

PLEASE RETAIN THIS GUIDE FOR FUTURE REFERENCE



USER GUIDE

Please read this user guide carefully when you assemble, install, operate, and maintain your stove.

If you have any more questions, please contact your local dealer.

Item Code	Nominal Heat output	Energy Index	Dimension (W*D*H)	Weight
I500	5.0kW	A+	489*346*641mm	81kg
I700	6.9kW	A	639*345*483mm	97kg

Assembly Instructions

PLEASE READ THESE INSTRUCTIONS CAREFULLY

It is a LEGAL REQUIREMENT that the installation of all new or replacement wood or solid fuel heating appliance obtain building control approval from your local authority, or the installation work must be carried out through a government approved competent persons scheme. A list of all competent person schemes can be found:

<https://www.gov.uk/guidance/competent-person-scheme-current-schemes-and-how-schemes-are-authorized>

All local regulations, including those referring to National & European standards, need to be complied with when installing the appliance.

This stove should not be installed into a chimney or flue system that serves other heating appliances. Any manufacturer's instructions must not be taken as overriding statutory requirements.

Our company will not be responsible for any consequential or incidental loss or injury however caused.

1. 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).

In England appliances are exempted by publication on a list by the Secretary of State in accordance with changes made to sections 20 and 21 of the Clean Air Act 1993 by section 15 of the Deregulation Act 2015. Similarly, in Scotland appliances are exempted by publication on a list by Scottish Ministers under section 50 of the Regulatory Reform (Scotland) Act 2014.

In Wales and Northern Ireland these are authorised by regulations made by Welsh Ministers and by the Department of the Environment respectively.

Further information on the requirements of the Clean Air Act can be found here at: <https://www.gov.uk/smoke-control-area-rules>

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.

As the customary practice in the UK requires that an exempted fireplace has to be constructed or adapted in such manner that it is impractical to operate it in a way whereby significant smoke will be emitted, for the I500, we recommend blocking the secondary/tertiary air controller at 23.5cm. This results in a minimum opening of 0.5 cm*. For the I700, we recommend blocking the secondary/tertiary air controller at 31cm. This results in a minimum opening of 1 cm*.

Appliance Specification

The stove is an inset appliance made of steel and equipped with a ceramic glass door. The combustion

chamber is made of ceramic bricks. Furthermore, the stove is equipped with a baffle plate made of vermiculite and steel. The combustion chamber and the baffle plate of the production models can be made of either ceramic bricks or vermiculite plates. Air supply is regulated by two controllers positioned below the loading door; one for primary air and one for secondary air (air wash). A grate and ash pan are present. The flue gas outlet is at the top of the appliance.

2. Unpacking Your Stove

Your Stove comes packed in a plywood crate. **TWO PERSONS ARE REQUIRED TO MOVE THE CRATE AND STOVE.**

(1) Remove the outer packaging.

- Carefully remove the packing straps and lift off the upper crate.
- Remove the plastic bag and take down the stove from the bottom panel.
- **IMPORTANT** - Ensure the plastic bag is disposed of correctly and kept away from children.

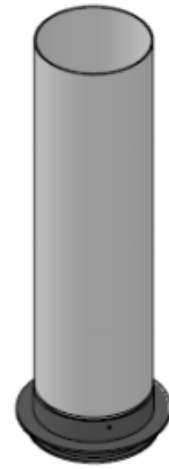


(2) Remove the flue collar from the stove.

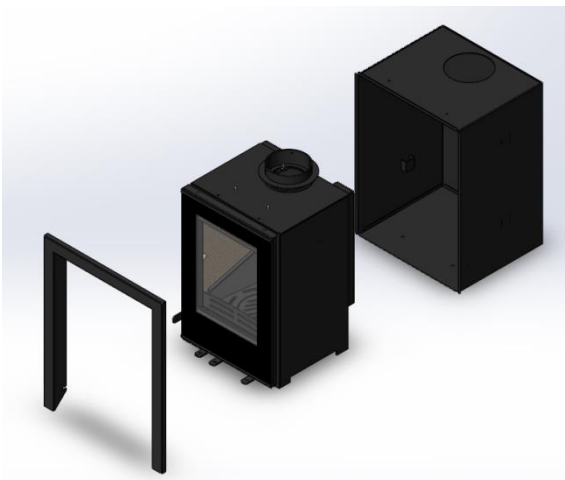
(3) Attach flue collar to flue and push upwards, leaving enough space for stove outer shell.



