

HEATMASTER PTY LTD
HEATMASTER “ ENVIRO ”
High Efficiency gas log space heater



Inbuilt Model

**Customer Operating information
&
Installation instructions**

ENVIRO gas heaters : Are Manufactured By

Heatmaster Pty Ltd
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Bayswater, Vic 3153
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CONTENTS

PRODUCT FEATURES.....	3
SAFETY PRECAUTIONS.....	4
CUSTOMER OPERATING INSTRUCTIONS.....	5
SAFETY FEATURES.....	7
GAS VALVE ADJUSTMENT.....	8
INSTALLATION INSTRUCTIONS.....	10
DIMENSIONS.....	17
WIRING DIAGRAM.....	18
TROUBLE SHOOTING GUIDE.....	19
SERVICING.....	20
SPARE PARTS.....	21
CARE OF APPLIANCE & WARRANTY.....	22
SERVICE CONTACT INFORMATION.....	22

**PLEASE STORE THIS MANUAL IN A SAFE PLACE
FOR FUTURE REFERENCE**

Product Features

HEATMASTER “ENVIRO “ INBUILT GAS LOG HEATER NAME PLATE

MODEL-ENVIRO	NAME PLATE		Manufacturer
GAS TYPE	NATURAL	LPG	
MODEL TYPE	Inbuilt	Inbuilt	Heatmaster (Pty.Ltd.)
GAS INPUT			41-45 Bendix Drv. Clayton, VIC. 3168
HIGH	42 MJ/h	42 MJ/h	
LOW	32 MJ/h	32 MJ/h	
HEAT OUTPUT			To be installed by an authorized person in accordance with installation instructions provided with the appliance.
HIGH	10.2 kW	10.2 kW	
LOW	7.33 kW	7.33 kW	
Efficiency	80.3 %	80.3 %	
Injector Size	3.5 mm	2.0 mm	
Manifold Pressure			
High	0.69 kPa	2.25 kPa	
Low	0.45 KPa	1.38 KPa	
SAI GLOBAL			
Approval No	GSCS20118	GSCS20118	
No to Code			
ASNZ 5263.1.3			
Electrical	Conform to AS3100		240V 50 Hz 160 Watts Max
Air Pressure Switch		Cleveland	
Cut in Pressure		100 Pa	
Cut out Pressure		91 Pa	
Electrical Connection		Standard Flex. 2 Mt. 3 Pin Plug	

POWER FLUED

ZERO CLEARANCES TO COMBUSTIBLES WALLS

ENERGY RATE 4.6 Stars

AUTOMATIC ELECTRONIC IGNITION

MANUAL OR REMOTE OPERATED CONTROLS

MODULATED HEAT SETTINGS

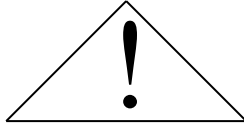
MODULATED FAN SPEED

EXTERNAL COMBUSTION AIR PREVENT DE-OXIGENATION OF ROOM AIR

DELAYED START FAN PREVENT COLD AIR BEING CIRCULATED AT START UP

HEAT DUCTED TO ANY NEIGHBOURING ROOM IN YOUR HOME

SAFETY PRECAUTIONS



- DO NOT OPERATE THIS APPLIANCE BEFORE READING THE INSTRUCTION BOOKLET
- DO NOT PLACE ARTICLES ON OR AGAINST THIS APPLIANCE
- DO NOT STORE CHEMICALS OR FLAMMABLE MATERIALS OR SPRAY AEROSOLS NEAR THIS APPLIANCE
- DO NOT OPERATE WITH PANELS COVERS OR GUARDS REMOVED FROM THIS APPLIANCE
- DO NOT ENCLOSED THIS APPLIANCE

THE GUARD IN THE GLASS DOOR IS FITTED TO THIS APPLIANCE TO REDUCE THE RISK OF FIRE OR INJURY FROM BURNS AND NO PART OF IT SHOULD BE PERMANENTLY REMOVED.
FOR PROTECTION OF YOUNG CHILDREN OR THE INFIRM, A SECONDARY GUARD IS REQUIRED.

THIS APPLIANCE SHALL ONLY BE INSTALLED BY AN AUTHORIZED PERSON
IN ACCORDANCE TO AS 5601 (GAS INSTALLATION CODE)
MANUFACTURER'S INSTALLATION INSTRUCTIONS
LOCAL GAS FITTING REGULATIONS AND MUNICIPAL BUILDING CODES

THIS APPLIANCE MUST NOT BE MODIFIED

Customer Operating Instructions

The Heatmaster Enviro Gas log space Heater has been designed for a simple and efficient operation to provide you with a higher heat output than any other heater in the market. With dual operation system (manual or remote controlled) at a touch of a button your heater will provide you with a fully controlled modulated supply of heat, from a pleasant and steady warmth to the strongest heat output to reach almost any corner of your home by using the heat optional transfer kit.

