

Installation Instructions & User Manual

burley 

Wood Burning Stoves



Models 9507 & 9510

“Panoramic”

Wood Burning Stoves

Applicable Appliances: Briary & Westhay

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THESE INSTRUCTIONS MUST BE LEFT WITH THE USER
FOR FUTURE REFERENCE

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**PLEASE CAREFULLY CHECK YOUR STOVE FOR DAMAGE
OR DEFECTS PRIOR TO FITTING.**

**WE CAN NOT EXCHANGE DAMAGED OR FAULTY
STOVES THAT HAVE BEEN FITTED.**



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 tanned wood and MDF should not be burnt in this appliance. Doing so is potentially dangerous and will invalidate any guarantees immediately.

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: 9507 & 9510

The nominal space heating output is:

'Briary' 9507: 7kW **'Westhay' 9510: 10kW**

Any of the above appliances should be installed by an installer registered with a competency scheme (i.e. HETAS/ELECSA England & Wales), conforming to Building Regulations Part J and the installation must be 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 and enjoyment from your new Burley Panoramic Stove.

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

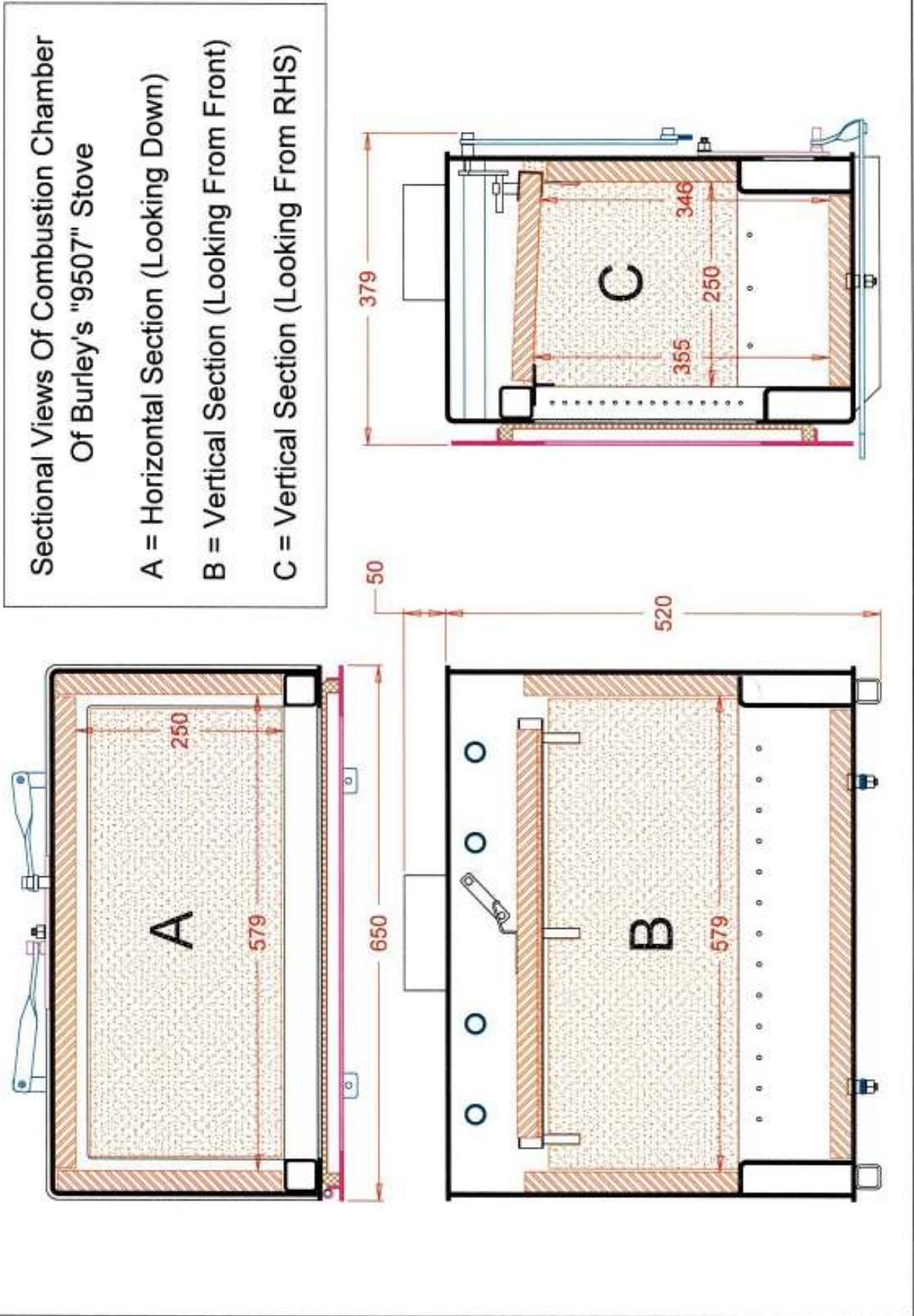
The appliances should not be fitted closer to combustible materials, e.g. wooden fire surround or stud wall, than is shown in the table on page 4.

