# Tenbury

STOVES

Multifuel Stove • Model T400ECO

To be retained by the user for future reference

Thank you for purchasing an ACR Heat Products stove

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Serial Number:

Document T400ECO 0101 • Version 1 Date 02/03/20

# Important!

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.

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.

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.



## **Tenbury Specifications**

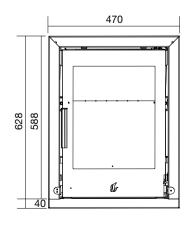
Nominal heat output	5 kW - Wood	5 kW - Maxibrite	
Chimney draft required	12Pa (on start up after initial 3 minutes)		
Height	550 mm (Internal Box) 588 mm (External Trim)		
Width	396 mm (Internal Box)	396 mm (Internal Box) 470 mm (External Trim)	
Depth	337 mm (Recessed) 34	337 mm (Recessed) 347 mm (External Trim)	
Weight	60 kg	60 kg	
Air Requirement	N/A ***		
Flue Mass Gas Flow	4.4g/s - Wood	3.1g/s - Maxibrite	
CO @ 13% O <sup>2</sup>	0.06 Wood Vol%	0.07 Maxibrite Vol%	
Mean Flue Gas Temperature	292°C - Wood	277°C - Maxibrite	
Efficiency	78.3% - Wood	82.1% - Maxibrite	
Mean CnHm @13% O₂	31 Nmg/m <sup>3</sup> - wood	42 Nmg/m³ - Maxibrite	
Mean NOX @13° O₂	87 Nmg/m³ - wood	81 Nmg/m <sup>3</sup> - Maxibrite	
DIN Plus Dust @13° O₂	19 Nmg/m³ - wood	17 Nmg/m³ - Maxibrite	
Log Length	Up To 250 mm		
Hearth Temperature	181°C		

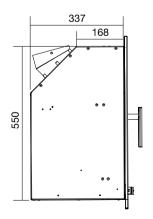
<sup>\*\*\*</sup> Please note that Building Regulations Document J advises that additional permanent air supply is required for appliances with an output of above 5Kw.

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

- If design air permeability ≥5.0m³/ (h.m²) then 550mm²/kW of appliance rated output above 5kW Or
- If design air permeability ≤5.0m³/ (h.m²) then 550mm²/kW of appliance rated output
- If in doubt, please consult your registered installer for advice.

# DO NOT INSTALL IN A ROOM CONTAINING AN EXTRACTOR FAN UNLESS THE APPLIANCE HAS BEEN CORRECTLY TESTED IN ACCORDANCE WITH BUILDING REGS DOC J







## **Technical Data & Declaration of Performance**



#### ACR HEAT PRODUCTS Ltd.

Unit 1 Weston Works, Weston Lane, Tyseley, Birmingham, B11 3RP +44 121 7068266

Models: Tenbury T400ECO 5kW

Intended Use: Intermittent domestic heating appliance

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

Model	T400ECO	
Performance Characteristics using	Wood Fuel ≤20% Moisture	Smokeless fuel Maxibrite
Appliance weight (packed/unpacked): (Kg)	70/60	70/60
Additional Characteristics Test Standard	DIN+	DIN+
Declared Nominal Output: (kW)	5	5
Approximate Output: (kW)	2.5 - 6.0	2.5 - 6.0
Harmonised EN European Standard (hEN)	BS EN13229: 2001 Amd 2: 2004	BS EN13229: 2001 Amd 2: 2004
Test Report Issue Date	16-03-20	16-03-20
Total Efficiency (net): (%)	78.3	82.1
Gross Efficiency: (%)	71.3	74.7
Tested Nominal Output: (kW)	5.0	5.1
Tested wood re-fuelling interval: (min)	47	62
Flue gas mass flow: (g/s)	4.4	3.1
Mean CO emission (@13%O2): (%)	0.06	0.07
Mean NOX emission (@13%O2): (Nmg/m3)	87	81
Mean CnHm emission (@13%O2): (Nmg/m3)	31	42
DIN + particulates (@13%O2): (Nmg/m3)	19	17
Mean Flue Temperature: (°C)	292	277
Approximate max log length: (mm)	250mm	N/A
Safety Distances From Combustibles		
Top Shelf: (mm)	400	400
Side Wall: (Protruding 100mm)(mm)	200	200
Side Wall: (Protruding 50mm)(mm)	100	100
Rear Wall: (mm)	300	300
Max Hearth Temperatures		
Directly under Stove: (°C)	181.8	181.8

Signed for and on behalf of the manufacturer by:

Jason Searle, Technical and Development Manager ACR Heat Products Ltd. 12/03/20



## 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 "unauthorized 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.

