




ODEON / GRANADA

**BEDIENUNGSANLEITUNG & GARANTIEKARTE
MODE D'EMPLOI & CARTE DE GARANTIE
ISTRUZIONI OPERATIVE & CARTOLINA DI GARANZIA
INSTRUCTIONS FOR USE & WARRANTY CARD
BEDIENINGSHANDLEIDING & GARANTIEBEWIJS**



Bitte kleben Sie hier Ihre Garantie-Nr. auf
(siehe Ofenrückseite bzw. Aufkleber Feuerraumscheibe).

Veillez coller votre N° de garantie à cet endroit
(voir la face arrière du poêle ou l'autocollant sur la vitre du foyer).

Applicare qui il vostro numero di garanzia
(vedi parte posteriore della stufa, ossia l'etichetta della lastra del focolare).

Please affix your warranty number here
(located on the back of the stove and on the sticker attached to the fire chamber window).

Plakt u hier s.v.p. uw garantienummer in
(zie de achterzijde van de kachel en de sticker op de kachelruit).

D	BEDIENUNGSANLEITUNG	S.	3 - 16
	Garantiekarte im Anhang		
F	MODE D'EMPLOI	P.	17 - 30
	Carte de garantie jointe en annexe		
I	ISTRUZIONI OPERATIVE	PAG.	31 - 44
	Scheda di garanzia in allegato		
GB	INSTRUCTIONS FOR USE	P.	45 - 58
	Warranty card in the appendix		
NL	BEDIENINGSHANDLEIDING	P.	59 - 72
	Garantiebewijs zie bijlage		

Dear Customer,

You have decided to buy a HASE tiled stove.

Traditional craftsmanship, elegant design and the latest combustion technology guarantee you years of enjoyment in front of your ODEON / GRANADA stove.

The bodywork of the HASE stove comprises strong modern welded steel plates.

The stability and long service life of all HASE models is ensured by both the heat-resistant tiling of the fire box and the temperature-stable special lacquer.

The top quality of all the materials is a matter of course for us as is the greatest possible care we take in production.

All control elements are easily located and simple to use.

Please read through these operating instructions carefully. They will give you helpful hints and useful tips to increase the pleasure you get from your stove.

We hope that you will enjoy many happy hours around your new HASE stove.

**Your
HASE-Kaminofenbau GmbH**

1. INSTALLATION	P.	3. CONTROL AND OPERATING ELEMENTS	P.
1.1 Legal building regulations	46	3.1 Primary and secondary air	51
1.2 Type of construction	46	3.2 The shaking grate	51
1.3 Flue pipe	46	3.3 The ash drawer	51
1.4 Heat-sensitive materials	46	3.4 The throttle flap	51
		3.5 The connection for the combustion air	51
2. OPERATION	P.	4. HEATING WITH THE ODEON / GRANADA	P.
2.1 Fuels	47	4.1 Initial operation	52
2.2 The combustion process	47	4.2 Heating with wood	52
2.3 The combustion products	48	4.3 Open operation	54
2.4 Your contribution to protecting the environment	48	4.4 Heating with wood at lowest thermal output	54 45
2.5 Heating between seasons	48	5. SAFETY	P.
2.6 Wood moisture content and calorific value	49	5.1 Safe distances	55
2.7 Drying and storing wood	49	5.2 Radiation zone	55
2.8 Assessment of the wood moisture content	49	6. HINTS AND TIPS	56
2.9 Cleaning and care	50	7. TECHNICAL DATA	57

1.1 Legal building regulations

Before installing your tiled stove we recommend that you talk to your local planning officer. He will advise you on the relevant building regulations, supply permission.

Also check whether the room in which the ODEON / GRANADA stove is to be installed has an adequate supply of fresh air. For new buildings and buildings with sealed windows and doors it may be that the required supply of fresh air is no longer ensured and the draught levels required by your stove may be insufficient. The performance of your tiled stove is also dependent on the draught from your chimney. This may be impaired by the cross section of your chimney or an effective chimney height of less than 4.50 m. The effective chimney height is the distance between the flue gas intake in the chimney and the top of the chimney pot.

