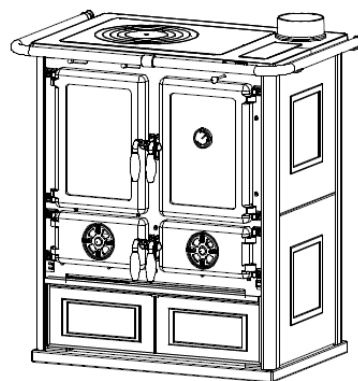
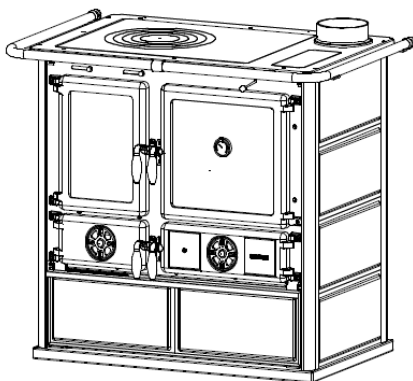




## INSTALLATION AND OPERATION INSTRUCTIONS FOR



## ROSA, ROSETTA & THERMOROSA (Boiler Model) RANGE STYLE WOOD BURNING COOKERS

PLEASE READ THESE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING,  
OPERATING OR SERVICING THIS APPLIANCE.

*Compliments for buying a Broseley Fires appliance*

Revision: TJ08C

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## INTRODUCTION

The keys to safe, successful and efficient wood burning are good planning, correct installation and proper operation. Please read the following instructions carefully to get the best from your new purchase.

Modern homes have better levels of insulation and are more energy efficient, with more effective and better seals on doors and windows. This makes our homes easier to heat, but also means that solid fuel appliances must be more carefully designed so that they will function correctly in the energy efficient, modern homes of today. The more energy efficient a house is, the less fuel is required to heat it. Less fuel use means less impact on the environment.

The operation of our appliances, so that they do not produce excessive smoke (beyond the initial light up and reloading periods) is most important. When our appliances are not smoking, it is an indication that it is being operated correctly and efficiently.

The flames that are seen inside the appliance are not the fuel burning, but the carbon particles and gases that are released from the fuel once it has been heated to a sufficiently high temperature. The escape of any un-burnt particles and some gases into the atmosphere is the cause of air pollution.

Our appliances are designed to ensure that the combustion of all gases and particles takes place within the firebox, to maximize the heat output of the appliance and to minimize the discharge of particulate emissions to the atmosphere.

It is important therefore, for appliances to be operated in accordance with our instructions in a manner that maintains a high temperature in the firebox with an adequate supply of air to ensure efficient combustion. A good indication of efficient combustion is a bright lively flame in the firebox. A dull flame or smoldering fire indicates poor or incomplete combustion.

To maintain adequate heat in the firebox, it is very important to use dry, well seasoned wood with less than 20% moisture content. The wood must be correctly sized for the particular appliance and it also helps to have at least three or four pieces burning at the one time to assist the combustion process.

Adding single pieces of unseasoned or wet wood to a fire will reduce the firebox temperature and prevent adequate combustion. This will result in increased smoke emissions causing the flue and internal components of the appliance to become blocked with tar and creosote more quickly. The tar and creosote deposits in the chimney will fuel a chimney fire.

These instructions cover both the boiler and non boiler version of the Rosa range style cooker.

Please ensure you fully understand the correct operation of your new appliance before you light a fire in it. If you use the controls in the wrong way, it will have a detrimental effect on the appliance and may cause damage to the appliance, your chimney or your health.

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**ANNUAL SERVICE RECORD  
LIMITED WARRANTY**

## 1. TECHNICAL DATA

	<u>THERMO-ROSA</u>	<u>ROSA</u>	<u>ROSETTA</u>
TOTAL POWER OUTPUT	15.5Kw	6.5Kw	6Kw
OUTPUT TO WATER	7Kw	N/A	N/A
OUTPUT TO AIR	8.5Kw	6.5Kw	6Kw
Wood consumption per hour ( wood with 20% humidity )	4,5 kg/h	2 kg/h	2 kg/h
FLUE PIPE DIAMETER	150mm / 6inches	150mm / 6inches	150mm / 6inches
BOILER CAPACITY	16 LITRES	N/A	N/A
FLUE DRAW (HOT) (Tested after one hour)	1,7-2,0 H <sub>2</sub> O (water gauge)	1,7-2,0 H <sub>2</sub> O (water gauge)	1,7-2,0 H <sub>2</sub> O (water gauge)
BOILER FITTINGS (flow and return)	1 Inch BSP	N/A	N/A
FREE AIR VENT SIZE	550mm <sup>2</sup> minimum + 550 mm <sup>2</sup> per Kw over 5Kw	550mm <sup>2</sup> minimum + 550 mm <sup>2</sup> per Kw over 5Kw	550mm <sup>2</sup> minimum + 550 mm <sup>2</sup> per Kw over 5Kw
TOTAL WEIGHT OF THE APPLIANCE	196/218Kg	169/191Kg	152/169Kg
WIDTH (without hand rail fitted)	890mm	890mm	740mm
DEPTH (without hand rail fitted)	550mm	550mm	500mm
HAND RAIL (protrudes to the sides & front only)	66mm protrusion each side	66mm protrusion each side	66mm protrusion each side
HEIGHT from floor to top of lid (with lid shut)	870mm	870mm	848mm (to top of hob - No Lid)
HEIGHT from floor to top of lid (with lid open)	1500mm	1500mm	N/A
TEMPERATURE OF EXHAUST GASSES	247 °C	239 °C	255 °C

The dimensions stated above were accurate at time of print (19/6/08).

### 1A. HEATABLE AREA (VOLUME)

The heating volume of this appliance; according to DIN 18893; will vary depending on the amount of thermal insulation that the property has. Properties with high ceilings, draughty windows and doors, solid brick walls and poor insulation, these are all going to affect the potential maximum heating volume of the appliance.

Property with: favorable construction - 186 m<sup>3</sup>

Less favorable construction - 107 m<sup>3</sup>

Unfavorable construction: - 73 m<sup>3</sup>

Using the correct fuel in the appliance, having suitable thermal insulation of the property and complying with the instructions, the heating volume is the greatest.

## **2. KEY ENVIRONMENTAL CONSIDERATIONS**

To minimize the impact on the environment the following issues need to be considered when proposing to install a solid fuel appliance:

- Local authorities (Councils) must be consulted for any restrictions that may apply to the use of solid fuel appliances in certain areas such as smoke free zones.
- The appliance must be correctly sized to suit the space and necessary clearances must be strictly adhered to.
- The appliance and flue system must be correctly installed to the current regulations in force at the time.
- The appliance must be correctly operated.
- The appliance and flue system must be properly maintained.
- It is also important to ensure that the dwelling to be heated is insulated and is as energy efficient as is practical.
- The correct fuel must be used.