• The Tenbury (T400Eco) has been recommended as suitable for use in smoke control areas when burning wood. As such, when the secondary/tertiary slider is in the closed position it remains open by 3mm 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 alarm manufacturers instructions and should not be considered a substitute for the appliance being installed incorrectly or regular maintenance of the appliance or flue system by a competent person.

## **Installation Instructions**

## Important information

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 below instructions should work in conjunction with building regulations document J, if there is a variation the most stringent requirement should be adhered to.

#### **Asbestos**

This appliance contains no asbestos, if there is the possibility of disturbing any asbestos in the installation of this appliance then specialist advice 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.

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.

#### **Fire Cement**

Some types of fire cement are caustic and should not be allowed to come into contact with the skin. In case of contact wash immediately with plenty of water.

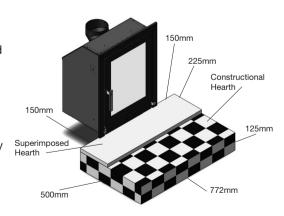
## Location of the unit

The appliance must stand on a non-combustible constructional hearth which is at least 125mm thick with the minimum dimensions as shown in the opposite diagram (please see Building regs. Document J for further information).

If the appliance is to be fitted in a raised application, due consideration should be given to extending the depth of the superimposed hearth to safely contain any falling embers or logs.

The hearth and building construction must be of a suitable material to comply with current building and local authority regulations. The fabrication of the construction must have a suitable load bearing capacity for the appliance and hearth.

If in any doubt, please consult a competent person for advice before proceeding.



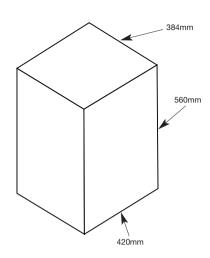


## Minimum Builders Opening

For ease of installation the builders opening may be made slightly larger than the appliance dimensions, please see diagram opposite.

The construction of fireplace recess should be of a suitable non-combustible material such as brick or concrete blockwork, and have a minimum thickness of 200mm to the sides and rear of the appliance, unless it is a back to back recess within the same property.

Please refer to building regs document J for more information.



# Clearances to combustible materials

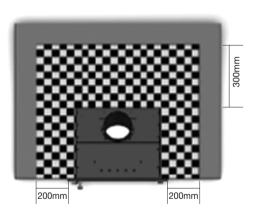
# Installation into a false chimney breast

All parts of the false studwork chimney must be constructed of a non-combustible material i.e. metal studwork.

Do not use combustible materials within the chequered area (200mm to the sides of the appliance and 300mm to the rear of the appliance).

Do not fill the area surrounding the appliance with insulating material, the void around the appliance must be ventilated to prevent a buildup of excess heat.

There must be minimum ventilating area at both high and low levels of 50 cm<sup>2</sup> each, the vents should take ambient air from the room in which the appliance is



installed and return the warm air back into the same room environment.

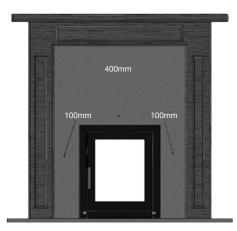
Consideration should also be taken to provide adequate access to the connecting flue for service and maintenance purposes.



# Installation into a wooden decorative fireplace

If the appliance is to be fitted in conjunction with a combustible fire surround the minimum clearances must be maintained, please see diagram opposite (100mm to the sides if protruding 50mm, 200mm if protruding 100mm and 400mm above to combustible shelf) these dimensions should be adhered to from any point of the appliance to any combustible material.

If granite, stone, marble or any other non-combustible decorative material is to be used as a superimposed hearth and back panel provision should be made for heat and expansion. The use of a slabbed and split back panel and hearth is recommended, if in doubt please seek the recommendation of a competent person or manufacturer of



the above mentioned product.

