MULTIBRANDSTOFKACHEL
POELE MULTI-COMBUSTIBLES
MULTIFUEL STOVE
MULTIBRENNSTOFFOFENOVE

640 GM 760 GM

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 sight of the fire blazing in the stove.

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

In the unlikely event of a malfunction, you can always rely on DOVRE's after-sales service. Any unauthorised modification of the appliance is forbidden and use only replacement parts recommended by the manufacturer.

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.

2. Safety

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.

In case of a chimney fire, immediately close all air intake vents of the appliance and alert the fireman.

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 stove 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 stove.

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.

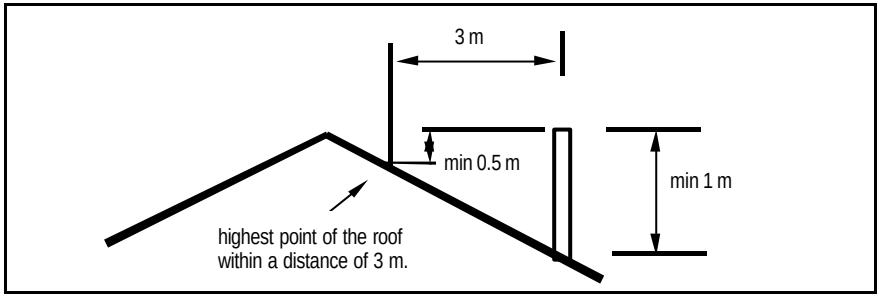
Please check which chimney is to be used for the stove you purchased and whether your chimney is appropriate for this specific usage. You should consider an expert's opinion on this matter.

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 accumulate inside the flue (and clog the flue!).
- The chimney's internal dimensions must not be too large in order to prevent the fumes 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.

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.

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 grill installed for these appliances.

If your stove is equipped with the (optional) connection set to feed combustion air from outside the room, you do not need an additional air supply. However, ensure sufficient ventilation of the room from which you supply air.

3.1.3. Floor, walls

A safe distance should be kept between the stove and combustible materials such as wooden walls and furniture. If you purchased a freestanding stove, this distance should be at least forty centimetres.

The appliance shall be installed on floors with an adequate load-bearing capacity. Combustible floors require sufficient protection against radiant heat by means of a fireproof protective plate. Rugs and carpets must be kept at a distance of at least eighty centimetres from the fire.

3.2. Preparing the stove

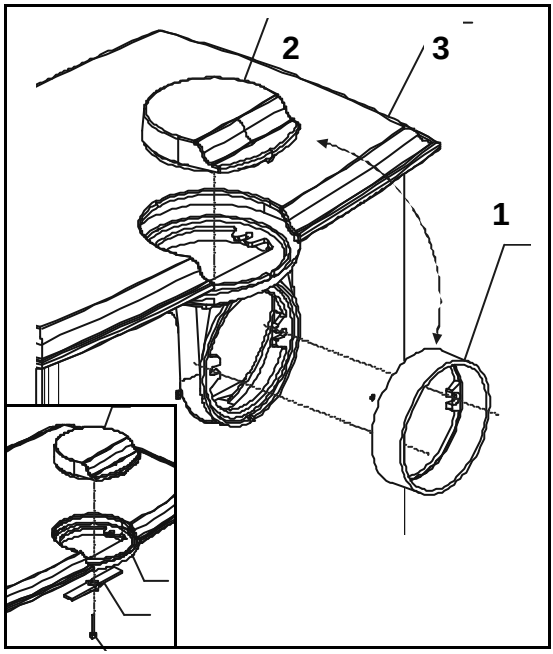
Please inspect the stove for damage caused during transport immediately after delivery and notify your distributor in case there are any defects. Do not put the stove into operation in the meantime.

In order to avoid damaging the stove during installation and to make handling of the stove easier, it is recommended to remove previously all loose parts (fire-resistant bricks, 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 connection collar with fixings
- A blanking plate with fixings
- A “cold handle” for the door
- A “cold handle” to pull out the ashtray and shaking the grate
- A “cold handle” to open the filling lid
- A scraper for the ashes

3.2.1. Smoke outlet



Your stove is suitable for two connections: a top or a rear connection.

