

Arrow

Ecoburn Plus

PLEASE RETAIN THIS GUIDE FOR FUTURE REFERENCE

EN 13240:2011 +A2:2004

BK665 SPECIFIC Rev 05

ISSUE DATE : 01/09/2016



Aarrow Ecoburn Plus Stove User Guide

Congratulations on the purchase of your new Aarrow stove!

More than 30 years of experience has been put into the development of your stove to ensure ultimate performance and years of trouble free use and enjoyment. Every detail of your stove has been carefully designed and engineered which is why we are so confident in the reliability of our products.

Your Aarrow stove is built to the highest standard of craftsmanship using the best materials and the most modern equipment available. It is a highly efficient and sophisticated piece of machinery and when properly installed and operated it should provide a lifetime of heating satisfaction.

Should you have any questions about your stove which are not covered by this manual, please contact the Arada retailer in your area, call our technical support department on +44 (0)1297 35700 or visit our website www.aradastoves.com which offers a wealth of information on how to care for, and get the best from your stove.

Please ensure that you read these instructions in full and understand them before operating your stove.

Arada has a policy of continuous product development and therefore we reserve the right to amend specifications without prior notice. Due to printing cycles, items or options may be described before they are generally available or after they have ceased. Please check with your retailer or dealer if you are unsure about any aspect of your stove, its installation or correct use.

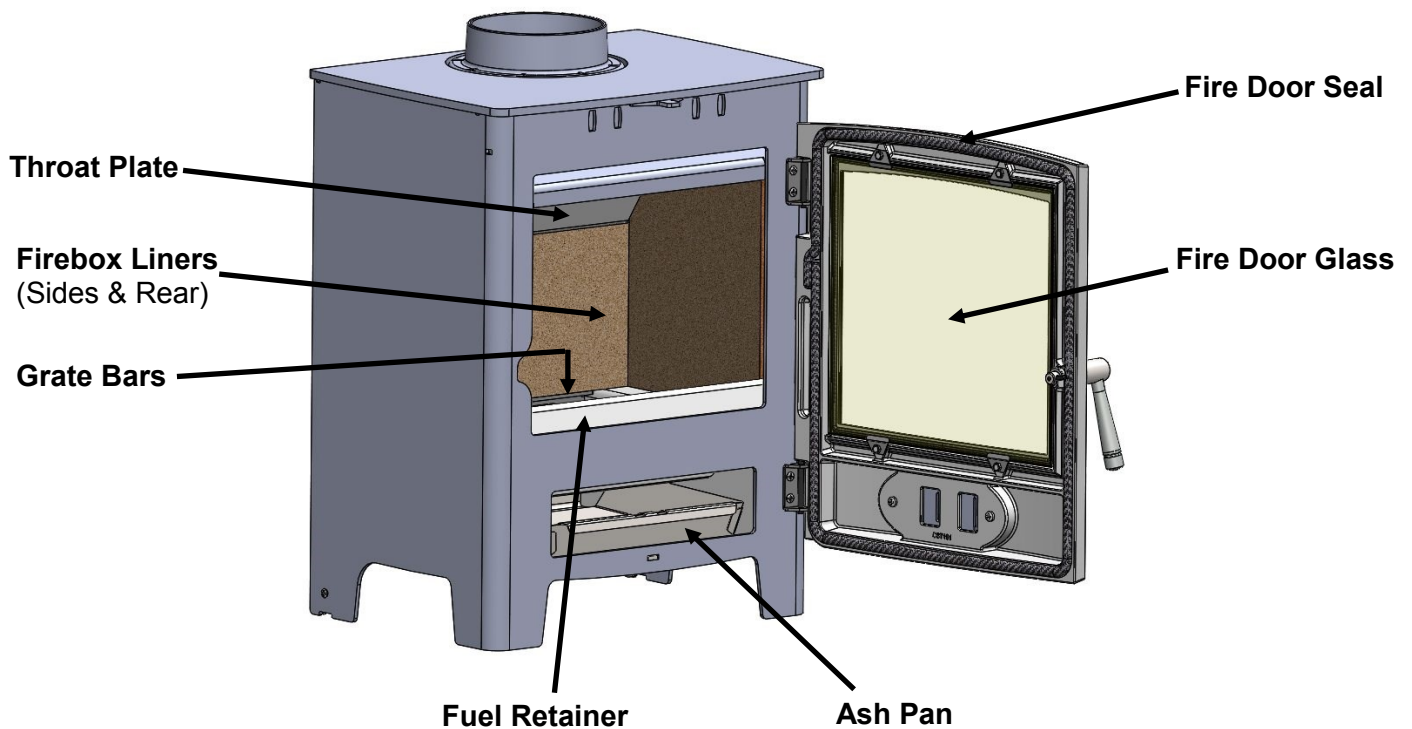
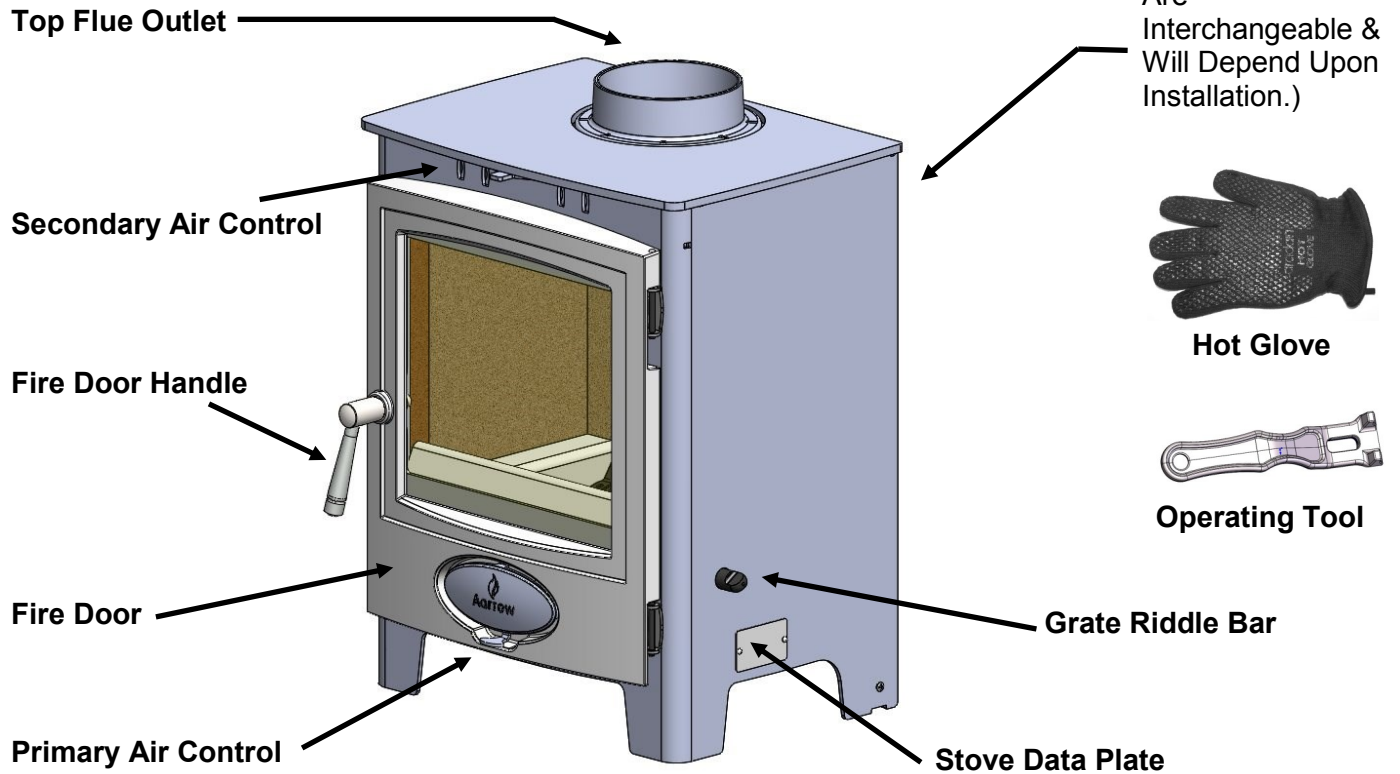
Contents

