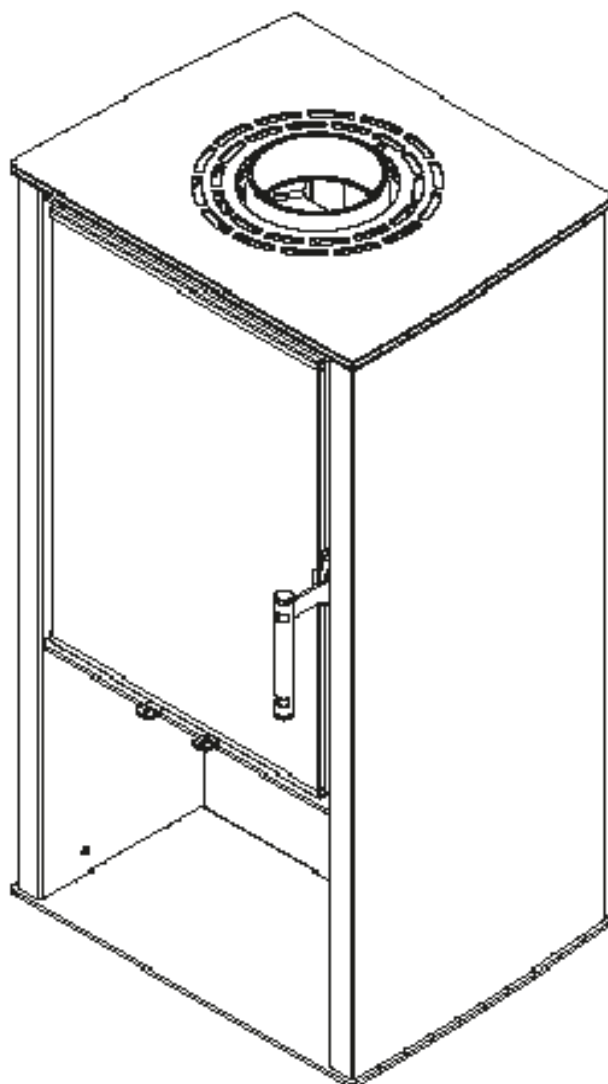

OPERATING AND ASSEMBLY INSTRUCTIONS

Free-standing stove

LUPO
LYNX
CANE



In accordance with the requirements of the Ecodesign
on the territory of EU member states:
"This product cannot be used as a primary heating
source."

Dear Customer,

Thank you for purchasing a Hitze freestanding stove!



**BEFORE FIRST USE, IT IS ESSENTIAL TO READ THE OPERATING AND
INSTALLATION INSTRUCTIONS IN FULL
AND CHECK THE COMPLETENESS OF THE PRODUCT.**

Table of contents

1. INTRODUCTORY NEWS	2
1.1. General information.....	2
1.2. In order to maintain the necessary safety rules, it is necessary to.....	2
1.3. Never	3
1.4. Hitze is exempt from civil and criminal liability in the event of.....	3
1.5. Purpose of the stove.....	3
1.6. Construction and operation of the furnace.....	6
2. TRANSPORTATION, ASSEMBLY, FURNACE INSTALLATION	7
2.1. Transport and handling	8
2.2. Assembly.....	8
2.3. Substrate recommendations.....	10
2.4. Flue pipe.....	11
2.5. Connection to flue pipe	11
2.6. The flue pipe system should meet the following features	12
2.7. Furnace ventilation.....	13
2.8. Furnace installation.....	13
2.9. Connection of hot air distribution system (DGP).....	14
3. STARTING UP	16
3.1. Preparing for launch	16
3.2. Firing up the stove.....	16
4. USE	17
4.1. Types of fuel.....	17
4.2. Adding fuel	17
4.3. Preventing fumes from escaping.....	18
4.4. Glass cleanliness.....	18
4.5. Operation in poorer climatic conditions and transition period.....	18
4.6. Ash removal.....	18
4.7. General comments.....	19
5. CONSERVATION	20
5.1. Recommended periodic cleaning of the furnace	21
6. FAULTS AND IRREGULARITIES DURING OPERATION	22
6.1. The most common irregularities and how to solve them.....	22
7. NAMEPLATE	23
8. INSPECTION CARD	24

1. NEWS INTRODUCTORY

Warmth from Nature - these words perfectly illustrate the Hitze brand philosophy. In accordance with it, we produce fireplaces and stoves that are heated with wood or wood pellets, that is, raw materials that are the least harmful to the environment. Thanks to new technology, we have created innovative solutions that are characterized by modern design and high heating efficiency.

We wish you trouble-free operation and lots of warmth!

Before installing and connecting the stove to the chimney system, it is essential to read the Operating and Installation Manual and check the completeness of the product components.

The information contained in the Operation and Installation Manual will ensure proper operation of the stove and avoid damage and mishaps caused by improper use.

If you have any doubts or problems with operation, please contact the point of sale or the Manufacturer.

NOTES:

The device must not be used by children.

Never leave children or pets unattended around a burning or just extinguished hearth.

Use protective gloves to open the oven door after and during use.

Danger of burns (hearth parts can be very hot).

In order to improve the product, the Manufacturer reserves the right to make changes in the drawings, photos and descriptions, as well as in the parameters of the equipment without notice and at any time. It is forbidden to copy in whole or in part the Operation and Installation Manual without authorization from the Manufacturer. Keep the Operating and Installation Manual out of the reach of children.

In case of destruction, loss or damage of the Operating and Installation Manual, you should apply for a copy of it to the point of sale or to the Manufacturer, providing the identification data of the device.

1.1. Information general

Security

Adherence to the following rules will enable the proper operation of the stove, avoid damage and accidents caused by improper use.

1.2. To maintain the necessary safety rules should:

- Read the Operation and Installation Manual with understanding before installing or maintaining the stove;
- Install the stove in the most convenient location while taking into account the current building and fire protection laws;
- Installation, maintenance and inspection of the operation of the installation be carried out by qualified professionals;
- Use the device for its intended purpose;
- in the place of installation of the stove absolutely ensure adequate ventilation and air supply;
- Place the clothes dryer at a minimum distance of 1.5m from the stove (fire hazard);
- check the permissible load on the substrate (floor, ceiling) in the planned location of the furnace (taking into account the total weight of the device including the housing);
- provide a suitable chimney installation that guarantees safe use (e.g., a chimney made of non-combustible materials that absorb heat poorly);

- avoid installing the stove in rooms with type B gas appliances, hoods (with and without exhaust), heat pumps, collective ventilation ducts, numerous operating smoke ducts, as well as

In close proximity to the stairwell and rooms with equipment that can generate negative pressure;

- **avoid direct contact with the furnace (the device heats up to high temperatures during operation) and, if necessary, use appropriate protective measures (clothing, heat-resistant gloves);**
- Install the stove in rooms with fire protection, equipped with fresh air supply and exhaust;
- If any difficulties arise, turn to the point of sale or the Manufacturer (in case of repair, demand original spare parts);
- Periodically check and clean the flue pipe in accordance with applicable regulations;
- Include the Operation and Installation Manual in case the device is sold or rented.

1.3. Never belongs:

- Resist and climb on the stove;
- use the device in case of faults or malfunctions;
- leave flammable materials at a distance of less than 1.5m from the stove;
- Light fires with flammable materials and burn waste.

1.4. Hitze is exempt from civil and criminal liability in the event of:

- use of the stove contrary to the Operating and Installation Instructions;
- modification of the furnace and unauthorized change of parts to non-original (these actions will immediately void the warranty);
- Injury and property damage caused by damage due to improper installation and improper maintenance (not in accordance with the Operating and Installation Manual).

1.5. Destination furnace

Stoves provide an additional source of heat in the rooms where they are located. These devices have fixed-fuel hearths, with manual loading of fuel, closed with standard (swinging) doors. The main fuel is seasoned hardwood (beech, hornbeam, birch) with a moisture content of less than 20%. During combustion, heat energy is released, which escapes from the combustion chamber through convection and radiation.

