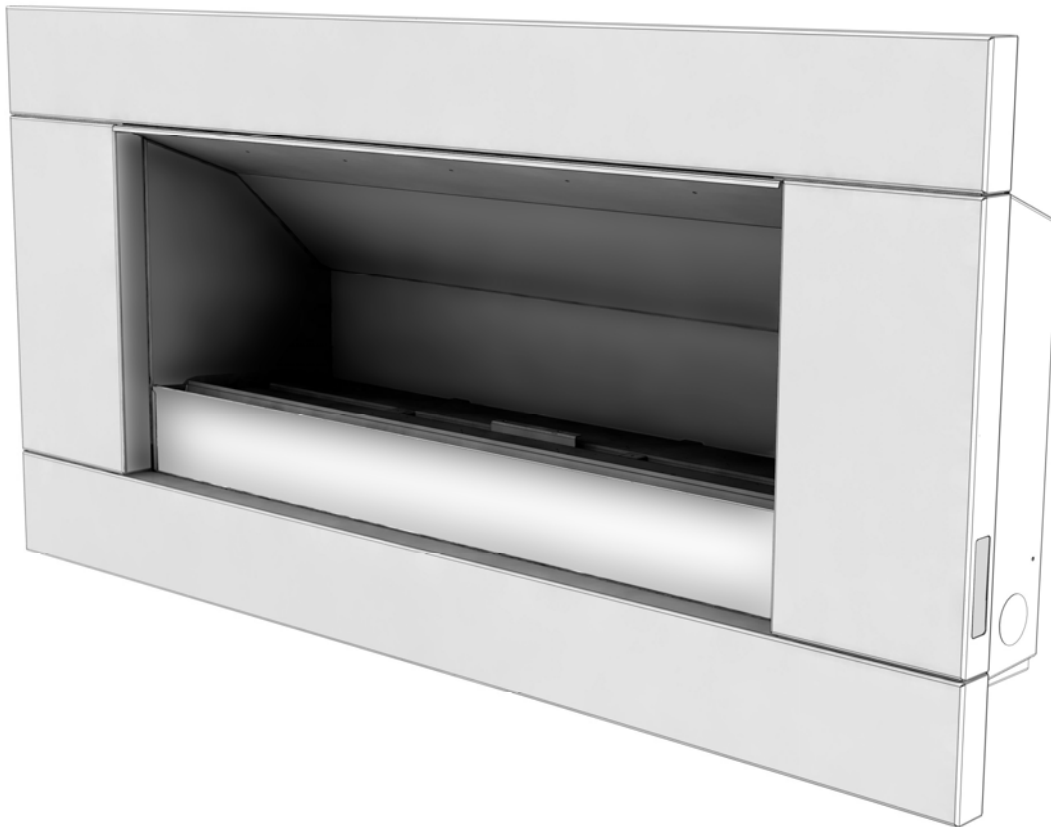

Installation Manual

EF5000 – NZ



Important:

The appliance shall be installed in accordance with;

- Local gas fitting regulations
- Municipal building codes
- NZ5261:2003 *Gas Installation*
- 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 RETAIN THEM FOR FUTURE REFERENCE.

Manufactured by: Escea Ltd, PO Box 5277 Dunedin NZ, Ph: +64 3 478 8220, email: info@escea.co.nz
For contact details of your local Escea distributor or dealer please visit www.escea.co.nz

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.

This Gas Fire is for outdoor use only.

Batteries Not Included

The EF5000 electronic control system is designed to work within the temperature range of 0°C to 60°C, with a humidity level that is non condensing. This is to ensure safe operation of the electronic and gas control system.

If the fireplace is subjected to an environment with temperatures very close to or exceeding these temperature limits (irrespective of if the fireplace is on or off at the time) the fireplace may not start up until the temperature returns back to within the operating range.

To remedy this, the environmental temperature should be addressed and the fireplace control system given time to adjust accordingly. The fireplace should then function correctly.

It would be prudent to consider these operational limits during the installation planning stage. Protecting the installed fireplace from low external ambient temperatures and cold drafts through the use of approved modern building methods and materials will help ensure that the required operating environment is maintained.

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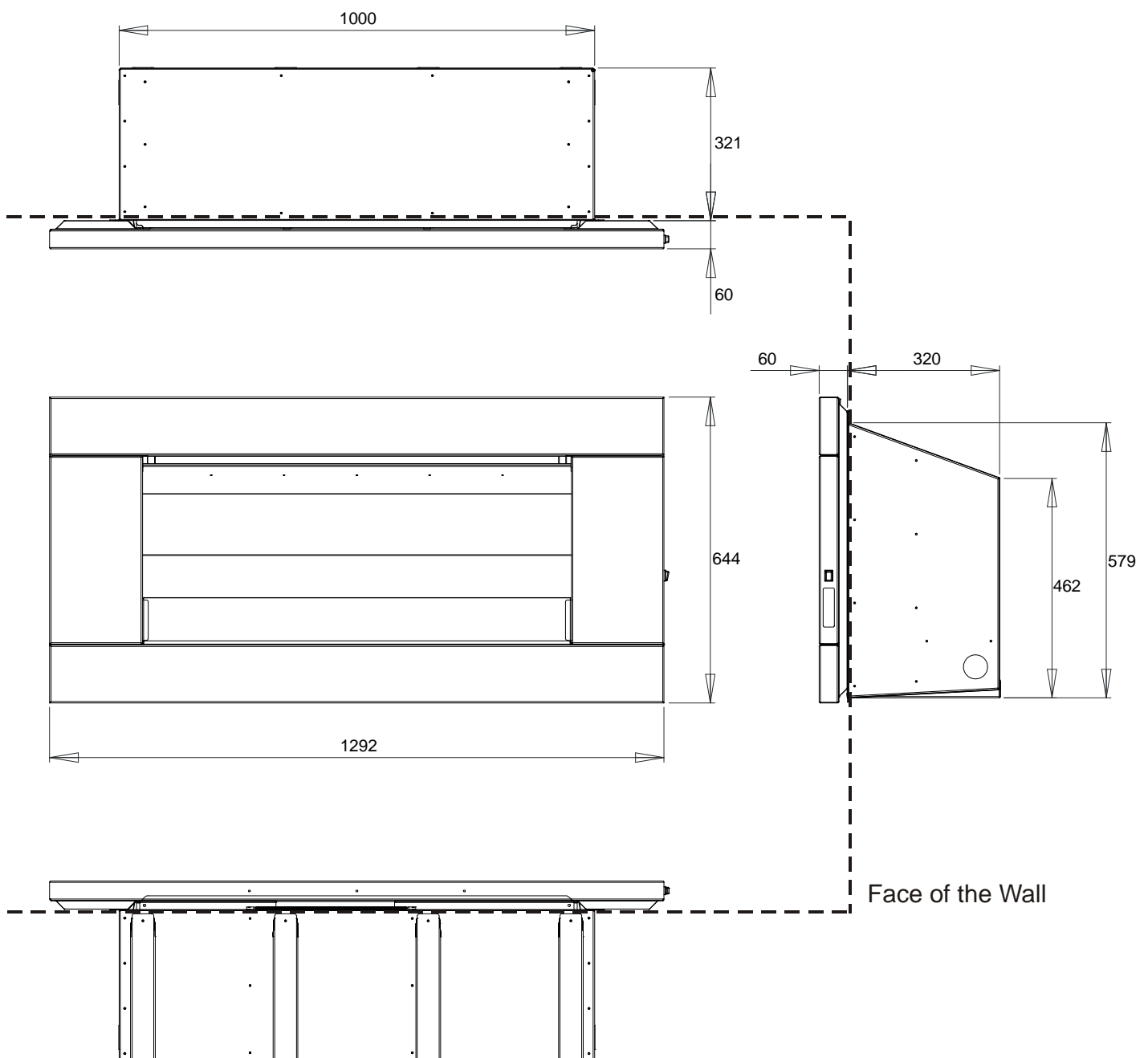
1.0 Product Description:

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 touch panel that is situated on the lower right hand side of the stainless steel fascia, or if the 'wall mount' option is chosen, the remote will be situated on the wall near the fire, connected by a cord.