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

We do not recommend that plasma televisions and expensive artwork are hung over the fireplace.

## Flue Requirements

The flue must comply with current Building Regulations Document J.

The construction of masonry, flue block, insulated flue systems and flexible flue liners must comply with the manufacturers instructions at all times.

#### The flue must be:

- A 150mm flue diameter is recommended, 125mm may be used if the appliance still has its smoke exempt stop in place
- In sound condition and provide sufficient draft (minimum 12pa within 3 minutes of ignition)
- Suitable for use with solid fuel burning appliances
- Be able to clean the entire length of the flue system without removal of the appliance



- Well insulated
- At least 4m in height from hearth level to termination, with no more than 4 x 45° bends in any one flue system and have a maximum horizontal length of no more than 20% of the overall vertical height
- The termination should be sited as to avoid a negative pressure zone

#### The flue must not be:

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

#### Installation of the unit

The appliance is supplied pre-assembled with the flue spigot in the top exit position and the Smoke Exempt stop in place.

The Smoke Exempt stop must not be removed unless the appliance is installed in a non-smoke exempt area and this action should only be undertaken by a competent person.

To remove the smoke exempt stop, remove the M8 smoke exempt bolt from the front of the secondary air slider.

- This appliance cannot be installed with a rear flue option, please note that if using a 4 sided trim this must be installed between step 7 and 8.
- Remove the trim by pulling it towards the front of the appliance.
- 2 Remove the vermiculite baffle by lifting and rotating through the combustion chamber. Remove the upper steel baffle.

- Remove the 4 x 10mm bolts located above the baffle.
- Remove the 2 x 10mm bolts located on the left and right half way up between the outer convection box and the inner combustion chamber.
- Seperate the outer box from the inner chamber and remove the remaining 2 x 10mm bolts that hold the flue collar in place.
- 6 Slide the outer box into the prepared opening and affix, connect the flue adaptor and liner to the flue collar, screw and seal using an appropriate sealant.
- Reconnect the flue collar using the 2 x 10mm bolts, if fitting with a 4 sided trim please fit the trim at this time before the combustion chamber is reinstalled.
- 8 Slide the combustion chamber back into place and replace the 6 x 10mm screws, replace the baffle and install the trim if not already in place.

## **Operating your stove**

# Always ensure that the ash draw is fully located before operation of the appliance

# Using your appliance for the first time

- To allow the appliance to bed in, and fixing glues and paint to fully cure, only fire the appliance using kindling and just get hot for at least three fires.
- Before lighting the next small fire please allow the appliance to return back to room temperature.
- During these first small fires you may experience a haze and unpleasant smell as the paint cures, do not touch the paint and keep the room well ventilated.

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.

The appliance should not be operated in mild weather with smokeless fuel. Under certain weather circumstances e.g. fog the chimney will not draw sufficiently and could cause asphyxiation. Either await better weather conditions or burn wood only.

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 250mm, maximum width 125mm.

Smokeless Fuels: below 20% Petroleum coke content such as Anthracite, Phurnacite, Maxibrite suitable for use with a closed heating appliance.

#### **Prohibited Fuels**

Green wood: i.e wood which is less than 2 years old with a moisture content of above 20%

Recovered wood: i.e pallets, railway sleepers etc. These will have been chemically treated and will pollute the atmosphere and possibly overheat the appliance.

Housecoal or Bituminous coal: these fuels will soot up the airways of the stove and possibly overheat the appliance.

Petroleum Based Coke: over 20% content - this will overheat the appliance and possibly damage the unit.

#### ¥ Liquid fuels

Paraffin fire lighter blocks: these can cause damage to the glass of your appliance.

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

#### Instructions for use with wood

- Please ensure that flat steel grate top is in place if burning wood logs, this will help to maintain a bed of ash and allow for correct combustion of the wood logs.
- Open the secondary air slider to the left hand side of the door, and open the primary air slider to the right hand side of the door by fully pushing the levers inwards.
- 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 couple of minutes add more logs and close the door.
- When the fire has become established, close the primary air, to the right hand side of the door, by pulling the lever fully outwards.

