REAL FLAME

ELEMENT FLAME EFFECT SPACE HEATER
XLC ROOFTOP TERMINATION FLUE CONFIGURATIONS
POLYPROPYLENE FLUE

INSTALLATION & OPERATING MANUAL

The Real Flame Element space heater is suitable to be installed into a masonry fireplace or in a frame out installation. Designed to operate on Natural gas, LPG and ULPG gas.

Approval no.GMK 10441

VERSION 6

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) 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) 876 2001

WARNING

The Element space heater has a primary safety glass fitted in front of the glass door. This safety glass is fitted to this appliance to reduce the risk of injury from burns and at no time should this glass be permanently removed. For protection of young children or the infirm, a secondary guard is required.

The appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilitites, 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.

WARNING

The outer glass panel gets extremely hot! Precaution should be taken and young children supervised at all times when heater is operating.

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.**
- **Do not modify this appliance.**
- **In all cases the installation of this appliance shall meet the requirements as set out in AS/NZS5601.1-2013.**
- **Do not install in a fireplace.**

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

IMPORTANT SAFETY NOTICE

- **DO NOT PLACE ARTICLES ON OR AGAINST THIS APPLIANCE.**
- **DO NOT USE OR STORE FLAMMABLE MATERIALS IN OR NEAR THIS 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.**

SERVICING

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

CORD REPLACEMENT

Electrical cord replacement must be undertaken by qualified and trained personnel only.

- **APPLIANCE IS DESIGNED TO OPERATE WITH LUMINOUS FLAMES. MAY EXHIBIT SLIGHT CARBON DEPOSIT.**

CONTENTS

DATA PLATE (Affixed to the base of the unit for reference to gas pressure & consumption)

Element 1200

GAS TYPE	INJECTOR SIZE	TPP	N.G.C. (Mj/hr)
Natural Gas	3 X 2.25mm	0.85kPa High / 0.55kPa Low	37 High/29 Low
LPG	3 X 0.95mm	2.50kPa High / 1.70kPa Low	33 High/27 Low
ULPG	3 X 0.95mm	2.50kPa High / 1.70kPa Low	33 High/27 Low

Element 1800

GAS TYPE	INJECTOR SIZE	TPP	N.G.C. (Mj/hr)
Natural Gas	3 X 2.30mm	0.92kPa High / 0.55kPa Low	39 High/30 Low
ULPG	3 X 1.00mm	2.50kPa High / 1.70kPa Low	35 High/28 Low

DIMENSIONS

1200 model
620mm

1800 model
620mm

1200 model
1355mm

1800 model
1955mm

430

INSTALLATION INSTRUCTIONS

LOCATION

Select a location where the fire can be supervised during operation.
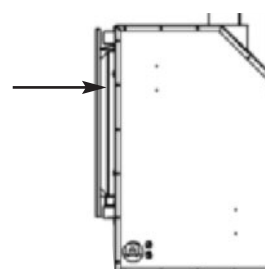
An electrical isolation switch must be fitted at the appliance or on an adjacent wall to allow for emergency shutdown and maintenance.

Installation must meet Australian gas codes AS5601

Installation clearances - Clearances from combustible materials

Floor	0mm
Sides	25mm
Top	25mm
Flue outer	25mm
Front	25mm
Back	25mm

Cladding between trim and firebox must be non-combustible materials

INSTALLATION INSTRUCTIONS

LOCATION

Select a location where the fire can be supervised during operation.

An electrical isolation switch must be fitted at the appliance or on an adjacent wall to allow for emergency shutdown and maintaince.

Installation must meet Australian gas code AS/NZS5601.1-2013.

INSTALLATION CLEARANCES – Clearances from combustible materials

Floor	0mm
Sides	25mm
Top	25mm
Flue outer	25mm
Front	25mm
Back	25mm

INSTALLATION CODES

Note appliance gas type – Natural gas, LPG or ULPG. Should the appliance be the incorrect gas type, please contact the supplier.

Installers – Please ensure the installation and instruction manuals supplied with this appliance are supplied to the customer and the customer is trained on how to operate the appliance correctly.

Do not modify the appliance.

Do not exceed maximum rated pressures.

Appliance must be installed with gas installation code (AS/NZS5601.1-2013) and applicable electrical installation code (AS3000).

Test for gas leaks prior to operating appliance.

Check gas pressures and adjust if incorrect.

FLUE CONFIGURATIONS

For flue configurations other than Poly flue Rooftop termination please refer to the correct manufacturer installation manual, Refer to Element or Element XL flue configeration appliance installation manual for instructions.

 Where lengths greater than 5m are required the inlet is run completely in aluminium flexible flue, the first 5m of the outlet flue is run in flexible aluminium flue, then a poly flue system is used that requires drainage points to waste for condensation removal. – Note drain fall direction is towards the appliance for Rooftop termination flues.

Aluminium flue connections must be sealed with a suitable sealant.

Recommended Silicon – Non-acetic, neutral cure 150degc or higher temperature rated.

Bostik RTV 926 or similar

Run air intake flue as required – Maximum run 14m. Flues can be run next to each other. Maintain clearances to combustibles.

INSTALLATION INSTRUCTIONS (continued)

Condensate disposal

Where possible the condensate drainage pipe should terminate at a suitable foul water discharge point, eg waste drain point washing machine waste point etc.

The HepVO waterless trap should be installed where access can be maintained.

A P-trap can be used as an option instead of the HepVo waterless trap.

Do not discharge condensate onto walkways, electrical connections, earth stakes, copper pipes, waterways, ponds etc.

POLY PRO GENERAL INSTALLATION REQUIREMENTS

Refer to specific setups for detailed installation guides.

⚠ **WARNING**

CARBON MONOXIDE POISONING HAZARD. Failure to follow the steps outlined below for each appliance connected to the venting system being placed into operation could result in carbon monoxide poisoning or death.

⚠ **WARNING**

Risk of carbon monoxide poisoning or fire due to joint separation or pipe breakage.

Poly Pro flue systems meets Flame spread/ Smoke ratings <25/<50 (per UL-723 ASTM E-84 and ULC-S102) when used in conjunction with the below noted materials.

•   3m Fire barrier Plenum wrap 5A+

•   Unifrax FyreWrap 0.5 Plenum insulation

•   Knauf Insulation – Atmosphere Duct wrap with ECOSE

Use soapy water to lubricate gaskets and tubes.
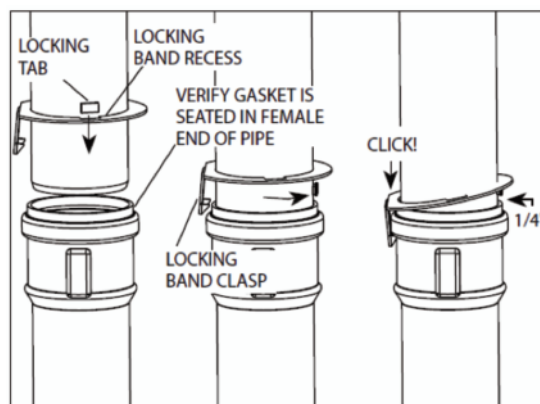
DO NOT USE petroleum based lubricants.

POLY PRO GENERAL INSTALLATION REQUIREMENTS (continued)

Joint Connections

Verify the gasket is seated evenly inside the groove in the female end. For PP/Metal pipe with a locking tab, slide locking band on male pipe section. Insert locking tab into locking band recess, rotate button away from locking band clasp, insert pipe sections, push lock band clamp downward into socket, disengage socket/tab 1/4˝ - 5/8˝ from socket.
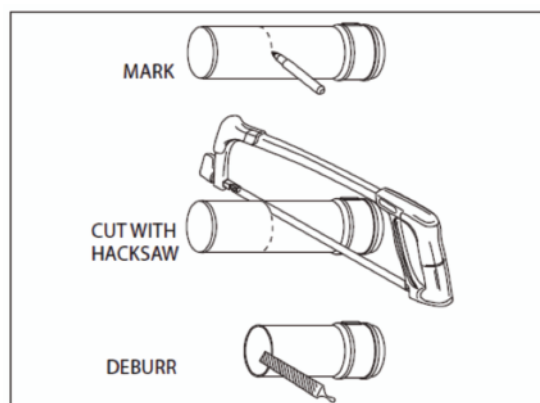
Screws are not allowed for joint connection. Never penetrate the wall of PolyPro vent pipe. (Exception - a SS screw may be used outside the building on exterior termination fittings to orient an elbow, etc.)

- IMPORTANT: Locking bands are mandatory on all exhaust vent joints.

Installation

1. Pipe lengths may be cut to length. Use an alternative clamp (PPS-PAC/PPS-LBC) for the connection if a locking tab is removed.

   - Cut square (not an angle) to the end of the pipe.

   - Remove burrs before assembly.

2. Check with appliance manufacturer for any restrictions or limits on vent length, number of elbows, etc.

3. The slope of the vent pipe must be at least 3° (50mm per meter) back to the appliance.

4. Every horizontal section must be supported.

5. The venting system shall be securely supported using suitable hangers. Duravent hardware is recommended; field supplied support hardware suitable to the AHJ is acceptable, hardware must not deform on damage the vent. Make sure the load on the vent system is not supported by the appliance.
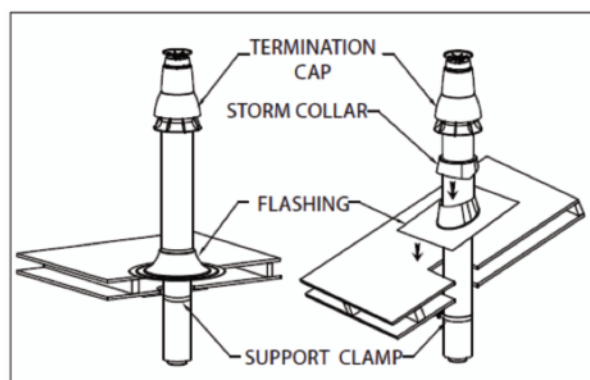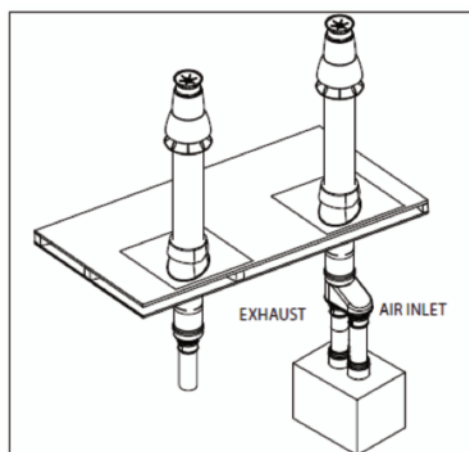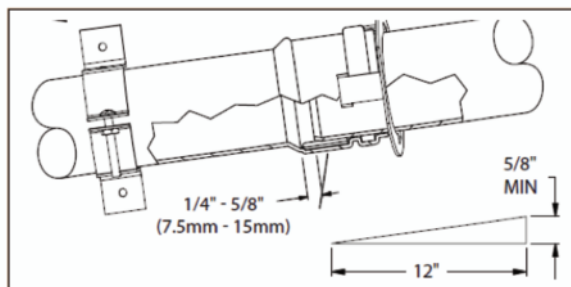
   On Duravent and other certain clamp styles, 1/4˝ or greater All-thread may be used as an extension.

