Installation and usage instructions for Lotus Stone and heat storage ovens

Oven families Beto, M, Maestro, QM40, Visto

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Content

Introduction

Dear Lotus customer. Congratulations on your new stove. We are pleased that you have chosen a quality product from Lotus.
Lotus has a long tradition and has been developing and manufacturing stoves since 1979. We place the highest demands on our products and our stoves are characterised by the latest combustion technology, high quality materials and manufacturing and an attractive design. The stoves are the result of good traditions combined with innovative thinking and have for years delighted their owners with faithful service.

We hope and believe it will give you many warm moments. But before you can really enjoy your investment and to ensure that you enjoy your stove for many years to come, you should read this guide carefully. It contains important instructions and many useful tips. You'll also find some concrete advice on how to get the most out of your stove - both now and in the years to come. That's why it's always a good idea to save it like any other instruction manual.

The stove is designed for 'intermittent combustion'. This means that each firing is burned down to embers before refuelling, which is achieved by following the instructions below under 'Using the stove'.

So congratulations once again on your new Lotus stove. It's sure to be a cosy start to a whole new home life.

1 Installing your stove

Before your new stove is ready to spread warmth and cosiness, you should read these pages carefully. Here we go through the requirements for assembly and installation. We also refer to the special assembly and installation instructions for the stove, which provides detailed instructions on how to assemble the entire stove in its individual parts.

Lotus recommends that the stove is installed by an authorised Lotus dealer or by an installer recommended by an authorised Lotus dealer.

Please also note that any air grilles must always be positioned so that they cannot be blocked.

The stove must be connected in accordance with applicable national and European standards and local regulations. To ensure this, you should contact your chimney sweep before installation. The chimney sweep or local authorities will also be able to inform you of the applicable local regulations and give you the necessary authorisation to use your stove once it is properly installed. Remember - the stove must not be used before the installation has been notified, registered and authorised by the local authority/ chimney sweep. Outside the EU, different rules apply in some cases.

Building regulations and fire regulations must be complied with. Lotus stoves are approved to EN13240 and for a selection of heat storage stoves also to

EN15250. For thermally insulated combustible walls, the installation standard DIN 18896 must be observed. If necessary, ask your chimney sweep for advice in advance.

In addition, please note that all applicable local regulations, including those referring to national and European standards, must be observed when installing the stove.

You must also be warned against any unauthorised modification of the stove.

1.1 Connection

Once the stove is installed and ready for connection, it must be connected to the house's existing chimney using a connector. The connector should be as short as possible. For a rear outlet - straight horizontal or slightly ascending. The connections must be tight. For ecoline models, a part of the connection pipe is supplied. The stove must be fitted with this or equivalent. Lotus stoves can be connected either from above or from the rear.
Lotus stoves are suitable for use on a flue gas manifold and must be connected to chimneys with multiple stoves.

1.2 Floor loading

Please note that the maximum permitted load on the floor must not be exceeded by the weight of the stove. Using a non-combustible floor plate distributes the weight of your stove over a larger area.

1.3 Krav til opstilling

Consult a qualified specialist or your chimney sweep before installation. Observe the safety distances specified for the specific stove. These can be found in the technical data section and must also be observed for a stove installed on a turntable. Be aware that when the door to the firebox is open, sparks can fly further out than the floor plate.

The floor plate must always be large enough to extend at least 50 cm*) in front of the firebox opening or oven door fig.1. The floor plate must cover at least 30 cm**) from the side of the firebox opening.

Please note that the firebox opening on a swivelling stove fig. 2 can take up different positions. This means that the floor plate must cover at least 50 cm*) of the entire swivelling area.

fig. 1

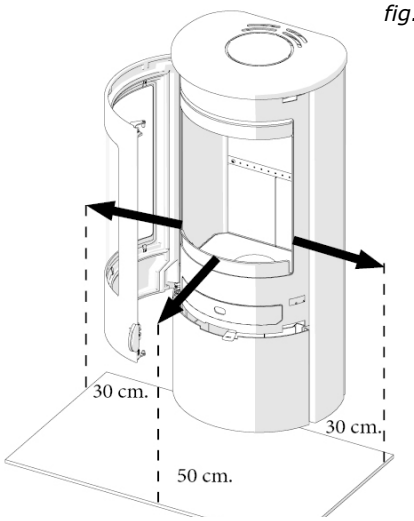
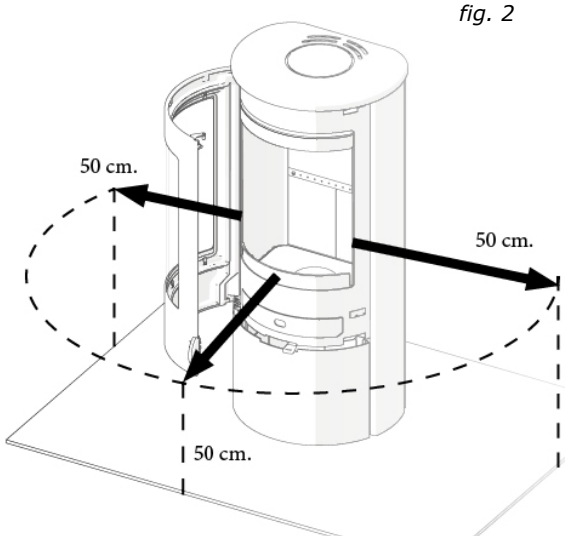


fig. 2



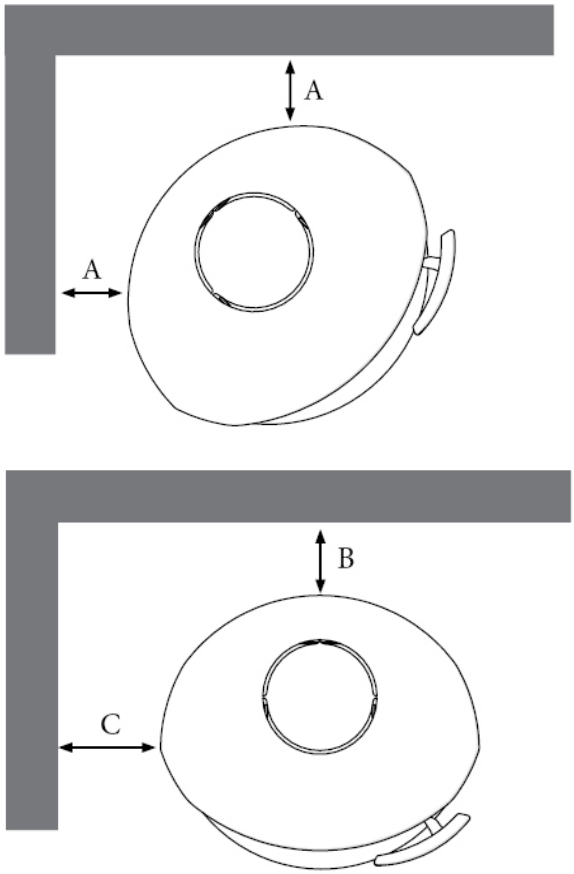
For non-flammable material where no safety distance needs to be maintained, we recommend 70-100 mm so that the stove can release and distribute heat while allowing easy cleaning behind the stove.

*) For Switzerland applies 40 cm and Denmark applies 30 cm
**) For Switzerland applies 10 cm and Denmark applies 15 cm

1.4 Safety distances to combustible materials

When placing your new stove in your home, special attention must be paid to distances to combustible materials, such as flammable walls, furniture, etc. for safety reasons. The statutory safety test has established a number of minimum distances that are important to observe. The distances can be found in the technical data sheet for the stove at the back of this manual.

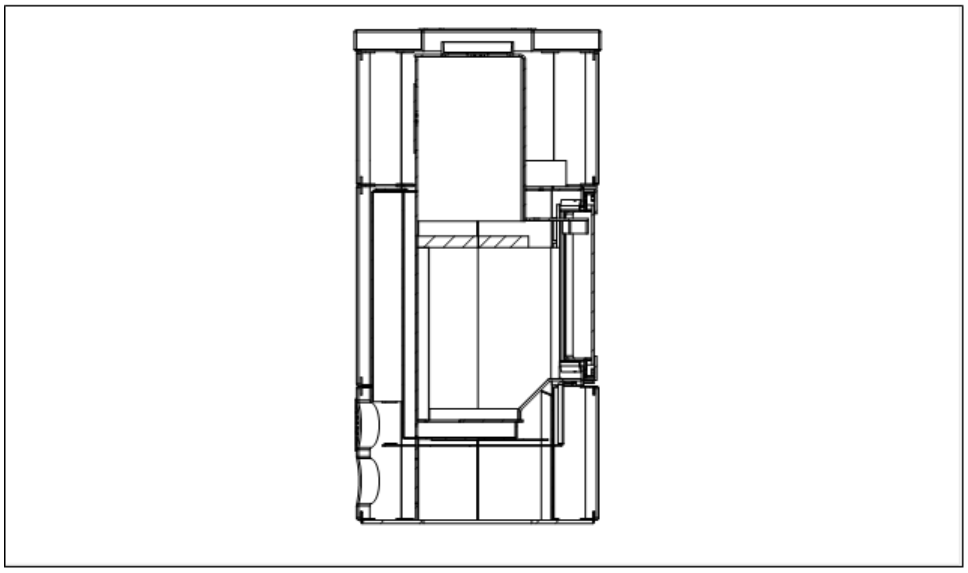
Safety distances for models without turntable and side glass.
There must be no flammable and/or heat sensitive components in front of or next to the stove in the direct radiation area of the glass pane. The distance to combustible and heat-sensitive components and furniture can be reduced by using a radiation shield. The effect is dependent on the individual installations and must be approved by the local authority.
The rear distance for Lotus ovens is up to 30 cm, depending on the type of oven. Also refer to the type plate and/or technical data sheet for your oven, which you will find in sections 10 and 11.
The safety distance from the side to combustible components and/or heat sensitive materials varies depending on the model of your stove. Please also refer to the rating plate and/or technical data sheet of your stove.



