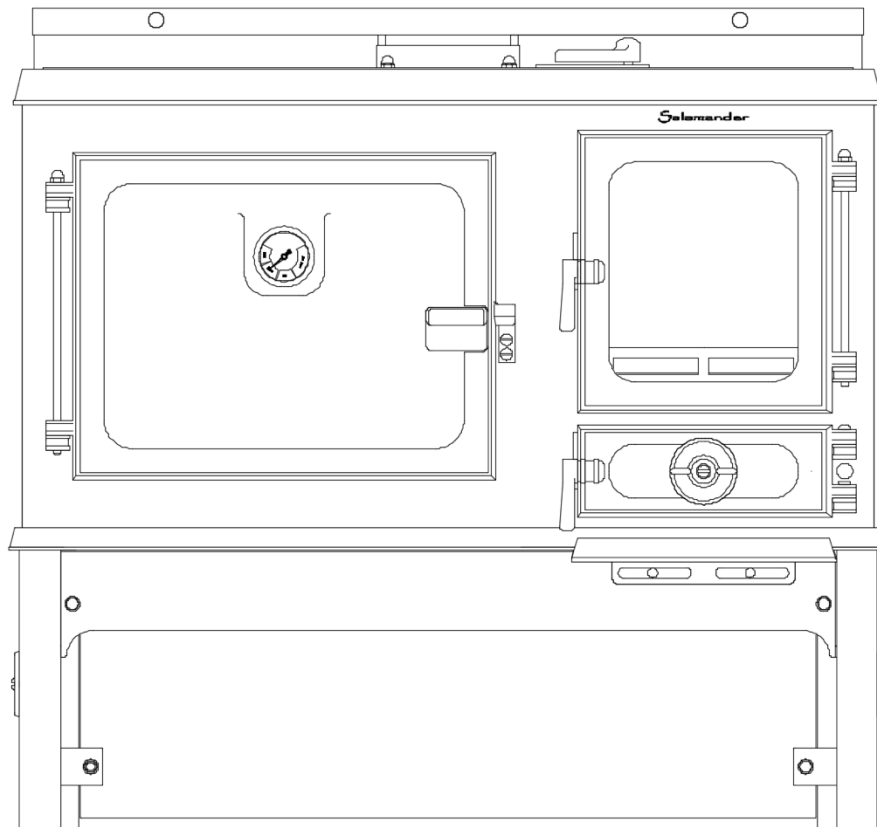


Installation and Operating Instructions



The Salamander SE Eco Range
Model 1701 SE Eco

**Installation and Operating Instructions for The
Salamander SE Eco Range
Model 1701 SE Eco
(Ref 1701 SE Eco Jan 2021)**

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Thank you for your purchase. You are now the proud owner of a Salamander SE Eco Range! All of our stoves are hand-finished at our workshop in the beautiful Devon countryside. We are confident that if the appliance is installed, maintained, and cared for correctly, then your Salamander SE Eco Range will provide you with many years of warmth and enjoyment.

PLEASE READ THESE INSTRUCTIONS CAREFULLY

For your safety, it is very important that your stove is installed and used correctly. Take care when assembling and moving the stove. It is made of cast iron and is very heavy (90kg).

1 - Important Information - Installing and Using The Stove

- When installing the stove, you must comply with all local and national regulations, including those referring to national and European standards.
- The stove must be installed by a registered installer, or the installation must be approved by your local building control officer.
- The stove must only be used for domestic heating purposes.
- Please make sure that you only burn approved fuels (wood or eco logs with a moisture content below 20%, coal, or smokeless fuel). Do not use pellets, peat or petroleum-based products, and do not use the stove as an incinerator for other items or general waste.
- The stove will get very hot whilst in operation and due care should be taken. Only use the multi-tool provided to operate the door handles, air controls, the oven control, the oven door, the riddling control, and the ash pan. Please refer to the health and safety precautions on page 14 for more guidance.
- The stove must not be installed into a chimney that serves any other appliance. The stove is suitable for intermittent burning.
- There must be a suitable air supply into the room where the stove is installed, and care should be taken not to block the air inlets to the stove.
- There must not be an extractor fan in the same room as the stove. This will restrict the draw of the appliance, and may cause fumes to be emitted into the room.
- Do not make unauthorised changes or modifications to the stove. Only use genuine spare parts from Salamander Stoves.
- The stove and chimney flue must be cleaned regularly. It is especially important to check for blockages following a prolonged shutdown period. It is recommended that the stove and flue is regularly maintained by a competent engineer.

2 – Unpacking

PLEASE TAKE CARE

The stove is made of cast iron and is very heavy.

