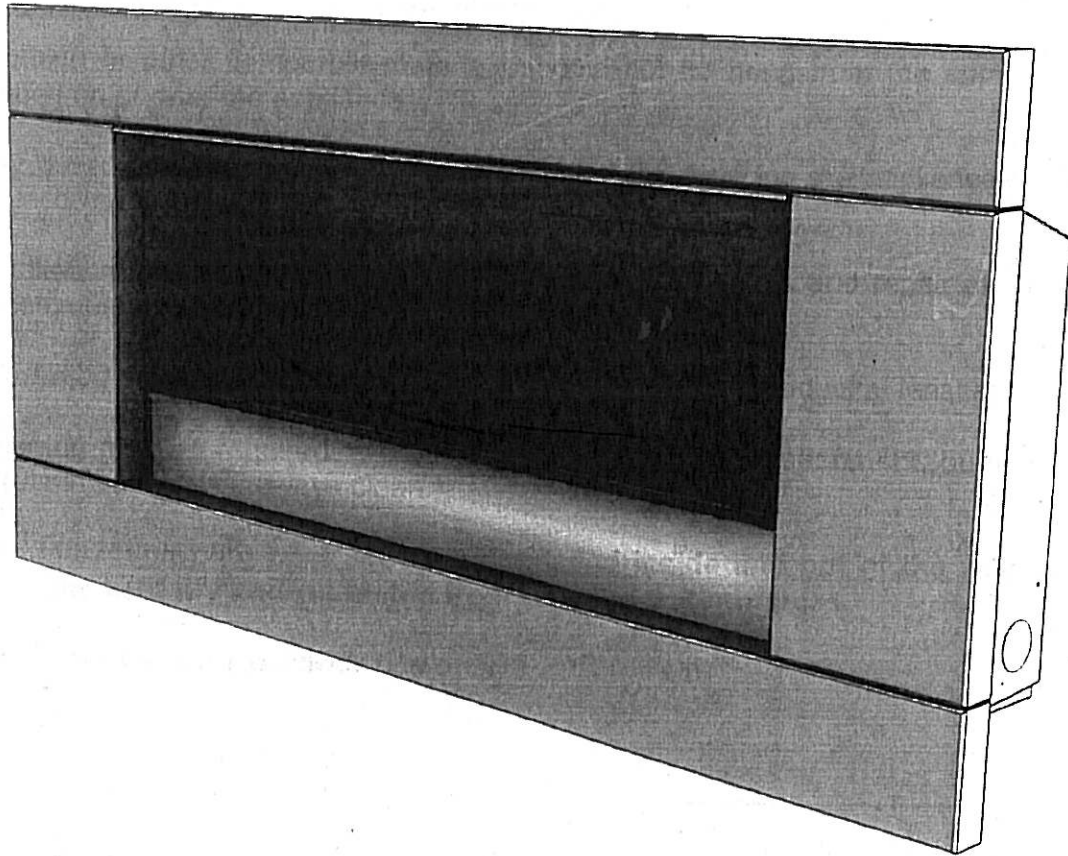


# escea.

## Installation Manual

EF5000 – AUS

v 2.0



### Important:

The appliance shall be installed in accordance with;

- Local gas fitting regulations
- Municipal building codes
- AS 5601 / AG 601—2000, *Gas installations*
- Any other relevant statutory regulations.
- **TO BE INSTALLED ONLY BY AN AUTHORIZED PERSON.**
- **THIS APPLIANCE MUST NOT BE INSTALLED OR USED INDOORS**
- **INSTRUCTIONS MUST BE LEFT WITH THE CONSUMER AND THE CONSUMER TO RETEAIN THEM FOR FUTURE REFERENCE.**

Manufactured by: Escea Ltd, PO Box 5277 Dunedin NZ, Ph: +64 3 479 0302, email: [info@escea.net](mailto:info@escea.net)  
For contact details of your local Escea distributor or dealer please visit [www.escea.net](http://www.escea.net)

## Warning:

Children and adults should be alerted to the hazards of high surface temperatures, burns and clothing ignition.

Young Children should be carefully supervised when they are in the area of the appliance.

Clothing or other flammable materials should not be hung from the appliance, or placed on or near the appliance.

Any guard or other protective device removed for servicing the appliance must be replaced prior to operating the appliance.

Installation of appliances fitted to fixed gas supply systems and repair of all appliances must be carried out by a qualified service person.

A qualified service person should inspect and service this product at least annually.

Cleaning may be required in order to keep the control compartment, burners, and circulating air passageways clean.

**The 240/24volt plug pack MUST be installed inside and out of the weather. It MUST be kept dry and protected from rain and water ingress.**

**This Gas Fire is for outdoor use only.**

Contents:	Page:
Product description_____	1.0
Power supply _____	2.0
Creating the cavity_____	3.0
Wall cladding around the fire_____	4.0
Minimum install height off the ground_____	5.0
Types of installation_____	6.0
Corner Installations_____	7.0
Laying gas pipe_____	8.0
Fixing the fire into the cavity_____	9.0
Connecting gas pipe_____	10.0
Connecting the power supply and touch panel_____	11.0
Testing of touch panel and spark ignition_____	12.0
Checking operating pressure_____	13.0
Assembly of stone cartridge_____	14.0
Fitting the fascia_____	15.0
Placement of ceramic pebbles_____	16.0
Operating Instructions_____	17.0
Maintenance and cleaning_____	18.0
Electrical Schematic_____	19.0

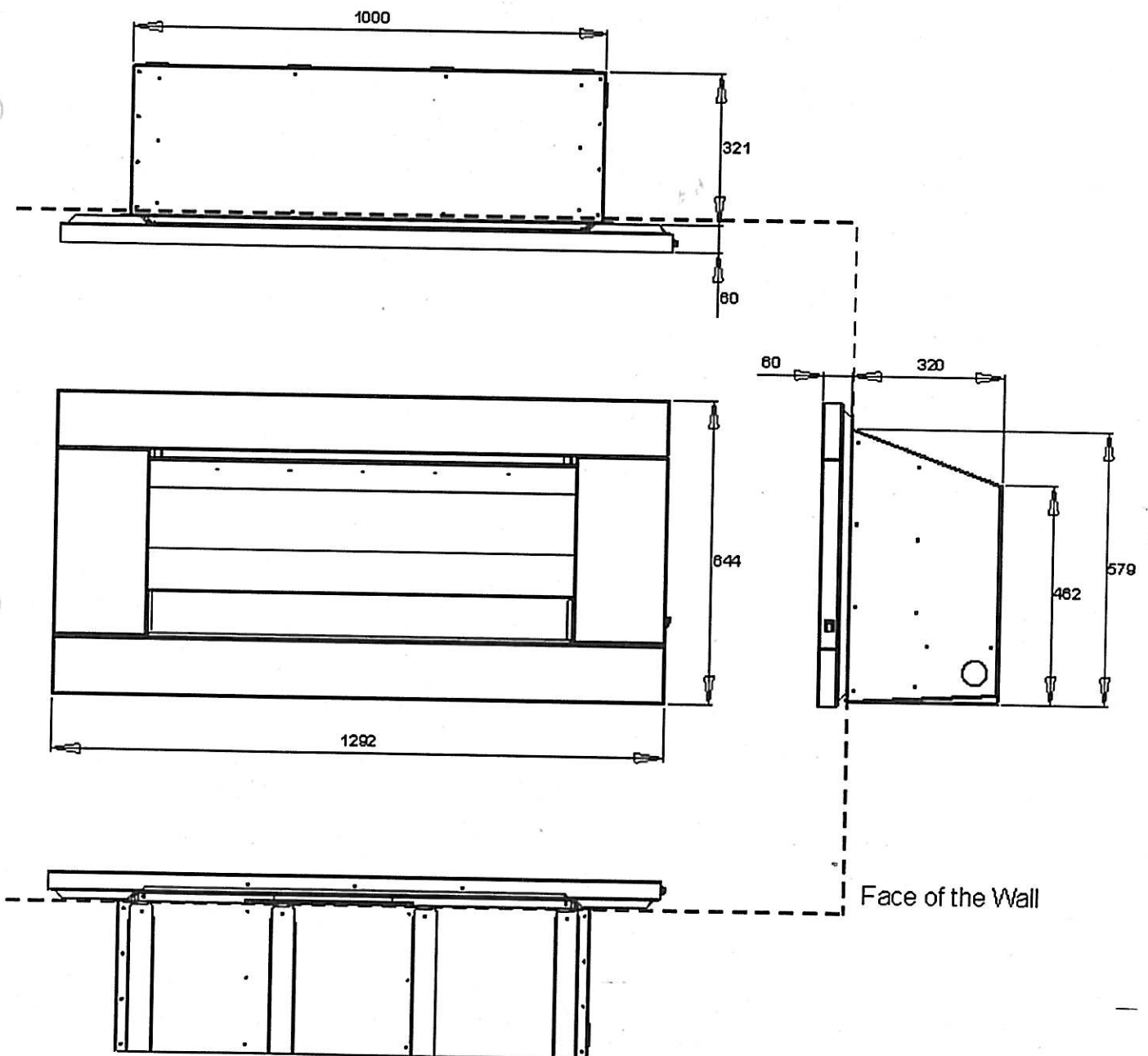
## 1.0 Product Description:

The escea EF5000 flame effect gas fire is designed for outdoor use only. This appliance requires no flue and must be permanently installed into a cavity. It may be installed into a timber cavity.

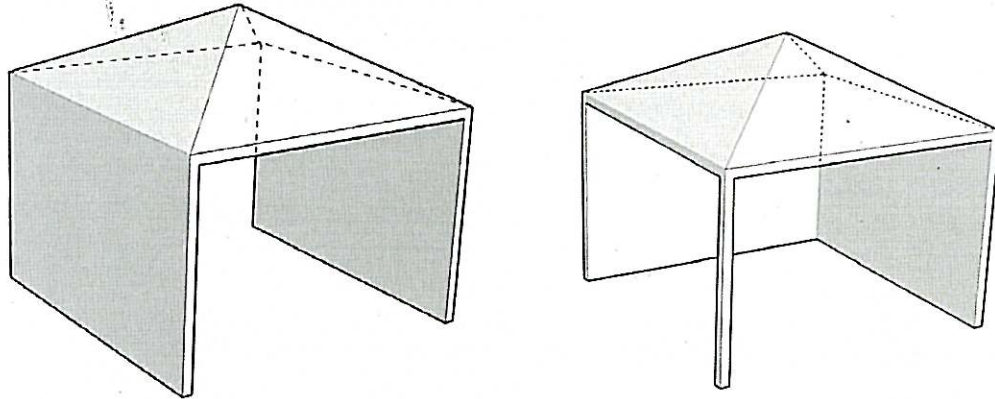
The fire is controlled by the user from a switch that is situated on the lower right hand side of the stainless steel fascia.

