

INSTRUCTION MANUAL

INSERT TYPE WOOD BURNING STOVES Models 600,700, 900 FLATLINE

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THE STOVE CAN REACH HIGH TEMPERATURES.

INFLAMABLE MATERIALS MUST BE PLACED AT LEAST 1 METRE AWAY FROM THE STOVE AT ALL TIMES

KEEP YOUNG CHILDREN AWAY FROM THE STOVE

READ THESE INSTRUCTIONS CAREFULLY BEFORE USE

HEALTH AND SAFETY PRECAUTIONS

INFORMATION FOR THE USER, INSTALLER AND SERVICE ENGINEER



Special care must be taken when installing a stove such that the requirements of the Health & Safety at Work Act are met.

Handling

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

Fire Cement

Some types of fire cement are caustic and should not be allowed to come into contact with the skin. In case of contact wash immediately with plenty of water.

PREPARATORY WORK AND SAFETY CHECKS

IMPORTANT WARNING

This stove must not be installed into a chimney that serves any other heating appliance. There must not be an extractor fan fitted in the same room as the stove because this can cause the stove to emit fumes into the room.

Asbestos

This stove contains no asbestos. If there is a possibility of disturbing any asbestos in the coarse of installation then please seek specialist guidance and use appropriate protective equipment.

Metal Parts

When installing or servicing this stove care should be taken to avoid the possibility of personal injury.

CO Alarms:-

Building regulations require that when ever a new or replacement fixed solid fuel or wood/biomass appliance is installed in a dwelling a carbon monoxide alarm must be fitted in the same room as the appliance. Further guidance on the installation of the carbon monoxide alarm is available in BS EN 50292:2002 and from the alarm 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.

Stove paint Aerosols

Paint aerosols are flammable and therefore dangerous to use around a lit stove. Be sure to allow aerosols spray paints to dry and ventilate the room well before lighting the stove. The use of any aerosol around lit stove is dangerous and care must be take in handling aerosols.

IMPORTANT:

These instructions cover the basic principles to ensure the satisfactory installation of Mendip Stoves product :- Christon 600,700,900fl models, although detail may need slight modification to suit particular local site conditions.

In all cases the installation must comply with current Building Regulations, Local Authority Byelaws and other specifications or regulations as they affect the installation of the stove.

It should be noted that the Building Regulations requirements may be met by adopting the relevant recommendations given in British Standards BS 8303, BS EN 15287 as an alternative means to achieve an equivalent level of performance to that obtained following the guidance given in Approved Document J.



DECLARATION OF CE-CONFORMITY

We, the manufacturers of the appliance, hereby declare under our sole responsibility that the products described below

conform to essential safety requirements. This declaration will be rendered invalid if any changes are made to the

appliance without our written consent

Manufacturer	Vale Montanha, Lda, Z. Ind. Coca Maravilhas, 26 8500-483 Portimão, Portugal Tel: +351 282470350 Fax: +351 282470359
Classification	Solid-fuel appliance: Insert
Applied Standards and Directives	EN13229 : 2001+ A1:2003 + A2:2003:2005
Test Institute	Laboratory K.V.B.G. – A.R.G.B Rodestraat 125 1630 Linkebeek, Belgium



Portimão, the 28th of August 2007

David Broad Managing Director



1. INTRODUCTION

Thank you for buying a **Mendip Inset** stove. To get the best ecological performance and highest output from this

appliance please follow these installation and operating instructions. The guarantee will cease to apply if the stove is

damaged as a result of a failure to follow the installation and operating instructions. The appliance must not be

modified without the manufacturer's written permission. Only original spare parts made by the manufacturer should be

used to repair this appliance. Prevailing laws and local architectural and fire prevention regulations must be followed.

