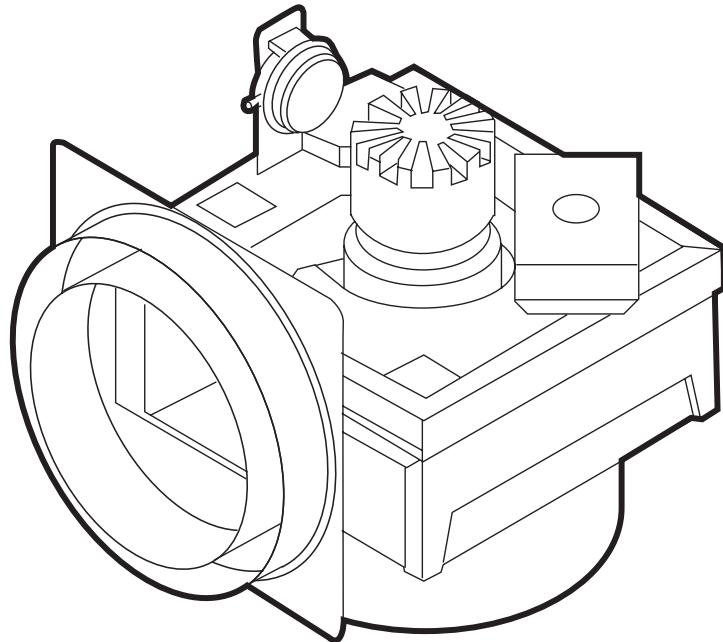




real flame

Leaders in
Gas Fireplace
Technology



POWER FLUE®

INSTALLATION & OPERATING MANUAL

The Real Flame Power Flue system is approved to be installed with any open fronted Real Flame gas fireplace.

VERSION 12

WARRANTY INFORMATION

The benefits provided to you under the following warranty are in addition to any other rights and remedies available to you under the law.

1. Warranty

If:

- (a) during the first 15 years from the date of purchase (Firebox Warranty Period), there is a defect in the firebox of the Real Flame Gas Burner; or
- (b) during the first 2 years from the date of purchase (Parts Warranty Period), there is a defect in the gas valves or other parts of the Real Flame Gas Burner,
due to improper workmanship or material, Real Flame will replace or repair the Real Flame Gas Burner without charge. Any replacement product is warranted only for the time remaining on the original Firebox Warranty Period or the Parts Warranty Period as relevant.

2. Registration

You must register to receive the benefit of this warranty by completing the warranty registration on our website (www.realflame.com.au) or completing and mailing the attached registration card within 30 days of purchase of your Real Flame Gas Burner (or, if the Real Flame Gas Burner is fitted to a new home, within 30 days of the date of settlement of purchase of such new home).

3. Exclusions

Real Flame is not obliged to replace or repair the Real Flame Gas Burner under clause 1 if:

- (a) it has been improperly stored, installed, connected, used, operated or repaired, or damaged, abused, tampered with, altered (without our written approval), or not maintained in strict accordance with our installation and operating instructions; or
- (b) it has been installed in an outdoor setting.

4. Limit of Liability

The warranty provided under this warranty is limited to replacement or repair of the Real Flame Gas Burner only, at our option. To the extent permitted by law, Real Flame excludes liability for consequential loss or any other loss or damage caused to property or persons arising from any cause whatsoever, and damage arising from normal wear and tear.

5. Claiming under the Warranty

In order to claim under this warranty you must, within the Firebox Warranty Period or the Parts Warranty Period (as relevant), contact Real Flame, providing the original proof of purchase and the details below:

Supplier Name _____

Date Of Purchase / settlement of property if new home _____

Model / Serial Number _____

This warranty does not cover the cost of claiming under the warranty or transporting the Real Flame Gas Burner to and from the supplier.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

If you would like to speak to someone about your Real Flame Gas Burner or claiming under this warranty, please contact the Real Flame Service Warranty Desk on 03 8706 2000.

Real Flame Pty Ltd ACN 006 311 155

Head Office: 1340 Ferntree Gully Road, Scoresby 3179

Telephone: 03 8706 2000 Facsimile: 03 8706 2001

WARRANTY

Provided your Real Flame Power Flue motor is installed in strict accordance with our installation instructions, the motor is unconditionally guaranteed for twelve months from date of purchase.

This unconditional warranty covers parts and labour at our discretion taking into consideration normal wear and tear and does not cover fires installed in outdoor settings.

INSTALLATION NOTICE

- The installation of this appliance is only to be carried out by an authorised person in accordance with the manufacturers instruction, local gas fitting regulations, AS/NZS5601.1-2013 installation codes for gas burning appliances and any other relevant statutory regulations.

IMPORTANT NOTES

The Real Flame power flue system is designed and manufactured by Real Flame and is approved to be installed with the following Real Flame Products.

- **MAGIGLO 320 PF**
- **MAGIGLO 360 PF**
- **MAGIGLO 400 PF**
- **MAGIGLO 540 PF**
- **MAGIGLO 750 PF**
- **MAGIGOLO 540 DOUBLE**
- **HEATSEEKER FIREBOX MODELS 600, 700, 850, 1000, 1500**
- **HOTBOX FIREBOX**
- **REGISTER FIREBOX**
- **SIMPLICITY 850, 1000, 1500, 1800, 3300**
- **ELEGANCE 850, 1000, 1500, 1800, 3300**
- **PURE VISION 850, 1000, 1500, 1800, 3300**
- **HYBRID 850, 1000, 1500, 1800, 3300**
- **SIGNATURE 850, 1000, 1500, 1800**

THE INSTALLATION MANUAL OF THE REAL FLAME POWER FLUE SYSTEM IS TO BE READ IN CONJUNCTION WITH THE INSTALLATION MANUAL OF THE REAL FLAME PRODUCT BEING USED.

THE DESIGN OF THE REAL FLAME POWER FLUE SYSTEM IS SUBJECT TO COPYRIGHT AND ALL INFRINGEMENTS WILL BE VIGOROUSLY PURSUED.

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INTRODUCTION - THE POWER FLUE SYSTEM

POWER FLUE DESIGN

A 'flue' using a fan to remove or assist in removing combustion products from an appliance, is known as a 'power flue'.