- The burning rate can be altered by moving the secondary air slider, to the left hand side of the door - pull the lever outwards to close down and push the lever inwards to increase the burn rate.
- Care should be taken to ensure that the logs are not placed where there is a danger that they may fall onto the glass or out of the chamber when the door is opened.
- Never load logs into the appliance that are oversized or too long for the combustion chamber, they could press against the glass and cause damage when alight. The maximum log length is 250mm.

#### Instructions for use with smokeless fuel

Before using this appliance with approved smokeless fuel, please ensure that the steel grate top is cold and removed to a safe place. Smokeless fuel is ONLY to be burnt directly on the cast iron grate.

 Open the secondary air slider to the left hand side of the door, and open the primary air slider to the right hand side of the door by fully pushing the levers inwards.

- Lay firelighters or rolled up newspapers on the grate and add a small amount of kindling wood to the top. Place a small quantity of smokeless fuel on 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 couple of minutes add more smokeless fuel and close the door.
- When the fire has become established, close the secondary air by 50%, to the left hand side of the door, by pulling the lever outwards.
- The burning rate can be altered by moving the primary air slide, to the right hand side of the door - pull the lever outwards to close down and push the lever inwards to increase the burn rate.
- Care should be taken to ensure that the firebox is not overfilled with smokeless fuel - it should be no higher than the log guard.

#### Re-fueling

When refueling the stove always refuel onto a bed of hot embers, fully open the secondary and primary 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. 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.

## 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.

#### Glass

Never operate the appliance if the glass panel is broken or cracked. This can cause the appliance to overfire, which may damage the appliance and flue system and may cause a danger to persons and property. Only use once the glass is replaced and the sealing gaskets checked for integrity, only replace with a manufactures approved glass.

#### Operation with door left open

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

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 out. 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 and smokeless fuel is 2 hours.



#### **Maintenance**

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

## **Daily Maintenance**

- The grate should be cleaned regularly and the ash pan emptied daily.
   Never allow the ash in the ashpan to overfill allowing ash to be in contact with the underside of the grate.
   This will overheat the grate and cause
  - This will overheat the grate and cause premature wear and distortion.
- The glass can be cleaned using a soft damp cloth or a stove glass cleaner (available from your local stockist)
- Do not clean the glass of your stove with abrasive cleaners or scratch pads as this may damage the surface of the glass causing it to weaken and wear prematurely.
- Never allow the door gasket to become wet when cleaning the glass, this will deteriorate the gasket prematurely.

#### Periodic Maintenance

- 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 internal vermiculite panels of the appliance should be checked regularly for soundness. If any 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.
- Is advisable as part on the periodic maintenance of your appliance to lubricate the moving parts of your stove i.e. handle, air sliders, door hinges, with a suitable high temperature lubricant this will ensure the correct operation of your appliance.
- It may be necessary to adjust to tension of the door closing mechanism during the lifetime of the appliance as the sealing rope will compress over time, this is achieved by the adjusting the bracket on the body of the stove to the required tension.

#### Summer

 When the stove is not going to be used for long periods e.g. the summer months, we recommend that you keep the air slides fully open and the door slightly ajar if possible. This will help to prevent condensation which may in turn lead to internal corrosion of component parts.

## 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.

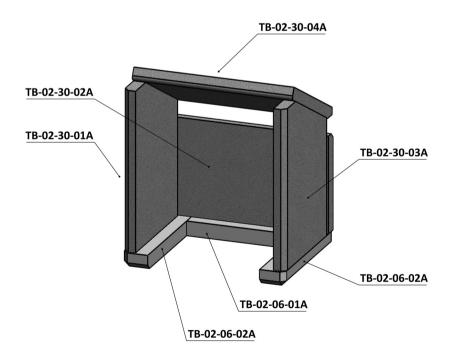
It is advisable to replace the internal panels when:

- The cracks are greater than 3mm.
- The surface of the refractory panel has eroded more than 25% of it's original thickness, or
- When the panel starts to crumble and fall apart in chunks.

To prevent the issue from happening and 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.

Use only replacement parts recommended by the manufacturer.



