# Varde Lyon Varde Nice

ЕНЕРГИЯ - СУЕРУЕІА (В) (А)
Varde Ovne A/S Lyon, Nice
A++ A+ A A A A+ A+ A+ A+ B C D E F G ↓
6,4
kW
ENERGIA · EHEPГИЯ · ENEPГEIA · ENERGIJA · ENERGY · ENERGIE · ENERGI
2015/1186

## Installation and User Manual

Revision 1



Pottemagervej 1, 7100 Vejle, Denmark. www.vardeovne.dk

# Congratulations on the purchase of your new wood-burning stove from Varde.

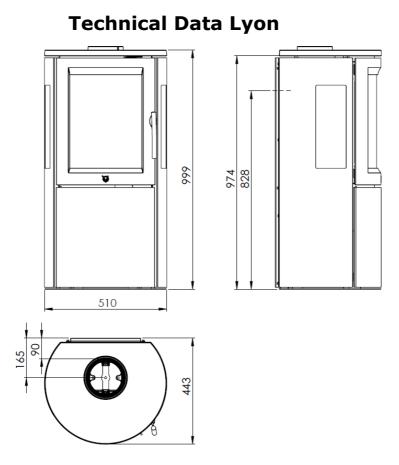
Wood-burning stoves from VARDE stand on the stylistic bedrock of Scandinavian design – created with the ambition of unifying quality, functionality and design.

With a VARDE stove, you and your family are ensured a warm gathering point and tranquil quality moments for many years into the future.

Jan Meldgaard CEO Varde Ovne A/S

### Contents

Welcome and contents	Page 2
Facts about Lyon	Page 3
Facts about Nice	Page 4
Rules and approvals	Page 5
Floor material and distances	Page 6
Installation distances	Page 7
Chimney	Page 8
Chimney assembly	Page 9
Operation	Page 10
Operation	Page 11
How to light up and use your wood-burning stove	Page 12
Overview of loose parts	Page 13
Vermiculite	Page 14
Choice of wood and nominal output	Page 15
Maintenance	Page 16
Spare parts	Page 17
How to correct faults and recycling	Page 18
Test certificate (RRF)	Page 19
Warranty	Page 20

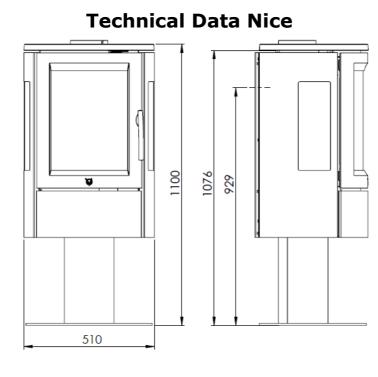


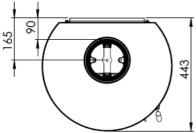
Height (cm)	100
Width (cm)	51
Depth (cm)	44
Weight (kg)	104
Output	5-9 kW
Nominal output	6,4 kW
Heated area	45-120 m <sup>2</sup>
Efficiency	83 %
EEI	111
Flue gas data: 260 °C at 25°	°C, 12 pa

Combustion chamber: (W x D x H): 31-40 x 25 x 36 cm

Smoke outlet Ø15 cm Installation height top: 97.5 cm Fitting height rear: 83 cm Distance to non-flammable material: 5–10 cm (recommended)

Distance to flammable material: Rear = 23 cm, Side = 60 cm, Front = 100 cm





Height (cm)	100
Width (cm)	51
Depth (cm)	44
Weight (kg)	104
Output	5-9 kW
Nominal output	6,4 kW
Heated area	45-120 m <sup>2</sup>
Efficiency	83 %
EEI	111
Flue gas data: 260 °C at 25°	С, 12 ра

Combustion chamber: (W x D x H): 31-40 x 25 x 36 cm

Smoke outlet Ø15 cm Installation height top: 108 cm Installation height rear: 93 cm

Distance to non-flammable material: 5–10 cm (recommended)

Distance to flammable material: Rear = 23 cm, Side = 60 cm, Front =100 cm

### Important!

Before you install and use your new Varde stove for the first time, we recommend that you first spend a couple of minutes reading this Installation and User Manual.

