THE PENMAN COLLECTION

FIRES & FIREPLACES

INSTALLATION INSTRUCTIONS

OLSBERG LUNEN

CYLINDRICAL STOVE

olsberg

innovativ. seit 1577

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1.0 USER INSTRUCTIONS

1.1 - Welcome

Thank you for your decision to buy an Olsberg Stove. The crackling, visible flames give you the sense of comfort and security. The combination of hot-air heating and heat radiation provides a pleasant and healthy climate in any room.

The combined use of modern heating technology, excellent quality of materials and effective heat exchange, results in high efficiency and economical operation.

Furthermore, the fire flaming in your Olsberg stove creates an intimate atmosphere for your family and friends. Use of excellent raw materials assures you will have a long-lasting pleasant experience. It is important that you contribute to the care of your new stove by carefully reading this manual and following the instructions.

In spite of the finest quality materials and workmanship, false fitting or misconnecting, overloading of the appliance or use of unsuitable fuel can cause damage to the appliance itself or to the connecting pipe and chimney.

1.2 - General

The Fire Plus System of your Olsberg stove provides optimal, environmentally friendly burning and combined with and an effective heat exchange system creates high efficiency.

After loading and lighting the fuel, the first phase of the combustion process starts by proceeding to burn the gases leaving the fuel. This is the known as the “high flames” period. After the flames reduce, the rest of the fuel burns up in the second phase of the combustion process. This process is characterized by strongly glowing embers with no or only smaller, temporary flames.

Optimal and environmentally friendly burning with high efficiency can only be achieved if the necessary quantity of air at the appropriate places in all phases of the combustion process. Both the longer time spent in the combustion chamber by gases mixed with air and the hot combustion chamber have a positive effect on the combustion process.

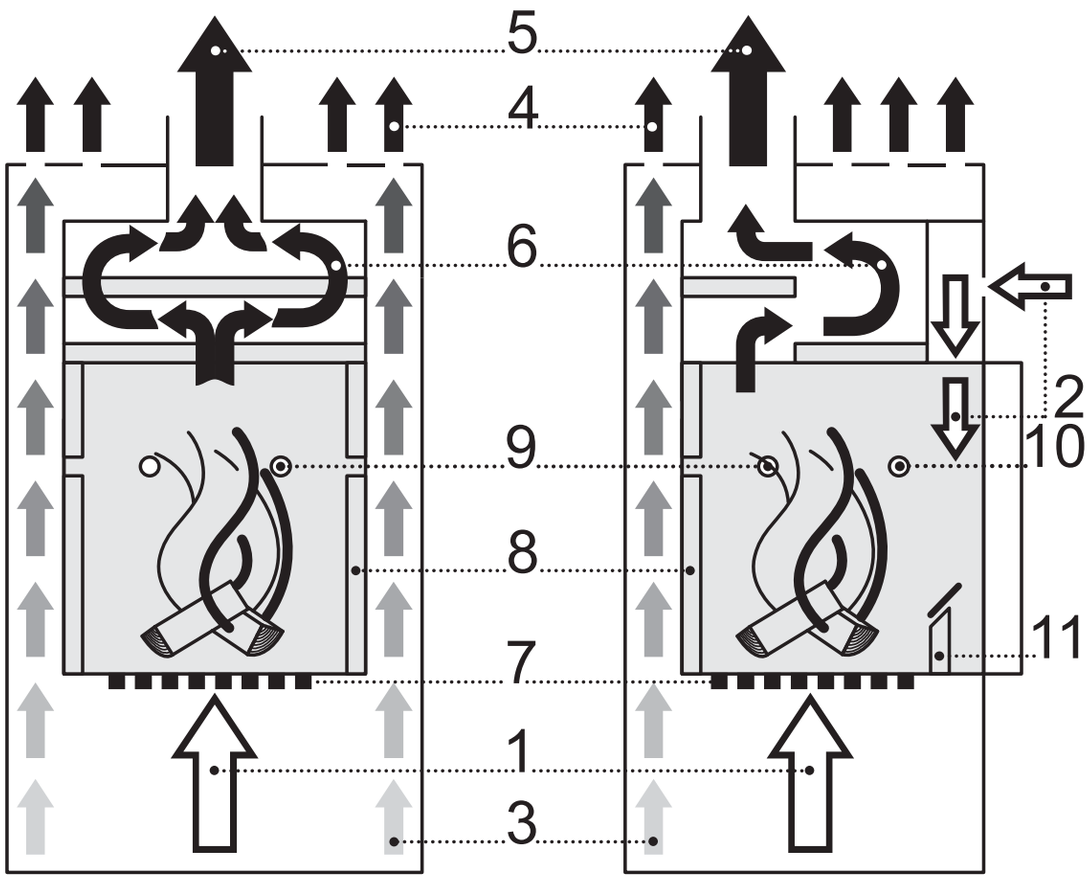
Wood is a fuel of “high flame”. At this height above the glowing embers, secondary and tertiary air get inside in such a way that mixing of the air and gases and the time that gases spend in the combustion chamber results in good burning. The excellent quality lining (chamotte/vermiculite) of the combustion chamber, provides high temperature, helping the process.