2. TECHNICAL CHARACTERISTICS:

Model		D600	D700	D800	D800F	D900F
Nominal capacity	kW	7	9	11	11	11
Capacity Limits		4 - 9	5 - 11	6 - 13	6 - 13	6 - 13
Output under nominal capacity		71	71	71	71	71
Flue gas temperature under nominal capacity	°C	365	365	365	365	365
Flue draught under nominal capacity	Pa	12	12	12	12	12
Average CO2 at 13% O2 at nominal power	Vol. %	9.74	9.74	9.74	9.74	9.74
Average CO at 13% O2 at nominal power	Vol. %	0.256	0.256	0.256	0.256	0.256
Air consumption under nominal capacity	m³/h	34	39	47	43	43
Safety distance from front	cm	100	100	100	100	100
Stove dimensions:						
Height	mm	530	600	670	550	550
Width	mm	600	700	800	800	900
Depth		410	430	450	450	450
Dimensions of the opening in the wall:						
Height	mm	540	610	680	560	560
Width	mm	620	720	820	820	920
Depth	mm	430	450	470	470	470
Weight of insert stove	kg	81	101	116	108	120
Fuel		wood	wood	wood	wood	wood
Consumption under nominal capacity	kg	2.5	2.9	3.7	3.7	3.7
Consumption under maximum capacity		3.3	3.5	4.0	4.0	4.0
Maximum fuel moisture		20	20	20	20	20
Maximum length of log	cm	40	50	60	60	60

3. WOOD

The stove burns only wood. The best results are obtained using dry wood. Logs cut to size, stored and ventilated under- cover for at least one year and preferably two, are best as they: A stove full of wood will generate more heat over a longer period of time. Logs should not be too large and, generally speaking, the harder the wood the better. Never use waste, chippings, wood shavings and sawdust, tree bark or waste from chipboard, laminated wood or surface-treated wood. Do not cut the firewood too small. Very thin pieces of wood burn very quickly and are only suitable for lighting the stove. Allow large pieces with the normal dimension of about 25cm to burn naturally. Large logs must be chopped small.

Note: The stove is not a waste incinerator. The environment legislation expressly forbids the burning of waste in household fires. Not only is it environmentally unfriendly to use a solid fuel stove incorrectly to burn household waste, chemically treated wood waste or waste paper, or to use it as a private waste incineration plant, but it is also in breach of the emission laws and liable to punishment. The appliance is not suitable for burning liquid fuels. Besides creating high and unchecked air pollution, harmful combustion products and combustion residues it also has a negative effect on the working and operating life of the stove and flue. This results in all kinds of defects and rapid wear, which may require expensive repair and even replacement of the stove. The burning of unsuitable fuels can lead to a house fire of a type not covered by your fire insurance.

- Produce considerably more heat than wet or green wood.
- Produce much less smoke and deposit less tar on the stove, chimney and glass panel than wet or green wood.
- Only dry wood prevents emissions of hazardous substances when burning.

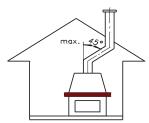


4. INSTALLATION

Your flue and chimney

For your stove to work properly the chimney must also work properly. Check out the following points whilst bearing in mind that this is for informational purposes only and is not binding for us in any manner whatsoever. It is an unfortunate fact that there are numerous factors that can play decisive roles in the correct functioning of a chimney.

- Thoroughly clean your chimney prior to installation. If it has not been used for a long time, ask a specialist to inspect it.
- The chimney should be of sufficient height to guarantee a minimum draw of 8-20 Pascal. It is only possible to measure the chimney draught while the appliance is working. If the draw is insufficient raise the chimney and/or insulate it. If the flue draught is too great you will need to install a draught regulator.
- **The flue should, ideally, be vertical and not change direction at any more than 45° from vertical.**
- The flue should not join into another. It should be separate throughout its entire length and have its own, separate chimney pot.

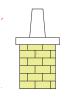




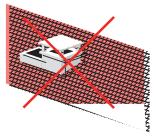


■ The flue should be free of obstructions, of the same size throughout and preferably round. The size should be that specified for the stove to function correctly (see catalogue).



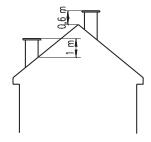


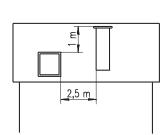


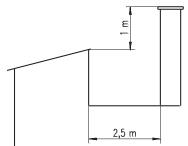




■ If the top of the chimney is within 60cm of the ridge of the roof, or closer, it should project at least 60cm above the ridge. Elsewhere on the roof, not close to the ridge, the chimney should be at least 1 metre above the roof, measured from the upper side.







- The chimney should not be close to tall trees, walls or buildings as these could cause downdraughts.
- The chimney must be well insulated. The internal face of the flue must be free from cracks and fissures and lined with fire cement or other, suitable, refractory material. If not, then a suitable liner must be installed throughout its entire length.