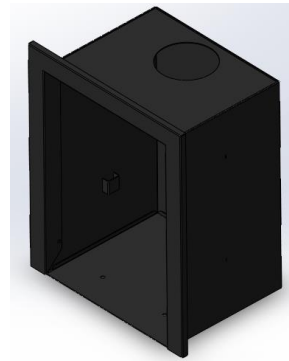
(4) Remove trim and stove separately.
Pull outward to separate them from outer shell.



(5) Re-attach trim to outer shell.



(6) Slide outer shell/ trim assembly into the cavity/recess, ensuring the back of the trim is flush with the front of the recess. Mount it to the floor/ cross-brace using the slot holes and screws provided (Inset fitting shown).



(7) Slide the stove into the fitted outer shell.



(8) Open the stove door, remove baffle plate(s) and pull the flue collar and flue down on top of the stove. Secure in place from the inside of the stove using the screws provided.



3. Installation Instructions

It is important that all local regulations, including those referring to national and European Standards need to be complied with when installing the appliance. Our company are not responsible for any fault arising through incorrect installation.

3.1. Safety Advice

3.1.1. Lighting the stove

- ❖ Open the door and ensure the secondary/air wash control lever is opened fully.
- ❖ On first lighting, we recommend using 2 - 3 firelighters along with wood kindling built in a pyramid above the firelighters to obtain a good fire bed. Ignite the firelighters then close the stove door and allow the firelighters and wood kindling to ignite to the point where the embers are glowing.
- ❖ Add your fuel of choice and periodically adjust each air control. Burn small loads initially before full fires are used, to allow paint & fitting cement to cure.

3.1.2.1 Burning Wood

- ◆ Air-wash/secondary air lever (The control to the right) - Use this to control the fire when burning wood.
- ◆ Primary air control lever (The control to the left) – This should be closed (moved to the left) as wood does not need air from below to burn effectively. However, this can be opened at the start to give the stove a sudden burst of air. Once established this can be closed off.

- ◆ Avoid overloading your appliance as this may cause damage to the product and cause unstable burn conditions.

3.1.2.1 Burning Coal

- ◆ The Air-wash/secondary air lever (The control to the right) – This should be left partially open, to allow the air-wash system to keep the glass clean
- ◆ Primary air control lever (The control to the left) - When burning coal, the stove should be mainly controlled using this lever.
- ◆ Avoid prolonged periods of slow burning which may cause build-up of creosote with certain fuel. Using a flue temperature gauge can help achieve the optimum temperature for clean combustion. Ensure you use the suitable fuel for the appliance.

3.1.2. Recommended Fuels

- Split and dried logs properly seasoned with less than 20% moisture content and no larger than 250mm x 100mm.
- Anthracite (Medium) smokeless fuel.
- Eco Logs.
- Briquettes.

Note that only Authorised fuels can be used in a Smoke Control Area.

3.1.3. Fuel to Avoid

Use of incorrect fuels can invalidate the warranty of your appliance.

- Petroleum Coke
- Household waste
- Wood with a moisture content above 20%
- Household coal or bituminous coal
- Waste timber that has been painted or treated e.g. railway sleepers.

3.2. Refuelling Wood

- Refuel when a layer of hot embers has been formed in the fire bed.
- Spread the embers out over the fire bed using the ash-pan tool.
- While the embers are still glowing, add 1 or 2 logs to the fire.
- Open the right air control fully to ignite the new fuel.
- Once new logs have ignited, adjust the right air control to give the desired combustion. If there are too few embers, use suitable kindling prior to the fuel load to prevent excessive smoke.

3.3. Refuelling Coal

- De-ash the fire bed.
- Fully open the left air control and add fuel.
- When the new fuel is fully lit adjust the left air control to give the desired combustion.

3.4. Weather Conditions

Weather conditions can affect the performance of the stove.

Strong winds combined with close buildings or trees can cause the stove to smoke.