### Inspection of the installation

It is extremely important that the installation is inspected by an authorised chimney inspector before the stove is used for the first time.

This  $\ensuremath{\textbf{Varde stove}}$  is approved in accordance with:

European Standard DS/EN 13240/PrEN 16510 German Stufe 2 and Norwegian NS and §15 for Austria and is accordingly certified as having eco-friendly combustion properties.

The stoves are designed for intermittent combustion and are also designed for chimneys with several stoves connected.

### Applicable regulations

The installation must comply with all local regulations, including those that refer to national and European standards. Seek advice and guidance from the dealer from which you bought the stove or from a professional installation technician. NB: All Varde wood-burning stoves are closed fires.

### Professional installation

We recommend that you seek advice from the dealer you purchased the stove from or from another competent installation technician, as there can be specific details that must be taken into consideration with the installation.

### **Duty to report**

### The local chimney inspector has a duty to report.

Before the installation is carried out, the stove must be stored in a dry place at room temperature. The stove does not tolerate moisture.

Please note that your existing chimney may not necessarily be efficient enough for a new, modern wood-burning stove.

ormity		
Varde Ovne A/S Pottemagervej 1, 7100 Vejle, Denmark		
<b>RRF</b> Im Lopperfeld 34b, 46047 Oberhausen, Germany		
Varde Lyon - Nice Wood-burning stove, suitable for intermittent use Construction product (89/106/EC) standard used EN 13240 Heating of homes Wood None		
2018 6,4 kW Wood 260°C 83 % 0,10 % Jan Meldgaard CEO		

### General advice and instructions are available on the Varde Ovne website. www.vardeovne.dk

### Floor material:

If the stove is to stand on a flammable floor, then the floor area on which it stands must naturally be covered by a non-combustible material, e.g. a steel sheet, glass sheet, tiles or artificial slate sheet. The floor sheet must extend by at least 15 cm out from the sides of the stove and at least 30 cm out from the front. However, we recommend 50 cm in front of the stove.

The floor structure must also be able to support the stove and if required, the chimney's total weight.

Stove	Weight
Lyon	104 kg
Nice	113 kg

### Installation distances:

If the wall is non-combustible, the stove may be positioned next to it. However, we recommend that you keep a gap of 5-10 cm, which will mean that you will be able to clean behind the stove. If the chimney cleanout access door is behind the stove, make sure there free access to it and there is enough space to clean the chimney thought it.

Installing the stove in relation to combustible material.

It is recommended that there is a distance of 22.5 cm from the outer edge of the flue to any combustible material. Please note that there may be other national and local regulations relating to the distance to combustible material. Contact your local chimney inspector for advice.

The stove's individual distance to combustible material is shown on page 7 or under the technical data.

### Free air supply

In the room where the stove is to be installed, you must ensure that there is sufficient free air supply. Combustion only works effectively when new air is constantly supplied to the fire. This can be achieved by e.g. installing room ventilation valves in the walls. It must not be possible to block these air grates.

The combustion requires airflow of approx. 14-20 m<sup>3</sup>/h.

### Installation distances:

The stove must, in accordance with the applicable regulations, comply with the following minimum distances to combustible walls and materials:

### From the sides: 60 cm

### <u>Rear: 230 cm</u>

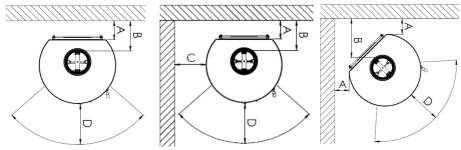
### Distance to furniture: 100 cm

## <u>NB: Note that B (from chimney to the wall) is a recommendation. There may be different local/national rules.</u>

Lyon and Nice

А	23 cm	С	60 cm
В	22,5 cm	D	100 cm

Lyon and Nice



### Chimney:

There must always be a chimney stack with a diameter of at least 15 cm. This is equivalent to clearing of 175 cm<sup>2</sup>. Remember to ensure that the **draught conditions** are satisfactory and that smoke does not inconvenience your neighbours.

If your chimney has a regulating damper, the draught can be regulated. Please note that the damper must never be completely closed. There must always be at least 20 cm<sup>2</sup> of free passage through the chimney.

In some cases, it can be an advantage on days when the wind is blowing strongly.

