

CSP 9768 07/2025 FIN

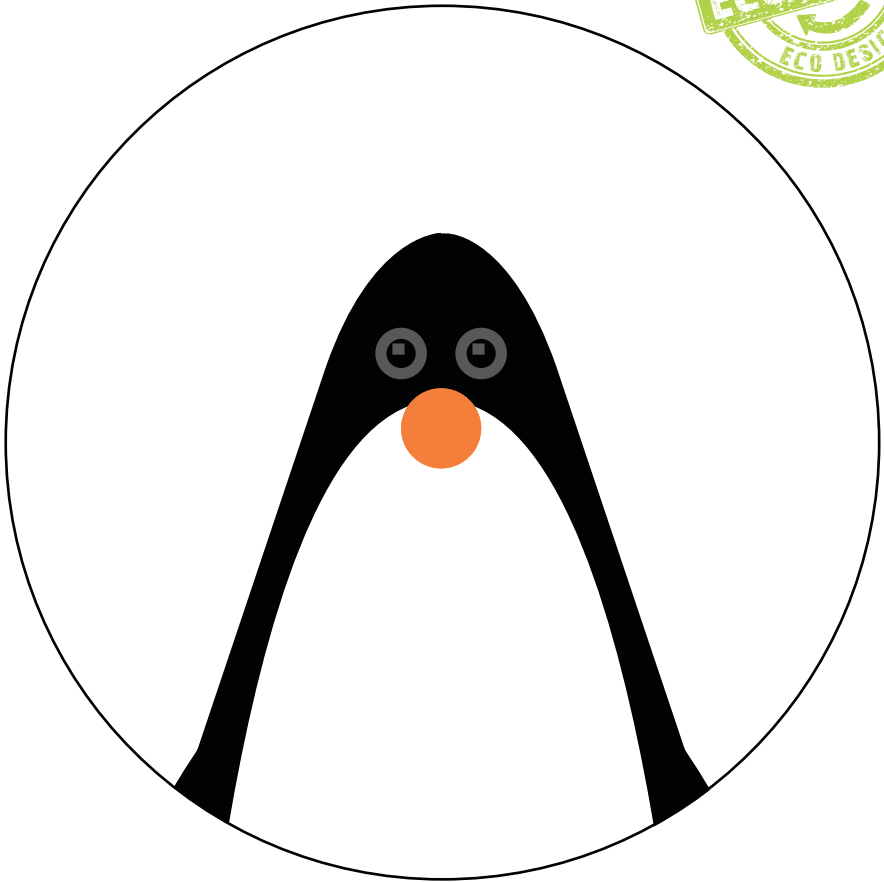


**The Fin** *Series*

[www.chillipenguin.co.uk](http://www.chillipenguin.co.uk)

*Have You  
Registered  
Your  
Warranty*

# Installation and Operating Manual



## YOUR STOVE SHOULD ARRIVE WITH...

- A pair of heat resistant gloves
- A tool for operating the stove and removing the ash pan
- This instruction manual
- An ash pan (smokeless version only)
- A fuel retainer bar (smokeless version only)
- An aerosol of spray paint - coloured stoves only
- A warm fuzzy feeling indicating that you are now part of the penguin family

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Your stove should arrive with

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# INTRODUCTION



Thank you for purchasing a Chilli Penguin Stove. You have purchased a high quality ecodesign stove that has been built to last. It has been designed and manufactured in the UK with a cleanburn system to ensure a clean and efficient performance.

We are proud to be a UK manufacturer. We are proud that our products heat and cook on wood - one of our most valuable renewable resources. As a company we are committed to putting sustainability first in all the decisions we make.

We put a lot of time and energy into developing and improving our stoves to enable them to run as efficiently as possible and be simple to use. Please spend a few minutes familiarising yourself with this manual, so you can get the best possible performance out your stove.

We love to hear how the penguins get on in their new homes, if you have any comments or questions, please get in touch or share a picture on social media.

If you have a quiet moment and want to make a penguin very happy, our penguins love good reviews - we have a review area on our website, we would love to hear your comments:



[www.chillipenguin.co.uk/reviews](http://www.chillipenguin.co.uk/reviews)



or leave us a [Google Review](#)

# DESCRIPTION

This manual is for the following ecodesign stoves.

| THE FIN SERIES |               |                         |
|----------------|---------------|-------------------------|
| Fuel Type      | Fin Wood Only | Fin Smokeless Fuel Only |
| Output         | 4.7kW         | 4.9kW                   |

The Fin is a **wood only** stove. There is a smokeless fuel kit available. Once the smokeless kit is fitted **only smokeless fuel** can be burned.



Spares are available through your local Chilli stockist or our online shop. There are diagrams online to help you identify the correct parts and advice about how to fit: [www.chillipenguin.co.uk/FAQ/looking-after-your-penguin](http://www.chillipenguin.co.uk/FAQ/looking-after-your-penguin)

# IMPORTANT - READ BEFORE FIRST FIRE

**Fin Wood Only** - only burn wood

**Fin Smokeless Fuel Only** - only burn smokeless fuel

## *To Set / Cure the Paint*

**If you are storing your stove for a period of time before use, it must remain covered. Moisture in the atmosphere or sitting on the surface e.g. an unheated room or wet plaster will cause rust.**

**The painted surface must be cured or set properly during your first fire.**

**Use dry cleaning methods only for the stove surface - no liquid, even water.**

We use a high temperature stove paint on all of our stoves. It is extremely important that the paint is cured properly **the first time that you light the stove**. This is done to ensure the paint finish will be able to withstand the high temperatures needed. Curing is achieved by following the three step process on the following pages. If this process is not completed properly you may experience issues with the paint. Be aware that curing will cause a very slight colour change, the hotter areas will change colour the soonest, pay extra attention to the curing of lighter colours.

**We want your penguin to be perfect, so give it the attention it deserves!**

Once this initial process has been completed, the paint will be properly cured and you can operate your stove normally according to the instructions provided in this manual. If any problems arise with the painted surface of the stove, this is a result of incorrect curing or misuse of the stove such as over fuelling or running the stove too hot. Therefore any problems with the painted surface are not covered by your warranty.

**This penguin is a living, breathing, hard working appliance. Expect to touch up the painted surface occasionally over its lifetime.**

**Note:** *During the final higher temperature burn phase there may be some visible smoke near the stove surface. There may also be an unpleasant odour. To mitigate this effect, ventilate the room with open windows and doors to provide airflow.*

**Health warning:** The smoke from the curing process displaces oxygen. Small children, the elderly and people with existing breathing problems should vacate the area during the hot burn to avoid discomfort. The smoke is primarily Carbon Dioxide, it is non-toxic but can feel uncomfortable.



YOU'VE BOUGHT AN AMAZING STOVE,  
LET IT BE AMAZING

# SIMPLE GUIDE TO YOUR FIRST FIRE (WOOD ONLY)

We recommend the goldilocks and the 3 bears method: small fire, medium fire, hot fire. This should be done in one session, rather than three separate fires.

## READ THIS MANUAL AND ALL WARNINGS CAREFULLY

The A, B & C of lighting your 1st stove fire are:

A = air control | B = burn dry wood | C = cure paint carefully

### TREEPEE METHOD PREPARE A SMALL KINDLING FIRE

- place one or two firelighters in the centre, kindling over the top, light the fire, close the stove door
  - open all air controls\*
  - ventilate room
- maintain this SMALL FIRE for 15 minutes
- this warms up the stove components gently to prevent the paint from being "shocked"

*\*Refer to 4a. Diagram of Outside of Stove*



### TREEPEE METHOD MEDIUM FIRE

- add a few split logs & maintain medium fire for one hour
- close air boost disc and airwash control (upper control knob) when burning well
  - aim to raise the surface temp to 450°F/230°C
- control on main air control (lower control knob)



### TREEPEE METHOD HOT FIRE

- add additional wood
- adjust controls to allow additional air flow to achieve a hot fire
  - aim to raise the surface temp to 600°F/315°C
- control on main air control (lower control knob)
  - maintain hot fire for one hour



### TOP DOWN METHOD - AN ALTERNATIVE METHOD

Criss cross two or three layers of split logs on top each other, then one or two layers of kindling on top and insert a firelighter. Light the firelighter and close the stove door. Clean all air control knobs, then adjust to suit, once the fire is established.



# SIMPLE GUIDE TO YOUR FIRST FIRE (SMOKELESS FUEL)

We recommend the goldilocks and the 3 bears method: small fire, medium fire, hot fire. This should be done in one session, rather than three separate fires.

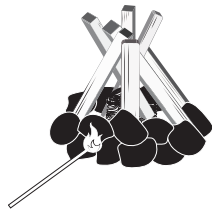
## READ THIS MANUAL AND ALL WARNINGS CAREFULLY

The A, B & C of lighting your 1st stove fire are:  
A = air control | B = burn dry fuel | C = cure paint carefully

### TEEPEE METHOD PREPARE A SMALL KINDLING FIRE

- place one or two firelighters in the centre, kindling over the top, arrange four or five lumps of smokeless fuel around base light the fire, close the stove door
  - open all air controls\*
  - ventilate room
- maintain this SMALL FIRE for 15 minutes
- this warms up the stove components gently to prevent the paint from being “shocked”

*\*Refer to 4a. Diagram of Outside of Stove*



### TEEPEE METHOD MEDIUM FIRE

- add more smokeless fuel & maintain medium fire for one hour
- close air boost disc and airwash air (upper control knob) when burning well
  - aim to raise the surface temp to 450°F/230°C
- control on primary air control (lower control knob)



### TEEPEE METHOD HOT FIRE

- add additional fuel
- adjust controls to allow additional air flow to achieve a hot fire
  - aim to raise the surface temp to 600°F/315°C
- control on main air control (left hand control knob)
  - maintain hot fire for one hour