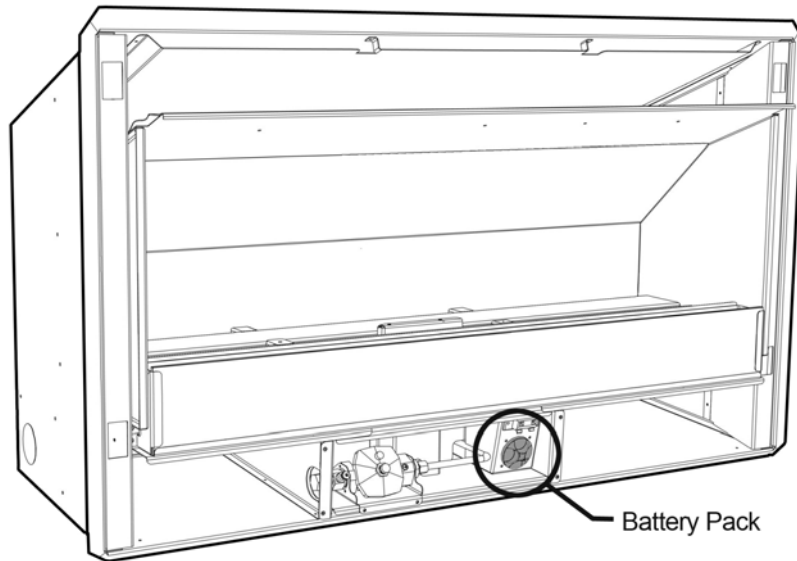
The Data Plate, containing all technical information such as manufacture date, serial number, gas type, jet size, etc, can be found in the lower right hand side of the fire, below the firebox. To access this, the fascia must be removed.

1.1 Product dimensions: (mm)



2.0 Power Supply:

This appliance requires 3 'D' sized cell batteries for operation, which are located in a battery pack inside the control tray behind the fascia, at the base of the fire. Alternatively, you can use the External Power Supply, described in section 2.2 of this manual.

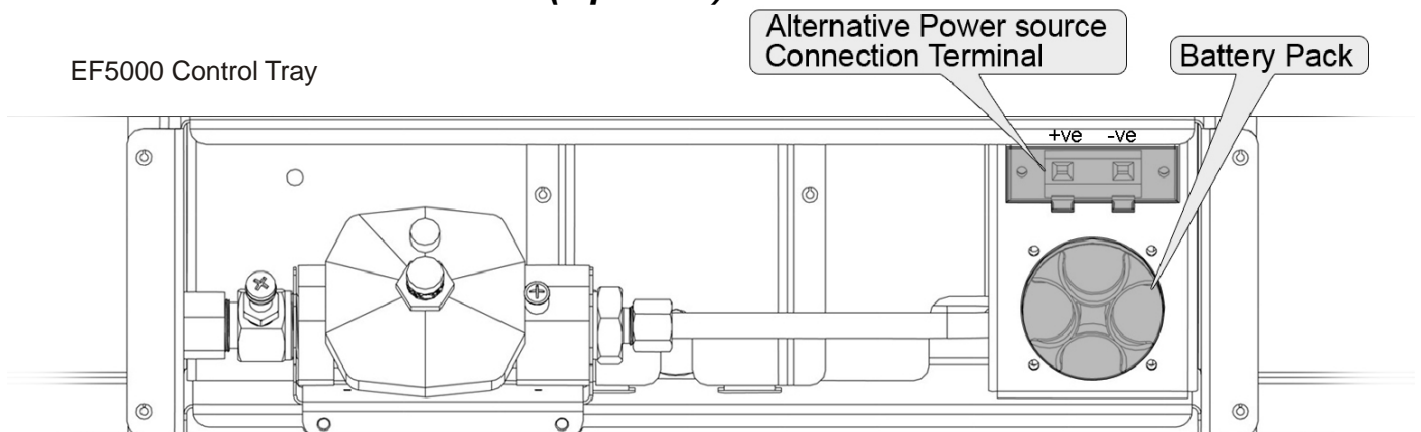


2.1 Replacing Batteries:

To replace the batteries, Remove the fascia to gain access to the battery pack pictured above. To remove the cap of the battery pack turn it anti-clockwise until it stops, then pull. The batteries inside should slide out. Ensure you replace the batteries in the correct way, dimple facing out.

Once the new batteries have been placed inside, replace the cap and turn it clockwise until it stops, to seal it.

2.2 Alternate Power Source: (Optional)



If you wish to connect your outdoor fire to mains electricity instead of using 3x D sized batteries, you may do so using the Alternative Power Source Connection Terminal, located on the control tray above the battery pack, as shown above.

You will need to purchase a transformer capable of 4.5v DC output, with a minimum of 1 Amp capacity. Connect the transformer to the fire by putting the Positive wire into the Red terminal of the control tray, then connect the Negative wire to the Black terminal.

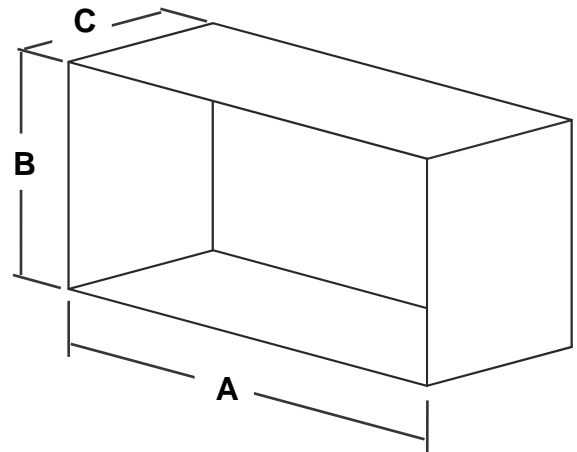
THIS MUST ONLY BE DONE BY AN AUTHOURIZED ELECTRICIAN

3.0 Creating the Cavity:

The dimensioned drawing below shows the size of opening that must be created to install the unit. The EF5000 can be installed into timber cavities with timber walls.

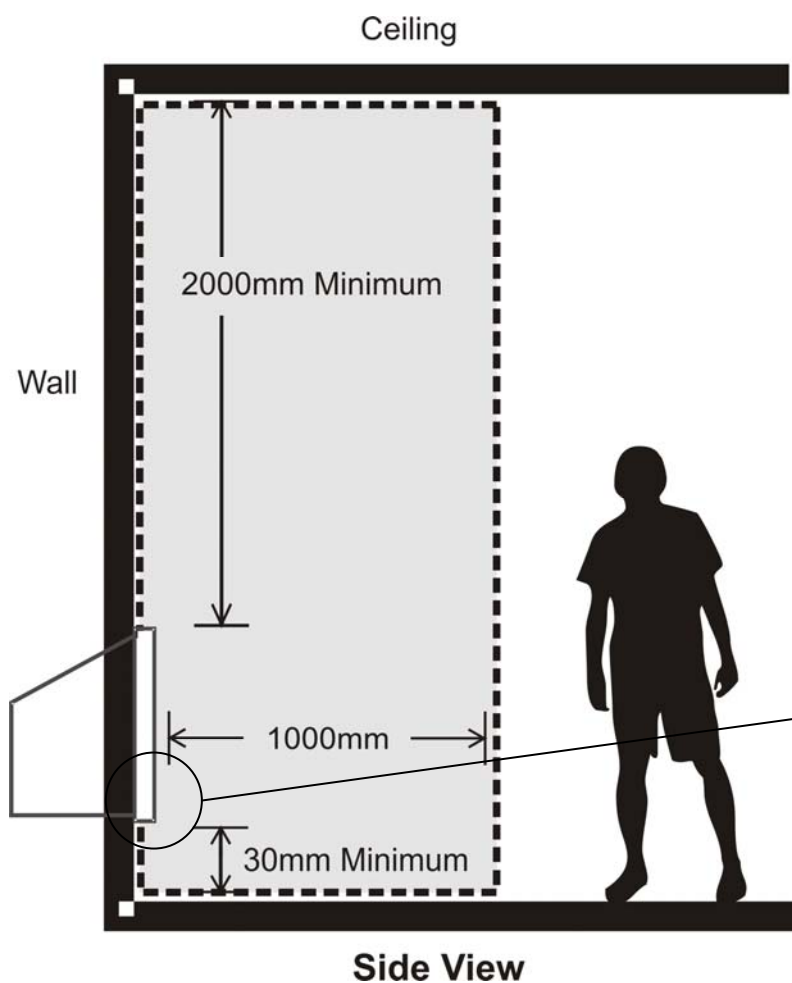
3.1 Cavity Dimensions:

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



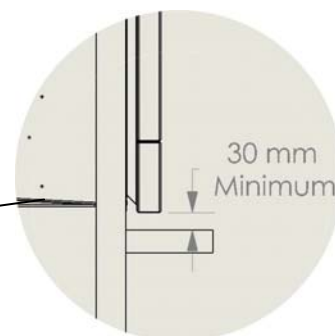
Where possible, it is recommended that the cavity is made slightly larger than the above dimensions to give the installer the maximum amount of space to work in.

3.2 Clearances:



Minimum clearance distance between the ceiling and fascia 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.



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. Timber can be used for cladding the walls.
- 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.

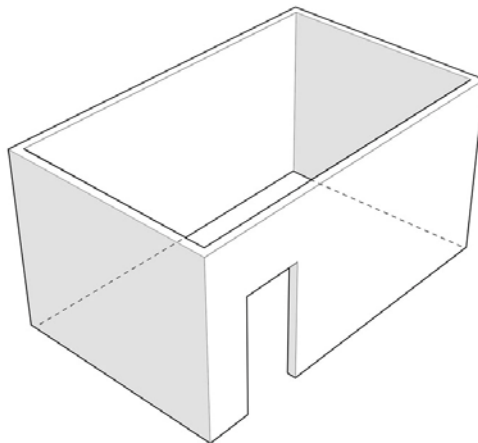
6.0 Types of Installation:

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

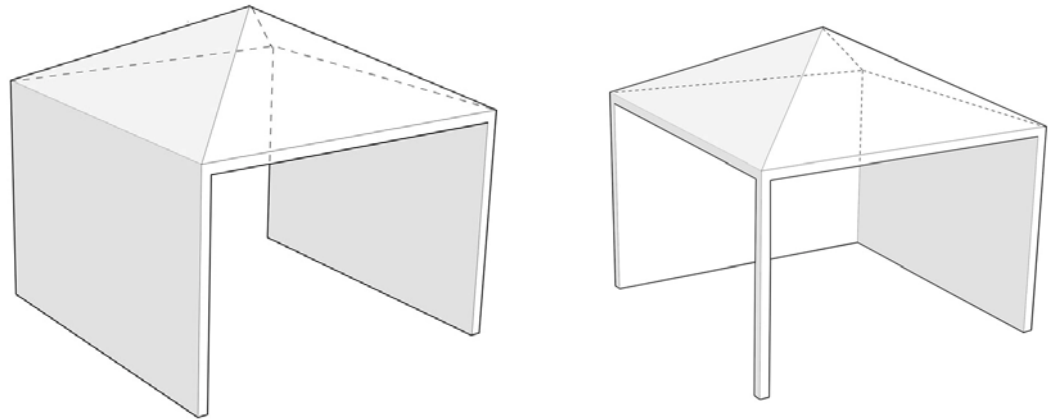
Certain materials or items, when placed under or near the appliance, will be subjected to radiant heat and could become damaged.

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

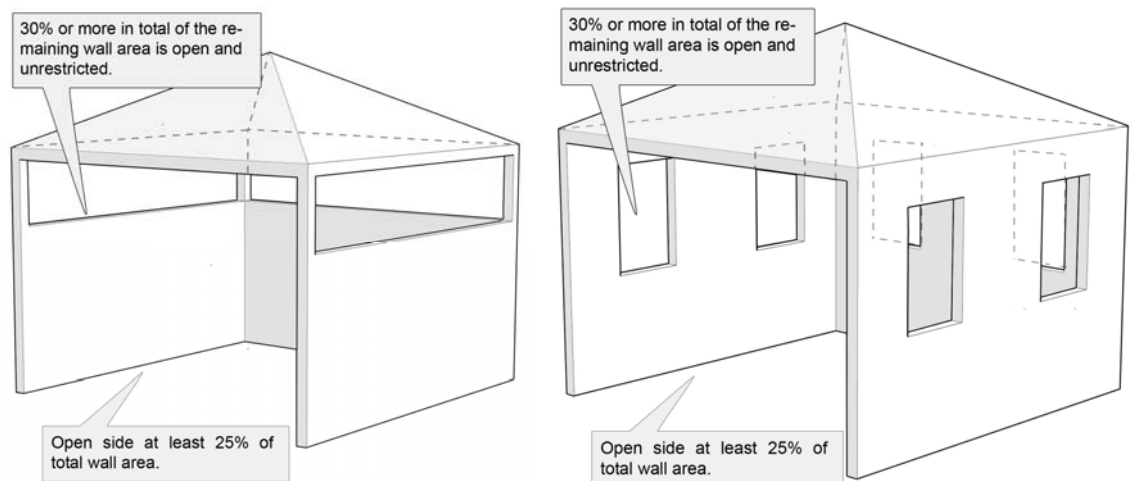
- An enclosure with walls on all sides, but at least one permanent opening at ground level and no overhead cover.



- 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 shall 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

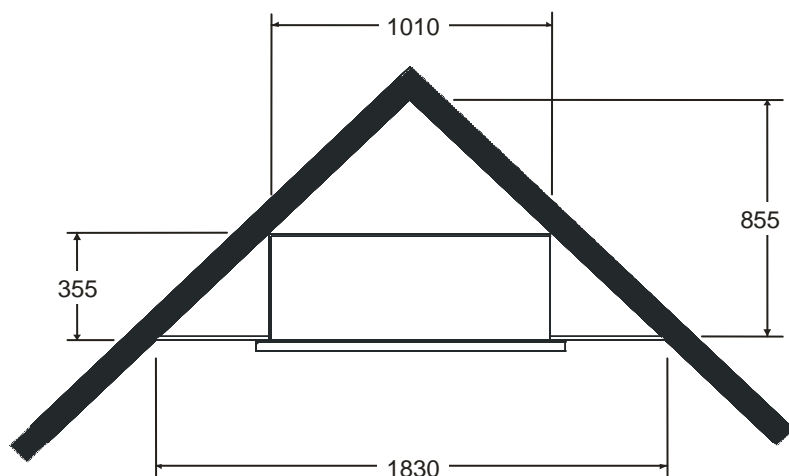


Rectangular areas have been used in the above diagrams, the same principles apply to any other shaped area.

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

7.0 Corner Installations:

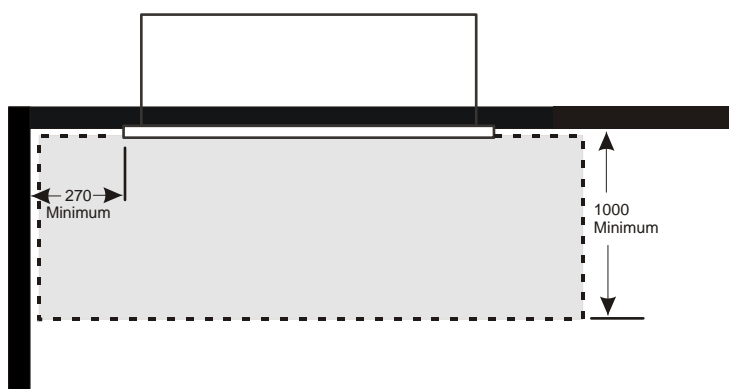
If a cavity is to be created in a corner, the following drawings give the minimum sized interior wall dimensions possible.