6. Vertical installations must be supported every 3 meters or less.

7. Elbows and tees are sufficiently supported when a bracket is fixed at the female end of the connected straight section.
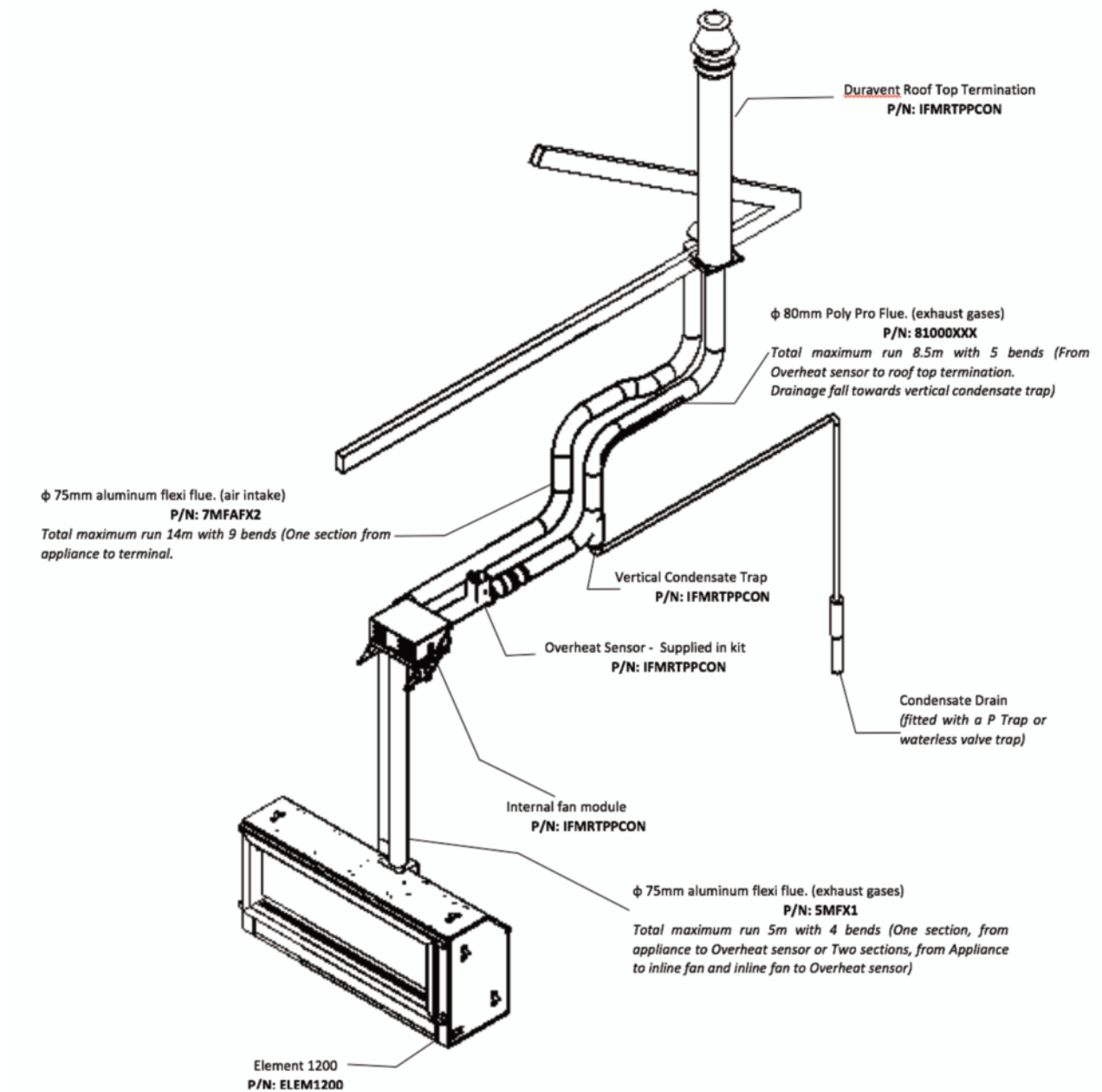
POLY PRO GENERAL INSTALLATION REQUIREMENTS (continued)

Vertical Concentric

1. Locate penetration.
2. Cut hole in roof.
3. Cut hole in ceiling above appliance.

    Cut hole(s) big enough for pipe in all ceilings above appliance if installing in a multi storey installation.
4. Firestop each ceiling penetration.
5. Attach flashing to roof.

    Slide storm collar onto flashing if using the adjustable roof flashing.
6. Slide vertical termination into flashing from above until seated on flashing.
7. Plumb termination and mount support bracket to structure.

SET UP WITH IN LINE OR APPLIANCE MOUNTED FAN

Duravent Roof Top Termination
P/N: IFMRTPPCON

φ 80mm Poly Pro Flue. (exhaust gases)
P/N: 81000XXX
Total maximum run 8.5m with 5 bends (From Overheat sensor to roof top termination. Drainage fall towards vertical condensate trap)

φ 75mm aluminum flexi flue. (air intake)
P/N: 7MFAFX2
Total maximum run 14m with 9 bends (One section from appliance to terminal.

Vertical Condensate Trap
P/N: IFMRTPPCON

Overheat Sensor - Supplied in kit
P/N: IFMRTPPCON

Condensate Drain
(fitted with a P Trap or waterless valve trap)

Internal fan module
P/N: IFMRTPPCON

φ 75mm aluminum flexi flue. (exhaust gases)
P/N: 5MFX1
Total maximum run 5m with 4 bends (One section, from appliance to Overheat sensor or Two sections, from Appliance to inline fan and inline fan to Overheat sensor)

Element 1200
P/N: ELEM1200

INSTALLATION INSTRUCTIONS

Intake pipe connection to appliance

Flexi flue is provided for air intake. A maximum of 2 x 7m lengths can be used.

Cut tube to length where required.

Ensure ends are burr free and round, test fit flue will slide over connection.

Recommended Silicon – Non-acetic, neutral cure 150°C or higher temperature rated.

Bostik RTV 926 or similar.

Apply an 8mm thick silicon bead fully around heater connection approx. 10mm from the top.

Apply an 8mm silicon bead fully around the inside of the flue end (heater connection end)

Fit flue clamp over flue (loosely).

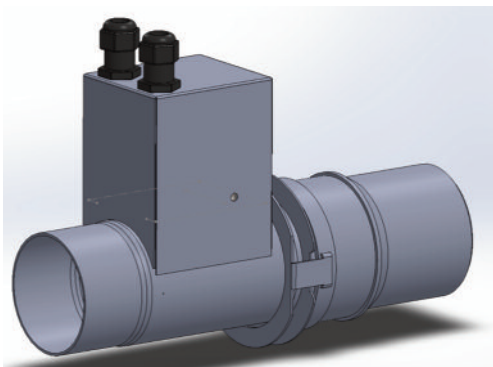# INSTALLATION INSTRUCTIONS (continued)

Slide flue onto connection spigot fully.

Tighten clamp fully.

Wipe excess silicon, visually check connection to ensure connection is fully sealed.

Intake pipe joiner connection

Ensure ends are burr free and round, test fit flue will slide over connection joiner.

Apply an 8mm thick silicon bead fully around both ends of connector approx. 10mm from the ends.

INSTALLATION INSTRUCTIONS (continued)

Intake pipe joiner connection (continued)

Apply an 8mm silicon bead fully around the inside of the flue ends.

Fit flue clamp over flue ends (loosely).

Slide each flue halfway onto connection joiner.
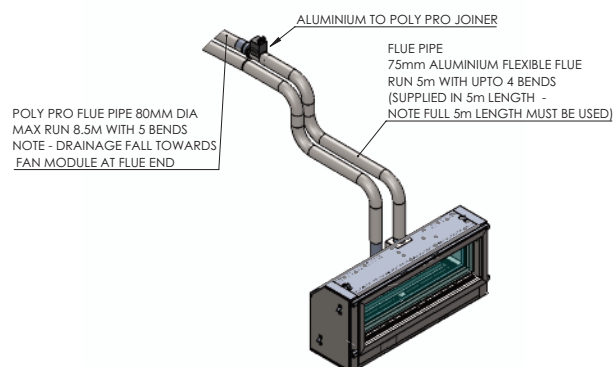
Tighten clamp fully.

Wipe excess silicon, visually check connection to ensure connection is fully sealed.

Intake connection to rooftop terminal

Rooftop termination should be mounted and adequately supported.

Ensure clearances to combustibles are maintained.

Termination must be installed to AS5601 gas installation codes.

Apply soapy water to the fitting and to the connection on the rooftop termination

INSTALLATION INSTRUCTIONS (continued)

Flue exhaust connections - Inlet connection to appliance

Note: The full 5m of flexi flue must be used.

Fully extend the 5m aluminium flexi flue. NOTE FULL LENGTH MUST BE USED.

Ensure ends are burr free and round, test fit flue will slide over connection.

Apply an 8mm thick silicon bead fully around heater connection approx. 10mm from the top.

Apply an 8mm silicon bead fully around the inside of the flue ends.

Fit flue clamp over flue ends (loosely).

Slide flue onto connection spigot fully.

Tighten clamp fully.

Wipe excess silicon, visually check connection to ensure connection is fully sealed.

INSTALLATION INSTRUCTIONS (continued)
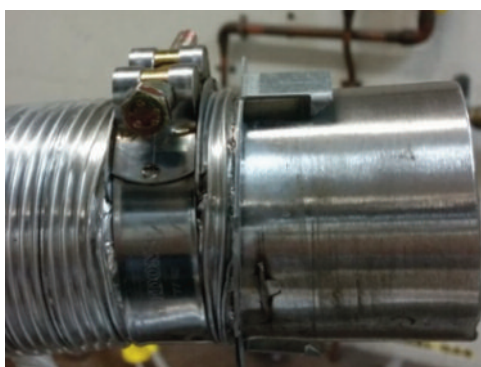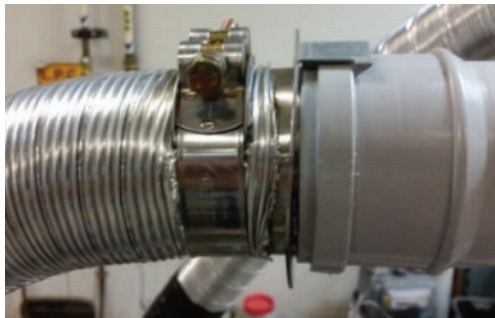
Aluminium to Poly Pro flue connection

Note: A total of 5m of aluminium flexi flue must be used prior to the joiner. Failure to do this will result in appliance shutdown.

ALUMINIUM TO POLY PRO JOINER

FLUE PIPE
75mm ALUMINIUM FLEXIBLE FLUE
RUN 5m WITH UPTO 4 BENDS
(SUPPLIED IN 5m LENGTH -
NOTE FULL 5m LENGTH MUST BE USED)

POLY PRO FLUE PIPE 80MM DIA
MAX RUN 8.5M WITH 5 BENDS
NOTE - DRAINAGE FALL TOWARDS
FAN MODULE AT FLUE END

Apply sealant to flue inner and connector.

Apply sealant to flue inner and connector.

Fit flue clamp over flue (loosely).

Slide flue onto connection spigot fully.

Tighten clamp fully.

Wipe excess silicon, visually check connection to ensure connection is fully sealed.

15

INSTALLATION INSTRUCTIONS (continued)

Aluminium to Poly Pro flue connection

Apply soapy water to o-ring in Poly Pro flue and dampen surface of connector.

