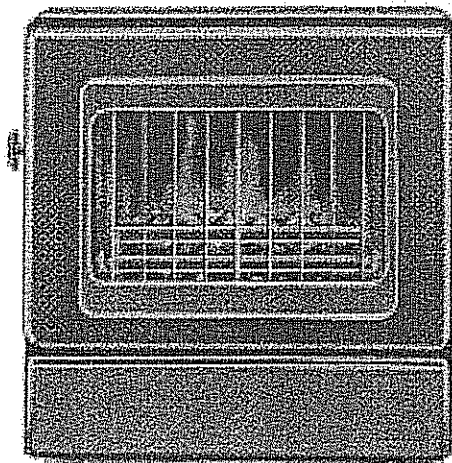


PARKRAY

THE FIRST NAME IN SOLID FUEL



PARKRAY 88G, 99G or 111G ROOM HEATER

Installation and Servicing Instructions



Approved for solid mineral fuel by HETAS Ltd.

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Read these instructions carefully

These instructions cover the basic principles to ensure satisfactory installation of the appliance although detail may need modification to suit local site conditions. In all cases the installation must comply with current Building Regulations, British Standard code of practice 8303 and 6461. When installed in caravans or mobile homes the current issue of BS6501 must be complied with. The fireplace surround must comply with the current issue of BS1251.

Note: To meet the Combustion Air Requirements of the current Building regulations, the 111G heater requires to be provided with a minimum free air inlet area to the room in which it is fitted of 5000mm². The 88G and 99G require 3800mm². All other site requirements must be met.

(A) Preparatory Work and Safety Checks

IMPORTANT WARNING

Before installation it is essential to ensure that:

1.1 The chimney is sound and has no cracks or other faults which might allow fumes into the house. Older properties, especially, may have chimney faults or the cross section may be too large, for example, more than 230x230mm.

1.2 The chimney has been swept clean immediately before installation.

NOTE: Where a roomheater is connected to a flue which previously served an open fire, advise the user to have the flue swept again a few weeks after installation.

1.3 The chimney is clear of obstructions.

1.4 This appliance is not installed in a room in which an extractor fan is fitted as this may result in flue pull reversal and fume emission.

2 Preparing the Location

2.1 The location of the Parkray appliance must conform with the dimensions shown on the "Installation Drawings and Dimensions". The shaded area on the face of fireplace surround illustrated is the minimum flat surface required.

2.2 The hearth must be fireproofed in accordance with the current Building Regulations.

2.3 The rear hearth must be flush with the front hearth, level, in good condition and at right angles to the front of the fireplace surround.

3 The Heating System

(B) Installing the Boiler

NOTE: Fire cement -NOT fireclay or mortar should be used for all points of sealing.

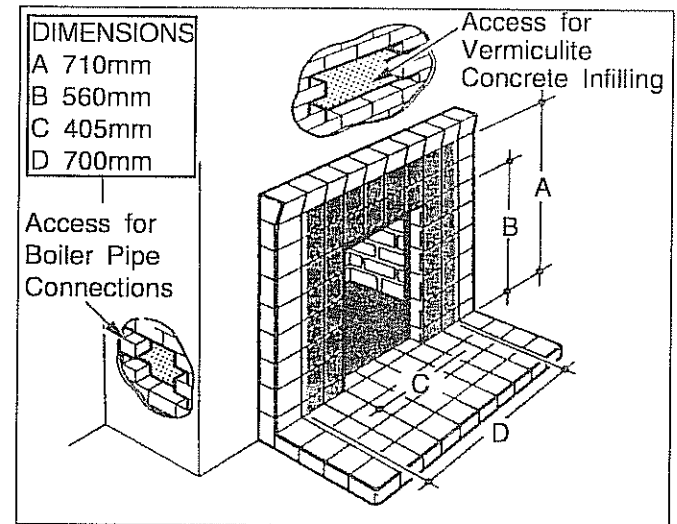
4 Preparation of Boiler

4.1 Remove locking screw from top right hand side of door. This is for transportation purposes only and is not required further.

