

The World's cleanest and most efficient wood burning stoves



The Ashdown Model 9408-C with catalytic converters
8kW nominal output, 11.7kW maximum

Thousands of hours of design and prototyping supported by over 100 years of experience in the heating industry has resulted in a truly amazing innovation, the world's cleanest and most efficient wood burning stoves.

"All my friends have wood burning stoves. None are as efficient as this one or give such a dazzling display"

Ecodesign, Ecoexcel and Ecoelite

At Burley we are so confident and proud of the performance of our stoves that we give total transparency, warts 'n' all. Throughout the brochure you will see charts similar to the one below, this allows you to easily compare products based on how environmentally friendly and efficient they are.

ecodesign

After 2022 all stoves sold in Europe must pass **Ecodesign**, but to allow you to identify which manufacturer's products just squeak by and which are truly clean, green and a benefit to all, Burley have introduced far more demanding criteria and are encouraging the rest of the industry to follow our lead.

ecoexcel

2022 approved **Ecoexcel**. For stoves to display Ecoexcel they must satisfy the higher efficiency of 79%+ and also all the reduced cleaner emissions.

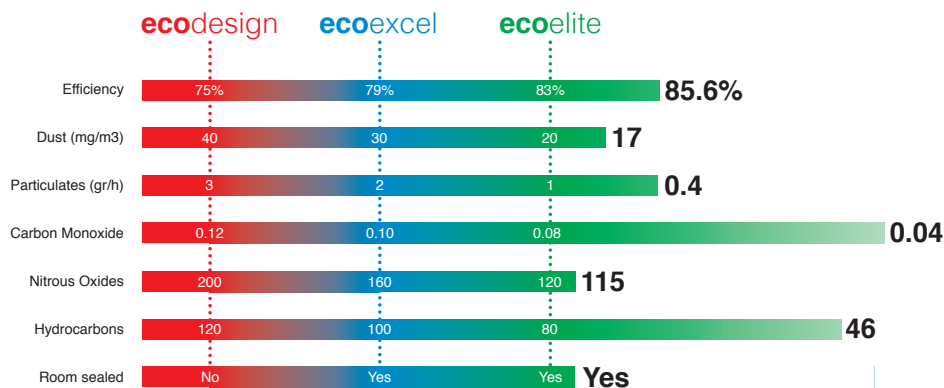
ecoelite

2022 approved **Ecoelite**. If a stove has earned the accolade of Ecoelite you can be assured that you have purchased an absolute state of the art product with particulate levels of less than 1/3rd that of a stove which is merely Ecodesign.



Front cover: The Ashdown model 9408-C with catalytic converters

Rated – **ecoelite**



"This stove is so frugal and efficient that I can get a great night's heating from 3 or 4 logs and it is still warm in the morning"

All quotes are genuine customer comments.



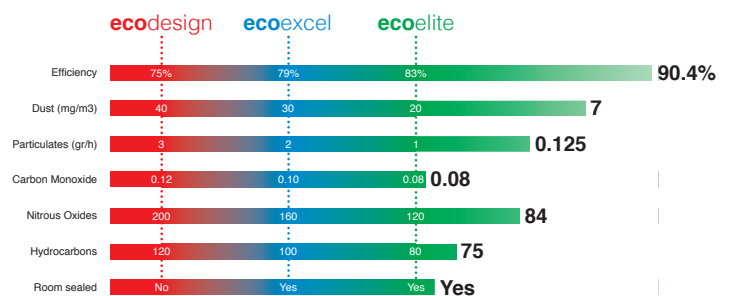
5kW nominal, 6.4kW maximum

The Hardwick Model 9405-C with catalytic converters
 Rated – **ecolite**

5kW nominal output, 6.4kW maximum

Catalytic converters

Many of the Burley's stoves are available with or without catalytic converters. The catalytic converter aids complete combustion, turning carbon monoxide into carbon dioxide and releasing more energy in the process, therefore the stove with catalytic converters will generally have lower CO and higher efficiency than the stove without. Burley's research and design has ensured the catalytic converters are working in the perfect temperature band, therefore with normal use they are rated for over 10,000 hours use. Unlike many other catalytic stoves, with average use Burley's cat's will never need replacing.

