# IRONWOOD

## **5kW Wide Woodburning Stove**



**User Instruction Manual** 



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## **5kW Wide Woodburning Stove**

Thank you for purchasing the Ironwood 5kW woodburning stove. Follow these simple instructions and guidelines to ensure you get the best and safest operation from your Ironwood stove.

#### **General**

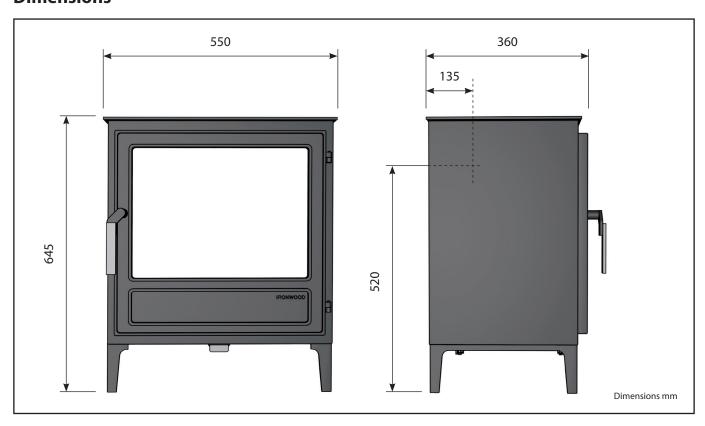
To ensure the safe installation of this appliance it must be installed by a Hetas registered engineer or approved by your local building control officer.

- · Only burn approved fuels
- Regular maintenance and chimney sweeping is required (see care & maintenance)
- Do not make any unauthorised modifications or changes to the appliance.
- Do not place combustible materials such as fuel close or in close proximity to the appliance
- Furniture should be at least 1 metre in distance from the appliance

## **Technical information**

Nominal Heat Output	5 kW
Efficiency	80.3%
Fuel	Wood Only
Model	IW W5kW
Weight	106Kg
Width	550mm
Depth	360mm
Height	645mm
Spigot internal dimension	155mm
Distance from rear to centre of spigot	135mm
Distance to combustibles	Side 300mm
	Rear 600mm
Intermittent operation only	

#### **Dimensions**



#### **Recommended fuels**

Ironwood stoves are designed for burning wood only. Choosing the correct log length is important and this depends on the type and size of the stove. For the Ironwood 5kW wide we recommend a 14" log which will ensure you get a long clean burn by having the size to comfortably fit the firebox and grate. Most importantly is ensuring the wood you choose is dry with a moisture content of no more than 20%. If the fuel is damp with a high moisture content this will result in poor combustion and also result in layers of soot and tar within the firebox chamber and chimney. This could potentially cause a chimney fire if allowed to build up over time. The glass will also mist up and the crystal clear view of the fire will be disrupted.



Burn only seasoned or kiln dried firewood with a moisture content of less than 20%. We recommend using 'Ready to Burn' fuel from an accredited Woodsure fuel supplier.

#### Do not

- Do not burn unsuitable fuels such as treated waste wood (eg old furniture, pallets or fence panels) or household rubbish. Treated waste wood and household rubbish can emit harmful fumes and toxic pollutants into your home when burnt.
- Do not use liquid fuels as a fuel or an incinerator.

## Lighting the first fire

The first few fires should be kept at a low temperature with a few sticks of kindling in order for any cement and seals to harden. On the third fire the temperature can be increased and logs introduced. At this stage the temperature will increase allowing the stove paint to cure and harden.

It is normal that the curing paint will smell and even create a misty haze in the room and a window or door to outdoors should be opened. The smell should stop after the first few firings. Take care not to touch the stove paintwork as during the curing process the paint is soft and can mark easily.



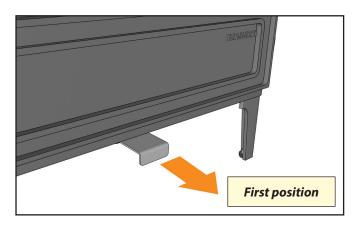
## Lighting and controlling the fire

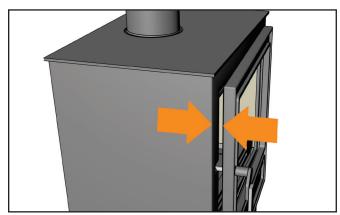
Warning: This appliance will be hot to touch during operation. Ensure a pair of stove gloves are worn at all times when operating and refuelling the appliance.

## STEP 1 Lighting-fully open, 2nd 'click'

Pull the air wash lever open towards you which will fully open all necessary vents to start the fire. Place firelighters/ newspaper and dry kindling wood on the grate. Light the paper or firelighters and leave the door ajar to allow the fire to establish. Add a few small diameter logs and after the fire is established larger logs can be introduced, usually after 10-15 minutes. The stove door should be closed fully at this point. Move to step 2.

