



The  
**Woodford**  
Collection

**PLEASE RETAIN THIS GUIDE FOR FUTURE REFERENCE**

# CONTENTS

|  |    |
|--|----|
| 1. The Clean Air Act 1993 and Smoke Control Areas..... | 4  |
| 2. Unpacking Your Stove.....                           | 5  |
| 3. Installation Instructions.....                      | 6  |
| 3.1. Safety Advice.....                                | 6  |
| 3.1.1. Handling.....                                   | 6  |
| 3.1.2. Metal Parts.....                                | 6  |
| 3.1.3. Other possible injuries.....                    | 6  |
| 3.1.4. Important Warning.....                          | 7  |
| 4. Installation.....                                   | 7  |
| 4.1. Chimney.....                                      | 7  |
| 4.2. Flue Draught.....                                 | 7  |
| 4.3. Chimney Connection.....                           | 7  |
| 4.4. Air Supply.....                                   | 8  |
| 4.5. Material Clearances.....                          | 8  |
| 4.6. Commissioning and Handover.....                   | 8  |
| 5. Operating Instructions.....                         | 8  |
| 5.1. Important Information.....                        | 8  |
| 5.2. Air Controls.....                                 | 9  |
| 5.2.1. Primary Air.....                                | 9  |
| 5.2.2. Secondary Air.....                              | 9  |
| 5.3. Grate.....  | 9  |
| 5.4. Ashpan.....                                       | 9  |
| 5.5. Burning Mineral Smokeless (Solid Fuel).....       | 9  |
| 5.6. Burning Wood.....                                 | 9  |
| 5.7. Refuelling on to a low fire bed.....              | 10 |
| 5.8. Fuel overloading.....                             | 10 |
| 5.9. Lighting the Stove.....                           | 10 |
| 5.10. Shutting Down.....                               | 10 |
| 5.11. Safety Notes for your guidance.....              | 10 |
| 6. Maintenance.....                                    | 11 |
| 6.1. Stove body.....                                   | 11 |
| 6.2. Baffle plate.....                                 | 11 |
| 6.3. Fireproof glass.....                              | 11 |
| 6.4. Ceramic rope.....                                 | 11 |
| 6.5. Flue & Chimney.....                               | 11 |
| 7. Trouble Shooting.....                               | 12 |
| 8. Technical Drawings and Performance Data.....        | 13 |

# USER GUIDE

**PLEASE RETAIN THIS GUIDE FOR FUTURE REFERENCE**

Please read this user guide carefully when you assemble, install, operate and maintain your stove.

If you have any more questions, please contact your local dealer.

| Item Code                             | Nominal Heat output | Energy Index | Dimension (W*D*H) | Weight |
|---------------------------------------|---------------------|--------------|-------------------|--------|
| <b>FC-E05</b><br><b>THE LOWRY</b>     | 5kW                 | A            | 388*355*487mm     | 68kg   |
| <b>Z05-2M</b><br><b>THE LOWRY 5X</b>  | 4.9kW               | A plus       | 496*396*585mm     | 85kg   |
| <b>Z05-2L</b><br><b>THE LOWRY 5XL</b> | 4.9kW               | A            | 561*377*654mm     | 97kg   |

**DEALER STAMP**



EN13240:2001

## **Assembly Instructions**

**PLEASE READ THESE INSTRUCTIONS CAREFULLY**

**It is a LEGAL REQUIREMENT that the installation of all new or replacement wood or solid fuel heating appliance obtain building control approval from your local authority or the installation work must be carried out through a government approved competent persons scheme. A list of all competent person schemes can be found:**

**<https://www.gov.uk/guidance/competent-person-scheme-current-schemes-and-how-schemes-are-authorized>**

**All local regulations, including those referring to National & European standards, need to be complied with when installing the appliance.**

**This stove should not be installed into a chimney or flue system that serves other heating appliances. Any manufacturer's instructions must not be taken as overriding statutory requirements.**

**Flue & Ducting Ltd will not be responsible for any consequential or incidental loss or injury however caused.**

### **1. The Clean Air Act 1993 and Smoke Control Areas**

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

In England appliances are exempted by publication on a list by the Secretary of State in accordance with changes made to sections 20 and 21 of the Clean Air Act 1993 by section 15 of the Deregulation Act 2015. Similarly, in Scotland appliances are exempted by publication on a list by Scottish Ministers under section 50 of the Regulatory Reform (Scotland) Act 2014.