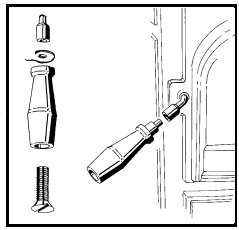
Upon supply, the top and rear exhausts have been left open. Depending on the position chosen, one opening can be covered with the blanking plate supplied (2); the other one can be equipped with the connection collar supplied (1) (see picture). Use the fixings supplied and be sure to tightly seal the connection collar and the blanking plate to the stove by means of the kit or paste supplied.

In order to make the connection easier, the top plate (3) may simply be removed from the stove and replaced afterwards.

The blanking plate (2) is designed such that, in case of rear mounting, it seems to be an integral part of the top plate; in case of top mounting, it can cover the rear opening without disturbing the outer appearance.

3.2.2. Assembling the "cold handle"

Assemble the different parts of the handle, i.e. a screw M8x50, a wooden handle and a nut, as indicated on the sketch.



3.2.3 Assembly and Placement of coalbunker (optional)

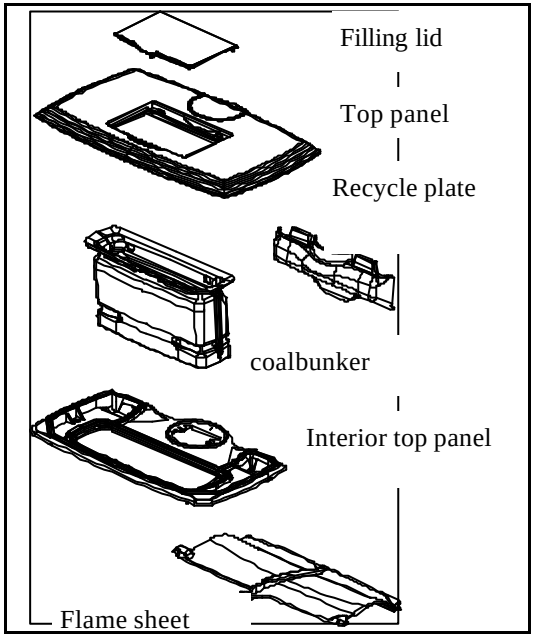
For the placement of the coal-bunker, one should follow these instructions:

Remove the top panel (which is located loosely on the interior top panel) togethe r with the filling lid.

Remove the flame sheet (which consists of two parts).

The bunker can now be placed inside the appliance. It should be placed against the edges of the interior top panel. Make sure that the longest side of the bunker is placed at the back.

Place the top panel and the filling lid on the appliance again.



3.3. Finishing

When the stove is placed in the final position and hermetically connected to the chimney, you can replace all of the loose parts.

Your stove is now ready for use.

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

3.4. Packaging materials

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

4. Instructions for use

4.1. Fuel

The only suitable fuels for this stove are wood, brown coal briquettes and charcoal. 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. Theyalso 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.

Brown coal briquettes

Brown coal briquettes burn in more or less the same way as wood does. You should only burn briquettes on a bed of charcoal in your stove.

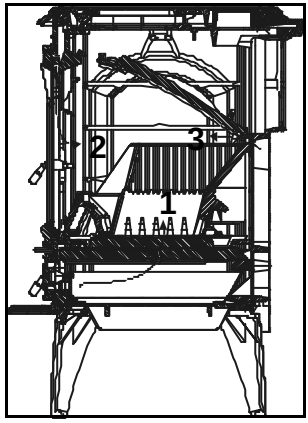
Charcoal

There are several categories of anthracite coal. Some characteristics may be legally determined. For instance anthracite “A” has to contain less than 10% of volatile substances, anthracite “B” less than 12%. The ash content may range from 3 to 13%.