Do not run the fire with the door ajar except for initial lighting and refuelling as this can cause over firing and damage the appliance.

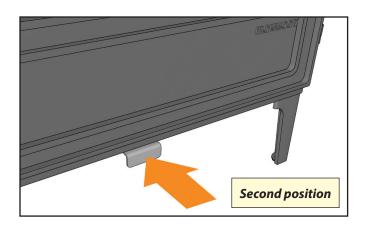




## STEP 2 Moving towards optimum temperature

When an optimum temperature of between 150 and 250 Celsius on the outer body of the stove is reached push the slider again further towards the stove to its second location. This will reduce the secondary air and slow the rate off enough to allow the stove to operate at its optimum temperature, where you can see the flames and slow efficient burning of the logs.

Burning seasoned or kiln dried wood with a moisture content of under 20% is essential for a smooth transition to optimum stove temperature.



## STEP 3

## Refuelling

Open the air vent fully for a few minutes before refuelling. Slowly open the stove door and place one or 2 logs diagonally onto the fire grate. The door should be left ajar for a period of around 3 minutes with the air vent slider open in order maintain flames on a new re-fuel charge.

Once the fire is established close the door and push the slider to the second location. The appliance is designed to be used with the door closed.

As a guideline refuel intervals are every 40-50 minutes. Ensure that the firebox is not loaded above the combustion inlets on the rear firebrick.

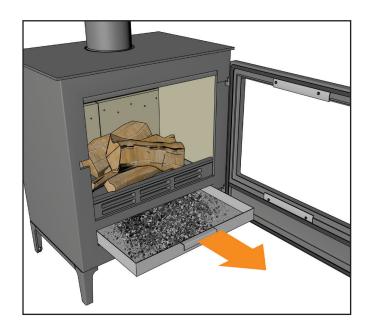


#### **De-ashing**

Wood burns best on a bed of ash approximately 25mm (1" deep). Remove any excess ash from the firebox by using an ash rake or a small shovel which will allow the ash to fall into the ashpan below the grate. The ashpan can be removed by opening the stove door and pulling out the ash tray beneath the grate.

Place the ash in an ash caddy or suitable metal container. Do not place hot ash in a container made from plastic or combustible material.

Ash can remain hot for a long period of time after use, ensure sufficient time has lapsed before removing. We recommend de-ashing once a week.



## Refuelling on to a low fire bed

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

#### **Fuel overloading**

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

#### **Operation with door left open**

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

#### **Dampers left open**

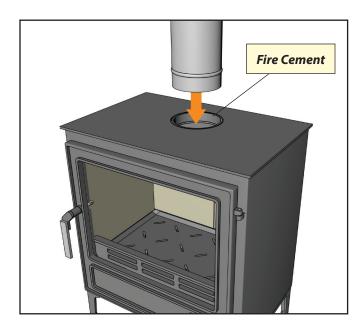
Operation with the air controls or dampers open can cause excess smoke. The appliance must not be operated with air controls or dampers door left open except as directed in the instructions.

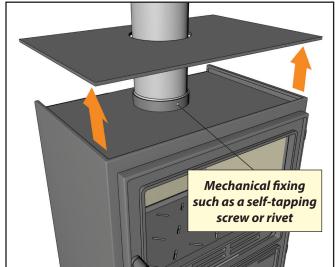
#### **Installation instructions**

Installation of this appliance must be by a registered Hetas engineer or approved by your local building control officer. All local regulations including those referring to National and European Standards need to be complied with when installing this appliance.

#### **Connection to top outlet**

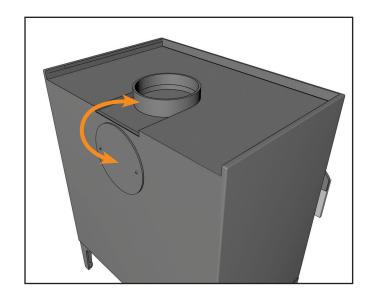
As standard the stove will be supplied with a top flue connection. Fire cement or heat resistant rope should be inserted into the spigot or around the male end of the pipe to allow a tight fit. A mechanical fixing such as a self-tapping screw or rivet is required to secure the pipe into position. While this connection is made we advise to lift the stove top in order to give the space required





#### **Connection to rear outlet**

Unscrew the top spigot and rear plate using a 10mm spanner and 4mm allen key. Reposition the spigot onto the rear of the stove and ensure the gasket is fitted inbetween the body of the stove and the spigot. Insert a tee piece into the spigot with fire cement or heat resistant rope and secure with mechanical fixing such as a self-tapping screw or rivet.