Lining Your Chimney

European standards must be followed. Due to the technical nature of these standards they are mostly intended for professional installers. The following lists the relevant European standards.

EN 12446: 2003 - Chimneys - Components - Concrete outer wall elements

EN 1443: 2003 - Chimneys - General Requirements

EN1856-1: 2003 - Chimneys - Requirements for metal chimneys - Part 1: Products for system chimneys

EN1856-2: 2004 - Chimneys - Requirements for metal chimneys - Part 2: Metal liners and connecting flue pipes

EN13384-1: 2003 - Chimneys - Thermal and fluid dynamic calculation methods - Part 1:

En 2006 - Chimneys serving one appliance

EN1857: 2003 - Chimneys - Components - Flue liners

EN1457: 1999 and Clay/ceramic flue liners - Requirements and test methods

En 2002

EN 1806: 2006- Chimneys - Clay/ceramic flue blocks for single wall chimneys - Requirements and test methods

EN13069: 2005 - Chimneys - Clay/ceramic outer walls for system chimneys - Requirements and test methods

EN 13063: 2006 - System chimneys with clay/ceramic flue liners - Part 1: Requirements and test methods for soot resistance

The liner must be safely and securely connected to the outlet pipe of the stove. And your chimney or liner must be swept at least once each heating season and in accordance with local regulations.

Your fireplace

If cement mortar has been used on the inside or outside of the fireplace during construction or installation then a period of at least 7 days should be allowed before operation to prevent the cement cracking when drying out. The stove will smoke slightly when first lit. These are fumes from the high temperature paint curing and baking hard. The house should be well ventilated during the curing period, which will last approximately twenty minutes. During this period the paintwork of the stove should not be touched. Only an appliance fitted by an accredited installer guarantees compliance with architectural and fire prevention regulations. These rules must be followed to ensure the correct and safe operation of the stove. The flue is extremely important when fitting the stove. Be sure to consult authorised specialists about the connection to ensure compliance with local building regulations. Bear in mind the following:

- The appliance door must be closed when in use and also when not in use.
- There must be an adequate supply of fresh air when the appliance is in use.

Fire safety measures relating to combustible or temperature sensitive floor surfaces:

- A fire resistant, non combustible covering must be fitted under and around the stove. This must be at least 15cm thick.
- No combustible materials should be stored underneath the appliance (e.g. firewood).
- The safety distances from combustible or temperature sensitive objects, given in the table of technical characteristics, must be adhered to.

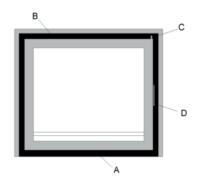
5. COMBUSTION AIR

Contrary to a normal fireplace the stove uses very little combustion air. In most houses entry of fresh air through gaps in doors and windows is sufficient to provide this air. However, in houses that are well insulated this may not be sufficient. If so, a ventilation grille should be set into an outside wall near the stove to provide additional combustion air. The combustion air consumption of your particular stove can be found in the technical characteristics. Take account of other heating appliances or air outlet installations in the same area or on the same combustion air connection. If needs be the total combustion air consumption for the room(s) should be calculated. If 15 minutes after lighting the fire there is still a backdraught of flue gases due to weather conditions (e.g. fog, storm) stop lighting the fire until the weather improves. Tip: be sure to take account of extractors which might be connected in the vicinity of the stove. These create negative pressure, which can lead to disruptions in the supply of combustion air. Any escape of combustion gas is potentially lethal and can damage the health of the people living in your home.

6. RUNNING IN YOUR STOVE

Run your stove in slowly. Your first fires should be made with a small amount of wood and a gentle flame, allowing the stresses in the metal to dissipate and the entire installation to dry out. Even after running in your stove, never make intense, prolonged fires. Little extra heat output is achieved and you risk damaging your stove.

7. SCHEMATIC DRAWING



- A. Cold air inlet.
- **B.** Hot air outlet.
- **C.** Combustion air control.
- D. Door catch.



8. OPENING AND CLOSING THE DOOR

Place the handle supplied into the hole provided in the door catch (D). Pull handle towards you to open the door and push away from you to close the door. The stove surfaces can become very hot. Use temperature resistant gloves at all times.