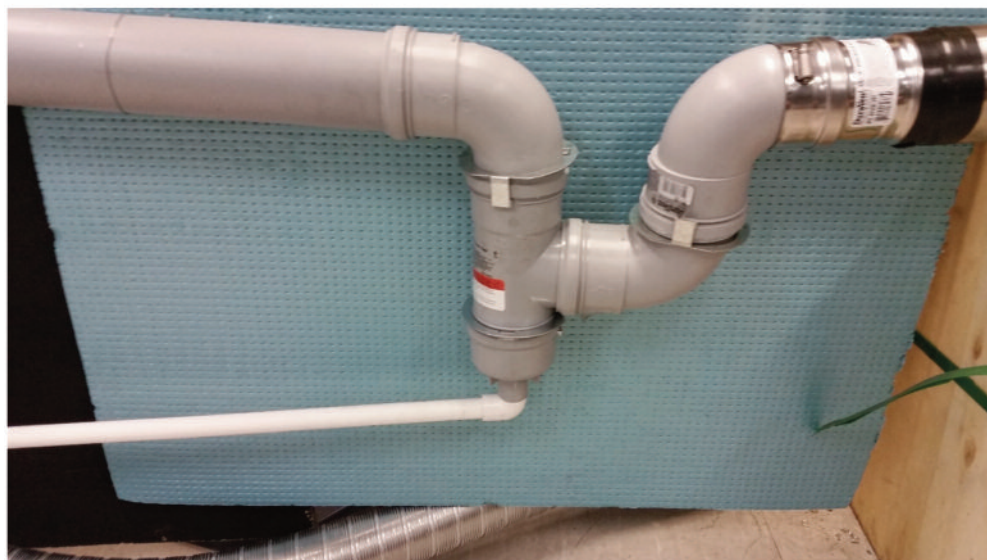Push connector fully into Poly pro end connection.

Push both clips over to lock into place.

Where remove the catch tab from side of condensate fitting. (Twist off)

Connect condensate drain trap to adapter. Insert fully.

Tighten locking hose clamp.

Condensate drain - P trap fitting

NOTE – DRAINAGE MUST FALL TOWARDS CONDENSATE TRAP LOCATED AT THE END OF THE ALUMINIUM FLUE SECTION

A P-TRAP MUST BE INSTALLED AS SHOWN

Connect 90deg elbow to Aluminum adapter facing downwards

Connect 2nd 90deg Elbow to first.

Connect vertical condensate tee to elbow with drain at bottom.

Connect drain cap to bottom of condensate tee.

Connect flue as required to rooftop termination.

P trap must be lowest part of the Polyflue system.

All poly flue must drain back to the P trap.

Connect waste pipe to p trap (PVC pressure pipe glue will be required for the connection.)

INSTALLATION INSTRUCTIONS (continued)

Poly Pro to Poly Pro flue connection

Verify gasket is sitting correctly.

Apply a light soapy water film to the gasket and tube end.
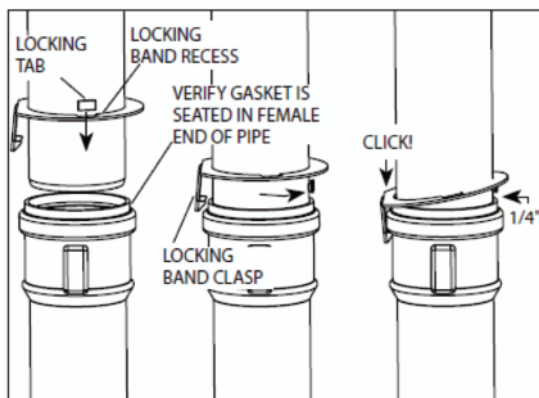
Insert pipe fully into end fitting, Pipe will push in smoothly and evenly, should this not occur remove pipe and reseat gasket. Reapply light soapy film to ensure easy fit.

Rotate clip so catch is opposite the location tab

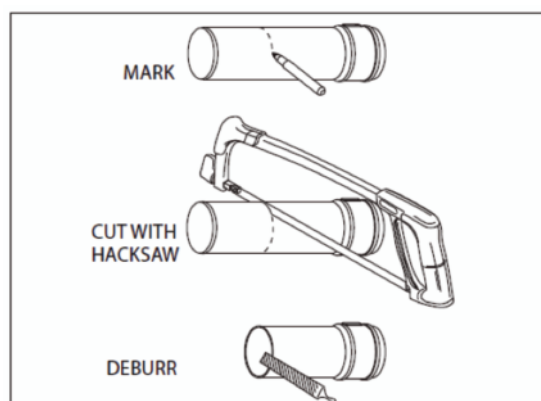Clip catch into place to prevent flue pipes from separating.

Ensure pipes are clipped adequately.

Ensure a minimum of 3deg fall occurs towards the drain end.

Installation

1. Pipe lengths may be cut to length. Use an alternative clamp (PPS-PAC/PPS-LBC) for the connection if a locking tab is removed.

    • Cut square (not an angle) to the end of the pipe.

    • Remove burrs before assembly.

2. Check with appliance manufacturer for any restrictions or limits on vent length, number of elbows, etc.

3. The slope of the vent pipe must be at least 3° (50mm per meter) back to the appliance.

4. Every horizontal section must be supported.

17

INSTALLATION INSTRUCTIONS (continued)

Poly Pro to Roof termination

Ensure termination is supported.

Join Poly flue to rooftop termination

Ensure clip is fixed to prevent flue pipes from separating.

Support flues.

WIRING – FLUE TEMPERATURE LIMITING DEVICE

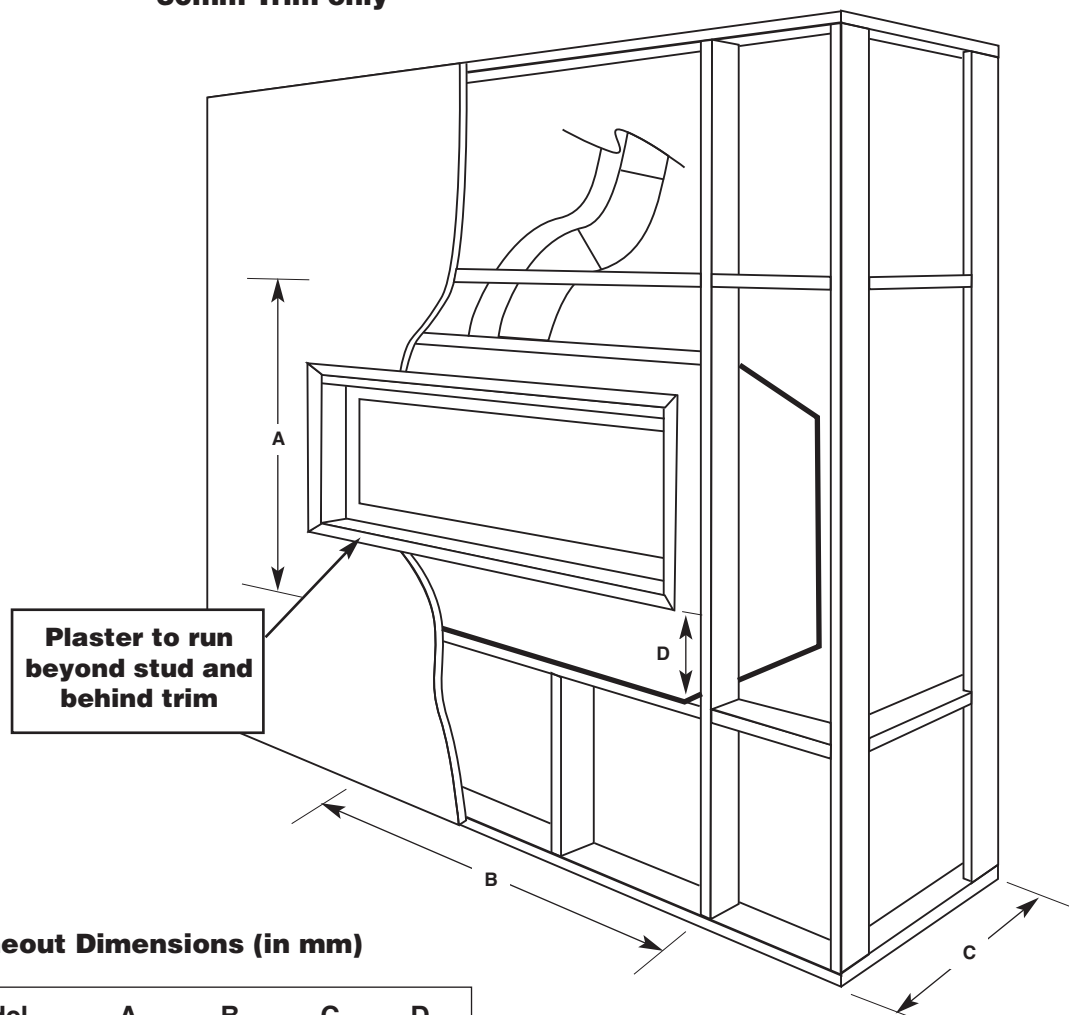The flue temperature limiting device is inbuilt into the extension wiring and the flue adapter.

The connection directly connects to the loom from the appliance. The other end directly connects to the fan module.

Connections are not interchangeable.

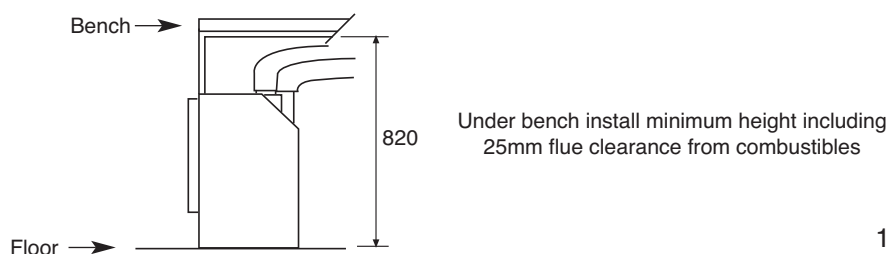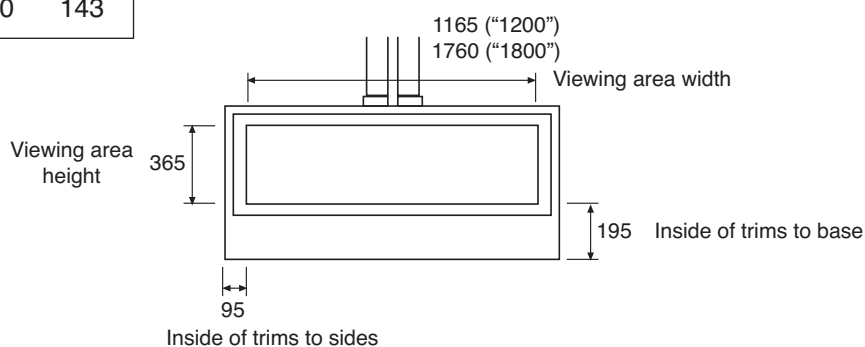The temperature limiting is preset and does not require adjustment.