1.2 Type of construction

Design 2:

ODEON / GRANADA is supplied in design 2. Design 2 must be connected to chimneys catering for singular configuration only. The ODEON / GRANADA can thus be operated either open or closed. Due to a substantially diminished energetic condition, however, we recommend operating ODEON / GRANADA while closed.

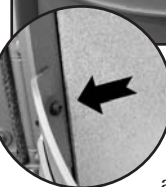
Design 1:

Design 1 allows the connection to chimneys catering for multiple configuration. Design 1 is achieved by limiting the opening of the combustion chamber to 500 cm². ODEON / GRANADA of design 1 must be operated closed only.

Remodeling to design 1

By installing the reduction panel (also transport safety contrivance) the ODEON / GRANADA meets the requirements of design 1.

Insert and tighten panel as illustrated.



After installing the panel please attach the type plate for design 1 to the rear of your ODEON / GRANADA stove.

1.3 The flue pipe

The ODEON / GRANADA must be connected to a flue pipe whose internal diameter is 150 mm. All the parts must be fitted extremely accurately at the connection points. The pipe must be sealed well in the chimney entrance and must not project into the cavity of the chimney otherwise smoke extraction will be impaired.

1.4 Heat-sensitive materials

If the floor is flammable, for example, if made of wood, plastic or is carpeted, etc., a floor plate must be used. (Please also read Chapter 5: Safety).

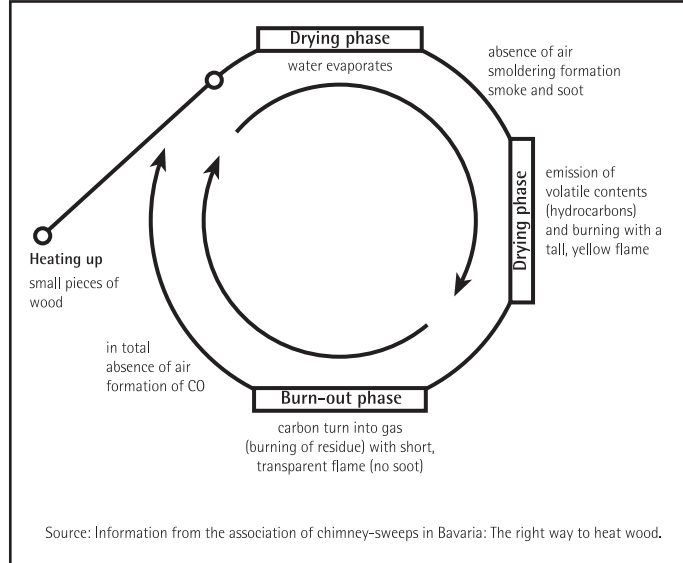
2.1 Fuels

In accordance with the First Ordinance on the Implementation of the Federal Emission Reduction Law, only fuels which generate low quantities of smoke may be used in stoves. For HASE stoves these are exclusively:

- natural wood with bark, eg. in the form of logs or bricks, and also brown coal briquettes , Anthracite, & Homefire smokeless fuel.

The following should. NOT BE BURNED:

- painted or plastic-coated wood
- wood treated with wood preservatives
- domestic waste
- paper briquettes (pollutants: cadmium, lead, zinc)
- damp wood (residual moisture content over 20%)
- Bituminous Coal



The combustion process

If the above materials are burned they not only generate unpleasant smells but also emissions which damage the environment and are harmful to the health.

Highly resinous kinds of wood (e.g. spruce, pine, fir) tend to give off large quantities of sparks. These types of wood should only be burned with the doors closed. Twigs and sticks of wood

should only be used for lighting the fire.

2.2 The combustion process

The following conditions must be met for burning solid fuels:

- The necessary supply of oxygen must be available. This is generally taken from the ambient air.
- The ignition temperature must be achieved. This means the temperature at which the fuel continues to burn without interruption whilst giving off large quantities of heat.

Steel expands very slightly on heating and contracts again to the same degree on cooling. The steel of which your stove is made also reacts to fluctuations in temperature. Your stove is however designed in such a way as to allow the fire box to expand and contract without damaging the stove. During the firing process the internal action in the steel produces a crackling noise.