After you have unboxed the stove, carefully open the firebox door and remove the packaging. Inside the stove, there will be the following items:

Packing List

- | | |
|----|--|
| 1 | Stove body with centre grate installed |
| 2 | Left fire brick (already fitted) |
| 3 | Right fire brick (already fitted) |
| 4 | Baffle plate (already fitted) |
| 5 | Fire bars |
| 6 | Ash pan |
| 7 | Salamander Multi-tool |
| 8 | Mini dustpan and brush set |
| 9 | Removable chrome oven shelf |
| 10 | Magnetic stove thermometer |

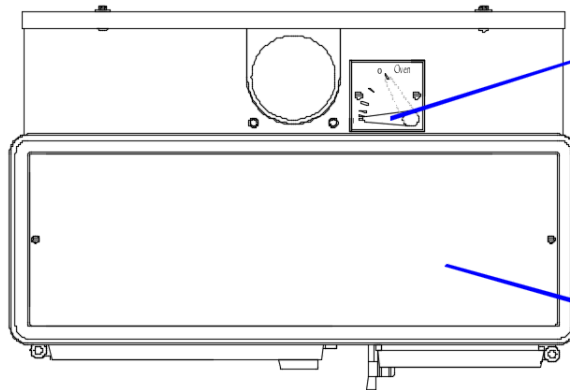
3 – Assembly of The Salamander SE Eco Range

- 3.1. The stove is supplied with the flue collar fitted to the top of the stove. The centre grate, fire bricks and the baffle are already installed for you.

- 3.2. Check that the grate and grate centre are located correctly. The grate should sit horizontally inside the stove. Check that the riddling mechanism operates and moves freely.

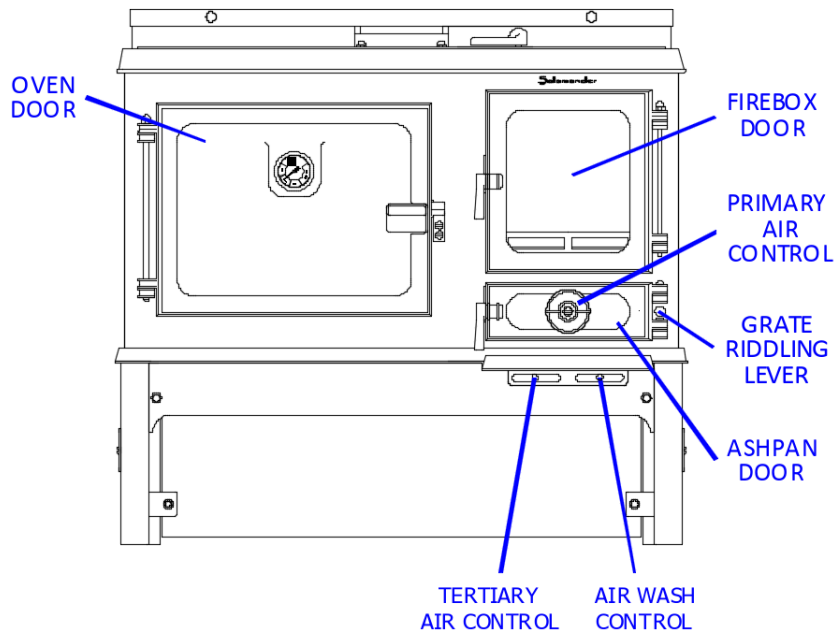


4 – Components



OVEN
TEMPERATURE
CONTROL

HOTPLATE



OVEN
DOOR

FIREBOX
DOOR

PRIMARY
AIR
CONTROL

GRATE
RIDDLING
LEVER

ASHPAN
DOOR

TERTIARY
AIR CONTROL

AIR WASH
CONTROL

5 – Installation

PLEASE READ THESE INSTRUCTIONS CAREFULLY

For your safety, it is very important that your stove is installed and used correctly. Salamander Stoves cannot accept responsibility for any fault arising through incorrect installation or use.

5.1 **Regulations**

When installing the stove, you must comply with all local and national regulations, including those referring to national and European standards.

5.2 **Installation**

The stove must be installed by a registered installer, or the installation must be approved by your local building control officer.

5.3 **Safety clearances**

You must install the stove in accordance with the minimum safety clearances from combustible materials. These are provided below:

Salamander SE Eco Range	Side	450mm
	Rear	500mm

Salamander SE Eco Range	Side	250mm
(Fitted with optional side and rear heat shields)	Rear	200mm

If the stove is going to be installed into a non-combustible recess, then we recommend leaving 100mm of clearance at the back and sides of the appliance. This will enable easier access for any maintenance work, and will allow air to circulate around the stove.

Please note: any connecting flue that is used in the installation should be installed in accordance with local and national regulations. The flue will need to be installed in accordance with any applicable safety distances. In the UK, this is specified in Building Regulations Part J.

5.4 **Floor**

Local and national building regulations must be complied with when considering the floor, or hearth, where the stove is going to be installed. The floor must be capable of bearing the weight of the stove and the hearth temperature.

The stove will need to be sited on a non-combustible hearth which is at least 12mm thick. You will also need to have at least 225mm of space from the front of the stove to the front of the hearth. This improves your safety if any fuel happens to fall out of the stove when you go to refuel the appliance.

5.5 **Access for cleaning**

Although access to the flue can be gained by removing the stove firebox components, consideration must be given to installing extra access in the flue system to ensure all sections can be cleaned and maintained.

6 – Operating Instructions

6.1 Fuel

Wood

Only burn seasoned timber with a moisture content of less than 20%. Typically, this means wood which has been cut and stored in an open, dry shelter for one-to-two years. You can also burn kiln dried wood from a reputable manufacturer.

