Made in the UK

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Installation Instructions & User Manual

for the super-efficient

burley

Wood Burning Stoves

Applicable Appliances: Springdale, Debdale, Hollywell, Brampton & Wakerley

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MUST BE LEFT WITH THE USER

~ Please retain these instructions for future reference ~

⚠ WARNING ⚠

The Burley series of stoves are wood burning only (this includes logs, sawdust briquettes and pellets). In smoke control areas only wood fuels should be used.

No attempt should be made to burn any other fuel, including any type of coal, smokeless fuels or petroleum coke. Under no circumstances should liquid fuels be added. It is not an incinerator and rubbish including painted or tanalised wood and MDF should not be burnt in this appliance. Doing so is potentially dangerous and will invalidate any guarantees immediately (unless optional multi-fuel grate has been used).

Installation Instructions

When installing these appliances, all local regulations, including those referring to national & European Standards need to be complied with.

This manual covers the appliances: Burley Models: 9103, 9104, 9105, 9108 & 9112

The nominal space heating output is:

'Springdale' 9103: 3Kw **'Debdale' 9104: 4k** **'Hollywell' 9105: 5Kw**
'Brampton' 9108: 8Kw **'Wakerley' 9112: 12Kw**

Any of the above appliances must be installed by a HETAS registered installer (UK & Wales) and the installation registered with the local council building control department.

⚠ *Failure to comply with the above renders all guarantees and liabilities of the manufacturer null and void.*

By carefully following the instructions below, we are certain that you will enjoy many years of warmth from your new Burley Stove.

The manufacturer will not guarantee or accept liability for any problem that arises unless a HETAS installation commissioning certificate has been completed and a valid receipt or proof of purchase is presented from the approved supplier.

The appliances should not be fitted closer than shown in the table, from combustible materials, e.g. wooden fire surround or stud wall.

When fitted against a wall made of combustible material e.g. a wooden stud wall with plasterboard, extra non-combustible material should be fitted behind the stove if the distance from the wall is less than shown unless a 75mm thick non combustible material is used as a barrier. When fitted inside a masonry or similar non-flammable material recess, e.g., fireplace opening, there is no minimum distance; the gaps are only an aesthetic consideration.

Technical data

All built to EN13240	Springdale 9103	Debdale 9104	Hollywell 9105	Brampton 9108	Wakerley 9112
Efficiency (Net)	88.9%	89.8%	89.1%	85.5%	84.1%
CO concentration @ 13% Oxygen	0.1%	0.1%	0.1%	0.1%	0.1%
Requirement of fuels used in smoke control areas	Dry logs <20% H_2O Maximum length 170 -220mm long Maximum width 150mm	Dry logs <20% H_2O Maximum length 200 -250mm long Maximum width 150mm	Dry logs <20% H_2O Maximum length 250 -300mm long Maximum width 150mm	Dry logs<20% H_2O Maximum length 250 -350mm long Maximum width 150mm	Dry logs<20% H_2O Maximum length 300 -450mm long Maximum width 150mm
Lower quality fuel can be used in non smoke controlled areas, but will not give the best efficiencies.	Dry Logs < 25% H_2O 220mm long	Dry Logs < 25% H_2O 250mm long	Dry Logs < 25% H_2O 310mm long	Dry Logs < 25% H_2O 430mm long	Dry Logs < 25% H_2O 580mm long
Weight in kg	45 kg	57 kg	95 kg	105 kg	130 kg
kW output intermittent	3kw	4kw	5kw	8kw	12kw
Air vent requirement.	Not Required	Not required	550mm sq min *Not required for homes built before 2010*	1,962mm sq. min 50mm diameter *Air vent not required if stove is room sealed*	7,850mm sq. min 100mm diameter *Air vent not required if stove is room sealed*
Minimum flue draught mm H^2O	0.5mm	0.5mm	0.5mm	0.5mm	0.5mm
Flue gas temperature Spigot Temp.	162 °C 258 °C	156 °C 253 °C	122 °C 241 °C	183 °C 274 °C	237 °C 316 °C
Flue size Min. chimney diameter Best chimney diameter	127mm (5") 127mm (5") 127mm (5")	127mm (5") 127mm (5") 127mm (5")	150mm (6") 150mm (6") 150mm (6")	150mm (6") 150mm (6") 150mm (6")	150mm (6") 150mm (6") 175mm (7")
Minimum distance to combustible materials All other distance as per Building regulations Part J or HETAS recommendations.	10cm behind (4") 35cm at side (14") 35cm to Top	40cm behind (14.5") 40cm at side (14.5") 40cm to Top	20cm behind (8"). 35cm at side (14") 35cm to Top	10cm behind (4"). 40cm at side (16") 40cm to Top	20cm behind (8") 45cm at side (18") 45cm to Top
Max. Hearth temp. **Min.** Hearth thickness	<100 °C 12mm	<100 °C 12mm	<100 °C 12mm	<100 °C 12mm	<100 °C 12mm

Approvals

All our wood stoves are approved to EN13240:2001 and EN13240 A2:2004.

