

ACR

STOVES

Wychwood

Woodburning Stove Model • WYC1WB



T
E
C
H
N
I
C
A
L
M
A
N
U
A
L

Serial Number:

WYC1WB • Version 1 Date 07/08/18

Thank you for purchasing an ACR Heat Products stove
To be retained by the user for future reference

IMPORTANT INFORMATION

To ensure that you gain the most from your purchase, please take a few minutes to read through this manual before lighting the appliance for the first time.

Since April 2002 only registered competent installers can install solid fuel appliances. Installations carried out by non-registered installers must be inspected by local authority building control.

For more information please contact hetas at: www.hetas.co.uk or telephone: 0845 6345626

- Before installation and/or use of this appliance please read these instructions carefully to ensure that all requirements are fully understood.
- This appliance must be installed by a registered engineer, or approved by building control, failure to do so may endanger life and property.
- All the instructions in this manual should work in conjunction with building regulations document J, if there is a variation the most stringent requirement should be adhered to.
- The installation of this appliance must comply with current Building Regulations and local regulations, including those referring to national and European standards need to be complied with when installing the appliance.
- Do not operate this appliance if it becomes damaged.
- Improper use, maintenance or fitting parts other than those approved by the manufacturer could lead to the appliance becoming damaged or unsafe which in turn could lead to personal injury or damage to the property and will void the warranty.
- The appliance must not be modified in anyway unless authorised by ACR Heat Products Ltd.
- The appliance should be inspected regularly to ensure the airways are clean and free from obstruction and the chimney swept at least once a year.
- The external surfaces of this appliance will be very hot to the touch when in operation and due care will need to be taken when operating the appliance to ensure safety. A fire guard should be fitted if it is likely that the elderly, infirm or children may come into contact with the appliance.
- This appliance has been designed for intermittent operation.
- This appliance must not be used as an incinerator.
- Each installation is unique to the property, the information contained in this manual may not give exact installation requirements for your installation.
- The installation must comply with Building Regulations, European Standards and Local authority bylaws.

Asbestos

This appliance contains no asbestos, if there is the possibility of disturbing any asbestos in the installation of this appliance then specialist advise must be sought and appropriate precautions taken.

Metal Parts

This appliance may contain sharp metal edges, take care when installing or servicing this appliance to avoid personal injury. Please use appropriate personal protective equipment at all times.

Before installation, please ensure that the correct model has been supplied.

Please make a note of the serial number of your appliance in the space provided on the front cover of this manual as this will be requested if you require technical assistance in the future.

Please also ensure that the commissioning checklist at the rear of the manual is completed in full.

Wychwood Specifications

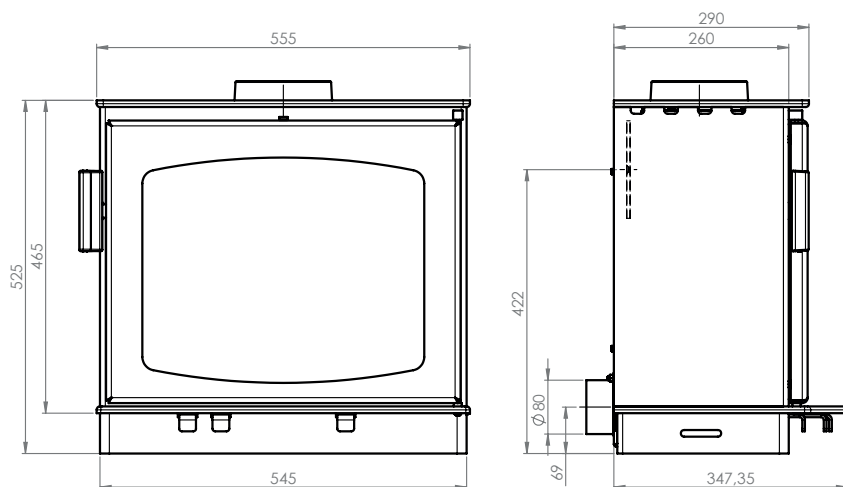
Nominal heat output	5 kW
Chimney draft required	12Pa min Start up
Height	525 mm
Width	555 mm
Depth	347 mm
Weight	90 Kg
Air Requirement	N/A***
Flue Mass Gas Flow	4.1 g/s
CO @ 13% O ²	0.12 %
Mean Flue Gas Temperature	245 °C
Efficiency	82.2 %
Mean CnHm @13%O ₂	85 Nmg/m ³
Mean NOx @13%O ₂	99 Nmg/m ³
DIN Plus Dust @13%O ₂	28 Nmg/m ³
Log Length	350 mm

*** Please note that Building Regulations Document J advises that additional permanent air supply is required for appliances with an output of above 5Kw.