POWER FLUE APPLICATION

A power flue application can be used to enable a client to have a decorative fire with a horizontal flue run or a vertical flue run where flue space is inadequate for the normal flue.

INSTALLATION INSTRUCTIONS

VENTILATION REQUIREMENTS

Air supply to the unit is to be in accordance with ventilation Clause 5.4 of the Gas Code 601. Ventilation requirements do not change by using a power flue. Refer page 19.

ACCESS TO POWER FLUE MOTOR

Access must be provided to the flue motor, this access MUST be at least 400mm x 400mm. There MUST be a minimum clearance of 250mm between the top of the motor and any fixed object i.e. ceiling or stud work. This is so the top of the fan box can be removed.

WIRING OF THE POWER FLUE

All wiring for the power flue is carried out at the factory and plug connectors are fitted for easy installation. The power supply for the power flue is via a 3-pin plug at the rear of the firebox that can be plugged into a power socket within the cavity.

ISOLATION SWITCH

If the power point is within a cavity an isolation switch accessible from outside the cavity must be provided.

WIRING CLEARANCES

Wiring must at all times have a clearance of at least 150mm from the flue.

FAN FAILURE SENSING DEVICE

All Real Flame Power Flue systems are fitted with a sensing device within the unit to ensure that, in the event of flow failure, the safety shut off valve within the module will go into lockout and shut off the gas supply to the unit. The device should ALWAYS be in the vertical position. Refer to the pressure differential switch on page 11.

'LOCKOUT'

'Lockout' is the term used when the module in the unit senses a fault. When a fault is detected by the module it will shut off the gas and go into lockout. If this occurs contact the manufacturer.

INSTALLATION INSTRUCTIONS (continued)

LOCATION OF FLUE TERMINAL FOR POWER FLUE

Listed below are the minimum clearances required for fan-assisted terminations:

1. Below eaves, balconies and other projections.200mm
- 1a. Below eaves, balconies and other projections for a 1500 & 1800 model300mm
2. From the ground, above a balcony or other surface.300mm
3. From a return wall or external corner.....300mm
4. From a Gas meter.1000mm
5. From an electricity meter or fuse box.....500mm
6. From a drainpipe or soil pipe.75mm
7. Horizontally from any building structure or obstruction facing a terminal.....500mm
8. From any other flue terminal. Cowl, or combustion air intake.300mm
9. 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
10. From a mechanical air inlet including a spa blower.....1000mm
11. Vertically below an openable window, non-mechanical air inlet,
or any other opening into a building with the exception sub floor ventilation.500mm

ELECTRICAL

SHOULD THE SUPPLY FLEX AT THE BACK OF THE FIREBOX BE DAMAGED, A SPECIALLY PREPARED FLEX IS REQUIRED. FOR REPLACEMENT CONTACT THE MANUFACTURER.

THE ON/OFF WALL SWITCH MUST NEVER BE ATTACHED TO A METAL FRAME.

WARNING

Whenever servicing the power flue system, always turn off the electrical power supply and close the manual gas control valve.

IMPORTANT INFORMATION

In addition to the instructions in this manual all national, state and local regulations must be adhered to. These include but are not limited to:

- Australian Standards AS3000 - Electrical Installation.
- Australian Standards AS/NZS5601.1-2013 - Gas Installation.
- Local Gas and Electrical Authority Regulations.
- Municipal Building Codes.

The power flue should be serviced every 12 months by an authorised technician. If repairs are needed an authorised technician must carry them out.

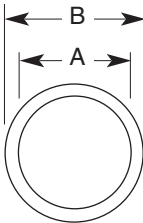
FITTING THE MOTOR

The Power Flue motor is fitted with two sets of spigots. The set on the base of the Power Flue box sit on top of the vertical flue and the set mounted on the side plate connect to the horizontal flue.

INSTALLATION INSTRUCTIONS (continued)

FLUE SIZE

The flue size for each model is different. Please refer to the table below.



MODELS	A mm	B mm
Double Vision, Hot Box and all Heatseekers	150	200
Pure Vision, Simplicity, Elegance, Signature, Hybrid 850, 1000 & 1500 Sizes	150	200
Pure Vision, Simplicity, Elegance, Signature, Hybrid 1800 & 3300 Sizes	200	250

NOTE: Ensure all power flue inner and outer flue lengths are sealed at joins.

HORIZONTAL / VERTICAL FLUE RUN

The standard length of flue for the Power Flue is up to 13.5m of flue with 4 x 90 degree or 45 degree bends. The flue size that connects to the firebox should be as stipulated in the product IOM. All flue after the baffle shall be as noted in the FLUE SIZE matrix above. For flue runs longer than 13.5m and more than 4 bends a flue schematic should be forwarded to Real Flame for approval. Once the flue run is approved you will be notified in writing. All horizontal terminations shall have a downward grade from the motor to the termination.

FLUE CLEARANCES

All flue clearances are as per the requirements listed in the heater specifications.

TERMINATION

The termination to be used for all horizontal installations is to be either a small flush cowl or if used as a service access panel, a large flush cowl is required. For vertical termination a vertical approved cowl must be used. An external motor can be used as an option on horizontal and vertical terminations.

INSTALLATION OF POWER FLUE KIT

POWER FLUE MUFFLER

The power flue muffler has a spigot at each end. The end that attaches to the firebox has a spigot equivalent to the inner flue spigot diameter of the firebox, the top of the muffler has a 150mm spigot which the motor fits to, or the 150/200 twin skin flue if required. The flow arrow on the muffler is to be pointing up. If a 1800 or 3300 unit is used the flue is 200mm/250mm.