The Data Label, containing all technical information such as manufacture date, serial number, gas type, jet size, etc, can be found in the lower right hand side of the fire, below the firebox, to access this, the fascia must be removed.

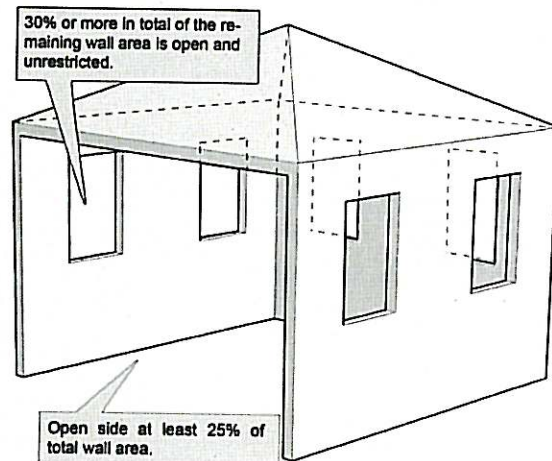
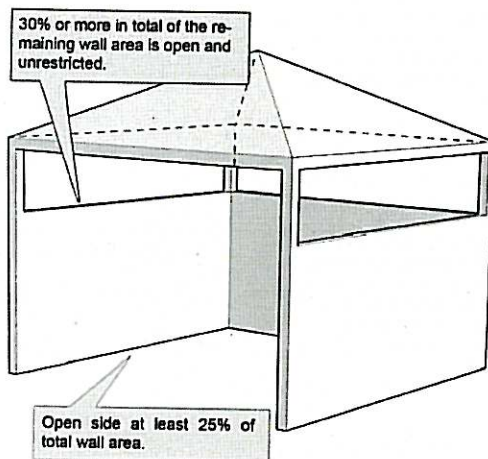
## 1.1 Product dimensions: (mm)



- Within a partial enclosure that includes an overhead cover and no more than two walls.



- Within a partial enclosure that includes an overhead cover and more than two walls, the following should apply:
  - At least 25% of the total wall area is completely open, and
  - At least 30% of the remaining wall area is open and unrestricted

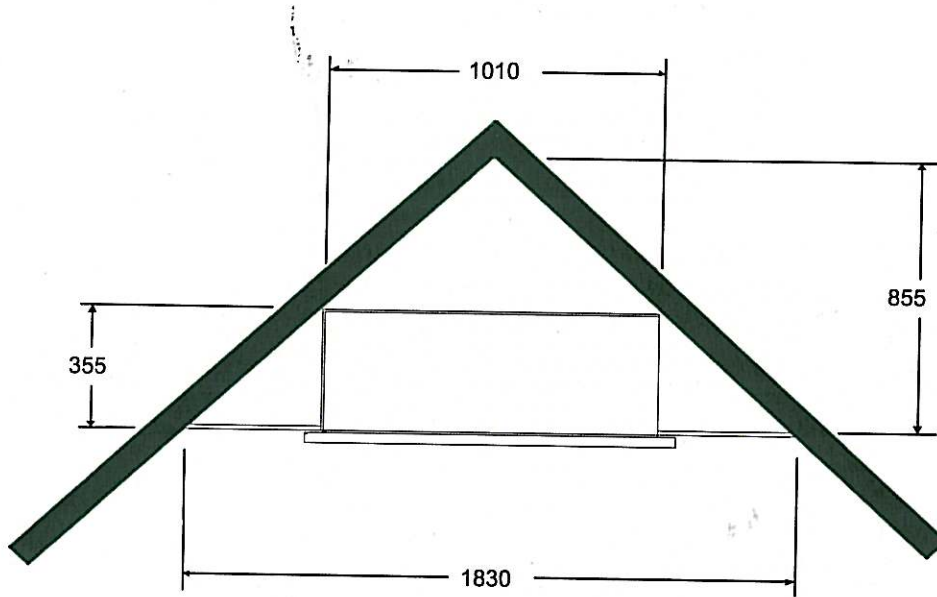


Rectangular areas have been used in the above diagrams; the same principles apply to any other shaped area.

In the case of balconies, at least 20% of the total wall area should be and remain open and unrestricted.

## 7.0 Corner Installations:

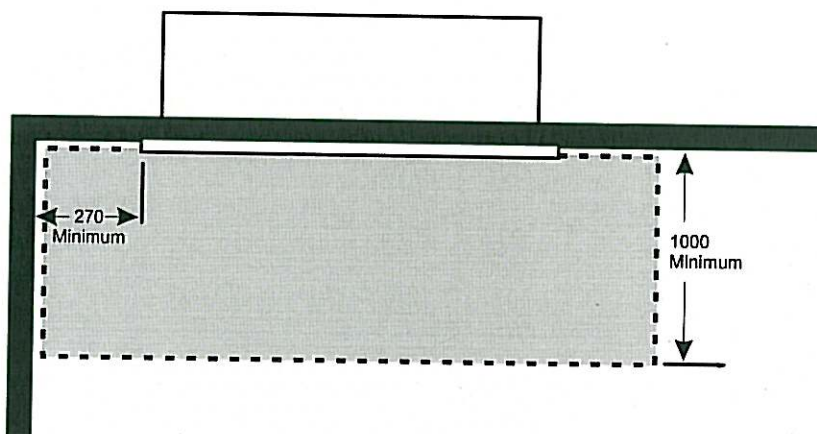
If a cavity is to be created in a corner, the following drawings give the minimum sized interior wall dimensions possible.



### Note:

Allowances need to be made for cladding the internal of the cavity.

Dimensions of the cavity in this diagram represent the internal size only.

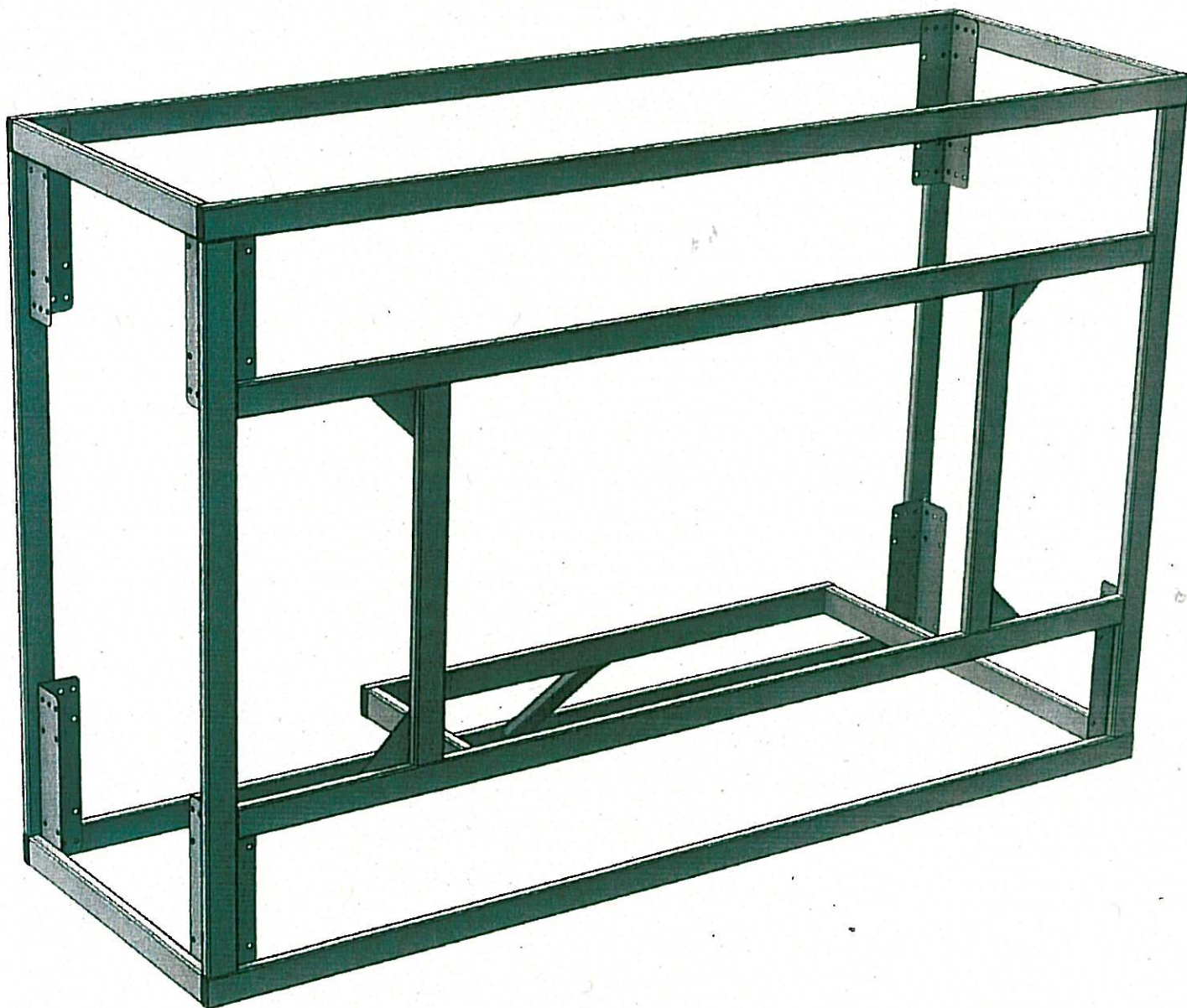


Minimum clearance distance between adjacent wall and fascia needs to be no less than 270mm.