Wood combustion can be broken down into three phases:

1. Drying phase

The moisture still contained in the air-dried wood (approx. 15 - 20%) is evaporated. This is done at temperatures of approx. 100°C. The wood must be provided with heat during the warming phase for this purpose, which can be achieved by quick-burning wood.

2. *Degasification phase*

At temperatures of between 100°C and 150°C the contents of the wood start (slowly at first) to decompose and gasify and the wood begins its thermal decomposition. At temperatures over 150°C the gas development increases strongly.

The proportion of volatile components makes up around 80% of the wood substance. The actual combustion begins with the ignition of the resulting gases at a temperature of around 225°C (ignition temperature) with the emission of heat. There must be an adequate supply of oxygen available for this purpose. The peak of the combustion process is reached at a temperature of around 300°C. The reaction is now so turbulent that the largest amount of heat is released at this point. Flame temperatures of up to 1100°C are possible.

3. *Burn-off phase*

Glowing charred wood remains after the volatile components have been burned off. This wood burns slowly and almost without flames at a temperature of approx. 800°C.

These processes do not only take place consecutively in a wood fire, however, but also simultaneously. The combus-

tion process is shown in the schematic diagram (s. Figure).

2.3 The combustion products

From a chemical point of view wood mainly consists of the elements carbon, hydrogen and oxygen.

Wood contains almost no substances which are critical from an environmental point of view, such as sulphur, chloride and heavy metals. Therefore after the total combustion of wood the main gaseous products are carbon dioxide and water vapour as well as a small quantity of wood ash which is the solid combustion product.

If the wood does not combust fully on the other hand, a series of pollutant substances may be emitted, such as carbon monoxide (toxic), acetic acid, phenols, methanol (toxic), formaldehyde, soot and tar.

2.4 Your contribution to protecting the environment

Whether your stove burns in a manner that is harmful to the environment or not depends to a large extent on how you operate it and the type of fuel you use (see Section 2.1).

The following hints are intended to help you with this:

- Use only dry wood, leaf-wood like birch and beech are most suitable. (see Sections 2.6 and 2.7).
- Only use small pieces of wood to light the fire. These will burn more easily than large logs and the temperature required for total combustion of the wood will be reached more quickly.
- Do not place too much wood in the stove at one time. It is better to add smaller quantities more frequently. The quantity of wood must always be adjusted to the amount of heat required.

The quality of the combustion process can be checked very easily by means of the following features:

- *The colour and characteristics of the ash.* If the combustion process

is good the result will be fine white ash. Dark colouration indicates that the ash contains charcoal residue. The burn-off phase in this case has been incomplete.

- *The colour of the flue gases emitted from the chimney.* In this respect remember the following: the less colour in the flue gases emitted from the chimney, the better the quality of the combustion process.

2.5 Heating between seasons

Between seasons (in spring and autumn) you may experience draught difficulties in the chimney if the outdoor temperature is over 16°C. If no draught can be created at these temperatures by a quick fire (temporary generation of great heat by rapidly burning paper or thin wood Chipping's) you should not light the stove.

2.6 Wood moisture content and calorific value

The calorific value of the wood depends largely on the wood moisture content. The more water the wood contains, the more energy must be used to evaporate it. This energy is then lost for heating. The more moisture the wood contains, therefore, the less its calorific value. An example: freshly cut wood has a moisture content of approx. 50% and a calorific value of around 2.3 kWh/kg; wood which has been well dried in the air, on the other hand, has a moisture content of approx. 15% and a calorific value of around 4.3 kWh/kg.

Therefore, if you use very moist wood you will have around half the heat output with the same quantity of wood than when you use dried wood. To be also considered is the fact that if you burn moist wood, the resulting water vapour can condense in the flue pipe or chimney. This can lead to pitting or the chimney becoming sooted or tarred up. Furthermore, if the wood has a high moisture content the combustion temperature is reduced which prevents total combustion of all the wood components and causes considerable pollution. The energy content of

the unburned wood is also lost. It is quiet clear, therefore, that burning inadequately dried wood is irresponsible both from an economical and an ecological point of view.

2.7 Drying and storing wood

As explained under Section 2.6 low wood moisture content is of great importance. Therefore, the following provides a few tips on how to dry and store wood.

