



## Windermere 5 SE

Smoke exempt multi fuel burning stove.

Installation & user instructions.

(To be left with customer).



UK | UK  
CA | NI



Edition 1

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# **1.0      Pre-installation checks, general safety notes.** **Clean Air Act 1993 & Smoke Control areas.** **HETAS Ltd approval.**

## **1.1      Pre-installation checks & general safety notes**

- Installation of this stove **must be** completed in accordance with current local codes and Regulations in each country. All local Regulations & any Rules in Force, including those which refer to National and European standards, **must be** observed when installing this product.
- Reference **must be** made to current issues of British Standard BS 8303, code of practice for installation of domestic heating and cooking appliances burning solid mineral fuel and BS EN 15287-1:2007 design, Installation, and Commissioning of chimneys.
- **Note:** It is a legal requirement under England & Wales Building Regulations that the installation of this stove is undertaken under Local Authority Building Control or is installed by a competent person registered with a Government Approved Competent Persons Scheme. Hetas Ltd operate such a scheme and a listing of their registered Competent Persons can be found on their website at [www.hetas.co.uk](http://www.hetas.co.uk)
- Should any conflict occur between these instructions and any current Regulations and Rules in Force then the Regulations and Rules in force must apply.
- An approved Carbon Monoxide alarm conforming to the latest edition of BS EN 50291 **must be** installed into the room into which the stove is installed. Installation and positioning **must be** in accordance with current National Building Regulations & any Rules in Force including (Approved Document J. England & Wales). Also refer to alarm manufacturer's instructions.
- This stove **must not** be installed into a flue that shares any other appliance.
- Extractions fans or units **must not** be installed into the room of stove installation.
- The installer has a responsibility to **ensure** that all requirements of Health & Safety at Work Act are observed & implemented as stated on the date of installation.
- Due to the weight of this stove adequate facilities **must be** available for loading, unloading & installation.
- **Always** ensure that there is an adequate air supply into the room containing the stove.
- It is very important that flue ways are regularly swept & checked by an approved person. It is recommended that sweeping and checking should be done at least twice each year for approved smokeless fuel use and quarterly each year for wood burning. The installer must ensure that the chimney is examined for soundness and suitability before the appliance 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 temperatures 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.
- All dampers or restrictors **must be** removed from the flue.
- This stove **must be** maintained to ensure safe operation & efficiency.
- **Only use** this appliance for domestic property heating in accordance with these instructions.
- This appliance **is not** suitable and **must not** be installed to any type of water vessel.

- Fire cement can be caustic & should **not be allowed** to come into contact with skin. Refer to manufacturer's instructions.
- This stove contains no asbestos. If there is any situation or possibility of disturbing any asbestos during installation **seek professional advice**.
- An installation / user manual is enclosed with this product. The installation **can only be used** after it has been inspected by a qualified inspector. A name plate of heat-resistant material is affixed to this product. This contains information about identification and documentation for the product.

## **1.2** **The Clean Air Act 1993 and Smoke Control Areas**

Under the Clean Air Act local authorities may declare the whole or part of the district of the authority to be a smoke control area. It is an offence to emit smoke from a chimney of a building, from a furnace or from any fixed boiler if located in a designated smoke control area. It is also an offence to acquire an "unauthorised fuel" for use within a smoke control area unless it is used in an "exempt" appliance ("exempted" from the controls which generally apply in the smoke control area).

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 "authorized" 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:  
<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 and you can contact them for details of Clean Air Act requirements."

**To ensure** smokeless operation operate the stove in accordance with these instructions. (Please see instructions within this manual).

The Windermere 5 SE have been recommended as suitable for use in smoke control areas when burning wood.

**The Windermere 5 SE must be fitted with a permanent stop to prevent closure of the secondary air control beyond 10.5mm open.**

The appliance is **only exempt** when used in accordance with these instructions.

## **1.3** **HETAS Ltd approval**

The Windermere 5 SE appliance has been **approved by HETAS** Ltd as an intermittent operating appliance for burning wood logs.

## **2.0**                      **Technical and Emission data.**

### **Windermere 5 SE**

Material:	Cast iron and steel.
Finish:	High-temp resistant paint.
Fuel:	Wood (Approved wood logs) Approved Smokeless Fuels (Maxibrite used for tests)
Log length:	30cm maximum
Flue outlet:	Top or rear
Flue pipe dimension:	Internal diameter 125mm / 122.7cm <sup>2</sup> cross section
Approx. weight:	80kgs
Dimensions, distances etc:	Figure 2 & 2A

### **Technical data according to EN 13240+A2:2004.**

#### **Fuel: Approved wood logs**

Nominal heat output:	5.0kw
Flue gas mass flow:	3.8 g/sec
Recommended chimney draught:	12.5 Pa
Net Efficiency:	81.3 %
Verified Seasonal Efficiency:	71.3%
CO emission (13% O <sub>2</sub> ):	0.11%
Mean flue gas temperature, at date of test:	274 °C
Operational mode:	Intermittent

<b><u>Emission data.</u></b>		
Mean CnHm emission	@ (13% O <sub>2</sub> ), mg/Nm <sup>3</sup>	90 Nmg/m <sup>3</sup>
Mean CO emission	@ (13% O <sub>2</sub> ), mg/Nm <sup>3</sup>	1354 Nmg/m <sup>3</sup>
Mean NOx emission	@ (13% O <sub>2</sub> ), mg/Nm <sup>3</sup>	97 Nmg/m <sup>3</sup>
Din Plus particulates	@ 13% O <sub>2</sub> : 930mg/Nm <sup>3</sup>	10 Nmg/m <sup>3</sup>

**Technical data according to EN 13240+A2:2004.**

**Fuel: Approved Smokeless fuels (Maxibrite used for tests).**

Nominal heat output:	5.0kw
Flue gas mass flow:	4.4 g/sec
Recommended chimney draught:	12.5 Pa
Net Efficiency:	77.4 %
Verified Seasonal Efficiency:	67.4%
CO emission (13% O <sub>2</sub> ):	0.11%
Mean flue gas temperature, at date of test:	280 °C
Operational mode:	Intermittent

<b><u>Emission data.</u></b>		
Mean CnHm emission	@ (13% O <sub>2</sub> ) mg/Nm <sup>3</sup>	17 Nmg/m <sup>3</sup>
Mean CO emission	@ (13% O <sub>2</sub> ), mg/Nm <sup>3</sup>	1375 Nmg/m <sup>3</sup>
Mean NOx emission	@ (13% O <sub>2</sub> ) mg/Nm <sup>3</sup>	107 Nmg/m <sup>3</sup>
Din Plus particulates	@ 13% O <sub>2</sub> : 930 mg/Nm <sup>3</sup>	18 Nmg/m <sup>3</sup>

## **3.0**      **Installation**

### **3.1**      **Unpacking the stove**

#### **Warning:**

Due to the weight of this stove (80kg) **we recommend that at least 2 people** will be required.

Adequate facilities **must be** available for loading, unloading & installation.

**Ensure** before unloading this appliance that all routes to the installation site are safe, well-lit, unobstructed and all people and animals are completely clear and safe of the delivery route. All relevant Health and Safety regulations must be observed.

**Ensure** that any surface or floor can support the weight of the stove, installers & equipment before attempting to unload and deliver the stove.

Before unpacking the stove, it is important to identify the stove door incorporating the ceramic glass window position to avoid damage, you will find a label on the packaging that informs the side the ceramic glass is facing.

Remove the straps that hold the ply box together.

Pull the ply box upwards until clear of the stove.

Remove the plastic and cardboard glass protector packaging.

Open the door and remove paper protection between the door and stove face.

Remove the glass internal ply protector.

Remove the instructions, Energy labels, Cardboard box that contains the flue collar adaptor, stove mitten and ash pan / operating tool plus all silica moisture absorbing sachets.

After removing the outer packaging, remove the combustion chamber from the wooden pallet and place it gently on its feet onto a level weight bearing floor. Note: There are lower bolts supplied for fitment into holes in the base of each leg, these are adjustable to allow level adjustment of the stove to uneven surfaces.

The instruction manual, Energy label, Energy fiche, Stove tools, and Stove mitten to be given to the user after installation and explanation of stove use.

Dispose all packaging & Silica sachets. Always dispose of items in a way that is sustainable as possible and that is in line with the current environmental protection, reprocessing / recycling, and disposal technology.

### **3.1.1**      **Installing this stove**

The stove and chimney installations **must** comply with all *Current National and Local Building Regulations and any Rules in Force* including current issues of British Standard BS 8303 code of practice for installation of domestic heating and cooking appliances burning solid mineral fuel and British Standards BS EN 15287-1:2007 design, installation, and commissioning of chimneys; your approved dealer or your local building control officer can advise regarding this. Ultimately, it is you and your installer who is responsible to ensure that the installation complies with all relevant Regulations and any Rules in Force.

For installations within England and Wales also refer to the Current Approved Document J that gives guidance on complying with the Building Regulations.

### **3.1.2**      **Tertiary air control**

The Tertiary air intake is a standard part for the Windermere 5 SE stove, there is no control to the tertiary air intake as it is set to 100% open at manufacture.



### **3.1.3 Assembling the baffles and removeable internal parts.**

**See figures 1 to 1.7**

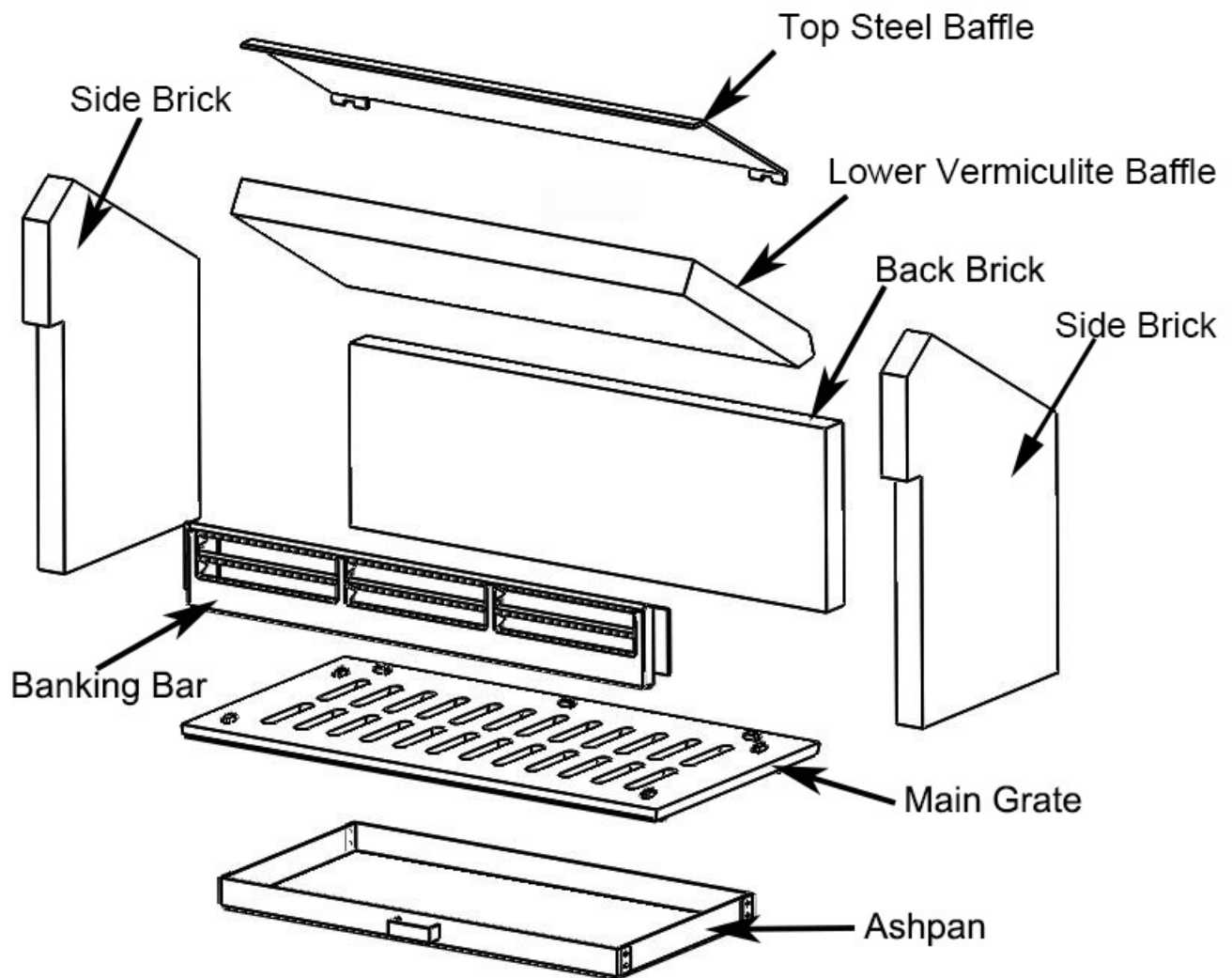
All stove internal parts are assembled at manufacture, however with movements and handling during stove delivery it is possible that some or all the located parts inside the stove may have moved, therefore it is **important to check** all these parts for correct position and fitment after the stove is located. Check the 2 baffles and all other parts are located into correct positions including side bricks, back brick, main grate, banking bar and ash pan. Before lighting the stove for the first time, confirm the baffle and all parts are in correct location.

#### **Location of non bolted stove internal parts.**

**See Figure 1**

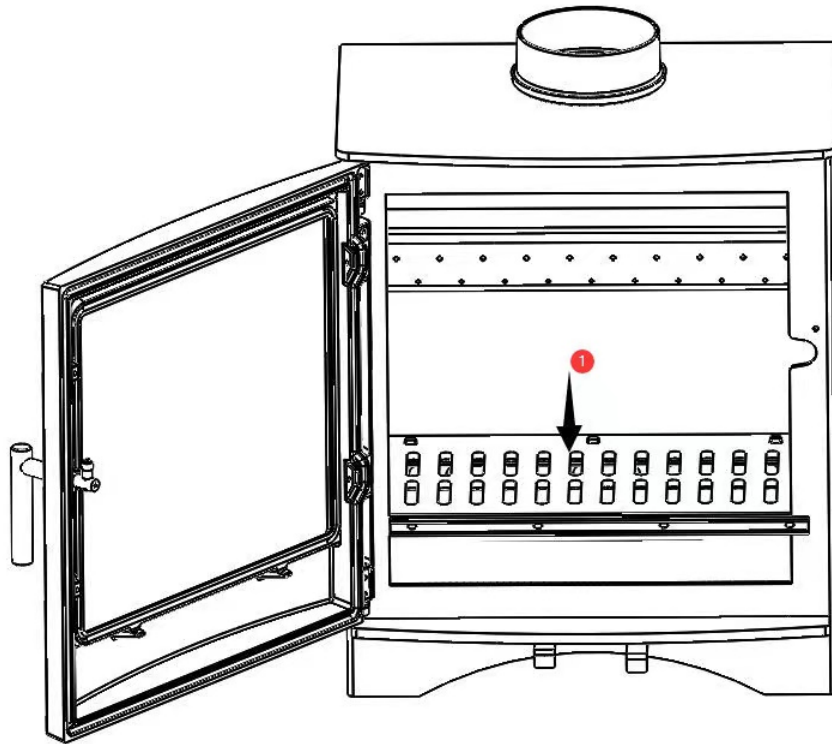
Drawing of parts that are not bolt fixed to the inside of stove that may have moved during transportation. These parts must be checked to ensure they are in correct location before lighting the stove.

**Fig 1**

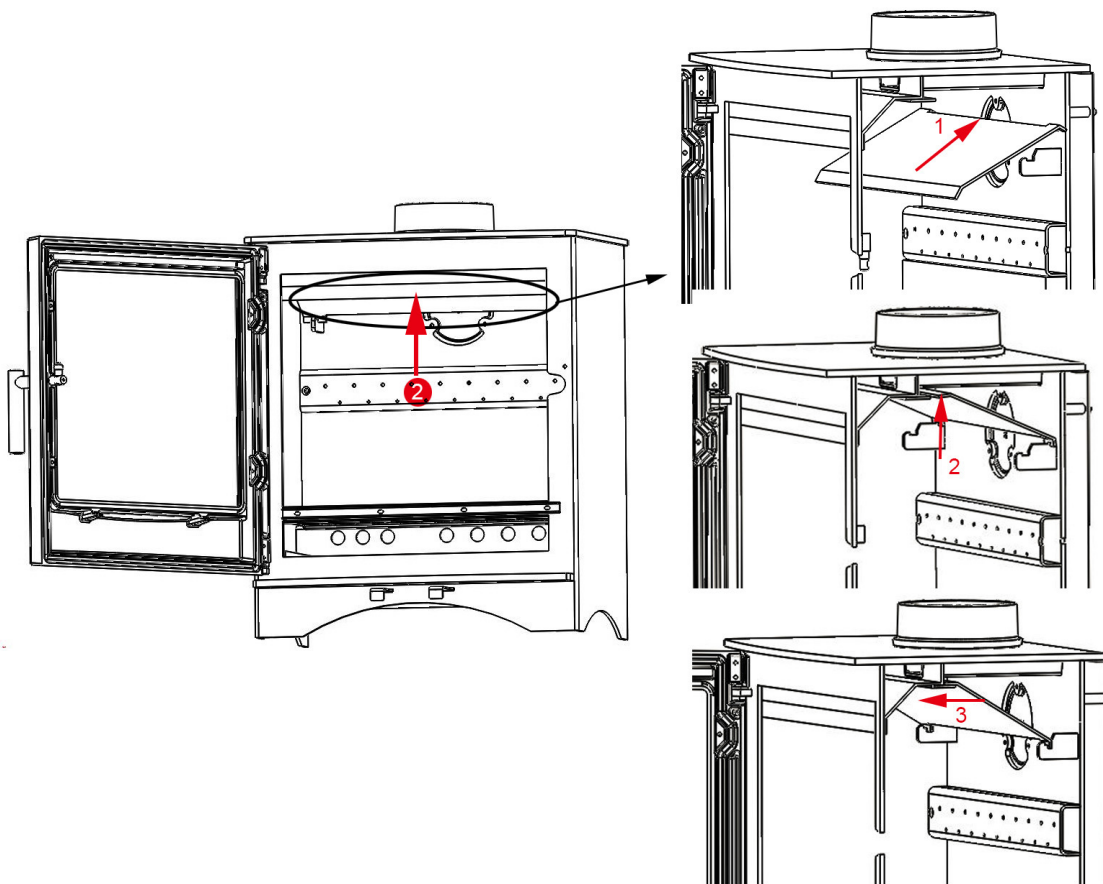




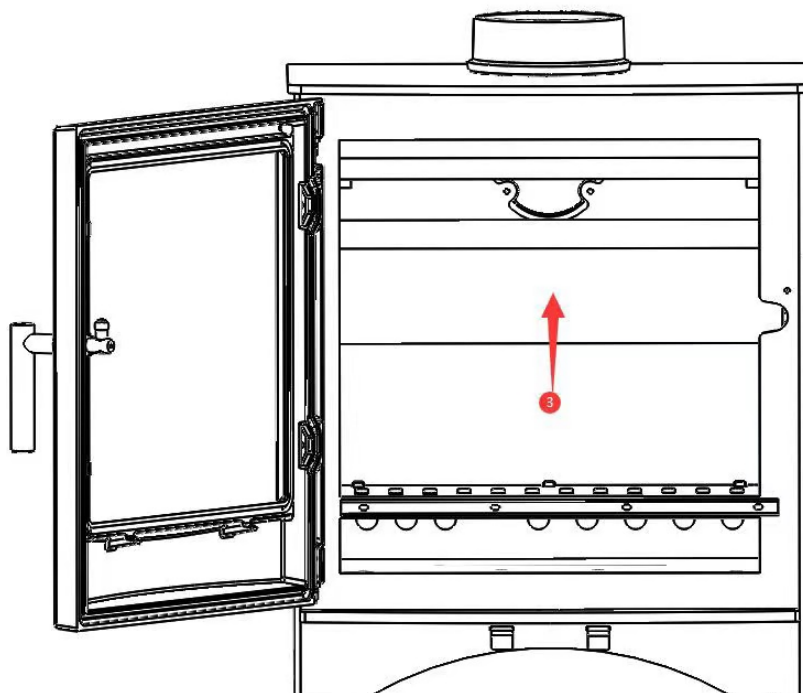
**Fig 1.1** Main grate positioning.