## THE CHARTER OF THE PENGUIN

**We guarantee** that your stove is good quality and well made

**We guarantee** that your stove will give you years of warm and efficient heating

**We know** this because we design and make them ourselves here in Wales

**We feel** that stoves make the autumn crackle and the winter glow

**We hope** that your stove will make the bad days bearable and the good days great

**We think** that human beings with stoves are happier than those without

**We believe** that your life has just got better



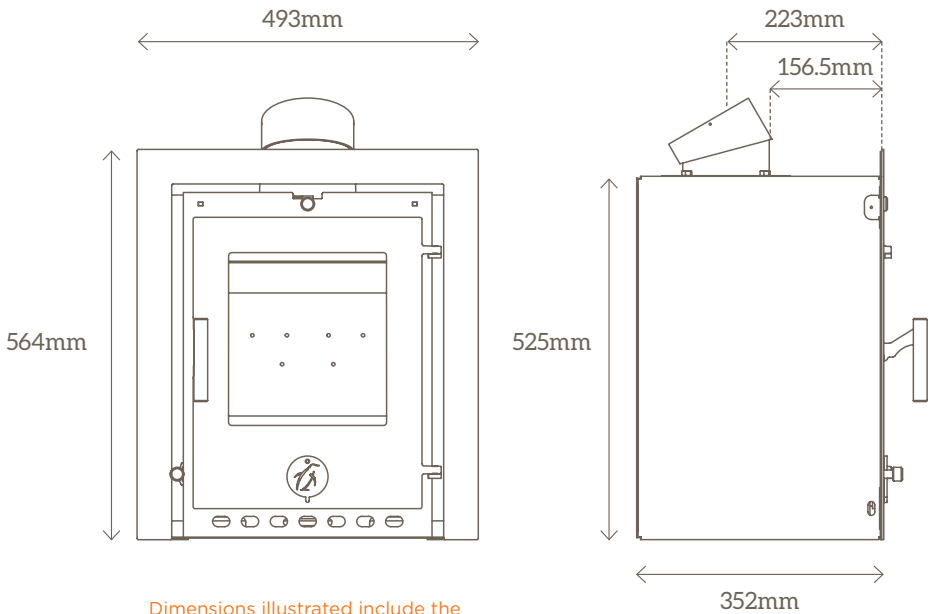
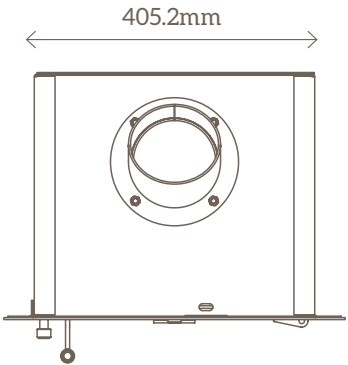
*Section 2*

# THE PLANS & TECHNICAL DETAILS

*Page 08-10*

# 2. The Plans

## The Fin Series



Dimensions illustrated include the 50 mm frame. If either of the other frame sizes are selected both the height and width dimensions will increase

# 2. The Tech Details

## The Fin Series



|                                                                 | WOOD ONLY                     | SMOKELESS FUEL             |
|-----------------------------------------------------------------|-------------------------------|----------------------------|
| Nominal Output                                                  | 4.7kW                         | 4.9kW                      |
| <b>Total Energy Efficiency %</b>                                | <b>77.2%</b>                  | <b>82.9%</b>               |
| <b>CO content @13% O<sub>2</sub></b>                            | <b>0.07%</b>                  | <b>0.04%</b>               |
| <b>Smoke Particulates @ 13% O<sub>2</sub></b>                   | <b>24mg/m<sup>3</sup></b>     | <b>4mg/m<sup>3</sup></b>   |
| <b>NO<sub>x</sub> mg/m<sup>3</sup></b>                          | <b>116mg/m<sup>3</sup></b>    | <b>159mg/m<sup>3</sup></b> |
| <b>Cx Hy mg/m<sup>3</sup></b>                                   | <b>30mg/m<sup>3</sup></b>     | <b>4mg/m<sup>3</sup></b>   |
| Rating                                                          | A/101.9                       | A+/110.9                   |
| Flue Gas g/s                                                    | 5.0g/s                        | 12.4g/s                    |
| Mean Flue gas temp. °C                                          | 249°C                         | 236°C                      |
| Approved For Use In Smoke Control Areas                         | Yes                           | Yes                        |
| Seasonal Efficiency                                             | 67.2%                         | 72.90%                     |
| Max. Fuel load                                                  | 2.5kg                         | 3kg                        |
| Max. Log length x average diameter                              | 270mm x 100mm                 | N/A                        |
| Flue Collar Diameter                                            | 127mm                         |                            |
| Flue Size Required                                              | Min 125mm                     |                            |
| Top Exit                                                        | Standard                      |                            |
| Rear Exit                                                       | No                            |                            |
| Hearth Type                                                     | Constructional                |                            |
| Chimney draught required                                        | 12Pa                          |                            |
| Construction                                                    | Welded Steel & Cast Iron Door |                            |
| Weight                                                          | 75kg                          | 80kg                       |
| <b>Tested to EN13229:2001 / EN13229-A2:2004 / BS3841-2:1994</b> |                               |                            |

*For distances to combustibles see section 3*



## *Section 3*

# INSTALLATION INSTRUCTIONS

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[www.chillipenguin.co.uk](http://www.chillipenguin.co.uk)

# 3. Installation Instructions

## 3.a Warning

All local and national regulations must be observed when installing the appliance. If installed incorrectly serious accidents can be caused.

Building Regulation Document J must be referred to when installing this appliance.

It is the installer's responsibility to ensure the manufacturer's instructions are complied with. A HETAS qualified installation engineer should carry out the installation and issue a compliance certificate. In addition, they should complete the commissioning checklist at the back of this manual. If a HETAS installer is not installing your stove your local Building Control department needs to inspect the installation and register the work carried out.

## 3.b Health and Safety Precautions

Special care should be taken when installing a stove so that the requirements of the Health and Safety at Work Act are met, with particular attention to the following.

**Lifting and handling:** adequate facilities must be available for loading, unloading and handling

**Fire cement:** some types of fire cement are caustic and should not come into contact with the skin. In case of contact, wash immediately with plenty of water

**Asbestos:** our stoves do not contain asbestos. If there is any possibility of disturbing asbestos in the course of installation, please seek specialist guidance and use appropriate protective equipment

**Metal parts:** when installing/servicing this stove take care to avoid the possibility of personal injury

A SAFE PENGUIN  
IS A HAPPY PENGUIN

### 3.c Smoke Control Areas and Exemption of Appliances

**Chilli Penguin Ecodesign stoves are classed as exempt stoves which means you can use them in smoke control areas.**

If you live in a smoke control area (introduced by The Clean Air Act, 1993, see below) you are permitted to burn approved smokeless fuel only, this does not include wood. However if you use an exempt stove then you can burn seasoned wood or approved smokeless fuels depending on your appliance. NEVER BURN HOUSE COAL in a closed appliance like a stove.

The appliances are not exempted when burning wood briquettes, paper bricks or unauthorised fuels.

The general principle to be observed in an exempt Chilli Penguin stove is that the air controls cannot be completely closed, allowing a permanent air supply to the fire chamber. This means that fuel burns more efficiently, thereby emitting less harmful emissions into the atmosphere. This adaptation is factory fitted in these stoves.

**The Chilli Penguin Fin has been recommended for use in smoke control areas when burning wood logs. The Chilli Penguin Fin stove in this manual is fitted with a permanent stop preventing closure of secondary air control for DEFRA exemption.**

#### **“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 “unauthorised fuels” for use within a smoke control area unless it is used in an “exempt” appliance (“exempted” from the controls which generally apply in the smoke control area).

The Secretary of State for Environment, Food and Rural Affairs has powers under the Act to authorise smokeless fuels or exempt appliances for use in smoke control areas in England. In Scotland and Wales this power rests with Ministers in the devolved administrations for those countries. Separate legislation, the Clean Air (Northern Ireland) Order 1981, applies in Northern Ireland. Therefore it is a requirement that fuels burnt or obtained for use in smoke control areas have been “authorised” in Regulations and that appliances used to burn solid fuel in those areas (other than “authorised” fuels) have been exempted by an Order made and signed by the Secretary of State or Minister in the devolved administrations.

Further information on the requirements of the Clean Air Act can be found here:  
[www.gov.uk/smoke-control-area-rules](http://www.gov.uk/smoke-control-area-rules)

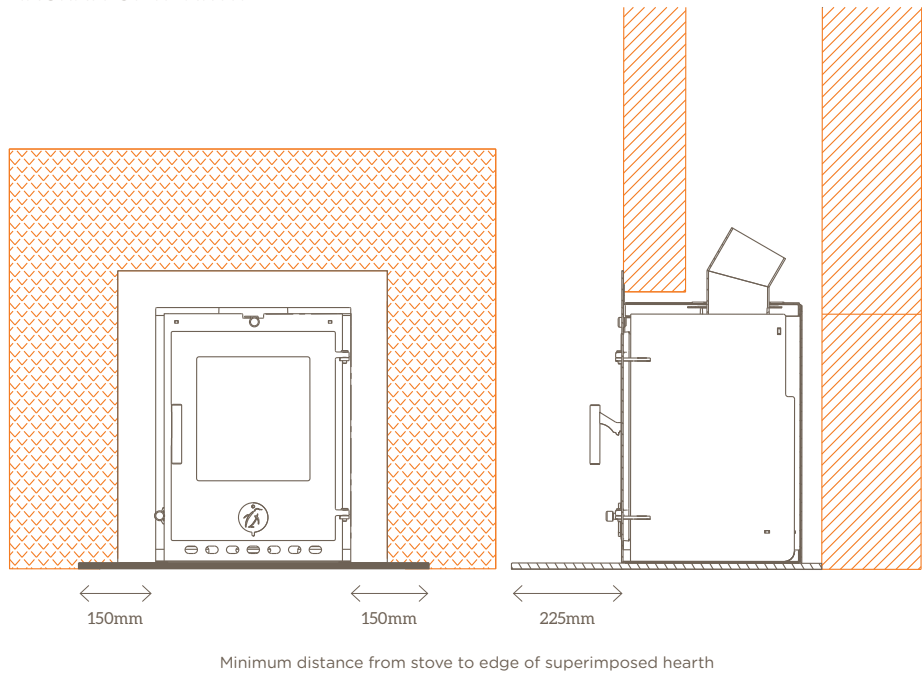
Your local authority is responsible for implementing the Clean Air Act 1993 including designation and supervision of smoke control areas and you can contact them for details of Clean Air Act requirements.

### 3.d Hearth

A hearth is made up of 2 layers: a constructional hearth (base concrete layer) and a superimposed hearth (top decorative layer). In some circumstances a superimposed hearth is acceptable on its own. The Fin Series require a constructional hearth.

|                           |                                                      |
|---------------------------|------------------------------------------------------|
| All models in this manual | Constructional total depth (incl.superimposed) 125mm |
| In front of the stove     | 225mm (minimum)                                      |
| Both sides of the stove   | 150mm (minimum)                                      |

#### DIAGRAM OF HEARTH



### 3.e Floors

Make sure the floor can take the weight of the stove, the cassette, the flue, the hearth and any decorative surround.

