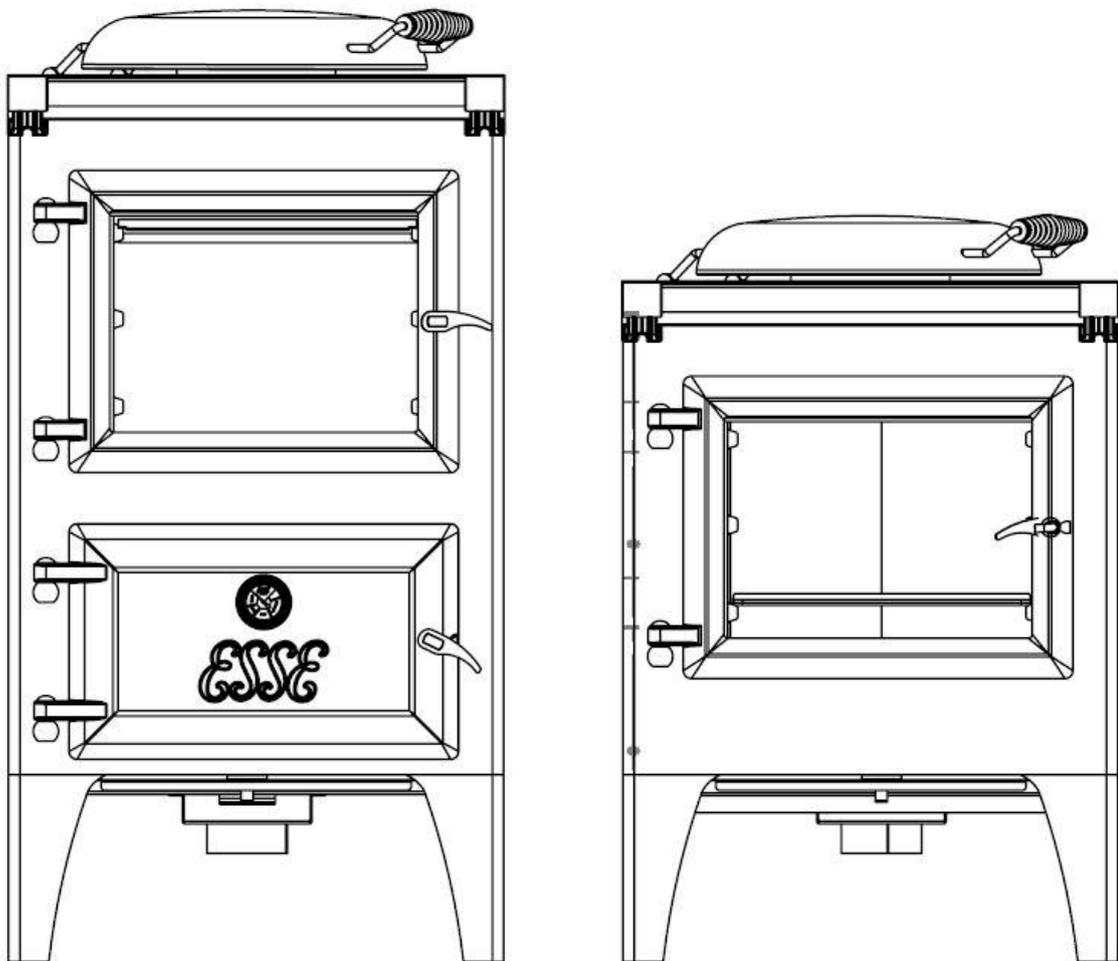


ESSE

Bakeheart & Warmheart

Wood Fired Cooking Stoves



CE

THIS APPLIANCE MUST BE COMMISSIONED BY A REGISTERED INSTALLER OR PLUMBER

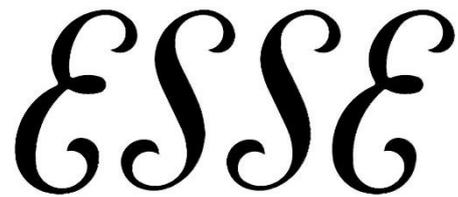
THE WARRANTY CARD MUST BE RETURNED TO ENSURE GUARANTEE VALIDITY

SAFETY NOTES

- Properly installed, operated and maintained, this appliance will not emit fumes into the dwelling. However, occasional fumes from de-ashing and re-fuelling may occur.
- Persistent fume emission is potentially dangerous and must not be tolerated. If fume emission does persist, open doors and windows to ventilate the room. Let the fire burn out or eject and safely dispose of fuel from the appliance. Once the fire is cold, check the flue and chimney for blockages and clean if required. Do not attempt to relight the fire until the cause of the fume emission has been identified and corrected.
- Seek expert advice if necessary.
- An adequate air supply for combustion and ventilation is essential. Air openings provided for this purpose must not be restricted.
- Should it be likely that children, aged, or infirm people approach the appliance whilst the fire door is open, then a fireguard should be used.
- Do not sit or stand on the appliance or use it as a 'step-stool' for access to cupboards or shelves etc. above the appliance.
- Avoid the use of aerosol sprays in the vicinity of the cooking stove when it is in operation and do not heat any unopened airtight containers.
- Ensure that precautions are taken when deep fat frying, never leave the appliance unattended and ensure you have fire safety equipment available, such as a fire blanket, in case of emergency.
- When operating the cooking stove use the tools provided and follow these instructions carefully.
- Attention is drawn to the fact that fire cement is caustic and hands must be washed thoroughly after use.
- The appliance is heavy and care must be taken during handling.
- These instructions give a guide for the installation of the appliance but in no way absolve the installer from responsibilities to conform to AS/NZS Standards, in particular AS/NZS 2918:2018, relating to the installation of solid fuel appliances. All local regulations including those referring to national standards need to be complied with, when installing this appliance.

Table of Contents

SAFETY NOTES	2
INSTALLATION INSTRUCTIONS.....	4
DATA LABELS	4
GENERAL SAFETY INFORMATION	5
DIMENSIONS AND CLEARANCES	6
TECHNICAL INFORMATION	7
CHIMNEY AND FLUE INFORMATION.....	8
INSTALLING THE APPLIANCE	13
HOT WATER SYSTEM.....	14
COMMISSIONING THE APPLIANCE	16
REPLACEMENT PARTS.....	16
COMMISSIONING CHECKLIST.....	18
OPERATIONAL INSTRUCTIONS.....	19
INTRODUCTION.....	19
BEFORE USING YOUR COOKING STOVE	19
YOUR COOKING STOVE.....	20
LIGHTING AND CONTROLLING THE FIRE	22
NOTES ON WOODBURNING.....	23
LONG TERM SHUTDOWN	24
FIREWOOD.....	24
COOKING WITH THE COOK STOVE	27
EXTENDED WOODBURNING	28
CLEANING AND MAINTAINANCE.....	29
CONDITIONS OF GUARANTEE	31
EXCLUSIONS.....	31
CUSTOMER CARE	32
Servicing.....	33



Bakeheart & Warmheart

INSTALLATION INSTRUCTIONS

DATA LABELS

Manufacturer: Esse Engineering Ltd. Long Ing, Barnoldswick, Lancashire BB18 6BJ, England	Serial No: 500IHB / 1811125
Type: Esse Cookstove	Model: "BAKEHEART"
TESTED BY: ASFT	TEST REPORT No: ASFT18070
3 GARDEN STREET, MORWELL, VIC, 3840	DATE TESTED: 14/08/2018
ABN: 46 610 154 768	DISTRIBUTOR: ESSE AUSTRALIA
WHEN TESTED IN ACCORDANCE WITH:	120 VICTORIA STREET,
AS/NZS 4012:4014 & AS/NZS 4013:2014	NORTH GEELONG, VIC
MAXIMUM AVERAGE HEAT OUTPUT BURNING HARDWOOD 5.0kW	
OVERALL AVERAGE EFFICIENCY BURNING HARDWOOD 66%	
PARTICULATE EMISSIONS FACTOR 1.4g/kg	
CATALYTIC COMBUSTER: NO - INSTALLED INTO A SHARED FLUE: NO	