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.

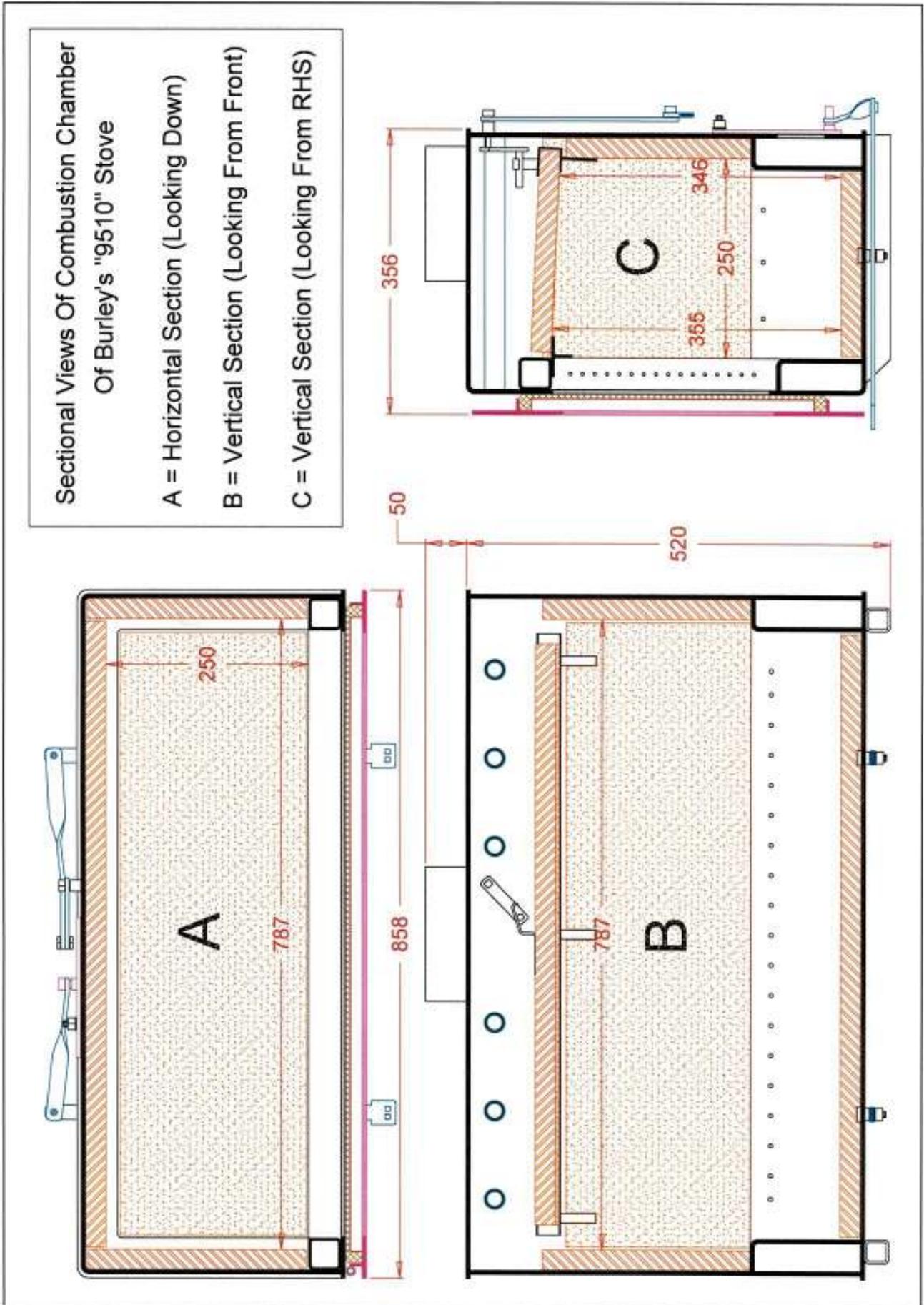
Technical data

<u>All built to EN13240</u>	<u>Briary</u> <u>9507</u>	<u>Westhay</u> <u>9510</u>
Efficiency (Net)	80.3%	80.2%
CO concentration @ 13% Oxygen	0.30%	0.26%
Requirement of fuels used in smoke control areas	Dry logs <20% H ₂ O Maximum length 200 -250mm long Maximum width 150mm	Dry logs <20% H ₂ O Maximum length 250 -300mm 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 ₂ O 520mm long	Dry Logs < 25% H ₂ O 720mm long
Weight in kg	95kg	115kg
kW output intermittent	7kW	10kW
Air vent requirement.	1650mm sq. min 50mm diameter <i>Air vent not required if stove is room sealed</i>	1650mm sq. min 50mm diameter <i>Air vent not required if stove is room sealed</i>
Minimum flue draught mm H ₂ O	0.5mm	0.5mm
Flue gas temperature	249 ⁰ C	247 ⁰ C
Spigot Temp.		
Flue size	127mm (5")	150mm (6")
Min. chimney diameter	127mm (5")	150mm (6")
Minimum distance to combustible materials	20cm behind (8") 35cm at side (14") 35cm to Top	20cm behind (8") 40cm at side (16") 40cm to Top
Non Combustibles	When fitted inside a masonry or similar non-flammable material recess, e.g., fireplace opening, there is no minimum distance; although we would advise a minimum of 50mm from any surface to allow for convection	
Max. Hearth temp.	<1000C	<1000C
Min. Hearth thickness	12mm	12mm

Stove Dimensions - 9507



Stove Dimensions - 9510



Approvals

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

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).

The Secretary of State for Environment, Food and Rural Affairs has powers under the Act to authorise smokeless fuels or exempt appliances for use in smoke control areas in England. In Scotland and Wales this power rests with Ministers in the devolved administrations for those countries. Separate legislation, the Clean Air (Northern Ireland) Order 1981, applies in Northern Ireland. Therefore it is a requirement that fuels burnt or obtained for use in smoke control areas have been "authorised" in Regulations and that appliances used to burn solid fuel in those areas (other than "authorised" fuels) have been exempted by an Order made and signed by the Secretary of State or Minister in the devolved administrations.