### 3.f CO Alarms

Building regulations require that when a new or replacement fixed solid fuel or wood/biomass appliance is installed in a dwelling a carbon monoxide alarm must be fitted in the same room as the appliance. Further guidance on the installation of the carbon monoxide alarm is included in Document J. Your CO Alarm must comply with BS EN 50292:2023.

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.

### 3.g Flue Dampers

We recommend that dampers are not used with our stoves.

### 3.h Ventilation

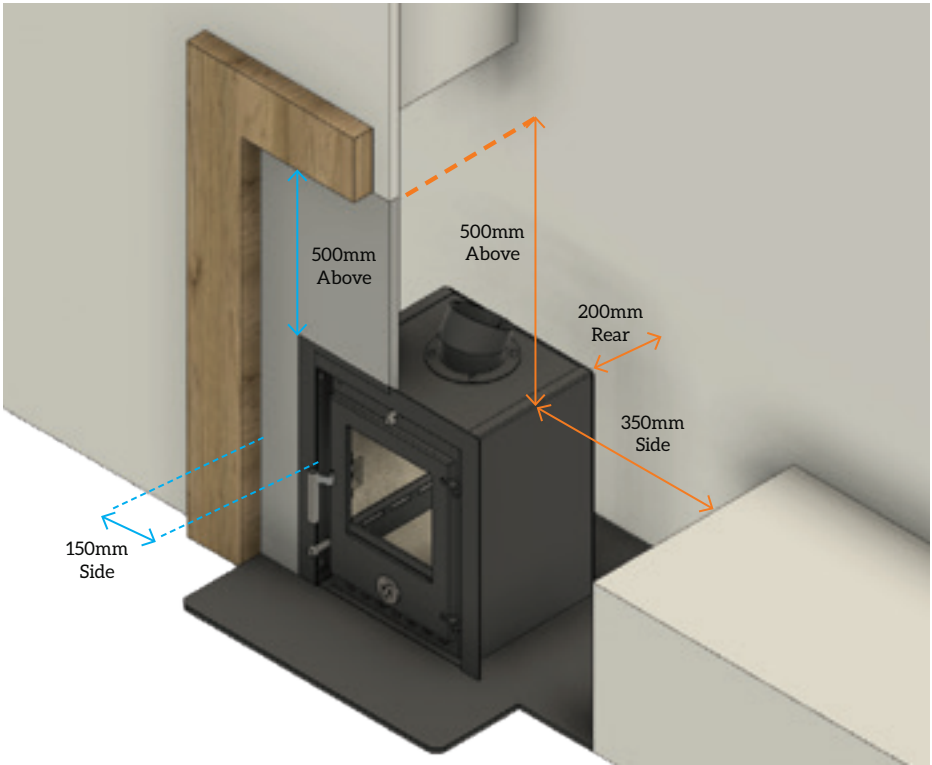
It is essential that the fire has adequate air supply for combustion and ventilation. Apertures provided for this purpose shall not be restricted. For stoves of 5kW and under a permanently open air vent may sometimes be required. In new build houses air vents are required for all sizes of stoves, this can apply to new extensions as well. This will depend on the air leakage (air permeability) of your property. Your HETAS installer should be able to guide you on your particular property. Permanent ventilation must be fitted in accordance with the guidelines given in Approved Document J of The Building Regulations.

If a stove is to be fitted in a room with an appliance such as an extractor fan, tumble drier or ceiling fan, it will affect the draw of the flue system and could lead to fumes entering the room. Additional room ventilation may be required, a flue draught test under worst case scenario must be carried out by a qualified installer. In the case of an extractor fan, often the simplest solution is to convert it to carbon filter extractor. Air vents should be positioned so that they are not liable to blockage.

GIVE ME A LITTLE PLACE...  
WITH SOME SPACE

### 3.i Combustible Walls and Mantle

Diagrams illustrating the minimum distances to combustible walls i.e wood/plasterboard

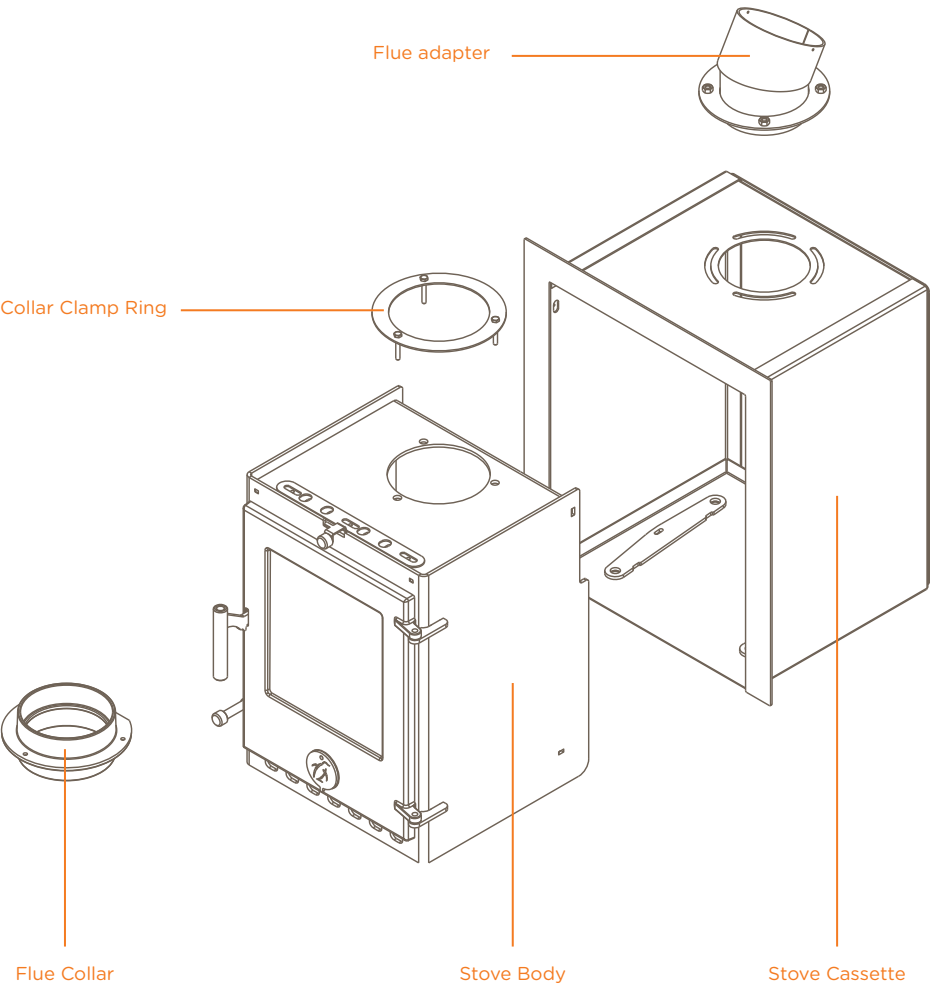


| MINIMUM DISTANCE TO                                                                                                                                                                                                                                   | Sides | Above | Rear  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|-------|
| Combustible Materials                                                                                                                                                                                                                                 | 350mm | 500mm | 200mm |
| Mantle Surround                                                                                                                                                                                                                                       | 150mm | 500mm | N/A   |
| <ul style="list-style-type: none"><li>Rear wall thickness needs to be at least 200mm thick.</li><li>These are minimum distances.</li><li>Any materials used within the minimum distances must be non combustible e.g. non combustible slip.</li></ul> |       |       |       |

### 3.j Non Combustible Walls

The cassette acts as a heat shield on all sides so no air gap in required.

### 3.k Installation of Stove & Casette



1. Ensure floor/ Hearth is completely flat, and level
2. Fit liner in accordance to all current regulations and building standards, and attach the **Flue adapter** to the liner using both fixing holes available in the upper part of the adapter. There is an allowance of 40 degrees of rotation for the flue adapter on the cassette, so preferred orientation should be considered at this time. Once fitted, the adapter can hang on the liner for the time being.
3. Install the **Stove Cassette** by pushing it all the way into the opening, until the front faces are flush with the wall. You may need to reposition the flue adapter to ensure the cassette is fully inserted.
4. Ensuring that the cassette is level in the opening, you can fix the cassette to the floor using the four M8 anchoring bolts (supplied). Additional holes in the rear of the cassette can be used for extra bracing for the cassette and to ensure squareness of the frame.
5. The flue adapter can now be fitted onto the cassette using the four M8 bolts supplied, and tightened in the preferred orientation as not to stress the liner.
6. Fit the **Collar Clamp Ring** loosely in the top of the stove. This cannot be fitted later.
7. Slide the **Stove Body** into the cassette, being cautious not to damage the paintwork on the cassette floor. There are guides in the base of the cassette to centre and square the stove as much as possible, however the depth of insertion should be determined by the position of the flue adapter position. There is limited clearance here when fitting, so we would not suggest using material under the stove as a slider in this instance.
8. Once the stove body is correctly positioned in the cassette, remove both the right hand side brick and the throat brick to allow access. The **Flue Collar** can now be fitted from the inside of the stove. The collar bolt holes should line up with the bolts on the Collar Clamp Ring, and tightened using three M6 nuts (supplied).
9. The front trim panel can be adjusted by loosening (x5) retaining screws, repositioning the frame, and re-tightening the screws.