The maximum log size is 200mm x 100mm x 100mm (8" x 4" x 4").

DO NOT BURN wet or unseasoned wood, construction timber, painted or treated wood, driftwood or manufactured board products. Doing so will result in the wood burning inefficiently, and excess smoke, soot, and tar will be produced. This will coat and damage the internal components of the stove and flue. It could also result in a chimney fire.

Solid Fuel

Use only manufactured smokeless fuel listed as suitable for use in closed heating appliances.

The Salamander SE Eco Range is a multi-fuel stove that can also burn eco logs/compressed sawdust briquettes, but **DO NOT BURN** pellets, peat, bituminous coal, any petroleum products, or liquid fuels.

6.2 Before Lighting

Check that the flue is clear and unobstructed before using the appliance for the first time, or if the stove has not been used for a long period of time.

Check that the riddling control is free to move and is pushed fully in towards the stove.

Check that the ash pan is empty, in position, and the ash pan door is closed.

WARNING

The stove has been coated with a heat resistant paint. During the first few times that the stove is being used, the paint may give off small amounts of smoke and odours whilst it cures. Please ensure that the room is well ventilated. This is completely normal for this type of appliance.

To aid the process and to help prevent damaging the stove's finish, it is best to light a few small fires when the stove is being used for the first time. Start off by burning a couple firelighters, and then a handful of kindling. Let each fire go out and allow the stove to completely cool down before lighting the next fire. Gradually increase the size of each fire and avoid firing the appliance vigorously, as this can cause the paint to develop a cracked and/or bubbled finish.

Salamander Stoves takes no responsibility for stoves which have been incorrectly cured.

6.3 **Air Controls**

The Salamander SE Eco Range is fitted with three air controls.

Primary Air Control

Located on the front of the ash pan door, the primary air control directs air into the base of the fire. It is only required when burning solid fuel.

When burning wood, the control must be kept fully closed (rotate clockwise).

Failure to do so will reduce the efficiency of the stove, and will increase the amount of smoke and carbon monoxide that will be released into the atmosphere.

Air Wash Control

Located below the ash pan door on the right-hand side, the air wash control directs air down the glass window and onto the fire that will be burning on the grate.

Lever to the left – minimum air wash

Lever to the right – maximum air wash

When burning wood, the control is used to regulate the burn-rate of the fuel on the grate.

When burning solid fuel, the control should be slightly open to ensure that the glass is kept clear.

Tertiary Air Control

Located below the ash pan door on the left-hand side, the tertiary air control directs air into the space above the fire.

Lever to the left – minimum tertiary air

Lever to the right – maximum tertiary air

When burning wood, the control is used to regulate the secondary burn of the gasses above the fire.

When burning solid fuel, tertiary air is not required and the control should be set to the minimum (lever to the left). Failure to do so will reduce the efficiency of the stove, and will increase the amount of smoke and carbon monoxide that will be released into the atmosphere.

6.4 **Lighting A Wood Fire**

- When burning wood:

Ensure that the primary air control is fully closed (turn the airflow wheel on the ash pan door fully clockwise)

Make sure that the air wash control is set to the open position (right-hand control below the ash pan door, fully to the right)

Have the tertiary air control halfway open (left-hand control below the ash pan door - central position)

- Turn the oven temperature control to "0" (All flue gasses will go directly up the chimney and reduce the time required to heat the flue to working temperature)
- Place 1 or 2 firelighters onto the fire grate, with a handful of kindling. Light the fire with a taper.
- When the firelighters are burning, leave the door ajar about 1 to 2 cm to achieve a good draw and to avoid condensation. Allow the burning kindling to warm up the chimney.
- After 2 to 5 minutes, the chimney should be warm enough to create a good draw, and the door can be closed.
- Once the kindling has formed a good bed of glowing embers, the stove can be refuelled with 2 or 3 pieces of wood. Do not be tempted to overfill the firebox. This could result in fuel falling onto the glass or falling out of the firebox when the door is opened. Overfilling the stove can also lead to excess smoke.

You can now close the top door. Once the new fuel is fully burning, the air wash and tertiary air controls can be adjusted to obtain the desired burn-rate.

When opening the top door of the stove, always open it gently for the first 2 to 3 cm to allow the pressure to equalise and to stop any smoke from escaping.

The stove should not be operated with either door left open for long periods of time, as excess smoke may be generated.

The stove doors should never be left open when the stove is in use.

Under normal chimney draught conditions, you can expect to refuel the stove every 45 to 60 minutes.

Operating the stove with the air controls open can cause excess smoke. The stove must not be operated with the air controls or the doors left open, except as directed in these instructions.

Refuelling

If there is insufficient fuel burning in the fire bed to light a new piece of fuel, then excessive smoke can occur. New fuel must be placed onto a sufficient bed of glowing embers and/or flames to ensure that the new piece of fuel catches alight and burns steadily. If there are too few embers in the fire bed, add suitable kindling to prevent excessive smoke.

Remember:

Smouldering wood which is producing smoke without a flame will be burning very inefficiently. This will produce unburnt gases and soot, which will be deposited inside the stove, the flue system, and on the glass window.

Wood burns best on a bed of ash, approximately 1cm deep.

