INBOUWHAARD / FOYER
FIREPLACE / KAMINEINSATZ

2300 2400



2300GL



2400BS



2400GL

INSTALLATIEVOORSCHRIFTEN EN GEBRUIKSAANWIJZING

INSTALLATION ET MODE D'EMPLOI

INSTALLATION INSTRUCTIONS AND OPERATING MANUAL

EINBAUANLEITUNG UND GEBRAUCHSANWEISUNG

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Foreword

The Installation Manual and Operators Instructions must accompany this appliance. As well as instructions for installation and information about use, you will also find advice concerning safety and maintenance.

Please read this booklet carefully before installation and before firing the unit.

Save this booklet and pass to any subsequent user who can also profit by it.

1. Introduction

Your DOVRE purchase has made you the owner of a high quality product that symbolizes a new generation of energy-saving and ecologically safe heaters, producing convection heat as well as radiant heat with optimum efficiency. Through the application of a revolutionary combustion concept DOVRE heaters achieve astonishing results in full compliance with strict environmental and safety norms. Also, you will be enjoying the lovely sight of the fire blazing in the stove.

Our heaters are produced in accordance with ISO 9002, using state-of-the-art production means.

In the unlikely event of a malfunction, you can always rely on DOVRE's after-sales service.

This heater is designed to be installed in a living room and to be hermetically connected to a flue (chimney).

If the stove is professionally installed, connected to a well-functioning chimney and sufficiently ventilated, you can take the long-term and trouble-free functioning of your heater for granted.

Please consult an expert when installing and connecting the heater. The manufacturer cannot be held liable for problems caused by faulty installation.

2. Safety

The heating unit is best installed, commissioned, and checked by a competent installer who is aware of national and local legislation.

The heater is designed to heat a room, which means that all surfaces, including the front glass, can get very hot (> 100 °C).

Please do not place any curtains, clothes, laundry, furniture or other combustible materials on or near the heater.

It is advised to make a fire in the stove with the highest possible intensity right after it is installed, so as to cure the heat-resistant paint finish. This may involve some odour production, which will however disappear after a while.

It is necessary to maintain and regularly clean the stove and the chimney for the stove to function safely and for a long period of time. Please follow the cleaning instructions in the chapter concerned.

Broken glass should be replaced before using the heater again.

The stove is specifically designed for burning certain kinds of fuels. In the technical specifications under cover you can find detailed information concerning this topic. It is absolutely prohibited to burn fuels other than these, as this may damage your heater. Moreover, it is ecologically harmful.

3. Installation guideline

3.1. Preparatory measures

The fireplace should be hermetically connected to a well-functioning chimney, sufficiently enclosed to keep combustible materials (floor and walls) at a distance, and should be installed in a room with sufficient ventilation.

Please inform about national or local norms and regulations concerning this subject. Your distributor will give you the necessary advice.

You can also consult the fire department and/or an insurance company about specific demands or regulations.

Please read the technical specifications under cover in this manual before installing the appliance.

3.1.1. The chimney

The chimney (the flue) has a double function:

- It draws air, that is necessary for good combustion, into the stove.
- It functions as an exhaust pipe for combustion gases via thermal or natural draught. Thermal draught is caused by the difference in heat between the air in- and outside the flue. The heated air in the flue is lighter than the colder air outside the flue and consequently rises up, along with the combustion gases. Natural draught is caused by environmental phenomena, such as wind.

It is prohibited to connect several heaters to one chimney (for instance the central heating boiler), unless local or national regulations allow this.

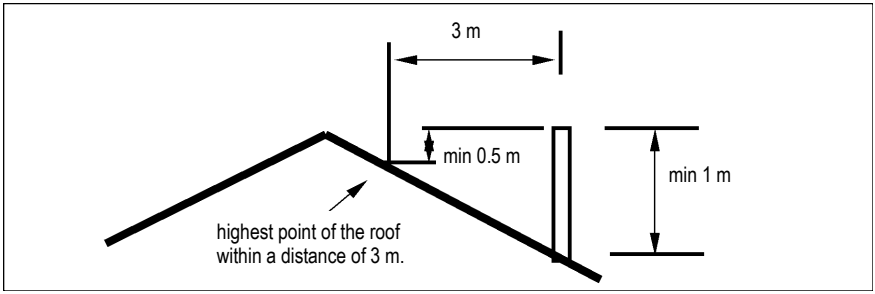
Please check which chimney is to be used for the stove you purchased and whether your chimney is appropriate for this specific usage. You should consider an expert's opinion on this matter.

