

# **HEATSEEKER® GAS FIREBOX**

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## **INSTALLATION & OPERATING MANUAL**

The Heatseeker 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 ULPG gases ONLY. Approval Number GMK10100.

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

VERSION 39

## 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 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 Gas Burner,  
due to improper workmanship or material, Glen Dimplex will replace or repair the 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](http://www.realflame.com.au)) or completing and mailing the attached registration card within 30 days of purchase of your Gas Burner (or, if the Gas Burner is fitted to a new home, within 30 days of the date of settlement of purchase of such new home).

### 3. Exclusions

Glen Dimplex is not obliged to replace or repair the 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 Gas Burner only, at our option. To the extent permitted by law, Glen Dimplex 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 Glen Dimplex, 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 Gas Burner or claiming under this warranty, please contact the Service Warranty Desk on 1300 554 155.

Glen Dimplex Australia Pty Ltd ACN 69 118 275 460  
Head Office: 1340 Ferntree Gully Road, Scoresby 3179  
Telephone: (03) 8706 2000 Facsimile: (03) 8706 2001

## 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, AS/NZS5601.1-2013 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 AS/NZS5601.1-2013.

- **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 NOTICES

- 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.
- DO NOT MODIFY THIS APPLIANCE.
- THIS APPLIANCE IS DESIGNED TO OPERATE WITH LUMINOUS FLAMES. THIS MAY EXHIBIT SLIGHT CARBON DEPOSITS.

## 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. It is recommended that a secondary guard complying with AS-NZS2286 be installed. The appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

## SERVICING

It is recommended you service your gas fire every 2 years as a minimum.

## VENTILATION REQUIREMENTS

MODEL	EFFECTIVE VENTILATION
600	18,000 sq mm
700	18,000 sq mm
850	32,000 sq mm
1000	32,000 sq mm
1500	40,000 sq mm

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## DATA PLATE (Affixed to burner)

### HSIB600

Fitted with Magiglo 400 or 400EI burner

Gas	Injector Size (mm)	TPP	N.G.C. (Mj/Hr)
Natural Gas	1 x 2.60	0.80 kPa	28
ULPG	1 x 1.30	2.70 kPa	21

Fitted with Magiglo 540 or 540EI burner

Gas	Injector Size (mm)	TPP	N.G.C. (Mj/Hr)
Natural Gas	2 x 2.25	0.80 kPa	37
ULPG	2 x 1.10	2.60 kPa	33

### HSIB850

Fitted with Magiglo 540 or 540EI burner

Gas	Injector Size (mm)	TPP	N.G.C. (Mj/Hr)
Natural Gas	2 x 2.25	0.80 kPa	37
ULPG	2 x 1.10	2.60 kPa	33

Fitted with Magiglo 750 or 750EI burner

Gas	Injector Size (mm)	TPP	N.G.C. (Mj/Hr)
Natural Gas	3 x 1.90	0.75 kPa	39
ULPG	3 x 0.95	2.55 kPa	34

### HSIB1000

Fitted with Magiglo 750 or 750EI burner

Gas	Injector Size (mm)	TPP	N.G.C. (Mj/Hr)
Natural Gas	3 x 1.90	0.75 kPa	39
ULPG	3 x 0.95	2.55 kPa	34

### HSIB1500

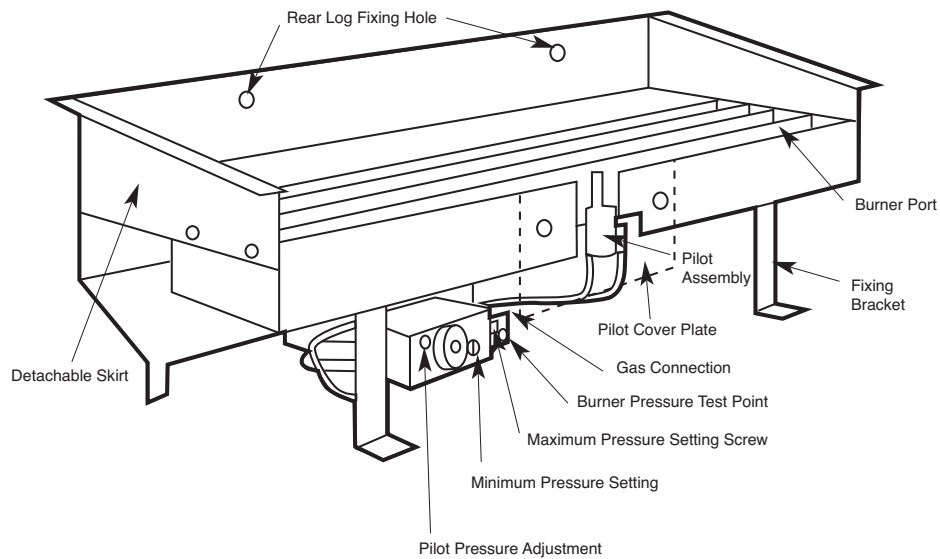
Fitted with 1000EI burner

Gas	Injector Size (mm)	TPP	N.G.C. (Mj/Hr)
Natural Gas	3 x 2.25	0.75 kPa	49
ULPG	3 x 1.12	2.60 kPa	49

Fitted with 1200EI burner

Gas	Injector Size (mm)	TPP	N.G.C. (Mj/Hr)
Natural Gas	4 x 2.20	0.80 kPa	55
ULPG	4 x 0.95	2.55 kPa	48

## PARTS



### TO CHECK PRESSURES

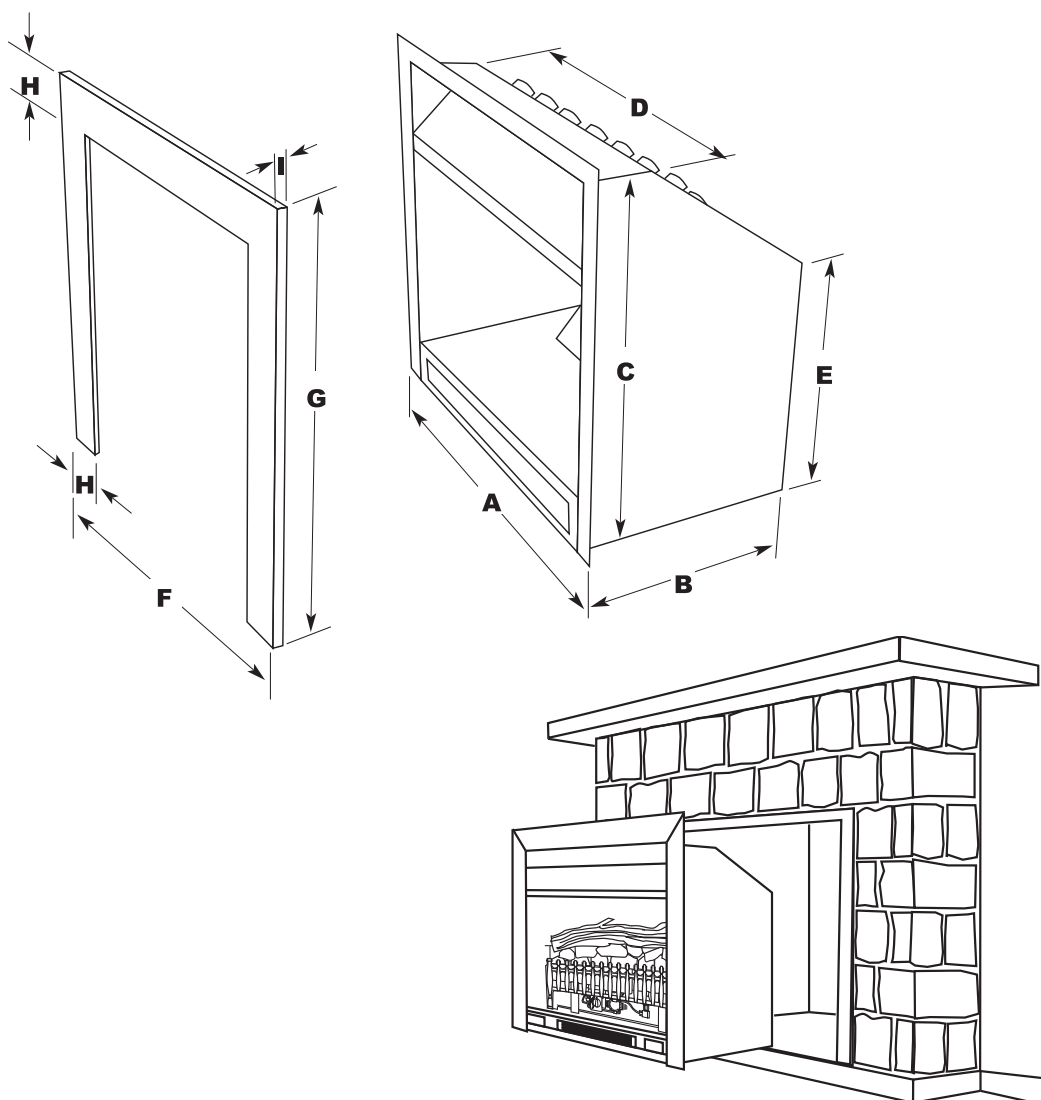
1. Fit manometer to test point.
2. Adjust pilot pressure screw (wind screw fully in, then wind out 2 1/2 full turns).
3. Adjust maximum burner pressure screw (wind max pressure screw out 2 full turns).
4. Ignite burner and set to maximum rate.
5. Adjust regulator pressure until burner pressure is correct.
6. Adjust maximum burner pressure - screw in adjustment screw to data plate setting.
7. Turn valve to low setting. Adjust valve minimum pressure.
8. Complete tests for safety/leakage and connections.
9. Turn burner off.
10. Replace regulator cap.
11. Remove manometer, replace sealing screw and washer and refit valve cover.

## HEATSEEKER INBUILT MODEL

- Unit installed into an existing “working” fireplace requires an AGA approved 225mm gas cowl and chimney plate fixed to the chimney top.
- If the fireplace is not a “working” fireplace, then the applicable flue to the model being installed should be installed using a gather, single skin flue and AGA approved gas cowl.
- If the flue is to be exposed, or enclosed with any combustible material, the appropriate approved twin skin flue and gas cowl is required.
- **For Type 1 installations models with an ODS pilot must be used.**

### Overall Dimensions (in mm)

MODEL	A	B	C	D	E	F	G	H	I
600	730	370	605	610	370	740	670	75	15
850	980	370	605	860	370	990	670	75	15
1000	1130	370	605	1005	370	1140	670	75	15
1500	1650	370	605	1505	370	1650	670	75	15



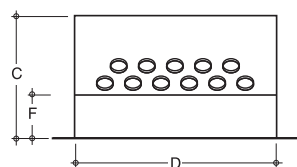
## DIMENSIONS

### Heatseeker 600

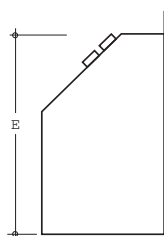
A	B	C	D	E	F	G	H
670	740	370	610	605	130	330	365