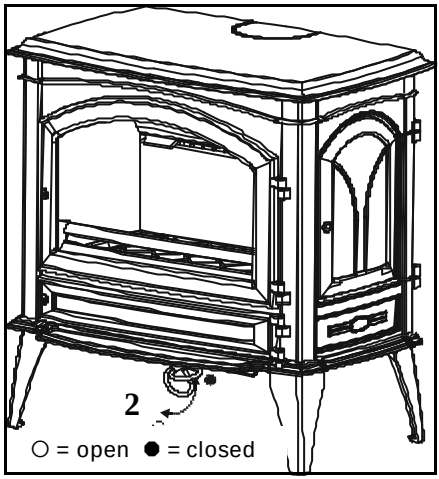
For a good operation of your appliance, the use of anthracite “A” with a low ash content is recommended. A combustible with a high ash content has a lower net heating value. Moreover, the ashes have to be removed more frequently and the fire will go out faster. The recommended calibre is 12/22 or 20/30.

4.2. Air supply adjustment

For the supply of combustion air, the appliance is provided with three air inlets at the back of the appliance, one of which is adjustable by way of a handle at the bottom of the front of the furnace. Through special air vents, this secondary airflow (2) is conducted to the top of the glass window. The primary air intake is controlled by way of a thermostat at the back. This air intake regulates the amount of air that passes through the grating (1). A sealable air intake at the back of the combustion chamber (3) ensures a perfect afterburning (only to be used for wood) (see images)



4.3. Lighting a fire

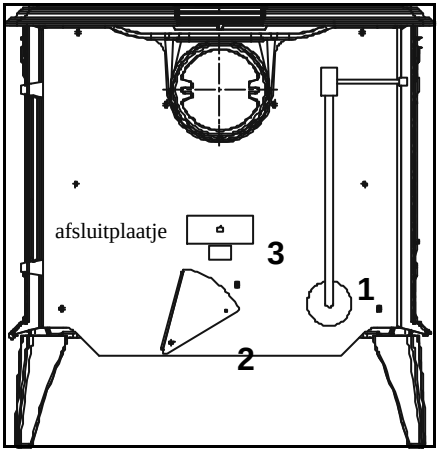


In order to create sufficient draught and to prevent smoke from being emitted into the room, the chimney should be warm enough before lighting a fire. A cold chimney can be heated up by lighting a ball of paper above the fire plate or at the back of the bunker.

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

Slightly open the door and turn the air slides wide open.

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



4.4. Burning wood

The best management of the hearth can be obtained by shutting off the primary airflow (1) completely (= thermostat) and by fully regulating the air intake with secondary airflow (2). If this management proves to be insufficient, or in order to fan the fire, one can temporarily open the primary airflow for extra air intake.

Make sure that the furnace door is always shut adequately.

Never stoke with an open door.

Add fuel timely. Do not add too much fuel at once. It is best to fill the hearth to maximally one third and to add regularly.

Always open the filling door slowly and always open it for the shortest time possible. Before adding, make sure that the charcoal base is distributed equally over the stoking surface. If needed, open the primary air valve for a little while.

If the wood is piled up loosely, it will burn very quickly because the oxygen will reach every piece of wood easily. This piling is used when one wants to stoke in a short time. When the wood is piled more compactly, it will burn slower as the air can only reach particular pieces of wood. It is best to use this piling method if one wants to stoke for a longer period of time

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.

open stacking

compact stacking

4.5. Burning coal

FOR BURNING WITH COAL, THE AIR INTAKE ABOVE THE DOOR (2) (= SECONDARY AIR INTAKE) AND THE AIR INTAKE AT THE BACK SIDE (3) MUST BE CLOSED AT ALL TIMES. (For shutting the air intake at the back, the blocking slide must be positioned in such a way that it shuts off the air intake.)

Burning coal without bunker

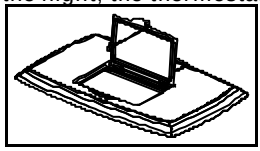
When the ignition fire has sufficiently stabilized and when there is a sufficient blaze, then a scoop of coal can be added to the fire.

Use the front door when filling. Once the coals have ignited, the addition of coals can be completed. Make sure that you do not put out the fire by adding too much coal at once. After the coals have been burning well for some time, adjust the level of the thermostat. Just prior to refilling, open the thermostat completely. Now use the shaking grate and shake until glowing bits fall into the ash drawer. After that, add coal.

After a couple of minutes, adjust the thermostat to the desired position. Add a maximum amount of coal until you can just make out the glow of the previous filling.