4.2 To minimise the possibility of glass breakage during installation, remove the fire door by lifting upward until it is clear of the top hinge and lower it off the bottom hinge.

4.3 To lighten the appliance for ease of handling remove the ashpit cover, ashpan, bottomgrate and front protection plate.

NOTE: To avoid unnecessary readjustment when replacing



Domestic hot water and radiator systems must comply with the current issue of BS5449, BS5446 and BS6700.

3.1 A suitably sized radiator should be fitted in parallel with the gravity hot water circuit to act as a heat leak.

3.2 It is recommended that the room back up radiator is fitted with a thermostatic control radiator valve.

3.3 A double feed indirect hot water storage cylinder to the current issue of BS1566 Part 1, should be used.

parts removed, it is essential that the numbers on the label:

(a) on the inside of the fire door

(b) on the inside of the ashpit cover and,

(c) on the inside of the firebox - are all the same.

5 Selecting Boiler Tappings

5.1 All Models

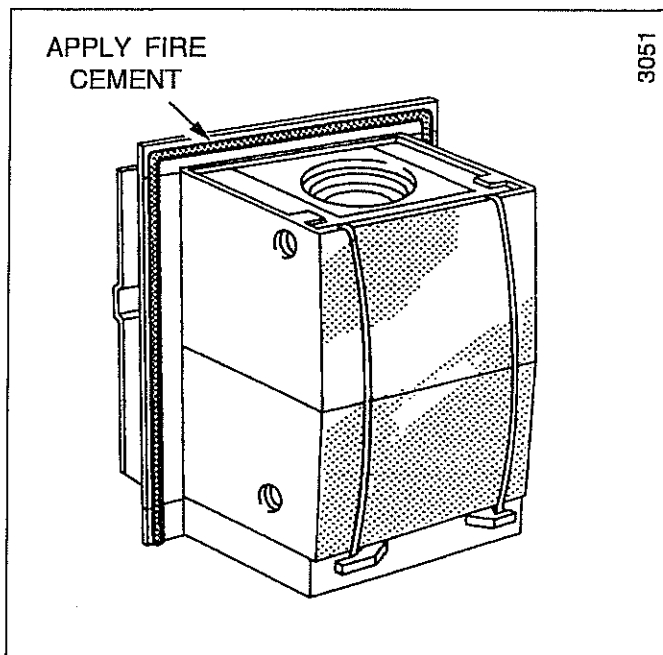
Fit plugs in unused boiler tappings, according to the hand of connection required and make good the joints.

(B) Installing the Boiler

6 Fitting Boiler into Recess

6.1 *All Models* Dampen the rope on the return edge of the sealing flange and apply ample fire cement to form a seal.

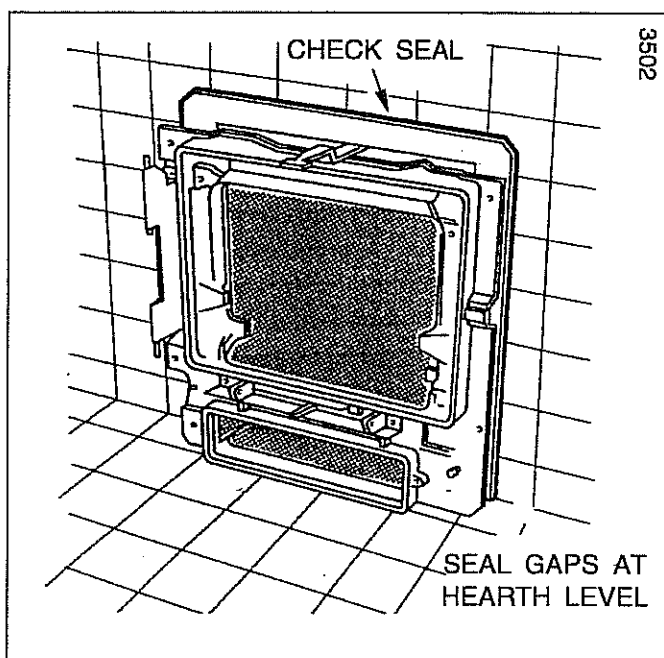
6.2 Dampen the projecting edges and the bottom front edge of the front casting and apply ample fire cement.