Minimum distances to flammable components and furniture are indicated on the rating plate and must be observed!

1.5 Installing smoke switch plates

Below is shown how to position the smoke turning plates (the shaded plate in the centre of the oven) when viewing a section of the oven from the side. The smoke turning plate is pushed all the way back towards the back of the oven.



The smoke baffle for M and Maestro is in two parts. Both parts are removed by lifting up one side and placing it at the front over the back. They can then be released on the other side and taken down into the firebox and out of the door. Similarly, they are put in place by sliding them up at an angle on one side and then on the other side, and then they are put in place in the centre and pushed backwards. For QM40 and Visto, the smoke deflector plate must be edged out in the same way, but it only consists of 1 part.

1.6 Installation for ecoline models with catalytic converter

Lotus ecoline models come with a specially designed catalyst module and a 50 cm loose connection pipe as part of the stove to be installed by the stove fitter.

In general

The catalysts in Lotus stoves are characterised by a long service life and very effective emission reduction under the right conditions. To ensure their efficiency and function during their lifetime, attention must be paid to correct installation, handling, use and cleaning.

Unpacking and handling

The catalysts are a ceramic structure coated with an active layer consisting of a mixture of metal oxides and precious metals. The catalysts should only be touched with gloves, otherwise the active layer may be damaged and the catalyst's efficiency reduced.
Important: Catalysts are fragile and must be handled very carefully.
Avoid bumping and dropping the catalytic converter. This can damage the catalytic converter.

Installing the catalytic converter
The catalyst is integrated in the upper part of the combustion chamber of your stove. It sits snugly and protected behind the smoke baffle plate in the perfect environment for the catalytic afterburning process. It is important to position the catalyst correctly to secure the gap for the required bypass.

Remove the catalytic converters from the transport packaging, remove the smoke baffle and carefully place the catalyser in the smoke box/flue (depending on model) as shown in the picture. Before installing the smoke baffle in the firebox, push the catalyst module all the way over to one side to create a gap that is a bypass for the flue gas. This is important and carefully adapted to the existing legal requirements.

Catalytic converter mounting above the ball catch behind the smoke deflector for M, Maestro, QM40 ecoline

Cleaning services
Depending on the operating time, fuel and user behaviour, the catalytic converter must be cleaned as coarse dust particles from the flue gases settle on the surface. These coarse dust particles must be regularly removed from the catalyst surface. As the user of the stove, you should regularly inspect the soiling of the catalyser and decide if cleaning is necessary. This is easy and can be done by any stove user.

Tools for cleaning.
To clean the catalytic converter, you can use a hand brush, paintbrush or the brush head of a vacuum cleaner.

Important:
A blocked catalyser no longer functions properly and should be cleaned or replaced before further use of the stove. It is therefore important that the catalyser is regularly checked by visual inspection.
For safety reasons, your ecoline stove is also equipped with a legally required bypass channel for the flue gases, so that the stove can still get rid of the flue gases even if the catalyst becomes blocked.
Catalytic converters that are blocked with tar can no longer be cleaned and must be replaced.
Before sweeping the chimney and flue, remove the catalyser. Otherwise there is a risk that the catalyser will be damaged and clogged.

Operating time.
When fired correctly and under the right combustion conditions, the catalyst is very durable and robust in relation to the environment above the combustion chamber. With regular inspection and cleaning, the catalyst will last for at least 3 firing seasons without needing to be replaced.

1.7 Safety instructions

The surfaces of the stove become hot. Parts of the stove, especially the external surfaces, door, control handles, glass pane and flue pipes become hot during operation! Appropriate care must be taken! Use suitable tools (1 glove is included in the scope of delivery).

1.8 Disposal of the packaging

Wood packaging: Send for recycling or disposal.
Stretch film/plastic film: Hand in for recycling or disposal.
Plastic bags: Hand in for recycling or disposal.

1.9 Disposal of oven parts

Steel/cast iron: Hand in for recycling or disposal.
Combustion chamber insulation: Hand in for disposal.
Packages: Send for disposal.
Glass: Dispose of as ceramic waste.
Catalyst:
At the end of its service life or if damaged, the catalytic converter must be replaced. However, the end-of-life catalytic converter does not have to be discarded and thrown away. The metals in the catalytic converter can be extensively reprocessed and reused. You can therefore return your used catalytic converter to your dealer at the same time as you buy a new one. Lotus will then take care of environmentally friendly and correct reprocessing.

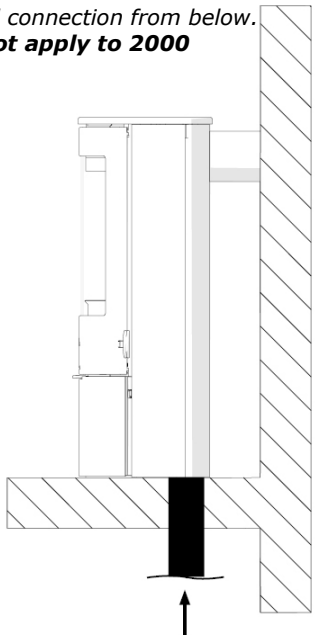
1.10 Tilførsel af forbrændingsluft

Before using the stove, it is important to ensure that there is sufficient combustion air available and that the room where the stove is installed is generally supplied with air or ventilated. In most rooms there will be enough air, especially if some of the doors between rooms in the house are open.

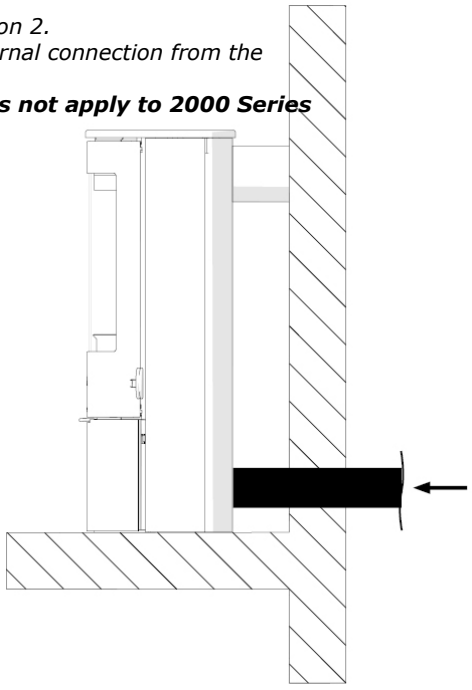
Ensure that there is sufficient combustion air. If necessary, talk to your chimney sweep in advance if you need to calculate the air requirement for the stove's installation site and tell you how much extra air is still needed, if any.

Wood-burning stoves are usually operated as room air-dependent stoves that get their combustion air from the installation room. In special cases, if windows and doors are closed tightly, the supply of combustion air can no longer be guaranteed. It may therefore be necessary to install an air valve in the outer wall of the room where the stove is installed. Insufficient combustion air can negatively affect the chimney draught, and other equipment that uses air installed together with stoves in the same room or room air system (e.g. hoods or fans) can also negatively affect the function of the stove. In the worst case, it can affect your well-being and safety. In such cases, sufficient consideration must be given to the necessary air equalisation.

Option 1.
External connection from below.
Does not apply to 2000 Series.



Option 2.
External connection from the rear
Does not apply to 2000 Series



Your new stove also has the option to connect to external combustion air, as illustrated in the figures. This is particularly practical in modern buildings that are very airtight. The external connection only requires a separate duct connection to the outdoor air or the exhaust duct of the ventilation system. See separate installation instructions.

1.11 Chimney and dimensioning

A good draught in your chimney is crucial to how well a stove will burn. A well-dimensioned chimney is not only crucial for the flue gases to be led away from

the stove, but also determines the supply of combustion air and thus how well your new stove will work overall. If the chimney draught is too low, ignition can be difficult in the stove and subsequently it can be difficult to achieve efficient and environmentally friendly combustion. Conversely, too high a chimney draft can lead to excessive oxygen supply and combustion with the risk of negatively impacting efficiency and emission values. If the architecture of your building or the surrounding landscape makes it difficult to dimension the chimney, a mechanical draft control may be a solution. Ask your chimney sweep for advice.

The chimney of a Lotus stove must comply with temperature class T400 and the effective height must typically be around 4.5 metres. Effective height is the distance from the top of the stove to the top of the chimney. The chimney must be able to provide a draught of at least 12 Pa for the best operation of the stove.

The cross-section of the chimney must be adapted to the stove. The clearance must be min. Ø150 mm (internal dimension) in steel chimneys and min. Ø175-180mm in brick chimneys or chimneys made of ceramic elements, as their inner surface is often rough and offers resistance.

Naturally, all joints and connection points must be sealed and there must be access to the cleaning hatches in the chimney. If your chimney has a smoke damper, it must have a forced opening of at least 20 cm2.

Your Lotus stove is approved for connection to a chimney with multiple flues that is used simultaneously for multiple stoves or other purposes. The specific local conditions must be assessed by the installer and/or chimney sweep.

The chimney must be dimensioned in accordance with EN 13 13384-1 and 2 or the country-specific building regulations.

2 Recommended wood for fuel

Various hardwoods such as beech, birch, ash or fruitwood are very suitable as fuel.

Firewood for Lotus stoves is cut into lengths of about 30 cm or less and split to a thickness of about 7-9 cm. A maximum moisture content of 15-20% is very important for good combustion (optimal value is 15-17%). If the wood is too moist, the stove's performance drops sharply because part of the energy is used to vaporise the water content. The water vapour causes the temperature in the combustion chamber to drop sharply, allowing condensation to form in the flue pipes. The condensation causes rust to form in the flue, and dripping water and peat soot can also be a consequence. If the wood is too dry, it burns too fast for the amount of air supplied and emits more particles than necessary.