Afterwards, the gases are lead through one or more dead plates in the upper part of the stove, namely through a heat exchange system, that consists of a pipe system where heat is transmitted again. Gases finally leave the stove through the connecting pipe. The remaining energy content of the gases provides the necessary feed pressure in the chimney, “motor of the stove”. This is the operating principle of Olsberg stoves.

Stoves are not structurally suitable for non stop use. Only a relatively small amount of fuel can be loaded in the combustion chamber at any time. More information about quantities of fuels loadable for one occasion is given in the technical data sheet section.

1.0 USER INSTRUCTIONS

1.3 - Cross Section Drawing



1. Primary air
2. Secondary air
3. "Cold" air of room
4. Warm air
5. Escaping gases
6. Hot gases
7. Grate
8. Chamotte or vermiculite lining

9./10. Tertiary air

11. Charcoal pan

1.4 - Heating Capacity

The heating capacity according to DIN 18893 standards is in m^3, referring to buildings that do not comply with the Heat Insulation Regulation. For buildings complying with the mentioned regulation other values are valid (DIN 18893 -1). Make inquiries about further details at a specialized dealer or a responsible chimney sweep.

	Heating conditions	m^3
9 kW	- favourable	200
	- less favourable	120
	- unfavourable	82
8 kW	- favourable	182
	- less favourable	105
	- unfavourable	71
7 kW	- favourable	148
	- less favourable	86
	- unfavourable	59
6 kW	- favourable	116
	- less favourable	69
	- unfavourable	47

1.5 - Health & Safety

The necessary feed pressure for chimney examination given on the technical data sheet is the necessary minimum value at the flue outlet of the stove. This is necessary for safe operation of the stove. Practice shows that higher, some times too high, feed pressure exists in chimneys. Such high feed pressure (more than 20 Pa) can lead to uncontrollable combustion process that can damage the appliance itself, the connecting pipe and the chimney sweep or a competent expert about finding a solution

In such cases, we recommend the use of a feed pressure regulator (flow control valve in the flue or providing secondary air inside the chimney).

Olsberg stoves comply with DIN 18891 (building category 1) and DIN EN 13240 standards.

1.5 - Health & Safety Cont.

Olsberg stoves are freestanding stoves that cannot be equipped with an individual cover or be built in as a fire chamber insert/cassette. You must not make any modifications influencing the operation of the stove.

Remove all packaging and supporting materials from the chamber and all accessories from the ash drawer and the wood case. Make sure that the lining of the fire chamber and all pieces of the dead plates are in the correct place and fitted correctly. ***Do not use the stove without these components.*** Take care as the packaging material can contain nails and other sharp pieces of metal, which can cause injury to you and the stove. Take care that the nylon and other wrapping materials do not get in children's hands, as they can cause suffocation. Carefully collect the packaging materials mentioned above, and take them to the local waste disposal site.