### 3.1 Chimney and Access for Sweeping

| Chimney / Flueway                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Must comply with all current building regulations (British Standards BS EN 15287-1:2007 design, installation and commissioning of chimneys).                                                                                                                                                                                                                                            |                                                                                                                                        |
| We recommend that all masonry chimneys are lined.                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                        |
| Minimum Flue Height                                                                                                                                                                                                                                                                                                                                                                     | 4.5 metres                                                                                                                             |
| Flue Diameter                                                                                                                                                                                                                                                                                                                                                                           | Lined with 150mm diameter class 1 liner where possible, where not, 125mm flue is permitted, due to pre fitted smoke control adaptation |
| A flue way must not be shared with other appliances                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                        |
| A flue way must be gas tight and free of tar deposits. The chimney must be swept and examined for soundness and suitability before the stove is installed. Remedial action should be taken if required, seeking expert advice if necessary.                                                                                                                                             |                                                                                                                                        |
| Where the 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. |                                                                                                                                        |
| <b>New chimney:</b> A new chimney of factory made insulated flue system must comply with Building Regulations. Consult a chimney specialist for advice on suitable flue systems for solid fuel.                                                                                                                                                                                         |                                                                                                                                        |

| Sweeping                                                                                           |
|----------------------------------------------------------------------------------------------------|
| The chimney must be swept and examined for soundness and suitability before the stove is installed |
| <b>Sweeping access</b><br>Remove throat brick and sweep through stove.                             |

CHIM CHIMINEY, CHIM CHIMINEY, CHIM CHIM CHER-EE  
A SWEEP IS AS LUCKY AS LUCKY CAN BE



Section 4

# CHANGE OF FUEL KITS

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4.a Wood Only Kit & Smokeless Kit



Wood Only Kit

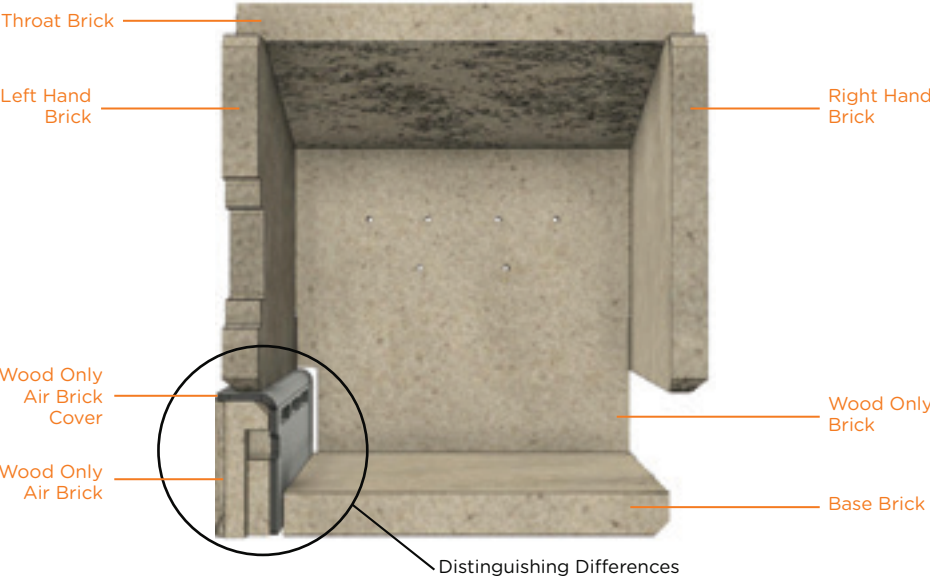


Smokeless Kit

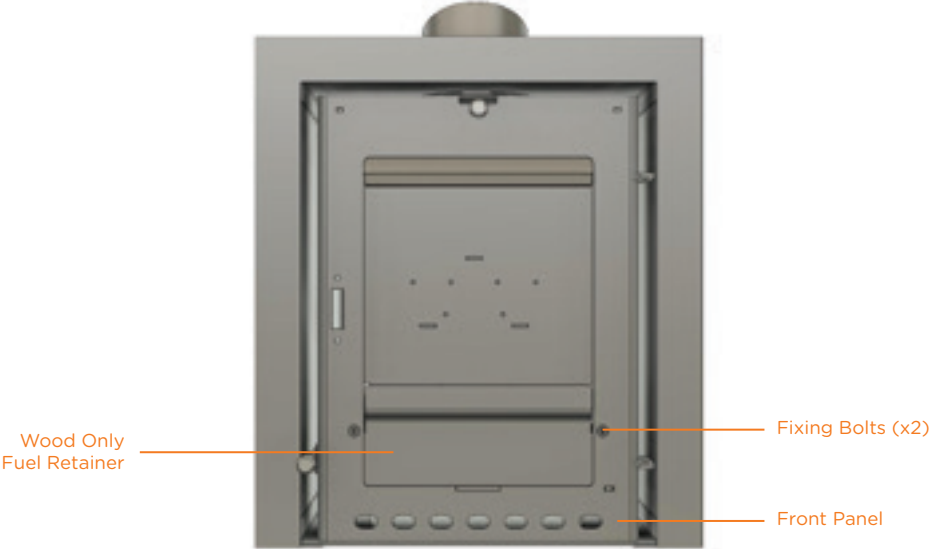
# 4.b Fitting the Smokeless Fuel Kit

If you want to reconfigure your wood only stove to a smokeless only configuration, you will need to order a “smokeless fuel kit”. You cannot burn wood in the smokeless confugaration or smokeless in the wood only configuration, written instructions on the following pages.

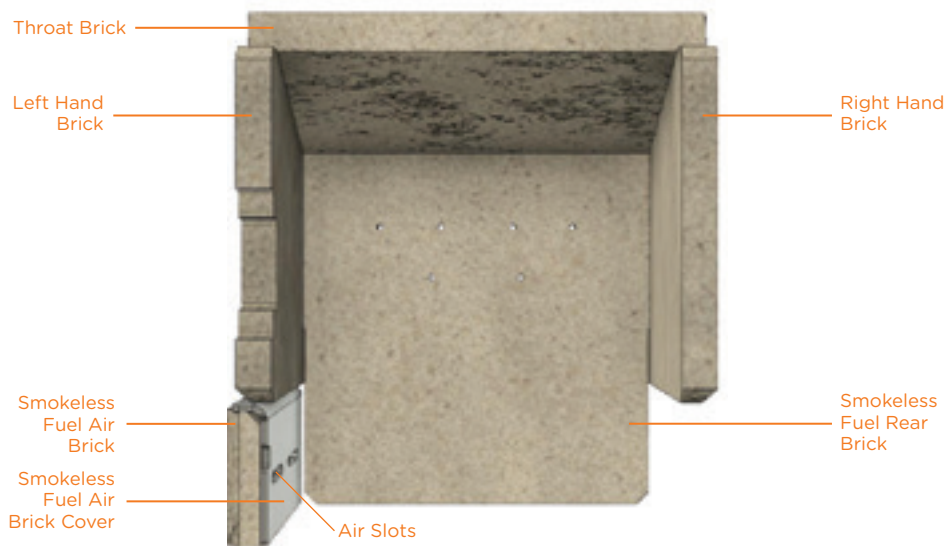
**FIG.1 FIN WOOD ONLY SETUP / BRICK LAYOUT**



**FIG.2 FIN WOOD ONLY SETUP - OUTSIDE**



**FIG 3. FIN SMOKELESS FUEL SETUP / BRICK LAYOUT**



**FIG.4 FIN SMOKELESS FUEL SETUP - OUTSIDE**



1. Remove all fire bricks
  - Remove the **Base Brick**. There are chamfers on the rear corners to allow for easier removal.
  - Support the **Throat Brick**, and remove the **Right Hand brick** by pulling the front edge towards the middle of the stove, and pulling towards the front, followed by the **Left Hand Brick**.
  - Remove Throat Brick by dropping the front edge down and rotating inside the stove.
  - Set the Left hand, Right hand and Throat Bricks aside for reinstalling later.
  - Remove the **Wood Only Rear Brick** followed by the **Wood Only Air Brick Cover** and the **Wood Only Air Brick**.
2. Using the 10mm spanner and screwdriver, remove both nuts and bolts on the **front panel**, fixing the **Wood Only Fuel Retainer**. Remove the Fuel retainer, and replace with the **Smokeless Fuel Panel Filler with Integrated Grate Support**. Ensure both nuts are tightened well. (see fig. 2 & 4).
3. Replace all **Smokeless Fuel Fire Bricks**.
  - Install the **Smokeless Fuel Air Brick**, followed by the **Smokeless Fuel Air Brick Cover**, ensuring the air slots are directed inwards.
  - Insert the **Smokeless Fuel Rear Brick**, ensuring it is fitted flush to the rear wall.
  - Insert the **Throat Brick**, ensuring the chamfer is at the rear, with the sharpest edge pointing downwards. Rest the back edge on top of the Rear Brick, and support the front.
  - Insert both **Left Hand** and **Right Hand** Bricks by placing the narrower rear section into the opening in the Rear Brick. You can rest the Throat Brick on top of both side bricks.
4. Place the **Rear Grate Support** (see photo) in the rear of the firebox, flat edge up, and towards the rear brick.
5. You can now insert the **Grate** (see photo). Take care when doing this as the grate is heavy and it is possible to trap your fingers. Wear gloves if possible and do not rush the job.
  - Tilt the Grate to an angle which allows it to enter through the aperture. Insert the Short edge in first and rotate the grate inside the stove.
  - Rest the grate on the stove where possible and insert one hand into the stove through the lower aperture. This will allow for easier handling when the grate is to be lowered.

- Lower the Grate into place, ensuring the rear base is sat on the Rear Grate Support fitted in step 4. The front edge of the grate should rest on the grate support fitted to the Panel filler fitted in step 2.
6. Fit the Fuel Retainer (see photo) into place, ensuring locating tabs are correctly fitted into the slots in the front grate support. You may need to adjust the Grate to allow room for the Fuel retainer. Once fitted, you can slide the Grate forward against the Fuel retainer to reduce movement.
  7. Slide the Ash Pan (see photo) into the lower aperture.
  8. Fit the additional length of Rope Seal (see photo) into the Rope Seal Groove running Right to Left inside the door.

### **INSTALLATION OF THE WOOD ONLY KIT**

Follow Instructions 1-8 in reverse.



Section 5

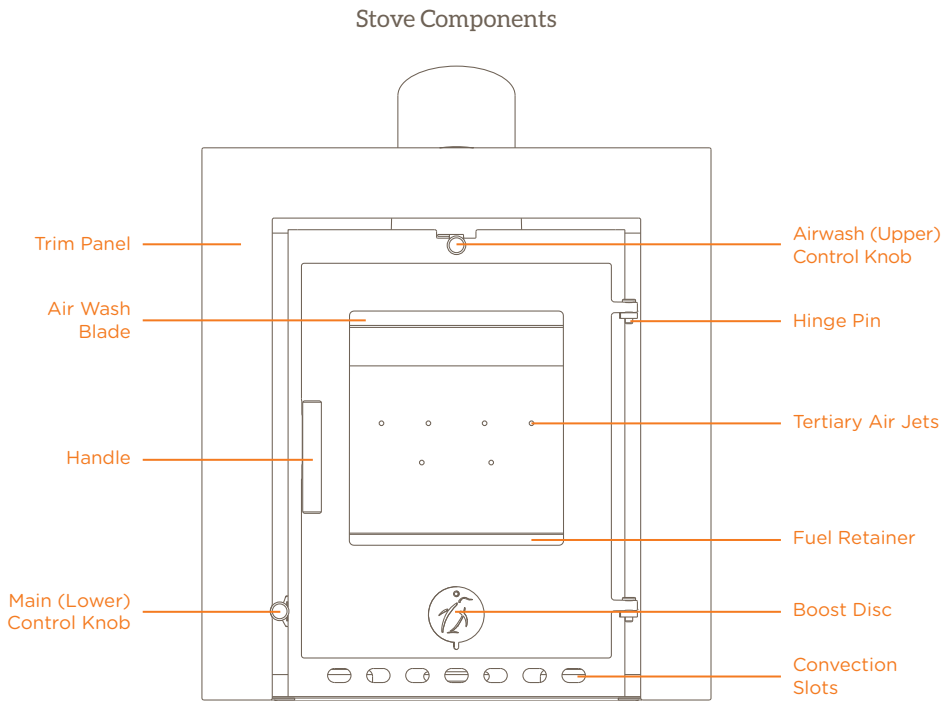
# INSTRUCTIONS FOR USE

Page 27-39

[www.chillipenguin.co.uk](http://www.chillipenguin.co.uk)

# 5. Instructions for use

## 5.a Diagram of the Outside of the Stove



**Airwash Control Knob:** controls airflow to clear the glass, and also allows additional air into the top of the fire to aid combustion (secondary).