Figure 1 Bakeheart Data Label

Manufacturer: Esse Engineering Ltd. Long Ing, Barnoldswick, Lancashire BB18 6BJ, England	Serial No: 500IHW / 1811134
Type: Esse Cookstove	Model: "WARMHEART"
TESTED BY: ASFT	TEST REPORT No: ASFT18072
3 GARDEN STREET, MORWELL, VIC, 3840	DATE TESTED: 21/08/2018
ABN: 46 610 154 768	DISTRIBUTOR: ESSE AUSTRALIA
WHEN TESTED IN ACCORDANCE WITH:	120 VICTORIA STREET,
AS/NZS 4012:4014 & AS/NZS 4013:2014	NORTH GEELONG, VIC
MAXIMUM AVERAGE HEAT OUTPUT BURNING HARDWOOD 4.1kW	
OVERALL AVERAGE EFFICIENCY BURNING HARDWOOD 68%	
PARTICULATE EMISSIONS FACTOR 1.5g/kg	
CATALYTIC COMBUSTER: NO - INSTALLED INTO A SHARED FLUE: NO	

Figure 2 Warmheart Data Label

GENERAL SAFETY INFORMATION

Clearances from combustible materials are 130 mm from the sides and 225 mm from the rear for the Bakeheart, and 350mm from the sides and 125mm from the rear for the Warmheart.

Clearances from non-combustible materials are 25mm from the rear of the cook stove and 10mm from the side fro both the Bakeheart and the Warmheart.

It is recommended that a smoke alarm and appropriate fire safety equipment such as a fire extinguisher and fire blanket are installed in the kitchen as a safety precaution and also a carbon monoxide detector.

An adequate air supply for combustion and ventilation is required. A purpose provided air vent maybe necessary. Air openings provided for this purpose must not be restricted. An external air kit is available.

DIMENSIONS AND CLEARANCES

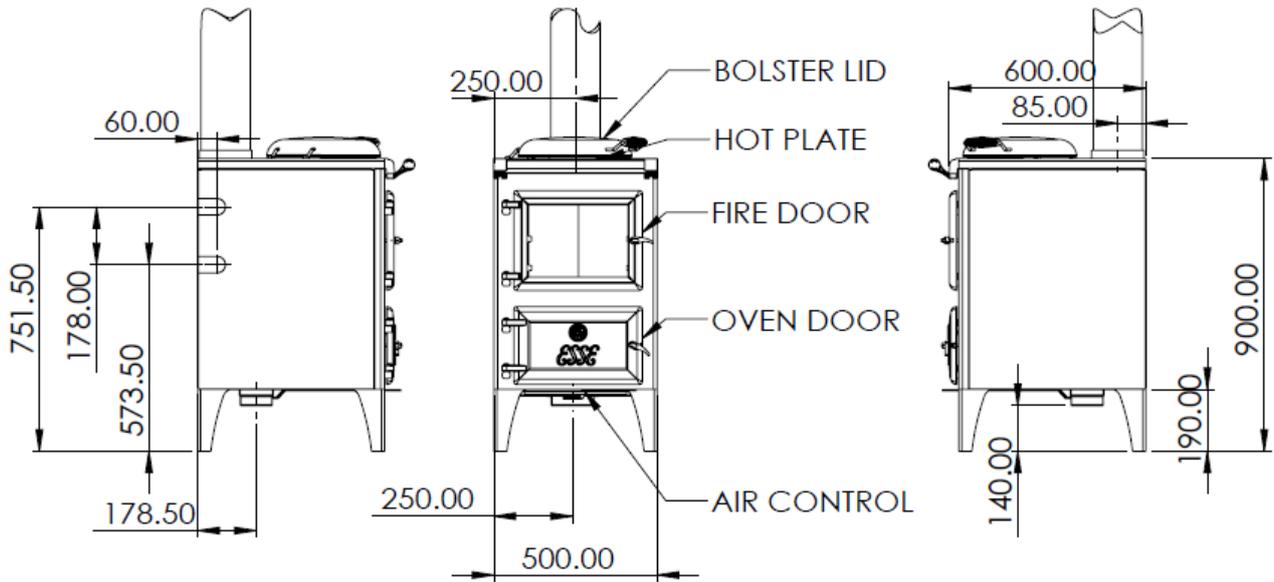


Figure 3 Bakeheart Cooking Stove

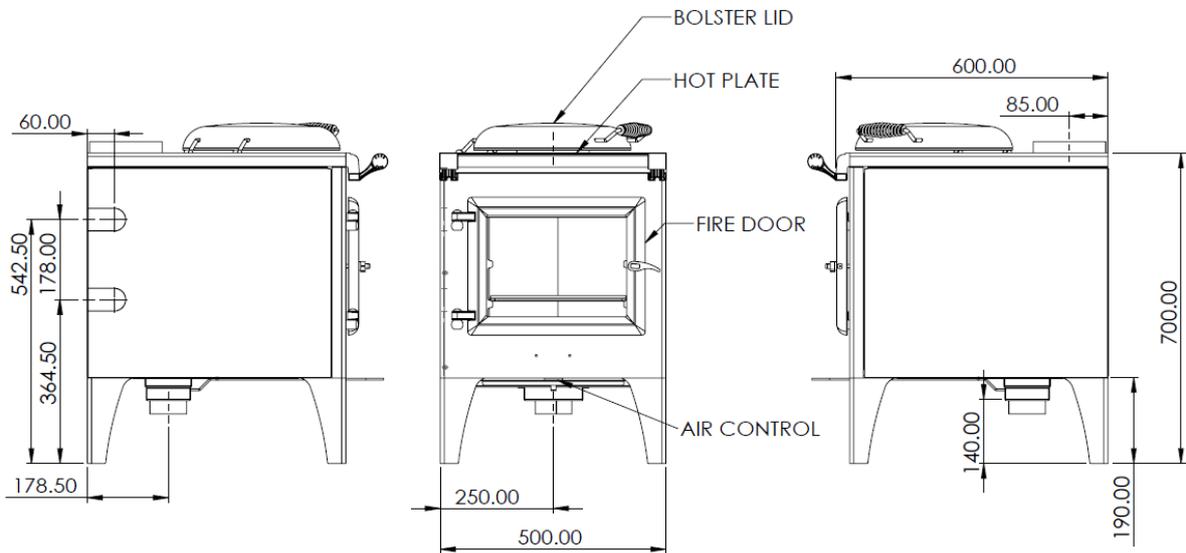


Figure 4 Warmheart Cooking Stove

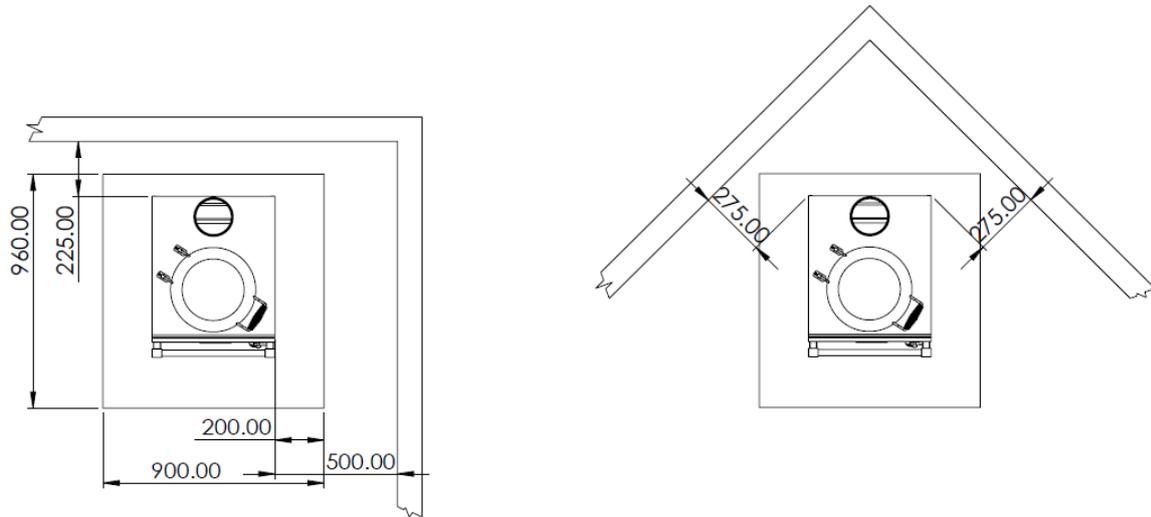


Figure 5 Bakeheart Minimum Clearance to Combustibles

TECHNICAL INFORMATION

Cut your logs to the approximate size shown in Figure 6 to minimise the need for refuelling.