**Fig 1.2** Top steel baffle positioning.

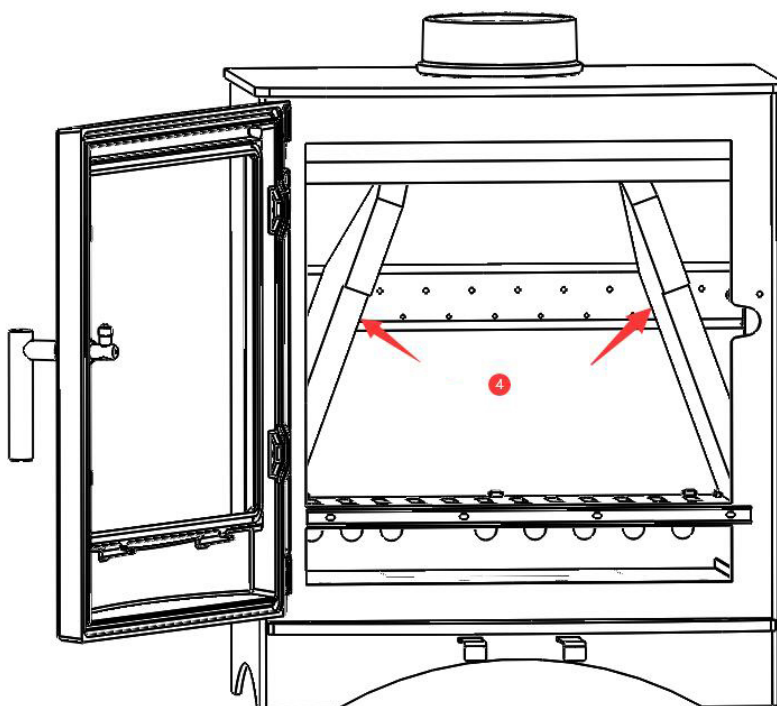


**Fig 1.3**    **Top (lower) vermiculite baffle positioning.**



**Fig 1.4**    **Left & right-hand side brick positioning.**

Note: The vermiculite lower baffle will require to be raised to the front edge to allow the side bricks to be installed against the internal sides of stove after which the lower baffle is lowered into correct position on top of both side bricks.

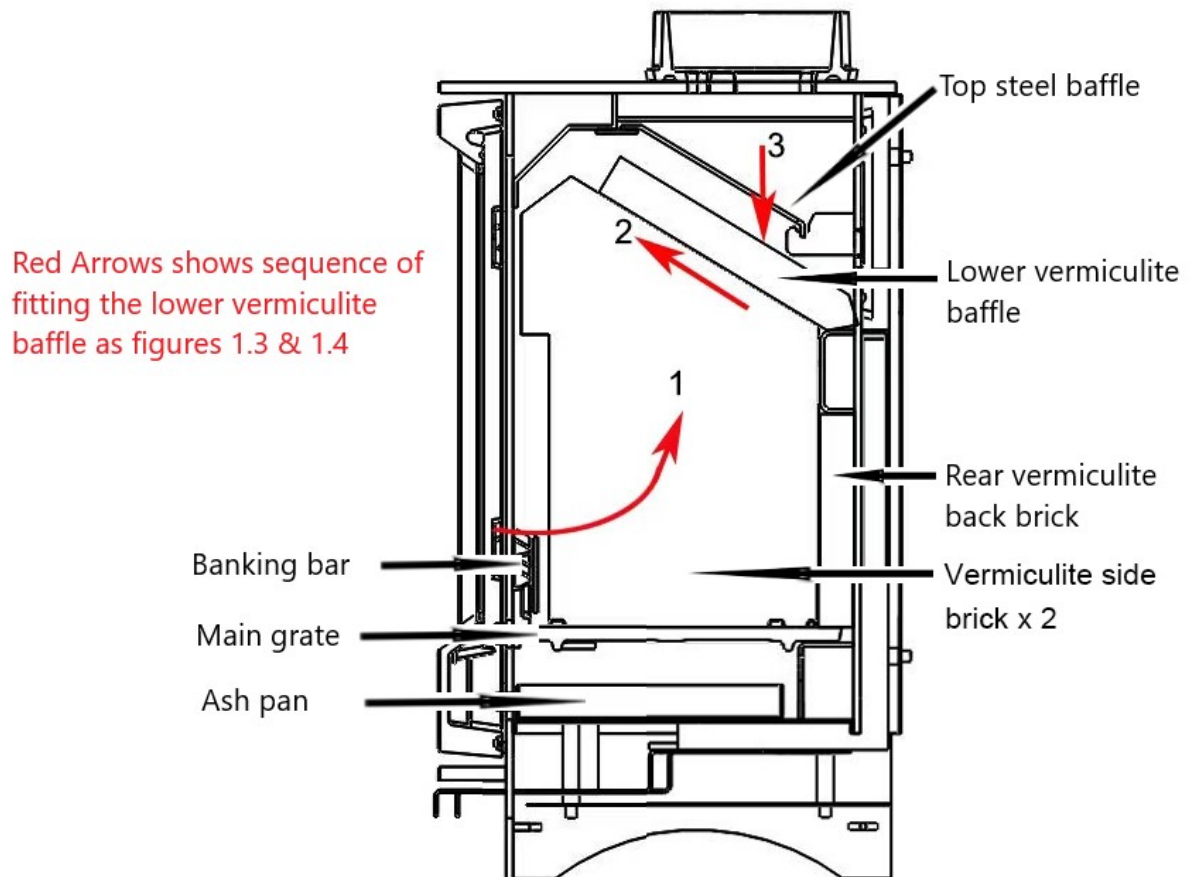


**Fig 1.5**

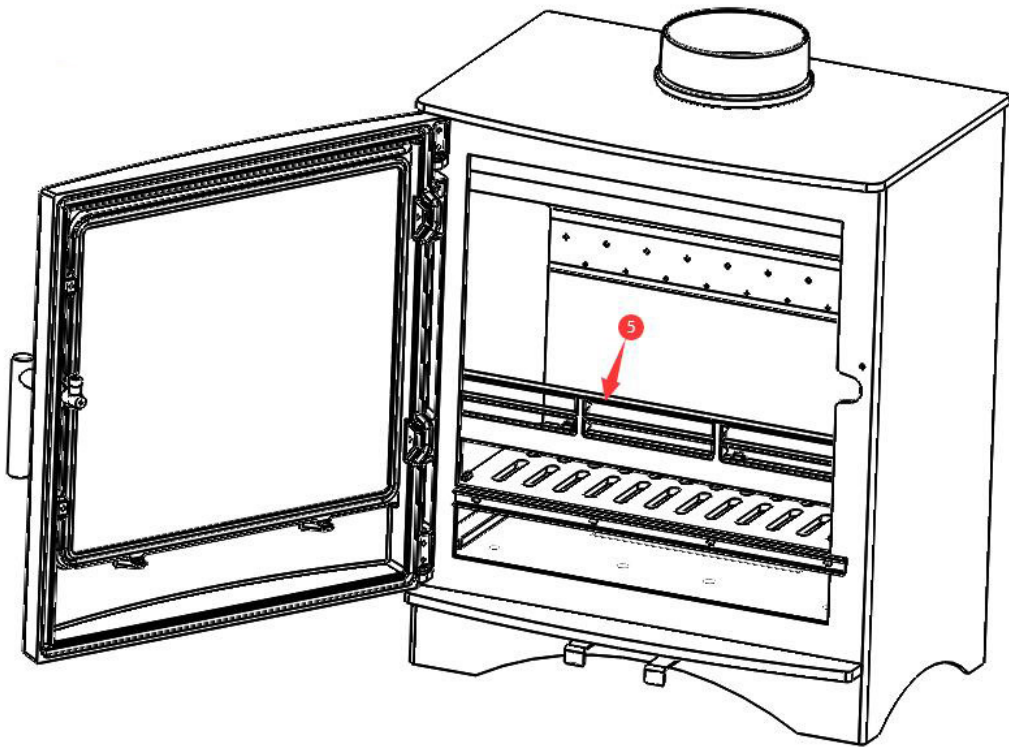
**Side view showing:**

Top steel baffle, Top (lower) vermiculite baffle, Rear vermiculite back brick, Vermiculite side bricks, Banking bar, Main grate & Ash pan positions.

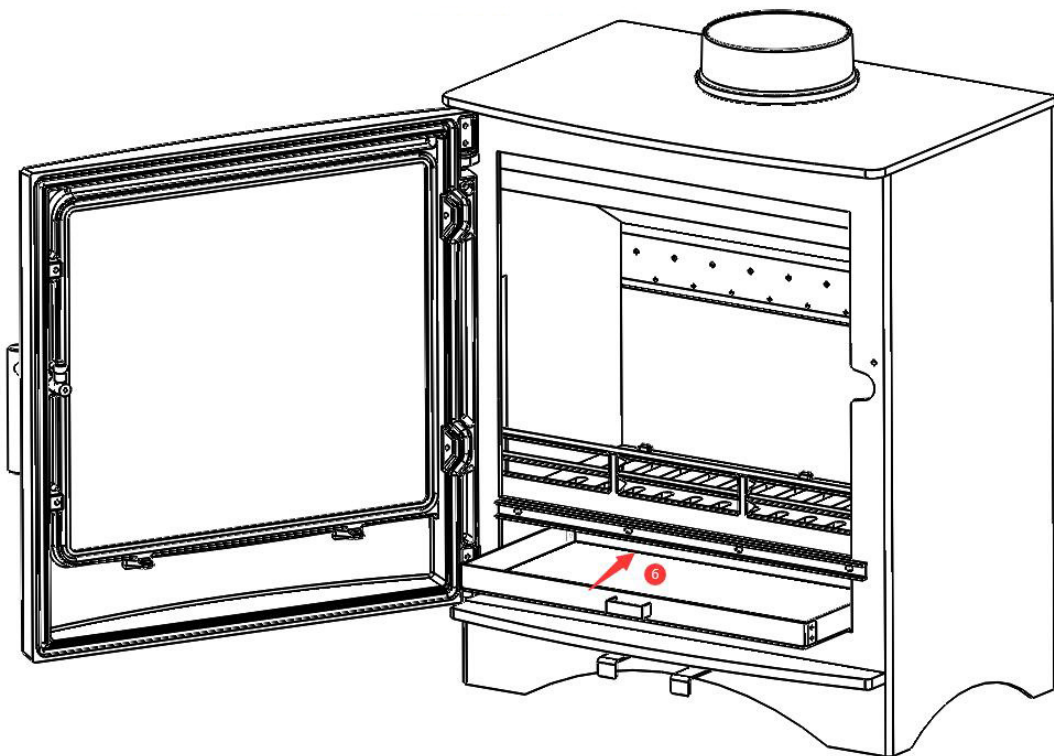
The red text and arrows show the sequence of positioning the top (lower) baffle into correct position also refer to figures 3 & 4



**Fig 1.6**    **Banking bar positioning.**



**Fig 1.7**    **Ash-pan positioning**



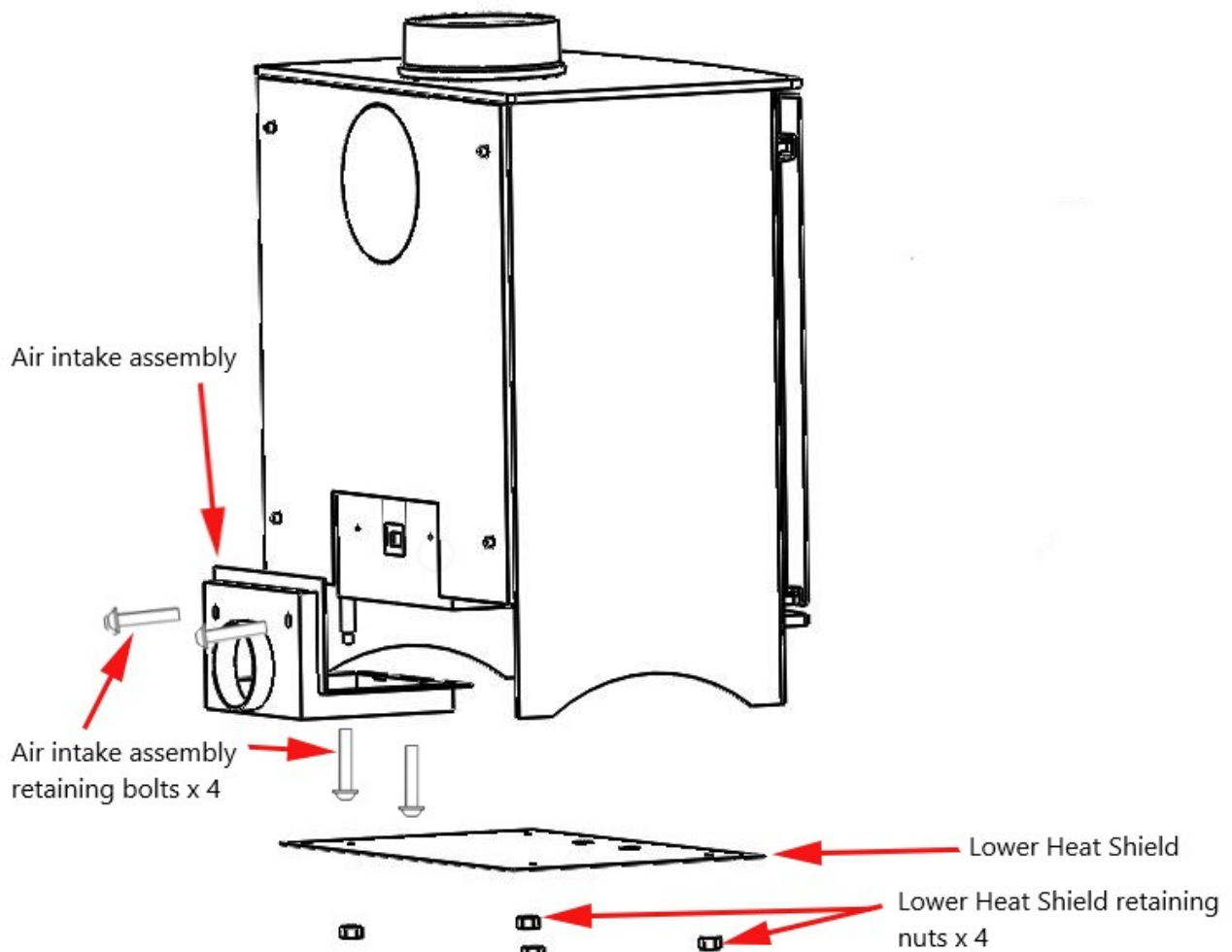
### **3.1.4 Removal of the air intake assembly for external air supply.**

#### **See figure 1.8**

As there are no current approvals offered by the test institutes for outside direct air feed connections therefore this facility **must not** be used and removed from the stove. The air feed for this stove uses room ventilation as section: **3.5 Ventilation (Fresh air supply):**

- 1) Remove the lower heat shield by removing the 4 retaining nuts.
- 2) Remove the 4 bolts securing the air intake assembly and remove from the stove.
- 3) Replace the lower heat shield securely using the 4 retaining nuts.
- 4) Check that all parts within the stove have not moved and are in the correct positions.