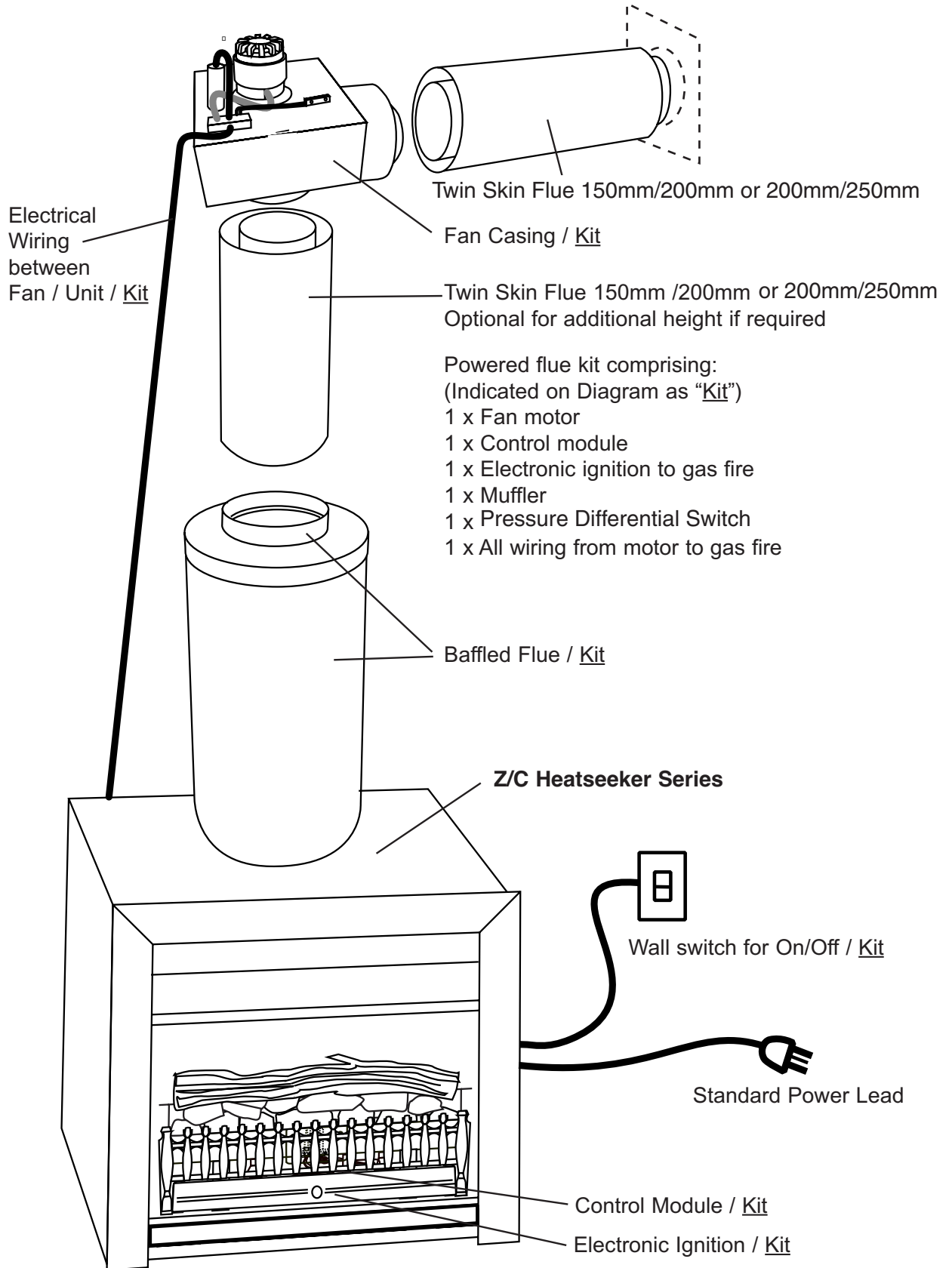
WIRING (see wiring diagram pages 17 & 18)

A 3 metre lead is supplied with the power flue, this lead has a different connection on each end, one end is plugged into the connection on the left hand side of the firebox and the other end is to be plugged into the fan. The wire coming from the rear of the firebox with the standard 3-pin plug attached is to be plugged into a power point. A single gang wall switch is also supplied attached to the 3 metres of lead; this wall switch is to be attached at a location accessible to the client. No other wiring is required.