With modern properties additional air may be required as Document J suggests that adequate air would be a benefit.

- If design air permeability $\geq 5.0\text{m}^3 / (\text{h}\cdot\text{m}^2)$ then $550\text{mm}^2/\text{kW}$ of appliance rated output above 5kW
- Or
- If design air permeability $\leq 5.0\text{m}^3 / (\text{h}\cdot\text{m}^2)$ then $550\text{mm}^2/\text{kW}$ of appliance rated output
- If in doubt, please consult your registered installer for advice.

If installing into a room containing an extractor fan, please ensure that the relevant tests are carried out according to Document J of the building regulations.



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 Northern Ireland appliances are exempted by publication on a list by the Department of Agriculture, Environment

and Rural Affairs under Section 16 of the Environmental Better regulation Act (Northern Ireland) 2016.

In Wales appliances are exempted by regulations made by Welsh Ministers.

• Wychwood (WYC1WB) has been recommended as suitable for use in smoke control areas when burning wood, as such, when the secondary air slider is in the closed position it remains open by 8mm and the tertiary air control should be fully open and is prevented from closing by a screw.



Further information on the requirements of the Clean Air Act can be found here: 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.

CO Alarms

It is required by Building Regulations that whenever a new or replacement wood/solid fuel or biomass appliance is installed in a dwelling a carbon monoxide alarm to BS EN 50292:2002 must be fitted in the same room as the appliance.

The alarm should be installed according to the alarms manufacturers instructions and should not be considered a substitute for the appliance being installed correctly and regular maintenance of the appliance and flue system by a competent person.

Installation Instructions

Location of the unit

Hearth Requirements

The appliance must stand on a level fireproof hearth with a minimum thickness of 12mm. The hearth temperature created by this stove is below 100°C. The hearth must protrude at least 225mm in front of the appliance and 150mm either side of the appliance.

The appliance shall be installed on a floor with an adequate load bearing capacity. If an existing construction doesn't meet with prerequisite, suitable measures (e.g. load distributing plate) shall be taken to achieve it.

Flue Requirements

The chimney must comply with current Building Regulations. Provision must be made to provide access for cleaning the appliance, the flue gas connector and the chimney flue.

The flue must be:

- ✓ In sound condition and provide sufficient draft (minimum 12pa at start up)
- ✓ Suitable for use with solid fuel burning appliances
- ✓ Be able to clean the entire length of the flue system without removal of the appliance
- ✓ Free from deposits
- ✓ Well insulated
- ✓ At least 4m in height

The flue must not be:

- ✗ Shared with other appliances
- ✗ Weight bearing on the appliance
- ✗ A smaller diameter than the appliance flue collar size (125mm)

Clearances to non-combustible materials

There is a recommended minimum clearance of 150mm at each side of the appliance. A clearance of 150mm is required at the back of stove (if the rear wall has a thickness of 200mm or more this measurement can be reduced to 50mm) a recommended clearance of 300mm is required above the appliance for servicing purposes.

Clearances to combustible materials

If using an insulated flue with an integrated appliance connector, such as the Midtherm HT-S Starter length, the minimum distance to combustibles is 250mm at the rear and 200mm to the sides of the appliance. If using a single walled flue pipe there must be a minimum clearance of 450mm clearance at the rear and a 550mm clearance to the sides of the appliance. There must be a minimum clearance of 375mm above the appliance to any combustible materials e.g. wooden beam.

Curtains and soft furnishings should be a minimum of 1m away from the appliance.

Adequate space should be provided for servicing the appliance.

We do not recommend that televisions or artwork are positioned above the appliance.