The stove is painted in high temperature paint and high quality heat resistant lacquer that gains its final stability when heating up for the first time. The smell at the first heating up derives from the evaporation of the protection lacquer in the paint. So the heated room must be carefully ventilated from time to time (every 1-2 hours). The smell will stop after a while of burning.

Do not put anything on the stove before the first heating up and do not touch its surface to prevent damage of lacquering. Use protective gloves for your own protection and for the sake of the intactness of the lacquering.

The doors of the stove should be kept slightly open during the first heating up so the insulation cord does not stick to the front of the stove.

2.0 INSTALLATION

2.1 - Heating Capacity - Installation Guide

This appliance must be installed by a competent person and the installation must comply with bs8303 – code of practice for installation of domestic heating and cooking appliances burning solid mineral fuel, national building regulations, local by-laws and standards and the requirements of the health and safety at work act - in particular:

Handling:

Adequate facilities must be available for loading, unloading and site handling.

Fire cement:

Some types are caustic and should not be allowed to come into contact with the skin. In case of contact wash immediately with plenty of water.

Asbestos:

These stoves contain no asbestos. If there is a possibility of disturbing any asbestos in the course of installation then please seek the guidance of a specialist and use appropriate protective equipment.

Metal parts:

When installing or servicing this stove care should be taken to avoid the possibility of personal injury

2.2 - Installation Notes & Guide

Attention should be paid to the following during and before the installation:
In the first step, the location and the way of connection of the purchased appliance has to be chosen with consideration of the safety instructions.

The chimney must be suitable for operating your stove.

Installation and usage of stoves must be reported to a competent chimney sweep or another competent expert. Applying the local regulations a chimney sweep/expert has to issue a written authorization to use the stove. Ensure to get a receipt of this to certify.

Examination of the chimney happens according to the local rules which are usually national or European standards.

The local rules should be taken into consideration during the installation of the connecting pipe as well. These are usually national or European standards. Necessary air supply for sufficient burning has to be ensured. In hermetically insulated rooms a separate air inlet pipe is needed to guarantee a sufficient supply of air for the operation of the stove. It is also necessary in the case of rooms with forced aeration systems (e/g extractor fan).

If it is possible a solution must be found for turning off these appliances. Some Olsberg stoves have an optional connection for an external air inlet.

Use of Olsberg stoves in building with hermetic insulation and mechanical airing systems is only allowed under certain conditions. Authorization of the stove as “independent of the air in the room” and insulated air inlet from outside are among these conditions. It is important to consult a competent chimney sweep or expert regarding this matter.

Choose a location for the stove close to the chimney to prevent the use of a long horizontal connecting pipe. The location of installation has to be flat and level. Make sure that the floor has the necessary load-bearing capacity. The weight of the appliance can be found on the technical data sheet. In case the load bearing capacity of the floor is too low, usage of a plate for better load distribution might help. If the problem exists you should seek professional help.