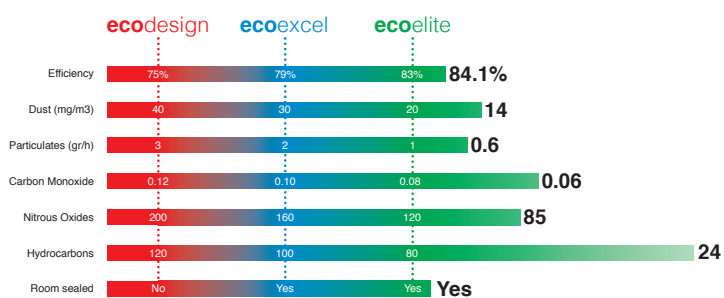


"Just a short email to offer my congratulations to your company for manufacturing such a brilliant Wood Burning Stove"

The Crownley Model 9412
Rated – **ecoelite**



12kW nominal output, 18.3kW maximum



"Everything about this woodburner screams quality"



Wood burning and air quality

There is a constant flow of rumour regarding air quality in connection with wood burning stoves, what you will read is largely confused with open fires or is based on a flawed study which failed to allow for other sources of pollution in the home such as cooking.

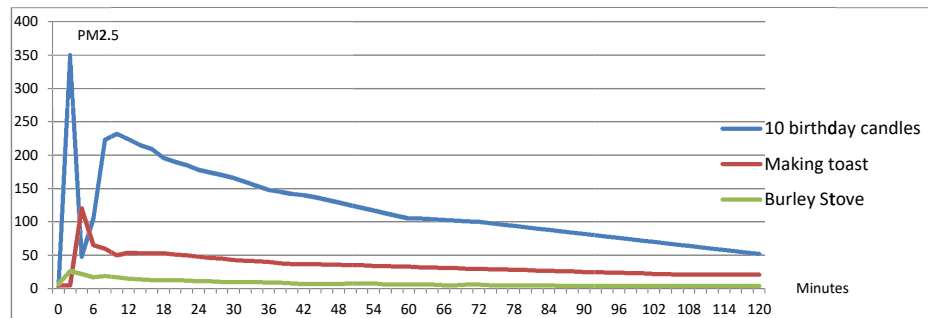
<https://www.mdpi.com/2073-4433/11/12/1326?s=09>

To provide meaningful figures we repeated the study but ensured no other activity was taking place in the house. For comparison to other domestic activities we also took air quality readings while making toast and when lighting ten candles on a birthday cake and then blowing them out.

Measurements

PM2.5 particulates measured during activity			
Time (minutes)	Burley stove	Making toast	Ten candles
00:00 (ambient)	7	5	3
01:00	26	5	730
04:00	28	120	125
10:00	16	50	232
30:00	10	43	166
60:00	6 (refuelled stove)	35	105
90:00	4 (refuelled stove)	28	82
120:00	4	21	52

Note- when the toast was burned even a little the analyser exceeded its limit of 1000 and the test had to be repeated.



Results

The Burley stove had little effect on indoor air quality, far less than that caused by other everyday tasks. Two hours after making toast the level of pm2.5's was still 4 times ambient and after blowing out the candles it was 20 times ambient and double the WHO advised exposure.

Outdoor air quality

It is impossible to determine the source of air pollution, even if you could blame stoves and open fires for 100% of the emissions, an open fire can easily produce 300 times more pollution than one Burley stove. Swapping the open fires and less clean stoves for a Burley stove, could cut emissions by 97%. Open fires are the problem, wood burning stoves are the solution.

A responsible and considerate use of energy

Even when people are aware of the facts concerning wood burning stoves, a common response is 'but there are other cleaner sources of energy', the simple answer is 'no there are not'.

What most people don't know is that for every one kilowatt of electricity coming out of your plug, three kilowatts of fuel have to be burned at the power station. Until 100% of electricity is created by renewable energy, heating your house with electricity creates three times more greenhouse gasses and pollution than heating it with gas.

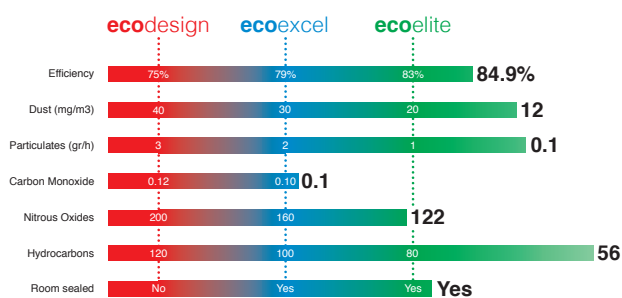
Wood on other hand is the only zero carbon heating we have. Trees absorb carbon dioxide as they grow, if the wood is burnt or if the tree lies on the floor and rots exactly the same amount of CO2 is returned back into the atmosphere. Putting 10kg of logs on your Burley stove during an evening creates as much warmth in your home as burning over 100kW of gas in a power station, which in turn saves 25kg of carbon dioxide (enough to offset a 600 mile train journey).