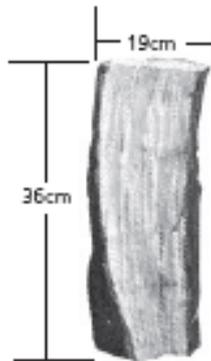


Figure 6 Approximate Size of Logs

Technical Information			
Nominal heat output	5.0kW	Minimum chimney draught	12Pa
Combustion air requirements	29m ³ /h	Mean flue gas temperature	170°C
Weight of appliance		Flue gas mass flow	10g/s
Bakeheart:	192 kg		
Warmheart:	154 kg		

CHIMNEY AND FLUE INFORMATION

The successful operation of the cooking appliance relies on the adequate performance of the chimney to which it is connected. The following chimney guidelines must be followed:

- It should have an internal cross section of no less than 320cm² (200mm dia.) (If a flue liner is used, it should be 150mm (6'') diameter and be made of suitable material for burning wood). A Flue with a diameter of 150mm (6''), is required to connect to the cooker.
- Voids in the chimney should be avoided, as these will prevent a steady flue draught. The appliance flue pipe should pass beyond the narrowing of the chimney.
- Terminate at least 1m above roof level so that the chimney does not terminate in a pressure zone.
- If the appliance is installed as a freestanding appliance, it should not support any part of the chimney.
- Be free from cracks, severe bends, voids, and obstructions.
- Be connected to this one appliance only.
- New chimneys must be in accordance with local regulations.
- The chimney must be capped to prevent ingress of rain.
- A flue/chimney access point is required so that the state of the chimney can be checked and any fallen soot removed.
- External flues must be insulated to prevent heat loss.
- Do not fit an extractor fan in the same room as the appliance.
- Be a minimum 4.6m high from top of the cooker to the chimney pot.

- It is recommended that an inspection hatch is fitted to the chimney as this will make future cleaning easier.
- A single wall starter length with a single to twin wall adapter will be needed to use twin wall insulated flue. The stove will need to be moved away from the wall to accommodate use of twin wall flue.

NOTE

The chimney/flue to which this appliance is being connected must be swept and examined for soundness prior to installation. Remedial action should be taken if required, seeking expert advice if necessary. Where the chimney is believed to have served an open fire installation it is possible that a higher flue gas temperature from a closed appliance may loosen deposits that were firmly adhered, with the consequent risk of flue blockage. It is therefore recommended that the chimney be swept a second time within a month of regular use after installation.

Flue Draught

The chimney can be checked before the appliance is installed with a smoke match. If the chimney doesn't pull the smoke, it may suggest the chimney needs attention.

This test is only a guide as an apparently poor flue may improve once the appliance is installed, lit and the flue is warmed. Once the appliance is installed a flue draught reading should be taken as detailed below.

Two flue draught readings should be taken, one with the appliance at minimum burning rate and one at maximum burning rate. The flue draught test hole must be drilled in the flue pipe as close to the appliance as possible and before any flue draught stabiliser.

Minimum reading: The appliance should be lit and allowed to warm the flue thoroughly. Close the air controls, and ensure firebox door is fully closed. Allow the burning rate to become steady. The flue draught reading should now be taken; the minimum required is 12 Pascals [Pa] (0.05" w.g.).

Maximum reading: The air controls can now be opened to allow the appliance to burn at maximum rate. Take a flue draught reading.

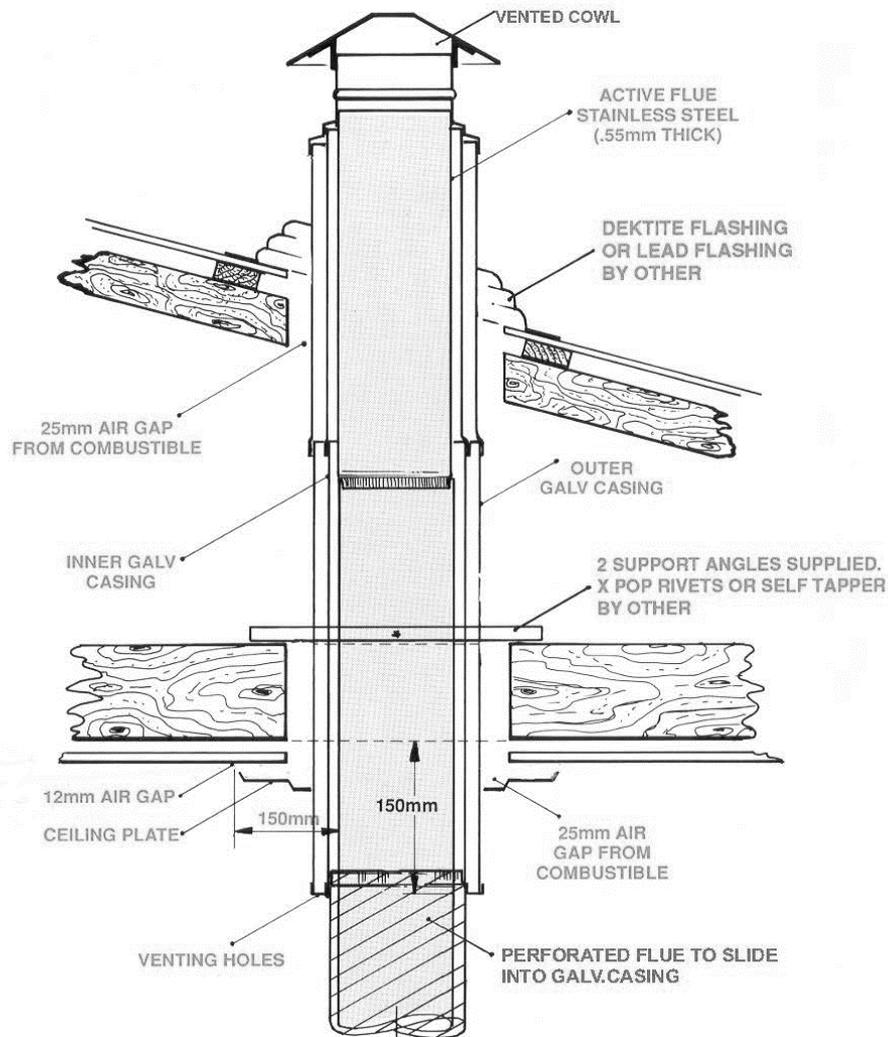
Ideally, the flue draught readings should range between 12Pa, 0.12mm (0.05" w.g.) and 25Pa, 2.5mm (0.1" w.g.). Any readings significantly outside this range may indicate the need for remedial action. Low flue draught symptoms: difficult

to light and smoke coming into the room. High flue draught symptoms: fuel burns away very quickly, overfiring which may damage the appliance & invalidate the warranty.

A flue stabiliser can be fitted to reduce the draught through the appliance if the draught may exceed 25Pa. The flue stabiliser should be fitted in the same room as the appliance and be the same size as the flue pipe. Consult building regulations regarding additional ventilation.

A fan flue booster can also be fitted if the flue draught is poor. This should be fitted according to the instructions supplied with the booster. An electrical supply will be needed.

Standard 6" Default Kit



COMPONENTS:-

- 1 x VENTED COWL
- 1 x 10" GAL WITH CAP
- 1 x 10" GAL FLUE
- 2 x 8" GAL FLUE
- 4 x 6" STAINLESS FLUE
- 1 x 8" PERF
- 1 x 8" PERF WITH RING
- 2 x SUPPORT ANGLES
- 1 x CEILING PLATE

NOTE:

- A. Cut correct hole in plaster.
- B. Put ceiling plate in position.
- C. Insert bottom outer galv. Crimped end up in position on joists using angles.
- D. Now proceed to join the outer flues in their positions ensuring all gaps are complied with.
- E. Stainless steel flues crimped end face down.
- F. Galv. Flue crimped end face up.
- G. All stainless steel joins to be pop rivetted or self tapped.

