



Ecosy+ Infinity V
Cylindrical Stove – Eco-
Design Ready

Operation and Installation Manual

PLEASE RETAIN FOR FUTURE REFERENCE

1) INSTALLATION INSTRUCTIONS

APPLIANCE LOCATION

The appliance must be located at specific distances from its surroundings. This is to prevent damage to products & furnishings within the vicinity of the appliance. Adequate space should be provided for servicing the appliance.

Please see below distances to **combustible** materials, i.e. wood and plasterboard. Non combustibles have no set distance but we would suggest leaving at least a 5cm gap at the side and rear to allow air flow around the fire. The more the better though. It is worth noting that the materials used may be non-combustible, but heat buildup can cause cracking of certain boards. Some air flow around the fire can help prevent this.

Distance to combustibles	Front	Side	Back
Ecosy+ Infinity V	80cm	5cm	5cm

VENTILATION

Your stove requires ventilation to supply it with air for combustion. Ventilation is also required to ensure the proper operation of flues and chimneys, to ensure that the products of combustion are safely dispersed to the outside air. Please ensure the stove has sufficient ventilation for operation.

Extraction fans lower the pressure in a building which can cause spillage of

combustion products from the stove, back into the room. Opposed to being pulled up the chimney. This can occur even if the appliance and the fan are in different rooms. If mechanical extraction is unavoidable in the same room as your stove, then seek specialist advice to ensure safe operation of the appliance. However, the stove is fitted with a direct air feed inlet and in most cases if this is attached to an external pipe, that mechanism of ventilation is not affected. The stove is rated at 5kw nominal, so in most houses built before 2008 no additional ventilation / air brick is required. The stove will simply draw in air directly from the room.

The direct air spigot is 4" in diameter.

FLUE / CHIMNEY

It is important that the flue or chimney to which this appliance is to be connected has been checked by a competent person to ensure its suitability and that it will work safely. The chimney or flue and installation should comply with local and national building regulations.

Sufficient operating draft is required for the product to function optimally. The following considerations should be considered to ensure safe operation of the appliance.

The flue must be:

- Suitable for use with solid fuel burning appliances (Min. rating of T400).
- In good condition and provide a draft of 10-20 Pa.
- Free from any internal obstructions.
- At least 4.5 metres from the top of the stove outlet to the top of the chimney.
- Independent from a shared flue system of any type.
- Larger or equal in diameter than the appliance flue collar size.

Provision should be made to ensure the chimney can be swept in the entirety of its length.

If using single wall flue, please ensure there is a clearance of at least 3 times the diameter of the flue pipe from any combustible material (e.g. 150mm pipe = 450mm minimum clearance to wooden beam).

HEARTH CONSTRUCTION

Hearths should be constructed of suitably robust materials and to appropriate dimensions such that, in normal use, they prevent combustion appliances setting fire to the building fabric and furnishings and they limit the risk of people being accidentally burnt.

The hearth should be able to support the weight of the stove and its chimney if the chimney is not independently supported. This model is suitable for a 12mm hearth but that hearth must be a minimum of 840mm x 840mm

FITTING INSTRUCTIONS

1. Remove the outer packing

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

Open the door, take out all the contents. Place all the items on a cardboard box or surface that will not scratch or damage the part

2. Removing the throat plate and liners

The throat plate rests on the rear liner and ledge within the upper edge of the door aperture. To begin with remove the internal grate and log retainer, then push up on the mid part of the throat plate with the palm of one hand. With the other, remove the side bricks to allow the throat plate to drop down. The remaining liners can now be removed.

3. Fitting The Flue Spigot Outlet

If not already attached, please fix the flue collar to the top of the fire with the bolts provided. There is no rear flue outlet on this fire.

4. Connecting The Spigot Outlet to The Flue System

The flue pipe must be fitted inside the outlet spigot.

Failure to do so could result in the spillage of condensation running down the flue. Fire cement should be used to create an airtight seal between the flue and spigot.

5. Firebox Liner Panels

All models of the Ecosy stove collection use firebox liner panels to the side, back and either side of the rotating grate to the base of the appliance. The stove will be delivered with the liner panels in situ; however, it may be easier to remove these during installation. Please note that these are not packaging and need to remain in place at all times.

OPERATION INSTRUCTIONS

Lighting the stove

1. Open the door and ensure the secondary/air wash control lever is opened fully. (The one of the right as you look at the fire)
2. 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.
3. 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.
4. If you are burning coal, you will primarily use the primary air control on the left side of the fire, as you are looking at the stove. Coal likes lots of air underneath, so you need to ensure that grate is kept clean and clear of debris.

Controlling Stove

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.

- Avoid overloading your appliance as this may cause damage to the product and cause unstable burn conditions. See max fuel load stated in 'Refuelling Wood' section for more info.