Heavy rain may lower the temperature of the flue making it difficult to light or slow to heat up.

3.5. 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.

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3.6. Dampers/ controls 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.

4. Operating Instructions

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 this user guide.

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 this user guide.

4.1. Important Information

All local regulations, including those referring to national and European Standards need to be complied with when installing the appliance.

This appliance is not suitable for installation in a shared flue system.

The firebox and ashpit cover shall be kept closed except during ignition, refueling and removal of residue material to prevent fume spillage. It is important to use this appliance correctly to achieve best results.

4.2. Air Controls

Warning! Parts of the appliance, especially the external surfaces will be hot when in operation and due care need to be taken e.g. Protective gloves should be given in operation.

It is essential for the appliance to have sufficient air supply for combustion and ventilation.

4.2.1. Primary Air

Primary air is controlled through the assembly on the bottom of the door. This provides a conventional air draught which passes through the fuel bed. The primary air intakes can be adjusted to control the fire in combustion chamber.

4.2.2. Secondary Air

The appliance is fitted with an air wash system which can keep the heat-resistant glass of the fire door clean. This secondary air is controlled through the fittings on the bottom of the stove.

4.3. Grate

The grate is a rotatory design. If you are burning wood you can allow the ash to build up on the grate. However, if smokeless coal is being burnt you should ensure the grate is riddled so primary air can flow up from underneath.

4.4. Ash pan

It is essential that you clean up the ash pan regularly. Use the supplied tool to lift the ash pan out of the stove.

4.5. Burning Mineral Smokeless (Solid Fuel)

DO NOT have more than a 30-degree incline of the fuel bed from front to back, when you put solid mineral fuels on the fuel bed. The height of loading fuels must not exceed the rear cast iron lining. The refueling intervals at nominal heat output will be approximately every 4 hours. We suggest you

refuel in time to get the best possible results. When using solid mineral fuels, we suggest you keep the secondary air control in the closed position, so it can burn at maximum efficiency. At this time the primary air controls can adjust the burn rate of the appliance.

In order to prevent the ash from being stacked to the underside of the bottom grate, please always de-ash before refueling. Once the ash builds up, it is possible that it will restrict the airflow and cause the fire to die.

Important! It is very important to empty the ashpan regularly. In case the ash builds up the underside of the grate, burnout or distortion of the grate may be caused.

4.6. Burning Wood

The refueling intervals at nominal heat output will be approximately 1.5 hours. You may load wood higher in the stove than solid mineral fuel, but wood or logs are not permitted to touch the baffle plate. Wood burns most efficiently with the primary air controls closed and the secondary control partially open. Moving the secondary control will control the burn rate of the stove.

Wood burns best with a layer of ash on the fuel bed, and care should be taken to only remove surplus residue from the stove timely.

We recommend you only use dry, seasoned wood as fuels; the wood should have been cut, split and stacked for at least one year in a circulating air surround to dry out. Otherwise, wet or unseasoned wood will cause tar deposits in the stove and unsatisfactory heat output will occur.

We recommend the use of wood logs with a moisture content of less than 20% for stoves.

Burning wet or unseasoned wood will create excess smoke emissions, tar deposits in the stove and chimney and will not produce a satisfactory heat output. Wood fuel purchased from an approved source may still require some drying out to remove surface water before use.

4.7. Refuelling on to a low fire bed

If there is insufficient burning material in the fire bed to light a new fuel charge, excessive smoke emission can occur. Refueling 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.

4.8. Fuel overloading

The maximum amount of fuel specified in this user guide should not be exceeded, overloading can cause excess smoke. We suggest that you refuel every 45 minutes to 1 hour, dependent on fuel.

The recommended maximum dimensions of wood logs are as specified below:

Model	Maximum Length - mm	Maximum Diameter - mm
I500	290	175
I700	440	210

stove is suitable for use with wood, coal and solid fuels. Note that the inset stove has been recommended for use in Smoke Control Area when burning wood logs. The inset stoves can be used in Smoke Control Areas when burning authorized solid fuels. A list of authorized fuels is available online:

<http://smokecontrol.defra.gov.uk/fuels.php>

4.9. Shutting Down

Firstly, close the primary air controls;

Secondly, close the secondary air controls;

The fire will now slowly die down as the oxygen flowing into the stove is decreased. Please note that this is a Defra model and does have a metal stop in place to prevent full closure of the vents!