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 to be no less than 270mm.

8.0 Laying Gas Pipe:

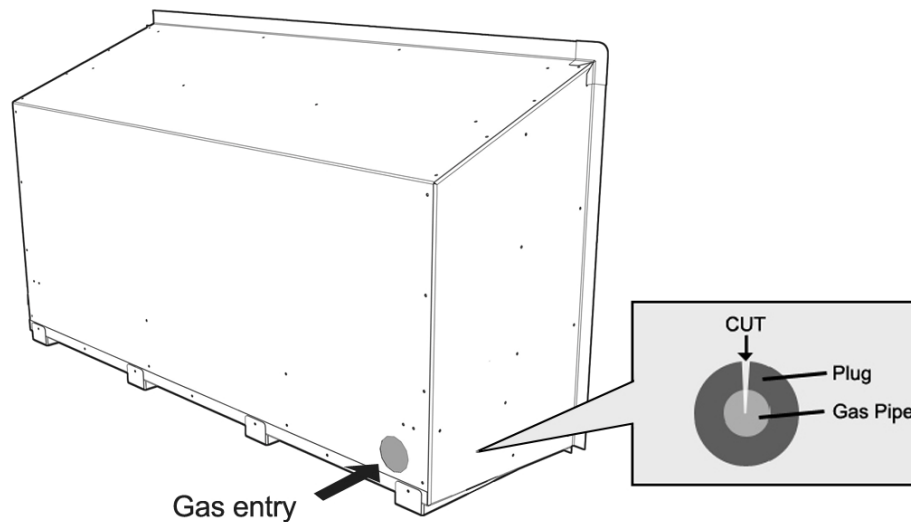
Gas pipe should be sized as per the requirements of NZS5261-2003. The pipe sizing must be sufficient to deliver the following volume of gas to the heater with all other gas appliances in the home running at the same time;

$$EF5000 = 60 \text{ MJ/hr}$$

It is highly recommended to install an easily accessible isolating shut off valve (ball valve) along the gas line to the EF5000 unit.

8.1 Gas connection is ½" BSP. 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 to pass through, keeping the plug as air-tight as possible.

Note: a flexible stainless steel hose is available from your escea retailer. Part #801240



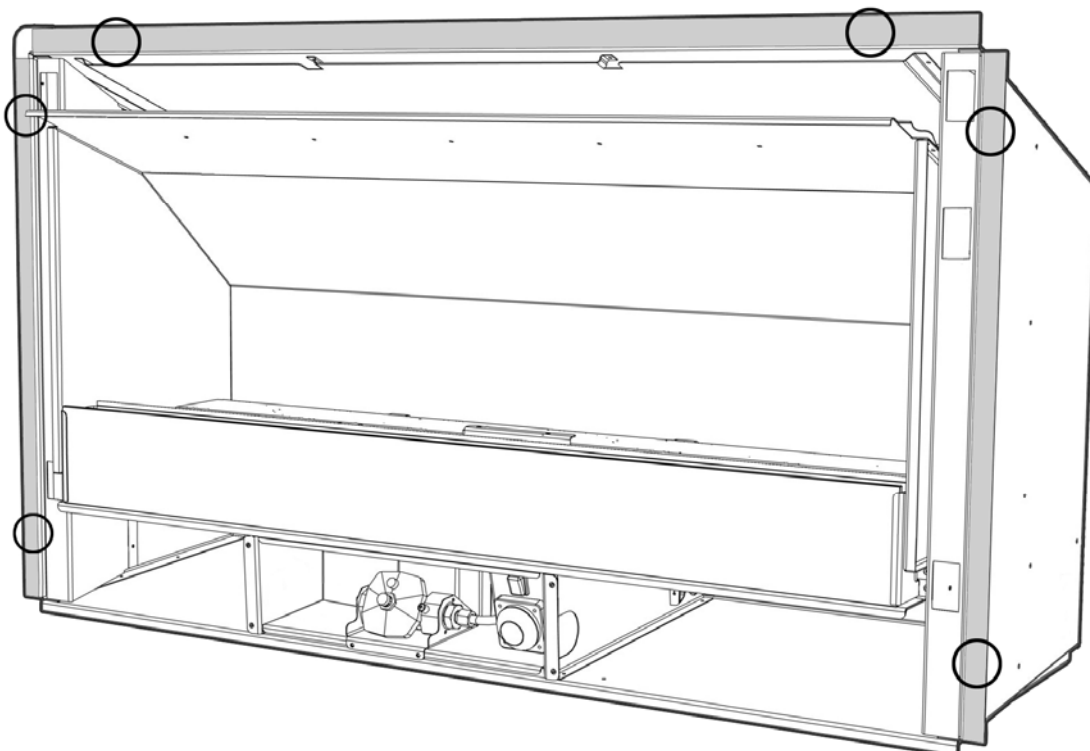
- 8.2 The gas hose should be properly located away from pathways or areas where the hose may be subject to accidental damage.

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 of screws for mounting:



10.0 Connecting the Gas Pipe:

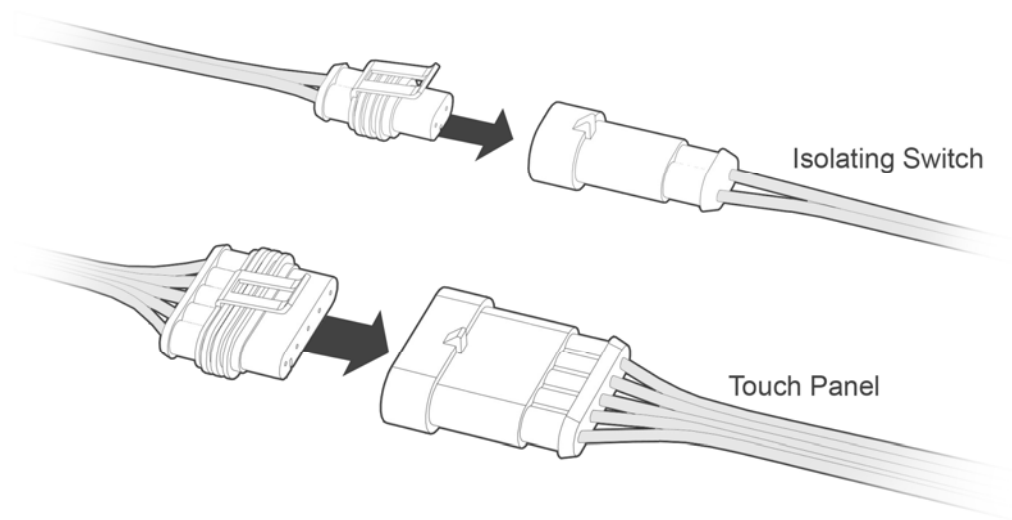
When the fire unit has been pushed into position and secured the gas pipe can be connected to inlet side of the appliance regulator using at the front centre of the fire.

- 10.1 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).

The gas fireplace and its individual shutoff valve must be disconnected from the gas supply piping 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 Touch panel:

- 11.1 The Touch Panel and Power Isolating Switch are located in the RH side of the Fascia.
- 11.2 The Touch Panel socket and Isolating Switch socket plugs into the 5 pin plug lead situated at the front RH side of the fire. Push them together until they 'click',



12.0 Testing of the Touch panel and spark ignition:

IMPORTANT: Before the operating pressure can be checked and the fascia fitted, The touch panel plug 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 touch panel 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 Ensure the correct inlet pressure has been achieved as per table below.