We do not recommend shutting the stove down and leaving the stove lit overnight. Burning your fuel too slowly is very inefficient, and this will create unburnt gases and deposits in the stove and flue system.

After refuelling the fire, increase the amount of air intake to light the wood as quickly as possible. Once lit, you can then reduce the airflow again.

It will take time to become familiar with how the stove works and the best way to operate the appliance under different conditions. How the wood burns, and therefore how you should use the stove, will vary depending on:

- The type of wood that you use.
- The condition of the wood.
- The chimney draught/the draw of your chimney/flue system.
- The weather, wind and outside temperature.

Burning the stove vigorously for a short period of time will remove any build up of unwanted deposits on the inside of the stove and on the glass window.

6.5 Lighting A Solid Fuel Fire

- When burning manufactured smokeless solid fuel:

Ensure that the primary air control is in the open position (turn the airflow wheel on the ash pan door fully anticlockwise).

Make sure that the air wash control is halfway open (right-hand control below the ash pan door - central position)

Have the tertiary air control fully closed (left-hand control below the ash pan door, fully to the left)

- Place 1 or 2 firelighters onto the fire grate, with a handful of manufactured solid fuel briquettes. Light the fire with a taper.
- When the firelighters are burning, leave the door ajar about 1 to 2 cm to achieve a good draw and to avoid condensation. Allow the fire to warm up the chimney.
- After 2 to 5 minutes, the chimney should be warm enough to create a good draw, and the door can be closed.
- Once the solid fuel is starting to burn, adjust the primary air control to ensure that all of the fuel is lit. Once the fuel has formed a good bed of glowing embers, the stove can be refuelled with more manufactured smokeless solid fuel. Do not be tempted to overfill the firebox. This could result in fuel falling onto the glass or falling out of the firebox when the door is opened. Overfilling the stove can also lead to excess smoke.

You can now close the top door. Once the new fuel is fully burning, the air wash and tertiary air controls can be adjusted to obtain the desired burn-rate.

6.6 De-ashing The Salamander SE Eco Range

Riddling the grate will allow ash to fall from the fire bed and into the ash pan underneath.

To riddle the grate, slot the riddling lever into the forked end of the multi-tool. The riddling lever is located between the hinges of the ash pan door.

Pull and push the lever backwards and forwards. Ash will fall through the grate and into the ash pan.



Remember:

When burning wood, it is good to maintain a bed of ash on the grate. This should be approximately 1cm deep.

Do not be tempted to over-riddle the grate, as hot or burning fuel may fall into the ash pan.

Do not let the ash level in the ash pan get higher than the sides of the pan. This will reduce the airflow to the fire through the grate. When burning solid fuel, air will need to flow up through the grate, therefore it should not get completely blocked with ash.

To remove the ash pan, use the rounded end of the multi-tool as shown. There is a lip at the bottom of the multi-tool, which slots neatly into a gap at the front of the ash pan. This enables the ash pan to be safely removed for emptying.



WARNING:

Take great care when removing and emptying the ash pan. It may be very hot, and it could still contain burning or smouldering embers, making it a fire risk.

6.7 **Cooking With The Salamander SE Eco Range**

- You will be able to cook on the stainless steel hotplate once the firebox has reached a working temperature.
- The temperature of the hotplate will vary across its length. The coldest section is to the left, and the hottest section is to the right, just above your fire.
- You can adjust the placement of your pans on the hotplate to cook with your desired temperature. Placing a pan on the left-hand side of the hotplate will provide a low temperature (great for warming food or drinks), placing a pan in the middle of the hotplate is well-suited for simmering, and pans can be positioned on the right-hand side for boiling, griddling, or other forms of high-temperature cooking.

Using The Oven

- To access the oven, you will need to lift up the handle on the right-hand side of the door, before pulling the door towards you. This will lift the oven door off of the latch.

When in use, the oven handle will become very hot, so the Salamander multi-tool should be used to safely open and close the oven door. This tool is included with every Salamander SE Eco Range.

- The oven door houses a temperature gauge, which will give an indication of the temperature inside the oven. Please note: if the oven door is left open, then the temperature gauge will cool down, and the inside of the oven may be hotter than what is being indicated.
- The oven temperature can be controlled accordingly by adjusting a combination of the following factors:

1 The burn-rate in the firebox

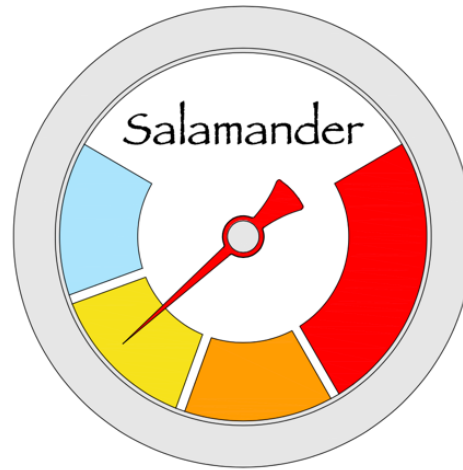
- The type of fuel
- The amount of fuel
- The primary air control
- The secondary air control
- The tertiary air control

