METALNA INDUSTRIJA D.O.O
17500 VRANJE, SRBIJA
Radnička 1, Tel.: 017/421-121

# Solid Fuel Stove

## Gala

## Gala with Stone

## Installation, Use, and Maintenance Manual

ENG_v.1.0

1611918

# Dear Customers!!!

Thank you for purchasing our product.

You have chosen a high-quality and economical product, the result of our many years of experience in manufacturing solid fuel stoves.

We hope we have fully met your expectations, both in terms of design and the size of the living space to be heated.

Before installing the stove, please read this manual carefully and follow all instructions.

It is necessary to comply with applicable building regulations and fireplace-related codes, as well as all relevant local, national, and European standards.

Before installing the stove, consult a qualified technician or authorized chimney sweep.

**Important notes:**

Never handle the stove by holding the top plate!

The stove should only be handled while still packaged. Bring the packaged stove to the installation location and only then unpack it.

| **ATTENTION!** | |
|---|---|
|  | **SURFACES MAY BECOME VERY HOT!<br>BE VERY CAREFUL** |

For the proper operation of the stove, please read this manual carefully and follow the instructions provided.

During combustion, thermal energy is released, which significantly increases the temperature of external surfaces, doors, handles, glass, and flue gases. Avoid contact with these elements unless you are wearing protective equipment (including heat-resistant gloves).

Ensure that children are aware of the risks and keep them away from the stove while it is in operation.

Packaging components may pose a danger to children and adults with disabilities. There is a risk of injury. All packaging components must be removed and stored safely.

Spare parts other than our tested original parts must not be used with the stove. Alfa Plam is not responsible for any consequences resulting from unauthorized modifications.

The air inlet or flue gas outlet must not be restricted or reduced.

The room where the appliance is installed must have an adequate supply of fresh air. If windows and doors are well sealed, or if other devices that consume air are installed in the same space (such as a steam cleaner, dryer, fan, etc.), and extract air, then combustion air (fresh air) must be supplied from the outside.

Only the recommended types of fuel should be used—specifically, firewood.

The required pressure in the flue pipe (chimney draft) should be 12 Pa under normal load. If the pressure exceeds 15 Pa, a draft stabilizer (damper) should be installed on the flue pipe.

The ash drawer must not contain flammable materials. The fill level must not exceed the height of the side walls of the ash drawer.

The firebox door must remain closed during operation of the device (except during ignition, when adding fuel, and when removing ash) to prevent combustion products (smoke) from escaping.

The stove must not be modified, except when using our verified original accessories and when the work is carried out by our authorized service technicians.

If a chimney fire occurs, the stove door must be closed and the air regulator shut. Never attempt to extinguish a chimney fire with water. The sudden generation of steam can damage the chimney. If necessary, contact the fire department.

In case of malfunction, close all air regulators and do not add any new fuel until the issue has been resolved.

If you follow the instructions for installing and using the stove, it will provide a reliable source of heat. Any issues with your stove can be resolved by our service team. If you have any complaints or problems regarding the stove's functionality, please contact our service department. They will also assist you with ordering spare parts.

Do not store flammable materials or firewood beneath the ash drawer, and do not use it to store fuel.

## ! ATTENTION

**Important Before Use**

- For your stove to function properly, it is essential to read this manual carefully and follow the instructions precisely.
- Only use the recommended types of fuel as defined in the user manual.
- It is mandatory to use firewood with a moisture content of less than 20%, i.e., firewood that has been stored for two years in a dry and ventilated area.
- The required chimney draft pressure under normal operating conditions should be approximately 12 Pa.
  If the pressure exceeds 15 Pa, a draft damper must be installed in the flue pipe.
- The chimney to which the stove is connected must meet the requirements specified in the user manual.
  -Do not use flexible hoses to connect the stove to the chimney; only steel flue pipes must be used.
- Regular maintenance and care, such as cleaning the stove and flue pipes, are essential for safe operation and especially for efficiency and preserving the value of the appliance.
- Unauthorized modifications to the appliance are strictly prohibited; any unauthorized alterations will void the warranty.
- Only original service parts manufactured by the producer may be installed on the stove.

# Sadržaj:

# 1. INTRODUCTION

The purpose of this manual is to provide the user with all necessary information and instructions for the safe and proper use of the stove.

ALFA PLAM reserves the right to modify the specifications and the technical and/or functional characteristics of the stove at any time without prior notice.

The wood-burning stove is intended for heating residential spaces. The stove operates exclusively with the firebox door closed. The door must never be opened while the stove is operating.

The specified purpose and the intended configurations are the only ones approved by the manufacturer: **the stove must be used only in accordance with this manual.**

The ALFA PLAM stove is designed for indoor use only.

The purpose of this manual is to enable the user to take all necessary measures to ensure safe and proper operation of the stove. This manual contains all the information required for installation, operation, and maintenance. Careful adherence to the instructions guarantees a high level of safety and performance. The manual must be stored safely and always kept accessible for reference by both the user and the personnel responsible for installation and maintenance.

The installation, operation, and maintenance manual is an integral part of the stove. If the manual is lost, a new copy should be requested from ALFA PLAM. In case of resale, the user is obligated to provide the manual to the new owner.

## 1.1 General Information

**INFORMATION**

When contacting the manufacturer, it is necessary to provide the serial number and identification data found on the "GENERAL INFORMATION" page at the end of this manual.

**LIABILITY**

ALFA PLAM assumes no responsibility for material damage or injury resulting from:

– Failure to follow the advice and warnings provided in this manual,
– Improper handling of the stove by the user,
– Modifications and repairs not authorized by ALFA PLAM,
– Poor maintenance,
– Unforeseen events,
– Use of non-original or incompatible spare parts.

Responsibility for proper installation lies entirely with the installer.

**STOVE USAGE**

When using the stove, all recommendations in this manual and all national regulations of the country where the stove is installed must be followed.

## 1.2 Manufacturer's Responsibility

The manufacturer assumes no civil or criminal liability, either direct or indirect, in the case of:

- Installation not compliant with current national regulations in the country of installation and safety recommendations,
- Failure to follow the advice and warnings provided in this manual,
- Installation carried out by unqualified and untrained personnel,
- Use not in accordance with the safety recommendations in the manual,
- Unauthorized modifications or repairs,
- Use of non-original spare parts or parts not intended for this stove model,
- Poor maintenance of the stove,
- Unforeseen events.

All local regulations, including those relating to national and European standards, must be respected during use of the appliance.

## 1.3 User Characteristics

The stove user must be an adult and responsible person with the technical knowledge necessary for the regular maintenance of the stove's mechanical parts.

Children must not approach the stove while it is in operation with the intention to play. This device may be used by children aged 14 years and older, and by persons with reduced physical, sensory, or mental capabilities, provided they are familiar with the user instructions and supervised by an adult. Cleaning and maintenance of the stove must not be performed by children without adult supervision.

## 1.4 Technical Support

ALFA PLAM is capable of resolving any technical issues related to the use and maintenance of the stove throughout its entire lifetime.

The technical support service is available to answer your questions and, if necessary, to direct you to the nearest authorized service center.

## 1.5 Spare Parts

Only original spare parts should be used. Do not wait for parts to wear out completely before replacing them. Replacing worn parts before they break prevents accidents caused by sudden breakage, which may lead to injuries or property damage.

## 1.6 Important Information

Thank you for purchasing the ALFA-PLAM stove.

Please take some time to read the manual carefully.

For proper stove operation and valid warranty, please follow the recommendations and guidelines in the manual.

If you have additional questions not covered in the manual, contact your local stove dealer or service center. Proper use and maintenance are prerequisites for long-lasting and trouble-free stove operation.

The device is not intended for use by persons (including children) with reduced physical, motor, or mental abilities, or persons lacking knowledge and experience, unless they are supervised or instructed regarding safe use by a responsible person.

## 1.7 Inspection Upon Delivery

* First, inspect the stove for defects or damage.
* Pay special attention to the glass and door.
* During stove use, the most common damage to the glass is usually caused by improper handling.
* Before installation, check the functionality of all moving parts. For any damage, contact your local dealer.

## 1.8 Precautionary Measures

* Warning! Heated metal parts and glass can cause burns, so wear protective gloves while the stove is in operation.
* Take special precautions if children are nearby.