If reviving the fire, the primary air controls are recommended to be opened first, followed by opening the secondary air controls.

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Warning! The stove will remain HOT after the fire has been extinguished.

4.10. Safety Notes for your guidance

This appliance is NOT suitable for use in a shared flue.

This appliance should NEVER be operated with the doors open.

NEVER clean the glass when the stove is hot. ALWAYS use stove glass cleaner, which is available from DIY and stove retailers, only when the stove is cool.

DO NOT use an aerosol spray on or near the stove when it is alight.

DO NOT use liquid fuels in this appliance.

NEVER leave the stove unattended for long periods without first adjusting the controls to a safe setting – careful air supply control should be exercised at all times.

DO NOT modify the appliance as it could result in damage to the appliance or injury to users.

IMPORTANT – DO NOT fit an extractor fan in the same room as this appliance.

FIRES CAN BE DANGEROUS – Always use a fireguard standard BS 8423:2002 in the presence of children, the elderly or the infirm.

It is essential that the fire has adequate air supply for combustion and ventilation. Apertures provided for this purpose shall not be restricted.

DO NOT OVERFIRE – it is possible to fire the stove beyond its design capacity, this could damage the stove, so watch for signs of overfiring – if any part of the stove starts to glow red, the fire is in an overfire situation and the controls should be adjusted to immediately prevent the overfiring.

WARNING – FUME EMISSION

Properly installed and operated, this appliance will not emit fumes. Occasional fumes from de-ashing and refueling may occur. Persistent fume emission must be stopped.

If fume emission does persist, then the following immediate action should be taken: -

- Open doors and windows to ventilate room
- Put the fire out, or safely dispose of the fuel from the appliance.
- Check for flue chimney blockage and clean it if required.
- Do not attempt to re-light the fire until the cause has been identified and corrected.
- If necessary, seek professional assistance.

IN THE EVENT OF A CHIMNEY FIRE

Raise the alarm to let others in the house know. Call the Fire Brigade

Close all air controls.

Place a fireguard or spark guard in front of the stove. Feel the chimney breast for sign of excessive heat.

Move furniture and rugs away from the fireplace and remove any nearby ornaments.

DO NOT endanger yourself or any other person, so if necessary, leave the house immediately after calling the Fire Brigade.

5. Maintenance

5.1. Stove body

Use a soft brush to clean the stove; cleaning must ALWAYS be done after it has cooled down. The finish can be renewed with proprietary stove paint.

5.2. Baffle plate

Remove and clean the baffle plate once a month to avoid soot or fly ash.
Block the flue ways and produce dangerous fume emission.

5.3. Fireproof glass

Use a proprietary glass cleaner to clean the glass when cool. Any material that may damage the glass should not be used to clean the panel. Wet logs on heated glass, a badly aimed poker or heavy slamming of the doors could crack the glass panels and care should be taken.

5.4. Ceramic rope

Ceramic or fiber glass rope is used on the stoves. Inspect the rope around the door and glass. If rope is becoming detached, use a proprietary rope glue to reattach it. Ensure you replace the rope in the case of it being in poor condition.

5.5. Flue & Chimney

Keep the chimney, flue way and any connection flue pipe swept regularly.

For users of smokeless fuels, sweep at least once a year; for wood and other fuels, at least twice a year. If the stove is 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 an open fire.

6. Trouble Shooting

6.1. Unable to light fire. Struggling fire

Please check the following measures:

- A proper fuel is being used.
- The air inlet is unobstructed.
- Chimneys and flue ways are clear and the chimney has the required 12Pa draw.
- Sufficient air supply in the room. A lack of free air will cause the stove to burn slowly.
- No extractor fan is working in the same room as the stove.

6.2. Fire blazing out of control

Please check:

- A suitable fuel is being used.
- The doors are tightly

- closed with the rope making a good seal
- The air controls are all in the closed position.
 - The primary air control flap is not wedged in the open position. The glass retaining clips are not loose.
 - The door rope seals are in good condition.