6.3 Offer up the appliance to the prepared recess, ensuring that it is central and that the rope on the casing return edges is hard against the fireplace surround.

6.4 Using a 6.5mm drill bit, drill through the hole in the base casting, then proceed with a No.12 masonry drill deep enough into the hearth to accommodate the anchor plug provided. Push the plug into the hole, insert the screw, provided and turn until fully tightened.

6.5 Seal over the screw head with fire cement. Remove any surplus fire cement, but make sure that the seal to the hearth and the surround is air tight.



7 Making Pipe Connections

7.1 *All Models* Make pipe connections to the boiler, ensuring that the primary flow and return pipes rise. Fill and vent the system and test for leaks.

8 Infilling Around the Appliance

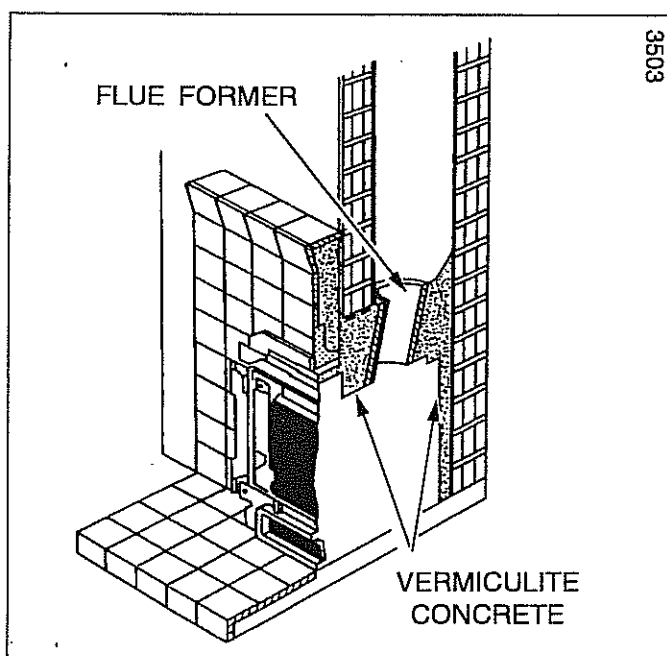
8.1 *All Models* Infill the space between the casing and the brickwork structural opening with vermiculite, for example, Micafil or similar, concrete. The following mix is recommended, six volumes of vermiculite granules to one volume of Portland cement, thoroughly mix together.

Sufficient water only should be added so that when a handful of the mixture is squeezed no more than one or two drops of water are released.

8.2 The connection between the appliance spigot and the chimney should be made with a length of 150mm diameter flue forming pipe (or cast iron off set connector, see diagram).

8.3 Cover the top front of the appliance for protection. Centralise the pipe and then completely fill in round with vermiculite concrete, particularly behind the fireplace surround. All pockets or cavities must be filled.