**Airwash Blade:** metal blade fitted which directs the airwash over the glass.

**Boost disc:** brushed stainless steel disc with penguin logo on it. In the balanced open position this will allow the maximum air flow in to the fire. It should swing easily into the closed position once the fire is established.

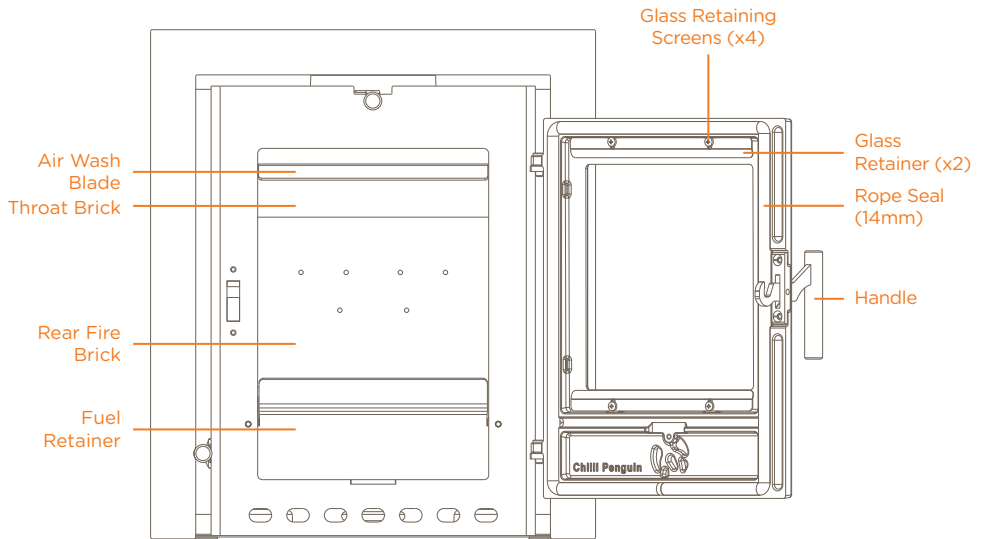
**Convection Slots:** inset stove utilises convection, drawing cold air through the slots in the front, heating and cycling through the cassette and out into the room.

**Hinge pin:** pins to hold the door to the stove body.

**Main Air Control Knob:** controls airflow into the firebox. With smokeless fuel kit, air will be introduced under the grate (Primary). As a Wood Only stove, the air is introduced to the top of the fire bed (secondary).

## 5.b Diagram of the Inside of the Stove - Fin Wood Only

### Internal Stove Components



**Fuel retainer:** this bar prevents logs falling against the glass, and reduces ash fallout.

**Glass retaining bars and screws:** metal strips used to clamp the glass in place, fastened by x4 machine screws.

**Rear bricks:** vermiculite bricks to the rear of the fire box.

**Rope seal:** rope used to create a gas tight seal around the door edges.

**Tertiary air jets:** additional air is introduced for combustion.

**Throat brick:** forms the “roof” of the fire box.

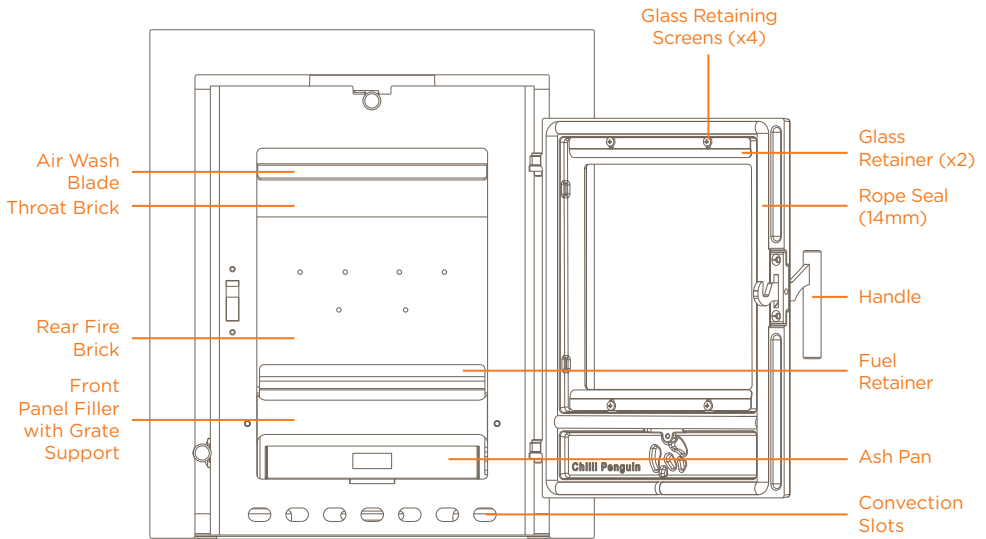
## WARNING

IN THE PRESENCE OF CHILDREN, AND OLD AND/OR INFIRM PEOPLE.

THE FIREGUARD SHOULD BE MANUFACTURED IN ACCORDANCE WITH BS 8423:2002,  
FIREGUARDS FOR USE WITH SOLID FUEL APPLIANCES.

## 5.c Diagram of the Inside of the Stove - Fin Smokeless Fuel

### Internal Stove Components



**Ash Pan:** metal drawer used for the collection of ash.

**Grate:** a cast iron grate that sits on the base of the fire chamber, on which the fire is made (not shown in diagram).

**Fuel retainer:** this bar prevents logs falling against the glass, and reduces ash fallout.

**Glass retaining bars and screws:** metal strips used to clamp the glass in place, fastened by x4 machine screws.

**Rear bricks:** vermiculite bricks to the rear of the fire box.

**Rope seal:** rope used to create a gas tight seal around the door edges.

**Tertiary air jets:** additional air is introduced for combustion.

**Throat brick:** forms the “roof” of the fire box.

WHEN YOU LOOK AT YOUR PENGUIN...  
...SMILE BECAUSE IT'S LOOKING BACK AT YOU

## 5.d Warnings and Pre-lighting Checks

WELCOME, YOU ARE NEARLY READY TO LIGHT YOUR FIRST FIRE.  
PLEASE FAMILIARISE YOURSELF WITH THESE CHECKS AND  
WARNINGS BEFORE YOU BEGIN.

**Chilli Penguin Stoves will not be responsible for any damage caused to the stove due to either the incorrect installation of the stove or the incorrect use of the stove, including the use of the wrong fuels. We strongly recommend the use of a qualified and experienced installer.**

### PROTECTING THE STOVE SURFACE

Your stove has been painted using a high temperature paint, this will give a long lasting and durable finish **after the paint has cured. The process of curing occurs during the first few times you light the stove, (see section 6).** Care must be taken when handling the stove prior to the first firings. It is at its most vulnerable at this stage. With the lighter colours we recommend that you wear clean gloves from unpacking onwards. Use dry cleaning methods only i.e. soft brush or Hoover. Do not use damp cloths. If you are plastering /decorating in the same room keep the stove covered and dry at all times, or you will see signs of rust.

### PAINTING THE STOVE

**IF** you wish to touch up your stove please read **Painting your stove, section 6.** All coloured stoves will come with an aerosol of the matching colour.

### FUMES

While the stove paint is curing, it will give off fumes. Please ensure that you ventilate the room, opening doors and windows as necessary.

### AIR SUPPLY FOR COMBUSTION AND VENTILATION

It is important that apertures provided for ventilation and combustion air are not covered.

### SMOKE EMISSIONS

Properly installed and operated the stove will not emit smoke into your home with the exception of the occasional smoke from de-ashing and re-fuelling. Occasionally adverse weather conditions can cause a down-draught, this should be very occasional. Persistent smoke emission is dangerous and must not be tolerated. If smoke emission does persist:

- Open all doors and windows
- Let the fire go out
- Check flue or chimney for blockage

Do not re-light fire until cause of problem has been rectified. Seek professional help.

**HOT SURFACES**

The surfaces of the appliance are designed to get hot during operation. It is recommended to use a fireguard in the presence of children or vulnerable adults.

**CO alarm**

**It is a legal requirement to install a Carbon Monoxide Alarm. In addition we strongly advise fitting a smoke alarm when you install a solid fuel appliance such as a stove. Take advice for position of both. (see CO Alarm, section 3)**

**FUEL**

Only burn dry, seasoned/kiln dried wood in the Fin Wood Only. **Do not burn smokeless fuel.**

In the Fin Smokeless Fuel, only smokeless fuel can be used. **Do not burn wood in this configuration.**

Never burn house coal in a stove. **Do not** treat your stove as an incinerator for general rubbish. **Do not** use any liquid fuels.

**CHIMNEY FIRE**

In the event of a chimney fire, close all stove doors and air vents. Evacuate the house and phone the fire service.

**PRE-LIGHTING CHECKS**

- Check that the door closes correctly and the rope seals and glass are intact
- Check that the throat plate brick is positioned correctly
- Check that all labels and packaging have been removed (including from the flue system)

| FOR YOUR FIRST FIRE YOU WILL NEED                    |
|------------------------------------------------------|
| Matches                                              |
| Firelighters <i>(we recommend the wax wool type)</i> |
| Kindling <i>(dry sticks)</i>                         |
| Seasoned or kiln dried split logs (Wood Only Fin)    |
| Approved smokeless fuel (Smokeless Fuel Fin)         |

YOU LIGHT MY FIRE

## 5.e Simple Guide to your First Fire - Fin Wood Only

We recommend the goldilocks and the three bears method; small fire, medium fire, hot fire.