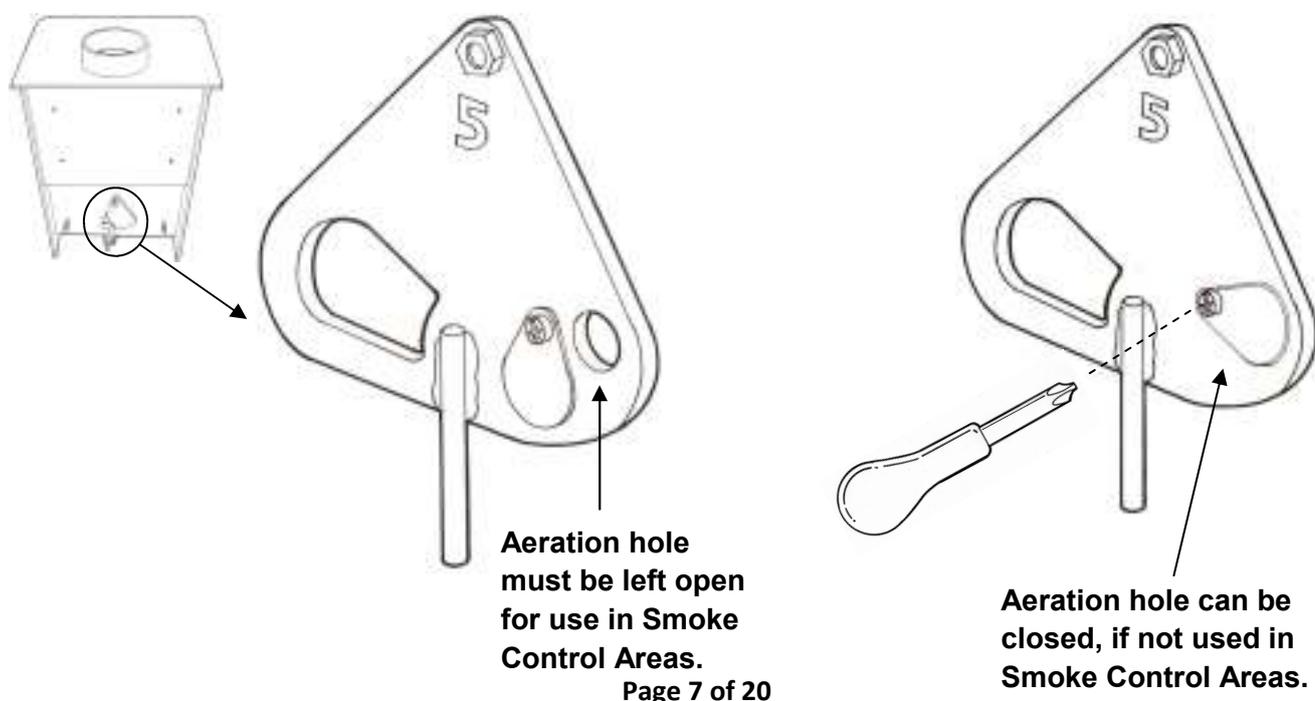
Further information on the requirements of the Clean Air Act can be found here:

<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 9507 AND THE 9510 has been recommended as suitable for use in smoke control areas when burning wood logs.

Due to its size the 9514 **cannot** be used in a Smoke Control Areas



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.

Each stove is supplied with heat shields to reduce the temperature of the hearth; these should always be placed beneath the stove as described below.

Strength and heat resistance of the hearth.

Stoves are very heavy and most material 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.

Stove tables

Burley manufacture dedicated steel tables which the Panorama stoves may sit on; a non-combustible surface must still extend 225mm in front of the stove and 150mm to the sides.

Heatshield

The heatshield is slid beneath the stove so the black edge is to the front with the edges turned down at the sides. This creates an air gap and reduces the amount of heat radiated downwards.

Inset installations

If desired the Panorama stoves may be built into a recessed opening. Distances to combustible surfaces stated in the table on page 4 must be observed and a minimum air gap of 150mm must be left to the sides, behind and above the stove to allow for circulation of air.

As with all heating appliances, be aware that convected and radiated heat from the stove may have a drying effect on plaster and other wall coverings.

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 minimum 100mm diameter hole needs to be drilled in the correct place (to take the 80mm duct as supplied). 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.

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:

- 9507 – 7kW
 - 9510 – 10kW
- 1650mm sq. min
50mm diameter**
- An air vent is not required
if the stove is room sealed***

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.

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

Chimneys

The 9507 requires a chimney of minimum 5" (125mm), model 9510 requires a chimney of minimum 6" diameter (150mm), and model 9514 requires a chimney of minimum 7" (175mm) diameter. All chimneys must be a minimum length of 4 metres above the stove and they must comply with Building Regulations J. Never share the flue with another appliance.