8.4 Make good the holes in the face and side of the chimney breast, ensuring that they are completely airtight.



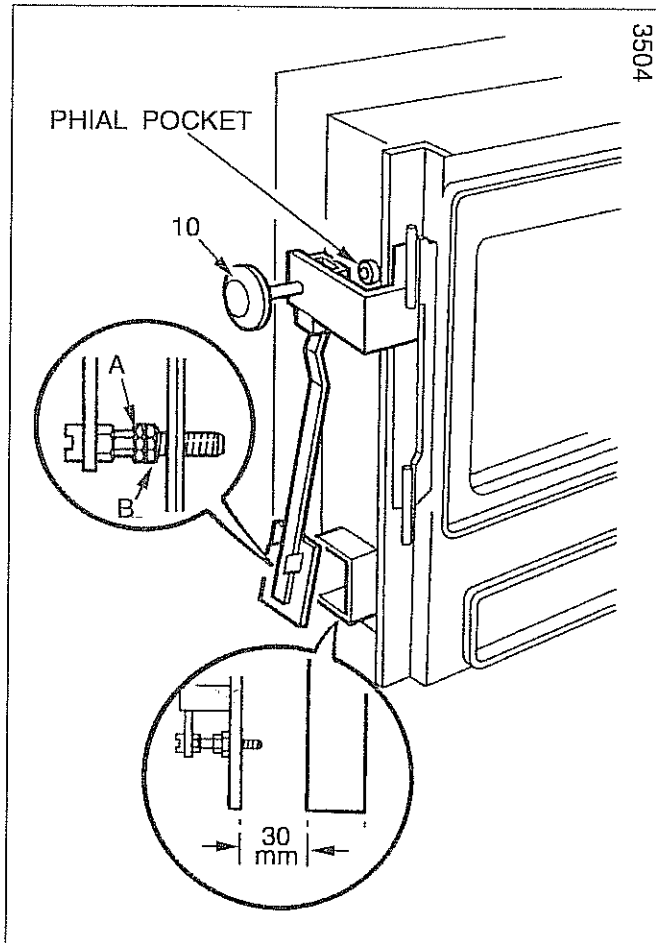
(C) Final Assembly and Adjustments

9 Thermostat

9.1 See also fitting instructions packed with the thermostat.

9.2 Fit the control knob to the spindle and turn fully clockwise, that is No.10 uppermost. Set the air control plate 30mm from the face of the air inlet port. To adjust, release locking nut "A" and turn adjusting nut "B". Retighten locking nut after adjustment.

9.3 Turn the control knob clockwise and anticlockwise a few times. Check that the free movement of the air control plate is not obstructed and that it completely covers the air entry port. For adjustment the thermostat fixing bracket, top left of fire opening, has clearance holes. Initially tighten one screw only until air control plate is correctly aligned. Tighten the other screw. Remove the control knob.



10 Bottomgrate Shaker Bar

111G Model ONLY

NB. If the bottomgrate shaker bar has been removed, it should be replaced in the following manner:

10.1 Thread the actuating lever through the square hole in the right hand side casting of the appliance.

10.2 Thread the locating bush on to the actuating lever with the projection on the locating bush innermost and positioning in the square hole with the projection pointing downward.

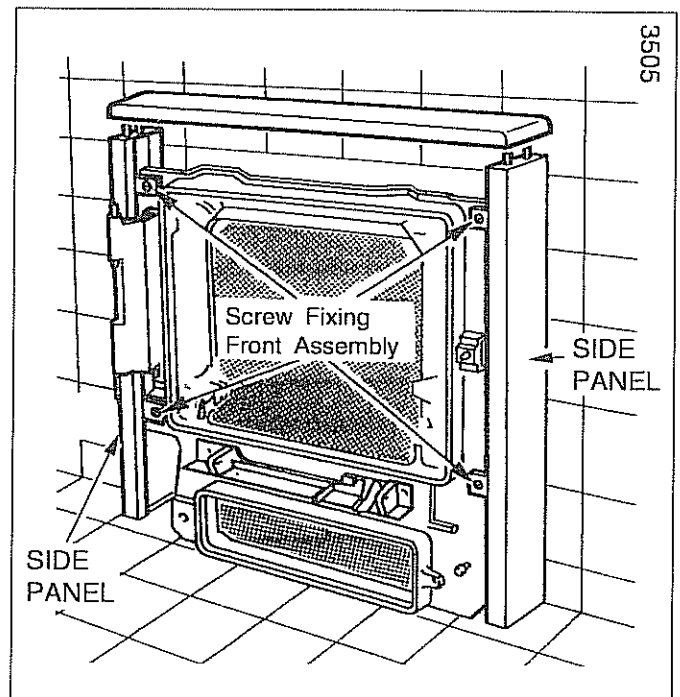
10.3 Locate the opposite end of the shaker bar on the bracket.