I	J	K	L
380	150	65	60

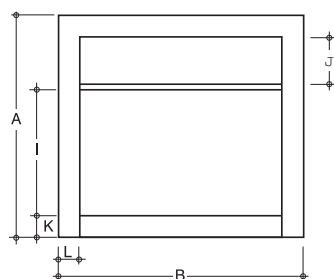
PLAN



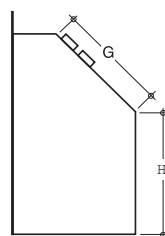
LHS



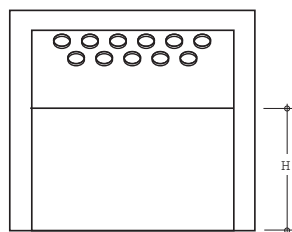
FRONT



RHS

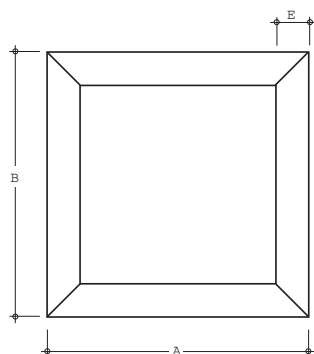


REAR

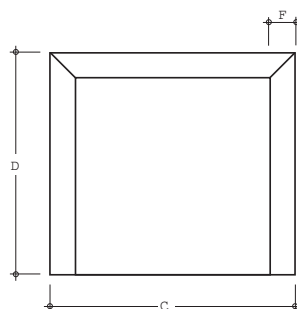


### Heatseeker 600 Trim

FRONT - 4 SIDED



FRONT - 3 SIDED



A	B	C	D	E	F
790	800	740	670	100	75

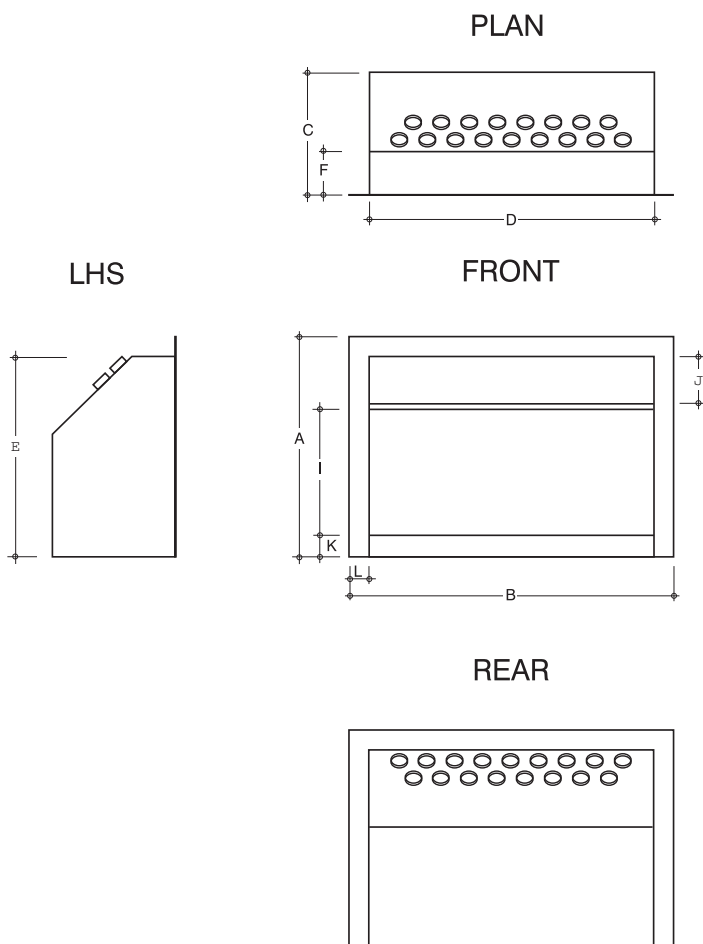


## DIMENSIONS

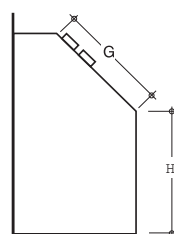
### Heatseeker 850

A	B	C	D	E	F	G	H
665	980	370	860	605	130	330	365

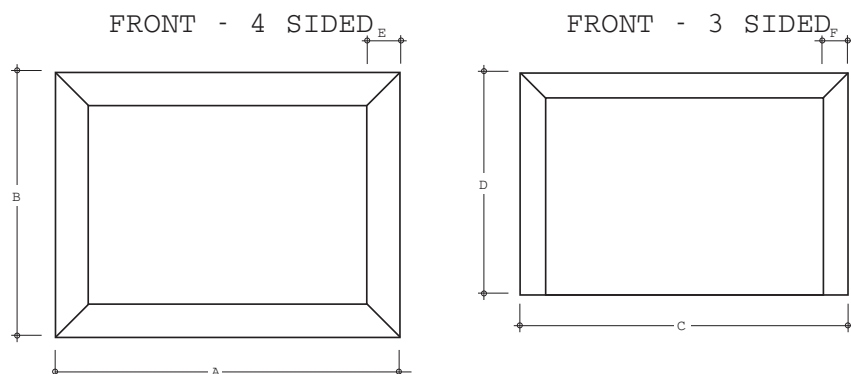
I	J	K	L
380	150	65	60



RHS



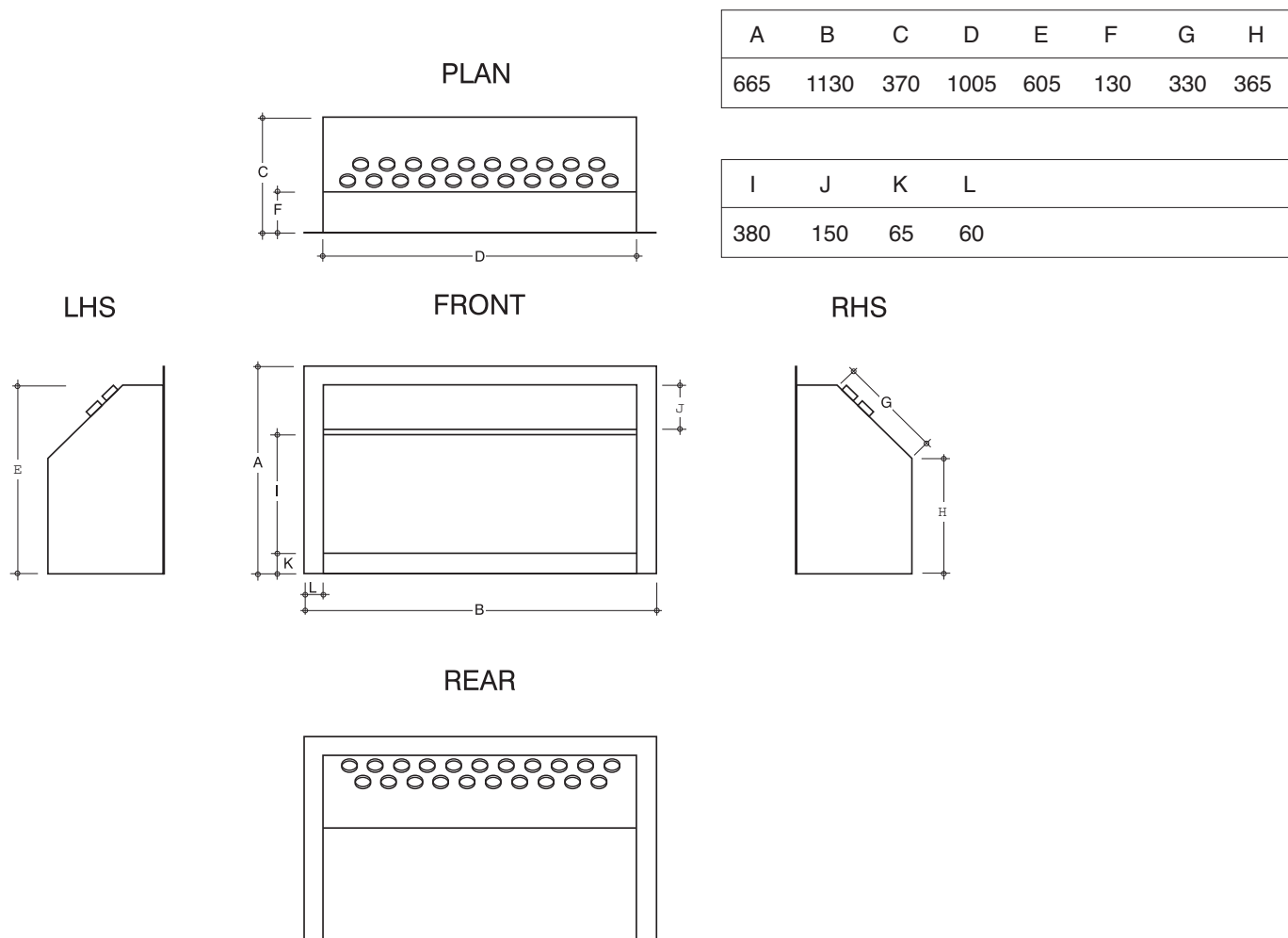
### Heatseeker 850 Trim



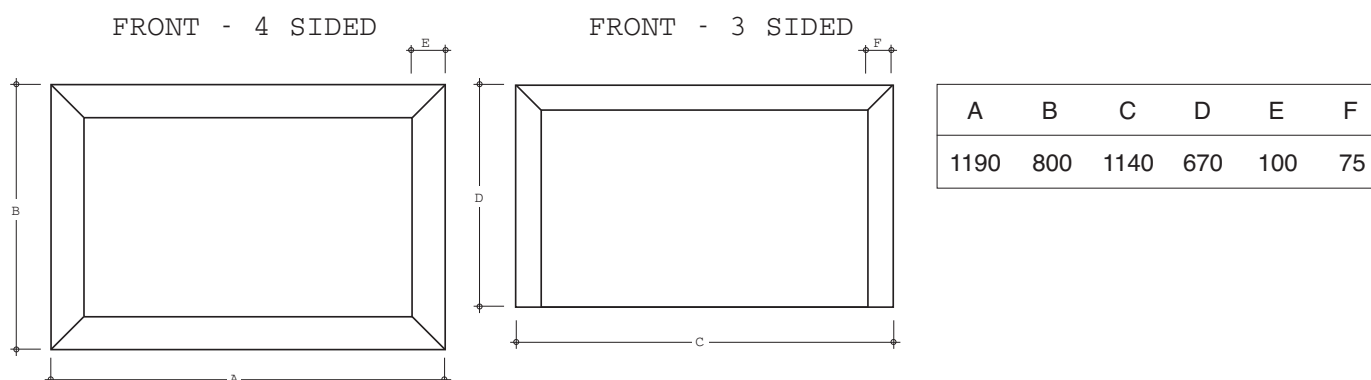
A	B	C	D	E	F
1040	800	990	670	100	75

## DIMENSIONS

### Heatseeker 1000

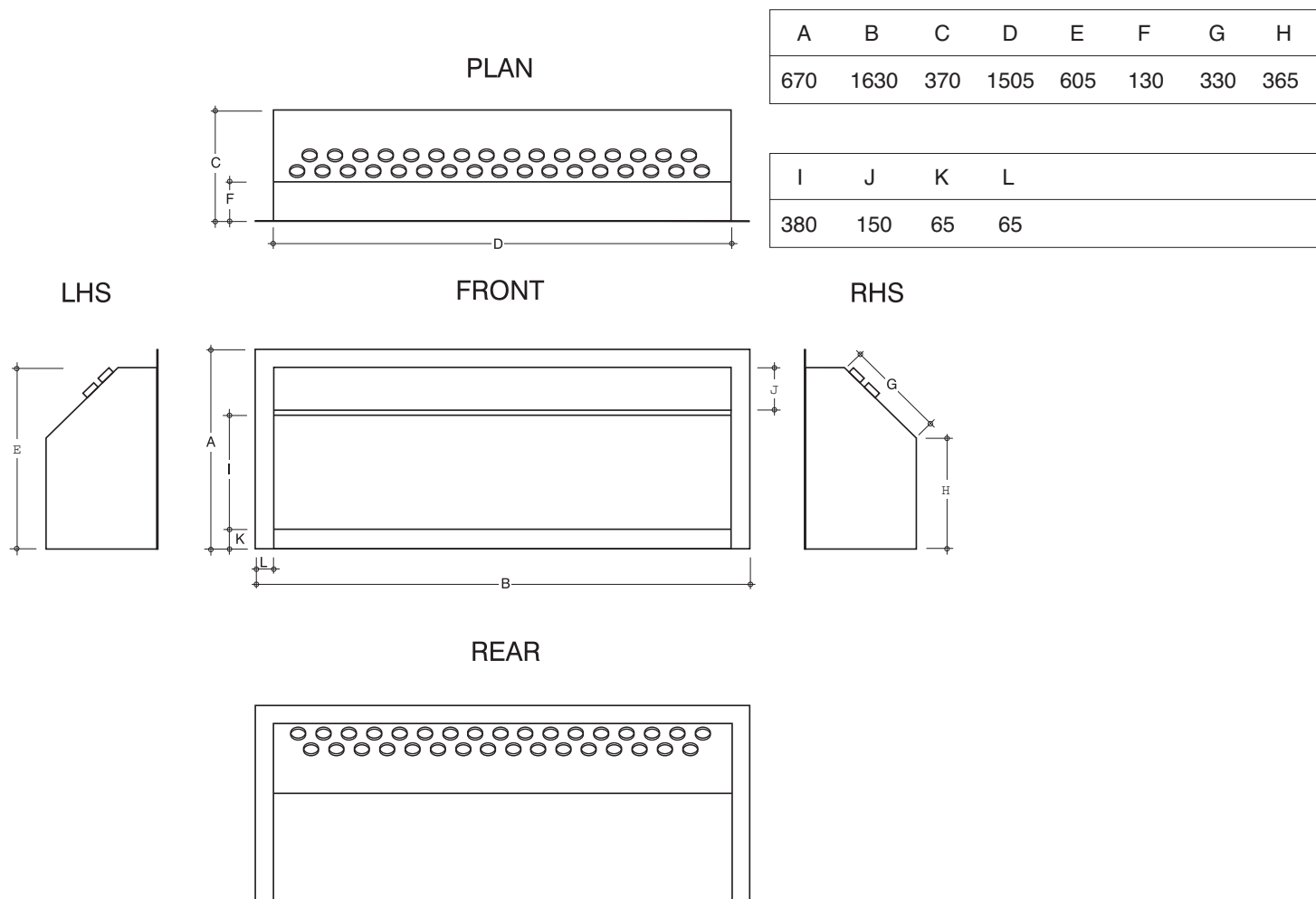


### Heatseeker 1000 Trim



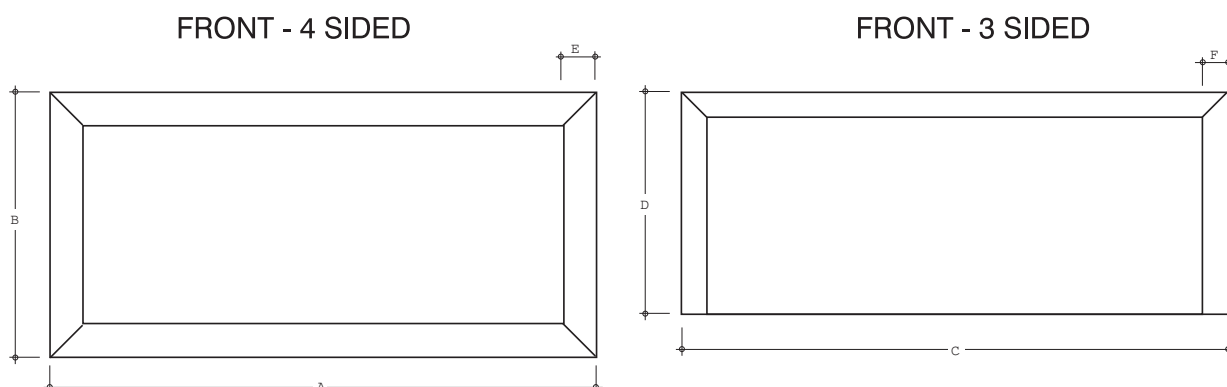
## DIMENSIONS

### Heatseeker 1500



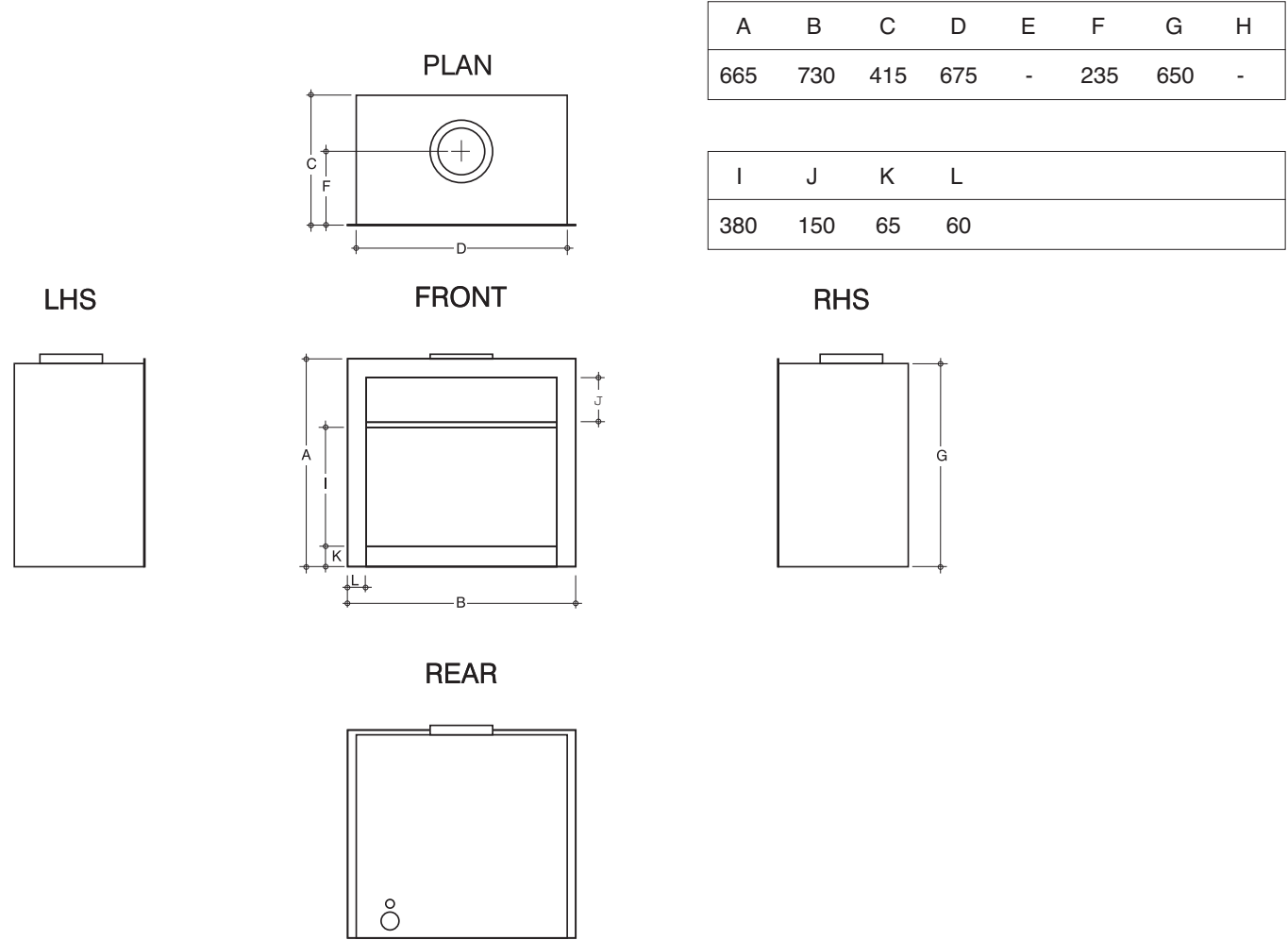
### Heatseeker 1500 Trim

A	B	C	D	E	F
1650	800	1650	670	100	75

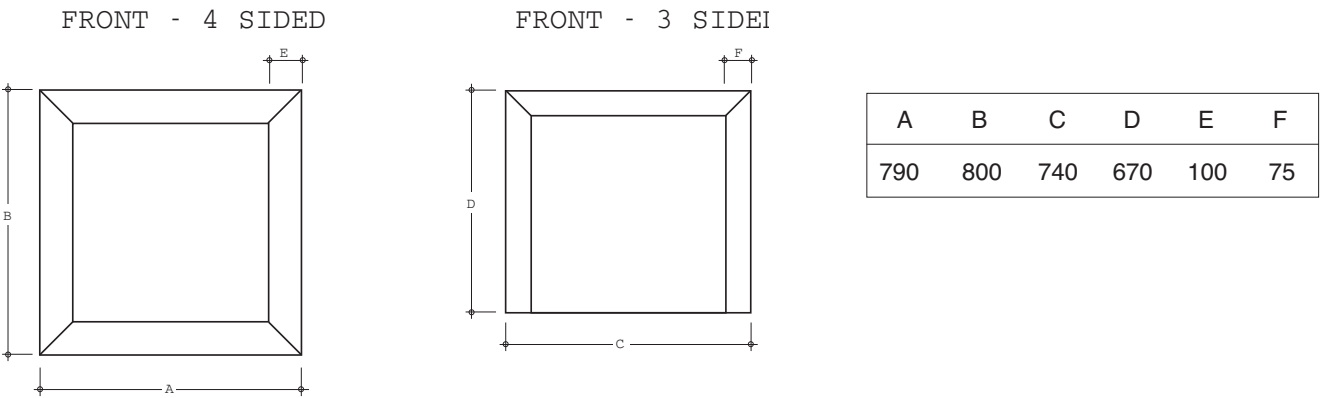


DIMENSIONS

Heatseeker 600 ZC

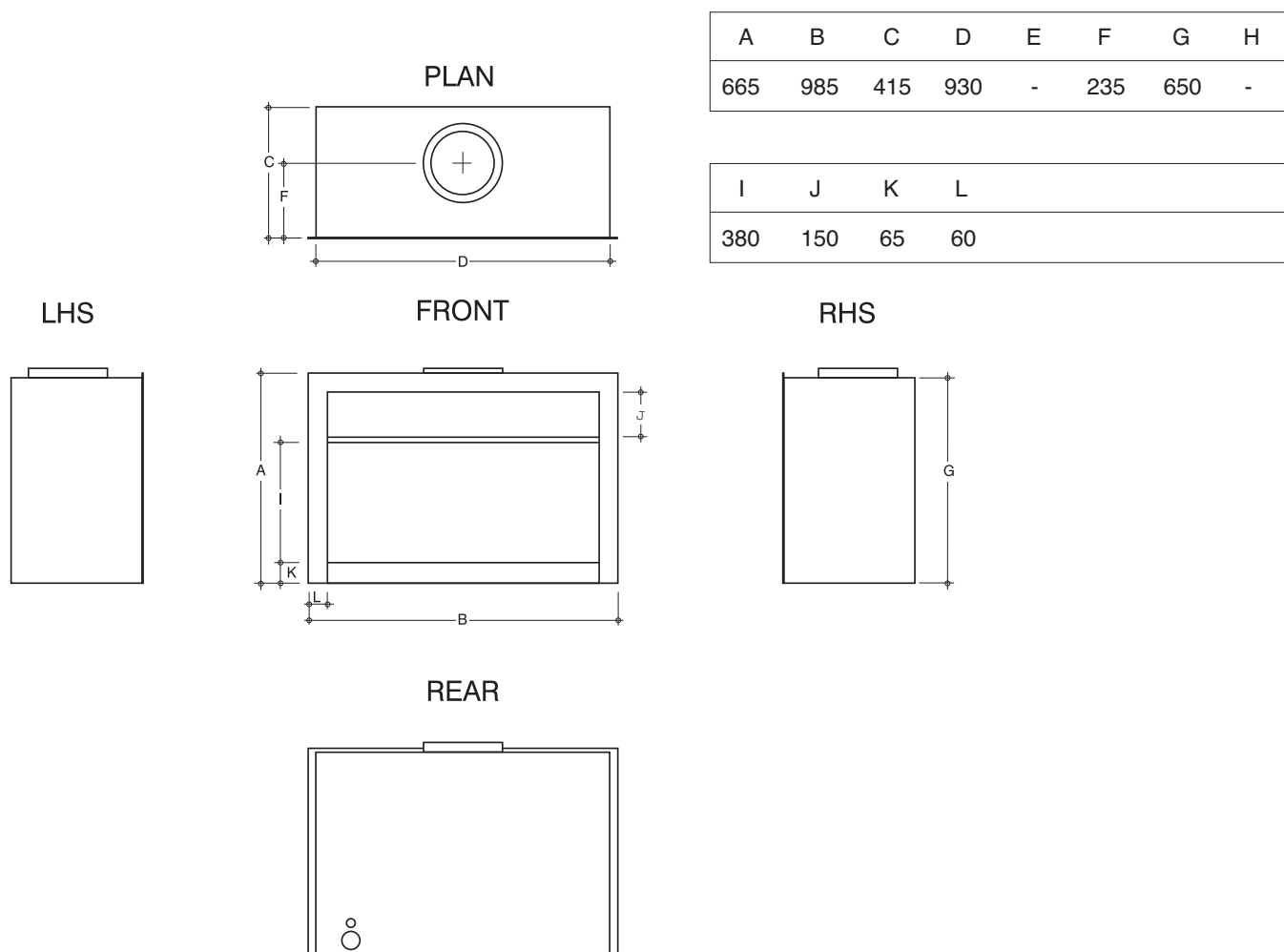


Heatseeker 600 ZC Trim

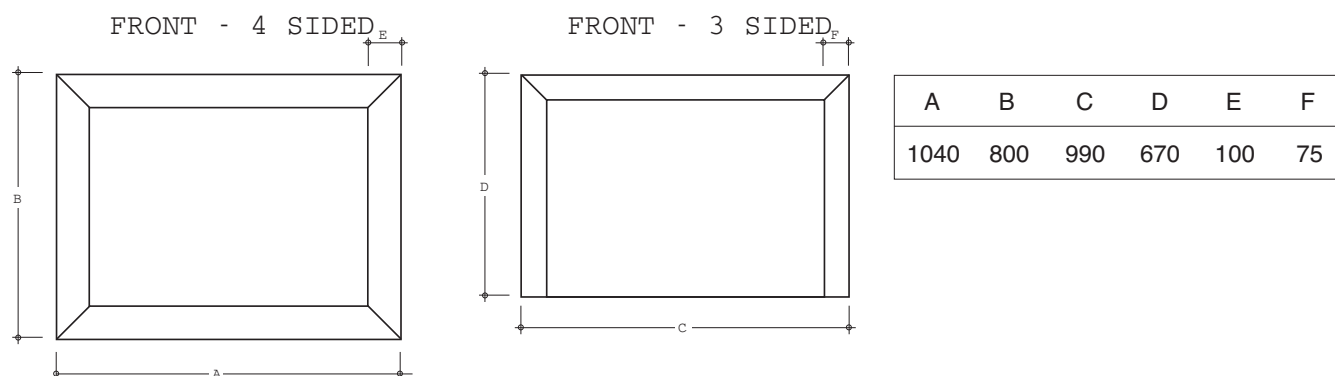


## DIMENSIONS

### Heatseeker 850 ZC

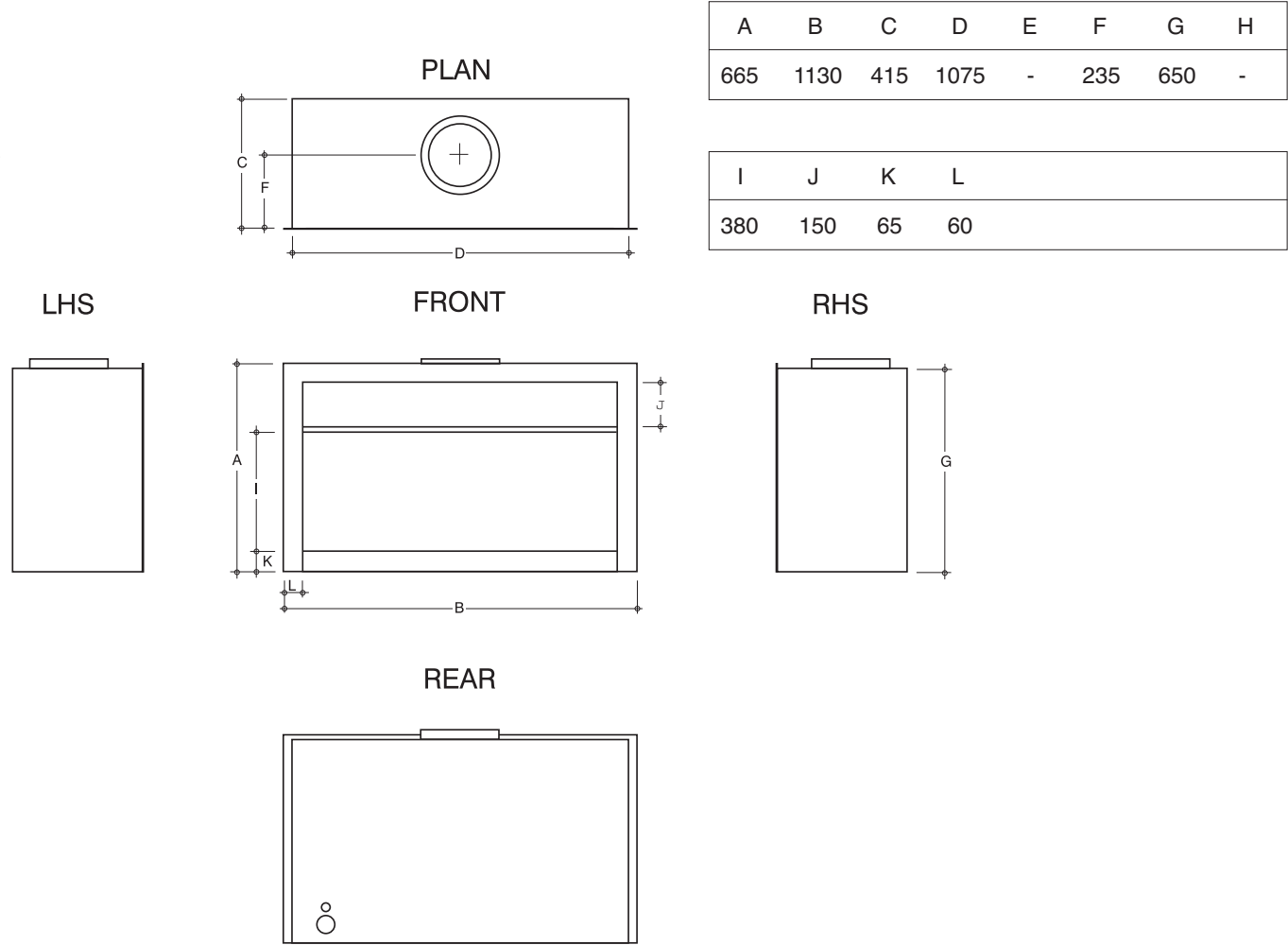


### Heatseeker 850 ZC Trim

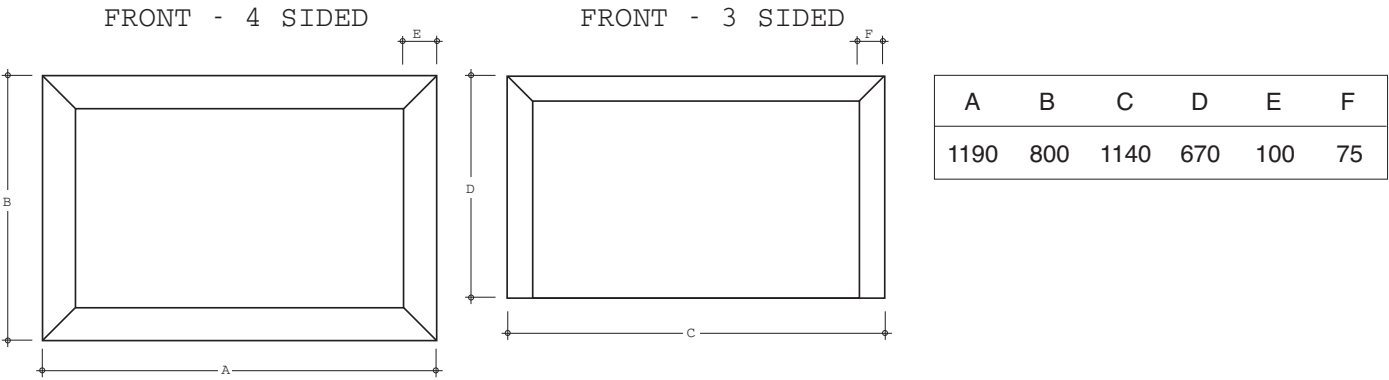


DIMENSIONS

Heatseeker 1000 ZC