Burning with coal with bunker (optional)

After sufficient burning of the ignition fire, the bunker is filled with coal by way of the filling lid on the top panel. After the coals have been burning well, the thermostat is adjusted to the desired position. The filling frequency depends upon the desired performance. In order to leave the furnace on during the night, the thermostat must be adjusted to level 1, approximately. The correct level depends on the chimney and the weather conditions

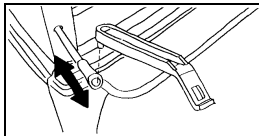


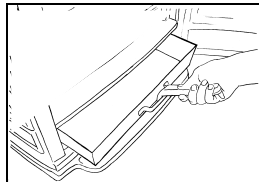
When the fire basket or the cast-iron plate fins are red-hot, you are heating too intensely.

4.6. Low heating (for devices suitable for continuous use)

To use the device as a 'continuous fire', you can select the primary and secondary air scoops in such a way you get the right burning speed. Always make sure there's enough glow on the heating bottom.

4.7. Ash removal

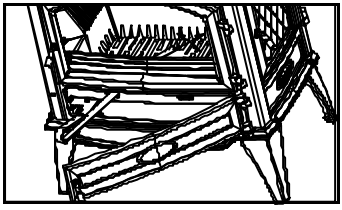




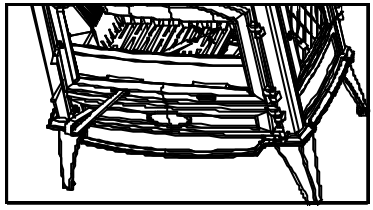
With the included “cold” hand, the shaking grate can be moved and the ashtray can be removed from the appliance (see image). The ash drawer must be timely emptied. The ashes must not obstruct the passage of the combustion air-flow, and in no case should the ash touch the underside of the grating. If not, the grating will overheat and will be damaged. You can break any caked ashes with the supplied “poker”. For the operation procedure, see figures.

Relatively speaking, burning wood produces little ash and it will not be necessary to remove it each time daily. The ash in the cavities between the ribs of the fire plate does not need to be removed, since wood burns better on a bed of ash.

640GM



760GM



4.8. 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.

4.9. Weather conditions

Attention!

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

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

5. Maintenance

It takes little effort to keep your stove in good condition.

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

The painted or enamelled cast iron mantle can be cleaned with a moist, soft cloth, when it is almost cold.
Minor paint damage can be touched up with a can of spray paint. Your dealer can supply you with the correct spray product. For enamel damage, small repair kits of appropriate colour are available from your dealer. Make sure no aggressive, acid products get in touch with enamelled parts.
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 from your dealer. Your installer can also supply you with appropriate products. However, never use abrasive or corrosive cleaning products.

To clean the air ducts, you may remove the top plate; it lies loosely on the stove and is not attached with screws or bolts.

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 fire plate for better and more thorough cleaning.

You should have your chimney swept by an expert before the heating season begins. It is also useful to check the chimney for soot during the heating season and to check for blockage of the chimney flue prior to re-lighting after a prolonged shut down period. 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.