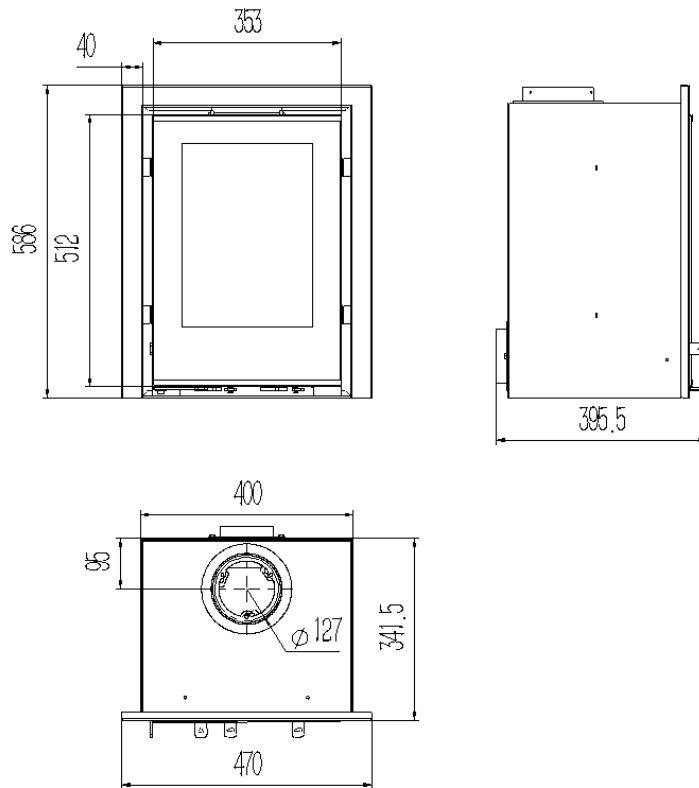
Product End-of-Life/Recycling: To dispose of the stove after the product life has expired, please observe the following information.

First, dispose of the items correctly i.e. separate the parts to be disposed of in material groups. Second, always dispose of items in a way that is as sustainable as possible and that is in line with the current environmental protection, reprocessing/recycling and disposal technology.