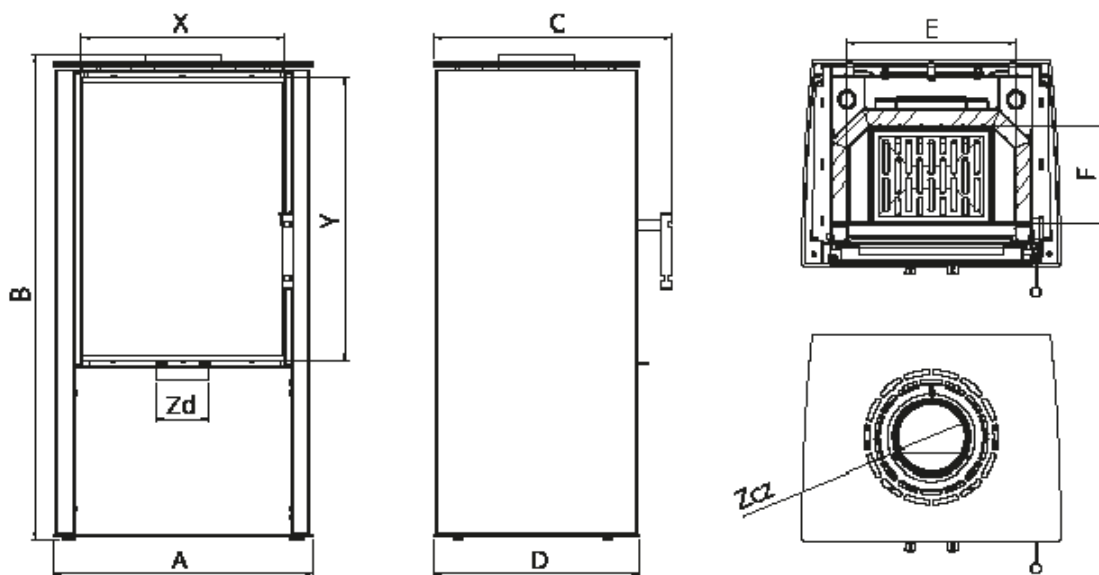


Fig. 1 LUPO stove

Dimensions [mm].		LUPO S	LUPO M	LUPO L
Width	A	502	657	992
Height	B	940	940	940
Overall depth	C	465	465	465
Body depth	D	400	400	400
Width of the hearth	E	326	481	816
Depth of the hearth	F	190	190	190
Air intake diameter	Zd	100	100	100
Flue diameter	Zcz	150	150	150
Glass width	X	390	545	880
Glass height	Y	545	545	545

Tab 1 LUPO furnace dimensions

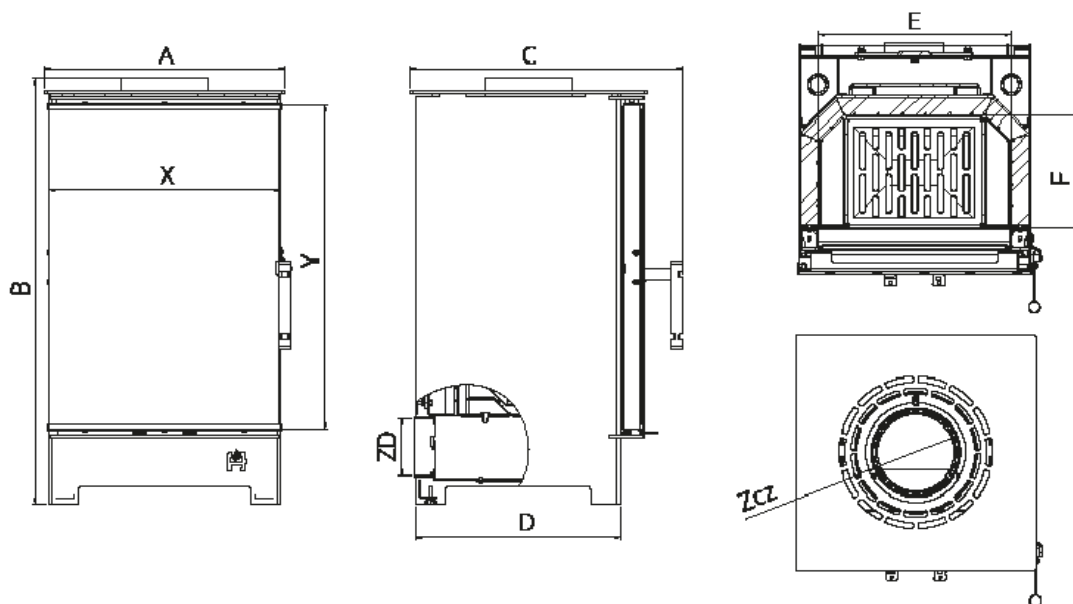


Fig. 2 LYNX stove

Dimensions [mm].		LYNX S	LYNX B
Width	A	407	453
Height	B	720	760
Overall depth	C	465	506
Body depth	D	346	433
Width of the hearth	E	326	326
Depth of the hearth	F	190	190
Air intake diameter	Zd	100	100
Flue diameter	Zcz	150	150
Glass width	X	390	365
Glass height	Y	545	515

Tab 2 LYNX furnace dimensions

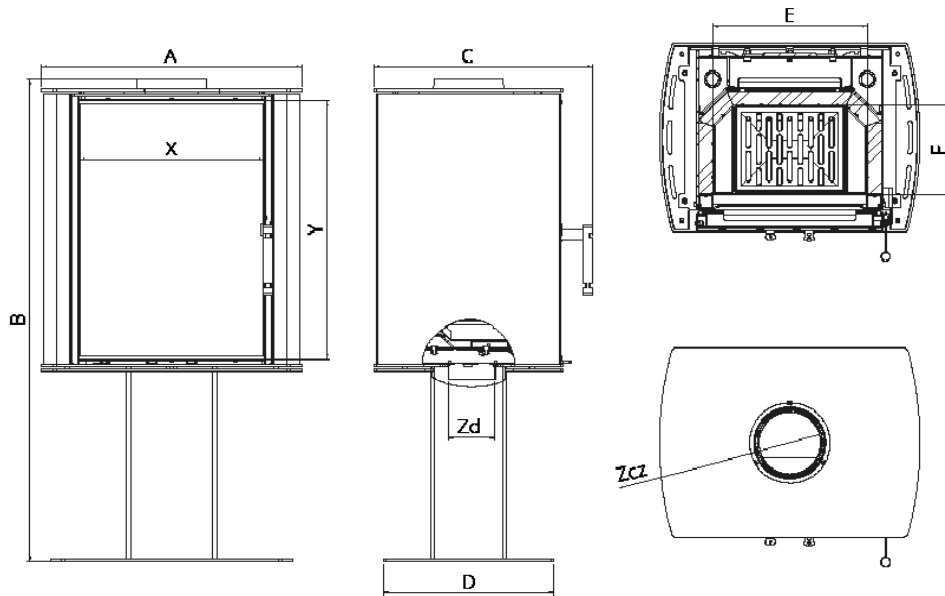


Fig. 3 CANE furnace dimensions

Dimensions [mm].		CANE S	CANE SF
Width	A	550	550
Height	B	1020	1020
Overall depth	C	465	465
Body depth	D	400	360
Width of the hearth	E	326	326
Depth of the hearth	F	190	190
Air intake diameter	Zd	100	100
Flue diameter	Zcz	150	150
Glass width	X	390	390
Glass height	Y	545	545

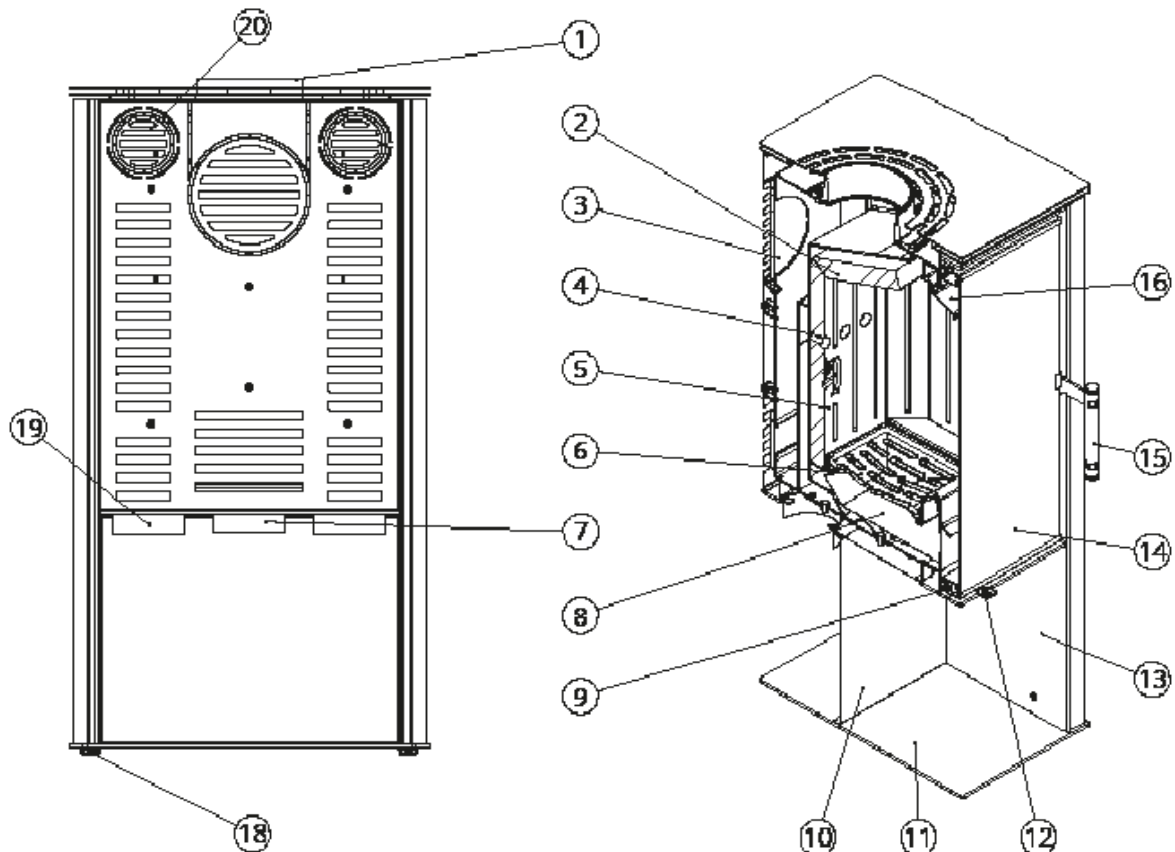
Tab 3 CANE furnace dimensions

Technical data:

parameter s	unit	LUPO S, CANE S, CANE SF LYNX S, LYNX B	LUPO M	LUPO L
Nominal power	kW	6,5	8,8	11
Heating load range	kW	3-8,5	4,5-11,5	5,5-14
Maximum fuel loading weight	kg	1,5	2	2,5
Average fuel consumption	kg/h	1,9	2,6	3,3
Thermal efficiency	%	83,5	83	82
CO emissions (at 13% O ₂)	g/m³	1,08	1,001	0,921
Pollen emissions (at 13% O ₂)	g/m³	0,038	0,033	0,028
Average flue gas temperature	°C	239	235	230
Dimensions of the glass in the fireplace	mm	390x540	540x540	880x540
Maximum length of billets	mm	350	400	400
Weight	kg	112	140	194
Fuel type	Recommended seasoned hardwood (beech, birch, hornbeam)			
Fuel moisture content	between 12 and 20%			

Tab 4 | Technical data

1.6. Construction and operation of furnace



- | | | |
|---|---|------------------------------|
| 1. flue | 8. ashtray | 14. flank |
| 2. deflector | 9. doors made of a special profile | 15. decor glass |
| 3. flue cap | 10. backplate | 16. handle |
| 4. flue gas afterburning system | 11. baseplate | 17. air curtain |
| 5. combustion chamber with insert ceramic | 12. adjustment lever secondary air damper | 18. leveling screws |
| 6. cast iron grate | 13. throttle control lever primary air | 19. connection of DGP system |
| 7. air intake | | 20. connection of DGP system |

Fig. 4 Construction of the furnace

Construction:

The stove is made of boiler steel grade P256GH with a thickness of 3 mm. The interior of the combustion chamber is lined with a ceramic insert that maintains heat 5. The design allows the flue gases to be routed out through either the upper or rear wall of the stove. The air intake 7 has a diameter of 100mm, the flue 1 150mm. The stove is adapted for use with a hot air distribution system (DGP) 18,19. The front of the stove consists of a steel door made of a special profile 9 and profiled sheet metal, heat-resistant glass 15, and a handle 16, which, thanks to its special design, remains cool while burning. The door is bolted to slats attached to the body of the stove.

Activity Description:

The air enters the stove through the inlet grille 7. Inside there are two air intake systems - primary and secondary. Adjustment of the amount of incoming primary air is carried out through the right adjustment lever located on the front of the stove under the door 13. The air then flows around the ash pan 8 and enters the combustion chamber 5 through the grate 6.

The amount of secondary air is regulated by the left lever 12 on the front of the stove. The air is directed to the upper part of combustion chamber 4 to postcombust the flue gases, which improves thermal efficiency and reduces the amount of pollutants. The air volume is adjusted by pulling the lever to open the air supply, and pulling it in to close the air supply.

The stove is also equipped with an air curtain 17 to help keep the glass clean. Above the combustion chamber is a special ceramic plate called deflector 2, which enhances heat exchange. During combustion, the hot gases flow around the deflector and then go up the chimney through the flue 1 and ducts. The environment around the stove is heated in two ways - the air surrounding the insert is heated (convection) and escapes through ventilation slots located in the stove housing. In addition, heat radiates directly from all the hot parts of the stove.

2. TRANSPORTATION, ASSEMBLY, INSTALLATION OF THE STOVE

The device complies with PN-EN 13229:2002 and is CE certified.

Before assembling, installing and operating the freestanding stove, carefully read the following Operating and Installation Manual and follow the guidelines contained therein. This will ensure safe and efficient operation of the stove. Failure to comply with these Operating and Installation Instructions may result in the loss of warranty and may expose the user to danger to health or life.

When assembling, installing and operating, national and local regulations and standards must be observed:

- Regulation of the Minister of Infrastructure dated 12.04.2002. Dz.U.Nr75, poz. 690 with amendments dated 07.05.2004.
r. Dz.U.Nr109, item 1156;
- Standard PN - B - 03406 :1994 Heating. Calculation heat demand;
- Standard PN - 89 / B - 10425 Smoke, flue and ventilation ducts made of brick;
- Standard PN - 78 / B - 03421.Ventilation and air conditioning. Design parameters of indoor air;
- Standard PN-EN 13229:2002 "Fireplace inserts including open fireplaces for solid fuels. Requirements and tests".

It is required that the installation of the stove be carried out by a qualified person or company and technical acceptance by a master chimney sweep and fire prevention specialist.

The order of execution of the work on the installation of the stove:

- Preparation of the place where the stove is to stand, checking the load-bearing capacity of the ground
- Connecting the stove to the chimney and making a supply;
- Using the furnace and observing for defects and irregularities (about 2 weeks).

2.1. Transport and handling

- The stove is delivered assembled, attached to a pallet and wrapped in stretch film;
- transportation of the furnace should be done in an upright position;
- After unpacking, check the stove for transport damage;
- Unpack the stove near the installation site; when moving (preferably with a cart), be careful (pay attention to the door and glass);
- furnace packaging materials are not toxic or harmful; their recycling or storage should be handled by the User;
- in order to relieve the burden on the stove, in case of installation in a hard-to-reach place, the ceramic inserts (covering the hearth) can be removed; after installation, each component must be correctly put back in place.

2.2. Assembly

The design of the furnace allows 2 configurations. The flue can be on the back wall or the top wall.

