

THE STOVE ROOM

exceptional wood burning stoves & accessories

BURLEY INSTALLATION GUIDE

The Burley series of stoves are wood burning only (this includes logs, sawdust briquettes and pellets); no attempt should be made to burn any other fuel, including any type of coal, smokeless fuel or petroleum coke. Under no circumstances should liquid fuels be added. It is not an incinerator and rubbish, including painted, tanned wood and MDF, should not be burnt in this appliance. Doing so is potentially dangerous and will invalidate any guarantees immediately. Technical data - For the most up to date information and installation guide please see the appliance instructions supplied with the stove. (Do not carry out any structural work without first having read the supplied instructions)

	9105-small	9108 -Medium	9112 -Large
Efficiency	89.1%	85.5%	84.9%
CO concentration @13% Oxygen	0.1%	0.1%	0.1%
Fuel	Dry Logs < 20% H ² O 250 – 300mm long	Dry Logs < 20% H ² O 250 – 350mm long	Dry Logs < 20% H ² O 300 – 450mm long
Weight in kg	95 kg	105 kg	130 kg
kW output intermittent	5kW	8kW	12kW
Air vent requirement Air vents are not required if stove is room sealed	550mm sq min	1,650mm sq. min 50mm diameter	4,950mm sq. min 100mm diameter
Minimum flue draught mm H ² O	0.5mm	0.5mm	0.5mm
Flue gas temperature	122 °C	183 °C	237 °C
Flue size	150mm (6")	150mm (6")	150mm (6")
Minimum distance to combustible materials	200mm behind, 350mm either side	100mm behind, 400mm either side	200mmbehind, 450mm either side

Installation Instructions - Always install the stove with the data contained in the installation instructions supplied with your stove (this is a guide only) When installing these appliances all local regulations, including those referring to national and European Standards, need to be complied with. This manual covers the Burley appliances: models 9104, 9105, 9108, 9112. The nominal space heating output is: 9104: 4KW, 9105: 5kW, 9108: 8kW, 9112: 12kW. Any of the above appliances must be installed by a HETAS registered installer 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. 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 400mm (16") at the side and 100mm (4") at the rear, from combustible materials, e.g. wooden fire surround or stud wall. When fitted inside a masonry or similar non-flammable material recess, e.g. fireplace opening, there is no minimum distance.

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 should stand on a non-combustible hearth of minimum thickness 12mm (1/2"). This should extend a minimum 225mm (9") in front of the stove. When a stove is free-standing, the hearth should also extend a minimum of 150mm (6") either side of the stove. The hearth must be capable of taking the load of the appliance. Suitable measures (e.g. a load distribution plate) should be taken to ensure stability. 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 4KW models.

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

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. This is not required on the 4kW models. 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:

Model 9104 - no vent required

Model 9105 - 550mm sq - (not required for homes built before 2010)

Model 9108 - 1650mm² (50mm diameter)

Model 9112 - 4950mm² (100mm diameter)

Only permanently open vents can be used and consideration should be given to draught when the stove is not in use. Site these vent carefully. The vent covers should comply with Building Regulations Part J and should be sited where they cannot be blocked.

Chimneys The 9105, 9108 and 9112 models require a chimney of minimum 6" diameter (150mm) the 9104 require 5" diameter and all a minimum length of 4 metres and they must comply with Building Regulations J. Never share the flue with another appliance. 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 or NACE 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 and connected it to a chimney with flue pipe, (we recommend 1mm stainless steel pipe sprayed matt black -do not use old style 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. 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 of 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. That 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 and 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.
4. Never empty all the ash - it is required to help keep the combustion chamber temperature up for an efficient clean burn.

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 some kindling wood criss-crossed diagonally, and finally 2 larger 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 about 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 center. 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. 6 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 gloves 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 $\frac{3}{4}$ " (20mm) in the bottom.

Ensure the fire is out and cool 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. This can usually be put on your compost heap or directly around fruit trees or rose bushes (check first that your variety of plants will benefit from ash).

Spread the remaining ash back evenly over the base of the stove and you are ready to relight the stove. 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. Remove the sheets of glass and clean the unbroken one. The glass seal is ready glued to the glass. Peel back the cover strip and position the second pane over this. 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. Chimney sweeping & maintenance 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 above.

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 and rubble and debris blocking the flue ways.

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 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.
 - The surface of the appliance is hot in normal use; guards should be used when young children or infirm people are around. Avoid all flammable materials within 300mm of the appliance.
 - In the event of a chimney fire, shut the air vent right down. If possible throw table salt onto the fire.
 - Never modify or fit parts to the appliance which are not recommended by the manufacturer.
 - Never use this appliance in the same flue as another appliance.
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