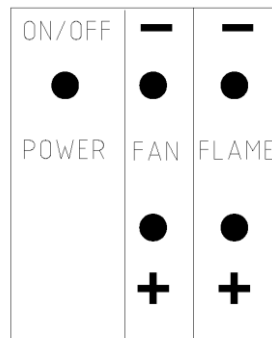
PRE OPERATIONS CHECKS

Prior to operating the heater, ensure that the flue terminal is not obstructed. Furthermore, make sure there are no combustible objects leaning against, resting on, or within the immediate vicinity of the unit. Check that the heater main power and gas supply are connected and switched on.

OPERATING THE HEATER

The heaters can be operated by two different modes, **manually** or by the **remote** controlled thermostat wall unit.

For the manual mode: the controls are located in the left of the front bottom grill panel. And the operation of the buttons are described in the picture as follow:



MANUAL OPERATED SWITCHES IN BOTTOM FRONT PANEL

- 1.-To ignite your heater press the **Igniton ON/OFF Button** and the heater automatically will start the ignition sequence and after approximated 30 second of self checking the heater will ignite.
- 2.-The heater **always start in the low heat** setting and the heater will **warm-up for at least 2 minutes** before automatically going to the maximum flame setting.
- 3.-The fan will not start till the heater has reached the minimum operating temperature. In the Max. heat setting the fan speed will be locked in high and can not be set to medium or low speed, unless your change the heat setting to medium or low. To select fan speed or the heat setting press the **flame** or **fan marked buttons** in the + or - at side of the switches to increase or decreased as desired.

For the remote programmable thermostat mode:

To use this feature refer to attached Thermostat manual included with this heater. But here are some basic instructions so you can override some functions to operate your heater.

- 1.-To ignite your heater simply press the ON/OFF power button and the heater automatically will start the ignition sequence within approximated 30 second of self checking the heater will ignite.
- 2.-The heater will **always start in the low heat** setting and the heater will **warm-up for at least 2 minutes** before automatically going to the higher flame setting.
- 3.-The fan will not start until the heater has reached the minimum operating temperature. To select fan speed or the heat setting press the **up** or **Down buttons** in the remote controller, to decrease or increase differential temperature between room and thermostat and flame and fan speed will increase or decreased as desired. (the bigger the temperature differential the bigger the flame and fan speed)

Note: In the Maximum heat setting the fan speed will be locked in high and can not allow to be set to medium or low speed , at least your change the heat setting to medium or low.

TURNING THE APPLIANCE OFF

For either manual or remote mode press the **on/ off** switch once. The room fan will continue to operate for a short period while the heater cools down.

Please note:

- 1.- This appliance can not be operated without the fan running
- 2.- Due to the performance and efficiency of the heater, steam may be noticed coming from the flue terminal on cool days
- 3.- As this appliance has a luminous effect some slight carbon deposition may Occur in the logs.
- 4.- During first time firing of this appliance, an odour may be noticed for a short period as the paint cures. It is advisable to leave the windows open during the first few hours of the very first operation only.

SAFETY PRECAUTIONS

IMPORTANT POINTS

! DO NOT place articles or clothing on or against this appliance

! DO NOT use or store flammable materials near this heater

! DO NOT place any item containing liquid on the heater

! DO NOT spray aerosol in the vicinity of this appliance when it is in operation

! ALWAYS supervise young children near the appliance

It is recommended that a secondary guard be used, to prevent access to appliance by children, as outer panels of this appliance may reach high temperatures.

NOTE: In the event the electricity supply cord is damaged it must be replaced with the original Heatmaster part obtainable from your authorized dealer.

SAFETY FEATURES:

Automatic Pre-purge: Before heater ignition this operation is done to evacuate any remains of gas or flue products from inside the firebox that could be the cause of a mishap

Automatic Shut-off: Should the flame extinguish for any reason there is an automatic shut off of the gas supply.

Over temperature protection: In the event of the room fan failing , blockage of airways ,or incorrect gas installation ,the gas supply will automatically shut off to prevent the appliance from over-heating .

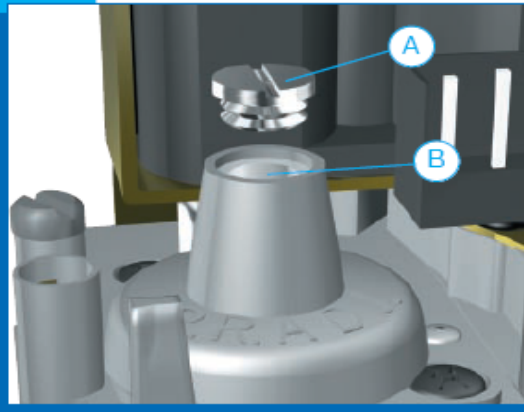
Warning : This appliance must be installed to comply to AS 5601 codes and regulations and only by an authorized person who is responsible for its correct operation at the time of installation and final commissioning .