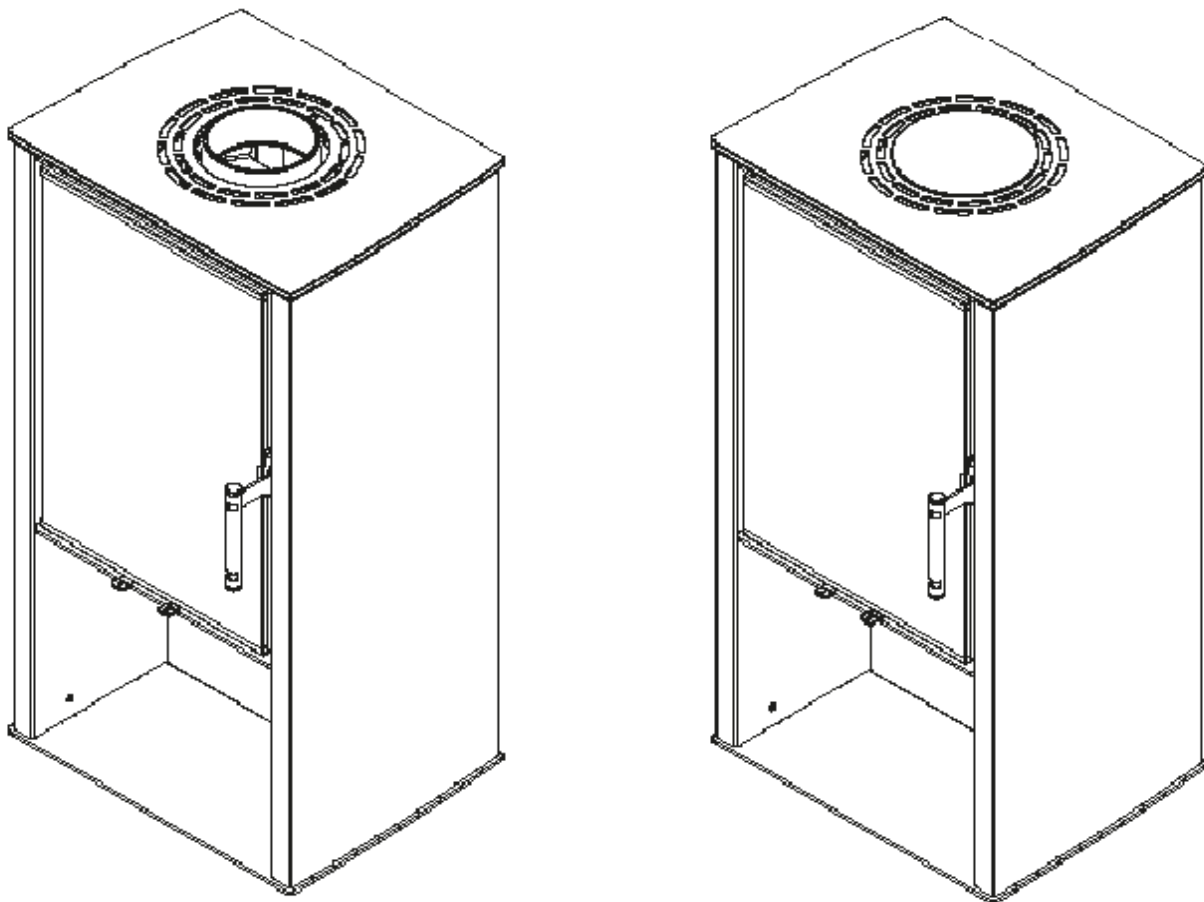
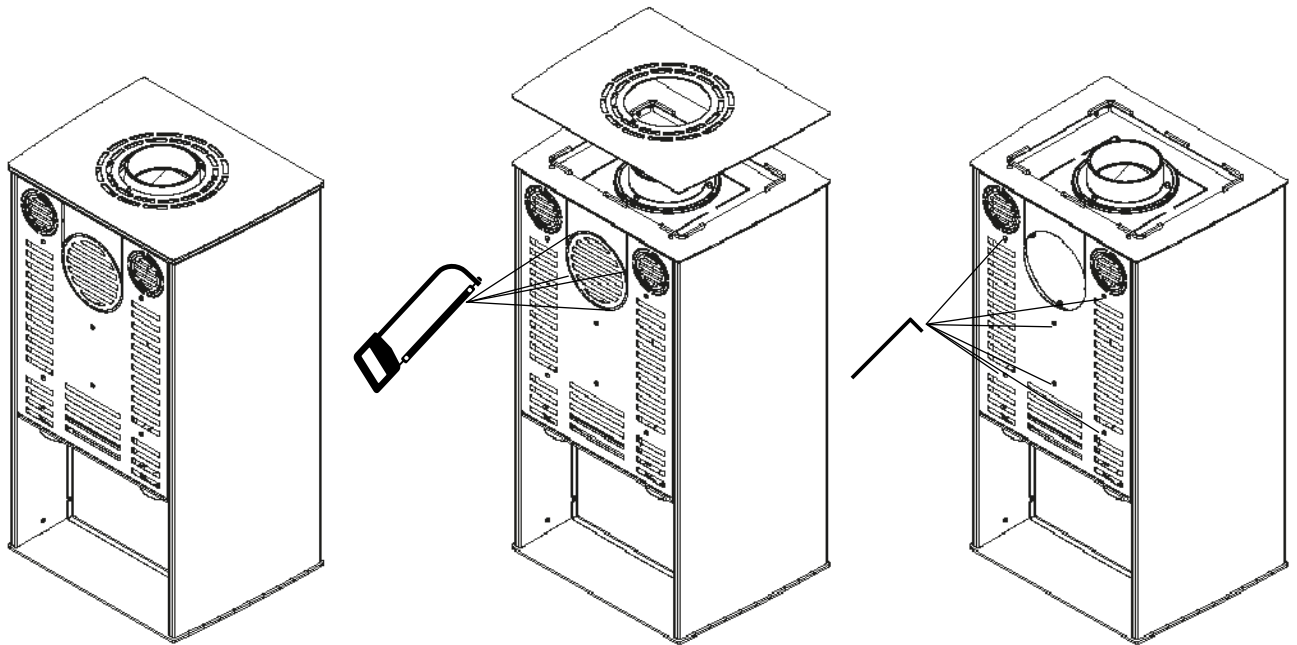


Fig. 5 Furnace configuration

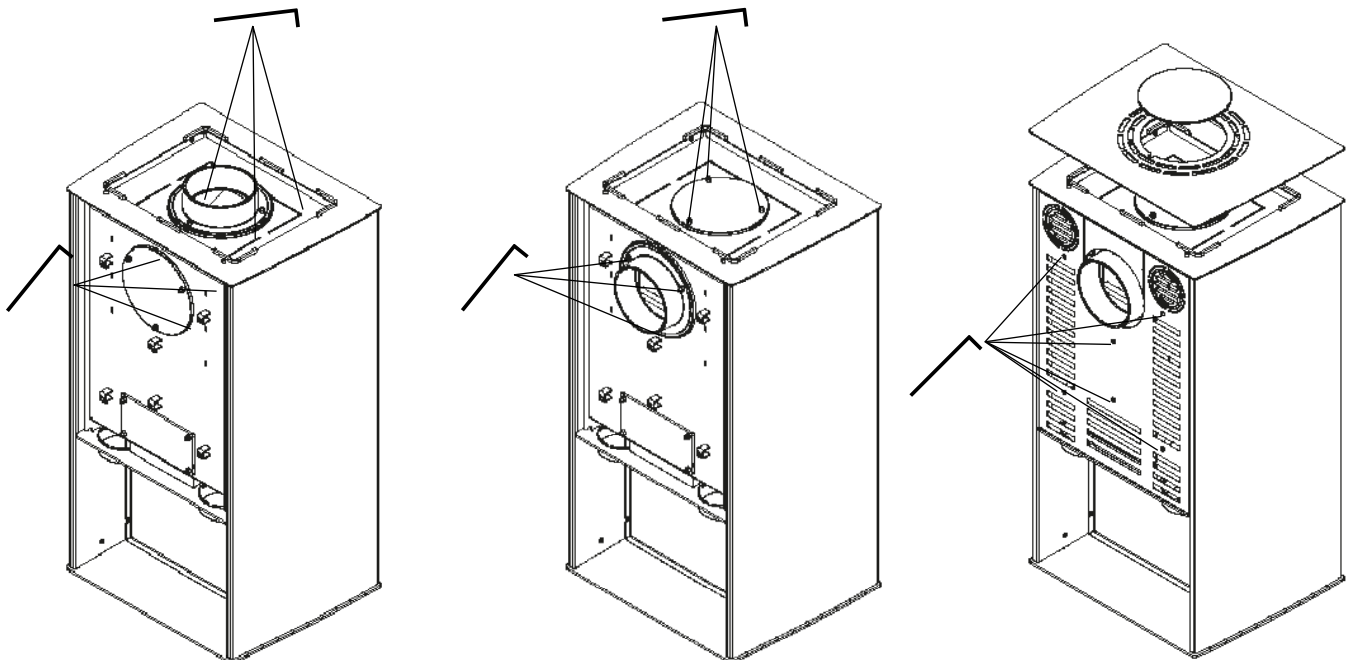
The operation of transferring the flue from the top plate to the back wall is shown in the figure.



1. A view of the furnace in its factory configuration,

2. Remove the top cover, cut a hole in the back plate with a hacksaw, or cut a hole with pliers for the stub,

3. Using an allen wrench, unscrew the back plate,



4. using an allen key, unscrew the stub and cap
In the back wall of the stove,

5. Reposition the stub and the cap to the correct places,
fasten with screws,

6. Screw the rear wall, put the top cover in place together with the cooktop.

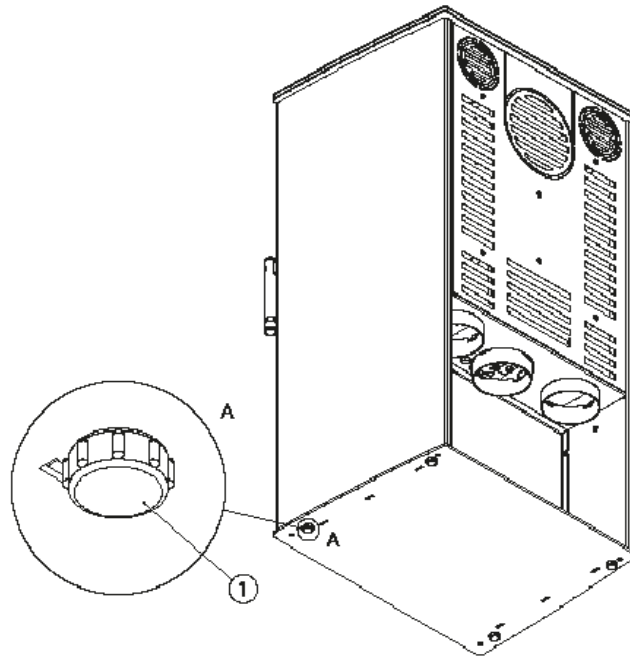


Fig. 7 Tightening the

2.3. Recommendations for substrates:

- Before installing the stove, check the load-bearing capacity of the floor (whether it meets the load-bearing conditions for the type of device depending on its weight);
- The floor must be made of non-flammable material with a minimum thickness of 30 cm, with a strip of space in front of the oven door with a width of at least 60 cm and extending beyond the edges of the door a minimum of 30 cm.

