Operating and installation instructions for Fire

Lotus H586

Version 1, 24/05-2016

Introduction

Congratulations on your new Lotus Fire.
We hope and believe that it will give you many hours of warmth. Before you really start enjoying your investment, please read these instructions thoroughly. They provide important advice to ensure you derive great enjoyment from your fire, both now and in the future.
First produced in 1979, Lotus wood-burning stoves boast a long history. The stoves are manufactured in Langeskov on Funen and exported to many European countries. So congratulations once again on your new Lotus fire, which is certain to mark the start of a new, cosy life for you.

Installing the fire

Before installing and igniting the new fire, ensure that you take the time to read these pages thoroughly.
Please ensure that all the necessary national and European standards and regulations are complied with. Your Lotus dealer or your local chimney sweep can provide you with the correct information.

Safety information

Burning wood releases thermal energy, which causes the surfaces, door, viewing window, flue tubes and front panel of the stove to become very hot; please do not touch these parts.
(Please use the enclosed heat-protection glove)

The plinth

Before installing the fire, ensure that your floor is capable of bearing the weight of your fire. If this is not the case, you must take suitable measures to ensure the load-bearing capacity of your floor (e.g. a load distribution plate).
Flooring made of combustible materials must be protected by a non-combustible covering around the opening of the fire. The non-combustible covering must extend at least 50cm to the front and 30cm to each side of the opening of the fire.

Aufstellhinweise

Der Feuerstätte ist anschlussfertig montiert und muss mit einem Verbindungsstück an den bestehenden Hausschornstein angeschlossen werden. Das Verbindungsstück soll möglichst kurz, geradlinig, waagerecht oder leicht steigend sein. Verbindungen sind abzudichten.

Es muss auch sichergestellt werden, dass genügend Platz vorhanden ist für die Wartung der Feuerstätte und Reinigung des Verbindungstücks.

Installation instructions

The fire is ready to install and must be connected to your existing chimney with a connector. The connector should be as short as possible, straight, horizontal or slightly upwardly inclined. The connections should be sealed.
It must also be ensured that there is sufficient space to service the fire and clean the connector.
It must be ensured that there is a sufficient air flow for combustion. This is particularly important where there are tightly sealed windows and doors (sealing lips). Air grilles should be positioned in such a way that they cannot become blocked.

Replacement parts:

Only replacement parts expressly authorised or supplied by Lotus A/S may be used. Where necessary, please contact your specialist dealer.

The fire must not be modified in any way!

The chimney dimensions should correspond to DIN 4705 T1, T2 or 13 13384-1, or to the regulations pertaining in your country.

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H586 was tested as an intermittent-burning fire.

The fire may be connected to multiple chimneys.

Chimney data from EN 13229 testing

Model	Flue gas temperature at nominal value °C Measured in the flue outlet	Performance kW	Flue gas mass flow g/s	Flue extraction PA	Weight kg	Distance from combustible materials Free-standing	
						Behind installation Cm	Laterally to the installation Cm
H586	334	11,1	10,1	12	300	0	0

The following instructions must be observed:

Distance from combustible building elements and furniture

Local and building regulations must be observed.
In case of doubt, please contact your local chimney sweep for advice.

Distance from non-combustible building elements and furniture

There are no requirements relating to distance from non-combustible building elements and furniture. (Defined in accordance with the relevant national building regulations)

Installation in combustible construction materials protected by insulation.