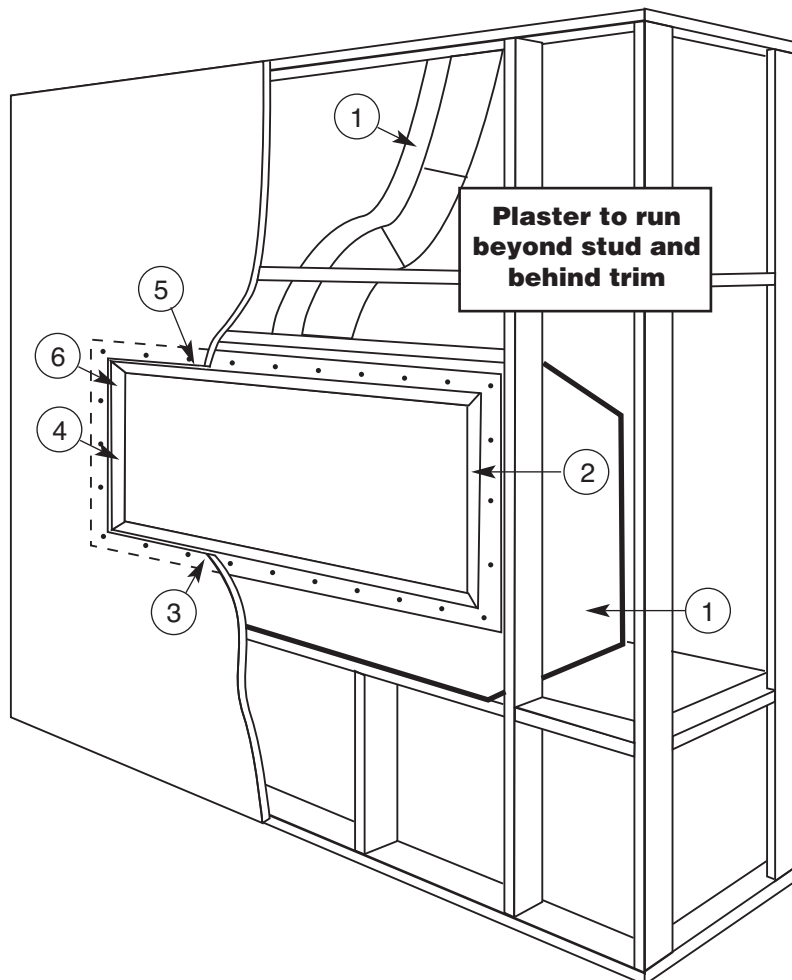# TIMBER FRAME INSTALLATION

50mm Trim only

Plaster to run beyond stud and behind trim

Frameout Dimensions (in mm)

Model	A	B	C	D
1200	660	1420	460	143
1800	660	2020	460	143

1165 ("1200")
1760 ("1800")

Viewing area width

Viewing area height

365

195   Inside of trims to base

95

Inside of trims to sides

Bench →

820   Under bench install minimum height including 25mm flue clearance from combustibles

Floor →

19

TIMBER FRAME INSTALLATION (continued)

18mm Trim (1200 only)

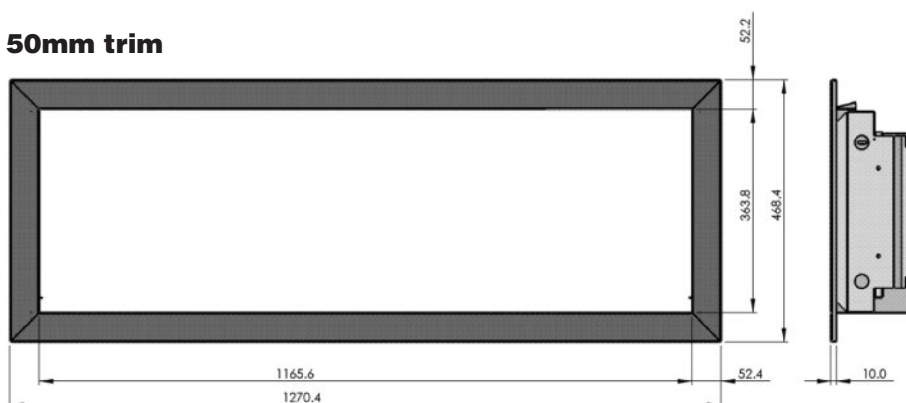Plaster to run beyond stud and behind trim

1.   Install Element 1200 or 1800 onto base and connect flue, gas and power.
2.   Fit 18mm trim frame.
3.   Locate 4 sided flange kit.
4.   Remove 18mm frame.
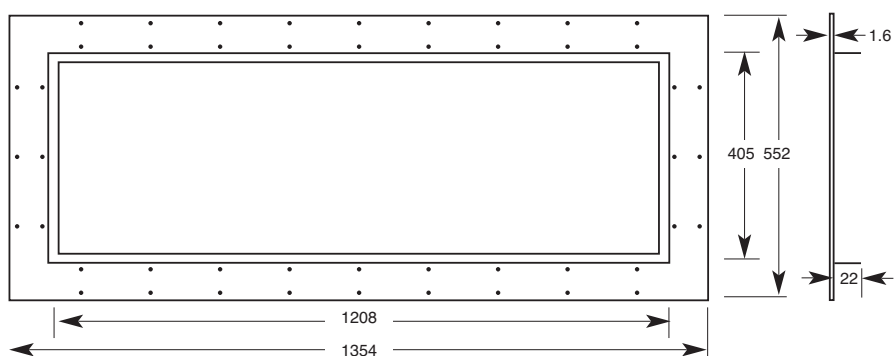5.   Clad wall to flange kit and finish.
6.   Refit 18mm trim frame.

NOTE:

If the wall is being plastered we recommend fixing stopping bead up to the flange to give a clean shadow line. The depth of the flange profile is 22mm to allow for tiling or rendering. If plaster is used we recommend packing out to 22mm.
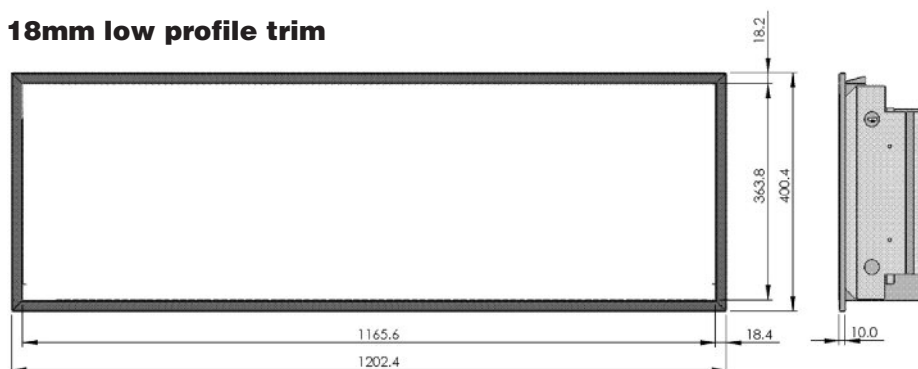
TRIMS

50mm trim

52.2
363.8
468.4
1165.6
1270.4
52.4
10.0

18mm trim flange kit

1.6
405 552
22
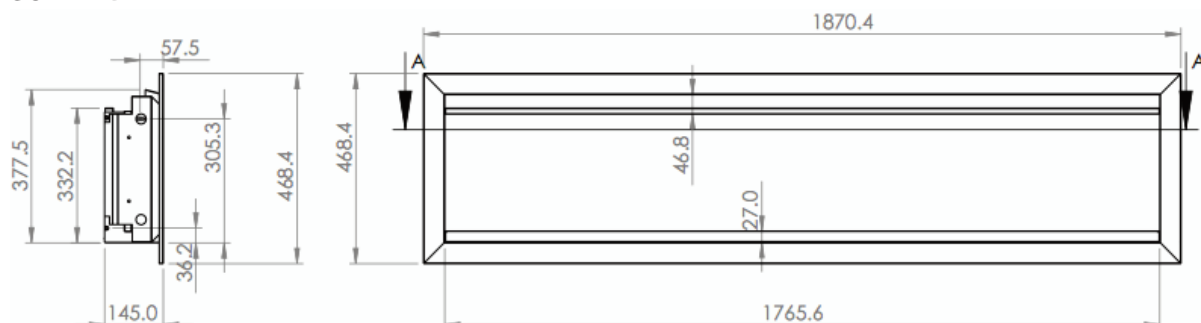1208
1354

18mm low profile trim
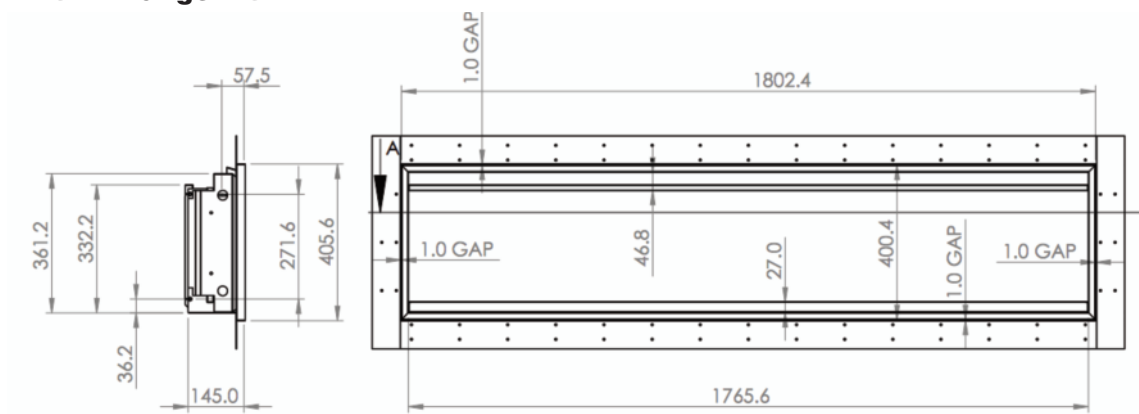

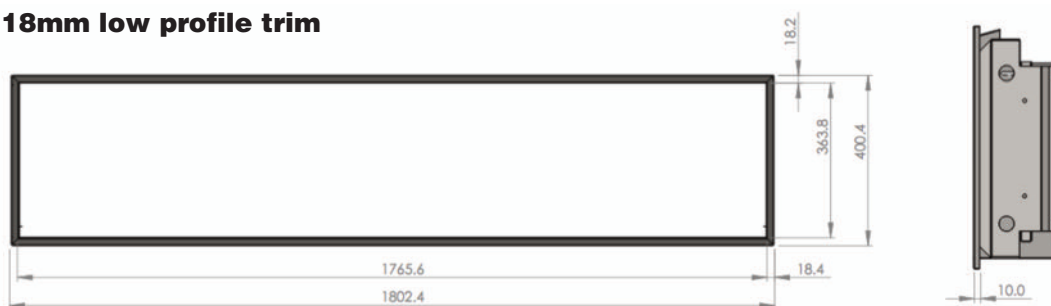18.2
363.8
400.4
1165.6
1202.4
18.4
10.0

TRIMS -1800

50mm trim

18mm trim flange kit

18mm low profile trim

COMMISSIONING PROCEDURE

Once the fire is installed:

- Install media.
- Check for gas leaks.
- Connect powerflue module loom to fan control unit.
- Carry out the lighting procedure.
- Check burner pressures and adjust as per Dataplate.
- Fit access cover and trim.
- Handover instructions to owner.
- Instruct owner on how to operate the fireplace safely.
- Instruct owner how to isolate appliance in an emergency.

MEDIA INSTALLATION

Driftwood

- Lay driftwood media in a random arrangement along the entire length of the burner.
- Avoid smothering the burner channel.
- Ensure media is not heaped in areas, spread evenly along.
- Do not add extra media, or combine media types.
- Only the approved supplied media is to be used.
- Refer to Real Flame for technical advice regarding media.
- Do not cover pilot area.
- Do not overfill with media above the pilot cover level.
- Ensure the pilot flame is not impinged by media and can cross light the main burner.
- Do not use any other media than as supplied and recommended by the manufacturer.
- Use of other media may result in explosive media which may cause injury or damage.
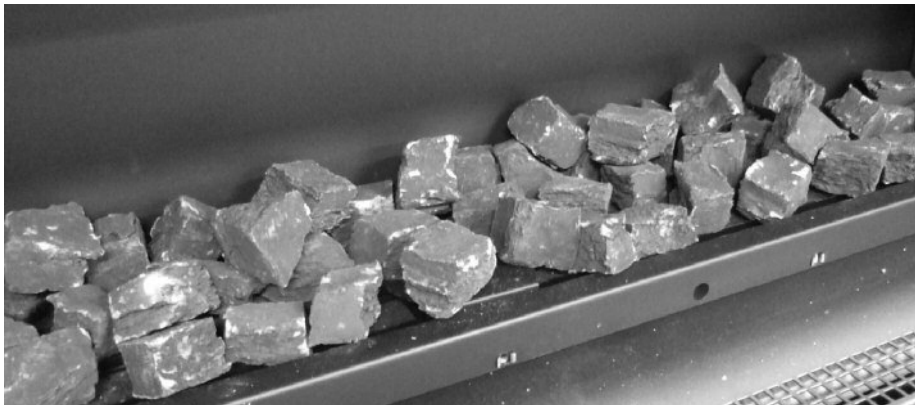
Typical setup

IMPORTANT - Do not cover or block pilot area.