**Fire Safety Measures Within Radiation Area**

* The minimum distance from the fire opening to combustible objects (e.g., furniture, alcoholic beverages) should be greater than 100 cm.
* The minimum distance of stove parts from the rear and side walls should be greater than 40 cm.

**Fire Safety Measures Outside Radiation Area**

* Do not place combustible materials within 100 cm of the open stove.

## 1.9 Suitable Fuels

The stove is intended for burning natural fuels (e.g., beech, birch) or wooden briquettes.

Beech wood has one of the best calorific values compared to other fuels, as well as good combustion properties (if properly dried and stored). Freshly split wood must be dried for about 12 to 18 months before use (it is recommended to dry the wood outdoors, protected from rain). The moisture content of the fuel must not exceed 20%. Beech, birch, and oak burn with a stable flame and produce long-lasting embers.

Conifers (e.g., pine, fir) have a pleasant smell, burn quickly, crackle, and produce sparks, but they are rich in resin, which can negatively affect the stove and chimney (causing chimney blockage).

## 1.10 Unsuitable Fuels

It is forbidden to burn the following materials in the stove:

* Saturated or wet wood
* Plywood
* Materials of animal origin (hooves, horns, etc.)
* Coal dust
* Plastic waste and household garbage
* Paper and cardboard (except when used as kindling)

Keep in mind that burning any waste is dangerous to your health as it leads to environmental pollution. It also causes poor combustion in the stove and shortens its lifespan.

Many flammable residues (e.g., wood, paper, mixtures, etc.) contain heavy metals (Cd, Pb, Zn, Cr, etc.) and halogens (e.g., Cl, F, etc.). Their combustion can emit toxic gases such as nitrogen oxides, hydrochloric acid, hydrocarbons, and dioxins, which pollute the environment.

## 1.11 Fire Hazard

Storing waste inside the stove and burning waste not only raises health and durability concerns but also represents a fire safety issue. Generally, if the stove is not used properly (regular cleaning, burning appropriate materials, etc.), a fire may occur.

In case of fire caused by improper use, the user will be held legally responsible.

## 1.12 Warnings

* It is not allowed to modify or brick up the stove (by adding/removing materials).
* Pay special attention to air supply and related regulation (air regulator). Always use protective gloves when handling the stove to avoid possible burns.
* Never use gasoline, alcohol, or similar substances to start a fire.
* Do not overload the stove (maximum 2-3 pieces of firewood and 2.5 kg/h for continuous burning).
* Always use the recommended fuel. This is important for the validity of the warranty.
* All damaged parts must be replaced before first use.
* The chimney connected to the stove must meet the requirements set out in the user manual.
* Never use flexible hoses instead of rigid flue pipes for connecting the device to the chimney.
* Regular maintenance and care, such as cleaning the stove and flue pipes, are important for safe operation, fuel efficiency, and preserving the stove's value.
* Unauthorized modifications to the device are prohibited as they void the warranty.

## 1.13 Basic User Characteristics

The stove user must be an adult and responsible person with the technical knowledge necessary for regular maintenance of the mechanical and electrical parts of the stove.

Children must not approach the stove while it is operating with the intention to play. The device may be used by children aged 8 years and older, as well as by persons with reduced physical, sensory, or mental capabilities, provided they are supervised by adults familiar with the user manual.

Children must not clean or maintain the stove without adult supervision.

# 2. Technical Data and Product Features

| Br. | Parameter | Unit | Comment | Gala | Gala with stone |
|---|---|---|---|---|---|
| 1. | Pnom | kW | Rated Power | 8 | |
| 2. | Pshnom | kW | Rated Heat Output | 8 | |
| 3. | Pwnom | kW | Hot-Water Exchanger Output | / | |
| 4. | ηnom | % | Efficiency at Rated Heating Capacity | 76,4 | |
| 5. | ηs | % | Seasonal Space Energy Efficiency | 66,4 | |
| 6. | EEI | - | Energy Efficiency Index | 101 | |
| 7. | COnom | mg/Nm³ | CO Emission with 13% Oxygen at Rated Power | 864 | |
| 8. | NOxnom | mg/Nm³ | NOx Emission with 13% Oxygen at Rated Power | 99 | |
| 9. | OGCnom | mg/Nm³ | OGC Emission with 13% Oxygen at Rated Power | 53 | |
| 10. | PMnom | mg/Nm³ | Dust Emission with 13% Oxygen at Rated Power | 34 | |
| 11. | pnom | Pa | Minimum Flue Draught at Rated Power | / | |
| 12. | dR | mm | Minimum Clearance between the Back and Flammable Materials | 400 | |
| 13. | ds | mm | Minimum Clearance between the Lateral Sides and Flammable Materials | 400 | |
| 14. | dc | mm | Minimum Clearance between the Top and Flammable Materials | >750 | |
| 15. | dp | mm | Minimum Clearance between the Front and Flammable Materials | 1000 | |
| 16. | dF | mm | Minimum Clearance between the Bottom of Product and Flammable Materials | 1500 | |
| 17. | dL | mm | Minimum Clearance between the Front and Flammable Materials for the Front Side Radiation Zones | 1500 | |
| 18. | dB | mm | Minimum Clearance between the Bottom of Product (excluding the footing) and Flammable Materials | 0 | |
| 19. | dnon | mm | Minimum Clearance between the Non-Combustible Walls | / | |
| 20. | s | mm | Protective Insulation in compliance with Manufacturer's Recommendations | / | |
| 21. | Tsnom | ˚C | Flue Gas Temperature at Rated Power | 305 | |
| 22. | Tclass | - | Chimney Designation in compliance with the Relevant Chimney Standard | T400 G | |
| 23. | Φf,g nom | g/s | Flue Gas Mass Flow at Rated Power | 9,2 | |
| 24. | CON or INT | - | (CON) operation of the device in continuous mode, (INT) operation of the device in interrupt mode. | INT | |
| 25. | dout | mm | Diameter of Flue Outlet | 120 | 150/120 |
| 26. | W,D,H | mm | Overall Product Dimensions (width, depth, height) | 599x430x979 | 599x440x992 |
| 27. | m | kg | Product Weight | 97 | 125 |
| 28. | mchim | kg | Maximum Chimney Load Capacity | 0 | |
| 29. | 🕮 | - | Read and Follow the Instructions in the User Manual | | |

*Table 1*

## 2.1 Recommendation in terms of Firewood

| Type of Wood | kg/m³ | kWh/kg moisture 20% |
|---|---|---|
| Beech | 750 | 4,0 |
| Oak | 900 | 4,2 |
| Elm | 640 | 4,1 |
| Cottonwood | 470 | 4,1 |
| Larch | 660 | 4,4 |
| Spruce | 450 | 4,5 |
| White Pine | 550 | 4,4 |

*Table 2*

Rated Heating Capacity is achieved during the use of the following fuel quantity:

| Type of Wood | Fuel Quantity | Combustion Period | Primary Air Regulation |
|---|---|---|---|
| Beech | 2,4 kg | 60 min | 4 mm (Figure 16) |

*Table 3*

- Pay attention to never place more wood than required for the nominal heating capacity. The amount of fuel stated above must not be exceeded, as this may cause the stove to overheat.
- The wood used must be dry (moisture content < 20%). This is usually the case if the wood has been stored for two years in a dry place with good ventilation. Wet wood has low calorific value and causes soot deposits in the flue channels and chimney. Wood with treated surfaces (varnished, painted, veneered, impregnated), plywood, all types of waste (packaging waste), plastic, newspapers, rubber, leather, textiles, etc., must not be used for burning.
- Burning such materials pollutes the environment and is prohibited by law. Moreover, it may cause damage to the chimney. In that case, any kind of warranty provided by the manufacturer becomes void.

# 3. Stove Description

The stove is intended for occasional heating of enclosed rooms, with the firebox door closed.

- • The stove is made of metal, cast iron, vermiculite, and natural stone, and has a closed combustion chamber.
- • The stove has an air regulator needed for lighting and burning the fuel.
- • The stove can be placed anywhere in the room (next to a wall, in a corner, etc.), provided the floor is level. No permit is required for installing the stove.
- • Our stove provides a feeling of comfort and satisfaction in your home through clean combustion and room heating.

## 3.1 Increased Functionality with a Simpler Regulator

• During the operation of the stove, a layer of embers forms in the combustion chamber, which ensures even fuel combustion.