1 Identifying your stove	
1.1 Identifying parts & terminology of your stove	5
2 Warnings	
2.1 Health and Safety	6
2.2 Smoke control areas	7
3 Advice on fuel types	
3.1 Wood	8
3.2 Solid fuel	8
4 Before using your stove	9
5 Air inlet controls	
5.1 Location and operation of the controls	10
5.1.1 Primary air	10
5.1.2 Airwash system / Secondary air	11
5.1.3 Smoke exemption permanent stop.....	12
6 Lighting your stove	
6.1 Smoke Control Areas.....	13
6.1.1 Fuel overloading	13
6.1.2 Operation with door left open	13
6.1.3 Dampers / Air controls left open	13
6.2 Burning wood	13
6.3 Burning solid fuels	14
6.4 Warning - Fume / Smoke emissions	15
6.5 Refuelling on to a low fire bed	15
6.6 Typical wood burn for stated output	15
7 Further information for all stove owners	
7.1 Door glass	16
7.2 Reduced burning	16
7.3 Over firing	16
7.4 Chimney fires	16
7.5 Ash removal	17
7.6 Periods of non-use (summer months).....	17
7.7 Classification	17
7.8 Adverse weather conditions	17
7.9 Replacement parts	18

8 Further information for multi fuel stove owners	
8.1 Multi fuel or <i>Flexifuel</i> grates	18
9 How heat is delivered by your stove	
9.1 Radiant heat	19
10 Care for your Aarrow stove	
10.1 Adjusting the door hinges	20
10.2 Liners / firebricks	20
10.3 Throat plate	20
10.4 Fire door seal	20
10.5 Cracked glass	20
10.6 Chimney / flue sweeping	21
11 Further resources / reading	
11.1 Information.....	22
11.2 Specifications	22
12 Guarantee	
12.1 Guarantee	23
12.2 Terms and Conditions	23-24
12.3 General	25
13 Technical data	26-27

1 Identifying your stove

1.1 Identifying parts & terminology of your stove





2 Warnings

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-authorised>

Any manufacturer's instructions must not be taken as overriding statutory requirements.

All Arrow Ecoburn Plus stoves MUST NOT be connected to a shared flue system.

Please Note: Classification of these appliances is for intermittent use only.

Do not use aerosol sprays or any other flammable materials near the appliance when in use.

Do not use the appliance as an incinerator.

Use only recommended fuels, STRICTLY NO unsuitable and non recommended fuels or materials or liquid fuels allowed.

Pure petroleum coke or Bituminous house coal must NOT be burned in this appliance. The use of these fuels will invalidate the appliance guarantee.

Arada recommends the use of approved smokeless fuels which have been deemed suitable for use on closed appliances, including multi fuel stoves.

If in doubt, contact The Solid Fuel Association, telephone: 0845 601 4406 / 01773 835400 or visit www.solidfuel.co.uk.

Please ensure that the air inlet vent grills to the dwelling are not obstructed or liable to be blocked.

Caution must be exercised during operation of the appliance as both internal and external surfaces will be hot to touch, use the stove mitten provided when the appliance is in operation.

A fireguard conforming to BS 8423:2002 should be used in the presence of children or elderly people.

Always observe the distances to combustible materials as stated on the appliance data plate and in the technical data section of this manual. Ensure no soft furnishings or combustible materials are susceptible to heat radiating from the appliance.

Any add in boiler options have not been certified for use in Smoke Control areas and therefore are unsuitable for use in Smoke Control Areas.

Under NO circumstances should the stove be operated for extended periods with the main fire door open. This will result in an over firing situation and will lead to severe damage to the stove and flue system.

Ignoring the warnings could lead to damage/injury to persons and/or property.

Arada Ltd will not be responsible for any consequential or incidental loss or injury however caused.

2.1 Health and Safety

Please consult health and safety guidelines for advice on handling heavy and / or large items.

2.2 Smoke control areas (The Clean Air Act 1993 & 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.

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.

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

The ECB 5F PLUS & ECB 5F PLUS-WS, have been recommended as suitable for use in a smoke control areas, when burning wood.

A factory fitted permanent stop mechanism has been incorporated in the above models, to prevent closure of the air control below acceptable limits.

The stop for secondary air control on the ECB5FPLUS-G2B is set at 20% open.

The stop for secondary air control on the ECB5FPLUS-WS is set at 50% open.

Details of this permanent stop can be found on PAGE 12.

3 Advice on fuel types

3.1 Wood

As a natural and renewable fuel, wood is the first choice for burning, however burning wood requires a little effort and planning.

Any type of wood is suitable (though hardwood is preferable) provided it is well seasoned and has a moisture content below 20%. This usually implies that the timber has been suitably stored to allow moisture to evaporate for at least 9 months in the case of soft wood, and at least 24 months in the case of hard wood. We recommend that for general burning, wood should be split into logs of no more than 100mm (4 inches) diameter.