11 Front Frame

11.1 Unpack the three front frame sections and fit the two side pieces with the four screws to be found in the polythene bag which contained the air control knob.

11.2 Fit the frame top, locating it on to the pins on the top edges of the side pieces.

The sides can be adjusted as necessary by loosening the fixing screws.



(C) Final Assembly and Adjustments

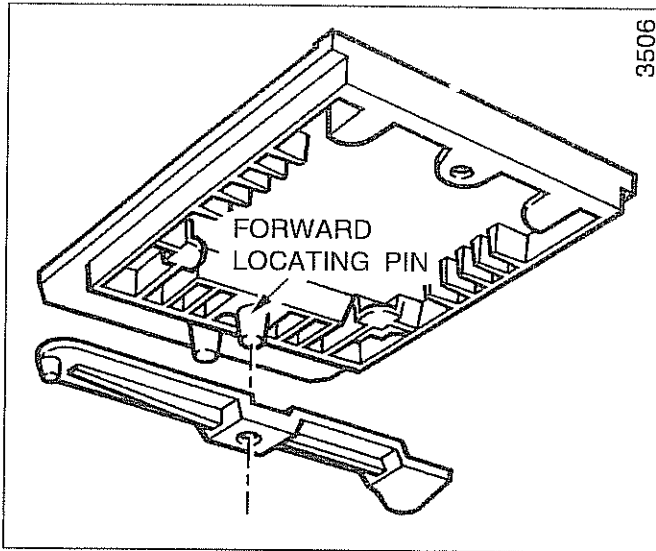
12 Firebox Parts (88G and 99G Models Only)

12.1 Replace the throat plate by locating its rear edge of the ribs on the boiler sides and slide it back until ribs on throat plate drop into their locating pockets. Check that the boiler damper moves freely.

12.2 Replace the bottomgrate, checking to ensure the shaker mechanism moves freely.

NB. The forward locating pins should be engaged in the rear shaker arm hole on the 88G series as shown in the diagram.

On the 99G series the rear locating pin should be engaged.



12.3 *88G Model* Replace the side bricks sealing them in position with fire cement.

13 Firebox Parts 111G Model Only

13.1 Replace the throat plate by locating on the rear nib and pulling forward on to the front support.

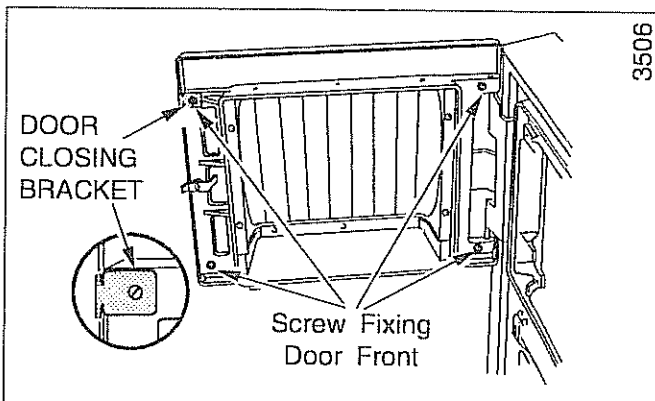
13.2 Replace the bottomgrate bars, checking to ensure the shaker mechanism moves freely.