The chimney should meet the following conditions:

- The flue should be made of fireproof material. Ceramic or stainless steel is recommended.
- The chimney should be airtight and thoroughly cleaned and should guarantee a sufficient draught (a draught or negative pressure of 15 to 20 Pa is ideal under normal circumstances).
- It should run as vertically as possible. Changes in direction or horizontal segments will disrupt the smoke flow and may cause soot to cumulate inside the flue (and clog the flue!).
- The chimney's inside dimensions must not be too large in order to prevent the smoke from cooling off too much. For recommended chimney dimensions, see the technical specification under cover. Larger dimensions can be used if the flue is well insulated.
- The flue's diameter should be the same throughout its whole length. Wider, or especially narrower segments will disrupt the smoke flow and are best avoided.

The same is true for a cover plate or exhaust hood on top of the chimney. The exhaust hood must not narrow the chimney's outlet and should be designed in a way that wind will not hinder, but promote the smoke flow.

- Especially if the flue runs through unheated rooms or outside the house, further insulation is necessary. Metal chimneys, or parts of the chimney outside heated rooms should always have double-walled, insulated flues. The part of the chimney outside the roof should always be insulated.
- The chimney should be high enough (at least four metres) and should end in a zone that is clear of nearby buildings, trees or other obstacles. The rule of thumb here is: 60 cm above the ridge of the roof. If the distance between the ridge and the chimney measures more than three metres, see the dimensions stipulated in the illustration below. Depending on the presence of nearby buildings or trees, the chimney should be higher.



3.1.2. Ventilation

The burning of wood, charcoal or gas involves oxygen consumption. It is of the utmost importance that the room in which the stove is installed should be sufficiently ventilated.

Insufficient ventilation may disrupt the combustion process and cause the smoke flow through the chimney to be interrupted, which may lead to smoke emissions into the room. Mainly in case of a fireplace, together with the combustion gases, lots of room air will be extracted through the chimney; that makes supply of sufficient fresh air and ventilation extremely important.

If necessary, you can install a ventilation grille to provide a constant flow of fresh air in the room. This precaution is particularly necessary in well-insulated rooms with mechanical ventilation.

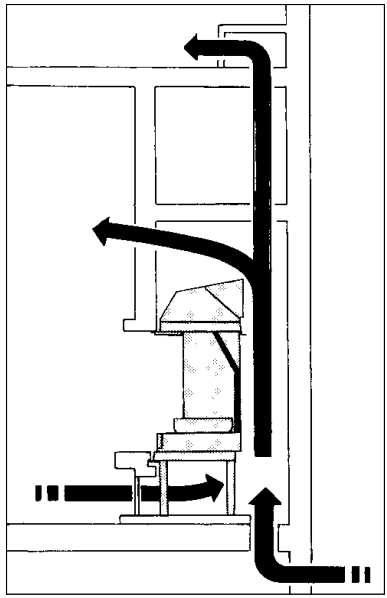
The DOVRE fireplace has been designed to produce most heat by means of convection. Heat is mainly transmitted through the back panel, the lateral panels, and the smoke dome. Both the material (cast iron) and shape (increased heating surface by means of corrugation) improve heat transmission to the surrounding air. As this air is heated, it will rise and a natural hot air flow, i.e. convection, will develop. Up to your choice, that hot air may be led to the same room or to another room.

For optimal heating and leading the convection air, the airflow must not encounter any obstacles. Hence, it is important that there is enough space between the fireplace and the surrounding material, and that the inlet and outlet area of convection air are sufficiently large.

Convection air may be led to arrive from both the room and outside (other room, cellar, exterior) to the bottom side of the fireplace. In case convection air is supplied (directly or indirectly) from outside, it may also be useful as a supply of fresh air for combustion.

At any rate, assure proper home air management and sufficient air supply into the room.

Ensure not to use other air-consuming appliances, such as heaters, cooking hoods, bathroom ventilators, in the same room or in the house while the stove is burning; or make sure to have an extra ventilation grille installed for these appliances.



3.1.3. Floor, walls

Combustible material must be sufficiently protected. The floor under the fireplace and the walls around it must not contain electric wires.