"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"

The Thorncombe Model 9404-C with catalytic converters
Rated – **ecoexcel**



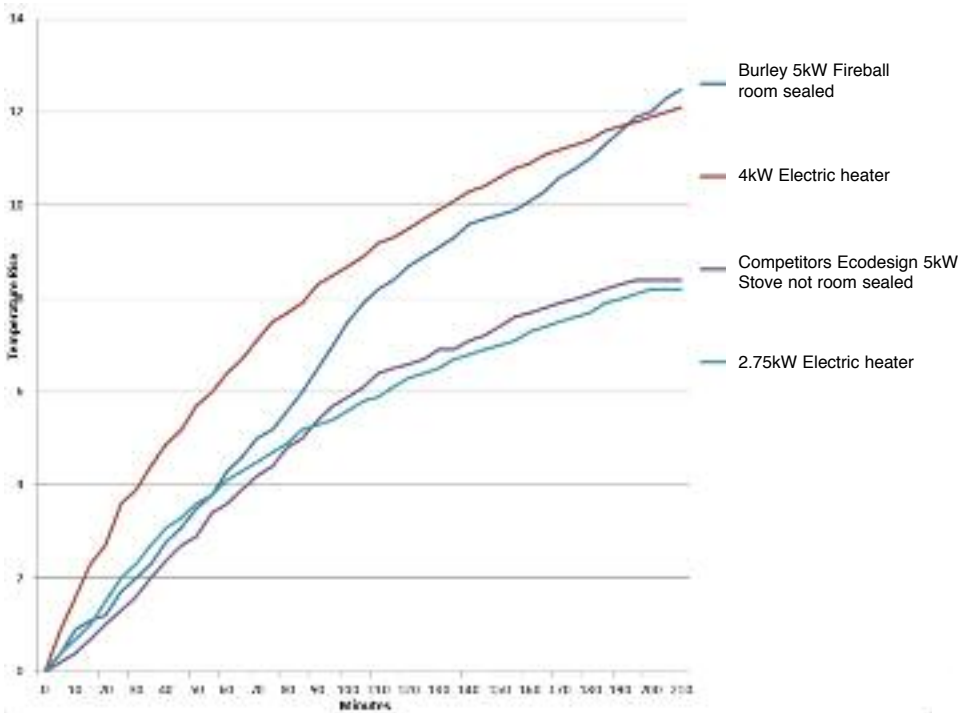
4kW nominal output, 5.3kW maximum



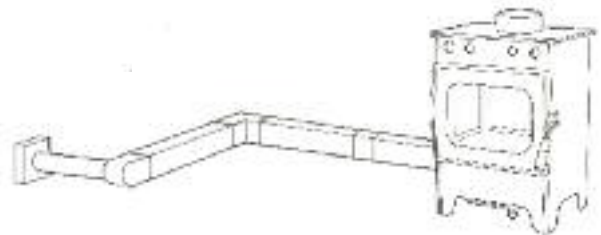
"Installed the Brampton this Christmas Eve, it transformed the house and our comfort, we are totally in awe of it"

Room sealing

If you can room seal your stove it will have a great effect on how it warms your home. Most stoves draw their air from the room, warm air which you have already paid to heat. An open chimney sucks all the air from your room once every single hour, 24 hours a day. This air is replaced by cold air creeping around windows and doors, chilling your entire house. A room sealed stove however draws the air directly from the outside, meaning all that lovely warmth stays in your room, radiating outwards throughout your home. It is Burley's environmental policy to only make stoves which can be room sealed.



The graph shows a real life comparison between a Burley 5kW room sealed stove and another leading 5kw stove which cannot be room sealed. Before the room even reached 21 degrees the non-room sealed stove was sucking heat from the room faster than it could put it in. Burley's stove however warmed the room up to a toasty 28 degrees and showed no sign of slowing down, 50% extra warmth for the same amount of fuel.



Angled room seal kit example



Standard room seal kit

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 from builders' merchants), to create a path to an outside wall. A maximum of five 90° angles may be used.

"The whole room and adjoining room are really cozy"

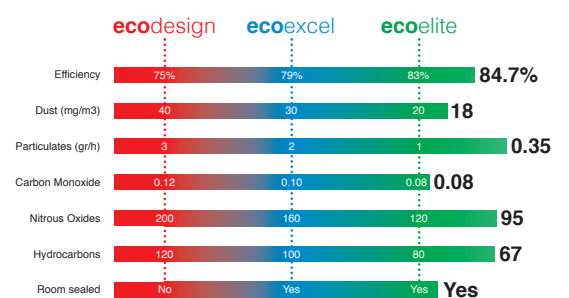
The Carlby Model 9307-C with catalytic converters
Rated – **ecolite**



7kW nominal output, 8.2kW maximum. Shown with base

The extended height of the Carlby provides a tall glass door, perfect for showing the fireball effect, enveloping the entire firebox.