2.0 INSTALLATION

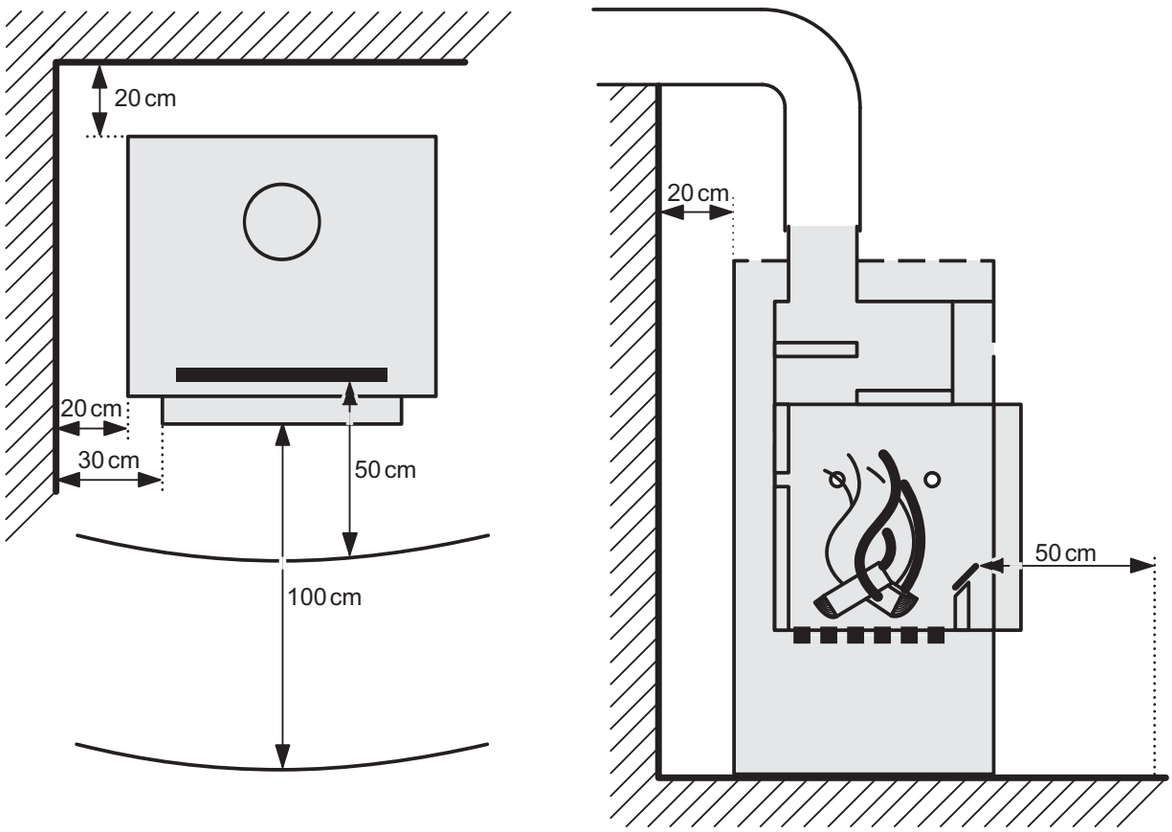
2.3 - Positioning the Appliance

The technical data sheet and the type of board on the stove contain the data referring to the stove that might differ from these standard regulations.

In case of combustible floors, being sensitive to a rise in temperature, non combustible floor protectors must be used. This floor protector must reach 50cm beyond the front of the stove, 30cm to either side (measured form inside the combustion chamber). The floor protector can be made of metal or glass. The given minimum distances from combustible or heat sensitive materials have to be kept by all means at the back, the front and sides.

Certain stoves can be installed without safety distances, which can be found on the technical data sheet and the type of board.

More information regarding min. safety distances from the connecting pipe can be found at the description of the connection.



2.0 INSTALLATION

2.4 - Flue Installation

The flue outlet diameter on the Olsberg Lünen is 125mm. Appliances are sold equipped with a top or rear outlet. We would recommend the top outlet connection mode because of combustion technological reasons. In case you would prefer to connect the stove at the back please refer to the technical data sheet, which contains the connection height), remove the flue outlet from the top and the closing lid from the back. Put the flue at the back, and close the top closing lid. Carefully insulate the outlets.

- **Readjusting the flue outlet from the back to the top, you need to;**
  - Remove the flue outlet from the back and closing lid from the top. Put the flue outlet on the top and the closing lid on the rear outlet.

  - Cover the rear outlet with a heat protecting plate also.

- **Incase of Top Flue, you need to ensure;**
  - The height of the connection can be chosen without any restriction but it cannot exceed 1 meter above the upper edge of the stove. The horizontal part of the connecting pipe must be at least 40cm from the ceiling. Be certain that there is a hermetically closable cleaning slot at the elbow of the vertical and horizontal connecting valves

  - Incase of stoves with a capacity of 6kW the minimum length of the vertical connecting pipe is 50cm.

