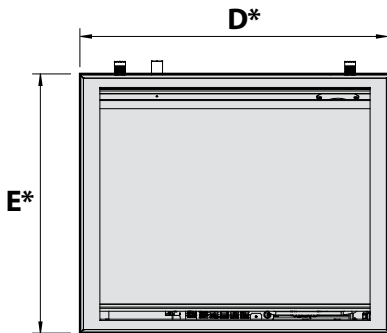
To ensure that your installation is fully complete, please use the “Installation Checklist” on page 43.

### A3 Product Dimensions

*NOTE: All outside dimensions taken from the appliance are with the standoffs attached*



	A	B	C	D*	E*
DF990	943mm	402mm	884mm	973mm	887mm



\*Slim Fascia Dimensions.

### END OF SECTION A

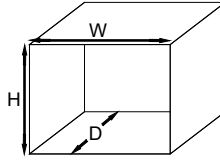
By the end of this section, you should have:

- A framed false cavity
- OR
- A masonry cavity sized to suit the appliance

# B Creating the Cavity

## B1 Cavity Shape

The side standoffs installed on the outside must only be removed when being installed into a masonry cavity.



Note: a top is not required when creating the cavity

		Height	Width	Depth
DF990	False Cavity installation (timber standoffs must be adjusted to the upright position when framing)	Framing	888mm	945mm
		Wall Lining	848mm + allowance for fascia clearance	
	*Masonry install with the side stand-offs and timber standoffs removed.	848mm + allowance for fascia clearance	935mm	400mm

**WARNING:** Wall lining **MUST NOT** be installed until after the fireplace is inserted into the cavity. Please follow the steps in the figures shown.

**WARNING:** Ensure adequate allowances are made for fascias: see section B9 on page 12.

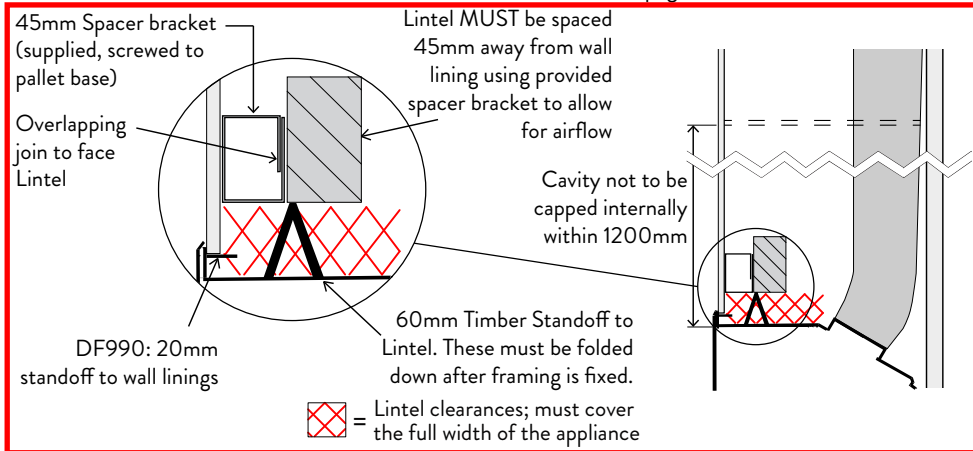
NOTE: Measure the indicated framing dimensions from the base of the appliance.

NOTE: If cavity dimensions significantly exceed those specified, a register plate is available for purchase through your local Escea retailer (New Zealand Only).

### Compulsory False Cavity Requirements

Ensure the fireplace is inserted first before the wall lining is built.

For floor-mounted installations, allow for fascia clearance, see B9 on page 12.





**WARNING:** DF990: the top standoffs must be adjusted to the upright position before the fireplace installation. All standoffs must remain in place for fireplace installation and then folded down once framing is fixed.

**NOTE:** Wall lining should hang below the lintel to meet the appliance edge.

**NOTE:** If your installation requirements do not align with the diagram above, please contact our architectural advisory team: [aa@escea.com](mailto:aa@escea.com)

## B2 Floor Clearances

If the appliance is mounted above a “**heat resistant floor**” (including but not necessarily limited to: ceramic tiles, concrete, and stone) then it may be positioned with the bottom of the fascia level with the finished floor if desired. (30mm required under the fire in this case depending on the fascia type.)

If the appliance is mounted above a “**heat sensitive floor**” (including but not necessarily limited to: carpets, vinyl, carpet tiles, rugs and mats, timber, joinery, wooden flooring - see materials guide.) then we recommend a distance of 100mm from the bottom of the fascia to the finished floor or hearth.

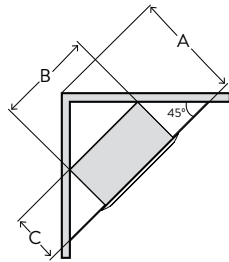
**NOTE:** Excerpt from AS/NZS 5601.1 Sec. 6.2.5. “A gas appliance shall be installed such that the surface temperature of any nearby combustible surface will not exceed 65C above ambient.”

Refer to section B4 on page 9 for hearths.

## B3 Corner Installations

If a cavity is to be created in a corner, the following drawing gives the minimum sized interior wall dimensions.

	A	B	C
DF990	915mm	945mm	435mm



## B4 Hearth

**A finished floor level hearth** is not required, however it may be used for decorative purposes or for protection of soft/ heat sensitive flooring as stated in the section B2 on page 11 to allow a smaller floor clearance. The hearth should not obscure the front face of the fire, must protrude at least 200mm from the face of the fireplace and be at least the width of the appliance.

**A raised hearth or joinery** should conform to the above guideline.

## B5 Cavity Base

This appliance **MUST** be fully supported on its base. The base must extend over the entire area of the underside of the appliance. The base must also be levelled to prevent vibration from possible fan imbalance. The base of the cavity must be strong enough to support 120kgs.

The fireplace must be seismically restrained in a manner appropriate to the installation location and accessible once the secondary glass is removed.

## B6 Wall Linings

*NOTE: For false cavity installations, DO NOT line the wall before the fireplace has been fitted into the cavity; the top standoffs are required to be upright for this installation type and then folded down once framing is fixed.*

The DF-Series fireplace has standoff rails installed on the outside of the chassis. The standoff rails may only be removed when installing the fire into a masonry cavity. The side-front flanges of the appliance must be on top of the finished wall surface in order for the fascia to mount properly. Take into account any plaster board, tiles, or any other finishing surface that may be intended for the finished wall surface.

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.

If, for some reason, the cavity dimensions exceed those specified in section B1 on page 8, a register plate is available (New Zealand only) for purchase through your local Escea distributor.

*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.*

## B7 Television & Mantel Clearances

### Television

The diagram (shown below) shows the recommended minimum clearances for the location of any electrical equipment (such as Plasma TV, LCD TV or home theatre) above a DF-Series gas fire. For DF990, a mantel/recess is required to comply with our recommendation of TV installation. Contact architectural advisory at [aa@escea.com](mailto:aa@escea.com) if you wish to install electrical equipment without a mantel/with a recess.

*NOTE: Dimensions from the top edge of the air opening.*

*NOTE: The 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 recommended installation suggestion will be suitable for all electrical or home entertainment appliances.*

A

B

C

D

E

F

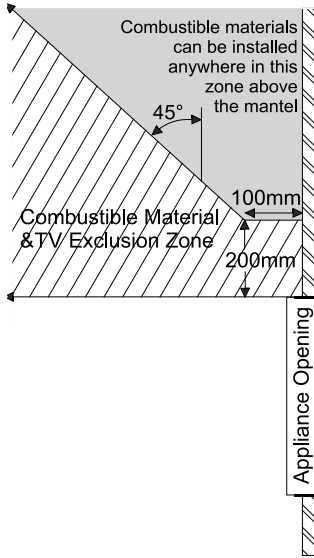
G

SERVICE

## Mantel

Mantels or protruding ledges above the heater must not be installed lower than the dimension shown to the right of the diagram below.

*NOTE: Dimensions are from the top edge of the air opening.*



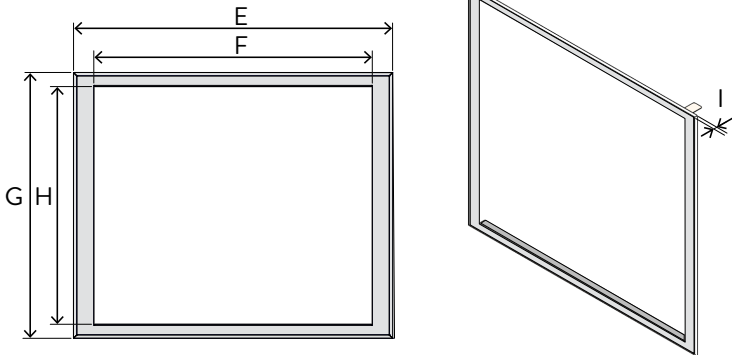
For DF990 a mantel is required

## B8 Fascia Dimensions

The dimensions of the fascias are shown below.

**Warning: The fascia is a critical component of your gas fire. Never run the fire without the fascia properly fastened.**

### Slim Fascia



	Fascia Type	E	F	G	H	I
DF990	Slim	973mm	870mm	887mm	817mm	5.5mm

A

B

C

D

E

F

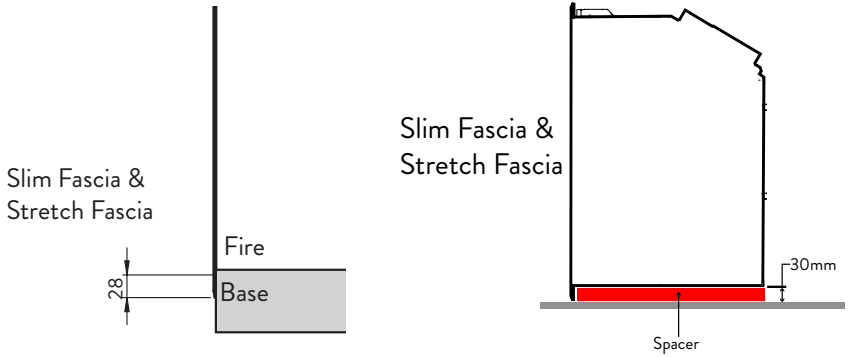
G

SERVICE

### B9 Distance from Fireplace to Fascia Base

The installation requires a spacer below the appliance to allow room for the fascia to sit flush with the non combustible floor or a hearth.

The following side-on view shows the measurement from the base of the fireplace to the base of the fascia:



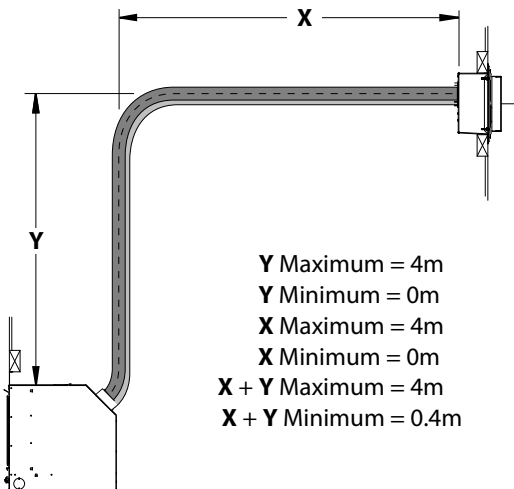
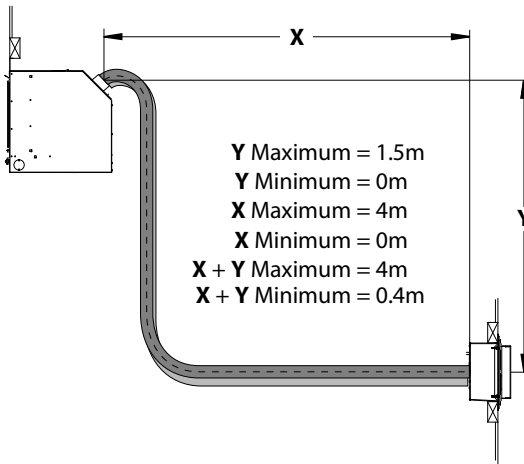
# C Installing the Flue

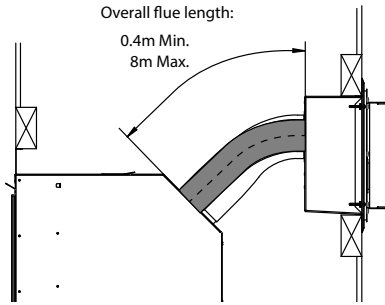
## C1 Flue Configuration (If less than 4m flue length is required)

If your flue system is less than 4m long (as shown in diagrams below), then a simple aluminium flexible flue is required. If you wish to install a longer flue run, see either section C2 on page 15 or C3 on page 16.

