

Owner Manual

Includes Installation Instructions & User Guide

**For Blithfield, Sudbury, Brocksford and
Somersal Classic Stoves**

Updated: May 2026



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Please make a note of your model and serial number prior to installation:

Model:

Serial No:

The serial number is on a data plate fixed to the rear or base of the stove.

Welcome to your Clock stove...

All Clock stoves are hand-made in the UK from start to finish: a claim very few can make.

Please note that it is a legal requirement under England, Wales and European building regulations that the installation of the stove is carried out under local authority building control approval or installed by a competent person registered with a government approved scheme.

Clock Woodburners are CE approved and Defra-exempt, and can be used in smoke-controlled zones only when *stop* is in place and installed in accordance with the current building control regulations.

Do not make any unauthorised modifications to the appliance, air controls, baffle, firebricks, or flue connectors. Any modification may compromise safety, increase emissions, and invalidate certification.

WARNING: the stove emits significant radiant heat, and surfaces become extremely hot.

It is recommended to use a suitable fireguard where children, vulnerable persons, or pets are present.

Use heat-resistant gloves when operating controls or refuelling.

List of Materials used in construction: Cast iron, stainless steel, mild steel, vermiculite, ceramic glass, ceramic rope, high temp silicone and high temperature stove paint.

Pre-Installation

This appliance must be fitted in accordance with the current Building Regulations and by a competent registered person.

Health and Safety Precautions

Special care must be taken when installing the stove so that the requirements of the Health and Safety at Work Act are met. **This appliance is heavy and must be handled with care.** Adequate facilities must be available for loading, unloading and site handling. The door and internal parts can all be removed to reduce the weight during installation.

Due to the proliferation of metal parts, care should be taken to avoid the possibility of personal injury when installing or servicing the stove.

The stove is supplied fully assembled for a top flue arrangement. Clock stoves must be connected to a suitable chimney. Clock strongly recommends using a complete and compliant chimney lining system.

The paint is soft and vulnerable to marking.

Our appliances contain no asbestos. If there is a possibility of disturbing any asbestos in the course of installation, then please seek specialist guidance and use appropriate protective equipment.

Ventilation

The appliance requires an adequate supply of combustion air. Approved Document J of the Building Regulations states that purpose-provided ventilation is not required in England and Wales unless the appliance nominal rated output is greater than 5kW. If over 5kW, then 5.5 cm² of ventilation (550mm²) is required for every kW output above 5. For example, 6.5kW requires 8.25 cm² and 8kW needs 16.5cm². In any case, if difficulty in starting the fire or any excessive fuming is experienced, then ventilation must be put in place as required to eliminate any flue problems. If a flue draught stabiliser is fitted, then extra ventilation is required. A specifically-designed direct outside air connection may be used with these stoves to provide appropriate levels of ventilation (significantly in excess of the above requirements) directly to the stove and chimney.

NOTE: An adjustable vent is still required even if using an outside air connection.

Always ensure air vents are positioned where they cannot be blocked. For detailed guidance, especially in new-build properties, please refer to the current Building Regulations in your area.

WARNING: There must not be a mechanical extractor fan fitted in the same room as the stove, as this can create negative pressure which can cause dangerous flue gas spillage into the room. If unavoidable, the appliance must be checked with Approved Document J (Section 1.21) and necessary action taken.

Action may also have to be taken if other heating appliances are in the same dwelling to make sure that the correct ventilation applies.

Chimney & Flue Requirements

- The appliance must be connected to a **suitable chimney** with the correct diameter, height, and draught.
- The chimney must be swept before installation and checked for soundness and suitability. The chimney must also be free from cracks and blockages. If you find the chimney is in a poor condition then expert advice should be sought.
- If the stove was fitted in place of an open fire then the chimney should be swept one month after installation to clear any soot falls which may have occurred due to the difference in combustion between the stove and the open fire.
- The chimney and connecting flue pipe must not narrow to less than the size of the outlet socket of the stove at any point. This appliance must not be used in a shared flue system.
- The minimum flue draft is 12 pascals at nominal output.
- Minimum flue height required is 5 metres.
- The 125mm diameter flue models may be increased to 150mm diameter.
- Flexible flue liners must be certified for solid fuel use.
- If the appliance is fitted in an area that has another flue (mechanical or otherwise), then a flue interference test must be completed and recorded. The appliance must be checked with reference to Approved Document J (Section 1.21) and necessary action taken.

Installation

This appliance must be fitted by an approved installer, or inspected and signed off by a Building Control Officer, in accordance with EN 16510-1:2022, national building regulations, and local codes. In addition to these instructions, the requirements of BS 8303 and BS EN 15287 must be fulfilled. Local authority byelaws and building regulations regarding the installation of solid fuel burning appliances, flues and chimneys must also be taken into account. The installation is a notifiable building work as defined in the Building Regulations and that it is a legal requirement under England and Wales Building Regulations that the installation is either carried out under local authority Building Control approval or is installed by a competent person registered with a government-approved competent person scheme. Therefore, this appliance and installation must comply with the following regulations:

- ✓ British Standards BS 8303, BS EN 15287-1:2010
- ✓ Building Regulation Approved Document J for England and Wales
- ✓ Building Regulations Part F for Scotland
- ✓ Building Regulations/1997 Technical Guidance Approved Document J – Heat Producing Appliances for the Republic of Ireland
- ✓ Registered Body: HETAS (GB only), INFO (Ireland)

This appliance must be fitted on a top hat connector and the stove must be removable without affecting the lining of the chimney.

Hearths

Clock freestanding stoves do not require a constructional hearth beneath them as they do not cause the floor temperature to exceed 100° Celsius. **Hearths must be generally level.** In all instances a non-combustible superimposed hearth, extending fully underneath the stove and forming an apron of at least 300mm at the front of the stove and 150mm on either side, must be provided. A superimposed hearth must not be less than 12mm thick and must have a clearly defined edge (change of level) to discourage placing of any combustible materials on or partially over it.

The appliance shall be installed on a floor with adequate load-bearing capacity. If the existing construction does not meet this requirement, then suitable measures (e.g. load distributing plate) should be provided to achieve it.

Clearances & Positioning

The stove must be positioned to maintain the tested **minimum distances to combustible materials** (see page 23). Adequate space for safe operation and servicing must also be provided.

The Clean Air Act: Smoke Control Areas

Under the Clean Air Act 1993, local authorities may declare the whole or part of the district of the authority to be a **smoke control area**. It is an offence to emit smoke from a chimney of a building, from a furnace or from any fixed boiler if located in a designated smoke control area. It is also an offence to acquire an “unauthorised fuel” for use within a smoke control area unless it is used in an “exempt” appliance (“exempted” from the controls which generally apply in the smoke control area).

The Secretary of State for Environment, Food and Rural Affairs has powers under the Act to authorise smokeless fuels or exempt appliances for use in smoke control areas in England.

In Scotland and Wales this power rests with Ministers in the devolved administrations for those countries. Separate legislation, the Clean Air (Northern Ireland) Order 1981, applies in Northern Ireland. Therefore, it is a requirement that fuels burnt or obtained for use in smoke control areas have been “authorised” in regulations and that appliances used to burn solid fuel in those areas (other than “authorised” fuels) have been exempted by an order made and signed by the Secretary of State or Minister in the devolved administrations. The smoke control must be set for use in a smoke control area by the HETAS installer.