At nominal operation, the stove has been tested with a flue gas flow of 4,5 g/s and with flue gas temperature of  $260^{\circ}$ C at a room temperature of  $25^{\circ}$ C.

Varde stoves are always equipped with a smoke guide plate. This ensures that the smoke's path to the chimney is as long as possible. This ensures that the smoke's heat is released in your home rather than in the open air outside. The smoke guide plate lies loosely in the stove's combustion chamber and you must ensure that the plate is pushed all the way back against the combustion chamber's rear plate.

### **Draught conditions**

Ask the chimney inspector how to get the best draught from your chimney.

### **Chimney height**

If required, refer to your chimney inspector, who will help you to set the correct height.

### Condensation drain in the flue collar

Your stove is fitted with a cast iron flue collar from Varde Ovne. The flue collar is designed for a flue pipe (chimney) with an inner diameter of 150 mm.

You can establish a condensate drain yourself, if your steel chimney is to be fitted in the stove's top outlet:

Make a hole in the bottom of the exterior grate (at the mark) using a small chisel or similar, thus making the condensate drain yourself, if you need it.

Marking of condensation drain.

Make an opening using chisel or similar.

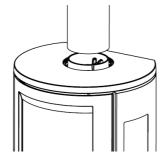
A condensate drain has now been made.



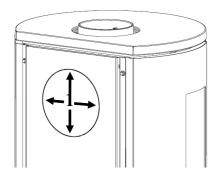


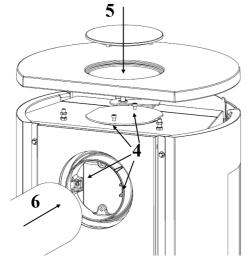


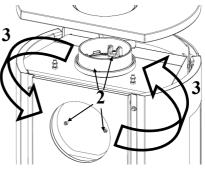
**Connecting the flue** Connect the stove using the top outlet.



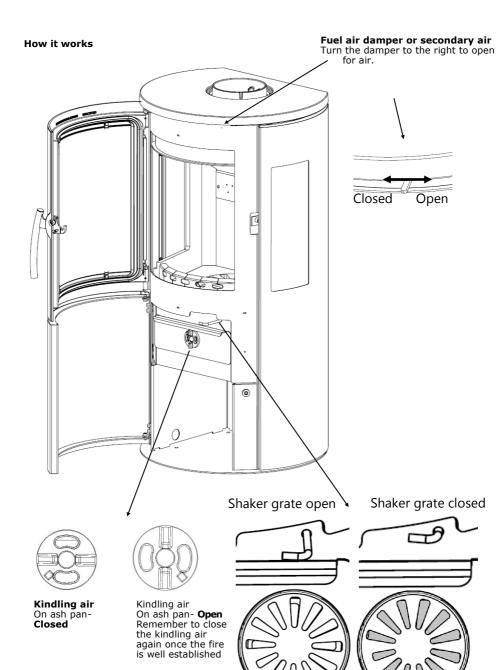
Connect the stove using the rear outlet.

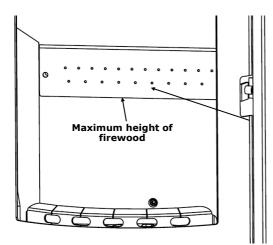






- 1. Cut the discs out in both back plate layers.
- Unscrew the bolts in the flue collar and facing plate.
  Swap the flue collar and facing
- 4. Screw the bolts in the facing plate and flue collar.
- 5. Put the top plate into position. NB! The cover plate to close the hole in the top plate is not sup**plied.** 6. Fit the flue pipe





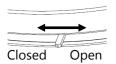
### **Tertiary airflow**

is a constant supply of air that ensures the stove burns more cleanly and, among other things, reduces the burning material's content of tar and soot particles to the absolute minimum sizes.

With optimal burning you will see that the glass and the combustion chamber will burn completely cleanly and there will be a minimal amount of ash left by the fire.

### **Combustion air**

Pre-warmed air for combustion (secondary airflow). It must be adapted in every single case. A strong chimney draught requires less supply of combustion air. This is also a way to regulate the intensity of the fire and this how much heat it produces. Never adjust it so low that there are no flames in the stove.