The selection, installation, correct use and maintenance of solid fuel appliances and flue systems are discussed in more detail in the following sections of these instructions.

## **3. TECHNICAL DESCRIPTION**

These continuous fire cookers are suitable for cooking on the hob and in the oven. They will also heat living spaces or support a central heating system. They are ideal for holiday apartments and weekend houses or as a heating / cooking system during the whole year.

The cooker has been designed and developed to burn wood.

The cooker is made of galvanized metal sheet, cast iron and thermo radiant "Italian majolica" ceramic tiles. These are available in various colours. A soap-stone version is also available.

Inside the fire chamber, there is a flat, cast iron grate.

The boiler wraps around three sides of the chamber and also protrudes over the top of the oven.

To optimize the efficiency of the boiler, its corrugated shape has been designed to give a terrific surface area; this heats the water more efficiently. The appliance has a panoramic door, fitted with ceramic glass (resistant up to 700 °C). This allows a wonderful view of the burning flames.

Under the oven door there is a food warming compartment, furnished with a cast iron door that has a spinner to adjust the temperature within.

The heating of the room in which the cooker is located is achieved through the external surfaces of the cooker.

The appliance is equipped with primary and secondary air controls, by which it is possible to control the burn rate and hence the output of the appliance. There is a damper control for when you wish to operate the oven.

## **4.0 THE 'AIR' CONTROLS**

The stove is fitted with controls that adjust the flow of air into the unit. It is very important that these controls are fully understood in order to achieve the best results from your stove.

When operating the controls, ensure that they are used in small increments and not changed by large amounts suddenly. Do not use them like an on - off switch.

It is important that the following controls are used correctly in order to prevent over-firing and to ensure efficient combustion.

The air controls are as follows:

- PRIMARY AIR CONTROL
- SECONDARY AIR CONTROL (AIR WASH)
- DAMPER CONTROL
- THERMOSTAT CONTROL (boiler version only)

### **4A THE PRIMARY AIR CONTROL (turning valve)**

The primary air control is found on the front of the ash door, it is in the style of a spinner.

This will be used when initially lighting and establishing a fire. This control introduces air from below the grate on which the fuel is laid.

The ash drawer must be regularly emptied, so that the ash does not obstruct the entry of primary air. The chamber in which the drawer is housed will also need to be cleaned on a regular basis, as any ash that spills over the sides of the pan will get pushed to the rear of the chamber and interfere with the thermostat control damper. Failure to keep this area clear will result in the damper being stuck in the open position.

### **4B SECONDARY AIR CONTROL (slider)**

Over the hearth door you will find the 'secondary air control' in the style of a slider.

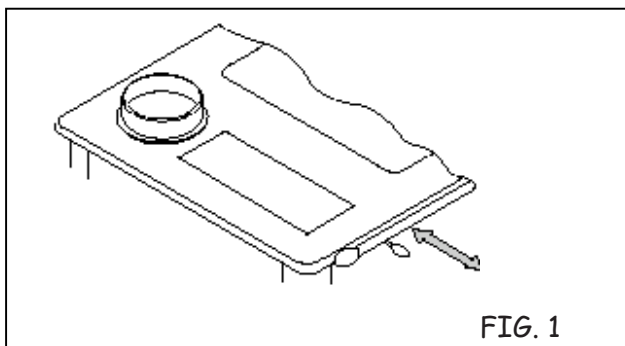
Combustion air entering the stove through this vent will be directed down the inside of the glass panel, this is known as the 'air wash system'. It helps to keep sooty deposits from sticking to the glass and obscuring the view of the flames. Having clean glass also improves the heat radiation to be uninterrupted.

This control will be used to control the combustion rate of the fuel inside the firebox (once a fire is established).

#### **4C FLUE DAMPER CONTROL BAR (pull push lever)**

The 'flue damper control', in the style of a pull push lever, can be found on the top right corner of the front side of the cooker, between the protection bar and the oven door.

FLUE DAMPER  
CONTROL



This control has two settings.

- **HOB COOKING ONLY:** When the bar is pushed to the back of the cooker, the combustion gases flow over the oven and directly into the flue and up the chimney.
- **OVEN COOKING:** When the control bar is pulled out, the hot combustion gases flow around the oven, heating it, then they exit the stove. This control is operated, Only when the fire is established and burning HOT.

PLEASE READ CHAPTER ON 'Lighting and maintaining your fire' FOR FURTHER INFORMATION.

#### **4D THE THERMOSTAT CONTROL (dial) fitted to the BOILER VERSION only**

The thermostat control is positioned on the drawer below the oven. It is in the form of a dial and is numbered between 0 and 5. The non boiler version has a warming drawer here, because of the position of the control on the boiler version; the use of this drawer is unfortunately lost.

The dial controls a damper that allows air to enter the stove from behind the ash pan.

It is used to regulate the burn rate of the fire and keep it at a constant heat output, irrespective of the fuel load. When wanting to control the stove using the thermostatic control, the primary and secondary controls must be shut.

According to the chosen position of the thermostat dial, the damper will react slowly and alter the combustible air entering the unit. This is the how a fire would naturally respond to changing air supply. Move clockwise from 0 to 5 to revive the fire and from 5 to 0; anticlockwise; in order to reduce the combustion.

As it a high precision device, we recommend you move the dial slowly and with care and never to force it. The thermostat control must not be used to build the fire up suddenly, and then shut it down suddenly. This is of no benefit and may cause serious damage to the internal components of the cooker or the control itself.

#### **4E THE 'LIFTING GRATE'. Operation and cleaning process. Fitted to the BOILER VERSION only**

The Thermorosa has a grate that is liftable by means of a crank. The square peg that the crank handle attaches to is found behind the door, just above the ash drawer.

This feature allows you to crank the grate closer to the underside of the hob.

Doing this in the Thermorosa will allow you send less heat to the water; as the heat passing through the side panels in the fire chamber will absorb less heat the higher and closer to the hob you position the grate.

If you are cooking on the hob only and have no need to keep the fire going, when you have finished, you can lift the grate closer to the hob as the fire is diminishing to allow you to get the best heat from the fire as it slowly dies.

Ensure that you keep the fire chamber and the crank mechanism clean and well maintained. This will allow you to use this feature to its best. If the grate is restricted in any way, it will be almost impossible to move.

To clean the mechanism that cranks the grate, just lift out the grate (when it is cold) and this will expose the rack and screw. Brush any loose ash from the top of the rack and crank the unit up and down; (without the grate in place); to ensure that the screw is free. The inside of the fire chamber will need to be freed of any soot deposits, as this will impinge the progress of the grate as it is raised or lowered.

Before replacing the grate, ensure that ALL the ash that has accumulated in the ash pan and the ash drawer is removed, before re-installing the grate and the ash pan. Failure to do this will cause the ash that is in the ash drawer getting pushed to the rear of the chamber and possibly interfering with the damper control that is there. It is important that the damper control is not restricted in any way.