13.3 A pressure test point has been supplied for the operating test pressure (as shown below).

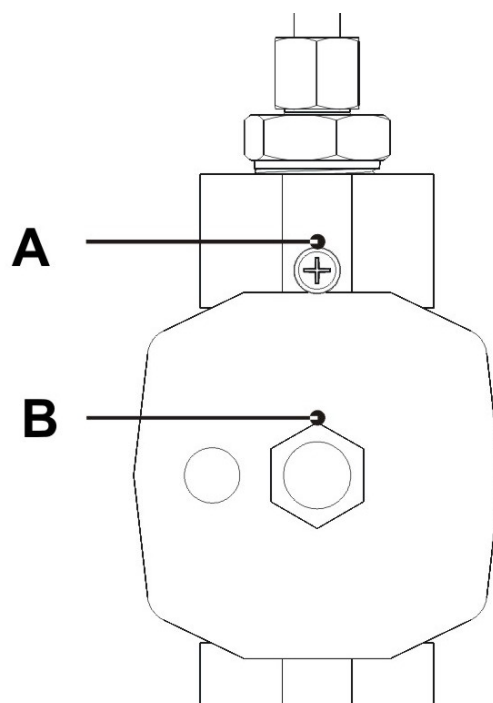
13.4 The operating pressure has been factory set. Please check that the operating pressure is exactly as listed below and if not, adjust screw in centre of regulator until correct pressure is achieved.

13.5 Replace operating test point screw and leak test for overall soundness using soapy water or other appropriate method.

A = Operating Pressure test point

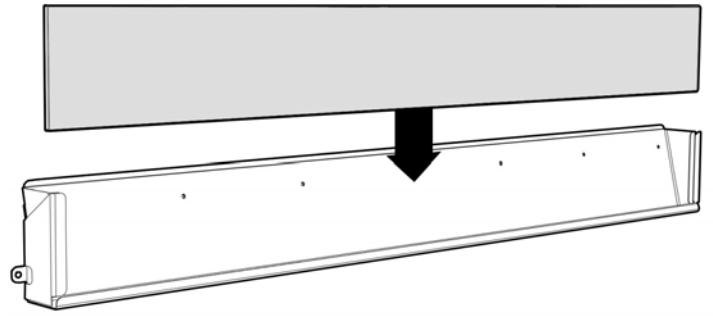
B = Pressure adjustment screw

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	2.3 kPa	1.0 kPa

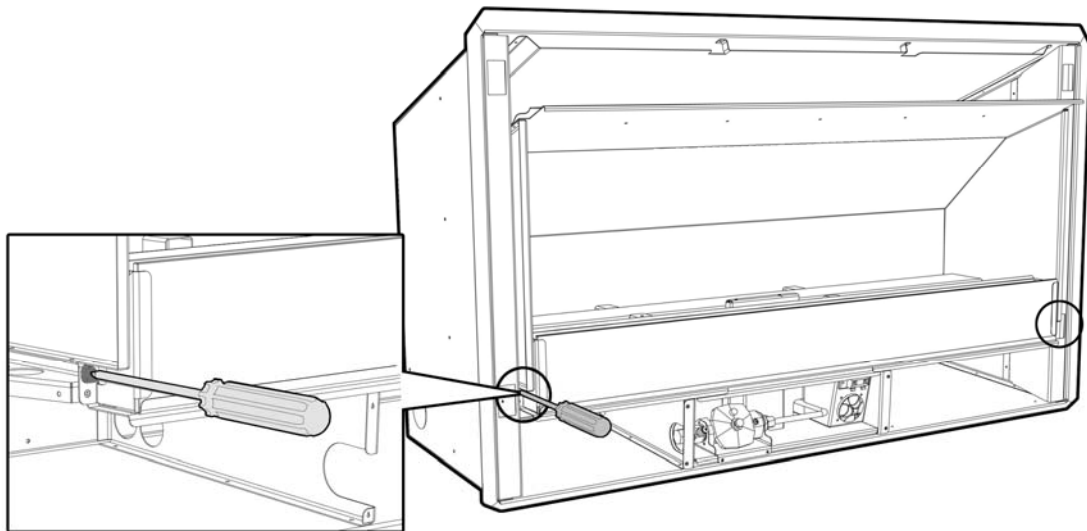


14.0 Assembly of stone cartridge:

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.



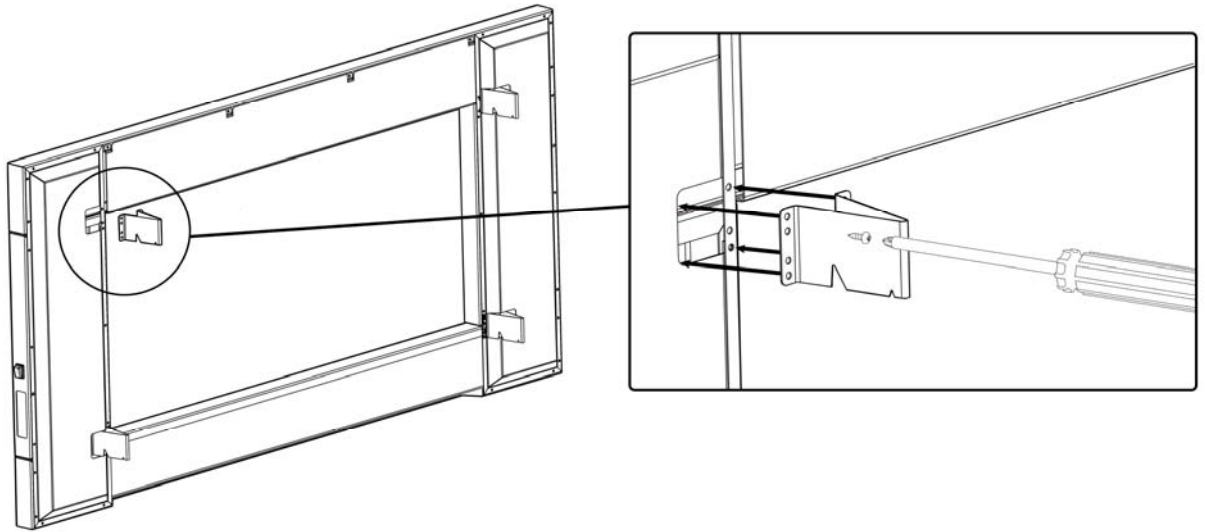
- 14.1 With the glass in position, fix the stone cartridge to the fire by using the two supplied screws in the location shown below. Do this before the fascia is fitted.



15.0 Fitting the Fascia:

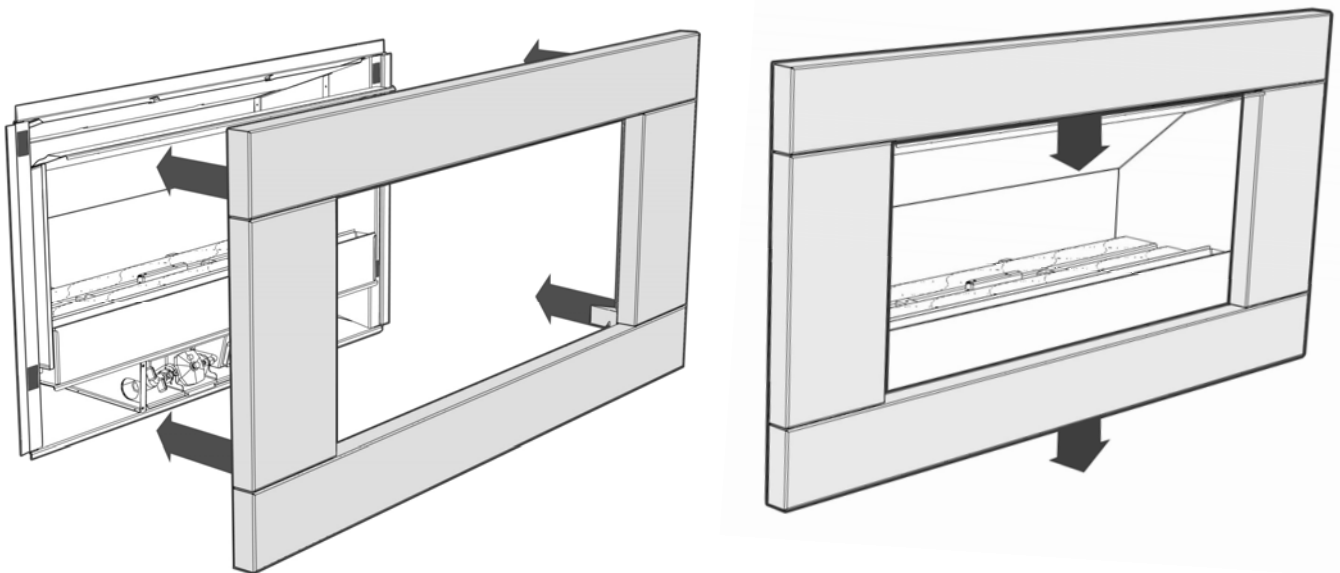
Before fitting the fascia, the hooks must be attached using the screws supplied. Ensure the two wires connecting the fascia to the fire are securely connected, as per section 11.0.