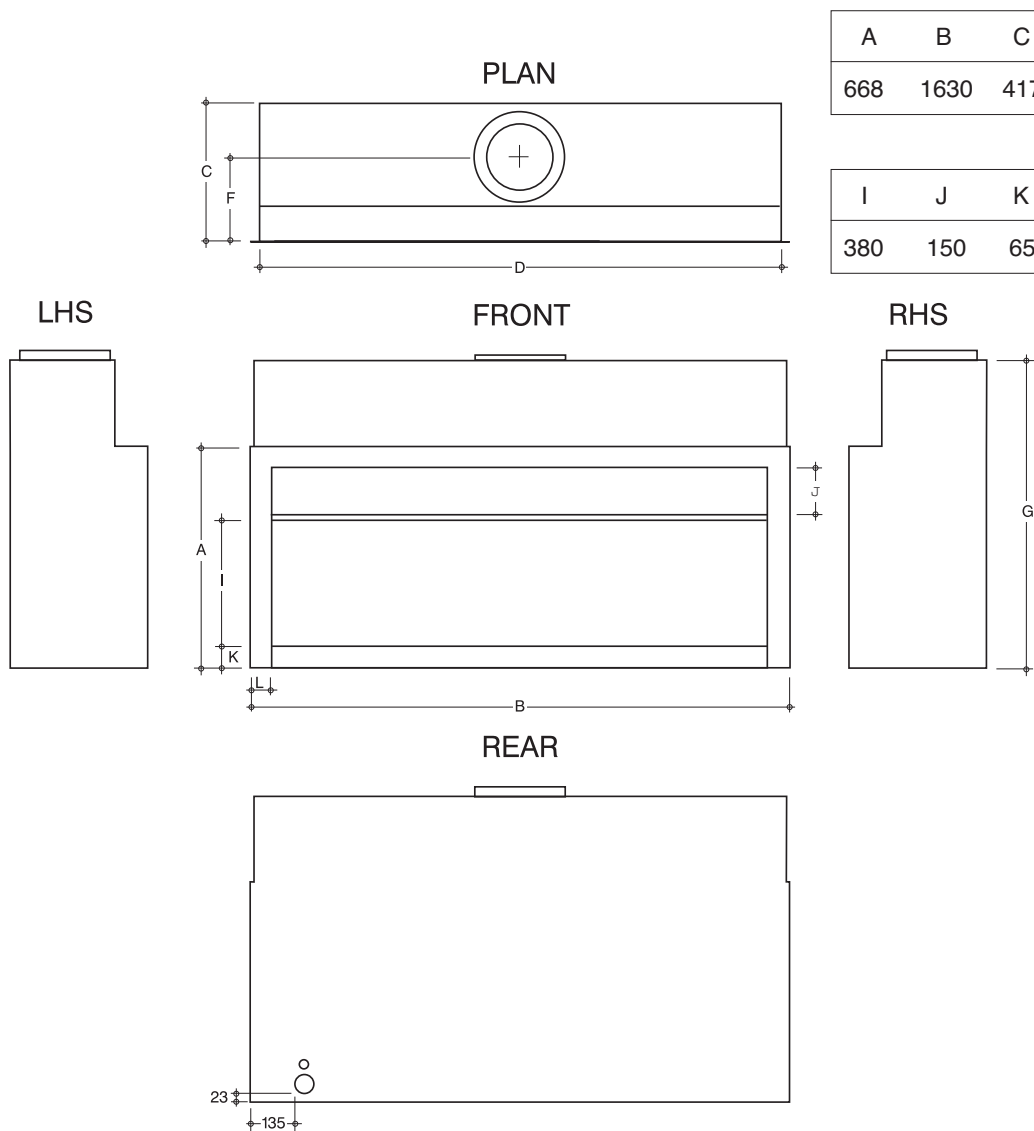


Heatseeker 1000 ZC Trim



## DIMENSIONS

### Heatseeker 1500 ZC

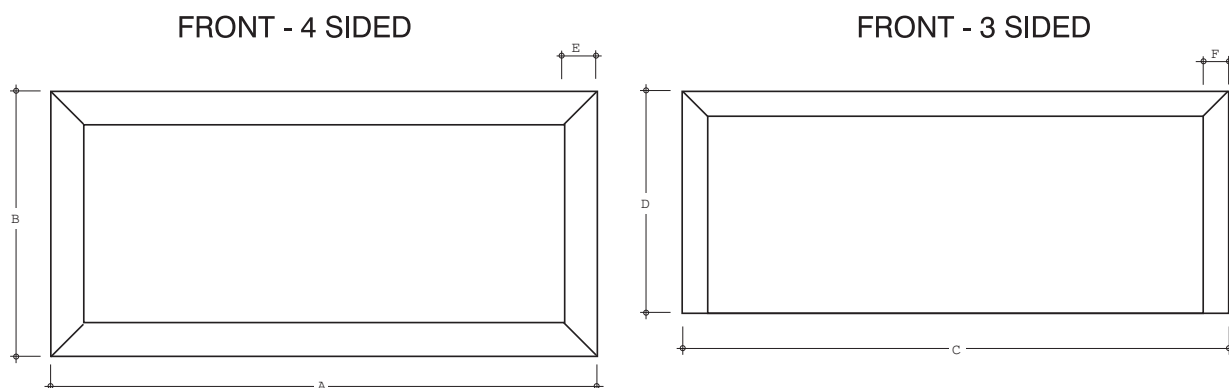


A	B	C	D	E	F	G	H
668	1630	417	1595	-	250	930	-

I	J	K	L
380	150	65	65

### Heatseeker 1500 ZC Trim

A	B	C	D	E	F
1650	800	1650	670	100	75



# HEATSEEKER INBUILT MODEL

## Heatseeker Inbuilt Installation Procedure

- TICK BOXES ☐ Check chimney for correct venting of fumes
- ☐ Position unit centrally
- ☐ Connect to gas supply using 15mm copper union
- ☐ Connect to power supply
- ☐ Assemble log and coal or pebble set as shown (Figures 1-7).

**IMPORTANT! Only logs, coals and pebbles supplied by Real Flame are to be used.**

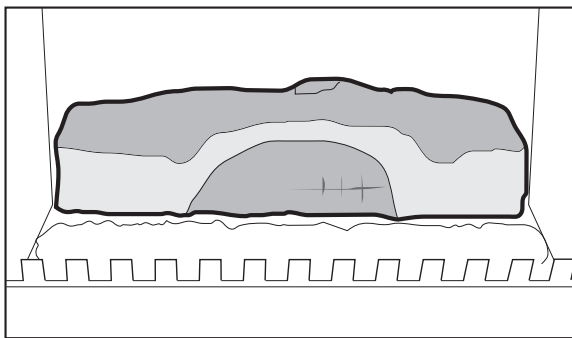


Figure (1) Remove box containing logset, and unpack. Place the large log at the rear of the burner just in front of the 2 square tabs on the log support panel.

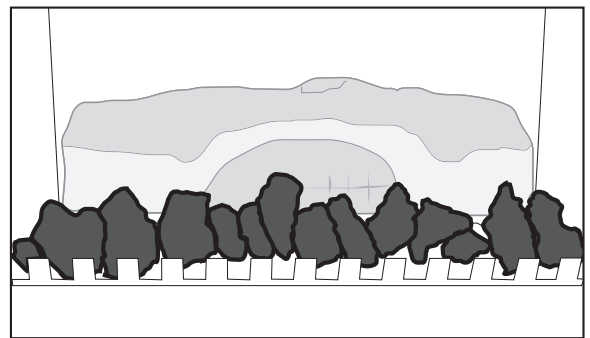


Figure (2) Place the 14 large coals and 8 small coals on top of the white ceramic blanket. Ensure front row of coals are placed 10 - 12mm away from the front grille.

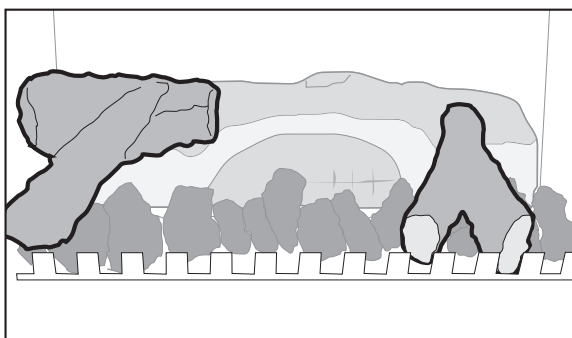


Figure (3) Place the 2 'Y' shaped logs as shown, the larger on the left. Position the 'Y' end of the logs towards the front of the heater.

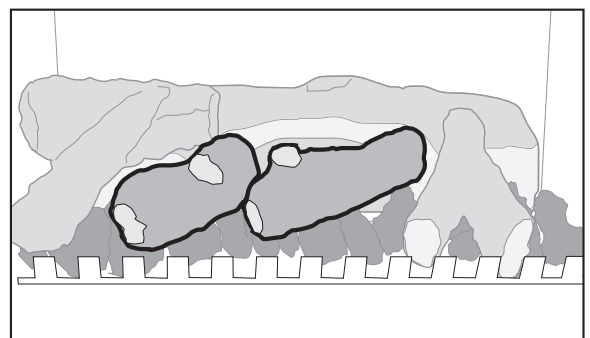


Figure (4) Place the 2 straight logs as shown

Note: For Redgum and Forest Wood sets refer to instructions provided with the media.



