

## Installing the stove:

According to existing regulations, stoves must be placed with the following minimum distances (in centimetres) to inflammable walls and materials:

**Sides: 30 cm Rear: 20 cm Distance to furniture in front of stove: 100 cm**

If walls are non-inflammable, the stove can be placed closer to them. However, we recommend a minimum distance of 5-10 cm. to allow for cleaning behind the stove. The cleanout gate must be accessible.

Optimal combustion can only be obtained if fresh air is constantly admitted. It is important, therefore, to ensure that this is the case.

The best way to provide a steady flow of fresh air is by installing 1-2 air vent's in the room where the stove is situated. (one in each side of the room).

## Flooring:

If the floor on which the stove is to be placed is inflammable, the floor must be covered with non-inflammable material, such as a steel or glass plate, floor tiles or artificial slate, covering an area of at least 15 cm. from the sides of the stove and at least 30 cm. from the front of it.

With regard to the front, however, we recommend 50 cm.

Also, the bearing construction must be capable of carrying the combined weight of stove and chimney.

**The weight of Thurø 1 is: 117kg.**

## The chimney:

Always use a chimney with a diameter of at least 15 cm. This corresponds to a clear of 175 square centimetres. Make sure the chimney is of a sufficient height, that it draws well and that smoke does not bother your neighbours.

We recommend that you fit your chimney with a damper, allowing for draft control. This may prove particularly important on windy days.

Note: the damper must never shut off draught completely – always allow at least 20 square cm free passage through the chimney.

With nominal usage the stove has tested a Smoke flow of 5,5 g/second and with a smoke temperature of 310° C in a room of 20° C.

Varde stoves are always fitted with a smoke plate which redirects smoke to make its way to the chimney as effectively as possible. This ensures that the heat from the smoke is emitted inside your home rather than outside it. The smoke plate is moveable and placed on top of the Vermiculite fire brick side plate. You should make sure that it is pushed all the way back against the back wall of the combustion chamber.

## How to light and stoke a fire:

The first time you light up the stove the enamel will temper, and give off some smoke and a slight smell. We recommend that you leave doors and windows open, as airing the room will make the smell disappear. This tempering softens the enamel making it susceptible to damage. Therefore exercise caution and avoid touching the enamel. Likewise we recommend opening the door to the stove at regular intervals for the first hours to prevent the insulation rope from sticking to the enamel.

Never use highly inflammable fluids such as spirit and petrol for lighting up! Instead, use a crumpled up piece of newspaper or kindling blocks topped by 10-15 small sticks (c. 2 kg.). A thin layer of ashes at the bottom of the stove makes lighting up a fire easier.

Before lighting up the stove, open the **shaking grate** by pulling the lever all the way out. Then open the valve on the ash-pan for access of **primary air** and open the valve under the ash-pan for **combustion air** (alternatively, shortly leave the door a little bit open if there is no wind and no draught in the chimney), thus allowing the fire to catch on. Always remember to close the door again, otherwise the stove can be overheated, and this is not covered by the warranty.

When the fire burns steady, then remember to close the valve on the ash-pan again, until its c. 10 % open.

The following optimal register and fuel quantity settings are recommended (in case of similar chimney draught):

Fuel Quantity [kg]	Primary-Air open [%]	Combustion Air open [%]	Nominal Output [kW]	Chimney Draught [PA]	Efficiency [≥i %]	Refill interval at nominal output [minutes]
2,0	10 (almost closed)	80 (almost open)	6,0	12	81	c. 65

## Regulations

All local regulations as well as National and European, should be adhered to when installing your stove.

All Varde Ovne stoves are closed fireplaces.

## Draught conditions

Consult your local stove dealer about how best to adjust the draught in your chimney.

## Chimney Fires

Should your chimney catch fire, cut off the air supply to the stove's combustion chamber and contact the emergency services. (The majority of fires die out after the oxygen supply is cut off). Following this, the least you should do is to contact your chimney sweeper, who will check your stove and chimney for damage.

## Continual fresh air

A continual supply of fresh air is required in the room in which the stove is situated. This can be achieved by installing 1-2 vents, whilst also ensuring that these can not be blocked.

## The shaking grate

The shaking grate is situated at the bottom of the combustion chamber. The ashes will be shaken into the ash-pan by the pulling and pushing of the lever.

## Primary air

Also known as 'sub-air', the air which is drawn into the combustion chamber through the air valve on the door.

## Combustion / Secondary air

Pre-heated air for the combustion process, the amount of which can be altered according to the desired room temperature, and the effectiveness of the chimney. A high level of chimney draught requires a lesser intake of combustion air.

## VARDE OVNE A/S

Is a Danish company specialising in functional, environmentally friendly and designed quality stoves.

The stove has passed the Danish (DS/EN 13240), Swedish (SP), and German (DIN) Kite marks, with following results: (CO value on 0,12 % and a smoke temperature of less than 320 °C).

"So when you light up your stove, consider the environment. We do."

## What kind of wood to use?

Generally, beech wood is considered the best type of wood for burning. It burns evenly without producing much smoke and the ashes are clean and take up little space. Ash, birch and maple wood are fine alternatives.

## Overheating

Occurs if too much wood is placed in the stove or if the combustion receives too much air.

## Vermiculite fire bricks

A special non-inflammable material. The vermiculite fire bricks both isolate and protect the stove from attrition. Vermiculite fire bricks and smoke plate are not covered by the warranty. Vermiculite is a very porous material, therefore handle with care. When refilling the stove, put in the wood carefully, use the glove.

In most instances, however, you will have to arrive at the **best combustion air settings** yourself, as the height and diameter of your chimney, as well as the quality of the firewood are decisive factors in determining how your particular stove is best set (see also the section on troubleshooting on next side).

