



# The most efficient wood burning stove in the world

"The fireball effect is phenomenal... we don't watch telly anymore... just the woodburner"



Brampton 9108-8kW



The Burley Fireball range of wood burning stoves are the result of thousands of hours of designing and prototyping, based and inspired by over 100 years of experience in the heating industry.

Designed, developed and manufactured entirely in the United Kingdom, the Burley range boasts advances which result in unsurpassed fuel efficiency and clean burning. This is made possible by the patented Fireball method of introducing air.

The flame picture created when burning by this method is so impressive that to do it justice the largest possible glass door had to be developed.

### The Hollywell Model 9105



5kW nominal output, 6.4kW maximum. Shown with optional cover plate

#### "Burley Hollywell, everything we ever wanted"

All quotes are genuine customer comments kindly posted on www.whatstove.co.uk





Hollywell shown with optional extended base, without cover plate.

#### Extended base

An extended base is available for all models. This is the perfect accompaniment for stand alone installations where height needs to be emphasised. The base also doubles as an area for storing logs. This item is a separate component and fits to the standard height stove.

"We bought our Burley Hollywell last week and were lucky enough to get it installed for Christmas and what a transformation it has made. We have a three storey terraced house and since starting it up the central heating has been off. The amount of heat it pumps out is truly astonishing"



# The Brampton Model 9108



8kW nominal output, 11.7kW maximum. Shown with optional cover plate

"This Brampton is amazing, gives out loads of heat and is really simple to control with its single lever"



Brampton shown with cover plate and optional extended base

"Our 9108 is very easy to light, is incredibly efficient on the wood and really bangs out the heat. Nice simple styling and solid build quality. I would not hesitate in recommending this stove to anyone who is thinking about buying one"

# Plate steel construction Many stoves, particularly in

Many stoves, particularly imports, are made from cast iron. Although cast iron is far cheaper to produce, castings are relatively brittle, and as cast stoves consist of many castings bolted together, they do not have the same physical strength or properties Burley required to allow total room sealing.

Our plate steel sections are 5mm and 8mm thick and are welded by robots. Hand-crafted is lovely when it comes to knitwear, but in a stove there is no comparison to welding by robots. Not only are the welds applied in exactly the right place and in exactly the right thickness, but the steel sections are actually melted and fused together to make a virtually indestructible construction.



Not only the most efficient stoves in the world but also the strongest This is a 43 tonne T55 Russian tank which ran over the Burley 9104 and 9103 stoves. Burley's Managing Director is lying underneath.

To see the whole video please visit www.burley.co.uk/woodburner.php or scan the QR code below.



"Everything about this woodburner screams quality"





# The most efficient wood burning stove in the world

The idea which drove the design of the Burley stove was to invent the cleanest burning and most energy efficient wood burning stove possible.

At up to 89.8% efficient and with innovative technology which has been developed to extract the heat and keep it in your house, Burley Fireball stoves do not simply beat the competition by a few percent, but by a country mile.

#### Three part combustion

How perfect combustion of wood is achieved

Burning wood efficiently requires a primary, secondary and tertiary combustion process.

#### Primary combustion

Primary combustion is the initial burning of the wood at relatively low temperatures. During primary burn, water is evaporated and large amounts of creosote gas are produced. This creosote holds 60% of the potential energy of the wood, but is often just deposited on the inside of the stove and the lining of the flue, which causes chimney fires.

"It is our only form of heating! The efficiency is tremendous. In three weeks we have used as much wood as we previously used in three days!"

#### Secondary combustion

If, however, the combustion chamber is designed correctly by having sufficient insulation to raise the core temperature to 400°C, and the correct amount of air is introduced, this creosote spontaneously combusts. This creates a chain reaction which increases the temperature inside the stove from 400°C to 600°C with no extra use of fuel. This is the secondary burn.

#### Introducing the air

The Burley range of stoves has a unique and patented system of introducing air for combustion, this is called The Fireball. A tubular framework channels air from the intake at the rear, around the fuel bed where it is preheated. The framework extends up each corner of the combustion chamber where the hot air is injected horizontally along the inside of the stove. This creates a vortex which spins anticlockwise and ensures every area of the fire box receives exactly the correct amount of oxygen.