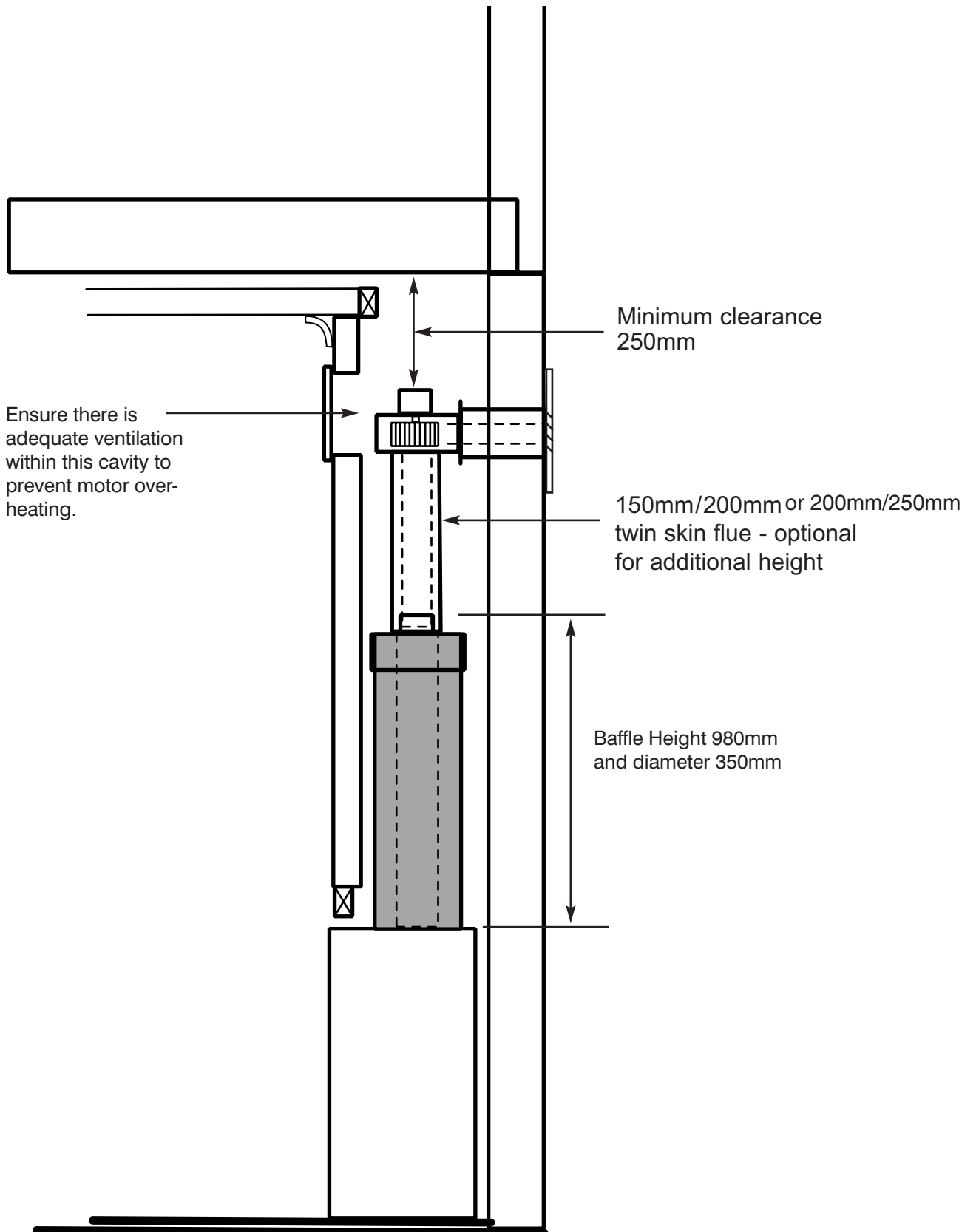
SERVICING OF THE POWER FLUE MOTOR

The Real Flame Power Flue motor is designed so as to make servicing the motor a simple task. The power lead connected to the motor is to be disconnected (unplugged) and the screws are to be undone, the fan motor will then lift out for servicing. The fan Motor box connected to the flue does not have to be disconnected from the flue.

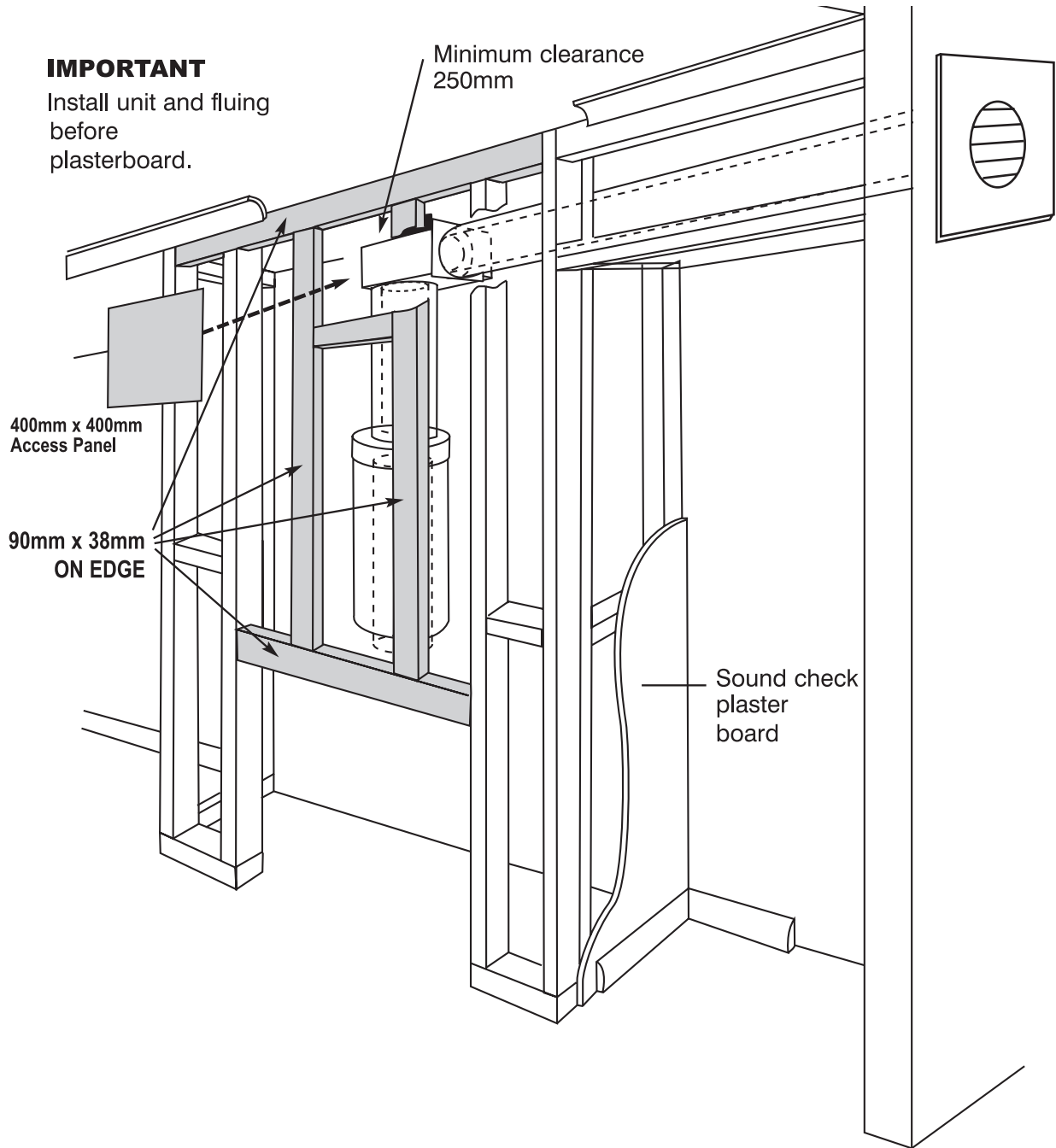
POWER FLUE KIT (Here shown with Heatseeker firebox)