Clock Woodburners multi-fuel and wood-burning stoves have been recommended as suitable for use in smoke control areas when burning <20% moisture wood logs and smokeless fuel only.

Further information on the requirements of the Clean Air Act can be found at:

smokecontrol.defra.gov.uk/appliances.

Your local authority is responsible for implementing the Clean Air Act 1993, including designation and supervision of smoke control areas. You can contact them for details of Clean Air Act requirements.

Carbon Monoxide Alarms (CO)

Building Regulations require that whenever a new or replacement fixed solid fuel or wood/biomass appliance is installed in a dwelling, a carbon monoxide (CO) alarm must be fitted in the same room as the appliance. Further guidance is available in BS EN50292:2002 and from the manufacturer's instructions. Provision of an alarm must not be considered a substitute for either installing the appliance correctly or ensuring regular servicing and maintenance of the appliance and chimney system.

WARNING: If the CO Alarm sounds unexpectedly:

- 1.** Leave the premises immediately and contact your installer.
- 2.** Let the fire go out.

Commissioning

Check that all internal parts (ash pan, 15mm steel grate, log retainer, rear and side firebricks, and baffle) are fitted correctly, that there are no gaps between the firebricks and baffle, and that the log retainer is secure. Check that all the dials are operating fully and freely.

On completion of installation, and after allowing any fire, cement and mortar to dry out, the stove should be checked so that all seals and joints are sound. The flue should also be checked by lighting a small fire and checking that fumes are taken from the appliance up the chimney and emitted safely.

The Curing Process

We recommend that you have two or three small fires before you operate your stove to its maximum heat output. This is to allow the paint to cure in steadily and to give a long service life of the paint finish. During this curing process you may notice an unpleasant smell whilst the paint finally cures. It is non-toxic, but for your comfort we would suggest that during this period you **leave all doors and windows open**.

First, fully open the single air control. Then load the firebox with plenty of starting fuel, such as dry kindling sticks and firelighters. A crib lattice pattern or wigwam pattern tend to work well. If using smokeless briquetted fuel, place a layer of briquetted fuel into the firebox as well. Light the fire at the base, leaving the air control fully open. Leave the door ajar for 5-10 minutes to enhance initial starting and reduce smoke emission, **but DO NOT leave the stove unattended if the door is ajar**. Allowing the fuel to reach a steady glow, build the fire up gradually by adding a few small, well-split logs, or Maxibrite briquettes at a time. Once you have a good fire bed established across the grate, further fuel can be added step-by-step as required. Don't be tempted to overload the fire bed with fuel all at once, or to close down the air controls, until the fire has been well established for some time. Once the ignition period is well under way, gradually reduce the air control opening to establish the burning intensity that you require.

First Lighting & Operation

This appliance is not to be used as an incinerator. Only HETAS-approved wood logs and smokeless fuels are recommended by Clock for use in this stove. This appliance is designed to operate with the door closed, except for lighting and reloading. Failure to close the door during operation can result in fume spillage.

Warning Note: If correctly installed, operated and maintained, then this stove will not emit fumes into the dwelling. Occasional fumes from de-ashing and re-fuelling may occur.

However, persistent fume emission is potentially dangerous and must not be tolerated. If fume emission does persist, the following immediate actions should be taken:

- Open doors and windows to ventilate the room, then leave the premises. Let the fire burn out or eject and safely dispose of fuel from the appliance.
- Check for flue or chimney blockage, and clean if required. Do not attempt to relight the fire until the cause of the fume emission has been identified and corrected. If necessary, seek expert advice from your installer.

Before lighting, please note the following points:

Clock stoves must only use HETAS-approved wood fuels and smokeless coal. Do not use any liquid fuels. Do not overload your stove. Never empty the ash when the fire is alight. Do not burn solid fuel and wood at the same time. Wood burns from the top down, whereas solid fuel burns from the bottom up, therefore there is a conflict of air supply for complete combustion of your fuel.

Always use the gloves provided to operate the handle and controls. This appliance will get very hot, so fireguards must be used when appropriate.

Important Information for Wood Burning

With a full load of wood, and burning near nominal output, the stove will need to be re-fuelled on average every 60-90 minutes (one or two large logs will burn longer than several smaller logs). Wood can usually be stacked higher in the stove than solid mineral fuel, but care must be taken that logs do not touch the baffle or the glass panel. Do not stack logs above the level of the tertiary air inlet in the rear ceramic firebox liners at the back of the stove.

Always make sure that flames are visible above the wood after re-fuelling for cleanest burning. Burning without flames above the fuel will create unnecessary smoke. After re-fuelling, open the single air control fully to the left side for three minutes, or until the logs are fully blackened, to achieve full flames above the fuel.

Wood burns best on a bed of ash, and it is therefore only necessary to remove surplus ash from the stove occasionally. Burn only dry, well-seasoned wood, which should have been cut, split and stacked – under cover from rain – for at least 12-24 months with free air movement around the sides of the stack to enable it to dry out. Burning wet or unseasoned wood will create tar deposits in the stove and chimney and will not produce a satisfactory heat output. Wood that is not properly dry (considered to be less than 20% internal moisture content) uses up energy from the burn process to evaporate the water inside the wood, thus creating very poor conditions for combustion. The main cause of burning problems with wood stoves is due to excessively damp wood. Wood can appear perfectly dry on the outside but still contain 40-50% water content on the inside. A moisture meter can be purchased from stove and equipment suppliers if you wish to check that your wood source is correct. Split a log in order to check the inside as well as the outside.

Refuelling on to a low fire bed:

Maintain a visible flame, as slumbering the stove for long periods increases emissions and soot. If there is insufficient burning material in the fire bed to light a new fuel charge, excessive smoke emission can occur. Refuelling must be carried out onto a sufficient quantity of glowing embers and ash so that the new fuel charge will ignite in a reasonable period. If there are too few embers in the fire bed, add suitable kindling to prevent excessive smoke.

- Use **only dry, untreated wood logs** with a moisture content below 20%.
- Do **NOT** burn painted or treated wood, MDF/plywood, plastics, household waste, coal, or liquid fuels.
- Using incorrect fuels can cause **dangerous emissions, chimney fires, and void the warranty.**

Fuel overloading:

Do not overload the firebox. The maximum amount of fuel specified in this manual should not be exceeded, as overloading can cause excess smoke. Never load fuel above the bottom edge of the tertiary air profiling in the back ceramic firebox liner or allow them to touch the glass.

For all models the maximum log diameter is approximately 150mm.

The maximum log length is 300mm for the Compact stoves; 450mm for the Blithfield 8kW; 550mm for the Somersal Classic; and 400mm for all other models. One log is acceptable **ONLY** if loading onto a hot, well-established, fire bed.

Important Information for Wood Burning

Operation with door left open:

Operating the appliance with the door open can cause excess smoke and spillage into the room. Always operate the stove with the door closed, except when re-fuelling.

De-ashing:

Never let the ash pan overfill or build up to the underside of the grate. When burning wood, it is a good idea to allow a 10mm build-up of ash on top of the grate. When burning smokeless briquetted fuel, always clean out after use when cooled. Be aware that there may still be hot material within the ash.