When refilling the stove with wood, we recommend opening the stove door only once embers are left in the combustion chamber. Opening the door whilst the flames are still burning and producing smoke and gas, might cause smoke to slip into the room instead of up the chimney.

## What to burn

This **Varde** stove is tested and approved for the burning of wood. Only dry wood with a moisture content of maximum 21 percent and the size to fit into the combustion chamber should be used. The burning of moist wood will result in an increased amount of tarry soot, pollution and uneconomic fuel consumption. Newly chopped wood contains about 60-70 percent moisture, which makes it completely unsuitable as fuel. Allow newly chopped firewood to dry in an open shed for a year before using it in the stove. Split firewood with a diameter larger than 10 cm. Use firewood with a length on 20-25 cm.

The use of larger quantities of fuel than recommended in the table page 2 will overtax the stove and result in increased temperatures in the chimney as well as a lowered efficiency. This may cause damage to both chimney and stove, and the annulment of the warranty. Also, never use toxic materials such as chipboard, painted or impregnated wood.

## Maintenance and cleaning

As any piece of equipment in daily use, your stove needs maintenance.

The stove should only be cleaned when cold. Use a dry cloth for cleaning the exterior of the stove.

Clean the interior regularly by removing ashes, soot and tar from the combustion chamber. The smoke plate should be removed for cleaning as the reverse side will be covered in dirt and soot. Finally check that the smoke's pathway through the smoke pipe and chimney is completely clear. You should also inspect the gaskets in the door and the ash-pan for signs of wear. Replace them if permeable. Also, remember to oil the hinges of the door as required.

Empty the ash-pan regularly. It can be emptied into your dustbin, as long as you make sure it contains no hot embers.

When in doubt as how to clean your stove, contact the dealer from whom you bought your stove, or your chimney sweeper. It is especially important to check the stove and its chimney for blockages after a long period of non-use.

**The enamelled surface** of the stove may wear down at certain places if the stove is **overheated**.

Worn surfaces, however, can be repaired with a special Senotherm® spray paint, available at your local vendor.

The plates in the combustion chamber are **Vermiculite plates** and will eventually be worn – as will the smoke plate. Should you accidentally break a plate, for instance by hitting it hard with a piece of wood, this does not effect the quality of the combustion. You need not replace the plate until the gap is 5 mm. wide.

**The door is constructed with a spring** which automatically swings the door shut.

This may be a function required by existing regulations. The springs is placed in both hinges, and can be removed, if you do not want this option.

**Only use original spare parts from Varde Ovne.**

**Do not make any unauthorised changes.**

**All external parts of the stove become hot during use, too. Therefore exercise necessary caution when the stove is in use.**

## Troubleshooting.

Smoke enters the room:

- Not enough draught in the chimney.
- Inspect the smoke pipe or the chimney for blockage.
- Clean the inside of the stove removing soot from the upper vermiculite / smoke plate.
- Make sure the height of the chimney is correct.

The glass or the chimney soot up:

- The wood is too moist.
- Not enough secondary air is applied to the combustion process.
- You may have shut off the supply of primary air too early when lighting up the stove.
- There always have to be clear flames in the combustion chamber.

No heat is emitted from the stove:

- The wood is too moist (all energy goes into drying it) or of a poor quality.
- Inspect the position of the smoke plate and make sure there is free passage for the smoke.

Combustion is too intense:

- Gaskets in the door or the ash-pan are no longer tight and need replacement.
- The chimney draught is too strong - apply a draught control.

The shaking grate is stuck:

- Inspect the grate for jammed wood, nails or the like.
- Make sure the lever is placed correctly.

## Height of chimney

If in doubt, contact your local stove dealer. He will be able to inform you of the correct height.

## Warranty

All **Varde** stoves go through a close quality inspection, and we take pride in always delivering products of a consistent quality. This being so, manufacturing faults may still occur, and on these we offer a **5 year warranty**.

### The warranty does not include:

- Wearing parts, such as the Vermiculite fire bricks in the combustion chamber, the smoke plate, glass, gaskets, cast iron bottom and the shaking grate.
- Damages which occur as a consequence of misuse, such as overheating, incorrect installation, missing or wrong maintenance etc. (see instructions earlier).
- Damages caused by external influences of a physical character.
- Cost of transportation in connection with warranty repairs.
- Assembling/reassembling in connection with warranty repairs.
- Compensation for following damages, including damage on other objects.

### Warranty conditions:

These instructions for use are also your proof of warranty. The warranty will not take effect until vendor's stamp, information about model, registration number and date of purchase (invoice if possible) have been applied below. In case of claims, please bring this proof of warranty to your local vendor.

Vendor's stamp and signature

Model:

\_\_\_\_\_

Reg.no.:

\_\_\_\_\_

Date of purchase:

\_\_\_\_\_



*Congratulations on purchasing  
your new stove from*



These instructions for use pertain to the following

DS / EN 13240

approved stove:

**Thurø 1**

This stove is designed for intermittent combustion and can be connected to a chimney used by other fireplaces, as long as the appropriate rules and regulations are adhered to.

Before lighting up your **Varde stove** for the first time, we recommend that you read these instructions carefully and contact your local stove vendor or building authorities to inquire about existing regulations regarding the installation of stoves. Please follow these regulations closely.  
**Please Note!** You are by law required to register your stove at the local chimney-sweeper.  
Until installation keep the stove dry and not too cold. The stove cannot stand moisture.  
Please note, that an existing chimney, not necessarily is effective enough for a new modern stove.

 **VARDE OVNE A/S**  
Kongevej 246, DK - 6510 Gram