It is not recommended to use firewood such as impregnated wood, chipboard, coloured leaflets or glossy paper that is not suitable for a Lotus stove. These develop acids or release heavy metals that can attack the metal surfaces in the

firebox and cause corrosion. In addition, treated types of wood and paper will not burn completely and cleanly but release substances into the flue gas and ash that are harmful to the environment.

2.1 Firewood for ecoline models

Lotus ecoline stoves are catalytic stoves and therefore it is even more important to follow the recommendations for fuel selection. Correct firing and the use of the correct recommended fuel is extremely important for the function of the stove and the most environmentally friendly use of the stove. Be aware that burning resinous woods such as spruce and pine entails a higher risk of catalyst blockage. In this case, it is important to check and inspect the catalyser more frequently than usual.

2.2 Wood for kindling

Use small pieces of split wood of an easily flammable wood type as kindling (approx. 2 x 2 cm with a length of approx. 25 cm). This creates a rapid heating in the stove and builds up the first layer of embers for the next firings. It is important that the kindling is completely dry.

3 Surface treatment at first ignition

After installation and chimney sweep approval, your new stove can be fired up. Lotus stoves are factory-coated with a very robust and heat-resistant special paint. This treatment causes the stove to emit a special odour when the paint hardens during the first firing, but this will disappear after a short period of operation once the stove has been well heated. Therefore, do not touch the surface during the heating phase to avoid damage and discolouration of the surface. Ensure good ventilation and airing of the room during the first use of the stove.

4 Operating the stove

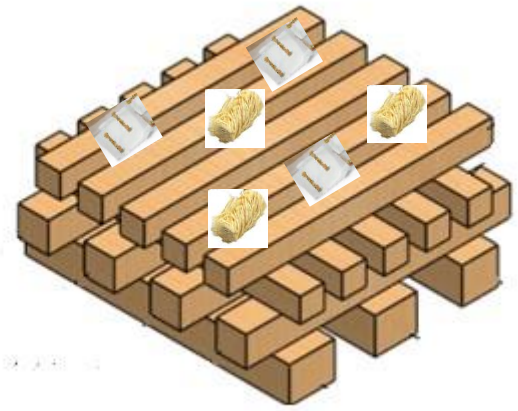
A Lotus stove is designed to be as easy as possible to fire correctly. There are only a few settings that need to be operated once the stove is lit in order to get the most out of the stove. It's only the correct air setting and the loading of firewood that you need to focus on to use the stove correctly. The combustion air is adjusted with one handle located centrally under the door. The stove then distributes the air volume to primary air, raw/secondary air and tertiary air. Next, it is the preparation of the fire that is important. When refuelling with new firewood, follow the firing schedule, which can be found in the technical data section. Light the fire with the correct number of logs arranged in the bottom of the firebox according to the schedule - parallel, across, crosswise, etc. Before use, it must be cut and split to the correct size and dried to the correct moisture content.
Below is a description of the method used in the stove's testing and approval by the accredited test institute. It is this method that leads to the best combustion at the given chimney draft of 12 Pa, and if you fire in this way, you will experience the same fantastic heat and efficiency as well as the most environmentally friendly use of the stove. The amount of wood and the setting of the air damper are important and differ between stove types. The correct values are listed in the firing schedule among the technical specifications at the back of this guide. However, the firing rate and damper setting can be varied

according to individual heating needs and the specific chimney draft for the installation in question.
The stove has been tested with beech and birch firewood with approximately 16-18% humidity.

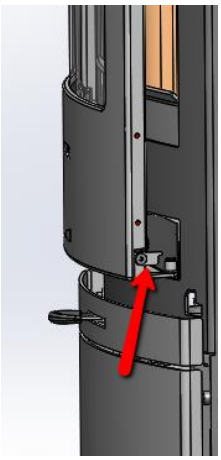
4.1 Firing up and loading wood

It is recommended that firing in a Lotus stove is done from above. Before firing, open the air valve under the door to maximum.

Place 2-3 small pieces of wood/blocks on the ash layer at the bottom of the firebox. Then place dry, finely split kindling on top of the lower pieces of wood in the centre of the firebox and build it up as a log layer as in the schematic example below. Finally, place a number of kindling blocks and wood wool on top of the top log layer.



The door should normally be closed, but if you need extra heat in the chimney, the door can be left ajar. There is a small door stop on the right side of the door that can be used during the heating phase if you need extra primary air for ignition. On the M stove, the door handle is used for this function. This ensures that the fire gets extra combustion air during the critical heating phase. Ignite the firelighters and, if necessary, leave the door ajar under supervision.



When the fire is burning and the glass pane is hot, you can close the door (approx. 5-10min).

When the fire has burned down to embers (no flames), prepare for the next firing. Take out the firewood according to the firing schedule and carefully open the oven door so that the ash does not swirl around. Spread the embers out in an even layer and place the next pieces of wood in the centre of the firebox arranged according to the diagram. Then close the oven door again.

Place the logs close together at the bottom, orientated as shown in the firing table. The pieces ignite best if they have one split side facing the door and one facing down into the embers. Close the door completely immediately.

Open the damper fully and wait about 4 minutes until the wood is well lit and adjust the air slide to the centre position. How far you can move the air slider to the left depends on the chimney draft, but the flames should now stabilise to a steady burning fire. However, there should always be a "lively" flame in the firebox.

Once the fire has burned down to embers (no flames), relight the fire as described above.

Slow combustion
A Lotus stone stove with power stones can also function as a slow-burning pellet stove. The stove's specification shows whether the stove has also been granted the additional approval as a pellet stove according to EN15250. Place a good amount of firewood (3.0-3.5kg divided into 3-5 pieces of firewood - not 1 or 2 large blocks) on a reasonable ember layer and when the fire is well established, reduce the air flow. Never reduce the air more than enough to maintain a clear and steady flame. Once this fire has burned down, the period until the next firing can be further extended by closing the damper completely so that no cold air is drawn through the stove.
If the air supply is regulated down too early or is generally too small, it results in reduced efficiency and increased emission values.

5 Ash

There should always be some ash in the firebox. The fire burns better if it is covered in a layer of ash. The ash causes the embers to accumulate faster and the embers last longer. Lotus recommends that ash is removed after the 10th firing process at the earliest. On Lotus stoves without an ash drawer, it is easiest to remove the ash with an ash extractor or a small shovel. The ash can be thrown in the rubbish bin when it has completely cooled down. The ash should always be cooled for at least 1-2 days before being thrown in the bin, otherwise there may still be embers that can ignite waste or rubbish bags.

6 Good advice

Over time, after using the stove a few times, you will get better and more experienced in firing and heating your home with your Lotus stove. We have compiled a number of tips and guidelines to help you maintain and enjoy your stove for many years to come.

6.1 Cleaning the oven

All Lotus ovens are factory-painted with a very robust and heat-resistant special paint in the colour 'charcoal' or 'grey'. The painted surface is maintained by brushing it with a soft, long-haired car brush or by careful use of the vacuum cleaner with brush.

A Lotus stove is designed so that when fired correctly, the surfaces in the firebox and the stove glass are self-cleaning during daily operation. However, the interior should be cleaned regularly if necessary. Ash, soot and any tar residue should be removed from the glass and combustion chamber. Smoke deflector plates should also be removed regularly to remove soot and dirt, which will often accumulate behind the plates. Check that there is a clear passage to the chimney. The bottom of the firebox should be emptied of ash

regularly, but the rest of the stove's surfaces can also be cleaned to keep the stove looking good throughout its lifetime. Steel and cast iron surfaces are best wiped and cleaned with a damp cloth, a mild detergent may be used, but harsh cleaning agents with solvents should be avoided. All Lotus ovens are coated with a robust heat-resistant paint, but solvents can damage the paint.

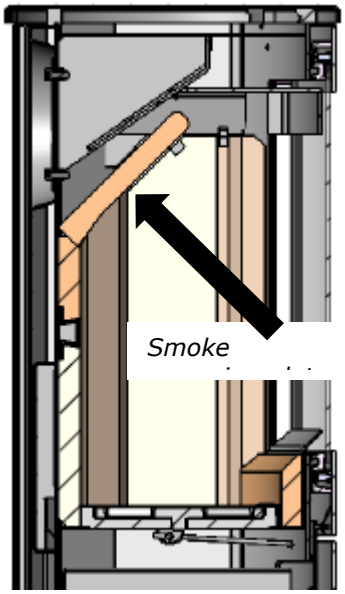
Cleaning the oven stone lining, soapstone and Indian night.
General cleaning is done with a hard-wrung cloth
with a little ordinary mild detergent or with a little window cleaning spray. Do not use acidic cleaners.
If necessary, the soapstone can be cleaned with quite
regular acetone/thinner.
If there are stains that the thinner cannot remove, you can lightly sand the stone with a foam scouring pad (the kind you use for pots). A small scratch can be carefully sanded down with very fine sandpaper.

6.2 Maintenance of the stove

Gaskets
Gaskets on doors and glass panes wear out. They may look nice at first glance, but they collapse over time, especially under thermal stress, and lose their ability to keep the stove sealed. Gaskets should be replaced as needed, as a tight seal is essential for good combustion and a clean glass pane.

Lotus recommends that you check the seals regularly, but at least once a year, and have them replaced by your dealer if necessary. (Seals are wearing parts and are not covered by warranty).

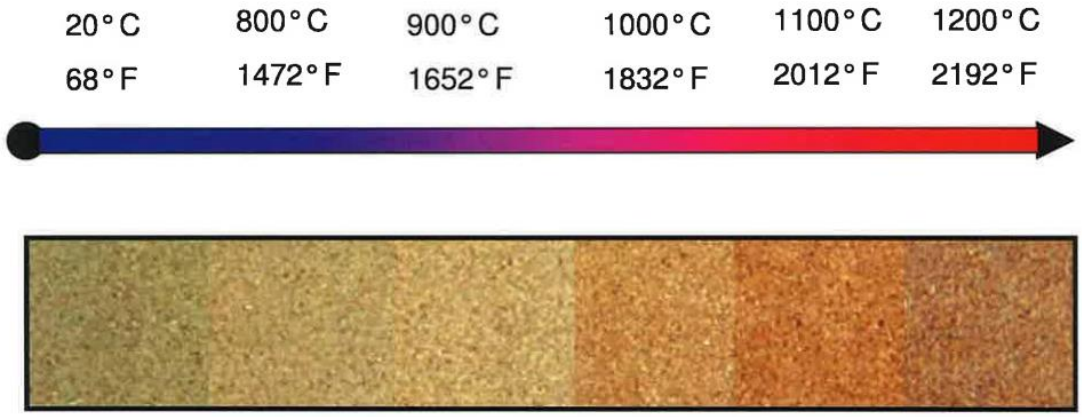
6.3 Combustion chamber lining



The sides of the combustion chamber are lined with ceramic and mineral plates to protect the steel structure of the stove, ensure a high and efficient combustion temperature and contribute to the optimal distribution of combustion air. The cladding can crack or become worn when overloaded. The plates are made of thermotte and vermiculite, which is an insulating material. The cladding is brittle and small cracks and flaking may occur over time when using the stove. These minor cracks in the firebox lining do not impair the function of the stove. In the event of heavy wear, the material should be replaced at the latest when the plates have a thickness of approx. 1.5 cm.
The vermiculite material is slightly porous and the thermotte is a brittle ceramic. To avoid damaging or breaking the plates, it is important that the firewood is not thrown, but placed in the centre of the firebox without touching the side cladding. Should you accidentally break a plate, it has no effect on the insulating effect of the plate. Spare parts kits for the combustion chamber lining are available from your Lotus dealer.

Over-fuelling with too much or the wrong fuel can damage the cladding, and the cladding can also crack if a log or other object is pushed hard into the cladding.

The mineral vermiculite insulation will change colour when heated strongly. The colour spectrum is shown below. If the vermiculite has been exposed to particularly heavy loads, it may change colour and become reddish. However, the material retains its insulating properties.



The combustion chamber lining is a wearing part and is not covered by warranty. It must be replaced if it is burnt through or has loose flakes. Contact your dealer for more information about original spare parts for your Lotus stove.

6.4 Glass panes

The glass panes of the oven are made of special ceramic glass. The glass pane is therefore highly heat-resistant.
When firing correctly in the stove, the special pane rinsing function automatically cleans the glass pane and the stove ensures that the glass remains clear and transparent so that the flames of the fire can be enjoyed. However, outside normal use, e.g. during firing or when the fire goes out, where the temperature is low and thus the supply of combustion air is low, soot deposits may form on the glass. When the stove is cold, the glass can be cleaned with a soft cloth.
During the special production process, micro-bubbles can form in the glass in special cases and do not constitute a quality defect.
(The glass pane is not covered by warranty).
Do not dispose of the glass pane with normal glass waste. (Dispose of as ceramic waste).

6.5 Repair paint

Repairing your stove with spray paint can cover stains or small scratches from objects or other damage. Larger damage should be sanded down with fine steel wool, vacuumed and then sprayed. The can should be shaken vigorously and spray painted with a distance of 15-20 cm. It is very important that the stove is out of operation and completely cold before using the spray, otherwise major damage can occur due to fire hazard. The original special paint is available as a repair spray from your local Lotus dealer.

6.6 Maintenance/spare parts

Maintenance/spare parts, especially moving parts, can become worn with frequent use. Only original spare parts may be used. At the end of a heating period, we recommend that you have the stove serviced by your Lotus dealer.

Treat all moving parts (hinges and locking mechanism) with a heat-resistant lubricant at least once a year. This will extend the lifespan of the moving parts and ensure they function smoothly.

7 Natural stone

Natural stone is a perfect heat accumulator. If a natural stone shows signs of minor scratches or fingerprints, these can be removed with a microfibre fleece cloth. Natural stone is characterised by varying degrees of veining on the surface, which makes it unique. With Indian Night, small cracks may appear on the surface; these are only on the surface and no longer go into the stone and are part of the stone's character.
The pattern of the veins cannot be affected. The stone cladding makes your stove unique and there will be deviations from other stoves - e.g. the display stove you have seen at your dealer. Therefore, there is no guarantee for the appearance of natural stone. Do not place cool containers on hot natural stone slabs. The large temperature difference leads to stresses that can cause cracks in the material.

8 Malfunction

If you are experiencing problems with your Lotus oven, the cause in some of the most common cases can be found below.

The stove is difficult to get to burn and may go out
There can be a number of reasons for this. The most typical are:
The damper is not open enough.
The firewood is too wet.
The draught in the chimney is too low, it may be clogged or leaking.
The ember layer was too small/annealed and did not provide enough heat to ignite the logs
Depending on the problem, it may be necessary to contact your Lotus dealer or a chimney sweep.

The stove is difficult to control - it burns too fast
If the stove is new, check that you have followed the operating instructions and set the air control correctly. If the stove is more than 1 year old or has been used a lot, it may be necessary to replace the seals. You can also check if the top smoke deflector plates are positioned correctly and pushed all the way back?

The oven draws poorly after installation
Check that the installation instructions have been followed and the smoke baffles are positioned correctly. There may also be problems with the chimney. Is the diameter and length as recommended? Is the chimney cross-section clear? Are the flue pipes and transitions clear? Is there a smoke damper in the chimney that needs adjusting? It may be necessary to contact the chimney sweep to solve the problem.

There is a smell of smoke and soot
This can be caused by wind falling into the chimney and can occur in certain weather conditions. The chimney does not have the prescribed effective height or there are taller trees or buildings in the immediate vicinity of the chimney.
Is there sufficient combustion air?

If windows and doors are tightly closed, it can lead to negative pressure in the room, which means that the air supply is not guaranteed, which greatly reduces the chimney's draught. If the chimney has previously been connected to another type of stove with a different type of fuel (oil, coke etc.), older soot residues in the chimney may continue to give off strong odours.

An extractor hood on the exhaust air in the same room or a room air connection can lead to a very high negative pressure in the room, causing flue gases to be sucked into the room. It is therefore mandatory to provide a safety device to ensure that there is always sufficient combustion air in the room.

Heating during the transition period
From an outside temperature of about 15 degrees and above, your stove may malfunction. The small temperature differences lead to a reduced draft in your chimney. This can result in poor ignition behaviour, unsatisfactory combustion, increased flue gas formation with sooting of the glass and smoke escaping when the stove door is opened.

Note in case of chimney fire
If incorrect or too moist fuel is used, a chimney fire may occur due to deposits in the chimney. Close all air vents in the chimney immediately and notify the fire department. Once the chimney has burned out, it should be checked by a professional for cracks and leaks.

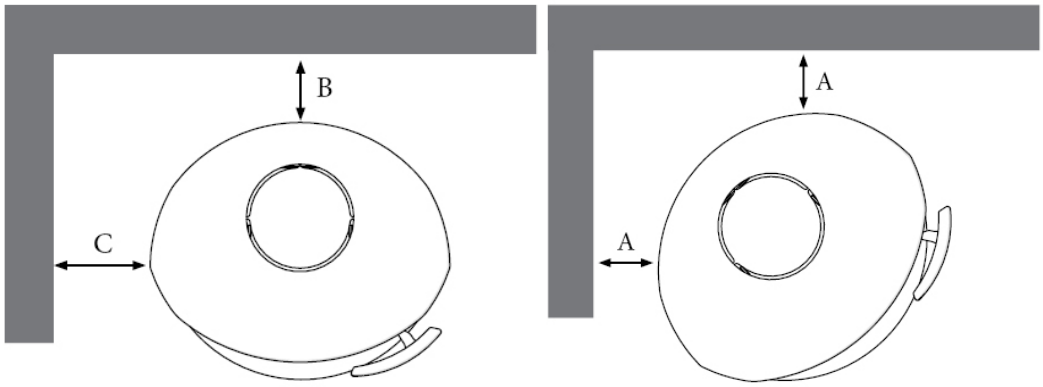
Special instructions
If the stove is overloaded significantly beyond the rated heat output or if fuels other than those specified are used, the manufacturer's warranty is void.

9 What is included with the stove?

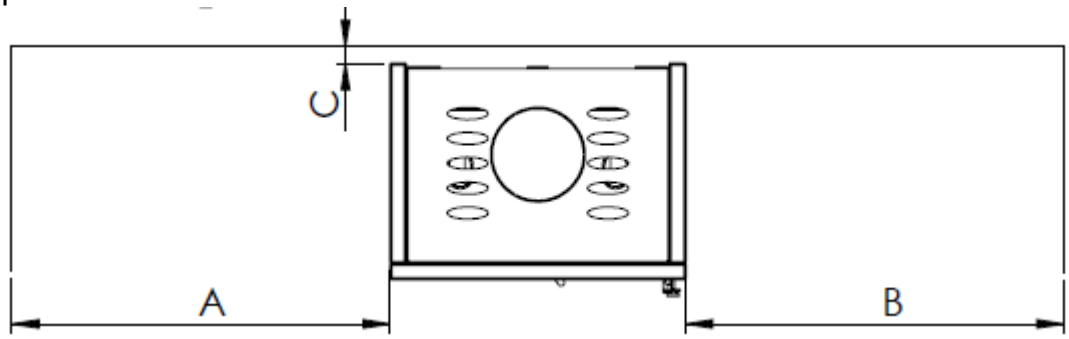
Depending on the selected stove model, different accessories and equipment are included to be used for set-up and installation. All stoves come with installation and operating instructions, a mounting kit for connecting the flue pipe and a glove.

10 Safety distances to combustible materials

The safety distances for each stove are defined during the safety testing for the stoves' type approval. It is important that these distances are observed to achieve a fire safe installation. The distances are only relevant for combustible materials and are not necessary for non-flammable building materials such as stone. In the technical data section of the stoves, the individual distances can be found. The different distances are illustrated below.



Special for Visto L R 3



11 Technical furnace data

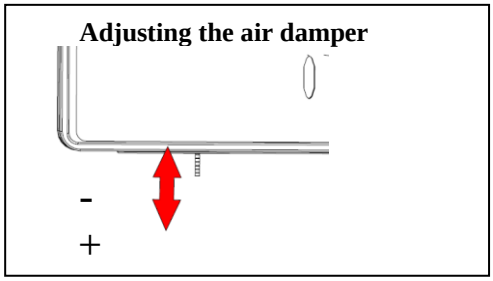
Beto 470

Type	Height mm	Width mm	Depth mm	Weight kg	A mm	B mm	C mm	Front mm
Beto 470	1341	830	510	301	350	350	350	1400
Beto 470+	1761	830	510	351	350	350	350	1400
Beto 470 M	1345	796	510	473	350	350	350	1400
Beto 470 M+	1705	796	510	553	350	350	350	1400

Chimney calculation form

Type	Smoke draft PA	Flue gas mass flow (g/s)	Flue gas Temperature	Efficiency %	Nominal power output kW
Beto 470, 470+, 470M, 470M+	12	5,3	320°	84	6

Amount of ignition and refuelling	
Kindling firewood	**Wood**
2.0kg	1.5-2.5kg



Data sheet

Supplier or brand name	***Lotus***	**Notes**
Model identity	***Beto 470 Series***	
Energy efficiency class	***A+***	
Direct heat output	***6.0 kW***	*rated power at EN test*
Energy Efficiency Index (EEI)	***112,8***	*Calculation with EEI calculator²*
Efficiency at nominal heat output	***84,0 %***	*Efficiency according to EN 13240*
Specific precautions to be taken when assembling, installing or maintaining the local space heater product.	*Selected examples:* *- Fire protection and safety distances, such as distances to combustible materials, must be observed!* *- An adequate supply of combustion air to the stove must be guaranteed.*	

Declaration of conformity

This manufacturer's declaration confirms the compliance with the requirements of Regulation (EU) 2015/1185 and the notification in the Official Journal 2017 / C 076/02 of the European Commission.

Manufacturer	Lotus Heating Systems A/S, Agertoften 6, 5550 Langeskov, Denmark +45 63237070
Product type	Room heater for solid fuel (wood logs only)
Model identifier	Lotus Beto 470
Documentation	www.lotusstoves.com
Requests	EN 13 229: 2001/A2:2004/AC:2007

EU Union legislation:

	Reference	Date	Title
Top level directives and regulations			
	DIR 2009/125/EC	21/10/2009	Energy Related Products Directive (ecodesign)
	REG (EU) 305/2011	9/3/2011	Construction Products Regulation (CPR)
	REG (EU) 2017/1369	4/7/2017	Energy Labelling Regulation
Implementation measures incl regulations and delegated acts			
	(EU) 2015/1186 (EL)	24/4/2015	Energy labelling delegated act on Room heaters
	(EU) 2015/1185 (ED)	24/4/2015	Ecodesign regulation on Room heaters
	2017/C 076/02	10/3/2017	COM Transitional methods OJ EU C76 Vol 60
Harmonised standards, other standards and technical specifications			
	EN 13240:2001	7/4/2001	Room heaters fired by solid fuel
	EN 13240/A2:2004	28/10/2004	Harmonisation of EN13240 by Annex ZA
	prEN 16510-1 (2013 ed)	January 2013	Emission measurement methods prior to 2018
	CEN/TS 15883	8/9/2009	Emission measurement from 2009
	EN 16510-1:2018	31/7/2018	Emission measurement methods 2018 onwards

Limit values:

This manufacturer declares the present room heater is in compliance with the limit values of the EU regulations.

η_s [%] Seasonal Heating efficiency	CO [mg/m^3] (13% O)$_2$	PM [mg/m^3] (13% O)$_2$	NOx [mg/m^3] (13% O)$_2$	C_{OGC} [mg/m^3] (13% O)$_2$
≥65%	≤1500	≤40	≤200	≤120

Date: 29/01-2024

Lars U. Borch
Lotus Heating Systems A/S

Beto 470W

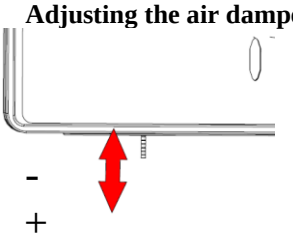
Type	Height mm	Width mm	Depth mm	Weight kg	A mm	B mm	C mm	Front mm
Beto 470W	1341	1050	510	373	500	500	500	1400
Beto 470W+	1761	1050	510	433	500	500	500	1400
Beto 470W M	1345	1009	510	638	500	500	500	1400
Beto 470W M+	1705	1009	510	726	500	500	500	1400

Chimney calculation form

Type	Smoke draft PA	Flue gas mass flow (g/s)	Flue gas Temperature	Efficiency %	Nominal power output kW
Beto 470W, 470W+, 470W M, 470W M+	12	6,8	315°	80,5	7

Amount of ignition and refuelling	
Kindling firewood	**Wood**
2.0kg	1.5-2.5kg

Adjusting the air damper



Data sheet

Supplier or brand name	*Lotus*	Notes
Model identity	***Beto 470W Series***	
Energy efficiency class	***A+***	
Direct heat output	***7.0 kW***	*rated power at EN test*
Energy Efficiency Index (EEI)	***107,7***	*Calculation with EEI calculator²*
Efficiency at nominal heat output	***80,5 %***	*Efficiency according to EN 13240*
Specific precautions to be taken when assembling, installing or maintaining the local space heater product.	*Selected examples:* *- Fire protection and safety distances, such as distances to combustible materials, must be observed!* *- An adequate supply of combustion air to the stove must be guaranteed.*	

Declaration of conformity

This manufacturer's declaration confirms the compliance with the requirements of Regulation (EU) 2015/1185 and the notification in the Official Journal 2017 / C 076/02 of the European Commission.

Manufacturer	Lotus Heating Systems A/S, Agertoften 6, 5550 Langeskov, Denmark +45 63237070
Product type	Room heater for solid fuel (wood logs only)
Model identifier	Lotus Style 470W
Documentation	www.lotusstoves.com
Requests	EN 13240 2001/A2 2004/AC 2007

EU Union legislation:

	Reference	Date	Title
Top level directives and regulations			
	DIR 2009/125/EC	21/10/2009	Energy Related Products Directive (ecodesign)
	REG (EU) 305/2011	9/3/2011	Construction Products Regulation (CPR)
	REG (EU) 2017/1369	4/7/2017	Energy Labelling Regulation
Implementation measures incl regulations and delegated acts			
	(EU) 2015/1186 (EL)	24/4/2015	Energy labelling delegated act on Room heaters
	(EU) 2015/1185 (ED)	24/4/2015	Ecodesign regulation on Room heaters
	2017/C 076/02	10/3/2017	COM Transitional methods OJ EU C76 Vol 60
Harmonised standards, other standards and technical specifications			
	EN 13240:2001	7/4/2001	Room heaters fired by solid fuel
	EN 13240/A2:2004	28/10/2004	Harmonisation of EN13240 by Annex ZA
	prEN 16510-1 (2013 ed)	January 2013	Emission measurement methods prior to 2018
	CEN/TS 15883	8/9/2009	Emission measurement from 2009
	EN 16510-1:2018	31/7/2018	Emission measurement methods 2018 onwards

Limit values:

This manufacturer declares the present room heater is in compliance with the limit values of the EU regulations.

η_s [%] Seasonal Heating efficiency	CO [mg/m^3] (13% O)$_2$	PM [mg/m^3] (13% O)$_2$	NOx [mg/m^3] (13% O)$_2$	C_{OGC} [mg/m^3] (13% O)$_2$
≥65%	≤1500	≤40	≤200	≤120

Date: 29/1-2024

Lars U. Borch,
Lotus Heating Systems A/S

Beto 700

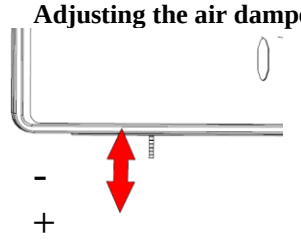
Type	Height mm	Width mm	Depth mm	Weight kg	A mm	B mm	C mm	Front mm
Beto 700	1600	620	510	279	400	300	400	1400
Beto 700+	2039	620	510	319	400	300	400	1400
Beto 700 M	1600	556	510	495	400	300	400	1400
Beto 700 M+	1940	556	510	562	400	300	400	1400

Chimney calculation form

Type	Smoke draft PA	Flue gas mass flow (g/s)	Flue gas Temperature	Efficiency %	Nominal power output kW
Beto 700, 700+, 700 M, 700 M+	12	5,7	308°	82,9	6

Amount of ignition and refuelling	
Kindling firewood	**Wood**
2.0kg	1.5-2.5kg

Adjusting the air damper



Data sheet

Supplier or brand name	*Lotus*	Notes
Model identity	***Beto 700 Series***	
Energy efficiency class	***A+***	
Direct heat output	***6.0 kW***	*rated power at EN test*
Energy Efficiency Index (EEI)	***111,2***	*Calculation with EEI calculator²*
Efficiency at nominal heat output	***82,9 %***	*Efficiency according to EN 13240*
Specific precautions to be taken when assembling, installing or maintaining the local space heater product.	*Selected examples:* *- Fire protection and safety distances, such as distances to combustible materials, must be observed!* *- An adequate supply of combustion air to the stove must be guaranteed.*	

Declaration of conformity

This manufacturer's declaration confirms the compliance with the requirements of Regulation (EU) 2015/1185 and the notification in the Official Journal 2017 / C 076/02 of the European Commission.

Manufacturer	Lotus Heating Systems A/S, Agertoften 6, 5550 Langeskov, Denmark +45 63237070
Product type	Room heater for solid fuel (wood logs only)
Model identifier	Lotus Beto 700
Documentation	www.lotusstoves.com
Requests	EN 13 229: 2001/A2:2004/AC:2007

EU Union legislation:

	Reference	Date	Title
Top level directives and regulations			
	DIR 2009/125/EC	21/10/2009	Energy Related Products Directive (ecodesign)
	REG (EU) 305/2011	9/3/2011	Construction Products Regulation (CPR)
	REG (EU) 2017/1369	4/7/2017	Energy Labelling Regulation
Implementation measures incl regulations and delegated acts			
	(EU) 2015/1186 (EL)	24/4/2015	Energy labelling delegated act on Room heaters
	(EU) 2015/1185 (ED)	24/4/2015	Ecodesign regulation on Room heaters
	2017/C 076/02	10/3/2017	COM Transitional methods OJ EU C76 Vol 60
Harmonised standards, other standards and technical specifications			
	EN 13240:2001	7/4/2001	Room heaters fired by solid fuel
	EN 13240/A2:2004	28/10/2004	Harmonisation of EN13240 by Annex ZA
	prEN 16510-1 (2013 ed)	January 2013	Emission measurement methods prior to 2018
	CEN/TS 15883	8/9/2009	Emission measurement from 2009
	EN 16510-1:2018	31/7/2018	Emission measurement methods 2018 onwards

Limit values:

This manufacturer declares the present room heater is in compliance with the limit values of the EU regulations.

$\eta_{s\ [\%]}$ Seasonal Heating efficiency	CO [mg/m$^{3]}$ (13% O)$_2$	PM [mg/m$^{3]}$ (13% O)$_2$	NOx [mg/m$^{3]}$ (13% O)$_2$	C_{OGC} [mg/m^{3}] (13% O)$_2$
≥65%	≤1500	≤40	≤200	≤120

Date: 29/01-2024

Lars U. Borch
Lotus Heating Systems A/S

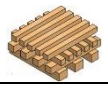
Maestro 1-2-3

Technical data					Safety distances to flammables				
Type	**Height mm**	**Width mm**	**Depth mm**	**Weight kg**	**A mm**	**B mm**	**C mm**	**Front mm**	**Loft mm**
Maestro 1	1233	560	560	420	100	100	100	800	-
Maestro 2	1543	560	560	530	100	100	100	800	-
Maestro 3	1853	560	560	557	220	100	220	800	540
Maestro 152	1533	560	560	510	220	100	220	900	-

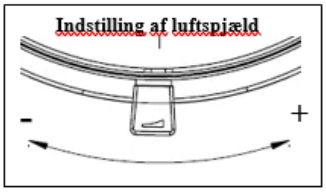
Chimney calculation form

Type	**Smoke draft PA**	**Flue gas mass flow (g/s)**	**Flue gas Temperature**	**Efficiency %**	**Nominal power output kW**
Maestro 1, 2	12	5,6	270	82	6
Maestro 3	12	5,5	240	86,6	6,7
Maestro 3 WF	12	5,4	189	89,4	6,7
Maestro 152	12	5,16	270°	83,5	6

optimal firing schedule

Maestro	Ignition	Pre-firing	Pre-firing	Firing	Firing	Firing
Firewood in kg.	2,5	2,5	2,0	1,4	1,4	And so on.
Damper setting	max open (55mm)	40 mm after 3 min max	25 mm after 3 min max	25 mm after 1.5 min max	23 mm from start	And so on.
Tree position and length	20 cm 	25 cm 	25 cm 	22 cm 	22 cm 	

Other data



Supplier or brand name	***Lotus***	**Notes**
Model identity	Maestro Series	
Energy efficiency class	A+	
Direct heat output	6.0 kW	*rated power at EN test*
Energy Efficiency Index (EEI)	112,1 116,6	*Maestro 1, Maestro 2* *Maestro 3* *Calculation with EEI calculator²*
Efficiency at nominal heat output	82% 86,6 %	*Maestro 1, Maestro 2* *Maestro 3* *Efficiency according to EN 13240*
Specific precautions to be taken when assembling, installing or maintaining the local space heater product.	**Selected examples:** *- Fire protection and safety distances, such as distances to combustible materials, must be observed!* *- An adequate supply of combustion air to the stove must be guaranteed.*	

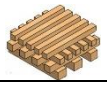
Maestro 1-2-3 ecoline

Technical data					Safety distances to flammables				
Type	**Height mm**	**Width mm**	**Depth mm**	**Weight kg**	**A mm**	**B mm**	**C mm**	**Front mm**	**Loft mm**
Maestro 1 ecoline	1233	560	560	420	180	100	350	1200	-
Maestro 2 ecoline	1543	560	560	530	180	100	300	1300	-
Maestro 3 ecoline	1853	560	560	557	150	100	300	1300	540
Maestro 3 BF ecoline	1853	560	560	557	150	100	300	1200	540

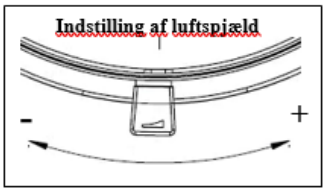
Chimney calculation form

Type	**Smoke draft PA**	**Flue gas mass flow (g/s)**	**Flue gas Temperature**	**Efficiency %**	**Nominal power output kW**
Maestro 1 ecoline	12	5,2	219°	88	6
Maestro 2 ecoline	12	5,3	228°	87,8	6
Maestro 3 ecoline (BF)	12	5,3	228°	87,8	6,7

optimal firing schedule

Maestro ecoline	Ignition	Pre-firing	Pre-firing	Firing	Firing	Firing
Firewood in kg.	2,5	2,5	2,0	1,4	1,4	And so on.
Damper setting	max open (55mm)	40 mm after 3 min max	25 mm after 3 min max	25 mm after 1.5 min max	23 mm from start	And so on.
Tree position and length	20 cm 	25 cm 	25 cm 	22 cm 	22 cm 	

Other data



Supplier or brand name	***Lotus***	**Notes**
Model identity	Maestro Series	
Energy efficiency class	A+	
Direct heat output	6.0 kW	*rated power at EN test*
Energy Efficiency Index (EEI)	118,6 118,3/120,6	*Maestro 1 ecoline* *Maestro 3 ecoline (EN13240 / BF)* *Calculation with EEI calculator²*
Efficiency at nominal heat output	88,5 % 87,8% / 89,4%	*Maestro 1 ecoline* *Maestro 2, 3 ecoline / Maestro 3 BF ecoline* *Efficiency according to EN 13240*
Specific precautions to be taken when assembling, installing or maintaining the local space heater product.	**Selected examples:** *- Fire protection and safety distances, such as distances to combustible materials, must be observed!* *- An adequate supply of combustion air to the stove must be guaranteed.*	

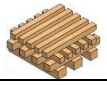
Maestro 2, Maestro 152, Maestro 3 ecoline EN 15250

Technical data					Safety distances to flammables			
Type	**Height mm**	**Width mm**	**Depth mm**	**Weight kg**	**A mm**	**B mm**	**C mm**	**Front mm**
Maestro 2	1543	560	560	530	220	100	220	900
Maestro 152	1533	560	560	510	220	100	220	900
Maestro 3 ecoline	1853	560	560	557	150	100	250	1100

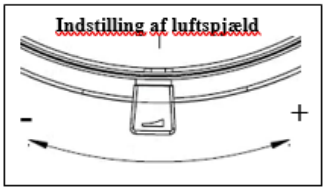
Chimney calculation form

Type	**Smoke draft PA**	**Flue gas mass flow (g/s)**	**Flue gas Temperature**	**Efficiency %**	**Nominal power output kW**
Maestro 2	12	7,6	260	81	2,2
Maestro 152	12	7,6	260	81	2,2
Maestro 3 ecoline	12	9,2	288°	79	2,6

optimal firing schedule

Maestro	Ignition	Pre-firing	Pre-firing	Firing	Firing	Firing
Firewood in kg.	2,25	2,25	2,25	2,5	2,5	And so on.
Damper setting	100% open (55mm)	40 mm after 1:30 min	26 mm after 1:30 min	23 mm after 1:30	Damper closed	And so on.
Tree position and length	20 cm 	30 cm 	30 cm 	30 cm 	30 cm 	And so on.

Other data



Supplier or brand name	***Lotus***	**Notes**
Model identity	Maestro 2, 152, 3 ecoline	
Energy efficiency class	A	
Direct heat output	2.2 kW 2.6 kW	*Maestro 2, 152* *Maestro 3 ecoline* *rated power in EN 15250 testing*
Energy Efficiency Index (EEI)	109 105,6	*Maestro 2, 152* *Maestro 3 ecoline* *Calculation with EEI calculator²*
Efficiency at nominal heat output	81% 79 %	*Maestro 2, 152* *Maestro 3 ecoline* *Efficiency according to EN 15250*
Specific precautions to be taken when assembling, installing or maintaining the local space heater product.	**Selected examples:** *- Fire protection and safety distances, such as distances to combustible materials, must be observed!* *- An adequate supply of combustion air to the stove must be guaranteed.*	

Declaration of conformity

This manufacturer's declaration confirms the compliance with the requirements of Regulation (EU) 2015/1185 and the notification in the Official Journal 2017 / C 076/02 of the European Commission.

Manufacturer	Lotus Heating Systems A/S, Agertoften 6, 5550 Langeskov, Denmark +45 63237070
Product type	Room heater for solid fuel (wood logs only)
Model identifier	Lotus Maestro 1, 2, 3, 152
Documentation	www.lotusstoves.com
Requests	EN 13240 2001/A2 2004/AC 2007

EU Union legislation:

	Reference	Date	Title
Top level directives and regulations			
	DIR 2009/125/EC	21/10/2009	Energy Related Products Directive (ecodesign)
	REG (EU) 305/2011	9/3/2011	Construction Products Regulation (CPR)
	REG (EU) 2017/1369	4/7/2017	Energy Labelling Regulation
Implementation measures incl regulations and delegated acts			
	(EU) 2015/1186 (EL)	24/4/2015	Energy labelling delegated act on Room heaters
	(EU) 2015/1185 (ED)	24/4/2015	Ecodesign regulation on Room heaters
	2017/C 076/02	10/3/2017	COM Transitional methods OJ EU C76 Vol 60
Harmonised standards, other standards and technical specifications			
	EN 13240:2001	7/4/2001	Room heaters fired by solid fuel
	EN 13240/A2:2004	28/10/2004	Harmonisation of EN13240 by Annex ZA
	prEN 16510-1 (2013 ed)	January 2013	Emission measurement methods prior to 2018
	CEN/TS 15883	8/9/2009	Emission measurement from 2009
	EN 16510-1:2018	31/7/2018	Emission measurement methods 2018 onwards

Limit values:

This manufacturer declares the present room heater is in compliance with the limit values of the EU regulations.

η_s [%] Seasonal Heating efficiency	CO [mg/m^3] (13% O)$_2$	PM [mg/m^3] (13% O)$_2$	NOx [mg/m^3] (13% O)$_2$	C_{OGC} [mg/m^3] (13% O)$_2$
≥65%	≤1500	≤40	≤200	≤120

Date: 31/1-2024

Lars U. Borch, **Lotus Heating Systems A/S**

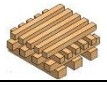
M-Series

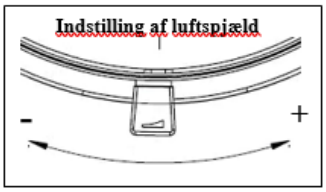
Technical data					Safety distances to flammables			
Type	**Height mm**	**Width mm**	**Depth mm**	**Weight kg**	**A mm**	**B mm**	**C mm**	**Front mm**
M1	1140	570	570	435	100	100	100	850
M2	1450	570	570	545	100	100	100	850
M3	1760	570	570	655	100	100	100	850
M Basic	1298	560	560	431	100	100	100	800

Chimney calculation form

Type	**Smoke draft PA**	**Flue gas mass flow (g/s)**	**Flue gas Temperature**	**Efficiency %**	**Nominal power output kW**
M1, M2, M3, M Basic	12	6,2	300°	81,9	6

optimal firing schedule

M1 ecoline	Ignition	Pre-firing	Pre-firing	Firing	Firing	Firing
Firewood in kg.	3,2	2,47	1,77	1,32	1,28	And so on.
Damper setting	100% open (55mm)	40 mm after 1:30 min	26 mm after 1:30 min	23 mm after 1:30	23 mm from start	And so on.
Tree position and length	20 cm 	25 cm 	25 cm 	22 cm 	22 cm 	



Other data

Supplier or brand name	***Lotus***	**Notes**
Model identity	***M Series M Basic***	
Energy efficiency class	***A+***	
Direct heat output	***6.0 kW***	*rated power at EN test*
Energy Efficiency Index (EEI)	***109,8***	*Calculation with EEI calculator²*
Efficiency at nominal heat output	***81,9 %***	*Efficiency when tested according to EN 13240*
Specific precautions to be taken when assembling, installing or maintaining the local space heater product.	**Selected examples:** *- Fire protection and safety distances, such as distances to combustible materials, must be observed!* *- An adequate supply of combustion air to the stove must be guaranteed.*	

M ecoline series

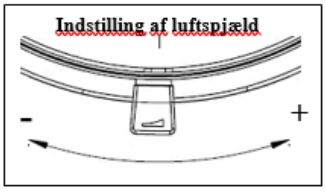
Technical data					Safety distances to flammables			
Type	**Height mm**	**Width mm**	**Depth mm**	**Weight kg**	**A mm**	**B mm**	**C mm**	**Front mm**
M1 ecoline	1140	570	570	435	150	125	450	1200
M2 ecoline	1450	570	570	545	150	125	450	1200
M3 ecoline	1760	570	570	655	150	125	450	1200

Chimney calculation form

Type	**Smoke draft PA**	**Flue gas mass flow (g/s)**	**Flue gas Temperature**	**Efficiency %**	**Nominal power output kW**
M1 ecoline, M2 ecoline, M3 ecoline	12	4,4	191°	86	5,6

optimal firing schedule

M1 ecoline	Ignition	Pre-firing	Pre-firing	Firing	Firing	Firing
Firewood in kg.	3,2	2,47	1,77	1,32	1,28	And so on.
Damper setting	100% open (55mm)	40 mm after 1:30 min	26 mm after 1:30 min	23 mm after 1:30	23 mm from start	And so on.
Tree position and length	20 cm 	25 cm 	25 cm 	22 cm 	22 cm 	



Other data

Supplier or brand name	***Lotus***	**Notes**
Model identity	***M ecoline Series***	
Energy efficiency class	***A+***	
Direct heat output	***5.6 kW***	*rated power at EN test*
Energy Efficiency Index (EEI)	***115,7***	*Calculation with EEI calculator²*
Efficiency at nominal heat output	***86 %***	*Efficiency when tested according to EN 13240*
Specific precautions to be taken when assembling, installing or maintaining the local space heater product.	**Selected examples:** *- Fire protection and safety distances, such as distances to combustible materials, must be observed!* *- An adequate supply of combustion air to the stove must be guaranteed.*	

Declaration of conformity

This manufacturer's declaration confirms the compliance with the requirements of Regulation (EU) 2015/1185 and the notification in the Official Journal 2017 / C 076/02 of the European Commission.

Manufacturer	Lotus Heating Systems A/S, Agertoften 6, 5550 Langeskov, Denmark +45 63237070
Product type	Room heater for solid fuel (wood logs only)
Model identifier	Lotus M1, M2, M3, M-Basic, M1 ecoline, M2 ecoline, M3 ecoline,
Documentation	www.lotusstoves.com
Requirements	EN 13240 2001/A2 2004/AC 2007

EU Union legislation:

	Reference	Date	Title
Top level directives and regulations			
	DIR 2009/125/EC	21/10/2009	Energy Related Products Directive (ecodesign)
	REG (EU) 305/2011	9/3/2011	Construction Products Regulation (CPR)
	REG (EU) 2017/1369	4/7/2017	Energy Labelling Regulation
Implementation measures incl regulations and delegated acts			
	(EU) 2015/1186 (EL)	24/4/2015	Energy labelling delegated act on Room heaters
	(EU) 2015/1185 (ED)	24/4/2015	Ecodesign regulation on Room heaters
	2017/C 076/02	10/3/2017	COM Transitional methods OJ EU C76 Vol 60
Harmonised standards, other standards and technical specifications			
	EN 13240:2001	7/4/2001	Room heaters fired by solid fuel
	EN 13240/A2:2004	28/10/2004	Harmonisation of EN13240 by Annex ZA
	prEN 16510-1 (2013 ed)	January 2013	Emission measurement methods prior to 2018
	CEN/TS 15883	8/9/2009	Emission measurement from 2009
	EN 16510-1:2018	31/7/2018	Emission measurement methods 2018 onwards

Limit values:

This manufacturer declares the present room heater is in compliance with the limit values of the EU regulations.

η_s [%] Seasonal Heating efficiency	CO [mg/m^3] (13% O)$_2$	PM [mg/m^3] (13% O)$_2$	NOx [mg/m^3] (13% O)$_2$	C_{OGC} [mg/m^3] (13% O)$_2$
≥65%	≤1500	≤40	≤200	≤120

Date: 31/1-2024

Lars U. Borch, **Lotus Heating Systems A/S**

QM 40

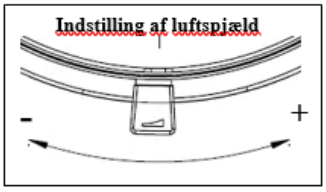
Technical data					Safety distances to flammables			
Type	**Height mm**	**Width mm**	**Depth mm**	**Weight kg**	**A mm**	**B mm**	**C mm**	**Front mm**
QM 40	1558	520	475	586	150	50	150	1200
QM 40 EN15250	1558	520	475	586	150	50	150	1200

Chimney calculation form

Type	**Smoke draft PA**	**Flue gas mass flow (g/s)**	**Flue gas Temperature**	**Efficiency %**	**Nominal power output kW**
QM 40	12	6,1 m	274°	80	5,7
QM 40 EN150250	12	7,7 m	316°	78	

optimal firing schedule (EN13240) For EN150250 please refer to Maestro.

QM40	Ignition	Pre-firing	Pre-firing	Firing	Firing	Firing
Firewood in kg.	2,5	2,5	1,8	1,2	1,2	And so on.
Damper setting	100% open (55mm)	40 mm after 1:30 min	26 mm after 1:30 min	23 mm after 1:30	23 mm from start	And so on.
Tree position and length	20 cm 	25 cm 	25 cm 	22 cm 	22 cm 	



Other data

Supplier or brand name	***Lotus***	**Notes**
Model identity	**QM 40 /EN15250**	
Energy efficiency class	**A+ / A**	
Direct heat output	**5.7kW/2.2kW**	*rated power at EN test*
Energy Efficiency Index (EEI)	**107/104**	*Calculation with EEI calculator²*
Efficiency at nominal heat output	**80 %/ 78%**	*Efficiency according to EN 13240*
Specific precautions to be taken when assembling, installing or maintaining the local space heater product.	*Selected examples:* *- Fire protection and safety distances, such as distances to combustible materials, must be observed!* *- An adequate supply of combustion air to the stove must be guaranteed.*	

Declaration of conformity

This manufacturer's declaration confirms the compliance with the requirements of Regulation (EU) 2015/1185 and the notification in the Official Journal 2017 / C 076/02 of the European Commission.