Important Information on Burning Smokeless Briquetted Fuel

Smokeless and coal-type fuels require very different burning conditions to log burning, and the single air control has been designed to allow for this. Use the control on the right side of its travel for best efficiency on these types of fuel. Maxibrite and other smokeless briquetted fuels can burn with very little primary air and stay in for many hours.

Also, for helpful tips:

HETAS (Heating Equipment Testing and Approvals Scheme) is the only specialist organisation approving biomass and solid fuel heating appliances, fuels and services. This also includes the registration of competent retailers, installers, servicing engineers and chimney sweeps.



For information on how to get the best out of your appliance, visit the HETAS Advice Hub at www.hetas.co.uk.

Following a few simple steps can really help you save money, stay safer and help the environment. They include:

- Only burn seasoned or kiln-dried logs with moisture content less than 20%.
- Never burn house coal in a stove – instead opt for smokeless fuel.
- Don't burn offcuts such as treated/painted woods or pallet wood.
- Don't mix smokeless fuel and wood, you won't get the best from either fuel.
- Learn how to use the stove's air controls – this will make a big difference to your burning experience.
- Don't apply excessive draught strips to doors and windows, or block air vents – solid fuel appliances and chimneys need a supply of air to function properly.
- Always get your chimney swept regularly by a professional, registered chimney sweep.

Controls

Controls for the Blithfield Standard 5kW, Blithfield Compact 5kW, Blithfield 8kW, Blithfield Inset, and Somersal Classic Stoves



The right-hand dial is the primary and the left-hand dial is the secondary (air wash) control. Turn the dials clockwise to open, and anticlockwise to close.

Wood burning

- When starting the fire, open the secondary control to about 70%. Open fully if draw is low.
- The primary may be used if there isn't sufficient draw; if this is the case open this to maximum.
- After about 20-25 minutes the stove will be up to temperature.
- Then shut the right-hand dial (primary) and control with the secondary (air wash) dial.

Solid fuel

- When starting the fire, open the secondary control to about 70%. Open fully if draw is low.
- The primary may be used if there isn't sufficient draw; if this is the case open this to maximum.
- After about 20-25 minutes the stove will be up to temperature.
- Have the right-hand dial (primary) slightly open and control with the secondary (air wash) dial.

Controls

Controls for the Blithfield Double-Sided Stove



The right-hand dial is the primary and the left-hand dial is the secondary (air wash) control. Turn the dials clockwise to open, and anticlockwise to close.

Wood burning

- When starting the fire, open the secondary control to maximum. Open fully if draw is low.
- The primary may be used if there isn't sufficient draw; if this is the case open this to maximum.
- After about 20-25 minutes the stove will be up to temperature.
- Then shut the right-hand dial (primary) and control with the secondary (air wash) dial.

Solid fuel

- When starting the fire, open both the primary and secondary controls to maximum.
- After about 20-25 minutes the stove will be up to temperature.
- Have the right-hand dial (primary) slightly open and control with the secondary (air wash) dial.

Controls

Controls for the Sudbury and Sudbury Compact Stoves



The dial is the primary (air wash) control. Turn the dial clockwise to open, and anticlockwise to close.

Wood burning ONLY

- When starting the fire, open the control to maximum.
- After about 20-25 minutes the stove will be up to temperature.
- Then control with the dial to your preferred operation (air wash).
- ALWAYS leave ½ an inch or so of ash in the base of the stove to avoid damaging the base bricks. The ash protects the bricks and prolongs brick life.

Controls

Controls for the Brocksford CS5 Contemporary Stove



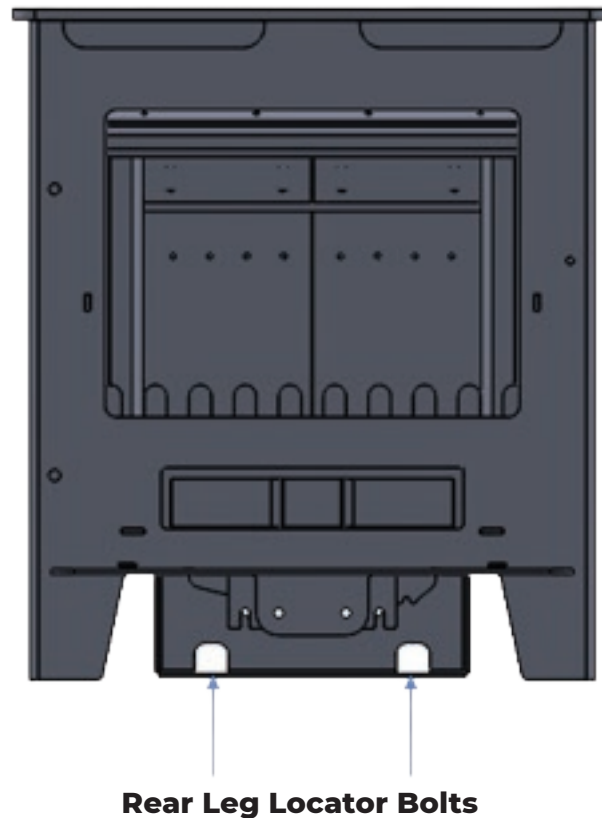
Wood burning ONLY

- To light the stove, slide the control towards the front of the stove. Position kindling sticks in a structure to allow air flow around them. Place two firelighters on top, light them and then shut the door. Once the sticks have sufficiently caught fire, add logs.
- Leave the control in this position for about 30 minutes. After this, slide the control away to manage the burn of the stove.
- On refuel, slide the control forwards for three minutes, then back to control the burn rate.

Inset Stove Installation Instructions

Remove the stove from the outer box.

- You will need to undo the collar from inside, to access these you will need to remove the fire bricks.
- Undo the two nuts located on the rear leg of the stove, then slide the stove out of the box.

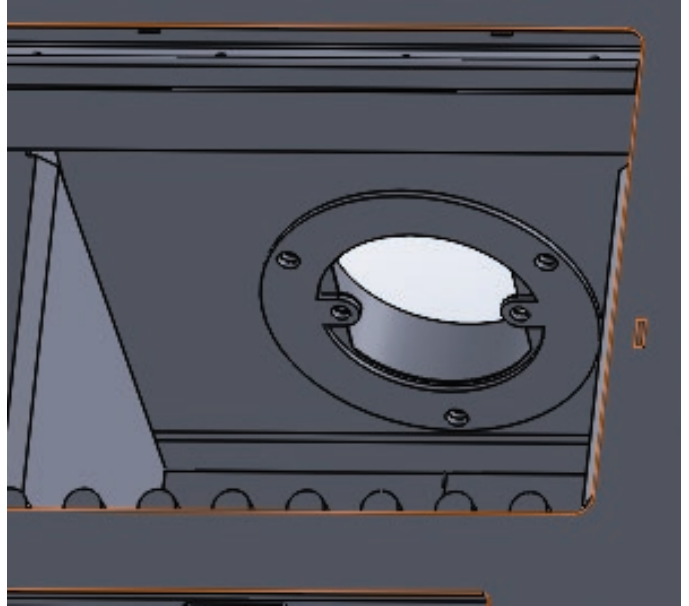


- Bring the liner down to just above where the box will be and attach an MA Adapter to the liner.
- The prepared opening should allow for at least 50mm of insulation around the sides, rear and top of the cassette. This is necessary to achieve the correct heat output. Ceramic fire blanket slabs are an easy solution.
- Do not use loose fill around the box.
- Ensure that the box is fixed in place using the holes in the bottom of the box to prevent it moving out of the opening.