- Wood needs time to dry. It will dry in the air outdoors after approx. one to two years if stored properly.
- The wood should be stored ready for use after being sawn and split. This ensures rapid drying because smaller pieces of wood will dry better than logs several metres in length.
- Your logs should be stored in a ventilated, if possible sunny position and be protected from rain (ideally facing south).
- Leave a hand's width between the individual piles of wood so that air can get in between them and remove any escaping moisture.
- Do not cover the piles of wood with plastic sheets or tarpaulins because

the moisture will then be unable to escape.

- Do not stack fresh wood in a cellar since it will rot rather than dry for the lack of air movement.
- Only store dried wood in dry cellar rooms.

2.8 Assessment of the wood moisture content

For you as a stove user it is important to be able to assess whether your wood is air dry (with a residual moisture content less than 20%) or whether it must be stored for a longer period.

The air-dried condition has been reached when the moisture content of the wood is in balance with the ambient air, i.e. it no longer dissipates moisture to the air and no longer takes moisture out of the air. The weight of the wood is characteristic for the moisture balance.

One method which allows you to assess the moisture content is described here. You must observe the points listed under Point 2.7 as a basis for optimum wood storage. Then proceed as follows:

- Take a log from various points in your wood pile.
- Mark these logs to enable you to identify them easily.
- Now weigh the logs on a kitchen scale and make a note of their weights.
- Now dry the logs artificially for several hours (e.g. near the stove, complying with safe distances bet-

ween the stove and the combustible materials or in the oven at 100°C).

- Then place the logs back in the wood pile where they were.
- Weigh the logs again one or two days later.

The moisture balance will be disturbed by drying the logs. The logs will therefore try to reproduce the balance after being dried by taking moisture out of the air. If they achieve the same weight as when they were first weighed they have absorbed the same quantity of water which they lost through being dried. This means that the moisture had balanced out before the wood was weighed for the first time.

If, on the other hand, they are still lighter, there was more water in them before they were weighed for the first time than required for the moisture balance. Therefore, these logs have to be stored for a while longer.



2.9 Cleaning and Maintenance

The chimney stove and the smoke tubes should be inspected each year - if required, even more often - at the end of the heating period for deposits. If any deposits are existing, the chimney stove and smoke tubes shall be cleaned. For that purpose, the top thermo-plate in the fire box can be moved upwards. The upper emissions can be accessed via the respective flue

gas pipe which is not connected. Any soot or dust deposits can be brushed off and vacuumed.

You can access the upper flue gas paths through the connecting vent currently not being used. If there is upwards discharge, the back wall has to be dismantled to access the paths.

We will have to provide the steel stoves with a finish of heat-resistant paint. However, heat-resistant stove lacquers do not provide protection against corrosion, with the result that a rust film may form in unfavourable conditions, for example caused through:

- the use of too much water for cleaning the floor/base plate area.
- spilt water from boilers or dishes.
- the positioning in "moist rooms", e.g. conservatories, or the intermediate storage in the building carcass/garage

Clean areas covered in a rust film with emery paper and spray them with stove lacquer spray (available at your HASE specialist dealer).

Do not use any detergents containing acid (e.g. citrus or vinegar detergents) to clean the steel parts. Sufficient cleaning can be achieved by wiping the steel parts with a slightly dampened cloth.

When the stove is properly operated, the secondary air simultaneously forms an air curtain in front of the pane and delays the sooting of the glass.

For cleaning purposes, the entire glass front can be opened. (see illustration)

A time-tested environment friendly method for cleaning the ceramic glass panels with materials which are available in every household is as follows:

Take:

- 1 ball of kitchen paper, newspaper, or the like
- wet it
- dip it into the cold wood ash
- wipe the glass with it
- wipe the glass with a clean ball of paper and the job is done.

3.1 Primary and secondary air

ODEON / GRANADA features a primary and secondary air valve. During heating-up, the primary air valve **(I)** must be fully opened. The secondary air valve **(II)** guides the amount of oxygen required for the complete burn out of the wood gas into the fire box. During the heating-up and degassing phase, the secondary air valve must stay open, as otherwise smoldering fire might evolve. Smoldering fire leads to inefficient use of the combustibles and high environmental-pollution by way of non-fired wood gas. To regulate the secondary air flow, the following **rule** applies:

A small fire requires only little secondary air, a large fire requires much secondary air. If the secondary air valve is not open wide enough, the panes might soot up.

