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## Fireplace inserts EN13229-W

## **Installation and Operating Manual**

Nameplate:



Our supply program: Oil heaters

Chimney stoves

Pellet stoves

Glazed tile and slow-burning stoves for wood and coal

Slow-burning stoves and cooking stoves for wood, coal and

Fireplace inserts for wood

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### Important notes:

- Inform your district chimney sweep or district master chimney sweep!
- Please thoroughly read the Installation and Operating Manual!
- Observe the regulations and instructions provided in it when installing and operating the fireplace insert!
- Please keep this Manual in a safe place!
- The enclosed Equipment Sheet is part of this Installation and Operating Manual.

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Congratulations! You are the owner of a HAAS + SOHN fireplace insert, a quality product. Please read the Operating Manual carefully. You will find information about how to use and operate your chimney stove which will enable you to increase the practical value of the device and extend its working life. In addition you can save fuel by burning it correctly and protect the environment. The accompanying Equipment Sheet is part of this Operating Manual.

Please keep this Manual with the Equipment Sheet in a safe place so that you can refamiliarise yourself with the correct operation of your chimney stove at the start of every heating period.

We can only guarantee our products if you adhere to the following guidelines of this Installation and Operating Manual.

11.3

### 1. Description

Fireplace inserts are highly suitable for the heating of living and working rooms.

The stove body consists of a welded steel structure. At the bottom is a wood storage compartment and above it the ash box, on top of that the firebox and a heat exchanger at the top. Between the latter the smoke gas draughts are arranged above the firebox.

Heating the room air and creating a comfortable living climate in connection with a covering is substantially achieved through convection heat. Because of this you can rapidly heat even cool rooms that have not been heated for an extended period of time. The room air enters the wood storage compartment, is heated in the convection duct between inner body and outer wall as it rises and flows out again through openings provided at the top of the stove. The component of radiation heat is obtained through heat radiation in the area of the view window of the firebox door from the metal surfaces of the stove and - if available - from the ceramic surfaces on the sidewalls.

## 2. General instructions, safety instructions

Adhere to national and European standards, local regulations, planning and building regulations as well as fire safety regulations. When installing your stove you must observe the fire prevention regulations and the national building regulations applicable at the place of installation in agreement with the responsible master chimney sweep of the district. He will also inspect the appropriate connection of the device to the chimney.

Prior to installation, verify that the carrying capacity of the substructure is suitable to support the heating insert. If the carrying capacity is insufficient, suitable measures (e.g. slab for load distribution) have to be taken to achieve this.

Your fireplace insert has been subjected to all inspections required by the legislator. It meets the specified characteristics in terms of firing efficiency and smoke gas emissions.

Your fireplace insert of design 1 described in this Manual has been tested according to DIN 18895 ("Fireplace inserts for solid fuels") and EN13229. The fireplace inserts of design 1 (see Equipment plate) may be connected to a multiple-use chimney if the chimney dimension according to DIN 4705 Part 2 allows this.

The fireplace insert is a limited time burning fireplace.

### **Basic requirement:**

Ensure that the entire structure, i.e. also connecting pieces and chimney, are operationally safe and fireproof and can be cleaned without effort!

## Place of installation:

- Fireplace inserts must only be installed in rooms and in places where, according to position, structural circumstances and type of use no hazards will develop. In the installation area of the covered heating insert no electrical wiring must be present in walls and ceilings. In particular there must be an adequate inflow of air for combustion in the installation rooms. The surface area of the installation room must be configured and of a size that allows proper operation of the fireplace.
- Fireplace inserts must not be installed in: staircases (except in residential buildings with more than two apartments); generally accessible hallways; rooms in which easily flammable or explosive substances or mixtures are processed, stored or produced in such a quantity that hazards are created through ignition or explosion; rooms or apartments from which air is removed through ventilation systems or warm air heating systems with the help of fans, unless the operation of the open fireplace without danger is ensured.
- The operation of open fireplaces is not threatened if the systems circulate air only within a room, the systems have safety devices which automatically and reliably prevent vacuum in the room of installation or the volumetric combustion airflows required for the fireplace inserts and the volumetric flows of the ventilation systems despite adjustment or removal of easily accessible control devices of ventilation systems altogether will not bring about a vacuum in the installation rooms of the fireplace inserts and the rooms of the combined ventilation greater than 4 PA.

## 3. Combustion air supply:

Ensure that the fireplace will have a minimum inflow of 360 m³/h of combustion air per each m² of firebox opening from the outside. Ask your master chimney sweep responsible for your district.

Installation rooms of fireplace inserts must:

- Have at least one door into the open or which are connected with other rooms of this type. Only rooms of the same apartment or utilization unit apply. If this is not sufficient, the installation room must have a combustion airline leading into the open and the firebox opening with at least 360 m³/h of combustion air for each m². If there are other fireplaces in the same combustion air system, there must

be a minimum inflow to the heating inserts of 540 m³/h of combustion air for each m² of firebox opening and additionally at least 1.6 m³ of combustion air per hour for other fireplaces and for each kW of total rated heat output with a calculated pressure differential of 4 Pa relative to the outside. (Not considered are fireplaces which are independent of room air, do not require a flue gas system or are located in rooms from which the operational safety of the heating inserts cannot be endangered).

- We recommend feeding the fireplace insert with combustion air in the area of the convection chamber.
- In accordance with the national building regulations, combustion airlines in buildings with more than two full storeys and combustion airlines bridging firewalls shall be established such that fire and smoke cannot be transmitted to other storeys or fire sections.
- When designing the combustion airlines, resistances have to be taken in account which

in particular applies to the installation of bends and deflections or long lines.

## 4. Suitable chimney:

Before installing the heating insert the responsible master chimney sweep for the district must be informed. Should the fireplace insert be connected to an already existing chimney, the latter has to be swept and checked by the chimney sweep for condition and tightness. He would also establish if the chimney is suitable for connecting the heating insert.

If no chimney is present or the existing chimney is not suitable, the master chimney sweep for the district determines the dimensions of the chimney to be newly erected according to DIN 4705 Part 1 and Part 2.

The effective chimney height starting from the flue gas inlet must be at least 4 m.

## 5. Data for chimney calculation:

The following data apply for dimensioning the chimney according to DIN 4705: **Operation with closed firebox:** 

	Insert Esprit 185.16	Insert Esprit 185.16	Insert Trend 184.18	Insert Trend 184.18	Inserts Komfort 180.18 + Prestige 181.18 + Exquisit 182.18	Inserts Komfort 180.18 + Prestige 181.18 + Exquisit 182.18	Insert Opus 186.18-1	Inserts Opus 186.18-1	
	NHO	Part load	NHO	Part load	NHO	Partload	NHO	Part load	
Net heat output	7		8		8		8		kW
Heat output area	8	3,7	8,5	4,6	9,2	4,7	8,5	4,5	kW
Flue gas mass flow	7		6,12		8		6,8/7,9		g/s
Mean flue gas connector temperature	290		272		330		320		°C
Efficiency	80,7		83,2		81,7		80,3		%
CO	0,09		0,08		0,08		0,1		%
Minimum delivery pressure at rated heat output	12		12		12		12/15		Pa
Minimum delivery pressure at 0.8 times the rated heat output	10		9		10		10/12		Pa

No data is listed for operation with open firebox since your fireplace insert must only be operated with the self-closing door (A 1).

## 6. Room heating capacity according to DIN 18893:

In this regard, please note the details on the Equipment sheet.

The values relate to rooms which do not correspond to the heat protection regulations. For rooms with a room volume in excess of 200m<sup>3</sup> a heat requirement calculation according to DIN 4701 has to be carried out.

			Inserts	
			Komfort 180.18,	
			Prestige 181.18,	
			Exquisit 182.18	
The rated heat output stated		Insert	Trend 184.18	
on the equipment		Esprit 185.16	Opus 186.18	
plate with		7 kW	8 kW	
- favourable	Lipating conditions are	144	186	$m^3$
- less favourable	Heating conditions are adequate for:	84	107	$m^3$
- unfavourable	auequate for.	56	73	$m^3$

## 7. Installation of fireplace insert and connection to the chimney

## 7.1 Connecting piece (flue gas pipe):

The connecting piece has to be technically matched to chimney and fireplace insert and be designed to suit the requirements of DIN 18160 Part 2.

In the case of metal connecting pieces the wall thickness must be at least 2 mm.

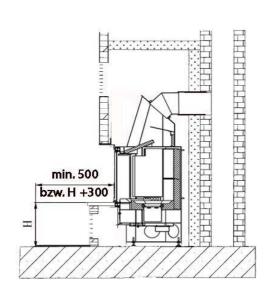
If the connecting piece penetrates components with combustible building materials (e.g. walls to be protected), protective measures according to DIN 18160 Part 1 and Part 2 have to be taken.

## 7.2 Protection of installation ceiling (floor):

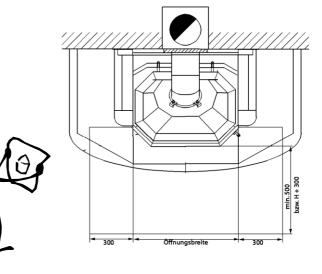
Installation ceilings without adequate transverse distribution (e.g. wooden ceilings) must be protected through an additional 6 cm thick proven concrete slab and a 6 cm thick heat insulation layer according to AGI Working Sheet Q 132 in the area of the heating insert. We recommend you seek advice from a structural engineer.

If the installation floor has adequate transverse distribution a 6 cm thick heat insulation layer is sufficient.

## 7.3 Floor in front of the fireplace insert:



In front of the heating insert the floor of combustible materials has to be protected through a sufficiently thick covering of non-combustible materials or replaced. The minimum dimensions of



this non-combustible area in front of the firebox opening are:

To the front in accordance with the height (H) of the firebox floor above the floor plus 300 mm., however at least 500 mm.

To the sides, in accordance with the height (H) of the firebox floor above the floor plus 200 mm, however at least 300 mm.

## 7.4 Chimney connection:

If the existing chimney does not have a suitable shaped connection piece for the fireplace insert a subsequent connection has to be established. The chimney connection height is obtained from the correctly placed fireplace insert plus fitted smoke gas bend and connecting piece, measured from the upper edge of the support plate to the centre of the connecting pipe in the inlet area of the

connection point. Please take into account the necessary distances for primary walling, heat insulation, expansion joint etc.

## 7.5 Primary walling and heat insulation of the back and side walls:

Once a suitable chimney connection piece has been installed the required primary walling and heat insulation can be carried out.

## 7.6 Necessary primary walling and heat insulation:

The required minimum heat insulation in front of components to be protected was established during the testing of the fireplace inserts Haas + Sohn according to DIN 18895 and EN 13229. The following protective measures were determined:

		Fireplace insert ESPRIT 185.16	Fireplace insert Opus 186.18	Fireplace inserts KOMFORT 180.18, PRESTIGE 181.18, EXQUISIT 182.18, TREND 184.18	
		Thickness in mm			
Drimon, walling	Back wall	100	100	100	
Primary walling	Side wall	100	100	100	
(Primary walling replacement, insulating material according to AGI Q 132)	Room ceiling within covering	60	60	60	
	Floor	40		40	
Heat insulation layer	Side wall	120	40 Termax SN 400	120	
	Back wall	120	40 Termax SN 400	130	
	Convection air ceiling /intermediate ceiling	110	120	120	
	Flue gas pipe outside the convection jacket	60	60	60	

- 1. Primary walling: 10 cm thick mineral primary walling must be erected directly on the building wall (back wall and if applicable side wall) to be protected. The primary walling must be erected up to the insulation layer and the building wall to be protected, however protrude at least 20cm over the connecting piece (flue gas pipe). Primary walling can be omitted if the building wall is at least 10cm thick and consists of non-combustible components and is not a carrying reinforced concrete wall.
- 2. Room ceiling above the heating insert (primary walling replacement): If the cavity or the covering above the fireplace insert reaches up to the room ceiling this must be protected if it consists of combustible materials or serves as a carrying element. The protection consists of an at least 6 cm (better 10 cm) thick heat insulation layer (insulating material code number: 12.07.21.75.11 according to AGI Q 132). This protective measure recommended as load-bearing intermediate ceiling (e.g. of plate) with heat insulation layer arranged on top.
- 3. Heat insulation: Convection jacket and convection hood (external equipment shape) must be covered with a heat insulation layer on all sides. The heat insulation must be butt joined without any gap and installed in an overlapping arrangement on the sides. If these insulation panels are not held by walls, coverings or adjoining panels, these shall be attached at a distance of approximately 30 cm. The room-side covering (apron) need not be heat-insulated if the heating insert design is such that the free surfaces of the covering and the surfaces of the recesses for fuel storage can heat to a maximum of 85°C. In the case of surfaces of mineral building materials, except surfaces on which items can be placed, the value of 85°C is replaced with the value of 120°C. The heat insulation layers of mineral wool or comparable must be tightly covered towards the installation room and convection air room to prevent flying fibres.

## 7.7 Permissible heat insulation and primary walling material (minimum requirements):

1. Insulation materials: Insulation materials according to AGI working sheet Q 132: 12.07.21.70.09 (=insulation material code number).

This means: Insulation material group 12, Type: stone wool,

Form of delivery group 07, Shape: Tiles, Heat conductivity Group 21, Supply form: G.-Curve 2

Upper application limit temperature Group 70 corresponds to 700°C

Rated pipe density Group 9 corresponds to 90 kg/m<sup>3</sup>

## 2. Primary walling:

Brick tiles according to DIN 105 Part 1 and Part 3

Bricks according to DIN 106 Part 1, DIN 4163, DIN 18151 or DIN 18152

Wall building tiles according to DIN 4166, DIN 18162 or DIN 18163

3. Alternative primary walling and insulating materials:

These are approved by the German Institute for Building Technology, Berlin (DIBt). They also mostly meet the material requirements of heat insulation and primary walling. Details on these building materials can be obtained from your specialist suppliers.

## 8. Installation of the fireplace insert:

Once the heat insulation has been carried out according to the insulation instructions, the fireplace insert can be placed on the prepared surface. Align the fireplace insert with the adjusting screws and connected to the chimney using the connecting piece (smoke pipe).

The chimney connection must be carried out in keeping with DIN 18160 Part 1 and Part 2 (see Page 5, Paragraph 7.1).

## **8.1 Expansion joint:**

An expansion joint must be provided between insert and covering which is closed with sealing cord or sealing band.

## 8.2 Covering:

The covering of the fireplace insert on the room side must consist of non-combustible materials of fire protection Class (e.g. glazed bricks, plaster on Α1 plaster substrates, metal or ceramic oven tile). There must be no direction connection between covering and fireplace insert. Caution! The covering of the chimney apron must only rest on a separate support

frame which is normally mounted to the wall.

## 8.3 Convection air openings:

The free non-obstrutable cross section for the air inlet and air outlet openings must be at least 600 cm<sup>2</sup> each.

Caution: After the installation of the entire chimney neither the convection air inlet nor the outlet must be obstructed by any components whatsoever. To avoid heat congestion, convection air inlet and outlet openings or grilles have to be always open during heating operation. **No** closable grilles, fins, louvers and the like may be installed in such openings. Convection air cross sections between heating insert and covering as well as rear insulation: free minimum distance between fireplace insert and lateral covering of noncombustible material: 50mm.

Free minimum distance between fireplace insert and rear insulation or placement wall of non-combustible material: 100mm.

Note: The minimum distance stated above must be maintained over the entire height of the fireplace insert over the entire width in each case so that the convection air is able to flow through freely.

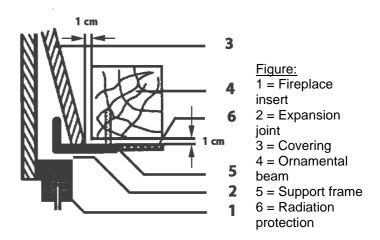
## 8.4 Convection air space:

Since the fireplace insert does not have a prefabricated convection air chamber device a distance to both sides of 60 mm must be taken into account between fireplace insert and heat insulation layer. The heat insulation layer as radiation protection equaliser and protection against flying fibres must be covered with a tight sheet metal jacket of galvanized sheet metal.

The convection air openings must at least meet the cross section mentioned above.

## 8.5 Ornamental beams:

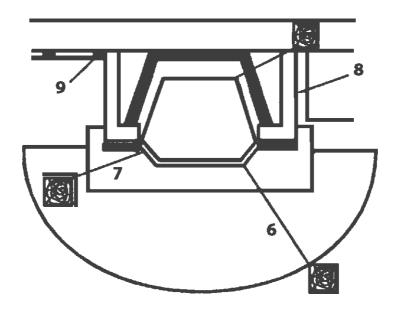
Ornamental beams in front of the covering of the fireplace insert are permissible at a distance of at least 1 cm if the ornamental beam is not part of the building and the intermediate spaces to the covering are clear so that no heat congestion can develop and the ornamental beam is not located in the radiation range of the fireplace insert.



## <u>8.6</u> <u>Fire protection within the radiation range:</u>

At least 80 cm distance has to be maintained from the firebox opening to the front and to

the sides (6). If radiation protection that is ventilated on both sides is arranged, a distance of 40 cm is sufficient.



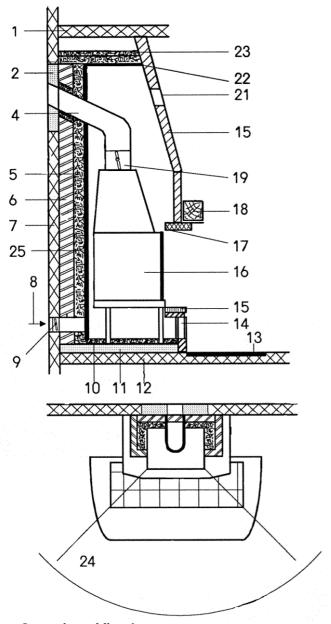
# **8.7** Fire protection outside the radiation protection:

From the outer surfaces of the covering of the fireplace insert at least 5 cm distance to combustible components must be maintained. The intermediate space must be open for airflow so that no heat congestion develops (8).

Components which cover only small areas of the fireplace insert covering such as floors, butt-joining wall coverings and insulation layers on ceilings and walls may be joined up to the covering without spacing (9). Other wider, strip-shaped and combustible components such as ornamental beams are permissible at a distance of 1 cm from the covering of the fireplace insert (see ornamental beam).

## 9. Installation drawing:

fireplace insert according to DIN 18895 /EN13229 without factory-made convection air jacket



- Ceiling to be protected of combustible components or as carrying building element
- Substitute material: Carry out heat protection measure according to DIN 18160
- 4. Connecting pieces of steel plate
- 5. Heat insulation layer:
  Rear wall (see Page 5),
  Side wall ceiling (see Page 5),
  Convection air chamber (see Page 5)
- 6. Primary walling
- 7. Wall to be protected of combustable building materials or carrying building element of concrete or reinforced concrete
- 8. Combustion air supply
- 9. Outside airflap
- 10. Heat insulation layer
- 11. Support plate
- Installation floor to be protected of combustible building materials or carrying building element
- Shielding floor protection of noncombustible building materials
- 14. Convection air inlet (circulating air)
- 15. Covering
- 16. Fireplace insert
- 17. Support frame
- 18. Ornamental beam
- 19. Throttle valve
- 21. Air outlet grille
- 22. Support element
- 23. Heat insulation layer (primary walling substitute) 6 cm thick
- 24. 80 cm radiation range
- Sheet metal covering convection air chamber

## 10. Operation of fireplace:

The fireplace inserts of Haas + Sohn with self-closing door have the designation fireplace insert EN13229-W Design 1 which means they are only suitable for operation with closed fire box and must only be operated with closed firebox.

In the case of stoves of Design 1 the closing springs of the firebox door must not be removed if such a device is connected to a chimney with multiple connections. The inclusion in Design 1 is defined by the self-closing firebox doors. The firebox doors must only be opened only to charge fuel and for removing ash. Otherwise these must be kept closed even if the stoves are not operated in order to avoid interference with other fireplaces and hazards connected with this.

## 10.1 Suitable fuels:

The fireplace inserts must only be operated with the following fuels and closed firebox:

- Plain dry billet wood
- Wood briguettes according to DIN 51 731 HP 2

**Caution!** Wood it not a slow-burning fuel so that continuous heating of the fireplace with fuel overnight is not possible.

The fireplace insert is intended for the burning of dry billet wood with a maximum water content of 30% of the dry weight. Billet wood should be stored in airy and dry places for 2 years. Excessively moist wood increasingly results in smouldering with tar and condensate formation which can damage the chimney. At any rate, excessive device contamination occurs. The billet wood length should be around 33 or 50 cm.

If incorrect or excessively moist fuel is used a chimney fire can occur because of deposits in the chimney. Immediately close all air openings in the stove and inform the fire brigade. Once the chimney has burnt out have it inspected for cracks or leaks by an expert.

Wood is a highly de-gassing fuel and requires a lot of top air (secondary air). Light or slow-burning control with this fuel is not possible. The heat output in the combustion of wood is always determined by the amount charged.

Firing of properly dried wood is the most economical and most environmentally friendly combustion since the calorific value of fresh wood is substantially less than that of dry wood.

The burning of waste, especially plastic, packaging material, coated and treated wood harms your fireplace insert and is additionally prohibited by the Federal Emission Protection Law. Brush wood, paper and small wood pieces must only be used for lighting.

Caution: Never use easily combustible liquids such as petrol, spirits for lighting and always keep such liquids away from your fireplace insert.

When operating the device ensure that adequate air is supplied to the room from the outside.

## 11. Use and start-up:

## 11.1 Initial start-up:

When using the fireplace insert for the first time burn it with moderate output to avoid possible damages due to heating it up too quickly (especially drying of the refractory brick lining). On initial heating, smell and smoke will develop due to the curing of the surface coating. Ensure the room is well ventilated during initial start-up.

### 11.2 Lighting:

The fireplace insert is charged with fuel through the firebox door.

Initially place 3 to 4 wood billets (approx. 2.0 to 2.5 kg) on the firebox floor or grate, uncoated paper on

## 10.2 Combustion air supply:

With both the open and closed operation of the fireplace carries a high demand for fresh air. Do not change existing precautions for combustion air supply. Ensure that the necessary combustion airlines are open while the fireplace is operated.

### 10.3 Convection air:

To avoid heat congestion the convection air inlet and outlet grilles must always be open during heating operation.

## **10.4** Fire protection outside the radiation range:

No objects of combustible building materials (e.g. shelves) must be placed closer to the open fireplace than a distance of 5 cm.

## 10.5 Fire protection within the radiation range:

Seen from the firebox opening forward and to the sides, no combustible components must be present (e.g. furniture, carpets, flowers etc.) in a range of at least 80 cm.

## 10.6 Protection against burns:

It is imperative to note that there are hot surfaces or operating handles present on heating devices which are in operation. Please use the enclosed protective glove to operate the fireplace. Presence in the 80 cm radiation range is only advisable to charge the fuel, prolonged presence there can result in skin burns. Keep children away from fireplaces in operation.

top, cardboard or an igniting cube, brushwood, small wood pieces or briquette pieces on top of this. Open all existing air control dampers to the maximum. After igniting, close the firebox door. Then set the air control dampers in accordance with the instructions on the enclosed Equipment Sheet.

Your fireplace insert is equipped with a typical design flat firing system which means that only one layer of fuel must be charged on the basic embers. Please note that the quantity, the size of the pieces and the kind of the wood charged has a direct influence on the heat output.

When feeding excessive fuel quantities your fire insert can be heated in excess of what is intended by the design. This can damage the fireplace insert, other parts of the chimney of the building itself. Never charge more than the stated fuel quantities at one time on the existing basic embers.

## 11.3 Maximum fuel charge quantity of approximately 1 hour:

Fuel	Quantity	Total quantity		
		Esprit 185.16	Komfort 180.18, Prestige 181.18, Exquisit 182.18 Trend 184.18, Opus 186.18	
Billet wood	2 – 3 billets	2,0 kg	2,5 kg	
Wood briquettes	4 – 5 small pieces (Divide large briquettes if required)	1,8 kg	2,1 kg	

## 11.4 Air setting with closed operation:

The fireplace inserts of Haas + Sohn have an adjustable air damper. The required combustion air enters as primary air through the grate and the lateral ducts and the firebox as window flushing air above the firebox door.

## 11.5 Adding fuel:



In addition to the use of suitable fuel and adequate fuel draught the manner in which the fireplace is operated also has major influence on keeping the view window clean. In this connection we recommend to charge only one layer of fuel, to use preferably long (approx.. 33 or 50 cm) which largely fill the firebox width. Briquettes should be arranged in the firebox so that they preferably fill one layer (approx. 5 to 10 mm distance between the briquettes).

## Caution! Add additional fuel only on the basic embers (no flames present).

Approximately 5 to 10 seconds before opening the firebox door completely close the primary air damper or dampers (see Equipment sheet) to prevent the leaking of smoke gases from the combustion chamber into the living room. Having charged the fuel, please close the firebox door again. After this, immediately set all air dampers to maximum opening to keep the time span to the igniting of the fuel as short as possible. As soon as the fuel burns lively re-establish the control setting as described on the enclosed Equipment Sheet.

### 11.6 Operating mode in the transition period:

In the transition period or with elevated outside temperatures, problems with the chimney draught can occur in the event of a sudden temperature increase so that the flue gases are not fully extracted. For this reason, always operate the stove in the transition period only with the least amount of fuel possible in order to be able to improve the combustion and draught situation in such cases by opening the air dampers.

## 11.7 De-ashing:

Following prolonged burning, at least once per day, remove the ash with the help of a poker through the grate in the ash box and empty the ash box. This is best done in the morning after the embers has left the fireplace in a relatively cold state. Please ensure that the ash box is emptied when approximately half full so that the ash cone does not grow up too closely to the grate.

If the grate is packed in the ash cone there is a risk that it is damaged through overheating since it cannot be circulated by any air.

Caution!

Before emptying ash always ensure that there is not residual embers in the ash. Even if the ash is cold remnants of embers may still be present and result in a fire in a waste container.

Wood ash can be composted and used as fertilizer.

### 12. Cleaning and care:

At least once per year, if required more frequently, clean and look after your fireplace insert in the cold state. When doing so, remove the ash deposits in the smoke pipe and on the smoke deflection plates or draught deflection plates. Draught deflection plates of vermiculite can be removed for cleaning (see Equipment sheet). Please reinstall these carefully in the same position after cleaning. For cleaning the smoke gas draughts an ash extractor with fine particle filter is best suitable. Dirt on the windowpane is best and environmentally friendly removed with a scouring pad moistened in water which you dip in the wood ash or other domestic glass cleaners. The chimney must likewise be regularly cleaned by the chimney sweep.

Your master chimney sweep will inform you on the necessary intervals.

The chimney stove should be checked by an expert once per year.

## 13. Warranty:

#### 13.1 General

HAAS + SOHN accept three years guarantee for this device within the scope of the warranty directives with the exception of parts which are directly exposed to the fire (wear parts). The guaranty commences on the day of delivery. The invoice must be presented as proof.

## 13.2 Warranty directives:

- 1. HAAS + SOHN accept guaranty for the duration of **three years** calculated from the delivery to the end user for
  - a) unobjectionable material condition and workmanship to suit the purpose,
  - b) expert assembly,
  - c) Adherence to the rated heat output (watt) according to DIN 18895/ EN 13229 and the room heating capacity according to DIN 18893 (see Equipment plate, technical data on the enclosed Equipment sheet or catalogue details).

The warranties a) to c) extend to the repair of the device or the parts subject of the complaint free of charge. Entitlement exists only for the free of charge replacement of parts having defects in the material and in the workmanship. Claims beyond this are excluded.

We provide 6 months guaranty for wear parts in the fire area such as refractory, vermiculite, fire grate, glass ceramic and seals as well as operating elements such as handles and painted surfaces.

- 2. HAAS + SOHN does not accept any guaranty for damages and defects on equipment or their parts caused through:
- External, chemical or physical effects during transport, storage, installation and utilisation of the device (e.g. quenching with water, food cooking over, condensate, overheating due to incorrect operation (e.g. open firebox door), or hair crack formation in natural stones or enamelled parts are not considered a quality defect,
- Incorrect choice of chimney stove size,
- Failure to heed the building regulations applicable from time to time,
- Errors in the installation and connection of the device.
- · Insufficient or excessive chimney draught,
- Incorrectly performed repair operations or other especially subsequent changes to the fireplace or flue gas pipe (smoke pipe and chimney),
- Use of unsuitable fuels,
- Incorrect operation: Overloading the devices (see Operating Instructions of the manufacturer)
- Wear on the parts of steel, glass ceramic seals, refractory or vermiculite directly exposed to the flames insofar as not included in the warranty (1a),
- Incorrect treatment,
- Insufficient care, use of unsuitable cleaning agents.

### 13.3 Complaints:

Please present your complaints only to your specialist dealer. When doing so, it is imperative that you should name the type and manufacturing number of your chimney stove. This information can be found on the nameplate of the device (in the wood storage compartment of the device).



## 14. Instructions for ordering replacement parts:

When ordering replacement parts please state the complete type and manufacturing number of your chimney stove. These details can be found on the nameplate of the device (in the wood storage compartment of the device).

Also pay attention to the technical drawings and tables on the Equipment Sheet where you will find the correct designation of the required replacement parts. For ordering refractory replacement parts, the refractory bricks in these drawings are numbered and the refractories are viewed from the top in these drawings (top view).

## Caution! Do not change the fireplace!

Use only replacement parts that have been expressly approved or are offered by the manufacturer.

If required, please contact your specialist dealer.

## 15. Procedure for end-of-life disposal of the heater

- Disassemble the central unit including the connected electrical components and hand them over for
- · recycling.
- Disassemble the control unit and hand it over for recycling.
- Disassemble the electrical cables and hand them over for recycling as non-ferrous waste – it is not an
- electronic waste.
- Remove the lining of the combustion chamber and dispose of as construction debris.
- Remove the concrete parts of the fireplace kit and dispose of as construction debris.
- Remove the sealing and silicone residues and dispose of them with household waste.
- The heater body and any steel or cast iron parts are to be recycled as metal waste.
- Disassemble the temperature sensors and hand them over for recycling as metal waste. (for pellet stoves)
- Disassemble the door glass and dispose of with household waste (not to be sorted with glass waste).