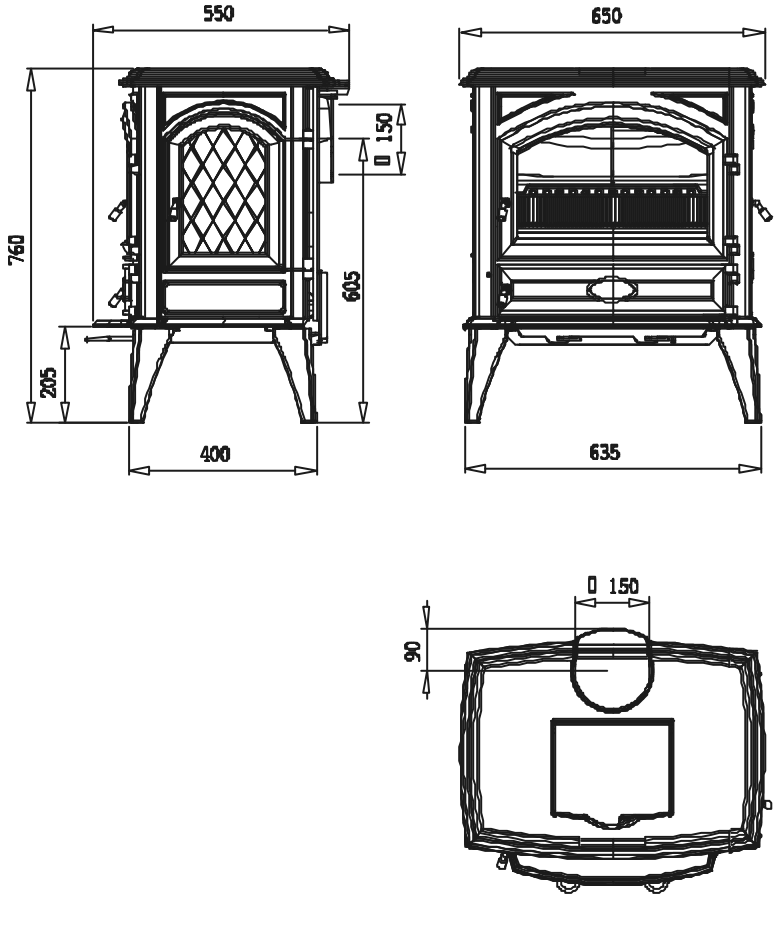
Bijlage 1: technische gegevens / données techniques / technical data sheet / technischen Daten

Model / Modèle / Modell	640 GM					
Nominaal vermogen / Puissance nominale / Nominal heat output / Nominalleistung	9 kW (max. 11 kW)					
Schoorsteenaansluiting (diameter) / Raccordement cheminée (diamètre) / Flue connection (diametre) / Schornsteinanschluss (Diameter)	150 mm					
Afstand tot brandbaar materiaal / Distance entre poêle et les matériaux combustibles / Distance to adjacent combustible materials / Abstand zwichen dem Gerät und brennbaren Materialien	40 cm minimum					
Gewicht / Poids / Weight	180 kg					
Stookregime / Régime de combustion / fire regime /	Niet continu gebruik / Feu intermittant / Intermittent operation / Zeitbrand			Continu gebruik / Feu continu / Continuous operation / Dauerbrand		
Aanbevolen brandstoffen Combustibles conseillés Advised combustibles Empfohlene Brennstoffe	Hout Bois Wood Holz	Bruinkool lignite Browncoal Braunkohl	Kolen Charbon Coal Kohlen	Hout Bois Wood Holz	Bruinkool lignite Browncoal Braunkohl	Kolen Charbon Coal Kohlen
% CO	0.11 %	0.07 %	0.08 %	0.23 %	0.52 %	0.12 %
Rendement / Rendement/ Efficiency / Wirkungsgrad	79 %	82 %	82 %	81 %	75 %	85 %
Massadebiet van rookgassen / Débit des fumées / Flue gas mass flow / Abgasmassenstrom	8.7 g/s	6.9 g/s	7.2 g/s			
Rookgastemperatuur / Température des fumées / Flue gas temperature / Abgasstutzentemperatuur	322 °C	369 °C	356 °C	302 °C	325 °C	347 °C
Minimum trek / Dépression minimal / Minimum draught / Mindesförderdruck	0.12 mbar	0.11 mbar	0.12 mbar	0.12 mbar	0.12 mbar	0.12 mbar