Pressure adjustment .

Your Enviro Heater has been factory preset and does not need to be readjusted during installation. But there will be some situations where some service has to be done and gas pressure may need to be readjusted as per following instructions:



840 OUTLET PRESSURE ADJUSTMENT



All adjustments must be made on the basis of the specific characteristics of the appliance. Check inlet and outlet pressure using the pressure test points provided. After testing, carefully seal test points with the provided screws. Recommended torque: 1.0 Nm.

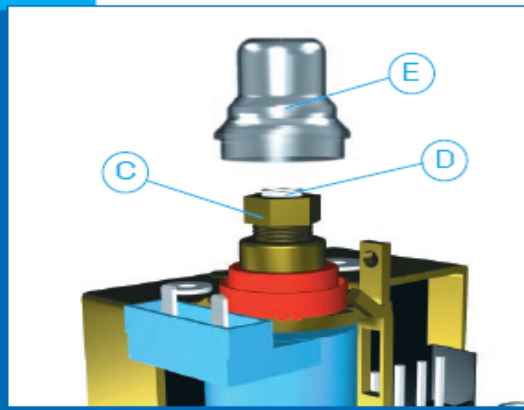
Disconnect pressure regulator connection "VENT" (if used).

Remove the protective plug A.

Screw in the screw B to increase the pressure and screw it out to decrease it.

After setting put back the protective plug.

843/845 OUTLET PRESSURE ADJUSTMENT



All adjustments must be made on the basis of the specific characteristics of the appliance. Check inlet and outlet pressure using the pressure test points provided. After testing, carefully seal test points with the provided screws. Recommended torque: 1.0 Nm.

Disconnect pressure regulator connection "VENT" (if used).

Remove the modulator plastic cap E.

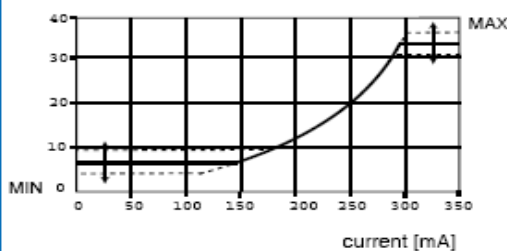
- Maximum pressure: power the modulator in the maximum condition. Screw in the nut C to increase the outlet pressure and screw it out to decrease it. Use a 10 mm spanner.

- Minimum pressure: Turn off the power supply to the modulator and, keeping the nut C stationary, screw in the screw D to increase the pressure and screw it out to decrease it. Screwdriver 6 x 1 blade. Carefully put back the modulator plastic cap. Reconnect pressure regulator connection (if used).

WARNING: to ensure the correct operation of the modulator it is necessary that the plastic cap E is returned to its original location.

845

Outlet pressure P_u [mbar]



Please for your own convenience record the following information in the space Provided:

Purchased from:

Name.....

Address.....

Phone No.....**Date of purchase**

Serial No of appliance.....

To be completed by the installer:

Name.....**License No**.....

Address.....

Phone No..... **Installation Date**.....

INSTALLATION:

!ONLY TO BE CARRIED OUT BY AN AUTHORIZED PERSON!

The Enviro inbuilt Heater for been a zero clearance appliance can be optionally installed in a false fireplace or wall cavity made of combustible materials such as wood or chipboard. Heatmaster provide the heater with their own flue kit of flexible pipes of 60mm and 50mm diameter for the inlet and exhaust. For the gas supply a flexible stainless steel pipe with a ½ “ BSP male connector is supplied with the heater and can be arranged by the installer to be located at the side or rear of the heater.

This easy access connection system allows the heater to be quickly serviced and replaced by one person when ever maintenance will be required in the future.

