HAAS + SOHN

# Installation and Operating Instructions
# Wood-burning stoves EN 16510 / EASY CONTROL

EN

Type plate:

Please read these operating instructions carefully. They provide information on the function and operation of this stove. Furthermore, by heating correctly, you can save fuel and protect the environment. The enclosed appliance data sheet and technical data sheet form part of these operating instructions.

## Key to symbols:

### WARNING

The most important instructions are marked with the heading **WARNING**. Instructions marked with the heading **WARNING** indicate a **serious risk of damage to the heater or personal injury**.

### NOTE

Notes marked with the heading **NOTE** indicate the potential for damage to your heater.

### Annotation

A note generally draws your attention to important information regarding the operation of your heater.

Please read and follow the operating instructions!

# Table of contents

# 1. Parameters specified on the type plate or technical data sheet in accordance with EN 16510

| Parameter | Unit | Explanation |
|---|---|---|
| $P_{nom}$ | kW | Nominal heat output |
| $P_{part}$ | kW | Part-load heat output |
| $P_{SHnom}$ | kW | Nominal space heating output |
| $P_{SHpart}$ | kW | Part-load space heating output |
| $P_{Wnom}$ | kW | Nominal water heating capacity |
| $P_{Wpart}$ | kW | Part-load water heating capacity |
| $CO_{nom}$ (13% $O_2$ ) | mg/m³ | CO emissions at nominal heat output |
| $CO_{part}$ (13% $O_2$ ) | mg/m³ | CO emissions at partial load heat output |
| $NOx_{nom}$ (13% $O_2$) | mg/m³ | NOx emissions at rated heat output |
| $NOx_{part}$ (13% $O_2$) | mg/m³ | NOx emissions at partial heat output |
| $OGC_{nom}$ (13% $O_2$) | mg/m³ | Hydrocarbon emissions at rated heat output |
| $OGC_{part}$ (13% $O_2$ ) | mg/m³ | Hydrocarbon emissions at partial heat output |
| $PM_{nom}$ (13% $O_2$ ) | mg/m³ | Particulate emissions at rated heat output |
| $PM_{part}$ (13% $O_2$ ) | mg/m³ | Particulate emissions at partial load heat output |
| $\eta_{nom}$ | % | Efficiency at rated heat output |
| $\eta_{part}$ | % | Efficiency at partial load heat output |
| $p_{nom}$ | Pa | Minimum delivery pressure at nominal heat output |
| $p_{part}$ | Pa | Minimum delivery pressure at partial load heat output |
| $T_{snom}$ | °C | Temperature at the flue gas outlet at nominal heat output |
| $T_{spart}$ | °C | Temperature at the exhaust manifold at partial load heat output |
| pw | bar | Maximum permissible water operating pressure |
| $d_R$ | mm | Minimum clearances from combustible materials — from the rear |
| $d_S$ | mm | Minimum clearances from combustible materials — from the sides |
| $d_C$ | mm | Minimum clearances from combustible materials — from the top to the ceiling |
| $d_P$ | mm | Minimum clearances from combustible materials — from the front |
| $d_F$ | mm | Minimum distances from combustible materials — from the front in the lower, front radiation zone |
| $d_L$ | mm | Minimum distances from combustible materials — from the front in the lower, front radiation zone |
| $d_B$ | mm | Minimum clearances from combustible materials — below floor level |
| $el_{SB}$ | W | Standby power consumption |
| $el_{max}$ | W | Auxiliary power consumption at rated heat output |
| $el_{min}$ | W | Auxiliary power consumption at partial load heat output |
| $W_{max}$ | W | Maximum electrical power consumption |
| E, f | V, Hz | Supply voltage, mains frequency |
|  | | Please read and follow the operating instructions! |

Note: The “Technical Data Sheet” contains all the parameters required for your device; some of these are also shown on the type plate.