In Wales and Northern Ireland these are authorised by regulations made by Welsh Ministers and by the Department of the Environment respectively.

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

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

The LOWRY multifuel stove has been recommended for use in Smoke Control Areas when burning wood logs. The Lowry stove is fitted with a mechanical stop blocking the combustion air controller at 32mm to prevent closure of the secondary air control beyond 6mm open. The Lowry 5X stove is fitted with a mechanical stop blocking the secondary/tertiary air controller at 50%. The Lowry 5XL stove is fitted with a mechanical stop blocking the secondary/tertiary air controller at 42mm.

### **Appliance Specification**

The LOWRY is a freestanding appliance made of steel and equipped with a window door. The combustion chamber is made of ceramic bricks. Furthermore, the LOWRY is equipped with a baffle plate made of vermiculite and steel. The combustion chamber and the baffle plate of the production models can be made of either ceramic bricks or vermiculite plates. Air supply is regulated by two controllers positioned below the

loading door; one for primary air and one for secondary air (air wash). A grate and ash pan are present. The flue gas outlet is at the rear and the top of the appliance.

## 2. Unpacking Your Stove

**Your Stove comes packed in a plywood crate. TWO PERSONS ARE REQUIRED TO MOVE THE CRATE AND STOVE.**

### 1: Remove the outer packaging.

- Carefully remove the packing straps and lift off the upper crate.
- Remove the plastic bag and take down the stove from the bottom panel.
- **IMPORTANT** - Ensure the plastic bag is disposed of correctly and kept away from children.



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



**3: Fit the Flue Collar with the set screws and washers supplied**

**Rear or top flue option.**

**If the Top Flue position is required remove the fitted Flue Cover and refit on the rear opening.**



**4: Fit the retainer bar and ashpan as shown.**



**5: Fit the back external air inlet with the set screws and gaskets.**

## 3. Installation Instructions

It is important that all local regulations, including those referring to national and European Standards need to be complied with when installing the appliance. Flue & Ducting Ltd are not responsible for any fault arising through incorrect installation.

### 3.1. Safety Advice

#### 3.1.1. Handling

Necessary facilities must be available for loading, unloading and site handling.

#### 3.1.2. Metal Parts

Be careful of personal injury when installing or maintaining this appliance.

#### 3.1.3. Other possible injuries

The stove contains no harmful materials, but if there is a possibility of using any dangerous materials in the course of installation then please seek specialist guidance and use appropriate protective equipment.

### **3.1.4. Important Warning**

This appliance **MUST NOT** be installed into a chimney that is shared with any other heating appliance. There **MUST NOT** be an extractor fan fitted in the same room as the stove as this can cause the stove to emit fumes into the room.

## **4. Installation**

Refer the installer to the current issue of; o British Standard BS 8303.

Refer the installer to the current issues of British Standards BS EN 15287-1:2007 design, installation and commissioning of chimneys.

Remind the installer to fit a CO alarm in accordance with the guidelines given in Approved Document J and BS EN 50291.

HETAS product approval only covers this appliance when installed conventionally in accordance with the manufacturer's instructions and current relevant standards and guidance. When installed using ducted combustion air supply, responsibility for the correct operation of the appliance and for appropriate manufacturer's instructions is carried by the appliance manufacturer, as allowed for under the Building Regulations.

A CO alarm should have been fitted in the same room as the appliance and the action to be taken if the alarm sounds unexpectedly.