**Fig 1.8**



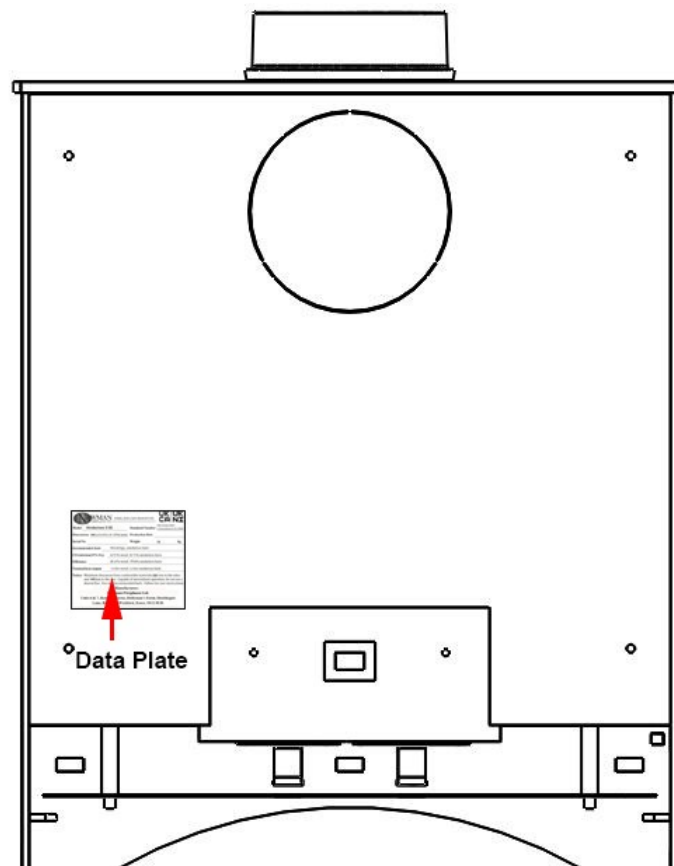
## **3.2 Stove Data plate position.**

**See figure 1.9**

Figure 1.9 shows the position of the stove data plate which is located to the rear of the stove. This shows important information, including:

- a) Model
- b) Standard number
- c) Production date
- d) Dimensions
- e) Serial number
- f) Weight
- g) Recommended fuel
- h) Co Emissions
- j) Efficiency
- k) Nominal heat output
- l) Notice showing minimum distance to combustibles and other safety notes
- m) Manufacturers details

**Fig 1.9**



### **3.3** **Stove placement / clearance requirements**

This stove **must only** be installed onto floors with an adequate load-bearing capacity. If an existing construction does not meet this requirement, suitable measures (e.g., load distributing plate) **must be** taken and **must be** in accordance with *Current National laws, Building Regulations, & any Rules in Force, including BS 8303 and BS EN 15287-1:2007. Also refer to (Approved Document J England & Wales)*

#### **Wooden floor protection.** See: **Figure 2 and 2A**

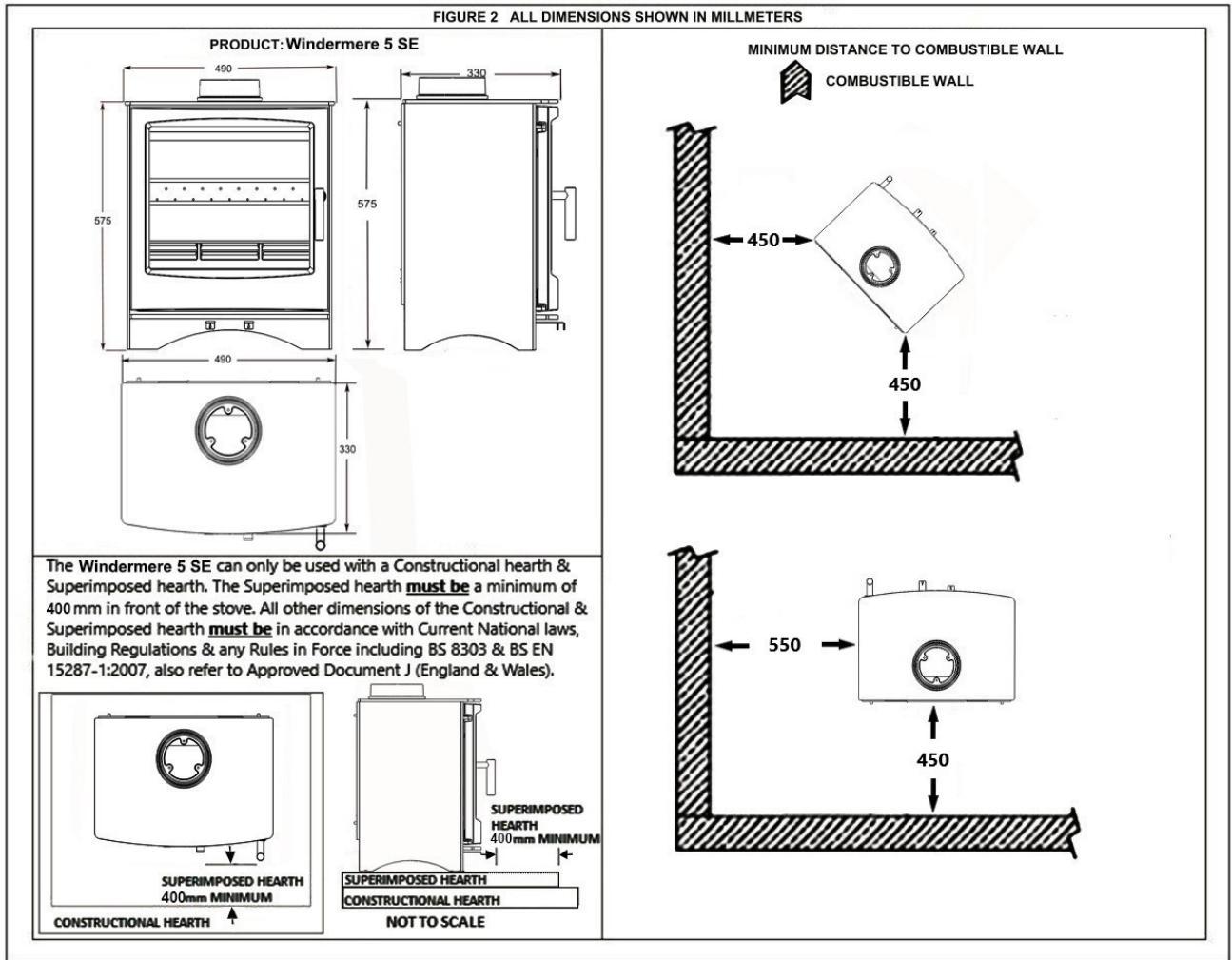
The Windermere 5 SE stove **can only be used** with a Constructional hearth and Superimposed hearth, the superimposed hearth **must be a minimum of 400mm** in front of the stove all other dimensions and specifications **must be** in accordance with *Current National laws Building Regulations, & any Rules in Force, including BS 8303 and BS EN 15287-1:2007. Also refer to (Approved Document J England & Wales).*

<b><u>Minimum distance between the stove and a wall made of combustible material</u></b>	
See: <b>Figure 2.</b>	
To the right-hand side of stove	<b>550mm</b>
To the left-hand side of stove	<b>550mm</b>
To the rear of stove	<b>450mm</b>

Also refer to: *Current National laws, Building Regulations, & any Rules in Force, including BS 8303 and BS EN 15287-1:2007 & (Approved Document J England & Wales).*

Contact your local building authority regarding restrictions and installation requirements.





## Minimum distances between stove and a conventional brick Class 1 Chimney.

**See: Figure 2A**

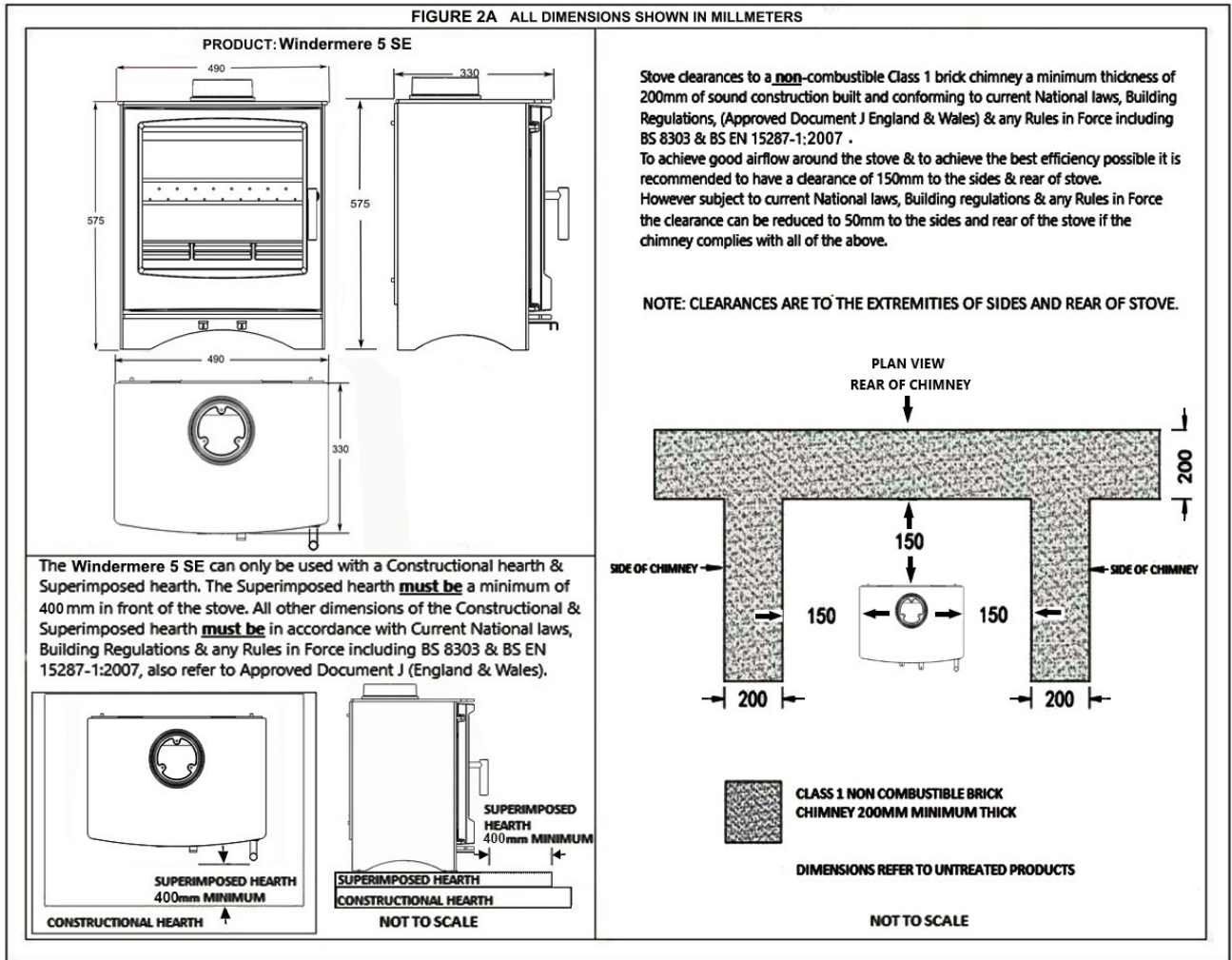
*Refer to Current National laws, Building Regulations, & any Rules in Force, including BS 8303 and BS EN 15287-1:2007 & (Approved Document J England & Wales).*

When installing this stove into a conventional class 1 non combustible brick chimney built to *Current National laws, Building Regulations and any Rules in Force* including BS 8303 and BS EN 15287-1:2007 the clearances between the stove and **non-combustible** chimney **must comply** with *Current National laws, Building Regulations & any Rules in Force*, providing all surrounding **non-combustible** chimney brick walls have a minimum thickness of 200mm the clearance between the rear & sides of stove can be reduced to 50mm, refer to *Current National laws, Building Regulations & any Rules in Force*. However, it is **recommended** that the measurement between the sides & rear of stove to be as large as possible above this dimension, as the efficiency of this stove is dependent on the clearances as shown in figure 2A.

For all other clearances to a **non-combustible** brick wall and chimney refer to *Current National laws, Building Regulations, (Approved Document J England & Wales) & any other Rules in Force, including BS 8303 and BS EN 15287-1:2007.*

Contact your local building authority regarding restrictions and installation requirements.

It is **recommended** that if a suitable **non**-combustible fireplace such as stone / marble or other **non**-combustible fireplace types is to be installed to accommodate this stove that the fireplace supplier is contacted to see what recommended clearances are required between the stove and the fireplace, although most natural stone and marble are non-combustible there is a possibility of the stone or marble being damaged such as cracking if the stone or marble material is heated excessively.



## Ceiling protection.

*Refer to: Current National laws, Building Regulations, & any Rules in Force, including BS 8303 and BS EN 15287-1:2007 & (Approved Document J England & Wales)*

## Clearances to furniture and soft furnishings

**Serious consideration** should be given to positioning of any furniture or soft furnishings that could be adversely affected by heat. Newman Fireplaces Ltd recommend that any furniture or soft furnishings or any combustible materials to be a **minimum of 2000 mm** away from the stove.

**Never** use or store aerosol sprays or any other combustible products in the vicinity of the stove when it is in operation or whenever the stove is hot. The stove will remain hot for some time even after the fire is extinguished.

When lit, a wood-burning stove gets hot and therefore adequate protection must be provided, particularly in situations where there is a safety risk to children or the infirm. When using this stove in situations where children, aged and / or infirm persons are present a fireguard

manufactured in accordance with BS 8423:2010 + A1: 2016 **must be used** and such persons **must be** supervised at all times.

It is also recommended that all other people should use a fireguard in accordance with BS 8423:2010 + A1: 2016 **at all times** when the stove is alight or hot.

### **3.4** **The chimney.**

*Refer to current National laws, Building Regulations, and any Rules in Force, including British standard BS EN 15287-1:2007 and BS 8303 and (Approved Document J England & Wales)*

The construction of the masonry chimneys, flue block chimneys and connecting flue pipe system must meet the requirements of the *Current National laws, Building Regulations, and any Rules in Force*.

This stove must **never** be connected to any shared chimney.

An efficient modern stove places heavy demands on the chimney, and you should have the chimney regularly swept and inspected at least twice a year for smokeless fuel use and quarterly for wood fuel use by an approved chimney sweep.

The flue or chimney system **must be** in good condition. It must be inspected and swept by a competent registered person and passed for use with the appliance before installation. The National Association of Chimney sweeps (NACS) and for Northern Ireland (NIACS) Northern Ireland Association of Chimney Sweeps offer a register of approved chimney sweeping and inspection services who will issue certificates after inspection and sweeping.

Where the chimney is believed to have previously served an open fire installation it is possible that the higher flue gas temperatures 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 by an approved & competent chimney sweep.

If it is necessary to fit a register plate it **must** conform to the *Current National laws, Building Regulations, and any Rules in Force*.

The minimum height of the flue or chimney must be 4.5m from the hearth to the top of the flue, with no horizontal sections and a maximum of 4 bends. Bends must have angles of less than 45 degrees from the vertical. There should be at least 600mm of vertical flue pipe above the appliance before any bends are introduced. Ensure the connecting flue pipe is kept a suitable distance from any combustible material and does not form part of the supporting structure of the building.

The installer **must ensure** the flue pipe diameter is not less than the diameter of the outlet of the appliance and does not narrow to less than the size of the outlet at any point in the system.

Make provision to remove the appliance without the need to dismantle the chimney.

Any existing flue **must be** confirmed as suitable for the new intended use as defined in the Current Building Regulations.

The flue or chimney systems **must be** inspected and swept by an approved chimney sweep to confirm the system is structurally sound and free from obstructions.

The flue exit from the building **must comply** with *Current National laws, local building control rules, Building regulations and any Rules in Force*.

Chimney heights and / or separations may need to be increased in particular cases where wind exposure, surrounding tall buildings, high trees or high ground could have adverse effects on flue draught

It is **highly recommended** that an approved and certified flexible flue liner that complies with *Current National laws, Building Regulations and any Rules in Force* of the correct internal

diameter be used to line the chimney, the liner **must be** approved for use with Multi Fuel burning. Flue liner installation **must comply** with *Current National laws, Building Regulations, and any Rules in force*, also refer to the flue liner manufacturer's instructions. The flue liner **must be** replaced when an appliance is replaced, unless proven to be recently installed and in good condition.

The cross-sectional area of the chimney (at its narrowest point) **must comply** with *Current National and Local Building Regulations and any rules in force*. Generally, the area needed for a wood-burning stove installation should measure at least 150 mm internal diameter. Please refer to *Current National laws, Building Regulations, and any Rules in Force*.

**Important note:** The Windermere 5 SE has been tested for smoke exemption so a minimum internal flue diameter of 125mm can normally be used. \*(This **must be** confirmed with HETAS or Local Authority Building Control and all *Current National laws, Building regulations and any Rules in Force*).

An over-sized chimney is generally hard to keep warm and results in poor draft. In cases where there is an oversized masonry chimney, it is highly recommended that the chimney be lined using an appropriate and approved chimney lining system with the correct internal diameter as stated above.

With respect to the chimney termination, all chimneys **must** terminate in accordance with *Current National and Local Building Regulations*.

Note: *Current National and Local Regulations* also apply with regard to the placement of chimneys and flues in connection with thatched roofs.

The chimney or flue system **must be** equipped with access doors for inspection and cleaning. The size of the cleaning door in the chimney must at least equal to that of the cross-sectional area of the chimney. In the event that a chimney fire occurs resulting from faulty operation or prolonged use of damp wood fuel, if safely possible close the air vents of the stove completely, evacuate all persons from the building and contact your local fire department immediately.

### **3.4.1** **Stove Pipe connection.**

Refer to: Current National laws, Building Regulations, and any Rules in Force including BS 8303 and BS EN 15287-1:2007 and (Approved Document J England & Wales)

There are two stove flue exits enabling either top or rear venting depending on installation requirements.

Check that the flue collar adaptor and flue blanking plate rope seals are not damaged and in correct position. See figures 3.0, 3.1 & 3.2

#### **Top flue exit position.**

If using the stove top flue exit, un-screw and remove the 3 flange bolts supplied from the stove top flue exit position.

Check that the flue collar adaptor rope seal is not damaged and in correct position.

Align the flue collar adaptor to the stove top flue exit position ensuring the 3 flange bolt hole positions align with the 3 threaded holes to the stove top flue exit position.

Screw each bolt through each flue collar adaptor flange into the threaded holes within the stove top, evenly tighten the 3 bolts so the flue collar adaptor is securely fastened to the top of the stove.

**Rear flue exit position.**

If using the rear flue exit position, remove the steel heat shield to the rear of stove by un-fastening the 4 securing nuts, this will expose the rear flue blanking plate.

Un-fasten the 3 bolts securing the blanking plate and remove.