Under the appliance

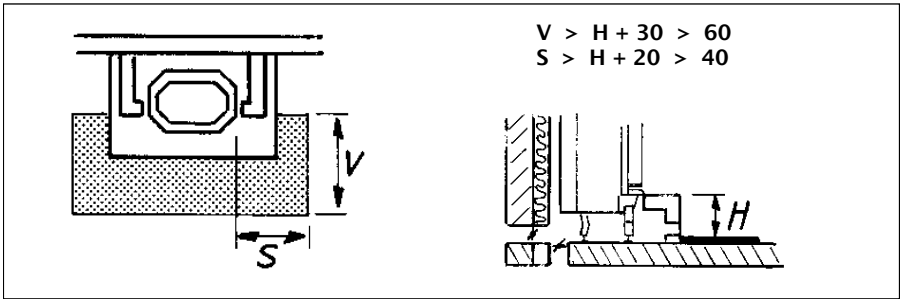
Under the appliance, any combustible material must be removed or specially shielded by means of a 6 cm concrete slab and 10 cm insulation. The legs of the appliance may rest directly on the concrete slab and insulation must be applied inbetween the legs.

Floor round the appliance

A floor made of combustible material must be properly shielded in the following areas:

Front: height of the lower part of the fire chamber + 30 cm, but 60 cm at least.

Sides: height of the lower part of the fire chamber + 20 cm, but 40 cm at least.



Walls, ceiling

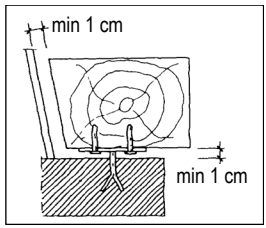
Combustible walls behind, next to, or above the fireplace must be shielded with at least a 10 cm stone or brick wall and 10 cm insulation. Fireproof materials should be covered with at least 6 cm insulation.

3.1.4. Combustible material round the fireplace

Within the radiation area of the fireplace

Assure a distance of at least 80 cm between the opening of the fireplace and combustible material. That distance may be reduced to 40 cm if the combustible material is sufficiently shielded and well ventilated.

Outside the radiation area of the fireplace



Assure a distance of at least 5 cm between the mantle built around the fireplace and combustible material. A small surface contact between combustible material and the mantle (e.g. wall cladding) is allowed if the mantle of the fireplace is sufficiently insulated.

A wooden ornamental rafter must not be installed within the radiation area of the fire. Outside the radiation area, there must always be a ventilation gap of 1 cm all around to prevent heat from building up (see picture).

No combustible material must be present within 50 cm from the convection outlet areas.

3.2. Preparation

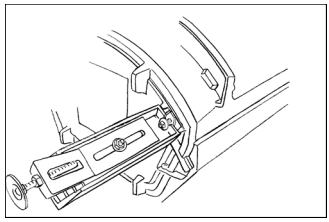
Please inspect the fireplace for damage caused during transport immediately after delivery and notify your distributor in case there are any defects. Do not put the appliance into operation in the meantime.

In order to avoid damaging the fireplace during installation and to make its handling easier, it is recommended to remove previously all loose parts (fire-resistant bricks, grille, ashtray, ...) from the stove. Note the location of those parts while removing them, so that you have no difficulties in re-assembling the parts later on.

The stove will be supplied with the following parts:

- A set of legs
- A smoke dome with fixing material
- A flue collar with fixing material
- A “cold handle” to open the door
- An ashtray (option)

3.2.1. Assembly of the legs



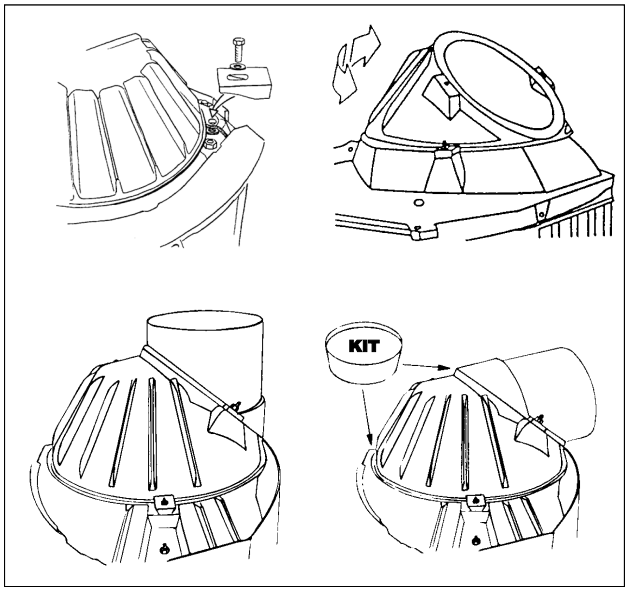
Carefully tilt the appliance onto its backside.