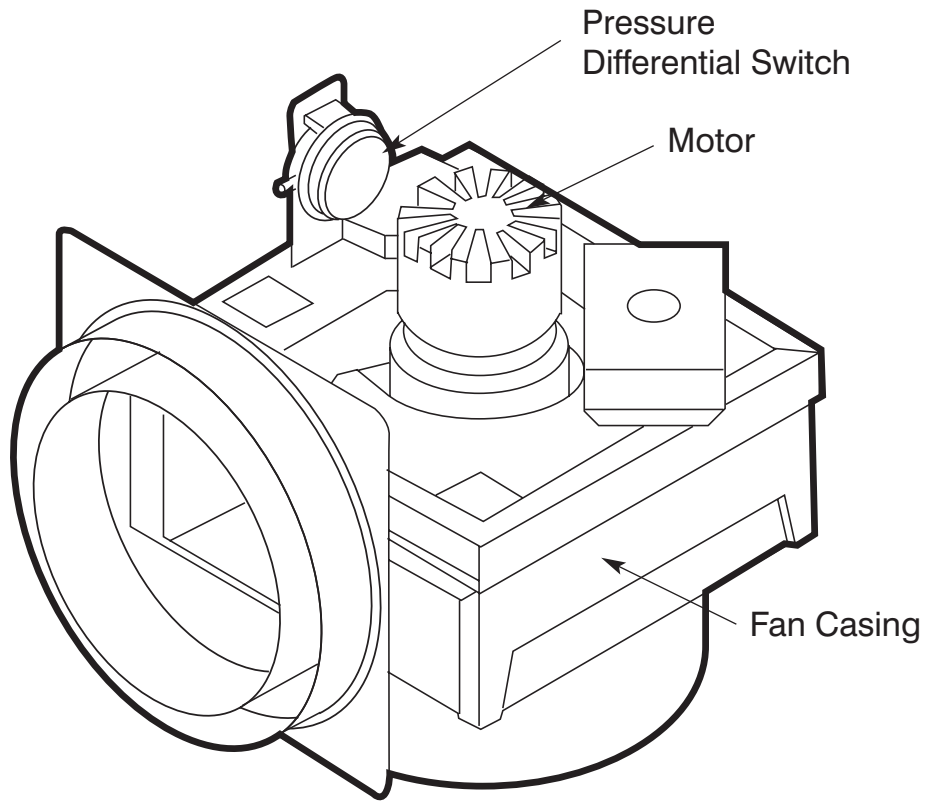
POWER FLUE MOTOR CLEARANCE



TYPICAL POWER FLUE FRAMEOUT

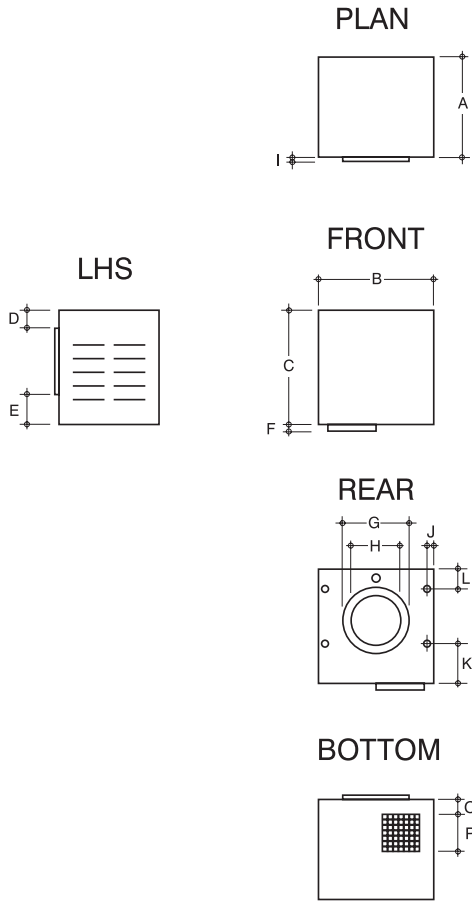


POWER FLUE MOTOR



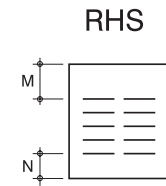
DIMENSIONS

External Flue Motor



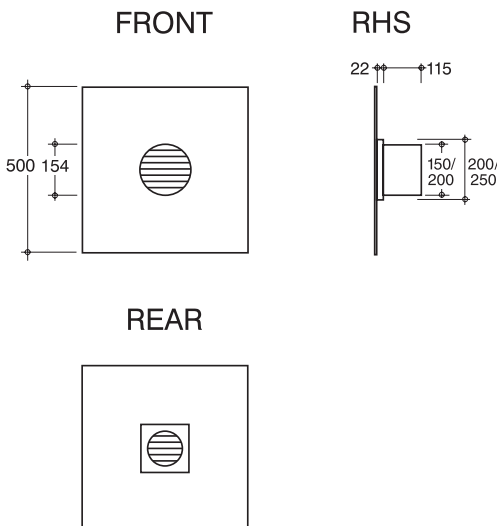
A	B	C	D	E	F	G	H
302	348	345	55/5	90/40	20	200/250	150/200

I	J	K	L	M	N	O	P
13	20	120	60	105	75	45	112

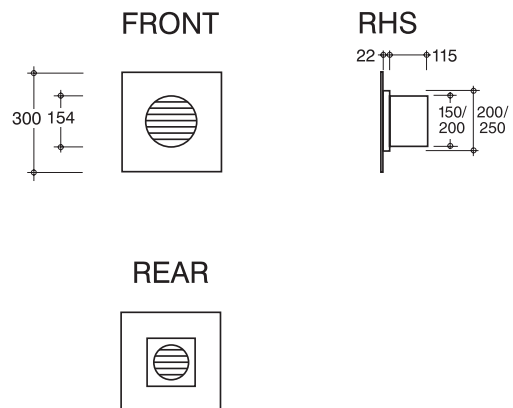


MODELS	H mm	G mm
Double Vision, Hot Box and all Heatseekers	150	200
Pure Vision, Simplicity, Elegance, Signature, Hybrid 850, 1000 & 1500 Sizes	150	200
Pure Vision, Simplicity, Elegance, Signature, Hybrid 1800 & 3300 Sizes	200	250

