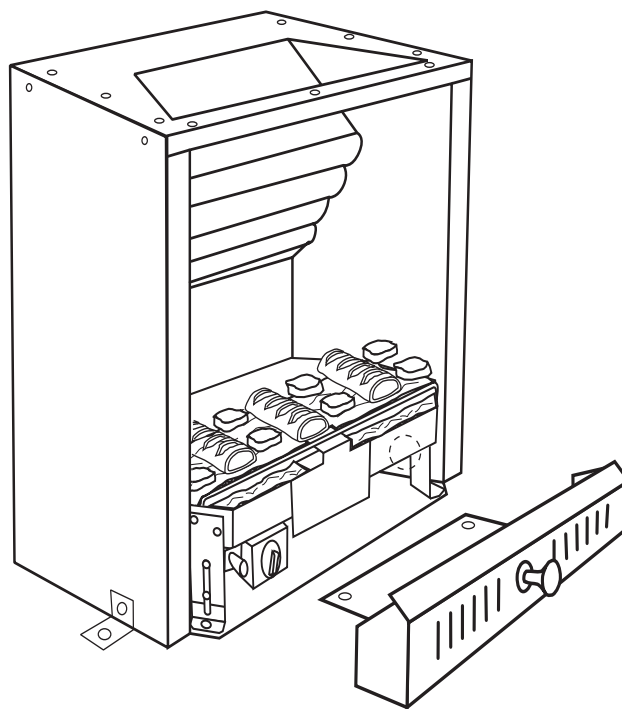


real flame
the hearth of australia



HOT BOX[®] GAS FIREBOX

INSTALLATION & OPERATING MANUAL

The Hot Box Gas Firebox is approved to be installed into a masonry fireplace and as a zero clearance firebox and is designed to operate on Natural Gas and Propane (LPG) gases ONLY. Approval Number 6094.

Installed primarily as a decorative appliance. Not certified as a Space Heater.

VERSION 8

WARRANTY

Provided your Real Flame gas fire is installed in strict accordance with our installation instructions, the firebox is unconditionally guaranteed for ten years and all other parts for twelve months from date of purchase.

This unconditional warranty covers part 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 Manufacturer's Instructions, local gas fitting regulations, AG601 installation code for gas burning appliances and any other relevant statutory regulations.
- In all cases the installation of this appliance shall meet the requirements as set out in AS5601/AG601.

- **NOTE:** A slight smell may be apparent for the first few hours of use. This is due to the heat resistant paint curing. It is recommended to open windows in the room for the first lighting of the fire. In some instances a slight discolouration may occur inside the firebox. This is a normal condition and is not covered by warranty.

IMPORTANT SAFETY NOTICE

- DO NOT PLACE ARTICLES ON OR AGAINST THIS APPLIANCE.
- DO NOT USE OR STORE FLAMMABLE MATERIAL NEAR THE APPLIANCE.
- DO NOT SPRAY AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHILST IT IS IN OPERATION.
- CARE MUST BE TAKEN TO ENSURE THAT ANY RETURN AIR REGISTER OR EXHAUST SYSTEM DOES NOT ADVERSLEY AFFECT THE OPERATION OF THE APPLIANCE OR DRAUGHT OF CHIMNEY OR FLUE.

WARNING

This firebox has a naked flame, care should be taken when it is operating if children or the infirm are in close proximity. A safety screen is recommended if constant supervision is not possible.

VENTILATION REQUIREMENTS

MODEL	EFFECTIVE VENTILATION
Hot Box	40,000 sq mm

CONTENTS

Contents	3
Data Plate.....	4
Installation Instructions	5
Commissioning Procedure	5
Clearances from combustibles.....	6
Installation into an existing fireplace	7
Dimensions	8
Frameout into room specification sheet 1.....	10
Zero Clearance Hot Box	12
Overall Dimensions	12
Components	13
Assembly	14
Optional Power Flue	15
Introduction	15
Installation	16
Motor Clearance.....	18
Frameout	19
Motor exploded view	19
Internal Motor	20
External Motor	21
Wiring Diagram.....	22
Parts List	23
Troubleshooting Electronic Ignition and Power Flue System.....	24
Real Flame contact information.....	28

DATA PLATE (Affixed to burner)

	NATURAL GAS	LPG
Injector	2.5	1.3
Mj/Hr	26	23
P.T.P.	0.8	2.7

INSTALLATION INSTRUCTIONS

INSTALLATION INTO AN EXISTING FIREPLACE

The Hot Box system is designed to be installed behind a cast iron insert or fascia.

1. Check that the fireplace and chimney are in working order, sound condition and clean and free from obstructions. Any cracks or gaps found in the masonry of the fireplace, must be sealed prior to the installation of the Hot Box.
2. Measure the fireplace opening to ensure that the Hot Box will fit into the opening.
3. If fitting the Hot Box into an existing fireplace, using the existing cast iron insert, you will need to remove the back from the cast iron insert. This will require the mantelpiece and insert to be removed from the fireplace prior to installing the Hot Box.
4. Install Hot Box by placing it centrally in the fireplace opening and fit cast iron fascia up to the Hot Box, ensuring that the fascia is firmly touching against the brickwork of the fireplace and the Hot Box. Remove fascia and permanently fix the Hot Box to hearth using the location lugs.
5. Before sealing the cast iron fascia to the brickwork have your gas fitter supply a 15mm copper pipe into the fireplace and Hot Box through the hole provided for connection to the Magiglo burner.
6. Once the gas supply has been installed into the Hot Box fit and seal the cast iron fascia to the brick work and install your desired mantel piece to complete your fireplace.
7. Have your gas fitter refer to the Magiglo Series Installation Instructions for connection and set up of the Magiglo 360 Series Gas Coal Set.
8. A 225mm approved gas cowl is required to be fitted to the top of chimney to stop down draft and rain entering into chimney.
9. Ventilation of 40,000 sq mm must be provided to outside air for the room that the Hot Box is installed. Four standard vents is normally enough. Check that they are clear of blockages.

IMPORTANT

After installing gas coal/log set the following commissioning procedure must take place before leaving premises.

COMMISSIONING PROCEDURE

Once the fire is installed and operational, the installer must check for spillage. Carry out the lighting procedure and turn the fire to high. Allow to warm up for 10 minutes and then using a smoke match, set 25mm down and 25mm inside of the fire opening, run the match across the width of the opening to check that all of the smoke is drawn away.

Repeat the test with doors and windows to the premises open and closed, and with any extractor fans in the same room or adjacent rooms running on high. The fire should continue to clear its combustion products. Also operate any other flued appliances in the same or neighbouring rooms and ensure they continue to function satisfactorily as multiple flues can work against one another.

If spillage is detected during this procedure it could indicate a faulty flue or lack of ventilation. If the problem cannot be rectified immediately, disconnect the appliance, and advise the customer not to use the appliance until the problem has been resolved.

The customer should always be advised of the need for regular servicing and checks to ensure the continued clearance of combustion waste products.

NOTE: A slight smell may be apparent for first few hours of use. This is due to the heat resistant paint curing. It is recommended to open windows in room for the first lighting.

COMMISSIONING PROCEDURE (continued)

WARNING

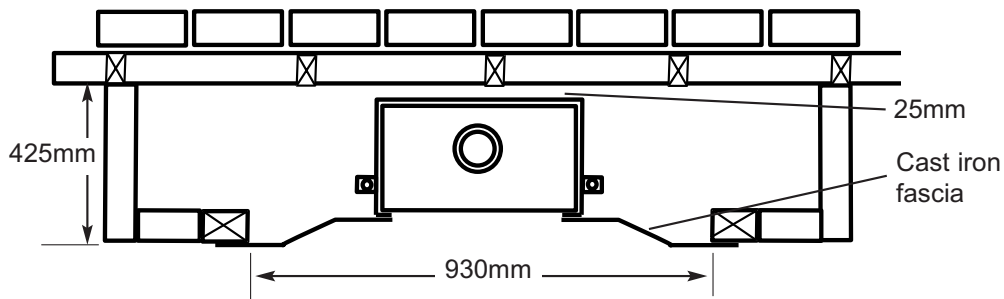
Care must be taken to ensure that any return air register exhaust system does not adversely affect the operation of the appliance or draught of chimney or flue.