• By regulating the supply of primary and secondary air through the air regulator (see figures 15, 17, and 18), the heat output from the stove can be indirectly controlled.

## 3.2 Main Parts of the Stove and Overall Dimensions

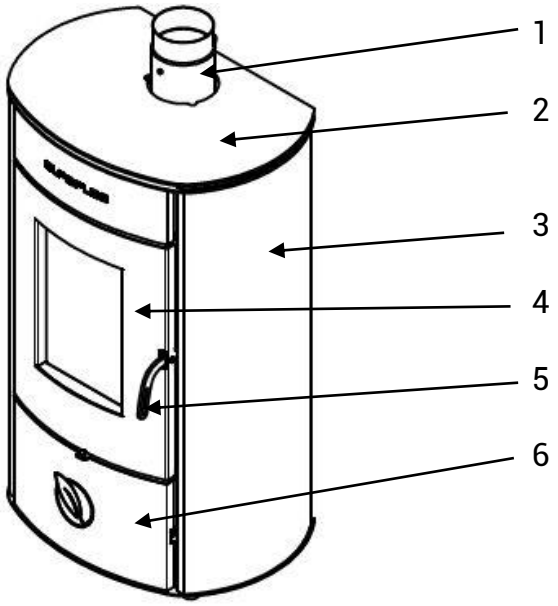



*Figure 1 – Solid Fuel Stove*

1. *Flue pipe connector*
2. *Stove top plate*
3. *Side panel*
4. *Door*
5. *Handle*
6. *Lower door*

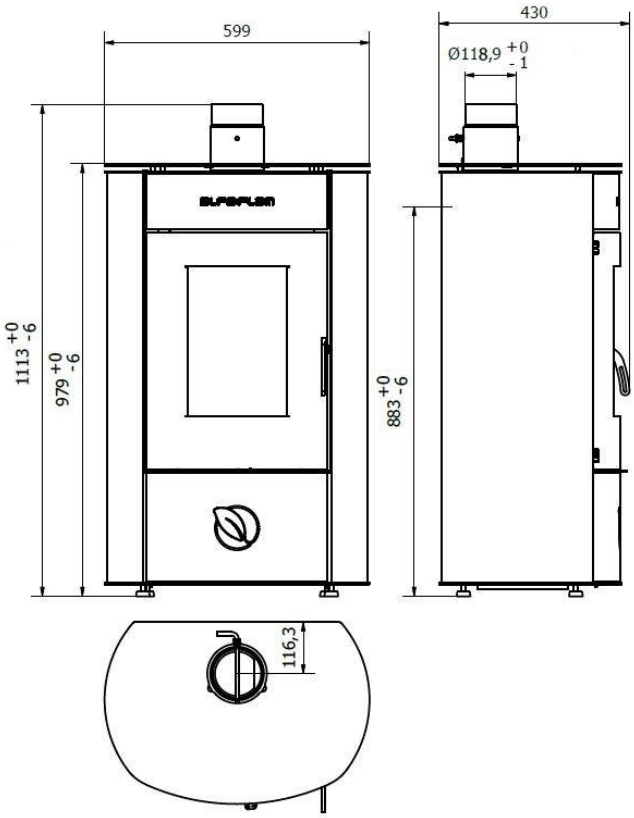



*Figure 2*

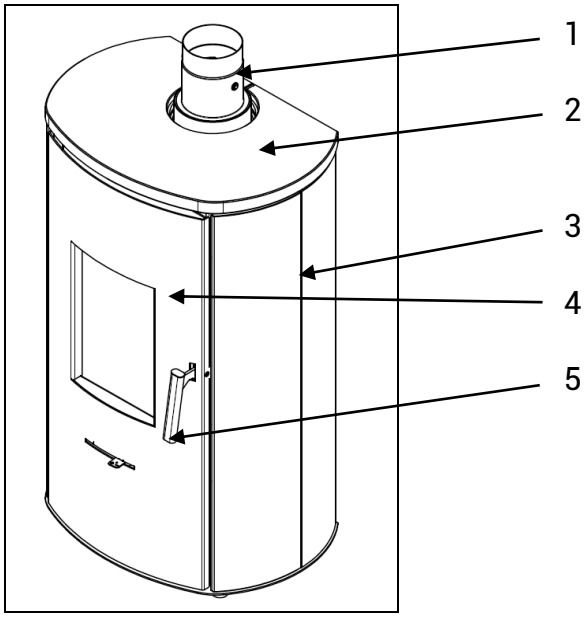



*Figure 1a – Solid Fuel Stove*

1. *Flue pipe connector (Reducer)*
2. *Stove top plate*
3. *Side panel*
4. *Door*
5. *Handle*

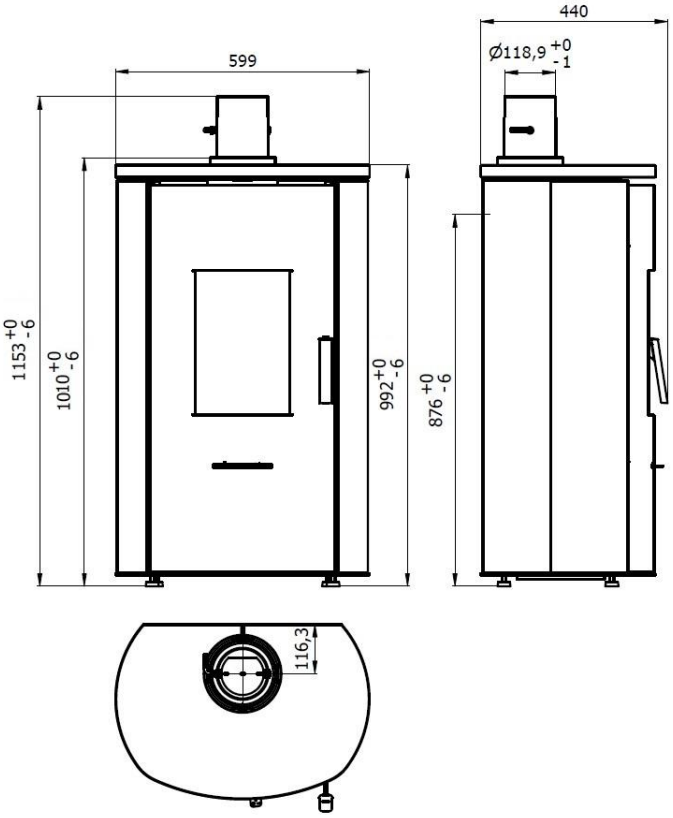



*Figure 2a*

## 4. CONNECTING TO THE CHIMNEY

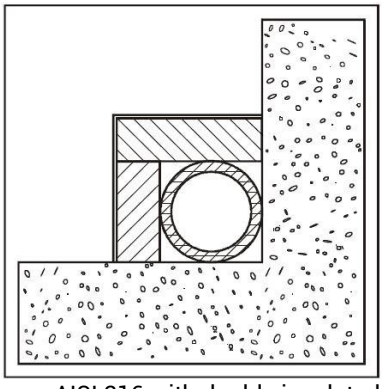
After unpacking the stove, it is necessary to read the instructions, inspect the stove, and familiarize yourself with the stove parts and accessories. Pay special attention to the following:

- The door must be well sealed to prevent uncontrolled air intake into the stove.
- That the power regulator, i.e., the air regulator handle (Figures 16 and 18), is functioning properly (opens and closes the air supply); The chimney connection must be properly sealed with sealing tape when installing on the side or rear flue outlet, depending on the position relative to the chimney.

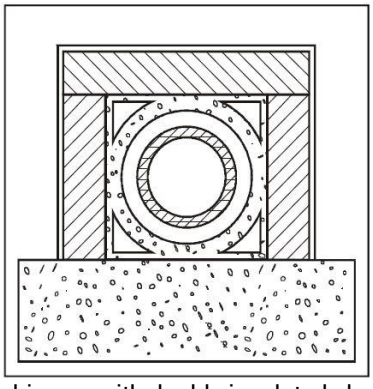
**SPECIAL NOTES**

- When installing a horizontal flue pipe (where necessary), the pipe must be installed with a slope of +5°.
- The flue connector, flue pipes, and chimney must not be narrowed.
- Installing the stove into a shared flue system is not recommended.
- All joints, as well as the chimney, must be well sealed, with no soot or dirt in the flue channels.