The distance from the back edge of the stove to the centre of the flue pipe is 98mm (9507).

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 of control levers

Due to the very wide door, Burley's Panoramic stoves have two built-in features which may be used to minimise the escape of smoke during re-fuelling should the draw of your chimney be weak.

Internal door restrictor flap.

A metal flap can be fitted onto pivots above the inside of the door opening. Remove the right-hand vermiculite board and position the flap to the right so the female hinges slide onto the pins. Replace the right-hand board. When the door is open the flap hangs down to reduce the size of the opening, when the door is closed the flap is pushed upwards so the view of the fire is not obstructed.

Right-hand control lever

To obtain the maximum possible efficiency, Burley's Panoramic stoves direct the hot combusted gasses up the sides of the stove, and then across the inner top forcing them to come into contact with the convection tubes, before exiting up the flue pipe.

When refuelling, before opening the door, slide the right-hand lever across to the left. This raises the back of the top vermiculite board and creates a bypass for the hot gasses, taking a direct route rather than the one described above. This makes an air curtain which draws any smoke to the back of the stove and prevents spillage into the room.



Levers and Handles

Please ensure that all levers and handles move correctly prior to positioning the stove in the opening or on the hearth. Adjustment may prove difficult once the stove is positioned.

Should the lever become loose over time adjustment can be made by tightening the nyloc nut at the rear or the one under the stove. Do not apply excessive force to the M8 nyloc

Installation of the vermiculite stove fire bricks (in order).

Top board

The top board has the stainless strip attached to it. Position this in the stove so the stainless strip is at the back with the legs pointing down, rest the front on the angle above the door opening, and then hook on the top of the stainless strip over the lifting pin.

Side boards

Fit the left side board so the chamfered edge is at the bottom left, against the outside of the stove. Fit the *door restrictor flap* as above if required. Lift the flap and fit the right hand board with the chamfered edge at the bottom right.

Back board

Lift the restrictor flap so the board can pass through the door opening. Position the board so it sits behind the legs of the stainless strip on the top board, with the Burley logo facing forwards.

Base board

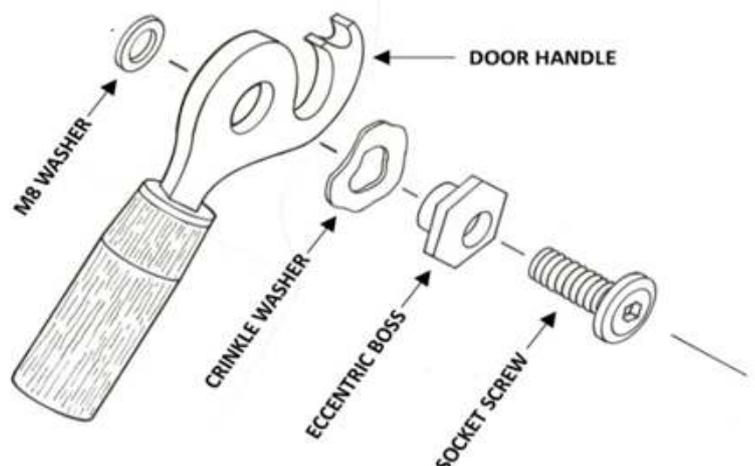
This sits in the bottom of the stove with the two routed holes downwards making a space for the welded studs to sit in.

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 then reposition all the components.

Door Handle Assembly

Fit the door handle and parts as per the assembly diagram below. (Please note it is very important to fit the parts in the correct sequence).

Tighten up the socket screw using the Allen key provided in the 'Thank You Kit'



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;-

The first time the stove is lit only a small fire should be used to allow the paint to cure properly.

Ventilate the room well as the fumes can be pungent.

Use a small amount of kindling to start the fire. If possible leave the door on the catch, although the fire looks fierce it is comparatively cool due to all the air being drawn in. Add a little more kindling as it burns down. When you have a small bed of embers place a small split log in the fire, allow it to catch well, and then close the door with the lever to the right. Stay with the fire during this process.