Power Flue Flush Termination 500 x 500

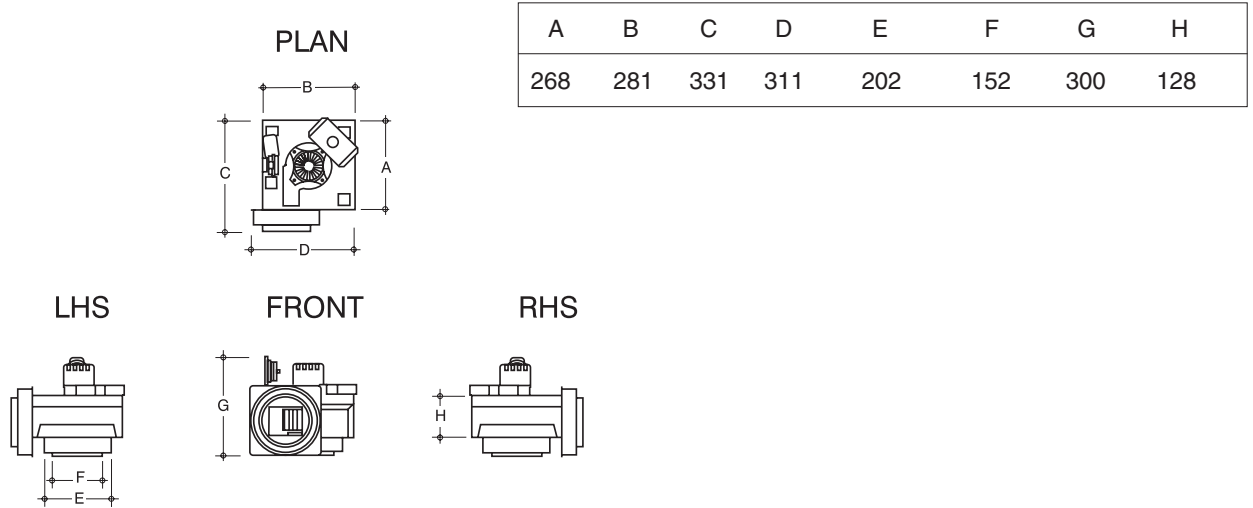


Power Flue Flush Termination 300 x 300

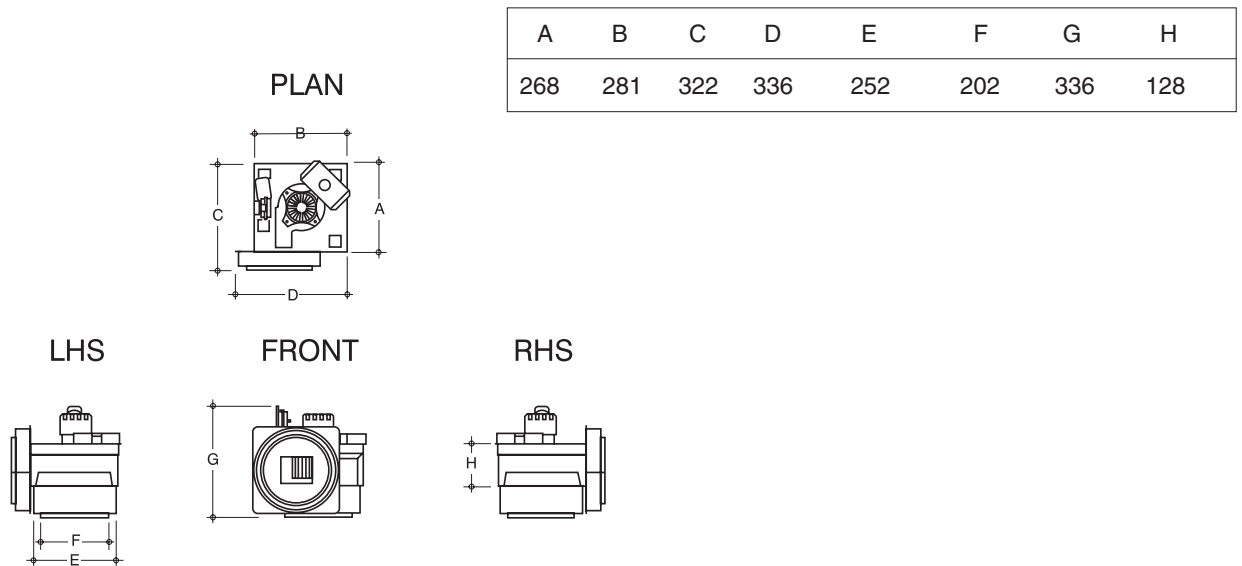


DIMENSIONS

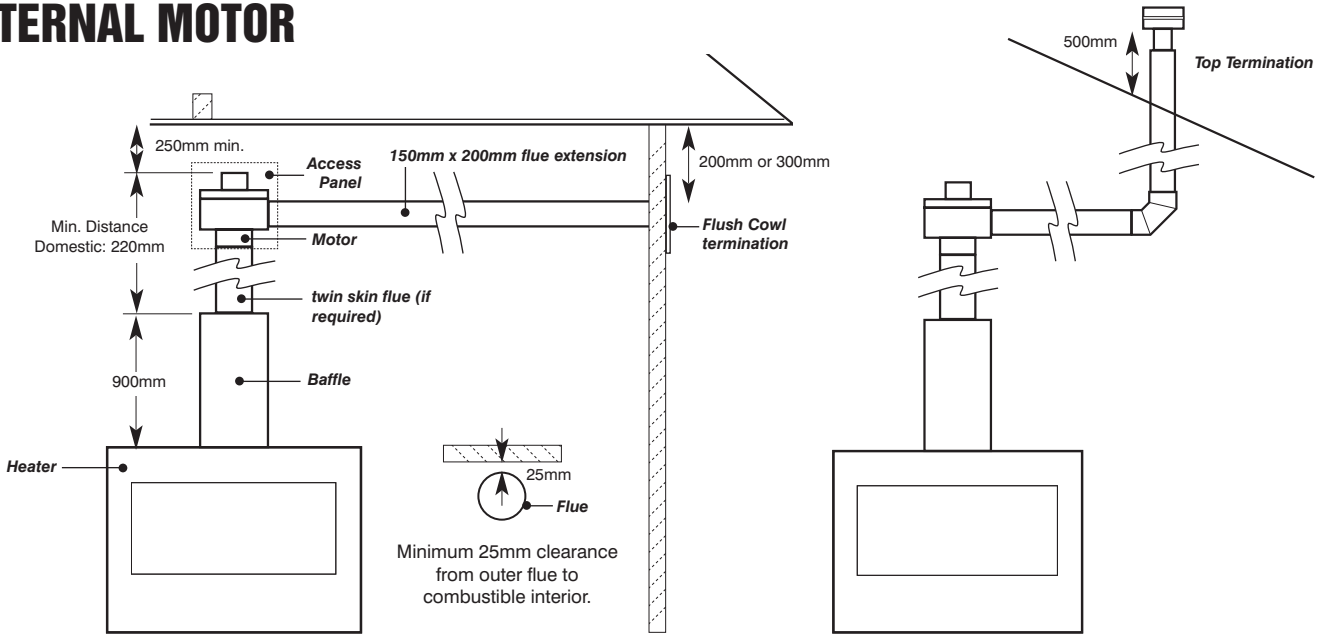
Internal Power Flue Motor



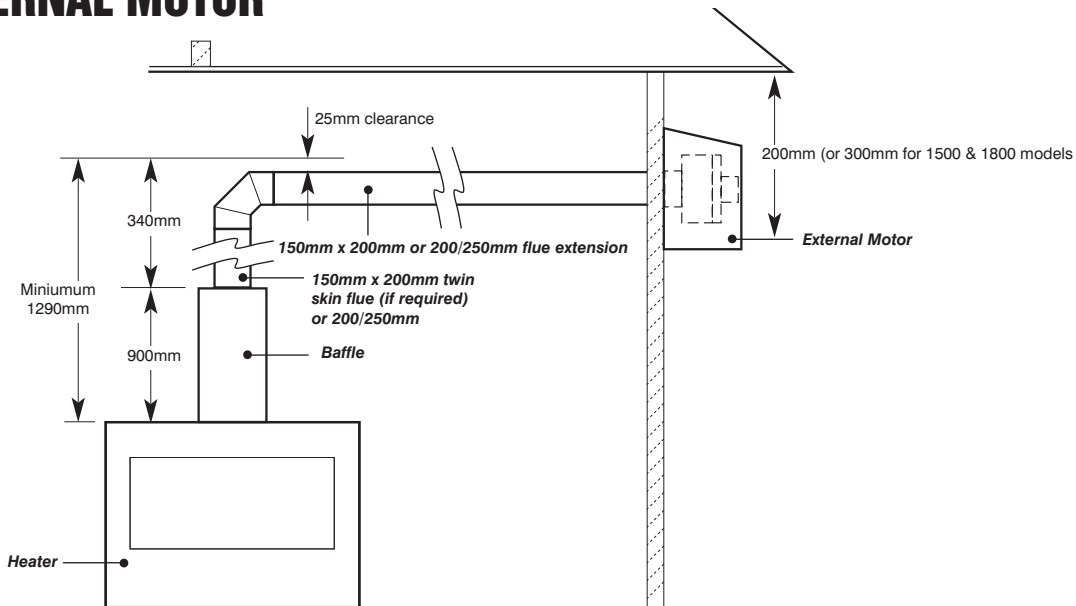
Internal Power Flue Motor 200/250



INTERNAL MOTOR



EXTERNAL MOTOR



TROUBLE SHOOTING FOR ELECTRONIC IGNITION AND POWER FLUE SYSTEM.

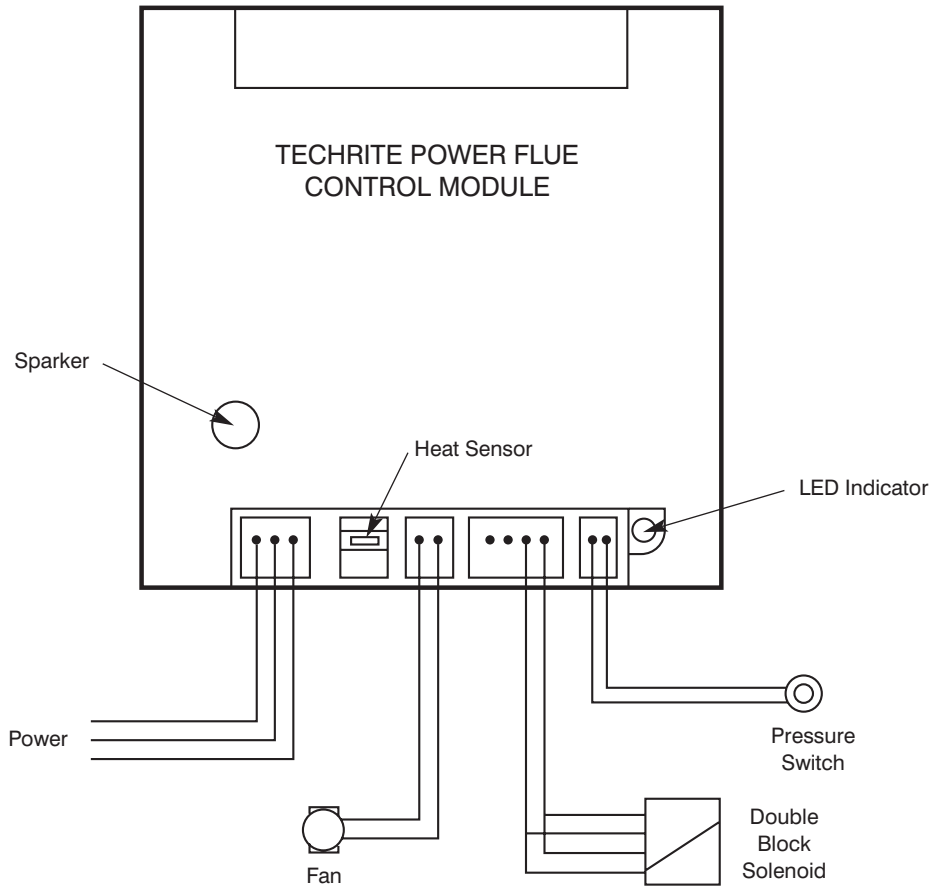
Symptom	Possible Cause	Corrective Action
Fire turned on and nothing happens	No Power to Module	Connect Power
Fire turned on and motor starts but there is no spark	Pressure switch not operating	Check pressure switch
Fire sparks when turned on but will not ignite	A. No Gas	Connect Gas.
	B. Sparker is to far from metal	Adjust sparker so it cross lights to metal.
	C. Pressure switch (Power Flue) is not operating correctly.	Remove fan from housing and check that small tube supplying air to pressure switch has not moved or been damaged.
	C. Valve solenoids are faulty	Check solenoids
Fire ignites and then shuts down within a couple of seconds	D. Solenoid wires to module not connected correctly	Check that the four pin plug from the valve has been connected correctly
	A. Something is touching the heat sensor	Ensure that nothing is touching the sensor which is located behind the cover plate at front of burner.
Fire ignites and shuts down after several minutes	B. The power polarity is reversed	Check polarity
	A. Insufficient air for burner to operate correctly	Check that the unit has correct ventilation as per Installation manual.
	B. Pressure switch not operating correctly	Check air supply tube to pressure switch.