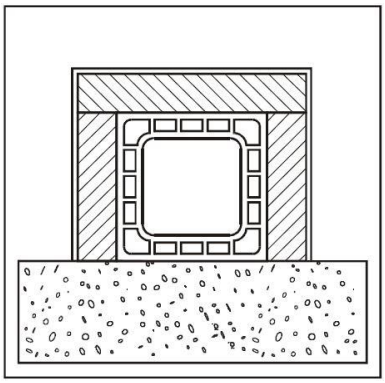
A properly installed chimney and fulfilling the other requirements are prerequisites for the flawless operation of the stove. The stove can be installed in the kitchen area or another suitable place, ensuring that there is a non-combustible surface beneath the stove. If the floor is parquet, a special metal plate must be placed underneath to prevent damage to the floor or fire risk due to careless handling.



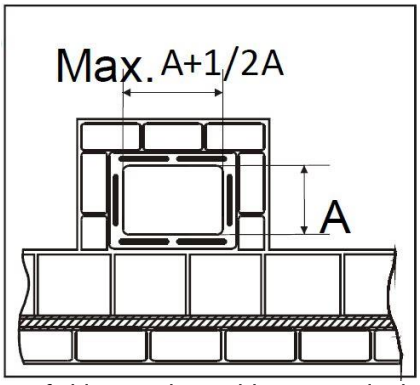
Steel chimney AISI 316 with double insulated chamber, heat resistant material up to 400 ° C. 100% optimal efficiency



Fireproof chimney with double insulated chamber and lightweight concrete external cladding. 100% optimal efficiency



Traditional-looking chimney made of clay with depressions. 80% optimal efficiency




The use of chimney pipes with rectangular internal section of different ratio than planned is prohibited. 40% moderate efficiency

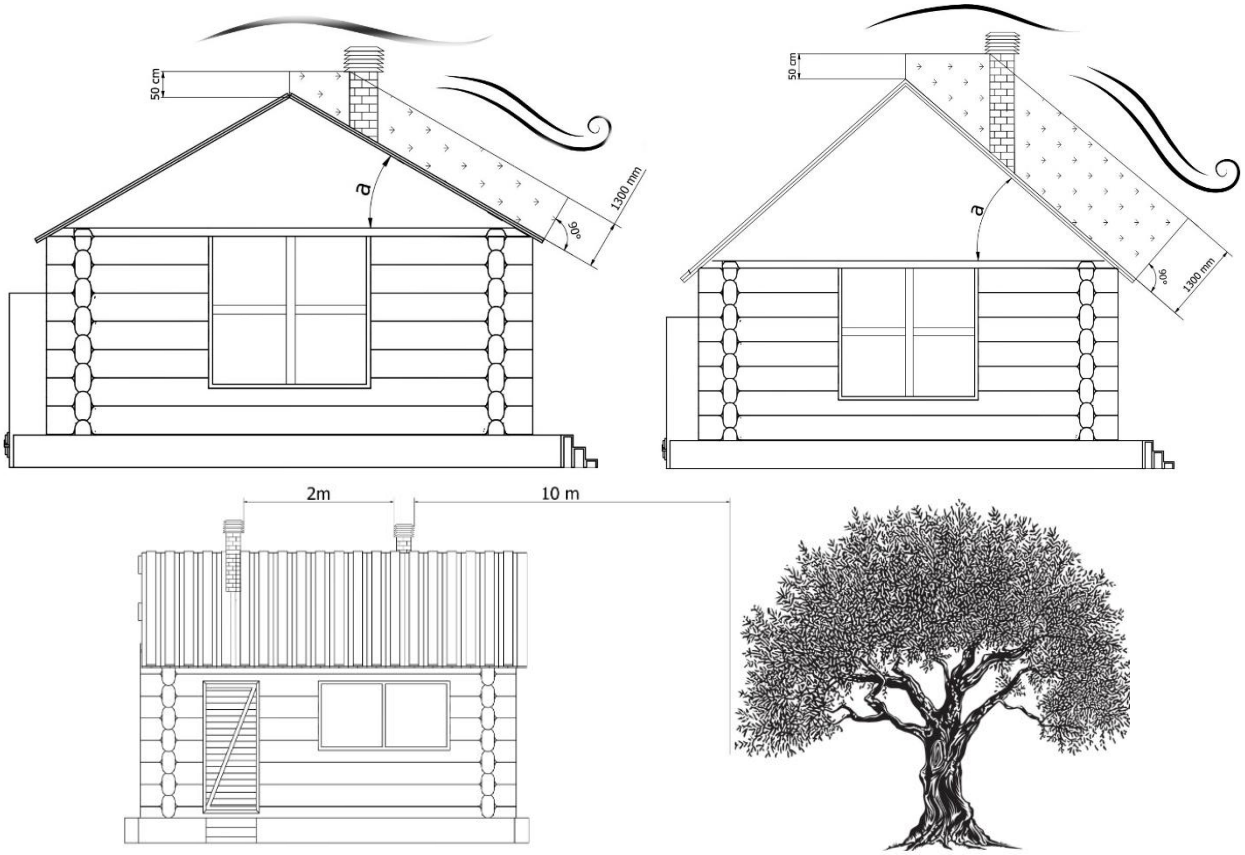



*Figure 3 - Chimney – Positioning and distance*

**⚠ ATTENTION**

Fumes from clogged chimneys are dangerous. Maintain the chimney and flue pipe clean; clean them according to the instructions in the manual.

Keep the flue channels and combustion chambers clean; clean them as per the instructions. Use only the recommended fuels. Read the user manual carefully.

**It is not advisable to use the stove continuously.** Weather conditions are an important factor in the dispersion of smoke into the environment.

Do not light a fire when there is no wind or during foggy days. Smoke gases can remain inside the house, which is harmful to your health and the health of your neighbors.

A wind speed of 2 or less on the Beaufort scale is considered calm weather (no wind).

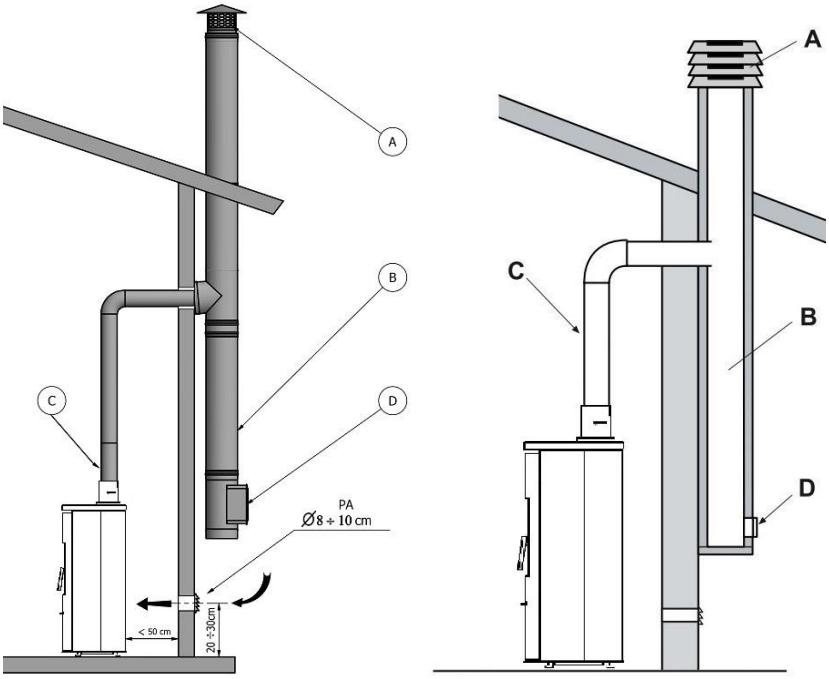



*Figure 4*

A – Chimney cap

B – Chimney with a minimum diameter of ø120 mm or minimum cross-sectional area of 12x12 cm, chimney height at least 4–5 m

C – Flue pipe ø120 mm

D – Cleaning inspection opening for the chimney

The stove, during operation, uses air from the room where it is installed. External air can be supplied directly via an 80 mm diameter pipe with a seal, as shown in Figure 4.

The air intake opening must be positioned about 20–30 cm above the floor. On the outside, a grille for continuous ventilation must be installed.