The EF5000 Stainless Steel 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.

- 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.



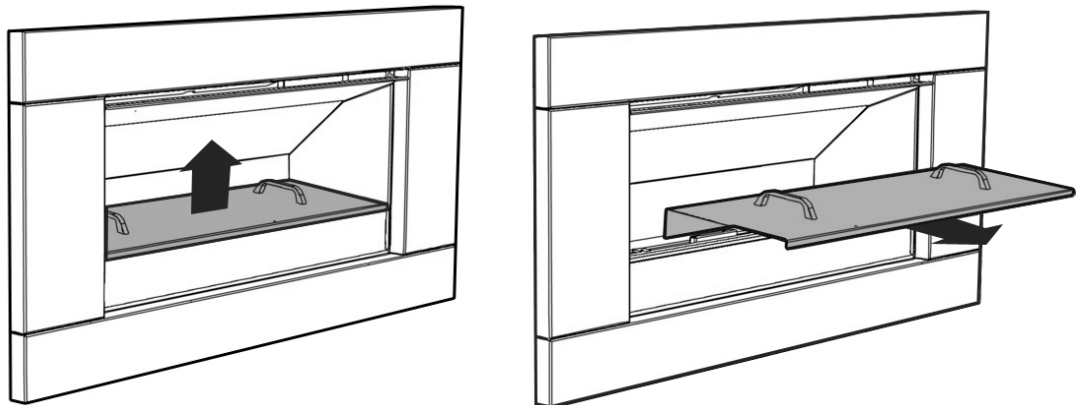
16.0 Placement of ceramic stones:

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.



- 16.1 **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**

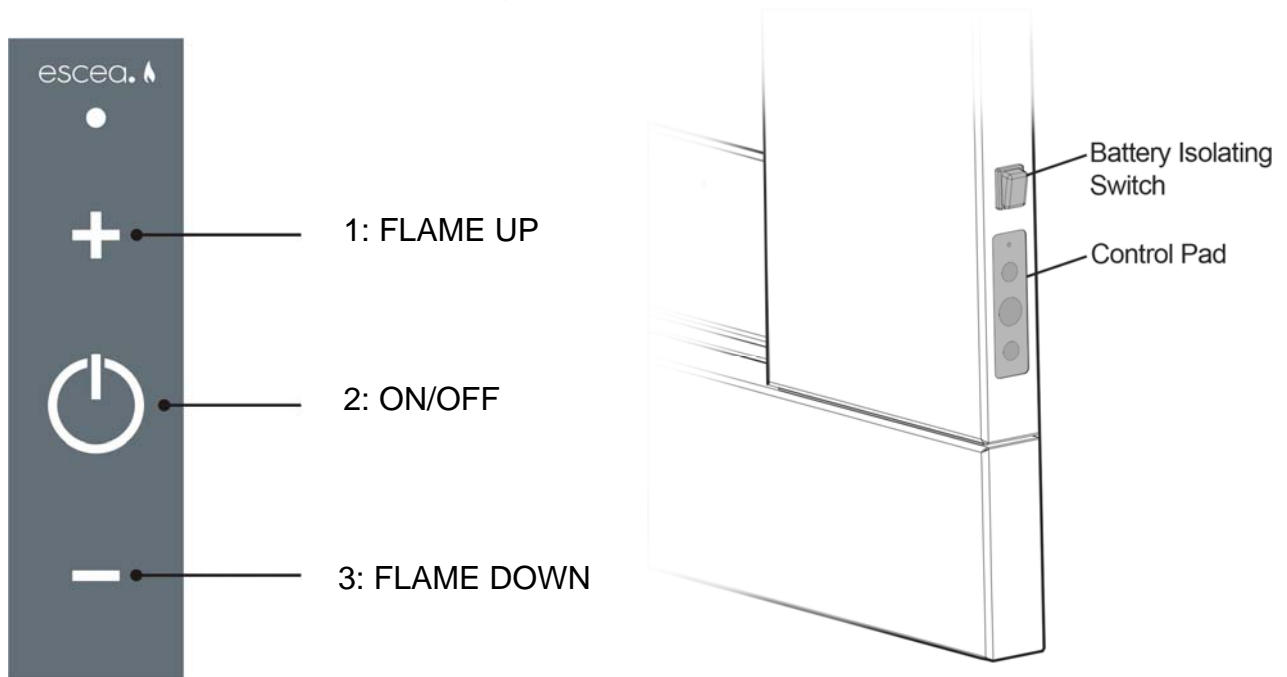
- 16.2 The Weather Cover supplied protects the stones and burners. This must be replaced when while the fire is not in use.
- 16.3 To fit the weather cover ensure fire is off and cooled, and place the front edge on the glass at the front of the fire, the rear flange of the Weather Cover will rest on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



- 16.4 The fire MUST NOT be operated while the cover is fitted.
- 16.5 The cover MUST NOT be fitted while the fire is hot. A cooling period of 30 minutes must be observed before fitting.
- 16.6 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 body parts enter the gas fireplace during the start-up or whilst the fire is running.

17.0 Operating Instructions:

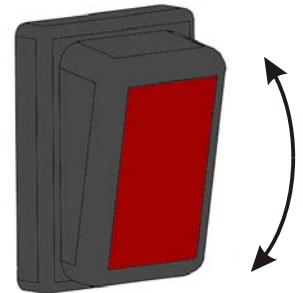
The EF5000 is operated by the touch control panel located on the Right hand side outer edge of the fascia. The basic operations possible from the touch control are ON/OFF and manual adjustment of the flame height.



17.1 Igniting the pilot flame

17.2 First turn on the battery isolating switch

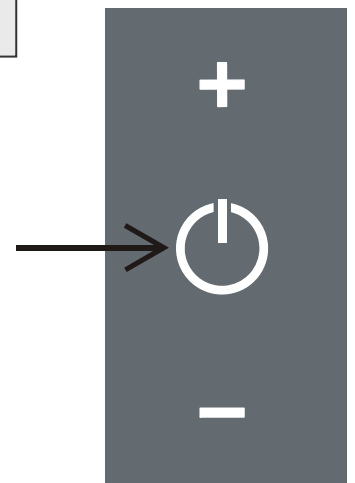
NOTE: The first time you attempt to ignite the EF5000 after connecting it to a gas supply, will take between 1 and 4 lighting attempts in order to let gas flow through the pipe system and purge all air. To do this, push 'power' to switch the fire on and wait for 12 seconds. If there is a spark but no flame, push 'power' again to switch off (you will hear a click) and then repeat until you get a pilot flame. Alternatively you can flick the battery isolating switch above the control panel off and then on again. This will totally reset the system.