Check the flue blanking plate rope seal is in correct position and un-damaged.

Securely bolt the blanking plate to the stove top flue position as described above.

Securely bolt the flue collar adaptor to the stove rear exit flue position as described above.

Securely fasten the heat shield to the rear of stove using the 4 nuts supplied.

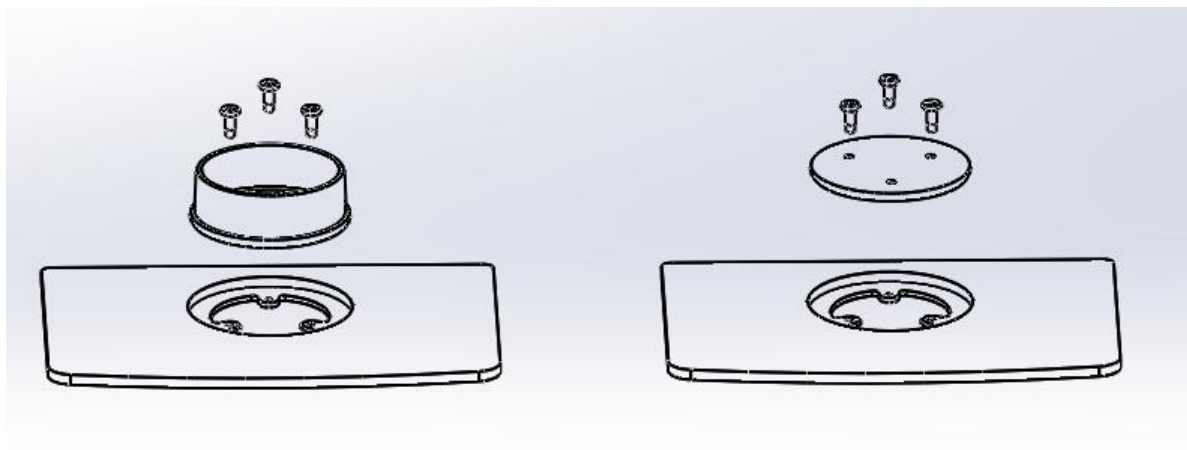
A suitably gauged metal rigid stove flue pipe of the correct size **complying** with *Current National laws, Building Regulations, and any Rules in Force* (not supplied), is connected to the flue collar. The joint between the stove collar and rigid stove pipe **must be** fully sealed using suitable stove rope / fire cement. When the rigid stove flue pipe is **fully** inserted into the stove flue collar drill two suitably sized holes in a suitable position 180° apart through the stove flue collar and rigid stove pipe and use either corrosion proof self-tapping screws or bolts, nut and washers of suitable size to ensure the rigid stove pipe is unable to be pulled out of the stove collar. **Ensure** the self-tapping screw or bolt nut and washers do not obstruct the stove collar flue way and ensure the screws or bolts and locating holes are airtight.

The chimney or flue way that the stove pipe is connected **must be** at least 125mm internal diameter. (ii) rectangular or square flues having the same internal cross-sectional area and a minimum dimension of 100mm for straight flues or 125mm for flues with bends or offsets. Refer to *Current National laws, Building Regulations, any Rules in Force including BS 8303 and BS EN 15287-1*: (This **must be** confirmed with HETAS or Local Authority Building Control and all *National laws, Building regulations and any Rules in Force*).

**Fig 3.**

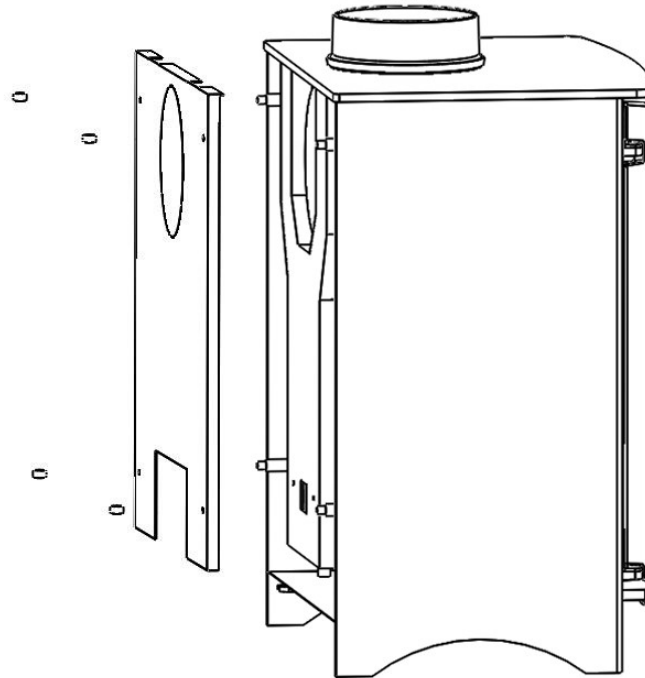
Flue adaptor if using the top exit.

Top exit blanking plate if using rear exit.



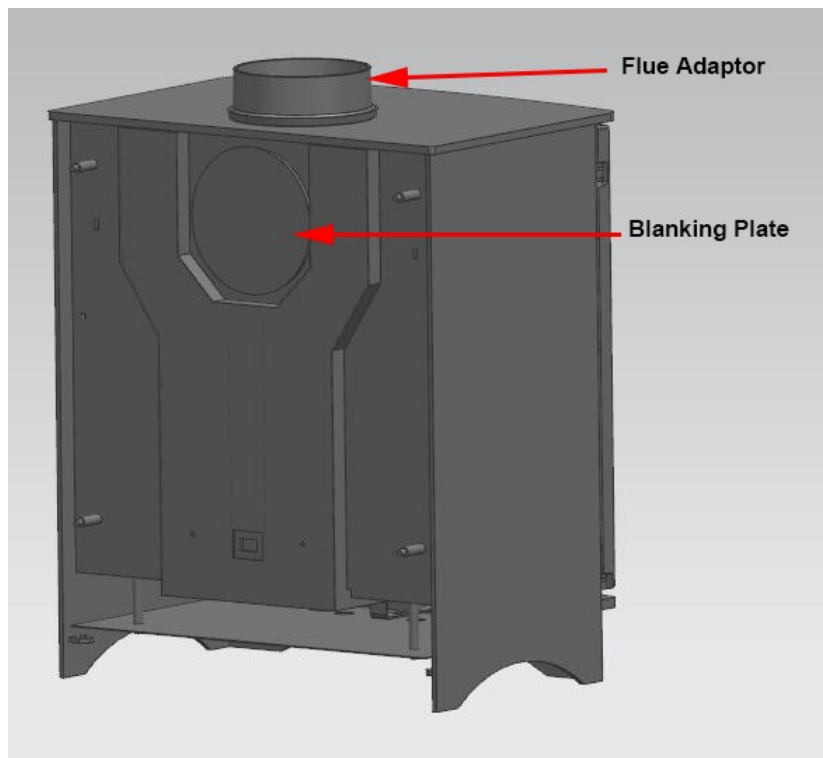
**Fig 3.1**

To gain access to the rear flue exit of the stove the steel heat shield must be removed by unscrewing the 4 fixing nuts. If using the rear flue exit remove the stamped circular blank from the heat shield so the rear flue collar can exit. Refit the steel heat shield securely when any works are complete.



**Fig 3.2**

Flue adaptor and blanking plate positions if using the top flue exit, vice versa positions if using the rear flue exit.



### **3.4.2 Connecting to a masonry chimney**

*Refer to Current National laws, Building Regulations, & any Rules in Force, including BS 8303 and BS EN 15287-1:2007 & (Approved Document J England & Wales)*

Installation & all parts used for the connection of the stove & rigid stove pipe to the masonry chimney & flue way **must be** in accordance with *Current National laws, Building Regulations, and any Rules in Force*.

It is **highly recommended** that an approved certified flexible flue liner that **complies** to *Current National laws, Building Regulations and any Rules in Force* of the correct internal diameter be used to line the chimney, the liner **must be** approved for use with multi fuel burning. Refer to the Flue liner installation instructions and *Current National laws, Building Regulations, and any Rules in Force*.

The masonry chimney or flue system **must be equipped** with access doors for inspection and cleaning. The size of the cleaning door in the chimney must at least equal to that of the cross-sectional area of the chimney.

The chimney or flue way that the stove pipe is connected **must be** at least 125mm internal diameter or (ii) rectangular or square flues having the same internal cross-sectional area and a minimum dimension of 100mm for straight flues or 125mm for flues with bends or offsets. Refer to *Current National laws, Building Regulations, and any Rules in Force including BS 8303 and BS EN 15287-1: (This must be confirmed with HETAS or Local Authority Building Control and all Current National laws, Building Regulations, and any Rules in Force)*.

### **3.4.3 Connecting to a stainless-steel twin wall insulated flue system**

*Refer to Current National laws, Building Regulations, & any Rules in Force, including BS 8303 and BS EN 15287-1:2007. Also refer to (Approved Document J England & Wales)*

If the installation is to use a suitable and approved twin walled stainless steel insulated flue system for Multifuel use then you **must comply** with *Current National, Local Building Regulations and any Rules in Force*, including referring to the flue manufacturer's instructions concerning installation and clearances to combustible materials such as walls, floor joists and ceilings etc.

**It is important** that the insulated flue system is properly supported both at ceiling level and at roof level.

The Stove **must not** bear the weight of the chimney system (See chimney flue manufacturer's instructions). Excessive weight on the stove will inhibit expansion and could lead to damage of the stove top. Damage caused to the stove in this way would not be covered by the manufacturers guarantee.

The chimney or flue system **must be** equipped with access doors for inspection and cleaning. The size of the cleaning door in the chimney must at least equal to that of the cross-sectional area of the chimney.

The chimney or flue way that the stove is connected **must be** at least 125mm internal diameter. (This **must be** confirmed with HETAS or Local Authority Building Control and all *Current National laws, Building regulations and any Rules in Force*).



### **3.5** **Ventilation (Fresh air supply):**

Refer to Current National laws, Building Regulations, & any other Rules in Force, including BS 8303 and BS EN 15287-1:2007 & (Approved Document J England & Wales)

The Windermere 5 SE, nominal heat output 5.0kw. Note: This is the nominal heat output **not** the maximum heat output.

- The Windermere 5 SE uses room ventilation, this stove **is not** approved for direct outside air to stove ventilation, see section 3.1.4
- A multi fuel burning stove **requires air** for combustion and therefore you may need to install additional ventilation to the room. An adequate air supply for ventilation & combustion **is required** to the room into which the stove is installed. As this stove is CE tested to 5.0kw nominal heat output a purpose provided air vent is not normally required, (England and Wales). However, in certain circumstances a purpose provided air vent may be required such as: insufficient natural ventilation, a flue draught stabiliser is fitted and date of building construction etc.
- Refer to *Current National laws, Building Regulations and any other Rules in Force* to any other country or area outside of England for ventilation requirements.
- **We suggest that it is advantageous** to provide an air supply into the room that the stove is installed.
- When determining the ventilation requirements account will need to be made for any other combustion devices in the room.
- Purpose provided air vents **must be** of the correct size, be non-closable and unrestricted, and **must** comply with *Current National laws, Building Regulation & any other Rules in Force*.
- Installation of purpose provided air vents must be installed to comply with Current National laws, Building Regulation & any other Rules in Force.
- Extractor fans or any other similar devices **must not** be installed in the room into which the stove is installed.
- Air inlet vents should be positioned in the room at locations to avoid them becoming blocked. If the air supply is inadequate the chimney draft may be too weak, with the possible result that the stove will not burn properly leading to a potentially dangerous situation. Smoke spillage may also occur especially during the refueling process.
- If there is an extraction fan fitted in adjacent rooms where this appliance is fitted, additional air vents may be required to alleviate the possibility of spillage of products of combustion from the appliance/flue while the fan is in operation. Refer to B.S. 8303 Part 1. Where such an installation exists, a test for spillage **must** be made with the fan or fans and other appliances using air in operation at full rate, (i.e., extraction fans, tumble dryers) with interconnecting doors fully open. and all external doors and windows closed. If spillage occurs following the above operation, an additional air vent of sufficient size to prevent this occurrence **must be** installed.
- This stove requires an adequate air supply in order for the stove to operate safely and efficiently. The installer may have fitted a permanent air supply vent into the room in which the stove is installed to provide combustion and / or ventilation air. This air vent should not under any circumstances be shut off or sealed.

## **3.6** **Chimney Draft**

*Refer to Current National laws, Building Regulations, & any Rules in Force, including BS 8303 and BS EN 15287-1:2007. Also refer to (Approved Document J England & Wales)*

The recommended chimney draft is 12.5 to 15.0 Pa when the stove is operating at its nominal heat output.

If smoke spillage occurs when the fire door is opened, it is probably due to poor chimney draft. This type of stove requires at least **12.5 Pa** of chimney draft to achieve satisfactory combustion and smoke spillage prevention. However, in cases where the stove door is opened too vigorously you could expect that slight smoke spillage may occur.

**Important:** If the flue draught is excessive this will cause over firing and rapid burning of the fuel, this will impair controlling the burn rate which is a dangerous situation and cause damage to the stove, the stove warranty would be invalidated in this situation. If the flue draught is excessive consult a Hetas registered stove installer or (equivalent for other countries). Do not use the stove until the situation has been remedied.

### **Draft conditions**

The chimney's draft is the resulting effect within the flue caused by the difference in temperature within the flue and the cooler temperature outside. Other factors that can influence the level of draft include the length of the flue, insulation of the chimney, adverse weather conditions or tall buildings or trees nearby the flue terminal.

#### **Poor draft occurs when:**

- The atmospheric temperature difference is too low, e.g., a poorly insulated chimney.
- The outside temperature is too high, e.g., during the summer months.
- There is no air movement (wind) outside.
- The chimney is not tall enough, with the result that the terminal sits in the lee of the roof surface or in the vicinity of tall trees or neighboring buildings. These conditions are also associated with downdraft where the flue gases are pushed back down the chimney.
- Flue draft is diluted by residual air entering the chimney, e.g., due to inadequate fluepipe joints or leaks at the cleaning door or flue collar.
- Unsealed, unused fireplaces are connected to the chimney.
- The flue is blocked, e.g., by soot, due to inadequate cleaning, loose debris or even a birds nest.
- The room to which the stove is installed is too tightly sealed. See section 2.8 Ventilation Fresh air supply).

#### **A good draft is achieved when:**

- The temperature difference between the flue way or chimney and outside atmosphere is high. (Higher temperature in flue way or chimney and cooler temperature to external atmosphere). This also applies during firing when the need is greatest.
- The weather is clear and there is a good wind.
- The chimney is of the correct height.
- The room that the stove is installed is adequately ventilated.

### **3.7** **Carbon Monoxide Alarm**

*Refer to Current National laws, Building Regulations, & any Rules in Force, including BS 8303 and BS EN 15287-1:2007 & (Approved Document J England & Wales)*

- An **approved** Carbon Monoxide alarm conforming to the latest edition of BS EN 50291 **must be** installed into the room into which the stove is installed. Installation and positioning **must be** in accordance with *Current National laws, Building Regulations and any Rules in Force including (Approved Document J England & Wales)*. Also refer to the alarm manufacturer's instructions.

### **3.8** **Commissioning and handover**

- **Ensure** the installation of this stove is completed in accordance with Current National laws, local codes, and Regulations in each country. All local Regulations & any Rules in Force, including those which refer to National and European standards, **must be** observed when installing this product.
- **Ensure** all parts are fitted in accordance with these instructions.
- Check the soundness of door seals, castings, and all joints.
- On completion of the installation allow a suitable period for any fire cement and mortar to dry out, before lighting the stove.
- Check the operation of all air controls.
- Carry out a final smoke draw test.
- Warm the flue within inside the stove with a blowlamp or similar product, for approximately 10 minutes.
- Place a smoke pellet on the centre of the grate. **Ensure** all air controls are fully open.
- Close the stove door. The smoke emitted from the smoke pellet should now be drawn fully up the flue and be seen to exit from the flue terminal.
- Complete the test with all windows and doors closed within the room the stove is fitted.
- If there are any extractor fans fitted in adjacent rooms the test **must be** repeated with the fans switched on and running on maximum with interconnecting doors fully open and all external windows and doors closed.
- Check the effect of any ceiling fans that may be installed on their maximum setting.
- If the smoke spillage test fails, re-check the flue system and room ventilation. Products of combustion entering the room are **potentially very dangerous** and the stove must never be left installed in this condition.
- When the fault of the smoke test failure has been identified and rectified another smoke test must be completed to ensure that no products of combustion enter the room and property.
- Check the stove for smoke or fume spillage under normal use, light the stove and slowly increase the temperature.
- Once the stove is under fire check all seals for soundness and check that the flue is functioning correctly and that all products of combustion are vented safely to atmosphere via the chimney terminal.
- Complete the test with all windows and doors closed within the room the stove is fitted.
- If there are any extractor fans fitted in adjacent rooms the test must be repeated with the fans switched on and running on maximum and with interconnecting doors fully open and all external doors and windows fully closed.