IMPORTANT INFORMATION

1. A permit from your local council must be obtained prior to installing your heater.
2. In most normal installations a triple skin flue should be used where installation is in close proximity to combustible materials, eg. Where the flue kit above the ceiling continues through another storey or if the flue kit is within a cupboard, or similar space, rather than a ceiling, consult your dealer.
3. Correct installation is the responsibility of the person installing the flue kit. NOT the manufacturer of the kit.
4. Regular inspection of your flue for creosote deposit or damage, and cleaning with a flue brush will ensure continuing good surface. The cowl is to be attached with 2 self tapping screws, and can be removed for cleaning.

Table 1 Flue Draught Troubleshooting Guide

Low flue draught symptoms: difficult to light and smoke coming into room	
CAUSE	REMEDY
Cold chimney	Line the Chimney
Chimney too short	Extend the chimney
Down draught	Relocate/extend chimney terminal. Fit an anti-down draught cowl
Chimney diameter too large	Line the chimney
Chimney obstruction	Clear/sweep the chimney
Restricted air supply	Check for competing draughts (other chimneys, extractor hoods/fans). Fit an air vent if the room is sealed.
High flue draught symptoms: fire difficult to control, fuel will not last, stove too hot, stove damage, chimney fire	
CAUSE	REMEDY
External wind conditions combined with chimney terminal	Fit stabiliser cowl Fit flue draught stabiliser

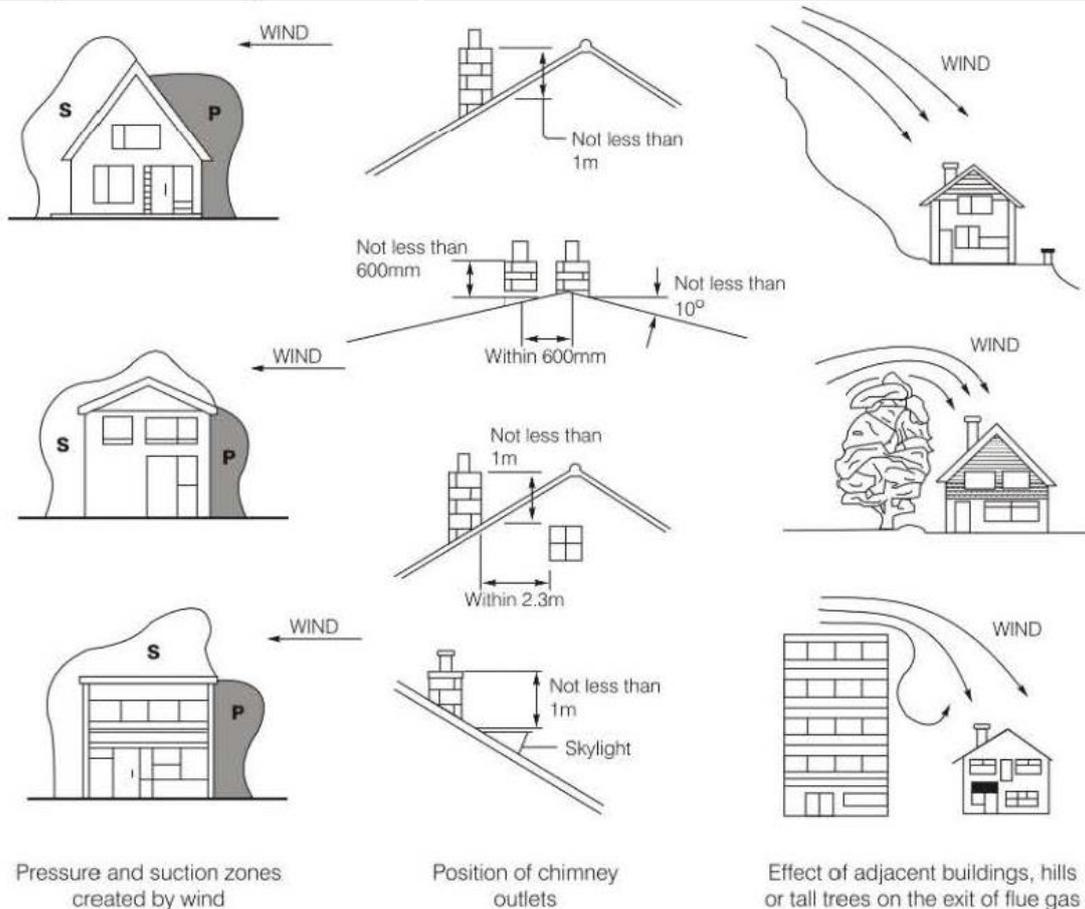


Figure 7 Chimney Location and Flue Performance

INSTALLING THE APPLIANCE

Flue Connection

The flue pipe used to connect the appliance to the chimney is 6'' (150mm) in diameter. (The flue connection is on the top of the appliance, in the centre at the back.)

Important Installation Notes

- The installation must allow access for adequate chimney sweeping and flue cleaning.
- Avoid using bends greater than 45° to the vertical. All flue pipe sections should be as close to the vertical as possible.
- All joints in the flue system must be effectively sealed.
- All flue sockets must face upwards. On completing the installation of the appliance, the chimney, hearth and walls adjacent to the cooker must conform to local or national regulations currently in force (AS/NZS 2918/2018).
- Air inlet grilles should be positioned so that they are not liable to blockage.
- An air extraction device shall not be used in the same room as the appliance unless adequate additional ventilation is provided.
- A flue cleaning hatch should be fitted to provide access for cleaning the flue and chimney.
- Check the appliance for soundness of seals between main components and that all supplied parts and fittings are correctly fitted.
- Ensure the appliance is left operational and hand over the operating instructions and operating tools supplied.
- Before leaving the installation demonstrate the operation of the appliance to the user. Explain all controls and flue way access for cleaning.

HOT WATER SYSTEM

- A. If a boiler is fitted to this system it must be connected to a heating system otherwise the warranty is void.
- B. There are two connections, both 1" BSP Female on the left hand side. Follow general notes below.
- C. The D boiler is of mild steel construction for use on an open vented indirect system. A domestic Stainless Steel boiler can be purchased from your supplier for use on an open vented direct system if required.
- D. General Notes on Water System: -
 - 1. The cooker will produce hot water at differing rates depending on how it is operated. Heating control is manual, no thermostat is fitted.
 - 2. The system must be designed to cope with loads between the maximum and minimum output. There must be sufficient gravity load to absorb 250L low pressure hot water output.
 - 3. This unit is not approved for use with hydronic heating systems.
 - 4. Whichever system is chosen the layout must follow established heating engineering practice. To avoid trapping air in the boiler a 1" BSP connection must be used on the flow and return tapping, and any reduction in pipe size thereafter being made on a vertical rising pipe. The cooker must be level when fitted and the flow pipe must rise from the boiler.
 - 5. The cylinder and pipe work should be lagged to avoid heat loss.
 - 6. The static head must not exceed 18 meters.
 - 7. A drain cock should be fitted to the lowest part of the circuit.
 - 8. The total water capacity of the boiler is 4 litres.
 - 9. A heat leak radiator should be fitted to absorb any excess heat that may be produced.
 - 10. The system must be open vented.
 - 11. It is recommended that the system is sealed with hemp & paste or equivalent which can withstand temperatures exceeding 100°C