7. Technical Drawings and Performance Data

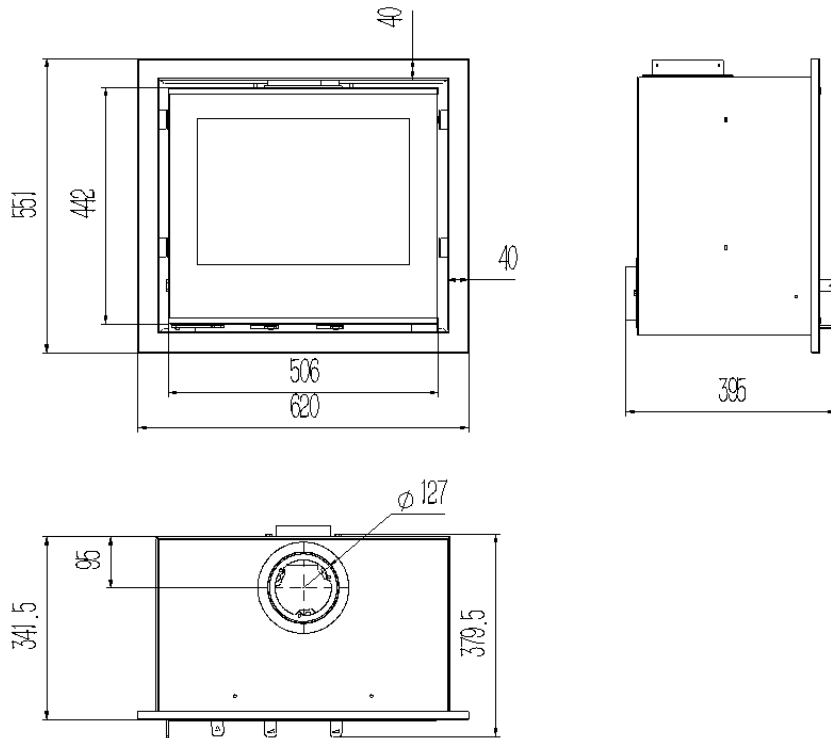
I500 inset Stove

I500	Wood Fuel	Smokeless Fuel
Nominal Heat Output	5.0 kW	4.9 kW
Net Efficiency	82.20%	83%
Seasonal Efficiency	73.20%	74.00%
PM at 13% O ₂	35 mg/m ³	18 mg/m ³
OGC at 13% O ₂	55 mg/m ³	50 mg/m ³
CO at 13% O ₂	0.09 vol%	0.08 vol%
NoX at 13% O ₂	98 mg/m ³	132 mg/m ³
Mean Flue Gas Temperature	231°C	222 °C
Flue Gas Mass Flow	4.0 g/s	4.1 g/s
Indirect Heating Functionality	No	No
Type of Heat output room Temperature control	Two or more manual stages, no temperature control	
Other Control Options	N/A	
Energy Index	110	



I500 Inset stove

I700	Wood Fuel	Smokeless Fuel
Nominal Heat Output	6.9 kW	6.8kW
Net Efficiency	75.80%	78.50%
Seasonal Efficiency	66.80%	69.50%
PM at 13% O ₂	29 mg/m ³	25 mg/m ³
OGC at 13% O ₂	56 mg/m ³	15 mg/m ³
CO at 13% O ₂	0.06 vol%	0.10 vol%
NoX at 13% O ₂	110 mg/m ³	146 mg/m ³
Mean Flue Gas Temperature	292°C	294 °C
Flue Gas Mass Flow	6.7 g/s	5.7 g/s
Indirect Heating Functionality	No	No
Type of Heat output room Temperature control	Two or more manual stages, no temperature control	
Other Control Options	N/A	
Energy Index	101	



Declaration of performance according to Regulation (EU) 305/2011

Ref No: I500 -CPR-2022-06

Point	Product Type		Room heater burning solid fuel without supply of hot water in accordance with EN 13229:2001
1			
2	Product model designation		I500 inset Stove, Serial No. -
3	Intended use		Room heater burning solid fuel without supply of hot water
4	Manufactured by		
5	Manufacturer's authorised representative		
6	System of assessment and verification of constancy of performance		System 3
7	Notified laboratory name and address		The notified laboratory SGS Neder land B.V., Laboratory number 608 performed the determination of the product type specification on the basis of type testing under system 3 and issued the test report Ref: EZKA/2020-03/00038-1
8	Declared performance:-		

	Harmonized Technical specification:	EN 13229:2001	
	Essential characteristics	Performance – Wood	Performance - Ancit
	Fire Safety:- Reaction to fire	A1	
	Clearance distances to combustible materials	Rear = 400mm Sides = 300mm Ceiling = NPD	
	Risk of burning fuel falling out	PASS	
	Emission of combustion products	CO = 0.09%	CO=0.08%
	Surface temperatures	PASS	PASS
	Electrical safety	N/A	N/A
	Clean ability	PASS	PASS
	Maximum operating pressure	N/A	N/A
	Flue gas temperature at nominal heat output	231 °C	222 °C
	Mechanical resistance to carry a chimney	NPD	NPD
	Nominal output	5kW	4.9kW
	Room heating output	5kW	4.9kW
	Energy Efficiency	82.2%	83%
9	The performance of the product identified in points 1 and 2 is in conformity with the declared performance given in point 8.		

Signed for and on behalf of the manufacturer by:

_____ (Name) _____ (Date of issue) _____ (Signature)

Declaration of performance according to Regulation (EU) 305/2011

Ref No: I700 -CPR-2022-06

Point	Product Type	room heater burning solid fuel without supply of hot water in accordance with EN 13229:2001+ 13229-A2:2004
1		
2	Product model designation	I700 inset Stove, Serial No. -
3	Intended use	Room heater burning solid fuel without supply of hot water
4	Manufactured by	
5	Manufacturer's authorised representative	
6	System of assessment and verification of constancy of performance	System 3
7	Notified laboratory name and address	The notified laboratory SGS Neder land B.V., Laboratory number 608 performed the determination of the product type specification on the basis of type testing under system 3 and issued the test