All mounted installations require ventilation.
The surround must provide openings for convection airflow.
Insufficient convection can result in damage to the surround/fire.
The illustration below shows the minimum permissible dimensions
to ensure sufficient insulation/ventilation.
Convection air inlet: 400cm² convection air outlet: 750cm²
Insulating material: any AGI Q132-approved insulation materials may be used
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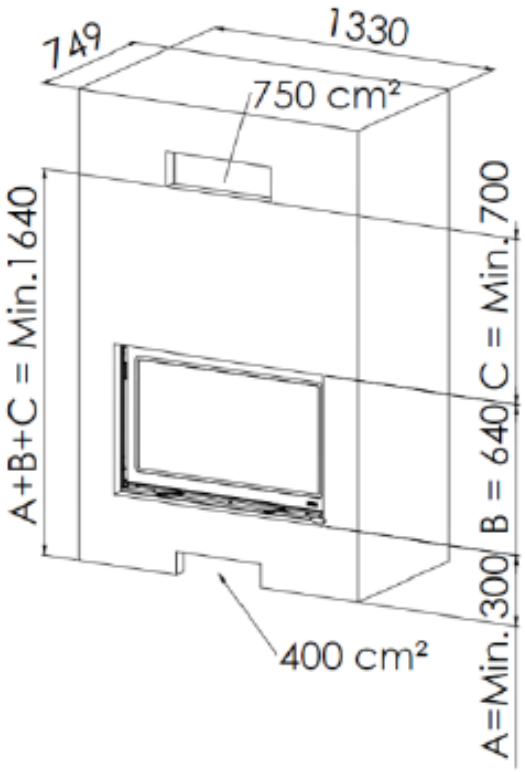
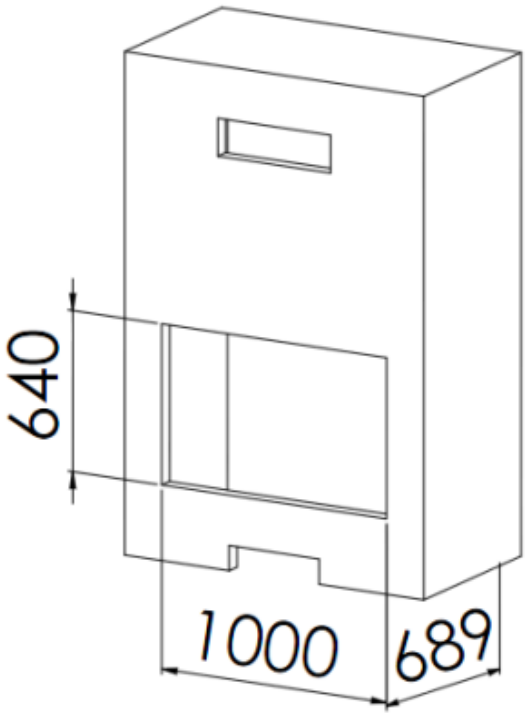
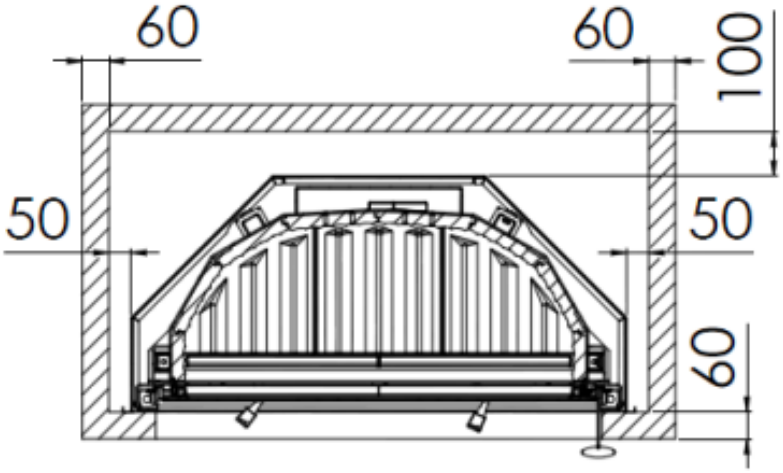


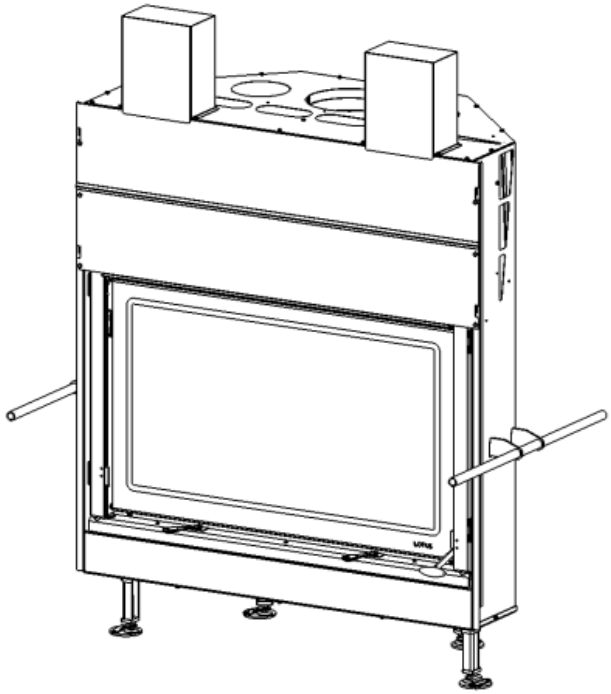
Minimum permissible dimensions



Illustration



H586 with carrying handle



Getting a fire started

Heating the fire for the first time will give rise to an unpleasant odour as the protective paint dries. This will however, be of short duration.

Use kindling with fire lighter cubes to start up the fire. Suitable combustible material may be added once the matchwood is alight.

Chimney/connection:

The chimney must be of the correct minimum length and diameter. It must be carefully constructed to ensure that it is pressure-sealed throughout its length. This is necessary to ensure the necessary updraught in the chimney required for the correct functioning of the fire.
If these conditions cannot be met, please discuss other options with your chimney sweep prior to installation.

Extractor hoods:
Extractor hoods, ventilation systems, etc. installed in the same room or interconnected rooms as the fire can negatively impact on the fire's functioning (escape of smoke into living area) and must not be operated simultaneously without suitable measures being undertaken.

Data for the chimney sweep:

Feed pressure:

Minimum feed pressure = 0.12 Pa.

Flue gas mass flow:

Exhaust gas mass flow = 10.1m(g/s).

Exhaust gas temperature:

The exhaust gas temperature is 334ºC.

Room ventilation:

Since a fire consumes oxygen, it must be ensured that oxygen is able to enter the living areas, particular in the case of well-insulated homes. Always leave

the doors open between all rooms when the fire is in use. This ensures that the fire receives more oxygen and also improves heat distribution.

Kindling
Kindling should be around 23-25 cm in length and 3-4 cm in diameter.

Wood
Various types of wood, including oak, beech, birch and ash are suitable fuels. Impregnated wood, particle board, colour brochures and coated paper are not suitable, as these all contain hydrochloric acid or heavy metals that cause damage to both the fire and the environment. Under no circumstances may waste materials or flammable liquids be used.
Split logs must be approximately 25-30 cm in length and 7-9 cm in diameter. A maximum moisture content of 15-20% is very important for good combustion. Excessively damp wood sharply reduces the performance of your fire, as a significant proportion of the energy produced is required to vapourise the water.

Storing wood
When buying wood, you should ensure that you have a sufficient quantity stored for 1-2 years' use. The wood needs to be in the form of split logs of the right size and be stored under cover for a minimum of one year, depending on the type of wood.

Nominal heat output
The fire's nominal heat output is 11,1 kW. This is attained at a minimum pressure of 12 Pa. No more than three wooden logs should be placed in the fire at any one time.
The fire is an intermittent-burning fire; please follow the instructions below to ensure compliance with this specification.

Operating the fire

Lighting and loading wood
1. Place around 3 kg of dry, finely split wood in the centre of the combustion chamber and arrange it in a pyramid shape. Light the wood with the help of two fire-lighter cubes.
2. Leave the door open by around 2 cm for the first 8-10 minutes – under supervision – and open the air valve fully (slide it all the way to the right).

3. If necessary, push the air valve in during the lighting process.
4. When the fire has burned down to embers (i.e. when there are no longer any flames), carefully open the door so as not to disturb the ashes, and spread the embers out into an even layer.
5. Place three equal-sized pieces of wood (approx. 2.6 kg) in the combustion chamber. Two pieces should be placed on top of the embers parallel to the front of the fire, approximately 1 cm apart. The front piece will ignite more easily if one of the split sides is perpendicular to the window and another side is turned towards the embers. The third piece should be laid parallel to the front piece. The door should then be closed immediately.
6. Open the valve fully and slide it back only when the fire is burning nicely. The degree to which the air valve needs to be open will depend on the draught in the chimney. The aim is to ensure a vigorous fire with stable flames. If the flames are upright and very calm, there is insufficient air (turbulence) and you need to open up the air valve a little further.
7. Once the fire has again burned down to embers (no flames), repeat the procedure as described from point 4, leaving the air valve fully open for the first two minutes or so.

Ashes

Ashes can be disposed of with your household waste. Ensure that there are no embers in the ashes that could ignite in your rubbish bin. The ashes should therefore be left to cool for at least 1-2 days prior to disposal.

Cleaning the fire

The surfaces of all Lotus fires have been finished by the manufacturer with original Senotherm paint in either black or grey. The fires will emit an unpleasant odour when they are first lit. Please ensure good ventilation. Surfaces are best cleaned with a soft brush or a vacuum cleaner with a brush attachment.
The combustion chamber, flue gas paths and flue tubes should be inspected each year for deposits and, if necessary, cleaned, e.g. following the sweeping of the chimney. When re-commissioning the chimney, please therefore ensure that its full diameter is clear of any blockages.

Maintaining the fire

Seals may seem in good condition, but can collapse as a result of heat and lose their ability to seal the fire. You should change them at least once a year if you use the fire frequently. We recommend that they are regularly inspected by a specialist.

It is easy to replace **thermal components** that are worn or disintegrating.

Baffle plates may also become worn down. They are easily replaced and can be removed and re-inserted as described above.
Senotherm spray can be **sprayed** onto the fire to touch up stains. To preclude the risk of fire, it is of the utmost importance that the fire is not in use (cold). Larger defects must first be carefully rubbed down with fine steel wool and surfaces must be free of dust and grease.
The spray can must be shaken vigorously and the fire coated from a distance of 15-20 cm

What is in the fire?

The fire contains installation and operating instructions, as well as heat-protection gloves to protect against burns.

Malfunctions

Should you experience problems with your Lotus fire, you may be able to find out the cause below.

The fire is difficult to control –it is burning too fast

If your fire is new, please check that you are following the operating instructions. If your fire is more than one year old or has been subjected to heavy use, you may need to replace the seals. When the seals have been in use for too long, they become flat and lose the ability to seal the fire effectively.

The fire has a poor draught since installation

Check that the installation instructions have been correctly followed. In particular, there may be problems in connection with the chimney and connector. If the diameter and length of the chimney are correct, is it properly sealed and are the flue tubes and connections sealed? You may need to contact your chimney sweep to resolve the problem, as there may be a blockage in the chimney.

I can smell smoke and soot□

This can be caused by wind blowing down the chimney and can occur when the wind is coming from certain directions. The chimney might be too short, or trees may have grown and be causing turbulence, or there might be an

insufficient supply of combustion air. If windows and doors are sealed, it maybe that there is no longer a sufficient supply of air, which can have an adverse impact on the air flow in your heater. A possible solution would be an additional supply of fresh air, e.g. by installing a ventilation flap near the heating device or providing the fire with a direct supply of fresh air.
If an extractor hood is installed in the same room or interconnected rooms sharing an air supply, it may negatively affect the function of your fire (and cause it to emit smoke) when in operation and must therefore never be used simultaneously.

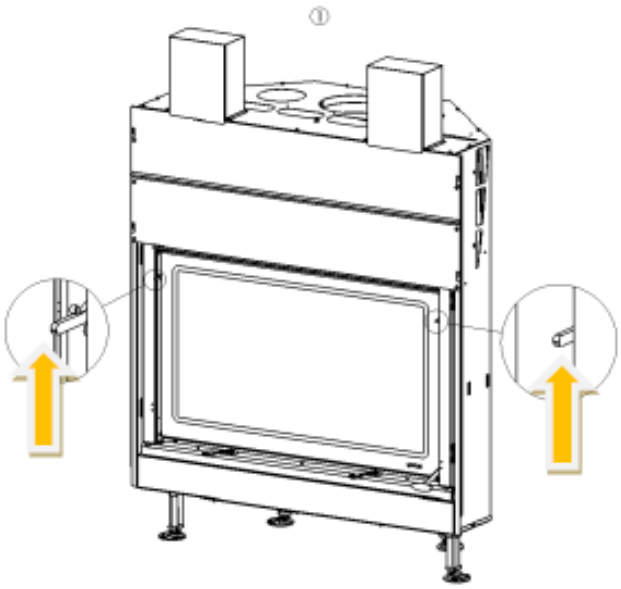
Heating during periods of transitional weather/unfavourable feed pressure

In periods of transitional weather, i.e. when outside temperatures are fluctuating between hot and cold, sudden increases in temperature may lead to disturbances in the air flow in your chimney, leading to the incomplete removal of the hot gases. Where this is the case, the fire should be filled with lower amounts of fuel and the primary air valve/controller opened to a higher setting, so that the fuel is burned more rapidly (with visible flames), thus stabilising the chimney draught.

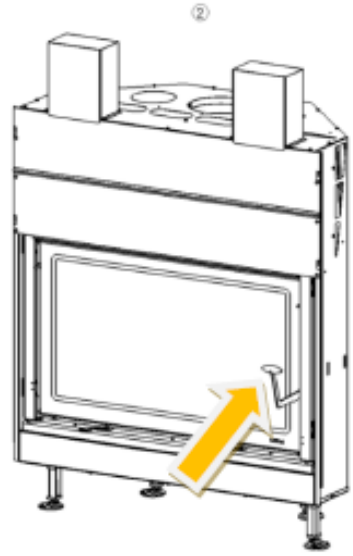
What to do in the event of a soot fire in your chimney

If the wrong wood or overly damp wood is used, deposits may form in the chimney, leading to a soot fire in the chimney. Close all the fire's vents immediately and inform the fire brigade. Once the fire in the chimney has burnt out, have your chimney examined by a specialist to identify any cracks or leaks.

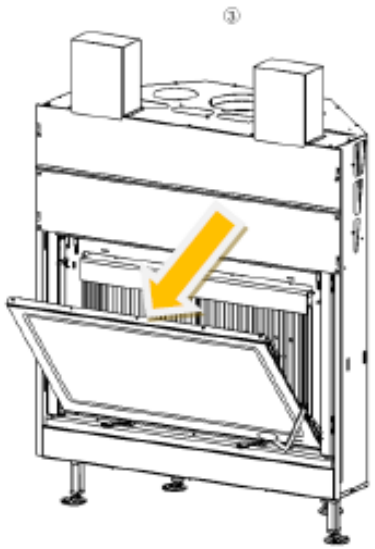
How to clean the (internal) glass panel



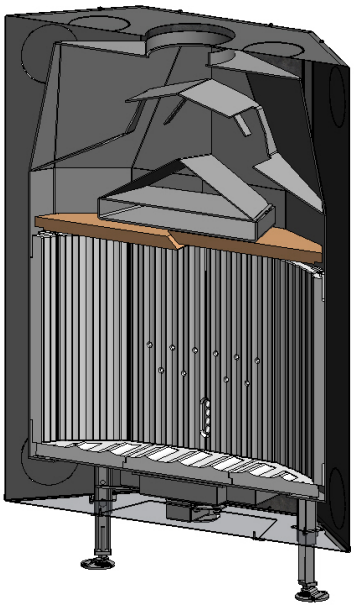
1. Open the sealing mechanism



2. Lift the door handle, which will allow you to open the door outwards



The baffle plates should also be regularly removed to allow the removal of any soot deposits that can frequently accumulate here.



First remove the vermiculite and then the steel baffle plates.

WARRANTY CERTIFICATE
Lotus wood-burning stove –10-year warranty

As from 1 September 2014, Lotus is now offering a 10-year warranty rather than the previous five-year warranty. This warranty is applicable to all fires supplied by Lotus after this date.

This warranty certificate is for the Lotus fire type _____, production number _____, purchased on _____.

Claims under the warranty are valid only under normal operational conditions, i.e. using normal split wood and compressed briquettes, and only if the wood-burning stove has been operated in accordance with the instructions.

The warranty covers the correct functioning of the fire and does not cover damage caused by overheating, damage to paintwork, parts subject to wear and tear and moving parts such as glass, fireclay, stones, riddling grate, baffle plates, seals, slide valves and the lock.

The warranty is invalid if the wood-burning stove is not operated in accordance with the instructions, and if defects or the like are repaired by a person not authorised by Lotus Heating Systems A/S, and in the event of attempted repairs by a person not authorised by Lotus Heating Systems A/S. The warranty does not cover damage caused by improper use.

If a product is returned to Lotus Heating Systems A/S and it transpires that the damage is not covered by the warranty, the customer shall be liable for the ensuing costs.

Any repair under warranty does not extend the warranty period for the repair, which is in line with the original warranty period.

This warranty certificate shall only be valid if completed and accompanied by the dealer's original invoice. The warranty period commences on the date of the invoice.

We hope you enjoy using your new Lotus wood-burning stove.

Yours sincerely

Johnny Ebstrup **Lotus Heating Systems A/S**

Dealer:

LOTUS
www.lotusstoves.com

EC Declaration of Conformity

Manucfacturer: Lotus heating Systems A/S
Agertoften 6, 5550 Langeskov
Denmark

Product: Inserts fired by solid fuel
Type designation: Lotus
Standard: EN 13229:2001/A2:2004/AC:2007
Fuels: Wood logs

Manufacturer's declaration: The inserts are approved by RRF Rhein-Ruhr feuerstätten Prüfstelle D- 45307 Essen (NB 1625). Manufacture of the product has taken place in accordance with these documents that are the basis for the relevant type approval certification and the required manufacturing checks.

Product code	Emission of CO @ 13 % O^2	Nominel Output kW	Energy effi-ciency %	Fire safety and Surface temperatur	Release of dangerous substance	Report no.
Lotus 370 Petite	0,09	5,8	77	Satisfies	None	RRF-29 16 4424-1
Lotus H470/H570	0,09	6	84	Satisfies	None	RRF-29 14 3815
Lotus H470W/H570W	0,10	7	80,5	Satisfies	None	RRF-29 13 3240
Lotus H570T	0,10	6	80,4	Satisfies	None	RRF-29 08 1600
Lotus H700	0,04	6	82,9	Satisfies	None	RRF-29 08 1703
Lotus Unico	0,08	6	80	Satisfies	None	RRF-29 14 3554
Lotus H486	0,10	8,9	82	Satisfies	None	RRF-29 16 4387
Lotus H586	0,09	11	80	Satisfies	None	RRF-29 16 4324
Lotus Prestige Integra	0,07	5	80	Satisfies	None	RRF-29 14 3642

Johnny Ebstrup
Lotus Heating Systems A/S

Product Fiche

Name or trademark	*Lotus*	Notes
Model identifier	***H586***	
Energy efficiency class	***A+***	
Direct heat output	***11,0 kW***	-meaning the space heat output according to the product standard -rounded to the nearest one decimal place
Energy efficiency index (EEI)	***107***	-rounded to the nearest integer:
Energy efficiency at nominal heat output	***80,0 %***	-Efficiency at nominal heat output according to the product standard (rounded to the nearest one decimal place)
Specific precautions that shall be taken when assembling, installing or maintaining the local space heater.	**Selected examples:** *- Fire protection and safety distances such as distances to combustible building materials must be observed!* *- An adequate supply of combustion air for the appliance must be guaranteed at all times. Air-suction systems can interfere with the combustion air supply!*	

Produktdatenblatt

Name oder Waren Zeichen	*Lotus*	Hinweise
Modell Kennung	***H586***	
Energieeffizienzklasse	***A+***	
Direkte Wärme Leistung	***11,0 kW***	– ist die Raumwärmeleistung nach den hEN's – auf die erste Dezimalstelle auf- bzw. abgerundet
Energie Effizienz Index (EEI)	***107***	- wird auf die nächstliegende ganze Zahl gerundet:
Brennstoff-Energie Effizienz bei Nenn Wärmeleistung	***80,0 %***	– Wirkungsgrad bei Nennwärmeleistung nach Norm (auf erste Dezimalstelle gerundet)
Hinweise zu besonderen Vorkerungen für Zusammenbau, Installation oder Wartung des Einzelraumheizgerätes	**Ausgewählte Beispiele:** *– Die Brandschutz- und Sicherheitsabstande u.a. zu brennbaren Baustoffen müssen unbedingt eingehalten werden!* *– Der Feuerstatte muss immer ausreichend Verbrennungsluft zuströmen können. Luftabsaugende Anlagen können die Verbrennungsluftversorgung stören!*	

Fiche produit

Raison social ou marque	*Lotus*	Notes
Désignation de modèle	***H586***	
Classe de performance énergétique	***A+***	
Puissance nominale	***11,0 kW***	-Indiquant la chaleur standard émis par l'appareil de chauffage
Indice d'efficacité énergétique (EEI)	***107***	- arrondie à l'entier le plus proche:
Rendement par rapport à la puissance nominale	***80,0 %***	-Rendement à la puissance nominale en fonction de la norme de produit (arrondi à la décimale près)
Precautions spécifique Pour l'assemblage, l'installation ou l'entretien du poêle à bois.	*Exemples divers:* *Protection contre incendie et distances de sécurité aux matériaux inflammables doit être observé !* *Un correct apport d'air de combustion doit être garanti toujours, soit par grille de ventilation non blocable, soit par gainage d'air frais directement au poêle si des systèmes de ventilation mécanique interfère avec l'apport d'air.*	