We recommend the use of an insert with a double wall for connecting to the chimney. The insert has to be installed into the chimney. Then you can connect to the connecting pipe of the stove to it. All combustible materials have to be removed within a 20cm radius of the insert and have to be replaced by heat resistant/ non combustible material. Install the insert carefully and insulate

If there is wallpaper it is recommended to remove from behind the stove. If the appliance is a corner model, remove from the sides as well.

- **Installation of the connecting pipe;**
  - Connect the pipe to the flue outlet of the appliance. Push the stove to the chosen location with consideration of the specified safety distances and install it in such a way that the connecting pipe fits into the prepared chimney insert. The safety distance from combustible or heat sensitive materials is contained in the technical data sheet.

NOTICE

All connections must be exact and insulated. The connecting pipe must not reach the free surface of the chimney. Connections are to be sealed with a suitable high temperature substance. Please ensure before using your new Olsberg stove for the first time, please refer to user's manual

2.5 - Soapstone or Ceramic Covers

Most Olsberg stove models are completely assembled and they only require professional fitting to the chimney. Some models are packed as a kit that needs assembling. Take into consideration the separately attached assembling guide with these models. In conjunction with installing the flue, you can also purchase optional soapstone or ceramic covers, for the top of the appliance, which need to be installed before flue is installed. If by any reason it becomes necessary to remove and refit the cover of the assembled models, please contact us by phone or mail, or have it done by a professional.

In both cases we can send you an additional users instruction manual for removing and refitting the cover.

Glass Cover

Soapstone Cover

3.0 OPERATING INSTRUCTIONS

3.1 - General Information
All national, regional, local laws, orders and regulations must be kept.

Therefore, depending on the location of installation, special operating conditions and restrictions can be enforced regarding the period of use and fuels used. It is important to consult a chimney sweep or other competent expert before installing and using the appliance.

3.2 - Suitable Fuels
The fuel recommended for use is Dry wood/logs(Beech, oak etc..). You can find the exact information on the technical data sheet and the type board. You can only use these specific fuels. Usage of other fuels is not allowed.

Depending on your choice of the fuels listed above, be sure that you use fuels of good quality. Wooden logs reach 15-20% humidity which is the most appropriate for heating if they are stored outside for 1-2 years (if they are covered and protected from rain). Recently cut wood has a high moisture content and burns poorly and causes soot. Apart from its very low heating value it is also a pollutant to the environment. High condensation and tar can lead to blockage in the stove and especially in the chimney. In all cases it causes deposit on the glass front and emissions that need to be avoided.

Burning wood is recommended for operating the stove at its nominal capacity. Watch the heating value of the fuel you use. You can get the exact data at a fuel supplier. Load the fireplace with fuel according to heat demand. The heating value of 1kg of dry wood is 4-4.5kW. This means you can place about 2.4kg of wood into a stove of 8kW capacity every hour.

When burning wood, if a lower capacity is required, do not restrain the fire. Put less wood in at one time instead. Don’t throw the fuel in the combustion chamber, because it can damage or break the chamotte or vermiculite tiles. Be aware that the volume of some types of fuels increases during burning.

The types of fuels that can be used, the maximum quantities that can be loaded at one time and the description of settings for the air regulators, can be found in the technical chart.

3.3 - Reducing Emissions
You can only avoid unwanted emissions by the use of the specified fuels. Put only the amount of fuel in the fireplace that is appropriate for necessary heat transmission. Burning more fuel is unnecessary and leads to unwanted emissions. Don’t burn waste in your stove. The use of other fuels than the ones listed is not allowed. You MUST NOT burn the following materials in your stove:
- Wet or treated wood
- Wood-shavings/sawdust
- Inner bark, bark, shavings panel
- Coal dust
- Waste, scrap, plastic, rubble
- Paper and cardboard (apart from use as firestarter)

3.0 OPERATING INSTRUCTIONS

3.4 - Lighting The Stove For The First Time
Follow the directions below when you light the fire for the first time.