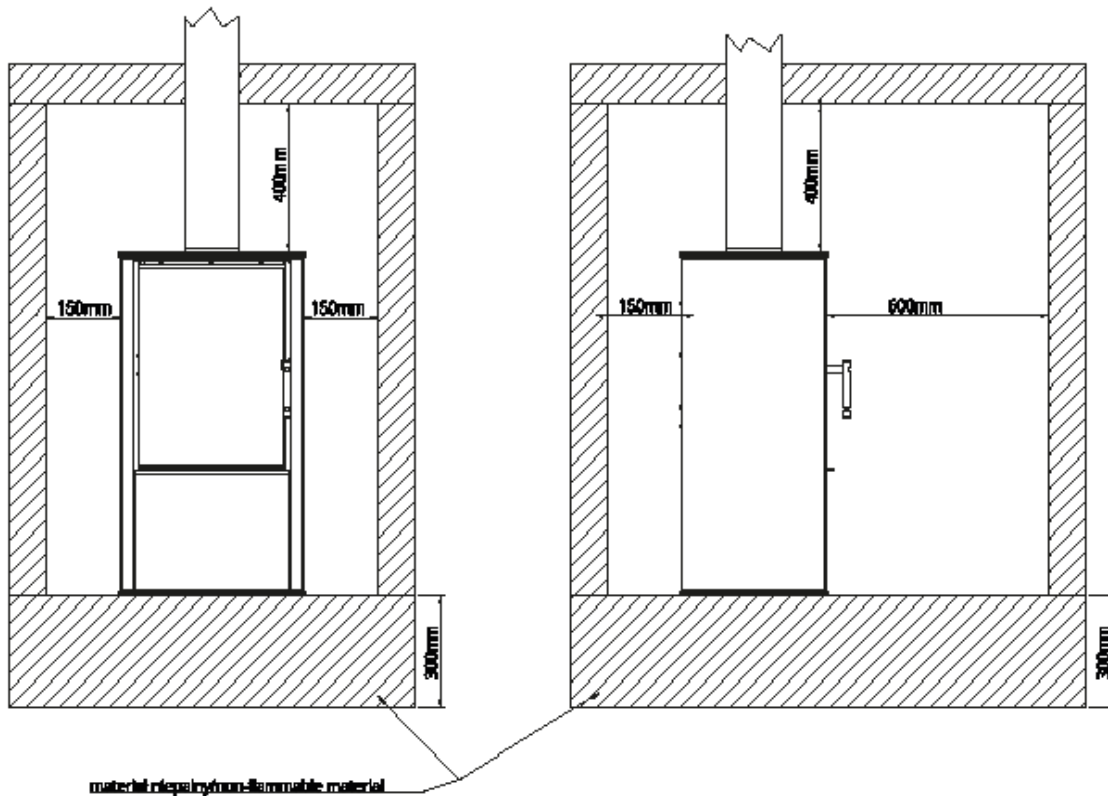


Fig. 8 Recommendations for substrate and

2.4. Duct chimney

The stove requires the proper selection of the cross-section of the flue (flue duct) and the proper height of the flue pipe.

The cross-sectional area of the flue and smoke duct is determined according to the formula:

$$F = \frac{0.003 \times Q}{\sqrt{h}} \quad [m^2]$$

Where:

F - cross-sectional area of the flue and flue pipe [m²]; Q - rated thermal power of the insert [kW];

h - chimney height [m].

According to current regulations, the flue must not be smaller than 14x14 cm, or its diameter must be at least 15 cm. More powerful fireplaces require a larger cross-section of the flue. The cross section also depends on the height of the chimney.

The stove must be connected to a flue or riser pipe according to the applicable standards of the country.

The size of the chimney draught should be:

- minimum draught - 6 ± 2 Pa;
- **AVERAGE, RECOMMENDED DRAINAGE** - 12 ± 2 Pa;
- maximum draught - 15 ± 2 Pa.

NOTES:

To ensure proper operation of the stove, it is necessary to ensure the right draught of the chimney at the smoke stub:

- Inadequate chimney draught causes poor functioning of the stove, excessive burial of the glass and excessive pollution of the flue gas routes; the total thermal output of the stove is reduced (the flue gas may penetrate into the room);
- A draught that is too strong can contribute to excessive combustion, high fuel consumption and lead to permanent damage to the stove.

Regular inspection of the chimney by a chimney sweep is recommended.

2.5. Connection to the flue:

- Before installing the stove, it is necessary to perform an expert examination and selection of the flue in terms of its technical parameters and technical condition;
- Installation of the stove can be made after a positive result of the chimney expert's report on the smoke duct.

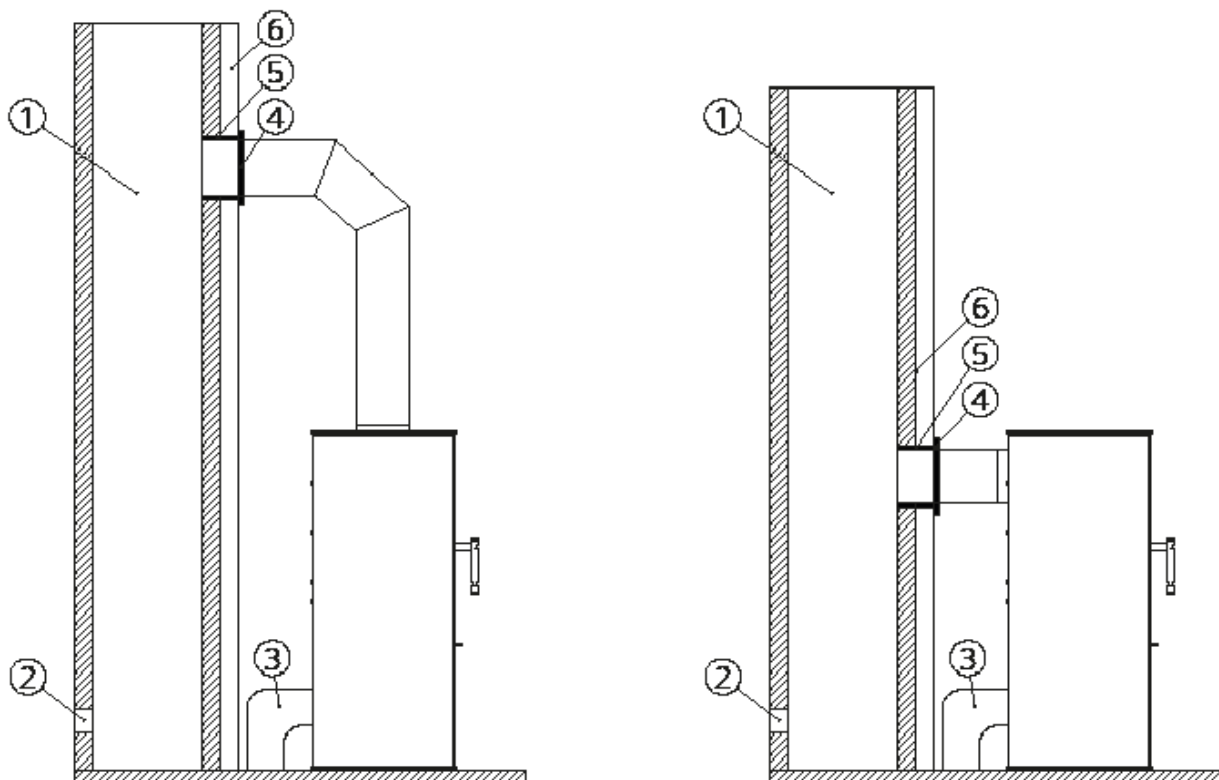
The flue must comply with the standard in force in the country or European standards.

In accordance with the supplied Operation and Installation Manual, embed and connect the stove to the chimney (including the installation of shielding sheets - if used and the insulation of the flue).

The manufacturer **does not recommend** assembly and installation of the device on its own. In order to ensure proper and safe start-up of the installation and fulfillment of the warranty conditions, the assembly and start-up of the device should be commissioned to a person or company with the appropriate installation authorization. The installer is obliged to confirm in the Warranty Card (entry and stamp) the fact that the installation was performed in accordance with the art and applicable legal regulations. Failure to do so will result in loss of the manufacturer's warranty.