#### **4 F OVER-FIRING WARNING**

**IT IS EXTREMELY IMPORTANT NOT TO LEAVE ALL OF THE AIR CONTROLS FULLY OPEN. LEAVING THE AIR CONTROL FULLY OPEN WILL LEAD TO "OVER-FIRING". OVER-FIRING IS CAUSED WHEN TOO MUCH HEAT IS GENERATED WITHIN THE FIRE CHAMBER, THIS WILL LEAD TO WARPING, BUCKLING AND GENERAL DAMAGE TO THE STOVE AND ITS INTERNAL COMPONENTS. OVER-FIRING CAN ALSO BE CAUSED BY RUNNING THE APPLIANCE WITH THE DOOR(S) OPEN OR IF YOU HAVE AN EXCESSIVE FLUE DRAW. PLEASE NOTE ANY DAMAGE TO THE APPLIANCE CAUSED THROUGH OVER-FIRING WILL NOT BE COVERED BY THE WARRANTY.**

## **5.0 FUEL ADVICE**

The appliance has been designed to burn wood; all figures stated in our literature are based on test firings carried out using beech with a moisture content of less than 20%.

You need to use good quality fuel in order to get the best results from your stove.

### **5A BURNING WOOD**

Most firewood you purchase will be green and have a fair amount of water content. It will need to be stored in a well ventilated shelter to season (this can take several years depending on the moisture content of the wood).

Wood used in this appliance must have a moisture content of less than 20%. Damp or wet wood will quickly form tar deposits on all the internal areas where the combustible gasses travel. They will coat the boiler and the outside of the oven, preventing the efficient heating of both.

The inside of the chimney/flue will also be coated, there is a greater risk of a chimney fire occurring.

Always use good quality wood, store it under cover in a well ventilated area.

Avoid burning oak bark, as this forms tar at a very fast rate.

When selecting wood, also take into consideration ease of splitting, ease of ignition and burning, how much smoke it produces and its "coaling" qualities. "Coaling" refers to the ability of a species of wood to form a long- lasting bed of hot coals when burned. Coaling qualities improve with higher density.

## **6.0 INITIAL BURNING AND CURING OF THE APPLIANCE**

The first few times that the appliance is lit, there will be an odour given off. This is the components of the appliance curing. It will be necessary to ventilate the room in which the appliance is sited.

The first firing needs to be done carefully to allow all of the components of the appliance to settle gradually. Never try to run the appliance flat out the first time you light it. Gradually build up the output of the fire so that no sudden stresses are put on the components of the appliance.

## **6A. USING YOUR STOVE - IMPORTANT NOTES:**

This appliance must be installed and commissioned by a fully qualified, registered engineer. HETAS engineers are recommended by Broseley Fires. For your nearest search [www.hetas.co.uk](http://www.hetas.co.uk)

THE SURFACES OF THIS APPLIANCE GET HOT WHEN THE APPLIANCE IS LIT. PLEASE ENSURE THAT CHILDREN, THE ELDERLY AND THE INFIRM ARE MADE AWARE OF THIS.

- As with all heating appliances, the surfaces will all become very hot whilst in use, therefore due care must be taken when near the appliance.
- Serious damage can result if the appliance is left running with the air controls fully open for extended periods.
- Make sure that none of the doors are left open while the appliance is in operation.
- Never leave the appliance unattended during the initial lighting sequence.
- Do not attempt to open the door immediately after igniting the fire. This could cause a flame flash out.
- Always wear the protective gloves when operating the appliance.
- Never burn treated wood (this includes paint, glue and any other chemicals).
- Do not overload the appliance with fuel.
- Never use chemicals or fluids such as gasoline, charcoal lighter, drain oil or kerosene to light a fire.
- Using the appliance on a very low output will cause excessive amounts of tar to build up inside the flue and can be a serious fire risk, as this will fuel a chimney fire.
- We advise that you have the appliance serviced annually by a competent heating engineer before the beginning of a new heating season.
- Don't attempt to light the fire if there is a risk that any part of the system is frozen.

## **7 OVEN OPERATION (only once fire is well established)**

DO NOT pull out the damper control for the oven until the fire is established and creating a high heat output.

- **If you wish to use the oven**, open the damper control by pulling the control rod. Once the fuel is burning intensely, the hot smoke can be sent round the oven to heat it. You will be sending the smoke round the oven, if you operate the damper too quickly when the fire is not hot enough this will cause tar deposits to form, that will stick to the outside of the oven walls and the boiler. These tar deposits will substantially reduce the speed at which the oven and water gets up to temperature. You will need to remove them to allow the appliance to operate efficiently.
- To check if your stove is burning effectively, burn your stove at different rates, go outside and check the emissions from your chimney. The absence of smoke indicates that your stove is burning cleanly and effectively.

When re-fuelling the appliance, open the air controls and the flue damper, this helps prevent smoke from entering the room through the door when opened. Do not allow ash to build up to an excessive level as this will prevent air from entering the chamber from underneath the grate (when using the automatic thermostat control).

## **8. LIGHTING AND MAINTAINING A LOG FIRE**

All chimneys and flues act differently. After a while, you will find out how your unit works best for starting.

- Use scrunched up paper and dry kindling to start the fire. Lay these on the grate.
- Open the primary and secondary air controls. The thermostat control should be set to number 5.
- The damper control; just under the hand rail; should be pushed in. This will open the damper to the chimney fully and create the best condition for the lighting of the fire.
- It will take a few minutes for the fire to establish itself.
- When the fire is burning hot, add small pieces of hardwood.
- Keep all the draft controls fully open till a bed of hot, glowing embers is established.
- Once you have some red hot burning embers, open the door and rake the embers evenly over the grate before adding larger pieces of wood.
- We suggest that you do not fully load the appliance until you have become completely familiar with the operation of ALL the controls.
- For best results, in an ideal situation, open the primary air control one third open and the secondary air control completely open. The output of the appliance can now be controlled using the thermostat control.
- Do not open the loading door too quickly when reloading the appliance as this can cause flames to flash out the door. This occurs when there is unburned fuel and a large amount of gases in the top of the firebox. When the door is opened, oxygen is combined with the gases and these ignite, causing a 'mini explosion'.
- The maximum size of the logs (when refuelling an established fire) should be 30 cm's long and 30-40cm's in circumference.
- DO NOT overload the fire chamber with wood, as this will insulate the boiler from the fire.
- Do not burn painted or varnished woods, MDF, oak bark or wood with more than 20% humidity.

## **9 ASH REMOVAL**

- The removal of the ashes should be done when the appliance is cold.

Ashes must be removed periodically for the correct and efficient operation of your appliance.

Don't wait till the ash pan's completely full. The frequency of this ash removal will depend on the type of wood being burned as softwood and hardwood create differing amounts of ash.

Keep in mind that cleaning your appliance boosts its efficiency, as ash, soot or tar deposits will block the heat from coming out of the appliance and also the transfer of heat to the oven, the hob and the boiler.

Excess ash in the pan can cause the fire to go out and may also cause severe damage to your grates. It will also block the damper control located at the rear of the ash pan chamber.

If there is ash inside the ash pan chamber, this will also need removing. If not removed it may get pushed into the damper control aperture; located at the rear of the ash pan chamber; preventing the thermostat control from working correctly. Periodical inspection is recommended.

CONTINUED ON NEXT PAGE.....

Take care when removing the ash, as small bits of hot embers can stay dormant for long periods when buried in ashes. These will then flare up again when exposed to oxygen; some knowledge of proper ash removal is required for safety. Here are the important points:

Remove ashes to a metal container using a small trowel. Never vacuum the ashes unless it is a genuine 'Ash Vac'. This is a vacuum you can buy at hearth shops; it is specifically designed for ash removal.

- Place the filled ash bucket on a non-combustible surface such as stone, concrete, brick, or slate, as the heat will transfer through the bottom of the container. Fit a lid for extra safety.

For your own protection, a pair of heat proof gloves and a dust mask may be necessary.

## **10.0 OPERATING IN TRANSITION PERIODS (Summer)**

When the outside temperature gets to be more than the temperature within the property, there is a strong possibility of the flue working in reverse. If the appliance is not lit, this will cause the draught of the flue to travel in a downward direction and the smell of smoke will be obvious in the room.

If you experience problems lighting the appliance because of the greater outside temperature, then it will be necessary to warm the flue before loading the appliance with kindling. There are various methods for this procedure. Ask your local supplier or registered chimney sweep for advice.

If the fire is lit, the heat output of the appliance is often reduced and the exhaust gases may not come out the chimney completely. This can cause them to come back into the room.

In this case,

- shake the embers more frequently,
- increase the air for combustion and
- Only load a reduced quantity of fuel.

This will help to keep the chimney hot and working efficiently.

Check that all the seals of the appliance are in good order and that the connections to the chimney are also sound.

## **11.0 MAINTENANCE - CLEANING THE APPLIANCE**

Take great care choosing the products you use to clean your appliance. A major amount of cleaning can be carried out using hot soapy water and a soft cloth. Using the wrong products will cause damage to its surfaces. Never use bleach or chlorine based products, caustic cleaners, paint solvents, biological powders, coarse abrasives or salt.

Never mix different products as they may cause a chemical reaction with each other and cause harm to either you or the appliance.

## **12A RECOMMENDED CLEANING PRODUCTS**

For the more stubborn stains, a mildly abrasive cleaner should be used, such as 'Astonish'.

This is safe to use on enamel surfaces. Do not use Astonish on the chrome components.

*For any further information, please contact your Dealer!*

## **12B DAILY CARE**

To keep the surfaces of your appliance bright and clean, a daily wipe over with a lint free cloth, soaked in hot water and a little soap is all that is needed.

To buff the cleaned surfaces, a soft, dry, lint free cloth should be used.

In order to keep your appliance in tip top condition, it is necessary to wipe up any spills or condensation streaks as soon as is safe to do so. (i.e. when the unit is cold)

This will prevent the mark burning onto the appliance and becoming a much tougher stain to remove at a later date, or causing a permanent mark. Try not to use excessive amounts of water when cleaning the appliance.

## **12C CLEANING THE OUTSIDE OF THE APPLIANCE:**

The appliance has three main surface finishes; these should be cleaned when the appliance is cool.

The cooking surface is cast iron and can be cleaned with a lint free damp cloth. Do not leave this surface wet as it will go rusty.

The side panels of the stove are Italian Majolica tiles that are completely hand-made.

The majolica tiles may show micro crackles, speckles, and shadings. These characteristics certify their precious origin.

For the cleaning of the majolica tiles, we suggest you use a soft, dry cloth; do not use detergent or liquid, the latter might soak in and make the crackles more visible.

The doors of the appliance are solid cast iron and painted with heat proof paint. These can also be cleaned with a lint free damp cloth, and then wiped over with a dry cloth. Should re-painting be necessary, contact your local supplier for a can of paint.

## **12D ASH REMOVAL:**

Not only does the appliance need to have the ash removed from the ash pan and fire chamber, but also from around the outside of the oven and boiler section. Because of the way in which the appliance works; by sending hot smoke and gasses around the boiler and oven before exiting up the chimney; there will inevitably be soot deposits on these components.

To clean these out, it is necessary to remove the hob rings and then the hob ring surround. It is only held in position by its weight and care should be taken when lifting because of this.

Once removed, you will have access to the area above the fire box, the boiler section and the top of the oven. To get access to the area down the right hand side of the oven, remove the rectangular plate to the right of the hob ring surround. This also just lifts out.

To gain access under the oven, you can remove the base plate of the oven. This is easily done by removing the two screws at the front edge of the plate. This plate has been sealed in position using a heat proof silicone sealant. This may need to be reinstated if the old seal leaks when the plate is replaced.

The efficient operation of your appliance is dependant on its correct operation and maintenance. Leaving soot to accumulate inside the areas mentioned above, will drastically reduce the output of the appliance and prevent it from doing what it is designed to.

## **12E GLASS CLEANING:**

There are various glass cleaners you can buy at stove shops that are specially designed to remove hydrocarbon (soot) and fly ash (mineral) deposits from the glass. Follow the manufacturer's instructions. Typically, just spray a small amount of cleaner on the glass and use a paper towel or rag to wipe it clean. If you only burn logs in your appliance, then you can dip a damp cloth in the ash and use this to scrub the glass clean.

### **12F FLUE MAINTAINENCE:**

If your appliance is installed into an existing chimney, you will need to clean the chimney as well as the flue pipe at least twice a year. To do this you will need the appropriate sized chimney brush and rods. Call a certified chimney sweep (National Association of Chimney Sweeps) or other qualified professional to clean the flue system. These professionals have the equipment and the experience to do a thorough job. The sweep will advise you as to the intervals that you should have your flue swept. We would recommend that you have it swept at least twice a year, but you may need to sweep it more.

Get them to inspect the condition of all the associated chimney items at the same time.

Be sure to check the pipe at least once every six months to determine if it has corroded.

### **12G ROPE SEALS:**

For the appliance to operate correctly, it is important that all the seals; where fitted; are in good condition and are sealing correctly. They should be replaced if they are showing excessive signs of fraying and are not making a good seal. They are glued into position using a high temperature, flexible, silicone sealant

### **12H AIR CONTROLS:**

Ensure that all the air controls operate smoothly and are free from ash or other foreign bodies.

## **13.0 INSTALLATION OF THE APPLIANCE**

This appliance must be installed and commissioned by a fully qualified, registered engineer. A "Declaration of completion Certificate" must be obtained for the installation and retained by the end user. Failure to comply with these requirements may void your warranty.

### **INSTALLATION - BOILER MODELS ONLY**

**All boiler models** are fitted with 2 water pipe connection bosses each with a 1.0 inch BSP female tapping located on the outside rear face of the appliance.

**The primary circuit supply** to the hot water cylinder must be a minimum 28mm diameter pipe. The 'flow' pipe must exit the appliance vertically from the top connection boss; this ensures good convectional flow and allows all air to evacuate the boiler.

If horizontal pipe runs are essential, air bleed valves must be incorporated where air locks are prone to occur. The hot water cylinder must be of the 'indirect' type. This is where the domestic hot water taps supply remains separate from the water circulating through the boiler and radiators.

If standard radiators and hot water cylinder are already installed, this will normally be an 'indirect' system. The heating engineer will be able to confirm the type of system installed.

An indirect system will not cause timescale problems in the same way that a direct system may.

Fitted to the 'primary return' pipe, close to the stove location but shielded from the direct heat of the stove, or, alternatively, a surface mounted thermostat fitted directly to the hot water cylinder. The thermostat should be set to switch the water pump 'ON' when the water temperature reaches at least 60 - 65 degrees C. The thermostat will ensure that the hot water cylinder will have priority to the supply of heat from the boiler, this is particularly important when the fire in the stove has been damped down for overnight burning.

**The secondary circuit supply** to the radiators must have pipe diameter sizes, appropriate to the system design for a solid fuel appliance. Pipe sizes will depend on the length and height of pipe runs, the number and sizes of radiators and their sequence on the circuit. These sizes are critical for the correct operation of the appliance.

### **Minimum Plumbing Requirements**

**This appliance must be installed on an open vented system**

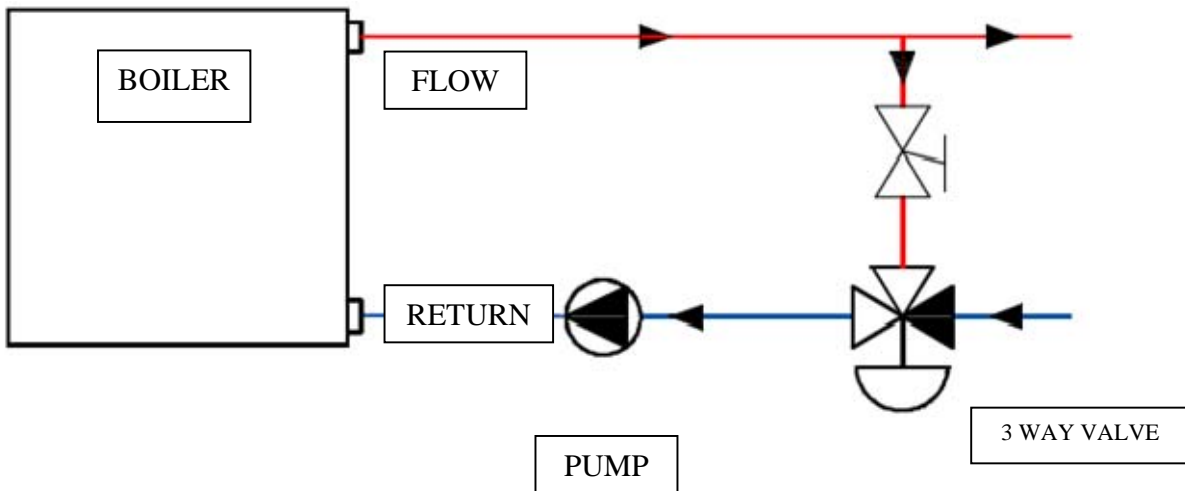
#### **Thermal Regulatory Valve - 3-Way Valve**

A Thermal Regulatory Valve must be installed on the system. This valve prevents cold water return into the boiler. This "Bypass" improves efficiency, reduces condensation and actively prolongs the longevity of the boiler. Once the desired temperature is met (60°C) the valve opens allowing the hot water to flow throughout the remainder of the system.

There are many valves available on the market Broseley Fires recommends the ESBE VTC511 Load Valve 60°C is readily available in the UK and is ideal for this situation.

The valve must be located in between the initial flow and return run and fitted as per the diagram below.

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**IMPORTANT** lack of installation of the device voids the boiler warranty.

NOTE.

- An existing gas-fired central heating system being replaced with a solid fuel system may require certain water pipe sizes to be increased.
- A continuously running pump will result in tepid water circulating around the system and is detrimental to efficiency of the appliance. It may also prevent the radiators and domestic hot water supply from reaching design temperatures.
- A time switch is not necessary.
- Do not light the fire before the boiler has been connected to the water system, serious damage may occur.
- Ensure that the correct amounts of radiators are fitted to the system.

## **14.0 FLUE REQUIREMENTS**

The chimney is possibly the most important part to your installation; great care should be given to its design. An older chimney, in need of repair, is a fire hazard in any installation.

The chimney must be thoroughly swept, checked for soundness and suitability, before any connection is made to the appliance. This must be carried out by a qualified person.

- This appliance must be installed into a '**Class 1 Chimney**'. If there is no existing chimney, then an approved solid fuel, factory built, prefabricated block type or a twin walled, stainless steel flue can be used. *Get advice from a qualified chimney engineer.*
- The flue diameter of this appliance must be a minimum of 150mm.
- In order for the appliance to perform satisfactorily, the chimney height must not be less than 4 meters measured vertically from the stove outlet to the top of the chimney.
- Adequate access for sweeping the flue, such as a soot door, must be provided. This will dramatically improve the ease of cleaning and sweeping of the flue.
- Flue pipe should be fitted inside the flue pipe collar (spigot) to prevent creosote and condensates from running down onto the top of the appliance.
- All flue pipe has to be suitable for solid fuel and fitted in accordance with building regulations, whilst complying with current legislation and manufacturers' instructions.
- If excessive draw is present, then a suitable draught stabilizer should be fitted. This must be fitted in the same room as the appliance is located.
- If the chimney suffers from down draught, then a special 'anti-downdraught' cowl will need to be fitted. In exposed windy locations, a 'stabilizing' cowl may need to be fitted. The minimum cowl requirement that we recommend, is a rain cowl with a bird guard.
- No flue sharing with other appliances is allowed.
- If a rear flue is able to be fitted, the horizontal length must be no longer than 150mm.

## **15.0 LINING THE FLUE**

An insulated chimney is the most efficient and safe way to flue the appliance.