### **4.1. Chimney**

The chimney must be fitted in accordance with manufacturer's instructions and the relevant part of the Building Regulations. The chimney height and the position of the chimney terminal should conform to Building Regulations and all local regulations, including those referring to national and European standards. The chimney must be in good condition, any cracks and obstructions are not permitted. The diameter of the flue should not be less than 125mm and not more than 200mm. If any of these requirements are not met, the chimney should be lined by a suitable method.

The chimney must be swept and 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 recommended that the chimney be swept a second time within a month of regular use after installation.

If you have any doubts about the suitability of your chimney, consult a local installer.

### **4.2. Flue Draught**

A flue draught of minimum 1.2mm to a maximum 2.5mm water gauge may keep the appliance in good performance. If the flue draught exceeds 2.5mm, a draught stabilizer must be installed in order to control the rate of burning and prevent overfire. You should check the flue draught when fire is on high output.

### **4.3. Chimney Connection**

You should brick up or seal an existing fireplace opening with a register plate. A short length of flue pipe of a minimum 125mm internal diameter may then be used to connect the stove to the chimney. This flue pipe should conform to Building Regulations. Ensure that the pipe end is no closer than 76mm to the side or rear chimney walls.

Ideally, the old fireplace should be filled in so that there is a smooth streamlined entry into the flue way. The length of any horizontal run of flue pipe must not exceed 125mm.

It is essential that all connections between the stove and chimney-flue are sealed and made airtight.

This appliance is not suitable for installation in a shared flue system.

Both the chimney and flue pipe must be accessible for cleaning and if any parts of the chimney cannot be reached through the stove (with baffle removed), a soot door must be fitted in a suitable position to enable this to be done.

#### 4.4. Air Supply

A permanent, unobstructed air opening is essential for the room or space containing this appliance. The air opening should be at least 3625mm<sup>2</sup> when a draught stabilizer is equipped. Due care for air requirements will need to be taken if any other appliances are permitted to work in the same room and space.

#### 4.5. Material Clearances

It is workable for the appliance to be recessed in a prepared fireplace, but a suitable free air gap must be left around the sides, top and back of the appliance to reach maximum heat output and for access to the rear of the stove.

In all instances the back wall of the fireplace recess and the hearth should be made of non-combustible material.

The hearth on which the stove is to be placed should not be less than 25-30mm thick and should be in accordance with the current building regulations.

Care should be taken to level the stove using the adjusting screws in the feet.

The appliance shall be installed on a floor with adequate load-bearing capacity. If the existing construction does not meet this prerequisite, suitable measures (e.g. load disturbing plate) should be taken to achieve it.

##### Space for fire - Distance to Combustible Materials

| Model         | Distance to Combustibles - Rear (mm) | Distance to Combustibles - Side (mm) |
|---------------|--------------------------------------|--------------------------------------|
| The Lowry     | 600                                  | 500                                  |
| The Lowry 5X  | Non-combustible wall                 | 600                                  |
| The Lowry 5XL | 800                                  | 400                                  |

#### 4.6. Commissioning and Handover

You should leave an appropriate period of time for fire cement and mortar to dry out upon completion of the installation. In order to ensure the smoke and fumes are taken from the stove up the chimney and emitted safely to atmosphere, a small fire should be lit first. Do not run the stove at full output for at least 24 hours.

Finishing the installation and commissioning, the operating instructions and tools for your stoves should be kept in hand. It is also important to know how to use the stove properly and use only the recommend fuels for this appliance. The user should know how to have smoke or fumes emitted properly form the stove and be warned to prevent injuries in case of the presence of children, aged or infirm persons.

## 5. Operating Instructions

Operation with the door open can cause excess smoke. The appliance must not be operated with the appliance door left open except as directed in this user guide.

Operation with the air controls or appliance dampers open can cause excess smoke. The appliance must not be operated with air controls, appliance dampers or door left open except as directed in this user guide.

#### 5.1. Important Information

All local regulations, including those referring to national and European Standards need to be complied with when installing the appliance.

This appliance is not suitable for installation in a shared flue system.

The firebox and ashpit cover shall be kept closed except during ignition, refueling and removal of residue material to prevent fume spillage. It is important to use this appliance correctly to achieve best results.