If, when burning wood, you see signs of sticky tar inside the appliance or chimney, your wood is 'green' or too wet and requires further seasoning. An electronic moisture meter can be obtained in order to determine the moisture content of your wood fuel.

Wet wood must not be used as this will greatly contribute to the creation of tar and creosote which may, in extreme cases, run down the chimney in liquid form. This will seriously damage both the chimney and the appliance and increase the risk of a chimney fire.

Paper will burn successfully. Burn dry paper only or damage will occur to the flue or chimney with an increased risk of a chimney fire.

3.2 Solid fuel

If you have chosen a multi/solid fuel stove this will have a cast iron Patented riddling grate which allows you to burn a wider variety of fuel types. It is important to ensure that your fuel is intended for use in a stove, modern stoves are designed for use with current cleaner burning and smokeless fuels.

Arada recommends the use of approved smokeless fuels which have been deemed suitable for use on closed appliances including multi fuel stoves.

For additional advice on fuels, please refer to The Solid Fuel Association (www.solidfuel.co.uk)

4 Before using your stove

Aarrow stoves are designed to be operated with the fire door(s) closed at all times, apart from refuelling (when alight) or cleaning (when cold).

Never leave the appliance unattended for an extended length of time with the door(s) open.

Prior to lighting the stove for the first time, please check with the installer that:

- Installation and all building work is complete. (Refer to the installation guide.)
- The chimney is sound, has been swept and is free from obstruction.
- Building Regulations and any local by-laws have been followed during installation.
- All firebox liner panels and throat plate are in place.
- The chimney draw has been checked and is within specification (between 0.1mb to 0.2mb, or 10-20 pascals). This ensures your stove will operate predictably and efficiently.
- Carbon Monoxide detector is correctly installed in the same room as the appliance.
- Suitable provision for combustion and ventilation air, depending upon building regulations have been undertaken by the installation fitter.
- Consideration must be given for the need for extra ventilation if another heating source needing air is to be operated simultaneously. If an extraction fan is proposed to be fitted to a connecting area of the house, after the stove has been installed, professional advice should be sought from a qualified engineer.

Ensure that you have read and understood these instructions before lighting the fire.

Our YouTube channel, www.youtube.com/user/aradastoves features a collection of videos designed to help you get the best from your Aarrow stove.

Always wear suitable protective fire gloves when refuelling your stove, such as the Arada hot gloves supplied with your stove. Always keep the hot glove away from naked flames and sparks, when re-fuelling the appliance.

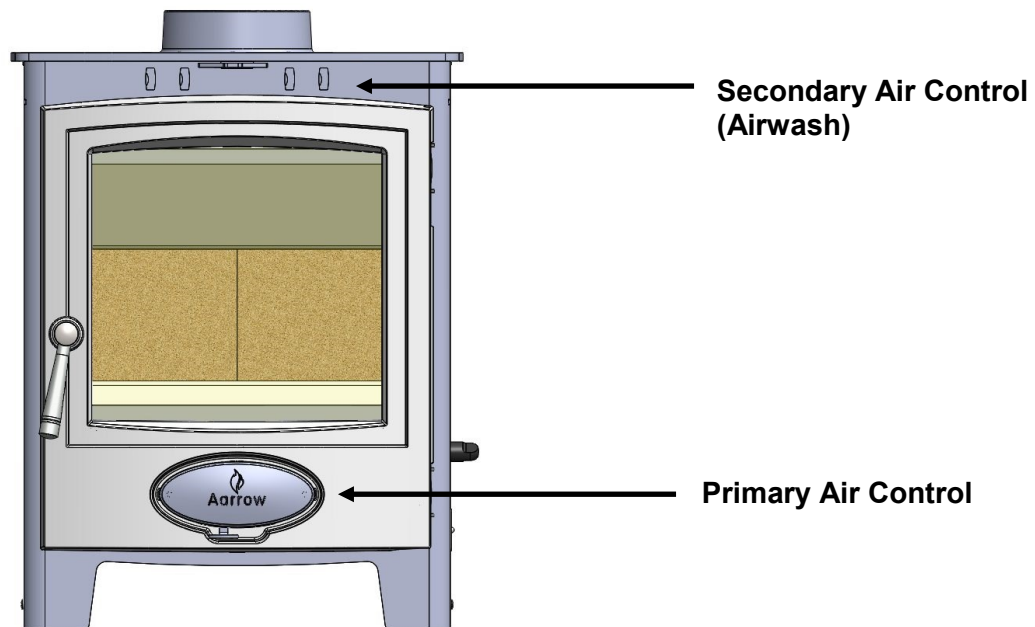
We recommend that you light a small fire for the first few days of use to cure the paint and allow the castings to relax. During this process the paint surface may smoke briefly, and you may smell a slight odour. The vapour is harmless and should not be confused with fume emissions, however, it is advisable to keep the area well ventilated until the vapour disperses.

You may hear your stove produce clicking or ticking noises whilst it heats up or cools down. This is completely normal and is produced by the expansion and contraction of the steel components in your stove when its temperature changes.

5 Air inlet controls

5.1 Location and operation of the controls

Your stove has two air inlet controls. These are located either on the stove body or the stove door.



5.1.1 Primary air

The primary air inlet provides under draught to the base of the fire chamber.

Primary air enters the appliance through the inlet near to the bottom of the fire door. Your stove has a control slider to adjust the flow of the primary air.

Sliding the knob to the right will increase the amount of air intake to the stove, as shown in position (in figure 1). To decrease, push the slider to the left, as shown in position (in figure 2).

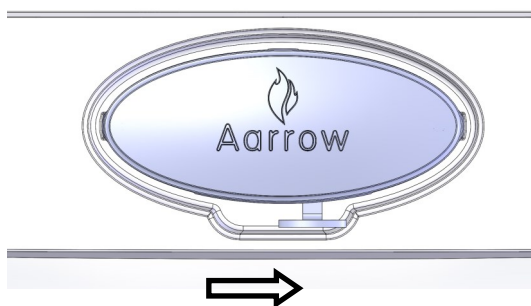


Fig. 1. Fully Open Position

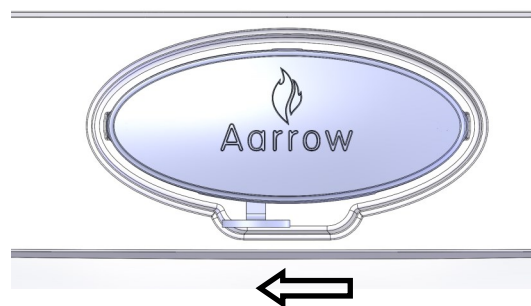


Fig. 2. Fully Closed Position

5.1.2 Airwash system / Secondary air

The secondary air provides an overdraft of air together with supplying air in front of the glass viewing panel within the door assembly. This is known also as the airwash system.