Typical DHW Gravity System

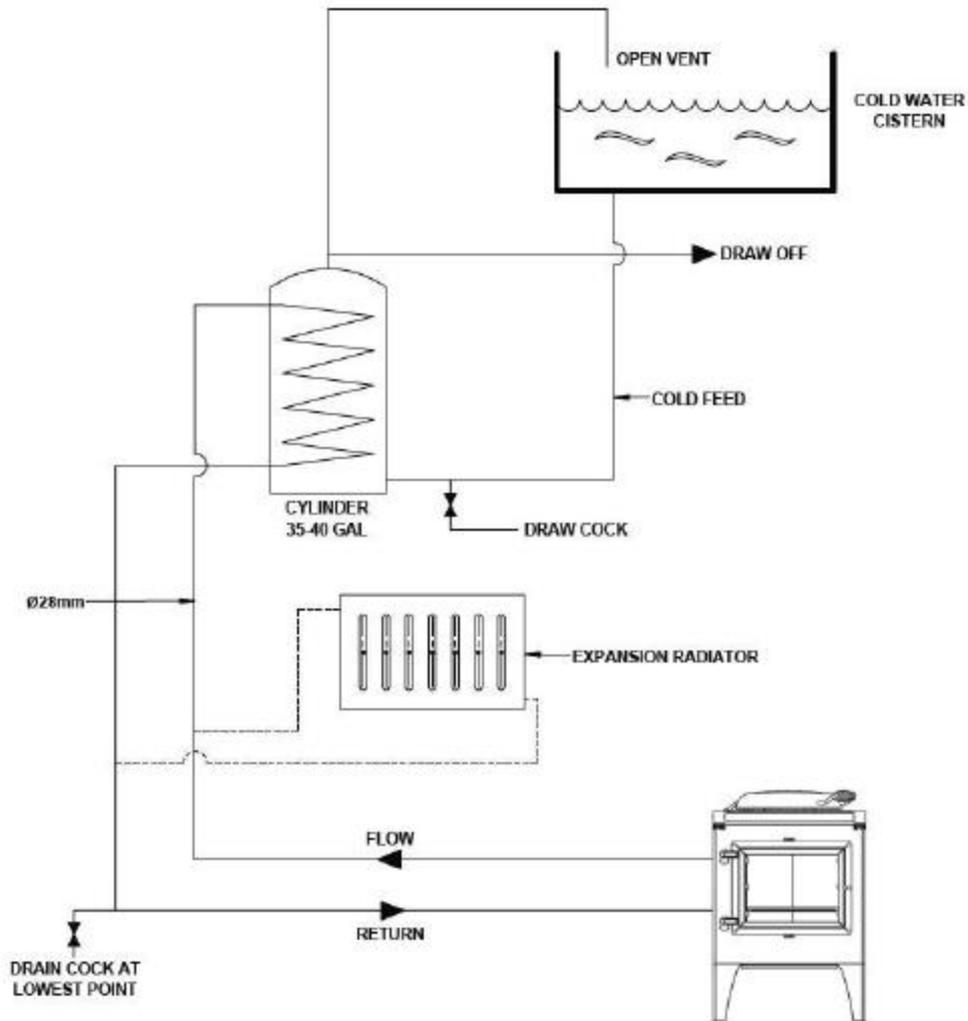


Figure 8 DHW Gravity Heating System

COMMISSIONING THE APPLIANCE

- Ensure the flue draught is compliant with AS/NZS 2918:2018
- Check ventilation
- Ensure fire bricks, baffles, and the after burner are in the correct position
- Check that all doors fit and seal correctly
- If applicable check plumbing circuit
- Check no extractor fan, other appliance or other flue interferes
- Complete commissioning card and return to ESSE to validate warranty

REPLACEMENT PARTS

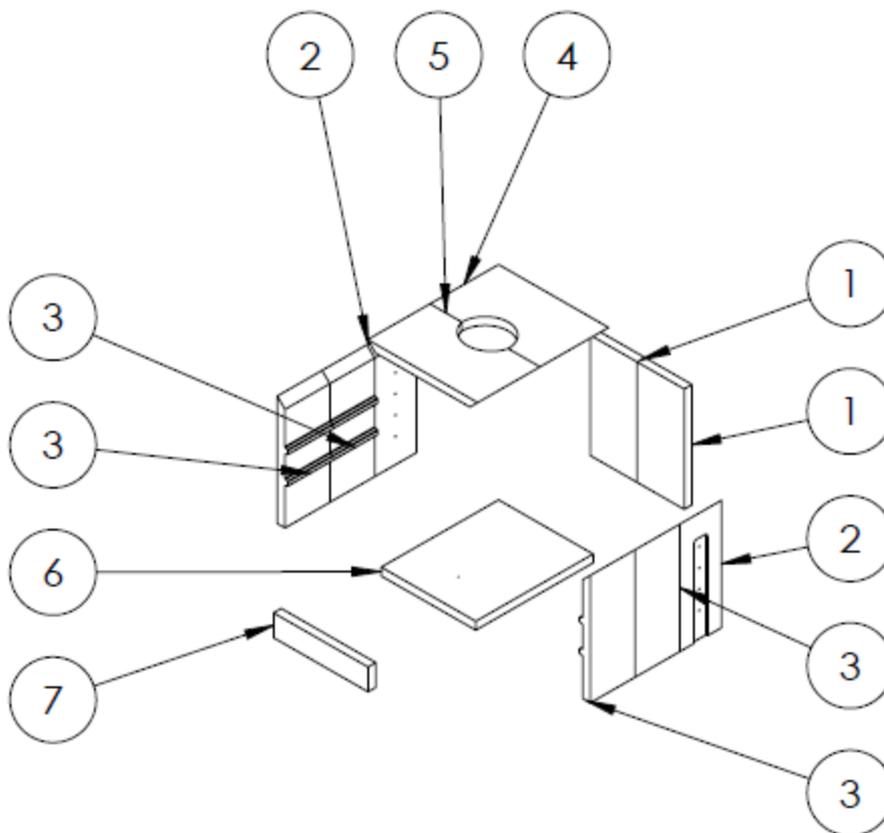


Figure 9 Firebrick Layout

Table 2 Firebrick Part Numbers

Item No.	Part Number	Description	Qty.
1	990-009	Rear Brick	2
2	500-IH-226	Side Rear Brick	2
3	500-IH-227	Side Front Brick	4
4	990-004	Top Back Brick	1
5	500-IH-235	Top Front Brick	1
6	990-009B	Base Brick	1
7	990-009C	Front Brick	1

Fire Door Glass

Combustor	WCKCU-012
Side Brick	500-IH-226
Side Brick (with shelf runners)	500-IH-227
Top Front Brick	500-IH-235
Top Back Brick	990-004
Base Brick	990-009B
Rear Brick	990-009
Baffle	PLUS-010-7
Oven Shelf	PLUS-011-REV2

COMMISSIONING CHECKLIST

To assist with any potential guarantee claim please complete the following information:-

To be completed by the installer.

Dealer the appliance was purchased from:

Name: _____

Address: _____

Telephone No: _____

ESSENTIAL information:

Date Installed _____

Model Description: _____

Serial No: _____

Installation Engineer:

Company Name: _____

Address: _____

Telephone No: _____

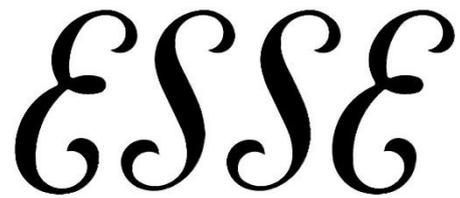
Commissioning Checks – to be completed and signed:

Has the use of the appliance, operation and controls been explained?	Yes		No	
Instruction book handed to the customer?	Yes		No	

Signature:.....

Print Name:.....

**A CERTIFICATE OF COMPLIANCE OF INSTALLATION MUST BE SENT WITH THE
WARRANTY CARD**



Bakeheart & Warmheart

OPERATIONAL INSTRUCTIONS

INTRODUCTION

Thank you for choosing an ESSE cooking stove. Please read these instructions carefully to ensure your safety and enjoyment whilst using this product. Correctly installed and operated, your ESSE cooking stove will provide faithful service indefinitely. We feel certain that like countless ESSE owners since 1854, you will be truly satisfied by the warmth and comfort it will provide and the taste of your food cooked within its oven.

BEFORE USING YOUR COOKING STOVE

Ensure that any plastic film used to protect surfaces has been removed (e.g. from the inside of the oven door). The hotplate has been painted at the factory to prevent rusting and therefore will require wiping with a damp cloth and drying with a tea towel or kitchen roll.

During the first few operations of the cook stove there may be some ticking and fumes emitted. This is normal and part of the initial expansion & material curing process.