### READ THIS MANUAL AND ALL WARNINGS CAREFULLY

The A, B & C of lighting your 1st stove fire are:

A = air control | B = burn dry wood | C = cure paint carefully

#### TREEPEE METHOD PREPARE A SMALL KINDLING FIRE

- place one or two firelighters in the centre, kindling over the top, light the fire, close the stove door
  - open all air controls\*
  - ventilate room
- maintain this SMALL FIRE for 15 minutes
- this warms up the stove components gently to prevent the paint from being "shocked"

*\*Refer to 4a. Diagram of Outside of Stove*



#### TREEPEE METHOD MEDIUM FIRE

- add a few split logs & maintain medium fire for one hour
- close air boost disc and airwash control (upper control knob) when burning well
  - aim to raise the surface temp to 450°F/230°C
- control on main air control (lower control knob)



#### TREEPEE METHOD HOT FIRE

- add additional wood
- adjust controls to allow additional air flow to achieve a hot fire
  - aim to raise the surface temp to 600°F/315°C
- control on main air control (lower control knob)
  - maintain hot fire for one hour



#### TOP DOWN METHOD - AN ALTERNATIVE METHOD

Criss cross two or three layers of split logs on top each other, then one or two layers of kindling on top and insert a firelighter. Light the firelighter and close the stove door. Clean all air control knobs, then adjust to suit, once the fire is established.



# 5.f Simple Guide to your First Fire - Fin Smokeless Fuel

We recommend the goldilocks and the three bears method; small fire, medium fire, hot fire.

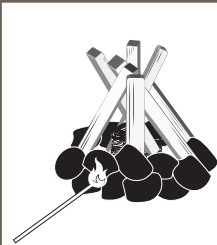
## READ THIS MANUAL AND ALL WARNINGS CAREFULLY

The A, B & C of lighting your 1st stove fire are:  
A = air control | B = burn dry fuel | C = cure paint carefully

### TEEPEE METHOD PREPARE A SMALL KINDLING FIRE

- place one or two firelighters in the centre, kindling over the top, arrange four or five lumps of smokeless fuel around base light the fire, close the stove door
  - open all air controls\*
  - ventilate room
- maintain this SMALL FIRE for 15 minutes
- this warms up the stove components gently to prevent the paint from being “shocked”

*\*Refer to 4a. Diagram of Outside of Stove*



### TEEPEE METHOD MEDIUM FIRE

- add more smokeless fuel & maintain medium fire for one hour
- close air boost disc and airwash air (upper control knob) when burning well
  - aim to raise the surface temp to 450°F/230°C
- control on primary air control (lower control knob)

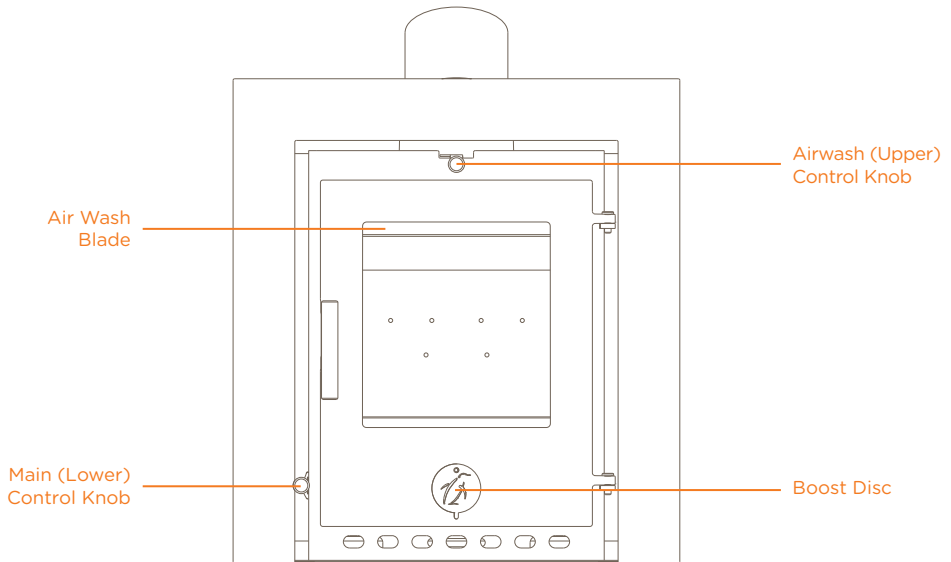


### TEEPEE METHOD HOT FIRE

- add additional fuel
- adjust controls to allow additional air flow to achieve a hot fire
  - aim to raise the surface temp to 600°F/315°C
- control on main air control (left hand control knob)
  - maintain hot fire for one hour



## 5.g Diagram of Air Controls



## 5.h Instructions for Use With Wood

For your first fire we recommend the tee pee method. After this, we prefer the top down method, but you can experiment to see what suits you. For further instruction, see 'Simple Guide To Your First Fire'.

**Damp, impregnated or painted wood will damage both stove and flue and tar up your flue. Damp wood will also give reduced heat to room and cause more emissions.**

### THE AIR CONTROLS

#### To start

Close the glass door. Pull main control (lower) out and slide the airwash (upper) right, to the open position and swing the boost disc up.

#### Once established

Close the boost disc.

You can now close the airwash control knob as required (control to suit glass cleanliness). The rate of burn is now controlled using only the RH (secondary) knob. Your stove is smoke control compliant, meaning the airwash control knob is pre set to prevent it being completely shut down. This prevents excessive smoke emissions.

## REFUELLING

Wood will burn most efficiently when burnt in complete loads – let the fire burn down to a bed of glowing embers before refuelling the fire box with new logs. Open both controls fully again to get the new fuel burning – once alight re-adjust controls to the desired position.

## WARNINGS

### Refuelling on to a low fire bed (not much fuel glowing)

If there is insufficient burning material in the fire bed to light a new load of fuel, excessive smoke emission can occur. Refuelling must be carried out onto a sufficient quantity of glowing embers so that the new fuel load will ignite in a reasonable period. If there are too few embers in the fire bed, add kindling and follow previous steps i.e. open controls and disc etc.

**WARNING - LOADING FUEL WITHOUT OPENING CONTROLS CAN LEAD TO A SUDDEN IGNITION AND POTENTIAL DAMAGE TO YOUR STOVE AND FLUE SYSTEM.**

### Air controls left open

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

### Fuel overloading

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

### De-ashing

De-ashing is only required periodically as wood burns better on a bed of ash. A Chilli Penguin dustpan, called a 'Sgŵp' can be used for this purpose - available in our online shop.

### Safety

Always use the glove provided when opening the doors of the stove and the supplied tool for operating the air controls.

Your stove has not been designed to run with the door open, it should therefore be kept shut except when refuelling is carried out

## 5.i Instructions for use with Authorised Smokeless Fuels

### MAKING A FIRE

Solid fuels can be more difficult to light in a cold stove. We recommend placing firelighters in the centre of the grate. Arrange kindling in a teepee shape around it. Then arrange the smokeless fuel on and around the teepee shape. Light the firelighter. Leave this to start glowing before adding more fuel. It is easy to smother the fire by adding too much fuel too soon.

## USING THE AIR CONTROLS

### TO START



Close the glass door. Pull main control (lower) out and slide the airwash (upper) right, to the open position and swing the boost disc up.

### ONCE ESTABLISHED



Close the boost disc.

When you are burning anthracite or manufactured smokeless fuel once they are glowing, you need to close the airwash control knob (upper) **all the way**. The rate of burn is now controlled using the main control knob (lower).

**WARNING - LOADING FUEL WITHOUT OPENING CONTROLS CAN LEAD TO A SUDDEN IGNITION AND POTENTIAL DAMAGE TO YOUR STOVE AND FLUE SYSTEM.**

### Air controls left open

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

### REFUELLING

Before refuelling, open main control knob (lower) fully for a few minutes before adding new fuel – do not put too much on at once as you may smother the fire. Leave air control open while fire re-establishes.

### WARNINGS

#### Refuelling on to a low fire bed (not much fuel glowing)

If there is insufficient burning material in the fire bed to light a new load of fuel, excessive smoke emission can occur. Refuelling must be carried out on to a sufficient quantity of glowing embers so that the new fuel load will ignite in a reasonable period. If there are too few embers in the fire bed, add suitable kindling and follow previous steps.

#### Fuel overloading

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

#### De-ashing

De-ashing is carried out by using a poker to make the ashes fall into the ash pan for safe removal. When burning smokeless fuel it is necessary to de-ash daily, this allows combustion air to flow up through the fuel. Smokeless fuel burns better with air from underneath.

#### Safety

Always use the glove provided when opening the doors of the stove. And the supplied tool for operating the air controls.

Your stove has not been designed to run with the door open, it should therefore be kept shut except when refuelling is carried out.

## 5.j Principles of Combustion

All fuels need the presence of oxygen to burn. The more oxygen a fire gets the hotter and faster it will burn. When, where and how air is introduced into a firebox of a stove will greatly influence the heat output, burning rate, fuel efficiency and impact on the environment. Different fuels burn in different ways and it is important to know the basics in order to operate your stove with confidence.

### THERE ARE 3 STAGES IN THE BURNING OF WOOD

#### STAGE 1

Drying out. When a piece of wood enters the firebox it will stay below the boiling point of water (100°C) until all the moisture has been driven out. Between 150 – 200°C wood begins to give off volatile gases, some of these will burn while others will mix with the carbon dioxide and water vapour and be carried out the chimney as smoke.



#### STAGE 2

In the second stage of combustion temperatures must reach 600°C for the gases to start burning off. This will only occur with the right amount of air and heat leading to higher efficiencies. These gases burn as a yellow flame above the wood.



#### STAGE 3

Charcoal is left once all the gases have been burnt off. The charcoal contains at least half of the wood's heat potential, at this stage the fire will burn more slowly and without flame requiring less air.

### WOOD (Fin Wood Only)

Wood needs to be seasoned (cut and stored for at least one year after cutting) or kiln dried prior to burning in the stove with a moisture content of less than 20%. As a fuel it gives a good flame and a reasonably high heat output, the burn rate is high and will vary considerably depending on size and species. Wood requires combustion air to be directed down onto it to burn most efficiently. The air controls on your stove provides the air necessary for burning off the volatile gases

#### Tips for identifying dry wood

- 1) Visible cracks at the end of the log
- 2) Bang two logs together, they will sound hollow
- 3) Wood moisture content measuring devices are available

If you are looking for a local wood supplier [www.woodsurre.co.uk](http://www.woodsurre.co.uk) has a list of certified fuel suppliers.