## 5.2. Air Controls

**Warning!** Parts of the appliance, especially the external surfaces will be hot when in operation and due care need to be taken e.g. Protective gloves should be given in operation.

It is essential for the appliance to have sufficient air supply for combustion and ventilation.

### 5.2.1. Primary Air

Primary air is controlled through the assembly on the bottom of the door. This provides a conventional air draught which passes through the fuel bed. The primary air intakes can be adjusted to control the fire in combustion chamber.

### 5.2.2. Secondary Air

The appliance is fitted with an air wash system which can keep the heat-resistant glass of the fire door clean. This secondary air is controlled through the fittings on the bottom of the stove.

## 5.3. Grate

There are Two options: Rotary style and grid style. For rotary style grate, you can operate it by dragging a stainless-steel rod forward and backward to de-ash. For grid style grate, a special hook is supplied to de-ash. It is highly recommended to de-ash regularly in case any build-up of ash will damage the cast iron fuel bed. You should be careful of any hot parts.

## 5.4. Ashpan

It is essential that you clean up the ashpan regularly. Use the supplied tool to lift the ashpan out of the stove.

## 5.5. Burning Mineral Smokeless (Solid Fuel)

DO NOT have more than a 30-degree incline of the fuel bed from front to back, when you put solid mineral fuels on the fuel bed. The height of loading fuels must not exceed the rear cast iron lining.

The refueling intervals at nominal heat output will be approximately every 4 hours. We suggest you refuel in time to get the best possible results. When using solid mineral fuels, we suggest you keep the secondary air control in the closed position, so it can burn at maximum efficiency. At this time the primary air controls can adjust the burn rate of the appliance.

In order to prevent the ash from being stacked to the underside of the bottom grate, please always de-ash before refueling. Once the ash builds up, it is possible that it will restrict the airflow and cause the fire to die.

**Important!** It is very important to empty the ashpan regularly. In case the ash builds up the underside of the grate, burnout or distortion of the grate may be caused.

## 5.6. Burning Wood

The refueling intervals at nominal heat output will be approximately 1.5 hours. You may load wood higher in the stove than solid mineral fuel, but wood or logs are not permitted to touch the baffle plate.

Wood burns most efficiently with the primary air controls closed and the secondary control partially open. Moving the secondary control will control the burn rate of the stove.

Wood burns best with a layer of ash on the fuel bed, and care should be taken to only remove surplus residue from the stove timely.

We recommend you only use dry, seasoned wood as fuels; the wood should have been cut, split and stacked for at least one year in a circulating air surround to dry out. Otherwise, wet or unseasoned wood will cause tar deposits in the stove and unsatisfactory heat output will occur.

**We recommend the use of wood logs with a moisture content of less than 20% for LOWRY stoves.**

Burning wet or unseasoned wood will create excess smoke emissions, tar deposits in the stove and chimney and will not produce a satisfactory heat output. Wood fuel purchased from an approved source may still require some drying out to remove surface water before use.

## 5.7. Refuelling on to a low fire bed

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

## 5.8. Fuel overloading

The maximum amount of fuel specified in this user guide should not be exceeded, overloading can cause excess smoke. We suggest that you refuel every 45 minutes to 1 hour, dependent on fuel.

**The recommended maximum dimensions of wood logs are as specified below:**

| Model         | Maximum Length - mm | Maximum Diameter - mm |
|---------------|---------------------|-----------------------|
| The Lowry     | 375                 | 175                   |
| The Lowry 5X  | 405                 | 175                   |
| The Lowry 5XL | 470                 | 175                   |

LOWRY stove is suitable for use with wood, coal and solid fuels. Note that the LOWRY multifuel stove has been recommended for use in Smoke Control Area when burning wood logs. The LOWRY multifuel stoves can be used in Smoke Control Areas when burning authorized solid fuels. A list of authorized fuels is available online: <http://smokecontrol.defra.gov.uk/fuels.php>

## 5.9. Lighting the Stove

It is better for you to have 2 or 3 small fires before operating your stove to its maximum heat output. This can help the paint to cure steadily and to give a long service life for the paint finish. During the period, there will be an unpleasant smell, you may keep all doors and windows open for your comfort, though the smell is non-toxic.