YOUR COOKING STOVE

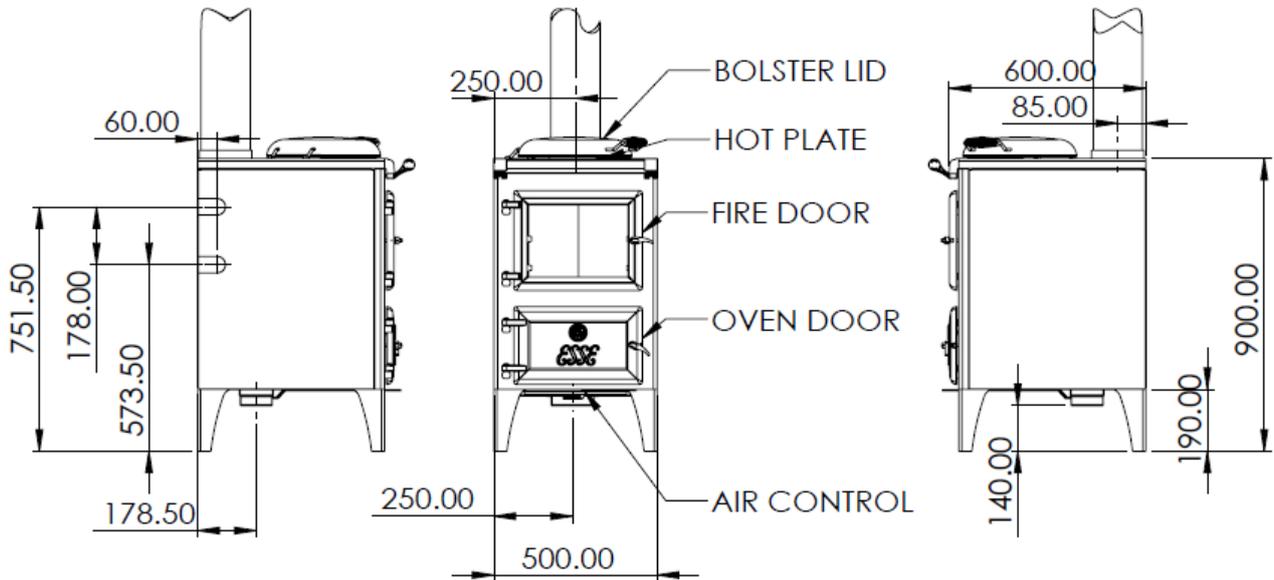


Figure 10 Bakeheart Cooking Stove

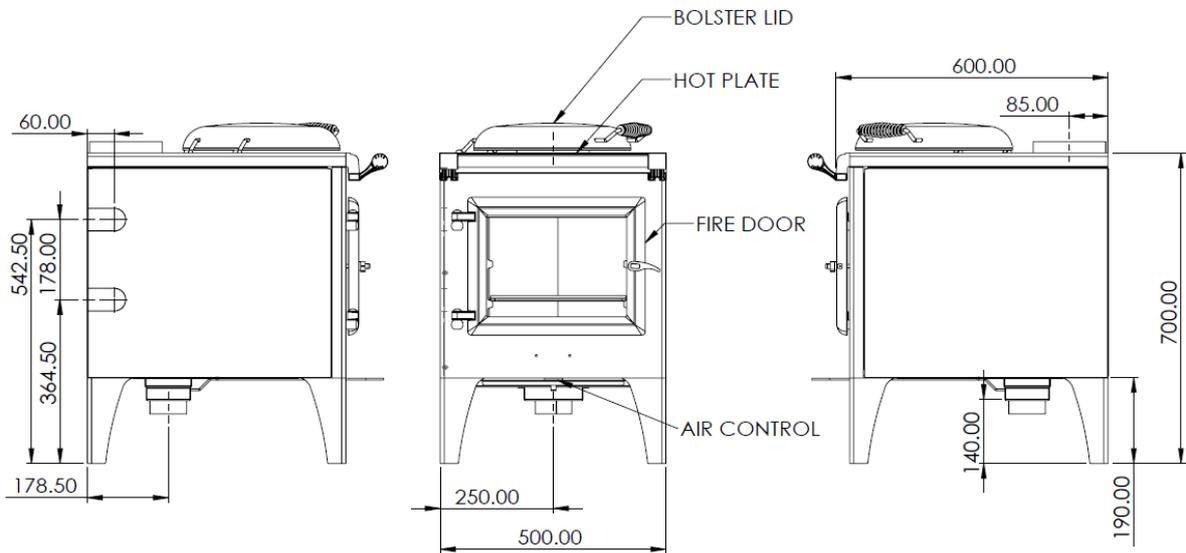


Figure 11 Warmheart Cooking Stove

Figure 10 and Figure 11 show the cooking stoves and their controls. The fire is loaded, refuelled, and emptied through the large glass fire door.

Included inside your cooking stove is a multi-purpose Operating Tool – for adjusting the air supply and operating the door. A glove is also provided to protect the user’s hand. (Figure 3)

WARNING

Do not place towels on the handrail, keep pets and children away and ensure that any curtains near the appliance cannot ignite even when displaced. Surfaces will be hot when in use.

An extractor fan MUST NOT be fitted in the same room as the appliance.

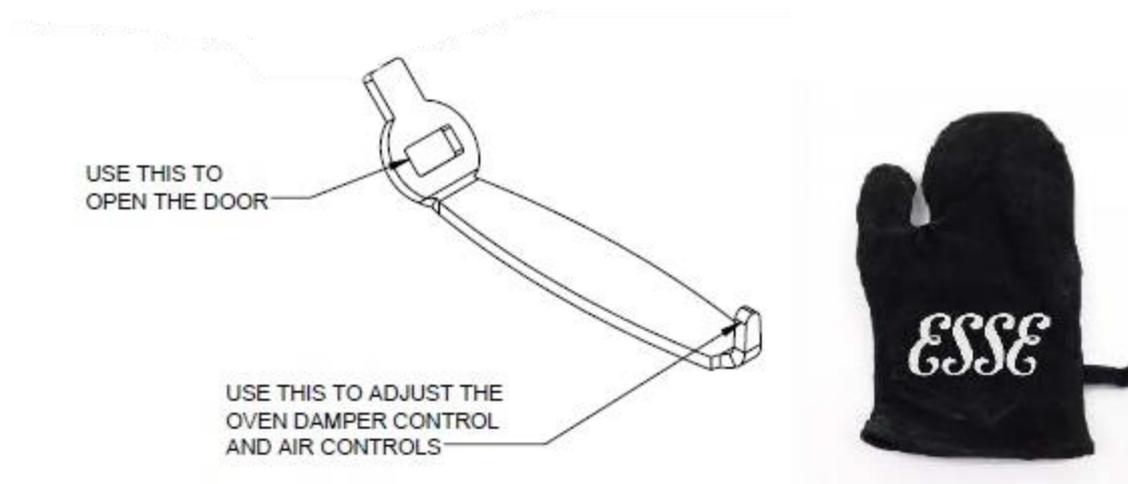


Figure 12 Operating Tool and Glove

LIGHTING AND CONTROLLING THE FIRE

Before lighting the fire ensure that all vermiculite bricks are in the correct position.

Ensure the air control is in the open position by moving the control to the right hand position.

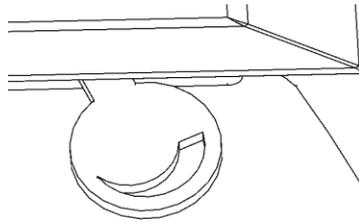


Figure 13 Air Control in Open Position

Open the fire door and place a firelighter in the centre of the firebox. Build a small pyramid of kindling over the firelighter ensuring that the firelighter is still reachable for lighting.

Place a two larger pieces of kindling across the stove, one each at the front and rear either side of the pyramid. Place two more pieces front to back, light the firelighter and repeat the pattern of alternating kindling until the firebox is two thirds full.

Once the fire has been lit leave the door partially open to allow additional airflow until the fire has become established. When the fire is established the fire can be loaded with logs and the door can be fully closed. The air control can be moved towards the closed position once the sooting has burnt off the brickwork. The air flow can be reduced by moving the control to the left once the fire has become established.