“...we still absolutely love this stove, it's burning now, amazing flame picture, just the right amount of controllable heat... I could go on”



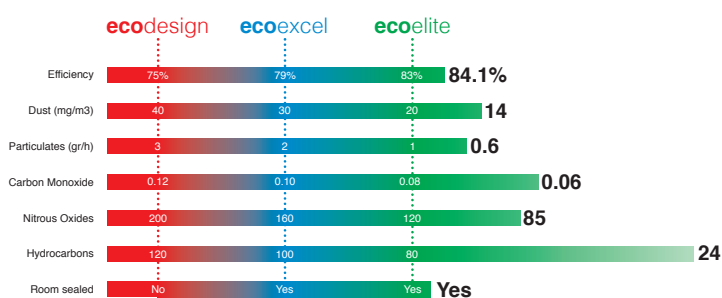
"In place now for a year and I have nothing but praise for this stove. Easy to light and control, it uses less wood than a smaller stove I have in another room and produces more heat. Great bit of kit"

The Bosworth Model 9312

Rated – **ecoelite**



12kW nominal output, 18.3kW maximum. Shown without base



Hydrocarbons

Hydrocarbons are the unburnt gasses escaping up your chimney, this is energy which is being lost. Burley's patented Fireball method of injecting hot air ensures these gasses are burnt and their energy is used to heat your home.

Efficiency – the world’s most efficient stoves

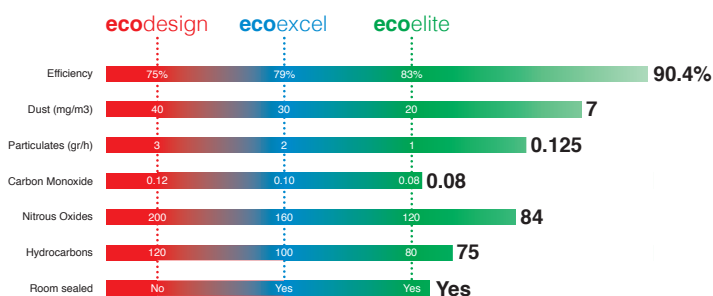
In each *Fireball* stove is an advanced heat exchanger. This heat exchanger scrubs the energy from the hot gasses before they go up the chimney and puts more warmth into your home.

The combination of efficient burning and heat recovery means that Burley are the ONLY company who guarantee that their wood burners will deliver more warmth and use less fuel than any comparable stove you may currently have.



The Bradgate Model 9305-C with catalytic converters
Rated – **ecoelite**

5kW nominal output, 6.4kW maximum.



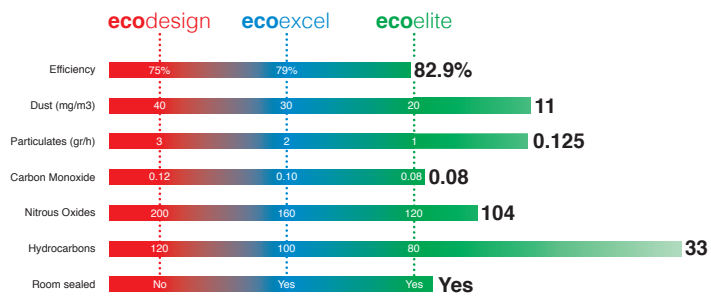
“It is our only form of heating! The efficiency is tremendous. In three weeks we have used as much wood as we previously used in three days!”

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



5kW nominal output, 6.4kW maximum.

The Bradgate Model 9305
Rated – **ecoexcel**



Particulates – Burley the cleanest least polluting stoves in the world

The particulates are the pieces of fine dust and soot which escape combustion and pass up the chimney, this is what air pollution in cities usually measures and focuses on. The intensity of Burley's Fireball combustion ensures almost all particulates are burnt before they leave the combustion chamber, any which do escape the fierce heat then have to pass through Burley's unique soot trap, this is a red hot stainless steel mesh on which particulates spontaneously combust on contact releasing even more energy. Any which survive the soot trap still have to make it through the catalytic converter where they are burnt through oxidation.