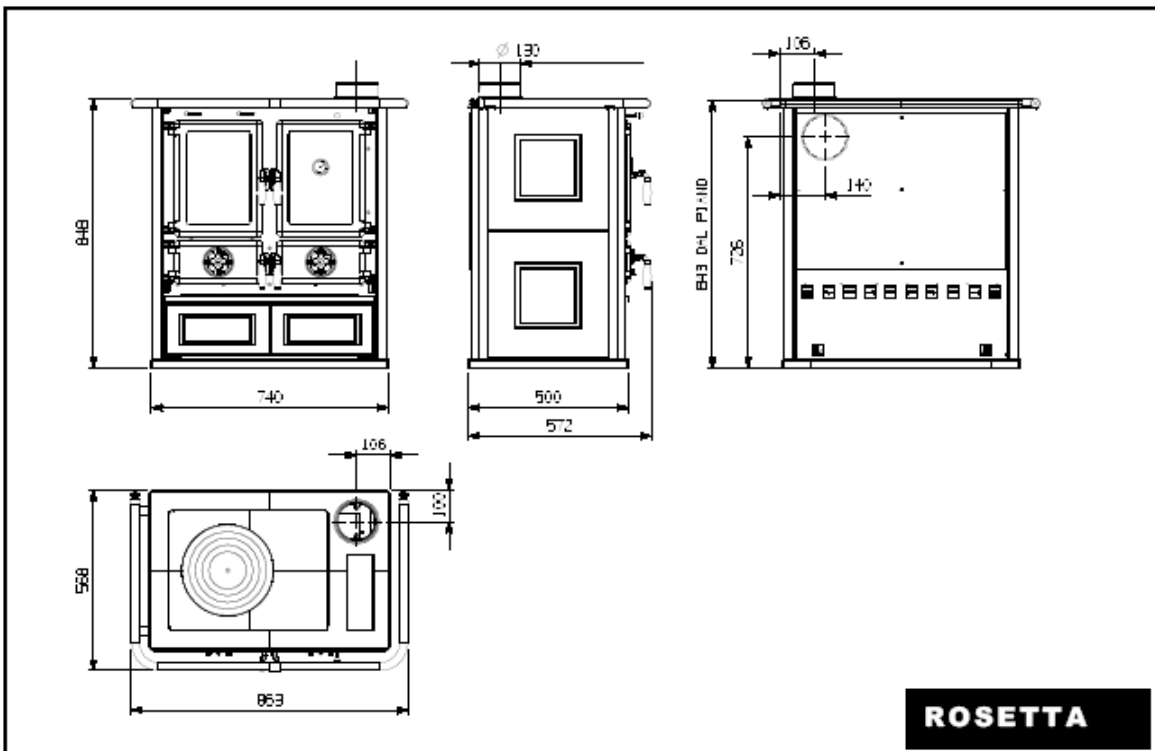
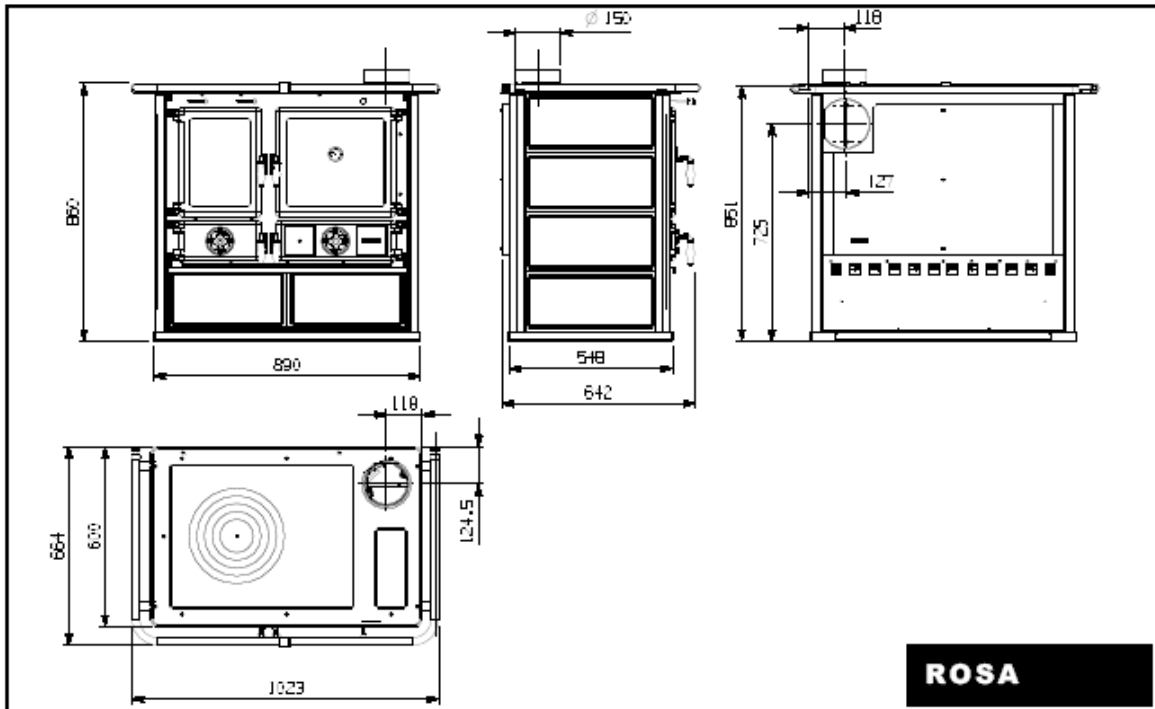
A standard chimney will gradually get saturated in tar, this is a fire hazard.

Tar stains may appear on the surface of the chimney breast inside the property.

