

**Installation- and user manual
for Lotus fireplace inserts:**

**H370, H470, H470W, H570, H570 ecoline,
H570W, H570W ecoline & H700**

Version 2 - 03.02.2026

INTRODUCTION	4
INSTALLATION	5
BASE	6
INSTALLATION OF THE SMOKE DIVERTER PLATE	6
CHIMNEY	6
INSTALLATION OF THE CATALYTIC CONVERTER	7
SAFETY INSTRUCTIONS	8
SUPPLY OF COMBUSTION AIR	9
CHIMNEY AND DIMENSIONING	10
FIREWOOD	11
RECOMMENDED WOOD AS FUEL	11
FIREWOOD FOR ECOLINE MODELS	11
KINDLING	11
FIRST LIGHTING	11
OPERATION	12
LIGHTING AND REFILLING	12
CLEANING AND MAINTENANCE	14
CLEANING THE FIREPLACE INSERT	14
MAINTENANCE OF THE FIREPLACE INSERT	14
GOOD ADVICE	15
COMBUSTION CHAMBER LINING	15
GLASS PANE	16
REPAIR PAINT	16
MAINTENANCE / SPARE PARTS	16
PROBLEMS, QUESTIONS AND ANSWERS	16
SCOPE OF DELIVERY OF THE FIREPLACE INSERT	17
DISPOSAL	18
DISPOSAL OF PACKAGING	18
DISPOSAL OF OVEN PARTS	18
DISPOSAL OF CATALYST	18
SAFETY DISTANCES	19
TECHNICAL DATA	20

Dear Lotus customer,

Congratulations on your new fireplace insert. We are delighted that you have chosen a quality product from Lotus.

Lotus has a long tradition and has been developing and manufacturing wood-burning stoves since 1979. We set the highest standards for our products, and our fireplace inserts feature the latest combustion technology, high-quality materials, workmanship, and attractive designs. The fireplaces are the result of good traditions combined with innovative thinking and have reliably delighted their owners for years.

We hope and believe that it will provide you with many cosy hours. However, before you can reap the full benefits of your investment and to ensure that you enjoy your fireplace insert for many years to come, you should read these instructions carefully. They contain important information and many useful tips. You will also find specific advice on how to get the most out of your fireplace, both now and in the years to come. Therefore, keep the instructions in a safe place, as you would with any other user manual.

The fireplace insert is designed for “intermittent combustion”. This means that each time you light the fire, it must first burn down to embers before new wood can be added – you can achieve this by following the instructions.

We hope you enjoy it!

Before your new fireplace insert is ready to spread warmth and cosiness, you should read these pages carefully. The requirements for assembly and installation are explained here. We also refer you to the special assembly instructions for the fireplace insert, which show in detail how the insert is assembled from its individual parts.

Lotus recommends that the fireplace insert be installed by an authorised Lotus dealer or by an installer recommended by an authorised Lotus dealer. Ensure that the fireplace insert is always positioned so that the ventilation grilles for convection are not blocked or obstructed. It is recommended that these be checked and cleaned regularly.

The fireplace insert 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 sweeps or local authorities can also inform you about the applicable regulations and grant you the necessary approval for using your fireplace insert once installation is complete.

Note: The insert must not be put into operation before the installation has been approved and registered by the competent authority or chimney sweep. Different regulations may apply outside the EU.

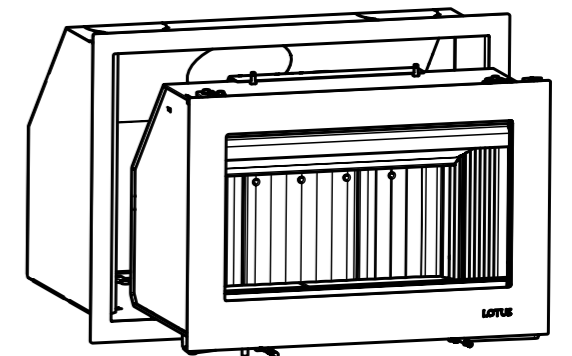
Building and fire safety regulations must be observed. Lotus inserts are approved in accordance with EN 16510. For heat-insulated combustible walls, the installation standard DIN 18896 must be observed. If necessary, consult your chimney sweep beforehand.

All local regulations in force at any given time, including those referring to national and European standards, must be observed during installation. Any unauthorised modification of the fireplace insert must be avoided.

The required opening for installing the fireplace insert is specified in the installation instructions.

All H- fireplace inserts can be removed from the housing by lifting them upwards out of the guide.

The flue pipe, which can be routed both backwards and upwards, is connected to the chimney.



BASE

The base must, of course, be solid and have sufficient load-bearing capacity. This is not normally a problem, especially when installing in an open fireplace.

INSTALLATION OF THE SMOKE DIVERTER PLATE

The following shows how the smoke deflector plate should be positioned. A cross-section of the fireplace insert is shown from the side (see Figure 1).

CHIMNEY

Good draught in the chimney is crucial for how well the fireplace insert burns. Ensure that there is access to inspection hatches.

The effective height of the chimney should typically be between 3.5 and 4.5 metres. Effective height refers to the distance from the top edge of the fireplace insert to the top of the chimney.

The diameter of the chimney should be at least Ø150 mm (internal dimension) for steel chimneys and at least Ø175–180 mm for brick chimneys or chimneys made of ceramic elements, as their internal surface is often rough and offers additional resistance.

All connections and connection points must be tight, and the chimney must ensure a minimum draught of 1.2 mm water column (12 Pa).

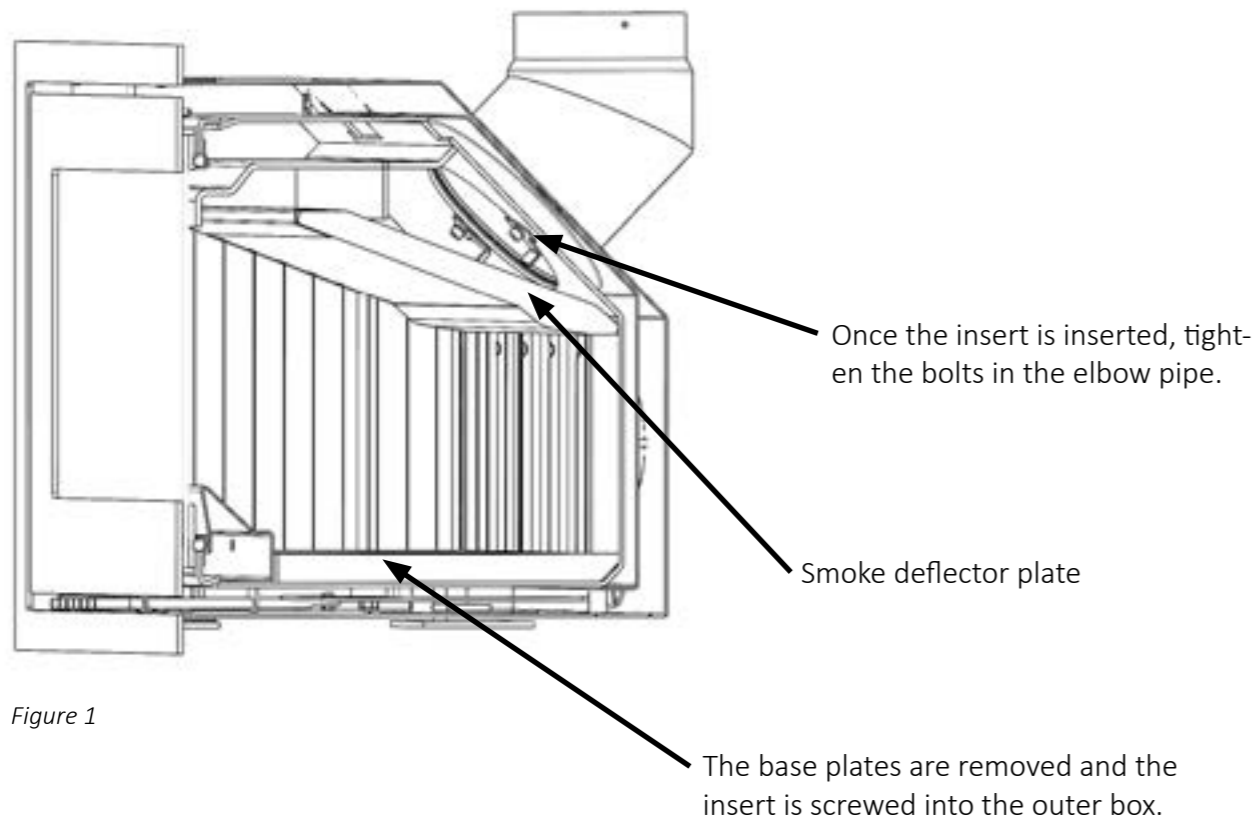


Figure 1

INSTALLATION OF THE CATALYTIC CONVERTER

Lotus ecoLine models are supplied with a specially designed catalytic converter module and one or two 50 cm long connection pipes, which must be installed by a professional installer as part of the chimney.

General

The catalytic converters in Lotus fireplace inserts are characterised by a long service life and highly effective emission reduction under the right conditions. To ensure their effectiveness and functionality throughout their service life, it is important to ensure correct installation, handling, use and cleaning.

Unpacking and handling

The catalyst consists of a ceramic structure coated with an active layer of metal oxides and precious metals. The catalyst must only be touched with gloves, as otherwise the active layer will be damaged, and the effectiveness of the catalyst will be reduced.

Important!

The catalytic converters are fragile and must be handled with great care. Impacts or falls can destroy the catalytic converter.

Installation of the catalytic converter

The catalytic converter is integrated into the lower section of the elbow pipe of your fireplace insert. It is well protected in a pipe and provides ideal conditions for the catalytic afterburning process. It is important to position the catalytic converter correctly to ensure the required bypass gap.

Remove the catalytic converters from their transport packaging, dismantle the smoke deflector plate and carefully push the catalytic converter into the flue pipe from below, as shown in the illustration.



Catalyst installation seen from the flue outlet above the vermiculite smoke baffle plate.

IMPORTANT!

A blocked catalytic converter no longer functions as intended and should be cleaned or replaced before the fireplace insert is used again. It is therefore important to check the catalytic converter regularly by means of a visual inspection. For safety reasons, your ecoLine stove is also equipped with a legally required bypass channel for exhaust gases, so that the fireplace insert can continue to discharge exhaust gases even if the catalytic converter is blocked. Catalytic converters that are blocked by tar can no longer be cleaned and must be replaced. The catalytic converter must be removed before sweeping the chimney and flue pipes.



Cleaning

Depending on the operating time, the 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 removed from the catalytic converter surface regularly. As a user of the stove, you should regularly check the degree of contamination of the catalytic converter and decide whether cleaning is necessary. This can be done easily by removing the catalytic converter through the combustion chamber after removing the smoke deflector plates. This can be done by any stove user.

Cleaning tools

The following can be used to clean the catalytic converter: Hand brush, paintbrush, vacuum cleaner brush head (Figure 2)



Figure 2

Operating life

When used correctly and under the right conditions for combustion, the catalytic converter is very durable and robust in relation to the environment above the combustion chamber.

With regular inspection and cleaning, the catalytic converter will last at least 3 heating seasons without needing to be replaced.

SAFETY INSTRUCTIONS

The surfaces of the fireplace insert become hot. Parts of the fireplace insert, especially the outer sides, the door, the operating handles and the glass pane, become hot during operation! Special caution is required! Use suitable tools. (A glove is included).

SUPPLY OF COMBUSTION AIR

It is important for good and clean combustion that sufficient air is supplied to the fire. However, for this to be possible, it is essential that sufficient air is supplied to the room in which the fireplace insert is installed.

Most rooms have sufficient air, especially if some of the doors between rooms in the house are open. In special cases, it may be necessary to install an air vent in the outer wall of the room in which the fireplace insert is installed. Air vents must be positioned so that they cannot be blocked.

It must be ensured that there is sufficient combustion air. If necessary, consult your chimney sweep beforehand if the air requirement for the installation location of the fireplace insert needs to be calculated and they can tell you how much additional air may be required.

Insufficient combustion air can have a negative effect on the chimney draught, and other appliances that consume air and are installed in the same room or in the room air system as the fireplace insert (e.g. extractor hoods or fans) can also have a negative effect on the function of the fireplace insert. In the worst case, this can affect your well-being and safety. In such cases, sufficient air compensation measures must be taken.

Your new fireplace also has the option of being connected to an external combustion air supply. (see figure 3 and 4). This is particularly practical in modern, highly airtight buildings. The external connection only requires a separate duct connection to the outside air or the exhaust air duct of the ventilation system.

Option 1:
External connection from below.

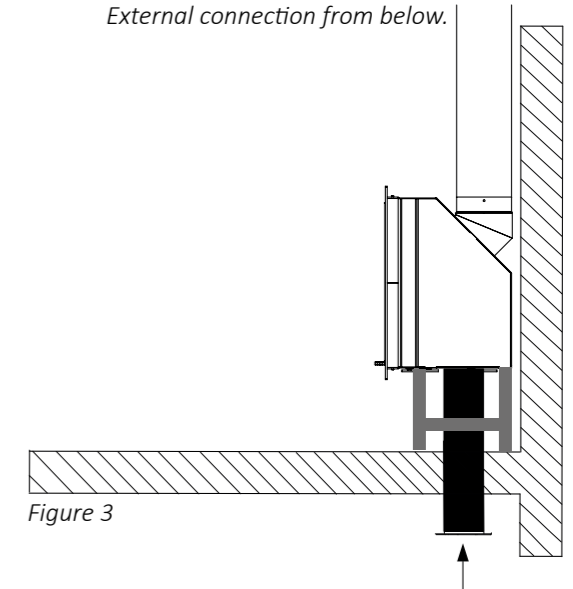


Figure 3

Option 2:
External connection from the rear.

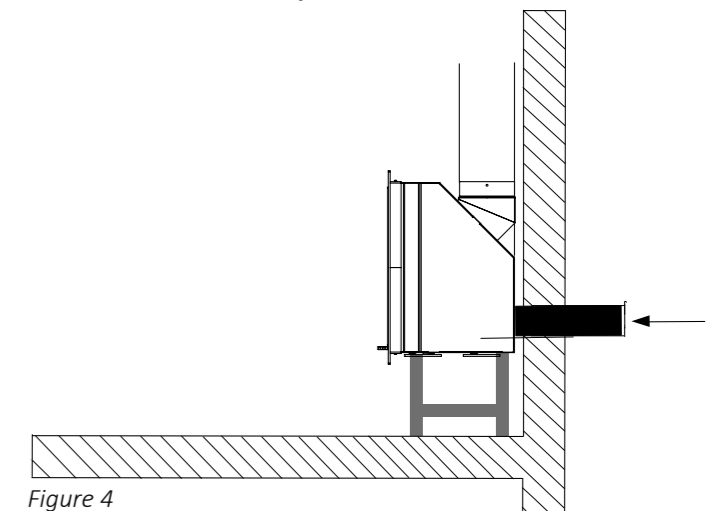


Figure 4

CHIMNEY AND DIMENSIONING

Good draught in the chimney is crucial to how well a stove burns. A correctly dimensioned chimney is not only crucial for the smoke gases to be able to escape from the stove, but also for the supply of combustion air and thus for the overall performance of your new stove.

Insufficient chimney draught can make it difficult to light the stove and subsequently difficult to achieve efficient and environmentally friendly combustion.

On the other hand, excessive chimney draught can cause too much oxygen to be supplied and combustion to occur, which can have a negative impact on efficiency and emission values.

If the architecture of your building or the surrounding landscape makes it difficult to dimension the chimney, a mechanical draught control system may be a solution. Ask your chimney sweep for advice on this.

The cross-section of the chimney must be adapted to the stove. The clear width of a steel chimney must be at least Ø150 mm (internal dimension). For brick chimneys, a clear width of 170 mm is recommended, as the internal surfaces are rougher and cause more soot deposits.

The effective height should typically be around 4.5 metres. The effective height refers to the distance from the top of the stove to the top of the chimney. The chimney must have a minimum draught of 12 Pa to ensure optimal operation of the stove.

All connections and connection points must, of course, be tight, and there must be access to inspection openings in the chimney. If your chimney has a smoke damper, it must have a minimum opening of 20 cm².

Your Lotus stove is approved for connection to a chimney with multiple flues that are used simultaneously for several 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 13384-1 and -2 or the country-specific building regulations.

RECOMMENDED WOOD AS FUEL

Various types of hardwood such as beech, birch, ash or fruit tree wood are very suitable as fuel.

Wood for Lotus fireplace inserts is cut into pieces approx. 30 cm long or shorter and split to a thickness of approx. 7–9 cm. A maximum moisture content of 15–20% is very important for good combustion (15–17% is optimal).

If the wood is too damp, the stove's performance will drop significantly, as some of the energy will be used to evaporate the water. The steam significantly lowers the temperature in the combustion chamber, which can lead to condensation forming in the flue pipes. This condensation can cause rust in the flue pipe; dripping water and tar substances may also occur.

If the wood is too dry, it burns too quickly in relation to the amount of air supplied and releases more particles than necessary.

It is strongly advised not to use wood such as impregnated wood, chipboard, coloured flyers or glossy paper, as these are not suitable for Lotus fireplace inserts. Such materials develop acids or release heavy metals that can attack metal surfaces in the combustion chamber and cause corrosion. In addition, treated wood and paper do not burn completely and cleanly, but release substances into the flue gas and ash that are harmful to the environment.

FIREWOOD FOR ECOLINE MODELS

Lotus ecoLine fireplace inserts are catalytic fireplaces, which makes it even more important to follow the recommendations for fuel selection. For the fireplace to function properly and to ensure the most environmentally friendly use of the fireplace, it is extremely important to light the fire correctly and to use the right, recommended fuel.

It should be noted that burning resinous wood types such as spruce and pine carries a higher risk of clogging the catalytic converter. In this case, it is important to check and inspect the catalytic converter more frequently than usual.

KINDLING

Use small pieces of easily ignitable wood (approx. 2 x 2 cm, length approx. 25 cm) for lighting the stove. This ensures that the stove heats up quickly and forms the first layer of embers for subsequent loads. It is important that the kindling is completely dry.

FIRST LIGHTING

Once installed and approved by the chimney sweep, the new stove can be lit. Lotus fireplace inserts are surface-treated at the factory with a very robust and heat-resistant special paint. During the first few times it is lit, the fireplace insert may give off a special odour while the paint hardens.

This odour disappears after a short time, once the fireplace insert has been properly heated. Do not touch the surface during the warm-up phase to avoid damage or discolouration. Ensure good ventilation and adequate airing of the room during the first use.

A Lotus fireplace insert is designed to be as easy as possible to light correctly. There are very few adjustments that need to be made when lighting the fireplace to ensure the best possible experience.

The only important things are to set the air supply correctly and to load the firewood correctly. The combustion air is adjusted using the handle located centrally under the door. The fireplace insert then automatically distributes the air volume between primary air, airwash/secondary air and tertiary air.

In addition, preparing the fire is crucial. When adding wood, the fire must be filled according to the firing schedule specified in the technical data section. The correct number of logs is arranged on the floor of the combustion chamber according to the schedule – parallel, crosswise, criss-cross, etc. Before use, the wood must be cut to the correct length, split and dried to the recommended moisture content.

The procedure used by an accredited testing institute to test and approve the fireplace is described below. This method results in the best combustion for a given chimney draught of 12 Pa. When firing according to this scheme, you achieve both optimum heat and efficiency as well as the most environmentally friendly use of the fireplace.

The amount of wood and the setting of the air damper are important and vary depending on the type of stove. The correct values are specified in the firing diagram in the technical specifications at the end of this manual. However, the amount of fuel and the damper setting can be adjusted to the individual heating requirements and the specific chimney draught of the respective installation.

The fireplace insert has been tested with beech and birch wood with approx. 16–18% moisture content.

LIGHTING AND REFILLING

It is recommended that you light the fire in a Lotus fireplace insert from above. Before lighting, open the air valve under the door to the maximum by pulling it out.

Place 2–3 small pieces/blocks of wood on the layer of ash at the bottom of the combustion chamber. Dry, finely split kindling is then layered on top of the lower pieces of wood in the centre and stacked as shown in the diagram below.

Finally, place a few kindling blocks and wood chips on top of the top layer. (see Figure 5)

When loading wood, the height of the fire must not exceed the lowest row of holes in the tertiary air channel.

A typical burn cycle lasts approximately 45 minutes.



Figure 5

As a rule, the door should be ajar, with an opening of approximately 3 cm. The door handle is used for this function. This ensures that the fire receives extra combustion air during the critical heating phase. Light the fire starter blocks and leave the door ajar under supervision.

On other models, the door handle is used for this function. This ensures that the fire receives additional combustion air during the critical heating phase. Light the firelighters and leave the door slightly open under supervision.

Once the fire is burning and the glass pane is hot, the door can be closed (approx. 5–10 minutes).

When the fire has burned down to embers (no flames), the next firing must be prepared. Take wood according to the firing schedule and carefully open the oven door so that the ashes are not stirred up. Spread the embers into an even layer and place the next pieces of wood in the centre of the combustion chamber. Then close the oven door. Caution! The oven surface and handle become hot. The oven comes with a protective glove that can be used if necessary.

The pieces of wood are placed close together on the floor. The pieces ignite best when they have a split side facing the door and one side is placed in the embers. Close the door completely immediately.

Open the air damper fully, wait approx. 4 minutes until the wood is burning well, then set the air slider to the middle position. How far the air slider needs to be moved to the left depends on the chimney draught, but the flames should now stabilise into a calm, even fire. However, there should always be a 'lively' flame in the combustion chamber.

When the fire has burned down to embers again (no flames), add more fuel as described above.

Slow combustion

Place a sufficient amount of wood (3.0–3.5 kg distributed over 3–5 pieces of wood – not 1 or 2 large logs) on a good layer of embers. Once the fire has taken hold, reduce the air supply. Never reduce it so much that the flames are no longer clear and stable. If the air supply is regulated too early or is generally too low, this will result in poor efficiency and high emissions, which are harmful to the environment.

Ash

There should always be some ash in the combustion chamber. The fire burns better when the wood lies on a layer of ash. The ash ensures that the embers come together more quickly and last longer. Lotus recommends removing the ash after the 10th burning process at the earliest. In Lotus stoves without an ash drawer, the easiest way to remove the ashes is with an ash vacuum cleaner or, if necessary, a small shovel.

The ashes can be disposed of in the bin once they have cooled down completely. The ashes should always be left to cool for at least 1–2 days before being disposed of, as there may still be embers that could ignite waste or rubbish.

Over time, once you have used your stove a few times, you will become better and more experienced at heating and warming your home with your Lotus stove. We have compiled a list of useful tips and advice to help you maintain your stove and enjoy it for many years to come.

Over time, once you have used the fireplace insert several times, you will become better at heating and warming your home with your Lotus stove and gain more experience. We have compiled a few useful tips and hints to help you maintain and enjoy your stove for many years to come.

CLEANING THE FIREPLACE INSERT

All Lotus fireplace inserts are surface-treated at the factory with original Senotherm paint in the colour's "black" or "grey". This treatment causes a slight odour during the first few burning processes, which disappears after a few lightings. Ensure good ventilation. The surface should be cleaned with a soft, long-bristled car brush. Do not use cloths with water or other liquids.

The insert should also be cleaned regularly from the inside. Ash, soot and any tar residues must be removed from the glass and the combustion chamber. The smoke deflector plates should also be removed regularly to remove soot and dirt, which often settles behind them. At the same time, check that the passage to the chimney is clear. Ash from the insert may still contain embers long after it was last used, so always place it in a fireproof container before disposing of it. Remember that the stove may only be cleaned when it is cold.

All Lotus fireplace inserts are treated with a robust, heat-resistant coating, but solvents can damage the coating surface.

MAINTENANCE OF THE FIREPLACE INSERT

Seals on doors and glass panes are subject to wear and tear. They may look fine at first glance, but over time they collapse, especially under thermal stress, and thus lose their sealing function. Seals should be replaced as necessary, as good combustion and a clean pane are only possible if the fireplace insert is sealed.

Lotus recommends checking the seals regularly, at least once a year, and having them replaced by your specialist dealer if necessary. (Seals are wear parts and are not covered by the warranty.)

COMBUSTION CHAMBER LINING

The sides of the combustion chamber are lined with ceramic and mineral plates, which serve 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 lining can break or wear out if overloaded. The plates are made of vermiculite, an insulating material.

The lining is brittle, and over time, small cracks and chips may appear as a result of using the stove. These small cracks in the combustion chamber lining do not affect the function of the stove. In the event of heavy wear, the material must be replaced at the latest when the plates have reached a thickness of approx. 1.5 cm.

Vermiculite is slightly porous. To prevent the plates from being damaged or breaking, it is important not to throw the wood in, but to place it in the centre of the combustion chamber without touching the side panels.

If a panel does break, this does not affect the insulating effect of the panel. Replacement kits for the combustion chamber lining are available from Lotus dealers.

However, excessive firing with too much or the wrong fuel can damage the cladding, and the cladding can also break if a log or other material is knocked hard against it.

Mineral vermiculite insulation can discolour when exposed to high temperatures. If the vermiculite has been subjected to particularly high temperatures, it may take on a reddish colour. However, the material retains its insulating properties (see Figure 6).

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

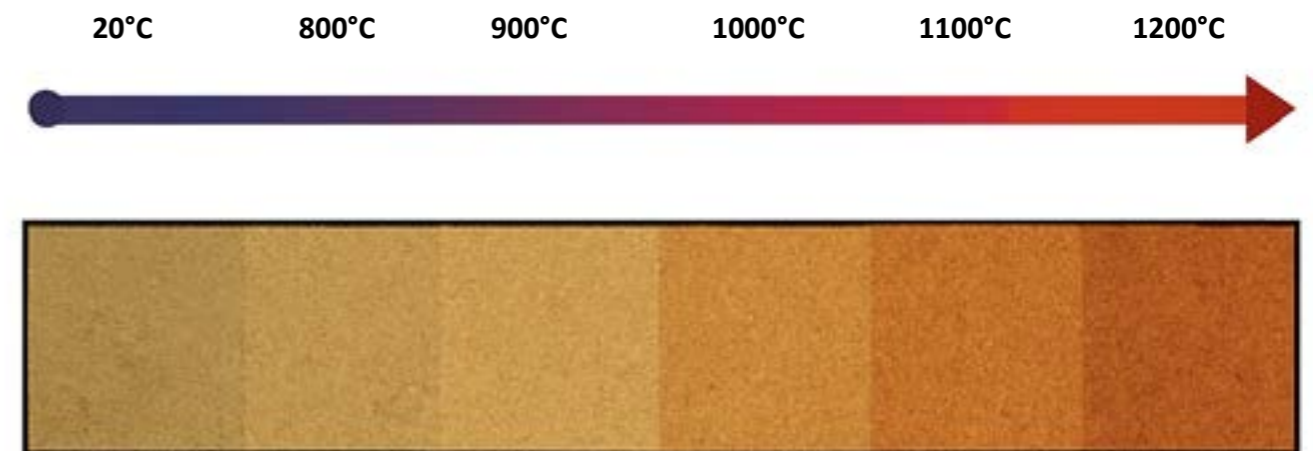


figure 6

GLASS PANE

The glass panes of the stove are made of special ceramic glass and are therefore very heat-resistant.

When operating correctly, the special pane rinsing function automatically cleans the glass, keeping it clear and transparent so that you can enjoy the play of the flames.

Outside of normal use, e.g. when lighting the stove or when the fire goes out, at low temperatures and thus with a low supply of combustion air, soot can deposit on the glass. When the stove is cold, the glass can be cleaned with a soft cloth or glass sponge. If the temperature is too high, the glass will turn milky white.

During the special production process, microbubbles may form in the glass in exceptional cases; this does not constitute a quality defect. (The glass pane is not covered by the warranty).

The glass pane must not be disposed of with normal glass waste but must be disposed of as ceramic waste.

REPAIR PAINT

Spray repair paint can cover stains or small scratches caused by objects or other impacts. Larger damage must be sanded down with fine steel wool, vacuumed and then sprayed.

The can must be shaken vigorously and the spray applied from a distance of 15–20 cm. It is very important that the oven is switched off and completely cold before using the spray, as otherwise there is a risk of fire and serious damage.

The original special paint is available as a repair spray from your local Lotus dealer.

MAINTENANCE / SPARE PARTS

Moving parts may wear out with frequent use. Only original spare parts should be used. At the end of each heating season, we recommend having your stove serviced by your Lotus dealer.

All moving parts (hinges and locking mechanisms) should be treated with a heat-resistant lubricant at least once a year. This will extend the life of the moving parts and ensure that they function properly.

PROBLEMS, QUESTIONS AND ANSWERS

If you are experiencing problems with your Lotus stove, the causes may be some of the most common issues listed below:

The fireplace burns poorly or may go out

There may be several reasons for this. The most common are:

- The air vent is not open far enough.
- The firewood is too wet.
- The draught in the chimney is too low; it may be blocked or leaking.
- The ember bed was too small or burnt out and did not give off enough heat to ignite the pieces of wood.

Depending on the problem, it may be necessary to contact your Lotus dealer or a chimney sweep.

The fireplace is difficult to regulate – it burns too quickly

If the fireplace is new, check that you have followed the operating instructions and set the air supply correctly.

If the stove is more than a year old or has been used extensively, it may be necessary to replace the seals. Also check that the upper smoke deflector plates are positioned correctly and fully inserted.

Poor draught after installation

Check that the installation instructions have been followed correctly and that the smoke deflector plates are positioned correctly. There may also be problems with the chimney:

- Are the diameter and length as recommended?
- Is the cross-section of the chimney clear?
- Are flue pipes and transitions unobstructed?
- Is there a damper in the chimney that needs to be adjusted?

If necessary, contact a chimney sweep to resolve the problem.

Smell of smoke and soot

This can be caused by wind backflow in the chimney and occurs under certain weather conditions.

- Does the chimney have the required effective height?
- Are there any tall trees or buildings in the immediate vicinity of the chimney?
- Is there sufficient combustion air?

If windows and doors are tightly closed, this can lead to negative pressure in the room, which restricts the air supply and greatly reduces the chimney draught. If the chimney was previously connected to a different type of stove using a different fuel (oil, coal, etc.), older soot residues may continue to emit a strong odour.

An extractor hood or room ventilation system in the same room can create very high negative pressure, causing flue gases to be drawn into the room. It is therefore essential to install a safety device that always ensures sufficient combustion air in the room.

Heating during the transition period

When the outside temperature is around 15 °C or higher, your stove may not function properly.

Small temperature differences lead to reduced draught in the chimney. This can result in poor ignition, incomplete combustion, increased smoke formation with soot deposits on the glass and smoke development when opening the stove door.

Note in the event of a chimney fire

If incorrect or excessively damp fuel is used, deposits in the chimney can cause a chimney fire. Immediately close all air vents on the chimney and notify the fire brigade. After the fire, the chimney should be checked for cracks and leaks by a specialist.

Special notes

If the fireplace insert is used at a load significantly exceeding its rated heat output or if fuels other than those specified are used, the manufacturer's warranty shall be void.

SCOPE OF DELIVERY OF THE FIREPLACE INSERT

Depending on the stove model selected, various accessories and equipment required for setup and installation are included. All stoves come with assembly and operating instructions, an assembly kit for the flue pipe connection and a glove.



DISPOSAL OF PACKAGING

Wooden packaging: For recycling or disposal.
Stretch film/plastic film: For recycling or disposal.
Plastic bags: For recycling or disposal.

DISPOSAL OF OVEN PARTS

Steel/cast iron: For recycling or disposal.
Insulation of the combustion chamber: For disposal.
Seals: For disposal.
Glass: Dispose of as ceramic waste.

DISPOSAL OF CATALYST

At the end of its service life or if damaged, the catalytic converter must be replaced. However, the used catalytic converter does not have to be discarded. The metals in the catalytic converter can be largely reprocessed and recycled. You can therefore return your used catalytic converter to your dealer when purchasing a new one. Lotus will then ensure that it is reprocessed in an environmentally friendly and correct manner.

The legally prescribed safety test has specified several minimum distances that must be observed. The distances are specified in the technical data sheet for the fireplace insert at the end of these instructions and on the type plate.

Safety distances from combustible materials

If the fireplace insert is installed in an existing brick fireplace, the requirements for distance to combustible materials and fire protection on the floor are usually met.

For new buildings, please refer to any applicable local fire safety regulations. If in doubt, please consult your chimney sweep.

When installing your new fireplace insert in your home, it is important to observe the safety distances to combustible materials such as combustible walls, furniture, etc. for safety reasons.

The various distances are illustrated below (Figures 7 and 8).

The legally prescribed safety test has specified a few minimum distances that must be observed.

Fireplace inserts must be insulated from combustible materials using an installation box.

The insulation material is specified in the technical data for each fireplace insert.

Note!

When using a grate, the opening area must still be maintained. This may mean that a larger opening is required, in order to achieve the same opening area.

- dC:** To ceiling
- dP:** Front
- dF:** Radiation towards the floor in front of the stove
- dB:** Bottom
- dL:** Side radiation towards wall
- dS:** Side
- dR:** Rear

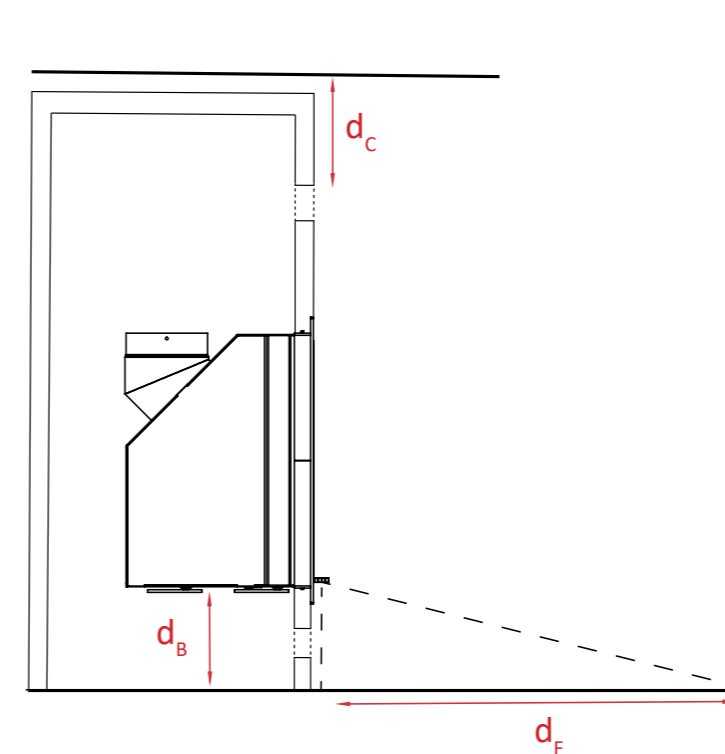


Figure 7

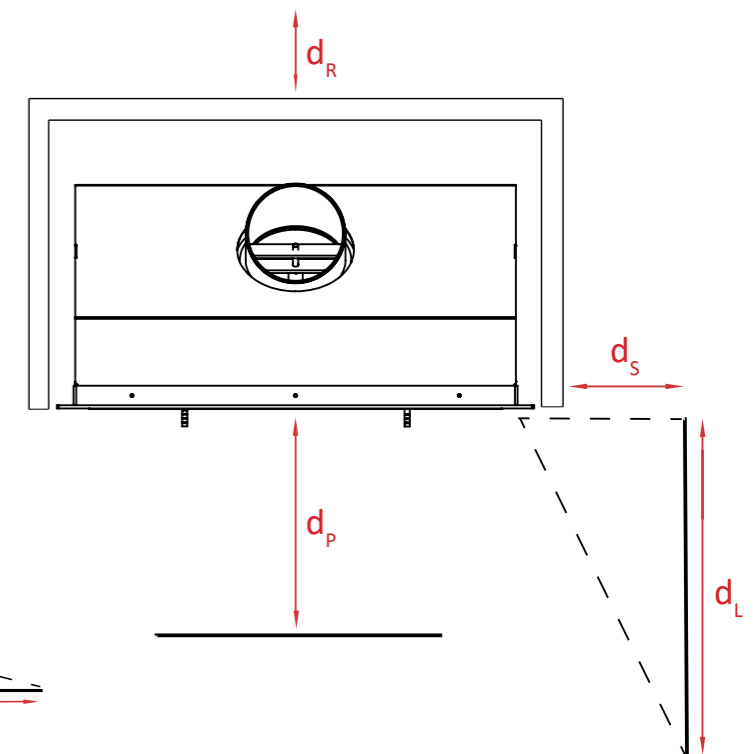


Figure 8

TECHNICAL DATA






Test in accordance with EN 16510-2-2		
P_{nom}	Nominal output	5.8 kW
η_{nom}	Efficiency at nominal output	77 %
η_S	Seasonal efficiency at nominal output	≥65 %
E_{EI}	Energy efficiency index	102 A
CO_{nom}	CO emissions 13% O ₂ at nominal output	≤1250 mg/m ³
NO_{xnom}	NO _x emissions 13% O ₂ nominal output	≤200 mg/m ³
OGC_{nom}	Hydrocarbon emissions 13% O ₂ at nominal output	≤120 mg/m ³
PM_{nom}	Particulate emissions 13% O ₂ at nominal output	≤40 mg/m ³
p_{nom}	Minimum flue draught at nominal output	12 Pa
T_{snom}	Flue gas outlet temperature at nominal output	363 °C
$\Phi_{f,g nom}$	Flue gas mass flow at nominal output	5.5 g/s
T_{class}	Chimney classification	T400- G
CON or INT	Continuous operation (CON) / Intermittent operation (INT)	INT
Type	Appliance type	BE

Basic technical data		
d_{out}	Flue gas outlet diameter	150 mm
m_{chim}	Maximum load from the chimney on the stove	0 kg
m	Mass (weight)	87 kg
H/W/D	General dimensions- Height/Width/Depth	530/735/340 mm

Minimum distances to combustible materials		
d_B	Under the base	300 mm
d_F	Front to lower front radiation area	0 mm
d_C	From top of oven to ceiling	750 mm
d_R	Rear	0 mm
d_S	Sides	0 mm
d_L	Front to side front radiation area	720 mm
d_p	Front	1400 mm
d_{non}	Minimum distances to non-combustible walls	0 mm
s	Insulation material thickness	90/90/NPD/0* mm

*For further information, see the Declaration of Performance (DoP)

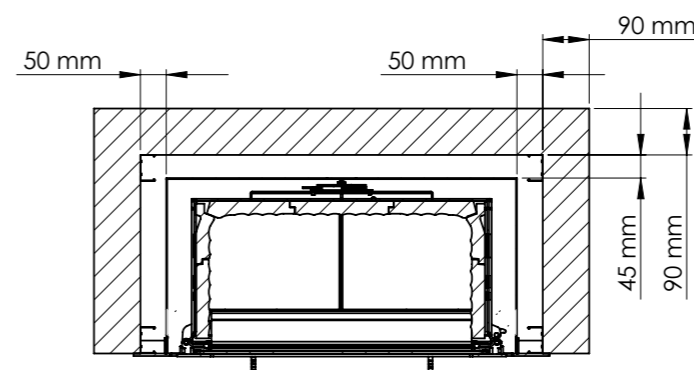
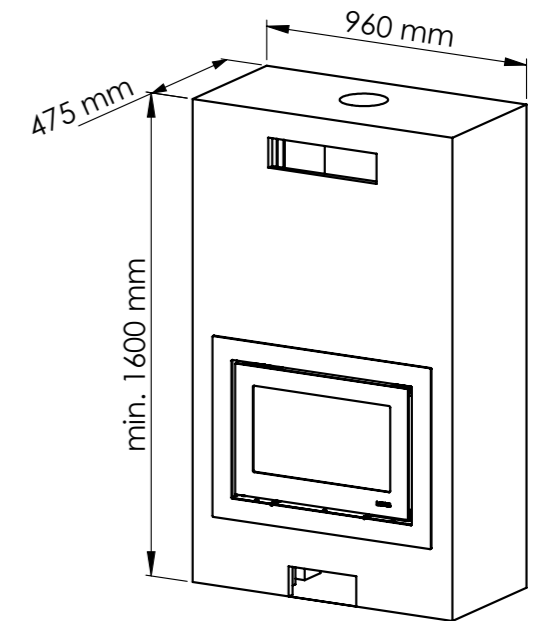
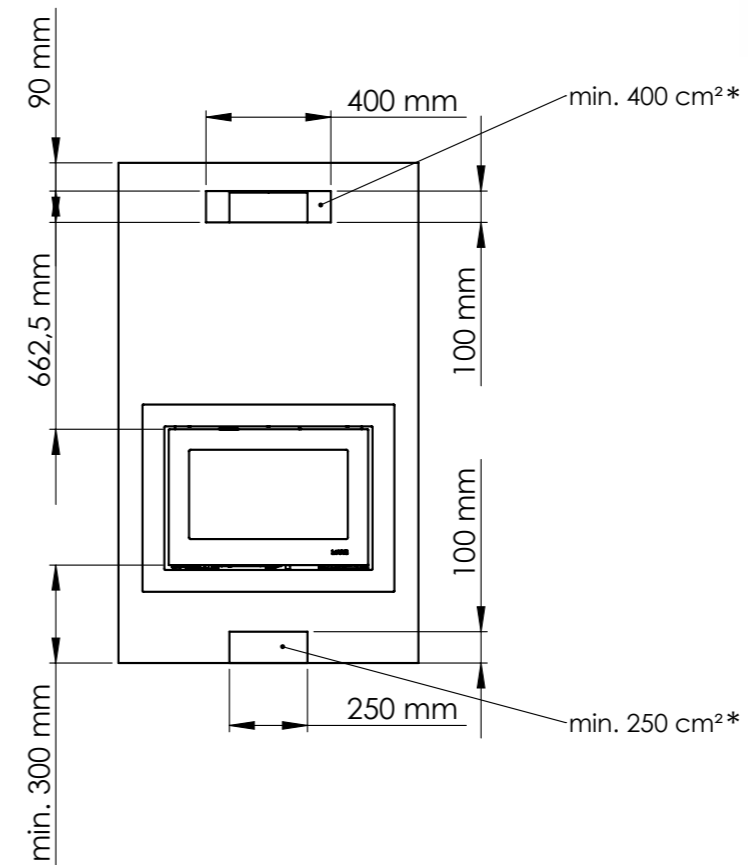
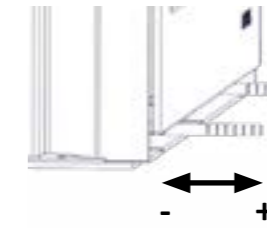
FIRE SCHEDULE

Recommended fuel designation code: Firewood (I)						
	Ignition	Pre-combustion	Firing	Firing	Firing	Firing
Firewood (kg)	1.5	1.5	1.3	1.3	1.3	etc.
Position and length of firewood	20 cm 	22 cm 	22 cm 	22 cm 	22 cm 	etc.

Contact Lotus for a detailed firing guide, during nominal testing or in connection with market surveillance sampling.

SETUP
Insulation material:

Mineral wool in accordance with EN 14303
 min. temp. 680 °C: $\lambda = 0.04$ W/mK; $\rho = \text{min. } 80$ kg/m³

ADJUSTING THE AIR DAMPER


*Convection area

TECHNICAL DATA

Test in accordance with EN 16510-2-2		
P_{nom}	Nominal output	6 kW
η_{nom}	Efficiency at nominal output	84 %
η_S	Seasonal efficiency at nominal output	≥65 %
EEl	Energy efficiency index	112 A+
CO_{nom}	CO emissions 13% O ₂ at nominal output	≤1250 mg/m ³
NOx_{nom}	NOx emissions 13% O ₂ nominal output	≤200 mg/m ³
OGC_{nom}	Hydrocarbon emissions 13% O ₂ at nominal output	≤120 mg/m ³
PM_{nom}	Particulate emissions 13% O ₂ at nominal output	≤40 mg/m ³
p_{nom}	Minimum flue draught at nominal output	12 Pa
T_{snom}	Flue gas outlet temperature at nominal output	302 °C
$\Phi_{f,g nom}$	Flue gas mass flow at nominal output	4.8 g/s
T_{class}	Chimney classification	T400- G
CON or INT	Continuous operation (CON) / Intermittent operation (INT)	INT
Type	Appliance type	BE

Basic technical data



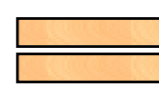
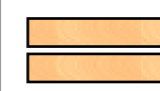

d_{out}	Flue gas outlet diameter	150 mm
m_{chim}	Maximum load from the chimney on the stove	0 kg
m	Mass (weight)	95 kg
H/W/D	General dimensions- Height/Width/Depth	530/735/440 mm

Minimum distances to combustible materials

d_B	Under the base	300 mm
d_F	Front to lower front radiation area	0 mm
d_C	From top of oven to ceiling	750 mm
d_R	Rear	0 mm
d_S	Sides	0 mm
d_L	Front to side front radiation area	720 mm
d_p	Front	800 mm
d_{non}	Minimum distances to non-combustible walls	0 mm
s	Insulation material thickness	60/60/NPD/40* mm

*For further information, see the Declaration of Performance (DoP)

FIRE SCHEDULE

Recommended fuel designation code: Firewood (I)						
	Ignition	Pre-combustion	Firing	Firing	Firing	Firing
Firewood (kg)	2.0	2.0	1.5-2	1.5-2	1.5-2	etc.
Position and length of firewood	20 cm 	22 cm 	22 cm 	22 cm 	22 cm 	etc.

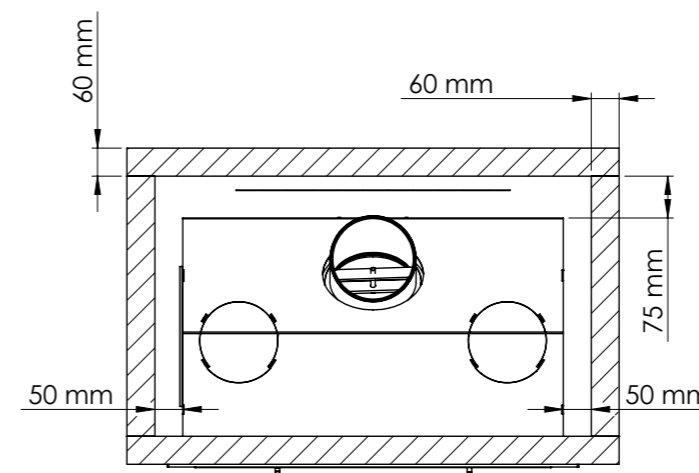
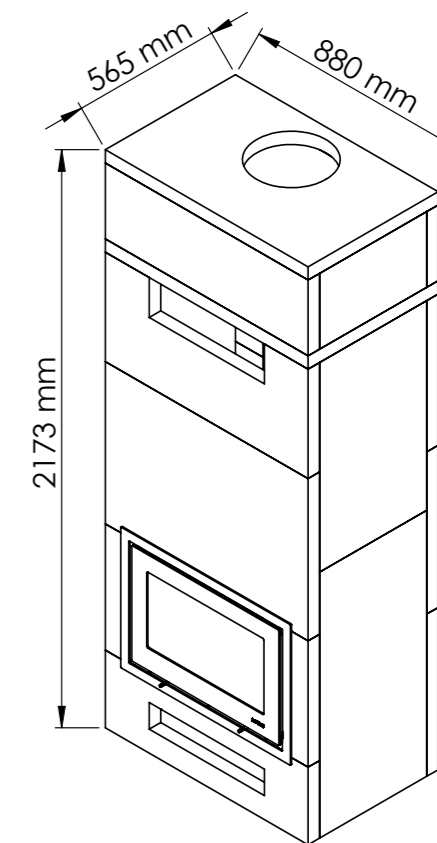
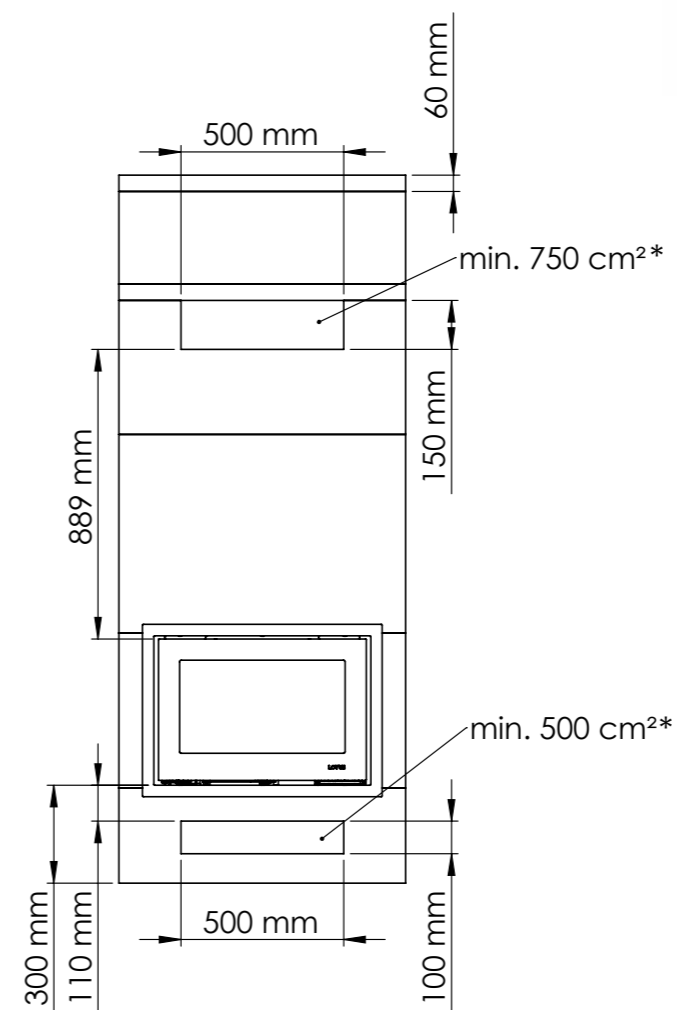
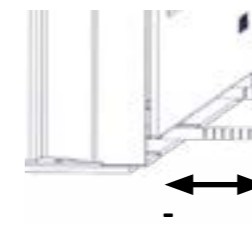
Contact Lotus for a detailed firing guide, during nominal testing or in connection with market surveillance sampling.

SETUP
Insulation material:

min. temp. 700 °C

$\lambda_{200, tr} \leq 0.090 \text{ W/(m}\cdot\text{K)}$

$\rho = \text{min. } 247 \text{ kg/m}^3$

ADJUSTING THE AIR DAMPER


*Convection area

TECHNICAL DATA

Test in accordance with EN 16510-2-2		
P_{nom}	Nominal output	7 kW
η_{nom}	Efficiency at nominal output	81 %
η_S	Seasonal efficiency at nominal output	≥65 %
E_{EI}	Energy efficiency index	107 A+
CO_{nom}	CO emissions 13% O ₂ at nominal output	≤1250 mg/m ³
NO_{xnom}	NO _x emissions 13% O ₂ nominal output	≤200 mg/m ³
OGC_{nom}	Hydrocarbon emissions 13% O ₂ at nominal output	≤120 mg/m ³
PM_{nom}	Particulate emissions 13% O ₂ at nominal output	≤40 mg/m ³
p_{nom}	Minimum flue draught at nominal output	12 Pa
T_{snom}	Flue gas outlet temperature at nominal output	315 °C
$\Phi_{f,g nom}$	Flue gas mass flow at nominal output	6.8 g/s
T_{class}	Chimney classification	T400- G
CON or INT	Continuous operation (CON) / Intermittent operation (INT)	INT
Type	Appliance type	BE

Basic technical data



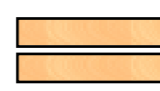


d_{out}	Flue gas outlet diameter	150 mm
m_{chim}	Maximum load from the chimney on the stove	0 kg
m	Mass (weight)	120 kg
H/W/D	General dimensions- Height/Width/Depth	530/950/440 mm

Minimum distances to combustible materials

d_B	Under the base	400 mm
d_F	Front to lower front radiation area	0 mm
d_C	From top of oven to ceiling	750 mm
d_R	Rear	0 mm
d_S	Sides	0 mm
d_L	Front to side front radiation area	720 mm
d_P	Front	800 mm
d_{non}	Minimum distances to non-combustible walls	0 mm
s	Insulation material thickness	50/50/NPD/0* mm

*For further information, see the Declaration of Performance (DoP)

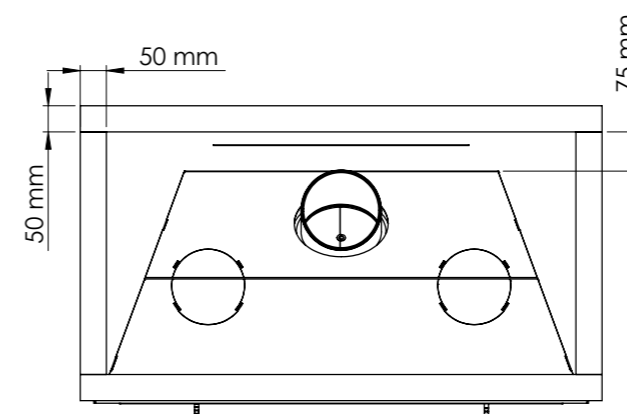
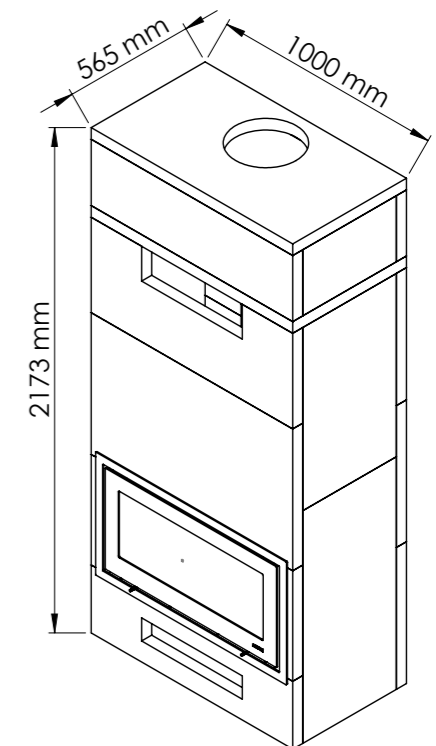
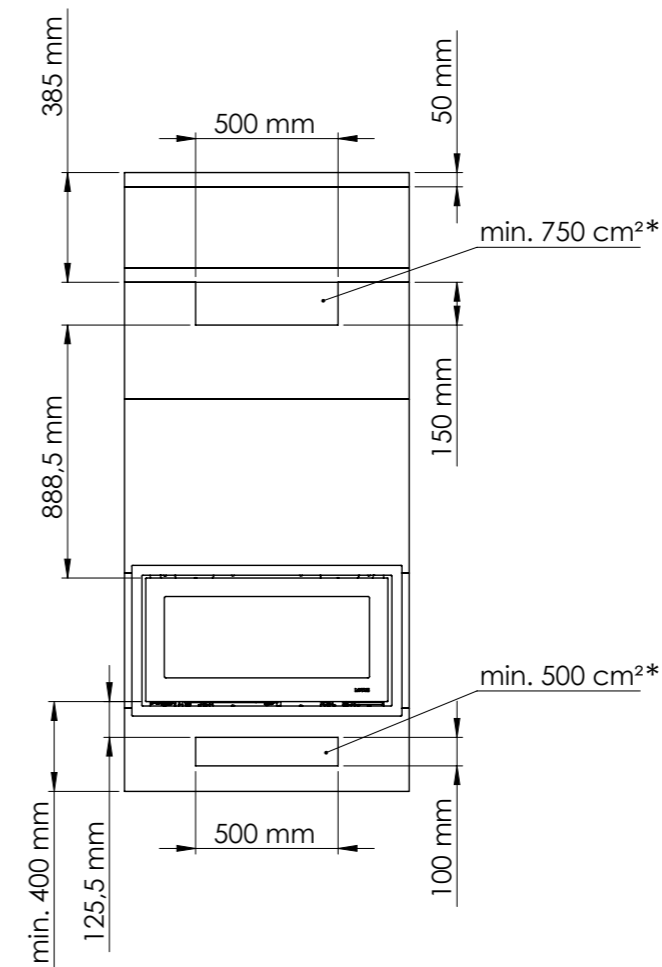
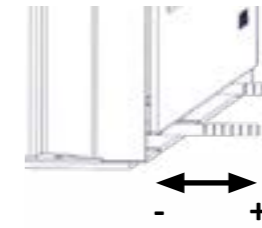
FIRE SCHEDULE

Recommended fuel designation code: Firewood (I)						
	Ignition	Pre-combustion	Firing	Firing	Firing	Firing
Firewood (kg)	2.0	2.0	1.5-2	1.5-2	1.5-2	etc.
Position and length of firewood	20 cm 	22 cm 	22 cm 	22 cm 	22 cm 	etc.

Contact Lotus for a detailed firing guide, during nominal testing or in connection with market surveillance sampling.

SETUP

Insulation material:
 min. temp. 950 °C
 $\lambda_{600, tr} = 0.15 \text{ W/(m}\cdot\text{K)}$
 $\rho = \text{min. } 245 \text{ kg/m}^3$

ADJUSTING THE AIR DAMPER


*Convection area

TECHNICAL DATA



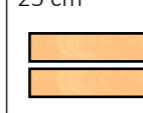
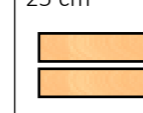
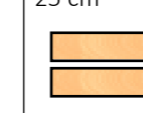
Test in accordance with EN 16510-2-2		
P_{nom}	Nominal output	6 kW
η_{nom}	Efficiency at nominal output	86 %
η_S	Seasonal efficiency at nominal output	≥65 %
E_{EI}	Energy efficiency index	115 A+
CO_{nom}	CO emissions 13% O ₂ at nominal output	≤1250 mg/m ³
NO_{xnom}	NOx emissions 13% O ₂ nominal output	≤200 mg/m ³
OGC_{nom}	Hydrocarbon emissions 13% O ₂ at nominal output	≤120 mg/m ³
PM_{nom}	Particulate emissions 13% O ₂ at nominal output	≤40 mg/m ³
p_{nom}	Minimum flue draught at nominal output	12 Pa
T_{snom}	Flue gas outlet temperature at nominal output	239 °C
$\Phi_{f,g nom}$	Flue gas mass flow at nominal output	4.9 g/s
T_{class}	Chimney classification	Pass
CON or INT	Continuous operation (CON) / Intermittent operation (INT)	INT
Type	Appliance type	BF
L	Leakage test- 10 Pa	4.55 m ³ /h

Basic technical data		
d_{out}	Flue gas outlet diameter	150 mm
m_{chim}	Maximum load from the chimney on the stove	0 kg
m	Mass (weight)	111 kg
H/W/D	General dimensions- Height/Width/Depth	655/755/440 mm

Minimum distances to combustible materials		
d_B	Under the base	530* mm
d_F	Front to lower front radiation area	0* mm
d_C	From top of oven to ceiling	0 mm
d_R	Rear	0 mm
d_S	Sides	0 mm
d_L	Front to side front radiation area	0 mm
d_p	Front	550 mm
d_{non}	Minimum distances to non-combustible walls	0 mm
s	Insulation material thickness	30* mm

*For further information, see the Declaration of Performance (DoP)

FIRE SCHEDULE

Recommended fuel designation code: Firewood (I)						
	Ignition	Pre-combustion	Firing	Firing	Firing	Firing
Firewood (kg)	2.9	1.4	1.4	1.4	1.4	etc.
Damper setting (mm)	100% open (55 mm)	33 mm after 2:15 min	31 mm after 2:00 min	31 mm after 2:10 min	31 mm after 2:10 min	etc.
Position and length of firewood	25 cm 	25 cm 	25 cm 	25 cm 	25 cm 	etc.

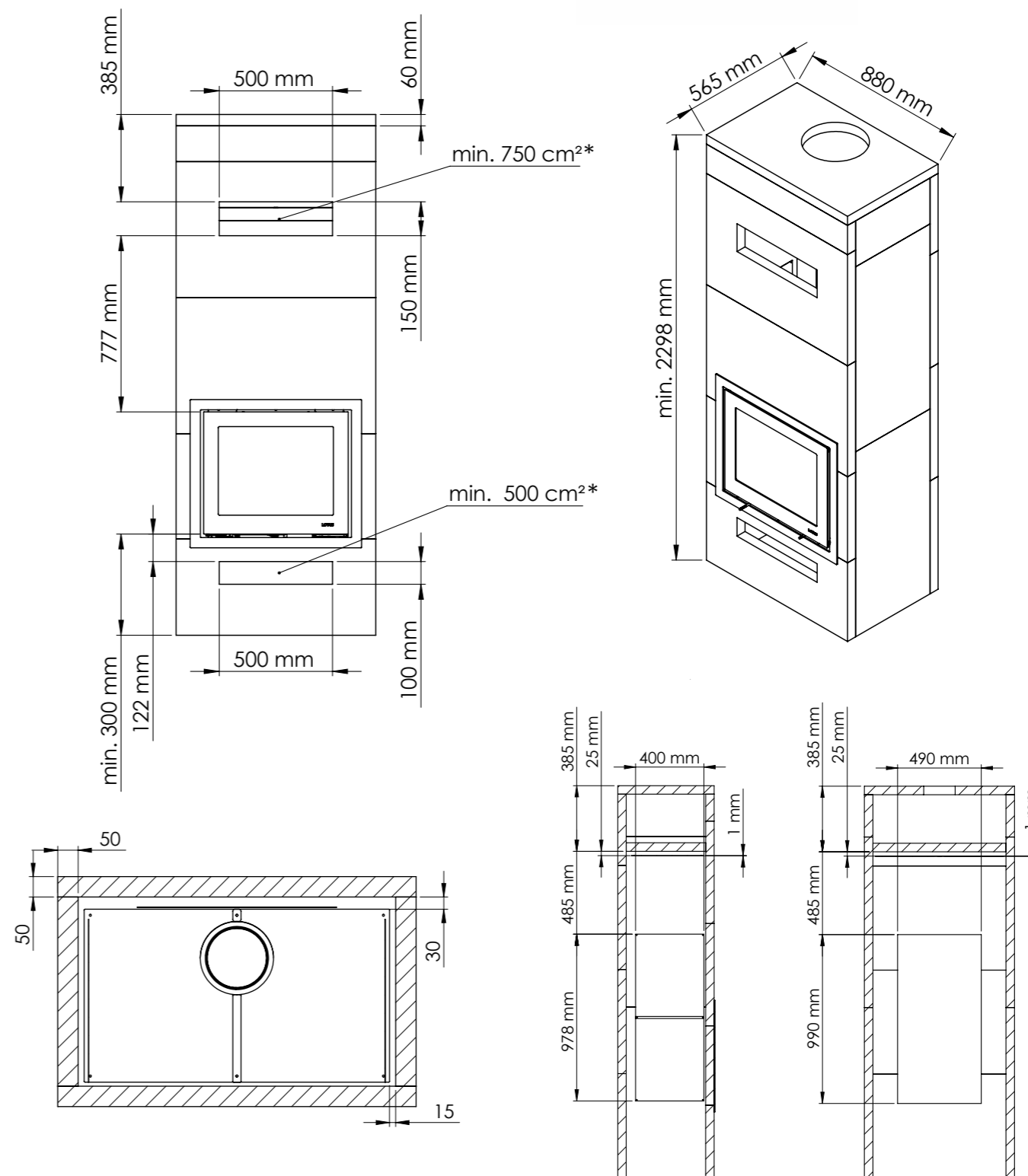
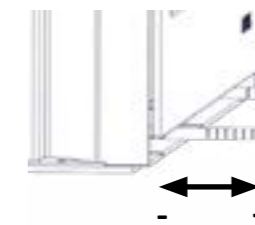
Contact Lotus for a detailed firing guide, during nominal testing or in connection with market surveillance sampling.

SETUP
Insulation material:

min. temp. ≥ 900 °C

$\lambda_{23,50} \leq 0.068 \text{ W}/(\text{m}\cdot\text{K})$

$\rho = \text{min. } 225 \text{ kg}/\text{m}^3$

ADJUSTING THE AIR DAMPER


*Convection area

Heating shields- 1 mm galvanized steel

TECHNICAL DATA

Test in accordance with EN 16510-2-2		
P_{nom}	Nominal output	7 kW
η_{nom}	Efficiency at nominal output	80 %
η_S	Seasonal efficiency at nominal output	≥65 %
E_{EI}	Energy efficiency index	106 A
CO_{nom}	CO emissions 13% O ₂ at nominal output	≤1250 mg/m ³
NO_{xnom}	NO _x emissions 13% O ₂ nominal output	≤200 mg/m ³
OGC_{nom}	Hydrocarbon emissions 13% O ₂ at nominal output	≤120 mg/m ³
PM_{nom}	Particulate emissions 13% O ₂ at nominal output	≤40 mg/m ³
p_{nom}	Minimum flue draught at nominal output	12 Pa
T_{snom}	Flue gas outlet temperature at nominal output	345 °C
$\Phi_{f,g nom}$	Flue gas mass flow at nominal output	6.1 g/s
T_{class}	Chimney classification	T400- G
CON or INT	Continuous operation (CON) / Intermittent operation (INT)	INT
Type	Appliance type	BE

Basic technical data


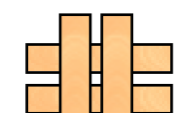
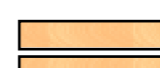
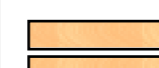
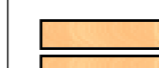
d_{out}	Flue gas outlet diameter	150 mm
m_{chim}	Maximum load from the chimney on the stove	0 kg
m	Mass (weight)	154 kg
H/W/D	General dimensions- Height/Width/Depth	655/1090/440 mm

Minimum distances to combustible materials

d_B	Under the base	400 mm
d_F	Front to lower front radiation area	0 mm
d_C	From top of oven to ceiling	400 mm
d_R	Rear	0 mm
d_S	Sides	375 mm
d_L	Front to side front radiation area	0 mm
d_p	Front	1650 mm
d_{non}	Minimum distances to non-combustible walls	0 mm
s	Insulation material thickness	50 mm

*For further information, see the Declaration of Performance (DoP)

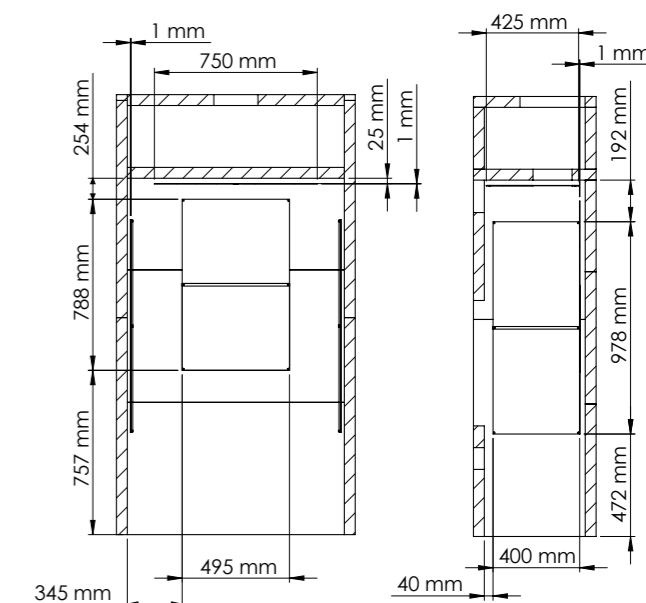
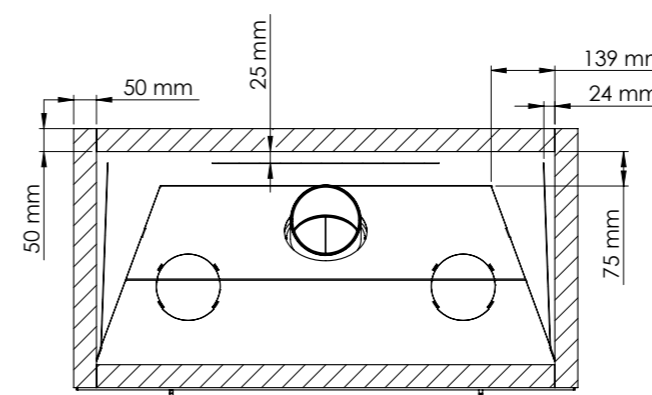
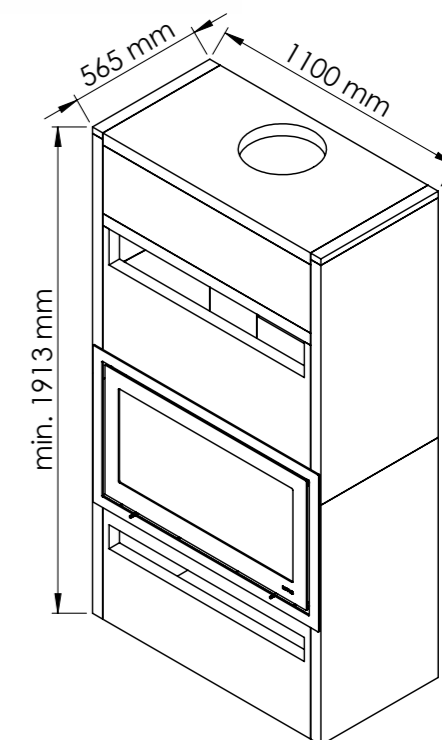
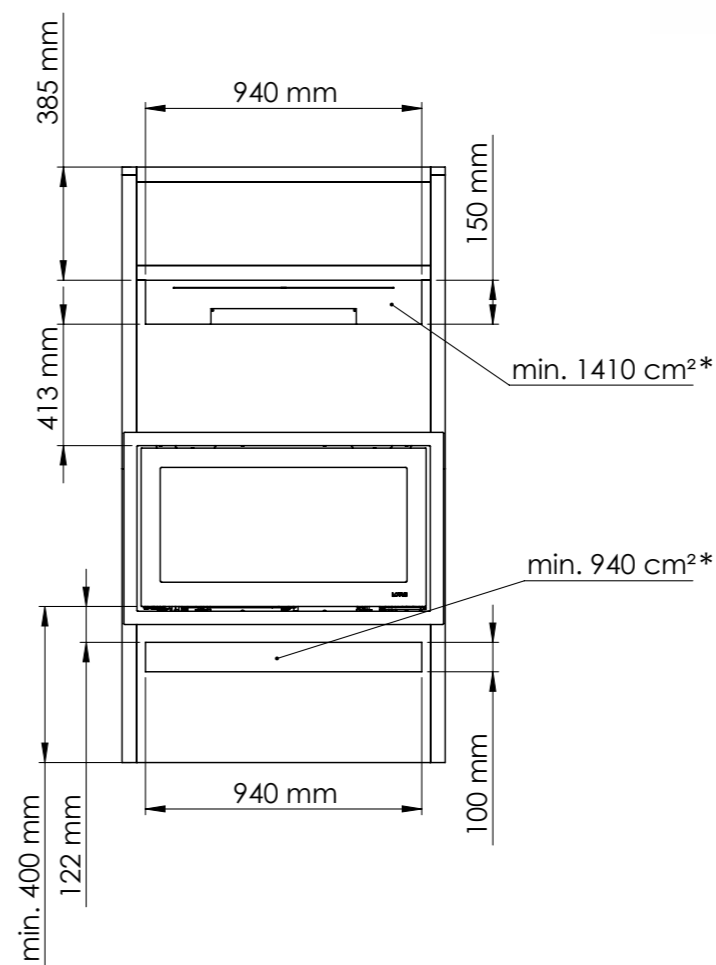
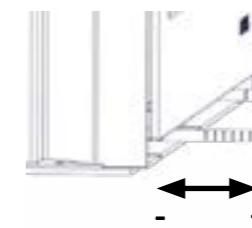
FIRE SCHEDULE

Recommended fuel designation code: Firewood (I)						
	Ignition	Pre-combustion	Firing	Firing	Firing	Firing
Firewood (kg)	3.5	2.0	1.5	1.5	1.5	etc.
Damper setting (mm)	100% open 60 mm after 9 min	42 mm after 9 min	42.5 mm after 1:50 min	42.5 mm after 1:50 min	42.5 mm after 1:56 min	etc.
Position and length of firewood	25 cm 	25 cm 	28.5 cm 	28.5 cm 	28.5 cm 	etc.

Contact Lotus for a detailed firing guide, during nominal testing or in connection with market surveillance sampling.

SETUP
Insulation material:

min. temp. ≥ 900 °C
 $\lambda_{23,50} \leq 0.068 \text{ W/(m}\cdot\text{K)}$
 $\rho = \text{min. } 225 \text{ kg/m}^3$

ADJUSTING THE AIR DAMPER


*Convection area

Heating shields- 1 mm galvanized steel

TECHNICAL DATA

Test in accordance with EN 16510-2-2		
P_{nom}	Nominal output	6.5 kW
η_{nom}	Efficiency at nominal output	87 %
η_S	Seasonal efficiency at nominal output	≥65 %
E_{EI}	Energy efficiency index	116 A+
CO_{nom}	CO emissions 13% O ₂ at nominal output	≤1250 mg/m ³
NO_{xnom}	NO _x emissions 13% O ₂ nominal output	≤200 mg/m ³
OGC_{nom}	Hydrocarbon emissions 13% O ₂ at nominal output	≤120 mg/m ³
PM_{nom}	Particulate emissions 13% O ₂ at nominal output	≤40 mg/m ³
p_{nom}	Minimum flue draught at nominal output	12 Pa
T_{snom}	Flue gas outlet temperature at nominal output	244 °C
$\Phi_{f,g nom}$	Flue gas mass flow at nominal output	5.1 g/s
T_{class}	Chimney classification	T400- G
CON or INT	Continuous operation (CON) / Intermittent operation (INT)	INT
Type	Appliance type	BE

Basic technical data


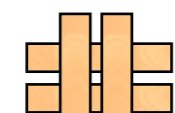



d_{out}	Flue gas outlet diameter	150 mm
m_{chim}	Maximum load from the chimney on the stove	0 kg
m	Mass (weight)	154 kg
H/W/D	General dimensions- Height/Width/Depth	655/1090/440 mm

Minimum distances to combustible materials

d_B	Under the base	285 mm
d_F	Front to lower front radiation area	0 mm
d_C	From top of oven to ceiling	400 mm
d_R	Rear	0 mm
d_S	Sides	200 mm
d_L	Front to side front radiation area	0 mm
d_P	Front	1200 mm
d_{non}	Minimum distances to non-combustible walls	0 mm
s	Insulation material thickness	50 mm

*For further information, see the Declaration of Performance (DoP)

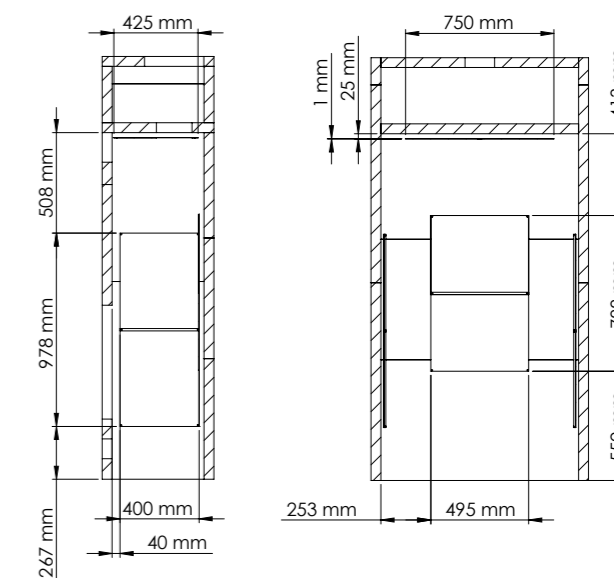
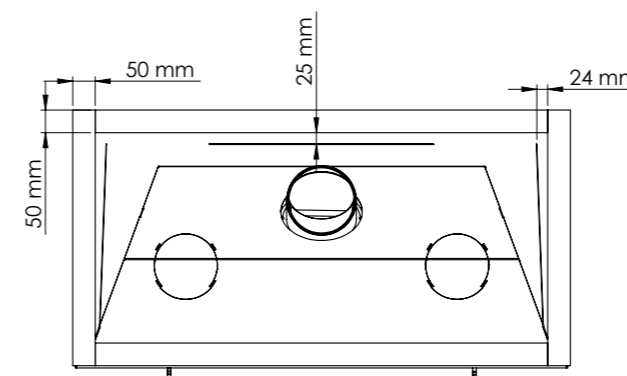
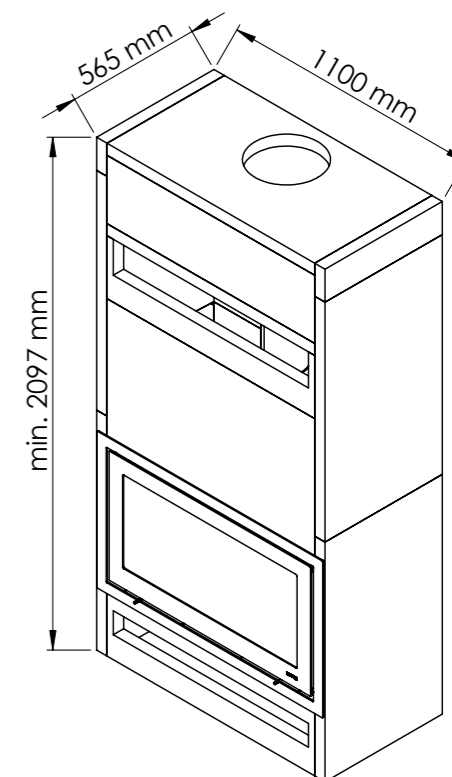
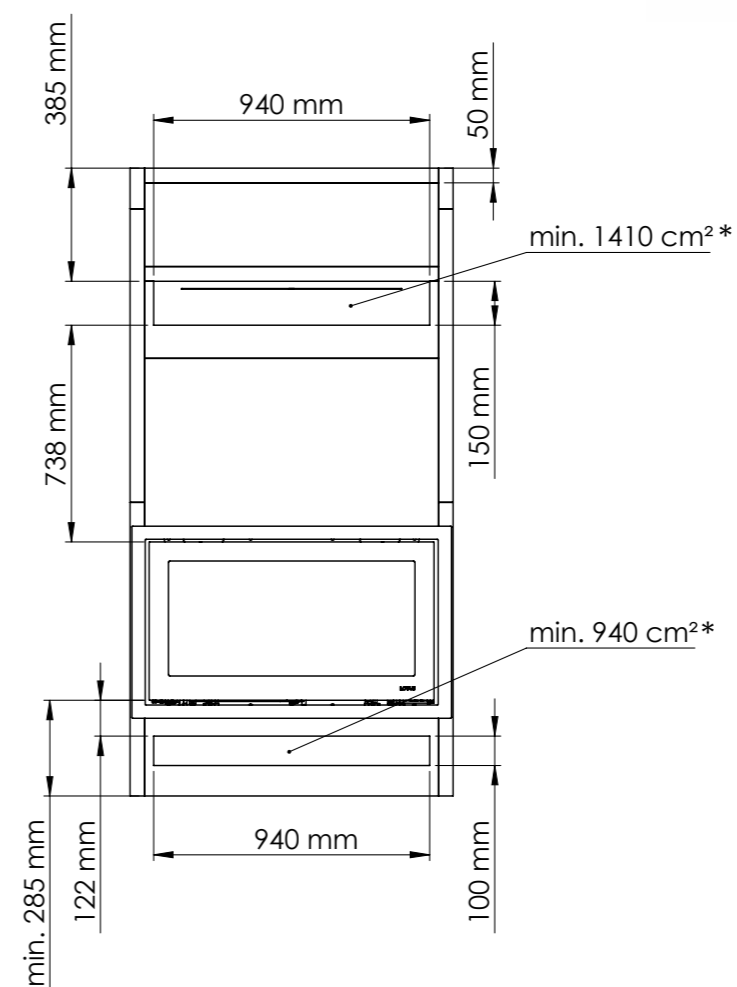
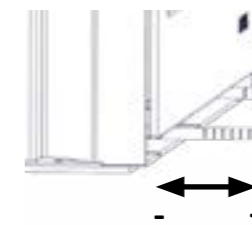
FIRE SCHEDULE

Recommended fuel designation code: Firewood (I)						
	Ignition	Pre-combustion	Firing	Firing	Firing	Firing
Firewood (kg)	3.5	2.0	1.3	1.3	1.25	etc.
Damper setting (mm)	100% open 60 mm after 14 min	42 mm after 2:30 min	39 mm after 1:50 min	39 mm after 1:43 min	39 mm after 1:45 min	etc.
Position and length of firewood	25 cm 	25 cm 	30 cm 	30 cm 	30 cm 	etc.

Contact Lotus for a detailed firing guide, during nominal testing or in connection with market surveillance sampling.

SETUP
Insulation material:

min. temp. ≥ 900 °C
 $\lambda_{23,50} \leq 0.068 \text{ W/(m}\cdot\text{K)}$
 $\rho = \text{min. } 225 \text{ kg/m}^3$

ADJUSTING THE AIR DAMPER


*Convection area

Heating shields- 1 mm galvanized steel

TECHNICAL DATA

Test in accordance with EN 16510-2-2		
P_{nom}	Nominal output	6 kW
η_{nom}	Efficiency at nominal output	80 %
η_S	Seasonal efficiency at nominal output	≥65 %
E_{EI}	Energy efficiency index	106 A
CO_{nom}	CO emissions 13% O ₂ at nominal output	≤1250 mg/m ³
NO_{xnom}	NOx emissions 13% O ₂ nominal output	≤200 mg/m ³
OGC_{nom}	Hydrocarbon emissions 13% O ₂ at nominal output	≤120 mg/m ³
PM_{nom}	Particulate emissions 13% O ₂ at nominal output	≤40 mg/m ³
p_{nom}	Minimum flue draught at nominal output	12 Pa
T_{snom}	Flue gas outlet temperature at nominal output	290 °C
$\Phi_{f,g nom}$	Flue gas mass flow at nominal output	5.1 g/s
T_{class}	Chimney classification	T400- G
CON or INT	Continuous operation (CON) / Intermittent operation (INT)	INT
Type	Appliance type	BE
L	Leakage test- 10 Pa	2.66 m ³ /h

Basic technical data


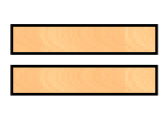
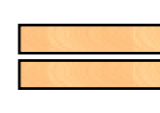
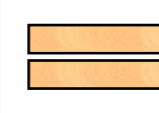
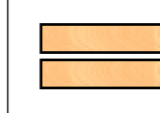
d_{out}	Flue gas outlet diameter	150 mm
m_{chim}	Maximum load from the chimney on the stove	0 kg
m	Mass (weight)	96 kg
H/W/D	General dimensions- Height/Width/Depth	785/515/440 mm

Minimum distances to combustible materials

d_B	Under the base	278 mm
d_F	Front to lower front radiation area	0 mm
d_C	From top of oven to ceiling	490 mm
d_R	Rear	0 mm
d_S	Sides	425 mm
d_L	Front to side front radiation area	0 mm
d_p	Front	1300 mm
d_{non}	Minimum distances to non-combustible walls	0 mm
s	Insulation material thickness	50 mm

*For further information, see the Declaration of Performance (DoP)

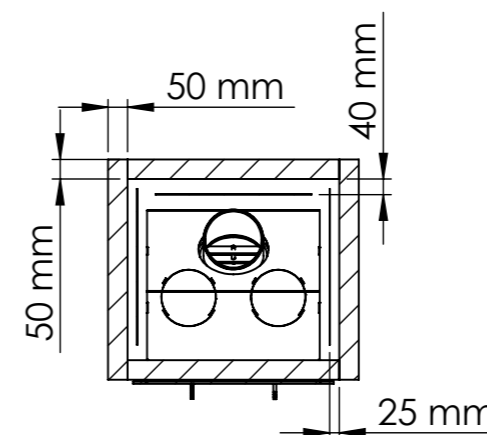
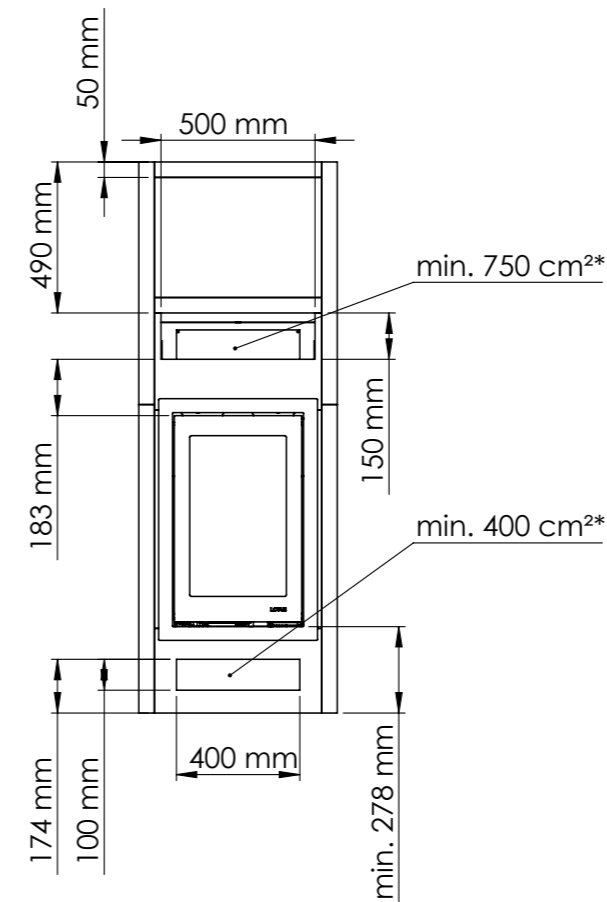
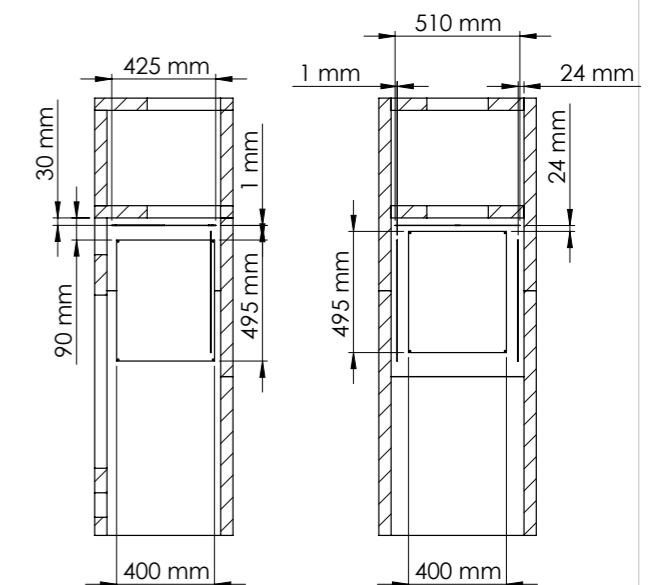
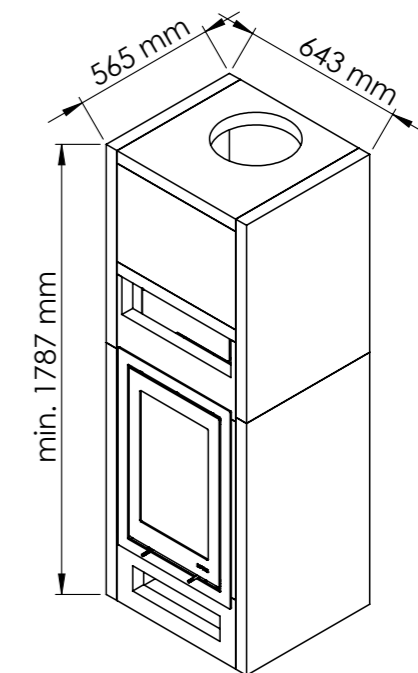
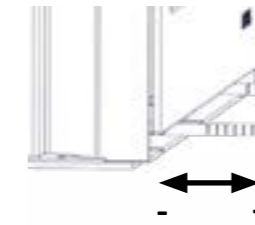
FIRE SCHEDULE

Recommended fuel designation code: Firewood (I)						
	Ignition	Pre-combustion	Firing	Firing	Firing	Firing
Firewood (kg)	2.9	1.4	1.4	1.4	1.4	etc.
Damper setting (mm)	100% open	47 mm after 2:15 min	46 mm after 2:15 min	46 mm after 2:05 min	46 mm after 2:05 min	etc.
Position and length of firewood	25 cm 	25 cm 	25 cm 	25 cm 	25 cm 	etc.

Contact Lotus for a detailed firing guide, during nominal testing or in connection with market surveillance sampling.

SETUP
Insulation material:

min. temp. ≥ 900 °C
 $\lambda_{23,50} \leq 0.068 \text{ W/(m}\cdot\text{K)}$
 $\rho = \text{min. } 225 \text{ kg/m}^3$


ADJUSTING THE AIR DAMPER


*Convection area

Heating shields- 1 mm galvanized steel

Tabel 1

Model identifier:*

Indirect heating function: N.A

Direct heat output:*

Fuel	Preferred fuel	Other suitable fuel(s)	η_s [x%]	Local heating emissions at nominal heat output [X] mg/Nm ³ (13% O ₂)				Emissions from local heating at minimal rated heat output [X] mg/Nm ³ (13% O ₂)			
				PM	OGC	CO	NOX	PM	OGC	CO	NOx
Wood logs, moisture content \leq 25 %		no	*	*	*	*	*	NA	NA	NA	NA
Compressed wood, moisture content < 12 % (e.g. according to ISO 17225-3)	yes	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									

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

Fuel efficiency (Based on the net calorific value (NCV))	Symbol	Value	Unit
Fuel efficiency at nominal heat output	$\eta_{th,nom}$	*	%
Fuel efficiency at minimum heat output	$\eta_{th,min}$	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.