The combined effect of all these measures results in particulates as low as 0.1 grams per hour, just 1/30th of what is allowed for Ecodesign. **Burning one single open fire produces more particulates than 300 Burley stoves!** Buy a Burley Fireball stove and your neighbours will love you for it.

The Launde Model 9304-C with catalytic converter
Rated – **ecoexcel**



4kW nominal output, 5.3kW maximum. Shown without base

Extended bases

All the *Firecube* models can be used with or without extended bases. Several bases can be used to raise the stove to the desired level, creating a more *Scandinavian* look with beautiful clean parallel lines.



With two bases

“Put simply this stove is brilliant! We've had our Burley stove for 4 months now, It's 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 that is thinking about buying one”

Plate steel construction

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.



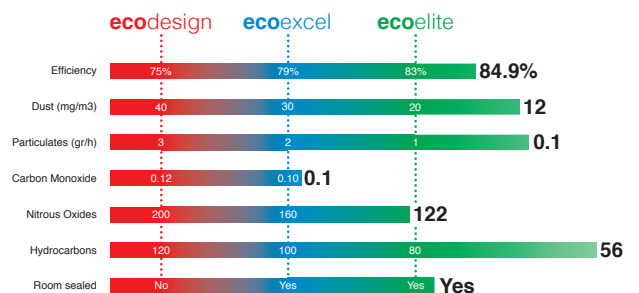
Not only the most efficient stoves in the world, but also the strongest?

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.



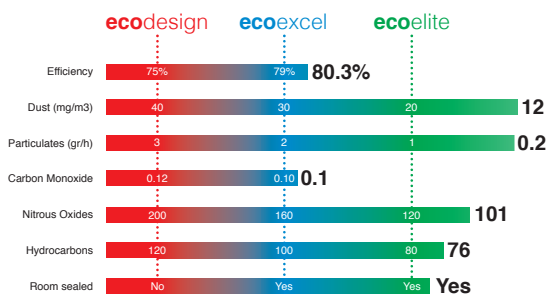
“So good, three of our relatives now have this model”





The Swithland Model 9308 without catalytic converters
Rated – **ecoexcel**

8kW nominal output, 11.7kW maximum.

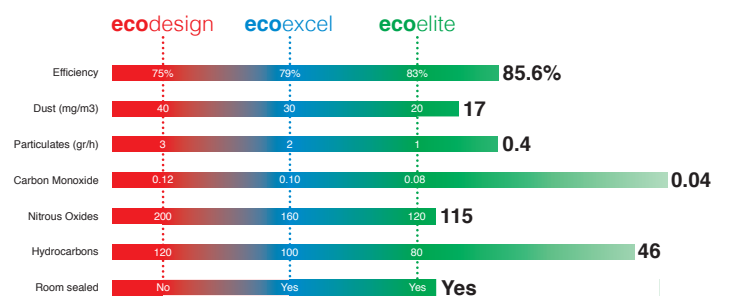


"This stove truly is a belter, well engineered, solidly built, quick to light, roasting hot and has the most superb flame effect"

The Swithland Model 9308-C with catalytic converters
 Rated – **ecoelite**



8kW nominal output, 11.7kW maximum.



The world's cleanest and most efficient wood burning stoves

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 90.4% 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.

How perfect combustion of wood is achieved

Four stage combustion

Burley Fireballs have a unique four stage combustion process.