#### Tertiary combustion

Tertiary combustion occurs by fully burning the carbon, charcoal and ash which is left behind. These contain a huge amount of energy and provide a long rate of heat. Anyone who has



"They are superb, we ran them for three months before cleaning any ash out of them. The heat output is tremendous, the flame picture is outstanding, the build quality is very good and it's made in the UK"

barbecued will be aware of how much heat is present in semi-combusted wood. Blacksmiths melt steel on it.

The vortex created by the Fireball technology also envelops the entire fuel bed, burning it so completely that there is no need for an ash pan. 100kg of wood can be reduced to 1 pint of ash (a ratio of 350:1) which is simply scooped out. No more carrying bucket loads of ash through the house every time you want a fire.



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100kg of logs can be reduced to one pint of ash.

#### Quaternary combustion

To create even more heat for your room and less soot for your chimney, Burley's stoves have a unique quaternary (fourth) combustion process. As the hot gases exit the combustion chamber they pass through a mesh filter. The mesh is heated to such a high temperature that when any particles of soot or creosote which have escaped the secondary combustion touch it, they are ignited on contact.

#### Results

Making a stove which will burn wood is very simple and cheap. Producing and designing a top quality stove which will burn wood efficiently and cleanly is very difficult and is expensive. During product approval, when the European test house was measuring the emissions from the Burley stove, the combustion was so clean they assumed that their gas analyser had broken and sent it away for recalibration.



#### Wood or multi-fuel

Many people ask for multi-fuel stoves in the belief that they can burn any household rubbish, you can't. A multi-fuel stove is not as efficient as a wood burning stove. Wood is far greener, cheaper, cleaner and gives a much nicer flame picture. Our advice would be 'don't compromise, potato peelings are not a source of fuel'. We are sure that once you buy a wood burner you will only want to burn wood, but in the off-chance that you do want to burn coal, Burley produce a multi-fuel grate for some models which can easily be retro-fitted into the stove.

#### Glass door

As two of the main reasons for buying a stove are to be mesmerised by the flame picture and to defrost your backside in the radiated heat, Burley wanted the largest possible window. Due to its size the screen has to withstand massive temperature fluctuations and thermal shock so it is actually ceramic and not conventional glass. Ceramic glass is very expensive, despite this your stove is double glazed which helps keep it clean and promotes secondary combustion.

To see the amazing flame effect please visit www.burley.co.uk/woodburner.php or scan the QR code below.





### The Debdale Model 9104



4kW nominal output, 5.3kW maximum. Shown with optional cover plate

#### Optional ducting components



Rectangular wall plate DUCTPLAT55



Rectangular grille DUCTGRIL571



Rectangular wall bracket DUCTBRAC56



Rectangular vertical bend DUCTVBEND5252



Round connector DUCTRCON111



Rectangular to round adapter DUCTADAP521



Rectangular coupler DUCTCOUP515



Round plastic duct DUCTROUN1005



Rectangular horizontal bend DUCTHBEND5251



Flat rectangular duct DUCTRECT5010

"Pumps out some heat. You can feel it drifting upstairs heating the bedrooms and working through the rest of the house. Central heating is hardly on now. The efficiency is remarkable"



#### Room seal your Burley stove

The majority of stoves draw their air from the room, often through vents at the top or bottom of the door. Whilst this is a very cheap and simple method, drawing air from the front of the fire for combustion means that you are dragging huge amounts of warm air from the room (which you have already paid to heat) and losing it up the chimney. The average chimney will drag all the warm air from your room once every single hour - 24 hours a day, 365 days a year. That is an awful lot of heat you are losing. This is replaced by cold air from outside, creeping around windows and under doors, chilling your entire house.

Burley stoves draw all their air through a vent at the rear where it is cooler. If you wish, you may attach the optional room sealing kit to the back of the stove so it only draws cold air from outside meaning all the lovely heat stays in your room, radiating outwards through your home. British standards dictate that any room with a stove rated greater than 5kW must have an air vent fitted. With the room sealing kit fitted to the stove you do not need to fit a vent in the room, conserving yet more energy.



room seal kit



Angled room seal kit example



#### Standard room seal kit or angled room seal kit

The Standard kit connects directly from the rear of the fire to the back wall. The Angled kit exits at 90° from the rear of the fire. This can then be connected to standard ducts (available as shown or from builders' merchants), to create a path to an outside wall. A maximum of four 90° angles may be used.