# Outdoor Fire Accessories

Optional Extras For Your EF5000

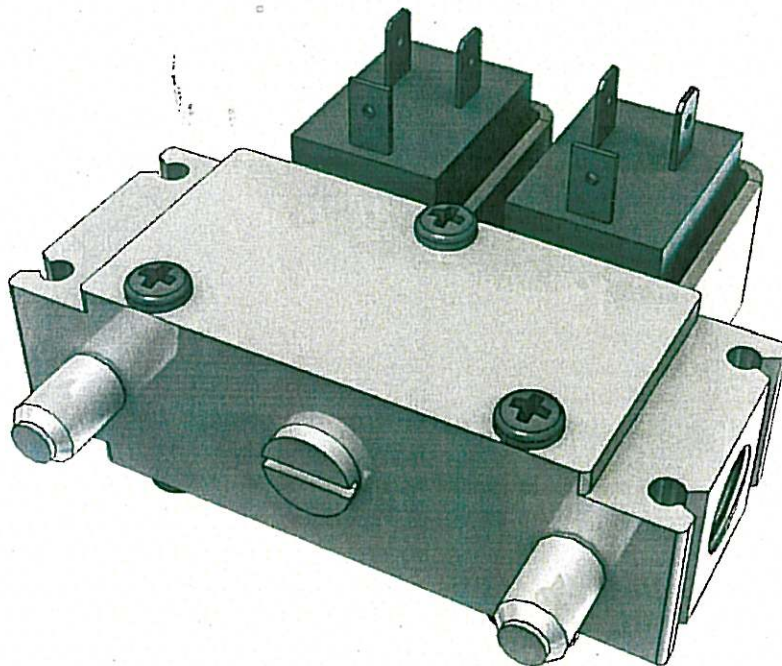
EF5000 Kitset Wall Unit



Outdoor Fire Kitset Wall Unit  
(910300)

## Electronics/Gas Components

Replacement kits for EF5000 fires

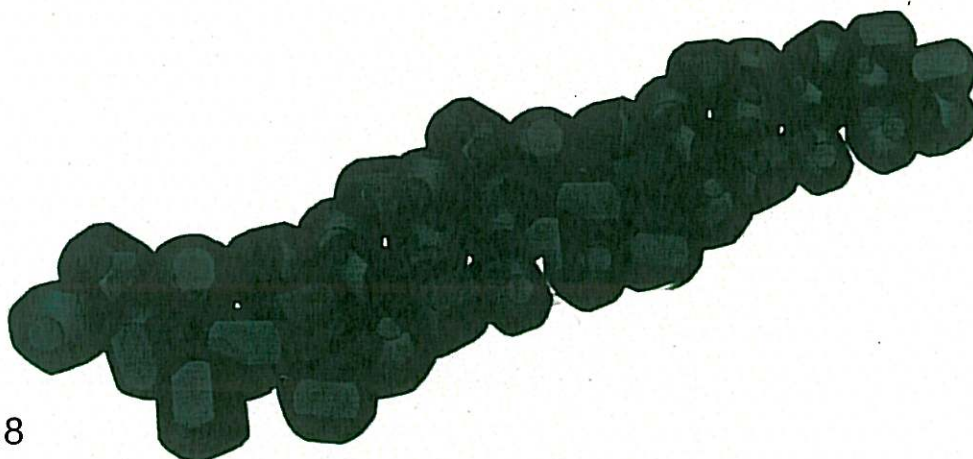


escea. Ltd, 31 Devon Street, PO Box 5277, Dunedin 9058, New Zealand, Ph: +64 3 479 0302, Fx: +64 3 479 0301, [www.escea.net](http://www.escea.net), [info@escea.net](mailto:info@escea.net)

## Miscellaneous

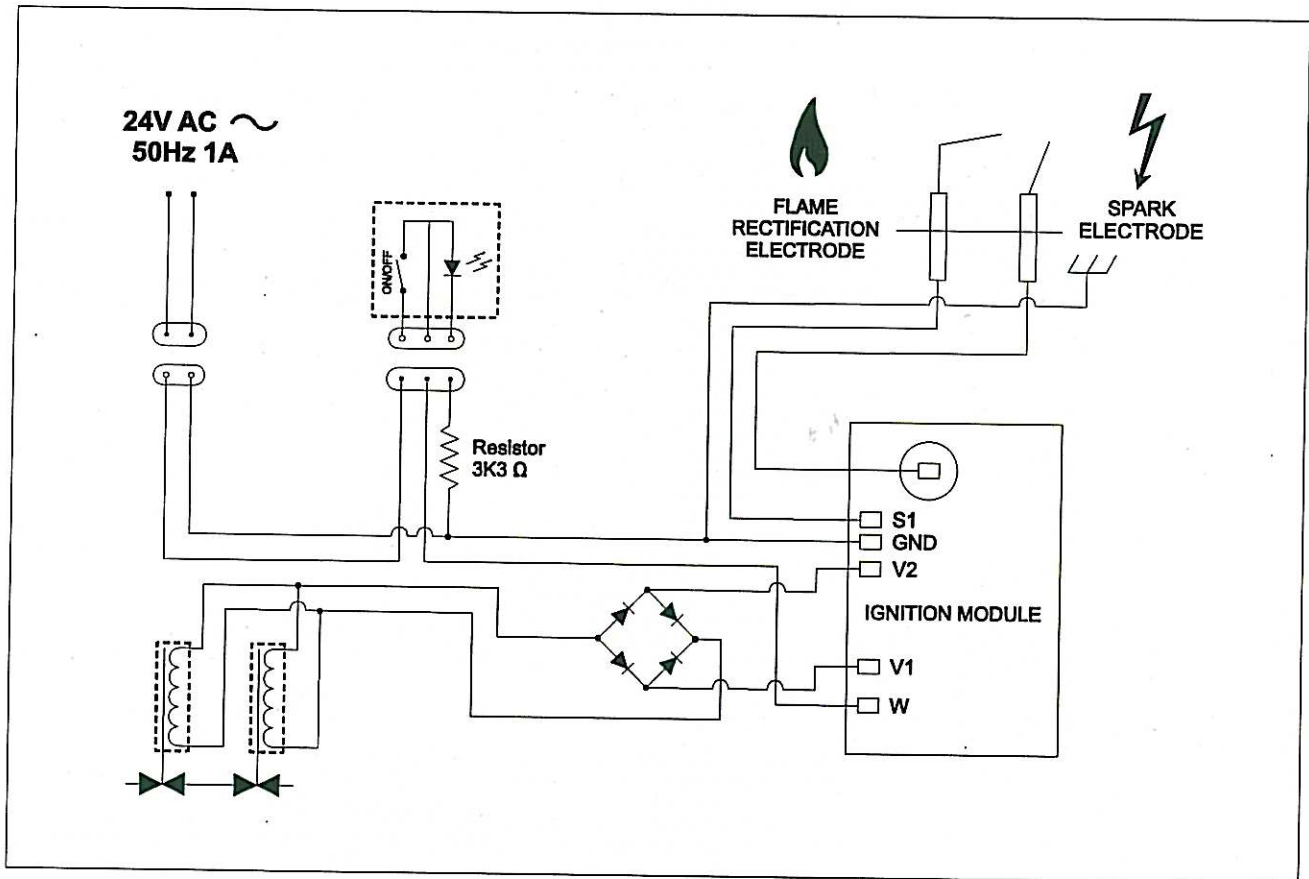
Replacement kits for EF5000 fires

- 800100 - Large WHITE Ceramic Stones 2.64kg
- 800102 - Large BLACK Ceramic Stones 2.64kg



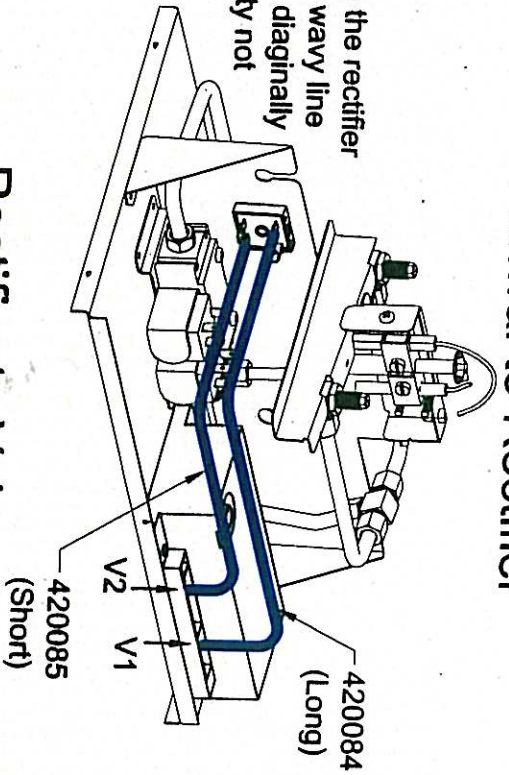
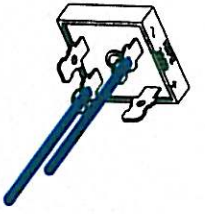


## 19.0 Electrical Schematic

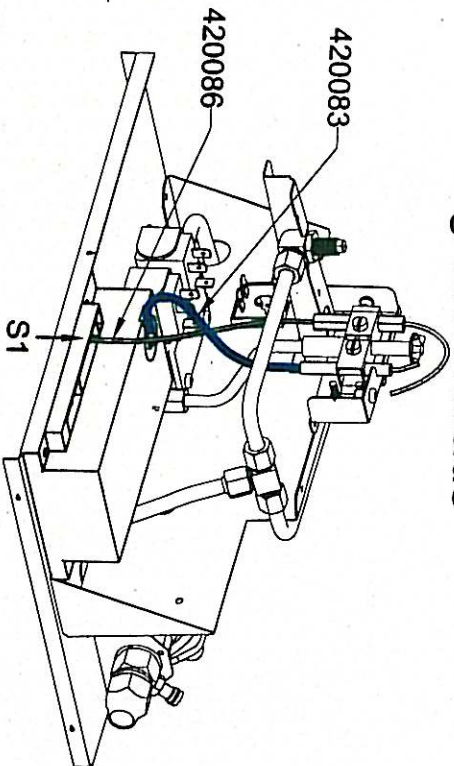


### Fenwal to Rectifier

Use terminal on the rectifier labelled with the wavy line and the terminal diagonally opposite. (Polarity not important)

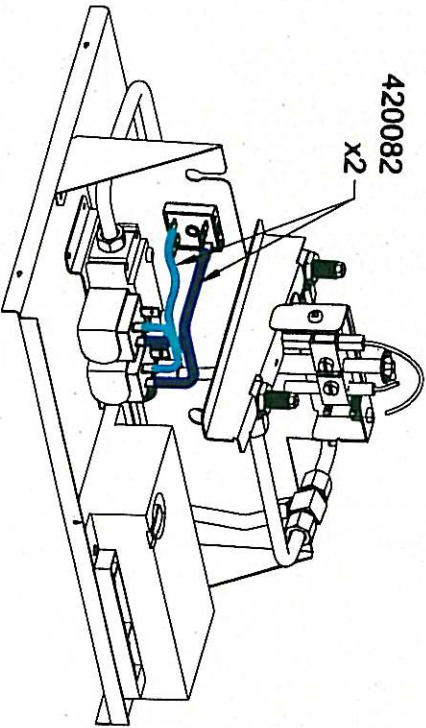
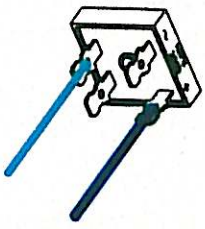


### Ignition Leads

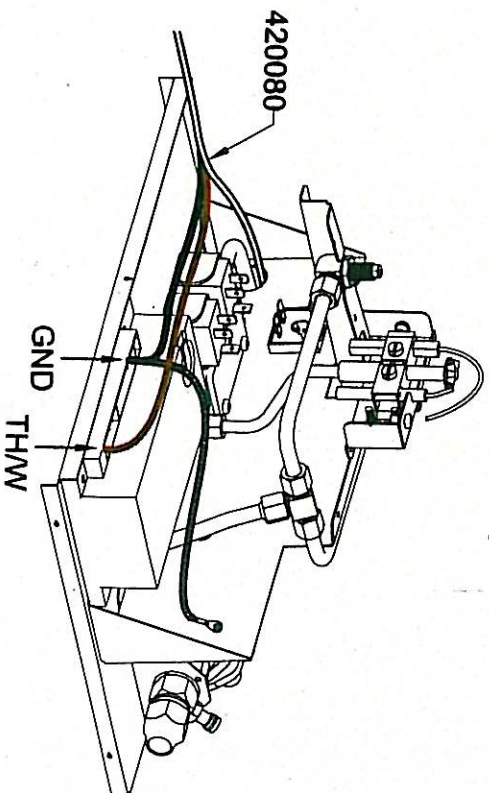


### Rectifier to Valve

Use terminal on the rectifier labelled with the positive symbol (plus sign) and the terminal diagonally opposite. (Polarity not important)