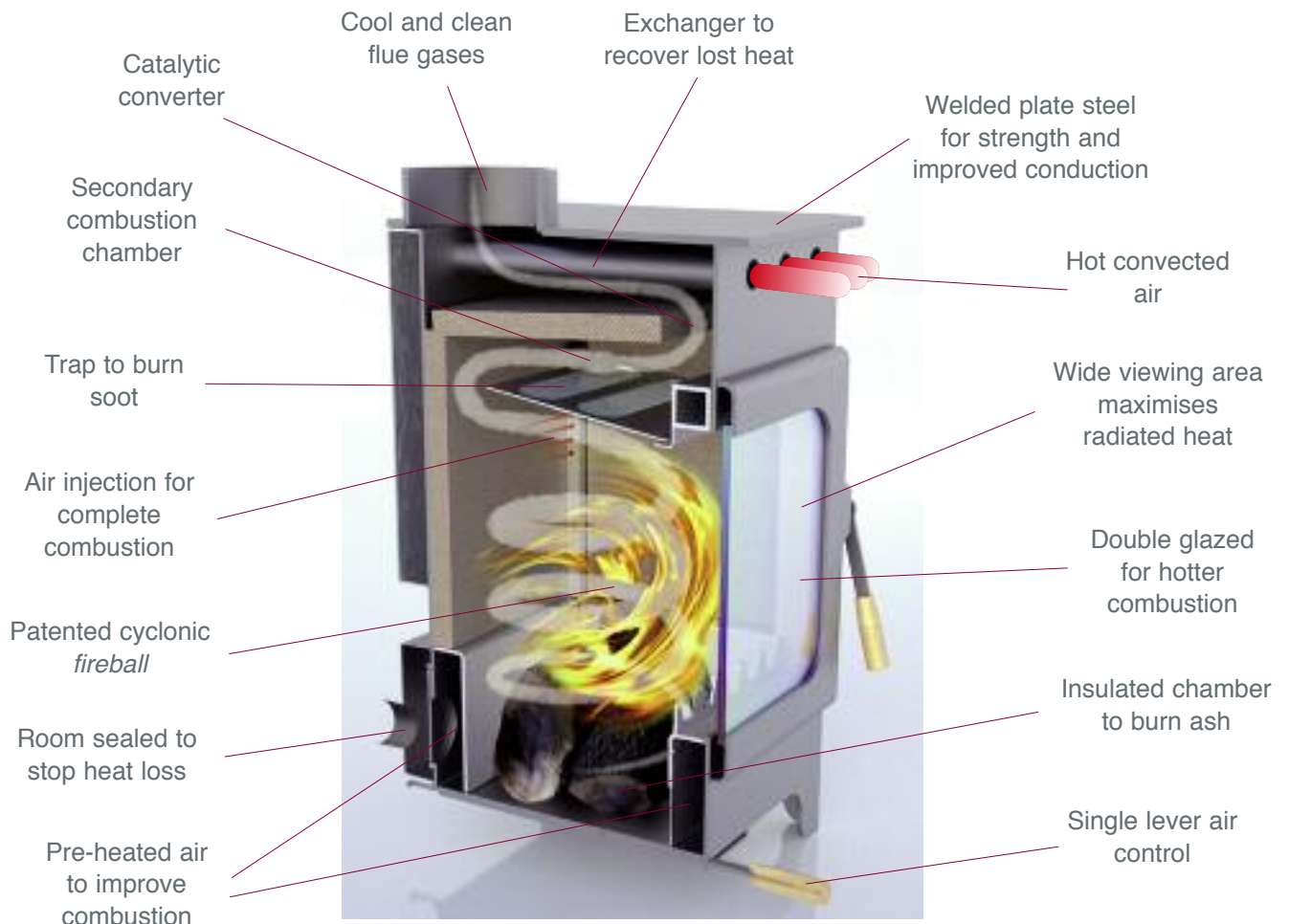
"Easy to light, very controllable, miserly with logs, leaves very little ash, and throws out oodles of wonderful heat"

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.

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.



“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”

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 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.

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.



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

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 the correct amount of oxygen.

Wood or multifuel?

Many people ask for multifuel stoves in the belief they can burn any household rubbish, you can't, potato peelings are not a source of fuel. A multifuel stove burns wood poorly and coal is polluting.

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 and the intensity of heat generated, 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.

Fireball effect

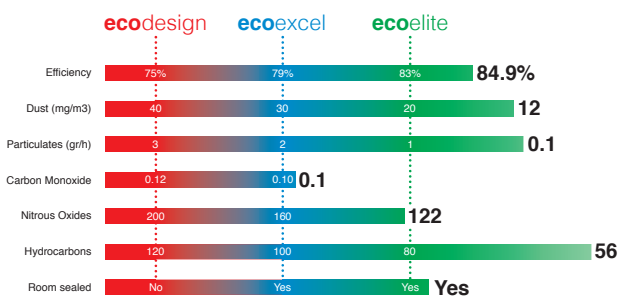
To see the amazing *Fireball* flame effect please visit www.burley.co.uk/woodburner.php or scan the QR code below.



Scan this QR code to go to the video.

"Nice one Burley, proper English wood burners"

The Debdale Model 9104-C with catalytic converters
Rated – **ecoexcel**



"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"



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



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 as shown. 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

Hopefully one of your reasons for buying a wood burning stove is that you want to reduce your carbon footprint. Rather than buying products cheaply in Asia, Burley are proud to not only manufacture all of our products in our factory in Oakham, but to also buy materials as locally and environmentally responsibly as we can.

Energy

We have a never ending policy of assessment and implementation to reduce our impact on the environment. This includes generating our electricity with a 200kW array of pv panels on our own factory roof and 300kW on other buildings. Not only does this generate most of the total energy we use, it also provides electricity for up to 170 houses at weekends.