High Burning temperature is necessary for the fuel to catch fire quickly, so put enough fire-starter on the grate at the lower part of the combustion chamber. Use 2 or 3 smaller pieces of kindling.

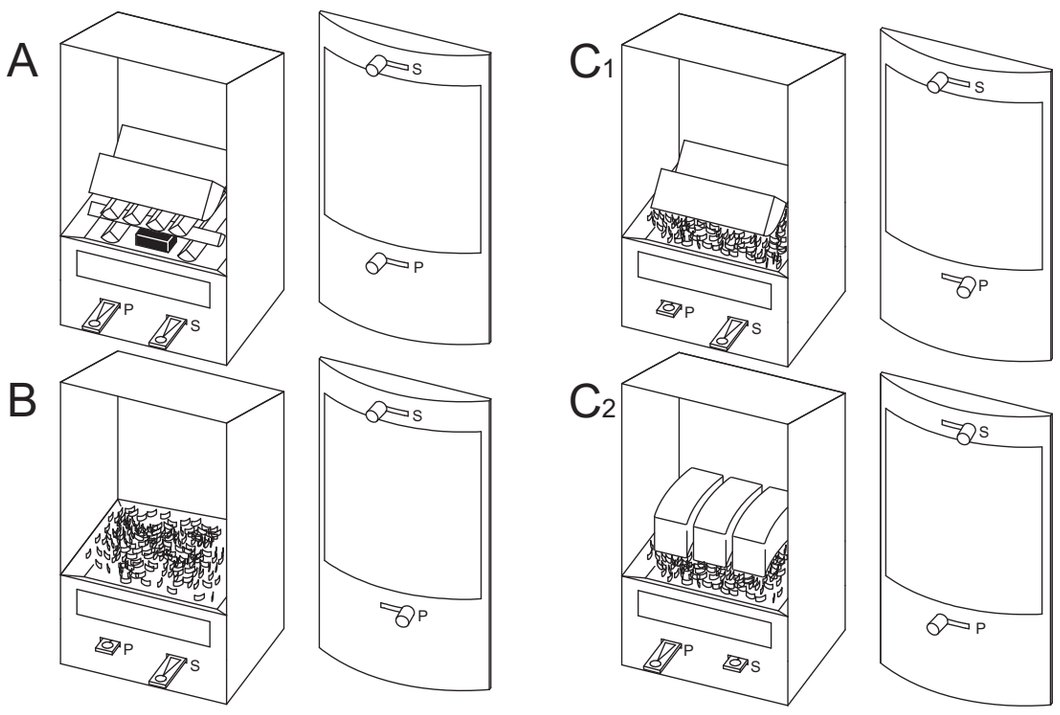
After lighting the fire, shut the door leaving it ajar/open slightly (only for the first fire, after which you will close it completely) and open all air regulators. After the wood has caught fire you can reduce the amount of the air flowing in. All nominal capacity settings can be found in the technical chart.

After a layer of glowing embers has been formed and you can't see any flames, you can place more fuel on it again and set the desired capacity with the aid of the air regulators. (See fig. B and C1/2).

Always maintain optimal burning. If you use too much fuel or let too much air flow into the combustion chamber, you might overload the appliance. This leads to high temperature and emission that can be avoided. On the other hand; too little air results in imperfect burning and high emission.

The stove is painted in high quality heat resistant lacquer that gains its final stability during the first heating. The smell during the first heating derives from the evaporation of the protecting lacquer in the paint. As a precaution, the heated room should be well ventilated from time to time (every 1-2 hours).

Do not put anything on the stove before the first use and do not touch its surface as it will cause damage to the lacquering. Use protective gloves for your safety and for the sake of keeping the lacquer intact. The doors of the stove should be kept slightly open during the first use so the insulation cord doesn't stick to the front of the stove.