The airwash/secondary air inlet has an internal sliding plate with slots, housed inside the body of the appliance and is located above the top of the fire door.

Sliding the control knob to the right as far as it will go, achieves the fully open position, see figure 3. Sliding it to the left will shut down the air inlet slots as shown in figure 4.

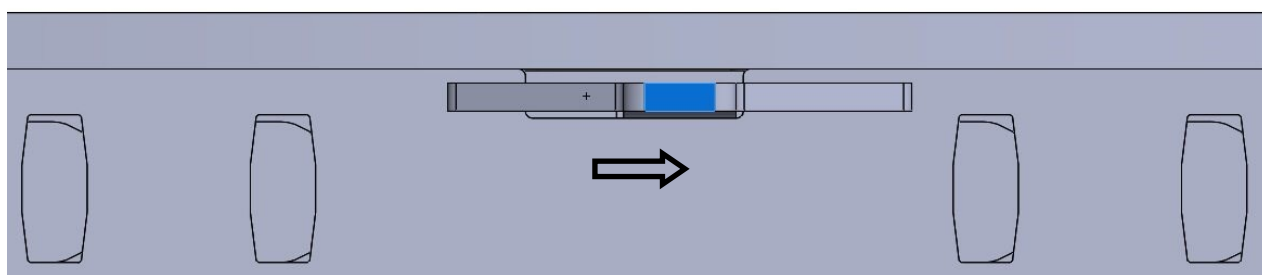


Fig. 3. Fully Open Position

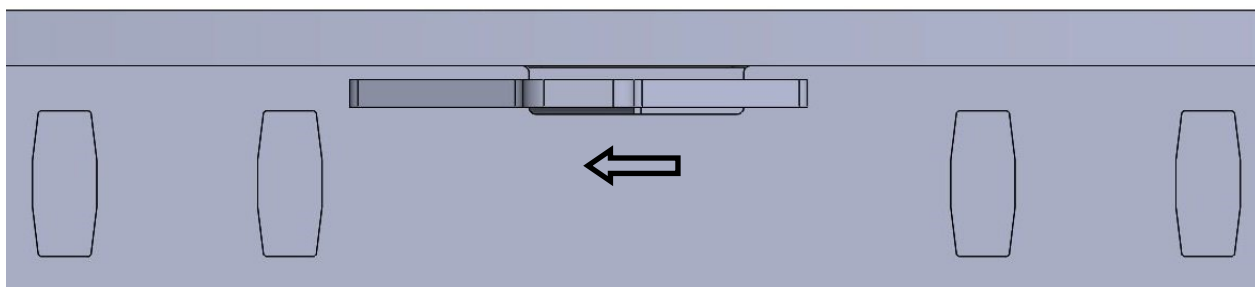


Fig. 4. Fully Closed Position

NOTE : For ECB 5F Plus & ECB 5F Plus-WS models that are fitted with the mechanical stop for smoke control areas, then please note that the airwash will not fully close as in Fig. 4.



NOTE : DO NOT COVER OR PARTIALLY OBSTRUCT THE AIR INLET OPENINGS FOR THE APPLIANCE.

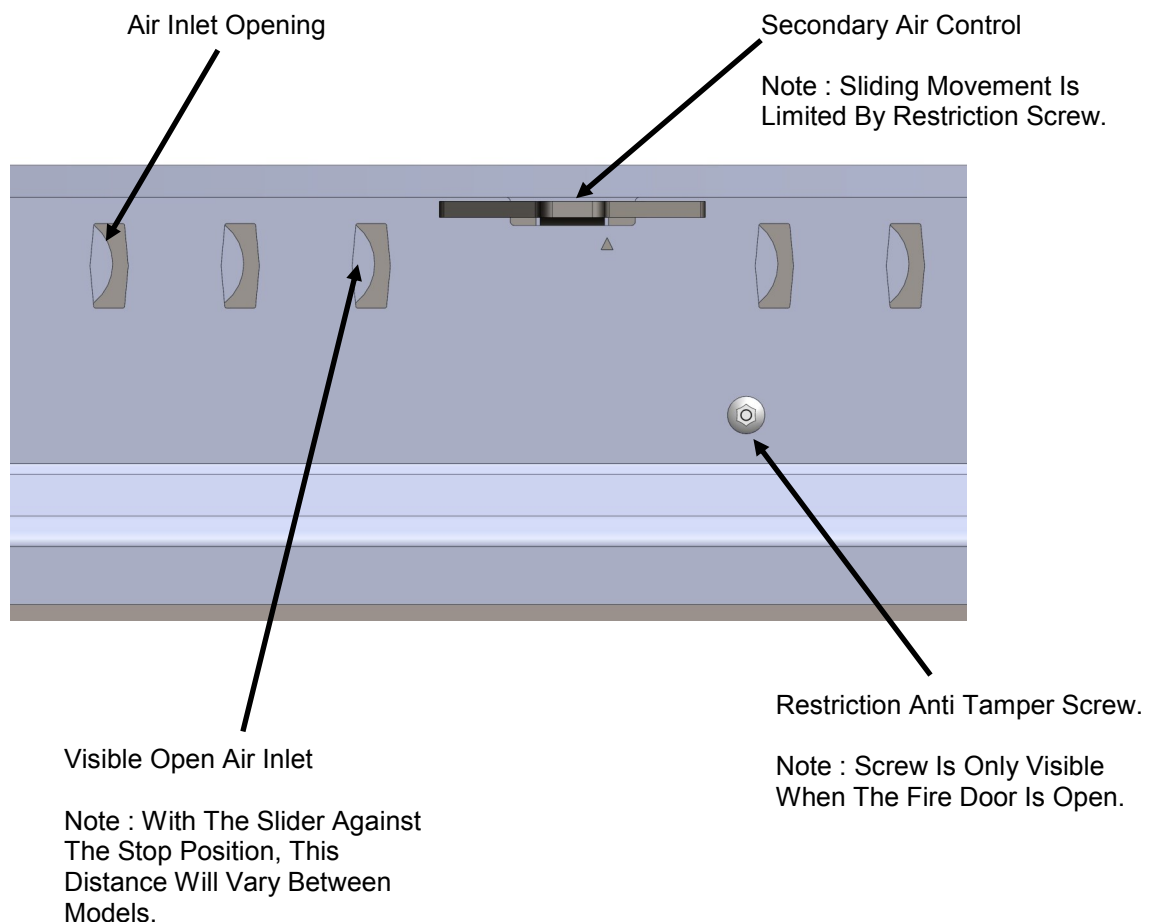


PLEASE NOTE—This Section only applies to ECB 5F PLUS & ECB 5F PLUS-WS.