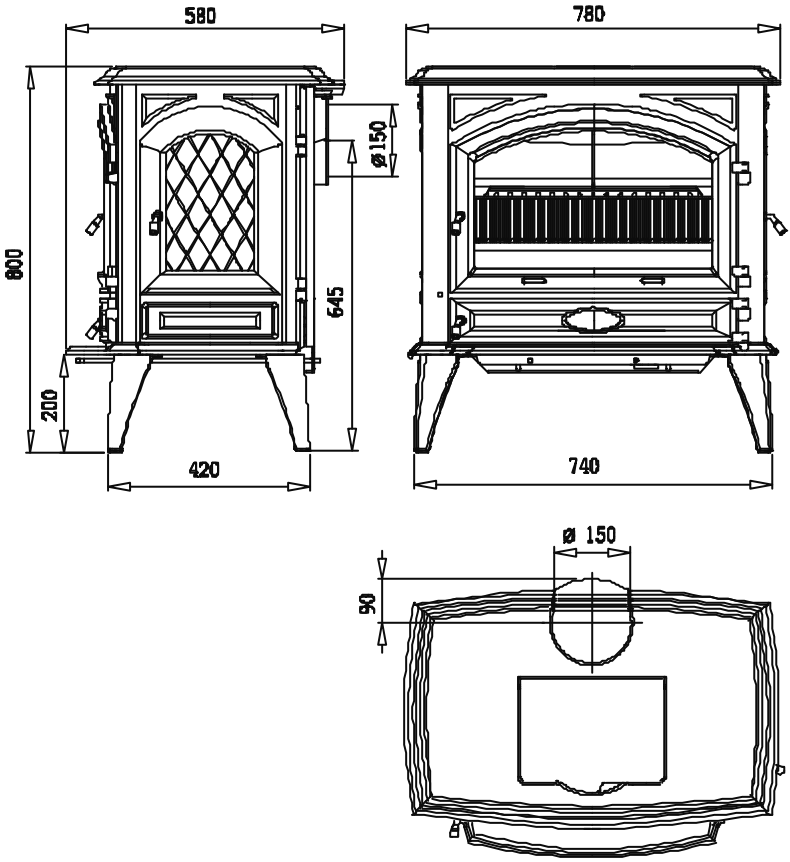
Model / Modèle / Modell	**760 GM**					
Nominaal vermogen / Puissance nominale / Nominal heat output / Nominalleistung	11 kW (max. 13 kW)					
Schoorsteenaansluiting (diameter) / Raccordement cheminée (diamètre) / Flue connection (diametre) / Schornsteinanschluss (Diameter)	150 mm					
Afstand tot brandbaar materiaal / Distance entre poêle et les matériaux combustibles / Distance to adjacent combustible materials / Abstand zwichen dem Gerät und brennbaren Materialien	40 cm minimum					
Gewicht / Poids / Weight	230 kg					
Stookregime / Régime de combustion / fire regime /	Niet continu gebruik / Feu intermittant / Intermittent operation / Zeitbrand			Continu gebruik / Feu continu / Continuous operation / Dauerbrand		
Aanbevolen brandstoffen Combustibles conseillés Advised combustibles Empfohlene Brennstoffe	Hout Bois Wood Holz	Bruinkool lignite Browncoal Braunkohl	Kolen Charbon Coal Kohlen	Hout Bois Wood Holz	Bruinkool lignite Browncoal Braunkohl	Kolen Charbon Coal Kohlen
% CO	0.08 %	0.09 %	0.06 %	0.28 %	0.54 %	0.20 %
Rendement / Rendement/ Efficiency / Wirkungsgrad	80 %	75 %	83 %	74 %	85 %	82 %
Massadebiet van rookgassen / Débit des fumées / Flue gas mass flow / Abgasmassenstrom	9.3 g/s	10.9 g/s	8.1 g/s			
Rookgastemperatuur / Température des fumées / Flue gas temperature / Abgasstutzentemperatuur	324 °C	353 °C	332 °C	342 °C	253 °C	351 °C
Minimum trek / Dépression minimal / Minimum draught / Mindesförderdruck	0.11 mbar	0.10 mbar	0.10 mbar	0.12 mbar	0.12 mbar	0.12 mbar

Bijlage 2 : afmetingen
Annexe 2 : dimensions
Annex 2 : dimensions
Anlage 2 : Abmessungen

640GM



760GM



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

CE

Notified body: 1641

Wij,
Nous,
We,
Wir,

Dovre nv Nijverheidsstraat 18 B2381 Weelde

verklaren bij deze dat de kachel 640GM, 760GM conform is volgens de EN 13240.
déclarons que le poële 640GM, 760GM est conforme au norme EN 13240.
declare that the oefen 640GM, 760GM is in conformity with the EN 13240.
Erklären daß das Produkt 640GM, 760GM entspricht EN 13240.

Weelde, 01.02.2006

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.

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