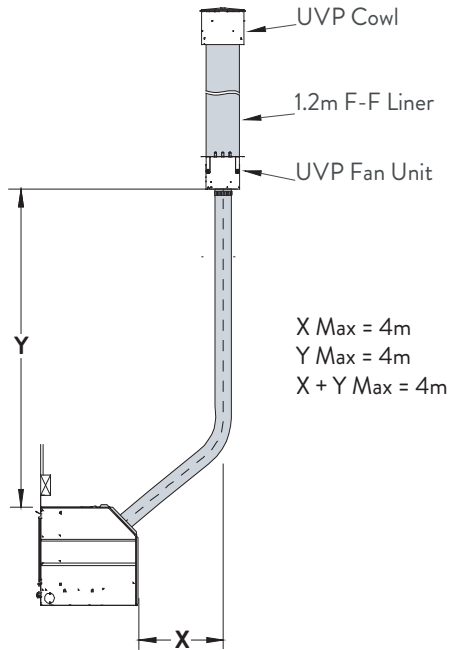
**Horizontally Terminated:** Utilizes the Escea Horizontal Power Flue enclosure kit.

The horizontal offset of the terminal can be any amount up to the total flue length listed below. Please consult with Escea's technical staff if your intended flue configuration steps outside of the bounds of the flue configurations shown below.





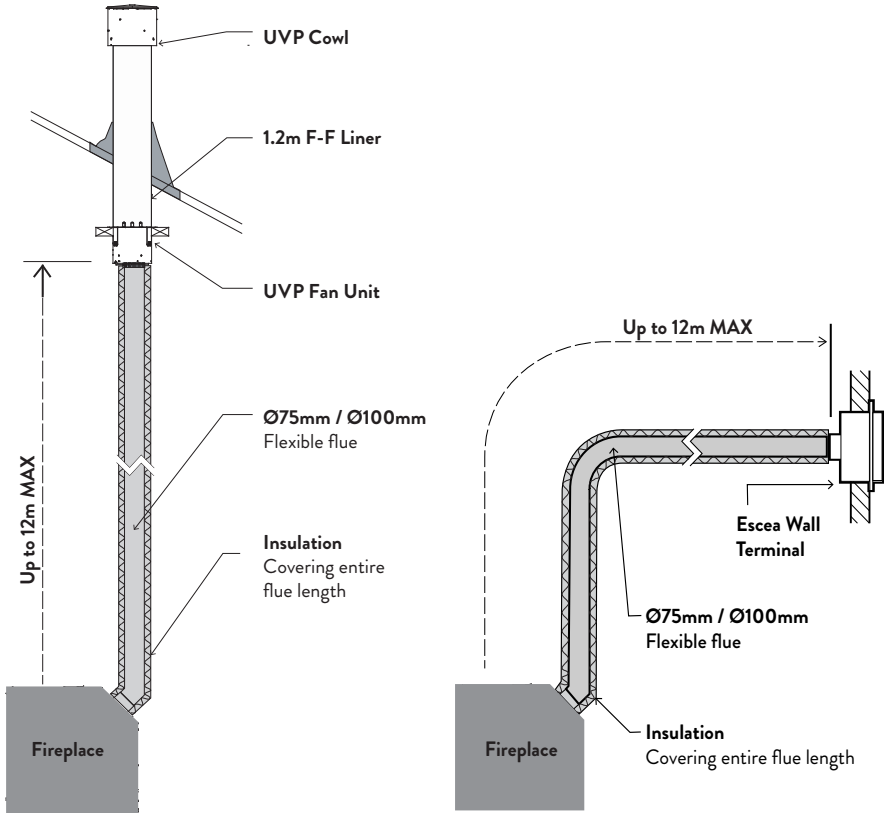
**Vertically Terminated:** Utilizes the Escea Vertical Power Flue enclosure kit.



## C2 Flue Configuration (If more than 4m flue length is required)

If your flue system is greater than 4m long (as shown in diagrams below), then there are the following options:

- DF: For flue run installations beyond 4m and up to 12m, flexi flue must be used for the entire flue run and must be fully insulated from appliance connection to fan unit. For information on the insulation installation see section C10 on page 26. Beyond 12m (up to 40m) please contact the Escea Advisory Team at [aa@escea.com](mailto:aa@escea.com).

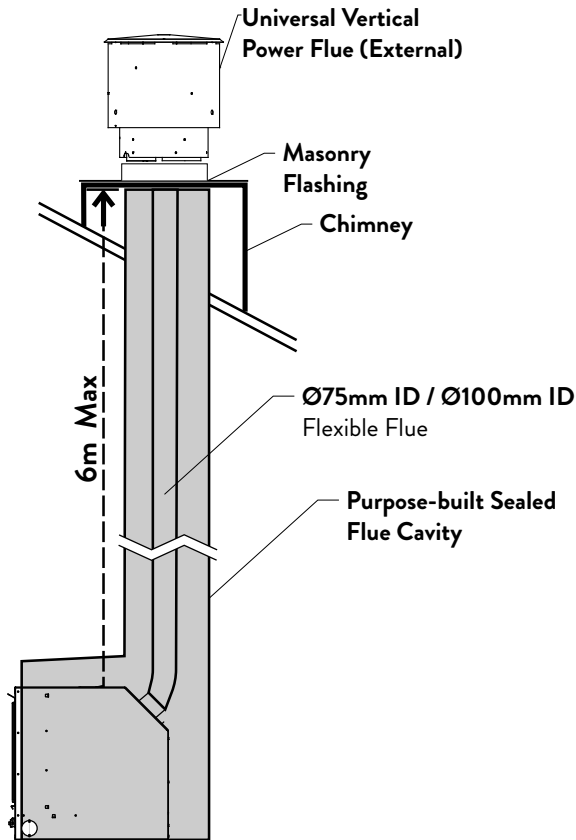


### C3 Masonry Vertical Power Flue Kit (up to 6m)

The following kit enables the installation of the aluminium flexi into vertical masonry chimneys for extending the flue system from the appliance spigot to 6.0 meters while providing the masonry flashing.

*Including, but not limited to, installations into: a complete masonry chimney, a flue liner, or a combustible sealed false chimney.*

If your flue system is to be run vertically through a purpose-built sealed flue cavity (the cavity must remain sealed up to the terminal); PolyPro and a condensate drain is not required. An extension kit can be purchased to extend the maximum length to 12m, see section C4 on page 17. Only the Universal Vertical Power Flue (UVP-External) kit can be used for this installation type.



**NOTE:** 225mm wide x 240mm long 906624-Masonry flue liner extension kit can be purchased to add extra protection for the high snow and rainfall areas.

**NOTE:** If any gap occurs in between the 400mm x 400mm masonry flashing and the chimney due to the chimney dimensions, the suitable chimney cap flashing can be built as keeping the spigot diameter 225mm.



## C4 Masonry Vertical Power Flue Extension Kit (6 to 12m)

The following kit enables the installation of the aluminium flexi into vertical masonry chimneys for extending the flue system to 12.0 meters from 906602-Masonry Vertical Power Flue kit that is required and supplemented by the 12m Masonry Vertical Power Flue Extension Kit.

*Including, but not limited to, installations into: a complete masonry chimney, a combustible sealed false chimney.*

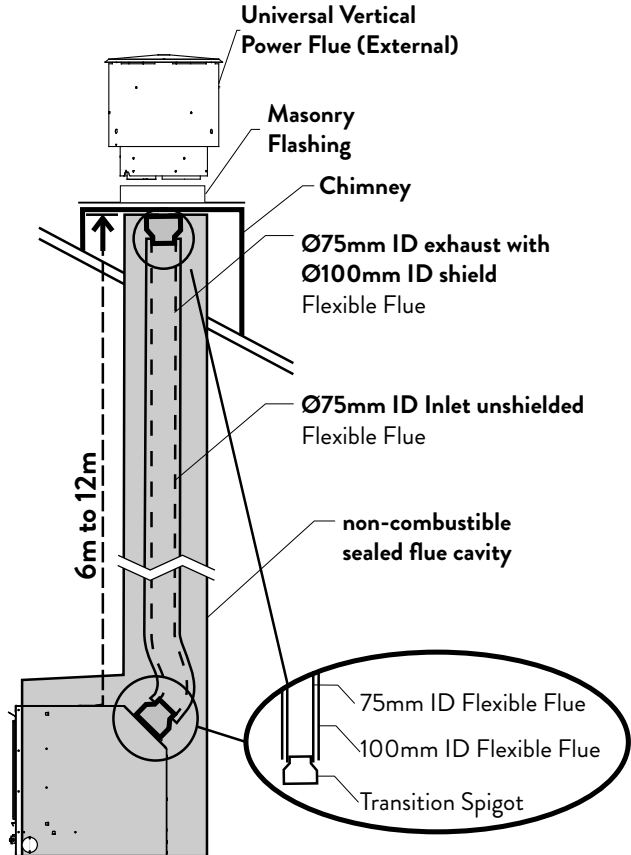
If your flue system is to be run vertically through a purpose-built sealed flue cavity (the cavity must remain sealed up to the terminal); PolyPro and a condensate drain is not required. Only the Universal Vertical Power Flue (UVP-External) kit can be used for this installation type.

The exhaust/inlet flue **MUST BE NO longer than 12.0M.**

The 100mm flue shroud must cover the entire length of the exhaust flue.

The intake and shrouded exhaust flue must be entirely enclosed within a fully vertical masonry or purposely constructed, a combustible sealed cavity/masonry chimney.

Feed the power flue cable down through the chimney cavity and connect to the appliance and Power Flue.



**NOTE:** This kit supplements and requires 906602-Masonry vertical Power Flue kit.

**NOTE:** If any gap occurs in between the 400mm x 400mm masonry flashing and the chimney due to the chimney dimensions, the suitable masonry flashing can be built as keeping the spigot diameter 225mm.

A  
B  
C  
D  
E  
F  
G  
SERVICE

## C5 Installing the Horizontal Power Flue

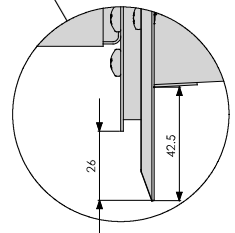
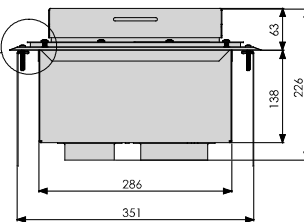
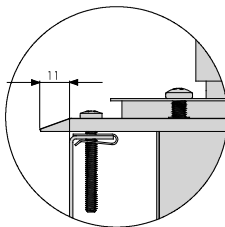
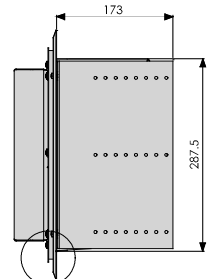
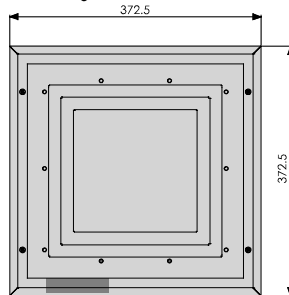
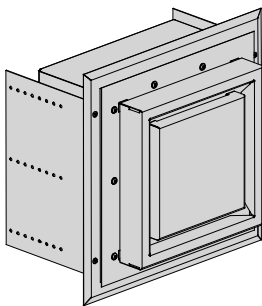
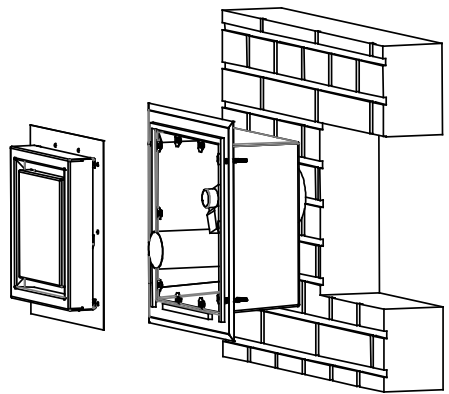
**NOTE:** The appliance is designed only to operate using the approved flexible or PolyPro flue supplied by Escea. Other brands of flue may not fit, and this will affect the appliance warranty.