### Loom Hook Up



**esceo**  
www.escea.co.nz

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Dunedin  
Ph: +64 3 479 0202  
Fax: +64 3 479 0201

Units: mm  
Date: 9-4-09

Designed by: Dave Olsen  
Drawn by: Dave Olsen  
Title: EF5000 Wiring Hook Up  
Description: Sheet 1 of 1

Checked by: [Blank]  
Tolerances (Unless otherwise stated):  
Linear ±0.05  
Radial ±0.05  
Angular ±0.1°

Scale: 1:4  
Paper: A4  
Drawing No: AAXXXXX  
Rev Date: 9-4-09  
DO NOT SCALE

No.	Date	Revision

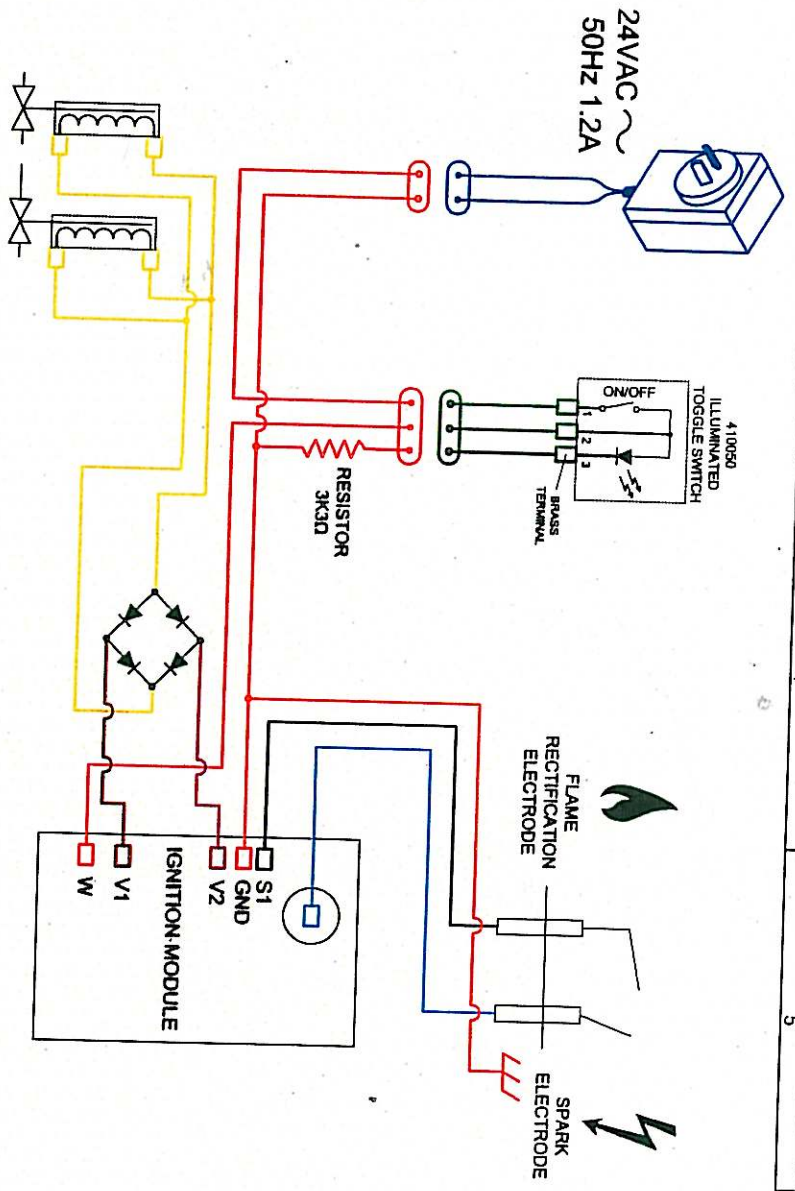
Drawing Rev: 0

Drawing Rev:		0	
No.	Date	Revision	

Date: 5-2-09  
 Drawn by: Dave O  
 Checked by: Dave O  
 Title: EF5000 AUS wiring layout  
 Description: 1 of 1

Units: mm  
 31 Devon St  
 Dunedin  
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 Fax: +64 3 479 0301  
**esceda.**  
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- 420079 Plug Pack 24VAC 1A
- 420080 Fenwal Wiring Harness
- 420081 Wiring to Button
- 420082 Rectifier to Valve Connection (2x)
- 420083 Spark Lead
- 420084 Fenwal - Rectifier Wire (Long)
- 420085 Fenwal - Rectifier Wire (Short)
- 420086 Flame Sense Lead



**Tolerances**  
 Linear ±0.05  
 Radial ±0.05  
 Angular ±0.1°

**Scale**  
 3.2  
 Scale: 1:1  
 Paper: A4  
 Drawing No.:

Rev Date: 5-2-09  
 DO NOT SCALE

## Charles Buttigieg

---

**From:** Dave Olsen [dave@escea.co.nz]  
**Sent:** Wednesday, 13 May 2009 12:39 PM  
**To:** Charles Buttigieg  
**Subject:** RE: EF5000 AUS Electrical drawings.

Possible field fix...

Try swapping the green and white wires on the switch in the fascia.

Dave

---

**From:** Dave Olsen  
**Sent:** Wednesday, 13 May 2009 2:20 p.m.  
**To:** 'Charles Buttigieg'  
**Subject:** EF5000 AUS Electrical drawings.

Hi Charles

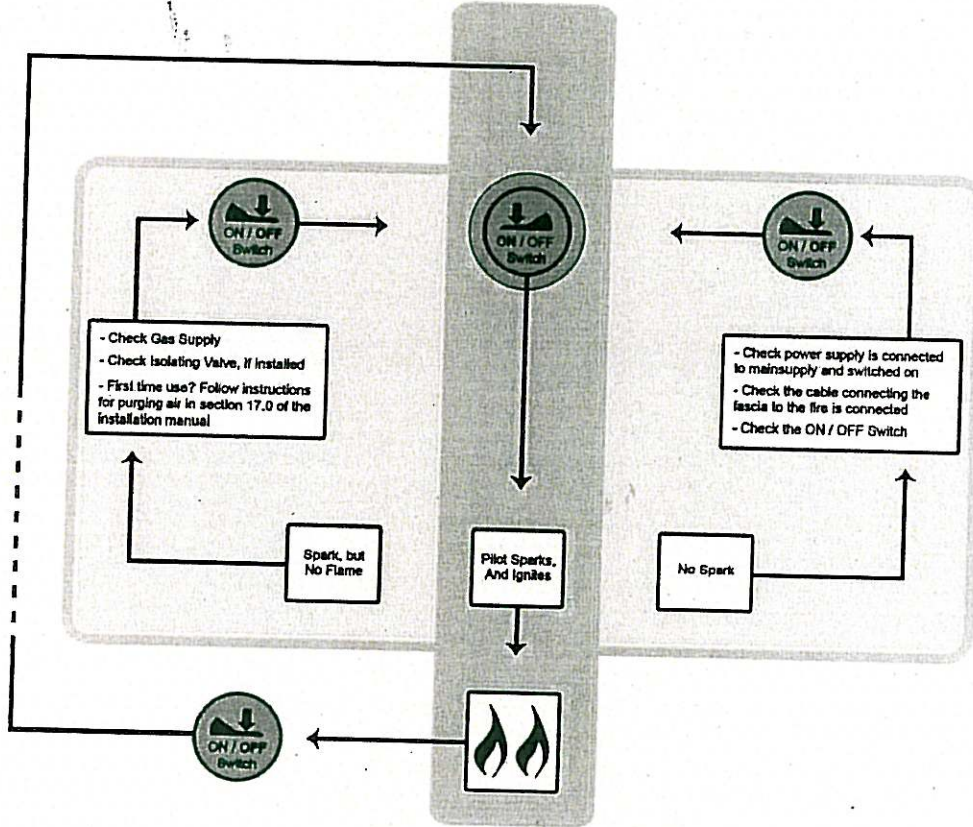
Attached.

Dave Olsen  
Product Design Engineer  
escea. Ltd  
31 Devon St  
Dunedin  
Ph: 03 479 0302  
Fax: 03 479 0301  
Mob: 027 648 8858

[www.escea.co.nz](http://www.escea.co.nz)

**escea.**

# 19.1 Operation Chart



	<b>Propane</b>	<b>Natural Gas</b>
Min. Inlet Pressure	2.50 kPa	1.00 kPa
Max Inlet Pressure	5.00 kPa	5.00 kPa
Manifold Pressure	2.00 kPa	1.00 kPa
Front Burner Jet Size	1.4	3.2
Rear Burner Jet size	1.4	3.2
Front Burner Aeration Hole	11mm x 2 off per burner	5mm x 1 off per burner
Rear Burner Aeration Hole	11mm x 2 off per burner	5mm x 1 off per burner
Mj/hour	40	52

For any inquiries, please contact your local Escea distributor or dealer [www.escea.net](http://www.escea.net)