## **Defra exemption**

The Ironwood 5 Wide Stove has been recommended as suitable for use in smoke control areas when burning wood logs. This is conditional upon following the wood burning instructions precisely. Suitable Authorised fuels can also be used in the appliances in Smoke Control Areas.

See Authorised fuel list:

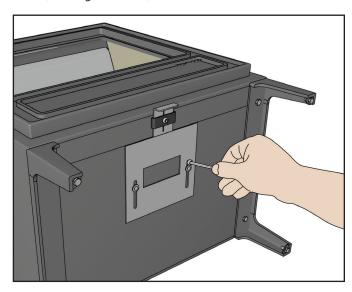
#### https://smokecontrol.defra.gov.uk/fuels.php

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.

This stove can be used in Smoke Control Areas by inserting the 5mm bolt (supplied) to the underside air slider of the stove (see diagram below).



## 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 Ironwood 5kW Wide Woodburning Stove has been recommended as suitable for use in smoke control areas when burning wood logs. The Ironwood 5kW Wide Woodburning Stove must be fitted with a permanent stop to prevent closure of the air control slide plate beyond 22.4mm open.

### Carbon monoxide alarm

The regulations currently state that "appropriate provision shall be made to detect and give warning of the release of CO". This is covered in Approved Document J of the Building Regulations that the statutory requirements for installations of solid fuel appliances. In particular regulation J3 states the following:

#### Warning of Release of Carbon Monoxide

J3. |Where a fixed combustion appliance is provided, appropriate provision shall be made to detect and give warning of the release of carbon monoxide.

A suitable alarm will have been tested to confirm it meets the necessary requirements of BS EN 50291:2010, and activate within the required time when the relevant volume of CO is detected. The alarm packaging itself will contain the relevant information, including appropriate Kitemark reference (if tested by BSI) and also confirmation of the test method standard, warning of the expected lifetime of the sensor and where incorporated stating the product includes an end of life indication.

The general provisions within ADJ and BS8303 ask that the CO alarm be positioned in a location which provides means for the immediate detection of CO upon spillage from a solid fuel appliance. Guidance in ADJ and in BS8303 is that CO alarms should be positioned as follows;

- a) On the ceiling at least 300mm from any wall or, if it is located on a wall as high up as possible (above any doors or windows) but not within 150mm of the celling; and
- b) Between 1m and 3m horizontally from the appliance.

## What to do in the event of a chimney fire

In the event of a chimney fire:

- 1. Close off the air controls immediately.
- 2. Leave the room, close the door and alert other people in the house.
- 3. Evacuate the property and call the fire brigade.
- 4. Do not re-enter the property until it is confirmed safe.

Do not use until a registered engineer has inspected the chimney and appliance to confirm the system is safe and free from obstruction. Only use genuine Ironwood parts in the event that stove parts require replacement. Ventilation

For ventilation requirements please refer to Document J.

Many older properties are sufficiently ventilated by natural leakage of air to provide suitable air supply for an appliance of 5kW output or less.

Modern building construction has meant that properties have become more air tight. If the air tightness of a modern property is less than 5m3 per hour per m2 a purpose air vent is required for a 5kW rated stove. The air leakage of a modern house is tested on completion of construction and a certificate should detail the information required.

An inadequate air supply can result in a poor combustion. This appliance requires a constant supply of air to maintain good combustion.

Extractor fans or cooker hoods must not be placed in the same room as this can cause fumes to emit into the room.

#### **Care & Maintenance**

#### **Annual service**

Before the start of the heating season an inspection must be made and the appliance cleaned as detailed below. It is important to ensure when any service or cleaning is undertaken the appliance has had time to fully cool.

Visual checks should be made to ensure the following are in good condition:

Stove glass and door rope

Side and rear firebricks

**Baffle plate** 

**Grate and log retainer** 

### **Chimney sweeping**

When burning seasoned or kiln dried wood you should sweep your chimney at least once a year. Ideally the chimney should be swept before, during and after the heating season. Sweeping the connecting flue pipe and chimney keeps the chimney clear from blockages to ensure that the appliance operates efficiently and safely. Access to cleaning the chimney is made by removing the firebrick and baffle plate (see below).

Always check that the sweep is qualified and leaves a sweeping certificate.