13.3 Replace the ashpan, protection plate, front firebars, ashpit cover and plastic control knob.

14 Firedoor

14.1 Refit the firedoor and check that it is bedded correctly. If necessary adjust at the door hinge bracket and door latch. There should be no gap greater than 0.25mm.

14.2 Open to 90° and attach the door front with the remaining four screws, ensuring that the door closing bracket is fitted by the top fixing screw, see diagram.

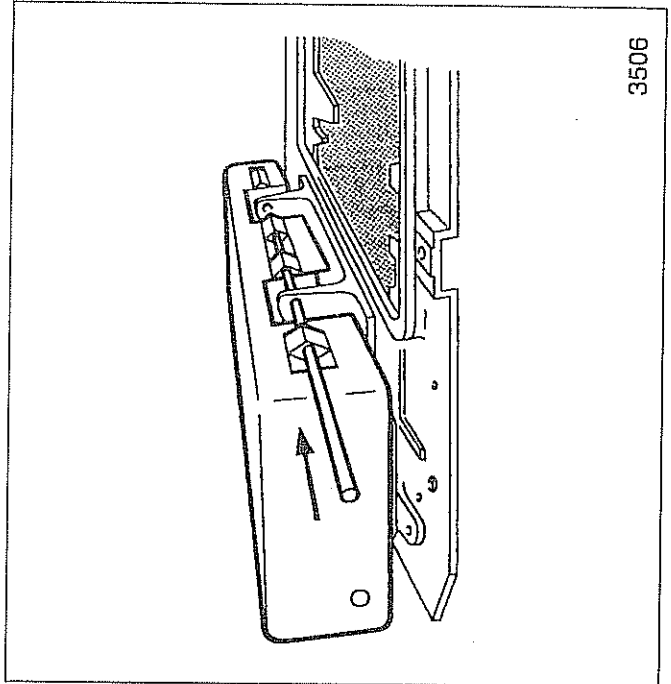


15 Ashpit Outer Panel - All Models

15.1 Untape the hinge rod from inside the ashpit outer panel.

15.2 Position the outer panel centrally over the hinge bracket.

15.3 Slide the hinge rod from the right hand side through the fixings in the outer panel and hinge bracket turning the rod to ease the operation.



Alternatively, in limited space the hinge bracket may be removed from the appliance for fixing the ashpit outer panel.

15.4 Check operation. Slide fully to the left to expose the deashing lever. Then open the firedoor and lift the ashpit outer panel slightly and slide to the right hand stop. Lift again and slide fully to the right. Panel should be retained in the open position.

15.5 To close, slide the panel to the left to the stop. Lower and slide fully to the left, then right to centralise.

16 Commissioning the System

A small fire may be lit immediately but do not run at full output for 24 hours. During commissioning of a combined domestic hot water and small bore system, the pump should be adjusted to give the correct rate of water flow against the small bore circuit resistance and the system correctly balanced. See How to Balance a Two Pipe System.

17 Advising the Customer

Make sure that the "Instructions for Use" are available for the customer.

Where possible go through the instructions so that the customer is fully aware of keeping the chimney, flue pipe, boiler flueway and throat plate clean and free from any build up of fly ash and soot.

Point out the "Periodical Shut Down Procedure".

Demonstrate the flue damper and/or throat plate removal and refitting.

Explain the general use of the operating tool.

Remind the user that they **MUST NOT** run the appliance for any period of time with the door open.

Advise the user what to do should fumes be given off from the appliance.

The slow combustion air bypass hole(s) in the ashpit should be left closed but inform the user regarding its adjustment.

WARN the user that petroleum based coke can be dangerous. It can cause fumes, flue gas explosions and structural damage and must not be used on this appliance.

D Supplementary Notes

How to Balance a Two Pipe Heating System.