2.6. The flue pipe system should meet the following characteristics:

- the cross-section of the flue pipe must not be smaller than the cross-section of the flue pipe and must not narrow towards the chimney (transitions can be used to increase the diameter from the flue pipe to the chimney);
- The flue pipe should have the shortest possible path and as few bends as possible (increase flow resistance, avoid condensation buildup);
- The stove must not be connected to a common flue with another heating appliance;
- It is recommended to connect the stove to a stand-alone flue;
- the flue pipe must not have more than two slopes of 45° up to a pipe height of 5m and 20° at a pipe height of more than 5m;
- The flue pipe must be made of non-combustible materials and thermally insulated;
- The flue insulation should have a fire resistance of at least 60 minutes;
- After the exit from the flue, use a straight section of pipe with a length of at least double the diameter of the furnace flue;
- The joint should be made tight;
- The end of the chimney should allow for trouble-free exhaust and be at least 60 cm above the highest point of the roof;
- joints must be made of stainless steel 1.4401 (316), heat-resistant or fireplace steel properly painted with a special paint and with the appropriate thickness of sheet metal (heat-resistant and stainless steel thickness of 1 mm and fireplace steel thickness of 2 mm) - the material should be characterized by resistance to high temperature, acidity of flue gases and condensate.



1. flue,
2. EXCLUSIVE,
3. Air intake from outside,

4. rosette,
5. sealing mortar,
6. non-flammable material.

Fig. 9 Diagram of the connection of the stove to the flue pipe

2.7. Recommendations for connecting the air intake and how to ventilate the cartridge:

- It is necessary to bring in fresh air from outside by unsealing the windows so that there is a constant supply of air. Too little fresh air from the outside can cause poor combustion (production of carbon monoxide), and in the worst case, with tightly closed windows, these windows can backfire with carbon monoxide air through the ventilation ducts and there may be a risk of fume poisoning;
- The design of the stove allows fresh air to be brought in from the outside (a pipe with a diameter of 100mm is used). The pipe can be brought out from the wall behind the back of the stove or, after breaking the plate from the bottom of the stove. It is also possible to supply air directly from the room in which the stove is located, with adequate ventilation secured against spontaneous closure of the air supply.
- It is assumed that the amount of air required to burn 1kg of wood is about 8 m³;
- when using an air distribution system to other rooms, in order to circulate air freely, it is necessary to ensure that the cooled air is returned to the room where the furnace is installed (otherwise the furnace cycle may be disrupted and the thermal air distribution process may be prevented);
- When determining the location and installation of the device, pay attention to the principles of proper air circulation and air balance in the room;
- Ventilation must be provided in the room where the Stove is installed;
- to ensure adequate convection space (cooling of the furnace, heating of the air), the furnace should be placed at least 80 cm from materials that could be distorted or damaged by high temperatures (furniture, paneling, wallpaper, etc.).

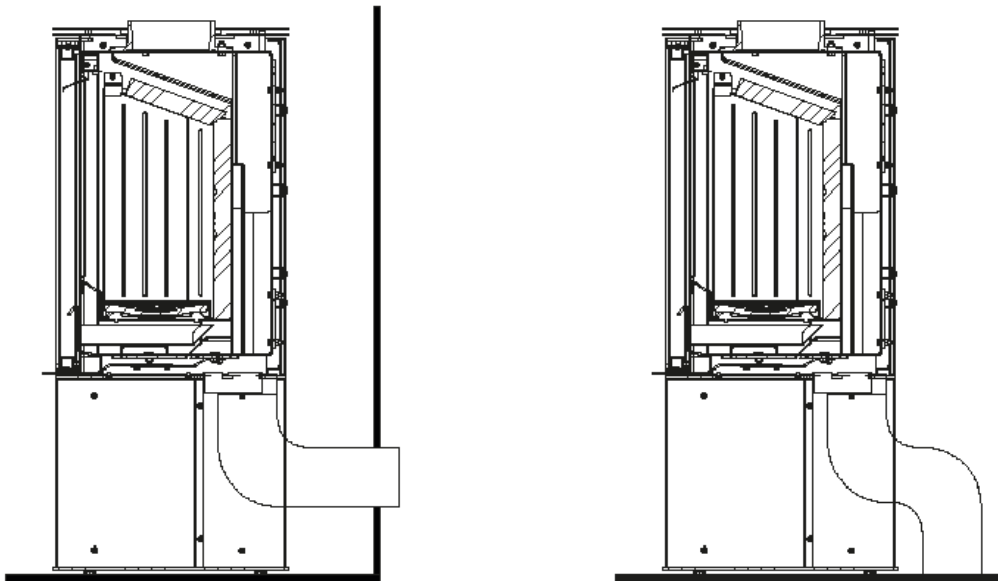


Fig. 10 Air intake connection diagram

NOTE!

- the best way to ensure the right amount of air to the stove is to supply it through a special supply duct directly from outside the building located under the floor
- It is also possible to connect the stove to the intake located in the wall of the building located in the fireplace housing using fireproof pipes;
- when using close inlet to the cartridge, we recommend turning off the pipe under the stove before plugging it into the air intake, so that the cold air has time to warm up before entering the combustion chamber;
- it is essential to ensure that cold air from outside does not lead to condensation of warmer air on and in the air intake pipe or furnace, which can cause increased moisture in the furnace chamber. This can lead to rapid corrosion of the stove;
- To prevent this phenomenon, we can make the connection of the stove under a slight slope to the outside, insulate the air inlet pipe and use an additional damper to close the air inlet when the fireplace insert is not in use;
- If the draught is too strong to regulate combustion, an additional damper should be used to further protect the fireplace insert from the influx of too much air into the combustion chamber when the stove is in use, or to completely shut off the air supply when not in use;

Failure to meet the above conditions can lead to malfunctioning of the furnace, corrosion or air control problems that are not subject to complaint.

2.8. Installation furnace

The device must be installed in accordance with applicable building code standards.

Installation and installation of the stove must be done by qualified professionals.

- The stove must be set at a safe distance from any flammable products (it may be necessary to protect the walls surrounding the stove);
- The space in front of the stove should be protected from sparks that may fall out of the hearth when adding fuel. The minimum safe area is 60 cm in front of the stove and 30 cm to the sides from the edge of the door. The surface can be protected with natural stone, floor tiles or a dedicated glass base;
- Do not install the stove in bedrooms, bathrooms and rooms where there is another heating appliance without an independent air supply;
- The stove is a unified structure and does not require additional supports;
- Height adjustment (leveling) of the stove is made possible by the feet (can be unscrewed up to 20 mm);
- If you need to raise the stove above the adjustment of the feet, make a masonry base and place the device on it (do not remove the feet needed for leveling);
- Lack of proper leveling will prevent the door from working properly (it will not close properly);

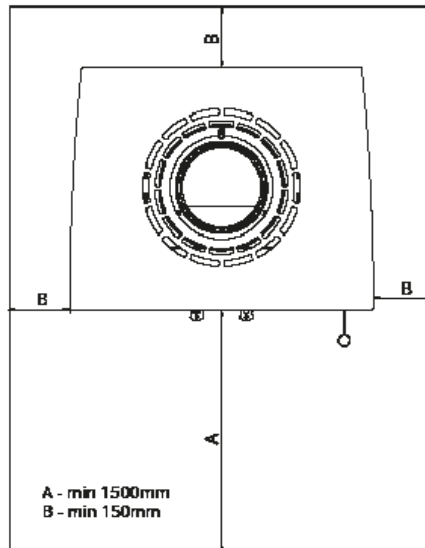


Fig. 11 Safe zone for flammable materials

2.9. Connecting a hot air distribution system (DGP)

The hot air distribution system (DGP) allows you to use the convection heat generated by the stove to heat other rooms. Depending on the power of the device and installation conditions, different solutions are used. The choice of the right one should be entrusted to a person or company with experience in this field. In small single-story houses, a simple gravity system works well. In larger areas it is sometimes necessary to use blowers in the system to force air circulation.

Free-standing stoves allow the DGP system to be connected to the stove in two ways: from above (LUPO, CANE, LYNX) or from below (LUPO, CANE). When installing from the top, it is necessary to cut out parts of the rear cover in the places marked on the drawing. Unobstructed air flow is gained. When installing the pipes from below, it is required to use a blower in the system to extract the heated air. Installation of pipes is carried out through special couplings with a diameter of 100mm. Cutouts allow mounting to thin or thick sheet metal.