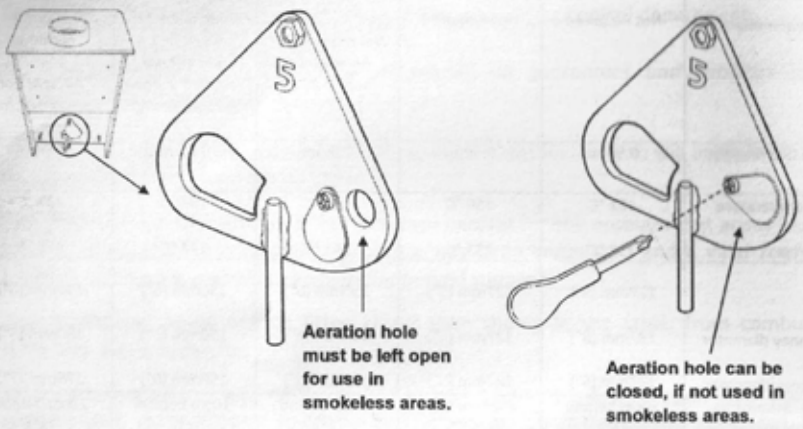
DEFRA Approval

The 3Kw, 4kw, 5kw and 8kw models have been approved by DEFRA for use in smokeless areas. They have been designed and tested with a special air plate (see below).

Web site: *http://smokecontrol.defra.gov.uk/appliances.php?country=e*

The plate restricts the air at high rate, but allows air into the stove when shut down to reduce the potential for producing smoke.

The 9112 is NOT approved by DEFRA.



⚠ Levers and Handles

All nuts are tightened for shipping purposes. Please ensure that all levers and handles move freely, prior to positioning the stove in the opening or on the hearth. Adjustment may prove difficult once the stove is positioned.

Hearths

The stove must stand on a non-combustible surface. Installation standards dictate that hearths must be at least 12mm thick, but installers must take into account the weight of the stove on such thin material.

The hearth should extend a minimum of 225mm in front of the stove. When a stove is freestanding the hearth should always extend a minimum of 150mm either side of the stove.

⚠ Strength and heat resistance of the hearth.

Stoves are very heavy and most materials used for hearths crack very easily. It is impossible for Burley to inspect each hearth or comment on every installation, so the onus is on the installer to ensure the construction of the hearth is suitable for the application.

As guidance however:

- Do not use boxed and lipped hearths
- Avoid marble, conglomerate or micro marble hearths
- Rather than using one large piece of material, use sectional hearths or slabs which will move independently and allow for expansion due to heat. Should a slab crack it is easy and cheap to replace.
- Bed hearths down on a level base, not directly on a hard surface which could be uneven.
- If necessary stand the stove on a steel or stone bed to ensure the weight is distributed.
- Do not subject the hearth to sudden impacts by dropping the stove. The stove is heavy and it is strongly recommended that lifting is undertaken by two people.

Surrounds

⚠ Must be capable of withstanding the temperature produced by the stove.

Air supply

All hydrocarbon burning appliances require an oxygen/air supply.

If the stove is to be fitted on an external wall the air supply can be taken straight from the outside. A 100mm diameter hole needs to be drilled in the correct place (138mm above the hearth) to take the 86mm external (80mm internal) duct as supplied.

This will allow for easy connection, any gap can be filled in with cement or mastic.

A proprietary grille is supplied with the kit.

If the room sealing kit is not used, an air brick or non-closing vent should be fitted to ensure the air supply is not blocked in any way.

Ventilation is not required on the 3Kw & 4Kw models.

A side vent option to the room sealing kit is available.

Room Sealing Kit

The room sealing method of supplying air is always to be preferred as heat loss from the room will be greatly reduced therefore increasing the efficiency of the appliance.