“DO NOT place articles on or against this appliance.”

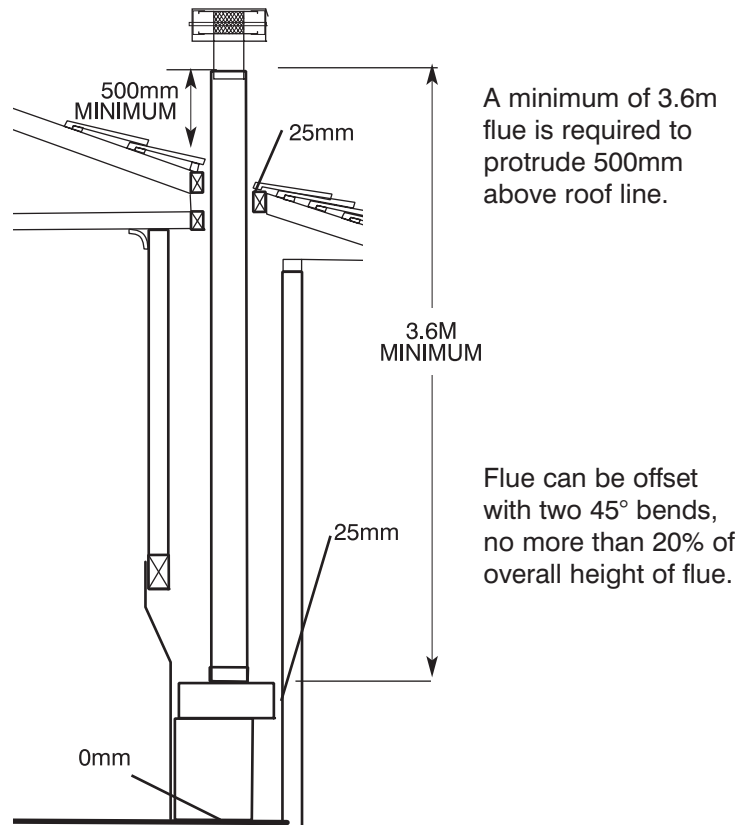
“DO NOT use or store flammable materials near this appliance.”

“DO NOT spray aerosols in the vicinity of this appliance while it is in operation.”