## **Chimney Sweeps:**

#### **NACS**

The national Association of Chimney Sweeps *nacs.org.uk* 

#### GOMCS

The Guild Of Master Chimney Sweeps www.guildofmasterchimneysweeps.co.uk

#### **APICS**

The Association of Professional Independent Chimney Sweeps

apics.org.uk

#### **SWEEPSAFE**

www.sweepsafe.com

#### **HETAS**

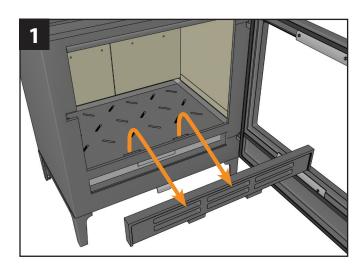
hetas.co.uk/find-chimney-sweep/

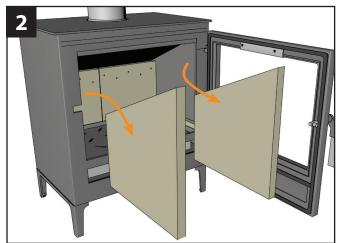
## Removing the baffle plate and firebricks

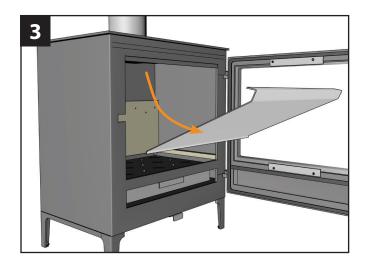
When sweeping the baffle plate must be removed. This can be achieved by removing the left hand and right hand firebrick, as illustrated below, which allows the plate to be passed through the front opening of the stove. To remove the rear firebrick the grate is to be moved vertically and then taken out of the front opening of the fire.

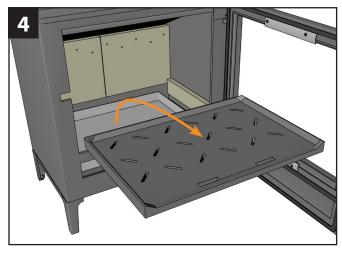
## Only use replacement parts supplied or recommended by Ironwood Stoves.

When removing the firebricks check for any damage and clean the fire brick with a soft brush. Care should be taken as the firebricks are fragile. If the brick has a hairline crack or any damage they must be replaced.







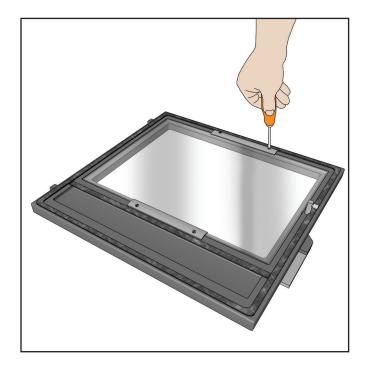


## Replacing the glass and door rope

To maintain a safe operation of the stove door any damaged glass should be replaced immediately. Remove the door by lifting from the hinges and lay down on a soft flat surface. Remove the glass fixing strips and fit new glass into position. Be careful not to overtighten the screws as this can break the glass. To fit a new door seal remove the rope and any residue adhesive. Insert rope adhesive into the channel and replacement rope. Wait approximately 12 hours for the rope adhesive to set before using the stove.

Glass dimensions: 407mm x 310mm

Rope diameter: 10mm (soft rope)



#### Seasonal use

Over the summer months, when the stove is not in use remove all ash and soot from within the ash pan and above the baffle plate. Set the air control to the halfway position as this will reduce any build-up of moisture in the stove and reduce any corrosion. In the event that there is rust on any of the components this can be removed using wire wool and 2 light coats of stove paint.

After a prolonged period of not using the appliance check for blockages will need to be made before re-lighting.



## **Trouble Shooting**

Symptom	Possible Cause	Solution
Difficulty in reaching an efficient burn	Wet wood	Ensure fuel is under 20% moisture content (use a moisture meter)
Poor control of the fire and over heating	High flue draft	Consult your installer who may advise use of an anti downdraft cowl
Excessive fuel use	Fuel too dry	Do not use constructional timber or pallet wood.
Excess air into firebox	Ensure fuel is not too dry. Do not use construction or building timber. Ensure door seals are not broken.	106Kg
Low heat output	Low flue draft	Consult a Hetas registered installer to check your flue system
Smoke spillage into the room	Blocked flue	Open all doors and windows and allow the fire to burn out. Consult a stove installer or chimney sweep.
Strong smell into the room	Paint curing	For the first few burns the appliance paint will be curing, open all doors and windows to ensure good ventilation
Wind noise from chimney	High draft	Consult your installer who may advise use of an anti downdraft cowl.

Note that a poor selection of fuel will result in an inefficient burn in the appliance which can further cause:

- · Low heat output
- Blackening of stove glass
- · Dirty firebricks
- A rapid build up of tar and creosote in the chimney

To ensure a clean and efficient burn only seasoned or kiln dried firewood with a moisture content of less than 20%. We recommend using 'Ready to Burn' fuel from an accredited Woodsure fuel supplier.



Tel: 01446 771567

www. iron woods to ves. co. uk