If the stove is not on an outside wall or the direct air supply method cannot be used, an air vent must be supplied in the room in which the stove is fitted. The sizes of the vents required are:

- 3Kw – No Vent Required
- 4kw - No vent required ***(Using the room sealing kit will increase the efficiency)***
- 5kw - 550mm sq required ***(For homes built before 2010 there is no air vent requirement.)***
- 8kw - 1650mm sq (50mm diameter)
- 12kw 4950mm Sq (100mm diameter)

Only permanently open vents can be used and consideration should be given to draught when the stove is not in use, therefore site this vent carefully.

The vent covers should comply with Building Regulations Part J and should be sited where they cannot be blocked.

Optional Cover Plate

The cover plate is an option for those people who do not like the industrial appearance of the convection tubes.

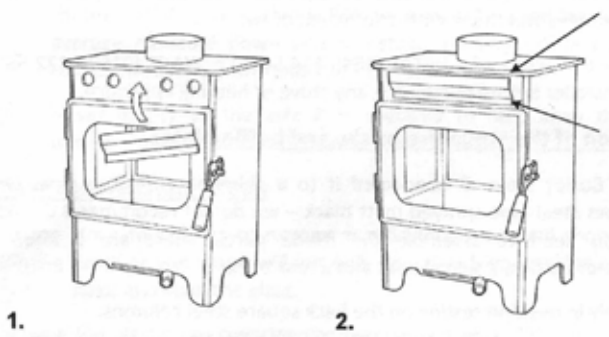
Fitting the cover plate is easy.

(1) Offer the cover plate up to the stove and

(2.) Locate the clips on the rear into the tubes and push it on.

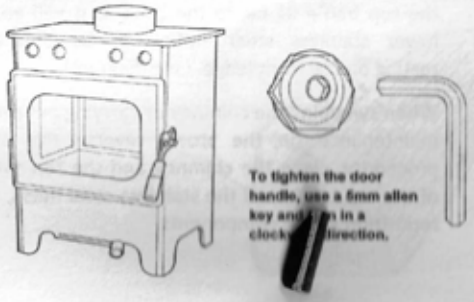
(3.) Make sure it is fitted open at the top and flush at the bottom. This is important for the convection heat to come through the tubes.

Fitting the cover plate will not affect the efficiency of the stove.



Door Handle Adjustment

There is a CAM and LOBE mechanism so that the door can be tightened against the glass seal. The door may require adjustment during use. An allen key will be required.



Chimneys

The **9103 & 9104** requires a chimney of minimum 5" (125mm), **9105, 9108 & 9112** models require a chimney of minimum 6" diameter (150mm) and they all must be a minimum length of 4 metres and they must comply with Building Regulations J. Never share the flue with another appliance.

The distance from the edge of the stove to the centre of the flue pipe is 105mm on the **9105, 9108 & 9112** models. On the **9103** it is 105mm & **9104** it is 125mm

Without a chimney to these specifications there could be insufficient draw on the chimney to pull sufficient oxygen through the appliance to make it burn properly.

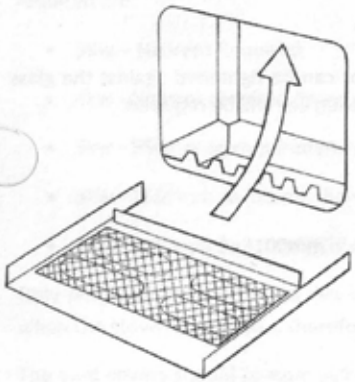
If you live in a valley or are surrounded by tall trees or buildings you might experience downdraught problems where the wind tries to stop the fumes rising up the chimney. An anti-downdraught cowl might help, but anti-downdraught cowls reduce draw, so will not work on single storey chimneys and those with insufficient draw.

We recommend you seek the advice of a HETAS (0845 634 5626) or NACE (01526 322 555) registered supplier and installer before purchasing any stove or heating appliance.

Assembly & installation of the stove fire bricks and baffle plates.

Having positioned your Burley stove & connected it to a chimney with flue pipe, (we recommend 1mm stainless steel pipe sprayed matt black – we do not recommend the use of vitreous enamel) you need to assemble the inside parts. There are 5 internal components: top and lower baffles, 2 side cheeks and a rear brick.

Place the top baffle loosely in position resting on the back square steel columns.



Place the left hand side brick in place, followed by the right hand. The top baffle can then be placed correctly and the rear brick inserted.