- Check the effect of any ceiling fans that may be installed.
- Ensure no products of combustion enter the room and property.
- When the appliance reaches its normal operating temperature open the door and carry out a spillage test with a smoke match or pellet around the door opening.
- If spillage occurs allow the stove and chimney system to cool and re- check the flue system and ventilation. This **must be** rectified to **ensure** safe operation of this stove before handing over to the end user.
- Whenever a stove or chimney is installed or renovated, it is a mandatory requirement that a Check List and Notice Plate be completed. The purpose of the Check List is to ensure that the installation has been carried out correctly. The Notice Plate is a record of the installation, the appliance and fuels that can be used with the chimney. It must be located in a convenient and accessible location, for example, near a services meter. Completion of the data required on the Notice Plate can be by the heating appliance installer, builder, chimney supplier/installer or other competent person.
- On the completion of the installation and commissioning **ensure** that the operating instructions for the stove are left with the customer and user.
- **Explain to the user** the safe operation of the appliance, use of controls and the importance of using suitable fuels and never to exceed the maximum fuel load stated within these instructions.
- **Explain to the user** how to open and close the door and the importance of not operating the stove with the stove door open other than as explained within these instructions.
- **Explain to the user** the high temperatures the stove can reach and never to touch any part of the stove and flue pipe. Explain that the stove and flue pipe will remain hot for some time after the stove has been used and not to touch any part. Show and hand to the user the stove mitten and tool supplied for use in operating the handle and all air controls, including the ash pan and explain how to use.
- Advise the user that when using the appliance for the first few days, to allow the appliance to settle and allow fixing sealers and paint to fully cure. Advise the user to operate the appliance at a **lower temperature** for the first few days to achieve this.
- **Advise the user** what to do should smoke or fumes be emitted from the stove.
- **Ensure** that an approved carbon monoxide alarm has been fitted and make the user aware of its operation and importance.
- **Explain to the user** the cleaning and routine maintenance requirements.
- **Explain to the user** the requirement to use a suitable fireguard when children, elderly or infirm persons are within the room the appliance has been installed.
- **Explain to the user** that it is recommended that **all persons** within the room the appliance is installed **to use** a suitable fireguard.
- Explain to the user that a suitable fireguard must be used when the appliance is left unattended.
- Record the appliance serial number and give a copy to the user as this will be needed for any spares that may be required and any warranty claim. The serial number is located on the data plate that is fixed to the rear of the stove,

## **4.0 User Manual**

### **4.1 Warnings and Safety**

**Important.** Please read the Installation and User Instructions so that you become fully acquainted and understand how to use and operate this stove safely.

▲ = **Warning sign.**

▲ Installation of this stove **must be** completed in accordance with Current Local Codes and Regulations in each country. All local Regulations & any Rules in Force, including those which refer to National and European standards, **must be** observed when installing this product.

▲ **Important Note:** It is a legal requirement under England & Wales Building Regulations that the installation of this stove is undertaken under Local Authority Building Control or is installed by a competent person registered with a Government Approved Competent Persons Scheme. Hetas Ltd operate such a scheme and a listing of their registered Competent Persons can be found on their website at [www.hetas.co.uk](http://www.hetas.co.uk)

▲ **Always** ensure that whenever operating the stove and near to the stove that:

- Long hair is tied back.
- Do not wear any loose-fitting jewelry.
- Do not wear loose fitting clothes.
- Ensure all clothing is fire retardant to Current Regulations.
- Check & ensure anything else that maybe worn or part of your physic such as beards etc; that is not possible to inadvertently either touch or enter the fire chamber area of the stove.

▲ This stove is a **high heat** producing appliance and **may cause severe burns & injury** if touched to any part.

▲ **Do not** touch the surface of this stove whenever alight or hot. **Caution** This stove may still be hot even after the fire is extinguished and can take many hours before the stove cools down therefore **do not** touch the surface of stove until it is completely **cold.**

▲ This stove gets **extremely hot when burning and remains very hot** for some time even when the fire is extinguished, therefore adequate protection **must be** provided, particularly in situations where there is a safety risk to children, aged and the infirm. When using this stove in situations where children, aged and / or infirm persons are present a fireguard manufactured in accordance with the latest edition of BS 8423 + A1 **must be** used and such persons **must be supervised at all times.**

▲ It is also recommended that **all other people** should use a fireguard in accordance with the latest edition of BS 8423+ A1 at **all times** when the stove is alight or hot.

▲ It is **not** recommended that the stove is left operating unattended. If the stove is operating unattended a fireguard **must** be used and comply with the latest edition of BS 3248

- ▲ **Ensure** the area around the stove is clear of all obstacles so as not to be a trip hazard and allowing a totally un-obstructed space whilst lighting, re fueling, adjusting the air controls, removal, and replacement of ash pan and at all other times.
- ▲ **Ensure** the area around the stove is safely clear of all people and animals whilst lighting, re fueling, adjusting the air controls, removal, and replacement of ash pan and at all other times.
- ▲ A stove mitten is supplied with this stove for your use when operating the stove, however if the mitten supplied is of the incorrect size for the user, then it is **recommended** that the user sources a CE approved stove mitten or glove to the correct size before lighting and operating this stove.
- ▲ **Use** the long ash pan / operating tool provided for operating and adjusting all the air controls, including when removal & replacement of the ash pan is required. Use a stove mitten when operating the stove and when holding and using the long ash pan / operating tool.
- ▲ Ash and all residue materials including the ash pan will be **extremely hot** and can cause severe **life-threatening injuries**, therefore extreme care **must be** taken whenever removing hot ash and residue material including the ash pan from the hot stove. See section 4.3.3
- ▲ **It is highly recommended** providing the ash pan is not full of residue material that the ash pan is emptied when the fire is **not in use** and the stove, with all residue and components are **cold**.
- ▲ It is **recommended always** to use approved and suitable stove tongs for loading and refueling the stove with suitable fuel to avoid any part of your arms and hands entering or touching the stove. Use the stove mitten to hold the tongs.
- ▲ **Never** leave any ash and residue material burning or smoldering within the building as this will release carbon monoxide into the air that is extremely dangerous and a potential fire hazard.
- ▲ Where the chimney is believed to have previously served an open fire installation it is possible that the higher flue gas temperatures 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 by an approved chimney sweep a second time within a month of regular use after installation.
- ▲ Chimneys / Flues and connectors should be **swept, cleaned**, and checked at least **twice** a year if burning approved smokeless fuel and at least **quarterly** each year when burning wood, by an approved and registered Chimney Sweep. Ensure the Chimney / Flue sweeping and checking; schedules for both fuels include sweeping and checking **at least once** before the heating season and **at least once** after the heating season.  
Registered chimney sweep associations:  
The National Association of Chimney sweeps (NACS) and for Northern Ireland (NIACS Northern Ireland Association of Chimney Sweeps. Both associations have a register of suitably qualified chimney sweeping and inspection services that issue certificates after inspection.

- ▲ If the stove is to be left unused for a prolonged period, 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, cleaned, and inspected by an approved and registered chimney sweep prior to lighting up after prolonged shutdown periods.
- ▲ The installer may have fitted a permanent air supply vent into the room in which the stove is installed to provide combustion and / or ventilation air. This air vent **must not** under any circumstances be shut off or sealed.
- ▲ **Clearances to furniture, soft furnishings & combustible materials**  
**Serious consideration** should be given to positioning of any furniture or soft furnishings that could be adversely affected by heat. Newman Fireplaces Ltd recommend that any furniture or soft furnishings or any combustible materials to be a **minimum of 2000 mm** away from the stove. **Never** use or store aerosol sprays or any other combustible products in the vicinity of the stove when it is in operation or whenever the stove is hot. The stove will remain hot for some time even after the fire is extinguished.
- ▲ **Never** place laundry near to the stove.
- ▲ **DO NOT** place photographs, TV's, paintings, porcelain, etc or other combustible items on the wall or near to the appliance. Exposure to hot temperatures can be dangerous and cause damage.
- ▲ **Never** over fire or use incorrect fuel to the stove as this can be dangerous and cause damage to the stove and invalidate the stove warranty.
- ▲ This appliance has been tested at a nominal heat output to the requirements of EN 13240:2001 for intermittent operation, it is **VERY IMPORTANT** you **DO NOT** exceed the maximum fuel loads and operation of the stove is followed as the instructions.
- ▲ **Only use** this appliance for domestic property heating in accordance with these instructions.
- ▲ This stove **is not suitable** for any type of water vessel.
- ▲ Your **home building insurance** company may require you to inform them that a new heating appliance has been installed on your property, so it is strongly advised to check with your insurance provider. Check that your cover is still valid after installing the appliance and check with them if all chimney sweeping, cleaning and inspections certificates are required to be kept together with the approved stove installer, installation, and service maintenance records.
- ▲ This stove should be serviced at **least annually** by a suitably qualified and registered stove installer.
- ▲ Extra fuel **must not** be stored on, below or next to the stove.



▲ **Never** use or store aerosol sprays or any other combustible products in the vicinity of the stove when it is in operation or whenever the stove is hot. The stove will remain hot for some time even after the fire is extinguished.

▲ This stove contains consumable parts, and their replacement intervals can vary depending on how the stove is operated and the fuel being used. Also, a heavy build up of ashes on the main grate will cause premature damage, see section 4.3.3

**Consumable parts:**

Grate, Banking bar, glass, all sealing ropes, side bricks, Back brick, both top baffles, Ashpan. Consumable parts **are not** covered under any stove guarantee.

▲ An approved Carbon Monoxide detector alarm conforming to the latest edition of BS EN 50291 **must be** installed into the room the stove is installed. Installation and positioning **must be** in accordance with current National laws, Building Regulations including (Approved Document J England & Wales) and alarm manufacturers instruction.

▲ **Actions to take if the alarm sounds in a CO emergency**

If you suspect fumes are escaping from your combustion appliance into your home, or your carbon monoxide alarm goes off.

- Turn the appliance off, by closing the air controls.
- Open doors and windows to ventilate the building.
- Leave the building immediately and do not return until your appliance has extinguished and the air in the room is clear.
- If you feel unwell go to your Doctor, or call one of the following:
- NHS England on 111
- NHS Direct on 0845 46 47 (in Wales)
- NHS 24 on 111 (in Scotland)
- If it is urgent phone 999 for an ambulance. Tell them you feel your symptoms may be related to carbon monoxide poisoning.
- Before you reuse the appliance, have it serviced by a **Hetas Registered Installer (England & Wales)** or an equivalent approved installer for other Nations and the chimney swept and condition checked by an **approved chimney sweep**.
- Do not use the appliance until you are told it is safe to do so.
- Provisions of an alarm must not be considered a substitute for either installing the appliance correctly or ensuring regular servicing and maintenance of the stove and chimney system.

▲ **The common symptoms of carbon monoxide poisoning can include:**

- Headaches
- Breathlessness
- Nausea and / or vomiting
- Dizziness or collapse

## **WARNING NOTE.**

- ▲ **Properly installed, operated, and maintained** this stove will not emit fumes into the dwelling. Occasional fumes from de-ashing and re-fueling 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 by the stove user:
  - Evacuate all people and animals from the room to a safe area.
  - Open outside doors and windows to ventilate the room and then evacuate to a safe area.
  - Let the fire go out and leave until the stove and residue material is cold.
  - Have the flue **checked** for chimney blockage and cleaned if required by an **approved** registered chimney sweep.
  - **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 flue way or chimney blockage. For your safety these **must always be** kept clean and unrestricted.

## ▲ **Fire Safety:**

### **Serious consideration should be given for the following:**

- The installation of **smoke detectors.**
- A conveniently located **approved fire extinguisher** to contend with small fires resulting from burning embers and any residue material.
- A practical evacuation plan.

## ▲ **A plan to deal with a chimney fire as follows:**

- **Notify** the fire department.
- Prepare all occupants for **immediate evacuation.**
- **If safely possible,** close all air openings into the stove.

## **4.2 Maximum fuel loads and recommended fuel.**

### **Maximum fuel load**

<b><u>Stove model</u></b>	<b><u>Wood</u></b>	<b><u>Smokeless fuel</u></b>
<b>Windermere 5 SE</b>	1 to 2 x Small to medium sized logs maximum total weight 0.98kg	Total weight 0.75kg

**Important note:** The Windermere 5 SE stove **is only to be used** with either suitable wood or approved smokeless fuels as listed, it is **not to be used** with a combination of wood and approved smokeless fuels.

### **Recommended fuel: Seasoned hardwood**

**Only use** seasoned hardwood logs with a moisture content of 16 % plus or minus 4 %

**Never use** wet wood or unseasoned wood.

The fuel **must not** contain halogenated organic compounds or heavy metals as a result of treatment with wood-preservatives or coatings.

Suitable hardwood is available commercially and normally sold in bags, ensure if your fuel is sourced this way that it meets the criteria above. It is **recommended** that your fuel supplier uses a managed and renewable source.

Pieces of wood with a diameter greater than 10cm should always be chopped. The pieces of wood should be short enough to be able to lie flat over the layer of embers, with air at both ends. The maximum length of wood to be no more than 30cm.

### **Maximum fuel load & Nominal heat output**

The nominal heat output of approximately 5kw is achieved by loading the stove with a maximum of 1 or 2 small to medium logs (total weight 0.98kg), the burn rate to be adjusted by the secondary air control so the logs burn for 0.83 hours before the stove needs to be refueled.

**Ensure** the wood fuel does not obstruct the tertiary air inlet holes to the rear of inside of the stove. The wood fuel to be placed below all tertiary air inlet holes.

**Ensure** that all wood is placed so as not to touch and obstruct the glass and door when closed, all fuel to be loaded behind the banking bar, ensuring that all fuel does not project passed the banking bar.

## **Recommended fuel:**

Approved smokeless fuels, the Windermere 5 SE was tested using Maxibrite.

## **Maximum fuel load approved smokeless fuel**

The maximum fuel load for approved smokeless fuels to be a total weight of 0.75kg. This should burn for about 1 hour before needing to refuel, then the appliance is burning at its nominal heat output of approximately 5.0kw.

Please note that HETAS Ltd Appliance approval only covers the use of wood logs on this appliance. HETAS Ltd Appliance approval does not cover the use of other fuels either alone or mixed with the recommended fuels above, nor does it cover instructions for the use of other fuels.

**Ensure** the smokeless fuel does not obstruct the tertiary air inlet holes to the rear of inside of stove. The smokeless fuel to be placed below all tertiary air inlet holes.

**Ensure** that all smokeless fuel is placed so as not to touch and obstruct the glass and door when closed, all fuel to be loaded behind the banking bar, ensuring that all fuel does not project passed the banking bar.

## **Not recommended as fuel:**

### **Green or damp wood**

Green or damp wood reduces stove efficiency and soils the glass and the internal walls of the flue (Soot, tar) etc. This can cause the flue ways to become blocked. pollutes the environment (pollution and smell,) etc, and cause the fire to burn too quickly and overheat.

Green wood or damp wood can **eventually cause a chimney fire.**

### **Softwood, used wood and treated wood**

Burning softwood, previously used wood and treated wood (railway sleepers, telegraph poles, off cuts of plywood or chip board, pallets, etc.) quickly clogs and blocks the flue ways (soot, tar,) etc, pollutes the environment (pollution and smell) etc, and cause the fire to burn too quickly and overheat.

Softwood, previously used wood and treated wood can **eventually cause a chimney fire.**

### **Prohibited fuel:**

Plastic bags and any form of bituminous coal or petroleum-based coke. **Do not** use the appliance as an incinerator or use any liquid fuels. **This is very dangerous and may damage the product and pollute the atmosphere.**

All other fuels.

## 4.3

## General use & operation

### Important

- The Windermere 5 SE is approved as an intermittent operating appliance as such it is strongly **recommended** that you **do not** leave the stove alight at night. It harms the environment and constitutes extremely poor use of the wood or approved smokeless fuel, as the gases in the wood or approved smokeless fuel do not ignite at the low temperature but settle as soot (unburned gases) in the chimney and stove, this can cause damage to the chimney flue and stove. Extreme conditions, such as poor draught in the chimney, large quantities of wood or wet wood, may, in the worst-case scenario, **cause an explosive ignition**.
- When firing in the summer period, when there is minimal need for heat, the combustion will be poor due to low air settings whilst controlling the fire, this will cause the gases in the wood or approved smokeless fuels to not ignite at the low temperature but settle as soot (unburned gases) in the chimney and stove, this can cause damage to the chimney flue and stove. Extreme conditions, such as poor draught in the chimney, large quantities of wood or wet wood, may, in the worst-case scenario, **cause an explosive ignition**.
- After a prolonged shut-down period the stove and chimney system should be checked by an **approved and competent** stove installer such as Hetas registered (England & Wales) and an **approved and qualified** chimney sweep to **ensure** that there is no blockage. For example, a bird may have nested at the top of the chimney.
- If you fire the stove using wet wood or approved smokeless fuel, a lot of the fuel's thermal energy will be spent forcing the water out of the wood or approved smokeless fuel, without releasing any heat to the stove. This incomplete combustion results in a layer of soot being left in the stove, pipe, and chimney. this can cause damage to the chimney flue and stove. Extreme conditions, such as poor draught in the chimney, large quantities of wood or wet wood, may, in the worst-case scenario, cause an **explosive ignition**.
- **Never overload the firebox**. The maximum amount of fuel specified in this manual **should not** be exceeded, overloading can be dangerous, cause excess smoke and damage the stove.
- **Ensure** the fuel does not obstruct the tertiary air outlet holes to the rear of inside of stove.
- The fuel to be **below** all tertiary air outlet holes.
- **Ensure** that all fuel is placed so as **not to** touch and obstruct the glass and door when closed, all fuel to be loaded behind the banking bar, ensuring that all fuel does not project passed the banking bar.
- **Never** leave the appliance unattended for long periods and **always ensure** that the newly charged fuel is burning well before leaving the room.
- **Do not** refuel when a large amount of flame is in the firebox as this could cause smoke or flames to spill into the room. Only refuel when the fuel and fire is **low**.
- **Close** the stove door immediately after refueling.
- Wood is a material that contains a great deal of gas (approximately 75 %). The gases are released when the wood is ignited and heated up. For this reason, it is important that the gases are ignited quickly after stoking. If the wood just lies smoldering, a lot of smoke is created, which, in the worst case, may cause an explosive ignition of the gasses, resulting in damage to the stove and a possible dangerous situation.
- In order to ignite the gases that are released from the wood, and to keep clear, lasting flames during the combustion process, it is always important to let in the required quantity of oxygen (air supply). The setting of the air supply, the method of ignition and the lighting intervals depend on the draught in the chimney, the wind and weather, the amount of heat required &

fuel, etc. This means that it may take some time before you get to know the correct functioning of the stove under any given circumstances.

- Note: (To load fuel, the door should be opened **slowly**, avoiding a sudden rush of intake air, so that smoke does not escape into the room). **Always close** the door after refueling.
- **Dampers left open. Operation with the air control or appliance dampers open can cause excess smoke. The appliance must not be operated with air controls, appliance dampers or door left open except as directed in the instructions.**

### **Operation with the door left open.**

- ▲ **Warning:** The firebox door shall be kept **closed** except during ignition, refueling and removal of residue material.
- ▲ It is **recommended** providing the ash pan is not full of residue material that the ash pan is emptied when the fire is **not in use** and the stove, and all residue and components are **cold**. The stove door should **never** be opened when the stove is being fired vigorously and only opened when the fire requires lighting, when the fuel is low and needs to be re fuelled or removal of residue material via the ash pan, at all other times the stove door **MUST BE CLOSED.**  
Operation with the door open can be dangerous and cause excessive smoke. The appliance **must not** be operated with the appliance door left open except as directed in the instructions.