The Horizontal Power Flue Wall Terminal must be installed in the correct orientation (the small horizontal slot should be at the bottom). This allows for the correct operation of the flue system and prevents the ingress of water.

The Horizontal Power Flue Wall Terminal must be weather tight when installation is complete to prevent damage to the dwelling. It must be installed by a suitably qualified person.

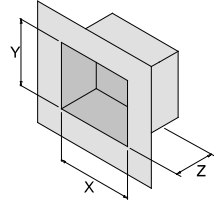
Fit the Horizontal Power Flue Wall Terminal into the hole and fix in place, making sure the installation is sealed appropriately to prevent the ingress of water from outside the wall cladding. Take notice of the label on the termination which shows the correct orientation of the terminal.

**NOTE:** It is the responsibility of the installer to ensure the Horizontal Power Flue Wall Terminal is installed to all relevant building codes to ensure weather tightness.



## Creating the Hole in the Outside Wall

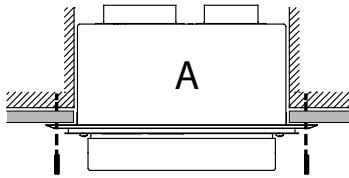
When cutting the hole in the outside wall, be mindful of how the installation of the Horizontal Power Flue Wall Terminal will be finished; the installation must be weatherproof.



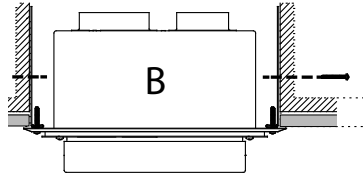
Ideal hole/cavity size for horizontal Power Flue		
	Without Side Brackets	With Side Brackets
X	298mm	360mm
Y	298mm	298mm
Z	175mm	Excluding allowance for flue which exits here

The Horizontal Power Flue Wall Terminal can be attached to the wall in two ways:

A) From the front of the terminal:



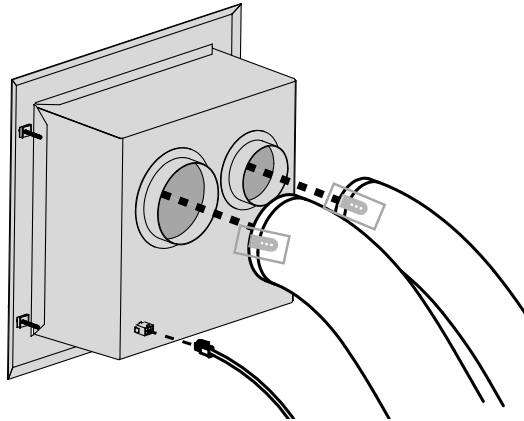
B) By attaching the optional wall terminal installation brackets to the sides of the cavity and attaching the Horizontal Power Flue Wall Terminal to these, from the front:



Attach the  $\varnothing 100\text{mm}$  and  $\varnothing 75\text{mm}$  flexible aluminium flues to the spigots on the rear of the Horizontal Power Flue Wall Terminal using the hose band clamps and the aid clips supplied. Make sure the flexi tube has been stretched out as far as possible where the hose band clamps are going to be attached (not still compressed). Plug the Power Flue electrical cable into the back of the Horizontal Power Flue Wall Terminal.

For information on the PolyPro flue, see the installation manual which is supplied with the flue components.

Ensure that the electrical cable is firmly secured to the wall terminal or building to prevent damage or disconnection if pulled.



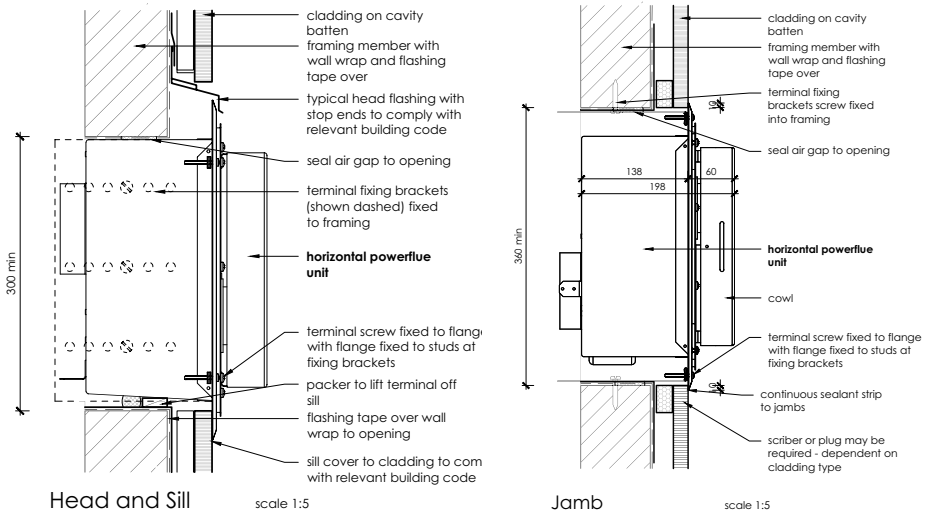
Fit the Horizontal Power Flue Wall Terminal into the hole and fix it in place, making sure the installation is sealed appropriately to prevent the ingress of water from outside the wall cladding.

**NOTE:** It is the responsibility of the installer to ensure the horizontal Power Flue wall terminal is installed to all relevant building codes to ensure weather tightness. This may necessitate the use of appropriate flashing material where appropriate.

**IMPORTANT:** Ensure that flashings do not restrict the air intake slot around the periphery of the cowl.

## How to Flash the Horizontal Power Flue

The following diagrams are excerpts from the Escea architect drawings and are available in full on our website. These diagrams are recommendations, and your installation must comply with any local or national building codes.



## C6 Installing the Universal Vertical Power Flue (Internal Install)

**NOTE:** For information regarding an external install of the UVP, go to section C7 on page 23.

The Universal Vertical Power Flue (UVP) internal configuration is designed to have the fan, mounted within the roof space of the house, and the vertical Ø225mm diameter liner, containing a Ø100mm flexi, penetrate through the roof. The UVP internal conversion kit comes with a 1200mm liner that is specific to the internal installation and must always be used.

**Note:** The flue setup must comply with either section C1 on page 13 or C2 on page 15.

Use standard methods to flash the roof penetration. The installation must be weatherproof and conform to all local council standards including powered flue termination rules.

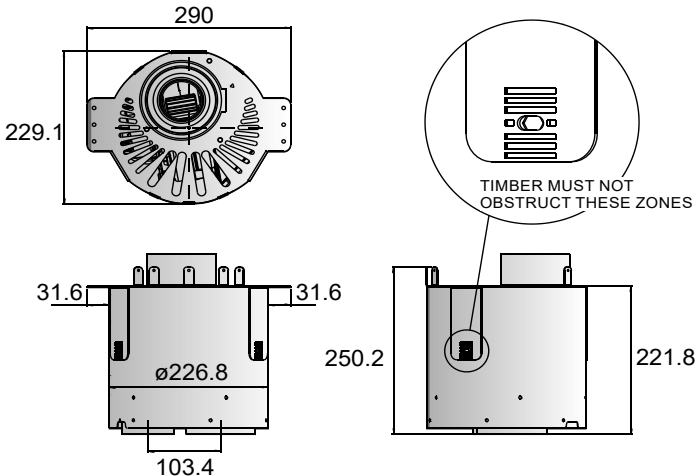
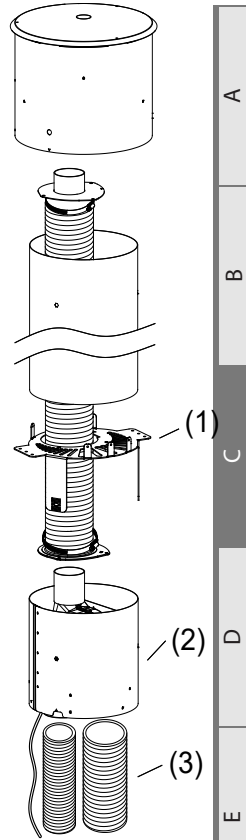
Mount the fan mount bracket (1) to the roof framing and strapping using timber ensuring that the flue is rigid and vertical. Ensure that the mounting timber does not obstruct access to the 3xM5 screw threads on the side of the fan unit.

Aim to have the fan enclosure (2) mounted as high as possible, mainly to allow sufficient fall for condensation drainage if the flexi-flue is to run horizontally.

Ensure there is sufficient space below fan enclosure (2) to have access to fit the flexi-flue tubes (3) and allow flowing bends if required.

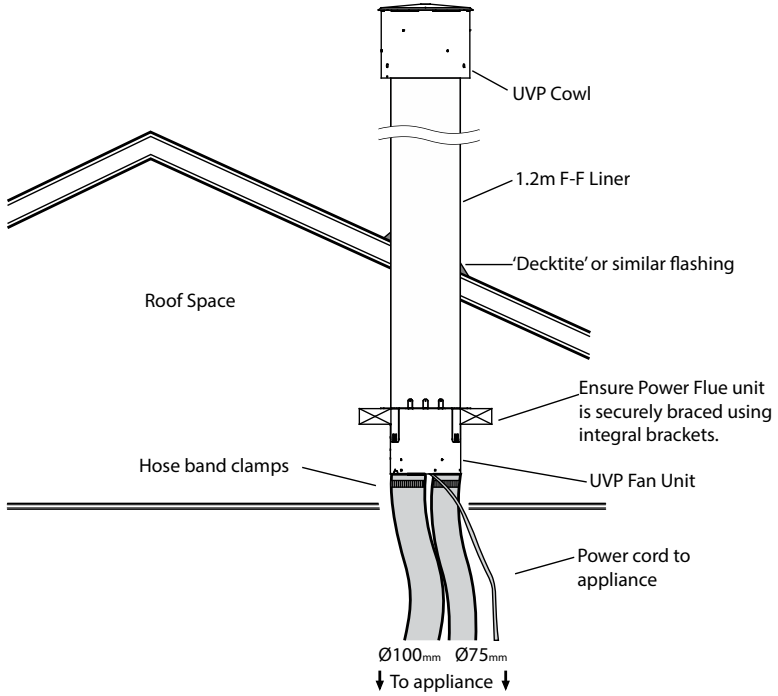
**NOTE:** The UVP-Internal and the flexi flue connections must be installed in a location accessible for service or replacement; a service hatch or removable flashing to allow access is required.

**NOTE:** When installing the unit onto a flue liner, ensure the length of flue liner above the roof is the minimum required length. **ENSURE** the Ø43mm restriction plate is installed on the inlet.



The UVP-Internal kit is intended for use within an accessible roof space or 'chimney' construction.  
**Service access must be provided.**

Ensure installation complies with relevant building codes and regulations.



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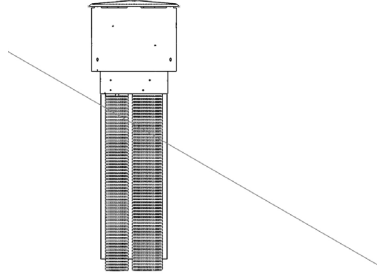
SERVICE

## C7 Installing the External Vertical Power Flue (UVP)

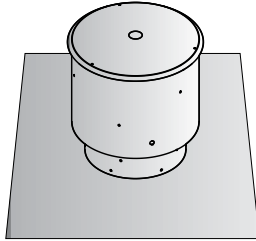
**NOTE:** For information regarding an internal install of the UVP, go to section C6 on page 21.

The UVP is designed to have the enclosure containing the fan unit mounted externally; an example is shown below.