Inset Stove Installation Instructions

Once the box is in place:

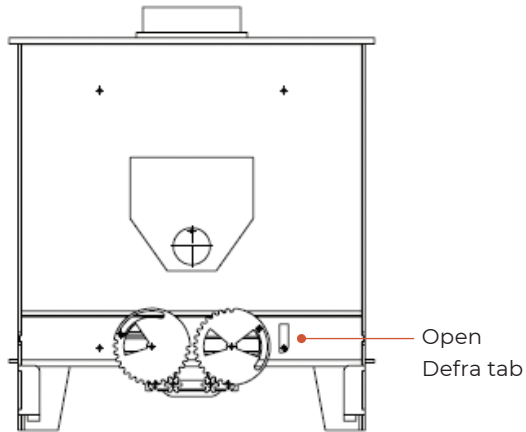
- Slide the stove into the box on to the locator studs.
- Bring the liner/MA through into the stove and attach the collar using a self-tapping screw with a shallow head. You may want to drill the collar to match the size of your screws.
- Once attached to the collar, push the liner and collar back up over the three studs, put the nuts and washers back on and tighten up.
- Once done, tighten the nuts on the locating studs on the rear leg. The stove is now locked into place.
- Leg adjusters for the front can be located behind the front legs.



DEFRA Settings

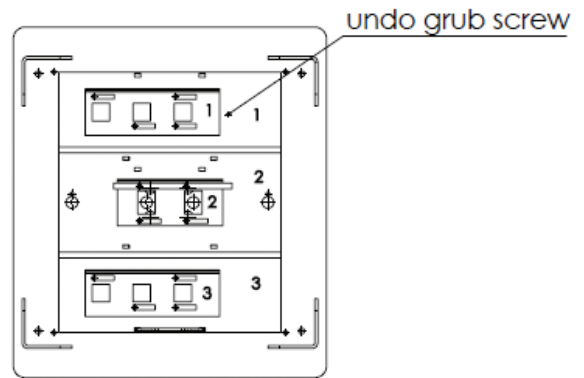
Blithfield 5kw, Compact and 8kw Stoves

- Open to engage Defra stop.



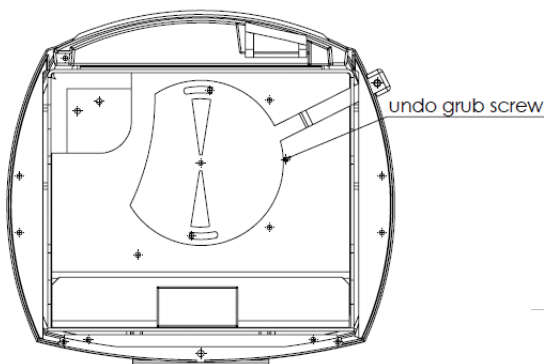
Blithfield Double-Sided 10kw Stove

- Undo grub screw to remove Defra stop if you are not in a smoke-controlled area.



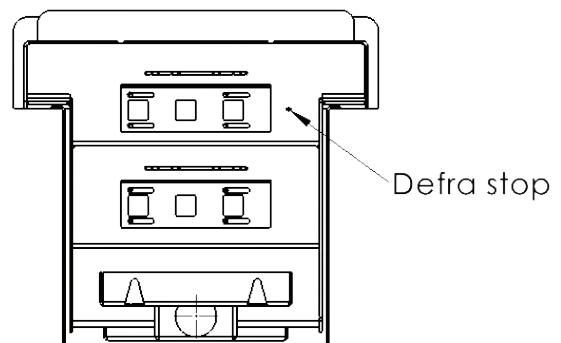
Brocksford Contemporary Stove

- Undo grub screw to remove Defra stop if you are not in a smoke-controlled area.



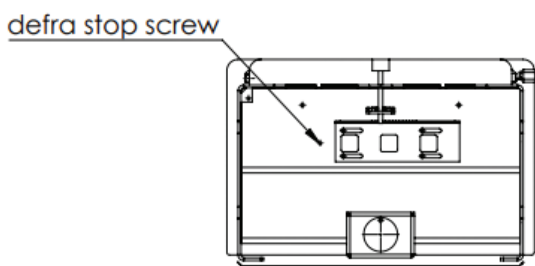
Blithfield Inset Stove

- Undo grub screw to remove Defra stop if you are not in a smoke-controlled area.



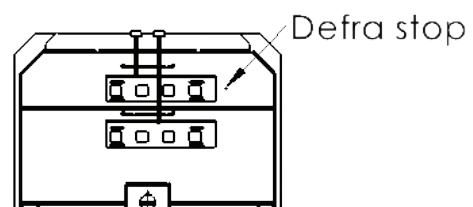
Sudbury and Sudbury Compact Stoves

- Undo grub screw to remove Defra stop if you are not in a smoke-controlled area.

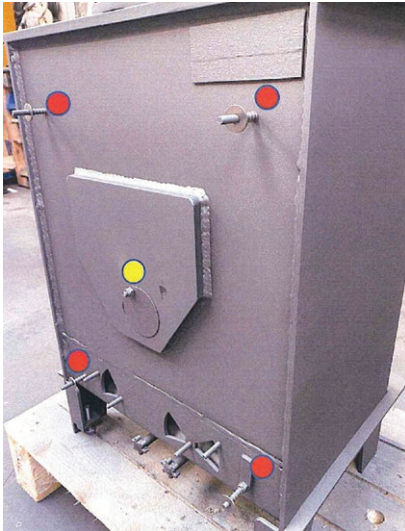


Somersal Classic and Somersal Boiler Stoves

- Undo grub screw to remove Defra stop if you are not in a smoke-controlled area.



Heat Shield Fitting Instructions



- Grind off excess thread on the centre bolt only
- Add springs and washers to the four corner threads



- Offer up first shield and hold with four spacer nuts



- Offer up second shield and fix with a washer and locking nut

Direct Air Manifold Fitting Instructions

After installation, check that the air controls still operate freely & that they are not obstructed by the manifold.

Blithfield Standard 5kW, Blithfield Compact 5kW and Blithfield 8kW Stoves

This manifold has three fixing holes on it. Offer it up to the back of the stove, making sure that the M6 pins (centre, bottom left and right) go through these holes and that the manifold sits flat against the back of the stove. It is then fixed in this position using the M6 washers and nuts.

Sudbury and Sudbury Compact Stoves

This manifold is fitted to the bottom of the stove. On the bottom of the stove there are three M6 pins for mounting the direct air manifold. Start by fixing the M6 locking nut on to each pin, followed by a M6 Hex-Nut on each one. It is important to fix the locking nut as this will aid the next step. Offer the manifold up to the bottom of the stove. Then use an M6 washer and bolt through each of the three fixing holes. Screw each bolt into the corresponding Hex-Nut.

Brocksford CS5 Contemporary Stove

This manifold has just two fixing holes. On the bottom of the stove there are two M6 pins for mounting the direct air manifold. Start by fixing the M6 locking nut on to each pin, followed by a M6 Hex-Nut on each one. It is important to fix the locking nut as this will aid the next step. Offer the manifold up to the bottom of the stove. Then use an M6 washer and bolt through each of the two fixing holes. Screw each bolt into the corresponding Hex-Nut.