### **Stove shut down for both wood and approved smokeless fuels.**

If there is still fuel burning in the stove firebox, it is not recommended closing the air controls completely unless there is a chimney fire in progress (See section 4.0 User manual, under the heading (A plan to deal with a chimney fire as follows). Closing the air controls during the combustion process will cause poor combustion and could cause a buildup of gases that could **ignite dangerously.**

**Always ensure** that the air controls are open enough to maintain some flames in the firebox. If it is required to shut down the appliance, then run the stove on a higher setting without over firing until all the fuel has been burnt before closing the air controls.

### **Odours when using the stove for the first time**

#### **Painted products:**

The stove may emit an irritating gas when used for the first time, and it may smell a little. The room should be thoroughly ventilated. Let the fire burn with a high draught (without over firing) until all traces of the gas have disappeared and no smoke or smells can be detected. **Evacuate all** people from the room until all odours have cleared. If for any reason the odours do not clear, do not add more fuel and allow the fire to extinguish, seek professional assistance.

#### **Air Controls: See figure 4**

- ▲ **Always use** the long ash pan / operating tool and stove mitten to operate the air controls

For **wood burning** the amount of heat emitted by the stove is regulated by using the **secondary** air control.

The secondary air (air wash system), which is supplied to the combustion chamber over the internal glass, is controlled using the right-hand push / pull control located below the stove door. Push to reduce the burn rate and pull to increase the burn rate.

For approved **smokeless fuel burning** the amount of heat emitted by the stove is controlled by the **primary** air control.

The primary air is controlled using the left-hand push /pull control located below the stove door. Push to reduce the burn rate and pull to increase the burn rate.

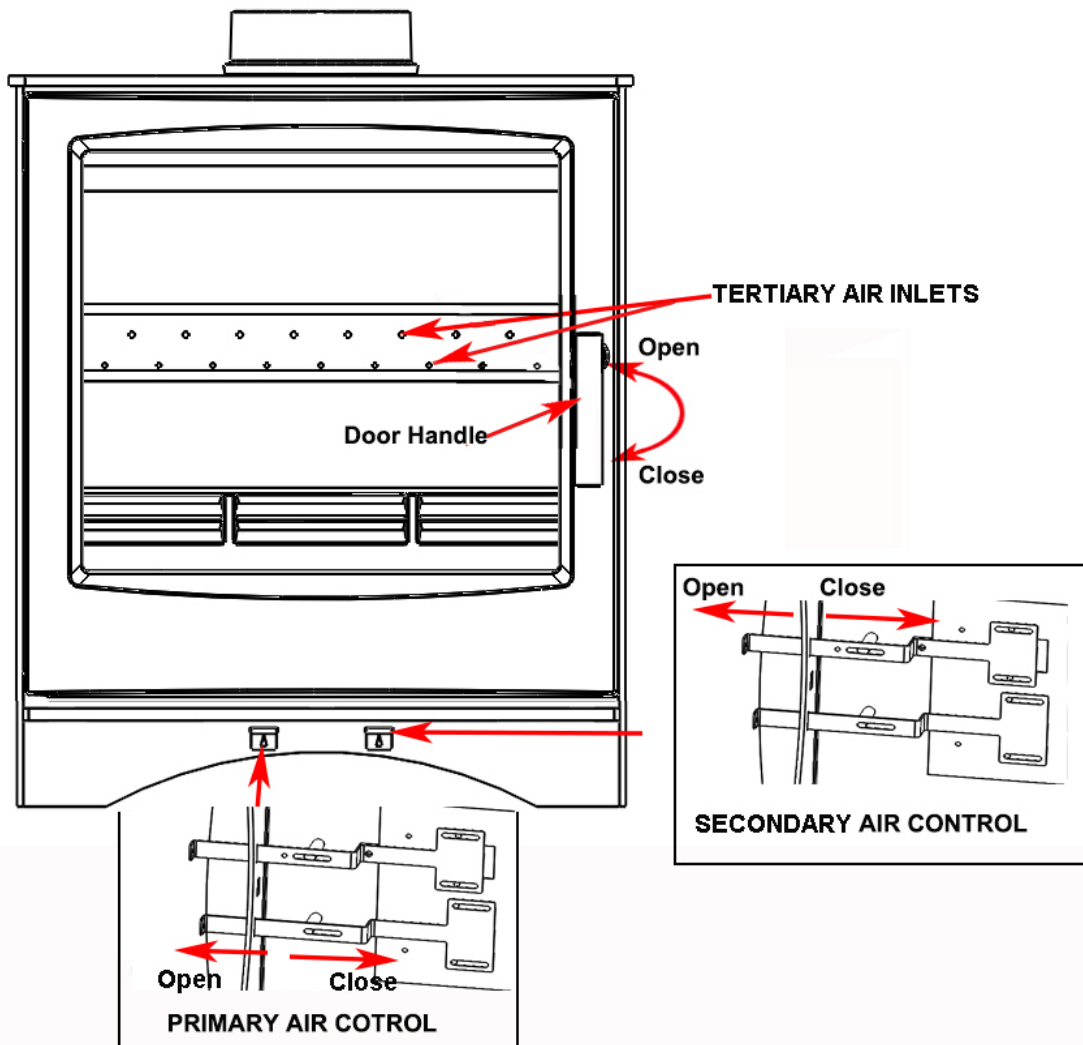
**Tertiary air** intake provides a constant, pre-heated air supply to the combustion chamber just above the fire, the tertiary air is set at manufacture and is not controllable.

The exact positioning of the air controls to achieve optimum burn for the Windermere 5 SE will depend on many factors such as weather conditions, chimney size and local topography. However, to give some guidance please read section 4.3.1 and section 4.3.2.

### **Windermere 5 SE controls. See figure 4**

A stove mitten and long ash pan / operating tool are supplied with this stove for your use when operating the stove, if the mitten supplied is of the incorrect size for the user, then it is recommended that the user sources a CE approved stove mitten or glove to the correct size before lighting and operating this stove.

**Fig 4**





## **Operation of the handle.**

- ▲ A stove mitten and long ash pan / air control tool are supplied with this stove for your use when operating the stove, if the mitten supplied is of the incorrect size for the user, then it is recommended that the user sources a CE approved stove mitten or glove to the correct size before lighting and operating this stove.

To Open the door:

Turn the handle anti clockwise.

To close the door:

Turn the handle clockwise ensuring the door is fully closed.

## **Handle adjustment to ensure the stove door is fully sealed when closed:**

- ▲ **Only adjust** the handle when the stove is **not in use** and the stove is **cold**. With the door open the handle can be adjusted as the handle spindle and the hole in the door are both threaded. Rotate the handle clockwise to untighten the door closure or turn anti clockwise to tighten the door closure.
  - The stove handle may need to be adjusted occasionally as the door seal over time can compress and wear, or whenever the door seal is replaced. This adjustment is recommended to be undertaken by an approved stove engineer.

## **Operation of the primary and secondary air controls**

- ▲ The primary and secondary air controls are located below the stove door, to operate pull to open thus increasing the air flow or pushing to close thus reducing the air flow. **Always use** a suitable stove mitten or glove and use the ash pan / operating tool to adjust the air setting controls.

## **Very Important:**

- ▲ **Warning:** The firebox door shall be kept **closed** except during ignition, refueling and removal of residue material.
- ▲ **It is highly recommended** providing the ash pan is not full of residue material that the ash pan is emptied when the fire **is not in use** and the stove, and all residue and components are **cold**.
- ▲ The stove door should **never** be opened when the stove is being fired vigorously and only opened when the fire requires lighting, when the fuel is low and needs to be re fueled and removal of residue material via the ash pan, at all other times the stove door **must be closed**.

### **4.3.1 Use with wood: See figure 4**

- ▲ It is recommended **always** to use approved and suitable stove tongs for loading and refueling the stove with wood to avoid any part of your arms and hands entering or touching the stove.
- ▲ Use the stove mitten to hold the tongs.
- ▲ **Always use** the long ash pan / operating tool and stove mitten to operate the air controls.

## Lighting

### Important:

- ▲ **Ensure** the area around the stove is safely clear of all people and animals.
  - ▲ **Ensure** any obstacles so as not to be a trip hazard and allowing a totally unobstructed space whilst lighting, refueling, adjusting the air controls, removal, and replacement of ash pan and at all other times.
- 1) Pull the secondary and primary air control fully open.
  - 2) To achieve clean burning and maximize the performance and efficiency of the appliance it is important to raise the temperature of the stove and chimney as quickly as possible. Thus, when lighting the appliance, the technique is to open the door and start with a small amount of kindling with the secondary and primary air controls fully open, use a long taper to ignite the kindling and then close the stove door.
  - 3) After a few (~5) minutes, open the stove door and add some larger pieces of wood. Close the stove door.
  - 4) Only when these have been well-alight and the flames dying down, should the stove door be opened and normal sized logs be added, then close the stove door.
  - 5) When the logs are well alight, the primary air control should be fully pushed in to close the air supply.
  - 6) Use the secondary air control to control the burn rate.
  - 7) To operate at the nominal heat output of approximately 5kw the primary air control must be fully closed, and the secondary air control should be adjusted so the maximum fuel load of 0.98kg of suitable wood burns for approximately 0.83 hours.

## Refueling

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

**Only open the door slowly** when the **fire is low** but with sufficient glowing embers to ignite the new fuel charge. Add more logs and close the stove door and open both the primary and secondary air controls.

- When the appliance is refueled, leave the primary and secondary air controls open for 2 to 3 minutes, or until the logs are well alight, before closing the primary air control and using the secondary air control to control the fire.
- **Always** refuel onto a good bed of glowing embers.
- **Never** leave the primary air control open, other than when lighting and re-fueling the appliance.

## Operation with door left open

- ▲ **Warning:** The firebox door shall be kept **closed** except during ignition, refueling and removal of residue material.
- ▲ It is **highly recommended** providing the ash pan is not full of residue material that the ash pan is emptied when the fire is **not in use** and the stove, with all residue and components are **cold**.
- ▲ Operation with the door open can be **dangerous** and cause excessive smoke. The appliance **must not** be operated with the appliance door left open except as directed in the instructions.

### **4.3.2**

### **Use with approved smokeless fuel. See figure 4**

- ▲ It is recommended **always** to use approved and suitable stove tongs for loading and refueling the stove with approved smokeless fuel to avoid any part of your arms and hands entering or touching the stove. **Use** the stove mitten to hold the tongs.
- ▲ **Always use** the long ash pan / operating tool and stove mitten to operate the air controls.
- When using authorised smokeless fuel, the burn rate is controlled using the primary air control.
- The secondary air control should be fully closed when the stove body is hot.

### **Lighting**

#### **Important:**

- ▲ **Ensure** the area around the stove is safely clear of all people and animals.
  - ▲ **Ensure** any obstacles so as not to be a trip hazard and allowing a totally unobstructed space whilst lighting, refueling, adjusting the air controls, removal, and replacement of ash pan and at all other times.
- 1) Pull the secondary air control to the fully open position.
  - 2) Pull the primary air control to the fully open position.
  - 3) Open the stove door and lay a reasonable quantity of firelighters or rolled up newspapers on the grate, if necessary, also use dry kindling wood. Place a small quantity of approved smokeless fuel on top.
  - 4) Light the firelighters or newspaper using a long taper and close the stove door.
  - 5) When the fire is beginning to burn briskly, slowly open the stove door and add further fuel, close the stove door.
  - 6) When the stove body is hot, close the secondary air control completely by pushing the secondary air control to the end of its travel.
  - 7) The burning rate can now be adjusted by the primary air control, to achieve the nominal heat output of 5kw, the maximum fuel load of 0.75kg of approved smokeless fuel should burn for 1 hour before needing to be refueled, then the stove will be operating at the nominal heat output of approximately 5kw.

### **Re-fuelling. See figure 4**

- When the fuel being burnt is low and requires to be refueled fully open the primary air control.
- Open the glass stove door and add fuel. (To load fuel, the door should be **opened slowly**, avoiding a sudden rush of intake air, so that emissions do not escape into the room.). Close the door.
- Leave the primary air control fully open for a few minutes to allow the initial volatiles in the fuel to burn.
- Adjust the primary air control to achieve the nominal heat output of approximately 5kw, the maximum fuel load of 0.75kg of approved smokeless fuel should burn for 1 hour before needing to be refueled.

### **4.3.3 Ash removal, disposal of ash & cleaning the main grate.**

**See: figure 5**

#### **WARNING**

- ▲ Ash and all residue materials including the ash pan will be **extremely hot** and can cause severe **life-threatening injuries**, therefore extreme care **must be** taken whenever removing hot ash and residue material including the ash pan from the hot stove.
  - ▲ **It is highly recommended** providing the ash pan is not full of residue material that the ash pan is emptied when the fire is **not in use** and the stove, with all residue and components are **cold**.
  - ▲ **Ensure** the area around the stove is clear of all obstacles so as not to be a trip hazard and allowing a totally unobstructed space whilst removing the ash pan, ash, and residue material.
  - ▲ Other than the stove user **ensure** that all people and animals are kept well away from the stove and kept well clear of any pathways and areas that the hot ashes and ash pan may be carried.
  - ▲ **Ensure** to take necessary action to avoid breathing in any ashes or any other particles or products when carrying out ash removal.
  - ▲ A suitably **approved dust mask, stove hand protection mittens or gloves and eye protection is** recommended for this process.
  - ▲ **Always** use the stove mitten to hold the ash pan key provided to operate and lift the ash pan.
  - ▲ It is **essential** to keep the grate free from a heavy build-up of ashes.
  - ▲ **Never allow** the ash pan to overfill allowing ash to be in contact with the underside of the main grate. If this condition is allowed, the grate will wear out pre-maturely.
  - ▲ Only open the door **slowly** when the **fire is low**.
  - ▲ **Always** empty the ash pan at least once a day or whenever it is full of ashes. Use the stove mitten to hold the ash pan key provided to operate and lift the ash pan.
- 1) If the ash pan requires to be emptied whilst the stove is alight, wait until the fire is low before slowly opening the stove door using the stove mitten.
  - 2) Use the stove mitten to hold the ash pan key and locate the forked end into the underside of the ash pan tab as figure 5. Gently lift the ash pan so it can be withdrawn from the stove, taking extreme care ensuring that the ash pan with hot ashes is not carried over or placed on any combustible materials.
  - 3) Close the stove door.
  - 4) Dispose of the ash and residue material as explained below.
  - 5) When the ash pan has been emptied, open the stove door, and replace the ash pan into correct position under the fire grate of stove using the stove mitten to hold the ash pan key provided to operate and lift the ash pan.
  - 6) Use the stove mitten to close the stove door.

#### **Disposal of ash and residue material**

- ▲ Ashes and any residue material should be placed in a non-combustible leak proof metal container with a tight-fitting lid. The closed container of ashes must be placed on a suitable non-combustible floor or ground that is resistant to very high temperatures without causing any damage well away from all combustible materials.
- ▲ People and animals **must be** protected from any hazard including the hot container and residue material pending final disposal.

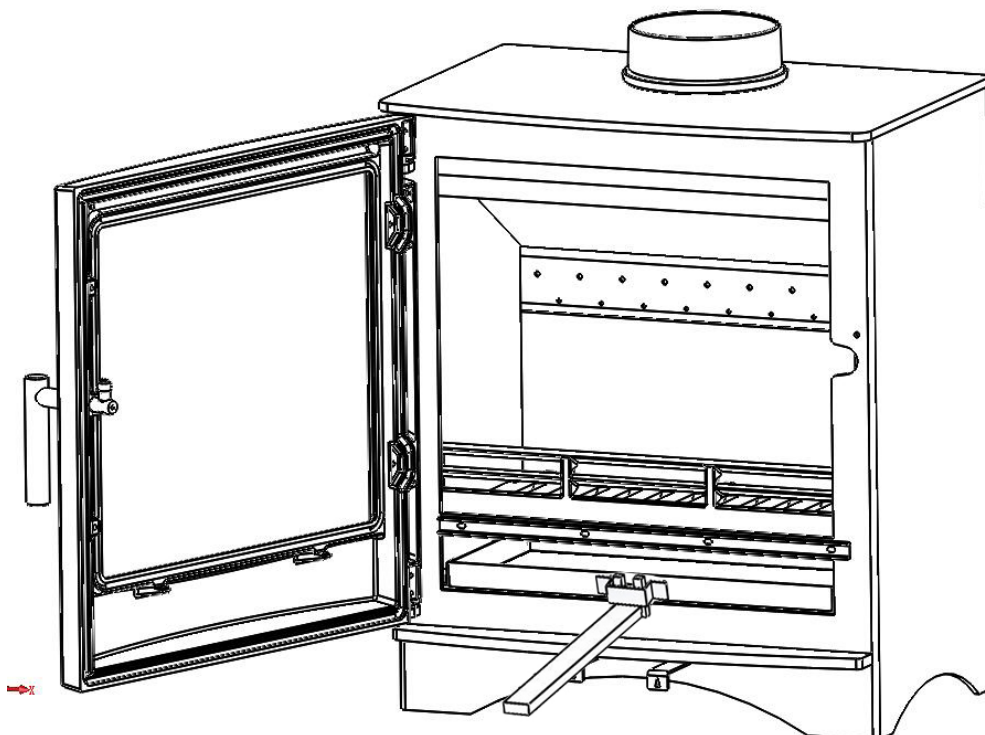
- ▲ **Never** leave any ash and residue material burning or smoldering within the building as this will release carbon monoxide into the air that is extremely dangerous and a potential fire hazard.
- ▲ If the ashes are disposed of by burial in soil or otherwise locally dispersed, in accordance with National Regulations and Bylaws, they should be retained in the closed container until all residue material and the container have completely cooled.