### Overheating

Overheating occurs when you put too much wood in the stove or if the fire has too much air. This can happen, for example, when the gaskets in the stove are not sealed or the ash pan has not been closed properly. In extreme cases, overheating can lead to a fire in the chimney. Overheating also causes much wear on the stove, both to wearing parts and gaskets, glass, vermiculite and the stove itself.

### How to light up and use your stove:

When you use the stove for the first time, the surface coating will cure and smoke will come from the stove and it will have a slightly pungent smell, which will disappear after a good airing. We therefore recommend that you open the doors and windows so there is airflow to/from outside.

During the curing process, the coating will become soft and vulnerable, so therefore avoid touching the coated surfaces. We also recommend that you regularly open and close the door during the first couple of hours to avoid the door's gasket from becoming stuck to the coating.

Never use flammable liquids such as spirits or petrol when you light the fire!

We recommend that you light the fire using the "Top-Down" method, where you light the wood at the top of the combustion chamber rather than at the bottom. This method is the most eco-friendly way to light a fire. At the same time, it will be easier to keep the glass in the door clean.

Cross 2-4 small pieces of kindling on the combustion chamber's base plate (approx. 0.7-1.1 kg). Position them so that there is a small gap between the individual pieces. On top of these, place 8-12 small wooden pins (0.5-0.8 kg), and place 1-2 kindling blocks on the top and in between the wooden pins. In total, about 1.6 kg wood. It is easier to light the fire if there is a thin layer of ash in the base of the stove.

Before you light the fire, air must flow up through the base grate, and the air rosette in the ash pan for the **kindling air** must be open, and the damper above the door for the combustion air must be drawn to the right so that it is completely open for the **combustion air**. When the fire is burning well, remember to close the kindling air again, since the stove and chimney otherwise can become overheated and the warranty for the stove and chimney will be void. Remember to check that the ash pan has also been closed correctly.

However, in most cases you will need to find the **best setting** for the combustion air yourself, due to: the chimney draught, chimney height, quality of the fuel etc. all this play a crucial role in how your stove operate best.

If the stove's nominal heat output becomes too great in relation to your heating requirements, you can reduce the heat output as follows:

- Use a smaller amount of fuel than normally, e.g. 1,0-1,3 kg and ideally consisting of 2 smaller pieces of wood. Apply full air to light the wood properly, then reduce the combustion air, perhaps down to 30%. However, you must not reduce it so much that it causes the fire to go out. There must always be clear flames.

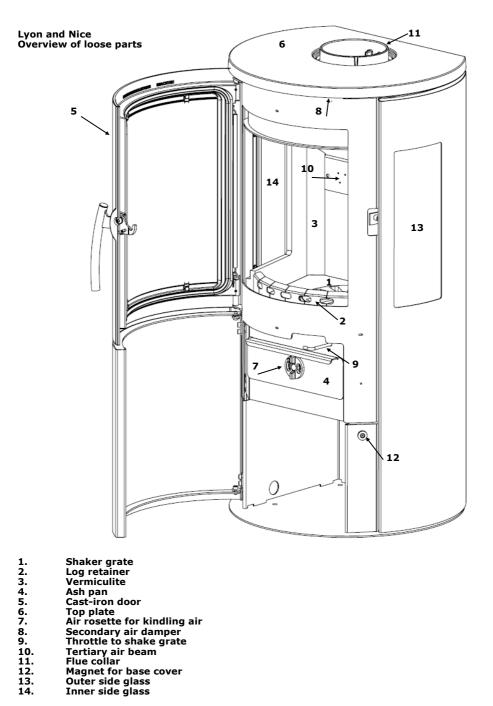
Using this method, depending on the chimney draught, quality of the fuel, etc., you can reduce the stove's heat output from a nominal 6,4 kW to perhaps 4,5-5,0 kW.

Note that if you reduce the combustion air too much, this can lead to poor combustion, which will result in reduced efficiency and increased emission value in the smoke (increased pollution).

When re-stoking the fire, we recommend that you first open the door and load new wood when there are only embers left inside the combustion chamber. If there are flames, then smoke and gas are still being generated, and depending on the efficiency of your chimney, there is a danger that smoke downdraught will enter the room. When re-stoking, use gloves when **loading** the wood.

when he stoking, use gioves when **louding** the wood.