* Check that the air intake opening is positioned so it cannot be accidentally blocked.
* If direct external air supply through a wall behind the stove (which is not an external wall) is not possible, an opening must be made in one of the external walls of the room where the stove is located.
* If the room has no external walls, it is possible to make an external opening in an adjacent room and ensure continuous air supply through a grille installed in the wall between the two rooms.
* If the stove is installed in a room with exhaust air grilles or where other devices operate by drawing air from the room, always ensure that the incoming air volume is sufficient to guarantee safe operation of the stove and other devices.

****Warning:** It is forbidden to supply combustion air from rooms where there is a fire risk, such as garages, storage rooms, warehouses, etc.**

If one or more exhaust fans (extractors) are operating in the room where the stove is installed, check whether poor stove performance occurs due to insufficient combustion air supply.

* The flue gas channel for smoke removal must be constructed according to current regulations regarding both size and materials used in its construction.
* To avoid drafts, each stove must have its own independent chimney.
* Using a traditional chimney is possible if the following rules are met:
  * Check that the smoke evacuation space in the chimney is unobstructed.
  * If it is an old chimney, renovation is recommended, i.e., inserting a steel pipe of appropriate diameter with suitable insulation (rock wool).
  * The minimum cross-sectional area must not be smaller than 12x12 cm or a diameter of ø120 mm.
  * The chimney height must be at least 4–5 m.

If the chimney is not cleaned regularly, the following problems may occur during stove operation:

* Poor combustion
* Dirty glass
* Accumulation of ash and soot in the combustion chamber, resulting in poor heat transfer.

# 5. INSTALLATION OF THE STOVE IN THE ROOM, COMBUSTION AIR SUPPLY, AND VENTILATION

During stove installation, applicable regulations regarding construction and fire safety requirements must be followed.

The stove should be placed on a solid, horizontal surface with a minimum distance of 40 cm from the rear and sides, and 100 cm from the front. The surface MUST NOT be made of easily flammable materials (linoleum, carpet, wood, etc.), and the stove must be connected to the chimney according to national regulations.

The stove connection to the chimney can be made from the top (factory setting) or from the rear. The device is supplied with a flue gas extension integrated with the pre-installed flue gas connection to improve product efficiency.

Attach the tape (Figure 5, detail b) (packed together with the flue gas extension and sheet metal screw) along the edge of the existing flue gas connection (Figure 5, detail d), above the existing screw holes, and install the flue gas extension (Figure 5, detail a) to create a sealed joint as shown in Figure 5. Then, secure with the safety screw (Figure 5, detail c).

## 5.1 Option to Connect the Flue Pipe to the Rear of the Stove

The stove is factory-set for connection of the flue pipe from the top. If suitable, the flue pipe connection can also be made from the rear.

The outlet can be changed according to the following instructions:

- Lift the top plate assembly (Figure 5a, item 1).
- Using pliers, cut the thin strips holding the cover on the rear of the stove (Figure 6).
- Unscrew the bolts and nuts from the flue gas connection and the cover on the back of the chamber (Figure 7, items 2 and 3).
- Attach the flue gas connection to the rear of the chamber, ensuring the sealing tape fits properly, and secure with bolts and nuts (Figure 8, item 3).
- Place the cover on the top of the chamber, ensuring the sealing tape fits properly, and secure with bolts and nuts (Figure 8, item 2).
- Return the top plate (Figure 11, item 1) to its place, making sure the supports (Figure 9, item L) fit into the holes on the lower part of the top plate.
- Position of the cover as delivered with the stove (Figure 10, item 4).
- Place the cover in the appropriate position on the top plate – assembly (Figure 11, item 4).

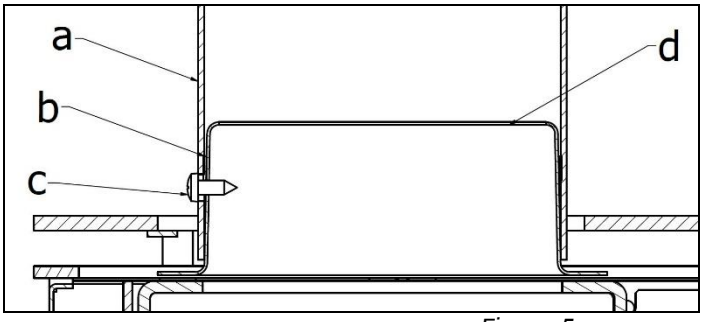


*Figure 5*

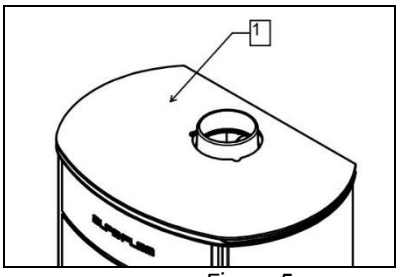


*Figure 5a*

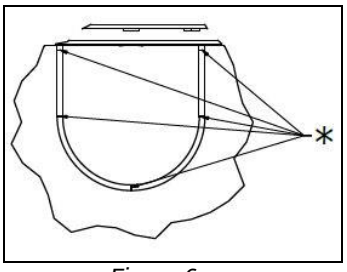


*Figure 6*

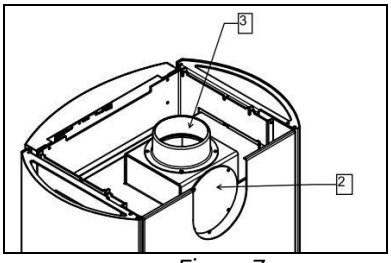


*Figure 7*

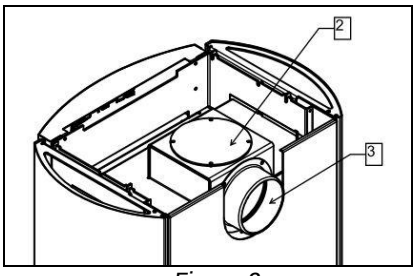


*Figure 8*

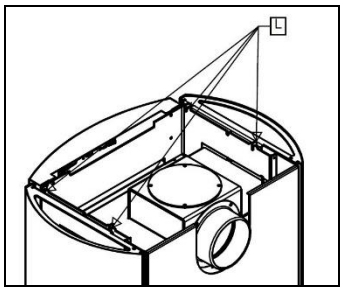


*Figure 9*

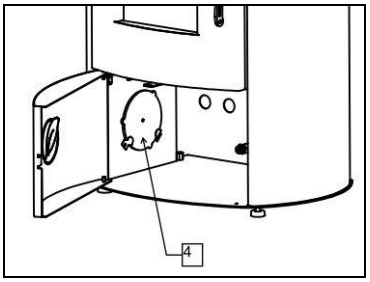


*Figure 10*

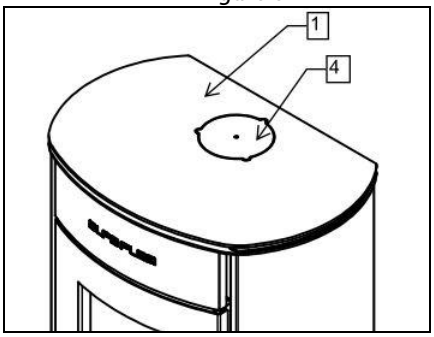


*Figure 11*

## 5.2 Air Combustion Supply and Ventilation

Combustion air must be supplied to the rooms where the stove is installed. The room should be ventilated continuously.

Fresh air inlet should be located at the bottom of room, with the air passing inside the inlet.

A) Combustion air supply via pipeline through the basement. For such option of connection, the combustion air is heated previously, which is useful regarding good and clean combustion. The installation of pipeline in the basement is simple.

B) Combustion air supply via basement. The combustion air is heated previously. The basement area should be separated from the ventilation system in the house and with external openings. Avoid high levels of dust and moisture.

C) Combustion air supply from above. Air supply from above can be done only with inspected chimney systems.

In this case it is necessary to calculate the exact size of chimney!

D) Combustion air supplied directly outside. If the air supply comes directly via external wall, the combustion air is only slightly preheated, which is unfavorable to clean combustion. In this case there is also a risk of condensation!

NOTE: These options of air supply are not recommended! However, if such options are implemented, contact qualified expert.

The room with installed heating device must be supplied with sufficient fresh air. If windows and doors are sealed hermetically or the room with the installed stove is also equipped with devices such as hood, hair dryer, fan etc., which extract the air, the combustion air (fresh) must be supplied externally. In any case, the issue should be discussed with the competent chimney sweeper before the stove installation.

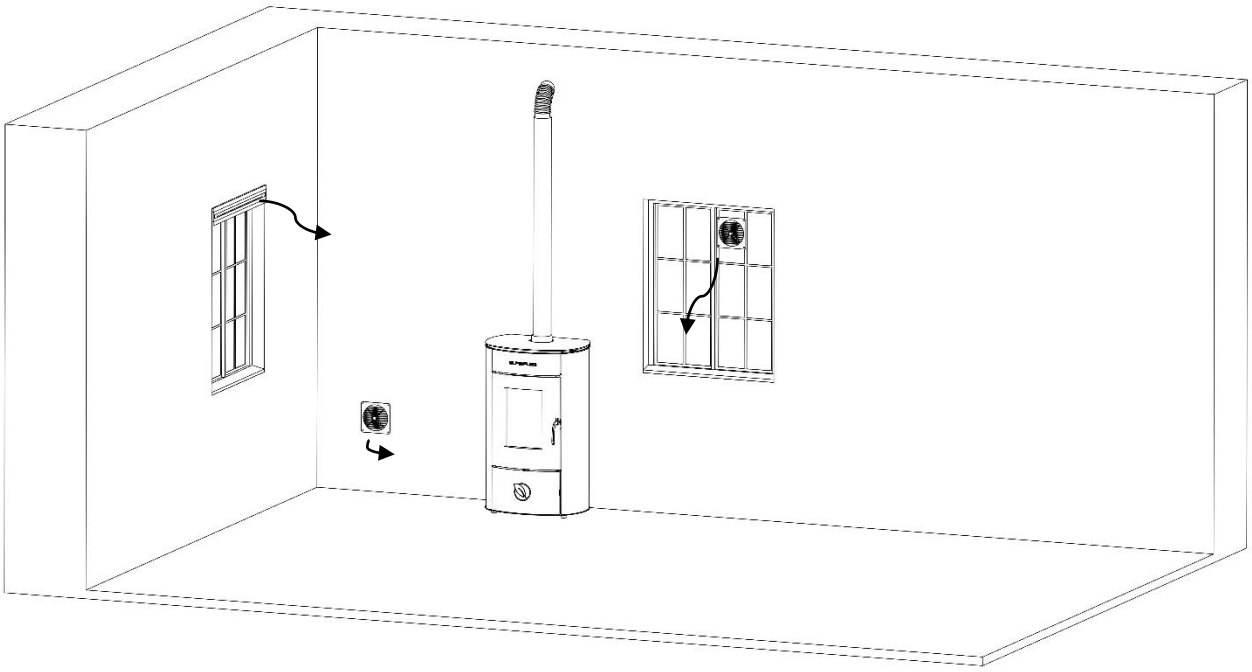
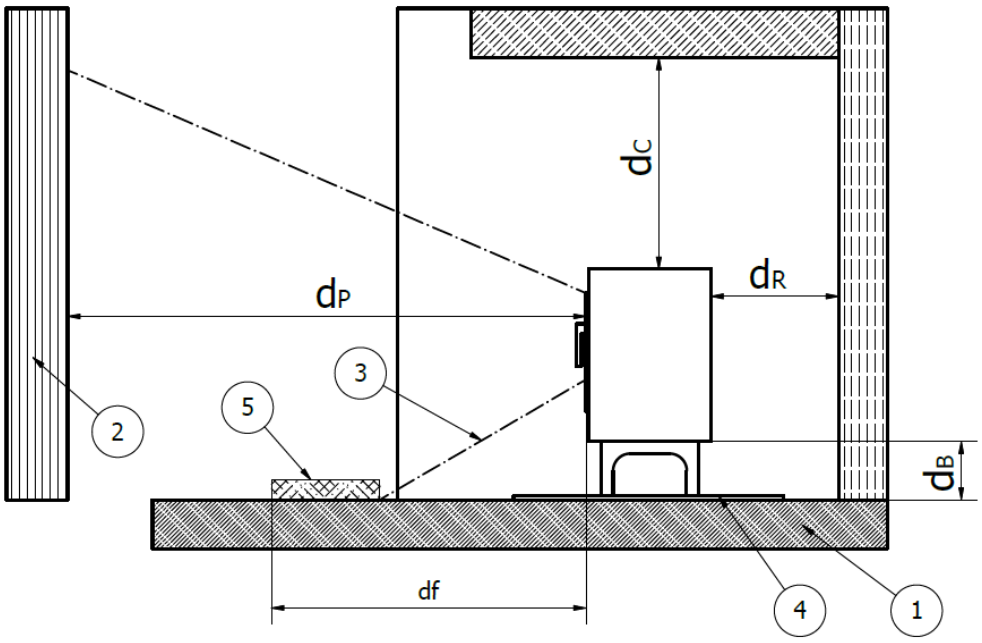


*Figure 12 - Fresh air supply to the room with installed stove*

Installation of all grates for the purpose of fresh air supply should be done so as not to cause blockage or closing off by accident.

## 5.3 Installation of the Stove

During stove installation you should follow valid regulations regarding the construction and firefighting requirements. The placement site should be horizontal and with sufficient bearing capacity, otherwise the appropriate measures must be applied for equal load distribution. In case of flammable floor (wood, plastics, textile...) it is necessary to put steel-sheet, copper or other inflammable material on the floor beneath the stove. Such base must cover the stove profile for at least 30 cm, and on the operation side it should be greater in length by 50 cm.



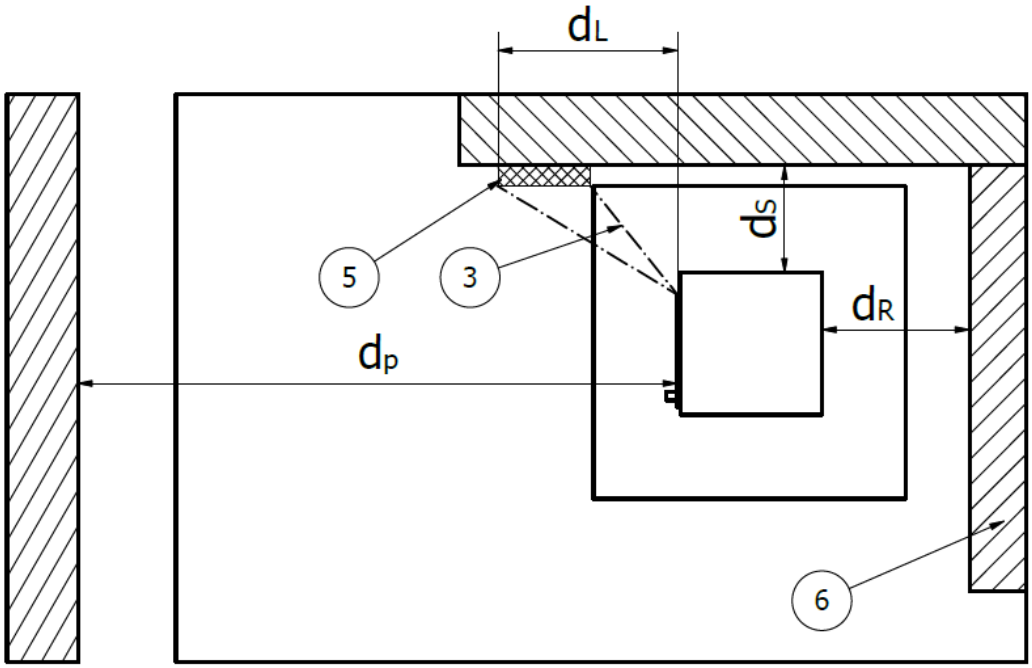



*Figure 13 - All minimum safety clearances are listed on the technical nameplate, DO NOT use lower values than those specified (view CE MARKING INFORMATION).*

| Bottom (which is 0mm in case of appliances without feet) | $d_B$ | 0 mm |
|---|---|---|
| Floor in Front | $d_F$ | 1500 mm |
| ceiling | $d_C$ | >750 mm |
| rear | $d_R$ | 400 mm |
| side | $d_S$ | 400 mm |
| Side radiation area | $d_L$ | 1500 mm |
| front | $d_P$ | 1000 mm |

*Table 4*

| | |
|---|---|
| 1. | Trihedron floor |
| 2. | Trihedron-like front plate |
| 3. | Radiation area |
| 4. | Floor protection plate |
| 5. | Critical area (65K superseded due to radiation) |
| 6. | Trihedron wallls |

*Table 5*

Before connecting the stove to the chimney, it is mandatory to consult the local authorized chimney service. The connection between the chimney and the stove must be made using connecting elements according to SRPS M.R4.031 (DIN 1298 or DIN EN 1856-2). Ensure that the chimney joints do not protrude into the cross-section of the flue pipe and that they provide a proper sealing function.

For optimal stove performance, the installation must be done correctly to ensure a flawless chimney system. In any case, the existing draft in the chimney must be checked before putting the stove into operation by placing a lit candle under the chimney inlet. The chimney draft is considered sufficient if the flame bends towards the chimney inlet. A slight bending of the flame indicates insufficient draft.

The room where the stove is installed should have an adequate supply of fresh air (see Figure 12).

# 6. FIRST FIRE IGNITION

After installing the stove and connecting it to the chimney, the first fire ignition should be performed by an authorized person (chimney sweep).

• Start with a low-intensity fire. All materials must be gradually exposed to heat to prevent fuel cracking, damage to coatings, and materials (binding).

• Ventilate the room well. If a smell is noticed during the first firing, this is a normal occurrence due to the stabilization of painted parts. During subsequent firings, the smell will gradually disappear.

## 6.1 Ignition Procedure and Regulator Adjustment

- Set the air regulator to ensure simultaneous supply of primary and secondary air; the end position is to the left (see image below, figure 14).
- Position the regulator handle on the flue extension as shown in figure 15 (along the flue extension).

- Open the door.
- After placing the ignition materials (thin wood, fire starter cubes, folded paper, etc.) into the combustion chamber, add 2–3 pieces of chopped wood on top. Carefully fill the stove to avoid possible damage.
- Ignite the combustible materials and close the stove door.
- When the stove heats up (usually within 5 to 10 minutes), close the primary air supply (figure 16) by adjusting the regulator to the optimal position. Ensure the stove parts are already heated and use protective gloves.
- Turn the regulator handle on the flue extension perpendicular to the pipe axis (figure 17). Note that the parts are already heated; therefore, use protective gloves.
- Heat output is regulated by opening or closing the secondary air intake.
- The nominal heat output (8 kW) is achieved when the air regulator is set so that the small circular opening on the regulator aligns with the small channel on the door (figure 16).

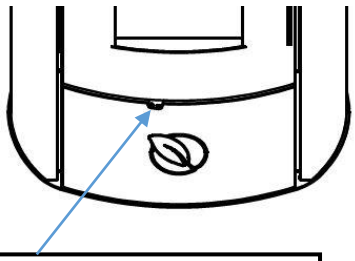


**Figure 14**
Regulator turned to the left. Primary and secondary air supply openings are fully open.

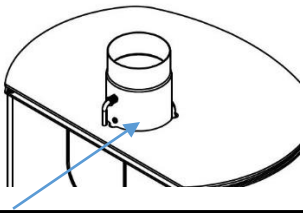


*Figure 15*
*Regulator handle along the pipe, regulator open*

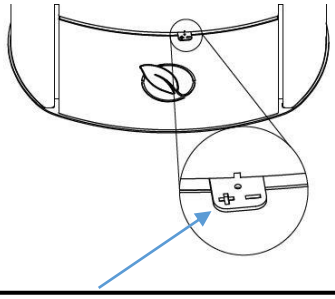


*Figure 16*
*Optimal position of the air intake regulator for the combustion process. The circular opening on the regulator aligns with the channel on the door.*

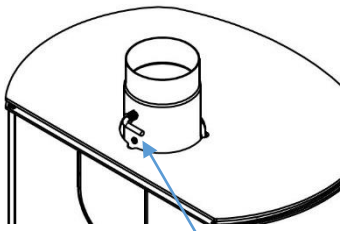


*Figure 17*
*Regulator handle perpendicular to the pipe axis, regulator closed*

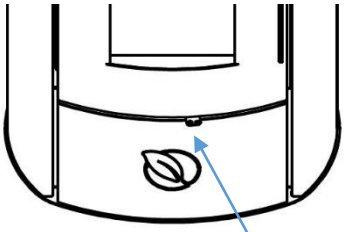


*Figure 18*
*Regulator turned to the right Both the primary and secondary air intake openings are fully closed*

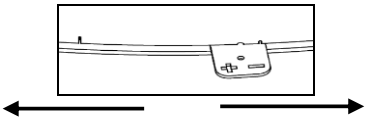
| Model | Regulator | Putting out of working | Nominal heating performance | Starting |
|---|---|---|---|---|
| **Gala** | one-hand air slide control |  | | |
| | | **CLOSE** | **OPEN 4 mm** | **5÷10 minutes OPEN** |

*Table 6*

- Approximately 2.4 kg of fuel in the combustion chamber (firebox)
- Draft of 12 Pa
- A certain amount of air heated inside the stove is directed through channels to the glass door, which is used to clean the glass (air wash system).

**Attention:** Stoves occasionally require a slightly longer ignition phase until sufficient negative pressure (draft) is created, allowing the stove to operate independently. In this case, use smaller pieces of fuel. Later, you can use larger pieces as well.
If the door is opened during ignition, a strong draft can cause the fire to flare up.

## 6.2 Heating

* The maximum firebox capacity is 2.4 kg of fuel per hour.
* Keep the fresh air intake open (if available).
* The fire intensity is regulated by the secondary air intake: the position of the circular opening in the center of the regulator aligns with the door channel (Figure 16).
* By turning the regulator to the right (Figure 18), both the primary and secondary air intakes are closed.

### 6.3 Fuel Loading (Refueling)

* Every time the stove door is opened, protective gloves should always be worn.
* Open the door slightly and wait 3-4 seconds, then open it fully and carefully to prevent smoke gases from escaping the chamber.
* Remember that the maximum fuel capacity is 2.4 kg per hour.
* Close the door.
* Always keep the fire under control to prevent possible fires. Pay special attention if children are nearby.

## 7. STOVE CLEANING

### 7.1 Cleaning Recommendations and Possible Issues

- Cleaning should be done after the stove has completely cooled down. Remember – embers can remain in the ash for hours after the fire is out.
- Always wear protective gloves whenever cleaning.
- Open the door.
- Remove any residues from the combustion chamber.
- The glass should be cleaned with a special cleaning agent (consult your local dealer for a recommended cleaner).
- If the stove is used properly, the glass should remain clean. (There is a possibility that the glass may become dirty or soot-covered if the fuel is damp, the chimney is inadequate, draft is insufficient, etc.)

**What happens if...**

**… there is not enough fresh air?**

- Is the air supply closed?
- Is the combustion air regulator closed?

**… the fire goes out by itself or is difficult to ignite?**

- Is the air supply closed?
- Is the combustion air regulator closed?
- Is there enough fresh air?
- Is the fuel damp?
- Are you using split wood?

**… the room is not heating sufficiently?**

- Is the combustion air regulator closed?

**… the stove is overheating?**

- Is the primary combustion air supply fully open?

**… the glass becomes sooty too quickly?**

- Does the fuel contain too much moisture?
- Was the fresh air supply insufficient?

It is recommended to clean the chimney once a year to prevent the buildup of deposits (creosote).

If the chimney is not properly maintained, due to high flue gas temperatures, deposits can ignite inside the chimney, creating unsafe conditions for the optimal operation of the stove, and thus increasing the risk of fire.

### 7.2 Warning

- Stove repairs should only be carried out by qualified and trained personnel. Reading the manual does not make you an expert. In case of any problems similar to those described above, contact the service center or chimney sweep.
- The space below the combustion chamber is not intended for storing flammable materials.

## 8. Safe Operation of the Appliance

Radiation from the stove, especially through glass surfaces, can ignite flammable objects surrounding the appliance.

For that reason, you should adhere to the instructions regarding clearance as specified by chapter **5.3 Installation of the Stove.**

The external surfaces on the stove may be extremely hot during the operation, you should be careful and always use protective gloves.