LOGS INSTALLATION:

!ONLY TO BE CARRIED OUT BY AN AUTHORIZED PERSON

Front view of empty tray no logs





Front View with Rear and Left Middle logs in position



Front view of Rear Logs and Middle Left and Right Log positioning

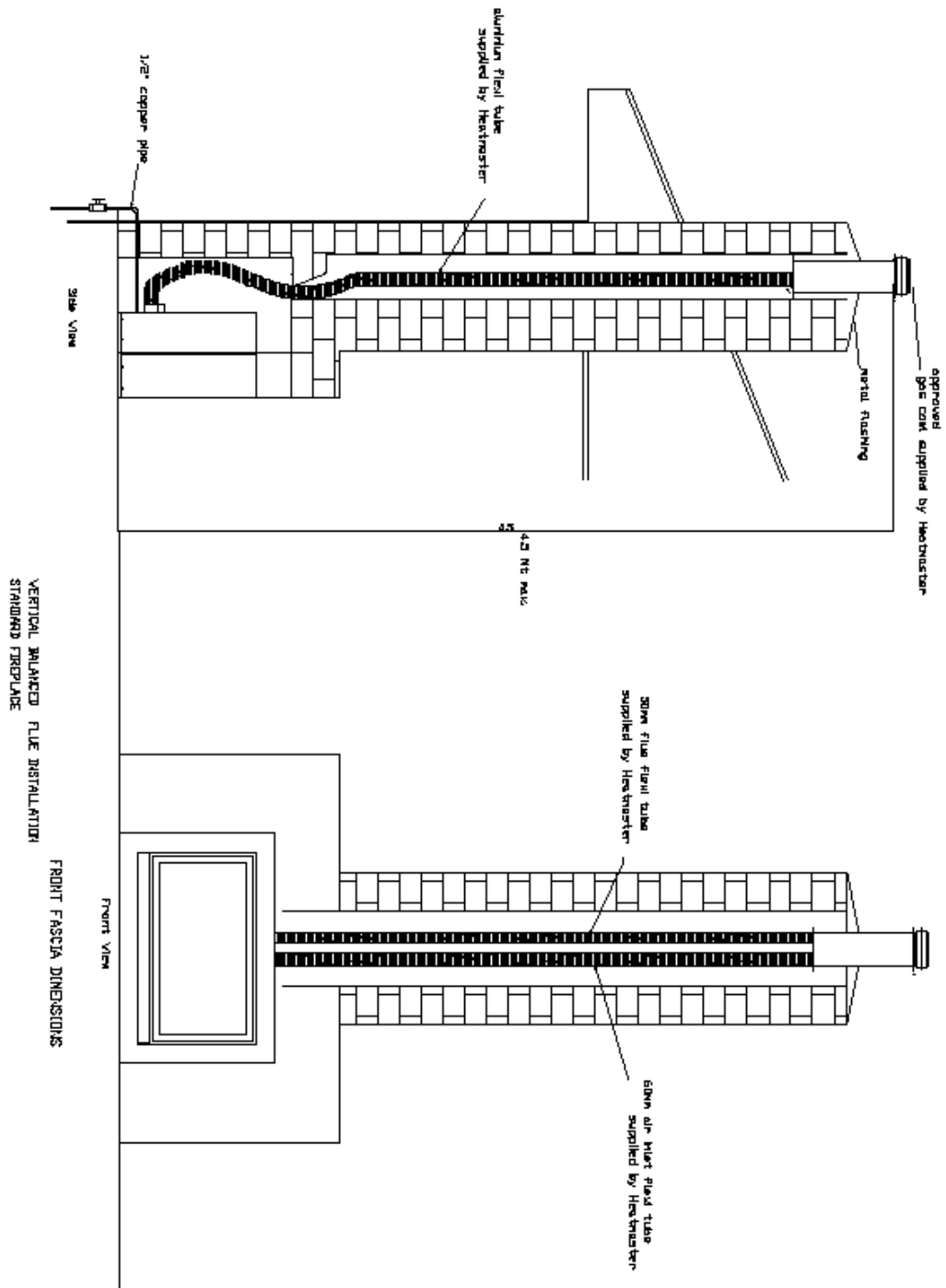


Front view of Rear, and Middle Logs complete with crossover log in position

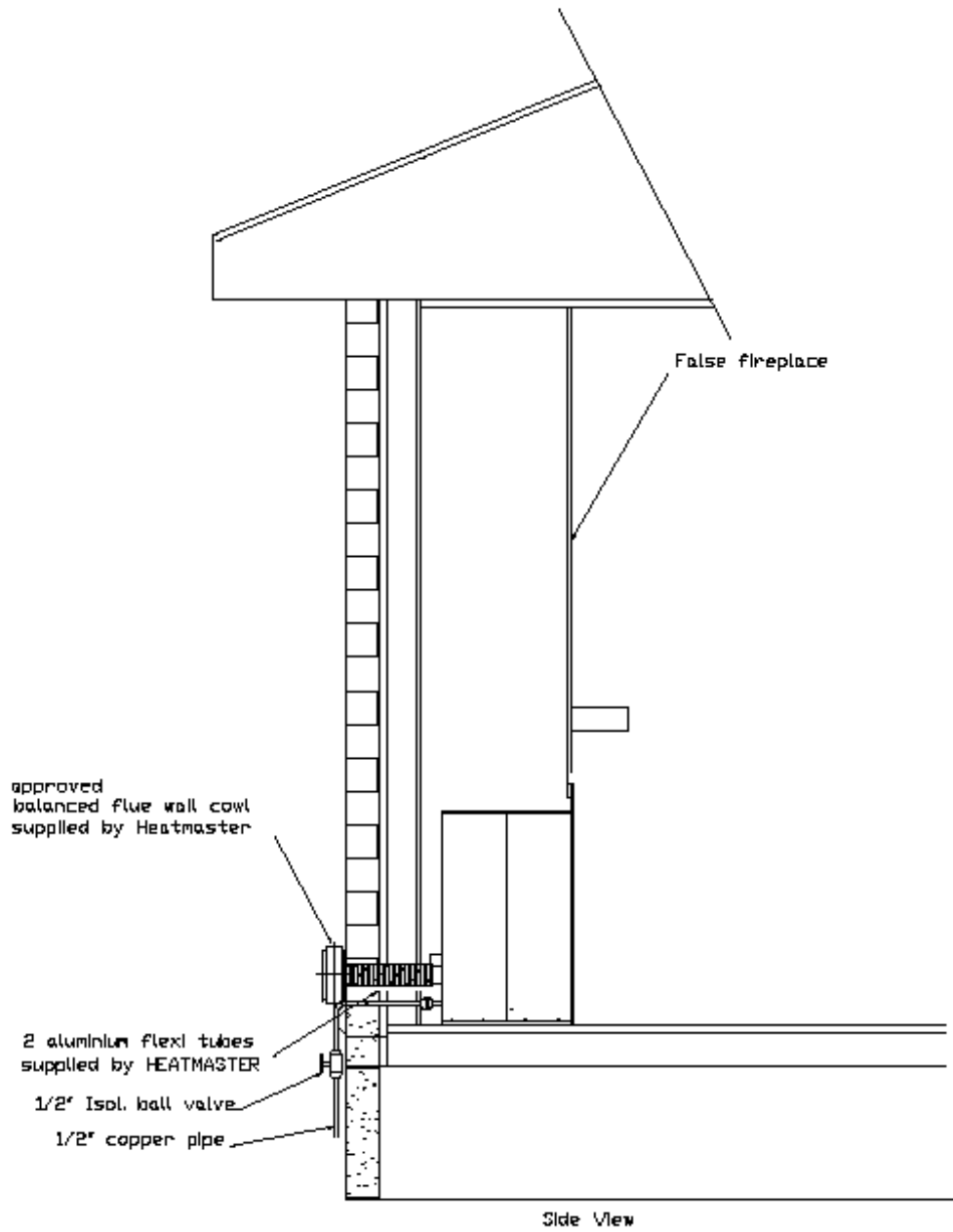
Complete Log set up with final front log in position