Fix the leg holders on the bottom plate with nut M8 and collar Ø8xØ17.

Adjust the height of the leg on the holder with bolt M8x50, nut M8 and both collars Ø8xØ25.

Fix the adjustment bolts under the legs. These will allow to adjust the fireplace level.

3.2.2. Assembly of the smoke dome and of the flue collar



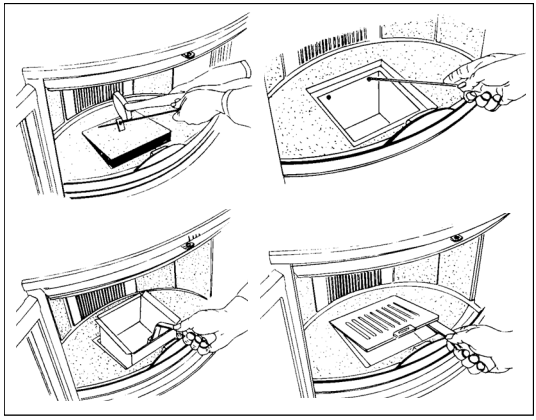
The smoke dome must be fixed to the top of the device and attached by means of the clamps supplied. Assure proper sealing by means of the kit or paste supplied.

It is recommended to install the smoke dome with its exhaust backwards. In case of proper draft, it may be turned up to 90° to the left or to the right if required for installation. In case of lower draft, an angle of maximum 60° is recommended.

The flue collar can be installed either horizontally or vertically. Fix the flue collar on the smoke dome with 2 bolts M6x30, 2 nuts M6, and 4 collars Ø6xØ12. Assure proper sealing with kit or paste.

3.2.3. Installation of the ashtray (if applicable)

The optional ashtray is installed as follows:

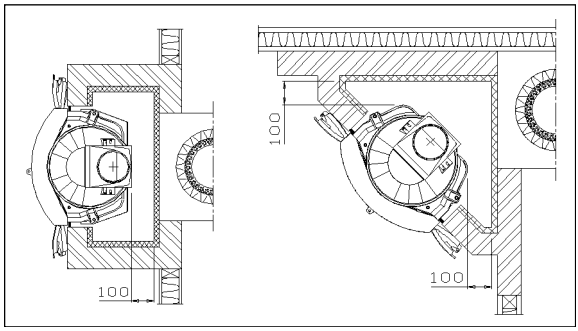


- Lift the plate in the middle of the bottom brick; insert a screwdriver into the hole to lift the brick (if necessary, tap the brick with a hammer to loosen it).
- Extrude the pre-cut plate from the bottom heat shield.
- Clean the sealing edge and put the supplied rope (diam. 6 mm) in the groove; install then the ashtray holder.
- Tighten the 4 plate screws in the ashtray holder and assure proper sealing with kit or paste.
- You can now install the ashtray and the grid.

3.3. Installation of the fireplace

3.3.1. Positioning and connection

Put the fireplace at proper height. Make sure that it is stable and level and that the side panels are perpendicular to the bottom plate. Put the fireplace far enough from the walls, so that minimum 10 cm of free air passage remains between the back of the fireplace and the wall after adding the necessary insulation.



Make an airtight connection between fireplace and chimney, according to good practice.

Before further installation of the fireplace, check for sufficient draft in the chimney and for proper connection between the smoke duct and the appliance.

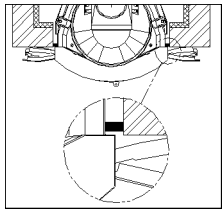
For that purpose, you can light a small intense fire with paper and small dry kindle. In case of a brick smoke duct, wait until the duct is dry enough.

3.3.2. Mounting

Start with the masonry round the base of the fireplace. In that masonry, the air supply grids (optional) will be installed. Minimum air supply opening is 250 cm². The grids may be installed on all sides.

It is important that air flows freely into the convection chamber. If you use an air vent (to convey outside air into the convection chamber), remember to build in the adjustment knob.