Finally, when these parts are snugly in position with the top baffle as far to the back as it will go, the lower stainless steel baffle can be positioned resting on the front ledge. (See diagram)

When sweeping the chimney or carrying out regular maintenance on the stove, reverse the above procedure, clean the chimney and the top surface of the top baffle and the stainless steel mesh, then reposition all the components.

Commissioning the Appliance

On completion of the installation, when any fire cement or paint used has dried, a smoke 'bomb' should be burnt and all joints checked for smoke leakage and the chimney draw checked with all doors and windows closed. Please leave the instructions with the customer and inform them;-

1/ When they first light the fire, smoke will appear around the stove and flue pipe with a strong acrid smell. This is normal and is the paint curing. If the stove is fired properly for at least 2 hours this should not happen again.

2/ That they should fire it quite hard for at least half an hour every time the stove is lit, to warm the stove, flue pipe & chimney. It can then be turned down, but it will tar up and become less efficient if kept running at a low temperature.

3/ The drier the wood the better. Wood should be below 20% maximum moisture content. Mixing wood that is 25% with manufactured logs @ 10% helps to keep the average moisture down and the stove working efficiently. If there is substantial smoke emission a lower moisture fuel should be used.

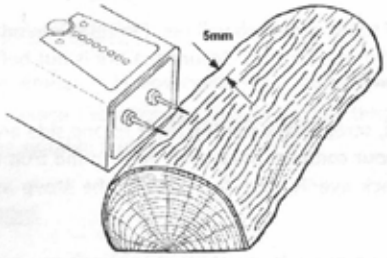
4/ Never empty all the ash; it is required to help keep the combustion chamber temperature up for an efficient clean burn.

Using the Moisture Meter

For the stove to operate at maximum efficiency the wood should be as dry as possible. Burning damp or wet wood will not only stop the stove working efficiently, but also create excess smoke and stain the glass.

Remove the plastic cap covering the two contact pins. The pins are sharp for a reason, so please use it carefully. Insert the pins into the **inner surface** of the split log (5mm as a guide) this will give an accurate reading.

Simply pressing the contact pins on the surface will not give an accurate reading, as this will only tell you if the surface is damp or dry as the inside may well be perfectly dry.



USER INSTRUCTIONS

To light the Stove.

It is important to keep an approximate minimum depth of ¾" (20mm) of wood ash in the fire box at any time. You will achieve this after the first few firings.

Place 1 or 2 firelighters in the bottom, then add some kindling wood criss-crossed diagonally, and finally 2 small logs on top. Light the firelighters open the air vent to maximum (to the right) and close the door to the first latch so there is an air gap around it.

Leave it like this for at least five minutes and then add a further 2 logs. After a further 5 minutes or so, the fire should be well alight, and the door can now be closed to become air tight. Leave the air control lever near the maximum (to the right) for a further 10 to 20 minutes to get the stove completely up to running temperature.

The best running position to achieve maximum efficiency will depend on the chimney draw, but will normally be near the centre. Every chimney is different, and you will find your stove's optimum position. This is when the flames are swirling in a lazy manner around the stove, not roaring. If the lever is pushed too far to the left, you starve the fire of oxygen, causing the glass to darken. Move the lever a small amount to the right until the glass just stays clean. Once your stove is up to temperature, and you have found your optimum running position, it is best not to move it.

The best way to run any wood stove is 'little and often'. If you are around it is best to keep adding a small log (approximately 1kg) every 45 minutes rather than adding 4 large ones every 2 hours.

⚠ **THE STOVE IS NOT DESIGNED TO BE USED WITH THE DOOR OPEN!** ⚠

To reload, open the air vent to the right, and then open the door slowly. Push some of the burning charcoal to the back of the combustion chamber and using the glove provided place the fresh log towards the front of the appliance.

Close the door and after 1 minute return the air slide to the central position.

After being used a number of times some ash will need to be removed. Never empty all the ash, leave at least ¾" (20mm) in the bottom. Ensure the fire is out before trying to remove any ash.

Using the ash scoop provided, scrape back the top layer to one side and scoop out some of the lower ash. Place this on your compost heap or directly round fruit trees or rose bushes. Spread the remaining ash back evenly over the base of the stove and you are ready to relight the stove.

Poor Appliance Operation & Troubleshooting

⚠ Refuelling onto 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. Refuelling must be carried out onto a sufficient quantity of glowing embers and ash to ensure that the new fuel charge will ignite. If the fuel bed is too low or cool, suitable kindling must be used to re-light fires.

⚠ Overloading the fire bed

The maximum amount of fuel specified in this manual should not be exceeded.