3.0 OPERATING INSTRUCTIONS

3.5 - After Use & Maintaining Perfect Burn

After using the stove, remove the ash from the combustion chamber before lighting another fire. Always empty the ash drawer before each use, while the unit and the ashes are cold. Please note leftover ash can obstruct the air supply and damage the grate. Continue the lighting procedure according to the section “Lighting the fire for the first time”.

Load more fuel only if the current fuel is glowing and flames are not visible any more. When loading more fuel, open the door of the combustion chamber slowly so that the smoke gases cannot flow out through the door. Place the amount of fuel necessary for the desired heating capacity on the embers, leaving an inch of space between each piece, levelling the glowing embers. Set the air regulators according to the nominal capacity as desired after it has burned down to embers. Always maintain optimal burning!

Repeat the procedure after the fuel has burned down. Never put more fuel in the stove at one time than is specified, which is shown in the technical data sheet. Only one portion of fuel can be burned at the same time. Load more fuel, only the fuel in the unit already, has burned down. Always check that there are not too many glowing embers piling up in the combustion chamber. Do not restrain the fire, load less fuel instead and never close the primary air regulator completely.

Your stove is equipped with an automatically closing door. It can be operated only with a closed door. Open the door only if you want to load more fuel and only if the previous amount has burned down to embers.

The condition of proper operation of the stove is the appropriate chimney draught (feed pressure). This is considerably dependant on the temperature of the outer environment. In cases of higher outer temperature (above 15°c) feed pressure can considerably fall and it can disturb proper operation. Do not use the appliance in such cases.

Combustible remains are deposited in the appliance, the flue and chimney during use. This happens increasingly if you use wet or treated wood or fuel that is not allowed. The possible overload of the stove or restrain of the fire can contribute to this also. It is rare that the deposits catch fire due to the lack of regular cleaning. However, this can be noticed from the black smoke flowing out of the chimney, the rise of the temperature of the chimney wall and the increased draught that can result in a whistling sound.

In case of chimney fire, call the fire brigade and close all air regulators and outlets. Do not spray or pour water in the chimney in any case because it can lead to gas explosion. Remove all combustible, heat sensitive materials from the environment of the chimney, even in the attic.

4.0 TROUBLESHOOTING

4.1 - General Troubleshooting

The condition of proper operation of the stove is the appropriate chimney draught (feed pressure). This is considerably dependant on the temperature of the outer environment. In case of higher outer temperature (above 15°C) feed pressure can considerably fall and it can disturb proper operation.

What can you do?

- Open the primary air regulator a bit more and fully open the secondary air regulator
- Use only a small amount of fuel at first
- Use only a small amount of fuel when reloading
- Riddle & Grate

What are the causes?

• ***There is no proper draught at heating up***

- Chimney or stove pipe is not closed properly
- Measurements of the chimney are not appropriate

• ***The space is not heating up?***

- The appliance is disproportionally small
- There is too much ash in the combustion chamber
- The air regulator is closed

• ***The stove gives off too much heat?***

- The air regulator is opened too far
- The chimney draught is too high
- Loading too much fuel

• ***The bottom grate is damaged?***

- The stove has been overloaded
- The ash drawer wasn’t emptied in time
- Chimney draught is too high

5.0 SPECIAL NOTES

5.1 - Notes

Your guarantee expires immediately in case of extreme or long lasting overload above nominal capacity or the use of fuel not specified.

5.2 - Cleaning Schedule

(To be performed only when stove is cold)

WHAT	FREQUENCY	UTENSIL
Combustion chamber of stove	Min. Once a year	• Hand broom • Vacuum cleaner
Smoke Outlet	Min. Once a year	• Hand broom • Vacuum cleaner
Copper elements	As needed	Copper cleaning agent or other substance with the Teflon content (when it is cold)
Glass	As needed	With stove glass cleaner or glass cleaning agent (when it is cold)

5.3 - Stove Product Quality

These stoves were designed with knowledge of the latest technical developments and are made of materials of excellent quality. There's continuous control through the manufacturing procedures and the finished stove is subjected to stringent quality control.