Blithfield Double-Sided Stove

This manifold is fitted to the bottom of the stove. On the bottom of the stove there are four M8 pins for mounting the direct air manifold. Use an M8 washer and bolt through each of the four holes to fix the manifold into position.

Performance Characteristics using Wood Fuel

MODEL:	Blithfield 5kw Compact	Blithfield 5kw Standard	Blithfield 8kw Large	Blithfield 10kw Double	Brocksford 5kw CS5	Sudbury 5kw Standard	Sudbury 5kw Compact	Blithfield 5kw Inset	Somersal Classic
Approximate kW Output Range	3.5-7	3.5-7.5	6.5-10	8.0-12.0	4.0-6.0	3.5-7	3.5-6	4-7	7-14
Total Efficiency	82.3%	84.3%	81.7%	75.3%	81.5%	80.8%	83%	82.6%	80%
Output to room	5kW	5kW	8kW	10.5kW	5kW	5kW	5kW	5kW	9.5kW
Nominal output (Declared)	5kW	5kW	8kW	10.5kW	5kW	5kW	4.9kW	5kW	9.3kW
Nominal output (Tested)	5kW	5kW	8.3kW	10.5kW	5kW	5.1kW	4.9kW	5kW	9.3kW
Tested wood re-fuelling interval	0.85 hr	0.86 hr	0.76 hr	0.75 hr	4.96 hr	0.78 hr	0.81 hr	0.81 hr	0.76 hr
Flue gas mass flow	4 g/s	3.7 g/s	5.7 g/s	8 g/s	0.75 g/s	4.3 g/s	3.9 g/s	3.6 g/s	7.6 g/s
CO emission*	0.1%	0.11%	0.9%	0.08%	0.09%	0.07%	0.08%	0.1%	0.11%
CnHm emission*	45	72	57	65	65	61	59	104	72
NOx emission*	107	101	72	76	75	68	87	83	77
DIN+ particulates*	24	11	23	13	21	10	17	21	25
Mean Flue Temperature	243°C	227°C	280°C	365°C	246°C	252°C	239°C	257°C	278°C
Approximate Max Log Length: (mm)	250	300	350	300 x2	250	300	250	250	500

*Emissions are mean values and measured in Nmg/m³ @13% O₂

All stoves meet the test requirements of the harmonised EN European Standard (hEN): EN13240: 2001 +A2: 2004

Performance Characteristics using Smokeless Fuel

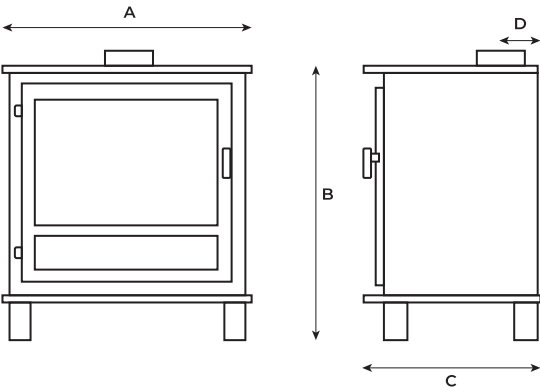
MODEL:	Blithfield 5kw Compact	Blithfield 5kw Standard	Blithfield 8kw Large	Blithfield 10kw Double	Brocksford 5kw CS5	Sudbury 5kw Standard	Sudbury 5kw Compact	Blithfield 5kw Inset	Somersal Classic
Total Efficiency	77.7%	80.3%	78.5%	78%	N/A	N/A	N/A	78.7%	80.2%
Output to room	5kW	5kW	8kW	10.6kW	N/A	N/A	N/A	5kW	8.6kW
Nominal output (Declared)	5kW	5kW	5kW	10.5kW	N/A	N/A	N/A	5kW	8.6kW
Nominal output (Tested)	5kW	5kW	5kW	10.6kW	N/A	N/A	N/A	5kW	8.6kW
Tested re-fuelling interval	1.03 hr	1.01 hr	1.01 hr	1 hr	N/A	N/A	N/A	1.03 hr	1.09 hr
Flue gas mass flow	3.5 g/s	4.1 g/s	5.7 g/s	7.7 g/s	N/A	N/A	N/A	3.8 g/s	6.7 g/s
CO emission*	0.08%	0.06%	0.05%	0.11%	N/A	N/A	N/A	0.09%	0.10%
CnHm emission*	50	10	44	79	N/A	N/A	N/A	36	15
NOx emission*	147	107	116	65	N/A	N/A	N/A	163	162
DIN+ particulates*	21	9	14	17	N/A	N/A	N/A	22	21
Mean Flue Temperature	279°C	288°C	313°C	327°C	N/A	N/A	N/A	275°C	287°C

*Emissions are mean values and measured in Nmg/m³ @13% O₂

All stoves meet the test requirements of the harmonised EN European Standard (hEN): EN13240: 2001 +A2: 2004

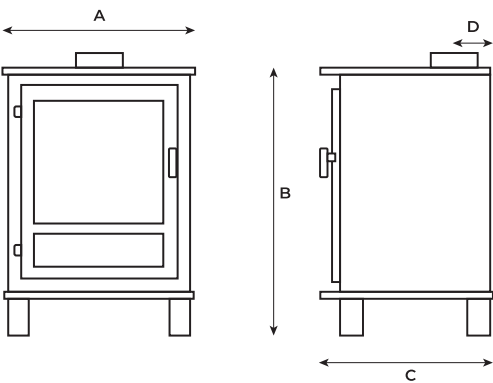
Stove Dimensions

Clock Blithfield 5 (Multi-fuel 5kW)



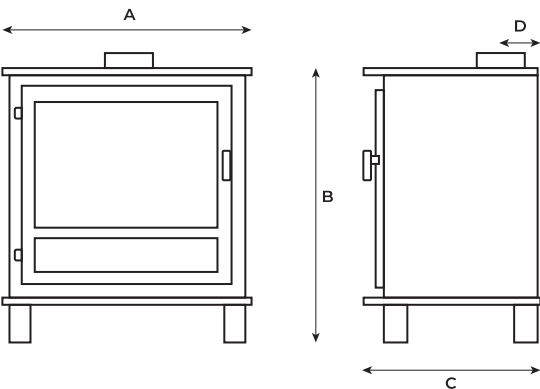
Dimensions	A	B	C	D	Weight
Blithfield 5	535mm	600mm	380mm	90mm	116kg
Blithfield 5 with Log Store	535mm	850mm	380mm	90mm	158kg

Clock Blithfield Compact 5 (Multi-fuel 5kW)



Dimensions	A	B	C	D	Weight
Blithfield Compact 5	435mm	600mm	340mm	90mm	85kg
Blithfield Compact 5 with Log Store	435mm	845mm	340mm	90mm	119kg