## HEATSEEKER INBUILT MODEL

### Heatseeker Inbuilt Installation Procedure (continued)

**The Heatseeker Gas Firebox (Natural Gas Only) is approved for use with Pebbles.**

To install the Pebbles, follow the installation instructions as per Figures 5-7. Note: A Real Flame Pebble Tray needs to be ordered for this option.

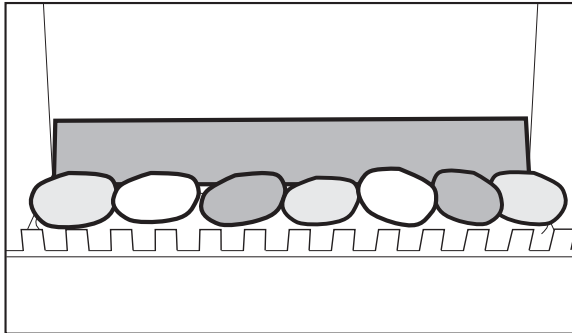


Figure (5) Install the metal angle at the rear of the fireplace and place one row of pebbles behind the burner rail.

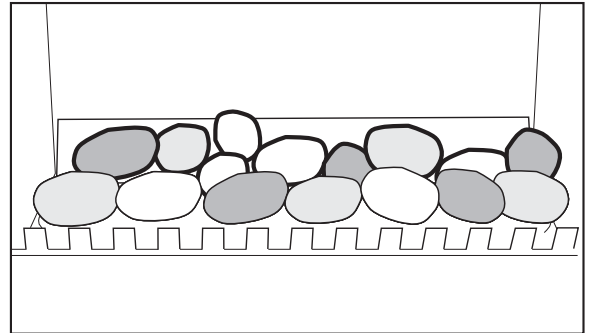


Figure (6) Place pebbles between the first row and the angled tray.

**Note: Keep pebbles clear of burner rail.**

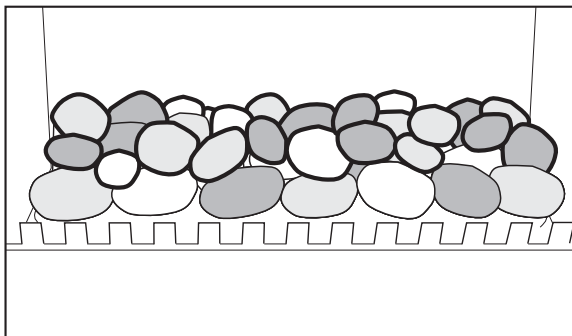


Figure (7) Place remaining pebbles up the angle of the rear tray so as the tray is hidden.

**Note: If a coals only configuration is being used, use the same set up as pebbles.**

## HEATSEEKER INBUILT MODEL

### Redgum Log Media Recommended Set Up

#### 400 Burner

STEP 1. Place coals on top of the burner. (Maximum 4 coals on burner channel.)



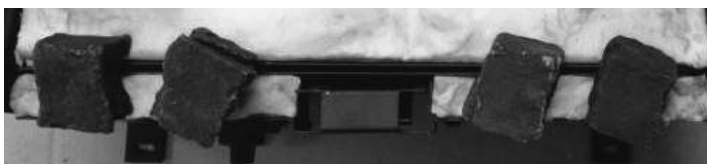
STEP 2. Place underlying layer of logs.



STEP 3. Place top layer of logs.



**Note: Do not overcrowd burner channel - Maximum 4 coals on burner channel.**



## HEATSEEKER INBUILT MODEL

### Redgum Log Media Recommended Set Up

#### 540 Burner

STEP 1. Place coals on top of the burner. (Maximum 6 coals on burner channel.)



STEP 2. Place underlying layer of logs.



STEP 3. Place top layer of logs.



**Note: Do not overcrowd burner channel - Maximum 6 coals on burner channel.**





## HEATSEEKER INBUILT MODEL

### Redgum Log Media Recommended Set Up

#### 750 Burner

STEP 1. Place coals on top of the burner. (Maximum 9 coals on burner channel.)



STEP 2. Place underlying layer of logs.



STEP 3. Place top layer of logs.



**Note: Do not overcrowd burner channel - Maximum 9 coals on burner channel.**



## HEATSEEKER INBUILT MODEL

### Forrest Log Media Recommended Set Up

#### 400 Burner

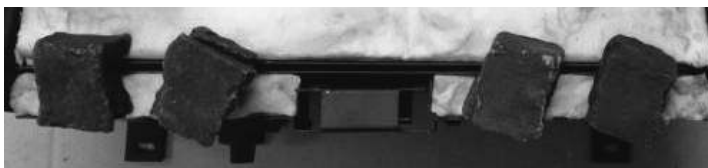
STEP 1. Place coals on top of the burner. (Maximum 4 coals on burner channel.)



STEP 2. Place top layer of logs.



**Note: Do not overcrowd burner channel - Maximum 4 coals on burner channel.**



## HEATSEEKER INBUILT MODEL

### Forrest Log Media Recommended Set Up

#### 540 Burner

STEP 1. Place coals on top of the burner. (Maximum 6 coals on burner channel.)



STEP 2. Place top layer of logs.



**Note: Do not overcrowd burner channel - Maximum 6 coals on burner channel.**





## HEATSEEKER INBUILT MODEL

### Forrest Log Media Recommended Set Up

#### 750 Burner

STEP 1. Place coals on top of the burner. (Maximum 9 coals on burner channel.)



STEP 2. Place underlying layer of logs.



STEP 3. Place top layer of logs.



**Note: Do not overcrowd burner channel - Maximum 9 coals on burner channel.**

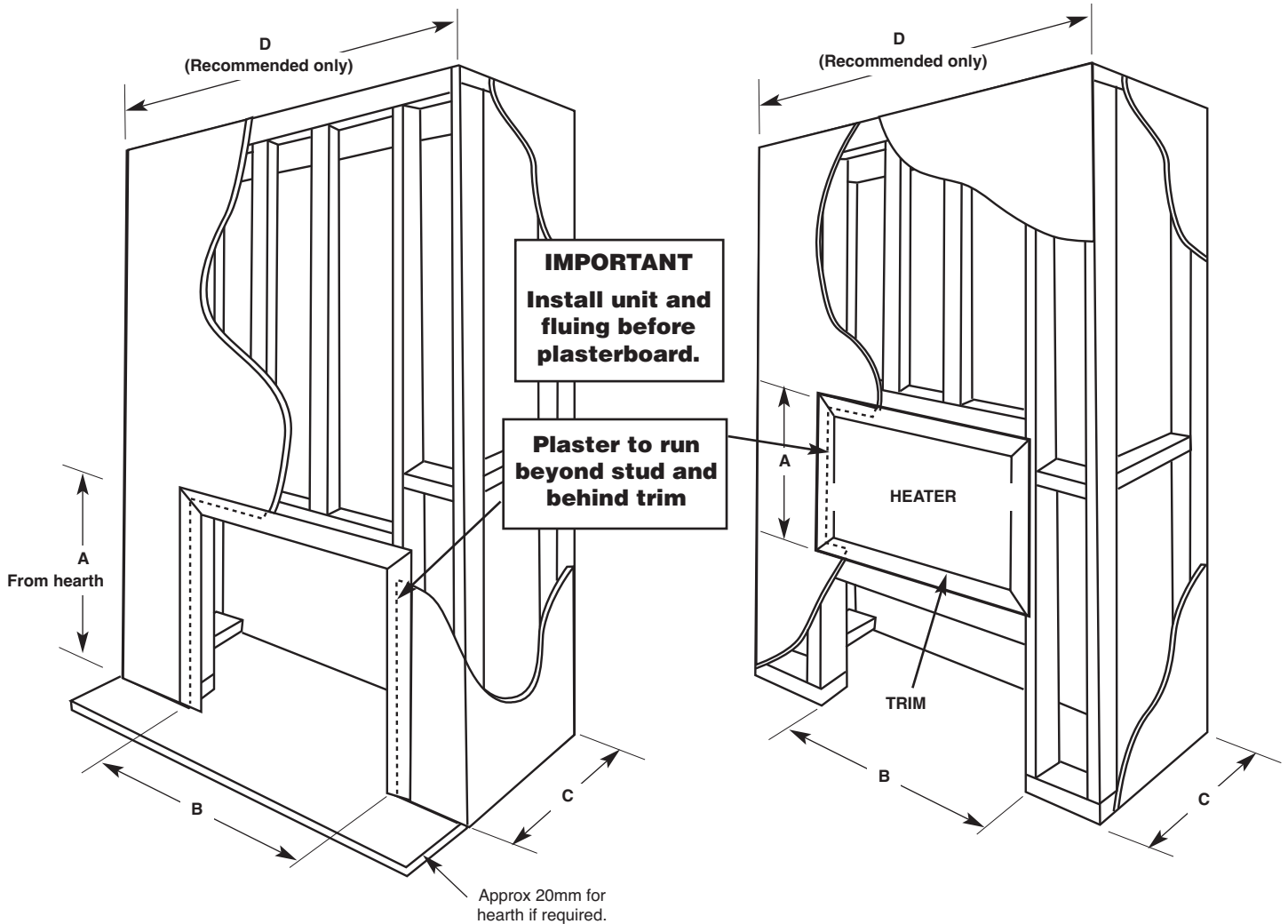


- TICK BOXES
- ☐ Fit the trim to the front of the firebox.
  - ☐ Light the unit following the procedure on page 27.
  - ☐ Install the 225mm AGA approved gas cowl where using the chimney to vent the fumes.
  - ☐ Test the unit for safe operation and show customer correct operating procedures.
  - ☐ Test for spillage.
  - ☐ Perform pressure test.

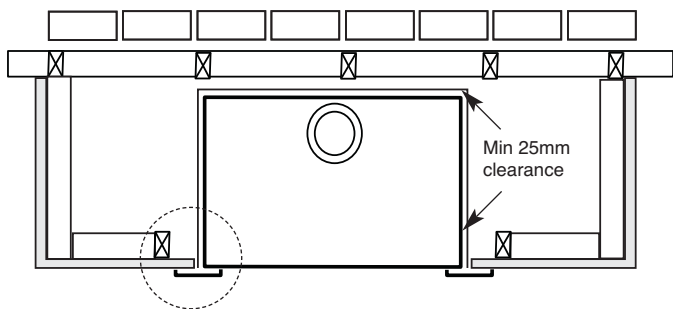


# HEATSEEKER ZERO CLEARANCE MODEL

## Heatseeker Zero Clearance Timber Frame Installation



**NOTE:** If fire is to be installed off the floor with a 4 sided trim, use the same A, B, C and D dimensions as shown with framework included below fire to required height. Ensure frame is suitable for fire weight.



### NOTE

Plasterboard to run beyond stud as shown, and to go behind fixing flange on unit.

### Frameout Dimensions (in mm)

MODEL	A	B	C	D
600	750	750	450	2100
850	750	1000	450	2100
1000	750	1150	450	2100
1500	1030	1680	450	2100

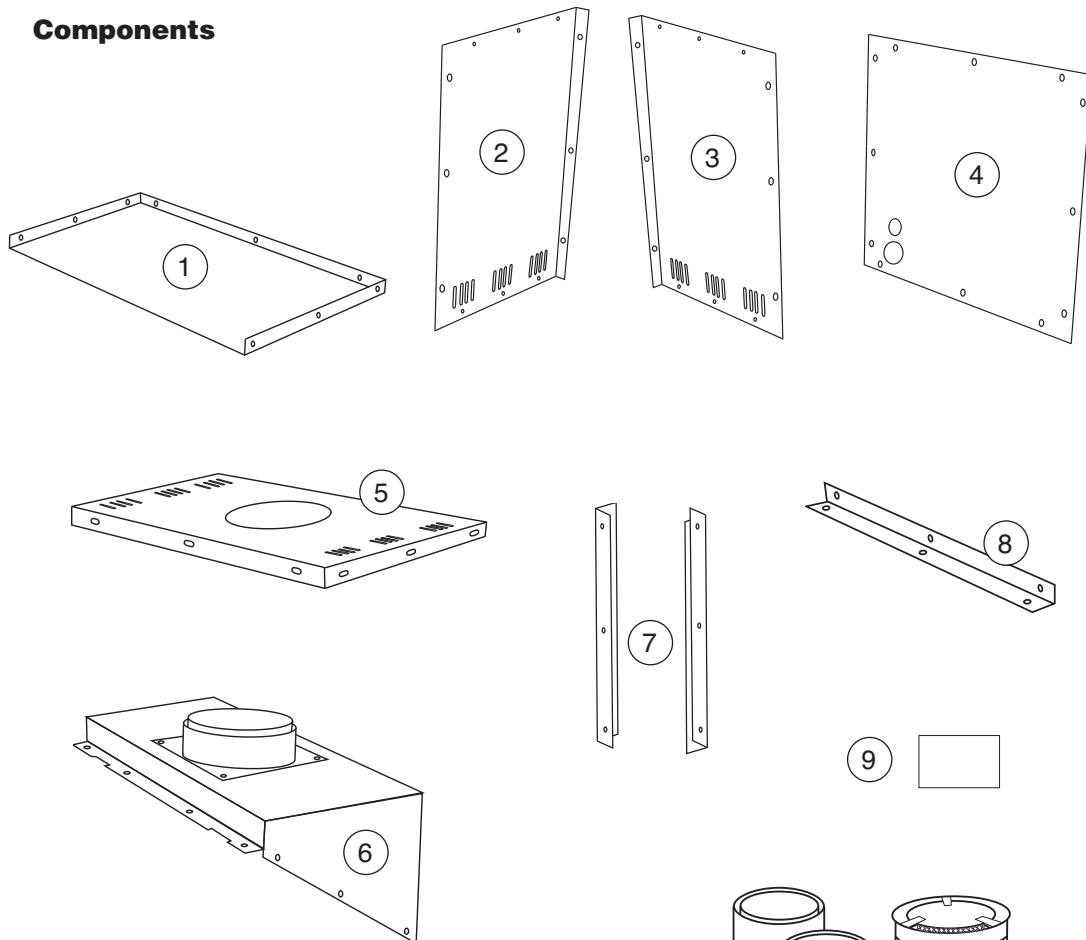
### CLEARANCES FROM COMBUSTIBLES

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

## HEATSEEKER ZERO CLEARANCE MODEL

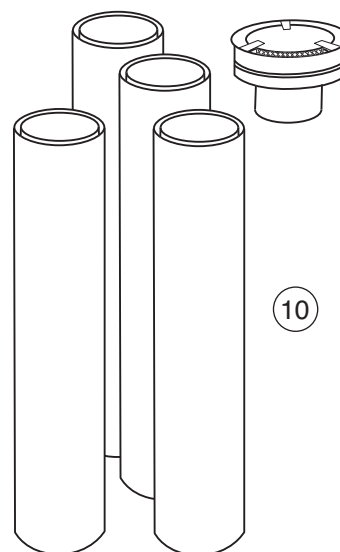
1. Position the Heatseeker firebox in the selected installation position in the room.
2. You will require the Zero Clearance Kit to suit the Heatseeker model you are fitting. This should be fitted to the firebox as shown on page 27.

### Components



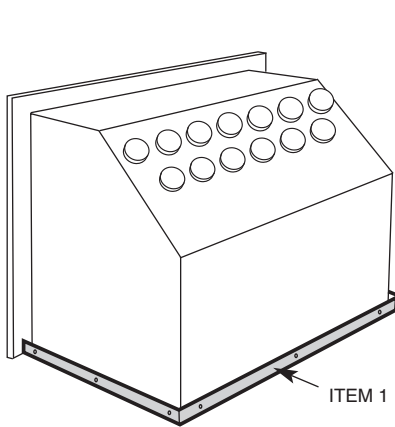
### ZERO CLEARANCE KIT COMPONENTS

No.	Description	Qty
1	Panel – Base	1
2	Panel – Side LH	1
3	Panel – Side RH	1
4	Panel – Rear	1
5	Panel – Top	1
6	Gather	1
7	Panel – Side Strips	2
8	Panel – Top Angle	1
9	Pack of screws	1
10	3.6m Flue Kit & Cowl	1

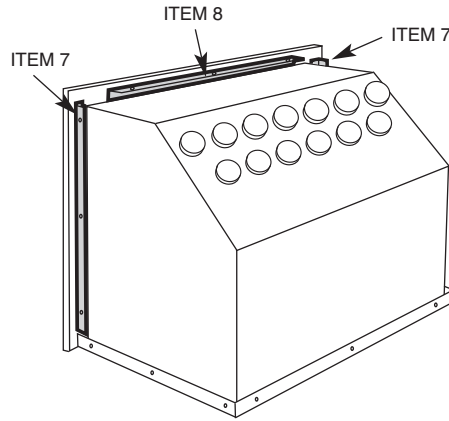


# HEATSEEKER ZERO CLEARANCE MODEL

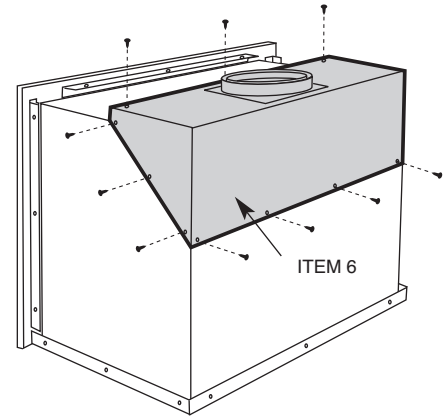
Fit Zero Clearance Kit to unit as shown below:



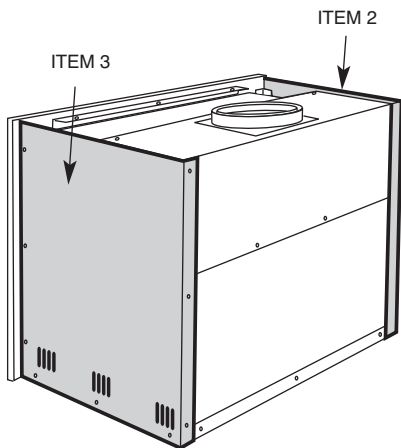
- 1.** Place main fire box (Item 1) centrally on base panel and secure.