The control elements of the valves are located behind the swing-out control panel located below the fire box.

For settings of the control elements, see chapter 4.

3.2 The shaking grate

The shaking grate serves to dispose of components (ash) which have not been burned and to feed them into the ash safe, to supply combustion air during heating up and during the firing of charcoal briquettes. It is operated by a slider **[a]** located on the lower right side, below the fire chamber.

3.3 The ash drawer

The ash drawer **[b]** must be emptied in good time. Ash piling up can prevent primary air from getting to the stove.

Please make sure that the ash is only removed when it is cold.

The ash drawer stands in its turned over lid when collecting ash. To empty the drawer pull out the lid, turn it over and push it on the ash drawer. This closes the ash drawer and prevents flying ash. This, in turn, keeps your home clean when you dispose of the ash. The ash drawer is put back into the stove by proceeding in the reverse order.

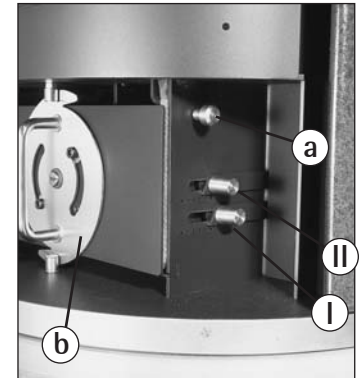
3.4 The throttle flap

The throttle flap is fitted in the flue pipe and is used to regulate the flue gas flow. It is not fitted in every flue pipe and is also not absolutely essential. The influence of the throttle valve on the burn off is dependent on many factors, including the chimney height and cross section, the indoor and outdoor temperature, etc. When the handle is horizontal the throttle flap is closed.

If the fire box door is opened during the firing process, first of all the throttle valve must have been opened.

3.5 The connection for the combustion air (connection piece for combustion air)

With the ODEON / GRANADA, combustion air can be conducted directly into the combustion chamber, without contact to room air. For that purpose, the connection piece for the combustion air, which is available as an accessory part, will be mounted on the rear of the stove.



HEATING WITH THE ODEON / GRANADA

4.1 Initial operation

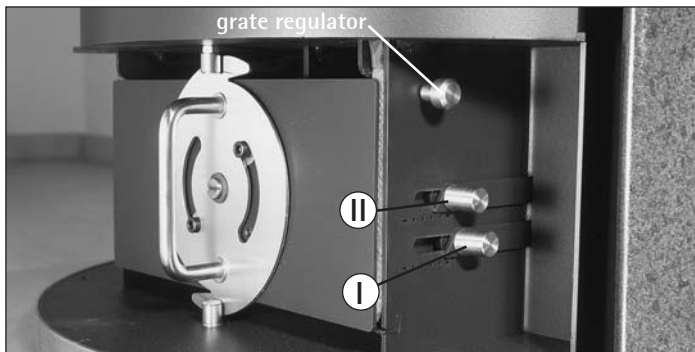
Please observe that during the first 2 to 3 firings a distinct odor will be experienced.

4.2 Heating with wood

Lighting

It is important to pass through the lighting phase quickly since during the lighting or firing phase, higher emission values may occur if mistakes are made. Therefore, for the sake of the environment, please observe the following closely. The stove should always be lit with wood.

Due to the large fire chamber window of the ODEON/GRANADA, it is particularly important to start the fire properly. Therefore, please ensure that you pay close attention to the instructions and information on the right side. Use only **thoroughly dried wood**, at best stored near the stove for several days (comply with safety distances). Softwood chips are particularly well-suited for kindling the fire (e.g. spruce).



heating-up air slide (I)

secondary air slide (II)