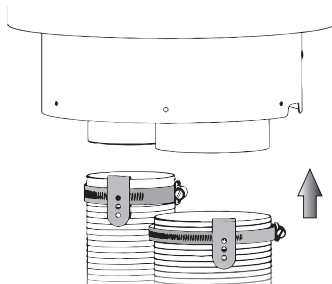
**Note:** When installing the unit onto a flue liner, ensure the length of flue liner above the roof is the minimum required length. **ENSURE** the Ø43mm restriction plate is installed on the inlet.



The cowl surround should be fixed in place as shown.



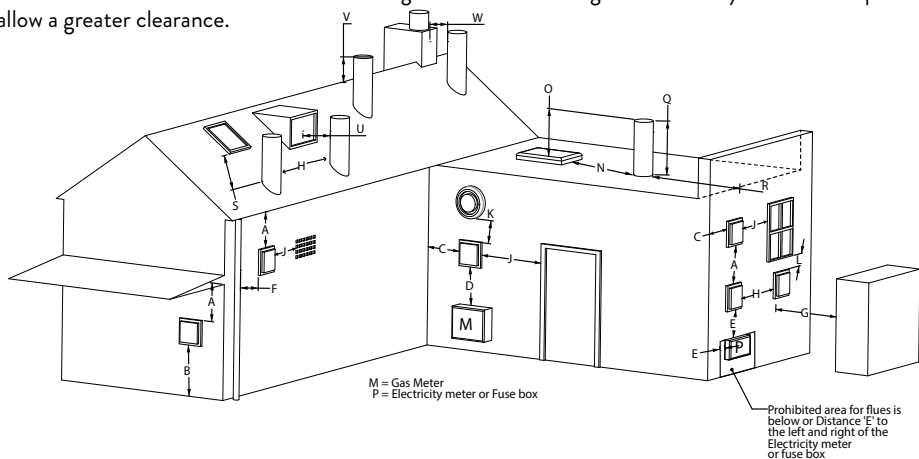
Mount the UVP kit to the top of a chimney flashing plate or penetrate the roof with an optional flue liner accessory and fit the UVP kit over the flue liner, sealing the penetration with a decktite or similar flashing. Ensure the terminal is vertical and rigidly mounted and the flexi flue attached below is fixed to the terminal spigots using the supplied hose clamps and aid clips. Place the clamp over the flexi flue and the clip over this. Make sure the flexi tube has been stretched out as far as possible where the hose band clamps are going to be attached (not still compressed). Slide the flexi tube over the spigot and hold it in place by drilling one hole through the spigot using the clip guide hole and riveting the three components together.



## C8 Installing in Accordance with Relevant Codes

The location of the Horizontal Power Flue Wall Terminal must be installed in accordance with AS/NZS 5601 and any other relevant building codes. If possible, avoid installing the Horizontal Power Flue Wall Terminal in areas exposed to high winds and extreme weather.

Some of the minimum clearances for a fan assisted wall terminal are listed below; please refer to AS/NZS 5601 Gas installation standard for full guidance on the design of the flue system. Where possible allow a greater clearance.



A	Below eaves, balconies and other projections	200mm
B	From the floor, above a balcony or other surface	300mm
C	From a return wall or external corner	300mm
D	From a gas meter or regulator vent	1000mm
E	From electricity meter or fuse box	500mm
F	From a drain pipe or soil stack	75mm
G	Horizontally from any building structure or obstruction	500mm
H	From any other flue terminal or combustion air intake	300mm
J	Horizontally from any openable window, door, non-mechanical air inlet, or any other opening into a building with the exception of sub floor ventilation	300mm
K	From a mechanical air inlet or spa blower	1000mm
L	Vertically below any openable window, door, non-mechanical air inlet, or any other opening into a building with the exception of sub floor ventilation	300mm
N	Horizontally from a roof light	600mm
O	Vertically from a roof light	500mm
Q	Vertically from a flat roof	500mm
R	Horizontally from a vertical structure	500mm
S	Below a roof window	2000mm
T	Above or either side of a roof window	600mm
U	From a dormer window	1500mm
V	Above the apex of the roof (see note 1 on following page)	300mm
W	From an open flue	1500mm



Notes:

- 1) Should the flue not extend past the apex of the roof, the bottom opening of the flue should extend at least 200mm from the roof (or 300mm in regions with heavy snow).
- 2) The installation of a flue into a carport is not recommended.
- 3) The flue terminal will get very hot when in use. Precautions should be taken to protect people and animals from injury.

### C9 Running the Flue

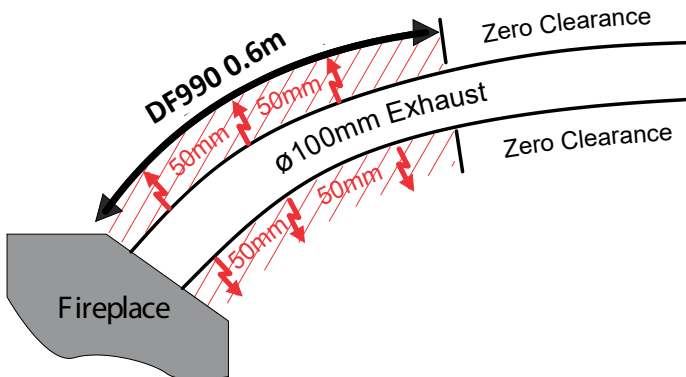
Use the following table to determine the exhaust flue clearances to combustibles:

Model	Clearance to Combustibles
DF990	50mm clearance for first 0.6m

Run the Ø100mm ID and Ø75mm ID (Ø110mm OD and Ø85mm OD) flexible aluminium hoses from the cavity to the rear of where the Horizontal or Vertical Power Flue Terminal will be installed. Allow enough stretch in the flexible aluminium flue to allow it to be able to protrude through the wall/ceiling/roof/flue liner to enable it to be connected to the Power Flue Terminal. The flue should be expanded at each end in order for the flue to be attached to the fire/Power Flue. It is advisable to secure the flexi flue at regular intervals to prevent vibration, movement and sagging. Steel wire or 'builders strapping' may be used for this purpose.

NOTE: The flexible flue is shipped in a 'compressed' form. Extend it to your desired length by stretching.

For information on running the PolyPro flue , see the installation manual which is supplied with the flue components.



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## C10 Insulation Specification and Installation

### Type of Insulation to use

Insulation R-value to be R1.5 and of malleable/flexible construction (rock wool or glass wool) and certified to withstand 230°C.

### Insulation Installation

Tape must be used for all overlapping joints and the entire flue must be wrapped. Care must be taken not to compress insulation.

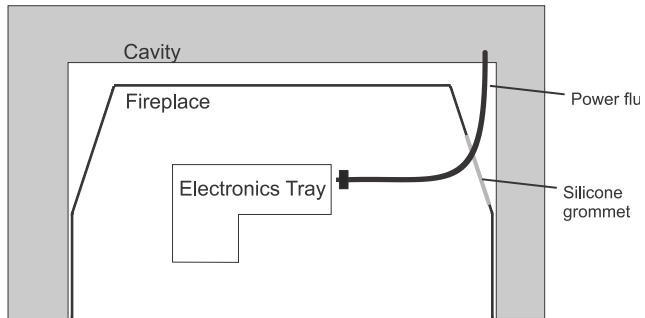
## C11 Running the Power Flue Electrical Cable

*Note: The Power Flue Terminal is powered from the appliance, and must be connected to the appliance with the supplied electrical cable only.*

*Note: Ensure that the appliance power supply is disconnected before making the connection to the terminal.*

The supplied electrical cable is 7m long, flue extension kits also include a Power Flue electrical cable extension.

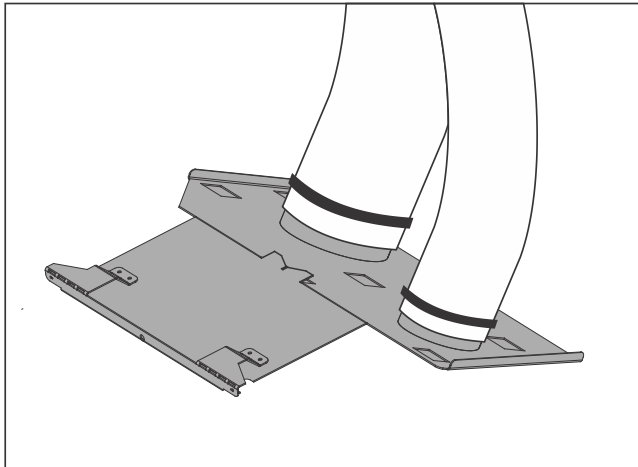
Run the electrical cable from the cavity where the appliance will be installed to the hole in the outside wall. Ensure it is not draped over, or in contact with, the outer shell of the appliance or the exhaust flue and kept clear from any other possible heat sources, sharp edges, or moisture. Fix it appropriately and allow enough cable looped to be able to pull both the appliance and the Horizontal Power Flue Wall Terminal out from their installed positions.



**If you do not connect the power flue electrical cable to both the fireplace and the Powerflue, this will result in an error when the fireplace is turned on.  
Test the fan before continuing with the rest of the installation.**

## C12 Setting up the Flue Spigot Plate

Connect the flexi flue to the spigot plate using the hose band clamps provided while the cavity is still empty. **Do not over stretch the aluminium flexi flue.**



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# D Installing the Electricity and Gas to the Appliance

In order to install gas to the fireplace, check the operating pressure or install the network cable, the glass and burner tray needs to be removed.

## D1 Power Supply

While the cavity is being created, consideration must be given to the location of an appropriate power supply. An earthed 230/240 volt mains power connection (typically a standard 3 pin outlet) must be available within 1m of the bottom right of the appliance. This connection **must** be accessible after the heater has been fully installed so that the appliance can be safely disconnected from the mains power supply prior to servicing.

A mains isolation switch (compliant to AS:NZS 5601 Clause 6.2.8) which is accessible from outside the cavity can also be used to disconnect the power.

Regardless of the method used, it **MUST ALWAYS** be possible to safely isolate the electrical supply to the appliance after it has been fully installed.

This appliance must not be located immediately below a socket outlet. This appliance will draw a maximum of 2 Amps from a 230/240V supply. No additional power supply is required for the Power Flue.

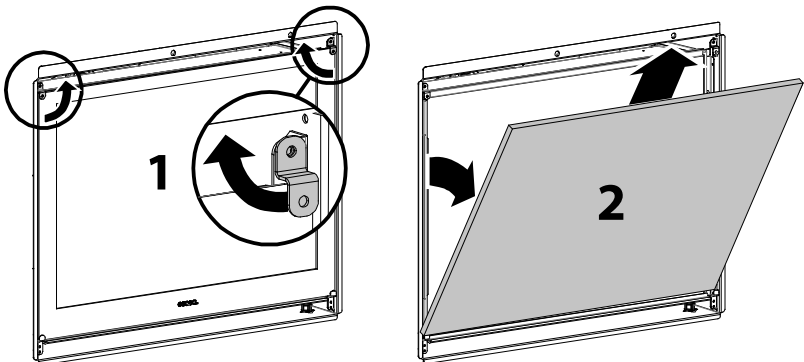
An electrical wiring diagram is located underneath the electronic tray, and also in the rear of this manual (Service Section S12 on page 52).

## D2 Removing the Glass

The DF-Series fireplace has two layers of glass: the inner glass seals the firebox and is called the primary glass; the outer glass is called the secondary glass.

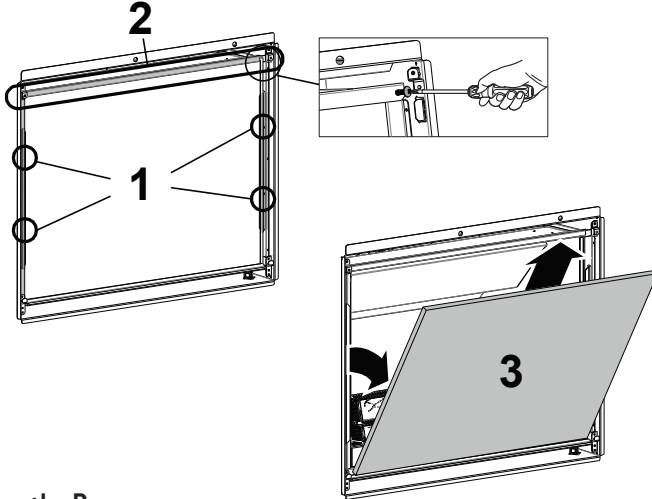
### Secondary Glass

1. Turn the upper glass brackets towards the centre of the fire to release the glass.
2. Pull the top of the glass toward you slightly, lift the glass out of the bottom glass retainer and carefully set glass aside.