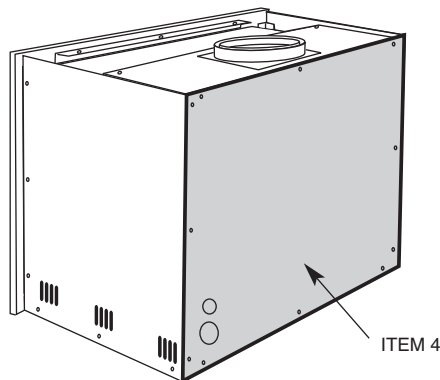
- 2.** Secure side strips (Item 7) and top strip (Item 8) to main fire box.



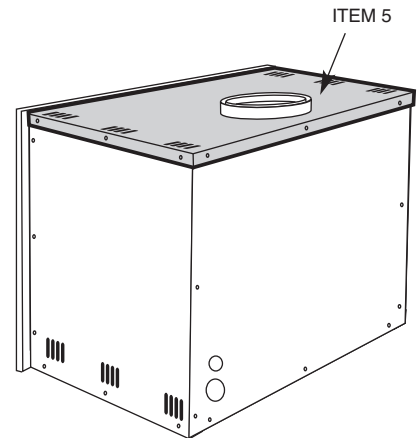
- 3.** Secure garter (Item 6) to main fire box.



- 4.** Secure LH and RH side panels (Items 2 & 3) to main fire box.



- 5.** Secure rear panel (Item 4) to main fire box.

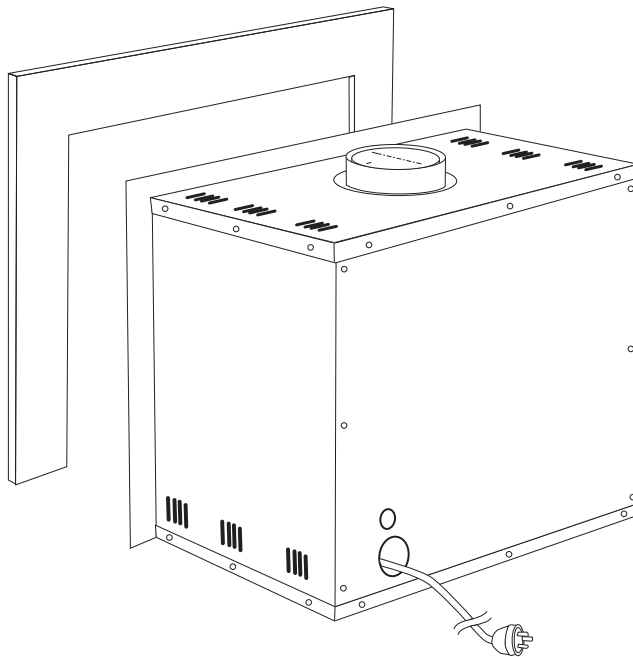


- 6.** Secure top panel (Item 5)

# HEATSEEKER ZERO CLEARANCE MODEL

## Heatseeker Zero Clearance Installation Procedure

- TICK BOXES
- ☐ Connect to gas supply
  - ☐ Connect to power supply
  - ☐ Install flue to 600mm minimum above roof line. (Min. total flue run 3.6m)
  - ☐ Plaster to unit with trim removed
  - ☐ Install trim
  - ☐ Assemble unit as per page 21
  - ☐ Test the unit for safe operation and show customer correct operating procedures.



### Flue Size

MODEL	Inner	Outer
600	150mm Gal	200mm Gal
850	200mm Gal	250mm Gal
1000	200mm Gal	250mm Gal
1500	225mm Gal	275mm Gal

## LIGHTING PILOT AND MAIN BURNER

Before lighting the pilot make sure that the gas line is connected.

### FOR YOUR SAFETY READ BEFORE LIGHTING

- The appliance has a pilot which must be lit using the piezo ignition, when lighting the pilot follow the instructions exactly.
- Before lighting the appliance check for gas leaks.
- Use only your hand to push in and turn the gas control knob, never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempt to repair may result in a fire or explosion.
- If the controls have been underwater, immediately call a qualified service technician to inspect the appliance and replace any part of the control system and fan that has been immersed in water.

## LIGHTING INSTRUCTIONS - Models 600, 850, 1000

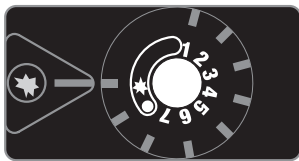


Fig 1

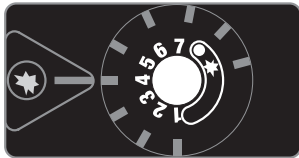


Fig 2

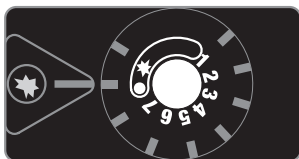


Fig 3

1. To light the pilot, press in and turn the gas control knob anticlockwise to the pilot position. (Fig 1)
2. Depress the knob and press the red button. If the pilot lights, continue to depress knob for 20 seconds and release. If pilot goes out repeat the procedure.
3. To light the burner, turn the control knob to the flame setting. The burner can be set anywhere between 1 and 7. (Fig 2)
4. To turn the burner off, turn the control knob clockwise to the "PILOT" position. This will leave the pilot burning. (Fig 1)
5. To turn off the burner and the pilot, turn the knob clockwise to the "OFF" position. (Fig 3)

**If you are unable to get the appliance to operate correctly, contact either your sales agent or the manufacturer (see contact details on back cover).**

Test operation of appliance and fully instruct user before leaving.

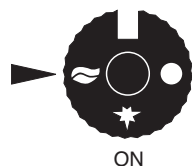
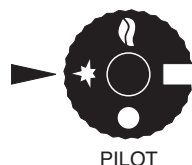
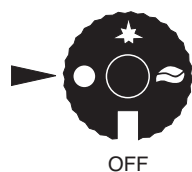
**Note: Check gas pressure. Refer to Data Plate on page 5 for details.**

## TO TURN OFF GAS TO APPLIANCE

Push in gas control knob slightly and turn to the "OFF" position.

## LIGHTING INSTRUCTIONS - Millivolt Option

Visit [www.realflame.com.au](http://www.realflame.com.au) to view a video instruction.



1. STOP! Read the safety information.
  2. Push in gas control knob and turn to "PILOT"
  3. NOTE: Control knob cannot be turned from "OFF" to "PILOT" unless the knob is pushed in slightly. Do not force.
  4. Light pilot burner following steps below.
  5. When the control knob is set at pilot, push it all the way in and hold it in. Immediately light the pilot using the piezo igniter. Red igniter button may need to be pressed rapidly several times. Once the pilot has lit keep holding the control knob in for about 45 seconds. Release the knob and it will "pop" back out, the pilot should remain lit. If pilot goes out repeat steps 1 to 5
  6. Turn gas control knob to the "ON" position
  7. Turn the switch to ignite the burner. The switch is supplied with the unit and should be installed within 6m of the fire.
- After lighting the pilot, if the control knob does not "pop" out when released, stop and immediately call your service technician.
  - If the pilot will not stay lit after several tries turn the gas control knob to "OFF" and call your service technician.

N.B: WHEN THE CONTROL KNOB IS TURNED TO THE "OFF" POSITION IT WILL TAKE APPROXIMATELY 60 SECONDS FOR THE VALVE TO RELEASE AND ALLOW YOU TO MOVE THE KNOB. DO NOT FORCE THE KNOB.

## TO TURN OFF GAS TO APPLIANCE

- A Turn the switch to "OFF" position
- B. Push in gas control knob slightly and turn to the off position

## 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:** 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.

### WARNING

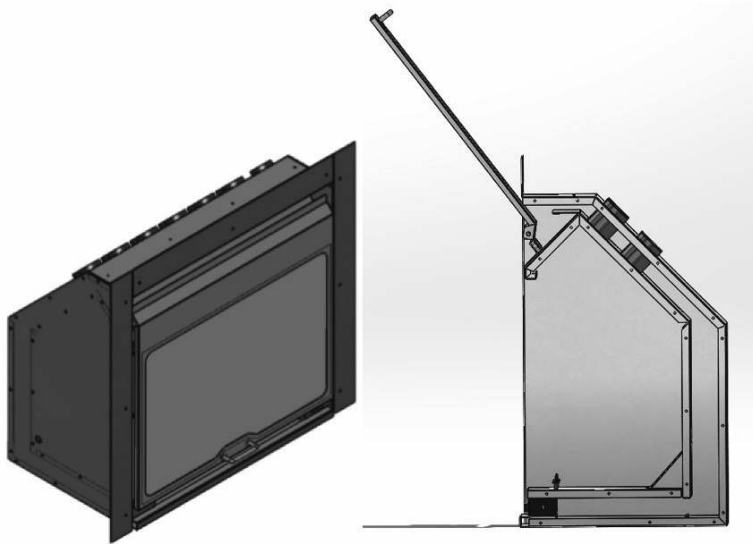
**"DO NOT place articles on or against this appliance."**

**"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."**

## OPTIONAL SAFETY SCREEN

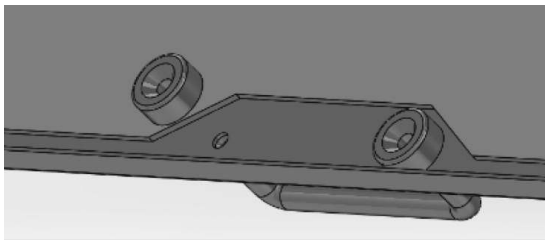
An optional safety screen can be fitted to Heatseeker units  
(NOTE: Safety screens are not available for HSIB1500 model.)



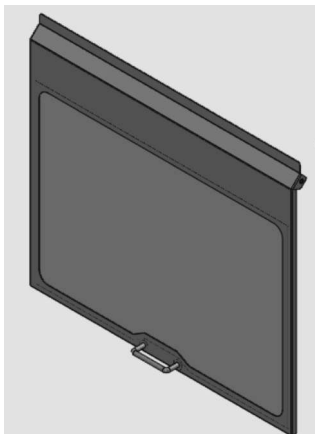
The safety screens are provided with magnetic catches located at the handle and the holding bracket to hold the screen in the open and closed position respectively.

### Installation Method

1. Fit the 18 mm magnets on to the screen.
  - Place the magnet concentric to the screen hole and handle thread.

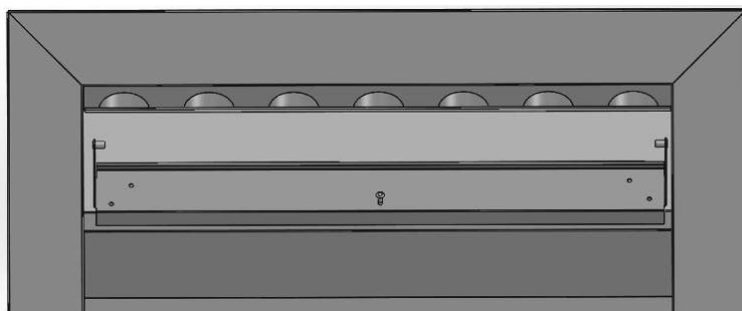
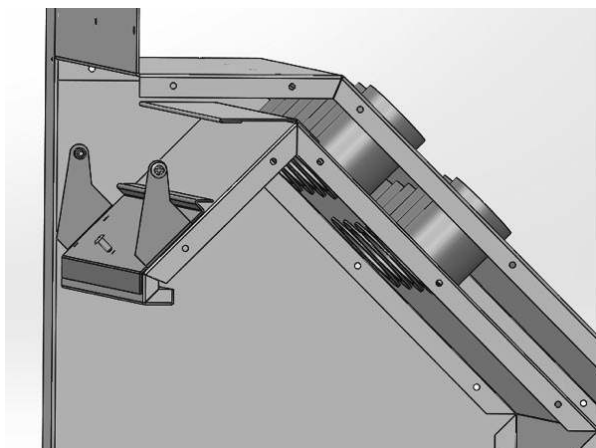


- Fix the magnet to the handle using 2 (M4 X10) countersunk screws



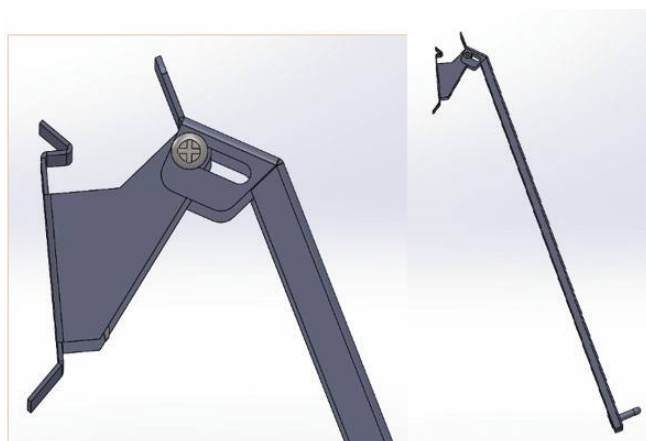
## OPTIONAL SAFETY SCREEN (continued)

2. Drill the holes (5 off) onto the top baffle of the combustion chamber using the holding bracket as a guidance.



- 3) Assemble the safety screen with the holding bracket.
  - a. Screw the screen onto the holding bracket inserts.
  - b. Use M5x20 MTS ZP PHILLIPS XR screws

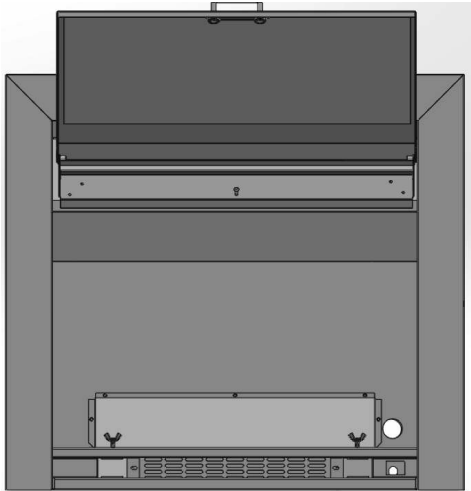
NOTE: Must be a loose fit.



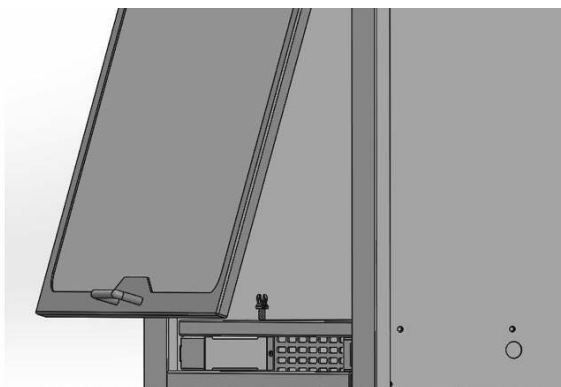


## OPTIONAL SAFETY SCREEN (continued)

4. Fit the holding bracket/ screen assembly onto the top baffle of the combustion chamber.
  - a. Use 4mm X10 Aluminum pop rivets (5 off).