### **Cleaning the fire grate**

- ▲ Only clean the fire grate, when the fire is **not in use** and the stove, with all residue and components are **cold**.
  - ▲ **Ensure** to take necessary action to avoid breathing in any ashes or any other particles or products when carrying out ash removal.
  - ▲ Suitably **approved dust mask, hand protection gloves and eye protection** are recommended for this process.
- 1) Protect the hearth and all other areas that are at risk from ash and residue contamination with suitable material before opening the stove door and commencement of cleaning.
  - 2) Open the stove door, it is **recommended** to use a specialist approved Hepa filtered stove ash vacuum for this task, (See manufacturer's instructions), alternatively sweep the ashes and residue material into the ash pan with a suitable brush.
  - 3) Safely dispose of the ashes in accordance with National Regulations and Bylaws.
  - 4) Replace the ash pan into correct position within the stove and close the door.
  - 5) Remove the protection from the hearth and other areas and dispose of in accordance with current National Regulations and Bylaws.

When locating or removing the ash-pan **always use** the cast iron key provided, this key is also used to operate the air controls. **Always use** a stove mitten or glove to hold the key.

**Fig 5.**



#### **4.4** **Maintenance** (By a professional registered, and approved, stove installer)

Refer to: Current National laws, Building Regulations & any Rules in Force. Also refer to: (Approved Document J England & Wales).

- ▲ The stove should be **regularly serviced** (At least once every year) by an approved and competent stove installer such as Hetas registered (England & Wales) or equivalent for other Nations to ensure continued safe and efficient operation.
  - ▲ Keep the stove instructional manual safe and readily available so the installer / maintenance engineer as detailed above has a reference to the maintenance and service checks as sections 4.4, 4.4.1 & 4.4.2
  - ▲ Maintenance & service checks **only** to be carried out when the stove is **not in use and cold**, the only exception to this is when it is required to test the stove for safe and efficient operation when the stove is alight where adequate precautions must be taken.
  - ▲ **Always** comply with all **Health and Safety Regulations** whilst servicing and maintaining this stove.
  - ▲ **Ensure the correct PPE is used** for each operation that is being undertaken, for example, suitable protective masks whilst cleaning the stove and re painting stove, suitable hand protection gloves to protect from any sharp edges, broken glass and any residue materials, suitable eye protection goggles to protect against sharp objects, broken glass and any dust or particles. Suitable body and clothes protection. If vacuuming ashes and any residue material, ensure the vacuum cleaner is suitable and approved for stove use and is equipped with the correct HEPA filters.
- Check to ensure the chimney and flue system is in sound condition and working correctly and safely.
  - Check that the chimney has been swept and inspected by a suitably qualified and registered chimney sweep to ensure that the chimney / flue is clean and free from any obstructions and to check that the chimney / flue is in sound and safe serviceable condition, also to check the chimney / flue is suitable for the stove being serviced.
  - Remove all non-bolted stove parts within the stove. Clean all parts and check for wear and damage. Any parts that are worn or damaged to be replaced with authorized replacements. Note: Vermiculite parts can become brittle with use so take care whilst removing and re fitting. It is recommended that these parts should be changed at least annually or before if required.
  - Whilst all the non-bolted parts are removed from the inside of the stove clean all remaining internal stove parts, check all other internal stove parts for wear and damage and replace with authorized parts if required. Remove both top baffles for cleaning and checking, replace with authorised parts if required.
  - Replace the ceramic glass panel fibre rope seal, ensure the rope seal is the same type and size as the original.
  - Replace the fibre rope seal to the door, ensure the rope seal is the same type and size as the original.
  - Check all external parts of the stove for wear and damage if found replace with authorised parts.
  - Check the stove collar and stove pipe for damage and wear and ensure any joints are sealed correctly. Rectify with authorized parts if any fault is found.



- Check the register plate (for installations that require) is in good serviceable condition and fitted correctly.
- Check the Carbon Monoxide alarm to ensure it is installed and operating correctly.
- Check that any combustible materials are a safe distance from the stove.
- Check room ventilation air supply to ensure the safe operation of the stove. **Air Supply:** It is **essential** to check any air supply ventilator in the room is suitable and fully clear and open.
- Check for correct operation of all air controls.
- Check the correct operation and adjustment of the door handle.
- Clean the glass panel as section 4.5.2
- Clean or repaint the external black painted surfaces of the stove as section 4.5.4
- All parts to be re installed to the stove into their correct positions.
- To carry out correct and safe operation tests of the stove as listed in section 3.8 Commissioning and handover.
- Refresh the user on the safe operation of this stove.

#### **4.4.1 Replacing the glass panel and rope seal.**

- ▲ Only change the glass panel and rope seals when the stove **is not in use and completely cold.**
- ▲ **Wear suitable protective gloves, mask and goggles** during this process.

#### **Replacing glass panel to stove door.**

##### **See figure 6**

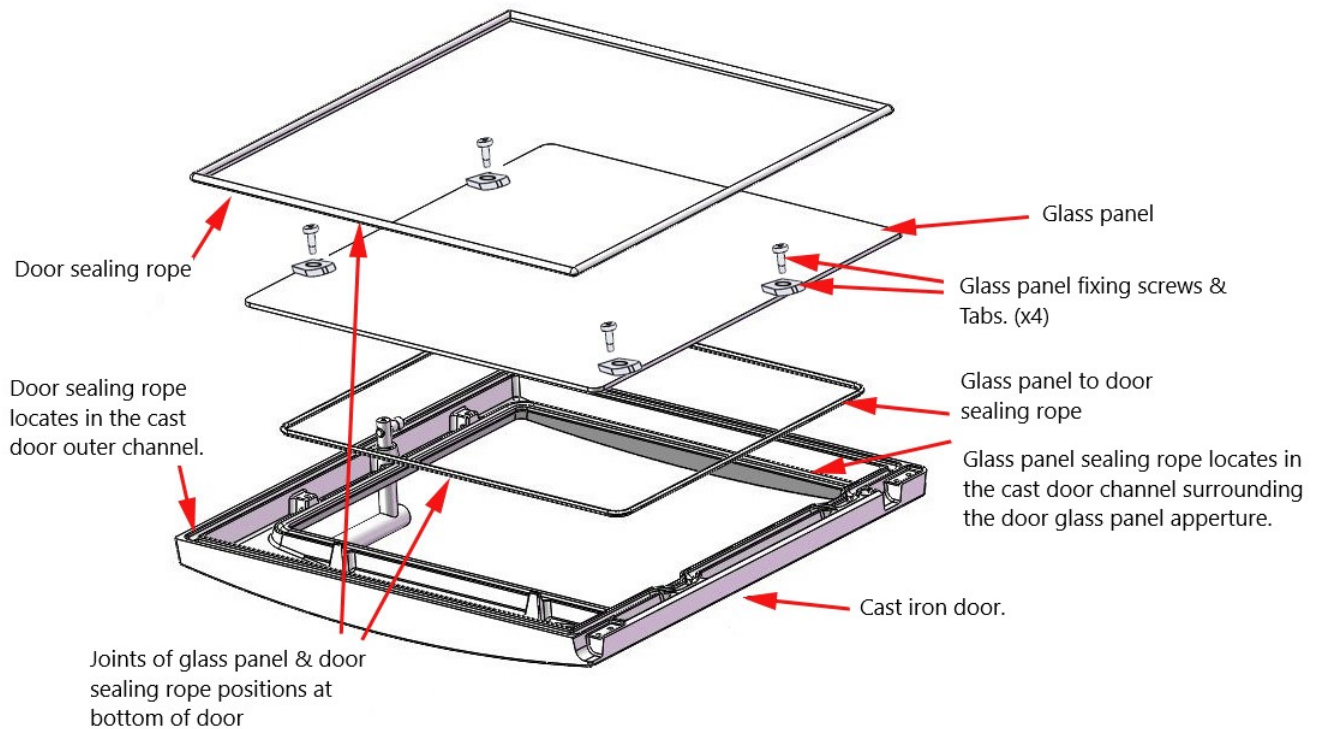
In the unfortunate event the glass panel to main door gets damaged the glass panel must be replaced with an approved stove glass panel, by an **approved and competent** stove installer such as **Hetas registered (England & Wales) or equivalent for other Nations.**

- Open the door. Remove the glass panel by removing the 4 screws and fixing tabs located to the inside of the door, the glass panel will require supporting during this process. Remove the glass panel. Check the glass rope seal for wear and damage, if found replace the rope seal. When fitting the new glass panel locate the glass so it is central to the stove glass seal and located correctly to ensure the glass panel will be sealed to all sides. Replace the 4 screws and fixing clips and secure the glass panel to door. **Do not** over tighten the screws as this can damage the glass.

#### **Replacing the glass rope seal**

- Remove the stove door by removing the 4 screws retaining the hinges to the door and place face down onto a soft sound surface so as not to damage the door or glass. To replace the glass panel to door seal: Remove the glass panel. Remove the old door rope seal and scrape old glue from the door locating groove.
- Clean the locating groove with a clean, dry cloth to remove all old dust and debris. Use suitable stove rope glue into the rope locating groove and press the new rope into the locating groove, noting the joint positions. Replace the glass panel. Refer to the stove rope glue manufacturer's instructions for drying times and when the stove can be used after the stove rope glue has been used.
- Using the appliance with a damaged glass seal or damaged glass can cause dangerous fumes to enter the room, or the appliance to over fire resulting in damage

**Fig 6**



#### **4.4.2 Replacing the door rope seals.**

**See figure 7**

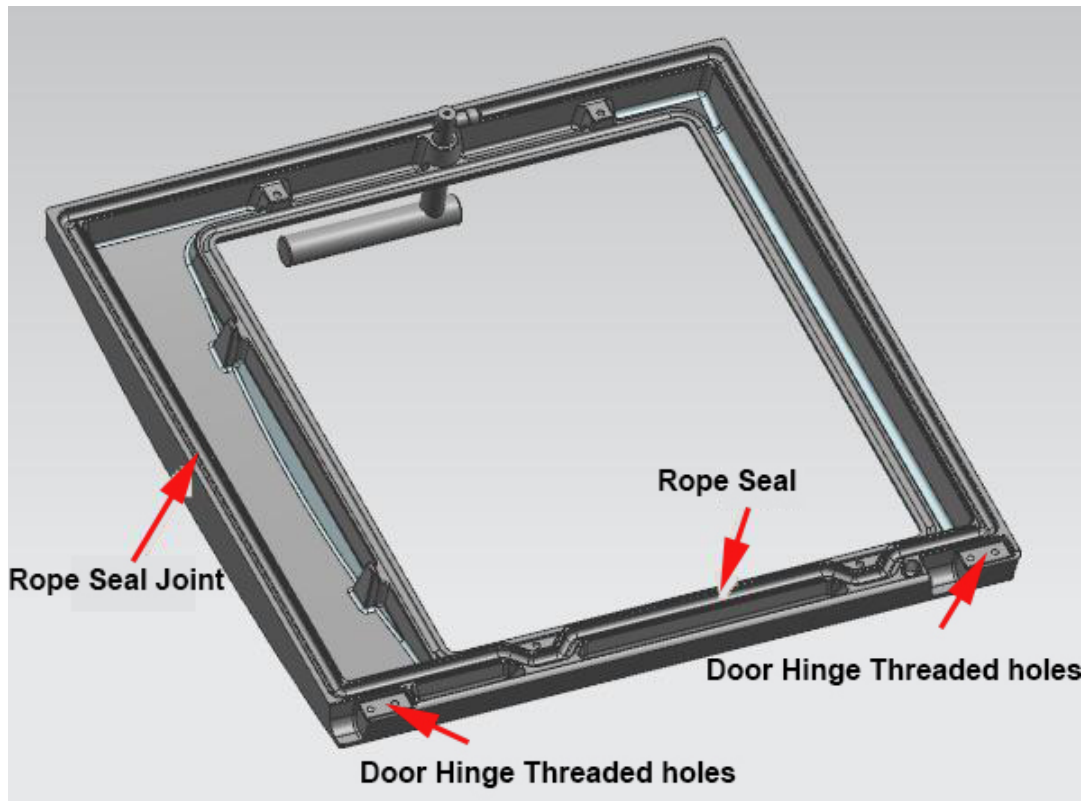
- ▲ Only change the glass panel and rope seals when the stove **is not in use and completely cold.**
- ▲ **Wear suitable protective gloves, mask and goggles** during this process.

The fibre rope seals in the door will wear out over time and should be replaced as required and renewed at least annually by an **approved and competent** stove installer such as **Hetas registered (England & Wales) or equivalent for other nations,** in order to prevent runaway combustion.

- Remove the stove door by removing the 4 screws retaining the hinges to the door and place face down onto a soft sound surface so as not to damage the door or glass.
- Remove the old fibre rope seals and scrape old glue from the locating grooves.
- Clean the locating groove with a clean, dry cloth to remove all old dust and debris. Squeeze a generous bead of fresh stove rope seal glue into the rope locating groove. Press the new fibre rope seal into the locating groove, noting the joint positions in fig 7. Refit door and close to apply pressure to new rope. Leave the door closed for at least 12 hours before lighting the appliance and run at a low temperature for approximately one day. Also refer to the stove rope glue manufacturer's instructions. This allows the adhesive to fully bond to the seal.
- Using the appliance with a damaged door seal can cause dangerous fumes to enter the room, or the appliance to over fire resulting in damage.



**Fig 7**



## **4.5** **User Cleaning and Maintenance**

### **4.5.1** **User Maintenance Safety Warnings**

- ▲ If the user does not feel confident to undertake the user cleaning and maintenance, it is **highly recommended** that you use a suitably qualified stove installer regularly to ensure continued safe and efficient operation of this appliance.
- ▲ Cleaning and maintenance **only** to be carried out when the stove is **NOT IN USE** and the stove plus all components including ashes and any residue material are completely **COLD**
- ▲ **Ensure the correct PPE is used** for each operation that is being undertaken, for example, suitable protective masks whilst cleaning the stove and re painting stove, suitable hand protection gloves to protect from any sharp edges, broken glass and any residue materials, suitable eye protection goggles to protect against sharp objects, broken glass and any dust or particles. If vacuuming ashes and any residue material, ensure the vacuum cleaner is suitable and approved for stove use and is equipped with the correct HEPA filters.

### **4.5.2** **Cleaning glass (User)**

This product is equipped with an air wash system to help keep the glass clean when burning wood. Air is sucked in through the air vent above the stove and down along the inside of the glass. However, some soot will always stick to the glass, but the quantity will depend on the local draught conditions, type of wood used and adjustment of the air wash vent. Most of the soot layer

will normally be burned off when the air wash vent is opened all the way and a fire is burning briskly in the stove. **Warning:** Do not exceed the maximum fuel load stated in these instructions and do not over fire the stove.

If it is necessary to clean the glass more thoroughly, we recommend using an approved stove glass cleaner, generally available from your stove retailer. (Follow manufacturer's instructions).

### **4.5.3** Cleaning and checks inside the firebox. (User)

**Inner firebox:** Brush the inside of the firebox clean from time to time to check the integrity of the plates and liners etc. See section 3.1.3 for details of removeable parts of the stove. It is not normally necessary to paint inside the firebox due to the high temperatures that mean that the paint does not have much effect before being burnt off.

The vermiculite firebox side and back brick linings may require replacement occasionally depending upon fuels and the type of usage experienced. If the firebox side or back linings are damaged or worn replace with manufacturers recommended parts, it is essential that the cast iron behind the side and rear bricks is not exposed to the fire. Side and back brick linings are not covered by warranty, as they are a wearing consumable part.

**Baffles:** **It is essential** to check both top baffles for buildup of soot and ash regularly irrespective if the stove has been used or not used. From time to time remove the baffles, to ensure that the flue way entrance is completely clear. Baffle plates will require replacement from time to time and are a wearing consumable part.

**Visual checks:** Make visual checks to the inside and outside of the stove if any other items are found to be worn damaged or cracked consult a suitably approved stove installer and do not use the stove until any fault is rectified.

**Stove controls:** Check the stove controls for full and free movement if any ash or debris is restricting the use of the controls, clean as necessary.

**Air Supply:** It is essential to check any air supply ventilator in the property is fully clear and open if installed.

### **4.5.4** External surface cleaning (User)

The steel and cast surface of the Windermere 5 SE stove is painted with black heat-resistant paint. It is best maintained by simply vacuuming it with a soft brush attachment or wiping it down with a dry, dust-free cloth, but only when the stove is not in use & fully cold.

If the stove is used too vigorously, the painted surface may assume a grey tinge over time, but the stove can easily be freshened up with an approved heat resistant spray paint which should be available from your local stove retailer.

The stove **must be fully cold and not be in use** before the stove is re painted.

Refer to the approved heat resistant spray paint manufacturer's instructions.

This process is recommended to be carried out by an approved and competent stove installer such as Hetas registered (England & Wales) or equivalent for other countries when the stove is being serviced.

**4.6****Operational problems – troubleshooting****Seek advice from a suitably qualified chimney & stove specialist****Operation troubleshooting**

<b>Problem</b>	<b>Probable Cause</b>	<b>Action</b>
Difficulty getting the fire alight and keeping it burning well	Low flue draught	Consult your stove installer
	Wet wood (Over 20% moisture content)	Use dry seasoned hardwood. (Less than 20% moisture content)
Poor burning control	Flue draught high	Consult your stove installer
Burning time is short	Wet wood (Over 20% moisture content)	Use dry seasoned hardwood. (Less than 20% moisture content)
Heat output too high. (Over firing).	Flue draught high	Consult your stove installer
	Air controls set too high	Reduce output by closing air control.
Low heat output	Flue draught low	Consult your stove installer
	Wet wood (Over 20% moisture content)	Use dry seasoned hardwood. (Less than 20% moisture content)
Excessive fuel being used	Flue draught high	Consult your stove installer
	Wood too dry	Do not use unsuitable wood such as constructional timber or pallets. Only use dry seasoned hardwood with less than 20% moisture content.