5.1.3 Smoke Exemption Permanent Stop

The position of this permanent stop has been determined during independent laboratory testing to PD 6434:1969 to enable the smoke particulate emissions to comply with the smoke exemption regulations.

Part of the permanent stop mechanism comprises of a restriction (anti tamper) screw, that has been factory fitted to your stove, this acts as a limit stop for the sliding air wash control and thus prevents full closure, reducing smoke emissions.



The stop for the secondary air control on the ECB5FPLUS-G2B is set at 20% Open.

The stop for the secondary air control on the ECB5FPLUS-WS is set at 50% Open.

6 Lighting your stove

6.1 Smoke Control Areas

Please check whether your dwelling is located in a smoke control area before installation or use. Please check with your local authority or <https://www.gov.uk/smoke-control-area-rules>.

6.1.1 Fuel overloading

The maximum amount of fuel specified in this manual should not be exceeded, overloading can cause excess smoke. Please see technical data section in this manual.

6.1.2 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.

6.1.3 Dampers / Air controls left open

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

6.2 Burning wood

When wood is burnt, it is in fact the volatile gases released from the wood, that burn and this requires a good supply of air coming from above the fuel. For this reason we will use all the air inlets while igniting the stove, but will then reduce this to air coming from the airwash system and over draught. As much as 40% of the heat from burning wood is obtained from secondary combustion and this can be severely hampered by air entering the fire box from below the fuel via the primary air inlet control.

- 1) Set the fire by using scrunched up newspaper and placing a layer of dry kindling wood on top of this. The use of two or three fire lighters may assist in lighting the kindling.
- 2) Fully open your air controls and light the fire lighters and or paper.
- 3) After the kindling has caught light, you should almost close the fire door leaving it ajar by about 10mm. This will aid flue draw during the initial lighting of the fire.
- 4) The flue temperature and draw should be established after five minutes and the kindling reduced to form an ember bed. Carefully load the stove with well seasoned wood and fully close the fire door.
- 5) After ten minutes, close the primary air control fully as generally no air below the grate is required for wood burning and regulate the airwash system to control the burn rate and maintain clear glass, typically by reducing to approximately half open.

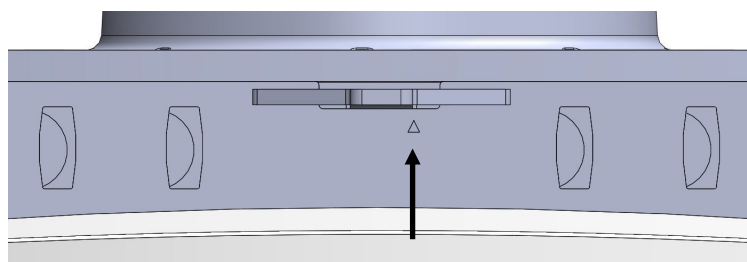


Fig. 5. Nominal Burn Position

6) On the ECB 5F Plus & ECB 5F Plus-WS stoves, a triangular mark within the front of the body is shown as the ideal position for the airwash control to achieve the nominal heat output. See fig. 5 below,

6.3 Burning solid fuels

Solid fuel burns best with its air supply for combustion coming from underneath the fuel. To achieve this the burn will be controlled by the primary air control (see Fig 1 & 2). This allows you to control the flow of air, underneath the grate. Riddling the stove occasionally will also help to ensure that burnt fuel does not prevent the supply of air from reaching the fire bed.

Please do not attempt to burn solid fuels in a dedicated wood burning stove. To burn solid fuel, your stove must have a cast iron grate to withstand the higher temperatures involved. To do so could damage your stove and will void your warranty.

- 1) Set the airwash (secondary) (see Fig 3 & 4) air slider to about one quarter open and the primary air slider fully open (see Fig 1).
- 2) Light as with wood fuel (see steps 1,2 and 3 on page 11), with kindling and fire lighters.
- 3) Once the flue draw has been established, after about five minutes, carefully load the stove with fuel and close the door.
- 4) When the fire is well alight regulate the burning rate by controlling the primary air inlet control.
- 5) The airwash should be opened sufficiently to keep the door glass clean. Whilst burning solid fuel it can be beneficial to occasionally riddle the grate bars so any burnt fuel will fall between the grate bars into the ash pan below. This will ensure a good under draught is maintained. This should be done with the supplied operating tool whilst wearing protective gloves.

6.4 Warning - Fume / Smoke emissions

Properly installed, with a suitable flue or chimney, operated and maintained correctly, this appliance will not emit fumes into the dwelling. Occasional fumes when de-ashing and refuelling may occur. However, persistent fume emission is potentially dangerous and must be investigated by a approved / registered installer.



Stop using the appliance if you smell fumes or see smoke escaping.

If fume emission does persist, the following immediate actions should be taken:

- Open doors and windows to ventilate room.
- Let the fire die or extinguish and safely dispose of fuel from the appliance.
- Check for flue or chimney blockage, and clean if required.

Seek expert advice from your approved installer. Do not attempt to re-light the fire until the cause of the fume emission has been identified and corrected.

6.5 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. 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 for ignition to prevent excessive smoke.

Important notes on usage to meet the requirements of Smoke Control exemption -

- **Always recharge onto hot embers.**
- **After re-charging, leave the door ajar for approximately 3 minutes to establish good combustion.**
- **Do not leave the appliance unattended until flames are well established.**
- **Periodic burning out of the fuel bed at high output to combust any remaining charcoal.**

NOTE :

The minimum air control setting is governed in manufacture to meet the requirements of Smoke Control exemption and as a result the appliance will **NOT** shut down completely when in the minimum air position setting.



NOTE : It is recommended that wood logs are place centrally against the rear liners, within the firebox to ensure the most efficient use of the fuel.

6.6 Typical wood burn for nominal output

To perform the most efficient burn at the nominal rated output please consult the specification table at the rear of this manual. Please note, many factors can effect the nominal output, so the stated weights of fuel (Seasoned Hard Wood) are a guide, which is a representation to laboratory burn conditions.

7 Further information for all stove owners

7.1 Door glass

The door glass should remain clear during normal burning. However under certain conditions, such as burning at a low or slow rate, using damp wood or overnight burning, the glass may become somewhat blackened. To remedy this, operate the appliance at a fast rate. Alternatively when the stove is cold, open the door and clean the inside face of the glass with a damp cloth or with glass cleaner (www.aradastovesandspares.com or Arada dealers).