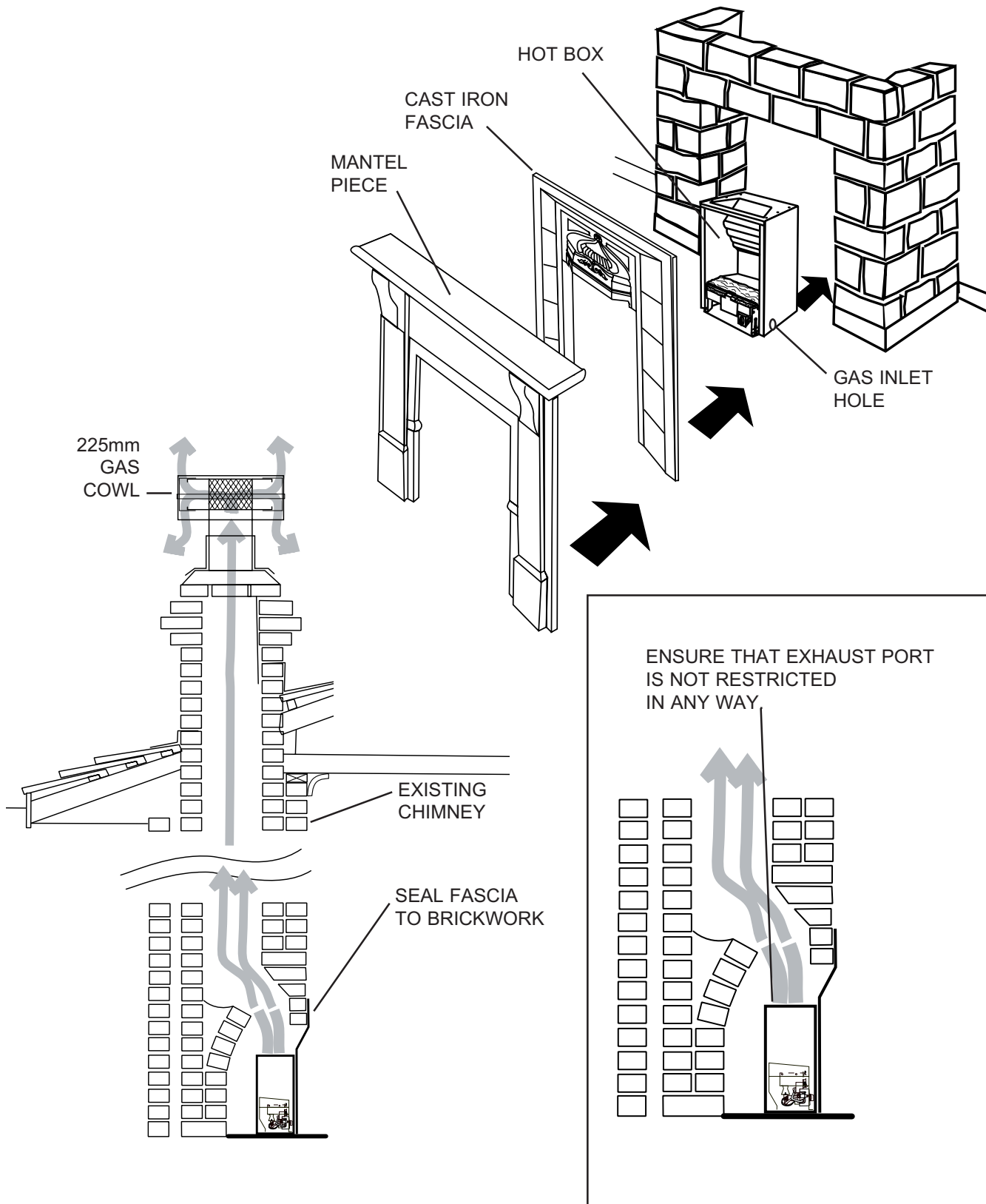
CLEARANCES FROM COMBUSTIBLES



Floor	0 mm
Sides	25 mm
Back	25 mm
Top	100 mm
Flue Outer	25 mm

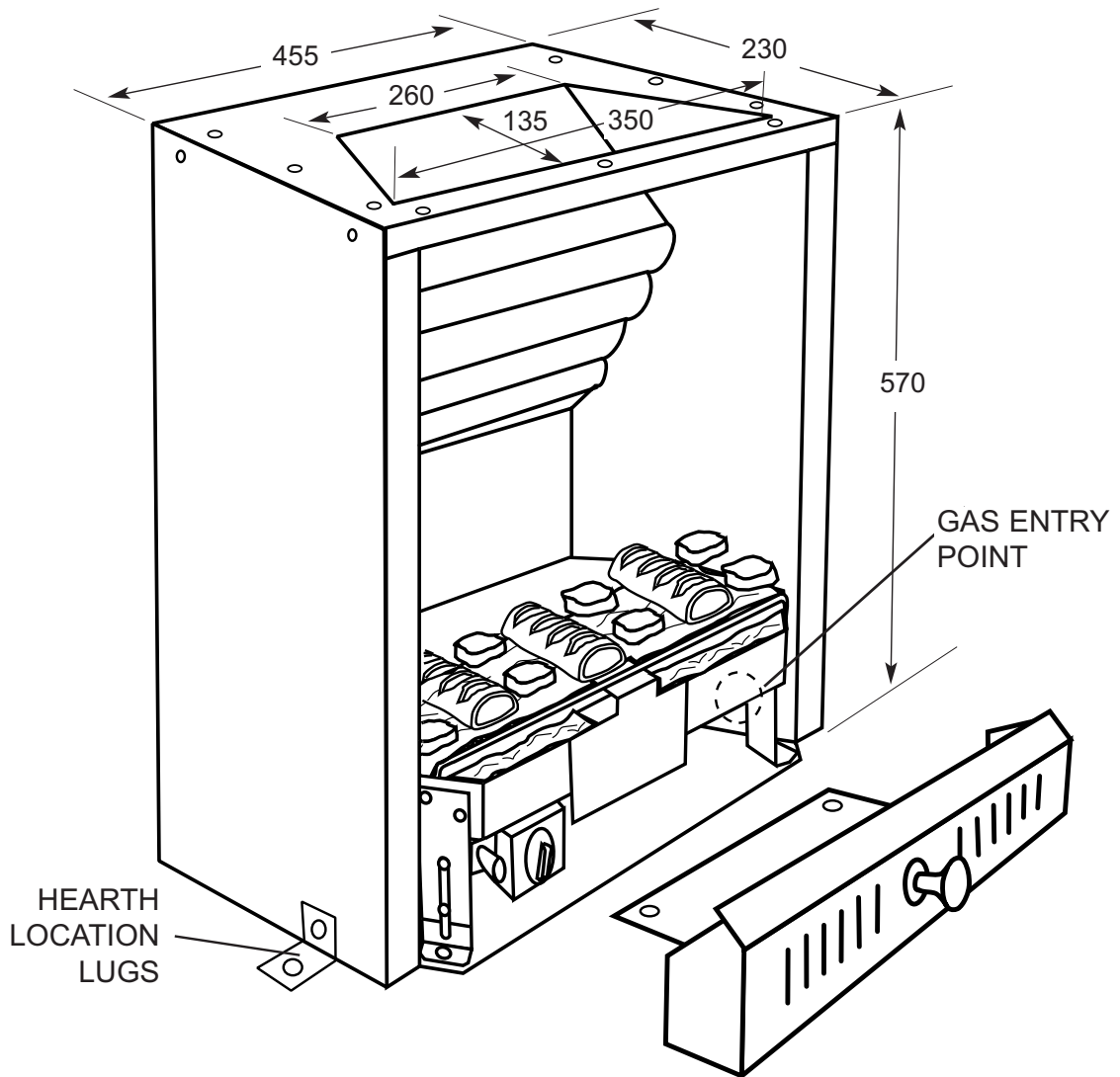


INSTALLATION INTO AN EXISTING FIREPLACE



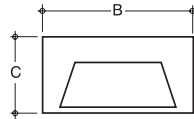
HOT BOX FOR EXISTING FIREPLACE

OVERALL DIMENSIONS



DIMENSIONS

PLAN

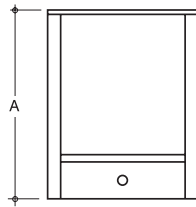


A	B	C
570	455	230

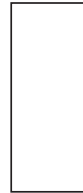
LHS



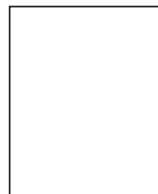
FRONT



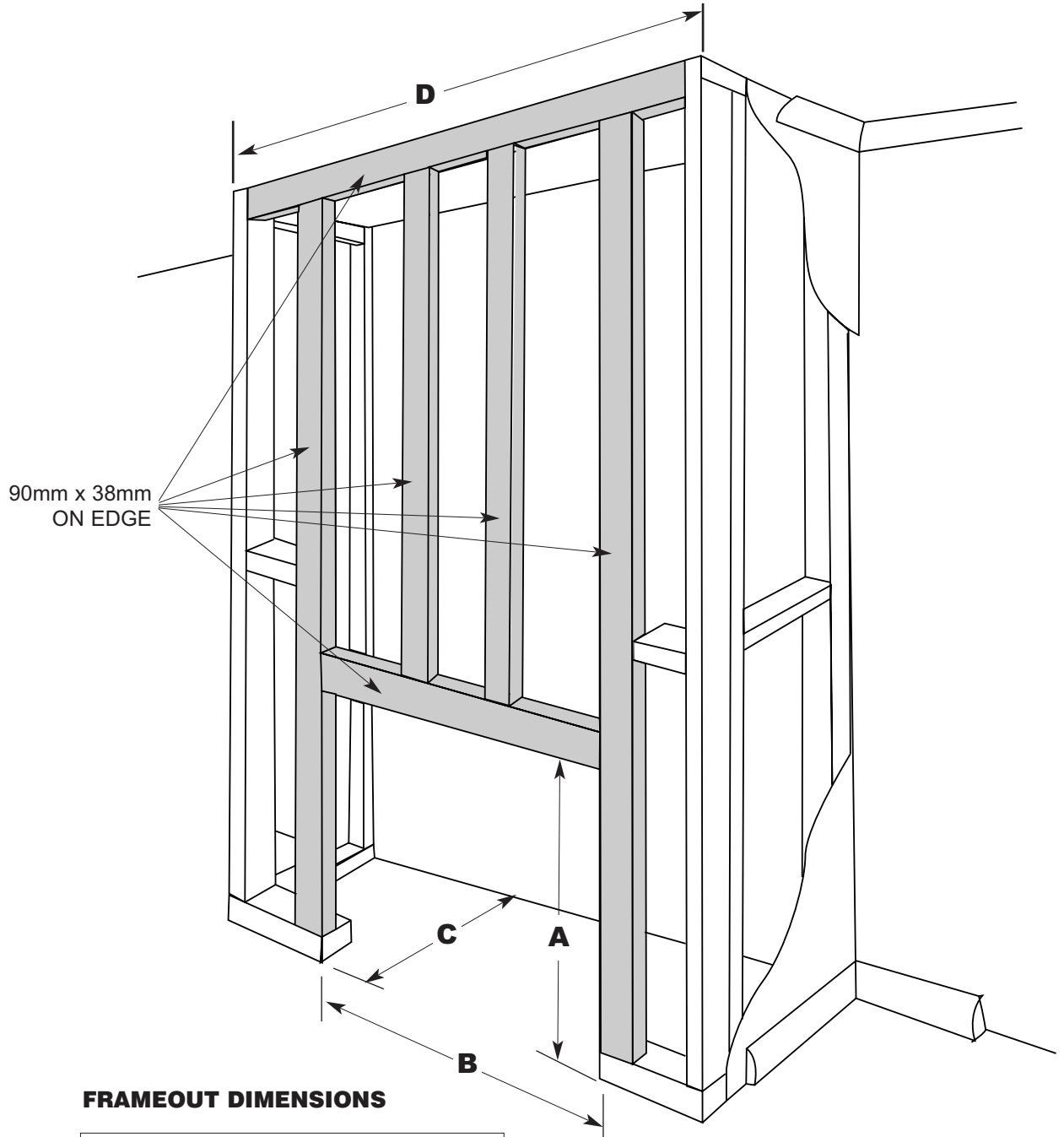
RHS



REAR

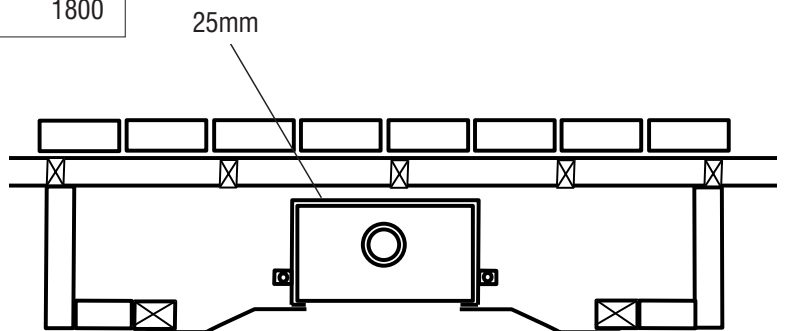


FRAMEOUT INTO ROOM SPECIFICATION SHEET 1

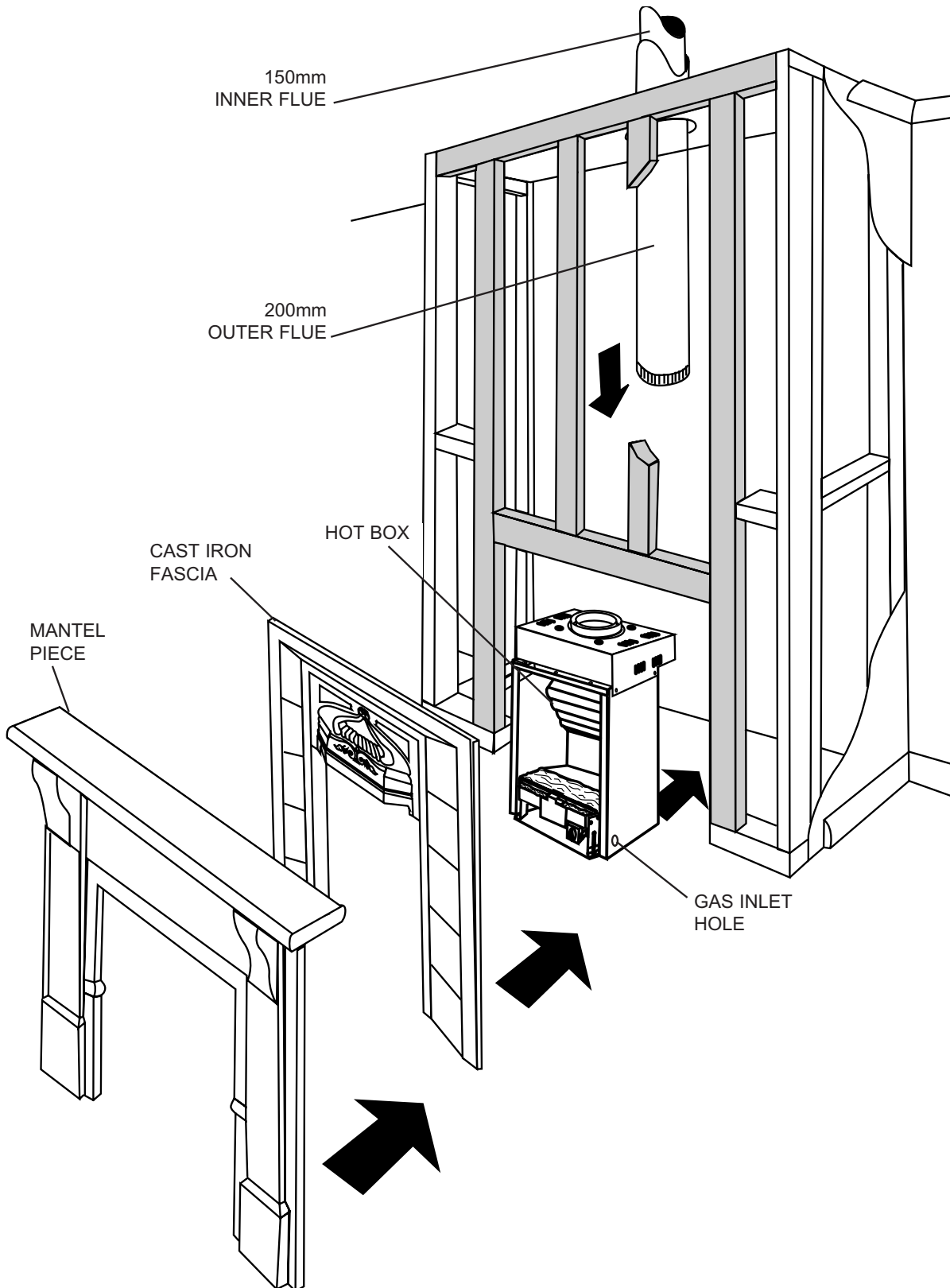


FRAMEOUT DIMENSIONS

Model	A	B	C	D
Hot Box	800	510	425	1800

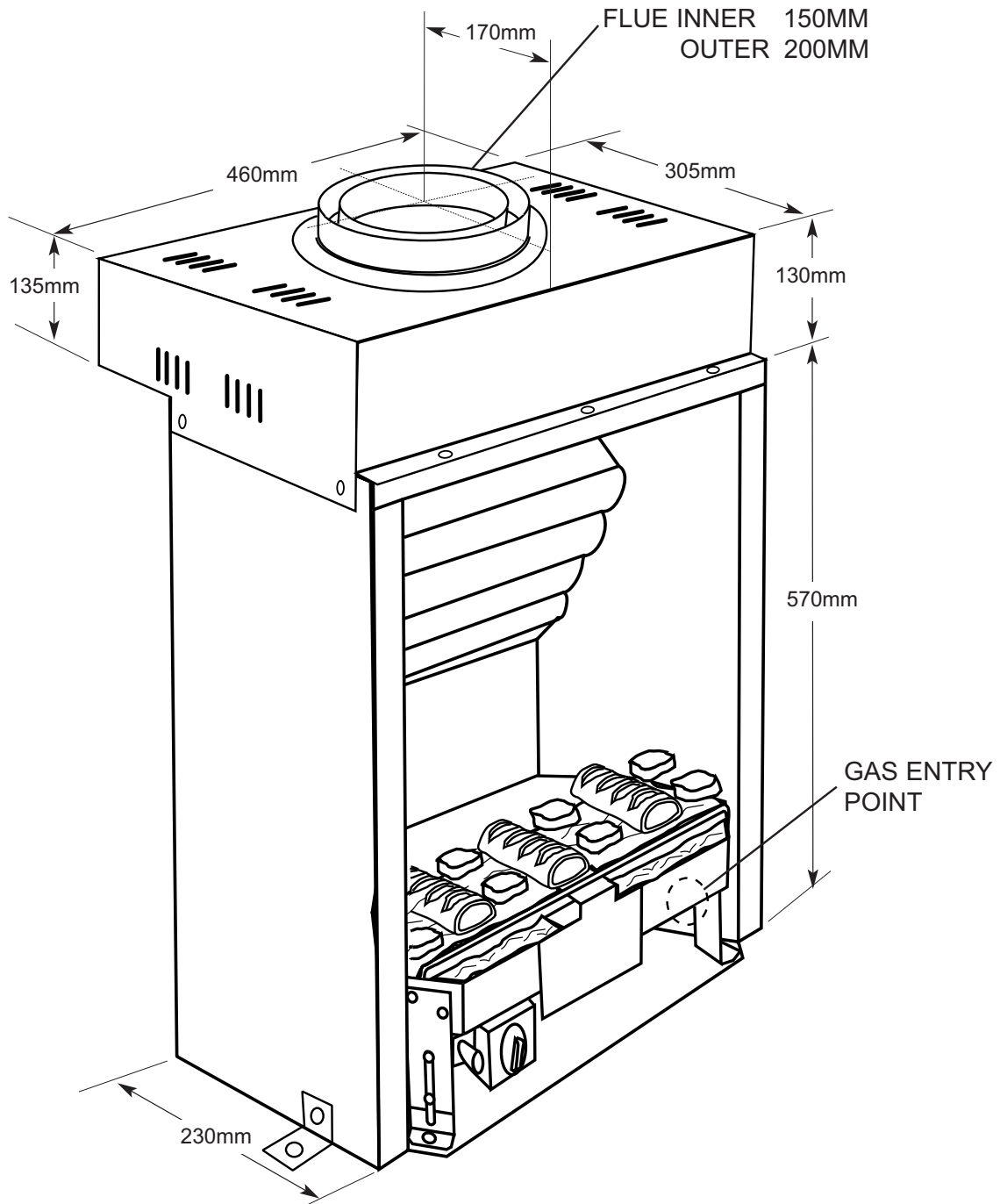


FRAMEOUT INTO ROOM SPECIFICATION SHEET 1



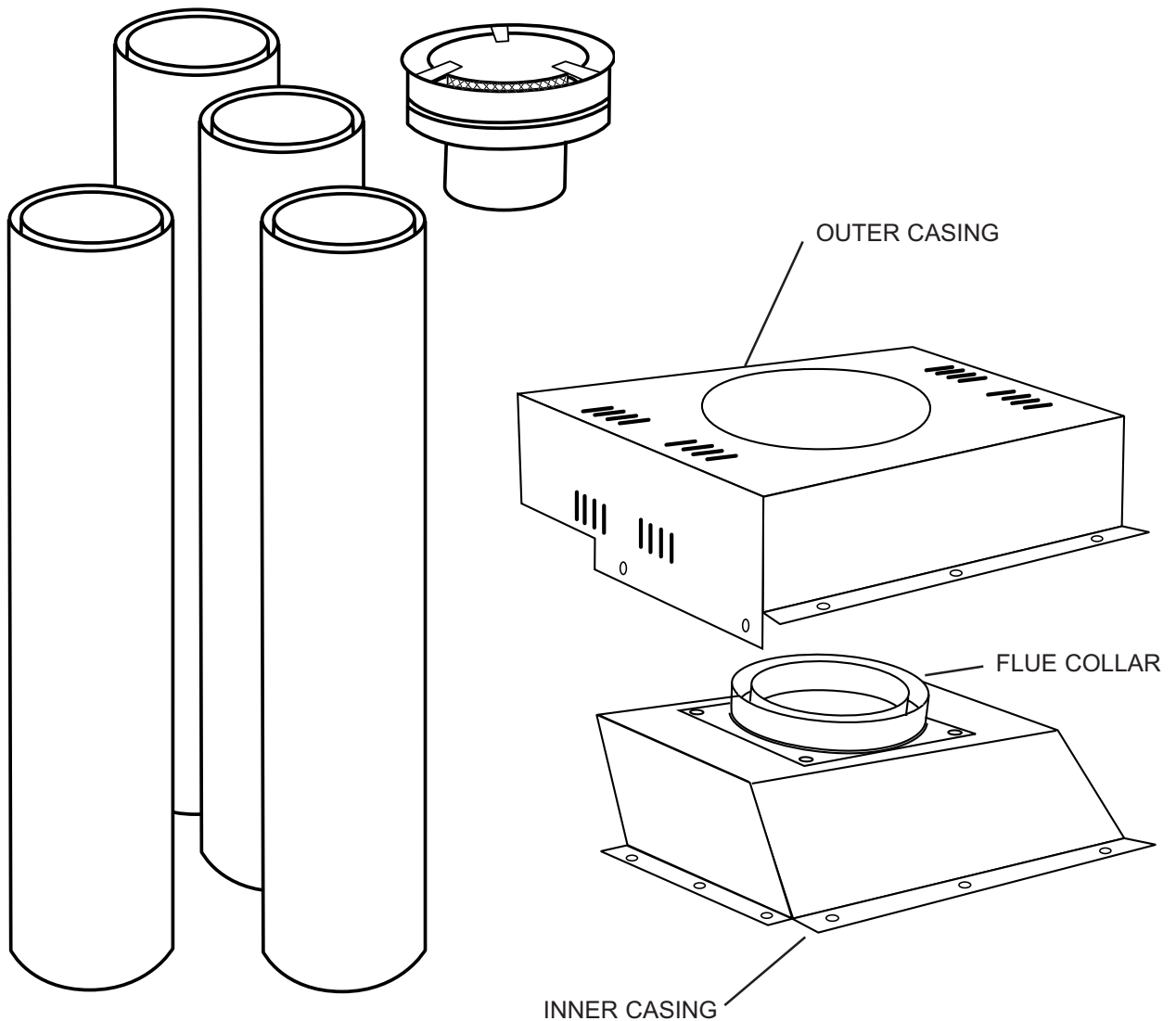