First, load the fire with starting fuel, i.e. paper, dry sticks and/or firelighters etc. Second, light the fire at the base keeping all air controls open. Wait until the fuel reaches a steady glow, when building the fire up step by step, more fuel should be added when you have a nice fire settled across the grate bed.

**Warning!** You need to check for blockages prior to re-lighting after a prolonged shut down period.

## 5.10. Shutting Down

Firstly, close the primary air controls;

Secondly, close the secondary air controls;

At last the fire will go out due to lack of air.

If reviving the fire, the primary air controls are recommended to be opened first, followed by opening the secondary air controls.

**Warning!** The stove will remain **HOT** after the fire has been extinguished.

## 5.11. Safety Notes for your guidance

This appliance is **NOT** suitable for use in a shared flue.

This appliance should **NEVER** be operated with the doors open.

**NEVER** clean the glass when the stove is hot. **ALWAYS** use stove glass cleaner, which is available from DIY and stove retailers, only when the stove is cool.

**DO NOT** use an aerosol spray on or near the stove when it is alight.

**DO NOT** use liquid fuels in this appliance.

**NEVER** leave the stove unattended for long periods without first adjusting the controls to a safe setting – careful air supply control should be exercised at all times.

**DO NOT** modify the appliance as it could result in damage to the appliance or injury to users.

**IMPORTANT – DO NOT** fit an extractor fan in the same room as this appliance.

**FIRES CAN BE DANGEROUS – Always use a fireguard standard BS 8423:2002 in the presence of children, the elderly or the infirm.**

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

**DO NOT OVERFIRE – it is possible to fire the stove beyond its design capacity, this could damage the stove, so watch for signs of overfiring – if any part of the stove starts to glow red, the fire is in an overfire situation and the controls should be adjusted to immediately prevent the overfiring.**

**WARNING – FUME EMISSION**

Properly installed and operated, this appliance will not emit fumes. Occasional fumes from de-ashing and refueling may occur. Persistent fume emission must be stopped.

If fume emission does persist, then the following immediate action should be taken: -

1. Open doors and windows to ventilate room
2. Put the fire out, or safely dispose of the fuel from the appliance.
3. Check for flue chimney blockage and clean it if required.
4. Do not attempt to re-light the fire until the cause has been identified and corrected.
5. If necessary, seek professional assistance.

**IN THE EVENT OF A CHIMNEY FIRE**

Raise the alarm to let others in the house know.

Call the Fire Brigade

Close all air controls.

Place a fireguard or spark guard in front of the stove.

Feel the chimney breast for sign of excessive heat.

Move furniture and rugs away from the fireplace and remove any nearby ornaments.

**DO NOT endanger yourself or any other person, so if necessary, leave the house immediately after calling the Fire Brigade.**

## **6. Maintenance**

### **6.1. Stove body**

Use a soft brush to clean the stove; cleaning must ALWAYS be done after it has cooled down. The finish can be renewed with proprietary stove paint.

### **6.2. Baffle plate**

Remove and clean the baffle plate once a month to avoid soot or fly ash.

Block the flue ways and produce dangerous fume emission.

### **6.3. Fireproof glass**

Use a proprietary glass cleaner to clean the glass when cool. Any material that may damage the glass should not be used to clean the panel. Wet logs on heated glass, a badly aimed poker or heavy slamming of the doors could crack the glass panels and care should be taken.

### **6.4. Ceramic rope**

Ceramic or fiber glass rope is used on the stoves. Inspect the rope around the door and glass. If rope is becoming detached, use a proprietary rope glue to reattach it. Ensure you replace the rope in the case of it being in poor condition.

### **6.5. Flue & Chimney**

Keep the chimney, flue way and any connection flue pipe swept regularly.