MEDIA INSTALLATION (continued

Coals only

- Lay coal media in a random arrangement along the entire length of the burner.
- Avoid smothering the burner channel. Apply coals either side of the flame channel.
- No more than 4 coals should cover the main flame channel.
- Ensure media is not heaped in areas, spread evenly along.
- Do not add extra media, or combine media types.
- Only the approved supplied media is to be used.
- Do not cover pilot area.
- Do not overfill with media above the pilot cover level.
- Ensure the pilot flame is not impinged by media and can cross light the main burner.
- Do not use any other media than as supplied and recommended by the manufacturer.
- Use of other media may result in explosive media which may cause injury or damage.

Typical setup

MEDIA INSTALLATION (continued)

Logs and Coals

- Lay coal media in a random arrangement along the entire length of the burner.
- Avoid smothering the burner channel. Apply coals either side of the flame channel.
- Ensure media is not heaped in areas, spread evenly along.
- Randomly place logs between and on top of the coal media in an evenly spread out pattern.
- Do not add extra media, or combine media types.
- Only the approved supplied media is to be used.
- Do not cover pilot area.
- Do not overfill with media above the pilot cover level.
- Ensure the pilot flame is not impinged by media and can cross light the main burner.
- Do not use any other media than as supplied and recommended by the manufacturer.
- Use of other media may result in explosive media which may cause injury or damage.

Typical setup

MEDIA INSTALLATION (continued

Pebbles

- Lay large pebble media in a random arrangement along the entire length of the burner.
- Avoid smothering the burner channel.
- Fill in voids with medium size pebbles.
- Fill in remaining voids with small pebbles.
- Pebbles should appear as a random mix and not be stacked more than 2 high in a few spots.
- Ensure media is not heaped in areas, spread evenly along.
- Do not add extra media, or combine media types.
- Only the approved supplied media is to be used.
- Refer to Real Flame for technical advice regarding media.
- Do not cover pilot area.
- Do not overfill with media above the pilot cover level.
- Ensure the pilot flame is not impinged by media and can cross light the main burner.
- Do not use any other media than as supplied and recommended by the manufacturer.
- Use of other media may result in explosive media which may cause injury or damage.
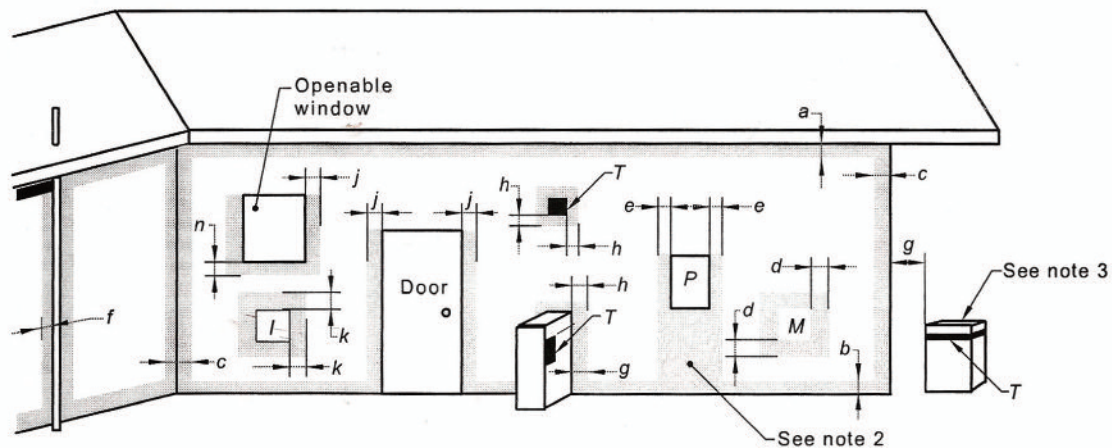
Typical setup

OPERATION – USER INSTRUCTIONS

- Do not operate if you smell gas. Turn appliance off, extinguish any open flame. Contact your installer or a licensed gasfitter.

- Do not use if any part of this appliance has been submerged in water. Contact your installer or a qualified service technician.

- Solid fuels must not be burnt in the fire. Leaves, sticks, wood, paper food or material must be kept away from the fire.

- Appliance operates with luminous flames, carbon deposits may occur during operation.

ELEMENT 1200 & 1800 FLUE TERMINATION (COWLS)

Balanced Flue

LEGEND:

T = Flue terminal
I = Mechanical air inlet

M = Gas meter
P = Electricity meter or fuse box

Shading indicates prohibited areas for flue terminals

Ref.	Item	Minimum clearances (mm)	
		Natural draft	Fan assisted
a	Below eaves, balconies and other projections:		
	• Appliances up to 50 MJ/h input	300	200
	• Appliances over 50 MJ/h input	500	300
b	From the ground, above a balcony or other surface †	300	300
c	From a return wall or external corner †	500	300
d	From a gas meter (M) (see 4.7.11 for vent terminal location of regulator)	1000	1000
e	From an electricity meter or fuse box (P)	500	500
f	From a drain pipe or soil pipe	150	75
g	Horizontally from any building structure † or obstruction facing a terminal	500	500
h	From any other flue terminal, cowl, or combustion air intake †	500	300
j	Horizontally from an openable window, door, non-mechanical air inlet, or any other opening into a building with the exception of sub-floor ventilation:		
	• Appliances up to 150 MJ/h input	500	300
	• Appliances over 150 MJ/h input up to 200 MJ/h input	1500	300
	• Appliances over 200 MJ/h input up to 250 MJ/h input †	1500	500
	• Appliances over 250 MJ/h input †	1500	1500
	• All fan-assisted flue appliances, in the direction of discharge	-	1500
k	From a mechanical air inlet, including a spa blower	1500	1000
n	Vertically below an openable window, non-mechanical air inlet, or any other opening into a building with the exception of sub-floor ventilation:		
	• Space heaters up to 50 MJ/h input	150	150
	• Other appliances up to 50 MJ/h input	500	500
	• Appliances over 50 MJ/h input and up to 150 MJ/h input	1000	1000
	• Appliances over 150 MJ/h input	1500	1500

† Unless appliance is certified for closer installation

NOTES:

1 All distances are measured to the nearest part of the terminal.

2 Prohibited area below electricity meter or fuse box extends to ground level.

3 See Clause 5.13.6.6 for restrictions on a flue terminal under a covered area.

4 See Appendix J, Figures J2(a) and J3(a), for clearances required from a flue terminal to an LP Gas cylinder. A flue terminal is considered to be a source of ignition.

5 For appliances not addressed above acceptance should be obtained from the technical regulator

REMOTE CONTROL OPERATING GUIDE

The Element 1200 & 1800 are controlled completely by the use of the remote control; this remote can be used either as a manual operation or an auto operation.

- The remote thermostat uses radio frequency to transmit to the gas/fan controller.

- The remote thermostat has a LCD display

- The remote thermostat uses 2 off "AA" batteries which should last for 12 months. (Depending on quality of battery.) Batteries should be changed when smoke alarms are changed.

- The remote control and the controller are non-serviceable parts and if faulty should be returned to Real Flame Pty Ltd for replacement.

Locating the remote

The remote houses the thermostat that controls the heat output of the fire. When storing the remote either on its wall bracket or by placing it somewhere in the room where the fire is located, ensure there are no other heat sources that will affect the thermostats ability to accurately read the room temperature. For example, by placing the remote in direct sunlight or under a cushion, the fire may turn down or off before the room reaches the set temperature.

Factory Set Features

- When turned on the fire will always start on the low setting and remain on low for 3 minutes, it will then go to the high setting.

- The fan will automatically come on in the high mode after the fire has been operating for 3 minutes 20 seconds.

- When the fire shuts off on auto mode or is shut off in manual mode, the fan will continue to operate for 3 minutes in the "High" mode.

- The fire can be operated in either "Auto" mode or "Manual" mode.

Quick Start Guide

On/Off

Press and release the ⏻ button to turn the thermostat on and off.

Setting the day of the week and time

With the thermostat off, press and hold the 'T' button for 2 seconds or longer to initiate programming the time. Time, the hour setting and AM/PM will flash.

Setting the hour function

Press and release the ▲ or ▼ button to increase or decrease the hour setting by 1 hour.

Press 'OK' to accept.

Setting the minute function

Press and release, or press and hold the ▲ or ▼ button to increase or decrease the minute setting by 1 minute.

Press 'OK' to accept.

Setting the day of the week function

Press and release the ▲ or ▼ button to change the day of the week to the following or previous day. Press and hold the ▲ or ▼ button for 2 seconds or longer to increase or decrease the day of the week by 1 day every 0.5 seconds.

Press 'OK' to complete setting.

REMOTE CONTROL OPERATING GUIDE (continued)

Manual mode

Manual mode does not require that the time and day of the week are set.

Press the ▲ or ▼ button to increase or decrease the temperature desired.

Automatic mode

The automatic mode allows the temperature to be regulated according to a programmed level and time.

Manually overriding the set program

At any time, the temperature may be adjusted up or down. However, whenever the thermostat changes to a new time period, the temperature will be set automatically according to that period's setting.

Programming

Each day of the week can be programmed individually for 4 periods P1, P2, P3 and P4, making a total of 28 programmed periods.

Alternatively, a weekday program can be set, so the same program is used for Monday-Friday. Similarly, a weekend program can be set for Saturday-Sunday. The entire week can also have the same program.

Alternatively, a weekday or weekend program can be set with individual programs for the remaining days.

The suggested period settings for each day/s are:

*   Period 1 - morning
*   Period 2 - daytime
*   Period 3 - evening
*   Period 4 - night-time

To begin programming

With the thermostat off, press and hold the 'P' button for 2 seconds or longer to initiate programming. The LCD will display **PROG**, *Pd* and the time at which the thermostat is currently set. **MO** will flash.

Period 1 can now be set.

*   *Setting the day of the week*

    You must choose which day/s of the week you wish to program.

    Press and release the ▲ or ▼ button to change the day of the week to the following or previous day. Press and hold the ▲ or ▼ button for 2 seconds or longer to increase or decrease the day of the week by 1 day every 0.5 seconds.

    The order that you can scroll through the days is as follows:

    MO → TU → WE → TH → FR → MO TU WE TH FR → SA → SU → SU SA → MO TU WE TH FR SA SU

    To accept the selected day/s of the week press 'OK'.

REMOTE CONTROL OPERATING GUIDE (continued)

Programming

- *Setting the period starting time*

   The hour and AM/PM settings will now flash. To set the P1 starting time, press and release the ▲ or ▼ button to increase or decrease the hour setting. Press and hold the ▲ or ▼ button for 2 seconds or longer to increase or decrease the hour setting by 1 hour every 0.5 seconds.

Please ensure that AM/PM is set correctly.

Press 'OK' to accept.

The minute setting will now flash. Adjust the minute setting similarly, using ▲ or ▼ button

Press 'OK' to accept.