2 The position of the oven temperature control

- Position "0" will result in:
Lower oven temperature
(Flue gases go straight up the chimney)
- Position "1" will result in:
Highest oven temperature
(Flue gases circulate past the oven)

- Please note: when the oven is in use, the left-hand side of the hotplate will increase in temperature, as the flue gasses will pass directly underneath the hotplate.
- As a helpful guide to showing the temperature range of the oven, the temperature gauge has been colour-coded from blue to red. Each colour represents the following approximate temperature range:

Blue	0 - 150 °C
Yellow	150 - 200 °C
Orange	200 - 230 °C
Red	230 + °C

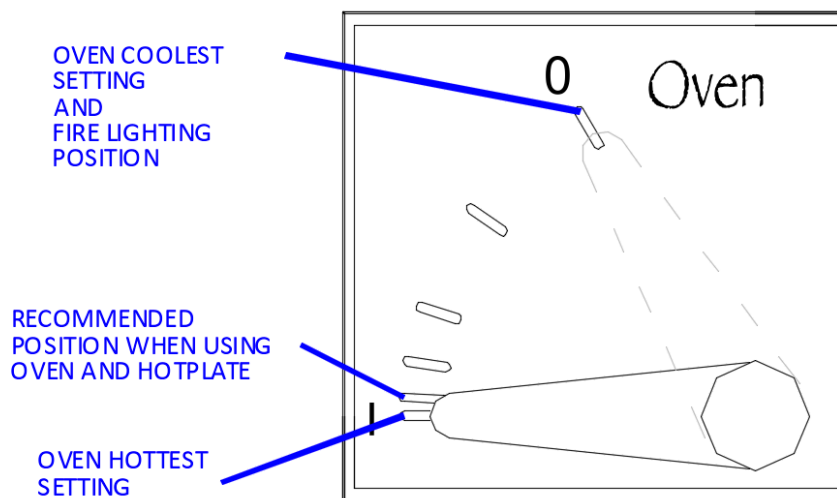


6.8 Maintaining The Correct Flue Temperature

- You should maintain the correct flue temperature when the appliance is in use, as this will ensure efficient, economical, and safe operation. When operating The Salamander SE Eco Range, it is very important that the flue temperature is maintained above 115°C (or 240°F). If the flue stays below this temperature when the appliance is in use, then tar may build up in the flue or the chimney. This can increase the risk of a chimney fire.
- If you fit a magnetic stove thermometer to the flue, then you will be able to easily monitor the temperature to ensure that it stays above 115°C (240°F) when in use.

WARNING:

It is recommended that the oven temperature control is used in the "1" position (the hottest setting) for limited periods only. If the Salamander SE Eco Range is on low fire, then there is an increased risk that the flue temperature may drop below 115°C, and tar may form in the chimney.



OVEN TEMPERATURE CONTROL

7 – Guidance on Safe Operation

Fire can be very dangerous

During operation, the stove and all of the fittings (door handles and controls etc.) will get very hot. While the stove is running, it should not be touched with bare hands. A Salamander Multi-tool is provided for safe operation of the hot appliance.

Do not over-fire the stove

It is possible to fire the stove to such an extent that excess smoke may be generated, or damage may occur to the appliance or the chimney/flue system. Look out for any parts of the stove or flue that may be glowing red hot. If such a situation occurs, adjust the air supply accordingly to reduce the burn-rate of the fire.

Chimney fire

In the event of a chimney fire:

- Shut all air controls immediately.
- Raise the alarm and evacuate the building.
- Call the fire brigade.
- Do not re-enter the building.

Fumes

If the appliance is installed, operated and maintained correctly, then the stove will not emit fumes into the room. Occasionally, very small amounts of fumes will be emitted into the room when refuelling or de-ashing the stove.

If fumes are being emitted during normal operation:

- Ventilate the room by opening all doors and windows.
- Let the fire burn out.
- Leave the room.
- Check the stove, flue and chimney for blockages.
- Do not use the stove until the cause of the problem has been identified and rectified.
- If required, seek expert help.

Adverse weather conditions

In a small number of installations, and under specific weather conditions, the draw of the chimney may occasionally be affected. A downdraught will cause fumes to be emitted into the room.

If this is the case, then the stove should not be used, and advice should be sought from a professional flue installer who will be able to advise on possible solutions, such as an anti-downdraught cowl.

8 - Health And Safety Precautions

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

Handling

Adequate facilities must be available for loading, unloading and site handling of the appliance. The stove is made of cast iron and is very heavy (90kg).

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.

Asbestos

This stove does not contain any asbestos. If there is a possibility of disturbing any asbestos in the course of installation, then please seek specialist guidance and use appropriate protective equipment.

Aerosols

Aerosols must never be used or stored near the appliance whilst it is alight or still hot.

Ventilation

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

Metal Parts

When installing or servicing this stove, care should be taken to avoid the possibility of personal injury which could arise when interacting with metal parts.

Children, aged and/or infirm persons

If the stove is going to be in the presence of children, aged, and/or infirm persons, then please ensure that a fireguard is used in accordance with BS 8423:2002. The fireguard should be manufactured in accordance with BS 8423:2002, and it should be suitable for use with solid fuel appliances.