For users of smokeless fuels, sweep at least once a year; for wood and other fuels, at least twice a year. If the stove is fitted in place of an open fire, then the chimney should be swept one month after installation to clear any soot falls which may have occurred due to the difference in combustion between the stove and an open fire.

## 7. Trouble Shooting

### **No Fire can be burnt**

Please check the following measures:

A proper fuel is being used.

The air inlet is unobstructed.

Chimneys and flue ways are clear.

Sufficient air supply is into the room.

No extractor fan is working in the same room as the stove.

### **Fire blazing out of control**

Please check:

A suitable fuel is being used.

The doors are tightly closed.

The air controls are all in the closed position.

The primary air control flap is not wedged in the open position.

The glass retaining clips are not loose.

The door rope seals are in good condition.

**Product End-of-Life/Recycling:** To dispose of the stove after the product life has expired, please observe the following information.

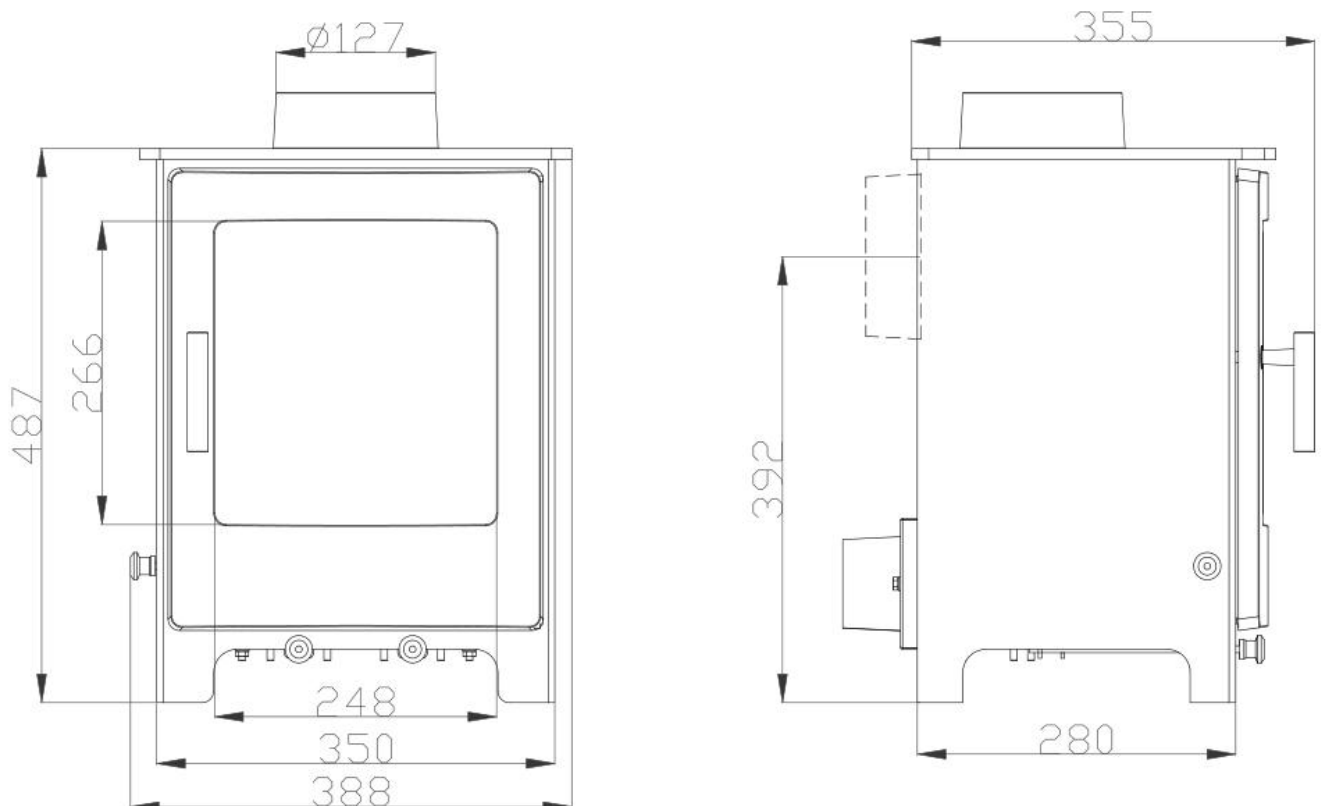
First, dispose of the items correctly i.e. separate the parts to be disposed of in material groups.