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 fuels. Using a flue temperature gauge can help achieve the optimum temperature for clean combustion. Ensure you use the suitable fuel for the appliance.

Recommended Fuels

- Split and dried logs properly seasoned with less than 20% moisture content and no larger than 250mm x 100mm (max fuel load on page 10 should not be exceeded).
- Anthracite (Medium) smokeless fuel.
- Eco Logs.
- Briquettes

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

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

Refuelling Wood

1. Refuel when a layer of hot embers has been formed in the fire bed.
2. Spread the embers out over the fire bed using the ash-pan tool.
3. While the embers are still glowing, add 1 or 2 logs to the fire.
4. Open the right air control fully to ignite the new fuel.
5. 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.

Max fuel load – 1.1kg (The maximum amount of fuel specified in this manual should not be exceeded, overloading can cause excess smoke)

Refuelling Coal

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

Refuelling on 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. 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.

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.

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/ 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.

2)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 Northern Ireland appliances are exempted by publication on a list by the Department of Agriculture, Environment and Rural Affairs under Section 16 of the Environmental Better regulation Act (Northern Ireland) 2016. In Wales appliances are exempted by regulations made by Welsh Ministers.

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

The Ecosy+ Infinity V has been recommended as suitable for use in smoke control areas when burning seasoned wood logs.

3) Troubleshooting/ F.A.Q.

<u>Problem</u>	<u>Probable Cause</u>	<u>Recommended Action</u>
Fire difficult to light	Green/Wet wood	Use recommended fuels
	Insufficient air	Open air controls
	Insufficient draft	Check flue is not obstructed, sweep if needed
	Fuel too large	Use kindling / small logs to start fire
Fire burns too quickly	Too much air	Reduce air controls

	Excessive draft	Install draft stabiliser/damper
Smokes upon initial lighting	Cold flue pipe	Burn firelighters/small fuel loads to preheat flue prior to lighting
Smokes while burning	Insufficient draft	Check flue is not obstructed
Glass blackening	Insufficient Air	Open air-wash control
	Damp fuel	Use recommended fuels
	Insufficient seal	Check condition of rope seal around glass
Glass crazing (minute splinter marks on glass)	Cold liquid hitting warm glass	Replace glass
Low heat output	Poor quality fuel	Use recommended fuels
	Insufficient Seal	Check condition of rope seal around glass

IMPORTANT NOTICE

WARNING: When properly installed and operated this appliance should only emit fumes during fuelling and de-ashing. The stove is designed to be operated only with the doors shut. To prevent fume spillage only open the doors for ignition, refuelling and cleaning. Persistent fume emission is dangerous and in certain circumstances could be fatal. It should not be tolerated. If you experience heavy or persistent fume emission, please follow the procedure below.

1. Open all windows or doors to ventilate the area.
2. Extinguish the fire and if safe to do so, remove fuel from the appliance.
3. Check for blockages in the appliance and clear if possible. Particular attention should be paid to the baffle plate which should be inspected for any accumulated soot and products of combustion regularly. If

excessive amounts are present, the baffle plate needs removed and cleaned.

4. Have the chimney checked by a professional person for any sign of blockage.
5. Do not attempt to relight the appliance until the source of the blockage has been determined and cleared.
6. Seek professional opinion on the cause of the blockage if in any doubt.

You may also detect a smell from the appliance on initial lighting while the paint cures. Stove paint must be cured on the surface of an appliance. During the first few hours of burning, there will be some fumes / smoke as the paint cures. When the body of the appliance is properly heated, it usually takes about an hour or so after that to bake / cure the paint. It is recommended to ventilate the room well by opening windows / doors during this time and where possible, leave the room.

In the event of a chimney fire, immediately close the door and move the air wash to the closed position. Call for assistance from fire service. A chimney fire can cause significant damage to the chimney construction and must be assessed by a professional before relighting your appliance.

Never burn plastics, household waste or liquids in your stove.

Whilst the paint is curing be very careful with the glove and do not wipe it.. At this delicate stage the paint is very soft and easily removed. Once the curing process is complete, the paint is much more tactile and hard wearing.

4) MAINTENANCE

De-ashing

The appliance should be de-ashed at least once every 24 hours depending on fuel type and heating load. Use the riddling control on the left side below the door handle, to filter the ash through the grate into the ash pan for removal. It is important that the level of ash in the ash

pan is not allowed to build up to where it is touching the bottom grate. This will cause the grate to burn out prematurely.

Baffle plate

Particular attention should be paid to the baffle plate, which should be regularly inspected for any accumulated soot and products of combustion. If a medium to excessive amount is present, the baffle plate needs removed and cleaned.