## Smoke emission troubleshooting

Problem	Probable Cause	Action
Small flames and smoke	Wet wood (Over 20% moisture content)	Use dry seasoned hardwood. (Less than 20% moisture content)
When appliance door is opened smoke spillage enters the room	Flue draught low	Consult your stove installer
	Room ventilation incorrect	Consult your stove installer
Smoke is emitted into the room	Flue blocked	Evacuate all people from the room into a safe area. If safely possible open all outside doors and widows to the effected room to ventilate. Vacate the room into a safe area. Allow the stove to fully burn out. Consult your stove installer. <b>Do not</b> re use the stove until the problem is fully rectified
The chimney is emitting grey / blue smoke	Wet wood (Over 20% moisture content)	Use dry seasoned hardwood. (Less than 20% moisture content)

## Adverse weather troubleshooting

Problem	Probable Cause	Action
Intermittent smoke enters the room when the stove door is opened on windy days	Down draught	The flue terminal position can effect the stove and flue performance ie, nearby trees or structures. Also weather conditions can contribute to flue down draughts. Consult your stove installer
Intermittent smoke enters the room when the stove door is opened on calm days	Poor flue draught usually caused by an over size flue	Consult your stove installer
Lighting and burning problems on damp and rainy days	Temperature of flue is low. Water ingress into the flue	Consult your stove installer
Noisy air control, (wind noise).	Flue draught high	Consult your stove installer

## Troubleshooting the stove

Problem	Probable Cause	Action
The rapid build up of creosote in the chimney	Wet wood (Over 20% moisture content)	Use dry seasoned hardwood. (Less than 20% moisture content) To avoid a large build up of creosote operate the stove at a higher temperature for a short period of time whenever the stove is used. <b>Warning:</b> Do not exceed the maximum fuel load stated.
Flue joints expelling tar	Stove operated at a continuous low temperature	Operate the stove at a higher temperature for a short period of time whenever the stove is used. <b>Warning:</b> Do not exceed the maximum fuel load stated. Refer to user instructions
	Poor quality wood being used	Use dry seasoned hardwood. (Less than 20% moisture content)
When the stove is lit a strong smell occurs	Stove operated at a continuous low temperature	Operate the stove at a higher temperature for a short period of time whenever the stove is used. <b>Warning:</b> Do not exceed the maximum fuel load stated. Refer to user instructions
	Poor quality wood being used	Use dry seasoned hardwood. (Less than 20% moisture content)
Noisy air control, (wind noise).	Flue draught high	Consult your stove installer
Excessive dirty glass	Wet wood (Over 20% moisture content)	Use dry seasoned hardwood. (Less than 20% moisture content)

## Troubleshooting the stove (Continued).

Problem	Probable Cause	Action
Excessive blackening of glass	Poor quality wood being used	Use dry seasoned hardwood. Less than 20% moisture content)
	Flue draught low	Consult your stove installer
	Air control use incorrect	Refer to user instructions for correct use of air controls
	Stove operated at a continuous low temperature	Operate the stove at a higher temperature for a short period of time whenever the stove is used. <b>Warning:</b> Do not exceed the maximum fuel load stated. Refer to user instructions

### **Important:**

Major causes of chimney fires are creosote and tar built up in the flue and stove. Consult an approved chimney sweep if you are experiencing tar and creosote problems before continued use of the stove.

Consult a qualified heating engineer if you experience continued flue problems and do not use the stove until the problem is rectified.

### **4.7** **Replacement parts and Modifications**

- **Only use** replacement parts recommended by the manufacturer.
- Modifications to this appliance **must not** be made.

### **4.8** **Product End-of- Life / Recycling**

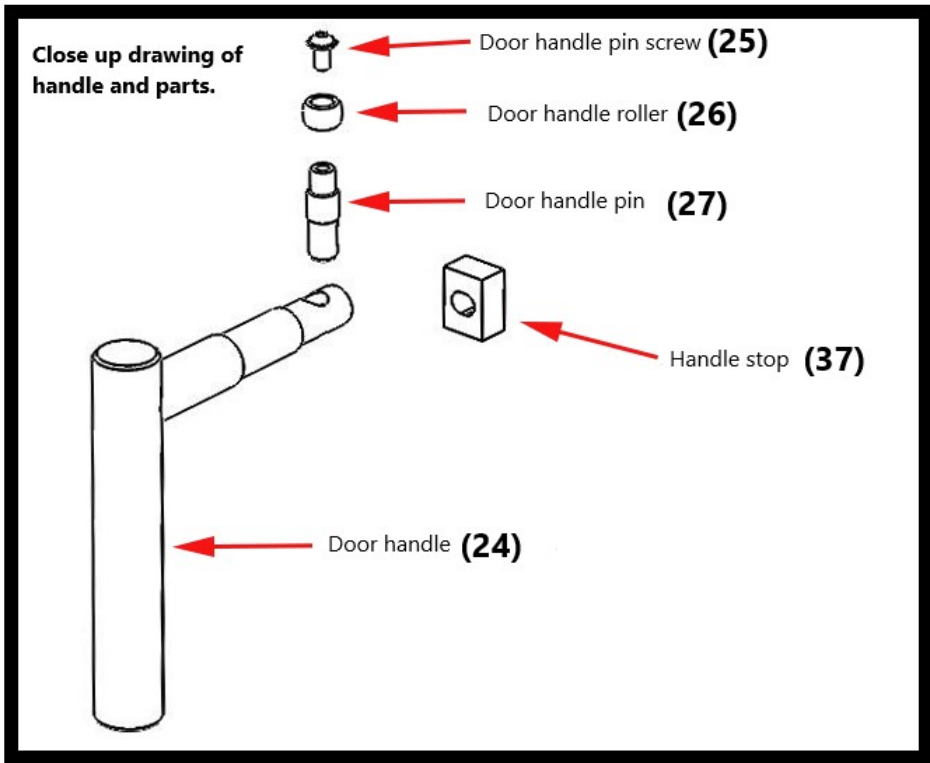
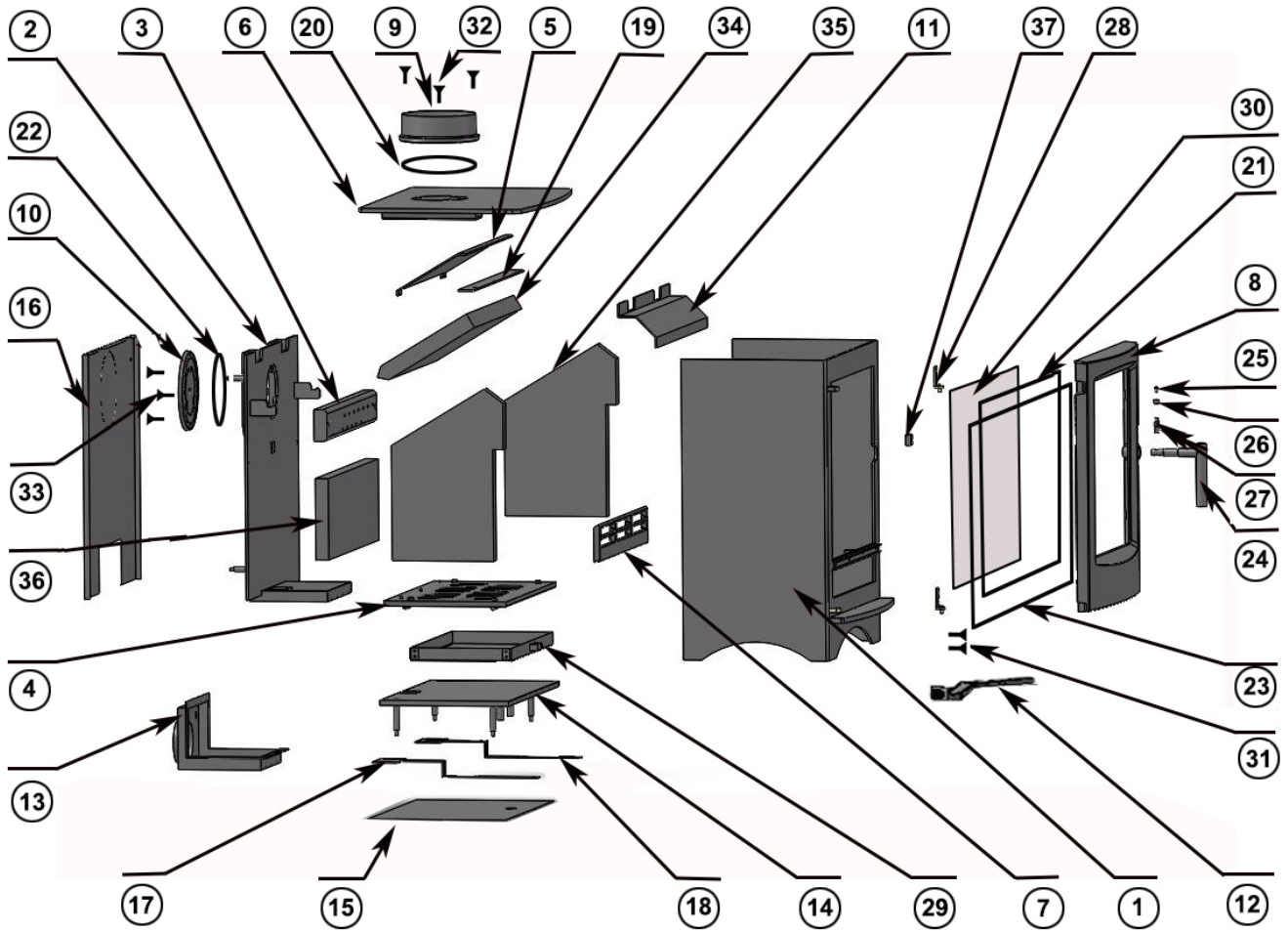
To Dispose of the stove after the product life has expired, please observe the following information:

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 sustainable as possible and that is in line with the current environmental protection, reprocessing / recycling, and disposal technology.

**4.9**

**Part Identification Windermere 5 SE**





## Stove part description and quantity

Part number	Name Description	Qty
1	Steel Body: Front and sides.	1
2	Steel Body: Back	1
3	Steel Tertiary Air Chamber	1
4	Main Grate	1
5	Steel Top Baffle	1
6	Steel Body Top	1
7	Banking Bar	1
8	Door	1
9	Flue collar adaptor	1
10	Flue Blanking Plate	1
11	Air Wash Plate Director	1
12	Ash Pan / Operating Tool	1
13	Air Intake Assembly	1
14	Steel body: Bottom	1
15	Lower Heat Shield	1
16	Rear Heat Shield	1
17	Primary Air Control	1
18	Secondary Air Control	1
19	Steel Top Baffle Bracket	1

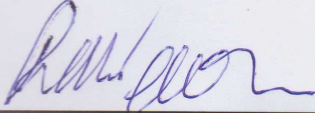
Part number	Name Description	Dimension mm	Qty
20	Flue Collar Adaptor Sealing Rope	Ø 6	1
21	Ceramic Glass Panel Sealing Rope	Ø 6	1
22	Flue Blanking Plate Sealing Rope	Ø 6	1
23	Door Sealing Rope	Ø 8	1
24	Door Handle		1
25	Door Handle Pin Screw		1
26	Door Handle Roller		1
27	Door handle Pin		1
28	Door Hinge		2
29	Steel Ash pan		1
30	Ceramic Glass Panel		1
31	Hexagon flat head Door Hinge Screw.	M6 * 5	4
32	Hexagon flat head Flue Collar Adaptor Screw.	M6 * 20	3
33	Hexagon Flat Head Flue Blanking Plate Screw.	M6 * 25	3
34	Lower Vermiculite Baffle		1
35	Vermiculite Side Bricks LH / RH		2
36	Rear Vermiculite Back Brick		1
37	Handle stop.		1

## 5.0

# Declaration of Performance, Energy label & Product Fiche.

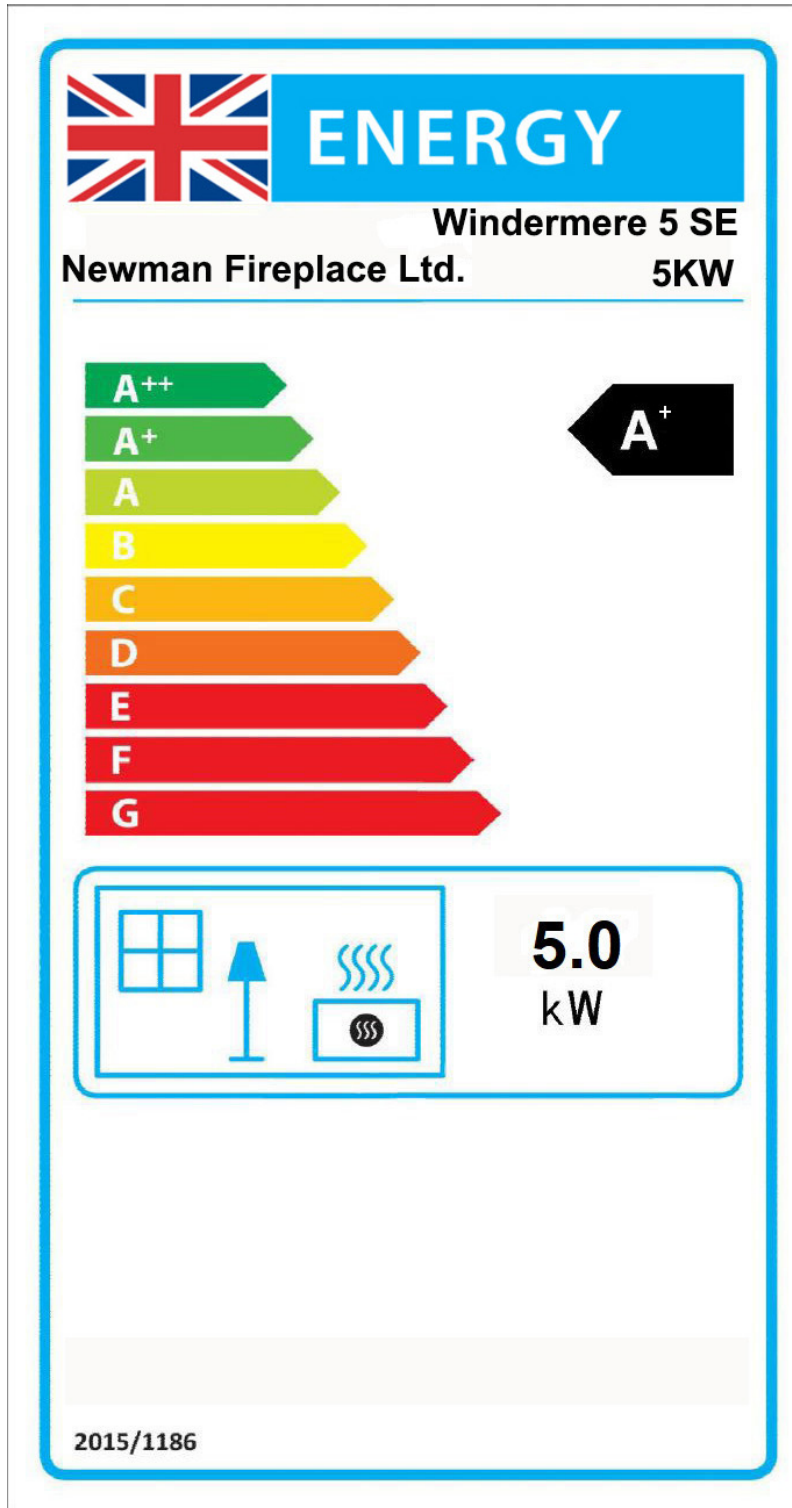
## 5.1

### Declaration of Performance

The undersigned, representing the following:		
Manufacturer		<b>UK UK CA NI</b>
<b>Newman Fireplaces Ltd</b>		
Unit 6 & 7, Rawreth Barns, Dollymans Farm, Doublegate lane, Wickford, Essex. SS11 8UD		
Herewith declare that the products:		
Description	Product code	
Windermere 5 SE	NS-24	
Description of product: Windermere 5 SE domestic multi fuel burning heating stove.		
Are in conformity with the provisions of the following EC directive(s) when installed in accordance with the installation instructions in the product documentation:		
98/106/EEC Constructional products regulation 305/2011 and the standards referenced below have been applied: EN 13240 : 2001 + Amendment A2:2004 Roomheaters fired by solid fuel- Requirements and test methods.		
Product: Roomheater fired by solid fuel as covered under the scope of the standards listed.		
Characteristic	Performance	Report
Fire safety	Satisfies	61446.
Emission of combustion data	<u>Wood</u> PM mg/m3 @ 13% 02: 10 OGC mg/m3 @ 13% 02: 90 CO emission mg/m3 @ 13% 02: 1354 NoX mg/m3 @ 13% 02: 97	61446.
	<u>Smokeless fuel (Maxibrite)</u> PM mg/m3 @ 13% 02: 18 OGC mg/m3 @ 13% 02: 17 CO emission mg/m3 @ 13% 02: 1375 CO NoX mg/m3 @ 13% 02: 107	
Release of dangerous substance	None	61446.
Surface temperature	Satisfies	61446.
Mechanical resistance (To carry a chimney / flue)	Maximum weight to be supported 1kg	61446.
Thermal output / efficiency Net	Wood 5.0kw @ 81.3% Smokeless fuel 5kw @ 77.4%	
Distance to combustibles	Minimum distances, in mm Rear: 450 Sides: 550	61446 Revised 19th April 2021
Test laboratory: 0558		
Name: R. A. Newman	Signature: 	
Position: Director		
Date: 22nd September 2021		

**5.2**

**Energy Label.**



**5.3****Product Fiche**

<b>Product Fiche</b>	
<b>Commission Delegated Regulation (EU) 2015/1186 Energy Labelling of Local Space Heaters</b>	
<b>Supplier's Name or Trademark:</b>	<b>Newman Fireplaces Ltd</b>
<b>Suppliers Model Identifier:</b>	<b>Windermere 5 SE</b>
<b>Energy Efficiency Class of Model:</b>	<b>A+</b>
<b>Nominal Heat Output to Room (kW):</b>	<b>5.0</b>
<b>Nominal Heat Output to Water (kW):</b>	<b>n/a</b>
<b>Net Efficiency (%):</b>	<b>81.3</b>
<b>Energy Efficiency Index (%):</b>	<b>107</b>



Address: Units 6 & 7, Rawreth Barns, Dollyman's Farm, Doublegate Lane, Rawreth,

Wickford, Essex. SS11 8UD.

Tel: 01268 763586. Fax: 01268 762366