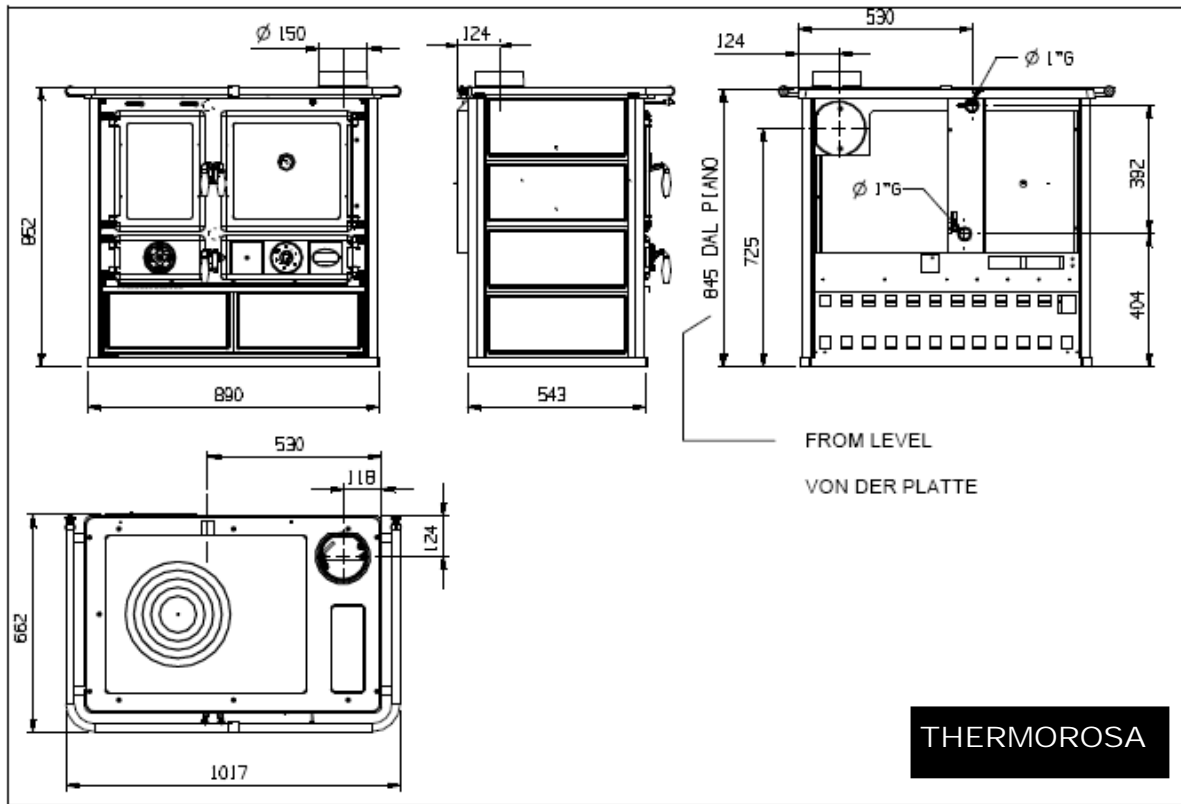
## **16.0 SITING THE APPLIANCE**

This appliance must not be fitted into a location where it will be impossible to service.

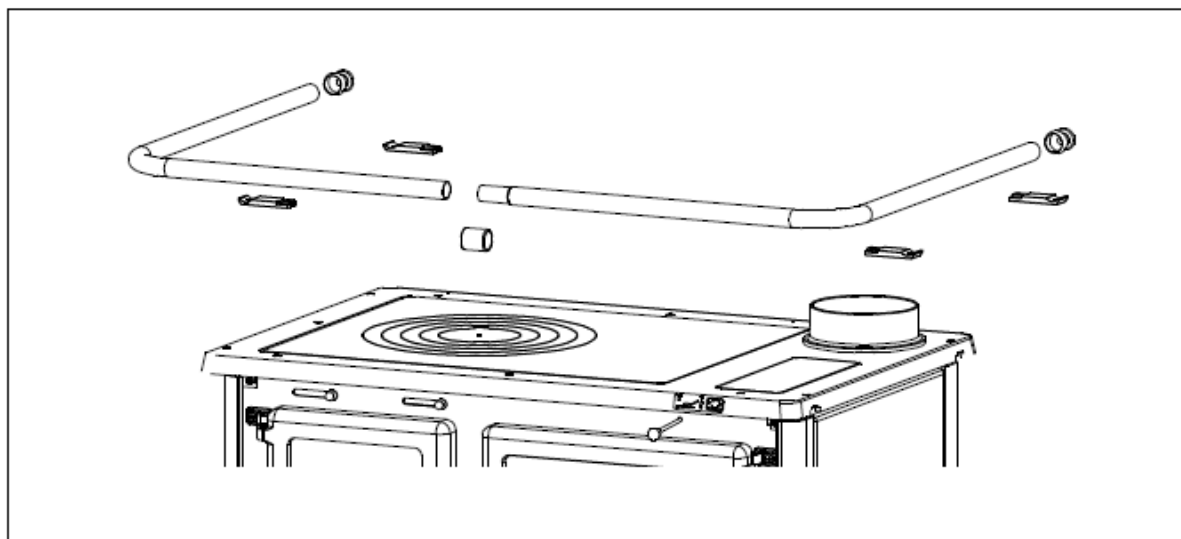
The location must comply with the requirements laid down in the building regulations.



**COOKER DIMENSIONS Continued**



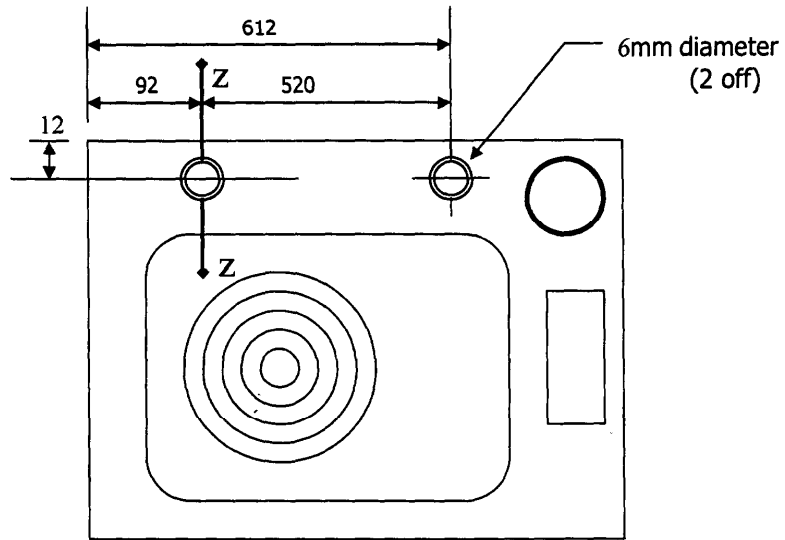
**16B FITTING THE HANDRAILS**



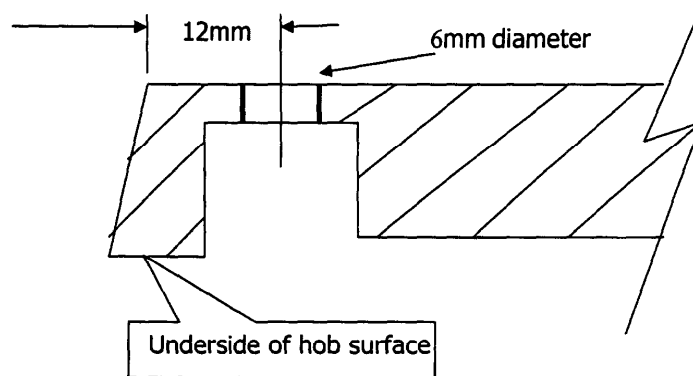
Drill the two clearance holes in the positions shown and attach the nuts to the threaded hinge on the insulated lid to underside of the hob; in the groove; as shown below.

**NOTE:**

The 12mm dimension is taken from the top edge of the hob as the side tapers away. See Section Z-Z



**PLAN VIEW**



**Section Z-Z through drilled hole.**

It is essential that the hearth / base on which the appliance will stand is strong enough to support the weight of the appliance and the chimney / flue. If not, independently support.

It must be level and made of a suitably robust, non combustible material.