CO Alarms

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

Your installer should have fitted a CO alarm in the same room as the appliance. If the alarm sounds unexpectedly, then follow the instructions given under "Warning Note" in the next section.

Warning Note

If this stove is properly installed, operated and maintained, then the appliance will not emit fumes into the dwelling. Occasional fumes from de-ashing and refuelling may occur. However, persistent fume emission is potentially dangerous and must not be tolerated. If fume emission does persist, then the following immediate action should be taken:

- (a) Open doors and windows to ventilate the room and then leave the premises.
- (b) Let the fire go out.
- (c) Check for flue or chimney blockage and clean if required.
- (d) Do not attempt to relight the fire until the cause of the fume emission has been identified and corrected. If necessary seek expert advice.

The most common cause of fume emission is flueway or chimney blockage. For your own safety these must be kept clean at all times.

For The Attention Of The Installer

When it comes to the installation of this appliance, please refer to the current issue of British Standard BS 8303 Code of Practice. This details the installation of domestic heating and cooking appliances burning solid mineral fuel.

Please also refer to the current issues of British Standards BS EN 15287-1:2007, which covers the design, installation, and commissioning of chimneys.

You must ensure that you also abide by any building regulations (such as Approved Document J of The Building Regulations), any local authority byelaws, as well as any other specifications/regulations that may affect the installation of this appliance.

The chimney must be swept and examined for soundness and suitability before the appliance is installed. Remedial action should be taken if required, and you should seek expert advice if necessary.

If your chimney is believed to have previously served an open fire installation, it is possible that the higher flue gas temperature from a closed appliance may loosen deposits that were previously firmly adhered, with the consequent risk of flue blockage. It is therefore recommended that the chimney be swept a second time within a month of regular use after installation.

You must ensure that all parts are fitted in accordance with this set of instructions, and the flue pipe diameter must be no less than the diameter of the outlet of the appliance.

Upon completion of the installation and commissioning:

- Please allow a suitable period of time for any fire cement and mortar to fully dry out before lighting the stove.
- Once the stove has been fired, make sure to check all seals for soundness, and check that the appliance and the flue are functioning correctly.
- Ensure that all products of combustion are vented safely into the atmosphere via the chimney terminal.
- Please ensure that the operating instructions for the stove are left with the customer.
- Please advise the customer on the correct use of the appliance, and warn them to use only the recommended fuels for the stove.
- Advise the user what to do should smoke or fumes be emitted from the stove.

9 - Maintenance

Maintenance should only be carried out when the stove is cool.

Before use

Between each fire in the stove, it is good practice to keep ash and debris to a minimum. It is particularly beneficial to keep the ash pan and the ash pan section free of debris. If you are only burning wood, then it is recommended that you keep a bed of ash on the grate, which should be approximately 1cm deep.

Cleaning the stove

The outside of the stove should be cleaned with a soft brush. You should regularly remove and clean the baffle and the side fire bricks to remove any soot and debris. The internal surfaces of the stove should also be kept clean. The frequency of cleaning will depend on how vigorously the stove has been fired, and what fuel has been used. Any deposits that have been allowed to build up in this area could reduce the lifespan of the stove.

Please note: If required, the flue can be accessed for cleaning from inside the stove. The internal components such as the fire bricks and the baffle will need to be removed before you can access the flue for cleaning.

Gaskets

The rope gaskets in both doors will need regular inspection to check their condition. This is to ensure that both door seals, and full control of the air supply to the fire, are well-maintained.

Stove glass

Only clean the stove glass when the appliance is cool. The best way to clean the glass is to wet a tissue, or some newspaper, before dipping it into the ashes of the fire when they have completely cooled down. Using this to scrub the glass will remove any build-ups on the window, but be careful not to scratch the glass. The window can also be cleaned with a specialist glass cleaner.

Please note: Using any abrasive cleaner will scratch the glass and make subsequent cleaning more difficult.

Chimney

It is important to have the chimney cleaned at least once a year. Regular inspection and cleaning of the internal components of the stove can indicate if the chimney requires cleaning more frequently. If the stove has not been used for an extended period of time (e.g. during the summer), the chimney should be checked by a competent person before use.

Please note: All parts that come into direct contact with the fire (grate, baffle, back and side fire bricks, and underside top air box) are considered consumable parts which are subject to general wear. Their lifespan will be dependant on how vigorously the stove is operated, and they must be inspected and maintained on a regular basis. If the parts become worn, damaged or positioned incorrectly, non-consumable parts such as the stove top and sides, will be exposed to excessive heat and may be damaged.

Shutting-down the stove to avoid condensation and corrosion

If the stove is to be left unused for a prolonged period of time then it should be given a thorough clean to remove ash and unburned fuel residues. To enable a good flow of air through the appliance to reduce condensation and subsequent damage, leave the air controls fully open.

It is important that the flue connection, any appliance baffles or throat plates and the chimney are swept prior to lighting up after a prolonged shutdown period.