It is recommended to cover the inner side of the convection chamber with extra reflecting insulation material. That prevents loss of heat radiation to outside walls or adjacent rooms, as well as deterioration of any inside wall insulation.



Make sure that the doors of the hearth move freely over the plate in front of the fireplace.

Continue building the chimney up to the smoke dome. Assure a gap of at least 2 mm between the fireplace and the masonry to allow for dilatation of the fireplace. If necessary, use heat-resistant strips.

Upper structure support

The masonry over the fireplace must not rest on the fireplace. That is why a support is used. Between the steel support and the smoke dome, you must leave a free space of at least 3 mm. That will prevent tensions in the material that might tear the upper structure. The steel support may rest on the side structure or be attached to the wall by means of threaded rods.

Convection chamber:

The convection chamber topside must be airtight. For that purpose, you can use a cover of steel, concrete, or any other fire-resistant material, and put extra insulation on top of it. Make sure that the cover is well horizontally placed.

The cover must be installed at 30 cm at least above the smoke dome. The outlet grids (optional) must be installed straight under that cover. Make sure that convection outlet area is big enough: minimum 500 cm².

In the convection chamber no combustible material must be used. Make sure that, when using other auxiliary material such as steel, it will not function as a heat bridge.

The picture on the next page shows an example of fireplace installation within combustible material.

3.4. Finishing

When the appliance is installed in the right place, its connection with the chimney made airtight, and the masonry mantle completely mounted, all loose parts are installed in the appliance.

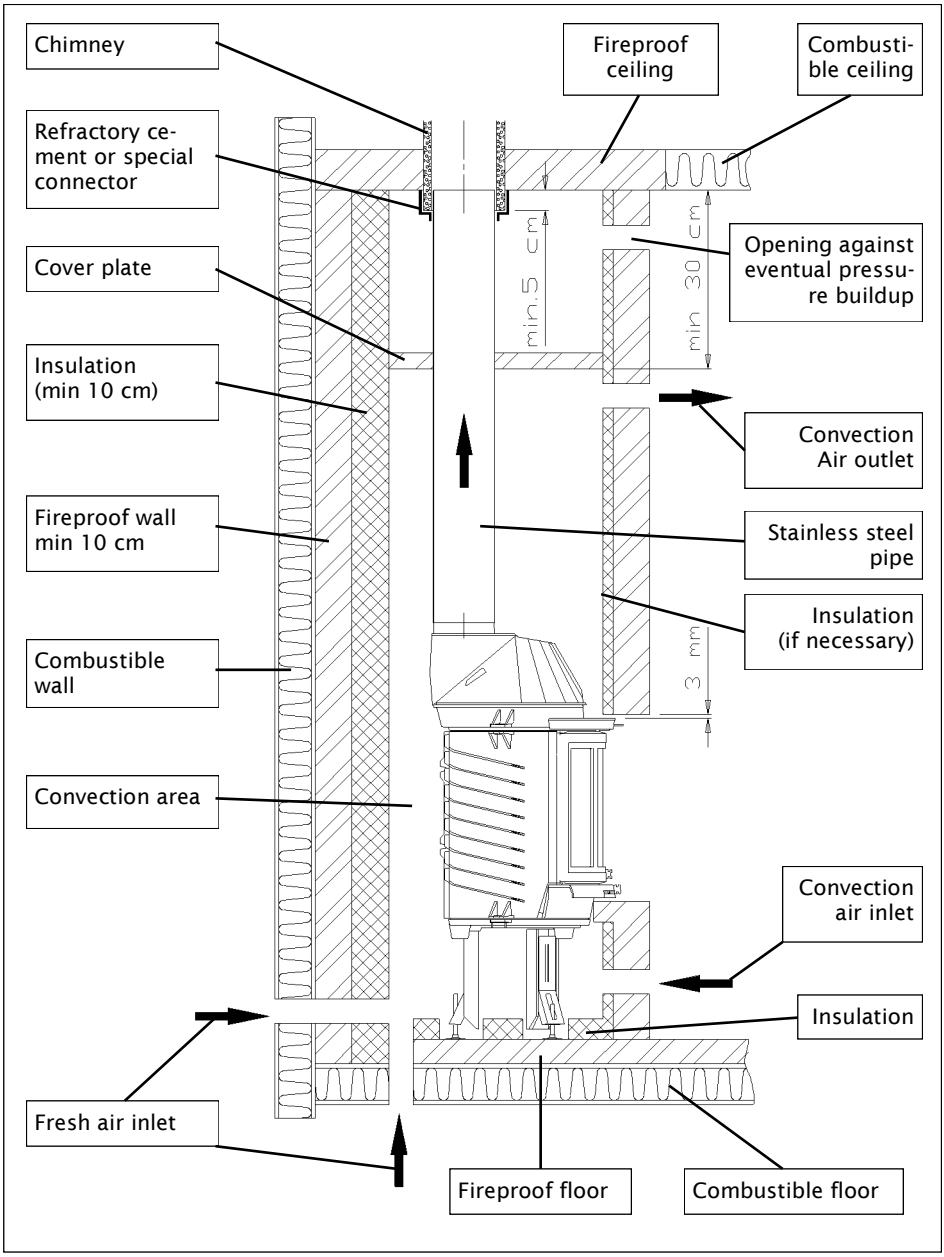
Your fireplace is now ready to be used.