- *Setting the temperature*

   The temperature setting will now flash. Press and release the ▲ or ▼ button to increase or decrease the temperature setting by 1 °C. Press and hold the ▲ or ▼ button for 2 seconds or longer to increase or decrease the temperature setting by 1°C every 0.5 seconds.

Press 'OK' to accept.

Period 1 is now set for the day/s of the week that you have chosen. The LCD will display *P2* to indicate that Period 2 can now be set for the same day/s of the week.

Repeat the programming process for periods 3 and 4.

After program 4 is set, press 'OK' and the program for the selected day/s will be set.

Repeat the programming process for any other periods/days that are required.

Restore factory default settings

With the thermostat off, press the following sequence of buttons: 'P', 'T', 'T' ▼.

Teaching RF thermostat ID code to control unit

CAUTION: The thermostat has already been programmed with a unique code. Do not attempt to teach the RF Thermostat ID code unless instructed by the manufacturer.

With the thermostat off, press the following sequence of buttons: 'P', 'T', 'T' ▲.

The LCD display will show 'CL' (Code Learn) for 2 seconds then return to the normal OFF state display. During this time a special code will be transmitted by the RF Thermostat to the Control Unit, causing the Control Unit to learn its ID.

WARNING

When the RF thermostat is in the "Auto" mode and the room temperature drops below the minimum temperature, the fire and fan will come on and operate until the room temperature is 3° above the minimum and then turn off, therefore:

- The minimum temperature should be set at a temperature that is not likely to cause the fire to continually turn on and off.

- If leaving the house for an extended period, the RF thermostat should be turned "OFF".

- As long as the RF thermostat is in the "Auto" mode and the temperature goes below the minimum set temperature, the fire will come on no matter what times are programmed into the thermostat.

- If you are unsure of the operation of the RF thermostat, please contact the manufacturer.

WIFI DEVICE CONTROL INSTRUCTIONS

Wifi control is available on the Element space heater.

Wifi control offers a temperature feature which can be used in conjunction with the supplied remote control or as the independent control.

Multiple devices can control the appliance. The appliance will operate based on its last received command.

Note 1 – Multiple devices may be connected to the appliance, only one appliance can be controlled by a device at a time.

Note 2 – The room air temperature sensing device is located in the remote, accuracy of the temperature sensing may be effected by the room layout, appliance installation and nearby furniture.

Note: The programming function is only done via the remote control.

Introduction

These pages outline the Operation of the Real Flame MKII Thermostat system. The System Includes

1. Real Flame Modulating Valve MKII update

2. Real Flame WiFi Interface MKII

3. Real Flame Thermostat MKII App

4. Real Flame MKII Web Service

These instructions assume that the Modulating valve has been installed into a fireplace with the WiFi module connected.

WiFi Set-up

From Factory settings the Fireplace will broadcast an Access Point for the Mobile App to join with, the Access point names have the following format,

Realflame_XXXXXX

Where 'XXXXXX' is the last six digits of the WiFi modules MAC addresses, the Access point is secured with the default password 'Realflame'

Joining the access point in this mode will allow you to,

1. Control the Fireplace via its own WiFi Access point, and is good for Demo and testing functionality

2. Push the Fireplace to a local or home network, this allows you to control the Fireplace whilst also being able to use your local network resource such as Internet, email and Facebook.

1. This mode is required to utilise the Server control features of the Fireplace.

WIFI DEVICE CONTROL INSTRUCTIONS (continued)
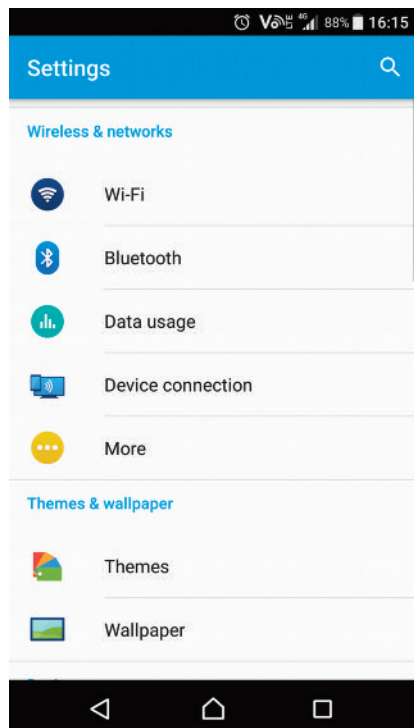
Step by Step – Pushing the Fireplace to a local network

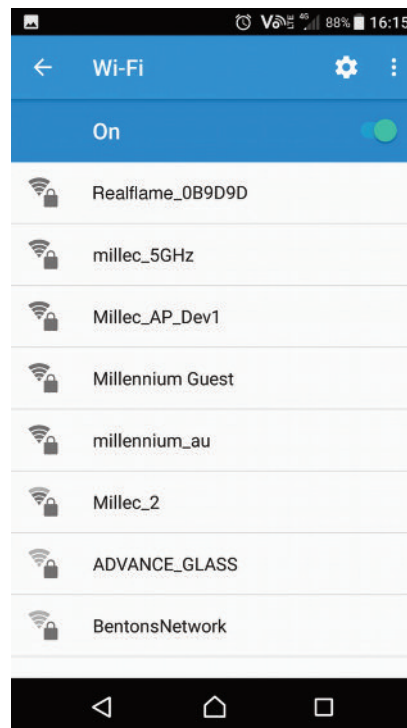*Illustration 1: Open up the settings Screen and select the Wi-Fi option*

Illustration 2: Select the Access point for your Fireplace
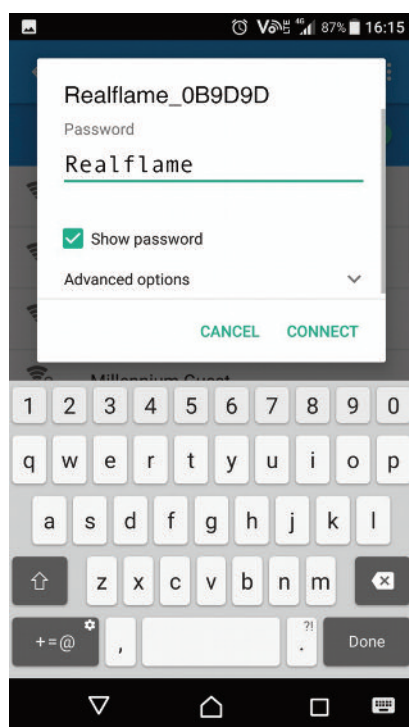

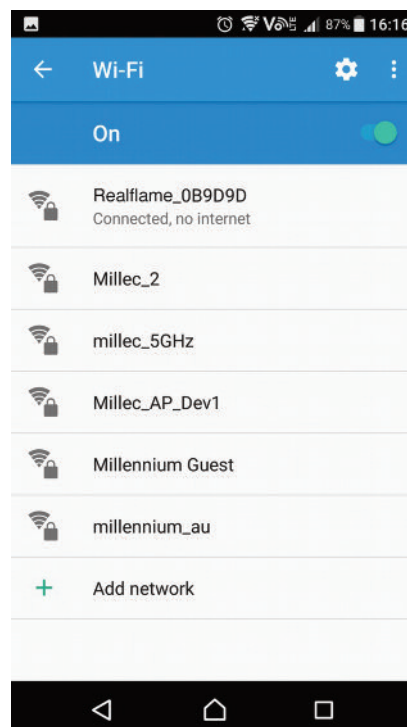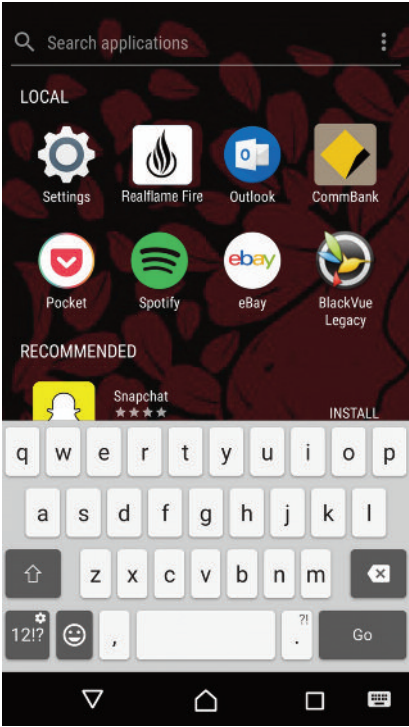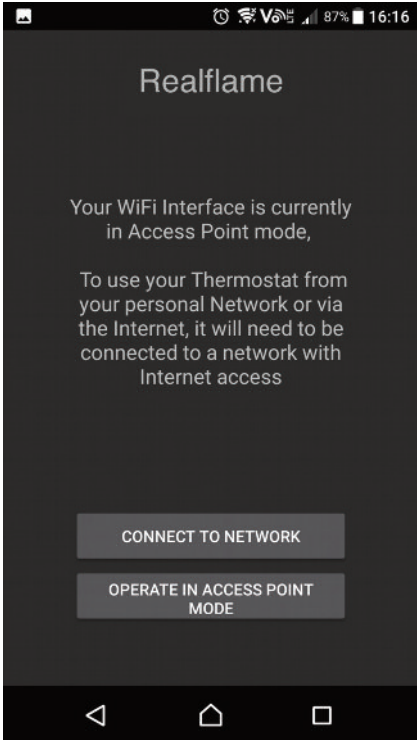*Illustration 3: Enter the default password for your Fireplace AP*

Illustration 4: Check the connection status for the Fireplace

WIFI DEVICE CONTROL INSTRUCTIONS (continued)

Step by Step – Pushing the Fireplace to a local network

Illustration 5: Open the Fireplace App

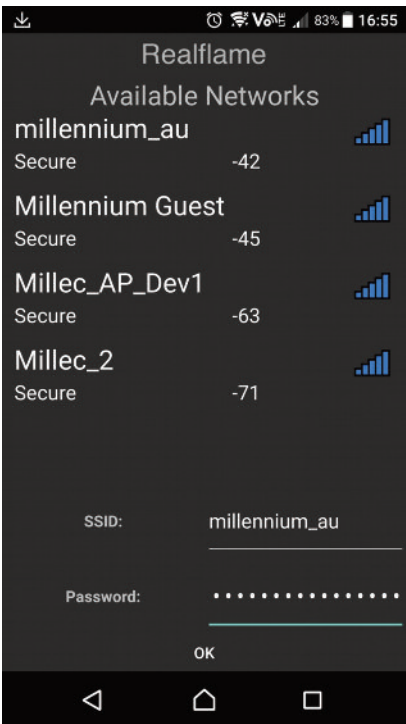*Illustration 6: When prompted, select 'Connect to Network'*

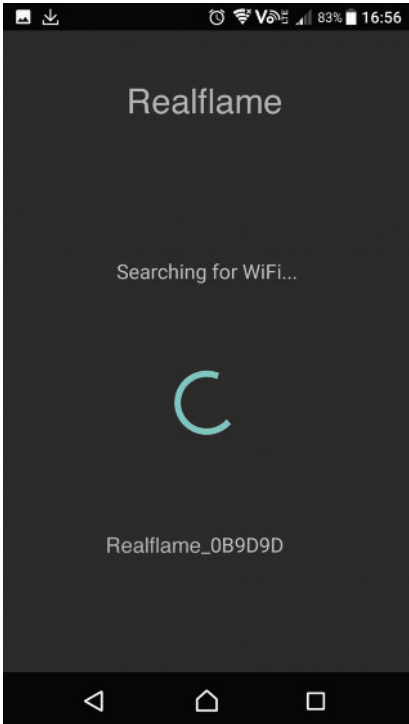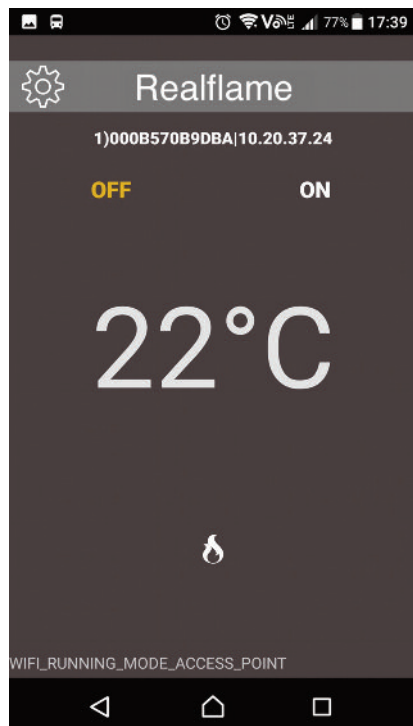*Illustration 7: Select the Network you want to use*