ZERO CLEARANCE HOT BOX

OVERALL DIMENSIONS



ZERO CLEARANCE HOT BOX

COMPONENTS

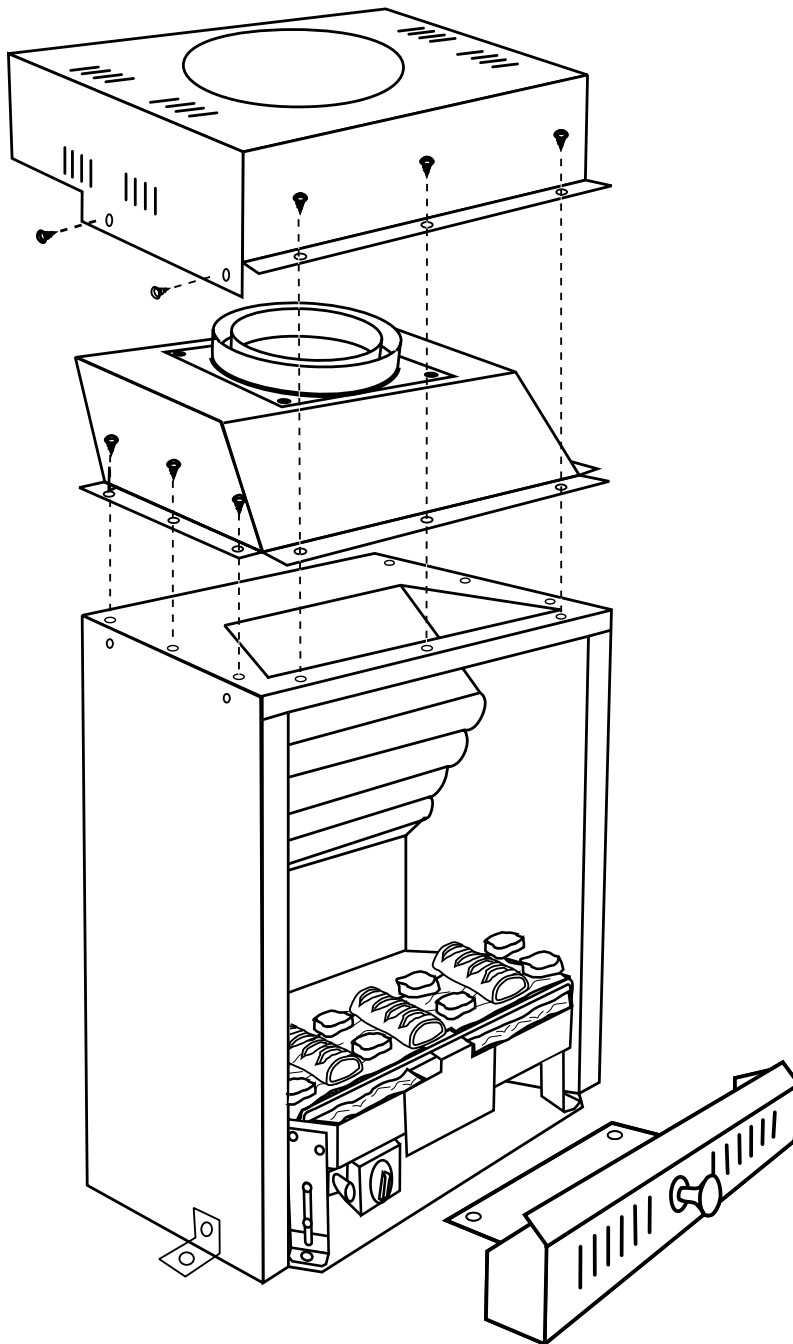


3.6M FLUE KIT
COMPLETE WITH COWL

ZERO CLEARANCE HOT BOX ASSEMBLY

Using screws provided:

1. Fit inner casing to Hot Box.
2. Fit flue collar to inner casing.
3. Fit outer casing over both flue collar and inner casing.



OPTIONAL POWER FLUE

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.

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.

All Real Flame installation manuals have the ventilation areas clearly defined for each product.

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.

'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.

OPTIONAL POWER FLUE (continued)

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
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 AS5601 - 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 has a 150mm spigot and a twin skin spigot of 150mm & 200mm. The single spigot fits over the vertical flue and the 150mm/200mm flue attaches to the horizontal spigot.

FLUE SIZE

All flue prior to the motor is 150mm/200mm twin skin and all flue after the motor is 150mm/200mm twin skin.

OPTIONAL POWER FLUE (continued)

Installation Instructions (continued)

HORIZONTAL FLUE RUN

The maximum length of horizontal flue run is to be 13.5 metres with a maximum of four (4) bends; these bends can be 45° or 90°. **The horizontal flue run is to have a grade downwards from the motor to the termination.**

VERTICAL FLUE RUN

The minimum vertical flue run is 900mm from the top of the firebox (1500mm from the floor). If a longer vertical run is required twin skin flue 150mm & 200mm can be added between the muffler top and the fan. The flue can be cut to the required height.