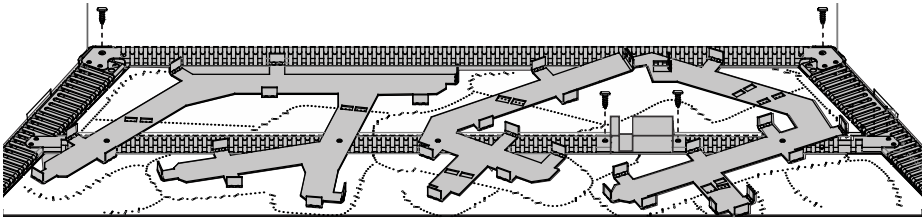
## Primary Glass

1. Remove the two screws in each of the two side brackets and take the brackets off.
2. Remove both machine screws holding in the top bracket and slide forward.  
*NOTE: Please slide the top bracket forward with caution to avoid scratches to the finish as the front of the part is visible.*
3. Pull the top of the glass toward you slightly, lift the glass out of the bottom glass retainer and carefully set glass aside. Note that the fiberglass tape around the glass can mark carpet and furnishings - use a dropcloth to protect furniture.

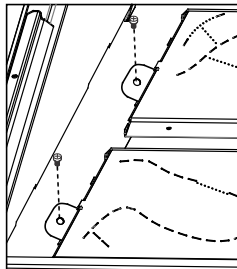


## D3 Removing the Burners

Remove the 2 screws in the rear corners of the infill assembly and the 2 screws either side of the pilot guard (shown in diagram below). Lift the infill assembly up and out of the firebox; place it carefully aside.



Remove the 2 machine screws at the left hand end of each burner. The burner can now be carefully moved left to detach the burner tube from the burner jets and lifted out of the firebox.



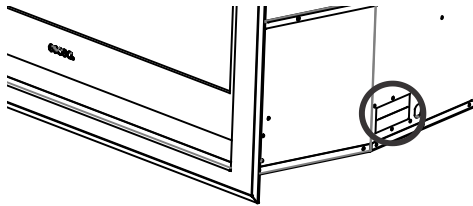
### D4 Gas Pipe Sizing

Gas pipe should be sized as per the requirements of AS/NZS 5601. 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:

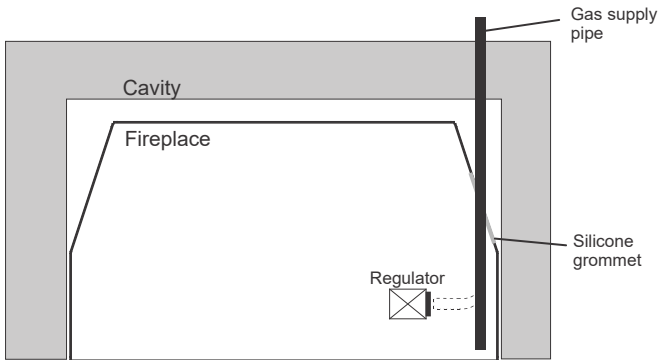
**DF990 Gas Consumption = 35MJ/hr**

### D5 Gas Pipe Position

The DF-Series fireplace gas pipe entry point is located in the lower right corner; a sheet of silicone is used as a grommet (circled below).



Get the gas pipe lined up with the silicone grommet so that when the chassis is pushed into the cavity in section E on page 31 the fire will look like the diagram shown below.



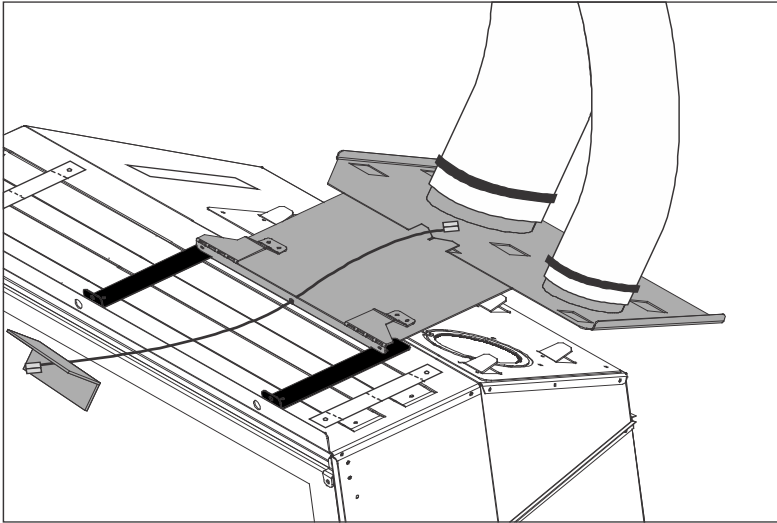
# E Installing The Appliance

## E1 Installation

*NOTE: Ensure the wall has been correctly framed to the dimensions specified in section B1 on page 8 before starting the appliance install. The wall must be lined after the fire has been fitted into the cavity with the appliance electrical cord plugged into an outlet, carefully place the appliance in front of the cavity base.*

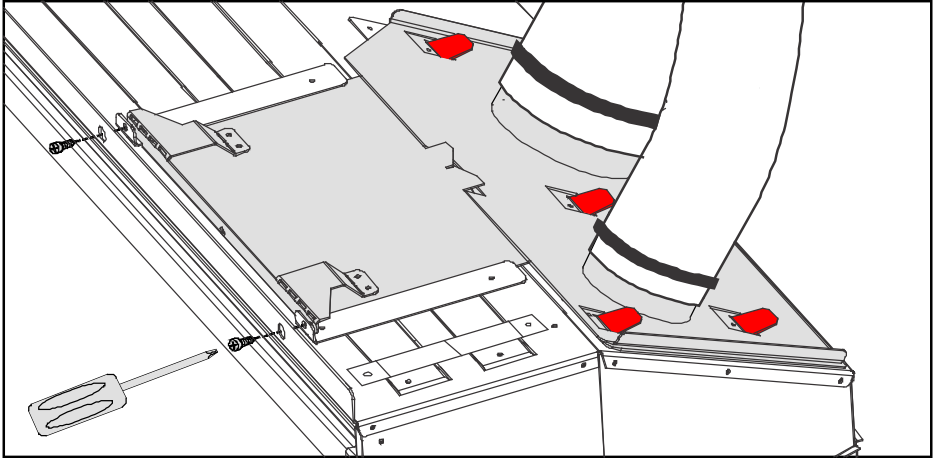
## E2 Connecting the Flue

Carefully push the fireplace into the cavity just enough to bring the gas connection through the silicone grommet of the appliance (as shown in the second diagram of section D5 on page 30). The appliance should have enough room above the fireplace to reach in and align the flue spigot plate onto the rails (highlighted in the diagram below). Use the cable tool provided for pulling the flue spigot plate up the railing in a tight cavity. Use the tool as shown in the diagram below: with the cable threaded through the hole in the front face of the flue spigot plate, locate the end of the tool into the “V” in the centre of the main fold in the flue spigot plate.



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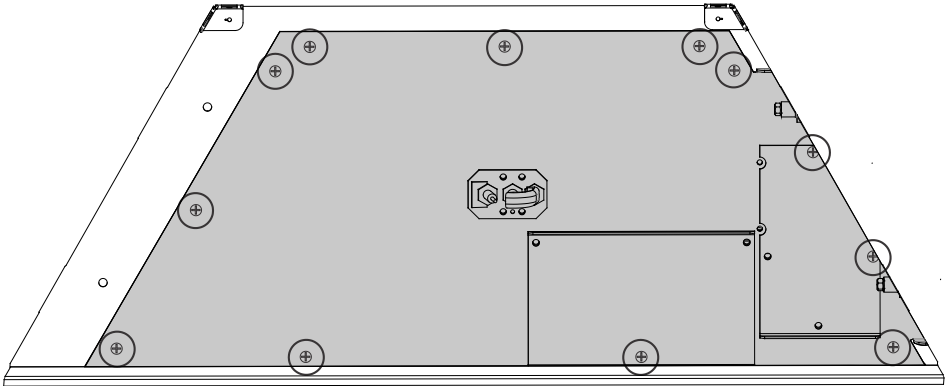
Make sure that all six of the fold up tabs (shaded in the diagram below) used for locating the flue spigot plate onto the chassis are poking through the flue spigot plate.



Insert the 2 long self tapping screws into the location shown in the diagram above to secure the flue spigot plate to the chassis.

### E3 Removing the Burner Tray

Remove the screws circled in the diagram below.



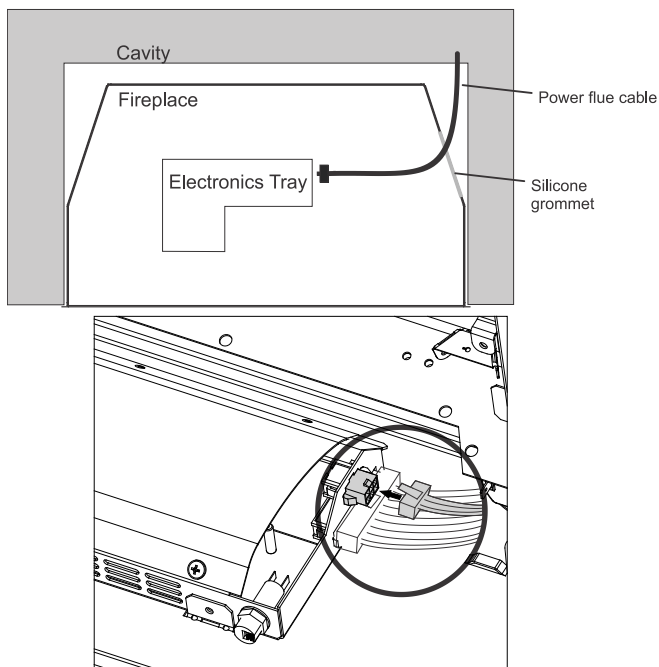
The left hand side of the burner tray can now be carefully tilted and lifted out of the firebox slightly to detach the 2 ignition leads, 8-way teddington valve connector and the earth lead.



## E4 Connecting the Power Flue Cable

*NOTE: Make sure to turn off the power supply before connecting the power flue cable. Feed the Power Flue cable through the silicone grommet on the lower right hand side of the chassis and connect it to the terminal on the electronics tray shown in the diagram below.*

*NOTE: the burner tray must be removed to access the electronics tray as shown in section E3 on page 32.*

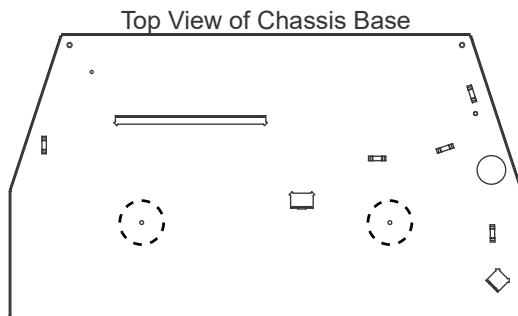


Test the fan now to ensure that it will run prior to continuing with installation. Failure to plug in the fan will result in an error code when starting the fireplace.

## E5 Fixing the Appliance to the Base

An appropriate fastening can be screwed down to the cavity base through the 2 circled holes in the diagram. For Freestanding installations, 2 machine screws will need to be removed from two rivnuts in the support base of the freestanding and re-applied.

**Ensure that the fire is seismically restrained in a manner appropriate to the installation location.**

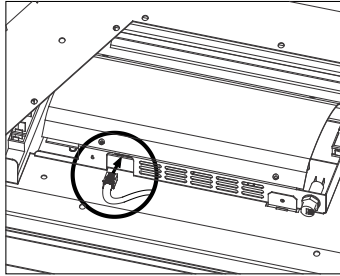


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## E6 Network Cable

If the appliance is to be wired to a home automation system or internet router/network being installed then provision must be made for the network cable to get to the electronics tray. An opening in a silicone sheet in the rear bottom right hand corner is provided for the gas supply, Power Flue cable, and network cable to pass through the chassis.