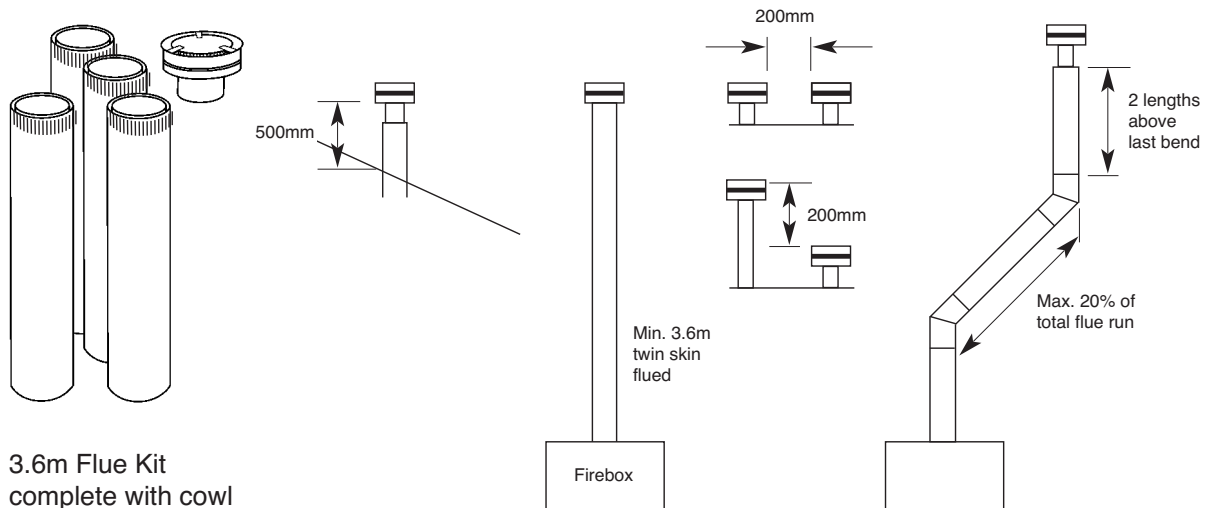
- b. Make sure the screen is moving freely upwards and downwards
  - c. Make sure locking mechanism holds the screen in the open position.
- 5.) Locate the screen in the closed position.
  - a. Pull the screen up to release it from the locking mechanism.
  - b. Make sure the magnets face the base plate.
  - c. Check for strong magnetic attachment between base plate and screen magnets by pulling the handle. (20 N load)



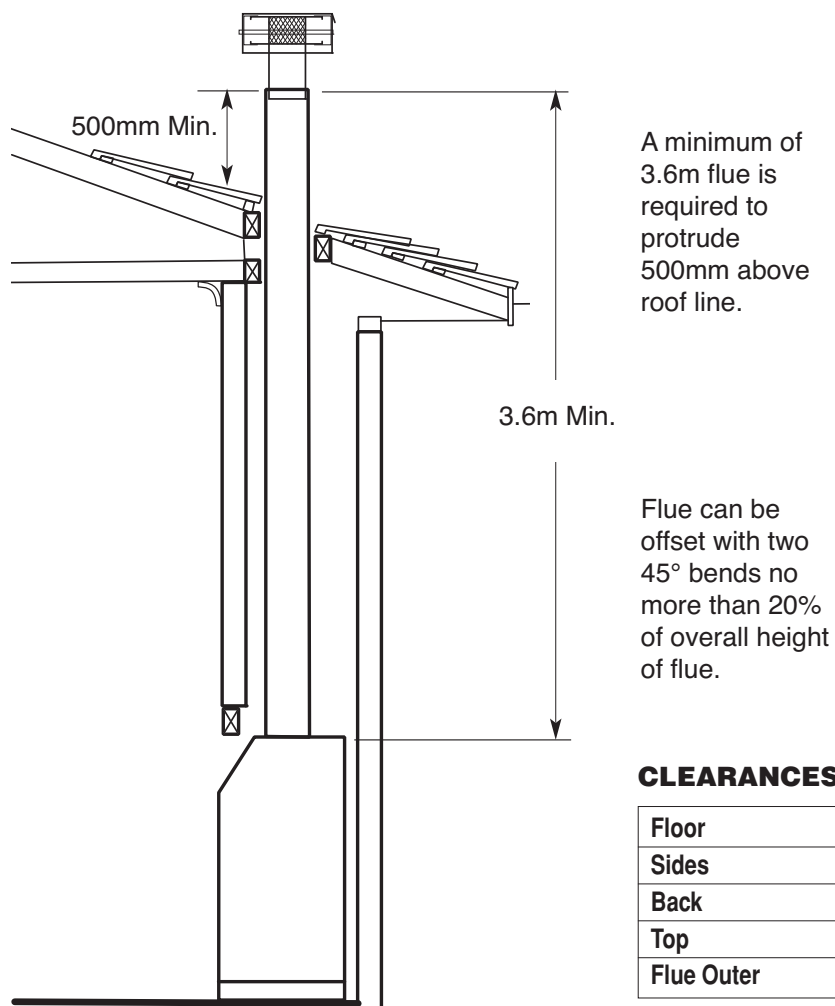
## FLUE REQUIREMENTS

### Natural Draught

The standard natural draught flue kit consists of 4 x 900mm lengths of twin skin flue (refer to page 23 for correct sizing) and an AGA approved cowl.



These notes must be read in conjunction with AGA code 601.



### CLEARANCES

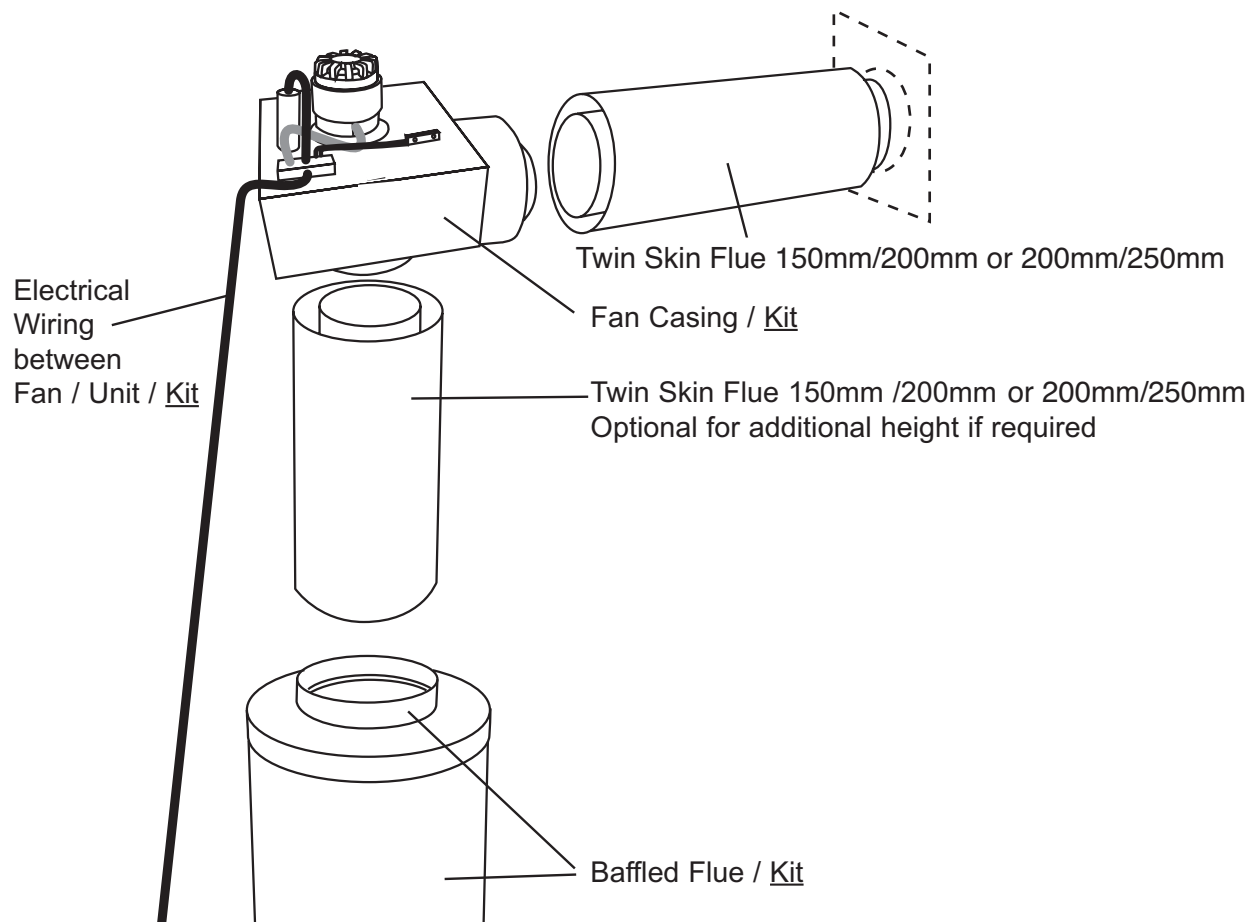
Floor	0 mm
Sides	25 mm
Back	25 mm
Top	100 mm
Flue Outer	25 mm

## FLUE REQUIREMENTS

### Power Flue Kit (Optional – refer to pages 35 to 47 for details)

The standard Power Flue Kit consists of ;

- 1 x Power Flue Fan
- 1 x Power Flue Motor
- 1 x Control Module
- 1 x Electronic Ignition Pack
- 1 x Baffle
- 1 x Pressure Differential Switch
- 1 x Loom
- 1 x Termination Cowl (horizontal or vertical)



## 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'.

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.

WHERE FITTED A POWERFLUE SYSTEM MUST BE DESIGNED AND INSTALLED TO MEET GAS INSTALLATION CODES AS5601.1.2013 CLAUSE H2 - POWER FLUE DESIGN.

Where the powerflue option described in this manual is installed, it represents a Power Flue installed in accordance with AS/NZS 5601.1 Paragraph H2. The powerflue system when installed to the instructions is designed to comply with the requirements of AS/NZS5601.

The powerflue must be installed and commissioned by the installer in accordance with Paragraph H2.2.7 AS/NZS 5601.1.

## INSTALLATION INSTRUCTIONS

### VENTILATION REQUIREMENTS

A requirement of the gas installation code AS/NZS5601.1-2013 is that ventilation is required as per the manufacturers instructions. Clause 6.10.9.5 of AS/NZS5601.1-2013 sets out the ventilation requirements.

#### 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

### 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 model .....300mm
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.

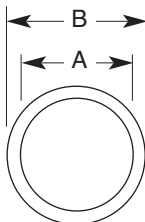
The power flue should be serviced every 12 months by an authorised technician. If repairs are needed an authorised technician must carry them out.

### 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



MODELS	A mm	B mm
All Heatseekers	150	200

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

### 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 (see page 32)

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 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.

### WIRING (see wiring diagram page 45)

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.

## COMMISSIONING THE POWER FLUE SYSTEM

THE INSTALLER MUST COMMISSION THE POWERFLUE SYSTEM AS PER CLAUSE H2.2.7 (AS5601.1.2013)

The correct CO<sub>2</sub> concentration shall be established by adjustment of dampers and checked by flue gas analysis. A check that the controls are operating in the manner specified shall be carried out.

The check shall include a simulation of fan failure.

Commissioning the powerflue system is an additional requirement to commissioning the appliance. The appliance must also be commissioned as per AS5601.1.2013.

### Sizing of the fan

In order to select a suitable fan, it is necessary to determine the volume and temperature of the flue gases. Before this can be done the percentage of CO<sub>2</sub> in the flue gases shall be decided.

If discharge is at a low level, 1% CO<sub>2</sub> may be used in the design formula. For other situations, values between 4% and 8% may be used. These values will give flue gas temperatures of 140°C and 220°C respectively.

For appliances with modulating burners, the CO<sub>2</sub> concentration in the flue shall be considered when the appliance is operating at normal rate, i.e. 8% CO<sub>2</sub> in the combustion chamber.

The quantity of flue gases to be handled by the fan may be determined by the following simplified formula, which is sufficiently accurate for most flue gases currently distributed. A suitable fan may then be selected.

$$Q = \frac{T}{R}$$

Where Q = volume of flue gases, litres per second

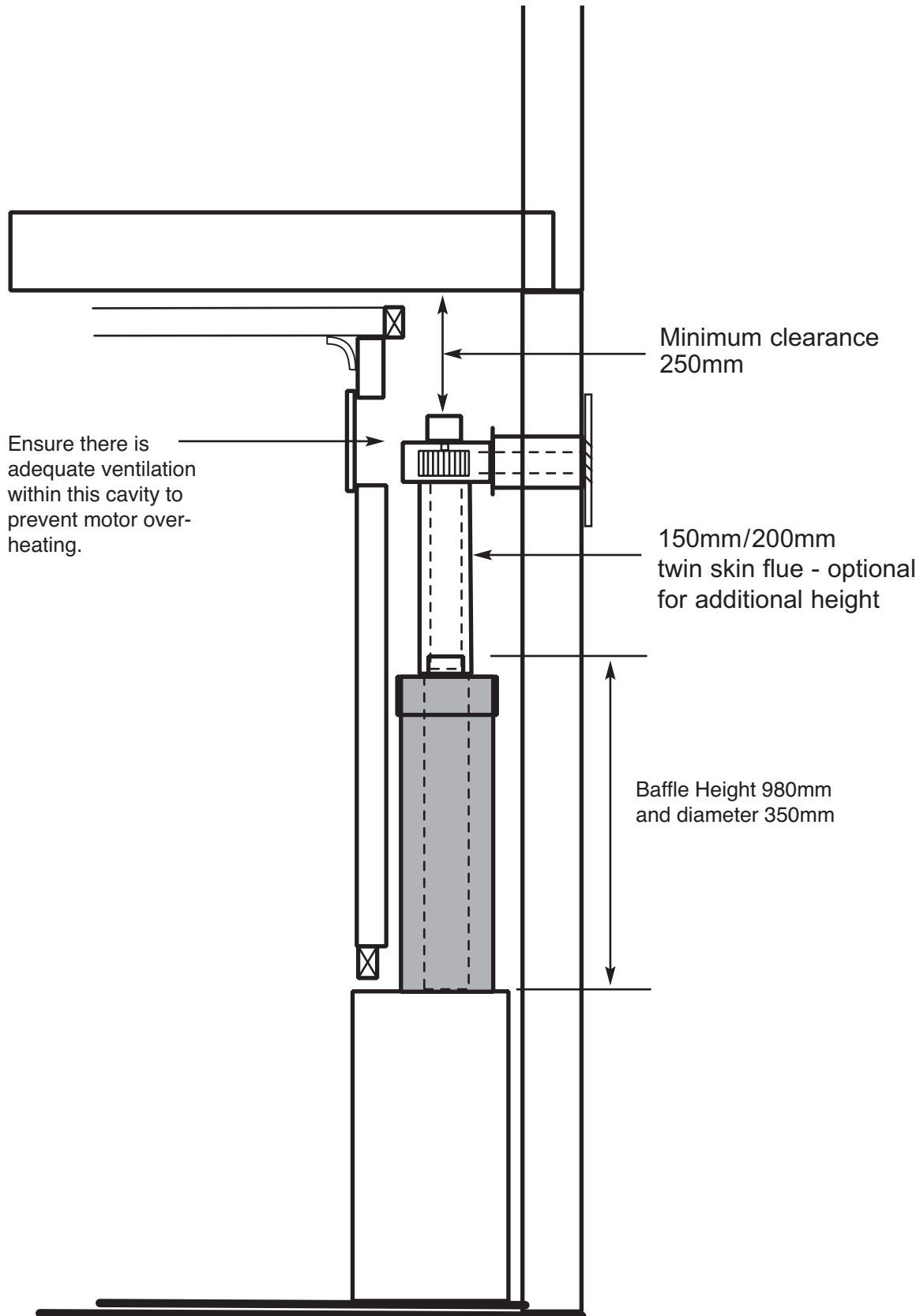
T = total gas consumption of appliances connected to flue megajoules per hour

R = desired % CO<sub>2</sub> concentration by volume in the flue gases at the discharge point

### FLUE GASES - RELATIONSHIP BETWEEN % CO<sub>2</sub> VOLUME FLOW RATE & % EXCESS AIR

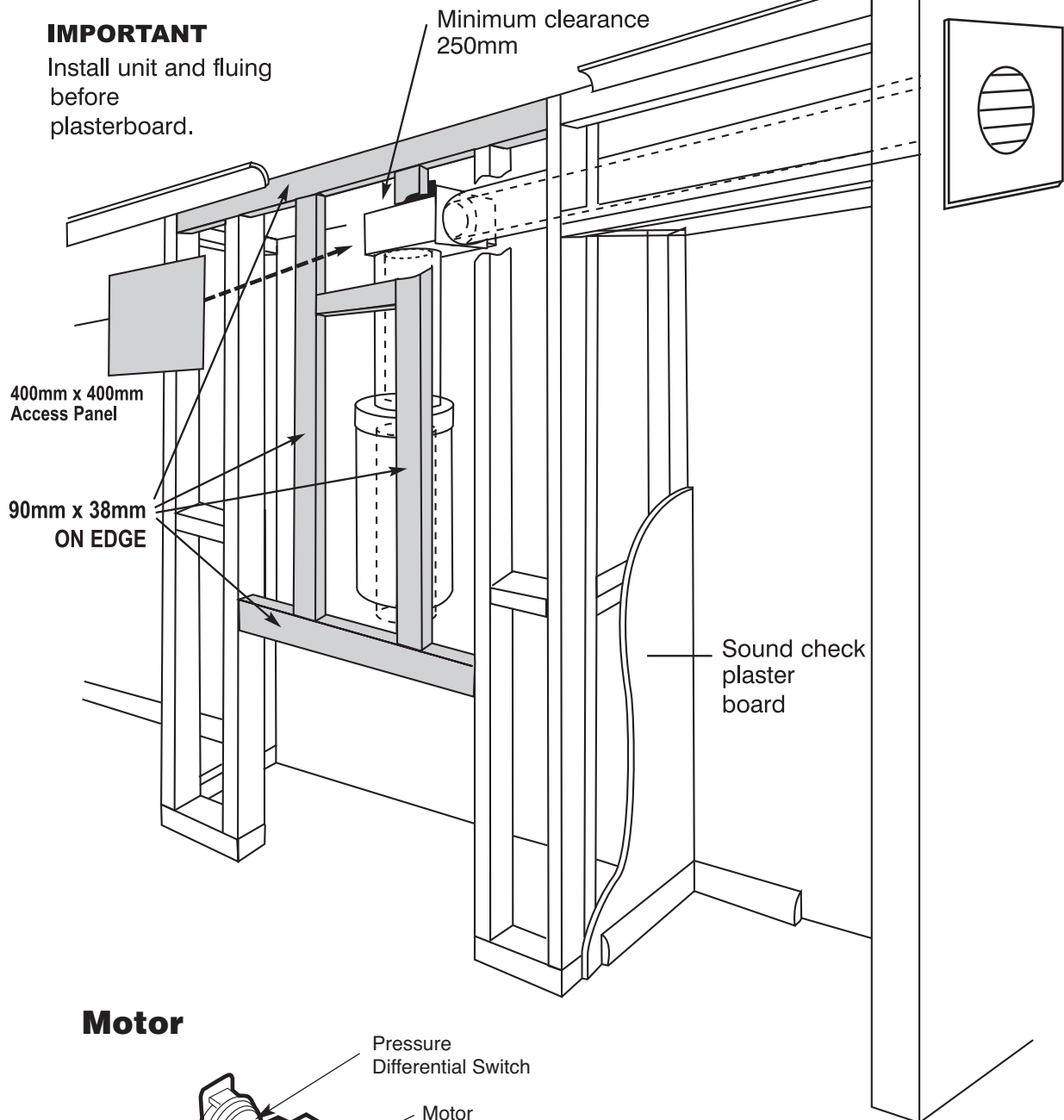
CO <sub>2</sub> %	Volume Flow Rate L/s/MJ/h	Excess Air %
10	0.10	33
9	0.11	50
8	0.13	67
7	0.14	90
6.7	0.15	100
6	0.17	120
5	0.20	170
4.4	0.23	200
4	0.25	230
3.3	0.30	300
3	0.33	400
2.2	0.45	500
2	0.50	500
1.7	0.60	700
1.2	0.80	1000
1.0	1.00	1200
0.8	1.20	1500
0.6	1.60	2000
0.5	2.00	2600