Second, always dispose of items in a way that is as sustainable as possible and that is in line with the current environmental protection, reprocessing/recycling and disposal technology.

## 8. Technical Drawings and Performance Data

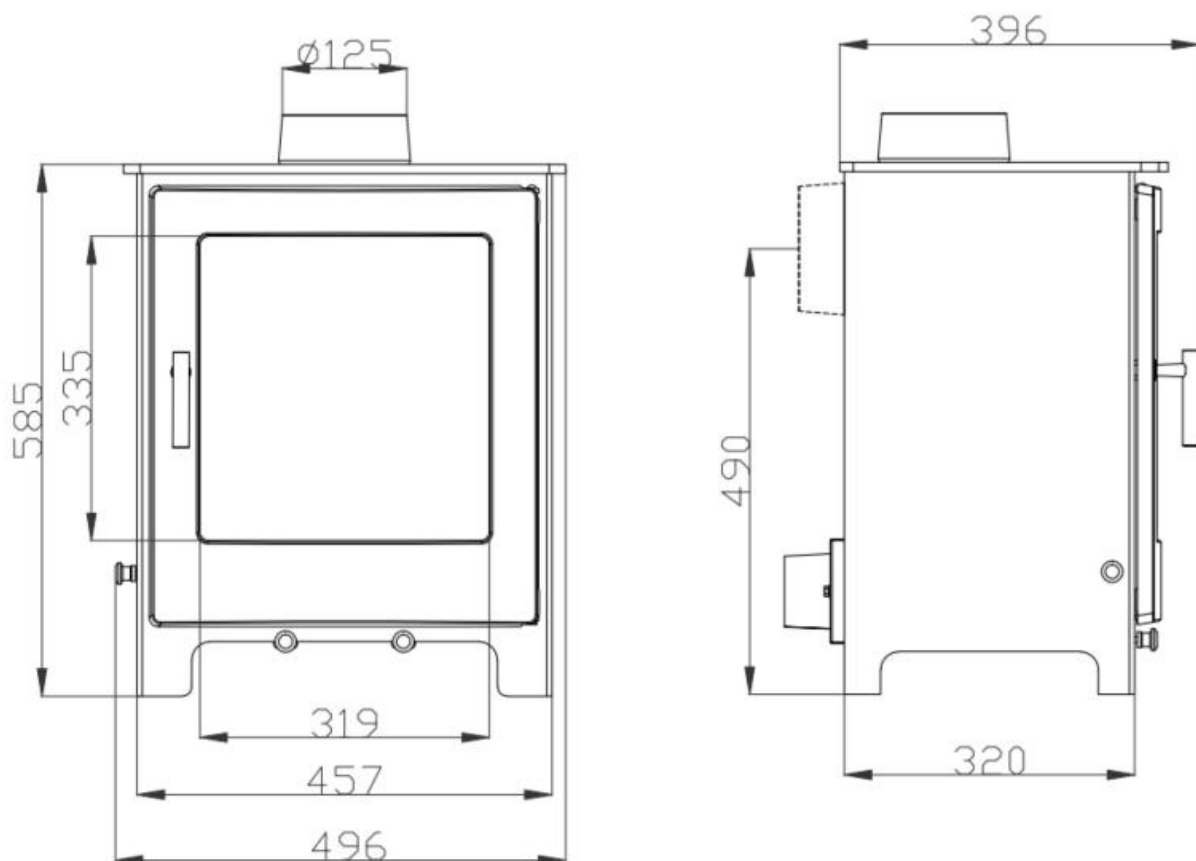
### The Lowry

| Lowry  | Wood – Primary Fuel                               | Smokeless Fuel         |
|--|---|------------------------|
| Nominal Heat Output                          | 5.0 kW  | 4.9 kW                 |
| Net Efficiency                               | 75.6 %  | 86.5 %                 |
| Seasonal Efficiency                          | 66.6%   | 77.5%                  |
| PM at 13% O <sub>2</sub>                     | 28 mg/m <sup>3</sup>                              | 16 mg/m <sup>3</sup>   |
| OGC at 13% O <sub>2</sub>                    | 118 mg/m <sup>3</sup>                             | 45 mg/m <sup>3</sup>   |
| CO at 13% O <sub>2</sub>                     | 1499 mg/m <sup>3</sup>                            | 1301 mg/m <sup>3</sup> |
| NoX at 13% O <sub>2</sub>                    | 102 mg/m <sup>3</sup>                             | 111 mg/m <sup>3</sup>  |
| Mean Flue Gas Temperature                    | 282 °C  | 210 °C                 |
| Flue Gas Mass Flow                           | 5.5 g/s   | 3.2 g/s                |
| Indirect Heating Functionality               | No  | No                     |
| Type of Heat output room Temperature control | Two or more manual stages, no temperature control |                        |
| Other Control Options                        | N/A   |                        |



**The Lowry 5X**

| Lowry 5X  | Wood - Primary Fuel                               | Smokeless Fuel         |
|---|---|------------------------|
| Nominal Heat Output                             | 4.9 kW  | 4.9 kW                 |
| Net Efficiency                                  | 83.2 %  | 86.7 %                 |
| Seasonal Efficiency                             | 74.2 %  | 77.7%                  |
| PM at 13% O <sub>2</sub>                        | 21 mg/m <sup>3</sup>                              | 12 mg/m <sup>3</sup>   |
| OGC at 13% O <sub>2</sub>                       | 80 mg/m <sup>3</sup>                              | 71 mg/m <sup>3</sup>   |