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 150mm cowl that has been approved as a horizontal cowl.

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.

WIRING (see wiring diagram page 22)

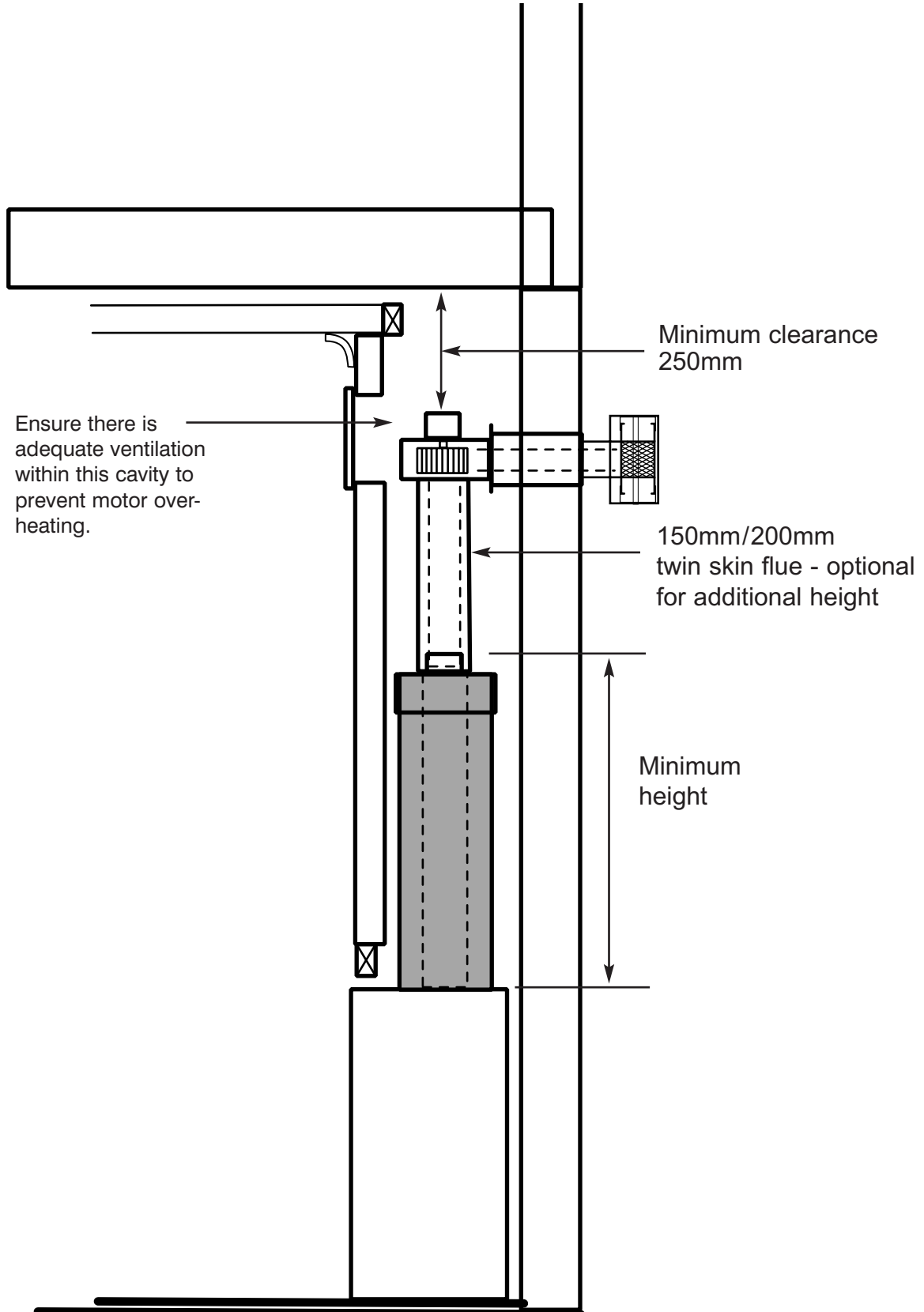
A 3 metre lead is supplied with the power flue, this lead has a different connection on each end, one end is plugged into the connection on the left hand side of the firebox and the other end is to be plugged into the fan. The wire coming from the rear of the firebox with the standard 3-pin plug attached 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 two side clips 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.

OPTIONAL POWER FLUE (continued)