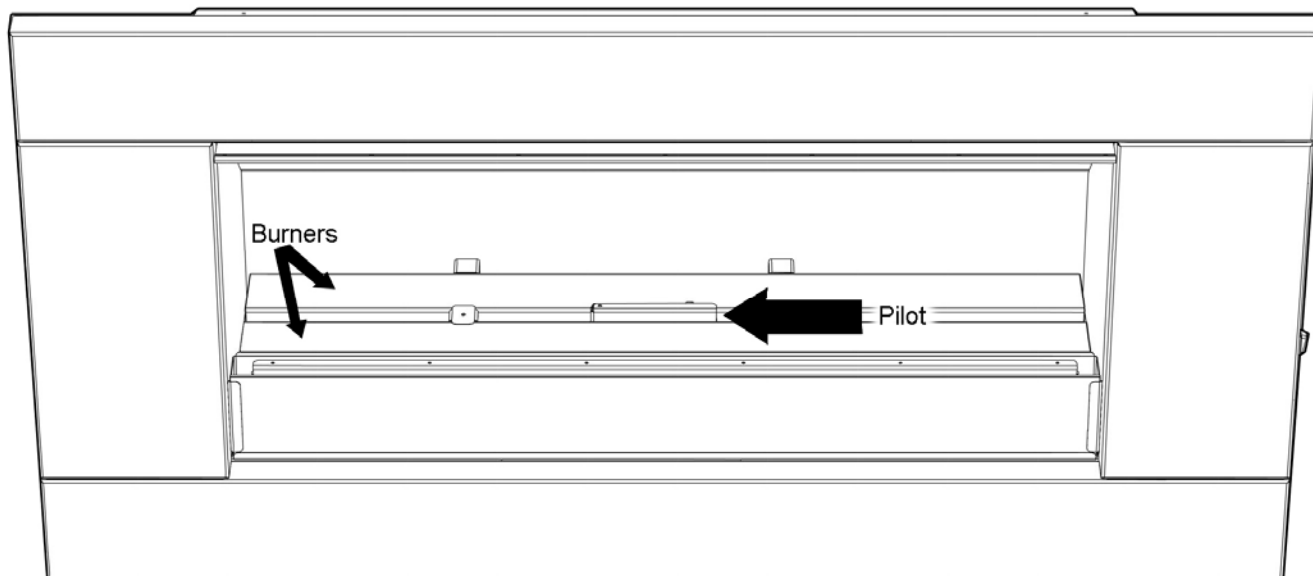
To turn on the fire push the ON/OFF button (2) on the touch control. The pilot will start sparking and gas will start flowing to the pilot which should light and be visible in a few seconds.

17.3 The pilot ignition process takes a duration of 12 seconds. No other button should be pressed during those 12 seconds.

In the event of the pilot not igniting after 12 seconds press the ON/OFF button (2) this will turn the valve and gas off. Now repeat the process from 17.2 until the pilot ignites.



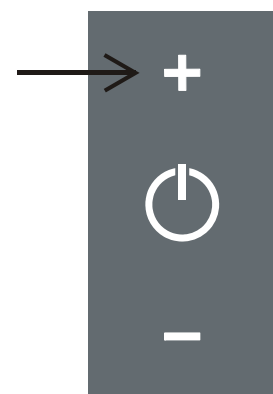
17.4 Pilot Flame and Burner Positioning



17.5 Turning on the main burners

Once the pilot flame has been running for at least 6 seconds press the FLAME UP (1) button to start the gas to the two main burners

- 17.6 The EF5000 has 4 flame positions: PILOT flame only, LOW burner flame, MEDIUM burner flame and HIGH burner flame.



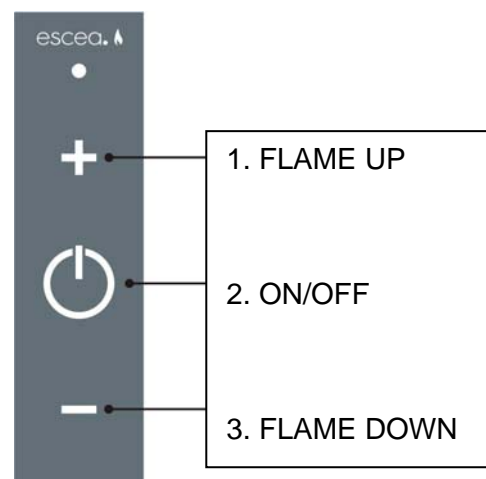
17.7 Adjusting the flame height

While the fire is on, push the FLAME UP button (1) or the FLAME DOWN button (3) to increase or decrease the flame height.

- 17.8 If the FLAME UP button (1) is pushed while the fire is in HIGH burner flame position, nothing will happen. Similarly if the FLAME DOWN button (3) is pushed while fire is in the PILOT flame position, nothing will happen.

17.9 Turning off the fire

To turn the fire off, you must push the ON/OFF button (2) this will shut down the gas flow to the pilot flame and both burners. Then turn off the isolating switch.



18.0 Maintenance and Cleaning

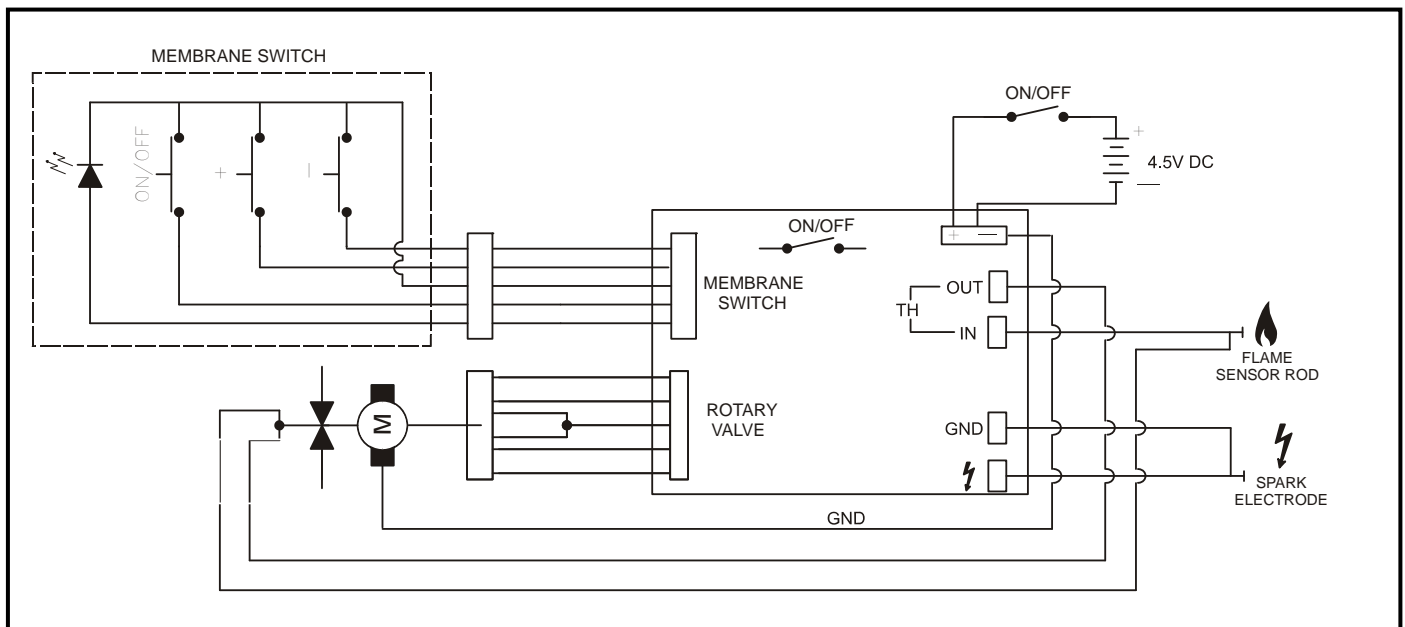
The unit must be cold before starting any form of maintenance or cleaning. To remove the glass and stones in the front stone tray simply reverse the steps in section 15.0. The glass can be cleaned using standard window cleaner and the quartz stones can be washed using soapy water