If you experience problems with lighting the fire and its function, see the section: **How to correct a fault.** 



- 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14.

### Vermiculite

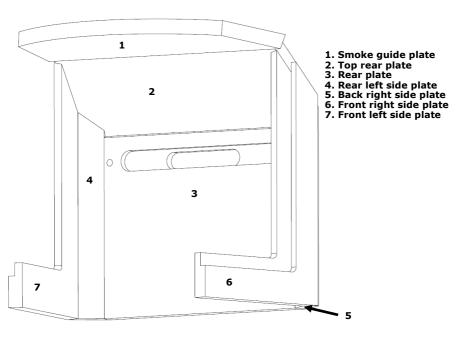
**The panels in the combustion chamber** are known as **vermiculite panels** and they become worn over time. The smoke guide plate also becomes worn. You only need to replace the panels if the crack is more than about ½ cm wide.

### Vermiculite

A special fireproof material made of compressed stone granulate, which looks like fibreboard. The panels are insulating and ensure that the stove does not wear out. Vermiculite panels are not covered by the warranty.

Vermiculite is a very porous material and must be handled with care.

### Only original spare parts from Varde Ovne A/S may be used.



### How to replace the vermiculite cladding

- 1. Raise the top rear panel (2) and tip out the front side panels (6 and 7).
- 2. The rear side panels (4 and 5) can now be tipped out.
- 3. Unscrew the two screws that hold the rear panel (3).
- 4. Raise the rear panel (2), then pull the rear panel (3) including the air rail out horizontally.
- 5. Now remove the rear panel, by taking out diagonally.
- 6. Push the smoke guide back against the rear wall in the stove and then edge out diagonally.

To fit, repeat the procedure in reverse.

### Which wood is the best?

In general, beech is the best wood for a fire. It burns evenly and produces very little smoke and the ash is clean and does not take up much space. Ash, maple and birch are also suitable alternatives.



### How big does the pieces of wood have to be?

Wood with a diameter that is greater than 8-10 cm should be chopped into smaller pieces. The logs must be 20-25 cm in length. Using larger amounts of firewood than stated in the table on the bottom of the page, will load the wood-burning stove with heat that is higher than it is designed for, which will cause a higher temperature in the chimney and lower efficiency. In this fashion, the chimney can become damaged and the warranty will be void.

### Your new stove

When you use the stove for the first time, the surface coating will cure and smoke will come from the stove and it will have a slightly pungent smell, which will disappear after a good airing. We therefore recommend that you open doors and windows so there is airflow to/from outside. During the curing process, the coating will become soft and vulnerable, so therefore avoid touching the coated surfaces. We also recommend that you regularly open and close the door during the first couple of hours to avoid the door's gasket from becoming stuck to the coating.

### What can you make a fire with?

This **Varde stove** has been approved and tested for the combustion of wood. Only dry wood may be used with a max. water content of 21% and a size that is suitable for the combustion chamber. If you use wet wood, it will produce a lot of tarry soot, pollute the outdoor air and your stove will have a poor fuel economy. Wood from newly felled trees contains approx. 60–70% water, and it is completely unsuitable for use in fires. You should expect that wood from newly cut trees will have to be stored under a roof for at least 12 months to dry before it can be used in the stove.

### Do not use! - Take care of the environment

Similarly, you must **never** fire your stove with wood that is toxic when burned, such as glulam, particle board, painted or laminated wood. If you fire your stove with these completely unsuitable materials, it will change the combustion properties, which will affect the stove's output and can result in overheating of the stove and the warranty will be void. In addition, the burning of this kind of material will lead to emissions of very unpleasant smoke with extremely high levels of pollution.