Plug the network cable into the electronics tray using the location below as a guide.



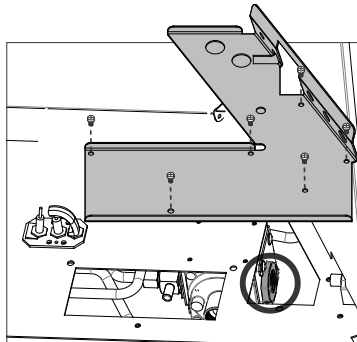
## E7 Connecting the Gas Pipe to the Regulator

**NOTE:** The regulator that is supplied with the fire **MUST NOT BE REMOVED**. Removal of the regulator, or replacing it with one not intended for use with an Escea fire, will void the limited appliance warranty.

The gas connection on the appliance regulator is a ½” female BSPP at the front right of the appliance; the regulator is located on the underside of the main burner tray (circled below). The gas supply section of the piping will need to be flexible inside the chassis to allow for pipe disconnection and burner tray removal.

With the burner tray out, the flexible gas supply pipe may be bent into position to align with the regulator connection point when the burner tray is replaced.

The gas supply can be tightened onto the regulator through the access hatch shaded in the diagram below.



## E8 Gas Isolating Valve

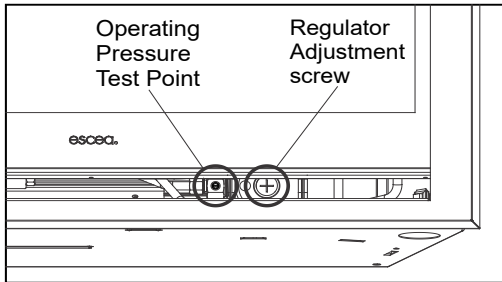
It is recommended that a gas isolating valve be installed as close to the regulator on the gas inlet side as possible with easy access if the fascia is removed. This will allow for easier servicing in the future.

## E9 Pressure Test Point

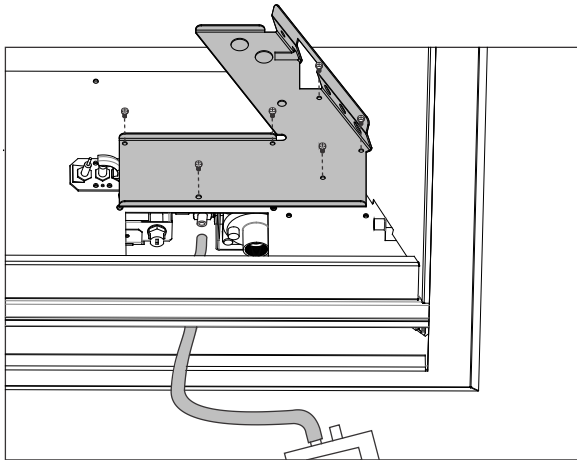
As per AS/NZS 5601, a pressure test point shall be provided by the installer prior to the inlet of the appliance.

## E10 Checking the Operating Pressure

**WARNING:** The regulator that is supplied with the fire **MUST NOT BE REMOVED**. Removal of the regulator, or replacing it with one not intended for use with an Escea fire, will void the limited appliance warranty.



- Check the inlet pressure to the appliance. Attach manometer tube to the first test point upstream of the appliance (typically at the gas utility meter or auto change device for a propane bottle station)
- Run the heater on full (both burners running) and measure inlet pressure with all the other gas appliances in the building running. If pressure does not fall within the maximum or minimum pressures listed on the specification sheet at the start of this manual then reassess installation pipe size or upstream regulator settings.
- Loosen the operating pressure test point screw. Connect the manometer tube and measure the operating pressure with the fireplace running on full (both burners running) and with all the other gas appliances in the building running. The manometer tube can be applied to the test point by removing the access hatch and feeding the tube through the front (as shown in the diagram below).



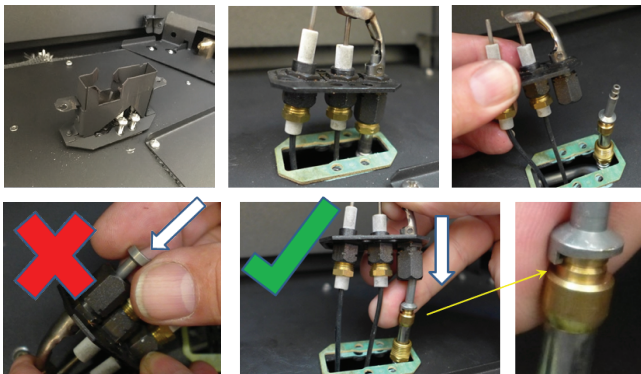
- Adjust the operating pressure by feeding a screw driver through the front face of the fireplace and turning the regulator adjustment screw.
- Tighten the operating test point screw and leak test both test points using a soapy water solution.
- Replace the test point hatch

## E11 Converting the Appliance Gas Type

THIS APPLIANCE IS CONFIGURED TO OPERATE ON A NG, ULPG, or PROPANE. If a gas type conversion is required, please contact Escea to request the necessary parts. Follow the steps on the following pages to change from NG to ULPG/Propane or vice versa.

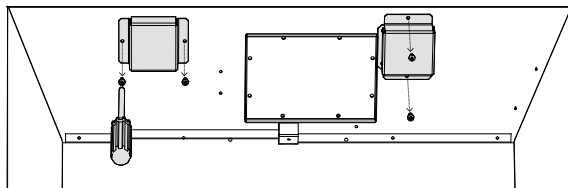
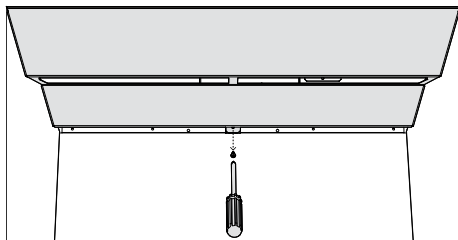
DF990 ONLY				
Jets	Front Burner	Rear Burner	Aeration Collar (2x)	Pilot Jet
NG	Ø 2.10 mm	Ø 1.80 mm	2 hole @ Ø 7.5mm	#42
Propane	Ø 1.20 mm	Ø 1.02 mm	Spacer (no restriction)	#27
ULPG	Ø 1.20 mm	Ø 1.02 mm	Spacer (no restriction)	#27

- Replace (or remove) the aeration collars using the table above (for the DF960 coals fuelbed on natural gas, ignore the rest of the steps).
- Remove the front and rear burner jet and replace with the correct jet as stated in the above table.
- Remove the 4 screws (shown below) securing the pilot assembly to the burner tray.
- Carefully lift the pilot assembly away from the burner tray to access and unscrew the pilot pipe nut. Slowly pull the pipe, nut and olive away from the pilot assembly to let the pilot jet down. Remove the existing pilot jet and replace with the jet supplied in the conversion kit. Tip: removing the test point hatch and guiding the pilot pipe up from below can make this process easier (shown below).



- Remove the left access hatch (shaded in the second diagram of section E9 on page 34). Remove the regulator screw cap and screw out the nylon adjuster screw to remove the existing spring.
- Replace the current spring with the purple spring supplied in the conversion kit and refit the nylon adjuster screw.
- Refit the access hatch using one screw to hold it in place.
- Refit the burners.
- For DF990:** Remove the firebox baffle screw (shown below on the top figure in grey) and then remove the baffle by sliding it upward to release it from the side pins. Remove the

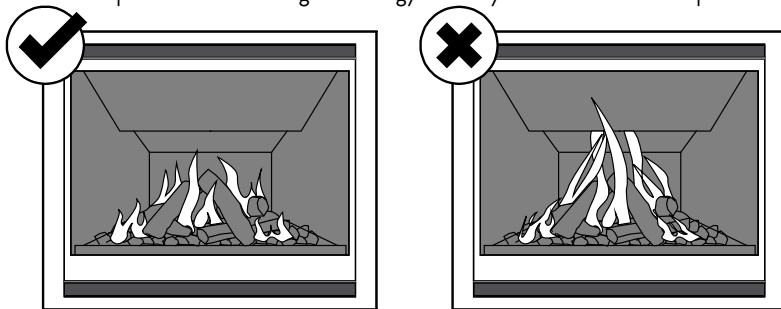
heat exchanger restrictors by unscrewing the 4 fasteners (shown below on the bottom figure in grey). Rescrew 4 fasteners and then refit the firebox baffle.



- Operate the fire with the glass off and adjust the operating pressure to 2.3kPa for Propane / ULPG by turning the nylon adjuster screw whilst the appliance is running on maximum.
- Turn the fire off and remove the burners and access hatch again to replace the metal regulator cap
- Adhere the conversion label over the top of the Natural Gas data label on the appliance data plate.
- Refit the access panel (all screws), burners, infill and fuel bed.
- Adhere the 'Propane' or 'ULPG' label over the top of the existing Natural Gas label on the side of the appliance (if accessible).

## E12 Flame Picture

An abnormal flame pattern will look long and stringy and may cause soot to build up inside the firebox.



An abnormal flame pattern will likely be the result of incorrect settings (jet size, burner aeration collar, flue restriction), and if present you must check these are correct before proceeding. If an abnormal flame pattern is still present, please contact Escea.

It is the responsibility of the installer to ensure a correct flame pattern.

### E13 Coal Fuelbed Installation

*NOTE: The log retainer bracket must be removed when installing the coals.*

Place all the coals in a **single layer** atop the burners, covering the entire area except the pilot and pilot guard.



### E14 Log Fuelbed Installation

Place logs 1,2,3 and 4 down first, locating them on the log retainer, followed by logs 5 and 6. The final layout should replicate the picture shown below. Place the embers or flakes in a single even layer after the logs have been located correctly (excess embers or flakes should NOT be added if one even layer has been achieved). The embers or flakes must not cover the pilot or pilot guard.

*NOTE: Logs must be located correctly as stated/depicted in this section or the warranty may void.*

### DF990 Log Layout



Use the index below as a guide for selecting the correct logs:



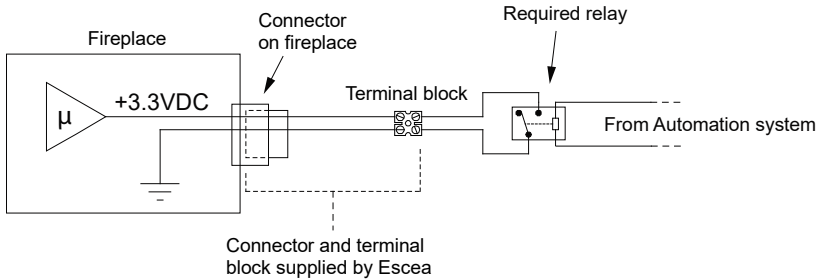
## E15 Installing the Glass

Refer to section D2 on page 28 and reverse the steps to reinstall the glass.

## E16 Home Automation Setup

Escea DF-Series fireplaces have a simple interface for connection to a home automation system. This allows the fireplace to be woken up, started, and then shut down. The “Close to Wake” connection (shown below) is essentially taking one of the 3.3 volt DC pins on the fireplace microcontroller and shorting it to ground.

In order to isolate the fireplace from the automation system, a relay needs to be used (as shown). This allows you to keep the fireplace’s 3.3V supply isolated.



The home automation connection can be found in your fireplace accessory pack (shown right).

This connects to the fireplace via the lower RH outside panel of the fireplace, next to the primary network cable access point, as shown in section D2 on page 28.

## Home Automation Operation

### Relay closed

The fireplace will start in a medium setting until the remote control talks to the fireplace and picks up the ‘ON’ signal (which can take up to 4 minutes). Once the remote has communicated with the fireplace it will turn on and begin operating thermostatically. The remote will use whatever temperature the user has previously set and cannot be altered by the home automation system. The fireplace will continue to operate while the relay is closed.