Nearly all our heating in the factory is re-circulated heat from fires and stoves which are being tested. The offices are heated by biomass.

Plastic

We are always reducing our use of plastic. In the past two years we have removed 100% of expanded foam and polystyrene and replaced it with cardboard. We have reduced our use of industrial shrink wrap film by 50%, and have almost entirely stopped our use of bubble wrap by using the end user carton as transit packaging, (which is why it may have the odd scuff on it occasionally).



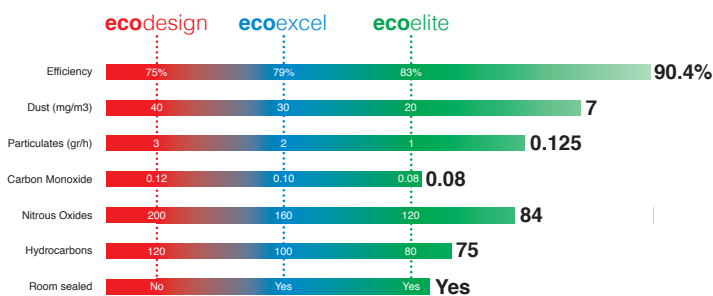
Burley's factory in Oakham with 200kW of solar panels.

*"Burley Hollywell,
everything we ever wanted"*

The Hollywell Model 9105-C with catalytic converters
Rated – **ecoelite**



5kW nominal output, 6.4kW maximum



Cover Plate

The convection holes are a feature of the stoves to increase efficiency.

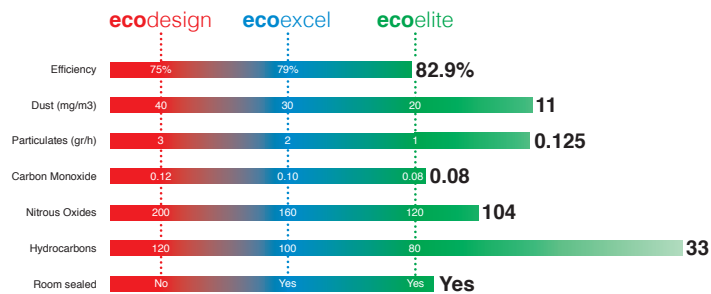
A cover plate is provided which may be fitted to cover the holes if preferred. The efficiency is not affected.

"I recently purchased a Burley Hollywell woodburner. It is absolutely fantastic, cannot praise it enough. Thank you."

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



The Hollywell Model 9105
 Rated – **ecoexcel**

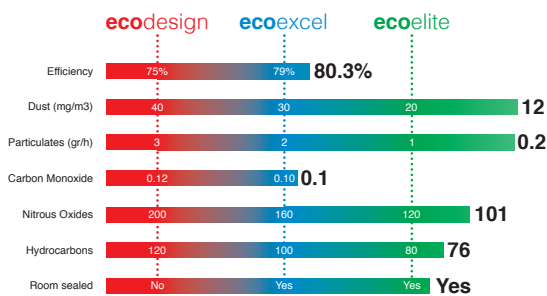


"We bought our Burley Hollywell last week and were lucky enough to get it installed for Christmas and what a transformation it has made. We have a three storey terraced house and since starting it up the central heating has been off. The amount of heat it pumps out is truly astonishing"

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



The Brampton Model 9108
Rated – **ecoexcel**



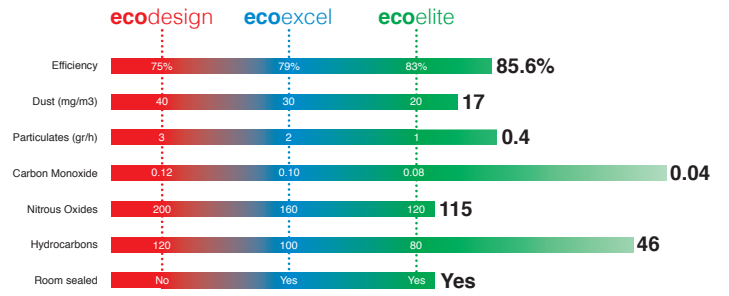
Extended base

An extended base is available for all models. This is the perfect accompaniment for stand alone installations where height needs to be emphasised. This item is a separate component and fits to the standard height stove.



Brampton shown with cover plate and optional extended base

The Brampton Model 9108-C
with catalytic converters
Rated – **ecolite**



8kW nominal output,
11.7kW maximum.