# 2. General information

- Please check the unit for transport damage when unpacking. If there are any defects, report them to your dealer immediately!
  Note: Loose draught deflector plates or similar components that have slipped out of their mountings do not constitute defects (see Section 6.3). The correct position of the draught deflectors is shown in the 'Dimensional Drawing' diagram in the product data sheet.
- National and European standards, local and building regulations, as well as the relevant regional building regulations or fire safety regulations, must be observed when installing, connecting and commissioning the fireplace.
- The wood-burning stove described in these instructions has been tested in accordance with DIN EN 16510, whereby the firebox door must always be closed during heating operation. The firebox door may only be opened when lighting the fire, adding fuel, removing combustion residues and for maintenance work!
- The wood-burning stove is a slow-burning fireplace. Suitability for multiple use is specified in the technical data sheet. Please observe national regulations!
- The installation surface for the appliance must have adequate load-bearing capacity. Otherwise, suitable measures (e.g. a load-distributing plate) must be taken.
- The wood-burning stove must only be installed in dry living areas! It must not be installed in wet rooms (e.g. bathrooms, toilets) or other damp areas (e.g. garages)!

# 3. Safety instructions

- For stoves with an external air supply, the air inlet must not be blocked or closed during operation.
- During operation, the designated combustion air opening must not be closed, restricted, narrowed, covered or blocked.
- Parts of the stove, particularly the external surfaces, become hot during heating! Therefore, appropriate caution is required! The stove should therefore be operated using the heat-resistant glove supplied.
  Please be aware of a potential fire hazard both within and outside the heat radiation zone (see also Section 5.1 Minimum clearances from combustible materials). Combustible and heat-sensitive objects must not be located within the specified minimum clearances!
- Make children aware of these dangers and keep them away from the fireplace whilst it is in use.
- Do not use any flammable liquids (e.g. petrol, lamp oils containing petrol, paraffin, barbecue charcoal lighter fluid, methylated spirits, ethyl alcohol) to light or relight a fire in the stove. Keep all such liquids away from the stove whilst it is in use!
- To shut down the stove safely in the event of a fault (e.g. overheating, chimney fire), close all air controls! The firebox door must remain closed!
- Please observe the additional safety instructions for the operating modes "RLA" (room-air-dependent) or "with RLU" (room-air-independent). When operating the stove "with RLU", the combustion air is fed to the stove via pipes or ducts.

## 3.1. Safety instructions for RLA (room-air-dependent)

- If the combustion air is drawn from the living space, a sufficient supply of fresh air must be ensured in all cases.
- Air extraction systems such as ventilation systems, extractor hoods, tumble dryers with exhaust air, etc., or other fireplaces must not interfere with the air supply to the stove.

**WARNING**

The fireplace insert must not be used whilst controlled ventilation systems in the home are in operation!

## 3.2. Safety instructions for RLU (room-air-independent)

- If the supply air duct is sealed (meaning the chimney cannot be used for multiple purposes), the stove complies with types FC41x (for LAS systems) and FC51C in accordance with the approval principles for room-air-independent fireplaces for solid fuels issued by the German Institute for Building Technology (DIBt) and the DIN 18897-1 standard.
- When used in combination with ventilation systems (controlled supply and exhaust ventilation systems, cooker hoods in kitchens, extractor fans, etc.), Section 4 of the German Combustion Ordinance (FeuVo) applies in Germany.

## 3.3. What to do in the event of a chimney fire!

- If incorrect or excessively damp fuel is used, deposits in the chimney can lead to a chimney fire.

Correct procedure:

- Immediately close all air vents on the stove.
- Notify the fire brigade and the chimney sweep.
- Ensure access to the cleaning openings.
- Once the chimney has burnt out, have it checked by a specialist for cracks or leaks.
- Determine the cause of the chimney fire.

# 4. Chimney

- The temperature class of the chimney must be at least T400 soot fire-resistant! Please observe the relevant national installation and building regulations!
- For information on suitable chimneys, please refer to EN 15287-1:2007+A1:2010, EN 15287-2:2008, EN 13384-1:2015+A1:2019. The proper functioning of the chimney in accordance with EN 13384-2:2015+A1:2019 must be verified, depending on the specific on-site conditions. Please contact your local chimney sweep for this.

## 4.1. Weather conditions

To ensure the safe operation of the fireplace, it is essential to ensure that the chimney can generate the necessary draught. This is particularly important during transitional periods (e.g. autumn or spring) or in poor weather conditions (e.g. strong wind, fog, etc.).