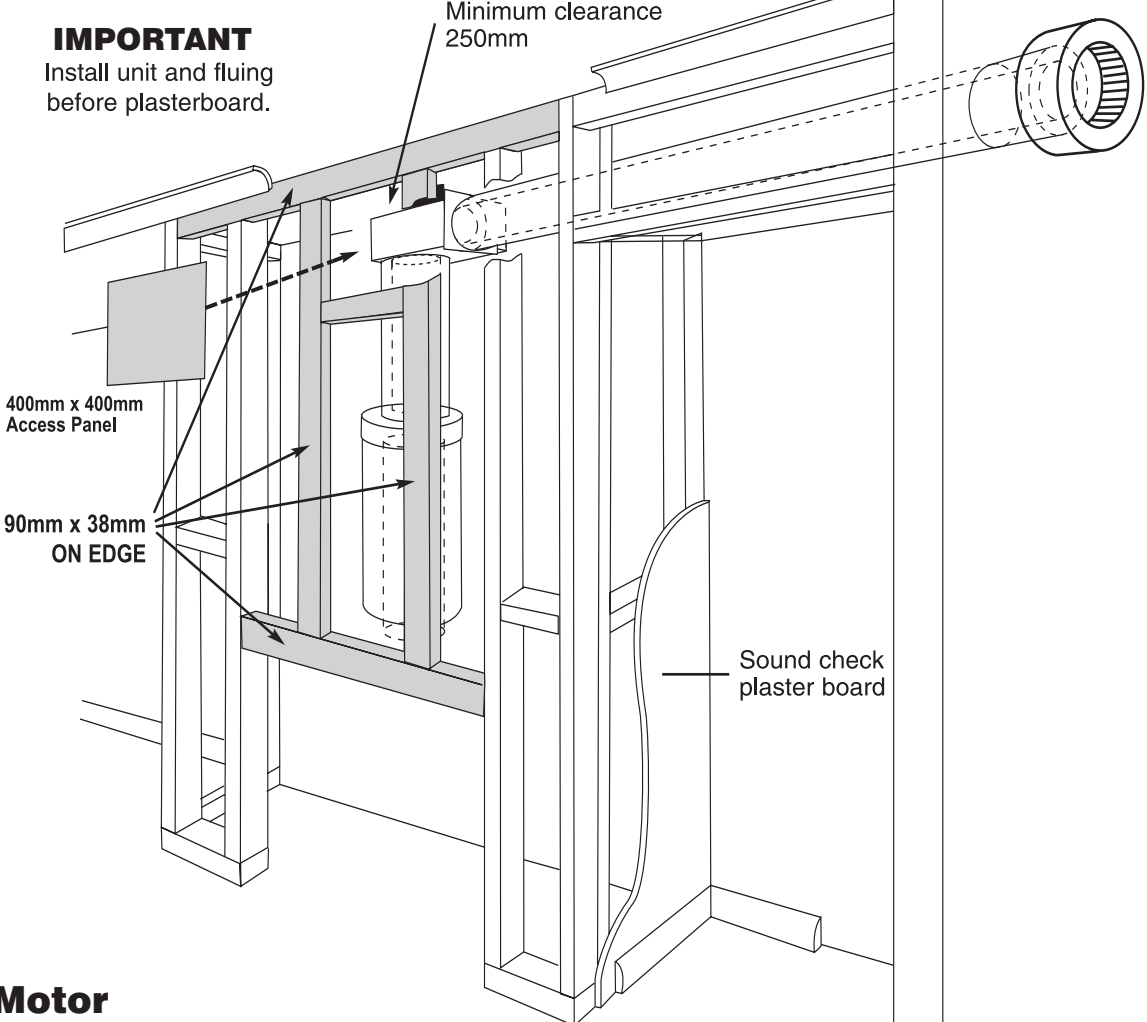
Motor Clearance



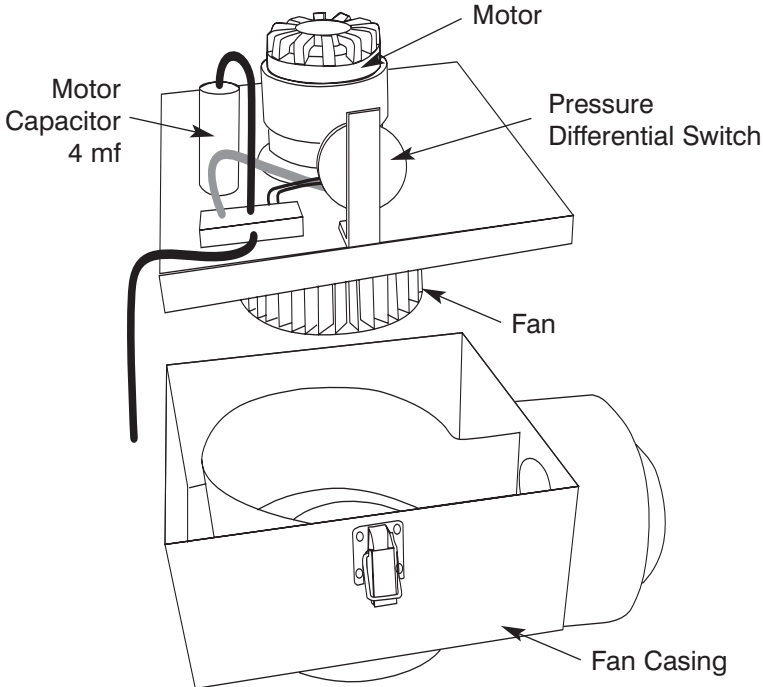
OPTIONAL POWER FLUE (continued)

Frameout

IMPORTANT
Install unit and fluing
before plasterboard.

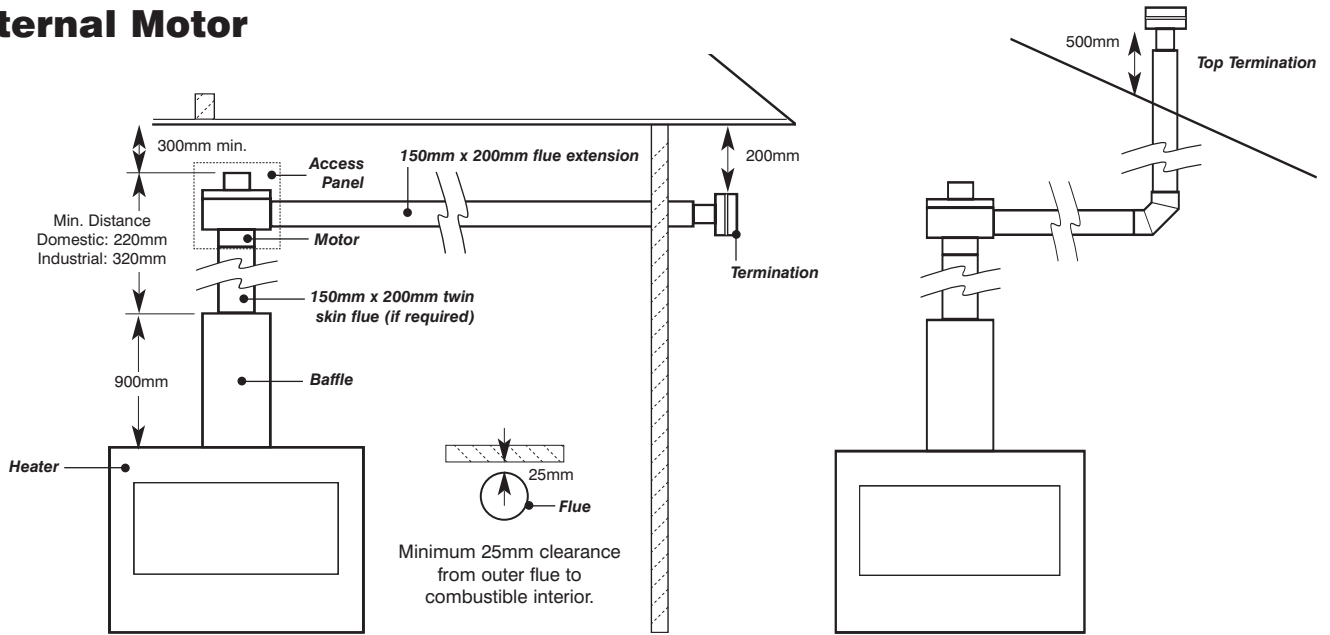


Motor



OPTIONAL POWER FLUE (continued)

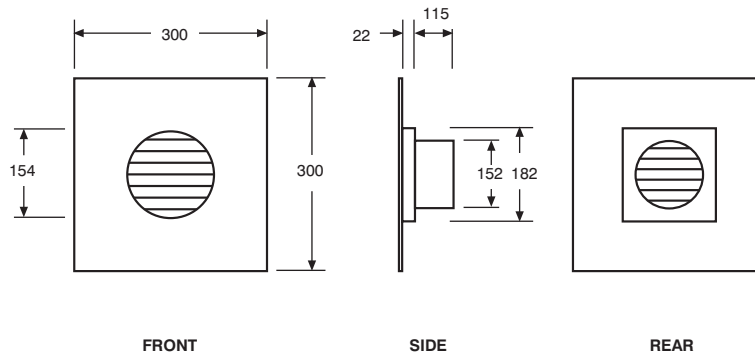
Internal Motor



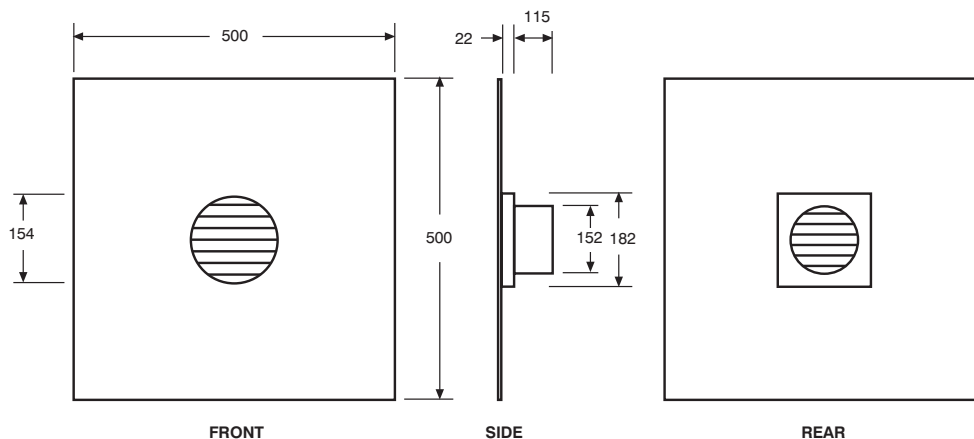
NOTE:

1. Maximum of 4 elbows, 45° or 90°.
2. Allow 400mm x 400mm access panel for service of motor.

Flush Cowl Terminations 300x300

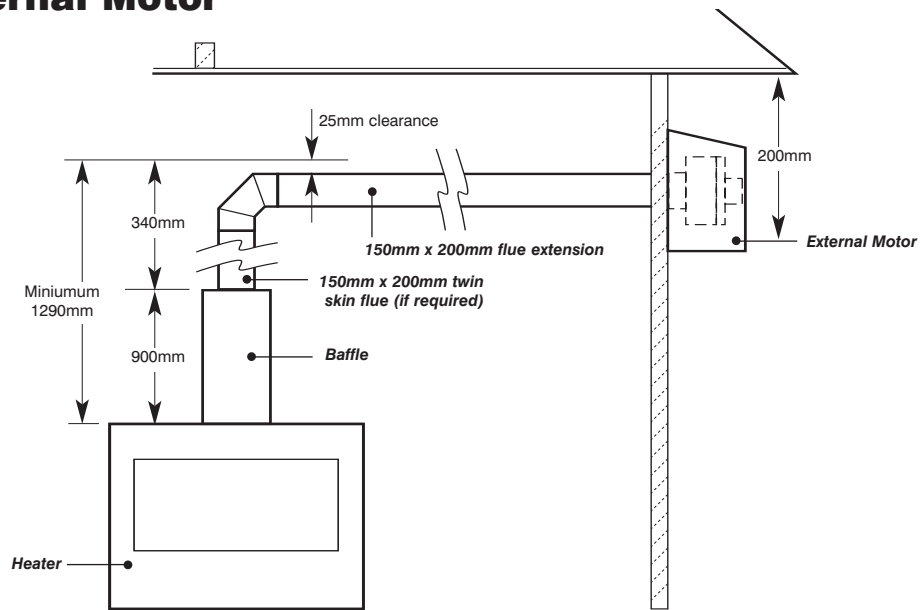


Flush Cowl Terminations 500x500



OPTIONAL POWER FLUE (continued)

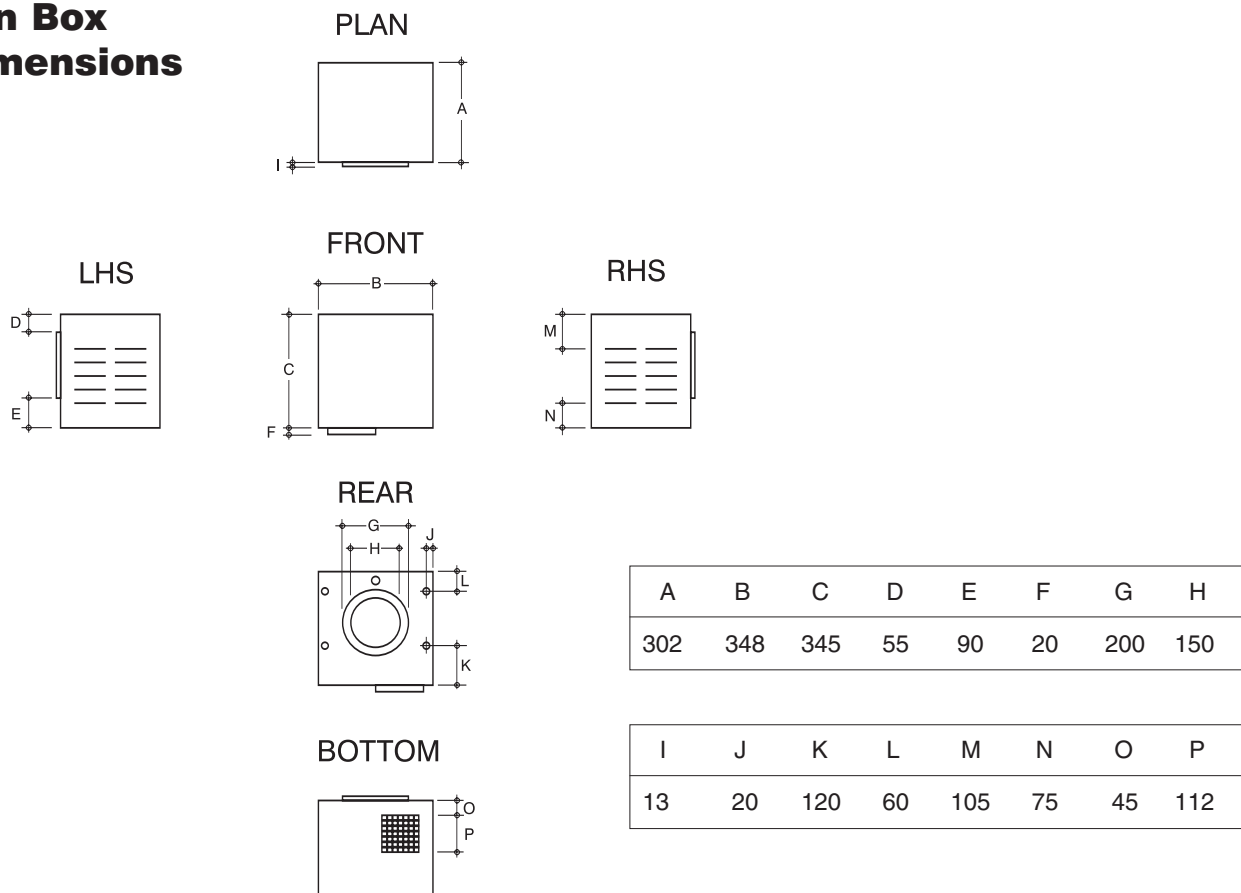
External Motor



NOTE:

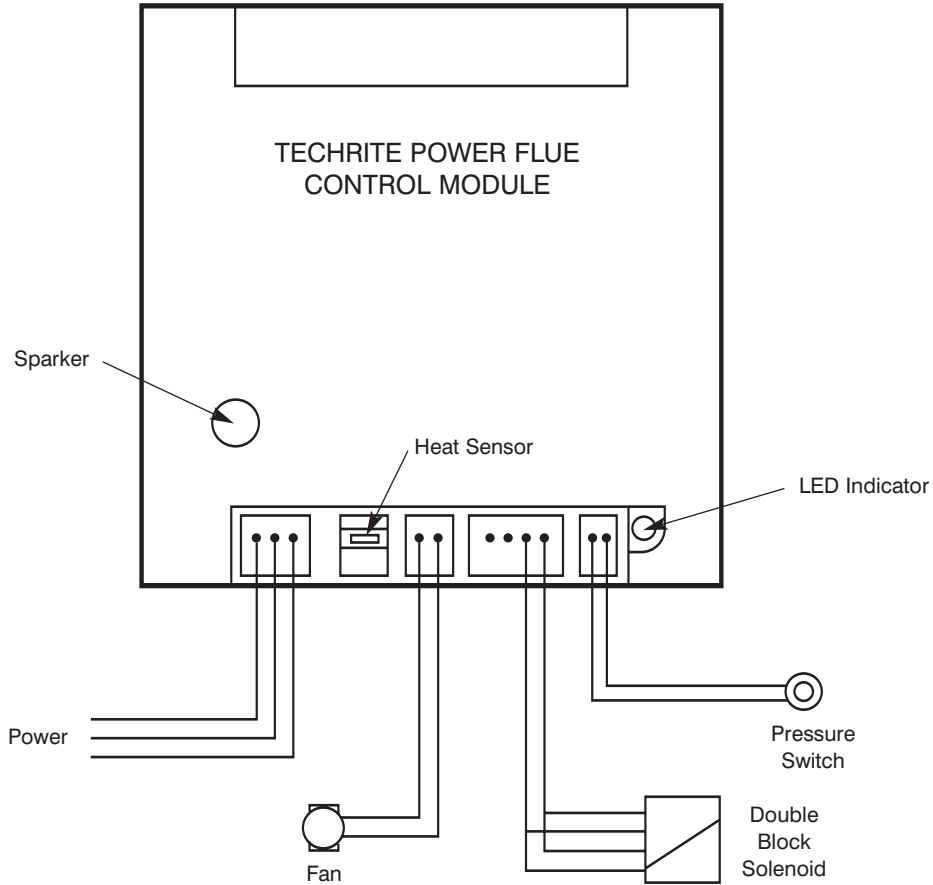
1. Maximum of 4 elbows, 45° or 90°.

Fan Box Dimensions



OPTIONAL POWER FLUE (continued)

Wiring Diagram



Parts List

PART No.	DESCRIPTION
1.	Dungs BM.740-007 double block solenoid valve
2.	Dungs DGAI.73 Module 5.1.3.
3.	Electronic Ignition Sparker
4.	Electronic Flame Sensor
5.	Ecofit 2GTA35 Motor. Complete with 'sail' switch.
6.	900mm Real Flame Power Flue Muffler.

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



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