WARNING

When the cooking stove is running ALL HANDLES become hot and the operating tool or glove provided should be used to open or close the doors (Figure 12)

The burning rate of the stove can now be regulated by the rate at which fuel is added and use of the air control. The maximum amount of fuel to be loaded during normal operation is 2kg per hour in order to achieve nominal heat output.

NOTE

This appliance is not an incinerator and only dry well seasoned wood should be used. Burning coal or other solid fuels such as treated wood is not possible.

If the cook stove is being used primarily to heat the room it is recommended that the bolster lid is kept in the raised position to allow heat from the hotplate to radiate into the room.

NOTES ON WOODBURNING

Wood burns most efficiently when the air for combustion is supplied from above the fire bed. This air supplies the oxygen necessary for the volatile gasses given off by the wood as it is heated to combust which increases efficiency and reduces heat being wasted up the chimney.

Running the cooking stove with the air control open will provide oxygen for the wood to burn on the fire bed and should be used to control the fire when lighting or refuelling. The cooking stove should ideally be run with the air control in the closed position for the majority of the time in use. If the fire appears to die down too low then opening the air control slightly for a short period can help revive it.

Cold Flue

This is below the condensation point of wood gasses and may cause the build-up of tar in the chimney, dirty the fire door glass and result in the inefficient burning of fuel.

When the flue is cold the fire will appear dull and residue will appear on the fire door glass.

Correct Flue Temperature

This is the most efficient operation of your cooking stove.

When the flue is at the correct temperature there will be rolling flames visible above the logs, any residue on the fire door glass will burn away.

Overheated Flue

Heat will be wasted up the chimney. Excess heat may damage the cooking stove or ignite an existing accumulation of tar resulting in a chimney fire. In the event of a fire, close the air controls on the appliance and call the fire brigade for assistance.

LONG TERM SHUTDOWN

If the cooking stove is to be shut down for long periods i.e. during summer months or if the appliance is in a second home that is not used all the time, precautions should be taken to avoid damage from condensation and corrosion.

First ensure that the cooking stove is fully cleaned and all ash removed. The ovens and hotplate can then be treated with a light coating of flax oil to help prevent moisture damaging the surfaces. The air control is to be left in the open position (Figure 13), the doors slightly ajar, and the bolster lid left raised to allow for ventilation.

FIREWOOD

Seasoning and Storing Firewood

Wood, which has recently been cut and is still full of sap and water is known as "green" wood.

Green wood will generally burn poorly and inefficiently, because it can have over 20% water in its cells. It may be hard to light, smoulder, not put out any heat and cause more than the usual amount of creosote to build up in your chimney.

So your aim should be to dry the wood out to below 20% moisture content, this process is called seasoning. As the name implies, you should store your wood

for a season or so, while it dries, but there are things you can do to speed up seasoning by cutting the wood now rather than just before you use it.

Wood is composed of bundles of microscopic tubes that were used to transport water from the roots of the tree to the leaves. These tubes will stay full of water for years even after a tree is dead. This is why it is so important to have your firewood cut to length for 6 months or more before you burn it, it gives this water a chance to evaporate since the tube ends are finally open and the water only has to migrate a small distance to escape. Splitting the wood helps too by exposing more surface area to the sun and wind, but cutting the wood to shorter lengths is of primary importance.

Here's how you can tell whether your wood is ready or not: Well seasoned firewood generally has darkened ends with cracks or splits visible, it is relatively lightweight, and makes a clear "clunk" when two pieces are struck together. Green wood on the other hand is very heavy, the ends look fresher, and it tends to make a dull "thud" when struck.

What Type of Wood is Best?

The difference between 'hard' and 'soft' woods is the density of their cells or fibres.

As a general rule, the deciduous trees (those that lose their leaves in the autumn) are usually thought of as hardwoods and the evergreen trees (such as pines, firs and larches) as the softwoods. But generalisations are of course always subject to many exceptions. Some evergreens may well be harder than some deciduous trees. Birch, for example, is not very hard at all. So we should understand that there is a whole range of densities amongst our tree species, including medium dense woods, which cannot be satisfactorily classed as hard or soft.

Firewood tends to be sold by volume rather than weight. Assuming that the wood is reasonably dry, the weight of a square metre of good hardwood may be double of that of a square metre of softwood. This means that the same volume of hardwood will provide you with more fuel to burn than an equal amount of softwood, simply because it contains more substance.

(N.B. The price of hardwood will normally not be double that of softwood, because it took the same amount of labour to prepare. So, if a trailer full of

hardwood costs more than the same size trailer full of softwood, the more expensive option may well be the most economical.)

The other advantage of good hard firewoods are that the cooker does not need to be fed as often and the charcoal-beds made by the glowing wood may burn more easily overnight.

However, the ideal situation would be to have a store of both hard and soft woods, because the softer woods also have distinct advantages. They light more easily than the slower burning hardwoods and if the softwoods are dry, they create a hotter, more intense fire. The draught created by the hotter fire moves the air up the chimney faster.

After reading the notes opposite about the burning process, you will understand that means less pollution in the form of smoke and less creosote condensation in your chimney.

The denser hardwoods tend to smoulder more easily when the fire is first lit, so their flue gas temperature will be much cooler.

Because softwoods like pine and larch contain a lot of resins and pitch, a popular misconception is that they will fur up the chimney with creosote more easily than a hardwood like oak. This is not necessarily true at all. It is not the pitch that is the problem, it's the water IN the pitch. Once the water in the wood has evaporated, that pitch becomes high octane fuel. When dry, softwoods burn extremely hot.

There is also the matter of seasoning to be considered. When you buy wood, it will usually have been cut in the winter of the year you buy it. Hard woods tend to take longer than softwoods to fully dry out.

Softwoods cut in the previous winter should, with proper storage, be ready to burn the next autumn, whereas many hardwoods may take a bit longer than that. Oak, for example, is very slow to dry out and ideally left for two years. It is also possible to purchase pre seasoned wood or kiln dried wood.

Summarising we can say that it is always sensible to buy this year for next years fuel supply and that it is very handy to have both soft and hardwoods. You can use the softwoods to start a good fire and you will have additional control over the fire (in addition to the cookers controls) by adding slower burning wood to fast ones if you want to leave the cooker without tending it for a while.

Alternatively you can add some fast burning softwood logs to the slower hardwood logs to instantly revive a fire, which has been neglected.

All firewood should have the bark removed before burning and should not be painted or treated as these can cause excessive smoke and tarring of the stove as well as releasing hazardous fumes when burnt.

NOTE

The above text is a guide only. The ideal operation of your cooking stove depends on a number of factors which vary with each installation. Gaining experience on your cooking stove is the only way to learn its best operation.

COOKING WITH THE COOK STOVE

The oven and hotplate are heated directly by the fire. In order to heat up the oven and hotplate, the fire should be lit as described on page 22.

The temperature of the hotplate is graduated from the inside out, see Figure 14 for approximate temperatures. Machined base pans are essential as heat is transferred to them via conduction.

1. 300°C
2. 290°C
3. 250°C
4. 190°C

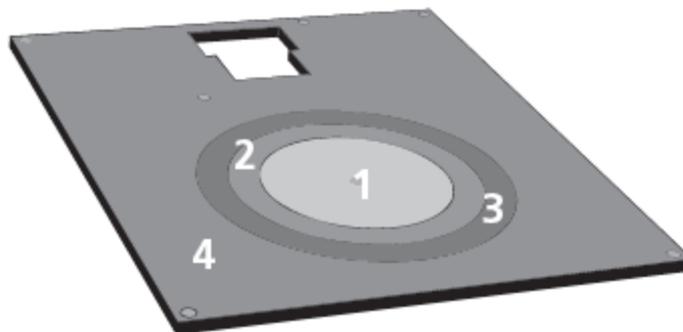


Figure 14 Approx. Working Temperatures 30 Mins. After Refueling

Food may be cooked directly on the hotplate if desired. The bolster lid may be left down when the hotplate is not in use in order to keep it at a cooking temperature.