9. COMBUSTION PRINCIPLE

The stove is designed so that full of wood, with a slow flame, it will burn at maximum efficiency for several hours. The stove can be made to burn overnight, very slowly, with little or no flame. This is not advisable because this incomplete combustion creates extra smoke, which, upon condensation, deposits tar on the stove, chimney and glass panel. An accumulation of such tar deposits is not only unsightly but also requires regular chimney cleaning to prevent chimney fires. If you are burning wet or green wood then the Combustion Air Control should be left open enough to ensure the creation of a slow, gentle flame.

Radiant heat

This is given from the hot embers and stainless steel and vermiculite back panels. The radiant heat is transmitted through the glass panel into the room and heats the immediate area in front of the stove.

Convection heat

Cool air enters via the cold air inlet, (A). It then passes along the base of the stove up the back and over the top before being expelled from the primary hot air outlet, (B). This convection air reaches the farthest corners of the room.

10. CONTROLS

Combustion air control (C)

This controls the amount of combustion air entering the stove thereby controlling the heat output. It is situated on the top right hand side of the door.

- To open Slide to the right for greater heat output but with greater wood consumption.
- To close Slide to the left for slightly less heat output but much less wood consumption.

Being situated at the top of the door the incoming pre-heated combustion air creates a high velocity air wash effect over the entire inner surface of the glass panel. This helps keep the glass cleaner for longer.

11. LIGHTING

The highest output is achieved by means of "top-down" burning. To achieve this, do not fill the stove in the traditional way.

- Traditional way: what is meant here is laying down paper first, then kindling and finally large logs. With this method the load is limited when lighting the fire.
- "Top-down" burning: this is done by loading the large logs first, then the smaller pieces, and the paper on top. In this case combustion takes place from the top down and is known as "Top-down" burning.

From cold

- 1. Fully open combustion air control.
- 2. Open door.
- 3. Place the logs in the "traditional way" or "top down" way.
- 4. Light the fire and close the door.
- 5. Leave the combustion air inlet fully open until the wood is burning and the ashes glow.
- 6. Choose a control setting. The best operation setting is around 60% Open

Reloading

- 1. Fully open combustion air control.
- 2. Open door.
- 3. Using poker provided rake hot embers evenly around the vermiculite base.
- Place fresh logs on top of embers.
- 5. Close the door and burn fiercely until flame has caught hold and embers are glowing.
- 6. Choose a Control Setting. The best operation setting is around 60% Open

Note: Do not load wood higher than the vermiculite walls.

BURNING WOOD IN A SMOKE CONTROL AREA

You must purchase a smoke control version of the Mendip stove which is modified slightly to comply with regulations. Any change to this modification will invalidate the stoves compliance for smoke control areas. The Clean Air Act 1993 and



Smoke Control Areas

Under the Clean Air Act 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. Further information on the requirements of the Clean Air Act can be found here: http://smokecontrol.defra.gov.uk/ Your local authority is responsible for implementing the Clean Air Act 1993 including designation and supervision of smoke control areas and you can contact them for details of Clean Air Act requirements

Refuelling on to a low fire bed

If there is insufficient burning material in the firebed 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 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

Fuel overloading

The maximum amount of fuel specified in this manual should not be exceeded, overloading can cause excess smoke. The following text may be required depending on appliance operation and instructions:

Operation with door left open

Operation with the door open can cause excess smoke. The appliance must not be operated with the appliance door left open except as directed in the instructions.

Dampers left open

Operation with the air controls or appliance dampers open can cause excess smoke. The appliance must not be operated with air controls, appliance dampers or door left open except as directed in the instructions



13. CLEANING

Cleaning is best performed when the stove is cool.

Glass

The specially designed forced hot air wash system and vermiculite insulation helps keep the glass cleaner for longer. However, if your glass becomes dirty.

- 1. Open the door.
- 2. Apply spray or gel type glass cleaner onto a clean cloth or kitchen paper. Apply to the inside surface of the glass (Be
 - careful as most glass cleaners are extremely caustic and can damage the painted surface).
- 3. Leave to soak.
- 4. Wipe off tar deposits using a slightly damp cloth. Polish with a dry cloth or paper.