Illustration 8: The App will start to search for the device on the network

WIFI DEVICE CONTROL INSTRUCTIONS (continued)

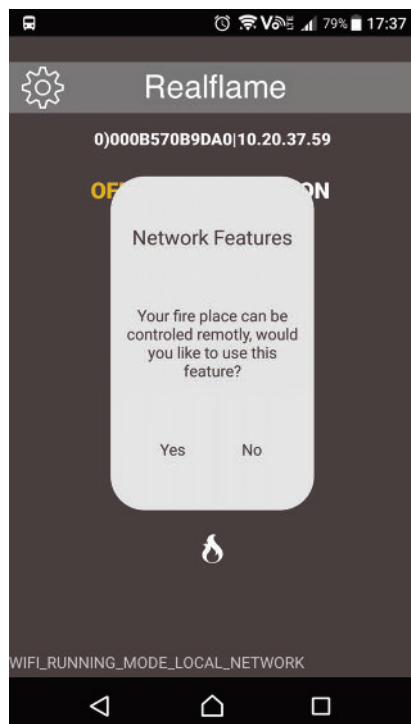**Step by Step – Pushing the Fireplace to a local network**

Illustration 9: You can now control your Fireplace from the network you are connected to.
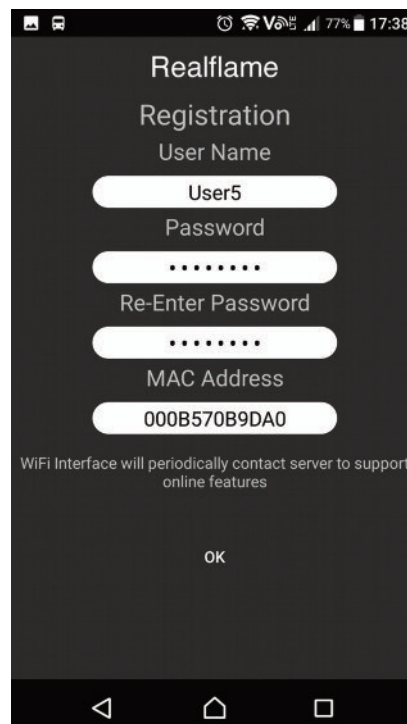
WIFI DEVICE CONTROL INSTRUCTIONS (continued)

Internet Control

If your model supports Internet control, upon using the App after being pushed to a local or home network with internet, the application will prompt you to set up the network features.

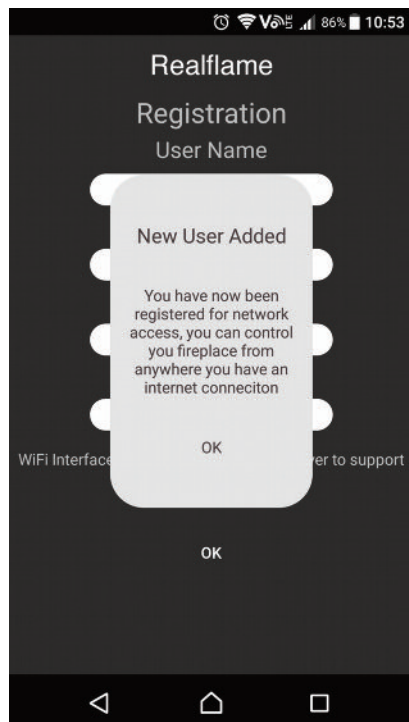### Set-up

Selecting Yes will take you to the sign up screen

Registration requires:

• A user name

• Password

• - Details of the connecting device; these will be pre-filled for you
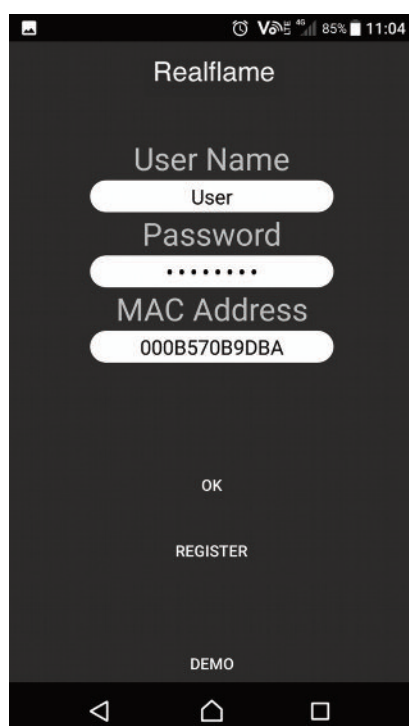
WIFI DEVICE CONTROL INSTRUCTIONS (continued)

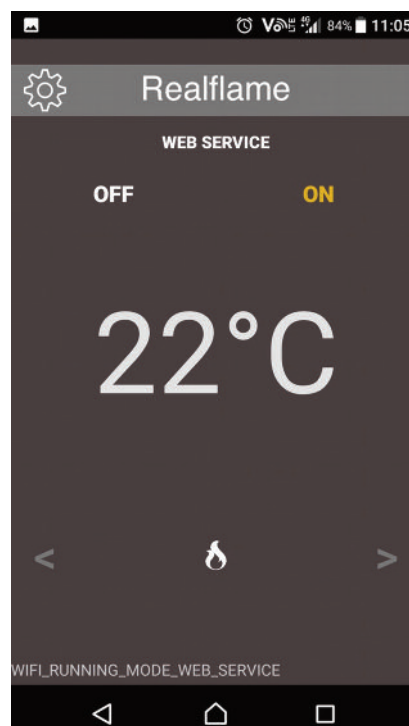## Step by Step – Pushing the Fireplace to a local network

User Added Successfully, your Fireplace is now linked to your account, you can control your Fireplace by logging into the application when prompted

Operation

When on another network or using your Mobile data, launching the App will present you with the log in screen.

Illustration 10: Enter Your Details to access the web control

Illustration 11: After a successful login, you will have control of you Fireplace

WIFI DEVICE CONTROL INSTRUCTIONS (continued)

Pushing the Fireplace to a different home or local network after initial install

Pushing the Fireplace to a different home or local network after it has previously been set up, is done at Fireplace power on, when the fireplace is powered off at the Main switch, upon being powered on, the Fireplace will show its Access point (Realflame_XXXXXX) for 30 seconds.

If you join the access point with your mobile device, you will be able to change the network the Fireplace is currently connected with via the mobile App.

If you do not join the Access point the Fireplace will join the network that is has settings saved for or if there are no settings, it will stay in Access Point mode.

Note: If you join the access point by accident on power on, you can simply power off the Fireplace and power on again, after the 30 seconds the Fireplace will join the network with its saved settings

Note: If not connected to wifi you can still control the fire via 4G or 5G network.

AUTO MODE - Only available via the remote.

TROUBLESHOOTING

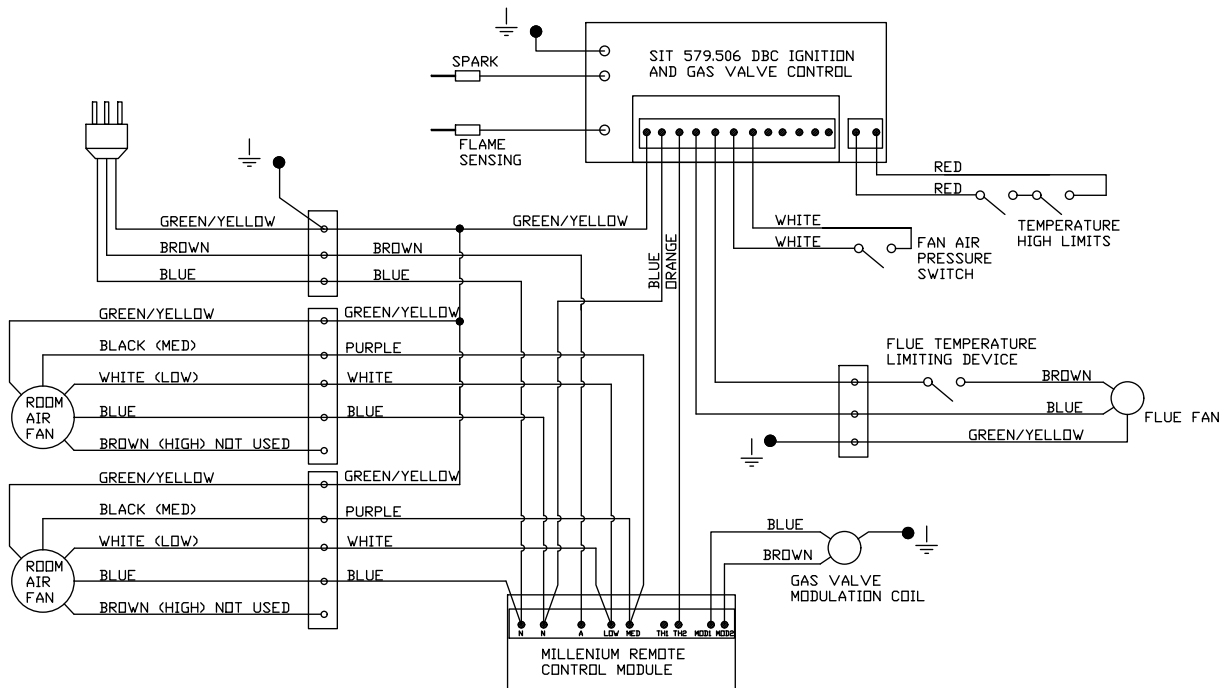| Problem	Possible Cause	Suggested Remedy
When the remote is activated nothing happens	The remote is not talking to the receiver.	Reprogramme the remote to the receiver (Refer Millennium manual in installation manual).
	The remote batteries are flat.	Replace the batteries.
The fire cuts off and won't relight	The over temp snap disc has been activated.	Allow the fire to cool down and then try to relight the fire. If the fire fails to relight, contact the manufacturer.
The fan will not come on	Possible caused by overheat or electrical fault.	Contact the manufacturer.
Flame appears to be low	Pressure not set.	All pressures are set in the factory at the time of manufacture, however the installing plumber mus make sure the pressures are correct.

IF YOUR FIREPLACE STILL DOES NOT OPERATE CORRECTLY CONSULT YOUR DEALER.

ALL SERVICE AND REPAIRS SHOULD BE PERFORMED BY AN AUTHORISED AGENCY.

ALL SPARE PARTS AND OPTIONAL TRIM FINISHES ARE AVAILABLE FROM REAL FLAME PTY LTD.