5.0 SPECIAL NOTES

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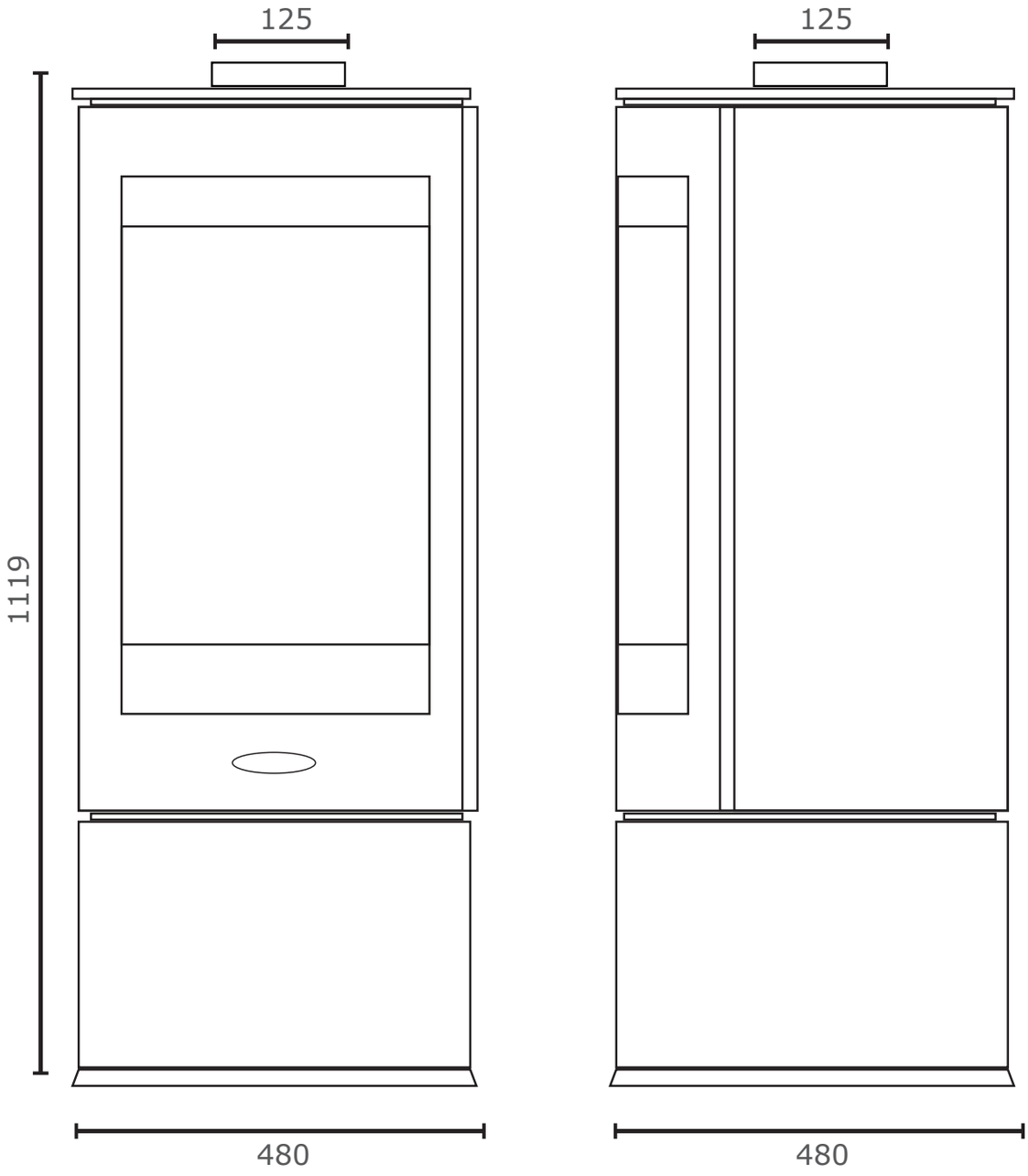
APPENDIX 1 - DIMENSIONAL DRAWINGS



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