7.2 Reduced burning (Slow Combustion)

When wood is burnt slowly in a closed appliance (eg: air controls at the minimum setting), it produces moisture and tar, which will create condensation and deposits in the chimney. This effect can be minimised by burning hard for a short period, fifteen to twenty minutes twice a day.

To avoid chimney problems your appliance should not be burnt at a reduced burn rate without a period of fast burning. Fast burning is when the stove is burnt with a 'lively flame' and a higher temperature. We strongly advise against stoking the fire with wood and reducing the air intake(s) before leaving the stove to extinguish (perhaps when retiring to bed) as this can lead to a cooling of the stove and flue also resulting in incomplete combustion, sooty deposits and high levels of pollutant gases released into the environment.

7.3 Over firing

DO NOT over fire your appliance. Firing the stove at maximum for prolonged periods may result in over-firing. If the chimney connector or casing glows red the appliance is being over-fired and this may result in a chimney fire. Other signs include warping and a red-oxide colouring will demonstrate the over- heating of internal parts; body paint which has turned dusty white is also indicative of such use.

7.4 Chimney fires

Used in the correct manner, with the correct fuel and regular maintenance a chimney fire should never occur, however in the even of a chimney fire, the following procedure should be actioned without delay:

- **Call the fire service—DIAL 999**
- **Immediately close all of the air inlet supplies on the appliance, to reduce the air supply to the stove.**
- **Move items of furniture and combustibles away from the surrounding area of the stove, to reduce the risk of fire and allow access for the fire service.**
- **Ensure access to the loft space is available.**
- **Evacuate the property.**

7.5 Ash removal

The ash pan should be emptied when the level of ash reaches the top of the ash pan. On no account should the ash be allowed to build up to touch the underside of the grate bars, as this will greatly reduce the life span of the grate.

To remove ash use the supplied operating tool & hot glove-

- Open the door of the stove, pausing briefly when ajar so as to allow the fire to adjust to the increased air supply.
- Put the fork end of the operating tool into the slots of the ash pan and remove from the ash pit chamber.
- Empty the ash into a suitable container and replace the ash pan into the stove, withdraw the operating tool and close the fire door.

Warning: The ash can be very hot. Care must be taken not to burn hands or household objects with falling embers—ALWAYS USE THE HOT GLOVE SUPPLIED.

Empty only into a metal container. Even if the ash appears cold, red-hot embers may be concealed and could easily start a fire or cause an injury.

7.6 Periods of non-use (summer months)

Please ensure that your stove is left clean and moving components are well lubricated with a water repelling corrosion inhibitor for the summer months (during periods of prolonged non-use). If possible store the throat plate outside of the stove. Check all moveable components at regular intervals, to ensure they are moving freely. Allow air movement through the stove by opening the airwash and primary air inlet control(s) to about half way, open or leave the door ajar. This will allow a free flow of air through the appliance thus preventing moisture and condensation forming inside the stove and chimney. This preventative maintenance will ensure your stove stays in the best condition for the coming winter months.

7.7 Classification

All Ecoburn stoves are classed as intermittent operation . There by meaning, to give nominal rated output, you will have to refuel a minimum of 45min for wood or 1hr for solid fuel, as stated in EN 13240:2011 +A2:2004, however, all Ecoburn stoves exceed the minimum refuelling time and the nominal outputs are quoted at 1hr burn rates for wood.

7.8 Adverse Weather Conditions

If due to adverse weather conditions your stove does not operate correctly and causes the stove to emit smoke, do not treat it as a nuisance, this smoke will indicate that carbon monoxide is being emitted into the room. Extinguish the stove by reducing the firing rate, open windows and allow the stove's fuel to burn out before closing the windows. The probable cause is insufficient draw, check flue ways and have the chimney tested for flue pressure.

7.9 Replacement parts

Genuine replacement spare parts can be obtained from www.aradastovesandspares.com or your Arada dealer.

You can find a complete list of spares and consumables such as liners, grate bars and throat plates as well as items to enhance its visual appearance and efficiency such as stove paint and rope kits.

It is worth noting that the fitting of non-official Arada parts to your stove will invalidate its guarantee.

8 Further information for multi fuel stove owners

8.1 *Flexifuel* grates

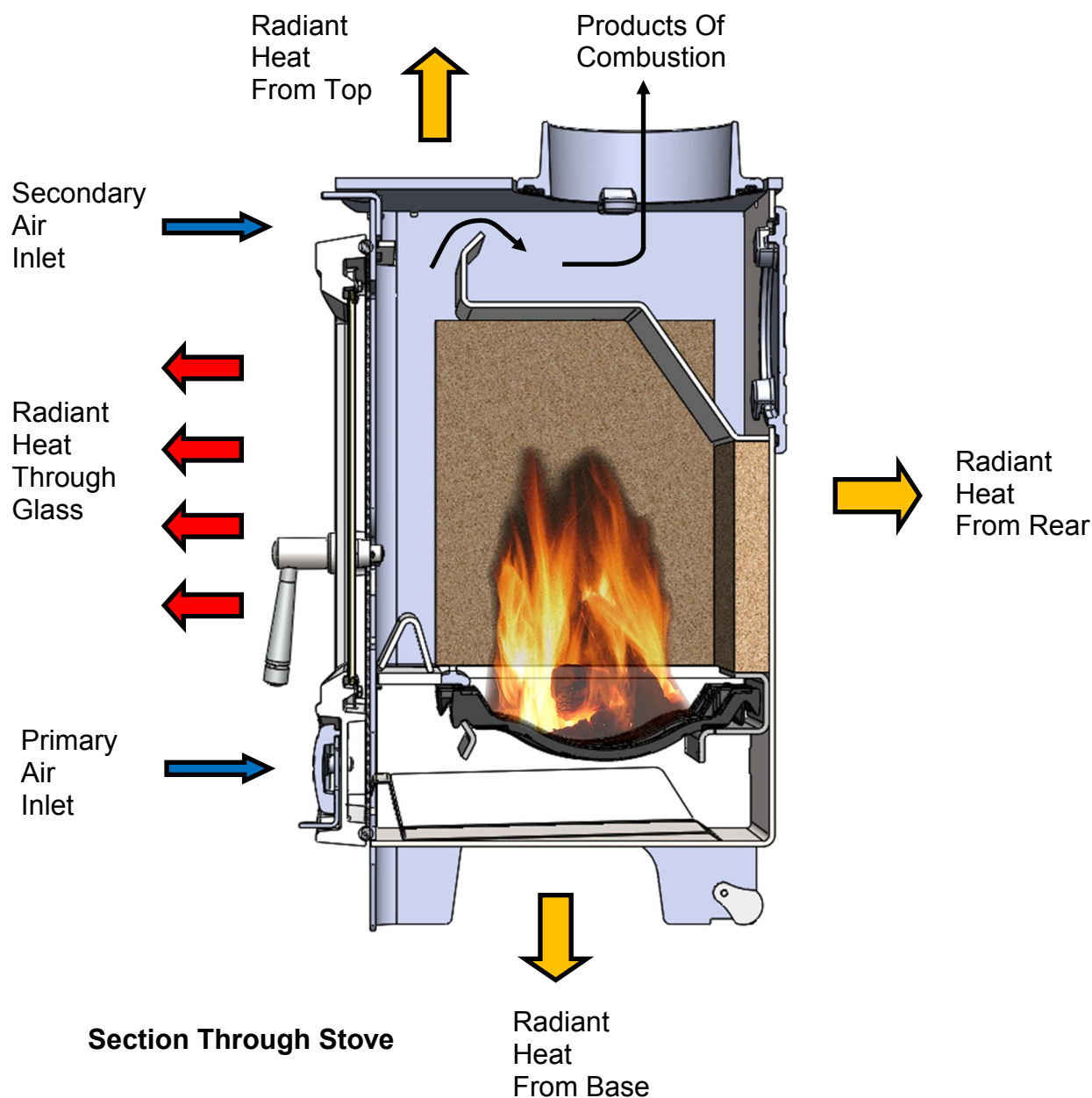
The Patented grate system in your Aarrow stove comprises of a series of reciprocating cast iron bars seated on a pivoted comb. These should come pre-assembled in your new stove. All bars in the grate are identical, but every other bar is turned 180 degrees, with the ends of the bars marked "H" sitting on the high sections of the comb, and the ends marked "L" sitting on the low sections.