Please remember that this appliance has been designed to provide heat and if installed into a recess enough space should be left around the appliance to enable the heat produced to rise and escape from the recess back into the room.

Installation Instructions

Location of the unit

Optional Rear Heat Shield

To reduce the rear distance to combustible material, the optional manufacturers heat shield (Part No - 9900-2370) may be fitted to the rear of the appliance. If using an insulated flue with an integrated appliance connector, along with the optional rear heat shield, the distances are:

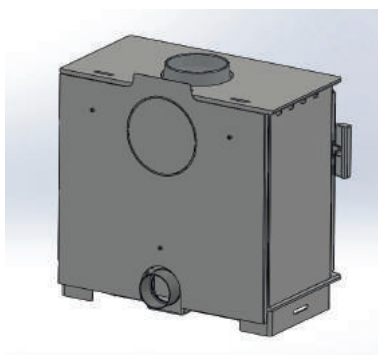
100mm at the rear of the appliance

250mm at the side of the appliance to combustible materials

Installation of Heat Shield

Align the heat shield with the rear of the appliance. Remove the 3 existing bolts from the back of the unit and affix the heat shield to the back of the stove using the 3 M5 x 55 bolts and 20mm spacers provided.

The spacers must be used to provide a 20mm gap between the rear of the appliance and the inner face of the shield.



Refractory Internal Panels

During the normal operation of your Acr stove, the refractory panels will experience heating and cooling. Sometimes minor hairline cracks can occur. All ACR stoves have a steel or cast iron structure behind the panels and therefore even if the cracks get larger, the stove will still operate safely. It is advisable to consider replacing the internal panels when:

The cracks are greater than 3mm

The surface of the refractory panel has eroded more than 25% of it's original thickness

When the panel starts to crumble and fall apart

To prevent the issue from happening and to prolong the life of your internal panels, the homeowner should "burn in" the refractory panels in the new appliance by building small kindling fires to begin with and then gradually working up to a larger fire. When adding more fuel to the fire, caution should be used to prevent excessive mechanical damage to the panels. ACR Heat Products bears no responsibility for the loss or damage of any kind to the internal panels during or after installation or during the normal operation of the appliance.

Assembly of the unit

This appliance is equipped with a pre-fitted manufacturer's smoke exempt stop. Under no circumstances should it be tampered with or removed unless expressly authorised by a competent person and the appliance is not installed in a smoke exempt area.

If the appliance is to be installed in a non smoke exempt area you can remove the restricting screw on the secondary air control (on right hand side under the ash lip) to allow full movement of the secondary air slider.

The appliance is supplied pre-assembled with the flue spigot in the top exit position.

If you intend to install the appliance using a rear flue connection, the blanking plate should be swapped over as follows:



- Remove the upper secondary steel baffle and internal vermiculite baffle (for further instruction please see under maintenance heading).



- Remove the rear metal cut out plate from the back of the stove
- Remove the rear blanking plate



- Remove the flue spigot from the top exit by removing the securing bolts and rope seal
- Refit the rope seal and flue spigot to the rear exit and secure with the bolts
- Refit the blanking plate to the top exit using the rope seal and retaining bolts

Operating your stove

Please note that during the first firing, we recommend a small fire is lit and that you slowly increase the temperature to enable the various parts to expand normally.

You may also experience fumes and a haze being given off by the stove during the first firing and possibly for the next couple of firings as the paint cures. This is normal but please ensure that the room is well ventilated during this period.

In the rare event of a malfunction due to overheating or a chimney fire, the air slides should be shut down completely and the fuel allowed to burn out. In the event of a chimney fire, once the air slides have been closed completely, dial 999 for assistance. If the appliance has overheated, the appliance and flue will need to be inspected for any damage before it can be operated again.

Recommended Fuels

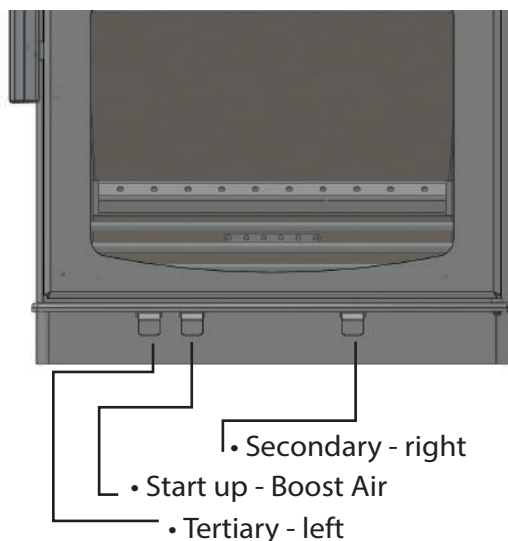
✓ Wood : hardwood such as ash, oak and beech which have been cut for at least 2 years and stored under shelter. The logs should have a maximum moisture content of 20%. Maximum log length 350mm, maximum width 150mm.

Prohibited Fuels

- X Green wood : i.e wood which is less than 2 years old with a moisture content of above 20%
- X Recovered wood: i.e pallets, railway sleepers, painted/treated wood etc. These will have been chemically treated and will pollute the atmosphere and possibly overheat the appliance.
- X Housecoal or bituminous coal : these fuels will soot up the airways of the stove and possibly overheat the appliance.
- X Petroleum Based Coke : over 20% - this will overheat the appliance and possibly damage the unit and craze the glass. Slumbering the stove with this fuel would also damage the flue liner.
- X Liquid fuels.
- X Paraffin fire lighter blocks: these can cause damage to the glass of your appliance.
- X Wood Only : **Under no circumstances should any solid fuel be used.**

Always check with your dealer or directly with the manufacturer as using the incorrect fuel may invalidate your guarantee and damage your appliance.

Operating your stove



Instructions for use with wood

- Pull the secondary air slider (on the right) fully forward and open the start up air slider (in the middle) fully by pulling the lever forward.
- The tertiary air slider should be pulled 50% open (under the ashlip) at all times when burning wood.
- Lay firelighters or rolled up newspapers on the grate and add a small amount of kindling wood to the top. Place 1 or 2 small logs on the top.
- Light the newspaper or firelighters using a long taper and push the door closed but do not engage the locking handle fully.
- When the fire is burning fiercely, after a maximum of 5 minutes, add more logs and close the door.
- When the fire has become established, close the start up air (in the middle) down by pushing the lever inwards.
- The burning rate can be altered by moving the secondary air slider (on the right) - push the lever inwards to close down and pull outwards to increase the burn rate.
- Care should be taken to ensure that the logs are placed securely behind the log guard.

Operating your stove

Re-fueling

When refueling the stove always refuel onto a bed of hot embers, fully open the secondary and boost air controls until the new fuel is well alight, before adjusting the air controls for the desired setting.

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

Never overload the stove - it will work very well with two medium sized logs. The amount of fuel specified in this manual should not be exceeded, overloading can cause excess smoke.

Daily Maintenance

The ashpit should be checked and emptied regularly.

Never allow the ash to build up to such a level that it spills out onto the ashlip and prevents the door from closing correctly. Never empty the ashpit when the appliance is alight.

Always dispose of the ashes safely and in a responsible manner.

Never leave that ash inside the property.

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.

Air controls left open

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

Operation with the air controls or appliance dampers open can cause excess smoke.

- Never leave the stove unattended until the new fuel is well alight.

- Persistent fume emission is dangerous and must be investigated.

If fume emission persists, open doors and windows to ventilate the room and let the fire die. Have the chimney inspected for blockages and clean if required. Do not relight the fire until the cause has been found. We recommend that you seek professional advice.

This appliance has been designed to be burned with the door closed at all times other than when refueling.

It should not be operated as an open fire.

Typical refueling intervals for wood is 1 hour.

Troubleshooting

Problem	Probable Cause	Action Recommend
Fire difficult to start / goes out	• Green wood / wet wood	Use hardwood logs with a maximum moisture content of 20%
	• Logs are too large	Use kindling and small logs to start the fire and once established use split logs
	• Not enough primary air	Open air control
	• Insufficient draft	Check the flue is not obstructed
Fire burns too quickly	• Too much draft	Reduce the air control
	• Excessive draft	Install a draft stabiliser
Smokes on initial lighting	• Flue is cold	Burn paper and kindling to increase heat in flue
Smokes while burning	• Insufficient draught	Check the flue is not obstructed
Low heat output	• Poor quality wood	Use seasoned Hardwood (this has a Higher calorific value)

Maintenance

We recommend that the appliance is serviced annually by a competent engineer to ensure it's continued safe operation.

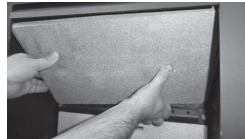
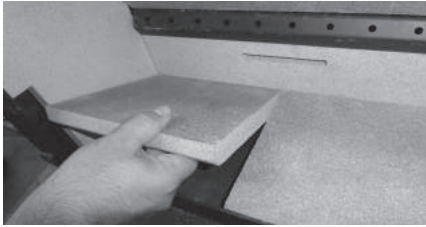
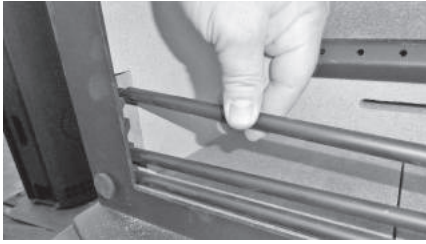
The chimney should be swept at least once a year together with the flue pipe connection. Care should be taken to ensure that there is not a build up of soot on the baffle and in the airways of the appliance.

If the appliance has not been operated for long periods, the flue should be inspected and swept before use to ensure there are no blockages within the flue.

The Ashpit should be cleaned regularly to avoid a build up.

- The internal vermiculite panels of the appliance should be checked regularly for soundness. If any excess wear and tear is found, we recommend these parts are replaced immediately.
- Check the rope door seals are intact and are not worn. These should be replaced on an annual basis to ensure the correct operation of this appliance.
- The glass can be cleaned using a soft damp cloth or a ceramic glass cleaner (available from your local stockist)

Use only replacement parts recommended by the manufacturer.



To remove the internal vermiculite baffle:
Firstly remove the front fuel retaining bars.

Then slightly lift the baffle and ease one of the side bricks forward by pulling the front edge of the side brick into the combustion chamber. Remove the

second side brick in the same manner, the vermiculite lower baffle can now be removed by lowering the front edge and rotating the baffle and removing through the front door.

Lift the front edge of the upper steel baffle and drop the back edge of the steel baffle into the combustion chamber, remove through door.

Commissioning Check List

Please tick boxes when each procedure is completed

- Ensure the serial number has been recorded on the front of this manual for any future use
- Ensure the door seals are in good condition and that the glass is secured correctly in the door (do not over tighten the glass as this will prohibit its expansion and could cause the glass to crack)
- Ensure that all internal components are fitted correctly (these may have shifted in transit)
- Ensure that the appliance operates correctly during the first firing
- Ensure the customer is aware that fumes may be given off during the first firings as the paint cures
- Advise the customer on the safe operation of the appliance
- Leave the instruction manuals, operating tool and glove for the customer's use.
- Record the flue draught reading of the appliance

Technical Data & Declaration of Performance

Manufacturer: ACR HEAT PRODUCTS Ltd.

Models: Wychood 5kW

Intended Use: Intermittant domestic heating appliance

Independently Performance & Safety tested by: Kiwa Gastec, Notified Body No: 0558