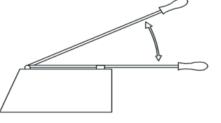
DO NOT USE ABRASIVE CLEANERS

Ash cleaning

The stove has a fixed ashtray. Clean daily with the metal scoop provided. The scoop is hinged. With the handle in a horizontal position, and locked, the scoop acts as a shovel. With the handle unlocked, and hinged upwards, the scoop acts as a bucket.

- 1. Open the door.
- 2. Rake hot embers to one side of the firebox so that they can be used to re-start the fire.
- 3. Rake spent ash to other side of the firebox and to the rear of the stove.
- 4. With the scoop in the horizontal position, and locked, enter into the stove in a forwards to backwards direction and shovel up excess ash.
- 5. Unlock and hinge the handle of the scoop upwards and remove from the stove. Take to the ash deposit.
- 6. Re-rake hot embers evenly over the vermiculite base
- 7. Place fresh wood on embers.

Note: Leave 1-2cms of ash on the vermiculite base. The ash insulates the hot embers Place firelighters on top of the ash and not directly on top of the vermiculite.



Paint

Wipe off ash deposits on the paint by using a soft haired brush, cotton cloth, or the suction brush attachment of a vacuum cleaner. Do not wash the stove.

Cold air inlet

Periodically open the air inlet cover plate and wipe away ash deposits that may have accumulated underneath the stove with a dry cloth.

14. MAINTENANCE

Paintwork

Repaint the stove using only heat resistant paint. Only repaint the stove when it is completely cold. Before spraying be sure to cover all parts of the stove that do not need to be sprayed (window and fireplace for example), and to de-grease any parts to be re-sprayed. Follow carefully the instructions written on the spray can.

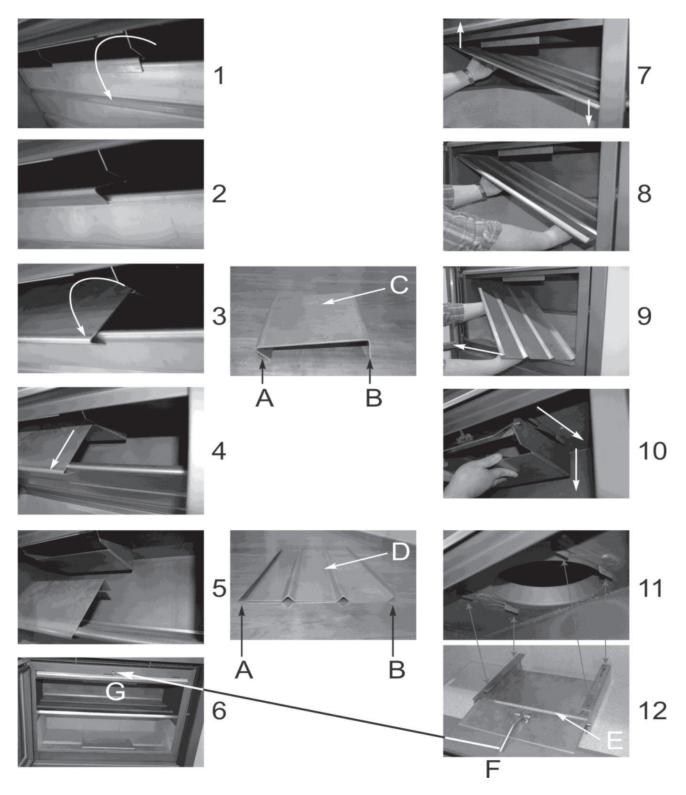
Chimney cleaning

It is important to have your chimney cleaned once a year. To do this the smoke damper must be removed from the appliance. To remove the smoke damper, follow the instructions below with care.

1. Open door and remove the smoke deflector (D). To do this, place your hand on the smoke deflector clamp (C) and rotate the back of the clamp upwards. The clamp will now come free from the deflector and you can move it towards you and out from the stove. See photos 1 to 5.

Note: The clamp (C) and deflector (D) both have a front and back, (A) and (B). You will need to bear this in mind when re- assembling the smoke damper.

- 2. You can now remove the smoke deflector (D) by raising the left hand side and lowering the right hand side, so that the right hand side can be turned to the front and the plate removed. See photos 6 to 9.
- 3. The smoke damper (E) is removed by sliding it backwards and letting it drop down. See photo 10.
- 4. To replace the assembly work in reverse order. Be sure when reassembling that you first mount the smoke damper operating shaft (F), photo 12, in the guide hole (G), photo 6, before placing the grooves of the smoke damper (E) onto the fixing strips. Now move the smoke damper forwards to prevent it from dropping.