Model	Page	Height*	Width	Depth	KW rating	Efficiency	Weight	Defra approved	Max log length	Extended base	Straight room seal kit *	Angled room seal kit *	Catalytic converter	Ecodesign Approved	Ecoexcel Approved	Ecolite Approved
Debdale 9104-C	18	560	422	340	4	84.9%	57kg	✓	280	183	✓	✓	✓	✓	✓	✗
Hollywell 9105	21	680	470	405	5	82.9%	95kg	✓	310	183	✓	✓	✗	✓	✓	✗
Hollywell 9105-C	20	680	470	405	5	90.4%	95kg	✓	310	183	✓	✓	✓	✓	✓	✓
Brampton 9108	22	680	598	405	8	80.3%	105kg	✓	430	183	✓	✓	✗	✓	✓	✗
Brampton 9108-C	23	680	598	405	8	85.6%	105kg	✓	430	183	✓	✓	✓	✓	✓	✓
Wakerley 9112	24	780	750	405	12	84.1%	130kg	✗	580	183	✓	✓	✗	✓	✓	✓
Launde 9304-C	12	560	398	340	4	84.9%	57kg	✓	280	114	✓	✓	✓	✓	✓	✗
Bradgate 9305	11	680	440	391	5	82.9%	95kg	✓	310	114	✓	✓	✗	✓	✓	✗
Bradgate 9305-C	10	680	440	391	5	90.4%	95kg	✓	310	114	✓	✓	✓	✓	✓	✓
Carlby 9307-C	8	856	450	425	7	84.7%	105kg	✓	400	114	✓	✓	✓	✓	✓	✓
Swithland 9308	14	680	568	400	8	80.3%	105kg	✓	430	114	✓	✓	✗	✓	✓	✗
Swithland 9308-C	15	680	568	400	8	85.6%	105kg	✓	430	114	✓	✓	✓	✓	✓	✓
Bosworth 9312	9	780	720	396	12	84.1%	130kg	✗	580	114	✓	✓	✗	✓	✓	✓
Thorncombe 9404-C	6	555	410	350	4	84.9%	60kg	✓	280	✗	✓	✓	✓	✓	✓	✗
Hardwick 9405-C	3	680	450	420	5	90.4%	105kg	✓	310	✗	✓	✓	✓	✓	✓	✓
Ashdown 9408-C	1	680	580	420	8	85.6%	115kg	✓	430	✗	✓	✓	✓	✓	✓	✓
Crownley 9412	4	780	720	420	12	84.1%	145kg	✗	580	✗	✓	✓	✗	✓	✓	✓

Because our policy is one of constant development, details may vary from those given in this brochure without notice.

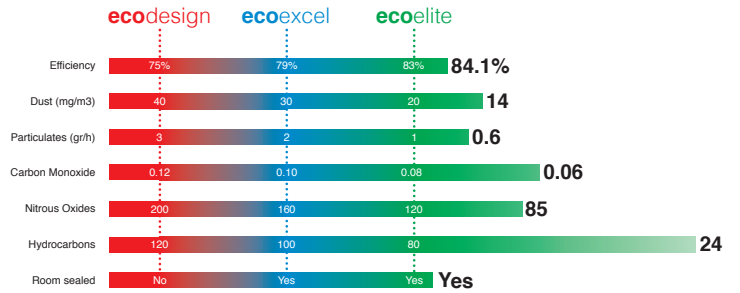
All stoves must be installed by a HETAS approved fitter in accordance with the manufacturer's installation instructions.

defra
approved

Warranty

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

*Height excludes flue collar (45mm).
*Optional room seal available. All measurements are in millimeters.



The Wakerley Model 9112

Rated – **ecoelite**



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

15 reasons to buy a Burley Stove

- The World's most efficient stoves
- The World's cleanest burning stoves
- Air injection burns most of the ash so less cleaning and no carrying buckets through the house when you want a fire
- Unique heat exchanger puts more warmth into your house, not up the chimney
- Unique 4 stage combustion burns most of the soot to help prevent chimney fires
- Accurate and easy to use single lever control
- Patented air injection system creates mesmerising *Fireball* flame picture
- Can be room sealed to radiate warmth through your entire home and stop draughts
- The only manufacturer who can guarantee more heat for less wood than your current stove
- Double glazed ceramic glass for cleaner combustion
- Free 'thank you' kit including moisture meter
- Made using mostly our own solar electricity
- Needs less wood so smaller fuel bills
- Plate steel construction for greater strength and conduction of heat
- Manufactured with pride entirely in the UK

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email: sales@burley.co.uk
www.burley.co.uk

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Rutland LE15 6RB
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to go to the video.