# **Commissioning Check List**

## Please tick boxes when each procedure is completed

Ensure that the serial number has been recorded on the front of the manual for future use	
Visual Inspection of appliance and flue ensure that all internal components are fitted correctly (these may have shifted in transit)	
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)	
Test on flue including satisfactory smoke test: Record flue draught reading	Pa/Wg
Spillage test preformed in accordance with available guidance	
Check socket joints and seals on the flue and appliance	
Instruct user on correct fuels and fuel storage	
Ensure the customer is aware that fumes may be given off during the first firings as the paint cures	
Instruct user on essential maintenance in particular annual maintenance of appliance and flue	
Hand over user instructions & demonstrate operation and all controls to the user	
Ensure that a Notice plate has been completed and fixed in position	
Ensure that an approved Carbon Monoxide alarm has been fitted	

Installation Engineers Name:

# Parts Information

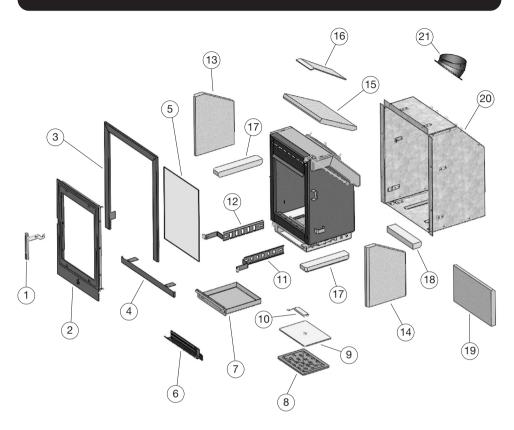


Diagram No.	Part No.	Description
1	TB-03-10-00	Handle
2	TB-03-00-00A	Steel door
3	TB-07-00-00	Three sided trim
4	TB-07-00-04A	Fourth/Bottom side trim
5	S-4-310x400	Glass panel
6	TB-04-00-00	Fuel retainer
7	TB-05-00-00	Ashpan
8	TB-200	Cast Iron solid fuel grate
9	TB-02-80-00A	Steel wood grate top
10	TB-100A	Wood grate top removing tool
11	TB-02-11-05A	Primary air slider
12	TB-02-11-04A	Secondary/Tertiary air slider
13	TB-02-30-01A	Left hand vermiculite panel
14	TB-02-30-03A	Right hand vermiculite panel
15	TB-02-30-04A	Lower vermiculite baffle
16	TB-02-20-00A	Upper steel baffle
17	TB-02-06-02A	Bottom grate side bricks x 2
18	TB-02-06-01A	Bottom grate rear brick
19	TB-02-30-02A	Rear vermiculite panel
20	TB-01-00-00A	Outer convection box
21	TB-01-08-00	Steel flue collar

# Troubleshooting

	Problem	Reason	Action
Your Stove	Rapid creosote build-up in the chimney or flue system	Wet wood (≥ 20% moisture)	Use dry seasoned wood ( $\leq$ 20% moisture content).  Operate at a high temperature for short periods each time the appliance is used to avoid large build-ups of tars and creosotes
	Tar coming from flue joints	Appliance operated at continuous low temperature	Operate at a high temperature for short periods each time the appliance is used to avoid large build ups of tar and creosotes. See user instructions for correct use of air control
		Using poor quality wood	Use dry seasoned wood (≤ 20% moisture content)
	Strong acrid smell after the appliance is lit	Appliance operated at continuous low output	Operate at high output for short periods. See user instructions for correct use of air control
		Using poor quality wood	Use dry seasoned wood (≤ 20% moisture content)
	Wind noise from the air control	High flue draught	Consult your installer for advice on suitable flue system
	Dirty firebricks	Wet wood (≥ 20% moisture)	Use dry seasoned wood (≤ 20% moisture content)
	Dirty glass	Wet wood (≥ 20% moisture)	Use dry seasoned wood (≤ 20% moisture content)
	Glass blackening	Using poor quality wood	Use dry seasoned wood (≤ 20% moisture content)
		Low flue draught	Consult your installer for advice on suitable flue system
		Incorrect use of air control	See user instructions for correct use of air control
		Appliance operated at continuous low temperatures	Operate at high output for short periods. See user instructions for correct use of air control