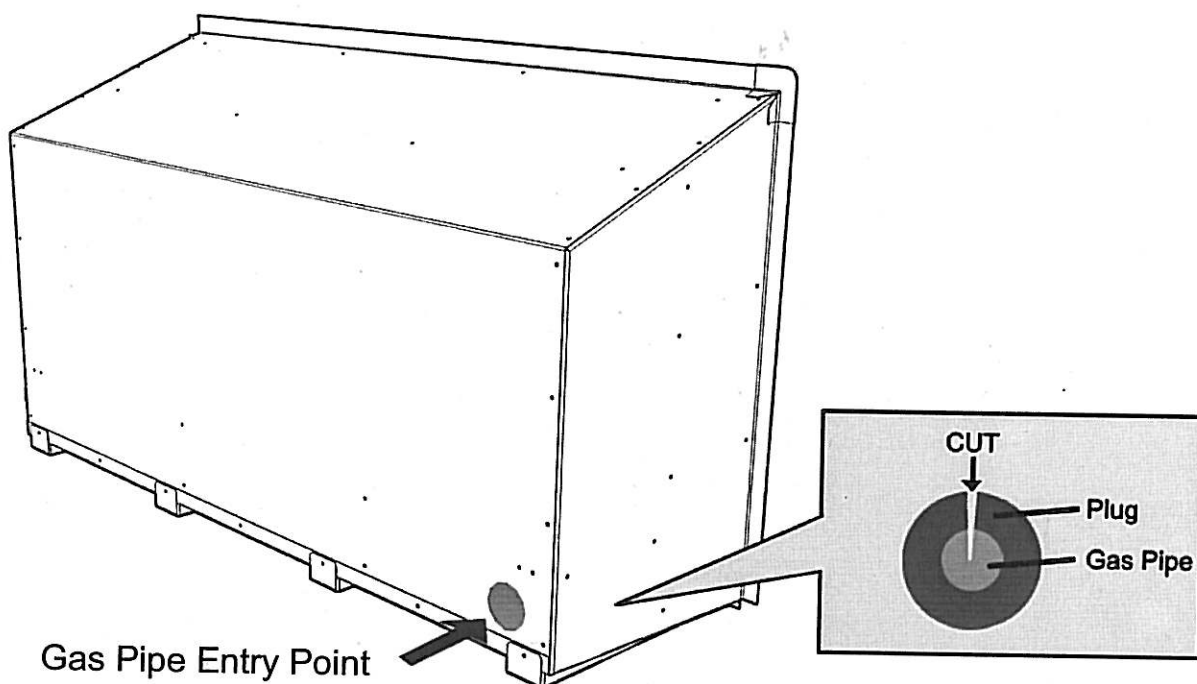
## 8.0 Laying Gas Pipe:

Gas pipe should be sized as per the requirements of AS5601/AG601-2000. The pipe sizing must be sufficient to deliver the following volume of gas to the heater with all other gas appliances in the home running at the same time;

*EF5000 Natural Gas = 52 Mj/hr*  
*EF5000 Propane = 40 Mj/hr*

It is highly recommended to install an easily accessible isolating shut off valve (ball valve) along the gas line to the EF500 unit which should be easily accessible to the user.

- 8.1 This fire has been supplied with a ½" pipe connected through a short 45° flare nut inlet connection to make the gas supply easy and safe. Solid pipe should be run to the inside lower left hand side of the fire. Insert the supplied rubber plug and cut it as shown below to allow the gas pipe and the electrical cable to pass through, keeping the plug as air-tight as possible.



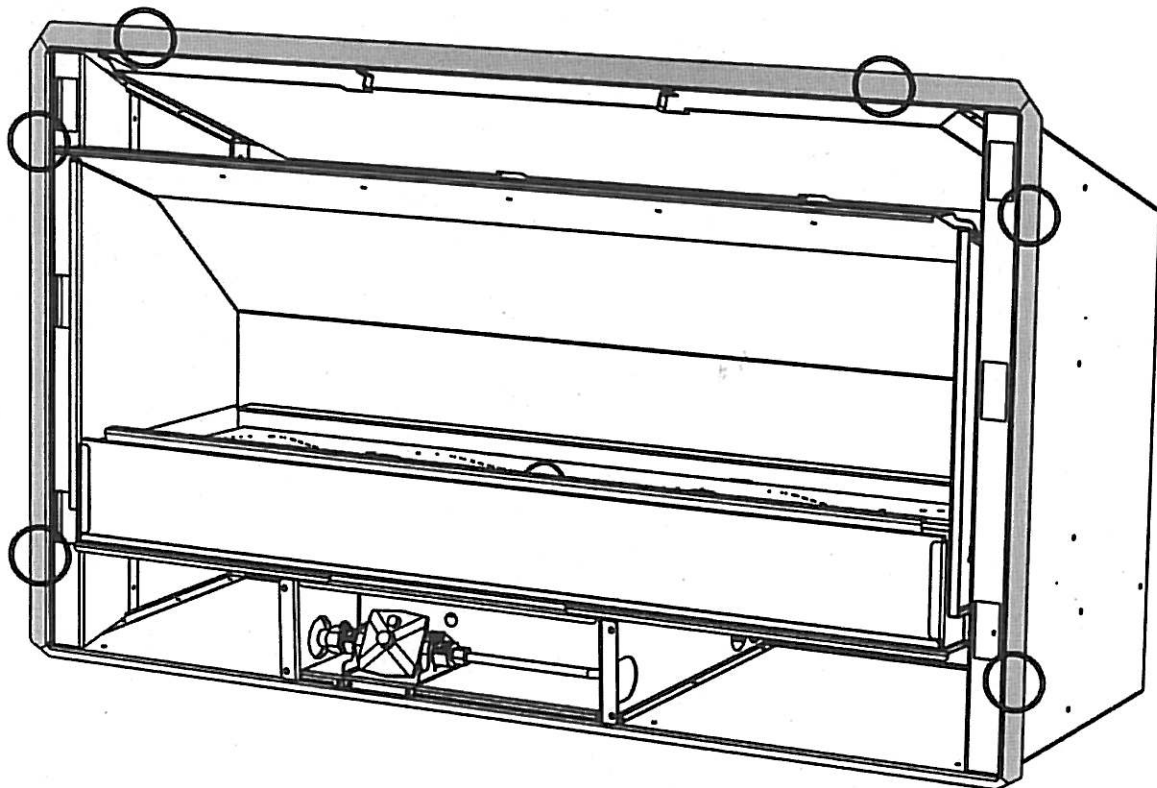
- 8.2 Any flexible pipe should be attached to the copper supply pipe and joint tested to ensure gas tightness, an isolating valve is recommended for this purpose.
- 8.3 Before each use of the appliance the hose assembly connecting the appliance to the gas supply must be inspected. If there is evidence of excessive abrasion or wear, or if the hose is damaged, then the hose assembly must be replaced before the appliance is operated.
- 8.4 The gas hose should be properly located away from pathways or areas where the hose may be subject to accidental damage.

## 9.0 Fixing the fire into the cavity:

To fix the fire to the cavity, first drill 4 to 6 (5mm diameter) holes in the *outer flange* (as shaded grey in the picture below) in locations which will give you the most support from the cavity framework behind and evenly spaced around the flange. Using the supplied Stainless Steel screws, fasten the fire to the cavity through these drilled holes.

Ensure that the fire is securely located and free from movement.

Suggested location for screws of mounting:



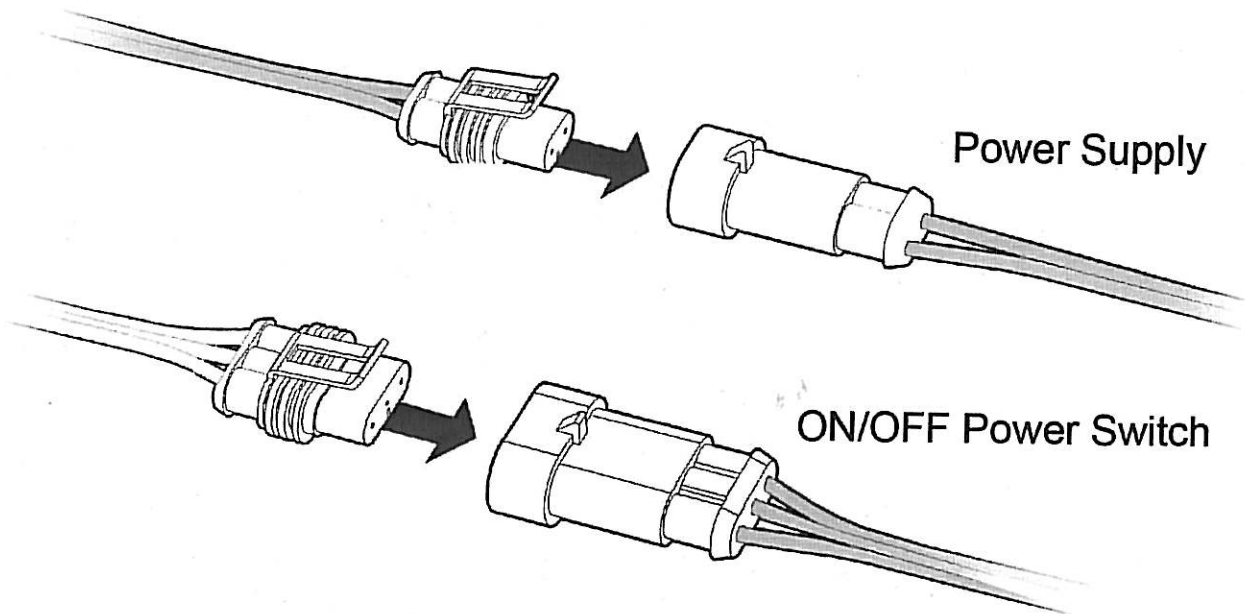
## 10.0 Connecting the Gas Pipe:

When the fire unit has been pushed into position and secured the flexible hose can be connected to the inlet side of the appliance regulator at the front center of the fire. The hose and pipe assembly should have been tested prior to this as per section 8.2

- 10.1 No matter which connection the installer chooses, the regulator that is supplied in the fire **MUST NOT BE REMOVED**. Removal of the regulator, or replacing it with one not intended for use with an Escea EF5000, will void the limited appliance warranty.
- 10.2 The EF5000 must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½ psi (3.5 kPa).

## 11.0 Connecting the power supply and power switch:

- 11.1 The Power Supply socket is located in the centerline of the fire, below the firebox, facing the right hand side behind the ignition tray. Push the 2 pin plug together until they 'click'.
- 11.2 The ON/OFF Power Switch socket plugs into the 3 pin plug lead situated at the front RH side of the fire. Push them together until they 'click'.



## 12.0 Testing of the power switch and spark ignition:

*IMPORTANT: Before the operating pressure can be checked and the fascia fitted,  
The power switch and spark ignition must be tested.*

- 12.1 This can be done with the gas supply either turned on or off.  
With the power supply and power switch connected, Lean the fascia Right end up beside the fire and run through the steps for igniting the pilot (refer to section 17.0 for instructions).



### 13.0 Checking Operating Pressure:

This is done at the regulator located at the lower front of the appliance.