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

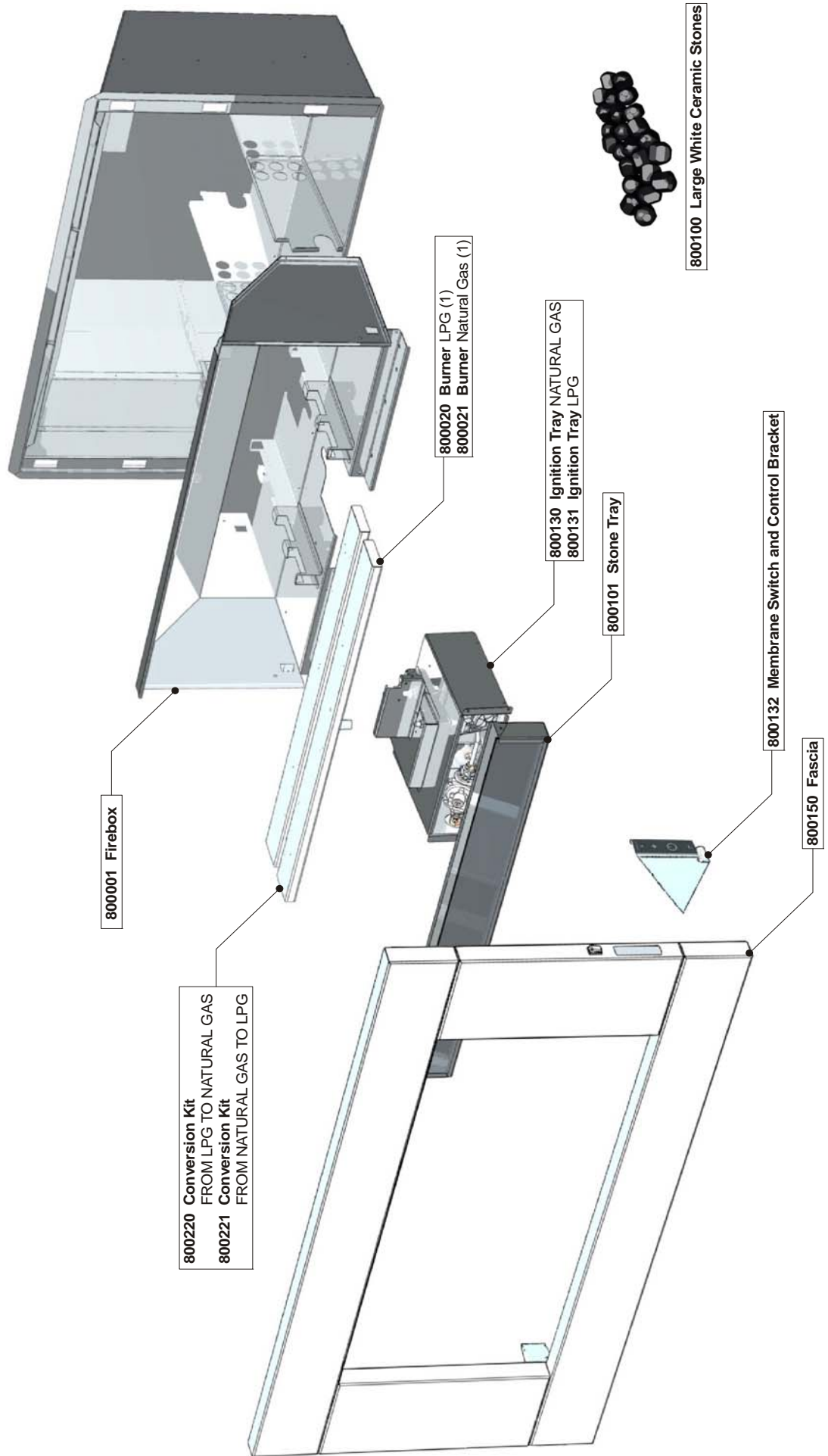
Periodically the pilot and burners should be checked visually for carbon and soot build-up, consistent flame and clean burning.

- 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.

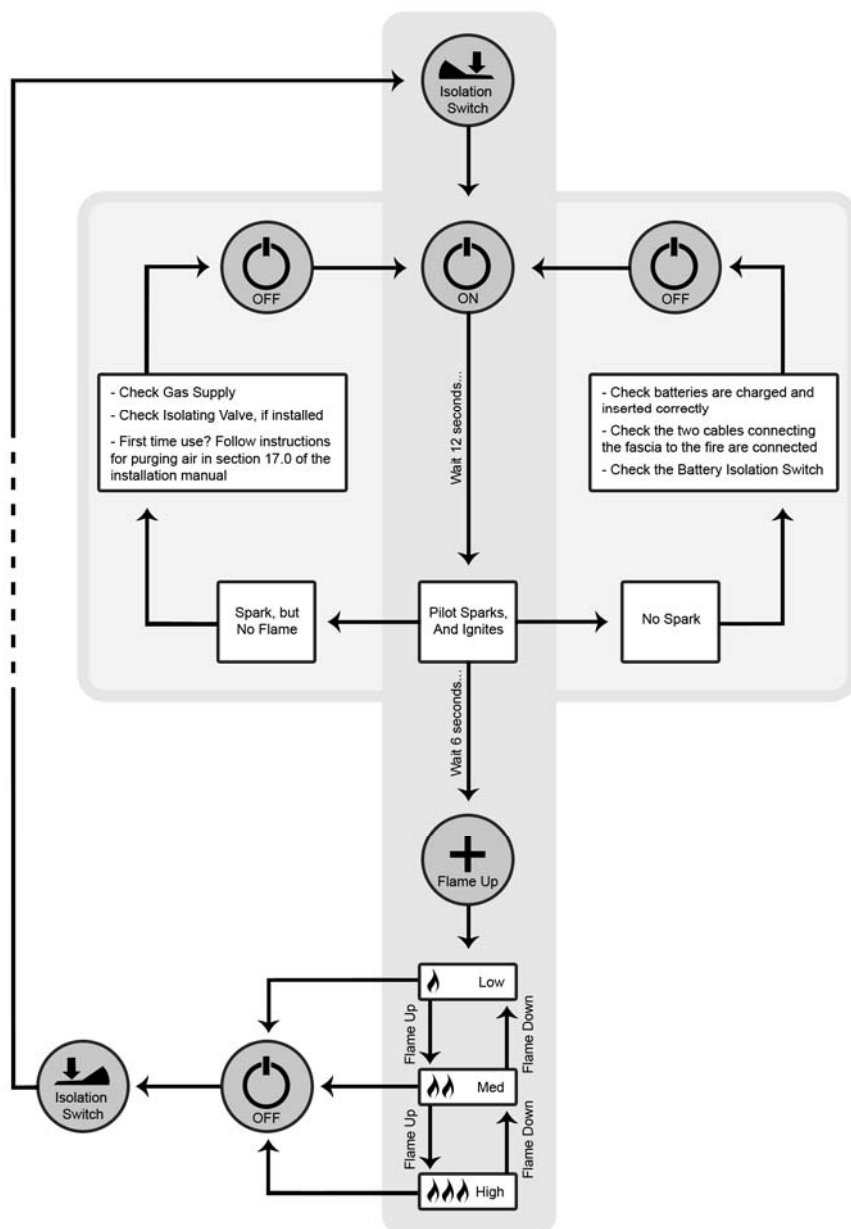
19.0 Electrical Schematic



EF5000 Replacement Parts



19.1 Operation Chart



	LPG	Natural Gas
Min. Inlet Pressure	2.5 kpa	1.0 kpa
Max Inlet Pressure	5.0 kpa	5.0 kpa
Manifold Pressure	2.3 kpa	1.0 kpa
Front Burner Jet Size	1.6mm	3.2mm
Rear Burner Jet size	1.6mm	3.2mm
Front Burner Aeration Hole	11mm	6mm
Rear Burner Aeration Hole	11mm	6mm
BTU	56000	54000

For any inquiries, please contact info@escea.co.nz or contact our Client Services Centre at 03 478 8220

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