"We've had a Hunter and a Villager [stove] before but this is a far superior beast. We love it!"



"We love our Burley! In place now for a year and I have nothing but praise for this stove"



Burley's 'Thank you' Pack. Contents vary between models.

#### Going the extra mile

We don't want you to be pleased with your Burley stove, we want you to be delighted. We listen to our customers and constantly make improvements where possible. We try to enhance your enjoyment with useful extras shown above. We have real people in our office in England who can speak to you knowledgeably should you have any questions or problems.

#### Not going the extra mile

One of your reasons for buying a stove may be to reduce your carbon footprint. Burley are proud to not only manufacture our stoves in Britain, but where possible to also source British components. We insist that our steel is not just rolled in Britain (which allows it to say 'British steel') but is smelted in Britain.

We have a never ending policy of assessment and implementation to reduce our impact on the environment. This includes generating our own electricity with a 200kW array of PV panels on our factory roof which provides most of our requirements as well as providing power for up to70 houses at weekends. Nearly all heating in the factory is re-circulated heat from fires and stoves which are being tested, our salesmen only drive cars which exceed 80 mpg, the offices are heated by biomass.



In 2014 Burley became a zero carbon company, we generate more energy than we use.



"I absolutely love this stove. Watching flames dance is mesmerising and, with the lights turned down, it is very cosy and enjoyable. It is highly controllable too, have it blasting out lots of heat one moment and, with a flick of a lever, it will settle down to gently glow in 10 minutes. Wish I had done it years ago. Buy it – you won't regret it"

# The Wakerley Model 9112



12kW nominal output, 18.3kW maximum. Shown with optional cover plate

"Put simply this stove is brilliant! We've had our Burley stove for 4 months now, It's very easy to light and is incredibly efficient on the wood and really bangs out the heat. Nice simple styling and solid build quality. I would not hesitate in recommending this stove to anyone that is thinking about buying one"



# The Coppice Model 9050–5kW



"We are so glad we went for a Burley. The quality is second to none..."



"I bought one of your stoves a few months ago and it is the best money I have ever spent"

A Fireball stove designed to easily convert an inefficient and draughty open fireplace into a highly effective source of heat and centre piece for your home.



"Absolutely amazing, well worth the money, the heat it generates is 10 times better than I thought it would be"

# The Carlby Model 9305



5kW nominal output, 6.4kW maximum. Shown with optional granite base

A freestanding clean modern design with an extended window to show off the Fireball effect.

"In place now for a year and I have nothing but praise for this stove. Easy to light and control, it uses less wood than a smaller stove I have in another room and produces more heat. Great bit of kit"

# The Springdale Model 9103



3kW nominal output, 4.1kW maximum. Inset into a standard fireplace opening

#### **Cover Plate**

The convection holes are a feature of the stoves to increase efficiency. A cover plate is provided (not on model 9103) which may be fitted to cover the holes if preferred. The efficiency is not affected.

#### Warranty

All welded steel components are guaranteed for 5 years (conditions apply).

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MOC	Height*	Width	Depth	44	Effici	Neils	Oetra	Wat	Ette.	\$100°	PUQ.
Springdale 9103	495	370	296	3	88.9%	45kg	1	220	183	1	1
Debdale 9104	560	422	340	4	89.8%	57kg	1	250	183	1	1
Hollywell 9105	680	470	405	5	89.1%	95kg	1	310	183	1	1
Brampton 9108	680	598	405	8	85.5%	105kg	1	430	183	1	1
Wakerley 9112	780	750	405	12	84.1%	130kg	×	580	183	1	1
Coppice 9050	542	403	346	5	86.1%	60kg	1	285	×	1	×
Carlby 9305	856	450	425	5	89.1%	105kg	1	400	125	1	1

Because our policy is one of constant development, details may vary from those given in this brochure.

All stoves must be installed by a HETAS approved fitter in accordance with the manufacturer's installation instructions.

\*Height excludes flue collar (45mm). All measurements are in millimeters.



"After you have experienced the Burley, nothing compares".

### The Hazelwood Model 9514



**Burley's** range of wood burning stoves have been further enhanced with the introduction of the spectacular **Panorama** models. Please ask your Burley stockist for information.

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