The weight is .7Kg for the Springdale, 1.8kg for the Debdale, 2.2kg for the Hollywell, 3.5kg for the Brampton and 5.25kg for the Wakerley.

Overloading can cause excess smoke.

⚠ Leaving door 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/vent/air supplies 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 left open except as directed in the instructions.

⚠ Substantial Smoke Emission

If substantial smoke emission is observed from the appliance at any time during the operation of the appliance the operator should ensure they are following the operation instructions and using suitable fuel.

⚠ Door Adjustment

The locking mechanism on the door is made up of a cam and lobe assembly. The door can be loosened or tightened with an allen key. The door will need to be adjusted over time.

Glass

Simple non-abrasive glass cleaner will keep the stove glass fresh most of the time, with a proprietary non-abrasive stove glass cleaner being needed once a month or so to deep clean any stains.

The stove is double glazed; check the rope seals and screws regularly to ensure a long life.

In the event of a glass breakage, lift the door off and place on a flat surface. Undo the 4 screws holding the glass fixing brackets and place to one side. **Don't not use with broken glass.**

The glass seal is ready glued to the glass. Peel back the cover strip and position the second pane over this. Remove the sheet of glass and clean the unbroken one.

Replace and tighten the screws and brackets. Take care not to over tighten the screws. The glass has to expand and contract with each lighting.

⚠ Over tightening of the glass clips could cause the internal glass to crack.

Chimney sweeping & maintenance

It may be wise to contact your local chimney sweep before installing the stove. Your chimney should be swept at least once a year by a registered sweep, twice a year with heavy use. The sweep should also replace the fire cement at the base of the flue if necessary.

The baffles should be removed in the reverse order described on page 8.

The chimney can be swept through the stove.

The baffle should be cleaned at least twice a year with heavy use, checked, renewed as required and replaced.

Under no circumstances should the stove be used with any baffle missing.

All rope and glass seals should be checked annually and replaced as necessary.

If the stove has not been used for a prolonged period, in excess of 6 months, the chimney should be swept prior to use to check for blockages, birds' nests etc. and rubble/debris blocking the flue ways.

Safety

⚠ NOTE: All solid fuel appliances produce considerably more Carbon Monoxide in normal use than oil or gas appliances, but the general 'smell' of the smoke or exhaust is much stronger (with perhaps the exception of smokeless fuel) and more easily detected by a healthy person.

Always use your appliance with the doors shut and look for tell tale signs of excessive leakage: smoke stains above the fireplace, smoke emitting around the door when running, strong smell of soot upstairs etc.

There is no such thing as a gas tight chimney, but there has to be a negative pressure inside a chimney for it to draw oxygen through the fire box. Check the seals at the joints annually and re-fire cement as required. Check especially the joint of the flue pipe to the chimney register plate, hairline cracks are OK, but lumps of cement missing are a bad joint. A proprietary jointing compound should be used here, as it is far superior to a cement and rope seal.

Never block air vents either internally or externally.

Use the supplied glove to reload the stove.

In the event of a chimney fire, close the door and shut the air vent right down. If possible throw ½ cup of course table salt onto the fire.

Never modify or fit parts to the appliance not recommended by the manufacturer.

Never use this appliance in the same flue as another appliance.

The surface of a wood burning stove gets extremely hot in normal use. When using the stove in situations where children, aged and/or infirm persons are present a fireguard must be used to prevent accidental contact with the stove. The fireguard should be manufactured in accordance with BS 8423:2002.

Warranty

All our stoves are covered by a 3 year metalwork warranty.
(This is subject to the correct fuel having been used and not overloading the stove.)

The 3 year warranty covers the stove body only and does not include consumable items such as grates, firebricks, vermiculite panels, baffles, log guards, door rope and glass.

Any warranty claims should be addressed to your original supplier and accompanied with the date of purchase and CE/Serial number of the appliance.

Reasons for premature wear of internal parts

• Stove being used/fired too vigorously / • Too little air passing through the bottom grate • Use of excessively dry wood (wood from old furniture) • Excessive debris collection on baffle plate or inner fireback (see section on cleaning) • Ash level too high in the ash pan.

If you need further help

If you need further help with your Burley Stove then your HETAS Installer will be able to provide the answers to most questions. Your Burley retailer has a great deal of experience and will also be able to provide helpful advice. Further help is available from Burley's Customer Services department who will be pleased to give advice, if necessary.

Customer & Installation Notes:

Date of Installation:	

Chimney Swept	Date

Notes: