



STOVE USER MANUAL AND INSTALLATION GUIDE

M series EMBER STOVES

M4, M4 L, M4 XL

Your stove EE number:

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EMBER STOVES

Our products are premium products of the highest quality to help you transform your living space into a warm home!

The Ember Kamin brand is an exclusive brand that was created to give a name to top quality and impeccable design. A brand whose exclusive stoves, kitchen stoves and garden grills meet the standards and requirements of the most important markets in Europe, as well as markets outside of Europe.

Ember heating stoves are intended for indoor use only. Ember stoves are designed to be fuelled by WOOD, thus producing warmth in a safe and healthy manner.

The intended use of the stove and its configurations are described in this manual and have been approved by the manufacturer.

The stoves described in this manual have been certified in accordance with the EN 16510-1:2022 and EN 16510-2-1:2022 standards and as such can be connected to shared flues (if possible, given chimney dimensions).

Parts of the stove get very hot during its use; therefore, children should be prevented in some way from coming close to the stove so as to avoid danger of burns!

Do not use the stove in a manner which is not in accordance with the instructions provided by the manufacturer.

DELIVERY

As soon as it is delivered, the stove must be carefully inspected and any damage must be noted **on the delivery note**. Afterwards the damage must be reported immediately to the retailer. Transport damage cannot be claimed after the installation of the stove, only upon receiving the delivery.

When transporting the stove, you must ensure that only safe, strong and approved carrying methods are used. The stove may only be moved in a stable, standing position or slightly inclined on a sack truck. A sack truck should only be used against the back of the stove. All parts of the stove must be protected against damage, moisture and rain, or other types of contamination during transport and installation.

1 STOVE MANUAL

PURPOSE AND CONTENTS OF THE MANUAL

The purpose of the stove installation instructions is preparing the user for correct, safe, and long-term use of the stove.

This manual contains all required information for the proper installation, use, and maintenance of the stove. If you follow the instructions carefully, you will ensure a high degree of safety and longevity of your stove.

KEEPING THE MANUAL

Please save the manual so that you can remind yourself of the features and steps for proper handling of the stove at the beginning of the following heating season. A manual comes with each stove, but should you lose it, feel free to contact the manufacturer directly to receive a new copy.

1.1 M4 SERIES STOVE MODELS



1.2 STOVE DESCRIPTION

The stove is constructed with welded steel. In the centre is the firebox or combustion chamber which is covered in lining (vermiculite or refractory/thermal concrete). Beneath the cast iron grate is an ashpan and the space under that is a wood storage.

The stove's handle is made of stainless steel. Therefore, the stove can be opened by the handle without a protective glove, although opening it with a glove when stoking fire is recommended.

The air distribution chamber is separated from the combustion chamber and all air intake regulation is done using the primary and secondary air levers as shown in the

Figure 1. The stove has the option of log door installation if your version of the stove did not come with the door already installed.

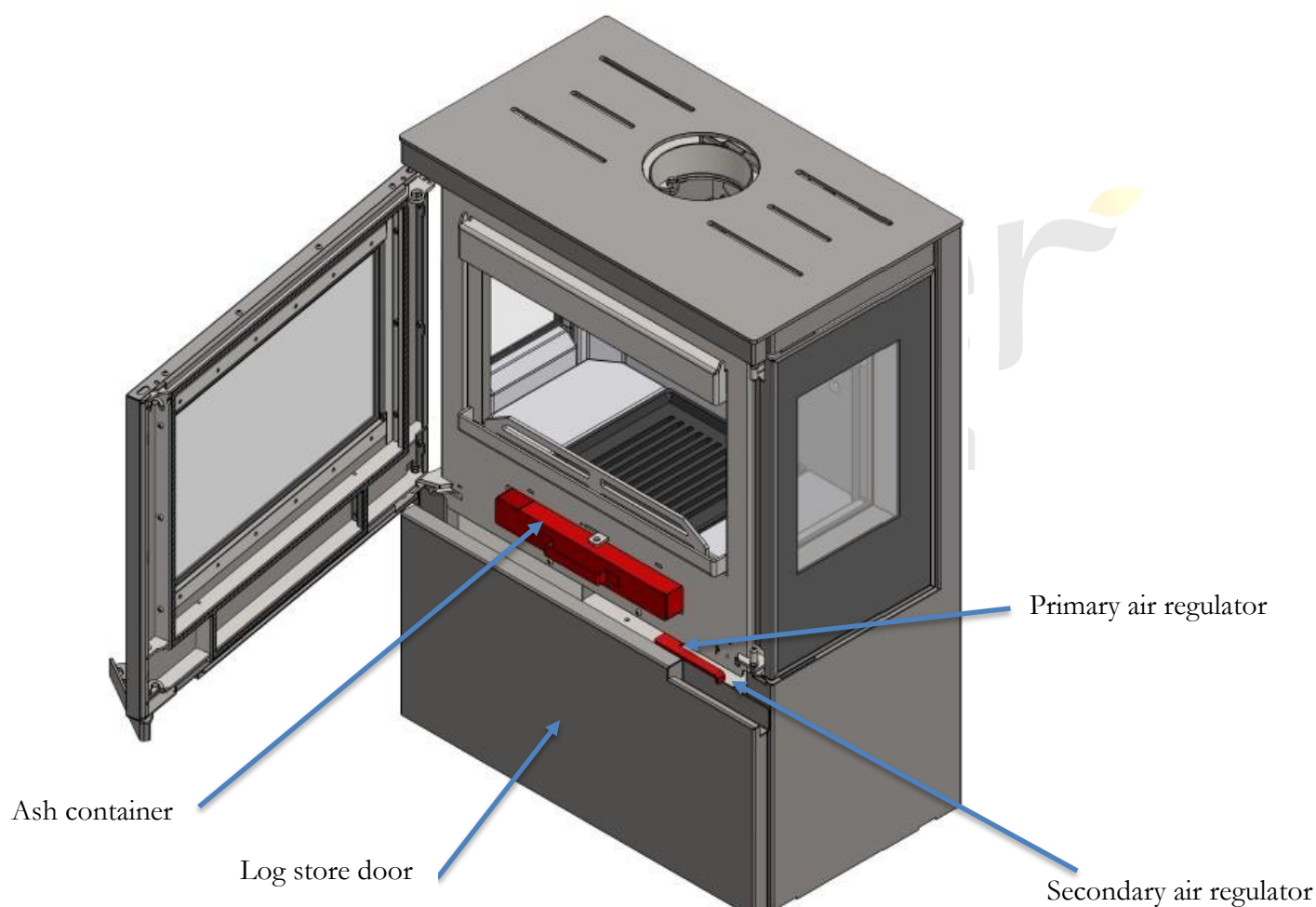
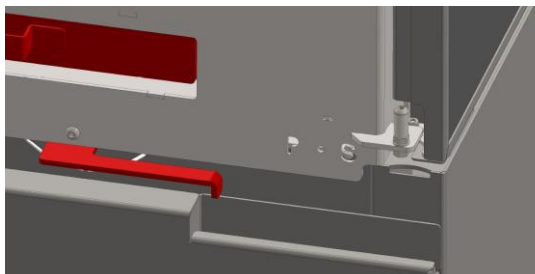


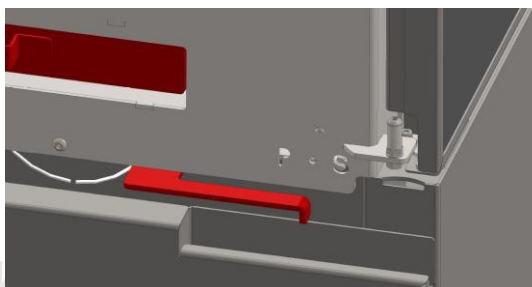
Figure 1 Positions of air regulators, ash container and log compartment doors.

Primary air is supplied to the combustion chamber through the cast iron grate and regulated by the primary air regulator. It is located on the right side of the stove as shown in the

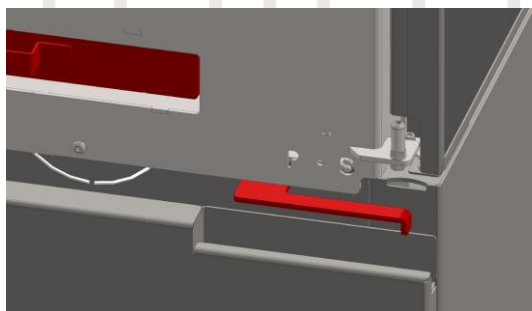
Figure 1. Primary air intake is the first to be closed when igniting the stove (more details under “3.3 HOW TO IGNITE A FIRE IN THE STOVE”). Primary air regulator is in fully opened state when lever is pushed to the left. More air means higher burning rate and shorter burn period.



Primary air is closed and secondary still open when lever is in the middle position.



Secondary air intake passes on the side or back ducts and heats up as it flows to the upper chamber. Therefrom it goes over the flame retarder and enters the combustion chamber. Secondary air intake clears glass from the soot (more details under “3.3 HOW TO IGNITE A FIRE IN THE STOVE”). Secondary air regulator is in fully opened state when pushed to the left, and fully closed when lever is pushed all the way to the right. More air means higher burning rate and shorter burn period.



The side glass has been designed for quick and convenient access, making routine cleaning simple. With the stove completely cool, use the supplied opening tool to release the top and bottom locking catches as illustrated. Carefully swing the side glass open to clean both glass surfaces. Once cleaning is complete, gently close the glass and confirm that both locking catches are fully engaged. Keeping the glass clean enhances the flame view while preserving the elegant appearance and optimal performance of your stove.

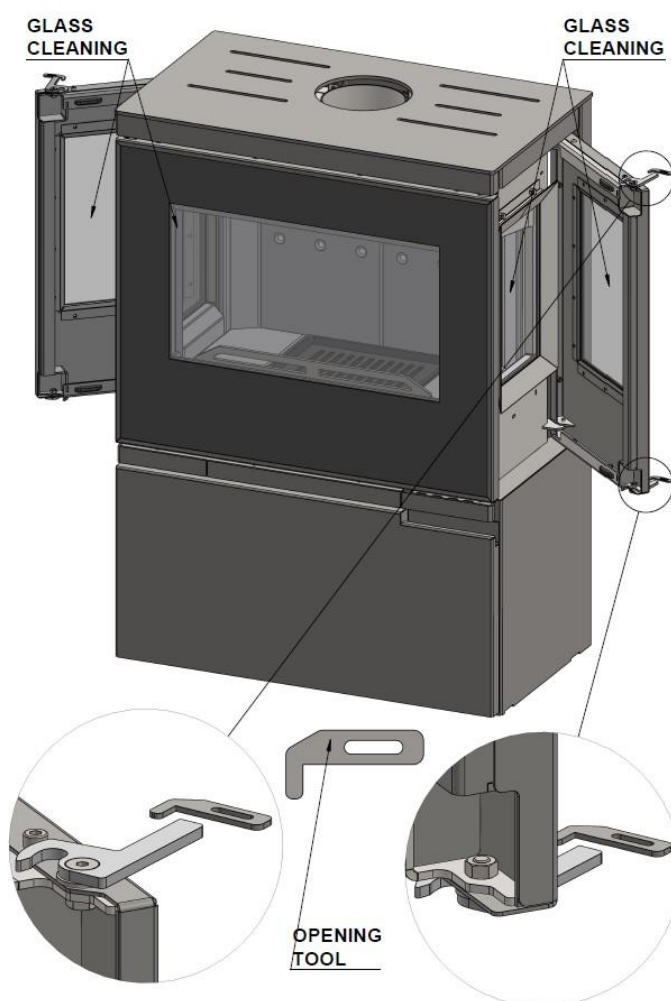


Figure 2 Opening side glass

The lining of the firebox is made of thermal concrete, except for the ceiling which is made of vermiculite (Figure 3). Thermal concrete is used as thermal insulator to avoid heat loss through stove body. This way, most heat is released through glass of the stove via radiation and convection. Together with good insulation properties, thermal concrete also has good mechanical properties, allowing for a longer lifetime when the stove is used properly.

Combustion chamber lining is a consumable and therefore it is expected to be changed with the use of the stove. Requirements for change are described in chapter 4.5 under section COMBUSTION CHAMBER LINING.

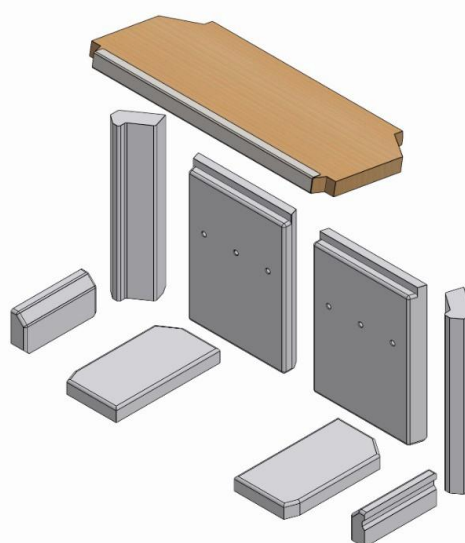


Figure 3 Firebox lining set

2 INSTALLATION OF THE STOVE

2.1 PRIOR TO INSTALLATION

The installation of your stove must be conducted in accordance with all the local regulations, including those referring to national and European Standards need to be complied with when installing the appliance. Consult with a licensed chimney sweep, who should check whether the connection of the stove is properly installed.

Important steps prior to installation:

- the room where the stove will be installed has to be able to withstand the weight of the stove ie floor has to have enough load bearing capacity, as well as provide enough space for its adequate installation,
- it is important to ensure sufficient space for accessing the stove after the installation (for example for cleaning the stove and sweeping the chimney),
- flue pipes'/chimney underpressure should not be lesser than 12 Pa,
- check weather the stove is sufficiently powerful to heat the room that it will be installed into at nominal load.

WARNING!!! Do not make any unauthorised modifications to the stove.

2.2 SAFETY MEASURES

2.2.1 INSTALLER INSTRUCTIONS

- Check whether the determined location of installation complies with all the local, national, and European laws and standards.
- Follow the installation requirements regarding safety distances (Table 1) provided in this manual.
- Check whether the chimney and the air intake are suitable for this type of installation. Chimney should be at least T400 specification.
- Proper function of the chimney should be proven according to EN 13384-2:2015+A1:2019.
- This stove is of the type B in accordance with the EN 16510-1:2022, Clause 4.
- This stove is suitable for installation in a shared flue system.
- Always use protective equipment and other protection prescribed by the law.

2.2.2 USER INSTRUCTIONS

Given that the stove is an appliance that generates heat, its outer parts can get extremely hot, which is why extra caution is advised when the stove is in operation. Pay special attention to the following:

- Floors made of combustible material must be protected by a layer of non-flammable material. This can be done, for example, by tiles or a plate made of glass or sheet metal at least 12mm thick. The floor (or hearth) must also be strong enough to take the weight of the stove and be completely level and stable.
- Do not approach too close and do not touch the glass on the stove because you might get burned.
- Combustible materials could be set on fire if put too close to the stove glass because of radiation. Observe minimum safety distance as stated in the Table 1.

- Remove any flammable materials outside radiation zone of the stove and make sure that other flammables cannot reach radiation zone to avoid any risk of setting fire in your room.
- Do not touch the flue pipes while the fire is burning in the stove.
- Do not clean the stove while in operation.
- Do not try to empty the ash container while the stove is in operation.
- Make sure that the stove has enough air for the burning of the fuel. Also, take care not to block air inlet on the stove. If you connect the air supply to the outside air, take care and check regularly that protection grilles are free from blockage or obstructions during the stove operation.
- Make sure that children do not get too close to the stove.
- Follow the instructions provided in this manual.
- Only use fuel intended for this stove (more details under section 3.1).
- Fill the combustion chamber with two layers of wood logs at most
- Uphold the prescribed routine for the stove maintenance as described in section 4.
- Do not use the stove if you notice any malfunction, if you suspect damage or breakage, or you hear an unusual noise.
- Do not throw water onto the stove when it is in operation or into the fire to extinguish it.
- Do not lean onto an open stove door because they can get bent that way.
- Do not use the stove as support.
- Do not clean the stove until its body and ash are completely cold.
- Everything you do on the stove should be done with absolute caution and care.
- If the chimney catches fire, call firefighters immediately, move all flammable objects away from the chimney, and notify your chimney sweep. Do not extinguish a fire in the chimney using water, as that may cause damage to the chimney. After the fire in the chimney has stopped burning, before the following ignition of the stove, you should call an expert to check the chimney and implement appropriate measures if cracks have appeared in the chimney.

2.3 INSTALLING THE STOVE

2.3.1 UNPACKING THE STOVE

Ember stoves arrive packaged in protective film and embraced in a wooden framework, positioned on wooden pallets, which gives them greater stability and protection of the stove (Figure 4). Each pallet is designed to perfectly fit the stove for which it is used.

Each stove also comes with:

- a manual on the use, installation and maintenance of the stove
- a protective glove



Figure 4 Display of screws to untighten to release the frame

The stove is unpacked by unscrewing the lower 4 screws (Figure). The pallet frame is then released from the base and lifted over the stove. The stove stands on the wooden base fastened by metal four braces. Those braces need to be released as well, before the stove can be lifted from the base. Braces are shown in the Figure 5.



Figure 5 Braces that hold stove to the base which also need to be released.

2.3.2 POSITIONING THE STOVE IN A ROOM

When installing the stove, it is necessary to adhere to the rules of fire safety. Figure 6 and Table 1 show the minimum required distances between the stove and the walls/floor.

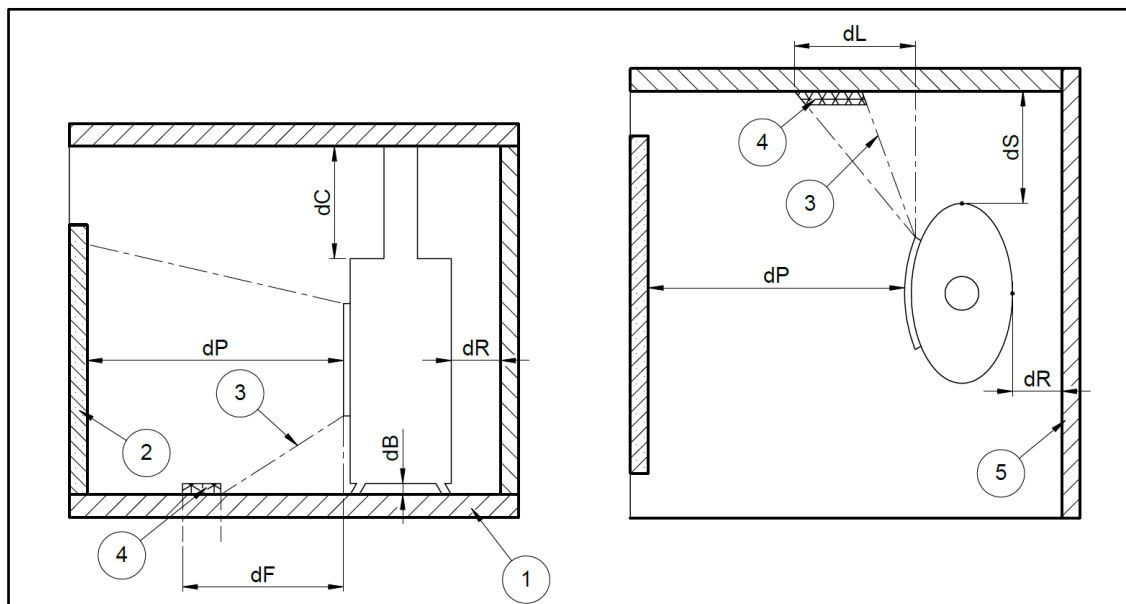


Figure 6 Schematic of minimum safety distances to combustible materials

Key to Figure 6

- | | | | |
|---|---|---|---------------------------------|
| 1 | floor | dF – dist. to front radiation area | dP – dist. to front combustible |
| 2 | front combustible material | dL – dist. to side radiation area | dS – dist. to side combustible |
| 3 | radiation area | dC – dist. to ceiling | dR – dist. to rear combustible |
| 4 | critical area (65K superseded due to radiation) | dB – distance to bottom (only for stoves with feet, otherwise 0 mm) | |
| 5 | combustible walls | | |

In the Table 1 values of the parameters shown above are given for your stove.

Table 1 Datasheet with minimum safety distances from combustible materials.

Safety distances from combustible materials		M4, M4L, M4 XL
Bottom – dB / Ceiling – dC	mm	0 / 750
Rear – dR / Side – dS	mm	200 / 600
Front – dP	mm	1400
Front/ Side front radiation area – dF/ dL	mm	0 / 0
Minimum distance to non-combustibles		50

It is important to protect all items that might catch fire when exposed to the stove's high temperatures.

It is recommended to install a floor plate, which is placed under the stove to protect surrounding floor from catching fire and stopping embers that might fall on the floor and damage it. This especially regards floors made from combustible materials.

2.3.3 LEVELLING THE STOVE

After you have found a location that fulfils all the legal and technical requirements, it is time to level the stove. Ember stoves have four individual levelling legs, and some models have two levelling legs, while the other two supports are fixed height. Legs allow you to easily achieve level necessary for proper functioning of the doors, and secure, tight flue pipe connection. Use allen key wrench of an appropriate size and a level tool to achieve level of the stove if a stove has holes on the bottom plate.

If our stove does not have holes on the bottom plate, levelling is done by tilting the stove and adjusting the levelling legs insertion. After the initial setting, lower the stove to the ground and check using level tool if additional adjustments are necessary. Repeat the process described above until the stove is level in both directions (front to back and left to right).

Levelling is especially important for the pedestal stoves. If the pedestal stove is not level, it can have serious negative consequences especially when the pedestal stove is attempted to be rotated. When not level, this can damage flue pipes and connection between pipe and stove.

2.3.4 COMBUSTION AIR SUPPLY

When the stove is in operation, it requires fresh air for proper combustion. That air (small amounts) is taken from the room where it is located, which is why it is advisable to provide fresh air in the room to ensure its sufficient quantity.

If the wall behind the stove is an outside wall, drilling an opening for fresh air intake is recommended. When the stove is connected to a fresh air intake, it becomes independent of the air in the room (the opening for the intake of fresh air into the stove is approximately 20-30 cm above the floor).

In the M stove model, the connection for fresh air intake is located on the back of the stove (Figure , right arrow) and underneath the stove, on which the pipe for connecting fresh air intake to the stove passes through the room floor and connects directly to the air chamber (Figure , left arrow).

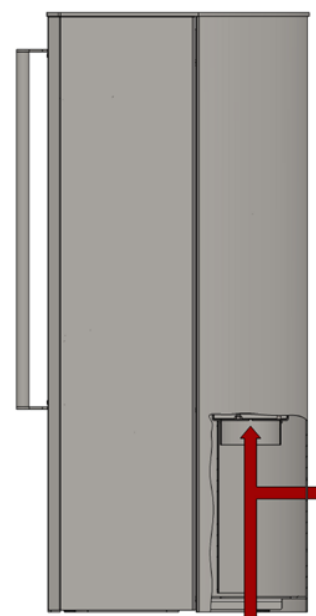


Figure 7 Available fresh air inlets, ie. possible connection directions

IMPORTANT!!!

Fans extracting air out of the room (extractor hood) where the stove is installed can cause leakage of flue gases into the room. In that case, fresh air should be connected directly to the stove.

2.3.5 CONNECTING FLUE PIPES

For the connection of the stove to the chimney, only a flue pipe with a minimum 2-millimeter wall thickness can be used!!!

Flue pipes, their dimensions and materials must be in accordance with current standards (DIN EN 1856:2).

Important instructions:

- the metal pipe connecting the stove to the flue pipe can never have a diameter smaller than the outlet of the stove,

- all connections from the stove to the chimney must be firm and tightly connected,
- each stove must have its own flue pipe and under no circumstances can the same flue pipe be used for multiple stoves.

All our stoves have two or sometimes three possible flue outlets. Depending on what kind of connection to the chimney is available to you, you can use any of the two or three available sockets. Our every stove has a top outlet which is most common connecting socket. On the back, there are one or two outlets. Stoves that have additional space above the combustion chamber have also the option of adding insert stones ie. heat accumulators. If the insert stones are used, then top flue connection socket has to be used.

To connect to chimney through the back of the stove first remove the round pieces of sheet metal using cutting nippers to free the pathway for the flue. Install the flue socket to the chosen output and then install the flue pipes as required. If the connection to the chimney is through the back of the stove, we recommend that you consider using telescopic flue pipe for the ease of mounting.

IMPORTANT notice regarding flue socket. If you decide you want to change flue outlet from for example top to the back, you will have to release flue socket on the top and mount it on the back. Similarly, endcover on the back of the stove has to be released and mounted on the top of the stove. When mounting cover and socket make sure **not to overtighten** them to avoid potential cracking sounds that can start if bolts are tightened excessively!

1. Chimney deficiencies can include: (

Figure 8)

- The chimney is lower than the top of the roof.
- The slope of the section is reclining excessively.
- The flue gas flow in the chimney changes direction too abruptly.
- A furnace or another appliance is connected to the same flue.
- Protrusions in the flue path.
- Cracks in case of a brick-type chimney.
- Foreign bodies or accumulated soot.
- Flue pipe inserted too deep.
- Fan, extractor hood, or another appliance creating under-pressure in the room.
- The cleaning opening is poorly sealed or open.

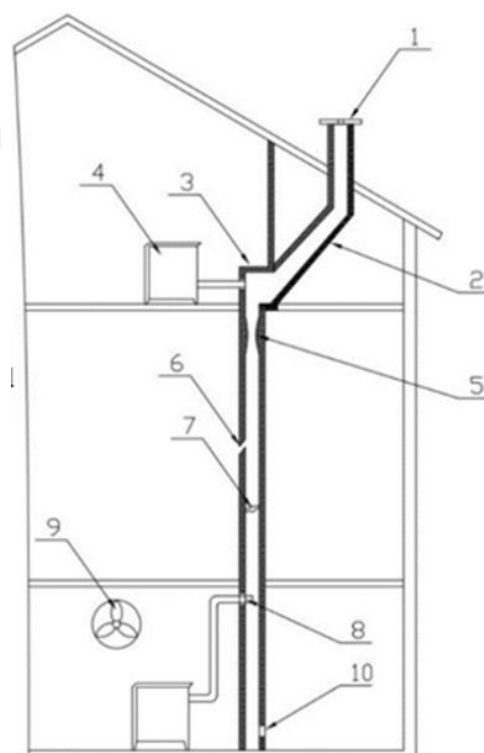


Figure 8 Shows schematic of potential chimney deficiencies

- If there is excessive smoke generating in the stove to the point of smoke leaking, or there are signs of condensation appearing or the like, please first make sure that your chimney is in order. See

Figure 8 and the list of possible deficiencies to determine whether there is some of the problems stated with your chimney. It is advised to also hire chimney sweep to check for deficiencies as well.



3 STOVE COMMISSIONING AND USE

3.1 APPROPRIATE FUEL WOOD TYPES

Ember stoves are designed for the use of wooden logs and wood briquettes only. There are some exceptions in lineup of our products that can use ancit as a fuel, but these are explicitly labelled as such.

The best sort of fuel wood is beech. Stove has been designed, tested, and certified using beech wood logs. Other types of wood logs are acceptable as well. Table 2 below shows acceptable wood types for use as a stove fuel and gives comparison of dry wood density to beech.

Table 2 Different types of wood comparison datasheet

Type of wood	Dry wood Kg/m ³	Compared to beech %
Hornbeam	640	110
Beech	580	100
Ash	570	98
Oak	570	98
Maple	570	98
Birch	540	88
Mountain pine	490	83
Spruce	370	65
Poplar	370	65

Fuel wood has to have certain level of moisture that is most suitable for burning. When freshly cut, lumber has a very high moisture content and therefore should be seasoned to reduce moisture content. Recommended moisture content is between 12% and 18%. We also recommend that you procure moisture level meter to control for the moisture of your wood.

To achieve optimal moisture level, wood should be seasoned anywhere from 12 months to 3 years protected from rain. Wood should be split to achieve better drying and should not be stacked too tightly to allow better air circulation for better drying results.

There are a lot of combustible materials that are not only not suitable for use with our stove, but they

void warranty if used. These materials include:

- Freshly cut wood with very high moisture content. Unseasoned wood reduces heating capacity of your stove, reduces efficiency drastically, causes higher blackening of glass, causes higher level of deposition of slag in the chimney etc.
- Any type of reclaimed wood. These include railway sills, old window frames, lacquered parquet etc.
- Any type of wood-based construction materials. These include old furniture made of pressed wood, OSB plates, any type of construction lumber, MFD furniture and flooring etc. These types of wood-based products are very often chemically treated to enhance woods properties like longevity, rotting resistance, burning resistance etc and can cause severe negative consequences to the stove (like overheating, high poisonous soot formation, severe rusting of metal parts and many other)
- Any type of coal. This regards anthracite, coal briquettes, slow burning coal, charcoal, lignite etc.
- Use of plastics as a fuel is strictly forbidden due to negative consequences they can have on the stove and the chimney, let alone environmental effect.

- Clothes and other household waste.
- Use of flammable liquids for starting or “reigniting” is strictly forbidden. Always keep flammable liquids away from the stove (these include gasoline, kerosene, charcoal lighter fluid, lantern fuel etc.)

We urge you to use caution when fuelling your stove with any kind of fir or spruce wood due to their high level of natural resin content. Softwood burns more intensely and produces higher temperature but burns quickly. Overloading the stove (see Max recomm wood weight in Table 3) with softwood can lead to heat overload, therefore, please use caution when using softwoods. Softwoods are very useful when heating up the cold room, and hardwoods are better for releasing warmth for longer.

Burning any type of waste is harmful to the environment as well as to your stove!

3.2 FIRST IGNITION OF THE STOVE

- Check whether all movable parts are put in the right place and whether air regulators are working properly.
- Wipe all external surfaces with a dry cloth to remove dirt.
- Before the stove is fired for the first time, we advise you to open all the doors and windows in the room where the stove is installed, to ensure an optimal ventilation.
- When igniting the stove for the first time, we recommend that you start very moderate fire ie. use half of nominal fuel weight (see Table 3) to avoid cracking combustion chamber lining. Also, we recommend that you use thinly split logs with cross-section not bigger than 7-8 centimeters.
- It is expected during initial ignition of the stove, that it will release a smell of metal and fresh varnish, but the smell should disappear with the second ignition. This is because, the varnish releases remaining dissolver and hardens completely that way fully adhering to the metal.
- It is also important for the primary air intake to be in a semi-open position for at least four hours.

3.3 HOW TO IGNITE A FIRE IN THE STOVE

- Fully open the primary and the secondary air regulator.
- Open the door of the combustion chamber and place a roll of paper or some other tinder on the bottom.
- Place several small pieces of wood ideally softwood onto tinder, arranging them crosswise over each other.
- Light one of the tinder pieces in the stove to start the fire.
- After the wood has caught the flame, you can start adding some larger pieces of hardwood on top of the smaller pieces of firewood.
- Do not fully close the combustion chamber door but leave it ajar until you notice the fire catching on and stabilizing. **At all other times, doors must be closed!**

At this time, the primary and secondary air supply must be open!

- After a few minutes, you can set the primary and secondary air supply according to your own preferences (see section 0 for more about the primary and secondary air supply) and refill the stove with fuel.
- If the wood is sufficiently dry (see 3.1), after the fire is lit, it is recommended to close the primary regulator completely and regulate stove burning with the secondary regulator only.
- Recommended fuel amount is given in the Table 3 under Nominal weight of the wood together with Maximum weight. Using recommended wood amounts, you should expect to restoke the fire every 45 to 75 minutes, depending on the weight added and air intake setting.
- To achieve slower burning, for example during night, put two logs criss-crossed at 45° angle with primary air intake fully closed and the secondary air must remain half open.

CAUTION! If the stove is continuously fired with larger amounts of wood than recommended and/or receives too much air, this can cause an excessive heat development liable to damage both stove and the surrounding walls. We therefore recommend that you always observe the max. recommended amount of fuel which amounts to double Nominal weight of the wood (See Table 3).

3.4 HOW TO STOKE THE FIRE

To keep the fire in your stove steady, and heat your home, the stove should be refuelled when needed. The ideal time for this is when you notice there are only embers in the stove, without any flames.

To achieve best burning results use us two pieces of **beech 330 mm in length total mass of 1.97 kg** (see Table 3 under nominal weight of the wood). Primary air intake fully closed, and the secondary air 28 mm open. (As set up in the testing laboratory to achieve certification)

Do not restoke the stove while there is still flame in the combustion chamber! Wait until only embers are left on the firebed to avoid smoke coming into your room.

Keep the doors closed at all times except when starting fire or restoking the fire!

Complete the following steps to refill the stove:

- Open the primary air supply fully (see section 0).
- When opening the doors first open them only slightly to allow pressure to equalize and then you can open the doors fully to avoid smoke flowing into your room.
- Add an appropriate firewood amount and close the door. Refer to the Table 3 for the correct amount of firewood. Take care not to use excessive amount of wood. To avoid adding too much wood, place two smaller or one larger log per refuelling without exceeding recommended amount. Restoking intervals are around 45 min at nominal power.
- Primary airflow is closed after the firewood has caught the fire and secondary air supply is then adjusted according to your own preferences.

4 MAINTAINING AND CLEANING THE STOVE

For the longevity of your stove, it is very important to maintain it regularly. This means cleaning it from the dust, regularly de-ashing the stove, cleaning the glass from the soot, sweeping the flue socket, flues and the chimney from carbonated residue. It is also very important, to check the stove if there is blockage, especially after prolonged period of no use of the stove.

4.1 SAFETY PRECAUTIONS BEFORE CLEANING

Before you begin any stove maintenance or cleaning, it is important to ensure the following steps:

- All parts of the stove must be cold.
- The ash in the stove must be cold; there must be no ember in it.
- Use protective equipment prescribed by the law (EEC 89/391).
- The tools you use must be appropriate.
- After finishing repairs or maintenance, make sure that all safety covers are in place and closed.

It is recommended to clean the stove surface only with a dry cloth and without the use of detergents, so as to avoid destruction of the surface!!!

4.2 CLEANING THE STOVE ASH

The ash container needs to be emptied regularly to avoid contact between the ashes and the stove grate. If this is not done regularly, there is a possibility that the combustion chamber grate will not be fully cooled and will thus eventually be damaged.

Ash container use: The ash container is located under the stove's combustion chamber, hidden behind the stove door. When ash is removed from the ash container, it is necessary to first open the combustion chamber door, then lightly pull the ash container handle and pull out and remove the ash, after which the ash container can be put back in place.

It is extremely ***IMPORTANT*** to ensure that no ember is left in the stove and that the ash is completely cold. If any embers remain while cleaning the stove, there is a risk of burns, as well as of a garbage can ignition. We recommend using the protective glove when disposing of ashes, as well as a metal container for ash disposal to avoid possible accidents.

DO NOT THROW HOT ASH IN THE GARBAGE CAN!!!

4.3 CLEANING THE STOVE GLASS

The stove glass can be cleaned using a wet cloth or newspaper dipped in ash sifted from larger pieces of coal. The stove glass is to be scrubbed until completely clean. It is recommended to use common household glass cleaning or kitchen cleaning detergents to clean the stove glass from soot build up. When cleaning the glass, take care not to overspray it to avoid leaking of the cleaning agent to the gasket. If gasket gets soaked, it can cause damage to the paint finish it gets in contact with. If it gets wetted, we recommend that you change the gasket. In addition to previously recommended cleaning procedure, special dry-cleaning sponges can be used as well. You can get more information regarding cleaning and cleaning equipment at your local dealer.

Do not clean the stove glass while the stove is in use; the stove must be completely cold!

Do not wet the door gasket to prevent it from hardening and losing its function!

4.4 SWEEPING THE FLUE PIPES AND CHIMNEY

It is recommended to clean the chimney, and flue pipes every time you notice a heavy flow of smoke.

Cleaning the soot and carbonated residue needs to be carried out properly, using the appropriate instruments and taking care not to damage the painted parts and seals. If you are unsure of the correct procedure, please hire a professional chimney sweep to clean the flues and chimney for you. Make sure that you have clean flues and chimney before each heating season.

4.5 COMBUSTION CHAMBER LINING

During normal use of the stove, chamber lining goes through cycles of heating up and cooling down, it absorbs some of the moisture and then releases it. Due to these processes, lining can develop cracks. These cracks do not cancel its function and will not cause breakdown of your stove. However, take care to notice when the lining begins to crumble, and replace the lining upon the first sign pulverization.

The combustion chamber lining is not covered by any warranty.

4.6 GASKETS

Stove doors have to have gaskets to prevent smoke leaking out of firebox. Gaskets are of rope-type and are made of ceramic/glass material. They lose their flexibility with use and consequently their function as well. Therefore, they have to be regularly replaced. We recommend annual replacement to retain high degree of sealing.

Gaskets are not covered by any warranty.

4.7 PAINT

When cleaning painted surfaces of your stove use only dry, lint-free cloth to wipe it.

If the paint finish gets damaged, you can purchase repair paint in spray form from your local dealer. As slight differences in colour shade are possible, we recommend you spray a larger area to achieve a natural blend. For best results, apply repair spray when the stove is warm enough for you to just keep your hand on it, but no hotter. **NOTE: Make sure to air the room thoroughly after applying spray paint.**

Avoid using strong chemicals to avoid damage to the paint finish!

Paint finish is covered by six-month warranty only!

If there are any problems with the paint finish, they would mostly be visible at the very beginning of use. Paint manufacturers test durability at temperatures by way of painting a surface and then leaving it in atmosphere with maximum allowed temperature for 2 hours. If no visible marks appear, the finish is good. It is to be noted that short temperature loads over the maximum allowed temperature have a major negative effect on the paint. So, if you overload the stove and the temperature reaches 700°C if only for a few minutes, paint can be destroyed in the places with highest load (for example around the door glass, on the door frame etc).

To avoid possibility of any such occurrence, observe maximum allowed weight for the long-term thermal load. See Table 3 for the maximum allowed weight of the wood.



5 TECHNICAL DATA OF THE STOVE

Table 3 Technical dataset according to EN 16510-1:2022 requirements

PARAMETER	UNIT	M4, M4L, M4XL	
Load		Nominale	Partielle
Fuel type		Bois	
Nominal heat output	kW	8,1	NPD
Nominal weight of the wood	kg	1,97	
Max recommended wood weight	kg	2,95	
Max size of wood log	cm	50	
Efficiency	%	80	NPD
Seasonal efficiency	%	70	
EEI	-	106	
CO ¹ emission @ 13% of O ₂	mg/m ³	750	NPD
NOx ² emissions @ 13% of O ₂	mg/m ³	101	NPD
OGC ³ emissions @ 13% of O ₂	mg/m ³	43	NPD
PM ⁴ emissions @ 13% of O ₂	mg/m ³	16	NPD
Minimum flue draft	Pa	12	NPD
Flue gas outlet temperature	°C	324	NPD
Flue gas mass flow	g/s	7,4	NPD
Flue gas outlet diameter	mm	150	
Weight depending on construction	kg	from 174 to 293	
Approval type		intermittent	
Safety distances from combustible materials			
Bottom – d _B / Ceiling – d _C	mm	0 / 750	
Rear – d _R / Side – d _S	mm	200 / 600	
Front – d _P	mm	1400	
Front/ Side front radiation area – d _F / d _L	mm	0 / 0	
Minimum distance to non-combustibles	mm	50	
Regulation which requirements are met			
DIN EN 16510-2-1:2022	-	✓	
EcoDesign 2022	-	✓	
Flamme Verte	-		
Levels 1 and 2 of BImSchV (Germany)	-		

¹ Carbon monoxide

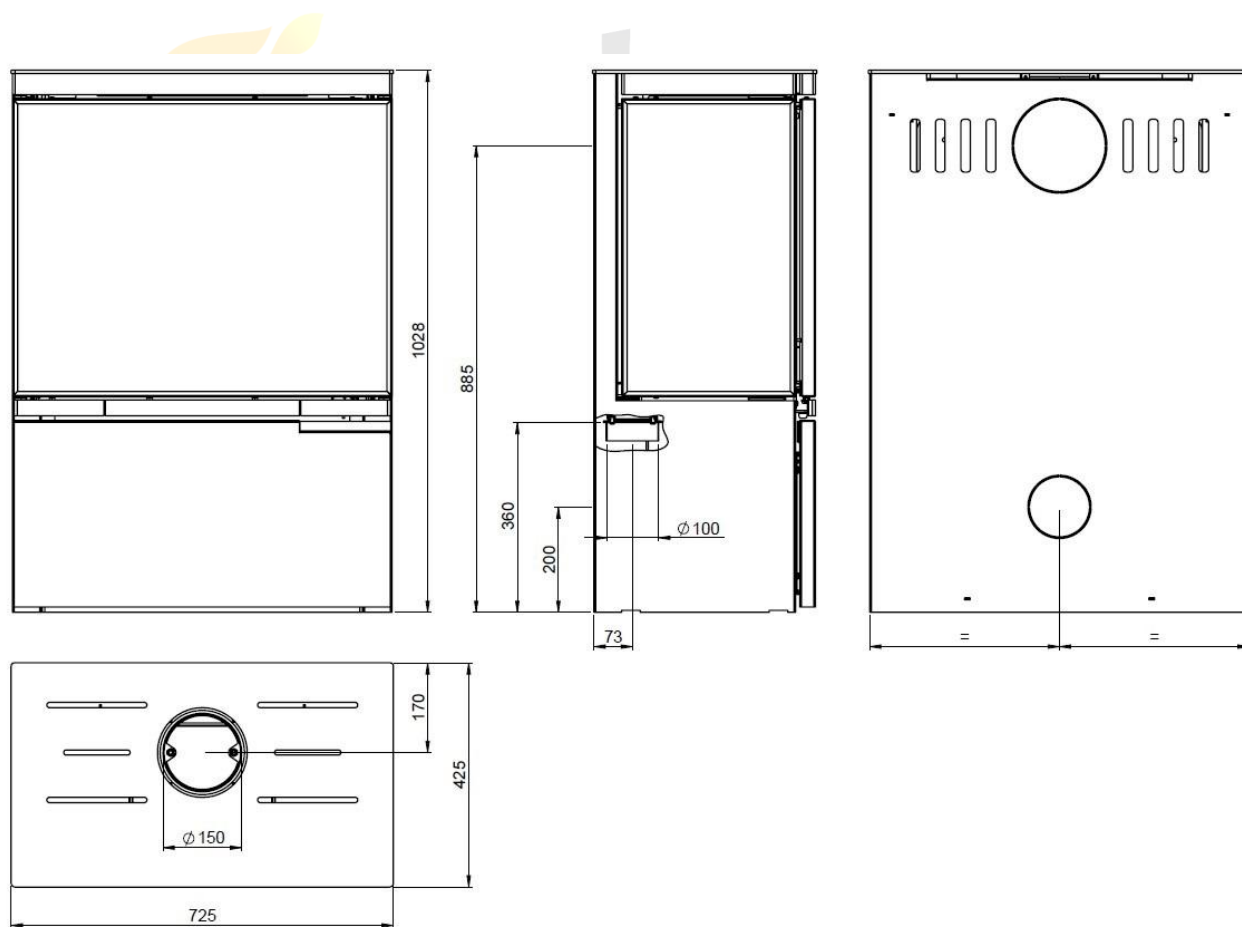
² Nitrous oxides

³ Organic gaseous compounds

⁴ Particulate matter

Table 4 General dimension of the stove and interface positions

Dimension Description	Units	M2	M2 L	M3
Stove Width	mm	773		773
Stove Height	mm	985	1185	985
Stove Depth	mm	430		420
Diameter Of the Fresh Air Inlet	mm	100		
Height Of the Fresh Air Inlet	mm	160		160
Diameter Of the Flue Gas Outlet	mm	150		
Flue Gas Outlet - Top	mm	828		830
Flue Gas Outlet – Back	mm	175		165
Flue Gas Outlet – Back Upper	mm	-		-



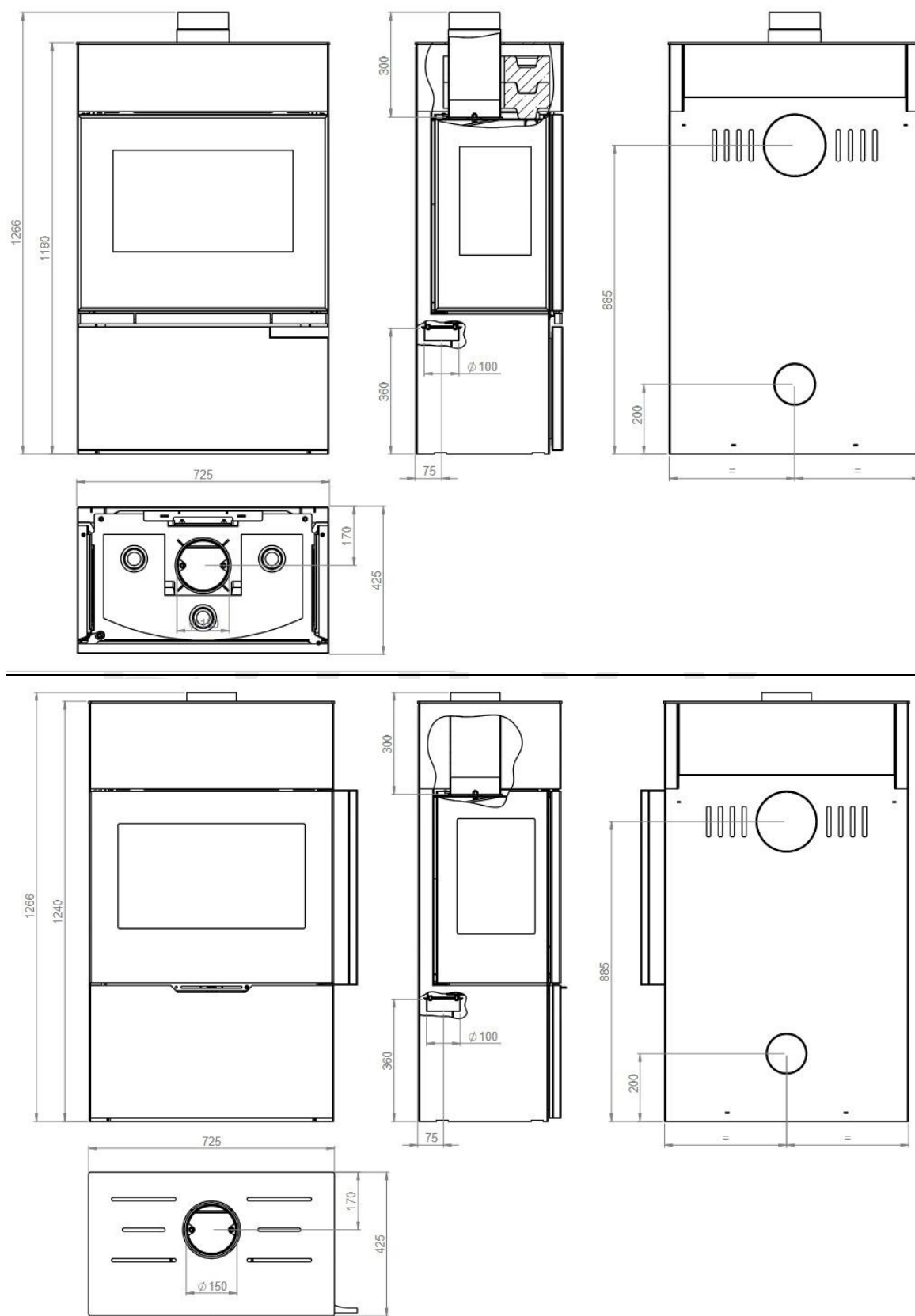


Figure 9 General dimensions and positions of air inlet and flue outlets

6 TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
Soot building up on the glass	- Chimney draft too low - Too much fuel in the combustion chamber - Firewood too moist - Innapropriate fuel - Secondary airflow too low - Primary airflow too high - Too large piece of wood on the embers	- Check the connection between the stove and the chimney - Check the chimney - Reduce fuel amount - Use wood with recommended moisture content - Use appropriate fuel - Increase secondary airflow - Reduce primary airflow - Use smaller wood pieces
Smoke coming out of the stove	- Soot build-up in the stove - Soot build-up in the chimney - Firewood too moist - Underpressure in the room (caused for example by the kitchen extraction fan) - Chimney not drawing sufficiently	- Clean the stove - Clean the chimney - Use wood with recommended moisture content - Ensure enough air in the room by opening the windows - Check and correct the chimney
Stove not heating properly	- Chimney draft too low - Not enough wood - Firewood with low calorific value - Firewood too moist - Baffle plates fitted incorrectly	- Check the chimney - Add more firewood - Use adequate firewood - Use wood with recommended moisture content - Check baffle plate
Stove heating excessively	- Chimney draft too high - Innapropriate fuel - Primary air left open	- Check the chimney - Use appropriate fuel - Close the primary air supply
White shadow on the inside of the glass	- Over-firing - Vacuum in the room	- Reduce primary air and firewood - Ensure enough air in the room
Surface of the stove turning grey	Overheating	See instructions in section 3.4

7 GENERAL WARRANTY TERMS AND CONDITIONS

The manufacturer is not liable for any problems resulting from inappropriate handling or unauthorised servicing and/or modification of the stove or replacement of its parts with parts which are not original or not specific to the model. Use only original spare parts.

The manufacturer is not responsible for the installation of the stove. Only certified technician should check the flue pipes and air supply, as well as the possibility of correctly following the prescribed instructions. Also, all legal provisions stipulated by the country in which the stove is being installed must be observed when installing the stove, as well as during its further handling.

All Ember stove models come with a **five-year warranty** for the proper functioning of the stove, with the exception of paint finish which has a **six-month warranty**. The Warranty is applicable to the original purchaser **ONLY** and is not transferable. The warranty covers only defects and/or damage caused by manufacturing and/or construction.

For claims regarding your stove, use attached Warranty form and make sure to attach **copy of the invoice** from you authorized retailer. Another very important note is to quote your stoves unique identifier number ie. **EE number** which can be found on the stove (inside wood log box for models that have it or on the back shield on the internal side for pedestal models).

Write your stove's EE number on the front page of this Manual for future reference and take care not to lose or remove the label with the EE number.

The manufacturer completely declines any liability if the following applies:

- installation of the stove was not done in accordance with laws stipulated by the country in which the stove is being installed, as well as if installation is not in accordance with safety regulations
- installation which was not performed in accordance with the instructions provided
- installation carried out by unskilled persons
- improper use, not in accordance with the safety regulations
- repairs and alterations which were not approved by the manufacturer
- use of spare parts which are not original or specific for that model
- missing or faulty maintenance of the stove or chimney
- exceptional events which are beyond the control of the company Ember Kamin

The following parts are considered as consumables and as such are not covered by any warranty:

- Combustion chamber lining
- Door and glass gasket
- Glass
- Baffle plates
- Ash grate

If you have a potential warranty claim, please contact your local dealer of Ember stoves. They will process it further. To ensure your claim is taken into consideration, please provide your retailer, at minimum, with following data: *stove invoice, EE number, photograph of the installation (front+side), clear photographs of claimed parts*. Make sure that the photos are sharp (in focus).