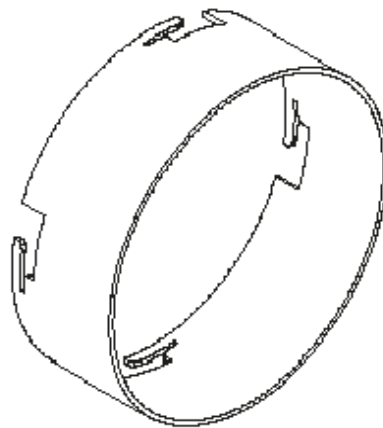


Fig. 12 Mounting connector with a diameter of 100mm

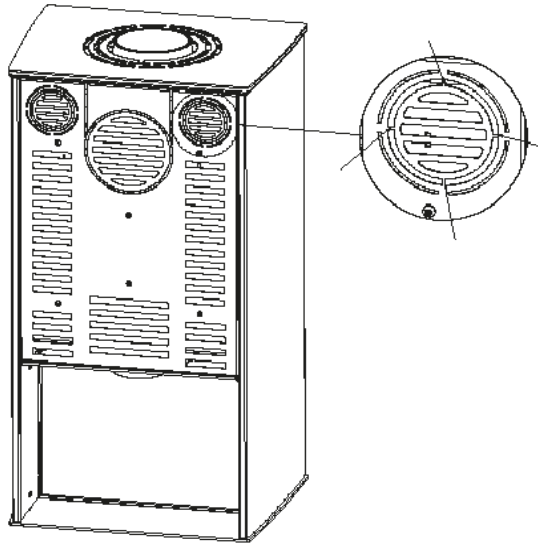


Fig. 13 Arrows indicate cutting locations before fitting connectors when connected from above

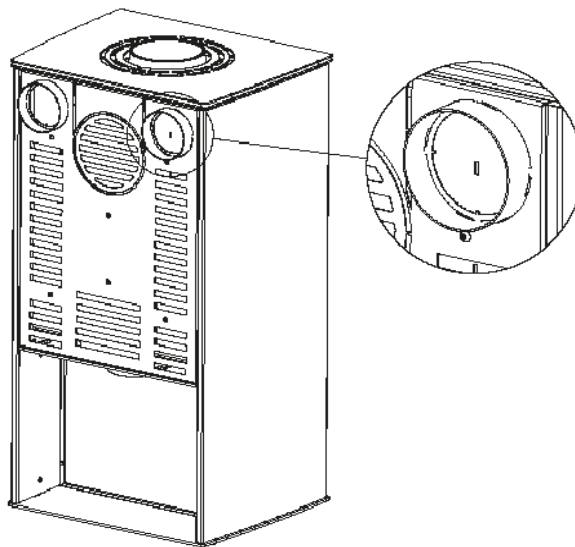


Fig. 14 Properly installed connectors when connected from the top of the stove

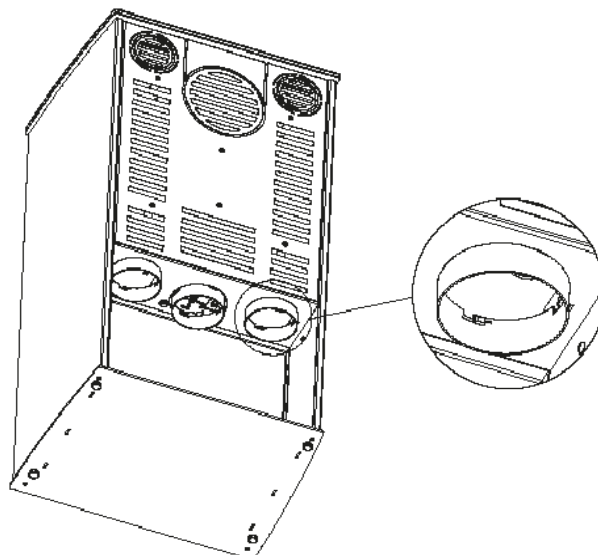


Fig. 15 Properly installed connectors when connected from the bottom of the stove

On the properly installed connectors are placed pipes that carry the heated air to other rooms. For proper operation of the system, it is necessary to ensure the return of cool air to the room in which the stove is located.

3. STARTING UP

The first start-up after the stove is set and properly connected to the chimney must be carried out by an installer or authorized service technician. The user should participate in the commissioning in order to be trained by the actuator. The commissioning officer is obliged to refuse to put the stove into operation, if he detects irregularities in the installation that threaten the safety of the User. Correct commissioning should be confirmed in writing in the Warranty Card.

3.1. Prepare for launch

Before firing up for the first time, you should:

- remove any stickers and other paper stickers and accessories from the body of the mantle, ash pan or pan that could be the cause of a fire, this also applies to transport protection;
- Check the proper seating of: deflector(s), ceramic fittings, grate, and whether they have not fallen out of their correct position during installation (If any defect in seating is found, correct it. Otherwise, the stove may malfunction. In the types of cartridges where a multi-part glass is used in the door, check that the individual parts of the glass have not become unsealed during transport or use of the stove);
- check operation:
 - mechanism for regulating the air supply to the combustion chamber (cold air intake dampers);
 - The mechanism of operation of the front door closure (hinges, handle);

3.2. Firing up stove

Before firing up the stove, you should:

- in the hearth first put the thicker logs, then the smaller wood, and finally the small pieces (sub-stick) - light with fireplace matches or a lighter;
- Open the primary air regulator to the maximum, and the secondary air regulator to the minimum;
- **After firing up, the stove door must be closed;**
- When the fuel is properly ignited, use the air regulators to set a calm, rather damped combustion (this results in only a small part of the primary air being fed under the stove grate; the secondary air damper to max - a larger amount of air is fed to the air curtain system, which protects the glass from sooting and to the gas afterburning system at the front of the insert; opening the air damper to 100% - maximum to itself, results in very intensive combustion of the fuel);
- It is recommended in the final stage of burning, to open the door and burn the remaining embers on the grate with a poker to better burn the fuel;

NOTES:

Since a large amount of air is fed under the grate and into the air curtain and flue gas afterburning system, too much fuel in the combustion chamber results in the production of a large amount of wood gas, which results in the momentary burning of the glass.

Moving the throttle to the right as far as possible, the air supply to the combustion chamber is completely cut off, resulting in the gradual extinguishing of the furnace.

If necessary, the grate is unclogged with a poker.

During the first hours of operation, it is recommended to operate the furnace at a low load, i.e. up to 50% of the normal load.

The first firing may be accompanied by condensation of water on the inner walls of the combustion chamber. This phenomenon is normal and is due to condensation of water vapor contained in the flue gases. It should cease after the chamber has warmed up.

If flue gas is escaping from the stove chamber, adjust the flue gas damper setting and increase the chimney draft.

Before the next kindling, the hearth should be cleaned of ash residue.

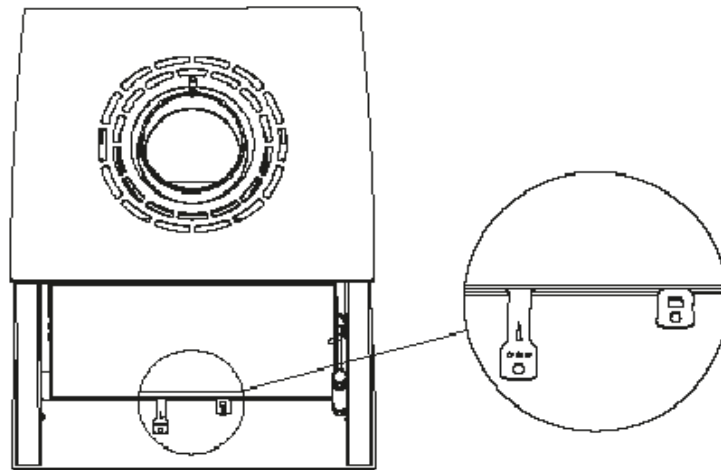


Fig. 16 Operation of the throttle - pressed in - air supply closed, pulled out - air supply open

4. USE

The surface of the stove is covered with a special heat-resistant paint, which, when the stove is fired up, first gets soft (be careful not to scratch it then) and then hardens. This process during the first few burnings can cause an unpleasant smell. The manufacturer then recommends intensive ventilation of the room. If there are pets or birds in the room, move them this- temporarily to another place. During the first burnings (for about 2 weeks), the manufacturer of the stove, recommends keeping the flame small and burning less fuel at a lower temperature. This method of burning is intended to prevent cracks in the ceramic lining, deformation of the structure, and damage to the protective coating (paint) of the stove.

4.1. Types of fuel

Due to the design of our equipment, the recommended fuel that should be used is hardwoods such as oak, hornbeam, ash, beech, birch. **We especially recommend birch.** The best fuel is seasoned wood (at least 2 years in an airy and dry place), in cut and split logs. We discourage the use of coniferous wood. Fresh wood or poorly dried wood is not a good fuel, as it has limited energy properties. Burning improperly dried wood can lead to higher emissions of creosote settling in the flue, which can lead to a chimney fire, overheating of the stove and cracking of the glass.

NOTES:

It is forbidden to burn waste fuels, flammable liquids and other fuels not recommended by the stove manufacturer.

The manufacturer strictly prohibits the use of coal, tropical tree wood, all kinds of products containing chemical compounds such as gasoline, alcohol, naphthalene, oil, od- pads and laminated boards containing adhesives, varnishes, etc. as fuel for the stove.

4.2. Accuracy fuel:

- The fuel is replenished when the flames disappear above the layer of embers in the firebox; it is best to rake the embers into a "pyramid shape" on the grate (on both sides in order to bring enough air from under the grate for the flame to appear) and add the wood chunks;
- do not pile embers on the grate in one plane, as this significantly reduces the air supply under the grate, and the formation of too much gas in the combustion chamber, resulting in gasification of the stove and the possibility of explosion;

- Wood billets in the combustion chamber should be laid parallel to the plane of the door.
- Before loading a fresh batch of fuel into the furnace, the grate should be ashed when necessary to empty the ash container.