The riddling lever, situated on the right hand side of your stove, can be operated with the stove operating tool to riddle ash into the ash pan below. Only riddle the stove with the door closed unless your stove requires you to open the door to access the riddling mechanism.

Stop riddling once red embers begin to fall into the ash pan.

After extended use it may be necessary to replace some of the grate bars.

9 How heat is delivered by your stove



9.1 Radiant heat

All Arrow stoves radiate heat into the room. The radiated heat is most intense at the front of the stove, especially through the door glass and less intense the further you move away from the stove.

This radiated heat is delivered as infrared rays which heat the objects they strike. It is then these objects (such as the chimney breast, hearth etc.) which heat the surrounding air.

Please note, the ECB 5F Plus & ECB 5F Plus-WS stove models have a heat shield fitted at the base of the appliance to reduce under hearth temperatures and thus is permissible to be used on a non constructional hearth.

10 Care for your Aarrow stove

The need for regular maintenance on your stove will ensure, safe and efficient use of your appliance. The following item listing should be checked and inspected by a competent person or engineer on a regular basis.

10.1 Adjusting the door hinges

Once the appliance has been under fire for a period of time the fire door may appear to have moved out of alignment with relation to the door aperture or catch. This is quite normal and due to the settling of the casting.

If the fire door needs to be raised, please follow the instructions below:

When the appliance is cold, open the fire door so that it is at right angles to the front of the stove and lift the fire door up off the hinges.

Drop one washer on the top and bottom hinge pins. Fit the door and check. Repeat again if necessary.

10.2 Liners / firebricks

The stoves liners (also known as firebricks) may become cracked after long periods of heavy use or after being knocked by the loading of fuel or a poorly aimed fire poker. If the liners are still staying in situ and are able to support the throat plate correctly there is no need to replace them. Cracked liners will not in themselves effect the performance of the stove.

10.3 Throat plate

The throat plate should be removed from the stove and checked once a month and any accumulated deposits should be cleaned off. This is best done with a brush. After a period of time the throat plate may begin to corrode. If it is distorted it will require replacing.

A replacement throat plate can be sourced from your dealer or www.aradastovesandspares.com.

10.4 Fire door seal

The rope seal around the edges of the main fire door should also be checked. Look for signs of fraying, peeling away or the ends not meeting. If the rope is unable to create a good seal with the stove body it should be replaced. A poor seal will decrease your ability to control the burn rate and its efficiency whilst leading to an increase in heat lost through the flue.

10.5 Cracked glass

It is not recommended to operate the stove with cracked glass; this can lead to over firing due to air leaking into the firebox and it may fail completely leading to personal injury or a fire.

You should discontinue use of your stove until it has been repaired. You can source replacement glass kits from **www.aradastovesandspares.com** or your Arada dealer.

10.6 Chimney / Flue Sweeping

Sweeping should be carried out with an appropriate sized bristle brush and rods to suit chimney size and type. As with all appliances regular sweeping of the flue / chimney is essential to avoid dangers of blockage and the escape of poisonous fumes. Access for cleaning should also be incorporated in the chimney (eg: soot door or access through the register plate etc).

It is important that the flue connections, flue pipe and chimney be cleaned prior to lighting after a prolonged period of non use.

11 Further resources / reading

Once again we would like to thank you for buying your Aarrow stove.

11.1 Information

We appreciate that we have given you a lot of information to read, but we hope it has been clear and helpful and that you are now able to enjoy the full benefits of your stove.

However if you have any queries, doubts or would like further advice please do not hesitate to speak to your Aarrow dealer or call us. You will find our contact details below, as well as a list of resources where you can discover more information about your stove and associated articles.

- Arada Technical Support
01297 35998
technical@aradastoves.com

- Arada Stoves Support Site
www.aradastoves.com/support

- Competent Person Schemes
<https://www.gov.uk/guidance/competent-person-scheme-current-schemes-and-how-schemes-are-authorised>

- Solid Fuel Association
www.solidfuel.co.uk

- Document J Building Regulations (Combustion Appliances)
www.planningportal.gov.uk/

- The National Association of Chimney Sweeps (NACS)
www.nacs.org.uk/

11.2 Specifications

All Aarrow Ecoburn Plus stoves are manufactured and independently tested to EN standard 13240 and are CE marked. Within the above EN standard, material specifications and criteria are defined.

12 Guarantee

When you buy an Arada stove, you are not only buying a first class appliance, you are receiving a commitment from us to look after you and your appliance.

12.1 Guarantee

If any part of the main body of the stove fails due to a manufacturing or material defect during the guarantee period that applies in respect of the relevant stove (as set out below), Arada will, at its sole discretion, repair or replace your Arada stove, for no charge.

For the purposes of this guarantee, a material or manufacturing defect includes the splitting or cracking of the main body (defined as the steel outer casing and items fixed immovably to the casing).

Damage caused by over-firing or over-heating is not covered (as described in the operation manual). Warping and a red-oxide colouring will demonstrate the over-heating of internal parts; body paint which has turned dusty white is also indicative of such use.

The following guarantee periods shall apply in respect of the following Arada stoves:

Arrow stoves come with a lifetime guarantee to the main body.

The external paint finish carry a one-year guarantee only.

This guarantee is subject to the Terms and Conditions set out below.

12.2 Terms and Conditions

The following terms and conditions must be satisfied in order for your stove to be covered by the guarantee set out above:

1. Your stove must have been purchased from an officially approved Arada dealer.
2. You must be the original purchaser of the stove in order to make a claim. This guarantee is not valid in relation to any claims made by someone who did not originally purchase the stove from Arada or an approved Arada dealer.
3. Any claim under this guarantee must be made through the approved Arada dealer where the stove was purchased and accompanied by proof of purchase (e.g. a valid receipt). Stoves not purchased from an approved Arada dealer will not be covered by this guarantee.
4. Your stove must be installed in the UK for this guarantee to be valid. Stoves installed outside of the UK will not be covered by this guarantee.

5. Your stove must have been installed by a suitably qualified person and in accordance with the manufacturer's installation instructions. Stoves not installed by a suitably qualified person or not installed in accordance with the manufacturer's installation instructions will not be covered by this guarantee.

6. Any claims under this guarantee shall not be valid where the installation of the stove does not conform to all required building regulations and other legislation in force at the time of purchase and where flue draw readings have not been made to confirm a suitability of the flue. The manufacturer's decision as to whether this condition has been satisfied shall be final.

7. The guarantee does not cover damage caused to the stove through careless handling or misuse or neglect of the appliance (misuse and neglect being not following the manufacturer's instructions and user guides in relation to the stoves, including the use of non-recommended fuels).

8. The following consumable service items are not covered by this guarantee:

- Firebox linings
- Grate bars
- Fuel retainer
- Throat plate
- Gaskets
- Door glass
- Seals

9. The guarantee does not cover damage caused by storing or using the stove in a damp environment, defects or faults caused by local conditions such as draught problems and chimney defects or corrosion caused by condensation, damp or water ingress into the flue, chimney or the surrounding of the stove.

10. The guarantee is only valid if the stove is serviced and checked annually by a suitably qualified heating engineer, with documentation to be retained and produced in the event of a claim being made.

11. The guarantee is only valid where any spare parts used are supplied by Arada or an approved Arada dealer. The use of spares other than those supplied by Arada Limited shall invalidate the guarantee. Parts can be purchased through an approved dealer or directly from Arada, online at www.aradastoveandspares.com.

12. The guarantee is not valid where any repairs or modifications have been made to the stove which have been carried out by anyone other than Arada or its authorised representatives or approved dealers.

13. All guarantee periods commence on the date of purchase and are non-transferable and solely for the benefit of the original purchaser of the stove.

12.3 General

Our guarantee is offered as an addition to your statutory rights and will not effect your statutory rights. You can obtain information about your legal rights from trading standards office's or a citizens' advice bureau.

If you believe your appliance is not working correctly or it has broken down, in the first instance please contact your local retailer or installer for assistance.

This guarantee is applicable in the UK only and operates exclusively in accordance with the laws of England and Wales.

13 Technical specification

TECHNICAL DATA	ECB 4 Plus	ECB 5 Plus	ECB 5 Plus Widescreen
Nominal Heat Output (Kw)	4.5	4.9	4.99
Efficiency Nett (%)	86.3	80.3	79.3
Mean Flue Gas Temperature (°C)	187	206.7	178.4
Mean CO Emission @ 13% O ₂ (%)	0.39	0.39	0.21
Flue Mass Gas Flow (g/s)	2.9	4.69	6.96
Minimum Distance to Combustible materials (mm)	Rear = 700 Side = 500	Rear = 375 Side = 300	Rear = 300 Side = 300
Height (mm)	535	550	600
Width (mm) Across Canopy	363	431	541
Depth (mm) (Inc. Handle)	365	365	365
Height To Centre Of Rear Flue (mm)	436	442	484
Depth From Back To Flue Centre (mm)	94	102	108
Flue Diameter (mm)	102 (4")	127(5")	127(5")
Weight Packed (Kg)	55 Kg	68 Kg	82 Kg
Weight Nett (Kg)	50 Kg	63 Kg	77 Kg
Ideal Log Length (mm)	240	300	380
Maximum Hearth Temperature (°C)	59.1	61.2	62.9
Typical Fuel Load To Achieve Nominal Rated Output Per Hour (Kwh/Kg) (Seasoned hardwood)	1.22	1.44	1.43

TECHNICAL DATA	ECB 7 Plus	ECB 9 Plus	ECB 11 Plus
Nominal Heat Output (Kw)	6.1	8.8	11
Efficiency Nett (%)	72.1	71.6	74.7
Mean Flue Gas Temperature (°C)	363	364	370
Mean CO Emission @ 13% O ₂ (%)	0.58	0.68	0.71
Flue Mass Gas Flow (g/s)	4.9	6.9	6.9
Minimum Distance to Combustible materials (mm)	Rear = 650 Side = 550	Rear = 750 Side = 500	Rear = 800 Side = 500
Height (mm)	585	600	638
Width (mm) Across Canopy	465	541	625
Depth (mm) (Inc. Handle)	365	365	381
Height To Centre Of Rear Flue (mm)	477	492	529
Depth From Back To Flue Centre (mm)	102	102	121
Flue Diameter (mm)	127(5")	127(5")	127(5")
Weight Packed (Kg)	73 Kg	82 Kg	97 Kg
Weight Nett (Kg)	68 Kg	77 Kg	92 Kg
Ideal Log Length (mm)	350	380	500
Maximum Hearth Temperature (°C)	45	45	67.5
Typical Fuel Load To Achieve Nominal Rated Output (kg/Kwh) Seasoned Hardwood	1.92	2.76	3.46



Aarrow is a brand name of Arada Ltd

All Aarrow ECOBURN PLUS Stoves are manufactured in the UK



Arada Ltd

Weycroft Avenue - Axminster - Devon
EX13 5HU
United Kingdom

www.aradastoves.com

T: +44 (0)1297 35700

info@aradastoves.com