To increase oven temperatures, refuel the cooker and increase the burning rate of the fuel by use of the air control, and regulate to the desired temperature.

The cookers are equipped with a wire shelf which can be set to the desired height on the side bricks in the firebox to cook over the embers. The shelf in the Bakeheart oven has anti-pull out stops on the ends to prevent it from being pulled out inadvertently; to remove a shelf, pull forward until the stop is reached, then lift at the front and pull out of the oven. Use reverse procedure to refit. If the shelves pull straight out then they are in back to front.

The temperature gauge on the oven door provides an indication of the oven temperature. It should be noted however that since the gauge is attached to the door, the indicated temperature will drop if the door is left open for a prolonged period. Once the door is closed the dial will come back up to temperature after a short delay.

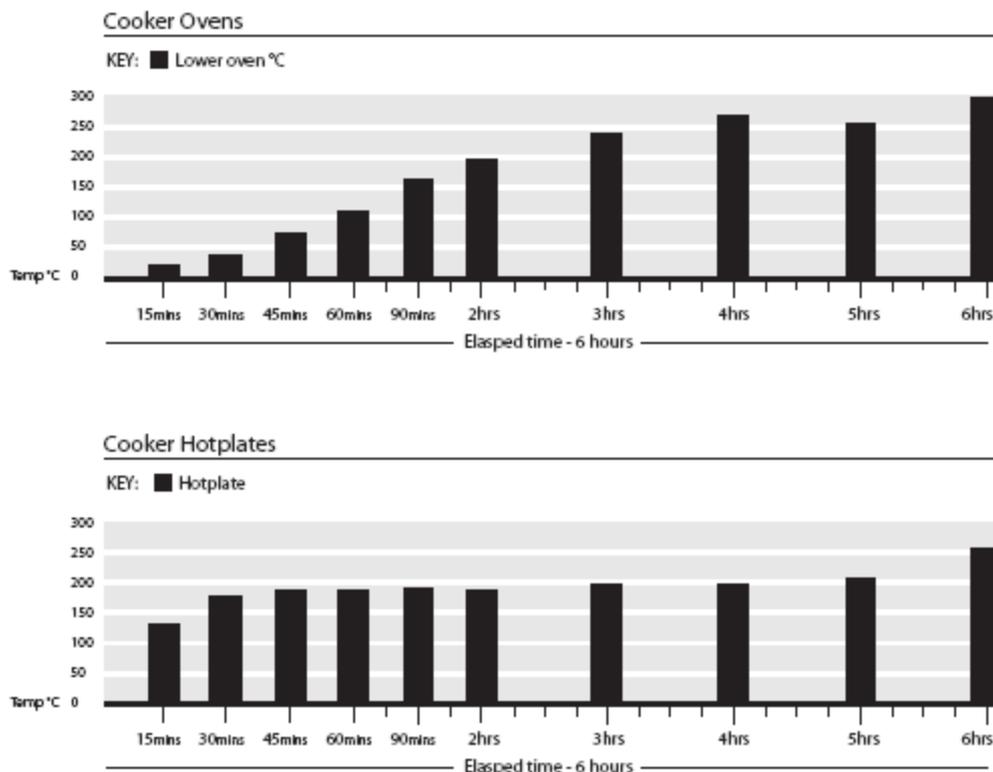


Figure 15 Estimated Heat-up Times

EXTENDED WOODBURNING

This appliance has been certified as a slow combustion stove. Loading a large amount of wood into the cooking stove all at once will reduce the temperature inside. If the temperature is too low, the gases given off from the wood will be

too low to combust, resulting in a lot of smoke which will cover the inside of the cooking stove, including the glass, with soot.

In order to avoid adverse combustion conditions it is a good idea to increase the temperature of the cooking stove before loading more wood by further opening the air control. Load the wood (3kg+ for long extended burning) and leave the air control open until the moisture is driven out of the wood and the cooking stove is up to an efficient operating temperature (approximately 20 minutes). The air control can then be closed to hold the temperature of the cooking stove.

CLEANING AND MAINTAINANCE

The successful operation of your range cooker is entirely dependent on the adequate performance (pull) of the chimney or flue to which it is connected. The following maintenance guidelines will be pointless unless the flue is also maintained and cleaned regularly. How often it needs cleaning will depend on the quality and moisture content of the wood you burn but an annual clean is recommended. A partially blocked or dirty flue can have disastrous implications for an otherwise perfectly installed cooker.

A healthy flue draught should read between 12 – 25 pascals. A flue draught reading below this value will result in poor smoky performance

Always carry out cleaning procedures when the cooker is unlit and has been allowed to cool sufficiently to avoid burns. With time and experience you will be able to gauge the intervals between cleaning more accurately. It will vary depending on the quality of your firewood and performance of your flue. Take time to get to know your cooker and inspect it at regular intervals for the first 6 months.

To clean the glass of any built up residue, special cleaning solutions can be used, or a ball of newspaper dampened and passed through the ash can be used. Do not use abrasive or chemically aggressive cleaning products on the glass as this can weaken or stain it.

If any of the chromed components become blue due to excess heat they can be restored using a chrome cleaner.

When de-ashing the cooking stove only remove small amounts of ash leaving ideally 30mm depth of ash in the bottom for best performance.



Figure 16 Under the Hotplate

To clean the flue way of the cook stove the hotplate must be removed. To avoid rust forming on the hotplate pans should not be stored on top of the cooker when not in use.

Cleaning the Flue

It is recommended that the flue is cleaned at least every 12 months to maintain a suitable flue draught and prevent poor performance of the cooking stove. It is essential to maintain the integrity and cleanliness of the flue to ensure that your cooker continues to perform at its best.

CONDITIONS OF GUARANTEE

Your ESSE is guaranteed against defects arising from faulty manufacture for 2 years when supplied by an ESSE Specialist.

Upon registration of the warranty, ESSE will extend the guarantee period to 5 years from purchase. Your details must be registered with us by either returning the completed warranty card or by completing registration on-line at www.esse.com. The warranty must be registered within 1 month of installation to qualify for the 5 year warranty.

The appliance must be only used for normal domestic purposes and in accordance with our instructions, be correctly installed and serviced.

EXCLUSIONS

This guarantee does not cover:

- Installation
- Wear & tear
- Parts deemed to be replaceable in the normal usage of the cooker. These parts are listed herewith: all firebricks, woodburning box, oven accessories, hotplate and door seals, door glass.

This guarantee is personal to the original purchaser and not transferable.

Any stove or defective part replaced shall become the Company's property.

CUSTOMER CARE

In the event you should require spare parts, please order through your ESSE dealer or by contacting Esse via telephone (01282 813235) or our website, www.esse.com.

Should you have cause for dissatisfaction with your cooker, you should contact your ESSE dealer, who will, in most instances, be able to offer you immediate assistance. You will be required to give the following details.

- Your name, address and postcode.
- Your telephone/contact details.
- Clear and concise details of the fault.
- Model and serial number of the cooker (found on panel at rear).
- Purchase date (please note that a valid purchase receipt or guarantee documentation is required for in-guarantee service calls).

We will then check that we have an accurately completed warranty card, if not then any work carried out may be charged.

We will assess the nature of the complaint and either send replacement parts for your dealer to fit, send an engineer to inspect & report, or send an engineer to repair. If the fault is not actually due to faulty workmanship but some other cause such as misuse or failure to install correctly, a charge will be made to cover the cost of the visit and any new parts required, even during the warranty period. Home visits are made between 08.30-1700 hrs Monday to Friday, and are arranged for either a morning or afternoon appointment.

Servicing

It is recommended that the cook stove is serviced annually by a qualified person. These services can be recorded below.

Service Date:

Carried Out By:

Comments:

Service Date:

Carried Out By:

Comments:

Service Date:

Carried Out By:

Comments:

Service Date:

Carried Out By:

Comments:

Service Date:

Carried Out By:

Comments:

Service Date:

Carried Out By:

Comments:

ESSE

Australia

Distributed in partnership with Pivot Stoves

234-238 Moorabool Street

Geelong, VIC 3220

Phone (03) 5221 4485

Website and On-line Store www.pivotstove.com.au