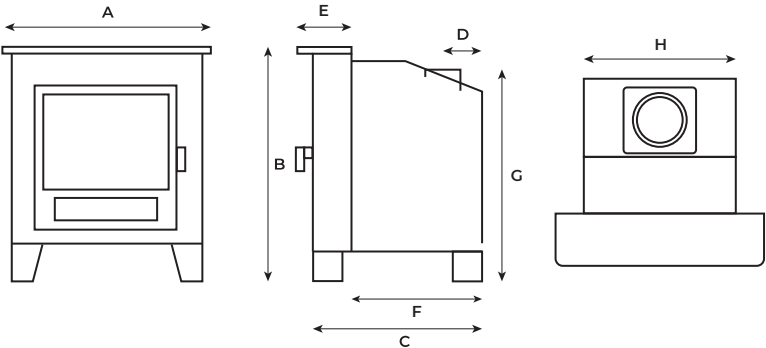
Clock Blithfield 8 (Multi-fuel 5kW)



Dimensions	A	B	C	D	Weight
Blithfield 8	595mm	640mm	380mm	100mm	136kg
Blithfield 8 with Log Store	595mm	910mm	380mm	100mm	180kg

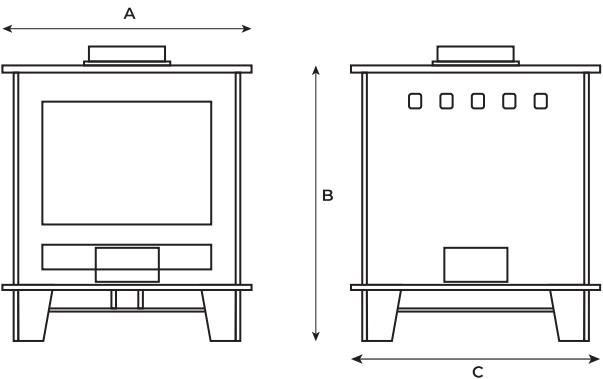
Stove Dimensions

Clock Blithfield Inset (Multi-fuel 5kW)



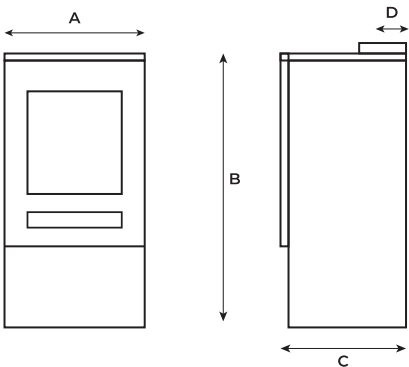
Dimensions	A	B	C	D	Weight
Blithfield Inset	535 mm	600 mm	484 mm	100 mm	136kg
	E	F	G	H	
	134 mm	350 mm	549.5 mm	390 mm	

Clock Blithfield DS (Double-Sided) (Multi-Fuel 10kw)



Dimensions	A	B	C	Weight
Blithfield DS	535mm	600mm	600mm	175kg

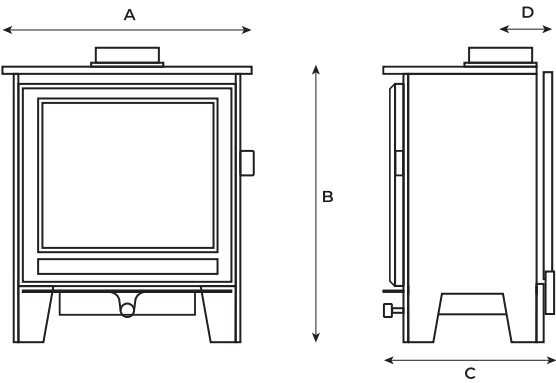
Clock Brocksford CS5 (Wood-Only 5kw)



Dimensions	A	B	C	D	Weight
Brocksford CS5	490mm	930mm	435mm	150mm	120kg

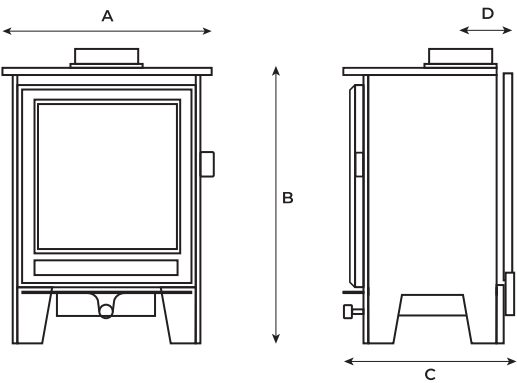
Stove Dimensions

Clock Sudbury (Wood-Only 5kw)



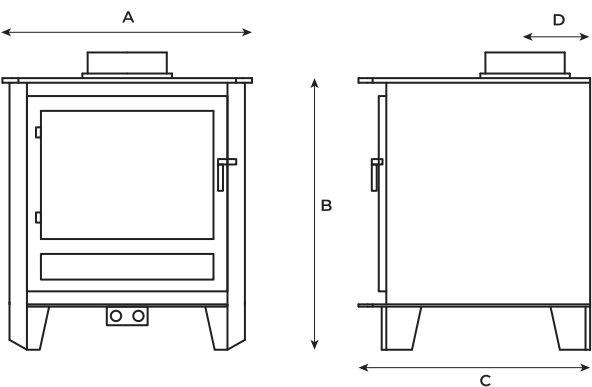
Dimensions	A	B	C	D	Weight
Sudbury	545mm	610mm	345mm	90mm	93kg
Sudbury with Log Store	545mm	850mm	345mm	90mm	130kg

Clock Sudbury Compact (Wood-Only 5kw)



Dimensions	A	B	C	D	Weight
Sudbury Compact	445mm	610mm	345mm	90mm	78kg
Sudbury Compact with Log Store	445mm	850mm	345mm	90mm	112kg

Clock Somersal Classic



Dimensions	A	B	C	D	Weight
Somersal Classic	705mm	675mm	465mm	110mm	160kg

Stove Dimensions: Comparison Table

MODEL:	Blithfield 5kw Compact	Blithfield 5kw Standard	Blithfield 8kw Large	Blithfield 10kw Double	Brocksford 5kw CS5	Sudbury 5kw Standard	Sudbury 5kw Compact	Blithfield 5kw Inset	Somersal Classic
Height (with log box)	600mm (845mm)	600mm (845mm)	640mm (910mm)	600mm	930mm	610mm (850mm)	610mm (850mm)	600mm	675mm
Width	435mm	535mm	595mm	535mm	490mm	545mm	445mm	535mm	705mm
Depth	340mm	380mm	380mm	600mm	435mm	345mm	345mm	484mm	465mm
Flue Collar	125mm	125mm	150mm	150mm	125mm	125mm	125mm	125mm	150mm
FC back to centre	90mm	90mm	100mm	300mm	150mm	90mm	90mm	100mm	110mm
Outside Air Height (with log box)	166mm (410mm)	166mm (410mm)	166mm (435mm)	N/A	320mm	110mm (355mm)	110mm (355mm)	N/A	166mm
Weight (with log box)	85 kg (119 kg)	116 kg (158 kg)	136 kg (180 kg)	175 kg	120 kg	93 kg (130 kg)	78 kg (112 kg)	115 kg	160 kg

Distances to Combustible Materials

MODEL:	Blithfield 5kw Compact	Blithfield 5kw Standard	Blithfield 8kw Large	Blithfield 10kw Double	Brocksford 5kw CS5	Sudbury 5kw Standard	Sudbury 5kw Compact	Blithfield 5kw Inset	Somersal Classic
Above	375mm	375mm	450mm	550mm	750mm	375mm	375mm	410mm	550mm
Sides	600mm	600mm	650mm	850mm	250mm	500mm	500mm	500mm	700mm
Back	500mm	600mm	600mm	N/A	150mm	500mm	500mm	N/A	950mm