Glass Cleaning

We recommend that the glass should be allowed to cool, then use a damp cloth to clean it. Abrasive cleaners should be avoided, as they tend to scrape the glass making it more and more difficult to keep clean. Use of a stove glass cleaner (available from your retailer) is recommended for stubborn stains.

Door

Check that the seal around the door is airtight. If not, replace the rope seal if necessary.

Paintwork

Whilst the paint is curing be very careful with the glove and do not wipe it. At this delicate stage the paint is very soft and easily removed. Once the curing process is complete, the paint is much more tactile and hard wearing. However, paint is not covered under the guarantee and can require touching up as a part of general maintenance.

Flue / Chimney cleaning

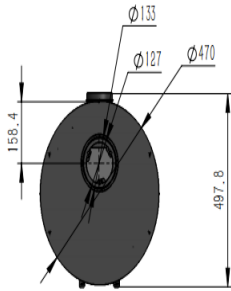
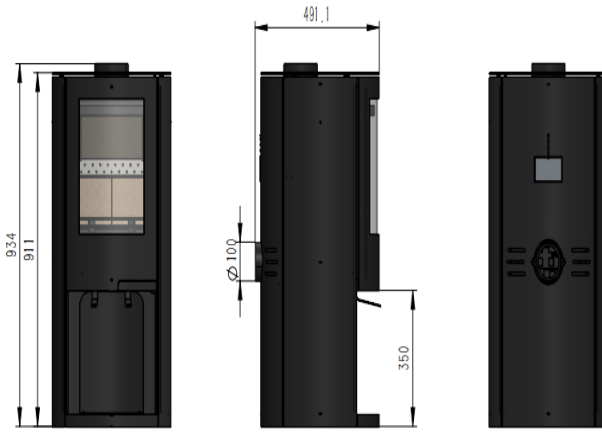
Please ensure that the Flue is swept as instructed. Blockages or build-

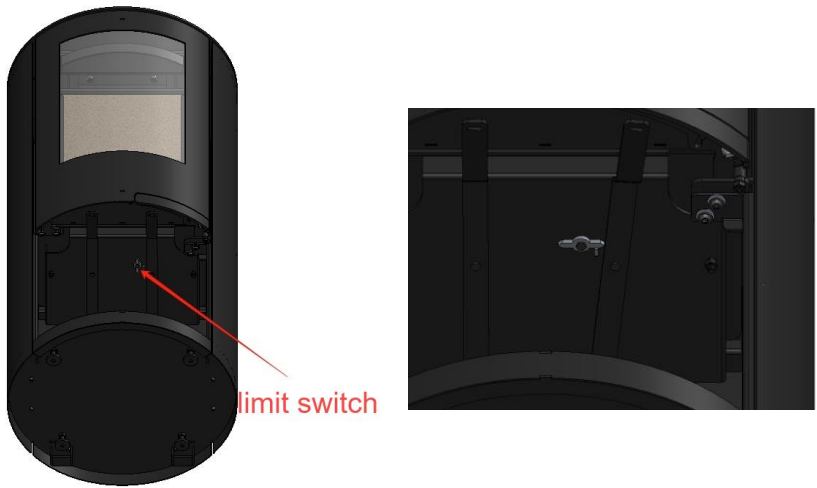
ups within the flue can cause loss of performance, damage to the product and harm to the surroundings and users as a result. Depending on the fuel source used, it's recommended that the flue is cleaned:

- Anthracite – Clean at least once a year.

Wood – Clean before and after the heating season. If used excessively, clean during the heating season as well.

5) TECHNICAL INFORMATION





Ecosy+ Infinity V	Beech	Anthracite
Output kW (nominal)	5.0	4.9
Efficiency (%)	82.2	83.0
CO Emissions at 13% O₂ (vol%)	0.09	0.08
NO_x Emissions at 13% O₂ (mg/m₀³)	98	132
C_xH_y (OGC) Emissions at 13% O₂ (mg/m₀³)	55	50
Dust (PM) Emissions at 13% O₂ (mg/m₀³)	35	18

Flue gas temp. (°C)	231	222
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6)DIMENSIONS

	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Collar (mm)	Maximum log length (mm)
Ecosy+ Infinity V	911mm	470mm	491mm	84	5"/125mm	250mm x 100mm

7)WARRANTY

Your stove includes a 5 Year guarantee. 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. Please keep hold of these receipts, as they will most likely be required in an unlikely event.

Not Covered

- Glass, glass clips, rope seals, baffle plate, left/ right/ back/ baffle bricks. Any other parts aren't covered by warranty.

- Defects or faults caused by local conditions such as draught problems and chimney defects.
- Damage caused by over firing.
- Damage resulting from the use of unsuitable fuel.

Unauthorised modifications, misuse, neglect, abuse, excessive wear and tear and the use of non-original replacement parts will invalidate the warranty of the stove.

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. 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.

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 instead does 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.