## 4.2. Chimney draught (draft pressure) at the stove's rated heat output

**WARNING**

A chimney calculation in accordance with the relevant standard must always be carried out prior to installation!

| | | |
|---|---|---|
| Minimum chimney draught: | 11–12 Pa | If the minimum draught is not achieved, the fireplace cannot operate properly. |
| | | **Note:**<br>If the draught is low, we recommend connecting the stove via a vertical pipe section at least 1 m long. |
| Maximum chimney draught: | 20 Pa | If the maximum permissible chimney draught is exceeded, fuel consumption, the combustion chamber temperature and, consequently, the heat output generated will increase. |
| | | **Note:**<br>There is a risk of overheating and, consequently, excessive strain on the components. If the chimney draught is too high, we recommend installing a draught regulator or draught limiter. |

## 4.3. Connection to the chimney

- The flue pipe must be securely fitted to the flue outlet.
- The flue pipe must not be laid with a downward slope towards the chimney.
- It is essential to ensure that the flue pipe does not protrude into the clear cross-section of the chimney, as this would disrupt the draught of the flue gases and prevent the chimney from being cleaned effectively.
- Longer horizontal flue pipe connections reduce the necessary chimney draught.
- All openings leading into the same chimney, such as stove and chimney cleaning openings, must be sealed.
- Where the chimney is used for multiple connections, the minimum vertical distance between two chimney connections should be 30 cm. The fireplaces must always be suitable and approved for multiple connections.

# 5. Installation

**NOTE**

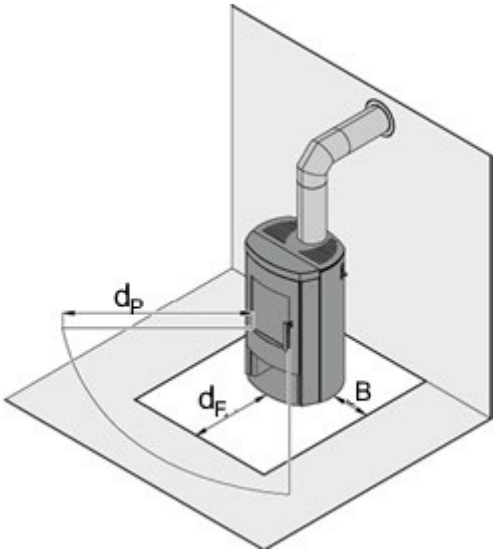
**When installing the wood-burning stove, all local regulations and fire safety requirements must be observed, including those relating to national and European standards and regulations for this type of appliance! In particular, the requirements of DIN 18896 must be observed when installing the fireplace!**

## 5.1. Minimum clearances from combustible materials:

**WARNING**

**All combustible building components (e.g. floors, walls, ceilings, furniture, wallpaper, wooden panelling) must be protected against excessive thermal stress! The minimum distances from combustible or temperature-sensitive materials must be observed (see type plate and technical data sheet)!**

In the case of combustible floors, a floor protection plate made of non-combustible material must be installed in front of the fireplace insert. Measured from the firebox door, this must generally cover the floor by at least 500 mm towards the front (measured horizontally). If the value for $d_F$ is greater than 500 mm, then the specified value must be observed as a minimum. The dimension $d_F$ can be found in the technical data sheet and on the type plate.
The floor protection plate must extend at least 300 mm beyond the width of the firebox opening on both sides (dimension 'B'). The floor protection plate also serves as protection against falling embers and sparks.
If there are side viewing windows, the same dimensions for the floor protection must be observed as at the front!




The following products are permitted as floor protection plates:
- Metal plates (e.g. made of steel or stainless steel) with a minimum thickness of 1.5 mm
- Floor tiles
- Natural stone slabs
- Non-transparent glass panels

**WARNING**

Transparent glass panels are not permitted for protecting combustible components (floor, side walls) from excessive radiant heat, even if they are coloured (e.g. black or grey), as they allow heat radiation to pass through!

## 5.2. Combustion air supply

Ensure that there is a sufficient supply of fresh air at the installation site. It is essential that you observe the safety instructions in Chapter 3!

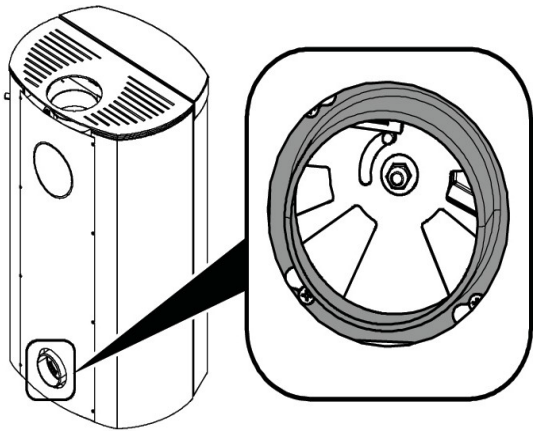
## 5.3. Outdoor air connection (if fitted)

**Annotation**

We recommend using the external air connection for the combustion air supply so as not to consume valuable indoor air during heating.

**WARNING**

It is not advisable to feed cold air into the room via a direct duct from outside, as this can lead to condensation forming.



# 6. Operation of the wood-burning stove

**NOTE**

**When operating the stove, all local regulations must be observed, including those relating to national and European standards and regulations for this type of appliance!**

**WARNING**

During heating operation, the lever on stoves with an easy-control system must not be set to “Supply air closed” or “0”, as this may cause a deflagration!
Even with stoves without easy-control regulation, they must only be operated with the recommended control settings!

## 6.1. Suitable fuels

The fuels approved for combustion and the maximum fuel load are listed on the technical data sheet. You will also find the maximum permissible fuel length there.

Guideline (depending on the type of wood):
1 kg of firewood = approx. 4 kW
1 kg of wood briquettes = approx. 5 kW

**Annotation**

When heating, only use logs that have been stored for 2–3 years and have a maximum residual moisture content of 17%!
Wood briquettes expand during combustion and should therefore be broken into pieces.

## 6.2. Unsuitable fuels

The wood-burning stove must not be used as a waste incinerator! Furthermore, unsuitable and non-recommended fuels (e.g. wallpaper, chipboard scraps, plastics or impregnated wood) and liquid fuels must not be used!
Burning these materials may cause damage to the appliance, thereby voiding any warranty.

## 6.3. Initial commissioning

Before first use, any

- any stickers must be removed.
- all accessories must be removed from the ash pan or the firebox.
- Check that the draught deflector plates are in the correct position (see the ‘Dimensional Drawing’ diagram in the appliance data sheet). These may have become dislodged during transport or installation of the stove.

**Annotation**

During initial commissioning, odours may be emitted for a short time. Please ensure the room is well ventilated during this period and avoid inhaling the fumes directly!
The paint finish is initially sensitive to scratches and damage, but it hardens after being heated several times.

## 6.4. Lighting

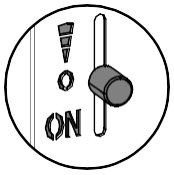
If there are specific instructions for lighting your stove, you will find them in the enclosed product information sheet. Please read and follow these instructions!

## 6.4.1. Lighting with EASY-CONTROL air control

- First place a few small logs (max. approx. 1.5 kg) on the firebox floor or grate, then a firelighter cube on top, followed by plenty of kindling. The amount of wood specified applies ONLY to the initial lighting process.
- Set the lever to “Light”, “ON” or “START”. Close the firebox door after lighting.
- The heating-up process depends on the draught. As soon as all the fuel is burning vigorously, set the lever to “Heating mode”.


Lighting

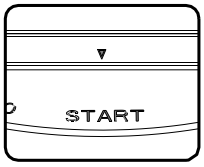

Heating mode



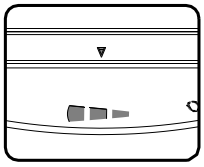

Supply air closed

### 6.4.1.1. Lighting the fire – Newham, Mayfair

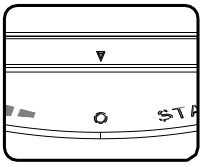
- First, place a few small logs (max. approx. 1.5 kg) on the firebox floor or grate, then a firelighter cube on top, followed by plenty of kindling. The quantity of wood specified applies ONLY to the initial lighting process.
- Set the lever to “Lighting” “START”. Close the firebox door after lighting.
- The heating-up process depends on the draught. As soon as all the fuel is burning vigorously, set the lever to “Heating mode”.




Lighting



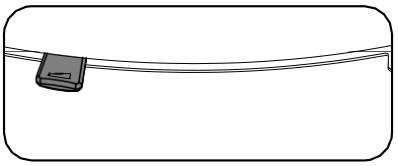
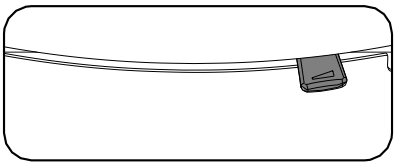
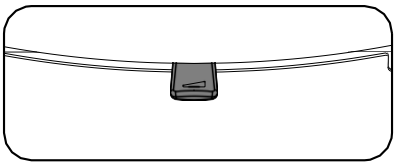
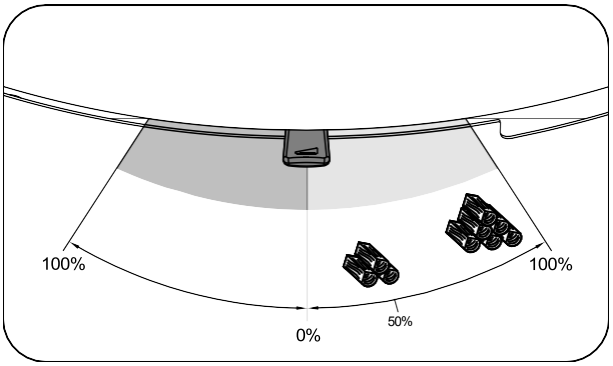
Heating mode



Supply air closed

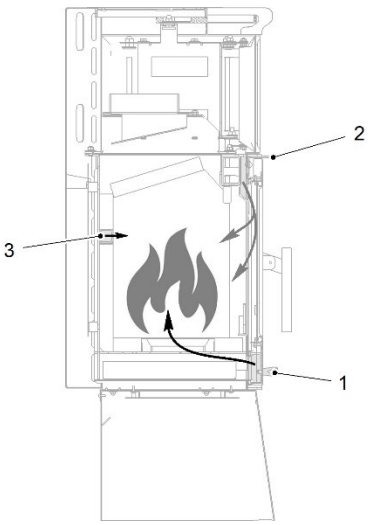
### 6.4.1.2. Ignition - Verona 04 246 17, Ellmau Cook 246.18, Treviso-III

- First, place a few small logs (max. approx. 1.5 kg) on the firebox floor or grate, followed by a firelighter cube, and then a generous amount of kindling. The quantity of wood specified applies ONLY to the initial lighting process.
- Set the lever to ‘Ignition’. Close the firebox door after ignition.
- The heating-up process depends on the draught. As soon as all the fuel is burning vigorously, set the lever to “Heating mode”.

| | |
|---|---|
| Lighting |  |
| Heating mode |  |
| Supply air closed<br>(Position “0”) |  |
|  | |

## 6.4.2. Ignition without EASY-CONTROL

- First, place a few small logs (max. approx. 1.5 kg) on the firebox floor or grate, then a firelighter cube on top of these, followed by kindling. The amount of wood specified applies ONLY to the lighting process.
- All air vents (primary and secondary air controls) must be opened fully. Once lit, close the firebox door. The heating-up process depends on the chimney draught. As soon as all the fuel is burning, the lower air vent (“primary air control”) must be closed.




**Combustion air**

1: Primary air control

2: Secondary air control

3: Tertiary air

## 6.5. Adding fuel

Fuel should only be added to the embers (no flame visible).

If there are specific instructions for adding fuel to your stove, you will find these in the enclosed product information sheet. Please read and follow these instructions!

**Annotation**

The stove becomes very hot during operation. You should therefore operate the stove using the heat-resistant glove supplied.

### 6.5.1. Wood-burning stoves with EASY CONTROL

- Before opening the firebox door, set the lever to ‘Supply air closed’ (0) to prevent flue gases from escaping from the combustion chamber into the living area.
- Once the fuel has been added, close the firebox door again.
- Then set the lever back to “Ignition” ON to keep the time until the fuel ignites as short as possible.
- As soon as the fuel is burning vigorously, set the lever back to “Heating mode”.

### 6.5.2. Wood-burning stoves without EASY CONTROL

- Before opening the firebox door, you should close all air vents completely to prevent flue gases from escaping from the combustion chamber into the living area.
- Once you have added the fuel, please close the firebox door again.
- Then open all the air dampers fully immediately to keep the time until the fuel ignites as short as possible.
- As soon as the fuel is burning, close the primary air control – the secondary air control remains open. Exception to the secondary air control: When the appliance is in Auto Air or Auto Air Coal mode, the air control cannot be adjusted manually as it is regulated automatically.

## 6.6. Overheating

**WARNING**

To prevent damage caused by overheating, the maximum permissible fuel quantity per load must not be exceeded (see Technical Data Sheet). Otherwise, damage may occur to the stove’s components and materials (e.g. cracks in the fireclay and vermiculite, cracks and deformation of the fire grate and support grate, cracks in tiles, discolouration of cladding parts, cracks and discolouration of storage bricks or glass panes, deformation of sheet metal parts, destruction of seals and cover glass plates, etc.). Any warranty claims for damage caused by overheating are void!

## 6.7. Ash removal

After prolonged burning, at least once a day, the ash should be removed from the grate into the ash pan using a poker, and the ash pan should be emptied. Please ensure that the ash pan is emptied when it is about half full, so that the ash cone does not touch the grate.

**NOTE**

When the wood-burning stove is in use, it becomes very hot. You should therefore operate the stove using the heat-resistant glove supplied.

**NOTE**

If the ash pan is not emptied in good time, there is a risk that air circulation will be interrupted, resulting in insufficient cooling. This can lead to overheating and damage to the grate.

**WARNING**

Before emptying the ash, always check that there are no embers left in the ash. Even if the ash is cold, there may still be embers present, which could cause a fire in the waste bin.

# 7. Cleaning and maintenance

- You should clean and maintain your wood-burning stove at least once a year, or more often if necessary, whilst it is cold. This involves removing ash deposits from the flue and from the smoke baffles or draught baffles. Draught baffles can be removed for cleaning (see product information sheet).
- Door glass pane: The most environmentally friendly way to clean this is to dip a damp cloth in wood ash and use it to wipe the pane. You can use either special fireplace glass cleaners or conventional glass cleaners (without corrosive acids or solvents). Glass panes must only be cleaned when the stove is cold!
- The chimney must also be cleaned regularly by a chimney sweep. Your local chimney sweep will provide information on the necessary intervals.

**Annotation**

The wood-burning stove should be inspected annually by a qualified professional!

# 8. Faults, causes

| Fault: | Cause: | Solution: |
|---|---|---|
| The stove is not heating properly or is smoking: | Chimney draught is too low (min. 10 Pa required at the flue outlet) | Have the chimney draught measured by a qualified chimney sweep! Seal any leaks in the cleaning openings on the chimney. |
| | The stove or flue pipe is sooty | Clean the stove and flue pipes in good time |
| | The connection between the stove and the chimney is leaking | Check and seal the connection |
| | The stove is being heated with too much fuel | Use the fuel quantity specified in the technical data sheet |
| | The stove has been connected incorrectly or the chimney is overloaded | Seek advice from a chimney sweep |
| | No fresh air supply from outside | Ensure there is sufficient fresh air supply; seek advice from a chimney sweep |
| | Poor weather conditions (transitional period) | You may need to set the air control lever to 'Heating'. |
| | Logs chosen too large | Use smaller logs (max. 0.7 kg per log) |
| Fuel is burning too quickly: | Leak in the appliance (door seal, glass) | Replace seals |
| | Chimney draught too high (max. 20 Pa at the flue outlet) | Have a draught limiter fitted |
| Door glass gets dirty quickly: | Wood too damp | Check the moisture content of the wood! Max. 17% residual moisture permitted |
| | Logs that are too large are being used | Use smaller logs (max. 0.7 kg per log) |
| Door glass gets dirty quickly: | Fireplace draught too low (min. 10 Pa at the flue outlet required) | Seal any leaks in the cleaning openings on the chimney! Have the chimney draught measured by a qualified chimney sweep. |
| | Always keep the air damper open in the "ON" or **"START"** position | Once the fuel is burning vigorously, set the air damper to "Heating mode" |
| | Chimney draught too high (max. 20 Pa at the flue outlet) | Have a draught limiter fitted |
| The door glass becomes "milky" | Overheating | Replace the pane |
| Smoke nuisance: | Fuel not fully burned down | Only add fuel to the embers (no visible flame) |
| | Insufficient draught (minimum 10 Pa required at the flue outlet) | Seal any leaks in the cleaning openings on the chimney. Have the chimney draught measured by the responsible chimney sweep. |

# 9. Warranty

HAAS + SOHN provides the purchaser with a warranty in accordance with statutory provisions. The two-year warranty period begins on the date of actual handover.

**Annotation**

The invoice must be presented as proof.

Should a defect occur in your appliance within the warranty period, HAAS + SOHN will rectify (repair) this defect as quickly as possible or, alternatively, replace the defective item. Cancellation of the contract or a price reduction is excluded, provided this does not contravene statutory provisions. Only spare parts expressly approved or supplied by the manufacturer may be used.

Changes to the purchased item resulting from normal use (wear and tear of parts exposed to fire, such as the combustion chamber lining, burner, ignition cartridge, combustion chambers, grate, paintwork, draught and deflector plates, sensors, glass-ceramic and seals, seals of any kind, handles, natural stone, joints, surface finish of cast parts) are excluded from the warranty.

Failure to carry out maintenance or cleaning, or carrying it out incorrectly; incorrect adjustment of the appliance, or insufficient or excessive chimney draught; condensation; improper use; negligence; and modifications to the appliance also exclude any warranty.

**WARNING**

Any structural alterations to the stove, as well as any use contrary to its intended purpose, will invalidate all warranty claims!

# 10. Spare part orders / Service enquiries / Complaints

If you have any complaints during the warranty period, please **contact the Haas + Sohn sales partner** from whom you purchased the appliance **directly**.
For enquiries regarding repairs and servicing, please use the service form on our website. This can be completed by both the dealer and the end user:

**Link to the service form: https://www.haassohn.com/serviceformular**

To ensure your enquiry is processed quickly, the following details from the type plate are essential:

- **Exact model designation** (model variant)
- Serial number

The following information is also useful for processing your enquiry:

- Photo of the type plate
- Photo of the fault

For warranty claims, the invoice is also required.

The type plate is located on the back of the oven and in the front section of the user manual. Please also refer to the technical drawings and tables on the product data sheet, where you will find the correct designation of the required spare part.
To order spare parts, we offer you the option of using our spare parts shop on our website.

**Contact details for enquiries regarding technical complaints and warranty and guarantee claims:**

**Email:** service@haassohn.com
**Hotline:** +43 (0)662 44 955-0

**Service hours:** Monday – Thursday: 09:00 – 12:30 and 13:00 – 16:00
Friday: 09:00 – 13:00

# 11. Instructions for dismantling a heater at the end of its life cycle

At the end of its life cycle, the oven must be dismantled into its recyclable components. If you have any questions regarding disposal, please contact your local recycling centre or a waste management company.

| Component | Disposal |
|---|---|
| Stove body and other steel components | Scrap metal container |
| Cast iron components | Scrap metal container |
| Glass panes (glass-ceramics) | Household waste or containers for flat glass (no waste glass!) |
| Furnace lining (fireclay, vermiculite) | Construction waste |
| Concrete elements | Construction waste |
| Stone cladding | Construction waste |
| Sealants, silicone residues | Household waste (residual waste) |
| Central unit, control unit and electrical components | Electrical waste |
| Electrical cables | Scrap metal container (no electronic waste) |
| STB (safety temperature limiter) | Scrap metal |

Subject to changes in dimensions and design, technical and visual modifications, errors, and typographical and printing errors.

All documents, such as operating instructions, product data sheets, test reports, etc., and contact details can also be found at:

www.haassohn.com