The positioning of the appliance and dimensions of the hearth must comply with current building regulations. A constructional hearth needs to be at least 125mm thick.

It must extend at least 150mm each side of the appliance.

It must project at least 300mm in front of the appliance.

A change in level of at least 12mm is advised to mark the perimeter.

There should be a 50mm air space under the constructional hearth if combustible material is present OR the combustible material should be 250mm below the top of the hearth.

The superimposed, decorative hearth is laid on top of the constructional hearth.

### **STOVE CLEARANCES TO FLAMMABLE MATERIALS**

- The minimum distance from any flammable object, or one that is sensitive to heat, (furniture, wood, fabrics. etc.) and from materials with flammable structure, must be 20 cm's to the rear and on both sides.
- In front of the cooker there must not be any flammable object or building material, sensitive to heat within 100 cm's.
- Above the cooker, there must not be any flammable items within 700mm.
- Never deposit / store any flammable materials near the stove.

### **STOVE CLEARANCES TO NON - FLAMMABLE MATERIALS**

- The minimum distance from any NON FLAMMABLE object, or one that is NOT sensitive to heat, (stone brick slate etc.) and from materials with non flammable structure, must be 100 mm's to the rear and on both sides.

PLEASE REFER TO BUILDING REGULATIONS "WALLS ADJACENT TO HEARTHES" for further information.

Where the hearth abuts a wall and the appliance is more than 50mm but not more than 300mm away:

- The thickness of the wall needs to be at least 75mm.
- The height of the wall needs to be at least 1.2M above the hearth.

## **18.0 ADDITIONAL VENTILATION**

There must be sufficient free air for combustion into the room where the appliance is installed.

Permanent openings or vents must not be covered. Vents needs to be positioned carefully, they must be protected from direct wind conditions. A baffle that has been specially designed to fit over the vent will protect it from the effects of wind, but must not restrict the total vent area and must be secured in a way that prevents its movement. Regular inspection of any vents is critical to ensure that the vent has not become restricted. The appliance may require up to 20 m<sup>3</sup>/hour of combustion air. The natural recirculation of air must be guaranteed by having permanent ventilation to the outside.

An extractor fan, cooker hood or similar product, installed in the same room, or in a room nearby; that sucks air out (aspirating); may negatively affect the functions of your cooker.

If the room contains more than one appliance; of the type that requires combustible air;

A calculation will need to be made to re-calculate the permanent air vent requirement.

## ANNUAL SERVICE RECORD

INSTALLATION DATE OF APPLIANCE: \_\_\_\_\_

PURCHASED FROM: \_\_\_\_\_ PURCHASE DATE \_\_\_\_\_

INSTALLATION ENGINEER: \_\_\_\_\_ . REG. No. \_\_\_\_\_

COMPANY NAME: \_\_\_\_\_

COMPANY ADDRESS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ POSTCODE: \_\_\_\_\_

CONTACT NUMBER \_\_\_\_\_

***1ST YEAR SERVICE completion date:*** \_\_\_\_\_

SERVICE ENGINEER: \_\_\_\_\_ . REG. No. \_\_\_\_\_

COMPANY NAME: \_\_\_\_\_

COMPANY ADDRESS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ POSTCODE: \_\_\_\_\_

***2ND YEAR SERVICE completion date:*** \_\_\_\_\_

SERVICE ENGINEER: \_\_\_\_\_ . REG. No. \_\_\_\_\_

COMPANY NAME: \_\_\_\_\_

COMPANY ADDRESS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ POSTCODE: \_\_\_\_\_

***3RD YEAR SERVICE completion date:*** \_\_\_\_\_

SERVICE ENGINEER: \_\_\_\_\_ . REG. No. \_\_\_\_\_

COMPANY NAME: \_\_\_\_\_

COMPANY ADDRESS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ POSTCODE: \_\_\_\_\_

***4TH YEAR SERVICE completion date:*** \_\_\_\_\_

SERVICE ENGINEER: \_\_\_\_\_ . REG. No. \_\_\_\_\_

COMPANY NAME: \_\_\_\_\_

COMPANY ADDRESS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ POSTCODE: \_\_\_\_\_

***5TH YEAR SERVICE completion date:*** \_\_\_\_\_

SERVICE ENGINEER: \_\_\_\_\_ . REG. No. \_\_\_\_\_

COMPANY NAME: \_\_\_\_\_

COMPANY ADDRESS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ POSTCODE: \_\_\_\_\_



## LIMITED WARRANTY

This appliance must be installed and commissioned by a fully qualified, registered engineer. A "Declaration of completion Certificate" must be obtained for the installation and retained by the end user. Failure to comply with these requirements may void your warranty.

You, as the end user, have a contract by law with the supplier / dealer from whom you purchased the product., that dealer then has the same contract with the manufacturer or wholesaler and these have a contract with their suppliers.

### ALL CLAIMS MUST FOLLOW THIS PROCEDURE.

Thank you for choosing a Product from **Broseley Fires Ltd**. This warranty gives you specific legal rights. The statutory rights of the consumer are not affected by the warranty, or the consumer's rights against the dealer arising from their sales / purchase contract.

#### The manufacturers' warranty:

Your Product will be free from defective parts, material, and workmanship at the time of its original purchase for a period of one (1) year.

This warranty does not cover any failure of the unit due to normal wear and tear, misuse, abuse, accident, illegal modification, installation or repair, damage resulting from improper use or failure to maintain the product. The consumable items within the product are not covered by the warranty, nor are the glass.

If during the warranty period, this Product fails to operate under normal use and service, due to defects in material and / or workmanship, Broseley Fires will either repair or replace the product. The repaired or replaced product shall be warranted for the remaining period of the original warranty or ninety (90) days from the date of repair, whichever is longer.

Repair or replacement may involve the use of functionally equivalent reconditioned units. Replaced parts or components will become the property of Broseley Fires.

Should you wish to claim under the warranty, please contact the supplier / dealer from whom you purchased the appliance from. Do not claim directly to Broseley Fires, as they are unable to process any direct claim from an end user.

Product design and any specifications are subject to change without notice. This is due to our continuous product development and improvement. The buyer will not be entitled to request free upgrades to the new design or compensation for previously purchased products.

- This Warranty covers all Broseley Fires costs within the Warranty period.

If the appliance remains uninstalled for a period greater than six months from date of delivery the Warranty will become active six months from the date of original invoice to the distributor.

IN NO EVENT SHALL BROSELEY FIRES BE LIABLE FOR INCIDENTAL OR CONCEQUENTIAL DAMAGES OF ANY NATURE WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOST PROFITS OR COMMERCIAL LOSS, TO THE FULL EXTENT THOSE DAMAGES CAN BE DISCLAIMED BY LAW. (if applicable)

A COPY OF OUR FULL TERMS AND CONDITIONS IS AVAILABLE ON REQUEST.