Procedure	Lighting	Position of control elements
Open the throttle flap entirely, if your flue pipe has one		Set handle of throttle flap along the length of the pipe
Open fire box door		
Open shaking grate		Pull out shaking grate slide
Open heating-up air slide completely		Push heating-up air slide (I) to the left
Open secondary air slide completely		Push secondary air slide (II) to the left
Slightly open ash drawer		
Sweep remaining ash and any unburned charcoal into the centre with broom		
Place screwed up newspaper, non-coated cardboard or wood wool into the middle of the firebox, top it with around 0.5 kg dry wood chippings and around 1.5 kg wood (2 logs)		
Light the material at several points		
Close fire-box door		
Once the wood is lit sufficiently on all sides close the ash drawer, and some 10-15 minutes later the primary air slide (I)		Set primary air valve (I) to zero
Set secondary air slide (II) later to ideal position (after around 15-20 min.)		Set secondary air valve (II) to 3 to 4

How to continue adding more wood

After the operating temperature has been reached, it is possible to operate the stove whilst producing very little pollution if a few basic rules are followed.

Place two logs weighing c. 2.5 kg in total and measuring c. 25 cm in length lengthwise to the rear of the fire chamber.

You can use these values as a guide. During the lighting phase you should add small logs.

After heating temperature has been attained larger logs in length wise direction may be added.

<i>Adding wood</i>	
Procedure	Position of control elements
Open the throttle flap entirely, if your flue pipe has one	Set handle of throttle flap along the length of the pipe.
Set control elements	Set heating-up air slide (I) to zero Set secondary air slide (II) to 5 to 6
Slowly open fire box door to prevent smoke from entering the surroundings	
Close shaking grate	Push in shaking grate slide
Rest two logs weighing c. 2.5 kg in total. Add a single layer of combustible	
Close door for fire box	
<i>Wood should be added when the flames of the prior fire are about to die</i>	

HEATING WITH THE ODEON / GRANADA

4.3 Open operation

54

Procedure	Position of control elements
Proceed as if lighting	Set handle of throttle flap in the direction of the pipe.
Operate closed until operating temperature has been reached	See also chapter for continued firing/adding wood
After reaching the operating temperature open the door to the fire chamber and close the secondary air valve	Turn secondary air valve to the left
Place log to the rear of the fire chamber (length of log must not exceed 25 cm)	

Never operate the ODEON / GRANADA when open without supervision!

4.4 Heating with wood at lowest thermal output

Procedure	Position of control elements
Close shaking grate	Press shaking grate slide
Close heating-up air slide	Set primary air valve (I) to zero
Set secondary air	Set secondary air slide (II) to 1 - 2
Place two thin logs (weighing c. 0.5 kg in total and measuring 25 cm in length) lying in the fire chamber	

5. Safety

Never use **methylated spirits; petrol or other flammable fluids to light the stove.**

Children should never be left unattended near the burning stove.

5.1 Safe distances

With flammable materials (eg. wood panelling, plastic cladding and curtains) the safe distance to the side and behind the stove is at least 20 cm. Flammable floor materials (eg. carpet, wood or plastic flooring) must be protected to the front and side with a non-flammable covering (eg. tiles, marble or steel plate) (see Fig. 1).

According to DIN 18891 the following safe distances are valid when using a covering for the floor:

- A 61 cm
- B 51 cm

With reducing strip BA1:

- A 50 cm
- B 30 cm

Distance of combustible materials
C 20,0 cm

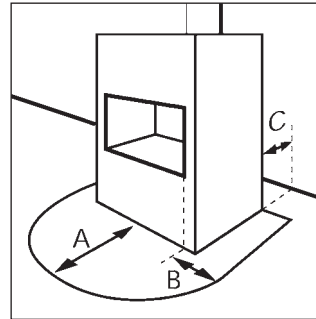


Fig. 1: Dimensions of bottom plate

5.2 Radiation zone

No flammable or heat-sensitive materials are to be left within a distance of 80 cm in the radiation zone (see Fig. 2).



ATTENTION!