# POWER FLUE MOTOR CLEARANCE

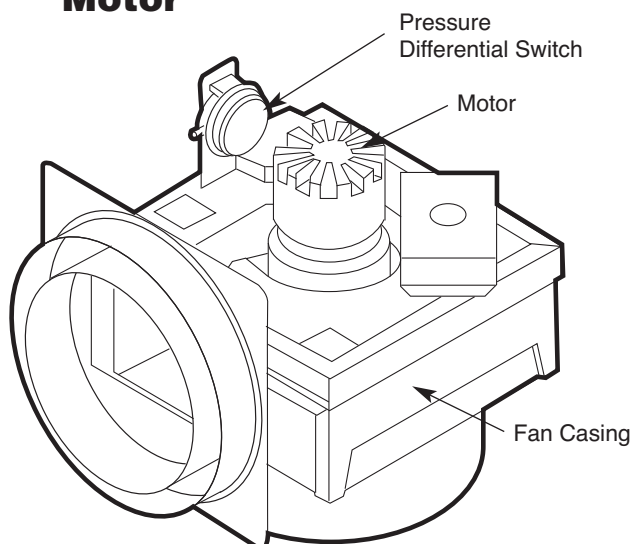




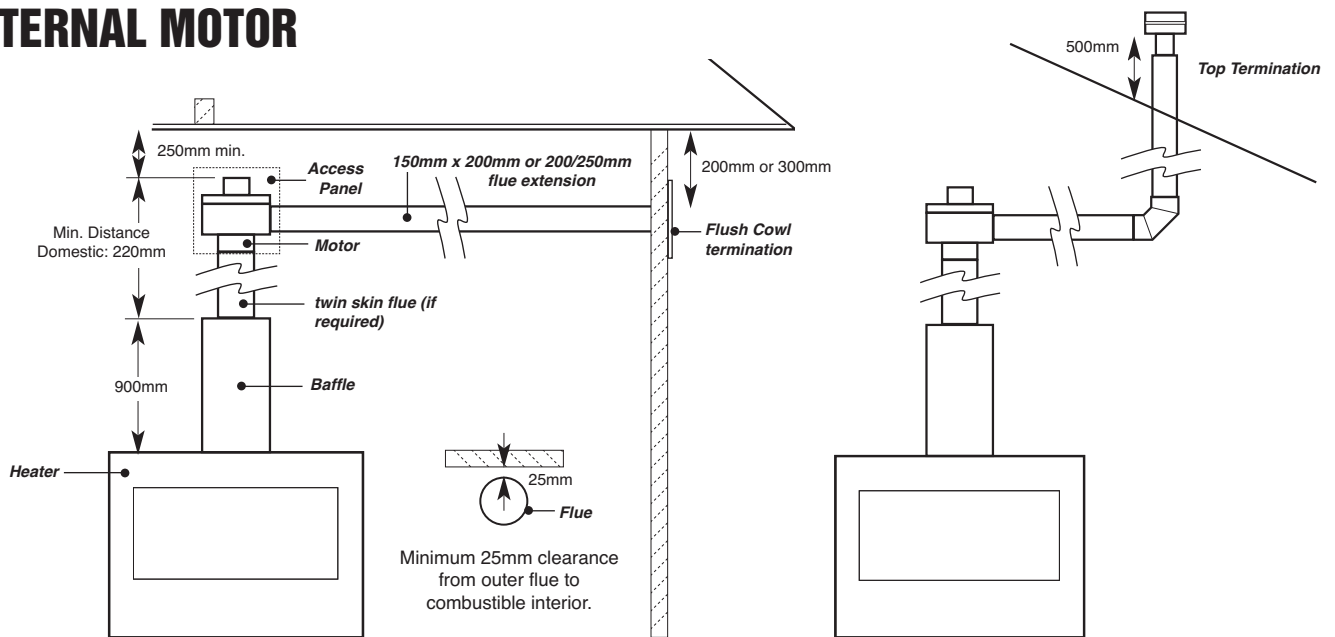
## TYPICAL POWER FLUE FRAMEOUT



### Motor



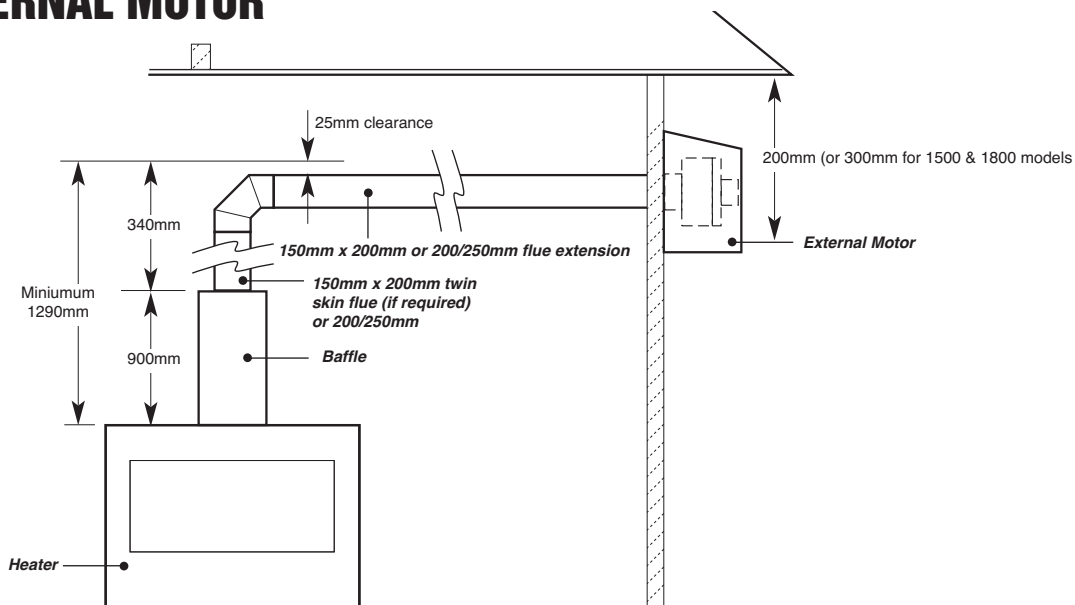
## INTERNAL MOTOR



### NOTE:

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

## EXTERNAL MOTOR

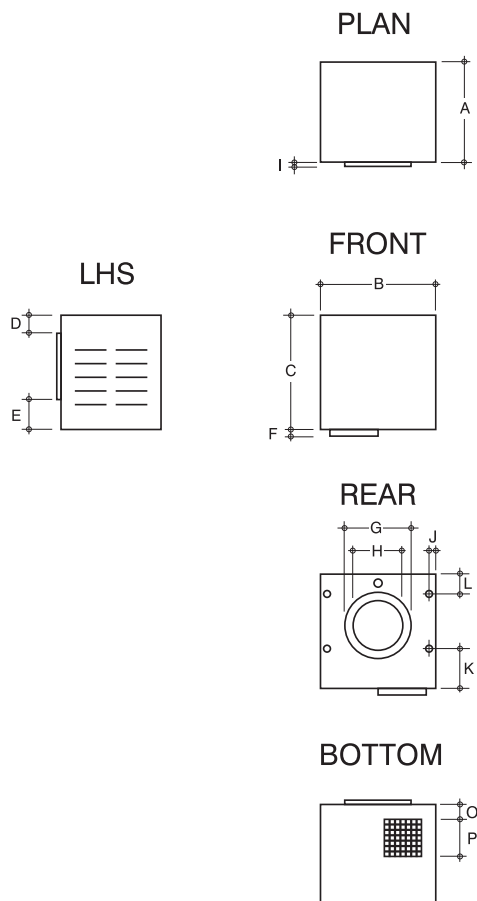


### NOTE:

1. Maximum of 4 elbows, 45° or 90°.

## DIMENSIONS

### External Flue Motor

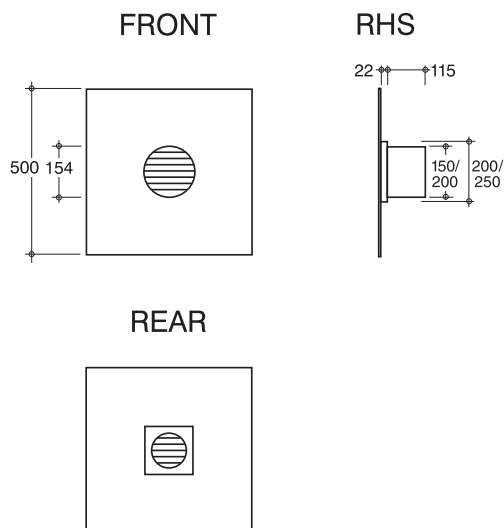


A	B	C	D	E	F	G	H
302	348	345	55/5	90/40	20	200/250	150/200

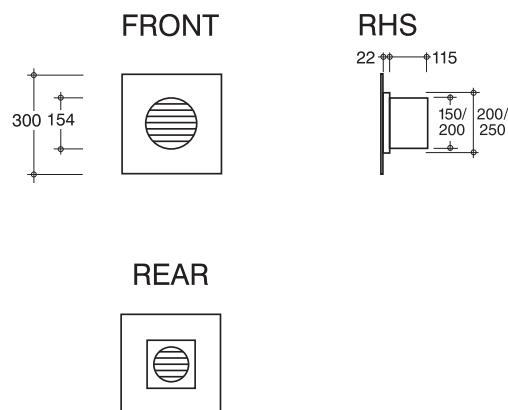
I	J	K	L	M	N	O	P
13	20	120	60	105	75	45	112

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

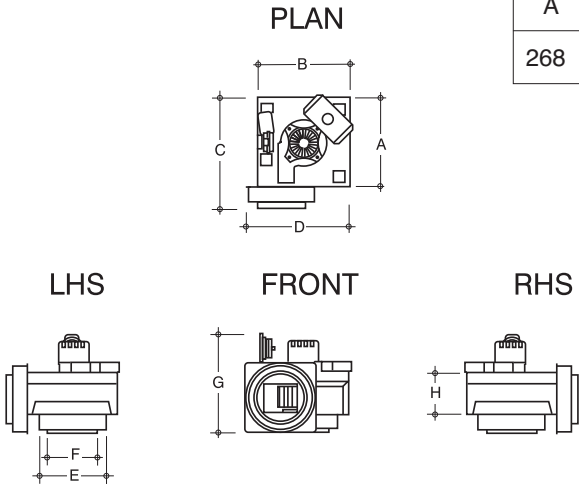


### Power Flue Flush Termination 300 x 300



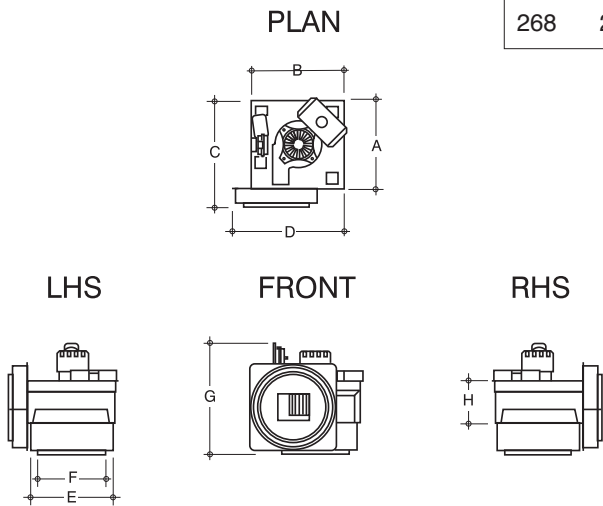
DIMENSIONS

Internal Power Flue Motor



A	B	C	D	E	F	G	H
268	281	331	311	202	152	300	128

Internal Power Flue Motor 200/250



A	B	C	D	E	F	G	H
268	281	322	336	252	202	336	128

## TROUBLE SHOOTING FOR ELECTRONIC IGNITION AND POWER FLUE SYSTEM.

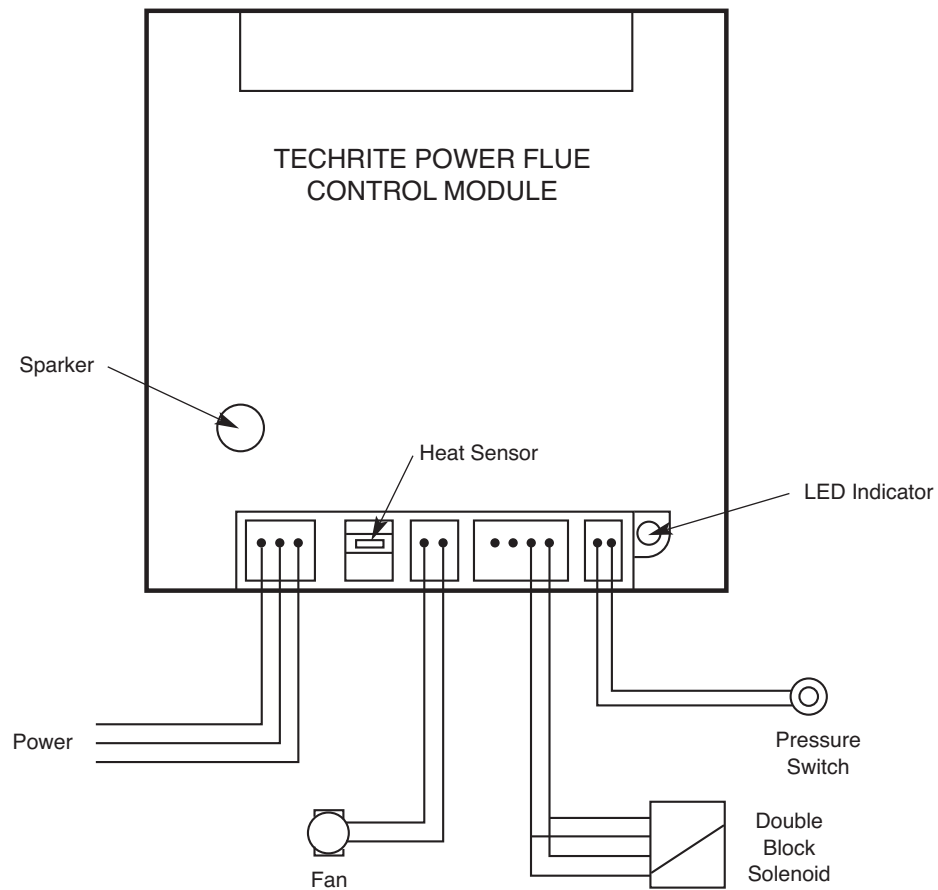
Symptom	Possible Cause	Corrective Action
Fire turned on and nothing happens	No Power to Module	Connect Power
Fire turned on and motor starts but there is no spark	Pressure switch not operating	Check pressure switch
Fire sparks when turned on but will not ignite	A. No Gas	Connect Gas.
	B. Sparker is to 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

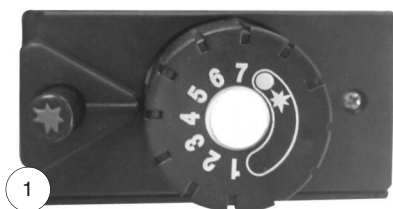
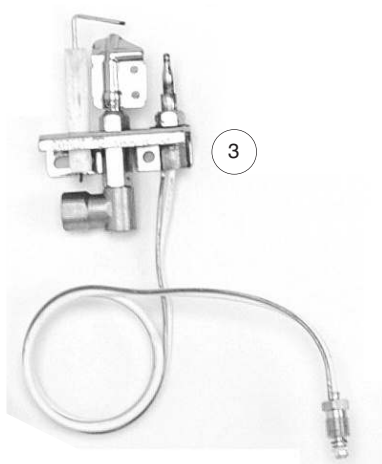


### NOTE

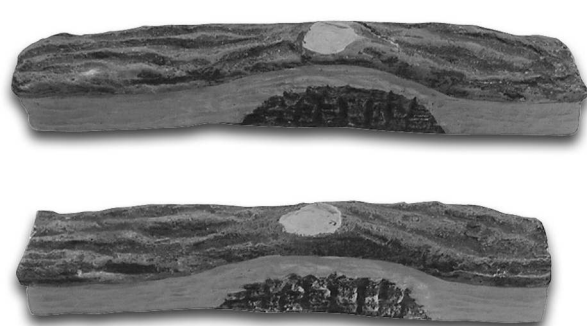
For C Bus and/or fresh air damper interlock systems, please contact us for wiring diagrams and relevant system instructions at [info@realflame.com.au](mailto:info@realflame.com.au)

## PARTS LIST

PART No.	DESCRIPTION	PART No.	
01	Eurosit 630 Valve	05	1/2" to 3/8" Hex Nipple
02	Regulator SC-75	06	5/16" 90O Union Elbow
03N	S.I.T. ODS Pilot Assembly (Natural Gas)	07	1/4" Nut and Olive
03P	S.I.T. ODS Pilot Assembly (Propane Gas)	08	Injector Holder Stem
04	1/2" Male to 1/2" Copper Union	09	Injector