*Note: If the fireplace cannot communicate with the remote within 10 minutes of the relay contact closure then the fireplace will shut down and return to standby. The remote controller is required to be within operating range of the fireplace for its safe operation.*

### Relay open

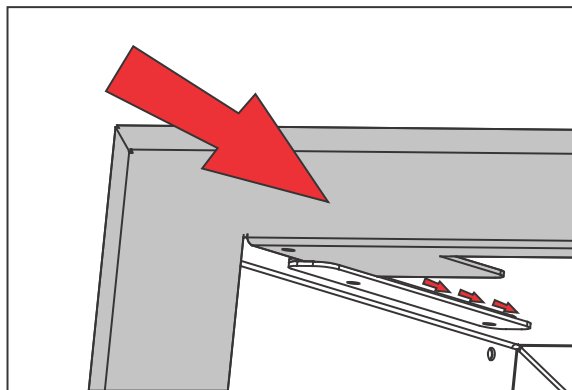
If the fireplace is operating with a closed relay then, upon opening the relay contacts, the fireplace will shut down and return the remote controller to its standby mode when it next updates (which can take up to 4 minutes). While the relay is open the fireplace will be in standby mode and available for manual operation by the user.

# F Fitting the Fascia and Finishing Installation

## F1 Fitting the Fascia

**Warning: The fascia is a critical component of your gas fire and is integral to the airflow. Never run the fire without the fascia properly fastened.**

Slide the top of the fascia (the side with two prongs facing away from the front face) into the fascia rails attached to the chassis in the two top corners. Push the bottom fascia lip above the chassis base. The fascia **MUST** now be flush with the wall.



## F2 Locating Wall Mount Cradle for Remote

The appliance's remote contains the thermostat that will sense the room temperature and communicate this back to the heater via radio frequency.

A wall mount cradle has been provided for the wireless control and where possible the control should be housed in this cradle.

The location of this cradle should be decided by taking into account the following factors:

- Simple and convenient access for the user
- Away from air flow and drafts through the room
- The parts of the room that people are likely to spend time
- Away from direct sun light
- A suitable distance away from the heater
- Ideally 1.2m to 1.5m from the floor



The radio frequency signal will go through some walls but for best results Escea suggest that the cradle position is less than 10 metres away from the heater.

The best height off the ground to locate the cradle is about chest height. This gives a good average room temperature and easy access for the user.

Please ensure that the cradle is screwed firmly onto the wall using the screws provided.



### F3 Operating the Appliance for the First Time

Remove the battery cover on the rear of the remote. Insert the new “AA” size batteries, paying attention to the polarity.

You should now see on the display of the remote the time showing “0:00”.

To turn the fire on, press the “POWER” button once, and within a few seconds the appliance will begin its startup sequence.

*NOTE: once the rear burner has lit there will be a fixed 15 second delay before the front burner will light.*

When the appliance has lit, set the room temperature by pressing the ‘plus’ or ‘minus’ button repeatedly until the display is showing the desired temperature. The remote will then revert back to the ‘current’ room temperature 30 seconds after making the change.

Run the appliance on full for an hour with the windows and doors open in the dwelling. This will ensure any running-in smells have the chance to dissipate.

The appliance is turned off by pressing the “POWER” button once more. The remote will display the time only.

Run the appliance again and check the operation of the thermostat by increasing and reducing the set temperature. Check the Flame Effect function and the Fan Boost functions work correctly.

For further operation instructions please refer to the User Guide.

### F4 Normal Operating Sounds and Smells

*Note: Each time the fire is lit from cold the glass may fog up with condensation. This is normal and the condensation will disappear within a few minutes once the glass heats up.*

#### Sounds

It is possible that you will hear some sounds from your gas appliance. This is perfectly normal due to the fact that various types of materials are used within your appliance. Listed below are some examples. These are all normal operating sounds and should not be considered as defects in your appliance.

Fan:

Escea gas appliances use electric fans to push heated air into the room. It is not unusual for the fan to make a “whirring” sound when ON. This sound will increase or decrease in volume depending on the speed setting of your fan.

Gas Control Valve:

As the gas control valves turn ON and OFF, a dull clicking sound may be audible. This is the normal operation of a valve. When the fire is switched off after being run for a while, there may be popping and fluttering noises as the residual gas in the burners burns away. These are normal and are no cause for concern.

Unit Body/Firebox:

Different types and thicknesses of steel will expand and contract at different rates resulting in some “cracking” and “ticking” sounds being heard throughout the heating and cool down processes.

## Smells

The first few times the unit is operated, the unit may release an odour and the flames will appear orange due to: the curing of the paint, the burning off of the starch in the gas logs and the oils in the metal. This is a temporary curing process which will disappear with use.

## F5 Cleaning the Glass

A deposit on the inside of the inner glass, caused by the starch in the logs, may appear as a build up after several uses. If this film is not removed, it will bake on and may become difficult to remove.

When the inner and outer glass are cold, remove both and place carefully aside. Note that the fiberglass tape around the glass can mark carpet and furnishing so the use of a drop cloth is recommended. Clean the glass, paying particular attention to the inside of the inner glass, with a non-abrasive cleaner. A standard, ammonia-free, glass cleaner is recommended.

**DO NOT ATTEMPT TO CLEAN THE GLASS WHILE IT IS HOT. NEVER OPERATE THE UNIT WITH THE GLASS REMOVED.**

### END OF SECTION F

By the end of this section, you should have:

- A correctly fitted fascia
- The remote control mounted on its cradle on a wall
- Operated the fire and verified that it lights reliably and safely
- Run the appliance on full for an hour with the doors & windows open
- Checked the operation of the thermostat, Flame Effect & Fan Boost functions

# G Installation Checklist

Go through the following checklist to ensure you have installed the appliance correctly

- Correctly sized cavity to suit your fascia and flue configuration
- Correct clearances to combustibles and mantles around the fascia
- An electrical isolating switch to the appliance, accessible after finished installation
- Correctly sized gas supply with a pressure test point, ensuring adequate supply with all other gas appliances in the dwelling running
- A weather-tight installed Horizontal or Vertical Flue Terminal with clearance as specified by AS/NZ5601
- Power flue cable connected correctly to the Power Flue Terminal and the electronics tray within the appliance
- Reasonable access to the Horizontal or Vertical Flue Terminal for maintenance purposes
- Flue attached to the rear/bottom of the flue terminal leading back to the appliance
- The appliance fixed to the cavity base
- The appliance plugged into a mains electricity supply
- All gas joints and pressure points leak tested, and soapy water and drop tests completed on gas pipework
- Gas type conversion process carried out if required
- Log or coal fuel bed correctly installed
- Primary and secondary glass correctly fitted
- A fitted fascia
- The remote control mounted on its cradle on a wall
- Operated the fire and verified that it lights reliably and safely
- Run the appliance on full for an hour with the doors & windows open
- Appliance functions checked, including thermostat operation, Flame Effect and Fan Boost
- Home-owner shown how to operate the appliance correctly
- Warranty card filled in with installer details and appliance serial number
- User Guide made available for end user
- Plumbing Industry Commission Compliance Certificate given to end user

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## IMPORTANT:

- This appliance must be serviced every 12 months.
- Any service operation should be carried out only by a suitably qualified and trained person.
- Gas and electricity supply **MUST** be isolated before any service operation is carried out on this appliance.
- This manual should be left with the appliance.
- **DO NOT MODIFY THIS APPLIANCE.**

## S1 Error Codes

This gas fire has been designed to show error codes to help explain and identify any fault situation that occurs. These codes will appear on the remote in the form of a large letter “E” with a number beside it. Codes can normally be reset by turning the fireplace off then on again at the mains power wall switch.

The following table shows what each code means and possible ways to rectify the situation. In the case of persistent or repeated shutdown errors, action must be taken immediately to find and repair the fault.

Error Code	Suggestion action
 <p>Electronics Over Temp</p>	<p>The electronics have gone over temperature.</p> <ul style="list-style-type: none"> <li>• Check for excess lint and dust build-up on the PCB/Controller.</li> <li>• Ensure correct gaps are present around glass.</li> <li>• Room air fans may be slowed or stalled. Remove firebox, check that fans are plugged in, clean, and free turning.</li> </ul> <p><i>Note: This error has a permanent lock out and will require the unit to be reset after the initial error (turning the power to the fire off “at the wall” then on again after a few seconds).</i></p>
 <p>Flame Failure or Power Flue trip</p>	<p>The fire has tried to light three times and failed.</p> <ul style="list-style-type: none"> <li>• Check gas supply and check other gas appliances to see if they are affected. If you have two separate LPG cylinders, switch over to the full bottle or contact your gas supplier. You may need to retry igniting the fire a few times after re-establishing gas supply.</li> <li>• Check correct gas pressure to the appliance with all other appliances running.</li> <li>• Check the electrode placement in relation to the pilot flame. Ensure it is well enveloped in flame as per the diagram in the installation instructions. Ensure no small coals have dropped onto the ignition electrodes between the burners.</li> <li>• Ensure the electrode is not contacting any metalwork including the burners and has the correct air gap.</li> </ul>



Appliance Over  
Temperature  
Sensor Trip

- The bimetallic snap disk mounted on the exhaust collector box has tripped.
- Check that fans are plugged in, cleaned, and free turning - room air fans may be slowed or stalled.
  - Check the regulator - being set too high may result in excess heat build-up.
  - Check flues are securely connected at both ends - if the inlet flue is not connected the appliance may draw warm air from the cavity.
  - Check the jets



Valve Solenoid  
Check Failure

- The valve solenoids have failed the pre-ignition test. A wire may have dislodged or the valve solenoid is faulty.
- Check that the connections to each solenoid are secure and in place. The connections on the ends of the wires may need to be tightened (e.g. with a pair of pliers) to ensure a robust connection to the valve terminal.
  - Disconnect and reconnect the firebox connectors ensuring they are firmly pushed into place.
  - One of the solenoids on the valve inside the fire may have failed. If this is the case, the valve will need to be replaced.



Internal Remote  
Error

- The remote cannot communicate with the fire.
- Check if the fire is turned off "at the wall" i.e. a loss of power to the fire or the remote is outside of its effective radio frequency range (too far away from the fire). Typical remote range is 1m to 10m.
  - Ensure there is power to the fire by pressing the auxiliary on/off (red) button on the fire, then press the on/off button on the remote to clear the error.



Combustion Air  
Flow Error

- Check whether the pressure switch is activating at startup (there is an orange indicator LED in the control tray). If not, check that the pressure switch electrical connection is correct.
- Check that the hoses are connected at both ends. Ensure the hoses are not kinked.
- Ensure the pressure switch is mounted vertically and the diaphragm is operational. The black hose should be connected to the low pressure port and the translucent to the high pressure port
- Check that both flues are securely connected at both ends to the appliance and the Power Flue wall terminal and that the flue is not damaged
- Check that the fan inside the Power Flue wall terminal is running during startup. This fan may need servicing if it is slowed or stalled.

## S2 Serial Number

The serial number for the fire can be found in two places. The first is in the battery compartment of the remote under the batteries. The second is on the data sticker on the chassis under the firebox on the left hand side.

## S3 Checking Operating Pressure

See section E9 on page 34 of this manual.

## S4 Cleaning the Fascia

The outside of an Escea Fascia must only be cleaned with a soft microfibre cloth. If heavier cleaning is required for the likes of grease or stubborn fingerprint removal we recommend the use of a dedicated stainless steel cleaner for stainless steel fascias or warm soapy water for powder coated fascias. These wipes have been tested by Escea technicians and produce very satisfying results, when used correctly. Instructions for their use follow.

### **NEVER RUB THE FASCIA.**

#### **For Stainless Steel Fascias:**

1. Ensure that the Gas Fireplace is off and that the fascia is cold to the touch.
2. Using the gloves provided with your fascia, a stainless steel cleaner and a clean cloth, apply a small amount of cleaner to the cloth and wipe the fascia with even, straight strokes.
3. Make sure your strokes follow the direction of the grain or brush finish. Wiping across the grain can leave small scratches.
4. The wipe will leave a very fine film over the fascia, ensure this film is distributed evenly.
5. If the film is applied too heavily and is quite visible, you can remove the excess by gently wiping dry with a microfibre cloth. Ensure your strokes still follow the direction of the grain or brush finish.
6. Ensure that no film is applied to the glass of your Escea Gas Fireplace. If applied accidentally, wipe off with an absorbent microfibre cloth.