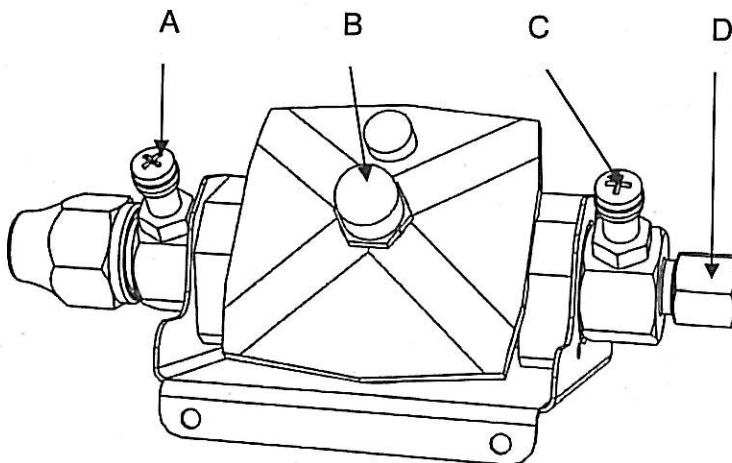
- 13.1 This must be done before fascia has been fitted.
- 13.2 Pressure test points are available for both inlet and operating test pressure (as shown below).
- 13.3 Remove inlet pressure test point screw and attach manometer tube.
- 13.4 Run the fire (refer to operating instructions in section 17.0) and measure inlet pressure. If pressure does not reach at least the minimum level that is listed on the table below, reassess installation pipe size or upstream regulator settings.
- 13.5 If Inlet pressure setting is above or equal to the level listed in the table below, replace inlet test point screw and remove operating pressure test point screw. Connect manometer tube and measure pressure with fire running.
- 13.6 The operating pressure has been factory set. Please check that the operating pressure is exactly as listed below and if not, adjust screw in centre of regulator until pressure is correct.
- 13.7 Replace operating test point screw and leak test both test points.
- 13.8 Test for overall soundness using soapy water, or other appropriate method.

A = Operating Pressure test point

B = Pressure adjustment screw

C = Inlet pressure test point

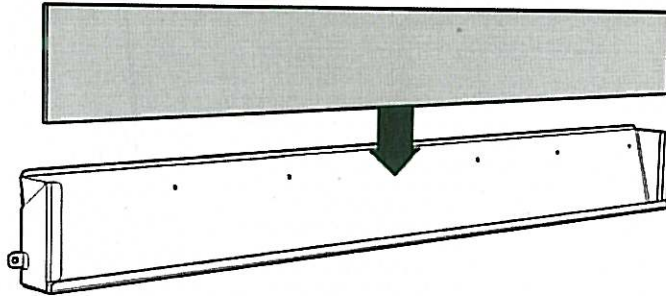
D = Inlet gas connection.



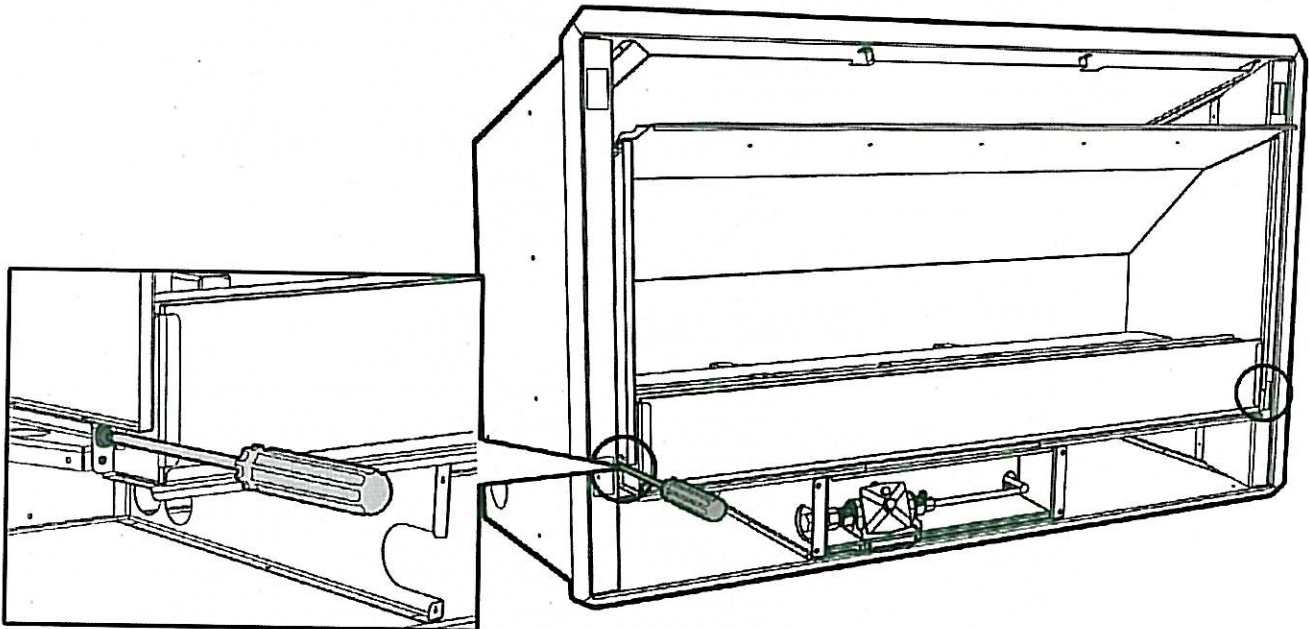
EF5000 Pressure table		
	LPG	Natural Gas
Minimum Inlet pressure	2.5 kPa	1.0 kPa
Maximum Inlet pressure	5.0 kPa	5.0 kPa
Operating Pressure	2.0 kPa	1.0 kPa

## 14.0 Assembly of stone cartridge:

The glass which fits inside in the stone Cartridge has been packaged to protect it during transit, and can be found inside the firebox. Insert the glass strip into the stone cartridge as shown to the right, between the two metal flanges and push it all the way to the bottom. A bag of pebbles (River Stones) are also supplied, use these to fill the stone cartridge.



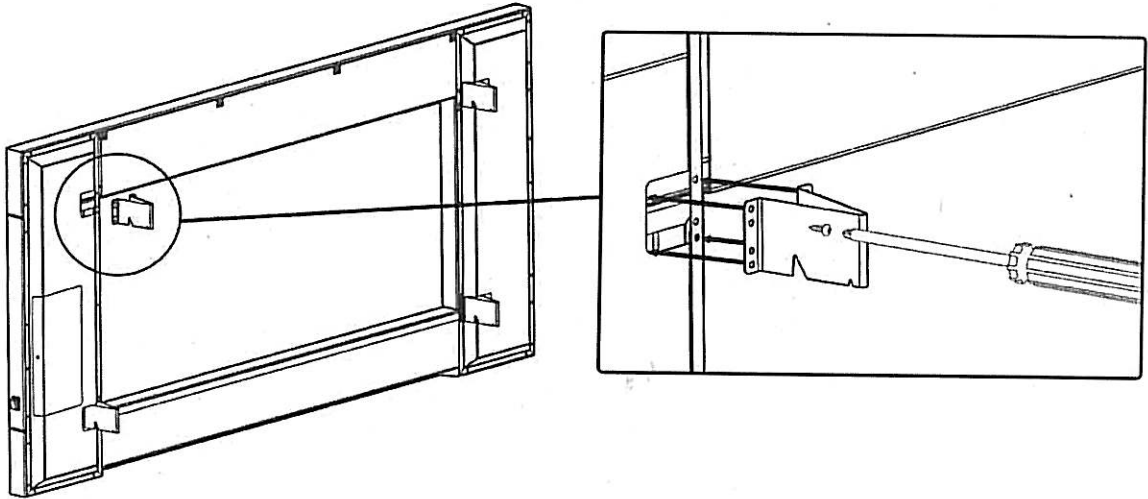
- 14.1 With the glass in position, fix the stone cartridge to the fire by using the two supplied screws in the location shown below. Do this before the fascia is fitted.



## 15.0 Fitting the Fascia:

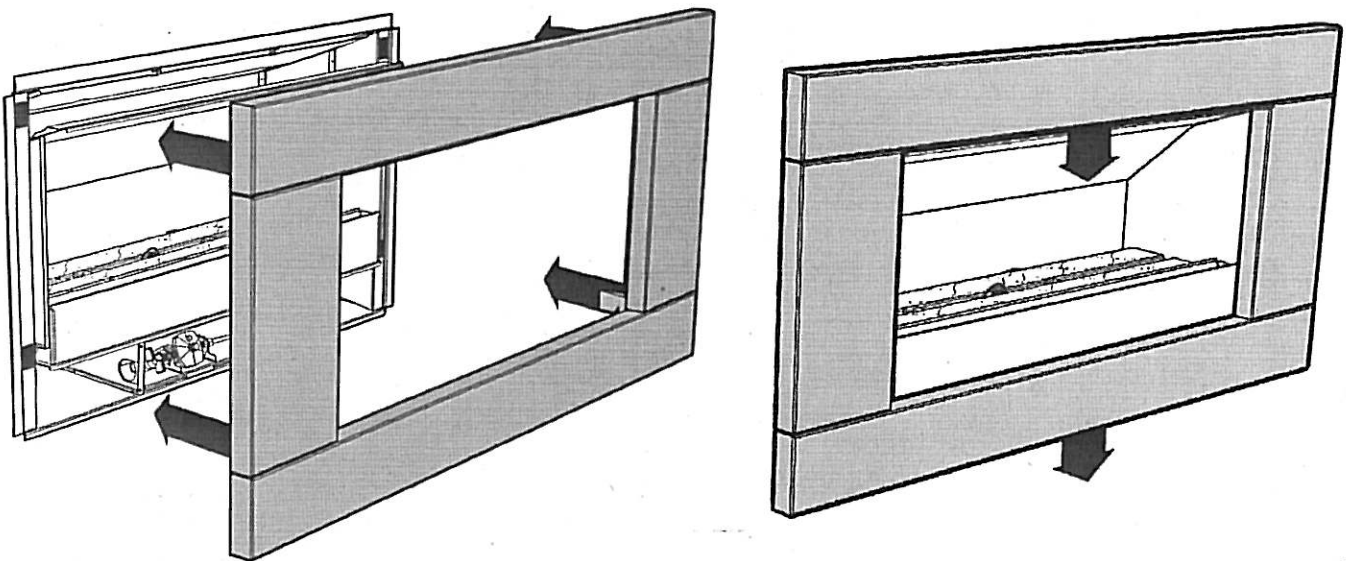
Before fitting the fascia, the hooks must be attached using the screws supplied. Ensure the wires connecting the fascia to the fire are securely connected, as per section 11.0.

The EF5000 fascia is attached to the combustion box by four 'hooks' on the corners of the fascia.



Line up the hooks with the receptacles on the Outdoor Fire pictured below, and push the fascia into position. The first slot in the hook can be used to hang the fascia in the receptacles in order to ease the attachment.

- 15.1 When you have pushed the fascia in as far as it will go, briefly push down on the fascia to secure the fascia into position.



## 16.0 Placement of ceramic stones:

Scatter the ceramic stones randomly on top of the burners, ensuring you have only one layer. Do not heap or mound the stones. Ensure the whole bag of coals and stones are used, attempt to get an even spread across the top of the burners.