TROUBLE SHOOTING FOR ELECTRONIC IGNITION AND POWER FLUE SYSTEM. (continued)

The power flue and electronic control box have a red LED light that indicates the possible cause of a problem, the LED light will flash in different sequences for different problems, the most common are:-

Long Flash	Short Flash	
1	0	Normal Running State.
1	1	Flame Failure.
1	2	Waiting for pressure switch ON
1	3	Waiting for pressure switch OFF
2	1	Maximum retries exceeded

POWER FLUE WIRING DIAGRAM



NOTE

For C Bus and / or make up air damper interlock systems, refer to page 18 and 19.

INTERFACING MAKE-UP AIR DAMPER INTO POWER FLUE OPERATION

A requirement of the gas installation code AS/NZS5601.1-2013 is that ventilation is required as per the manufacturers instructions. Clause 5.12.13.3 of AS/NZS5601.1-2013 sets out the ventilation requirements.

The real flame power flue system has the option of controlling a make-up air damper to allow fresh air directly from outside into the room where the fireplace is located.

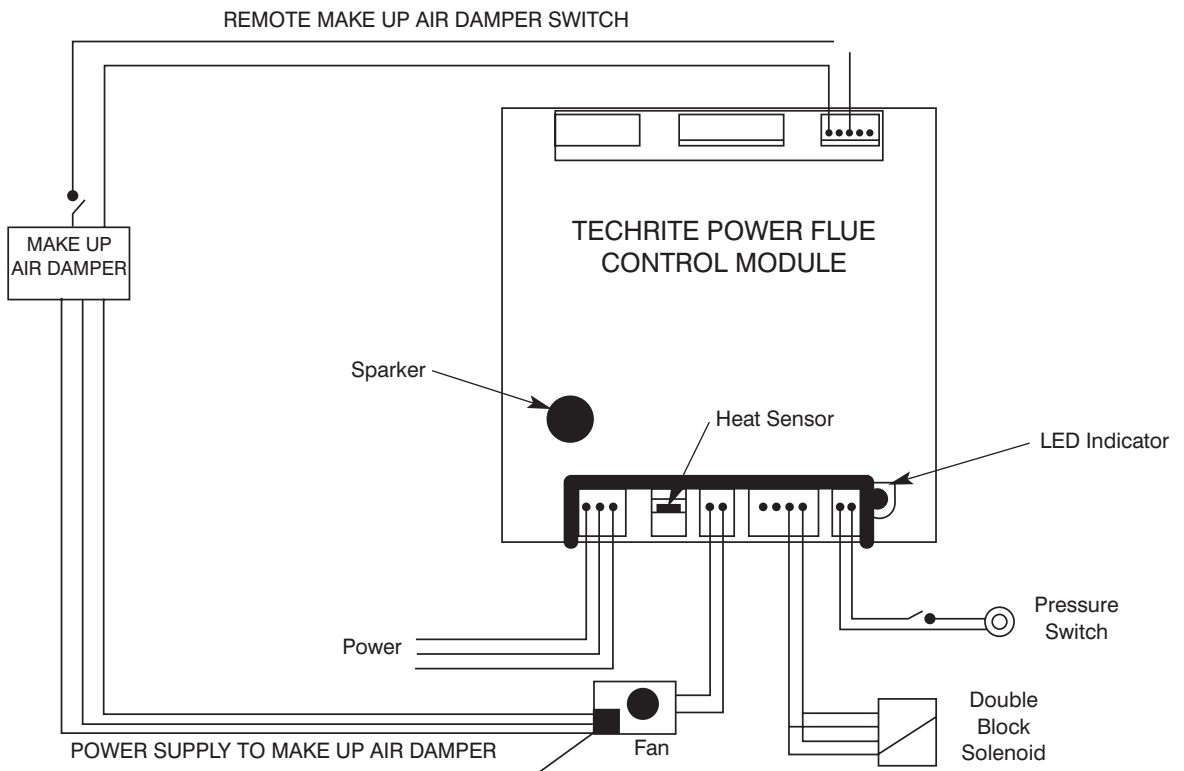
When a make up air damper is to be used the damper must comply with the following.

- The damper must be capable of supplying sufficient air to the room as required by the manufacturer (see installation manual)
- The damper is to operate from 240V power.
- The damper must have an interlock signal that activates in the fully open position.

How does the system work?

The make up air damper 240 volt lead is connected directly into the junction box that is fitted to the top of the real flame power flue system.

The wiring from the interlock device is connected to the 2 core wiring at the rear of the firebox (this wiring is fitted at the time of manufacture and in turn connects to the control module within the firebox. (see below schematic)



INTERFACING MAKE-UP AIR DAMPER INTO POWER FLUE OPERATION

(continued)

Operation

When the on/off switch is turned to the on position to operate the fire, the module will check that the interlock safety switch of the make up air damper is in the open position, if it is, the fan will then start up, the pressure switch located on the fan will then indicate to the module that the fan is operating correctly, the module will then allow the gas to the fire and the fire will ignite.

After operating for 60 seconds the module will check that the make up air damper interlock safety switch is in the closed position (which indicates that the damper is open), if the damper is open the fire will continue to operate, if the damper is not open the fire will shut down.

Ventilation requirements of models installed with Power Flue

MODELS	Ventilation Sq mm
Double Vision, Hot Box and all Heatseekers	18,000
Pure Vision, Simplicity, Elegance, Signature, Hybrid 850, 1000 & 1500 Sizes	18,000
Pure Vision, Simplicity, Elegance, Signature, Hybrid 1800 & 3300 Sizes	32,000



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