**That is why it is very important to pay attention to the following while the stove is in function:**

– don't get close and touch glass on the firebox door and oven door, there is DANGER OF BURNS,
– don't get close and touch exhaust pipe, there is DANGER OF BURNS,
– don't perform any cleaning activities on stove while the stove is in function,
– don't empty ashes while the stove is in function,
– children and pets should be kept away from the stove,
– ADHERE TO ALL RECOMMENDATIONS CONTAINED IN THE MANUAL.

**For proper use of the stove, you should do the following:**

– use only fuel in compliance with the manufacturer's instructions,
– always adhere to the stove maintenance plan,
– clean the stove according to the recommendations within the manual
– don't use the stove in case of malfunction or other irregularities during operation, unusual sound and/or you suspect malfunction,
**– don't spray or spill water on the stove, even for putting out fire,**
– don't lean on the stove, as the stove may not be stable enough and COULD OVERTURN ,
– don't touch painted parts of the stove while in function,

- use only recommended firewood specified in the user manual
- don't use the stove for burning waste,
- always perform all actions with maximum safety measures.

The manufacturer is always at your disposal to provide all necessary information regarding the stove, as well as installation instructions for your conditions. Proper installation of stove in compliance with the manual, as well as local and national regulations is very important to prevent danger, fire and any malfunction or poor operation.

In terms of complaints regarding errors or defects related to function you should contact our service center.

Use only original parts on the stove as recommended by the manufacturer.

**The stove works** with negative pressure in the combustion chamber. **For that reason, you make sure that flue exhaust system is well sealed thermally.**

**DANGER: In case of fire in the exhaust pipe or chimney,** evacuate all people and pets from the room and call firefighters immediately.

**DANGER**: The stove is not intended for the combustion of lignite or other types of fuel.

**DANGER**: Don't use the stove for burning waste.

In case of fire or overheating, close the air inlet cover and do NOT open the door of the stove. Extinguish fire with the appropriate means (household fire extinguisher, ...). NEVER USE WATER TO EXTINGUISH FIRE! In case of fire you should also inform the local firefighters. Adhere to the local fire protection regulations!

**Never** use gasoline, gasoline fuel for lanterns, kerosene, lighter fluid, ethyl alcohol or similar liquid to start or rekindle fire. Keep all liquids away from the appliance while in function.

The stove may not be used if the gaskets on the firebox door, ash dump door, cleanout opening are damaged.

Primary air control should be closed upon completion of combustion process.

**WARNING: Fumes generated from blocked chimney are harmful. Keep the chimney and the flue pipe clean; clean according to the instructions. Exhaust pipes should be kept clean; clean according to the instructions.**

**Use only recommended fuel. Read the user manual.**

Firebox door and ash dump door should be closed at all times during the use of appliance (except for stoking, additional refueling and ash clean-up) in order to prevent the release of products of combustion (smoke).

# 9. Potential Malfunctions and Problems during Operation

Potential malfunctions and solutions for wood-burning stoves:

| Malfunction | Solution |
|---|---|
| Combustion of wood with great speed | Check sealing tapes on the door<br>Check door hinges and closing mechanism.<br>Check whether the rate is in the appropriate position and not damaged.<br>Check that the chimney draught would not be too great.<br>Check whether the appropriate fuel is combusted. |
| Stove makes whistling and other similar sounds | Stove whistling may be a sign that stabilizer or chimney cap is required.<br>Whistling is a result of combustion air entering the stove through restricted pathway and over sharp or angular edges. It is usually caused by great draught above 20 Pa (Pascal).<br>Whistling is also experienced more often for stoves with tertiary air inlet.<br>If you experience whistling of stove, we recommend you to check chimney draught. |
| Stove makes clicking sound (crackling) | It is normal for wood-burning stove to produce certain sounds during stoking. Cause is the expansion and contraction of metal component when heated. |
| Too much smoke | Continuous emission of smoke could be harmful potentially and should not be tolerated.<br>In case of continued emission of smoke: Open doors and windows to ventilate the room. Exit the room. Seek expert advice, if necessary.<br>You may have a cold stove and cold chimney that might need small fire before lighting. Read more about cold chimneys.<br>Burning wet wood logs may lead to the combustion with more smoke and odors. Read more about burning wet wood logs.<br>Poor quality of chimney – Check chimney draught<br>Adding fuel at the wrong time – Fuel should be added only when there is no flame, namely on a hot ember. When you are done using the stove and the fire is out, don't be tempted to turn off the air controls. Leave the levers fully open and allow air to enter the stove and pass through the chimney to prevent blockage of cold air.<br>Air control malfunction. Check the furnace air control guide during ignition and refueling. |
| Corrosion on cast parts | In case of corrosion on cast parts, remove corrosion with abrasive material and then apply neutral vaseline to the treated surface. |
| Damaged sealing tapes | Sealing tapes guarantee the impermeability of product and subsequently good operation.<br>They must be inspected periodically. In case of damage, they must be replaced immediately. |

*Table. 7*

# 10. Disassembly, Recycling and Safe Disposal at the End of Service Life

Disassembly and disposal of old stove that shall no longer be used is complete responsibility of the stove owner.

The stove owner must comply with applicable legal regulations of relevant country with regard to safety and protection of environment.

Disassembly and disposal of the stove can be entrusted to the third party, provided that it is a company authorized for the collection and disposal of such materials.

**ATTENTION**

**The product is delivered together with the guidelines for disposal of stove at the end of service life.**

**It is necessary to follow the instructions contained in the manual during the disassembly of the stove.**

**NOTIFICATION**: In all cases, you must comply with applicable legal regulations of relevant country regarding the disposal of such materials (objects) and, if necessary, report the disposal of such objects.

**ATTENTION**

Disposal of stove at public place is a dangerous threat for people and animals. In such cases, the owner is always liable for injuries to people and animals.

Once the stove is disassembled, CE marking, the user manual and all other documentation related to the stove must be destroyed.

# 11. General data

If you adhere to the instructions for installing and use of the stove, this stove will be a reliable source of heat. All problems with Your stove can be resolved by our service. In case of complaints regarding problems or mistakes about the functions, please contact our service. They will help You as well as for orders of spare parts.

# 12. Information on Use and Transport

During the stove relocation make sure that the stove remains in balance, therefore avoid sudden movements.

Before any movement is done, check whether the forklift has the load capacity greater than the weight of the stove in question: the operator is in charge of lifting the load.

# 13. Frequently Asked Questions

The ignition problems:

- Open the primary air and if necessary, open the ashpan door slightly,
- Use well-dried wood logs,
- Check whether the flue pipes are well-connected,
- Check the draught in the chimney,
- Check whether the ashes and the combustion residue have clogged the exhaust pipes or the firebox grate.

Glass gets dirty very quickly:

- Wet wood logs: use dry firewood (10-20% relative humidity),
- Check whether the ashes and the combustion residue have clogged the exhaust pipes or the grate,
- Inappropriate firewood,
- The stove does not have sufficient pull (see the connection and the chimney),
- There is a condensate inside the combustion chamber,
- In the first few ignitions the formation of condensate is expected, as the materials covering the stove contain moist,
- Check whether the chimney size is too big and whether the flame reaches the chimney top.

# 14. DETERMINING THE REQUIRED HEATING POWER

There is no absolute rule for calculating the required heating power. This power is determined by the space you want to heat, but it also largely depends on insulation. On average, the required heating power for a properly insulated room would be 30 kcal/h per m³ (at an outdoor temperature of 0°C).

| | | Indicative combustion value | | Required amount relative to 1 kg of dry wood |
|---|---|---|---|---|
| **Fuel** | **Unit** | **kcal/h** | **kW** | |
| Dry wood (15% moisture) | kg | 3600 | 4.2 | 1.00 |
| Wet wood (50% moisture) | kg | 1850 | 2.2 | 1.95 |

*Table 8*

# 15. STOVE OVERHEATING OR FIRE / SHUTTING DOWN THE STOVE

In case of fire or overheating, close the fresh air intake covers and DO NOT open the stove door. Extinguish the fire using appropriate devices (household fire extinguisher, etc.). NEVER USE WATER TO EXTINGUISH THE FIRE!

In the event of a fire, also notify the local fire department. Follow local fire safety regulations!

# 16. The Nameplate

The nameplate is attached to the back or the bottom of stove, containing serial number that should be listed for each order.