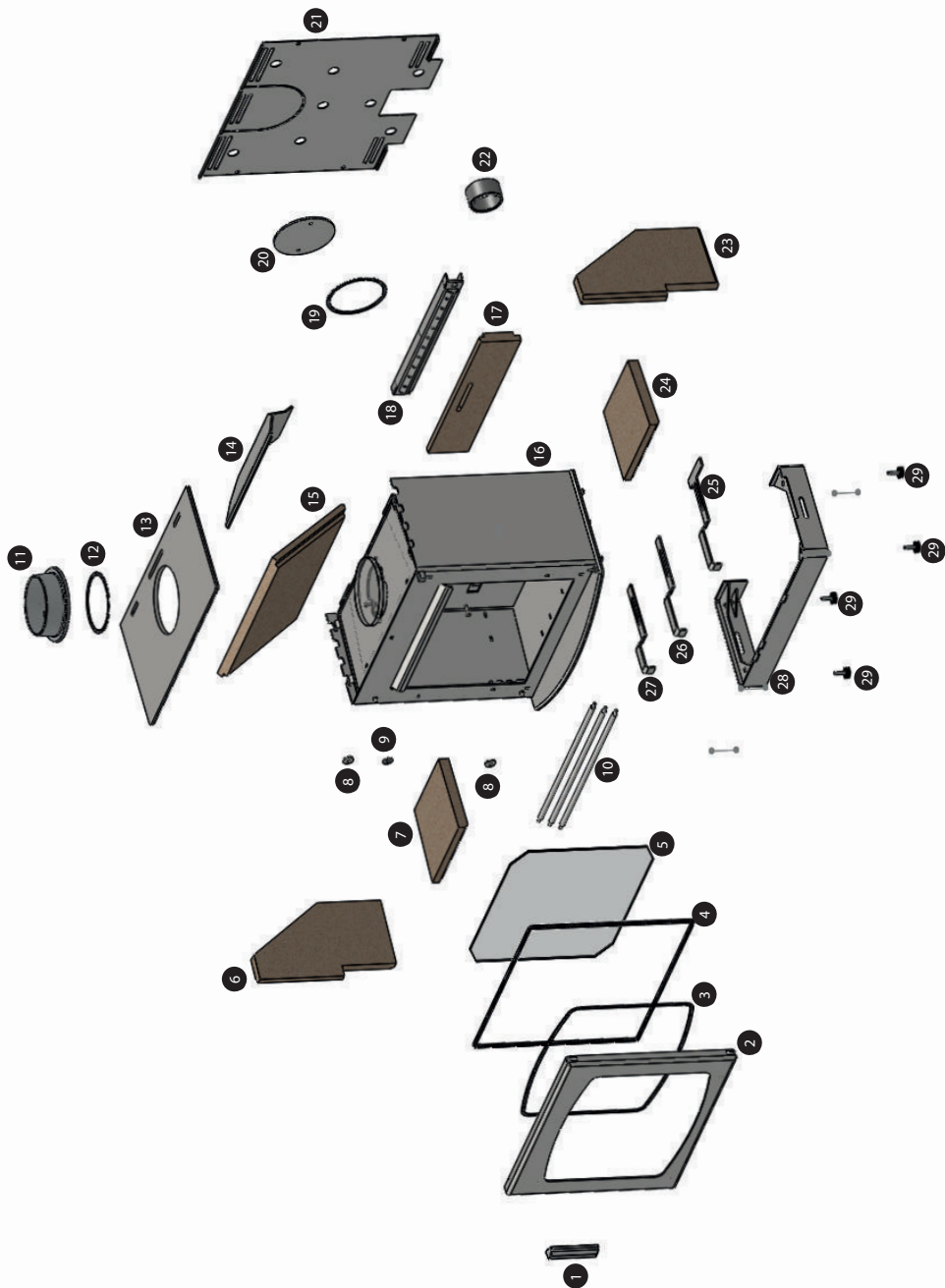
Model	Wychwood
Performance Characteristics using Wood fuel	
Appliance weight (packed/unpacked) (Kg)	95/90
Additional Characteristics Test Standard	DIN+
Declared Nominal Output: (kW)	5
Approximate Output: (kW)	3.0 - 6.5
Harmonised EN European Standard (hEN)	EN13240: 2001 Amd 2: 2004
Test Report Issue Date	24/07/2018
Total Efficiency (net)%	82.2
Gross Efficiency (%)	74.8
Tested Nominal Output: (kW)	5
Tested wood re-fuelling interval: (min)	50
Flue gas mass flow: (g/s)	4.1
Mean CO emission (@13%O2) : (%) (Nmg/m3)	0.12
Mean NOX emission (@13%O2 Nmg/m3)	99
Mean CnHm emission (@13%O2) : (Nmg/m3)	85
DIN + particulates (@13%O2) : (Nmg/m3)	28
Mean Flue Temperature : (Deg C)	245
Approximate max log length: (mm)	350mm
Safety Distances From Combustibles	
Side Wall: (mm)	200
Rear Wall: (mm)	250
Safety Distances From Combustibles: With Optional Heat Shield: (mm)	
Side Wall: (mm)	250
Rear Wall: (mm)	100