It is important to burn wood in complete loads, this will ensure all the wood in the load is at the same stage of combustion as much as possible. By doing this the firebox temperature will stay in the gas burning stage for longer making the stove more efficient and cleaner burning.

We do not advise you to try and keep a wood fire in overnight. When the air controls are put on a low setting, logs can smoulder and burn inefficiently, releasing harmful emissions into the atmosphere.

If you have the wood only version, **DO NOT** burn smokeless fuels, it can effect both your glass and flue.

### **SMOKELESS FUELS (Fin Smokeless Fuel)**

Those which are suitable for your stove include:

- Natural smokeless fuel - anthracite
- Manufactured smokeless fuels for closed appliances. The fuel must state **“suitable for closed appliances”** and **“suitable for heating appliances”**. It should have a sulphur content less than 2%. A fuel with a high petroleum or sulphur content can damage both the stove glass and flue liner

Your local approved coal merchant will be able to source a suitable product for you. The Solid Fuel Association will also advise on fuels, [www.solidfuel.co.uk](http://www.solidfuel.co.uk). A list of approved fuels can be seen at [www.hetas.co.uk/consumer/fuel-schemes/solid-mineral-fuel](http://www.hetas.co.uk/consumer/fuel-schemes/solid-mineral-fuel)

Smokeless fuels burn most effectively when air is introduced beneath the fuel bed. Depending on the type of fuel used, they will gas off different amounts during the first stage of combustion. Secondary combustion air assists in the burning of these gases before they escape up the chimney. When you are left with glowing coals the secondary air requirement reduces.

Smokeless fuels have a relatively low burning rate due to its high density and low volatility, ideal for longer periods of burning. They need a relatively low amount of air to keep burning.



## Section 6

# MAINTENANCE

Page 40-48

# 6. Maintenance

For more info and advice visit:

[www.chillipenguin.co.uk/FAQ/looking-after-your-penguin](http://www.chillipenguin.co.uk/FAQ/looking-after-your-penguin)

## 6.a Routine Checks and Cleaning

### AS REQUIRED

**Stove surface** should be cleaned with a soft brush or lint free cloth when cold, some people use a vacuum cleaner attachment. **Never use water or a damp cloth.**

**Smokeless Fuel Only - Ash pan** should be emptied daily when using smokeless fuel. If this is done while the stove is still warm, use glove and tool provided. Ensure hot ashes are disposed of safely.

**Glass cleaning** - a damp cloth is all that is needed. Do not use abrasive pads or cleaners. We wipe ours daily because we love a perfect view of the fire! There are different types of stove glass on the market which require a more abrasive clean. Our glass does not. For any stubborn areas see our website for further info.

### QUARTERLY

**Throat brick** - must be removed for cleaning, ensure it is refitted correctly - failure to do this could result in a partial blockage of the flue.

**Doors** should be checked for positive closure against the seals.

**Seals** check to make sure the seals are secure, free from damage and not brittle. Your local stove shop should be able to supply replacement rope seal and glue, alternatively they can be ordered through our online spares shop. All our door seals have a diameter of 14mm for fire doors.

### ANNUALLY

These stoves can be swept through the fire box. We recommend using an experienced and qualified sweep. Correct rods with the appropriate size brushes should only be used with flexible stainless steel liners. The use of incorrect rods can damage your flue.

If the stove is left for long periods without use, i.e. over the summer, it is advisable to clean the stove thoroughly and leave the air controls open. This will help prevent any build-up of condensation, allow the stove to keep dry and limit internal corrosion. The whole system should be checked after any prolonged period of inactivity to ensure that it is free from blockage.

**Note: The appliance should be regularly maintained by a competent engineer.**

# 6.b Painting your Stove

If you are touching up an area of your stove there are 3 steps (do not use an aerosol spray when the stove is lit).

- 1. Preparing the surface
- 2. Applying the paint
- 3. Curing or setting the paint

The most critical step is surface preparation. The paint will adhere to the surface coat, if there is rust, it will fail. If the stove has a coating that is peeling, blistering or chalking in any way, the topcoat will release in the same way. If there is oil/grease/contaminant the paint will not adhere.

1. Preparing the surface

- Remove all rust by sandblasting, sanding or grinding. IF YOU APPLY ON TOP OF RUST the paint will adhere to the rust and fail . A new stove should arrive rust free, this will only be relevant if you are renovating an old stove
- Remove oil, grease, contaminants, and ‘key’ the surface with fine sandpaper. This preparation is vital

TRUBLE SHOOTING

Paint coming off in patches indicates a problem with surface preparation. The remedy is to remove the paint, prepare the surface and start again.

2. Applying the paint (vapour and propellant are flammable, avoid all naked flames and sparks)

- Best results are achieved when the paint, the stove/flue surface and the air temp. are between 18°C/66°F - 29°C/85°F. You can warm a cold can of paint by running a hot tap over it for 2 minutes. DO NOT expose to flames
- Shake the paint for 2 minutes to thoroughly mix the pigments, metallics and solvents
- Do a test spray onto a piece of cardboard, the first spray can be mostly propellant with no pigment
- Apply the first of 2-3 light coats. The first coat should be a mist coat (it will look like dots on the surface). Apply from 12-15 inches, if you are too close the paint will drip/run, if you are too far away you will get a gritty finish

- You can apply the second coat after 15 minutes. The paint will be touch dry in about 20 minutes. We recommend leaving it 4 hours before lighting the first fire
- If you are touching up a stove be aware that there are minute variations from batch to batch of paint so you may need to paint a whole surface to avoid these variations showing. eg if you are covering a mark on the top you may want to apply a coat to the whole top plate. **YOU WILL BE COMPARING CURED PAINT WITH UNCURED PAINT SO THE DIFFERENCE WILL BE MORE APPARENT UNTIL THE NEW PAINT HAS CURED**

## TROUBLE SHOOTING

If paint peels/looks like shattered glass/comes off in thin strips, too much paint was applied. If the surface is gritty the spray was applied too far from the surface. The remedy is to remove as much paint as possible, prepare the surface and repaint.

### 3. To set or “cure” your paint

- Wait 4 hours after paint is applied (this does not apply if unpacking a new stove, this time is allowed in the workshop). Then we recommend the Goldilocks and the 3 bears method; small fire, medium fire, big fire
- Light a small kindling fire, keep burning for 10-15 minutes
- Add fuel gradually to build a medium fire. Building a hot fire immediately will “shock” the paint and cause it to release from the surface. Keep it burning like this for about 60 minutes (bringing the stove surface temperature to 450°F/230°C)
- For the final stage of curing, add fuel to make a very hot fire. Keep it at this level for about 60 minutes (achieving temperatures above 600°F/315°C)

## WARNING

Don't touch the surface with anything during the curing process. There is likely to be a strong smell when the paint is curing, ventilate the room well, open windows/doors as necessary. Take extra care if anyone else in the household has breathing difficulties. There will be a very slight colour change as the paint cures, the hottest areas will cure the soonest. This is completely normal. (It can be more obvious in the lighter colours)

## 6.c Keeping your Stove Glass Clear

To maintain clear glass there are 2 factors.

- 1. Correct and dry fuel** (see **Principles of combustion, section 5**)
- 2. Correct use of air controls** (see **Making a fire - wood/solid fuel, section 5**)

As a general rule the hotter the fire the clearer the glass will be. If you have wet fuel the fire will struggle to reach high temperatures, an inefficient burn = blackening. If not enough air is being drawn through the firebox, due to incorrect use of the controls, the fire will slumber and not burn as well or efficiently also leading to blackening.

However there are also times within both the burn cycle and areas within the physical firebox where the temperatures are cooler. As far as the burn cycle you can just wait for a hotter fire and any discolouration will burn off. Cooler spots in the fire box such as in front of the fuel retaining bar and the corners of the glass can show signs of discolouration or a pattern of white dust. When the stove is cool, this should be cleaned with a soft cloth dampened with water **ONLY**. There is more info on our website, FAQ/ looking after your penguin.

## 6.d Door Seal

If the door seal shows signs of deterioration, you may need to replace it (14mm diameter rope). To test the effectiveness of the seal, when the stove is cold, trap a piece of paper between the door seal and stove body shutting the door completely, you should feel resistance when you try to pull the paper out. Repeat this for each edge.

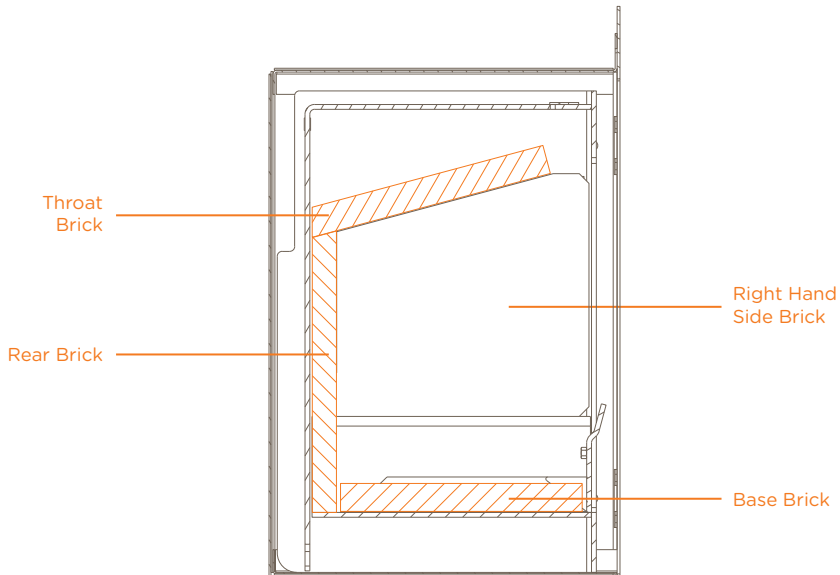
## 6.e Door Glass Replacement



**FIRE DOOR:** Remove the 4 stainless steel screws retaining the glass panel. Replace the glass rope seal if necessary. Position replacement glass and fit retaining bars, tighten screws just enough to pinch the glass. Overtightening can result in the glass cracking.

## 6.f To Remove the Throat Brick - All Version

Model Displayed is Wood Only configuration but steps are identical for Smokeless Fuel.



### LOCATING THE THROAT PLATE

#### STEP 1

Take note of the position of all bricks. Lift the throat brick by pushing the rear of the brick upwards.

#### STEP 2

Whilst supporting the throat brick, remove the right hand side brick by pulling the front edge towards the middle of the stove, and pull out.