1. Having completed filled and vented the system, light the fire with pump off to obtain a good gravity circulation to the domestic hot water cylinder.
2. Set the pump on its minimum setting - note - pump heads generally are more than adequate for the average domestic system and rarely need to be set above minimum.
3. Fully open all wheelhead radiator valves. If there are any thermostatically controlled valves, have them at maximum setting and if necessary, open windows to ensure these valves stay open.
4. Make sure that all radiators are vented of air, as any airlocks will prevent the free flow of water.
5. Turn the appliance heating control to a low setting and let the fire burn at a low level while ensuring that all air has been purged from the system. Taking each radiator in turn (but NOT the heat leak radiator), fully close the lockshield valve and then open a $\frac{1}{4}$ turn only. With all radiators on the pumped circuit set to this condition allow the system to stabilise. If any radiator is noticeably cooler than the others open the lockshield valves $\frac{1}{4}$ turn stages allowing a short time between each stage to let the adjustment take effect.

Note: Less than $\frac{1}{4}$ of a turn at any time is desirable when altering the lockshield valves.

When all radiators have heated to the same temperature, the radiator system flow and return pipes near the boiler should have a temperature difference of about 10°C (18°F).

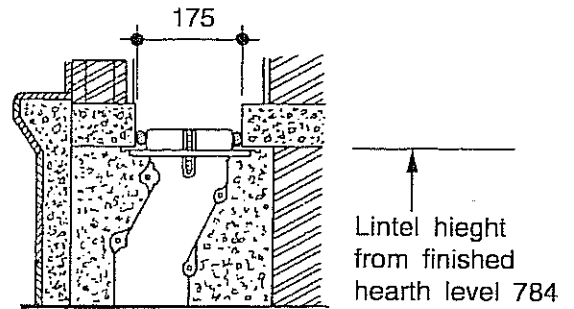
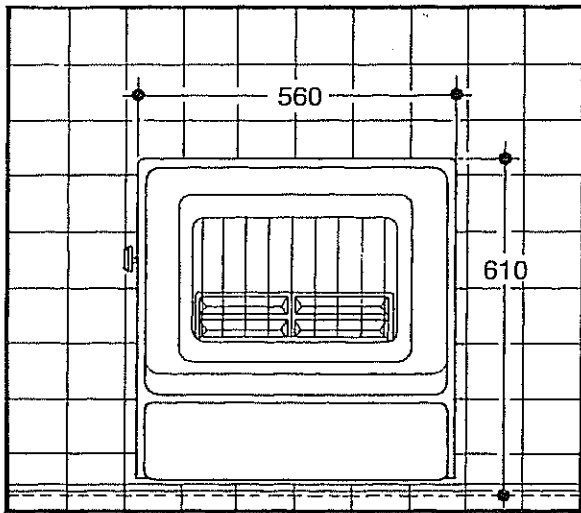
The temperature difference should be checked using contact thermometer or similar measuring instruments.

Symptoms of an Unbalanced System:

1. The radiators will not heat up satisfactorily.
2. The domestic hot water cylinder will not reheat and goes cold when the radiators are on.
3. A higher than normal fuel consumption.