Distances to Non-combustible Materials

MODEL:	Blithfield 5kw Compact	Blithfield 5kw Standard	Blithfield 8kw Large	Blithfield 10kw Double	Brocksford 5kw CS5	Sudbury 5kw Standard	Sudbury 5kw Compact	Blithfield 5kw Inset	Somersal Classic
Above	250mm	250mm	300mm	300mm	250mm	250mm	250mm	250mm	300mm
Sides	100mm	100mm	100mm	200mm	100mm	100mm	100mm	100mm	200mm
Back	50mm	50mm	50mm	N/A	50mm	50mm	50mm	N/A	100mm

Cleaning & Maintenance

Outer body

It is good practice to regularly clean the exterior of your stove using a dry lint-free cloth or a clean shoe brush, wiping away any soot or dust that has accumulated. You can also use a household vacuum cleaner with soft brush attachments to remove traces of dust or fully cooled ash. This will prevent any build-up that could damage the exterior of your stove.

Never use a damp cloth or water to clean the exterior of your stove – this can cause it to rust over time. Do not use any furniture polish or cleaning agent other than your stove supplier's recommended paint. It is not advised to spray oil-based lubricants, such as WD40, on to the body of the stove.

Inner firebox

Brush the inside of the firebox clean from time to time to check the integrity of the plates and liners, etc. It is not normally necessary to re-paint inside the firebox due to the high temperatures that mean that the paint does not have much effect before being burnt off. Steel and high-quality cast ceramic liners are very resilient firebox materials and will give reliable service without major cleaning or work on the firebox. The ceramic liner boards are very durable but may require replacing occasionally depending upon fuels and the type of usage experienced. As firebox linings are a wearing consumable part, they are not covered by warranty.

Baffle plate

Your stove's baffle plate can buckle or burn out due to its position at the top of your stove's firebox. If you see any signs of buckling or damage to your stove's baffle, it will likely need replacing soon.

It is essential to check the top of the baffle for build-up of soot and ash regularly when in use and after a long period of disuse, such as in summer. From time to time remove the baffle to ensure that the flue way entrance is clear.

Blithfield, Somersal and Sudbury: Remove the ash pan, then the log retainer and grate (for the Sudbury remove the base bricks). Remove one side brick by putting your finger in the bottom front corner and pulling towards the centre of the stove. Repeat for the second side brick while holding the baffle up. Then drop the baffle front down and remove.

Blithfield Double-Sided: Remove ash pans, log retainers and the grate (take care as this is heavy). Remove the bolts that hold the baffles together and then remove one side brick by putting a finger in the bottom front corner and pull towards the centre of the stove. Hold the baffle up while removing the second side brick. Drop the baffle front down to remove, then repeat for the opposite side.

Brocksford: Remove the ash pan and grate, then remove the back bricks by the bottom towards the centre of the stove. Remove the side brick while holding the baffle, remove the second side brick and drop the baffle down. Then remove the secondary baffle by undoing the bolts.

Repeat the instructions in reverse to restore the baffles.

Cleaning & Maintenance

Fire bricks

Very small hairline cracks in fire bricks are not a cause for concern, and you can continue using your stove if you spot these. When your bricks start to show signs of larger cracks and begin to crumble it is crucial that you replace them (see page 26 for instructions).

To keep your firebricks in the best condition:

- Don't throw or force fuel into the firebox; only load the appropriate amount
- Burn the suitable and good quality fuel for your stove and avoid overfiring (see page 27).

Rope seal

Your stove contains a rope seal around the inside of the door, which is an essential part of your appliance. The rope creates an airtight seal that prevents excess air intake and keeps the warmed air in the stove, increasing overall heat output and reducing the potential for overfiring. A faulty or degraded rope will compromise the seal, causing difficulty in controlling the fire and burning through fuel much quicker than expected. It is advisable to replace your stove rope annually, but it may need replacement at irregular intervals depending on usage.

You should periodically check the rope for fraying, or to see if it is compressed and no longer fills the groove in the stove door. A simple test to check your stove rope is known as the paper test:

1. Wait for your stove to fully cool
2. Open the door and hold a piece of paper at the entrance, closing the door and trapping the paper in it.
3. Attempt to pull the paper out of the closed door, noting any resistance you feel.
4. Repeat steps two and three across all sides of the stove door.

If you feel minimal or no resistance, this is a sign that your stove rope has deteriorated and needs replacing. There should be resistance around all sides of your stove door as you try to pull the paper out.

Many stove owners replace the rope themselves, but if you don't feel confident simply contact your installer or another HETAS-approved technician. All Clock stoves feature 12mm soft rope which can be purchased from the Spares and Accessories section of our website www.clockwoodburners.co.uk, where you can also find instructions on how to change the rope.

Glass

Despite the advanced air wash system provided, the glass will still need cleaning occasionally depending on the fuel quality and burning rates. Never clean the glass when the stove is hot. Always use a non-abrasive stove glass cleaner or ceramic hob cleaner, which is available from your stove retailer or supermarket. If burning wood, as an alternative use a damp cloth with some wood ash, but be careful to use very fine ash so as not to scratch the glass. **DO NOT** use coal ash to clean the glass.

Air supply

It is essential to check the air supply grille on the outside of the property if the direct outside air connection is installed. Regularly brush or vacuum out any debris, cobwebs or similar materials to ensure that the air supply is not restricted. Ensure the air intake chamber, visible underneath the ash pit section with the stove door open, is kept free of excessive ash or debris.

Instructions For Changing Fire Bricks

Blithfield Double-Sided

(4 x Side Bricks)

- Before proceeding, it is important to know which bricks go where. The chamfered edges go along the inside corners and the two flat sides of the bricks go against the brick next to it. The chamfer is there to accommodate the welds inside the stove.
- Remove the ash pan and log retainer. Lift the grate, rotate diagonally and remove.
- Separate the two baffles by removing the M6 nuts and bolts.
- Support one of the baffles with one hand then remove side bricks one at a time.
- Rotate the first baffle diagonally to remove it from the stove; then repeat for the baffle on the other side.
- Put one side brick in position, then rest the baffle on top of this brick and support weight while inserting the opposite side brick. Repeat this step for the remaining baffle and side bricks.
- Then refix the two baffle plates with the M6 nuts and bolts.
- Take extreme care when putting the grate back into the fire. Place on a diagonal and support until you can lay the grate flat. It is advised to wear some suitable gloves to avoid injury, as this part is very heavy.
- Put the log retainers and ash pan back into position.