#### STEP 3

Bring the throat brick forward and lower the right hand side, and remove the brick.

#### STEP 4

For cleaning, brush soot off brick.

#### STEP 5

Refitting of plate is the reversal of removal.

# 6.g Vermiculite Bricks

The vermiculite bricks which line the fire chamber will need replacing over time, they are a perishable item. They are a pressed board, not a ceramic brick so they should be treated with care. They insulate the stove allowing it to burn more efficiently and protect the steel body from the heat of the stove. The amount of time they will last depends on stove usage, the fuel you burn and the care you take re-fuelling.

| Fire brick signs of damage  |                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cracks                      | Hairline cracks are caused by impact or vibration, usually a log thrown in a little roughly or a log that is slightly too large being pressed against the bricks when the door closes, replace if steel body of the stove is exposed or if the crack causes part of the brick to fall into the fire. A hairline crack in a brick will not damage the stove body. |
| Crumbling edges and corners | Expected wear and tear, replace if steel of stove body is exposed.                                                                                                                                                                                                                                                                                               |

| Caring for your vermiculite bricks                                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------|
| Do not use over sized logs                                                                                                      |
| Do not over fill the fire chamber                                                                                               |
| Place logs in rather than throwing or dropping                                                                                  |
| If using a poker or tool inside the fire box try not to disturb the bricks                                                      |
| Do not use water or water based cleaning agents to clean the interior of the stove, vermiculite will weaken if it absorbs water |
| Only burn correct fuel                                                                                                          |

If the bricks require replacement it will first be necessary to remove the throat brick and the grate (smokeless fuel only). Take a note of their position. It is very common when replacing one fire brick to damage another. For this reason we recommend that if very small areas of damage/hairline crack are visible and the steel is not exposed, wait until you are ready to replace the whole set.

**Bricks are available through your local Chilli stockist or our online shop. There are diagrams online to help you identify the correct bricks.**  
**See [www.youtube.com/@chilli\\_penguin](https://www.youtube.com/@chilli_penguin) for more guidance on replacing bricks and grates.**



## 6.h To Remove the Grate (Fin Smokeless Fuel Only)

Take care when doing this as the grate is heavy and it is possible to trap your fingers. Wear gloves if possible and do not rush the job.

**For mor information please see our YouTube Channel:**



### STEP 1

Remove the ash pan and fuel retainer, place one hand inside the lower opening and push the grate upwards, lifting the grate into the diagonal position (left to right, not front to back).

### STEP 2

Reach into the fire chamber with your other hand to receive the grate, support the grate on the stove while you find a comfortable 2 handed hold.

### STEP 3

Tilt the grate onto an angle which will allow it to exit the door aperture.

### STEP 4

Manoeuvre the grate carefully out of the stove, usually a left to right angle first, then tilt forward.

### STEP 5

To re install it, follow the same steps in reverse, then replace the ash pan and fuel retainer.

## 6.i Disposal / Recycling

To dispose of the stove after the product life has expired, please observe the following information:

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

6.j Trouble Shooting

| PROBLEM | POSSIBLE CAUSE | REMEDIAL ACTION |
|---------|----------------|-----------------|
|---------|----------------|-----------------|

| CANNOT GET FUEL TO STAY ALIGHT                                       |                                                                                                                                                                                                                |  |
|----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1. Fuel is damp<br>2. Fire has been smothered<br>3. Insufficient air | 1. <b>Ensure fuel is dry</b><br>2. <b>Load smaller amounts of fuel at a time – be patient!</b><br>3. <b>Air boost disc has been closed before the fire has been established (see Making a Fire, section 4)</b> |  |

| SMOKE ENTERS ROOM                                                            |                                                                                                                                                                                                                                                                           |  |
|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1. Blocked flue way<br>2. Damaged chimney<br>3. Site and location of chimney | 1. <b>Let the fire go out then drop the throat plate or throat plate brick down and check for blockages. Sweep chimney</b><br>2. <b>Get chimney inspected</b><br>3. <b>If flue is clear and stove installed correctly and problem persists – seek professional advice</b> |  |

| GLASS BLACKENS<br><i>(SMALL LOCALISED AREAS WHERE WOOD HAD FALLEN AGAINST THE GLASS IS NORMAL, THIS WILL BURN OFF AS THE FIRE GETS HOTTER)</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Air controls closed down too soon before fire established                                                                                      | 1. <b>Use correct fuel for your stove configuration</b><br>2. <b>Leave air controls open longer</b><br><br>Some discolouration of the glass is normal after several fires, in the cooler areas of the glass door: near the fuel retainer and the corners. This will burn off in a hot fire or can be removed when stove is cold with glass cleaner/damp cloth dipped in wood ash <b>(see Keeping Stove Glass Clear, section 5)</b> |  |

CHIMNEY FIRE

By following the instructions in this manual, including regular cleaning of the stove and flue system you should avoid the possibility of a chimney fire. In the unlikely event that one occurs, raise the alarm to let others in the house know, call the Fire Service, if time and safety allows close the stove air controls, and exit the building.



*Section 7*

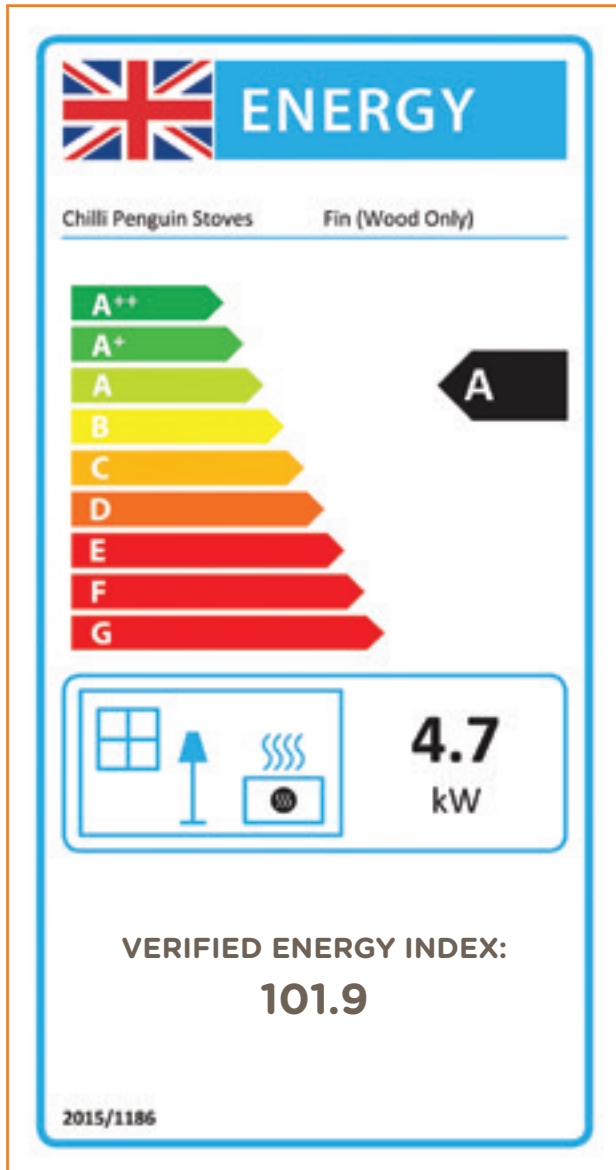
# ENERGY EFFICIENCY & WARRANTY

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[www.chillipenguin.co.uk](http://www.chillipenguin.co.uk)

# 7. Energy Efficiency & Warranty

## 7.a Energy Efficiency Labels



7.b Warranty

7 Year Warranty (available on registration)



A free 7 year extended warranty is offered if your stove is purchased through your local approved Chilli Penguin stockist and the warranty is registered online within two months of purchase. Go to [chillipenguin.co.uk](http://chillipenguin.co.uk), you will see warranty in the menu.

When you register your warranty, you will get a Penguin Owners account. This will record your stove model for future spares orders and you will receive a few stove care emails to help your penguin settle into its new home.

A Chilli Penguin Stove warranty covers the materials listed plus the construction and workmanship. The assembly, installation and operation of the stove, because they do not come under our direct control, are not included in this warranty. You are advised to take these matters up with your stove supplier or accredited installation engineer. The painted surface of the stove does not come under the warranty.

In the unlikely event of the failure of components covered by this warranty, CPS will repair or replace them to their original specification. Labour and shipping costs will be discretionary. It is important to use only replacement parts recommended by CPS.

Should any components arrive in a damaged state upon delivery, they will be replaced provided a written claim is made within 5 days.

| Items covered                                         |
|-------------------------------------------------------|
| The steel body, cast iron door, handles and controls. |

| Items NOT covered                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Those items that are considered service items, these include; vermiculite bricks, door seals, door glass, gloves and painted surface.                                                                                                                                                                                                                                                                |
| The whole of the warranty is invalid if there is any unauthorised modification of the appliance or if any part of the stove assembly, installation, operation and maintenance does not comply with the instructions supplied and with all Building Regulations in force at the time of purchase. In addition they must be certified by either a Hetas installer or your local building control dept. |

7.c Commissioning, Stove and Installation Details

| Commissioning checklist |                                                                                                                                 | (Initials) |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------|
| 01                      | Have all parts been fitted in accordance with the instructions?                                                                 |            |
| 02                      | Has fire cement and mortar dried out before lighting the stove?                                                                 |            |
| 03                      | Have all seals been checked for soundnes and gas tightness?                                                                     |            |
| 04                      | Is the flue functioning correctly so that all combustion products are vented safely to the atmosphere via the chimney terminal? |            |
| 05                      | Have operating instructions, tool and gloves been left with the customer?                                                       |            |
| 06                      | Has the customer been advised about the correct use of the stove?                                                               |            |
| 07                      | Has the customer been warned to only use the correct fuel for this stove?                                                       |            |

| Stove and installation details                                |  |                          |  |
|---------------------------------------------------------------|--|--------------------------|--|
| Shop Name                                                     |  | Purchase Date            |  |
| Installers Name                                               |  | Installation Date        |  |
| Installers HETAS No.                                          |  | Or Building Control Ref. |  |
| SERIAL NO.<br>(Needed in order to register your stove online) |  |                          |  |
|                                                               |  |                          |  |



HAVE YOU REGISTERED YOUR  
FREE 7 YEAR WARRANTY YET?

scan here



**Sales and Technical Support**  
Call: 01758 721 247



**stoves@chillipenguin.co.uk**



**Local Stockists**  
[www.chillipenguin/contact](http://www.chillipenguin/contact)



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