WIRING DIAGRAM

SPARK

FLAME SENSING

SIT 579.506 DBC IGNITION AND GAS VALVE CONTROL

GREEN/YELLOW
BROWN
BLUE

GREEN/YELLOW
BROWN
BLUE

GREEN/YELLOW

BLUE
ORANGE

RED
RED

TEMPERATURE HIGH LIMITS

WHITE
WHITE

FAN AIR PRESSURE SWITCH

GREEN/YELLOW
BLACK (MED)
WHITE (LOW)
BLUE
BROWN (HIGH) NOT USED

ROOM AIR FAN

GREEN/YELLOW
PURPLE
WHITE
BLUE

FLUE TEMPERATURE LIMITING DEVICE

BROWN
BLUE
GREEN/YELLOW

FLUE FAN

GREEN/YELLOW
BLACK (MED)
WHITE (LOW)
BLUE
BROWN (HIGH) NOT USED

ROOM AIR FAN

GREEN/YELLOW
PURPLE
WHITE
BLUE

BLUE
BROWN

GAS VALVE MODULATION COIL

N   N   A   LOW MED   TH1 TH2   MOD1 MOD2

MILLENIUM REMOTE CONTROL MODULE

CONVERSION INSTRUCTIONS

Natural gas / Propane / ULPG.

TOOLS
10mm spanner
15mm spanner
16mm Spanner (recommended) or small/medium shifter
No2 Phillip head screwdriver
Allen key 2.5mmAF

BURNER
1/   Turn appliance and allow to cool.
2/   Turn off gas to appliance
3/   Turn off and isolate appliance from electrical supply
4/   Remove trim screws (2 off)

5/   Remove trim (Slides out)

CONVERSION INSTRUCTIONS (continued)

6/   Remove lower access panel.

7/   Remove door screws (10 off)

8/   Lift off door (Ensure door is cool before attempting)
9/   Remove media where fitted.

10/   Remove end cover plate screw and lift out end plate.
       (LH and RH end)

CONVERSION INSTRUCTIONS (continued)

11/ Remove burner fixing screws (2 off at ends of burner).

12/ Lift burner up and gently support.

13/ Undo gas connection pipe at end of burner. (15mm and 16mm spanner required)

CONVERSION INSTRUCTIONS (continued)

14/ Lift burner out gently. Avoid marking back wall. Keep burner in the flat position until insulation is restrained (Rotating the burner may cause insulation to fall and be damaged.

15/ RECOMMENDED STEP

To avoid damage to the insulation apply low tack tape to the burner to restrain the insulation into position. Avoid pressing the tape onto the media. The insulation media may easily crack if the appliance have been operated for several hours.

The media may be carefully lifted out and placed flat to store until refitting.

The media can be repainted using an approved high temperature paint, contact Real Flame for details.

16/ Turn burner over gently. AVOIDING DAMAGING THE INSULATION

17/ Loosen gas pipe nuts form injectors and move gas pipe away. Note – 15mm spanner required for the nuts, a shifter or spanner should be used to support the brass injector assembly.
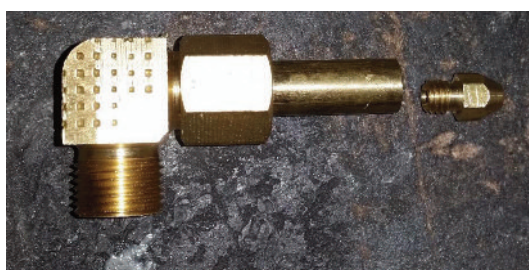
CONVERSION INSTRUCTIONS (continued)

18/ Undo grub screw (Allen key 2.5mm AF). Injector assembly can now be removed.

19/ Remove all injector assemblies.
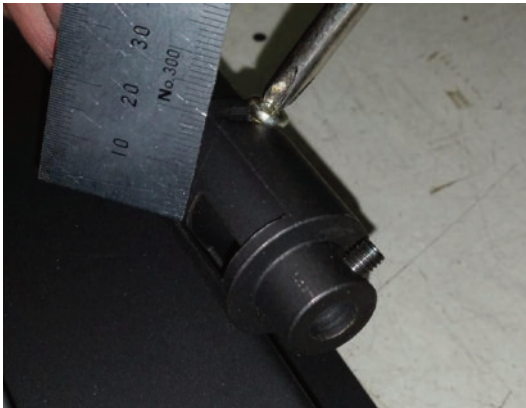Unscrew injector and replace with correct gas type.

20/ Loosen aeration cap screw approx. ½ turn.
Rotate cap until the correct gap is achieved to suit the gas type.
The listed opening is required on each side of the aeration cap.
(A ruler or similar can be used to check the opening, a drill bit of the designated size can also be inserted to check the opening)
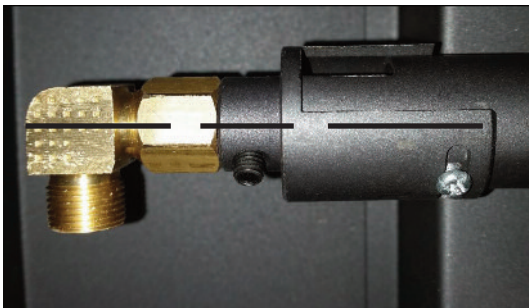Tighten screw to retain aeration cap setting

Aeration Settings

NAT GAS	LPG	ULPG
5.0mm open	10.0mm open	Full open

CONVERSION INSTRUCTIONS (continued)

21/ Refit injector assembly into aeration cap.

22/ Refit gas pipe and tighten nuts.

23/ Ensure injector assembly is sitting firmly into aeration cap and tighten grub screw.

NOTE – ENSURE INJECTOR ASEMBLY IS AIMING CENTRALLY INTO THE AERATION CAP AND TUBE

Correct where required.

24/ Rotate burner to check insulation is correctly located.

The burner consists of two types of insulation. In the event the lower insulation (white glass wool blanket) has moved push firmly down and ensure blanket fills all gaps and corners of the burner.

25/ Sit 12mm hard insulation back into burner. Hard insulation should sit loosely onto the top of soft insulation approximately level with the burner. Where required adjust the soft insulation to ensure sitting correctly. TAKE CARE – where the burner has been previously used the hard insulation is easily cracked.

The insulation media can be repainted using an approved high temperature paint, contact Real Flame for details.
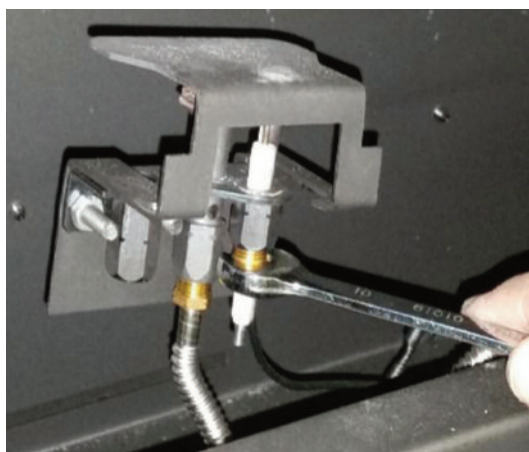
CONVERSION INSTRUCTIONS (continued)
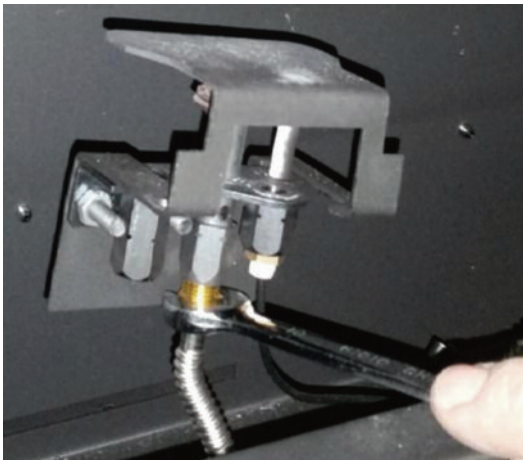

PILOT

1/ Remove pilot bracket holding screw.

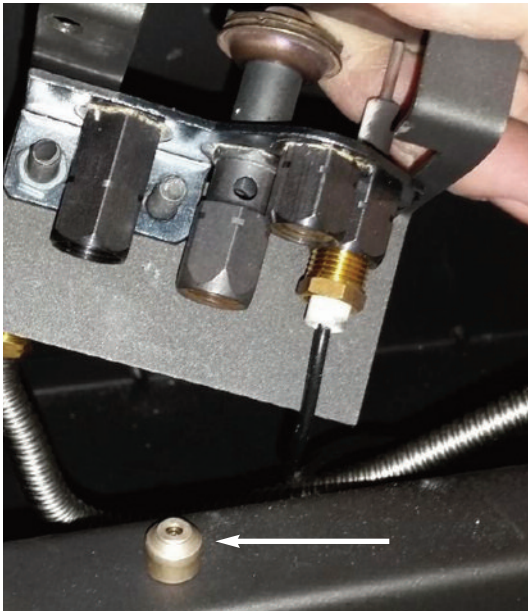2/ Gently lift pilot assembly up to enable access to pipe fittings.

3/ Remove spark lead

4/ Remove spark probe (10mm spanner required)

CONVERSION INSTRUCTIONS (continued)

5/   Remove pilot pipe fitting from pilot assembly.

6/   Remove pilot orifice from pilot or replace whole pilot assembly with correct gas type.

PILOT REFITMENT

1/   Replace pilot orifice with correct gas type.
2/   Refit pilot gas pipe and tighten
3/   Refit spark probe and gently tightly
4/   Refit spark lead
5/   Push pilot assembly down to original position and refit the bracket retaining screw.

CONVERSION INSTRUCTIONS (continued)

6/ Check all wires are sitting correctly, flush to front wall. Ensure spark lead is not broken or excessively bent. Ensure lead hole is still sealed. (High temperature silicon is suitable for resealing.)

BURNER REFITMENT
1/ Carefully place burner into firebox, supporting LH end of the burner.
2/ Tighten gas pipe connection to the end of the burner. Burner can now be lowered fully into the firebox.
3/ Refit burner retaining screws (2 off)
4/ Refit End cover plates and refit holding screws. (Screws only need to be done finger tight)
5/ Replace media as per media fitment instructions.
6/ Refit door. Check door seal is sitting correctly. Hang door onto firebox. Fit screw and lift door slightly to locate.
   10 x screws to be refitted
   DO NOT OVERTIGHTEN SCREWS – Hand tight is suffient for door to seal.

CONVERSION INSTRUCTIONS (continued)

7/ Fit manometer to appliance.

8/ Start appliance and check for gas leaks in lower area and in firebox.

9/ Adjust high and low burner pressures to the dataplate. (The appliance must operate for 3minutes before high pressure setting can be obtained).

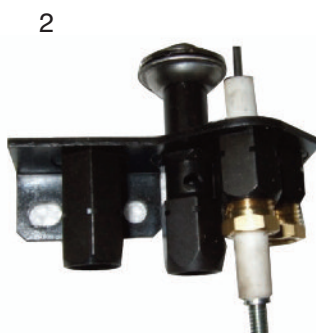10/ Check appliance for correct flame operation, Check pilot flame, Check main burner is not smothered and flames are even along burner with correct colour and not excessively yellow or sooty. (Note it takes upto 10minutes of operation for the flame to achieve full colour.)

11/ Remove manometer and tighten test point. Check test point for gas leaks.

12/ Turn appliance off.

13/ Refit lower access panel.

14/ Refit trim.

15/ Refit trim retaining screws (2 off) Screws locate into 2 off prethreaded holes in the appliance casing.

Burner pressure test point

Max pressure adjustment nut

Min pressure adjustment screw

PARTS LIST

1	Valve
2	SIT Pilot assembly Natural gas
	SIT Pilot assembly Propane
3	Injector Natural gas
	Injector LPG - ULPG
4	Millennium receiver (Element)
5	Millennium remote control (Element)
6	Sit Ignition pack / gas control

1

2

3

4

5

6

REAL FLAME

www.realflame.com.au
1300 554 155