When this first log is burning down add another log, when this one is burning well you should be able to move the lever midway to the centre. Keep feeding the stove for three hours with a small split log as it burns low.

When you need to remove some ash wait until it is cold and then take some out using the scoop provided. Always leave an inch of ash so you have a nice bed for your next fire.

USER INSTRUCTIONS

To Light the Stove

It is important to keep an approximate minimum depth of $\frac{3}{4}$ " (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, and finally a small log 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 around five 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 to the right for a further 15 to 20 minutes to get the stove completely up to running temperature. If the stove does go out when the door is closed then the flue is still too cold and will not pull, in this case you may need to leave the door open with kindling burning for longer. The flue's pull will change dependant on temperature and atmospheric conditions.

The best lever 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 eventually 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. We do not recommend use of a stove thermometer – the high efficiency of the stove means flue gases are cool and would give an inaccurate reading, leading to over firing and damage to internal components (see page 12).

The best way to run any wood stove is 'little and often'. If you are with the fire, it is best to keep adding a small log every 45 minutes rather than adding large ones every 2 hours.



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

When refuelling, before opening the door, slide the right-hand lever across to the left. This raises the back of the top vermiculite board and creates a bypass for the hot gasses, taking a direct route rather than the one described above. This makes an air curtain which draws any smoke to the back of the stove and prevents spillage into the room. Also when the door is opened the internal door restrictor flap hangs down to reduce the size of the opening. Using the glove provided, place the fresh log towards the rear of the appliance. Close the door, when the door is closed the flap is pushed upwards so the view of the fire is not obstructed.

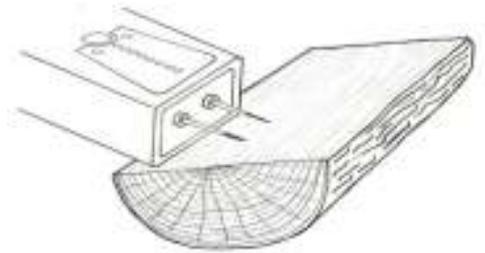
Do not over load the stove with wood and close the damper down, this produces lots of creosote and blackens the glass

Recommended fuels & using the Moisture Meter

	9507	9510
Requirement of fuels used in Smoke Control Areas	Dry logs <20% H ₂ O	Dry logs <20% H ₂ O
	Maximum length 170 -220mm long	Maximum length 200 -250mm long
	Maximum width 150mm	Maximum width 150mm

For the stove to operate at maximum efficiency the wood should be as dry as possible, certainly below 18%. 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. Push the pins into the inner surface of the split log (5mm as a guide) this will give an accurate reading.



Simply putting the contact pins onto the surface will not give an accurate reading, as it may tell you that the surface is dry whilst the interior of the log may well be damp.

Stove Thermometers - DO NOT USE WITH OUR STOVES

We receive a very small number of calls from customers who have managed to damage their stoves from over-firing, in almost all cases they have a thermometer fitted to their flue.

The Fireballs are the world's most efficient stove because firstly, due to the unique method of introducing air, the combustion chamber is extremely hot, and secondly, the heat is extracted from the combusted gasses to heat the room before it enters the flue.

On the Westhay for example, the gasses have been cooled to just 247 °C, far below what the stove thermometer will measure. Because the thermometer is not 'in the green', you think that the stove is not operating efficiently, so load the chamber with wood and have the air wide open.

This creates such an inferno that occasionally the ceramic glass can frost (something even the windows on the space shuttle could not achieve during re-entry), and although it is very rare, the stainless steel baffle can also be damaged, stainless steel melts at over 1500°C!

The **ONLY** thing that a stove thermometer shows is that you have an inefficient stove and are losing a lot of heat up the flue, not a great deal of use really.