### **Kindling sticks**

Length: 20–25 cm Size 3 x 3 cm Normal amount: 10–15 sticks (approx. 1.6 kg)

### Logs

Length: 25–30 cm Diameter: max. 10 cm Normal amount: 2 logs (approx. 1.3 kg)



To achieve the nominal heat output, follow this procedure:

| First firing | Kindling   | Combustion | Nominal | Chimney - | Efficiency | Stoking frequency |
|--------------|------------|------------|---------|-----------|------------|-------------------|
| amount       | air        | air        | output  | draught   | in         | at nominal output |
| [kg]         | [%]        | [%]        | [kW]    | [PA]      | [≥ i %]    | (minutes)         |
| 1,3          | 0 (closed) | approx. 50 | 6,4     | 12        | 83         | approx. 45        |

### Maintenance:

As with anything else that you use on a daily basis, your stove must of course be maintained. You should only clean your stove when it is cold. Wipe the outside using a dry cloth, and you should clean it regularly on the inside. The actual combustion chamber should be cleaned of ash, soot and tar remnants. You should also remove the smoke guide plate, because dirt and soot will build up behind it, and check that there is free access through the flue and chimney. You should also check that the gaskets in the door and ash pan are not worn out. If the gaskets do not seal properly, they must be replaced. Remember to lubricate the door hinges as required.

### Glass

We recommend the use of VARDE glass cleaner to clean the pane; this can be bought from our dealers.

The **ash pan** must be emptied regularly, and the ash can be disposed of along with your domestic waste. But you must of course make sure that the ash does not contain any embers. If you are unsure about how to clean or maintain your wood-burning stove, contact the dealer who sold you the unit or contact your chimney inspector.

In particular, following a long period of time where you have not used the stove, before using it again you must make sure that there is nothing blocking the flue or the chimney.

Some exposed areas of the **stove's painted surface** can over time become worn out e.g. through cleaning or overheating of the wood-burning stove. However, this can be repaired using a special coating, Senotherm®, which comes in a spray can and can be purchased from your dealer.

The **panels in the combustion chamber** are known as **vermiculite panels** and will become worn over time. If a piece of wood damages a vermiculite panel, it has no effect on combustion. You do not need to replace the panels unless the crack in the panel is more than about  $\frac{1}{2}$  cm wide.

### Only original spare parts from Varde Ovne A/S may be used.

The door is fitted on a lock spring, which pulls the door in. This is a regulatory requirement in certain countries. The spring is attached to the hinge, and can be removed if you do not wish to have a spring-loaded door.

### No unauthorised alterations may be made to the wood-burning stove.

### All of the exterior parts of the wood-burning stove will become very hot during use. You should therefore exercise necessary caution.

#### IMPORTANT!! Chimney fires

If your chimney catches fire, you must follow this procedure:

- Close all of the air supplies to the stove and telephone 112.

(Most chimney fires will go out on their own once you have stopped any air from getting into the stove).

As a minimum, you must contact your chimney inspector, who will then inspect the stove and chimney for damage.

### Spare parts

Should you require spare parts for your wood-burning stove, below is an overview of the spare parts.

Spare parts overview for Lyon and Nice

Log retainer, product no. and barcode 100483 /5703505042920 Top cover made from cast iron, product no. and barcode 100266 / 5703505033546 Glass, product no. and barcode Front: 100280 / 5703505042722 Inner side glass: 100937 / 5703505051427 Outer side glass: 100938 / 5703505051434 Handle product no. and barcode 100402 / 5703505042142 Ash pan, product no. and barcode 100712 / 5703505044382 Set of Vermiculite panels, product no. and barcode: 100941 / 5703505051489

Gasket for glass and ash pan, product no. and barcode 100443 / 5703505045457

Gasket for door incl. adhesive, product no. and barcode 100351 / 5703505040162

Glass cleaner, product no. and barcode: 100493 / 5703505045471

Repair spray for coating, black 400 ml, product no. and barcode: 100603 / 5701909002069

### How to correct a fault.

### Smoke entering room

- Poor draught in the chimney.
- Check that the flue and chimney are not blocked.
- Check that the chimney height is correct in accordance with the surroundings.

### Glass and/or chimney soot:

- Wood is too wet.
- There is insufficient combustion air (secondary air).
- You have closed the kindling air too quickly when you started the fire.
- There must always be clear flames in the combustion chamber.

### The stove is not heating the room:

- The wood is too wet (all the energy is being used up in drying the wood) or the wood is poor quality.
- Check that the smoke guide plate is positioned correctly (free passage for smoke).
- Insufficient combustion air (secondary air).