INSTALLATION OPTION 1: EXISTENT FIREPLACE OR ROOF PENETRATION WITH ENVIRO VERTICAL FLUE KIT

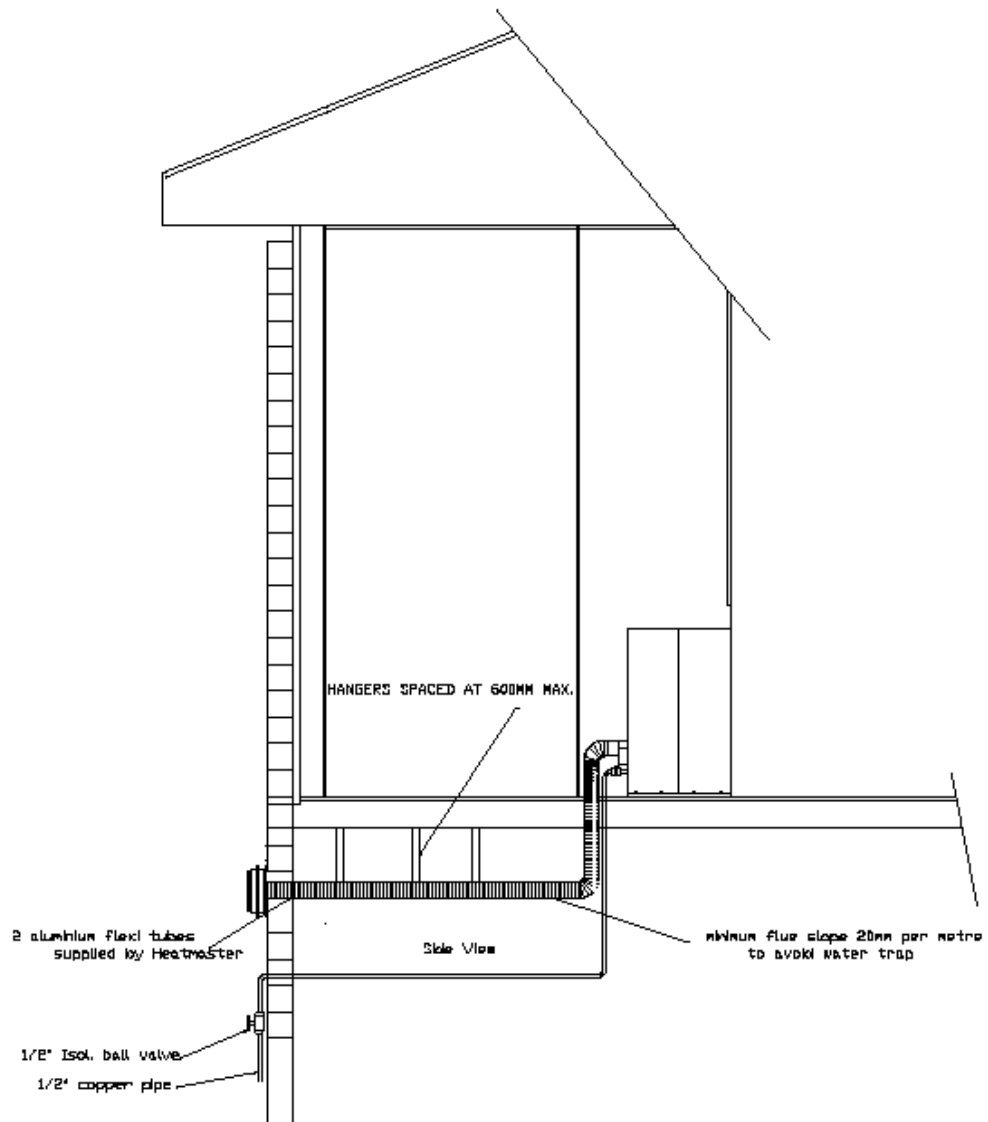


**INSTALLATION OPTION 2:
FALSE FIREPLACE ON STUMP FLOOR AND WALL
PENETRATION WITH ENVIRO HORIZONTAL FLUE KIT.**



Wall penetration with HEATMASTER Balanced flue on stumps floor

**INSTALLATION OPTION 3:
INTERNAL WALL ON STUMPS AND HORIZONTAL FLUE
UNDER THE FLOOR.**

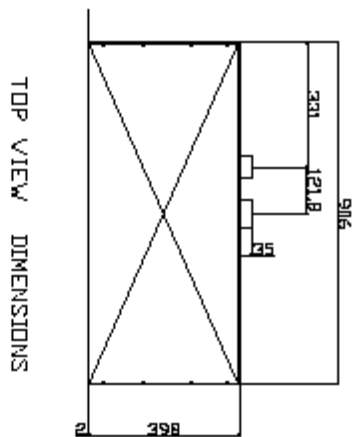
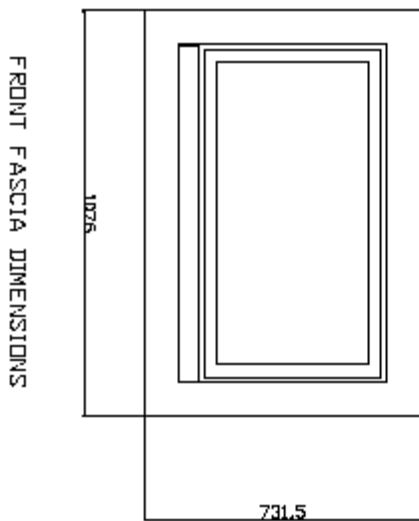
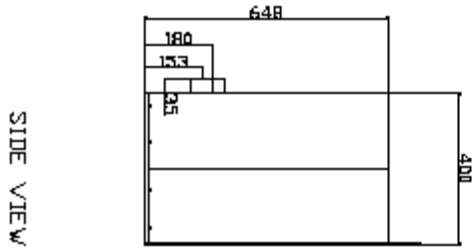
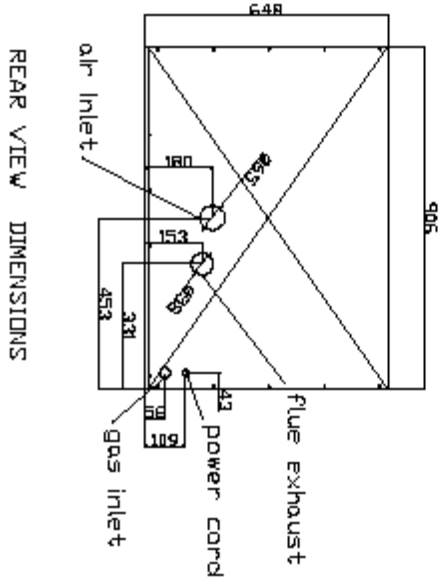


Internal Wall under floor with horizontal Balanced flue max length 4.5 mt.