10 – Troubleshooting

Problem	Cause	Solution
Fire will not burn	<ul style="list-style-type: none"> The fuel is too wet and not suitable. Air inlets to the stove are blocked. The flue is blocked or restricted. Inadequate air supply into the room. 	<ul style="list-style-type: none"> Only burn dry fuel with a moisture content below 20%. Ensure there is an adequate supply of air being directed into the firebox of the stove - open the primary, secondary and/or tertiary air controls accordingly. Check the flue for blockages and organise for the flue to be swept if necessary. Ensure there is a good supply of air into the room and the stove. Install one or more vents or consider a direct air intake system for the appliance.
Soot has built up on the glass	<ul style="list-style-type: none"> Fuel is too wet. Fuel pieces are too large and "smouldering" rather than burning. The stove operating temperature is too low. The stove is being run too "slow" with not enough air. Poor chimney draw. Too little secondary air washing over the window. 	<ul style="list-style-type: none"> Only burn dry fuel with a moisture content below 20%. Carefully break the fuel up into smaller sizes with your hands or an axe. Start by lighting a small fire, allowing kindling to burn steadily to warm up the flue and to achieve a good draw before placing larger pieces of fuel on the fire. If there is not enough air going into the stove, then adjust the controls accordingly. If the stove is burning too vigorously, then close the primary air intake and ensure that the secondary air control is set to the open position. This will activate the air wash system, which will help clean the glass.
Excessive wear on internal parts	<ul style="list-style-type: none"> Stove fired too vigorously. Too little air passing through the bottom grate. Use of wood that is too dry (e.g. wood from old furniture). 	<ul style="list-style-type: none"> Replace any worn or damaged components accordingly with genuine spare parts from Salamander Stoves. Adjust the primary air controls to allow sufficient airflow through the bottom grate. Only burn wooden logs that have been suitably dried. Only burn approved fuel as specified in this instruction manual.
Oven will not heat up	<ul style="list-style-type: none"> The oven control is set to the "0" position. The stove is not up to working temperature/the fire is not burning hot enough. 	<ul style="list-style-type: none"> Turn the oven control anti-clockwise, so that the lever is positioned closer to the "1" setting. Add more fuel to the fire, taking care not to overfill the firebox. Alternatively, you might choose to burn a different type of fuel which has a higher heat output. Check the flue system to ensure it will provide an adequate draw.

11 – Spare Parts

A full range of products are available to maintain your stove, including:

- Fire rope and fire rope adhesive
- Fire cement
- Heatproof silicone sealant
- Stove paint

All individual components of The Salamander SE Eco Range are available as spares. For a complete list of the available spare parts and their prices, please visit our website at www.salamanderstoves.com or scan the QR code on the back cover of this manual.

12 - Salamander SE Eco Range Performance Results

Output and Efficiency

All efficiencies in the table below are net values.

Wood Logs Results (0.80 Hour Refuels)

Parameter		A20/1 81-1	A20/1 81-2	A20/1 81-3	Mean
Test duration	h	0.87	0.83	0.83	0.84
Total efficiency	%	86.0	86.0	85.1	85.7
Nominal heat output	kW	4.1	4.4	4.3	4.3
Mean CO emission (at 13 % O ₂)	%	0.06	0.06	0.06	0.06
Mean flue gas temperature	°C	187	193	189	190
Flue gas mass flow	g/s	3.4	3.4	3.8	3.5
Mean C _n H _m emission (at 13 % O ₂)	Nmg/m ³	74	88	72	78
Mean NO _x emission (at 13 % O ₂)	Nmg/m ³	75	66	76	72
DIN Plus particulates (at 13 % O ₂)	Nmg/m ³	18	20	15	18

Maxibrite Results (1.0 Hour Refuels)

Parameter		A20/179 -1	A20/179 -2	Mean
Test duration	h	1.05	1.03	1.04
Total efficiency	%	83.8	82.9	83.4
Nominal heat output	kW	4.2	4.2	4.2
Mean CO emission (at 13 % O ₂)	%	0.04	0.04	0.04
Mean flue gas temperature	°C	197	195	196
Flue gas mass flow	g/s	3.1	3.3	3.2
Mean C _n H _m emission (at 13 % O ₂)	Nmg/m ³	33	34	34
Mean NO _x emission (at 13 % O ₂)	Nmg/m ³	125	105	115
DIN Plus particulates (at 13 % O ₂)	Nmg/m ³	26	20	23

Distances to Combustible Materials

With rear and side heat shields fitted to the appliance:

Back wall = 200mm

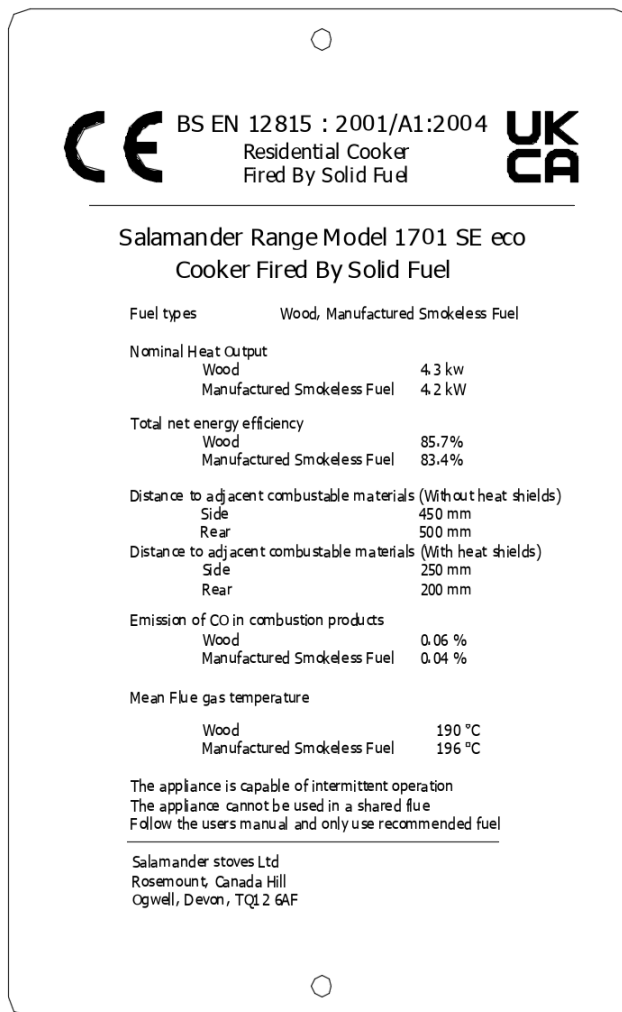
Side wall = 250mm

Without rear and side heat shields fitted to the appliance:

Back wall = 500mm

Side wall = 450mm

13 - Copy of the CE plate attached to the stove:



13.1 More Information and Statistics

Energy efficiency class: A+

Energy efficiency index (%): 114

Seasonal efficiency (%): 75.7

Flue diameter: The Salamander SE Eco Range has a 100mm/4" size flue outlet. You can connect the outlet to single wall flue with a 100mm/4" internal diameter, or you could connect into an adaptor to convert into a wider single wall or twin wall insulated flue pipe.

You must ensure that the flue pipe diameter is no less than the diameter of the outlet of the appliance. The Salamander SE Eco Range can run off a chimney liner with a 5" or a 6" internal diameter.

14 - Disposal / Recycling

After the product life of the appliance has expired, please ensure that the items are disposed of correctly. Parts will need to be separated out into material groups before disposal. Each Salamander SE Eco Range is made up of the following materials: glass, fibre glass, cast iron, stainless steel, steel, brass and aluminium.

Make sure you use suitable gloves when handling any sharp metal, glass, or fibre glass. Seek assistance or a professional disposal service if the item is too heavy for you to handle.

Always dispose of these items in the most sustainable way that is possible, and in a way which is in line with current environmental protection/regulations and any recycling, reprocessing or disposal technologies. The wooden box that the appliance is packaged in can be re-used a planter for vegetables or flowers. You could also use it as a storage box, or a bookshelf.

Additional Information



The Salamander SE Eco Range
Model 1701 SE Eco
Exempt under the Clean Air Act 1993 for use within UK Smoke
Control Areas

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).

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 the regulations, and that appliances used to burn solid fuel in those areas (other than "authorised" fuels) have been exempted by an order made and signed by the Secretary of State or Minister in the devolved administrations.

The Salamander Range Cooker (Model:1701 SE Eco) has been recommended as suitable for use in smoke control areas when burning wood logs. The Salamander Range Cooker SE ECO is factory-fitted with a permanent stop to prevent full closure of the secondary air rotary plate.

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. You can contact them for details of Clean Air Act requirement.

Air Controls

The Salamander SE Eco Range is fitted with three air controls.

PRIMARY AIR CONTROL

Located on the front of the ash pan door, the primary air control directs air into the base of the fire. It is **only required when burning solid fuel**.

When burning wood, the control must be kept fully closed (rotate clockwise).

Failure to do so will reduce the efficiency of the stove, and it will increase the amount of smoke and carbon monoxide being emitted into the atmosphere.

AIR WASH CONTROL

Located below the ash pan door on the right-hand side, the air wash control directs air down the window glass in the firebox door and onto the fire that's burning on the grate.

Lever to the left – minimum air wash
Lever to the right – maximum air wash.

In order to comply with the Clean Air Act and to keep the emissions below the allowed levels, the air wash control cannot be fully closed.

When burning wood, the control is used to regulate the burn-rate of the fuel on the grate.

When burning solid fuel, the control should be set to minimum, just to ensure that the glass is kept clear.

TERTIARY AIR CONTROL

Located below the ash pan door on the left-hand side, the tertiary air control directs air into the space above the fire.

Lever to the left – minimum tertiary air
Lever to the right – maximum tertiary air

When burning wood in a smoke control area, the control is used to regulate the secondary burn of the gasses above the fire and should be set to maximum (lever to the right). Failure to do so will reduce the efficiency of the stove and will increase the amount of smoke and carbon monoxide being emitted into the atmosphere

When burning **solid fuel**, tertiary air is not required and the control should be set to minimum (lever to the left). Failure to do so will reduce the efficiency of the stove and will increase the amount of smoke and carbon monoxide being emitted into the atmosphere.

Scan The QR Codes Below For More Information

Warranty Registration



Eco Design



Stove Accessories



Spares and Maintenance



Instruction Manual Version 2
The Salamander SE Eco Range
Dated 01/09/2022