Blithfield Stoves

(2 x Rear Bricks, 2 x Side Bricks, 2 x Insulating Baffle Bricks)

- Remove grate and log-retaining bar from inside the stove
- Remove side bricks one at a time while supporting the steel baffle
- Remove steel baffle
- Remove back bricks
- Install back bricks
- Reset the steel baffle on to back bricks
- Support steel baffle while inserting side bricks one at a time
- Replace grate and log-retaining bar

Sudbury Stoves

(2 x Rear Bricks, 2 x Side Bricks, 2 x Base Bricks, 2 x Insulating Baffle Bricks)

- Remove base bricks
- Remove side bricks one at a time while supporting the steel baffle
- Remove steel baffle
- Remove back bricks
- Install back bricks
- Reset the steel baffle on to back bricks
- Support steel baffle while inserting side bricks one at a time
- Replace base bricks

Brocksford

(2 x Rear Bricks, 2 x Side Bricks)

- Remove grate from inside the stove
- Remove back bricks
- Remove side bricks one at a time while supporting the steel baffle
- Remove steel baffle
- Reset the steel baffle on to back bricks
- Support steel baffle while inserting side bricks one at a time
- Install back bricks
- Replace grate

Baffles

To replace baffles, follow the instructions in the Cleaning & Maintenance section on **page 24**.

Other Replacement Parts

In addition to bricks and baffles, other replacement parts can be purchased from the Spares and Accessories section of our website **www.clockwoodburners.co.uk**. To receive the right parts, please ensure that you select the correct stove model when ordering spares.

To maintain safety and compliance, use only manufacturer-approved replacement spare parts. **Parts may vary or change due to development of products.**

How to Avoid Overfiring Your Woodburner

Over firing is simply your fire burning too hot for your stove. Every stove is designed to unique specifications and has a maximum temperature that it is capable of withstanding. A number of issues arise when your stove's fire gets out of control and produces excessive amounts of heat. Prolonged and repeated overfiring can lead to increased deterioration and even permanent damage to your stove. **It is unlikely that your warranty will cover damages resulting from overfiring.**

What causes a stove to overfire

Overfiring is caused when a stove has too much wood or an excessive amount of airflow.

Overloading your stove with wood provides an excess of fuel, creating a runaway burn that becomes uncontrollably hot. Too much airflow feeds your fire too much oxygen, causing it to burn excessively. Excessive airflow can result from leaving the stove door open, improper air vent usage, or deteriorated rope seals.

Signs of overfiring

- Blackened stove glass
- Unusually high temperatures in the room
- Red-hot sections of your stove or flue pipe
- Whooshing or blowing sounds
- Disfiguration or warping to your baffle
- Damage to your stove's exterior
(cast iron stoves tend to crack or expand whereas steel bodies tend to warp or bend)
- Cracks to firebricks or mortar

How to avoid overfiring

- ✓ Using a stove thermometer
- ✓ Have a stove that is a suitable size for your home where its heat output is sufficient to warm the room. Contact a local HETAS Approved Retailer to discuss your needs and requirements.
- ✓ Operating your appliance according to the manufacturer's instructions.
- ✓ Only refuel your stove when it is necessary: when your fire is reduced to glowing embers.
- ✓ Regularly maintaining your stove and getting your chimney swept by a HETAS Approved Chimney Sweep will keep your installation functioning efficiently and safely, preventing issues that cause overfiring.
- ✓ Regularly get your stove serviced by a HETAS Approved Servicing Technician. They will identify and rectify any faults that may be present in your installation and causing your appliance to overfire or underperform.
- ✓ Use an appropriate amount of "Ready to Burn" firewood to ensure you are getting an optimal, clean, and efficient burn.

For further advice on optimal woodburner use, visit www.hetas.co.uk

Installer Commissioning Check List

	YES	NO
Stove is sitting level		
Distances from combustibles checked		
Fitted to current Building Regulations		
Draw test completed and Stove is drawing well		
Operating demonstration by installer completed		

Installer Signature:

Customer Signature:

Notes on installation:

Annual Service Record

It is important to have your appliance inspected and serviced **at least once per year** by a qualified technician. Records of annual services ensure that warranties are maintained if correctly registered.

The chimney / flue must be swept:

- **At least once per year** for occasional use
- **Twice per year** for regular use

Services should include:

- Checking firebricks, baffle, and internal components
- Inspecting flue connections and seals
- Verifying air controls and safety features
- Checking for corrosion or deformation

Annual Service Record Year 2	
Chimney swept	
Ropes checked	
Bricks in good condition	
Any water ingress?	
Air controls checked	
Baffle check	
Grate	
Fuel used	

Annual Service Record Year 1	
Chimney swept	
Ropes checked	
Bricks in good condition	
Any water ingress?	
Air controls checked	
Baffle check	
Grate	
Fuel used	

Annual Service Record Year 3	
Chimney swept	
Ropes checked	
Bricks in good condition	
Any water ingress?	
Air controls checked	
Baffle check	
Grate	
Fuel used	

Annual Service Record

Annual Service Record Year 4	
Chimney swept	
Ropes checked	
Bricks in good condition	
Any water ingress?	
Air controls checked	
Baffle check	
Grate	
Fuel used	

Annual Service Record Year 5	
Chimney swept	
Ropes checked	
Bricks in good condition	
Any water ingress?	
Air controls checked	
Baffle check	
Grate	
Fuel used	

Annual Service Record Year 6	
Chimney swept	
Ropes checked	
Bricks in good condition	
Any water ingress?	
Air controls checked	
Baffle check	
Grate	
Fuel used	

Annual Service Record Year 7	
Chimney swept	
Ropes checked	
Bricks in good condition	
Any water ingress?	
Air controls checked	
Baffle check	
Grate	
Fuel used	

Warranty & Spares Information

- ✓ All Clock stoves are covered by a standard 12-month warranty, which is valid from the date of purchase.
- ✓ Clock Woodburners will extend the standard warranty on the stove body to **7 years** if a warranty registration form is completed on our website **within 60 days** of purchase from an authorised dealer.
- ✓ The warranty is **not** transferable and is solely for the benefit of the original purchaser of the stove. Please retain your dated proof of purchase at all times.
- ✓ The 6-year extension **only** applies to stoves purchased through our **approved dealer showroom network** and installed by a registered HETAS or OFTEC installer. If you are planning a self-install, then you must provide a copy of your Building Control Certificate sign-off sheet when registering your stove to qualify.
- ✓ Any new Clock stove purchased via a third party, such as an unauthorised dealer or online, will carry a statutory 12-month warranty and call-out charges will apply.

To maintain your warranty, you must undertake and keep regular records of a yearly service carried out by a recognised and qualified professional. The warranty will not cover faults occurring due to the lack of maintenance or appliance abuse. Clock Woodburners reserve the right to fix any problems on site.

Register your stove within 60 days on our website:
www.clockwoodburners.co.uk/about/warranty

We suggest that you record the following details here and keep the receipt as proof of purchase. This information may be asked for when you contact the helpdesk. You must fill this in online as well, as this manual is for reference only. The serial number is on the data plate fixed to the rear or base of the stove. The retailer details, plus your installer's information, is required to register for the extended warranty.

Model:		Serial Number:	
Retailer name:			
Retailer address:			
Installer name:			
Installation date:			

Replacement Spare Parts

Consumable parts of the appliance that are NOT covered under warranty are:
Grate, Glass, Log retainer, Paint, Rope and Fire bricks.

Replacement items of these parts can be purchased from the Spares and Accessories section of our website **www.clockwoodburners.co.uk**

To receive the right parts, please ensure that you select the correct stove model when ordering spares. To maintain safety and compliance, use only manufacturer-approved replacement spare parts.

Parts may vary or change due to development of products.

**Unit 2,
Navigation Business Park,
Road One, Winsford,
Cheshire CW7 3RL**

Part of the TEP Group

www.clockwoodburners.co.uk