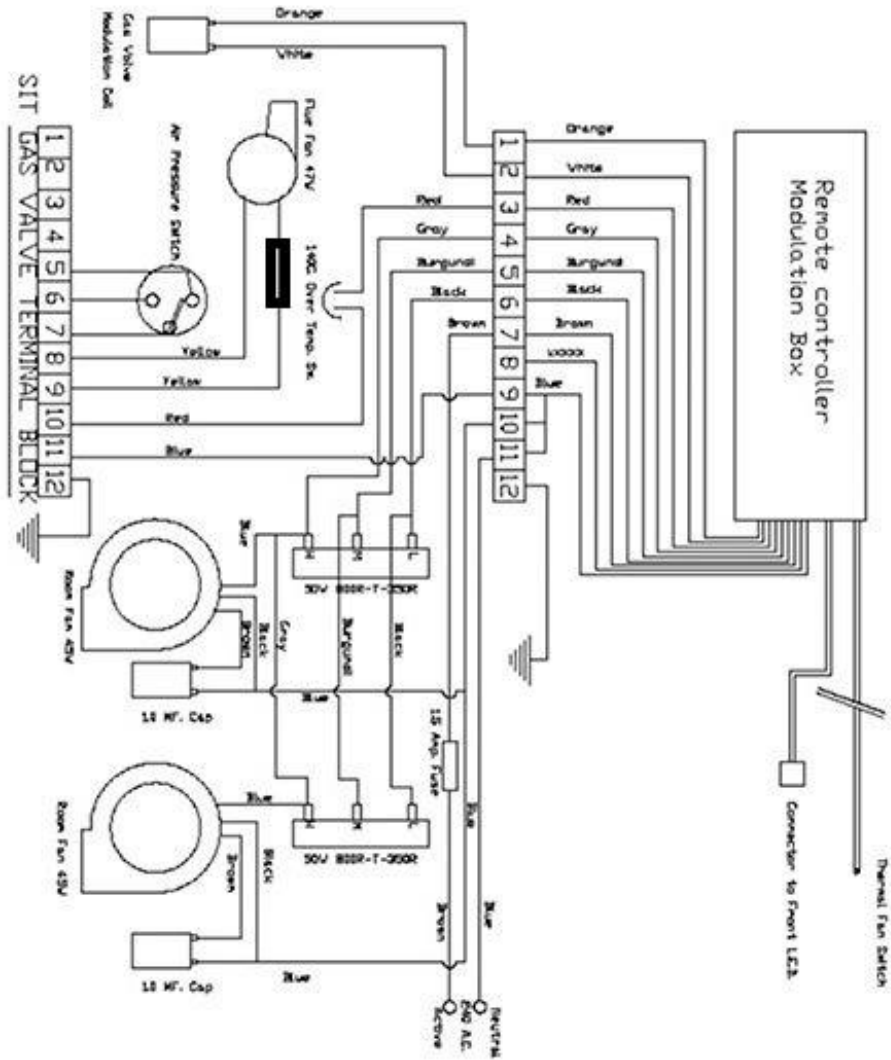
DIMENSIONS OF ENVIRO INBUILT MODEL

ENVIRO INBUILT SPECIFICATIONS

- Gas Input = 44 mJ/h
- Inlet Flue Pipe $\varnothing 60\text{mm}$
- Outlet Flue Pipe $\varnothing 50\text{ mm}$
- Max. Vertical Length 4.6Mt
- Max. Horizontal Length = 4 mts
- Efficiency= 85 %
- Heat Output 10.4 KW
- Heating Area- 25 Sq.
- Electric power consumption 100 Watts Max.
- Electric power Cord 2 mt Flex Cord Standard 3 pin Plug .
- Zero clearances Installation to combustibles



Wiring diagram:



TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	REMEDY
Appliance fails to ignite.	No gas or supply pressure insufficient. No electrical supply. Incorrectly wired power point. Incorrect gas valve adjustment. Insufficient time allowed between attempts. Internal wiring disconnected.	Ensure gas supply connected, purged, and pressure appropriate. Ensure unit plugged in and switch is on, check supply fuse. Check supply. Active, neutral, & earth must be correctly orientated and connected. Adjust valve pressures. Wait at least 30 seconds for unit to purge combustion chamber after switching on. Check all plugs inside appliance are connected properly and correctly located, Ensure operation of combustion fan & air pressure switch.
Unit will not operate on Low.	Incorrect gas valve adjustment. Incorrect or loose wiring.	Adjust valve. Check wiring.
Room fan not operating.	Insufficient time allowed. Loose wiring. Fan not located correctly. Fan blocked.	Fan has a delayed start and will not start until unit warms-up. Check wiring. Install fan in correct location. Remove and clean fan.
Unit cuts out after a period of time then cycles on and off.	See "Room fan not operating" Heat exchanger blockage. Excessive pressure or incorrect gas type.	See "Room fan not operating" Clean heat exchanger. Ensure correct gas type, injector size, and pressure setting.
Excessive carbon (soot) deposits on inside of firebox, logs, and/or glass.	Incorrect gas type or pressure setting. Primary air shutter incorrectly adjusted for gas type.	Ensure correct gas type, injector size, and pressure setting. Adjust primary air shutter.
Excessive flame height.	Incorrect gas type or pressure setting.	Ensure correct gas type, injector size, and pressure setting.
Excessive flame "lift off"	Flue or inlet blockage. Recirculation of flue gases.	Clear blockage. Flue incorrectly installed.
Unit fails to heat.	See "Room fan not operating" Incorrect gas type or pressure setting. Gas supply blockage.	See "Room fan not operating" Ensure correct gas type, injector size, and pressure setting. Check injector, burner supply pipe, & valve for foreign matter.

All service work to be carried out by a qualified & authorised person

All service work to be carried out by a qualified & authorised person.

SERVICING INSTRUCTIONS:

Warning ; Before you do any attempt to service the heater be sure that electric power plug has been disconnected.

Your heater should be serviced at least once a year to clean the Room Fans from lint and dust accumulated in the bottom compartment.

Flues should also be checked at this point to ensure no damage or obstructions have occurred since installation.

This heater does not require to be removed to service and maintain any items such as logs , PES, room fan , electronic components. To service this items follow the next step:

- 1.- To access the logs and burner components undo the four screws that hold the door . Two at the top of door frame where the hot air outlet is and two at the bottom of door where room air inlet is.
- 2.- To access the gas valve and electrical components and fans, remove front fascia surround by simultaneously lifting and pulling it outwards so the catch hooks in this part can be released from the heater.
- 3.- Once surround has been removed, unplug the electrical lead connector from the manual control switches located in the front of side panel (left hand in the bottom of panel). Then front fascia panel can be Put aside from heater .
- 4.- Remove electrical protection guard mesh by undoing the four retaining screws. After this has been done you can proceed to service the components.

NOTE:

The heater needs to be removed partially from it installed cavity to access the following components :

Flue fan, Over Temperature Switch, and Heat Exchanger.

SPARE PART COMPONENT LIST OF ENVIRO GAS HEATER

Comp. No.	Comp. Name	Part No	
1	Gas Valve	00-ST-845	
2	Electronic PES	00-ST-579	
3	Modulation Box	00-ML- 03	
4	Digital Thermostat	00-ML-032	
5	Air switch	00-CL-91	
6	Flame sensor	00-CS-110	
7	Spark ignitor	00-CS-111	
8	Flue Fan	00-FM-47	
9	Room Fan	00-MS-50	
10	Fan Resistor	00-RH-80	
11	Gas Burner	00-HM-44	
12	OverTemp Switch	00-HM-140	
13	Ceramic Glass	00-HM-820	
14	Door rope seal	00-HM-2200	
15	Log set	00-HM-60	
16	Injector Nat	00-HM-37	
17	Injector LP	00-HM-20	

CARE OF YOUR ENVIRO GAS HEATER

This appliance requires minimal maintenance, however, it is recommended that a full service and check be made by a qualified person annually for more details. Please call the nearest dealer.

The Bottom fascia air grill should be removed by unscrewing the two screws and the fan vacuumed annually.

To clean the appliance, simply wipe over with a damp cloth. Do not use solvents or abrasive cleaning agents.

Before calling check that:

- 1.- Electrical power is on
- 2.- Gas is turned on
- 3.- There are no obstruction /blockages of the flue terminal

WARRANTY

As a purchaser of this Enviro product, Heatmaster (Aust.) Pty.Ltd. provide you with the following warranty:

Heat Exchanger _____ 5 Years _____ 1 Year free labour

All other Parts _____ 1 Year _____ 1 Year free labour

This Warranty is in addition to all other rights and remedies, which the purchaser may have under statute.

Note: Glass or logs are not covered against accidental breakage

For more information about your nearest dealer contact:

Heatmaster Pty Ltd.

2/9 Nicole Close – Bayswater,

Victoria – 3153

Or visit our website: www.heatmaster.com.au