Broken glass

The glass panel is heat resistant and very tough. However, it can be broken through lack of care. By applying the following tips you will prevent any damage.

- Never leave wood sticking out in front of the stove. Otherwise, when closing the door the protruding wood could pierce the glass.
- When filling the stove with wood never do so in a dangerous manner i.e. that the wood can fall forward and break the glass.
- When cleaning the glass do not apply excessive pressure.

If your window does break, consult your installer.



Replacing broken glass

Order a glass replacement kit for your specific stove model and size from your nearest dealer. The model specification can be found on your guarantee card.

- 1. Remove broken glass from door.
- 2. Take the replacement glass and feed the top edge up into the top of the door. The bottom edge of the glass will then drop into place.
- 3. Push glass downwards to fit against the fibreglass rope in the bottom of the door.

It may be necessary to replace the fibreglass rope seal that surrounds the glass on the bottom and both sides of the frame of the door. The rope is available from your dealer. It prevents air leaking into the stove around the glass. It must therefore be tightly packed.

15. TROUBLESHOOTING

Apparent malfunctions are often caused by incorrect operation. If you think something has gone wrong with your stove, check out the points below. If the trouble is not remedied after checking these points then contact your installer.

Problem	Possible causes	Remedy
Stove smokes	1. Damp or green wood.	1. Use dry wood.
	2. Chimney needs cleaning.	2. Clean chimney.
Takes a long time to get	1. Damp or green wood.	1. Use dry wood.
the stove hot.	2. Chimney needs cleaning.	2. Clean chimney.
Fire does not stay in	Insufficient wood in stove.	1. Load more wood.
overnight.	2. Too soft wood e.g. pine.	2. Use harder wood.
	3. Door seal needs replacing.	3. Replace door seal.
	4. Wrong air inlet regulation.	4. Close combustion air control.
Fire goes out.	1. Damp or green wood.	1. Burn dry wood.
		2. Get the stove hotter before closing combustion
	2. Stove not up to temperature.	air control.
Glass gets dirty.	1. Lack of flame.	Leave primary air control slightly open to ensure
		a slow flame at all times.
	2. Damp or green wood.	2. Use dry wood.

16. GUARANTEE

Your **Mendip Inset** stove has the following guarantees:

- 5 years for the basic structure.
- 2 years for internal removable parts and electrical components.
- Glass windows, seals, refractory bricks and vermiculite are not included in this guarantee.

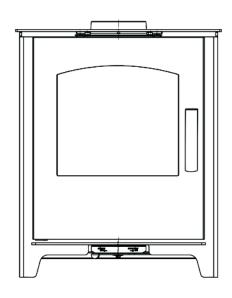
The guarantee starts from date of purchase and is only effective where:

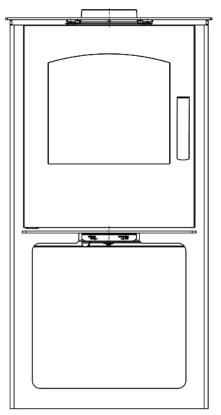
- 1. The product has been purchased from an appointed dealer of **Mendip Stoves**.
- 2. The complaint has first been investigated by the appointed dealer of **Mendip Stoves**.
- 3. The installation, operation and maintenance of the product is, in the opinion of the appointed dealer and **Mendip Stoves**, in accordance with the installation and operating instructions provided.
- 4. Only **Mendip Stoves** accessories have been used and wood fuels burned in accordance with Mendip Stoves operating instructions.
- 5. No modifications have been made to the product without prior written permission of **Mendip Stoves**.

The guarantee is strictly limited to the replacement or repair, by **Mendip Stoves** or their appointed dealer, of parts recognized by us to be defective and excludes all other indemnities. The affected part must be returned to our factory. The costs of removal and reinstallation are not covered by this guarantee.

Note: Due to the wide variations in design and construction of chimney flues we cannot guarantee that your chimney provides sufficient draught for your stove to be smoke free. However, if your chimney conforms to the criteria laid down in these instructions and to European Standards smoke problems should not occur.







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