### The fire burns too intensely:

- The gasket in the door or ash pan does not seal (it must be replaced).
- The chimney draught is too powerful (fit a damper in the chimney).
- Check that the kindling air is closed.

### The shaker grate is stuck:

- Check that a piece of wood or similar is not stuck in the grate.
- Check that the shaker grate bar is in the correct position.

### Recycling

### Packaging

In consideration of the environment, the packaging should be disposed of in accordance with local regulations for the disposal of waste. The packaging is 100% recyclable.

### **Ceramic glass**

Ceramic glass must be taken to the local recycling station and recycled with other ceramic and porcelain, where it is sent to a waste disposal facility.

### Vermiculite

Vermiculite panels from the wood-burning stove must be taken to the recycling station, where they will be sent to a waste disposal facility.

#### Rhein-Ruhr Feuerstätten Prüfstelle • Im Lipperfeld 34 b • 46047 Oberhausen

- Anerkendt prøveinstitut, godkendt af Europakommissionen (EU) Nr. 305/2011, notified body: 1625
- Prøveinstitut efter DIN EN ISO/IEC 17025:2005, DAkkS Nr. D-PL-17727-01-00
- Anerkendt prøveinstitut i h. t. Delstatsbyggevedtægterne, reg.nr.: NRW 15
- Anerkendt prøveinstitut for byggetilsynsmæssige tilladelser
- Anerkendt DIN CERTCO prøveinstitut, reg.nr.: PL139





### PRØVNINGSATTEST

| Kontrolerklæring nr       | RRF - DK 18 4865  |  |
|---------------------------|---|--|
| Prøvens art               | Prøve i h. t. EN 13240:2001/A2:2004/AC:2007   |  |
| Ordregiver:               | Varde Ovne A/S  |  |
|                           | Pottenmagervej 1, DK-7100 Vejle   |  |
| Genstand for prøven:      | brændeovn   |  |
|                           | Lyon  |  |
|                           | Nice  |  |
| Nominel varmeydelse:      | 6,0 kW  |  |
| Emissioner i forbrændings | produkterne relateret til 13 % O <sub>2</sub> .   |  |
| CO-emissionen             | 0,10 %  |  |
| Støvemissionen:           | 19 mg/m <sup>3</sup> efter CEN/TS15883, Annex A. 1 (D!Nplus metode)   |  |
| OGC                       | 73 mg/m <sup>3</sup> efter CEN/TS15883, Kapitel 4   |  |
| Virkningsgrad:            | 83 %  |  |
| CVR nr.:                  | 21554979  |  |
| P-nr.:                    | 1005018532  |  |
|                           |   |  |
| Prøvningsresultater:      | Det attesteres herved at ovenfor nævnte fyringsanlæg opfylder<br>emissionskravene i: Bilag 1 til bekendtgørelse nr 1461 af 07/12/2015 vedr.<br>regulering af luftforurening fra fyringsanlæg til fast brændsel under 1 MW |  |

Bemærk venligst, at de oplyste værdier er uddrag af prøvningsrapporten.

(1. og 2. trin)

Godkendelsesafdelingens leder

(Dipl.-Ing. S. Müller) Obernausen, 24.05.2018

Seite 1 von 1

Dato,

Skorstensfejer påtegning

underskrift

PB 13240 V16 20180219SM

### Warranty

All **Varde stoves** undergo substantial quality control, and we take pride in supplying the same high quality at all times. We do, however, offer a **5-year warranty** for any manufacturing defects, should they occur.

### The warranty does not cover:

- Wearing parts, vermiculite panels in the combustion chamber, glass, handles, gaskets, cast-iron base and shaker grate.
- Damage there is the result of incorrect operation, e.g. overheating, unapproved fuel, incorrect connections, lack of or incorrect maintenance, etc. (see these user instructions).
- Damage caused by external effects of a physical nature.
- Transportation costs in connection with any warranty repair.
- Installation/dismantling during the warranty period.
- Compensation for any consequential damage, including damage to other items.

# All enquiries regarding complaints must be made through the dealer where the stove was purchased.

When making a complaint, make sure that the complaint includes pictures, the purchase receipt and the 16-figure serial number, which is on the rear of the stove.



Pottemagervej 1, 7100 Vejle, Denmark. www.vardeovne.dk