	Problem	Reason	Action
Weather Effects	Windy days, intermittent smoke spillage into room when appliance door is opened	Down draught in flue caused by air turbulence caused by nearby buildings or trees	Weather conditions combined with the flue terminal position can have an effect on the appliance performance. Consult your installer
	Calm days, intermittent smoke spillage into room when appliance door is opened	Over size flue giving poor flue draught	Weather conditions combined with the flue terminal position can have an effect on the appliance performance. Consult your installer
We	Damp/rainy days lighting and burning problems	Flue temperature low/rain water inside flue	Use good quality wood to start and maintain the fire, consult your installer to fit a rain cowl
	Wind noise from the air control	High flue draught	Consult your installer for advice on suitable flue system

	Problem	Reason	Action
	Difficulty starting the fire and keeping it burning well	Low flue draught	Consult your installer
		Wet wood (≥ 20% moisture)	Use dry seasoned wood (≤ 20% moisture content)
	Poor burning control	High flue draught	Consult your installer
	Short burn times	Wet wood (≥ 20% moisture) Insufficient amount of fuel or excessive softwood fuel	Use dry seasoned wood (≤ 20% moisture content)
		Using poor quality wood	Use dry seasoned wood (≤ 20% moisture content)
tove	Excessive heat output (over firing)	Air control left fully open	Close air control to reduce output
ssues Using Your Stove		Wet wood (≥ 20% moisture)	Use dry seasoned wood (≤ 20% moisture content)
	Low heat output	Low flue draught	Consult your installer for advice on suitable flue system
		Wet wood (≥ 20% moisture)	Use dry seasoned wood (≤ 20% moisture content)
	Excessive fuel consumption	High flue draught	Consult your installer for advice on suitable flue system
ne		Excessive use of softwood	Do not use building off cut timber or pallet wood
SS	Smoke and small flames	Wet wood (≥ 20% moisture)	Use dry seasoned wood (≤ 20% moisture content)
	Intermittent smoke spillage into room when appliance door is opened	Low flue draught	Consult your installer for advice on suitable flue system
		Incorrect additional ventilation air into building	Consult your installer
	Continuous smoke spillage into room when appliance in use	Blocked flue	Open all doors and windows to ventilate the room. Allow the fire to burn out. Check flue for blockage. Do not re-use until cause of spillage is identified. Consult your installer for advice.
	Excessive smoke from chimney	Wet wood (≥ 20% moisture)	Use dry seasoned wood (≤ 20% moisture content)

Key to Symbols: ≤ - Less Than ≥ - More Than

#### **Smoke Emission Guidance**

#### The flue system has two main functions:

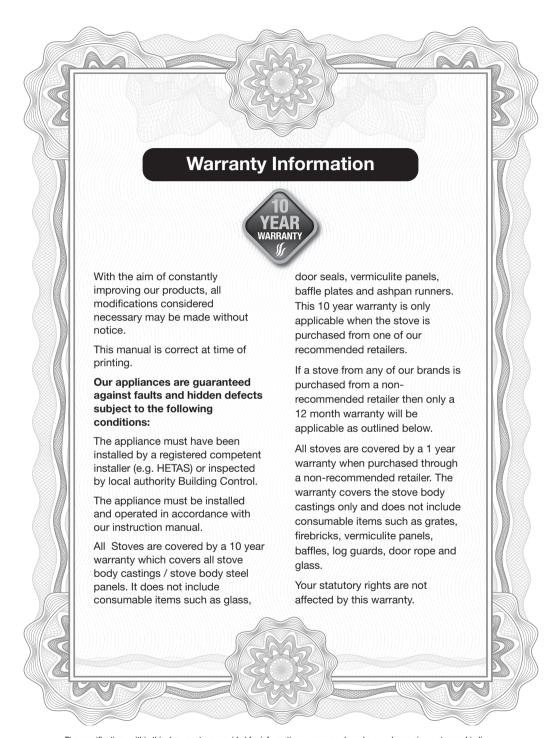
- To safely remove the smoke, fumes and combustion gases from the appliance.
- To provide a sufficient amount of flue draught in the appliance to ensure the correct amount of combustible air is introduced to keep the fire burning.
- The flue draught is caused by rising hot gases when the appliance is lit.
- Tar and creosote are a major cause of chimney fires. If the appliance experiences problems with tar build up, consult a chimney sweep before continued use of the appliance.

For advice on the correction of persistent flue problems consult a qualified competent engineer before continuing to use the appliance.

# **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:	



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