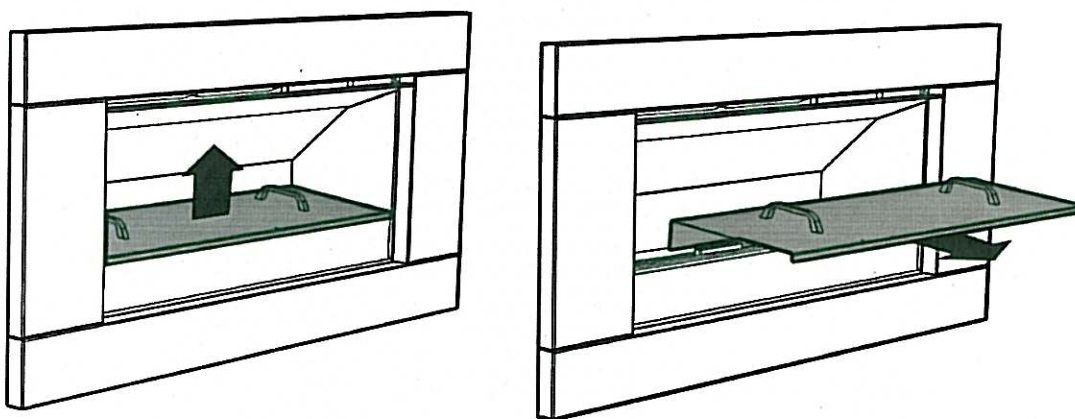


Ceramic stones

River stones

**UNDER NO CIRCUMSTANCES SHOULD THE SUPPLIED SMALL STONE PEBBLES (RIVER STONES) BE PLACED ON THE BURNERS. THEY ARE FOR USE INSIDE THE STONE CARTRIDGE ONLY**

- 16.1 The Weather Cover supplied protects the stones and burners. This must be replaced when while the fire is not in use.
- 16.2 To fit the weather cover ensure fire is off and cooled, and place the front edge on the glass at the front of the fire, the rear flange of the Weather Cover will rest on the burner supports behind the rear burner. To remove, lift the Weather Cover upwards and then towards yourself.

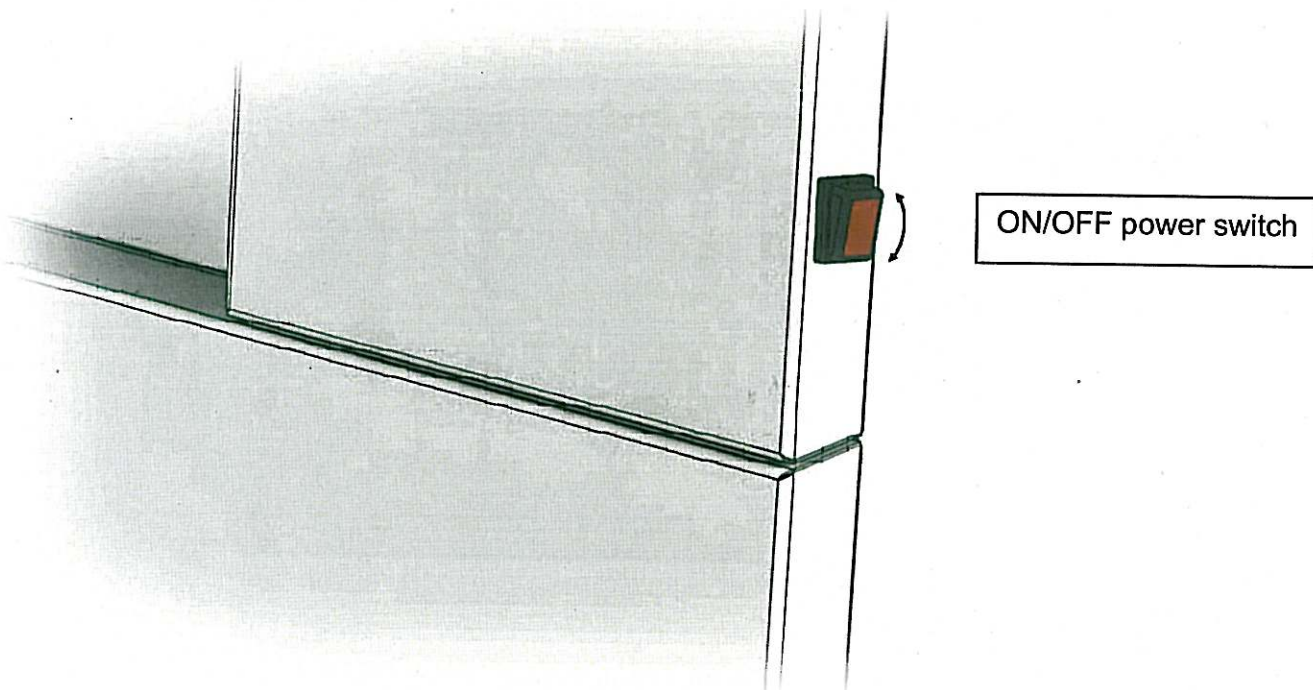


- 16.3 The fire **MUST NOT** be operated while the cover is fitted.
- 16.4 The cover **MUST NOT** be fitted while the fire is hot. A cooling period of 30 minutes must be observed before fitting.
- 16.5 Objects such as wood, coal, fire logs or any other solid fuels shall not be burned in the gas fireplace.  
Under no circumstances should any part of your body enter the gas fireplace during the start-up or whilst the fire is running.

## 17.0 Operating Instructions:

The EF5000 is operated by the switch located on the right hand side outer edge of the fascia. The basic operations possible are ON/OFF.

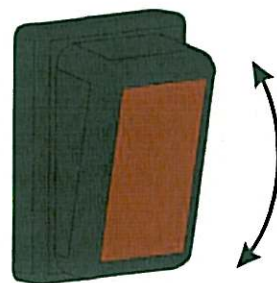
Before operating the fire, ensure the power transformer is plugged into the mains wall socket & turned on, and the supply is turned on.



### 17.1 Igniting the pilot flame

To turn the fire on push the ON/OFF rocker switch to the on position. The ignition unit will start sparking and the pilot and burners will ignite almost immediately.

In the event of no gas, the ignition unit will attempt to try to light up to 3 times before shutting down.

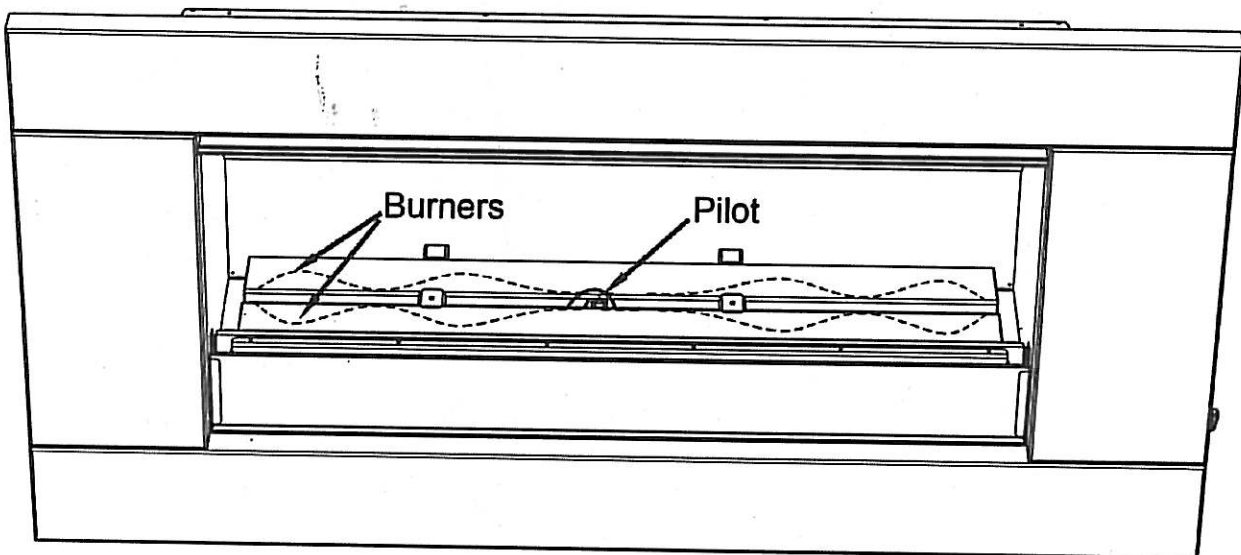


### 17.2 Turning off the fire

To turn the fire off, simply flick the ON/OFF rocker switch to the off position. This will shut down the gas flow to the pilot flame and both burners.

Please ensure the gas supply is also turned off, and as an extra safety please turn off the — main power supply at the house.

### 17.3 Pilot Flame and Burner Positioning



### 18.0 Maintenance and Cleaning

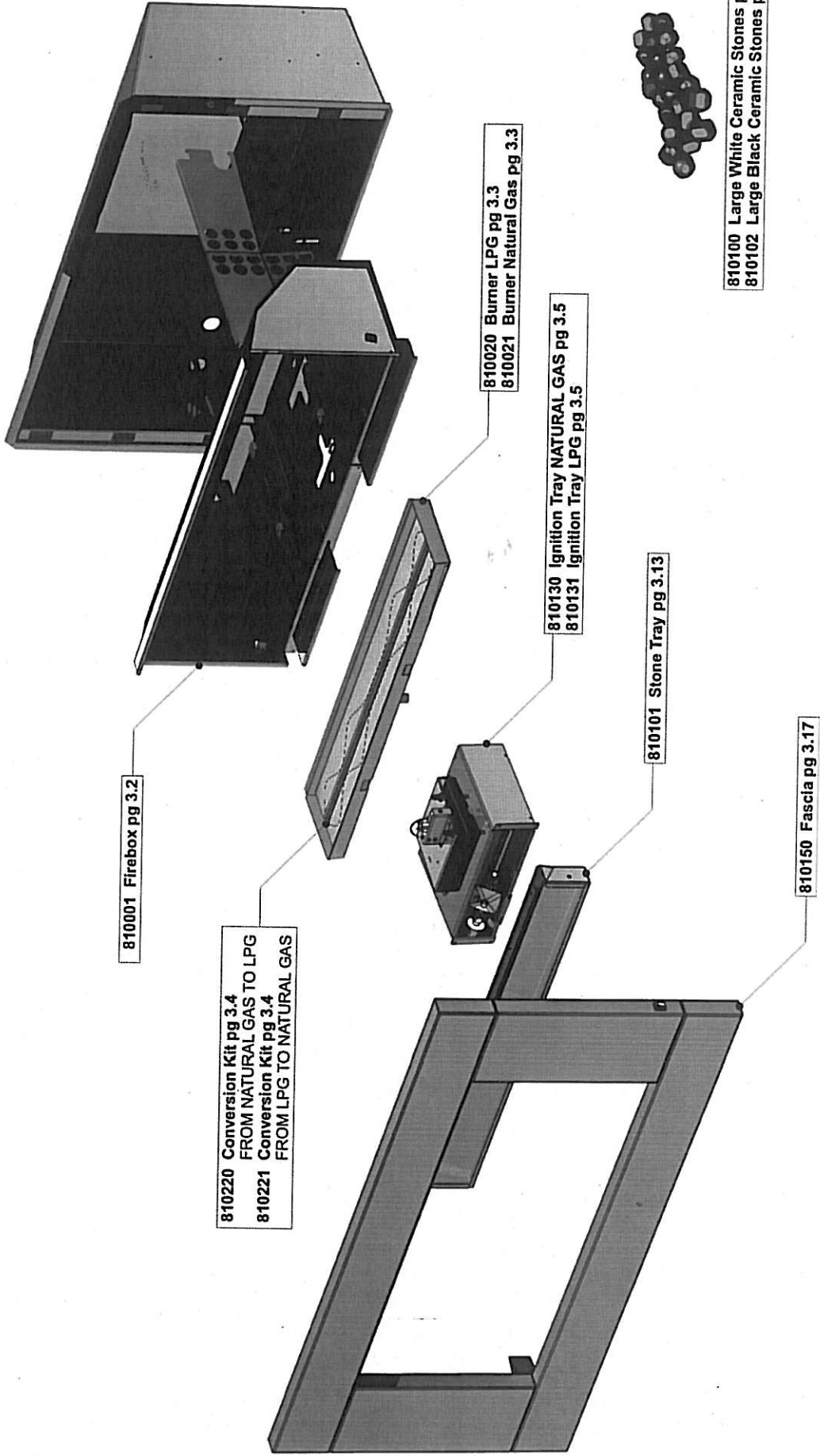
The unit must be cold before starting any form of maintenance or cleaning. To remove the glass and stones in the front stone tray simply reverse the steps in section 15.0. The glass can be cleaned using standard window cleaner and the quartz stones can be washed using soapy water