#### **For Powder Coated Fascias:**

1. Ensure that the Gas Fireplace is off and that the fascia is cold to the touch.
2. Using the gloves provided with your fascia, gently clean the fascia with a cloth and warm soapy water.
3. Wipe off with an absorbent microfibre cloth.

## Cleaning the Log Set and Glass

This is a service procedure that will need to be carried out whenever soot builds up on logs and/or inside of glass. If soot build up becomes excessive or regular then one of the following actions may be required:

- Check gas pressure; operating gas pressure may be too high.
- Reposition log set so that each log is sitting correctly in the log retainer bracket.
- Clear any blockage from primary air port of burner.
- Check flue tube is not damaged or disconnected.

*For diagrams and further info on removing your fascia, reverse the steps found in section F on page 40.*

- Refer to section D2 on page 28 for instructions on removing the glass. Note that the fiberglass tape around the glass can cause marking on carpet or furnishing.
- Clean the inside and outside of both pieces of glass with normal ammonia-free glass cleaning products. Use a CLEAN DRY cloth only. Stubborn marks may be cleaned with a ceramic glass cleaner.
- Replace in opposite order and test run heater.

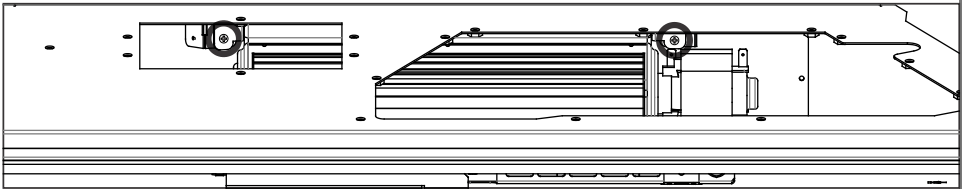
## S5 Removing or Cleaning Fan

As part of regular service procedure, it is recommended that the fan is removed for cleaning. Dust will build up on the fan rotor and in the cavity where the fan is located. This can be removed by the service person using a hearth brush and a vacuum cleaner.

ISOLATE THE POWER AND GAS SUPPLY TO THE FIRE BEFORE COMMENCING THIS PROCEDURE.

Remove the electronic tray located on the base of the chassis (instructions provided in the next section) before attempting to remove the room air fan. Disconnect the 3-way fan connector and remove the two screws circled in the diagram below the DF990 requires the LH access hatch to be removed in order to get to the LH screw. The room air fan can now be pulled towards you and removed through the burner tray hole.

### DF990 Fan Screw Locations



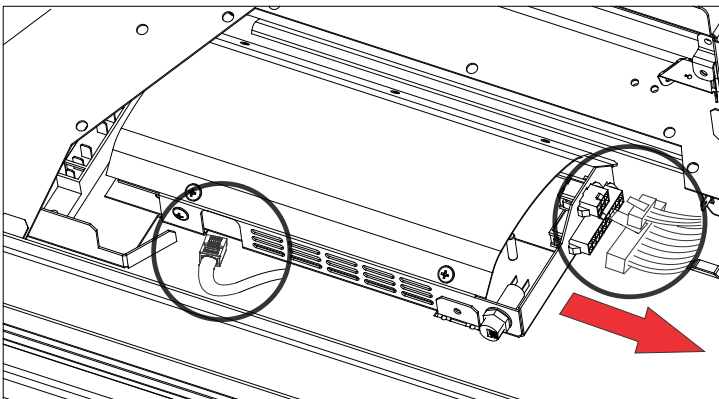
## S6 Removing Electronic Tray

ISOLATE THE POWER TO THE FIRE BEFORE THIS PROCEDURE.

All of the electronic components of the heater have been located on a removable tray. Remove the 18-way connector & 6-way connector from the end of the tray, the network cable, if installed (both locations circled in diagram shown) and the transformer connector located in the rear LH corner of the electronics tray.

Remove one self tapping screw in the front face of the electronics tray.

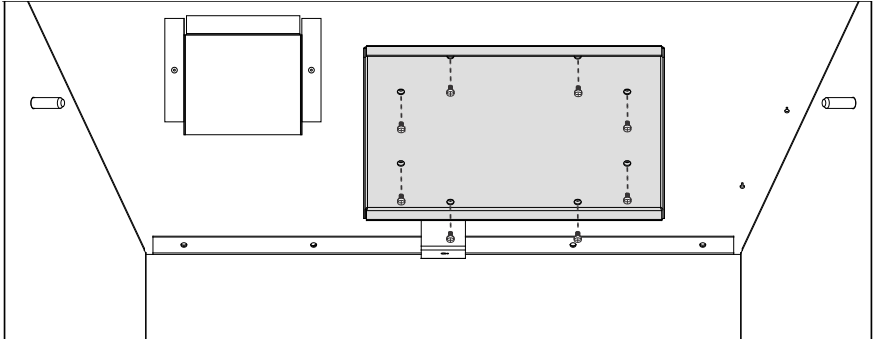
The tray can now be slid towards the RH side then lifted out of the burner tray hole in the firebox.



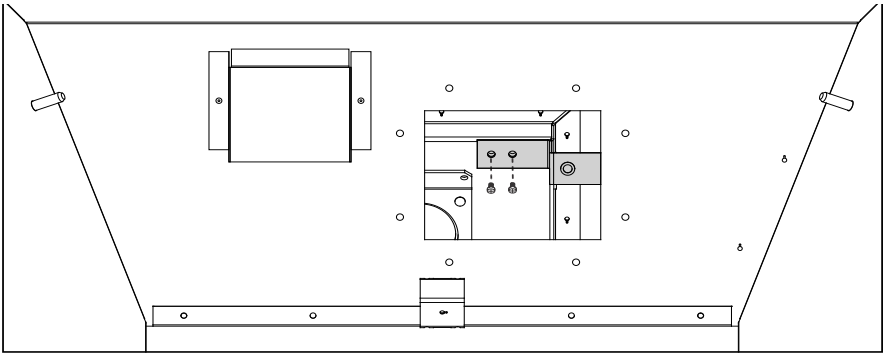
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### S7 Replacing the Thermal Cut Out

Once the screw is removed from below the stepped firebox baffle, gently lift the baffle up and bring towards you. Remove the 8 machine screws in the access panel (as shown in the diagram below).



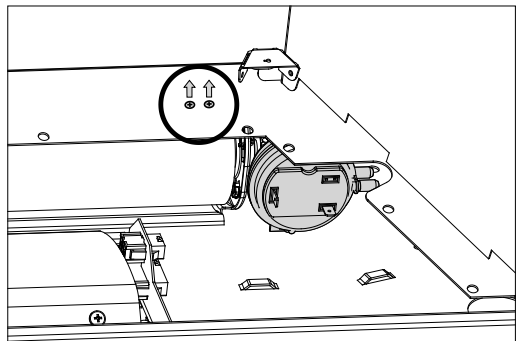
Remove the 2 machine screws from the TCO bracket (as shown in the diagram below)



Disconnect the two wires from the TCO and the bracket with the TCO may then be removed from the fire box for replacement.

### S8 Removing the Pressure Switch

Remove the two machine screws located in the rear RH side of the firebox to detach the pressure switch bracket. Unplug the white and orange wires along with the two tubes to remove the bracket and pressure switch from the appliance.



The bracket with the pressure switch may now be removed from the firebox.

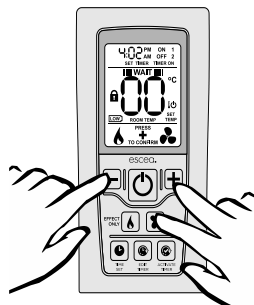


## S9 Replacing a Remote

If the wireless control becomes lost or damaged, a new one can be ordered from any Escea retail agent. When you have the new remote, the following procedure needs to be followed to “teach” the remote to only communicate with that fire.

1. Ensure the fire and remote are set to ‘OFF’ (only the time is displayed on the remote).

2. While the remote is in its ‘OFF’ mode with only the time showing on the display, press the MINUS, PLUS, and FAN BOOST buttons simultaneously (as shown right) until the characters “03” light up on the display. Release the buttons. The remote will count down and display “GO”. The screen will then display all characters and should be reading “00”. This will put the remote into test mode. *Note: if the digits start counting then the remote is already paired.*



3. Press and hold the MINUS button until the two large temperature digits reading “00” start to flash slowly. Release the MINUS button. The remote control is now ready to be linked to the fire.

4. Press and hold the auxiliary on/off button on the fireplace for a minimum of ten seconds or until the two large temperature digits start counting upwards from 00 to 99 repeatedly.

*Note: Pressing the red auxiliary button on/off button will start the fire. Once the remote control is counting the fire can be turned off by pressing the red auxiliary button again.*

5. Press the large power button in the middle of the remote control to exit the test mode and return to normal operation. The remote should only be displaying the time. Check the fire will start using the remote control by pressing the large power button. Turn it off again using the remote control.

6. The fire is now linked to the remote control.

A

## S10 Servicing the Horizontal/Universal Vertical Power Flue

Ensure the power to the power flue is off by disconnecting the power to the appliance inside. If the appliance has been running, allow the power flue to cool before attempting to service it.

B

### Servicing a Horizontal Power Flue:

If the Power Flue needs servicing, the fan can be accessed from the outside of the installation for horizontal termination and accessed from within the roof space for vertical termination.

Undo the screws on the outside of the Power Flue box and separate the two parts, giving you access to the fan inside.

C

Removing this plate gives complete access to the fan for servicing or replacement. Check that all the seals are still intact. Check that the fan electrical terminals, motor, and impeller are not corroded. Ensure there are no signs of leakage in or around the terminal.

D

When reassembling the Power Flue, line up the round silicon grommets with the outlet tube of the fan and push the cowl back into place. Ensure all seals are still in place and replace all of the screws to hold the cowl in the correct position.

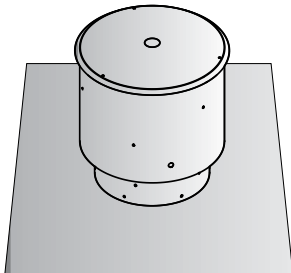
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### Servicing a Universal Vertical Power Flue:

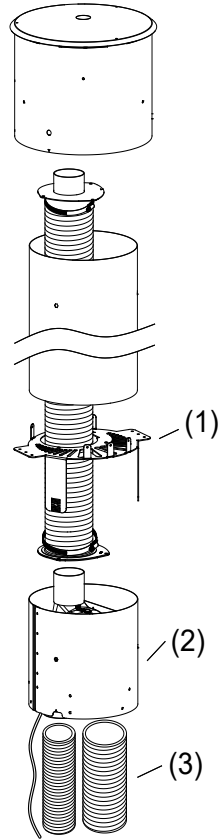
If the UVP is internally installed remove the unit (2 in the right hand image) and replace the complete fan unit.

If the UVP is externally installed the cowl/fan unit pictured below is to be completely replaced by removing it from the liner or flashing.

F



G



## S11 Annual Service Procedure

- Isolate power and gas supply to fire.
- Remove front glass and clean inside of glass.
- Remove fuel bed and brush off any soot.
- Clean electrode and pilot hood of any carbon build up and ensure correct gaps between electrode and pilot hood
- Remove burners and blow compressed air through the burner ports.
- Remove jets and clean injector hole (with solvent if necessary).
- Remove the control tray to give access to fan; brush and vacuum any dust build up from fan blades.
- Vacuum any dust from the cavity that houses the fan and from the underside of the fire box around the valve and solenoids.
- If the gas piping includes a flexible hose connected to the regulator, check the hose for signs of wear (discolouration, loss of flexibility, cuts, worn covers, cracks, crushing, kinking, flattening or loose end fittings) and replace if worn, or more than five years old.
- Test all joints for gas tightness.
- Reassemble heater and check that operating pressure is correct.
- Check glass sealing tape and replace if necessary.
- Check to make sure that flue system is intact and not in any way blocked.
- Trial heater with several start/stop cycles and trial fan-boost, flame effect only and thermostat modes to ensure that all modes function correctly.
- Ensure that the fascia is properly installed and is sitting flush with the wall after service.

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S12 Wiring Diagram