Troubleshooting/Poor Appliance Operation

	Refuelling onto a low fire bed	<p>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</p>
	Air damper left fully open	<p>Operation with the air controls or appliance dampers open can cause excess smoke. The appliance must not be operated with air controls, appliance dampers or door left open except as directed in the instructions. Although the fire will look impressive, you will be burning more wood for less heat. The glass can also be damaged.</p>
	Leaving door open	<p>Operation with the door open can cause excess smoke and be a potential fire hazard. The appliance must not be operated with the appliance door left open except as directed in the instructions.</p>
	Overloading the fire bed	<p>The maximum amount of fuel specified in this manual should not be exceeded. The weight of dry wood per hour is: 2.8kg for the 9108 and 4.4kg for the 9112. Overloading can damage components of the stove. The stove is not designed for unattended slumbering.</p>
	Substantial Smoke Emission	<p>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 <u>suitable</u> fuel. The flue may not be pulling as it is too cold or incorrectly specified/installed. There might be a down draught. Check that the top brick is at the back of the fire.</p>
	Door Adjustment	<p>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 (see page 12). The door will need to be adjusted over time as the rope seal compresses.</p>

Reasons for Premature Wear of Internal Parts

- Stove being used/fired too vigorously
- Too little air passing through the stove
- 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 over 2 ½ “
- Overnight burning or unattended slumbering
- Use of a stove thermometer

Care of Glass

The first few firings will cure the paint and we recommend that you clean the glass after this has happened. This will ensure that there are no contaminants on the glass to attract further staining. After a time the glass does deteriorate but to prolong the life:

- Clean the glass each time before re-lighting, this prevents fly-ash from being fired onto the glass
- Clean glass with a ceramic glass cleaner
- If necessary, remove fired on stains with clean wire wool (not a 'brillo' type pad) every time before lighting
- Ensure all glass cleaner is removed from glass before firing
- Do not over aerate the stove as this can cause fly ash to stick.
- Do not run for long periods with the lever to the right
- Only add logs at the back of the stove
- Make sure the log retainer points into the stove
- Most deposits burn off when the stove is very hot, this is with the lever roughly in the middle
- Do not over load the stove or try and keep it slumber burning overnight. Add a little wood often.

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



Take care when removing glass clip screws or they could shear



Do not use with broken glass



Do not over tighten the glass clips as this could cause the internal glass to crack.



Only clean the glass when it is cold.

Chimney Sweeping and Maintenance

It may be wise to contact your local chimney sweep before the stove is installed. 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 chimney can be swept through the stove.
- The top brick should be removed in the reverse order described on page 12.
- The baffle should be cleaned at least twice a year with heavy use, checked, renewed as required and replaced.
- Unless advised by Burley the stove should not be used with any baffle missing.
- All rope and glass seals should be checked annually and replaced as necessary.



Please remind the sweep to make note of brick orientation before removing them so that they are replaced in the correct order.

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: As with all solid fuel appliances, a carbon monoxide detector should be purchased for use in the room. 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 and more easily detected by a healthy person.

- Always use your appliance with the door 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.
- Check the seals at the joints annually and replace the 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 produce 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 coarse table salt onto the fire.
- Never modify parts or fit parts to the appliance that are 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 or 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 five year metalwork warranty. **(This is subject to the correct fuel having been used and not overloading or over aerating the stove.)**

The five 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 serial number of the appliance.

If you need further help...

If you need further help with your Burley Stove then the first point of contact should be your HETAS installer, who will be able to provide the answers to most questions.

Your Burley retailer also 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.

Spare Parts

DESCRIPTION	Briary 9507		Westhay 9510	
TOP VERMICULITE BOARD				
BACK VERMICULITE BOARD				
BOTTOM VERMICULITE BOARD				
LEFT HAND VERMICULITE BOARD				
RIGHT HAND VERMICULITE BOARD				
GLASS				
GLASS CLIPS				
GLASS ROPE TAPE				
DOOR SEAL ROPE (20mm)				
STAINLESS STEEL BAFFLE				

Customer & Installation Notes

Date of Installation:	
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Installer Name & contact details

Chimney Swept	Date

Notes:



Made in the UK



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burley.co.uk/category/wood-burning-stoves/

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