Signed:



Jason Searle
 Technical and Development
 Manager
 August 2018

Parts Information



Parts Information

Position	Quantity	Description	Product Code
	1	1 Door Handle	5790-255
	2	1 Door	8300-364A
	3	1 Glass Gasket (D8)	1982-004
	4	1 Door Gasket (D13)	1982-006
	5	1 Glass	5540-424
	6	1 Left Vermiculite Brick	6081-1200B
	7	1 Bottom Left Vermiculite Brick	6081-1204
	8	2 Door Magnet	5021-583
	9	1 Handle Striking Plate	7912-2205
	10	3 Log Guard	4735-174A
	11	1 Flue Spigot	3490-047A
	12	1 Flue Spigot Gasket (8 x 3mm)	1982-004
	13	1 Top	8700-269B
	14	1 Upper Steel Baffle	3711-251A
	15	1 Lower Vermiculite Baffle	6081-1203
	16	1 Combustion Chamber	H6390A
	17	1 Rear Vermiculite Brick	6081-1202
	18	1 Tertiary Air Chamber	9900-2304
	19	1 Flue Spigot Gasket	1982-004
	20	1 Blanking Plate	4111-136
	21	1 Rear Intergrated Heat Sheild	3211-549A
	22	1 Air Intake Collar	9900-1005B
	23	1 Right Vermiculite Brick	6081-1201B
	24	1 Bottom Right Vermiculite Brick	6081-1199
	25	1 Secondary Air Slider	5311-957
	26	1 Primary Air Slider	5311-959
	27	1 Tertiary Air Slider	5311-958
	28	1 Base Plynth	9900-2273A
	29	4 Adjustable Feet	4300-949
Part Not Shown		1 Cosmetic Blanking Plate	4411-2062
Part Not Shown		1 Hinge Pins	5136-414
Part Not Shown		1 Magnet Composition Piece	9900-2344
Part Not Shown		1 Handle Assembly	9900-2314A
Part Not Shown		1 Handle Arched Spring	6536-024A
Part Not Shown		1 Handle Pin	5721-254
Part Not Shown		4 Glass Retaining Brackets	6612-213

Warranty Information



With the aim of constantly improving our products, all modifications considered necessary may be made without notice.

This manual is correct at time of printing.

Our appliances are guaranteed against faults and hidden defects subject to the following conditions:

The appliance must have been installed by a registered competent installer (e.g. HETAS) or inspected by local authority Building Control.

The appliance must be installed and operated in accordance with our instruction manual.

All Stoves are covered by a 10 year warranty which covers all stove body castings / stove body steel panels. It does not include

consumable items such as glass, door seals, vermiculite panels, baffle plates and ashpan runners. This 10 year warranty is only applicable when the stove is purchased from one of our recommended retailers.

If a stove from any of our brands is purchased from a non-recommended retailer then only a 12 month warranty will be applicable as outlined below.

All stoves are covered by a 1 year warranty when purchased through a non-recommended retailer. The warranty covers the stove body castings only and does not include consumable items such as grates, firebricks, vermiculite panels, baffles, log guards, door rope and glass.

Your statutory rights are not affected by this warranty.

The specifications within this document are provided for information purposes only and are under no circumstances binding.

Full warranty information can be viewed on our website www.acrheatproducts.com/warranties

Warranty Claim Form

In the unlikely event of a warranty claim, please complete the below claim form and return it to your supplying dealer:

Customer Name:

Customer Address:

Postcode:

Daytime Tel: Mobile Tel:

Model Name: Model Number:

Serial Number: Date of purchase:

Date of installation:

Installer's Name and address:

Installer's Registration Number:

Building Control Certificate Number:

(if not installed by a registered competent installer)

Dealer Name and address:

Notes

A sheet of white paper with horizontal grey lines, intended for writing notes. The paper is positioned below a black header bar that contains the word "Notes".



ACR Heat Products Limited, Unit 1, Weston Works,
Weston Lane, Tyseley Birmingham B11 3RP, England.

- Tel: 0121 706 8266
- E-mail: enquiries@acrheatproducts.co.uk
- Fax: 0121 706 9182
- www.acrheatproducts.co.uk