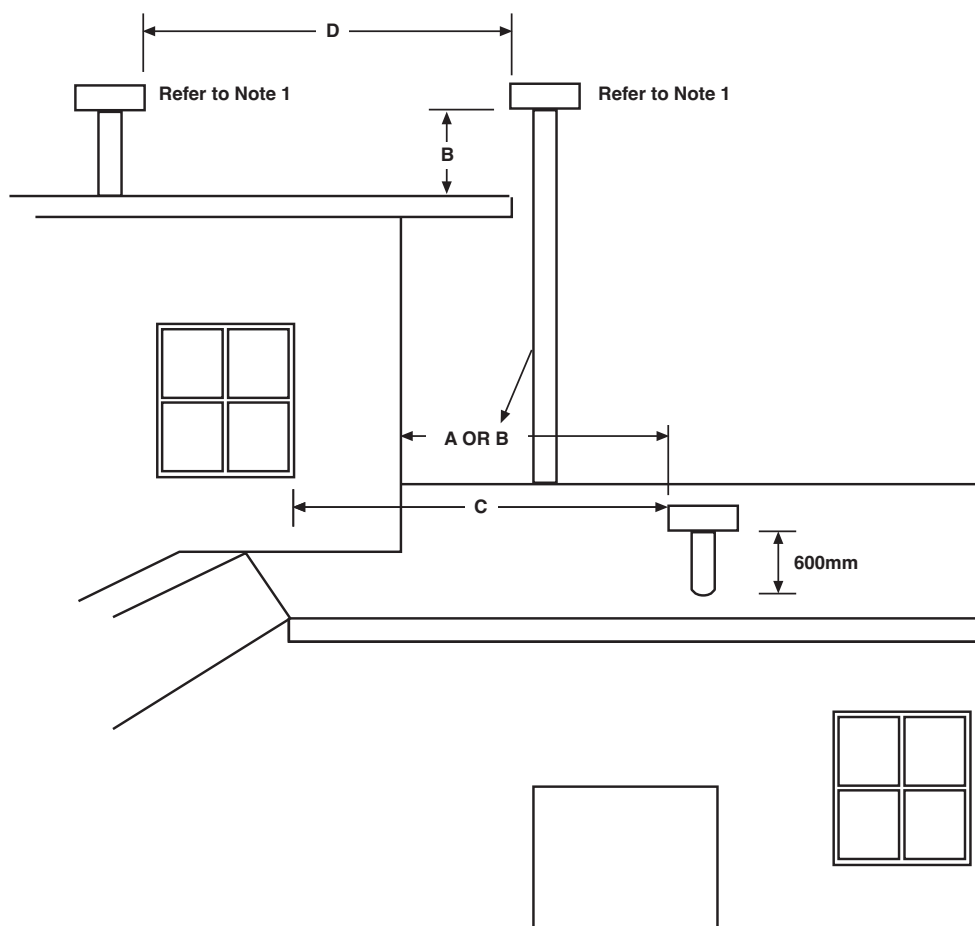
## LOG AND COAL SETS





# HEATSEEKER FLUE TERMINATION (COWLS) REGULATIONS

## Natural Draught



### AREA

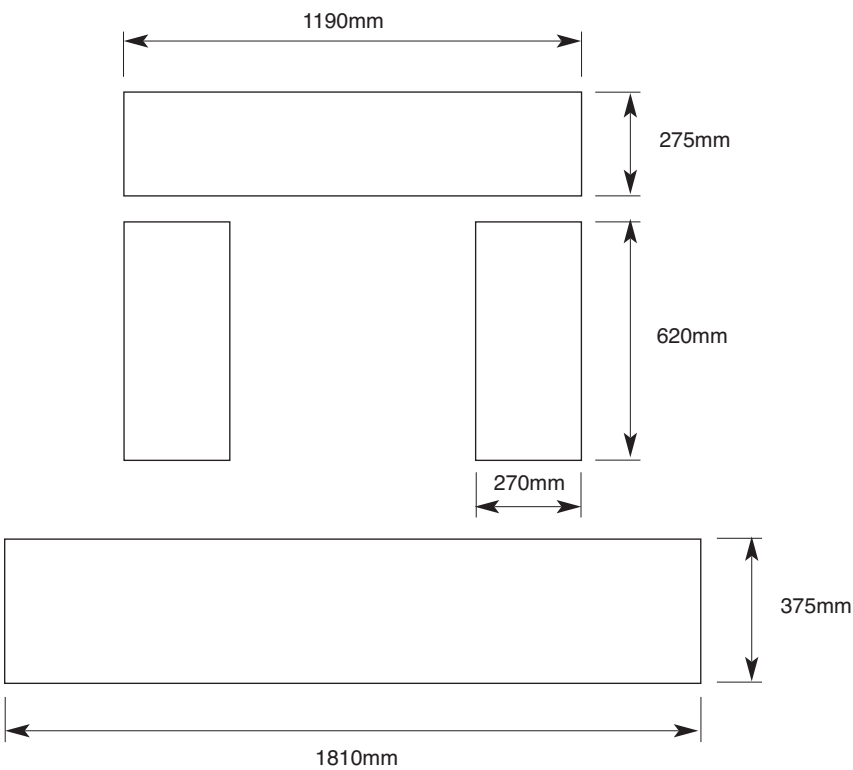
### CLEARANCE REQUIRED

- A:** Horizontally from a neighboring structure. ....1000mm
- B:** If less than a meter horizontally from a neighboring structure  
then terminates above that structure by. ....500mm
- C:** From any opening into a building. ....1500mm
- D:** From another flue terminal. ....200mm

### Notes:

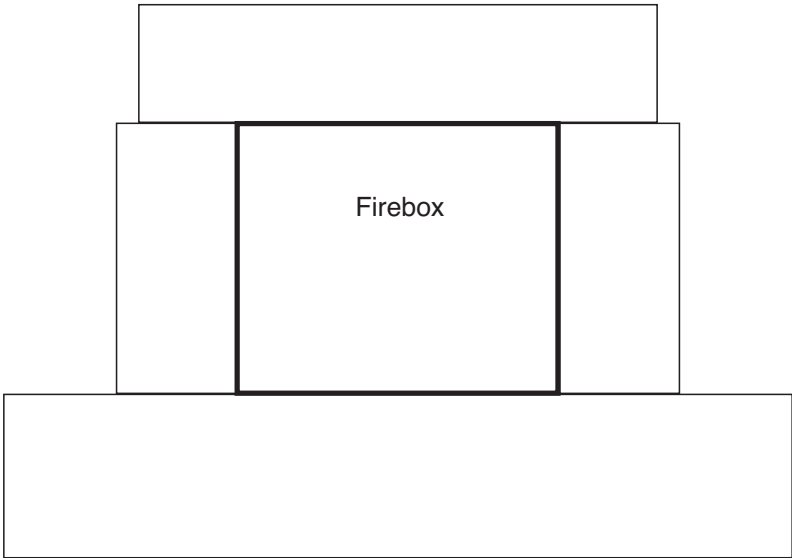
1. A trafficable roof designed for personal or public use, the end of the flue shall be at least 2 meters above the roof level. This dimension is to be increased where necessary so that the minimum distance of 500mm is maintained above any surrounding parapet or at least 200mm from the nearest part of a chimney.
2. The current version of the AG601 gas codes and any other relevant codes should be read in conjunction with the above guidelines to ensure a correct and safe installation.

# **OPTIONAL MARBLE HEARTH AND/OR MARGIN SET** (Not supplied by Real Flame.)

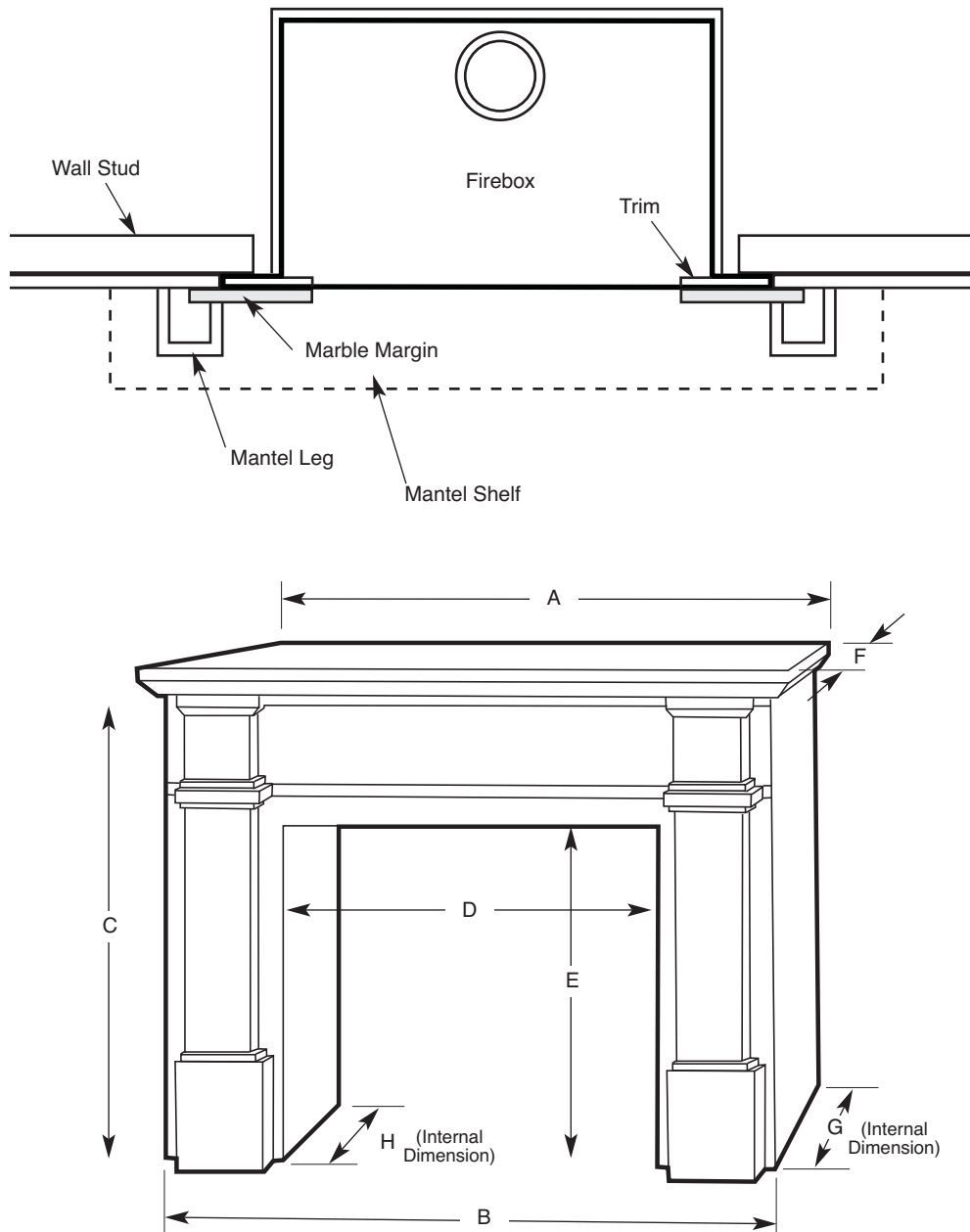


## **Marble Margin Set Installation Procedure**

1. Install Heatseeker with trim in place.
2. Install marble over trim up to the fire opening. Use liquid nails to fix to wall. Marble should look like the diagram below once it has been installed and before mantelpiece has been attached.



## OPTIONAL MANTELPiece INSTALLATION (Not supplied by Real Flame.)

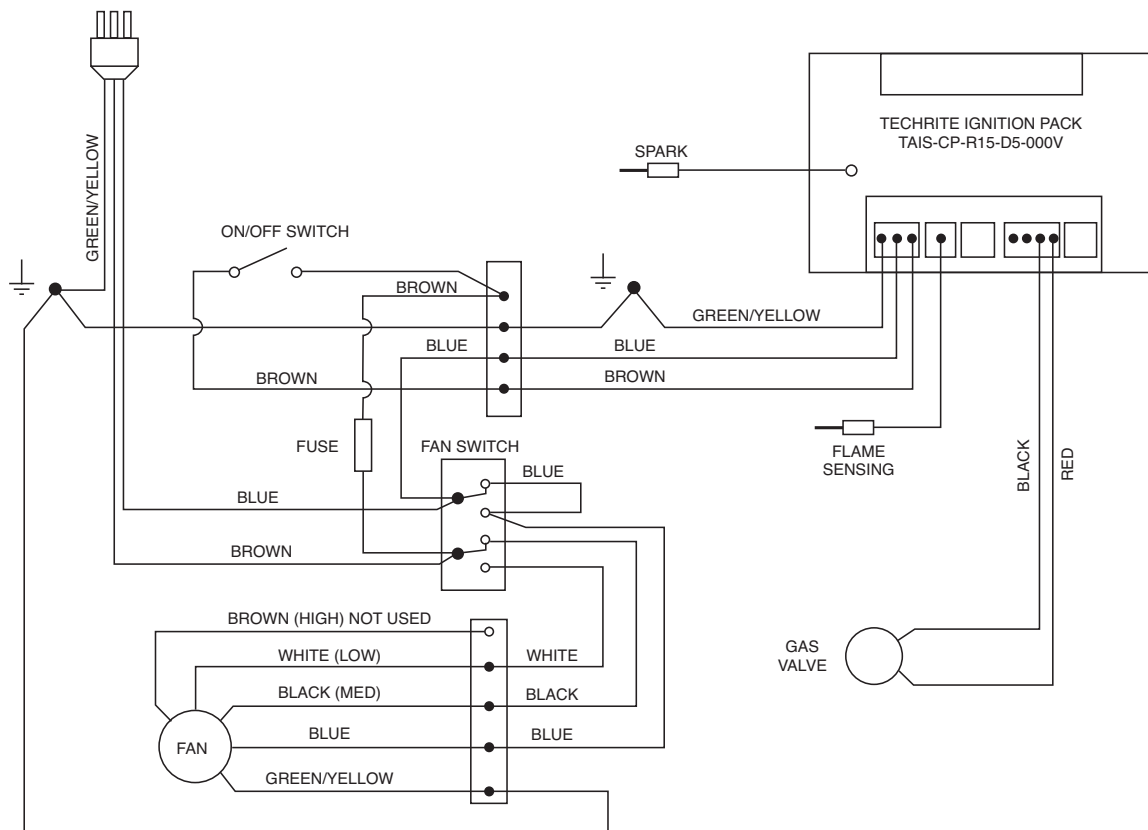


### MANTELPiece DIMENSIONS

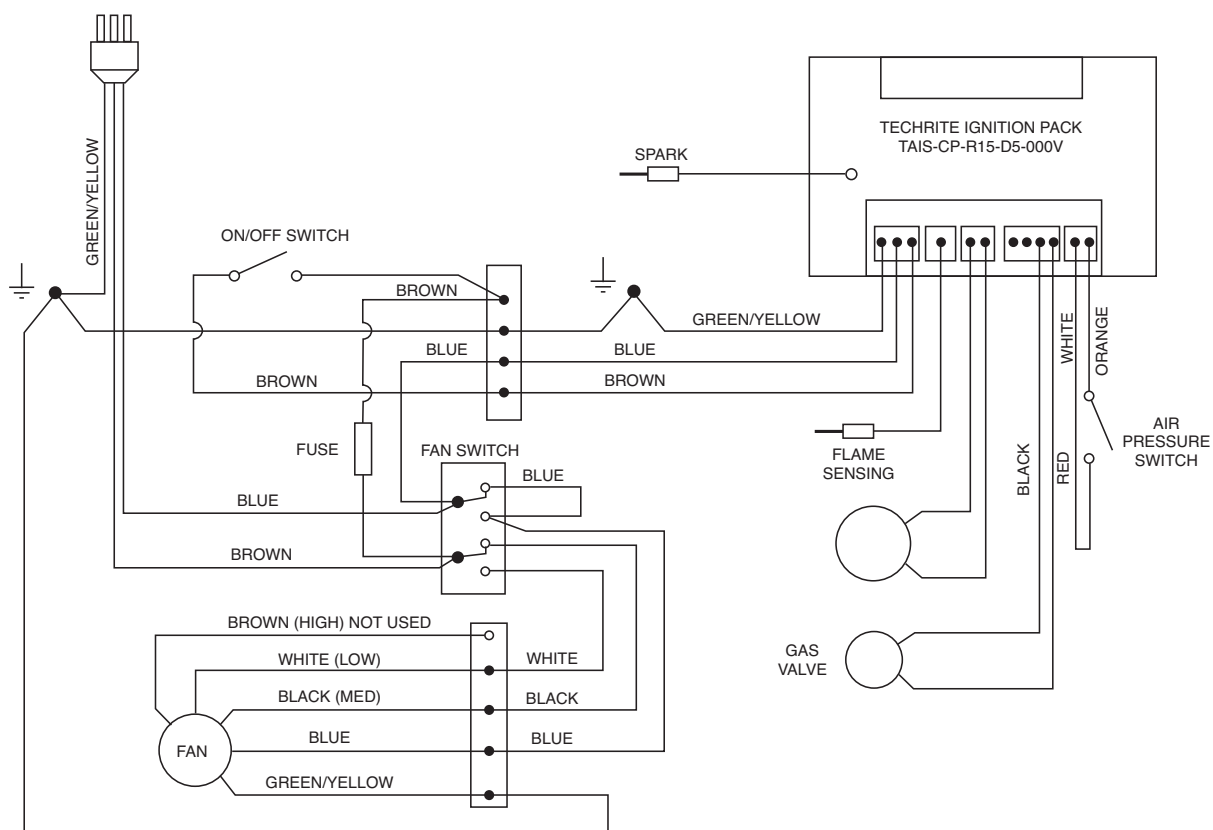
	A	B	C	D	E	F	G	H
Federation Square	1440	1340	1165	950	950	235	-	-
Adelaide Federation	1460	1300	1170	950	950	235	-	-
Windsor Universal	1810	1665	1180	1090	860	280	100	80
Bouvier Universal	1810	1665	1180	1090	860	280	100	80
Kensington Universal	1810	1665	1180	1090	860	280	100	80
Friedrich Universal	1810	1665	1180	1090	860	280	100	80

# ELECTRICAL DIAGRAM

## Electrical Ignition models



## Powerflue models











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