| CO at 13% O <sub>2</sub>                        | 1372 mg/m <sup>3</sup>                            | 1026 mg/m <sup>3</sup> |
| NoX at 13% O <sub>2</sub>                       | 106 mg/m <sup>3</sup>                             | 147 mg/m <sup>3</sup>  |
| Mean Flue Gas Temperature                       | 196 °C  | 225 °C                 |
| Flue Gas Mass Flow                              | 4.3 g/s   | 2.9 g/s                |
| Indirect Heating Functionality                  | No  | No                     |
| Type of Heat output room<br>Temperature control | Two or more manual stages, no temperature control |                        |
| Other Control Options                           | N/A   |                        |



**The Lowry 5XL**

| Lowry 5XL                                       | Wood - Primary Fuel                               | Smokeless Fuel         |
|---|---|------------------------|
| Nominal Heat Output                             | 4.9 kW  | 4.9 kW                 |
| Net Efficiency                                  | 75.7 %  | 81.5 %                 |
| Seasonal Efficiency                             | 66.7 %  | 72.5 %                 |
| PM at 13% O <sub>2</sub>                        | 29 mg/m <sup>3</sup>                              | 21 mg/m <sup>3</sup>   |
| OGC at 13% O <sub>2</sub>                       | 108 mg/m <sup>3</sup>                             | 59 mg/m <sup>3</sup>   |
| CO at 13% O <sub>2</sub>                        | 1370 mg/m <sup>3</sup>                            | 1447 mg/m <sup>3</sup> |
| NoX at 13% O <sub>2</sub>                       | 119 mg/m <sup>3</sup>                             | 152 mg/m <sup>3</sup>  |
| Mean Flue Gas Temperature                       | 235 °C  | 213 °C                 |
| Flue Gas Mass Flow                              | 5.9 g/s   | 4.7 g/s                |
| Indirect Heating Functionality                  | No  | No                     |
| Type of Heat output room<br>Temperature control | Two or more manual stages, no temperature control |                        |
| Other Control Options                           | N/A   |                        |