Depending on the materials used for mounting, it is recommended to wait for some time until all masonry is dry before lighting a fire.

Attention: never light a fire with the inner plates or refractory stones removed.

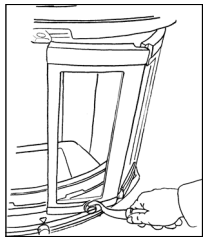
3.5. Packaging materials

Packaging materials should be disposed of in a responsible way and in accordance with governmental regulations.



Example of fireplace installation within combustible material

4. Instructions for use



4.1. Opening and closing the door(s)

The door can be opened and closed by means of the cold handle supplied.

4.2. Fuel

The only suitable fuel for this stove is wood. No other fuels are allowed to be burnt, as they can inflict serious damage to your stove.

Do not burn any treated wood either, such as scrap wood, dyed wood, impregnated or preserved wood, plywood or chipboard. The fumes of these, as of synthetic materials, old papers and household waste, are highly polluting for both your stove and your chimney, and for the environment. They also could cause chimney fires.

Wood

Hard woods, such as oak, birch- and fruit-trees, are the ideal fuels for your stove.

The wood must have dried for at least two years in a covered and well-ventilated place. Split logs will dry faster. Dry wood should contain no more than twenty percent moisture.

Wet logs are unsuitable for burning, as they do not produce enough heat and all of the energy is lost in the process of evaporation. Moreover, the burning of wet wood causes badly smelling gases to be released and a thick layer of tar will deposit on the stove panels and in the chimney.

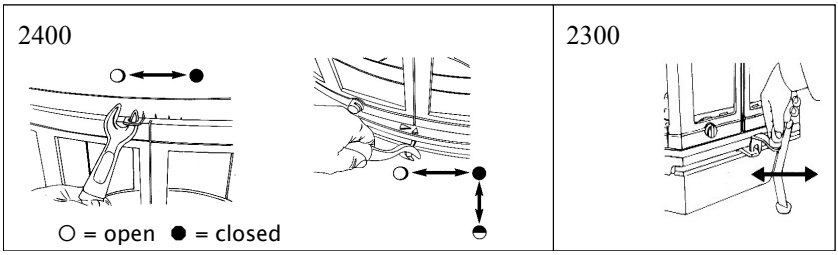
4.3. Lighting a fire

In order to create sufficient draught and to prevent smoke from emanating into your living room, the chimney should be warm enough before lighting a fire. A cold chimney can be heated up by lighting a ball of paper above the fire plate.

To kindle the fire in the stove you can use paper and/or firelighters and small pieces of wood.

Slightly open the door and pull the air slides wide open. See the illustration opposite on how to use the air slides.

It is important that the kindled fire should burn intensely. You can then throw larger pieces of wood onto the fire, and close the doors. When the fire has eventually stabilized and is glowing enough, you can put the logs.



4.4. Burning wood

The best way to control the fire is to completely close the lower air slide, which you use to get the fire started, and to regulate the air supply with the upper air slide only. In case the air supply through the upper slide seems insufficient, or if you would like to fan the fire, you can partially open the lower air slide for a while.

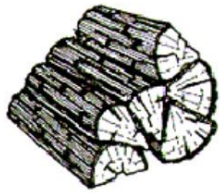
Add extra fuel when necessary. Never add too much fuel. It is best to fill the stove for one third and to top it up on a regular basis.