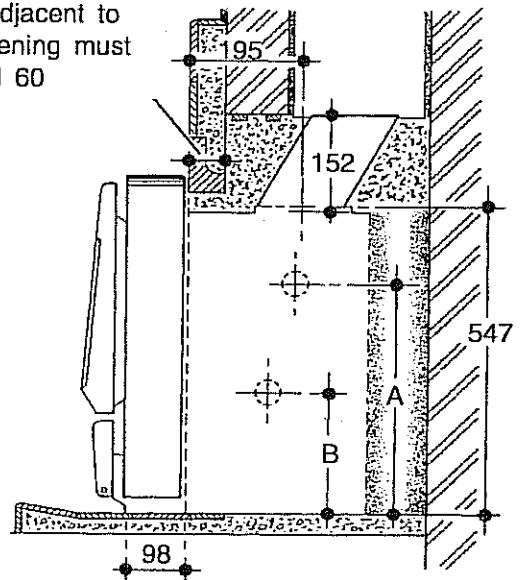
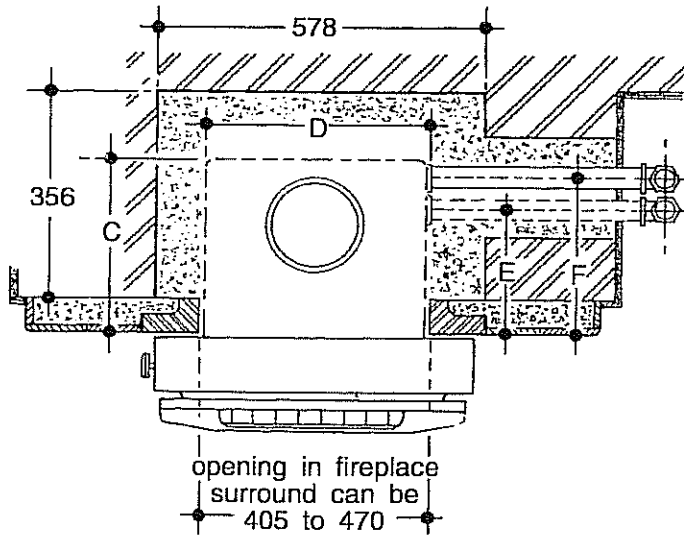
INSTALLATION DRAWINGS AND DIMENSIONS

All dimensions in millimetres



C.I. Flue connector, Part No. 0022110, (125 dia. offset 85) for new homes.

the projection from the wall face of that part of surround adjacent to the fire opening must not exceed 60



	88	99	111G
A	428	428	173
B	286	286	173
C	349	349	356
D	397	397	398
E	252	252	232
F	292	292	269

CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH

Information for the Installer and Service Engineer.

Under Section 6 of The Health and Safety at Work Act 1974, we are required to provide information on substances hazardous to health.

The adhesives and sealants used in this appliance are cured and give no Known hazard in this state.

GLASSYARN

These can cause irritation to skin, eyes and the respiratory tract.

If you have a history of skin complaint you may be susceptible to irritation, High dust levels are usual only if the material is broken.

Normal handling should not cause discomfort, but follow normal good hygiene and wash your hands before eating, drinking or going to the lavatory.

If you suffer irritation to the eyes or severe irritation to the skin seek medical attention.

HEALTH AND SAFETY AT WORK ACT 1974

Handling

Adequate facilities must be available for loading, unloading and site handling.

Glass

Special care is required concerning the fire door/glass, to clean use a Ceramic Hob cleaner.

Fire Cement

This material is caustic. Any fire cement which comes into contact with the skin, particularly cuts, must be immediately washed off.

Electrical

Any appliance with electrical components must be connected in accordance with the Installation Instructions and all wiring must comply with the Regulations for the Electrical Equipment of Buildings.

Asbestos

This appliance contains no asbestos. Where there is a possibility of disturbing asbestos in existing installations guidance must be sought.

Gas Safety

Where a gas burner is supplied it MUST be installed by a

competent person in accordance with the current issue of the Gas Safety (Installation and Use) Regulations. Draw attention, if applicable, to the current issue of the Gas Safety (Installation and Use) Regulations, Section 35, which imposes a duty of care on all persons who let out any property containing a gas appliance.

Metal Parts

When installing or servicing this room heater care should be taken to avoid the possibility of personal injury when handling metal parts, with particular regard to edges.

Flues, Combustion Air Supply and Siting of Appliances

In addition to our detailed installation Instructions, the relevant codes of practice and the current Building Regulations must be observed.

Commissioning of Appliance and System

All electrical connections must be checked and continuity of earthing satisfied.

Where any gas supply has been connected, this should be checked for soundness and correct setting pressure.

All appliances should be checked under fire for soundness of all seals, joints and castings and that the products of combustion are correctly clearing the chimney.



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