The stainless steel doors must be opened when the GALERIA is operated. They must not be within the reach of the radiation area

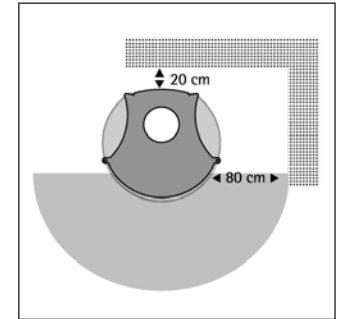


Fig. 2: Radiation zone

HINTS AND TIPS

Problem	Cause	Remedy
The wood does not light or only does so slowly	The wood is too thick The wood is too damp The air supply is too low	Section 4.2 Continue heating Section 2.8 Section 4.2 Lighting
The wood burns without a bright, yellow flame, smoulders or even goes out	The wood is too damp The air supply is too low The throttle flap is closed too far	Section 2.8 Section 4.2 Lighting Section 3.5
Too much soot is generated, the insulating tiles do not stay clean	The wood is too damp The air supply is too low The quantity of wood is too small and thus the combustion chamber remains too cold	Section 2.8 Section 4.2 Continue heating
Although the fire burns well the stove does not get warm	The chimney draught is too strong	Section 3.4
The wood burns up too quickly	The chimney draught is too strong The wood has been cut too small Incorrect setting of operating elements	Section 3.4 Section 4.2 Section 4.2
Smoke escapes into the room while the stove is burning	The air supply is too low The throttle flap is closed too far The chimney cross section is too small The flue gas ducts in the stove pipe or chimney are badly sooted The wind is blowing down the chimney	Ensure supply of fresh air (i.e. open the window) Section 3.3 Fit a draught booster (flue gas fan) Section 2.9 Fit a wind guard on the chimney pot
The chimney becomes wet and sooty, condensate runs out of the stove pipe	The wood is too damp The flue gases are too cold The chimney is too cold The chimney cross-section is too large	Section 2.8 The stove pipe is too long and must be insulated The chimney must be insulated

If you have any problems or questions please ask your dealer or your local chimney sweep.

Type description	ODEON
Standard reference:	chimney stove to DIN 18891-1

The following data shall apply to the dimensions of the chimney in accordance with DIN 4705:

Operation with fire box closed (design type 1)

Nominal thermal output	9 kW
Waste gas mass flow rate	10 g/s
Waste gas outlet temperature	270 °C
Minimum delivery pressure at nominal thermal output	0,11 mbar

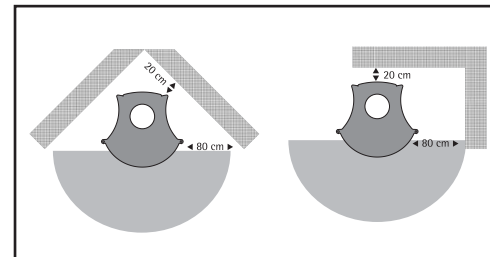
The nominal thermal output of **9 kW** indicated on the unit's type plate will be sufficient for provided that heating conditions are favorable **82 bis 200 m³** (volume in accordance with DIN 18893)

	Height	Width	Depth
Oven	150 cm	57 cm	52 cm
Fire box	62 cm	28 cm	30 cm
Fore box opening			500,0 cm²

Pipe	diameter internal 150 mm
Connection branch	top (rear installation possible.)
Connection height back, pipe centre	133,4 cm

Combustion air inlet	diameter internal 120 mm
Connection height back, pipe centre	113,3 cm

Safety distances from flammable materials



Type description **GRANADA**
 Standard reference: chimney stove to DIN 18891-1

The following data shall apply to the dimensions of the chimney in accordance with DIN 4705:

Operation with fire box closed (design type 1)

Nominal thermal output	9 kW
Waste gas mass flow rate	10 g/s
Waste gas outlet temperature	270 °C
Minimum delivery pressure at nominal thermal output	0,11 mbar

The nominal thermal output of **9 kW** indicated on the unit's type plate will be sufficient for provided that heating conditions are favorable **82 bis 200 m³** (volume in accordance with DIN 18893)

	Height	Width	Depth
Oven	153,3 cm	55,4 cm	52,3 cm
Fire box	62 cm	28 cm	30 cm
Fire box opening			500,0 cm²

Pipe diameter internal 150 mm
 Connection branch top (rear installation possible.)
 Connection height back, pipe centre 133,3 cm

Combustion air inlet diameter internal 120 mm
 Connection height back, pipe centre 13,2 cm

Safety distances from flammable materials