Always open the filling door slowly. Before filling up, the charcoal bed should be carefully spread open. Check whether the coals are glowing enough just behind the log retainer, so that the added fuel will immediately catch fire. If necessary you can open the lower air slide for a while.

Open stacking will make the logs burn very intensely, as the oxygen can easily reach every part of the fire. This method of stacking is applied when burning wood for a short while. Compact stacking will make the fire burn slower, as the air can only reach the outer parts of the fire. This stacking method is best used when burning for a longer while.



open stacking



compact stacking

Low intensity fires cause tar and creosote to deposit in the chimney after a long period of time. Tar and creosote are highly combustible substances. Thicker layers of these substances might catch fire when the temperature in the chimney increases suddenly and steeply. Therefore it is necessary for the fire to regularly burn very intensely, so that thin layers of tar and creosote immediately disappear.

Low intensity fires also cause tar to deposit on the stove panels and doors.

When it is not too cold outside it is better to let the stove burn intensely for just a few hours a day.

The fireplace can burn with either open or closed doors. When the doors are left open, it is recommended to use a spark screen.

4.5. Ash removal

If your fireplace is equipped with an ashtray (optional), it must be emptied before the ashes reach the lower edge of the combustion grid. With the cold handle supplied, you can tilt the grid upwards and remove the ashtray from the device.

Relatively speaking, burning wood produces little ash and it will not be necessary to remove it each time daily. Moreover, wood burns better on a bed of ash.

4.6. Extinguishing the fire

Stop fuelling the fire and let it burn out.

Damping a fire by closing the air slides involves the release of noxious gases. You should let the fire burn out and keep an eye on it as long as it is still glowing.

4.7. Weather conditions

Attention!

Mist and heavy fog will block the chimney's smoke outlet and may lead to smoke emissions into the living room.

It is best not to use the fireplace under these weather conditions.

5. Maintenance

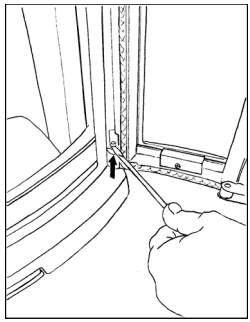
It takes only little effort to keep your appliance in good condition.

Regularly check whether the sealing cord still closes the doors tightly enough.

Minor paint damage can be touched up with a can of spray paint. Your dealer can supply you with the correct spray product.

During the first use after repainting your unit might give off some slight odour. However, this will disappear quickly.

The glass can be cleaned with a number of glass cleaning products available on the market. Your installer can also supply you with appropriate products. However, never use abrasive or corrosive cleaning products.



At the end of the heating season, seal off the chimney with a ball of paper. You can then thoroughly clean the stove on the inside.

If necessary, replace the sealing ropes and use fire cement to fill up possible leaks. Remove the fireplate for better and more thorough cleaning.

To remove the doors, disassemble the hinges as shown.

You should have your chimney swept by an expert before the heating season begins. It is useful to check the chimney for soot during the heating season as well. Checking and maintaining the chimney is a statutory requirement.

When all of the above advice is heeded, you will be able to fully enjoy your stove.

CE-conformiteitsverklaring
Declaration de conformité CE
EC Declaration of conformity
Konformitätserklärung CE

CE

Notified body: 1625

Wij,
Nous,
We,
Wir,

Dovre nv Nijverheidsstraat 18 B2381 Weelde

verklaren bij deze dat de inbouwhaarden 2300 en 2400 conform zijn volgens de EN 13229.
déclarons que les foyers 2300 et 2400 sont conforme au norme EN 13229.
declare that the fireplaces 2300 and 2400 are in conformity with the EN 13229.
Erklären daß das Produkt 2300 / 2400 entspricht EN 13229.

Weelde, 04.03.2005

T. Gehem

In het kader van een continue productverbetering, kunnen specificaties van het geleverde toestel afwijken van de beschrijving in deze brochure, zonder voorafgaande kennisgeving.

Dans le cadre d'une amélioration constante des produits, les spécifications du produit livré peuvent différer du contenu de ce document, sans avis préalable.

Due to continuous product improvement, specifications of the delivered product may differ from the content of this booklet, without further notice.

Im Rahmen kontinuerlicher Produktverbesserung, können Specifikationen des geliefertes Produktes von den Beschreibungen in dieser Broschure abweichen.

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E & O E