		report Ref: EZKA/2021-3/00031-1	
8	Declared performance:-		
	Harmonized Technical specification:	EN 13229:2001	
	Essential characteristics	Performance – Wood	Performance - Ancit
	Fire Safety:- Reaction to fire	A1	
	Clearance distances to combustible materials	Rear = 400mm Sides = 200mm Ceiling = NPD	
	Risk of burning fuel falling out	PASS	
	Emission of combustion products	CO = 0.06%	CO=0.1%
	Surface temperatures	PASS	PASS
	Electrical safety	N/A	N/A
	Clean ability	PASS	PASS
	Maximum operating pressure	N/A	N/A
	Flue gas temperature at nominal heat output	292 °C	294 °C
	Mechanical resistance to carry a chimney	NPD	NPD
	Nominal output	6.9kW	6.8kW
Room heating output	6.9kW	6.8kW	
Energy Efficiency	75.8%	78.5%	
9	The performance of the product identified in points 1 and 2 is in conformity with the declared performance given in point 8.		

Signed for and on behalf of the manufacturer by:

(Name)

(Date of issue)

(Signature)

Guarantee

The main body of your stove is guaranteed for 5 years.

Incorrect use or installation not carried out by a registered HETAS installer will void the guarantee. The only exceptions will be if the install has been signed off by your local authority or suitably qualified Oftec installer. In addition to this the stove must be serviced annually by a suitably accredited chimney sweep or stove installer. For example, HETAS / METAC / NACS. In this service any perishable parts that are damaged will need replacing.

Notes:

If a fire brick is only split but is still fully protecting the shell, then it does not always need replacing in the service. They only need replacing when they have crumbled away, exposing the stove's shell.

If the seal is leaking air into the fire this does need changing right away. Any excess air could cause the burner to over fire. In some cases, the rope is fine, and the handle simply needs adjusting to make the door lock a little tighter.

If the glass is not split and is only crazed, then it does not need replacing to keep in line with the guarantee terms.

Please keep a record of all services as this will be required if a claim is ever put forward.

As a company we will only ever be responsible for the product itself and would not cover installation / de-installation of any product that did have to be replaced.

The guarantee period will begin when the stove has been invoiced. Please keep hold of your invoice as Ecosy+ Stoves of Hampshire

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this will be requested if a claim is started. If this is not provided upon request, we will not be able to escalate your claim. The guarantee will begin from the sale date on the invoice and we do not cover any cost incurred when removing faulty appliances or installing new ones, even if it has been proven that the stove is faulty. For full guarantee details please visit www.ecosystoves.co.uk. With every claim we will require a signed copy of the sign-off sheet.

BROKEN FIRE BRICKS

It is common for vermiculite bricks to break. They are fully heat resistant but can be quite fragile. The most common bricks to break are the base and back bricks as these take the brunt of abuse. To ensure the longevity of your fire bricks, please ensure that you gently place fuel in the fire and do not over stack fuel. We would also suggest leaving a small bed of ash in the fire at all times. This helps the wood burn more efficiently and also acts a cushion between the log and the brick itself. If a brick is split it will not need replacing and this could potentially happen at any point. We only suggest changing bricks when they have crumbled away, exposing the stove's body.



BROKEN / CRAZED GLASS

The glass used in all fires is fully approved heat resistant ceramic glass. This glass will not break through heat but can easily break if struck with a log or similarly hard object. This is why the glass is not covered by any manufacturer of stoves. Common causes for glass breakages are customers closing the door when a log is still sticking out. Glass will not always break straight away and can be chipped or weakened. It will then often break at a different time with seemingly no contact. When replacing glass, ensure you only pinch up the glass clips. If they are over-tightened it could cause the glass to break.

Cloudy, 'milky' or crazed glass is caused by unburned acidic condensates etching the ceramic glass and unfortunately this cannot be easily removed. It is definitely not faulty glass, but may have more to do with the quality of the fuel that you burn and the way that you operate your stove (long slumbering). This is less common on wood-only models as it is often caused by the high sulfur content in some coals. It is, however,

possible. If your glass is crazed it does not need changing and is safe to use.



Ecosy+ stoves