Manufacturer	Lotus Heating Systems A/S, Agertoften 6, 5550 Langeskov, Denmark +45 63237070
Product type	Room heater for solid fuel (wood logs only)
Model identifier	Lotus QM40
Documentation	www.lotusstoves.com
Requests	EN 13240 2001/A2 2004/AC 2007

EU Union legislation:

	Reference	Date	Title
Top level directives and regulations			
	DIR 2009/125/EC	21/10/2009	Energy Related Products Directive (ecodesign)
	REG (EU) 305/2011	9/3/2011	Construction Products Regulation (CPR)
	REG (EU) 2017/1369	4/7/2017	Energy Labelling Regulation
Implementation measures incl regulations and delegated acts			
	(EU) 2015/1186 (EL)	24/4/2015	Energy labelling delegated act on Room heaters
	(EU) 2015/1185 (ED)	24/4/2015	Ecodesign regulation on Room heaters
	2017/C 076/02	10/3/2017	COM Transitional methods OJ EU C76 Vol 60
Harmonised standards, other standards and technical specifications			
	EN 13240:2001	7/4/2001	Room heaters fired by solid fuel
	EN 13240/A2:2004	28/10/2004	Harmonisation of EN13240 by Annex ZA
	prEN 16510-1 (2013 ed)	January 2013	Emission measurement methods prior to 2018
	CEN/TS 15883	8/9/2009	Emission measurement from 2009
	EN 16510-1:2018	31/7/2018	Emission measurement methods 2018 onwards

Limit values:

This manufacturer declares the present room heater is in compliance with the limit values of the EU regulations.

η_s [%] Seasonal Heating efficiency	CO [mg/m^3] (13% O)$_2$	PM [mg/m^3] (13% O)$_2$	NOx [mg/m^3] (13% O)$_2$	C_{OGC} [mg/m^3] (13% O)$_2$
≥65%	≤1500	≤40	≤200	≤120

Date: 31/1-2024

Lars U. Borch, **Lotus Heating Systems A/S**

Visto Series

Technical data					Safety distances to flammables			
Type	Height mm	Width mm	Depth mm	Weight kg	A mm	B mm	C mm	Front mm
Visto L	1513	590	400	318	700	400	30	1000
Visto R	1513	590	400	318	400	700	30	1000
Visto 3	1513	548	400	281	700	700	30	1000

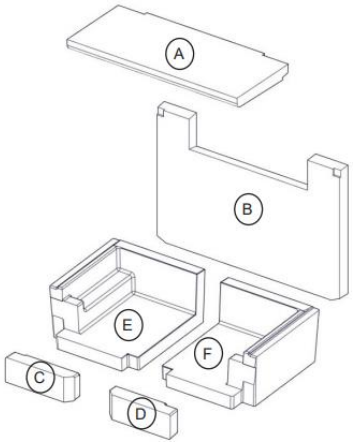
Chimney calculation form

Type	Smoke draft PA	Flue gas mass flow (g/s)	Flue gas Temperature	Efficiency %	Nominal power output kW
Visto L, Visto R, Visto 3	12	7,3	246°	81,9	5,4

fyringsskema

Amount of ignition and refueling	
Kindling firewood	Wood
2.1kg	1.5kg

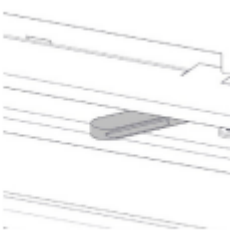
Visto thermal mitten set



Setting the air damper

FIG A

FIG B



A. Ignition damper
Pressed in = Closed
Pulled out = Open

B. Air damper
Left = Closed
Right = Open

Mounting the thermottee in the combustion chamber

A. Smoke deflector plate (bracket removable)
B. Back plate
C. Left bottom front
D. Right bottom front
E. Bottom left
F. Bottom right

Other data

Supplier or brand name	***Lotus***	**Notes**
Model identity	***Visto L R 3***	
Energy efficiency class	***A+***	
Direct heat output	***5.4 kW***	*rated power at EN test*
Energy Efficiency Index (EEI)	***110***	*Calculation with EEI calculator²*
Efficiency at nominal heat output	***82 %***	*Efficiency according to EN 13240*
Specific precautions to be taken when assembling, installing or maintaining the local space heater product.	*Selected examples:* *- Fire protection and safety distances, such as distances to combustible materials, must be observed!* *- An adequate supply of combustion air to the stove must be guaranteed.*	

Declaration of conformity

This manufacturer's declaration confirms the compliance with the requirements of Regulation (EU) 2015/1185 and the notification in the Official Journal 2017 / C 076/02 of the European Commission.

Manufacturer	Lotus Heating Systems A/S, Agertoften 6, 5550 Langeskov, Denmark +45 63237070
Product type	Room heater for solid fuel (wood logs only)
Model identifier	Lotus Visto L, R, 3
Documentation	www.lotusstoves.com
Requests	EN 13240 2001/A2 2004/AC 2007

EU Union legislation:

	Reference	Date	Title
Top level directives and regulations			
	DIR 2009/125/EC	21/10/2009	Energy Related Products Directive (ecodesign)
	REG (EU) 305/2011	9/3/2011	Construction Products Regulation (CPR)
	REG (EU) 2017/1369	4/7/2017	Energy Labelling Regulation
Implementation measures incl regulations and delegated acts			
	(EU) 2015/1186 (EL)	24/4/2015	Energy labelling delegated act on Room heaters
	(EU) 2015/1185 (ED)	24/4/2015	Ecodesign regulation on Room heaters
	2017/C 076/02	10/3/2017	COM Transitional methods OJ EU C76 Vol 60
Harmonised standards, other standards and technical specifications			
	EN 13240:2001	7/4/2001	Room heaters fired by solid fuel
	EN 13240/A2:2004	28/10/2004	Harmonisation of EN13240 by Annex ZA
	prEN 16510-1 (2013 ed)	January 2013	Emission measurement methods prior to 2018
	CEN/TS 15883	8/9/2009	Emission measurement from 2009
	EN 16510-1:2018	31/7/2018	Emission measurement methods 2018 onwards

Limit values:

This manufacturer declares the present room heater is in compliance with the limit values of the EU regulations.

η_{s} [%] Seasonal Heating efficiency	CO [mg/m^{3}] (13% O)$_2$	PM [mg/m^{3}] (13% O)$_2$	NOx [mg/m^{3}] (13% O)$_2$	C_{OGC} [mg/m^{3}] (13% O)$_2$
≥65%	≤1500	≤40	≤200	≤120

Date: 31/01-2024

Lars U. Borch, **Lotus Heating Systems A/S**

WARRANTY CERTIFICATE
Lotus Woodburning stove - 10 year warranty

From 1 September 2014, Lotus offers a 10-year warranty instead of 5 years. This warranty applies to ovens delivered from Lotus after this date.

This warranty certificate covers Lotus stove model _____ with production number _____ purchased on _____.

The warranty covers normal firing, i.e. with ordinary split wood and pressed wood briquettes, and only if the stove is operated according to the instructions in the user manual.

The warranty covers the flawless operation of the stove and does not cover overheating damage, damage to paint, wearing parts and moving parts such as glass, shamol, stone, shaker grate, smoke deflector plates, gaskets, sliding dampers and closing devices.

The warranty is void if the stove is not operated in accordance with the operating instructions and if defects or similar are sought/repaired by a person not authorised by Lotus Heating Systems A/S. The warranty does not cover any damage caused by inappropriate, unauthorised use of the stove.

If a product is returned to Lotus Heating Systems A/S and it subsequently turns out that the damage is not covered by the warranty, the costs incurred shall be borne by the customer.

In the event of a warranty repair, the warranty period for the performed repair is not extended, but continues to follow the original warranty period.

This warranty certificate is only valid when completed and accompanied by the original invoice from the dealer. The warranty period follows the date of the invoice.

We wish them the best of luck with their new Lotus stove.

Sincerely yours Dealer:

Lars U. Borch, **Lotus Heating Systems A/S**

Lotus heating Systems A/S www.lotusstoves.com **+45 63 23 70 70 70**

Table 1

Model identifier: *
Indirect heating function: N.A

Fuel	Preferred fuel	Other suitable fuel(s)	ηs [x%]:	Local heating emissions at nominal heat output [x] mg/Nm³ (13%O2)				Emissions from local heating at minimal rated heat output [x] mg/Nm³ (13%O2)			
Wood logs, moisture content ≤ 25 %	yes	No	*	*	*	*	*	NA	NA	NA	NA
Compressed wood, moisture content < 12 % (e.g. according to ISO 17225-3	No	No									
Other woody biomass	No	No									
Non-woody biomass	No	No									
Anthracite and dry steam coal	No	No									
Hard coke	No	No									
Low temperature coke	No	No									
Bituminous coal	No	No									
Lignite briquettes	No	No									
Peat briquettes	No	No									
Blended fossil fuel briquettes	No	No									
Other fossil fuel	No	No									
Blended biomass and fossil fuel briquettes	No	No									
Other blend of biomass and solid fuel	No	No									

Direct heat output: * kW

Heat output	Symbol	Value	Unit
Nominal heat output	P name	*	kW
Minimum heat output	P min	N.A.	kW
Auxiliary power consumption			
At nominal heat output	max power	N.A.	kW
At minimum heat output	el min	N.A.	kW
In standby mode	Electricity SB	N.A.	kW

Fuel efficiency (Based on the net calorific value (NCV)	Symbol	Value	Unit
Fuel efficiency at nominal heat output	ηth,nom	*	%
Fuel efficiency at minimum heat output	ηth,min	N.A.	%
Permanent pilot flame power requirement			
Pilot flame power requirement (if applicable)	Ppilot	N.A.	kW

Type of heat output/room temperature control

Single-stage heat output, no room temperature control	No
two or more manual stages, no room temperature control	Yes
with mechanic thermostat room temperature control	No
with electronic room temperature control	No
with electronic room temperature control plus day timer	No
with electronic room temperature control plus week timer	No

Other control options

room temperature control, with presence detectors	No
room temperature control, with open window detection	No
with distance control option	No

*See the CE Declaration of conformity and the technical data sheet for the stove model.