- 18.1 If the stainless steel fascia or weather cover requires cleaning the following products are recommended; 3M Stainless steel cleaner or methylated spirits.

Periodically the pilot and burners should be checked visually for carbon and soot build-up, consistent flame and clean burning.

- 18.2 Cleaning of the burners and ceramic stones can be carried out using a brush and a dry cloth and should be done at least annually. This will remove carbon or soot build-up.

# EF5000 Exploded View



Drawing Rev: <b>1</b>		No.	Date	Revision
		13-2-09		Changed wire colours to match those supplied.
Title		Initials		
Date		Rev		

Units: **MM**

Date: **12-2-09**

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 Fax: +64 3 479 0301  
 www.escea.co.nz

Designed by: **Dave O**

Drawn by: **Dave O**

Checked by:

Title: **EF5000 AU 420081\_3 Cable to Toggle switch Connection**

Description:

Sheet: **1 of 1**

**Tolerances**  
 (Unless otherwise stated)

Linear ±0.05  
 Radial ±0.05  
 Angular ±0.1°

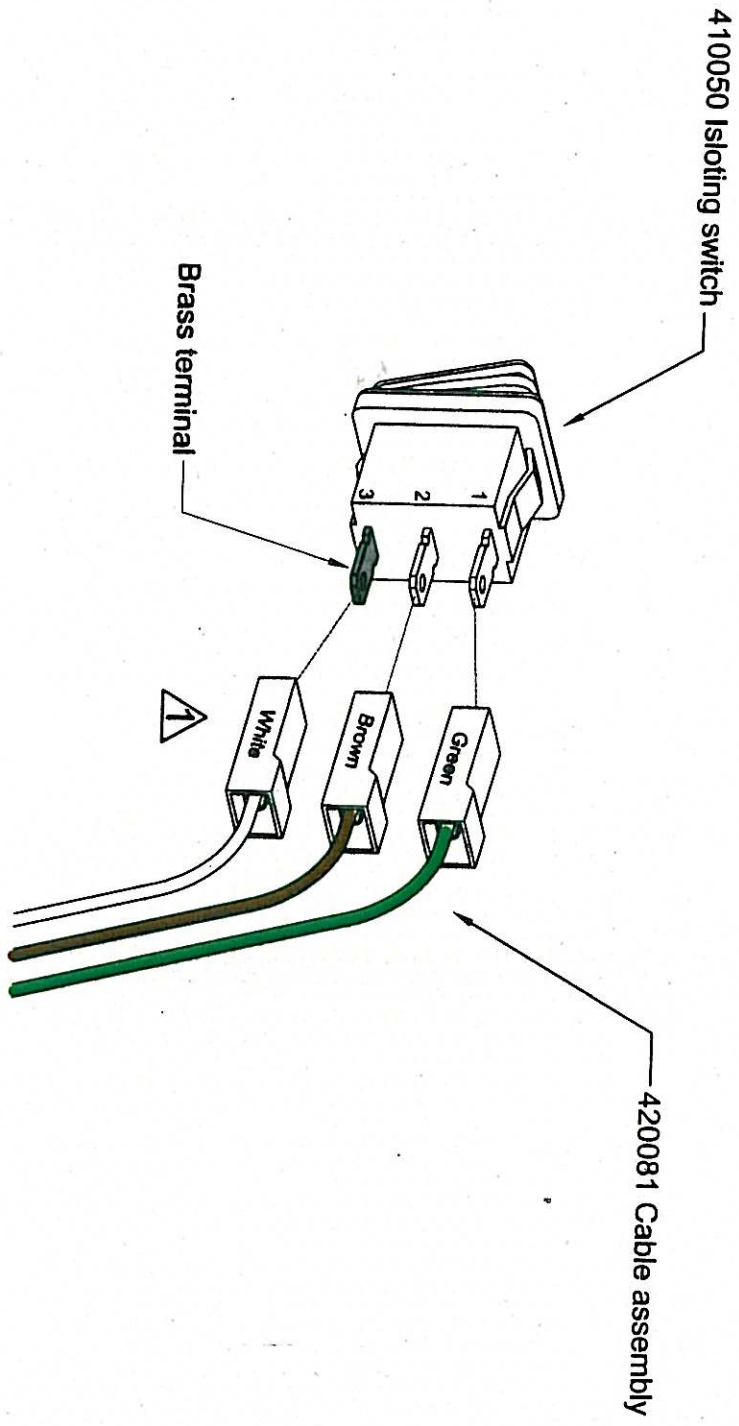
**Ra**  
 (Unless otherwise stated)

3.2

**Scale**  
 1:1

Rev Date: **13-2-09**

**A4**  
 DO NOT SCALE  
 Drawing No.





#### 4.0 Wall cladding around fire:

- 4.1 The temperature of the wall directly above the heater does get hot and hence may discolour paint finishes.
- 4.2 Some dark coloured exhaust stains may also become visible directly above the fire due to exhaust. In most cases this can be cleaned off with water and a brush.

#### 5.0 Minimum install height:

The fire has ventilation gaps behind the fascia at the top and bottom. These must not be blocked, so ensure there is a gap of at least 30mm between the bottom of the fascia and anything below.

#### 6.0 Types of Installation:

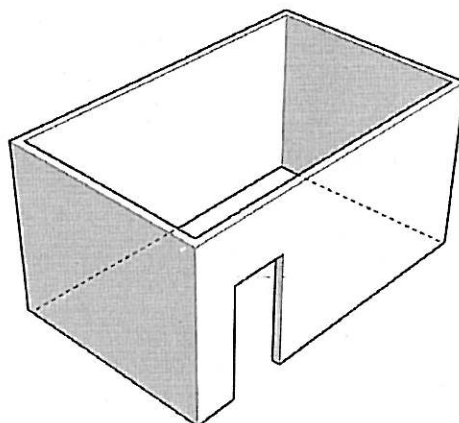
This appliance shall only be used in an above ground open-air situation with natural ventilation, without stagnant areas, where gas leakage and products of combustion are rapidly dispersed by wind and natural convection.

Certain materials or items, when placed under or near the appliance, will be subjected to radiant heat and could become damaged.

The following installation diagrams are escea recommendations only and may or may not comply with your local council standards. Please check with your local council for actual building standards.

Typically an outdoor space is not enclosed but, any enclosure in which the appliance is used should comply with one of the following:

- An enclosure with walls on all sides, but at least one permanent opening at ground level and no overhead cover.



## 2.0 Power Supply:

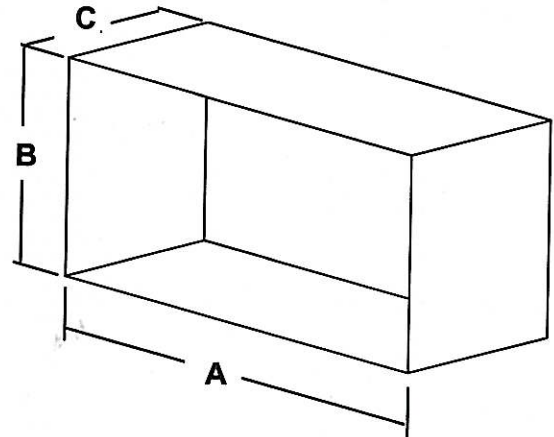
This appliance requires a constant external 24V AC 1A power supply to mains electricity. A transformer is supplied with the fire.

## 3.0 Creating the Cavity:

The dimensioned drawing below shows the size of opening that must be created to install the unit.

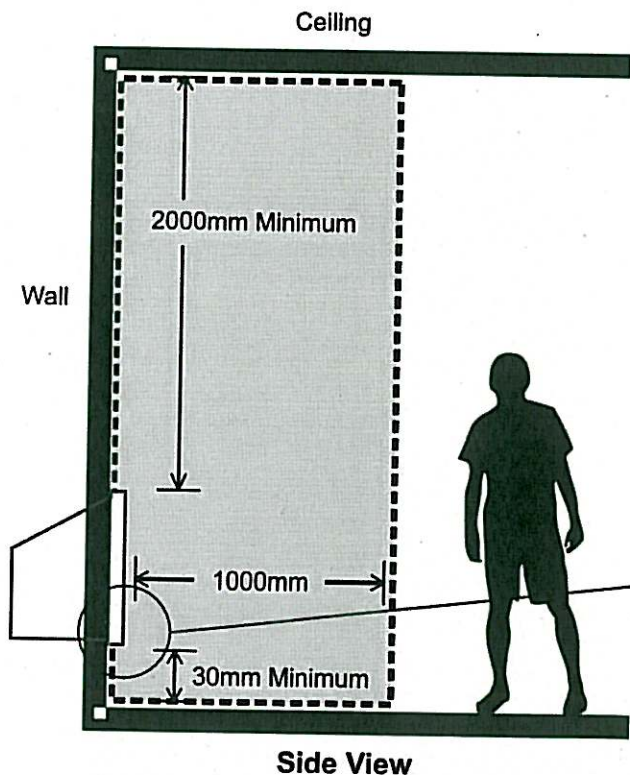
### 3.1 Cavity Dimensions:

Minimum Cavity Dimensions		
A	B	C
1010 mm	585 mm	330 mm



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

### 3.3 Clearances:



Minimum clearance distance between the ceiling and the fascia has to be no less than 2000mm.

Warning: Under no circumstances should any object such as people, pets, furniture, etc. be closer than 1 metre in front of the escea EF5000.