4.3. Preventing fumes from escaping

In order to prevent the escape of fumes from the stove into the room when opening the door-check is recommended:

- Approximately 10 seconds before opening the door, fully open the primary air regulator (throttle lever moved to the left as much as possible);
- Slightly open the door and, after waiting a few seconds (the time needed to extract the fumes), slowly open the stove door;
- When opening the door and after opening the door, be very careful because flared pieces of fuel may fall out of the firebox;
- After adding the correct amount of fuel, close the fireplace door;
- After firing up the fuel, set the air regulator to the original position;
- The optimal amount of fuel is given in the table.

NOTES:

The manufacturer of the stove warns against overloading the stove with fuel. Overloading risks permanent damage to the structure of the device.

4.4. Clean glass

Keeping the glass clean, in addition to using the right fuel, is influenced by:

- To supply an adequate amount of combustion air;
- optimal chimney draft;
- how to operate the oven;
- Using fuel with a moisture content of less than 20%.

In order to keep the glass clean, it is recommended to add the recommended amount of fuel so that the fuel is centrally on the grate and as far away from the glass as possible.

If the windshield is contaminated during heating, we recommend increasing the intensity of combustion by opening the air damper, as a result of which the windshield will mostly clean itself.

4.5. Operation in poorer climatic conditions and transition period ści

During the so-called transitional period or in worse climatic conditions (e.g., during fog, on humid rainy days, during strong gusty winds and when the outside temperature exceeds +15°C), the chimney draft may deteriorate, resulting in incomplete flue gas removal. To offset this adverse effect, load as little fuel as possible into the stove or additionally use draught regulators.

4.6. In case of poor draught, it is recommended to break out the plate located above the deflector of the stove.

In the upper part above the deflector there is a piece that should be broken by changing the position of the sheet metal upside down until it is completely broken to provide better draught.

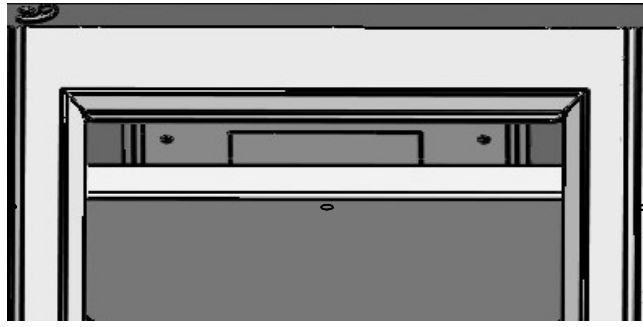


Fig. 17 Plate view

It is held on 2mm sheet metal on the left and right sides

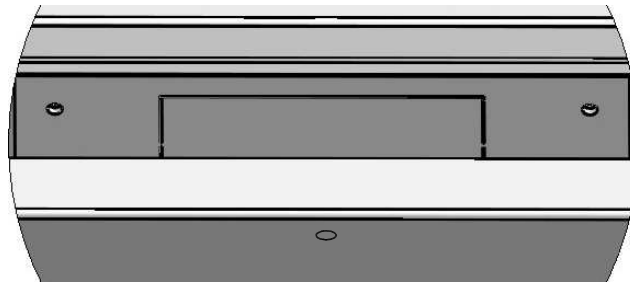


Fig. 18 Method 1 plate removal

The following are ways to break it out.

METHOD 1. The easiest way is to break it out from the top if it is possible to provide access through the flue

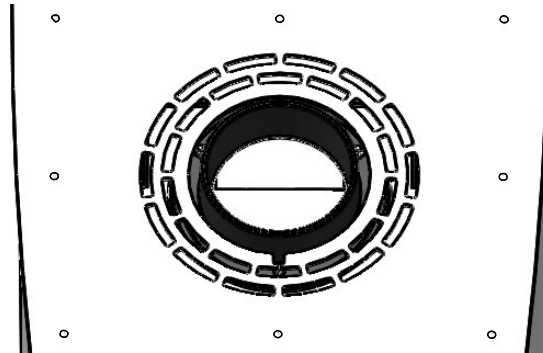


Fig. 19 Method 2 plate removal

METHOD 2 (for LUPO M and L only). Spread the deflectors to the sides. This gives us a gap in the middle so that we can maneuver the plate to break out. Preferably using a flathead screwdriver

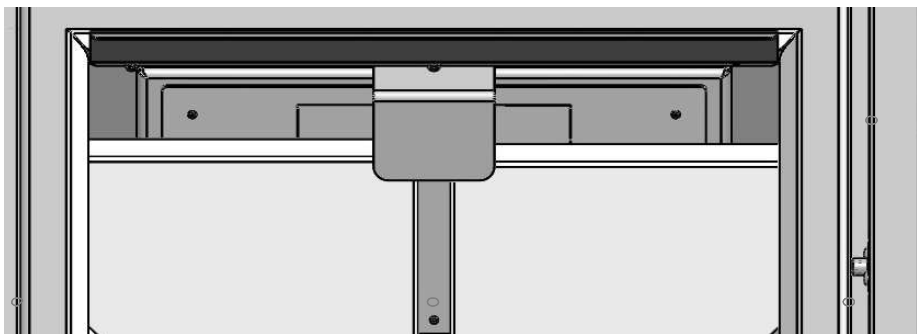


Fig. 20 Method 3 plate removal

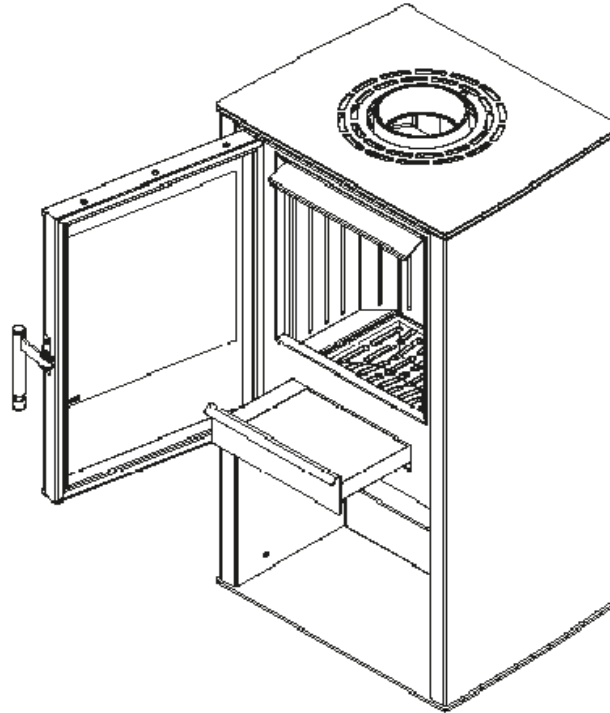
METHOD 3. Another method is to take out some of the concretes. The method of taking out the concretes is described in section

5.2 Cleaning the chimney

4.7. Ash removal

Depending on the amount and grade of fuel to be burned:

- Using a poker, scrape the ashes through the grate into the ash pan;
- After scraping the ashes, remove the ash pan and empty it;
- The ash pan can be emptied only when it is cold, we recommend that this, activity be performed at the latest before each firing;
- Before emptying the ash pan, inspect it for glowing fuel residues that could cause a fire in the waste container.



NOTES:

The manufacturer recommends that the ash pan not be overfilled. Overfilling the ash pan leads to a restriction of the air supply under the grate, which results in a deterioration of the combustion parameters, and in extreme cases may make it impossible to fire up the stove.

If ash is left in the ash pan for too long, it can result in premature corrosion. Ash from burned wood can be used for compost or as fertilizer.

4.8. General comments

One should:

- make sure that **the door of the furnace (combustion chamber) is closed** (except when performing furnace operations);
- after any prolonged break in the operation of the stove, and before firing it up again, carry out a check on the patency and cleanliness of the flue of the chimney and furnace;
- when performing any activities related to the operation and operation of the furnace, remember that the furnace components may be high temperature, therefore, **protective gloves** should be **used** for operation;
- Use only replacement parts from the stove manufacturer for any repairs;
- perform any repairs only through an installer with the appropriate authorization;
- During the operation and use of the stove, keep the rules that provide basic safety conditions.

Prohibited:

- leave near the stove glass, any, flammable and heat-sensitive items;
- Operate the device with a broken glass;
- extinguish furnaces with water;w
- **Allow children or pets into the device;**
- make any structural changes, changes in installation and use rules without written permission from the manufacturer;
- **If you find any interference with the device, immediately extinguish the stove.**

NOTES:

Emergency extinguishing of the stove is to cover the fuel with dry sand or cold ash. WATER MUST NOT BE USED!

When performing activities on a malfunctioning stove, it is also necessary to ensure intensive ventilation of the premises and the activities are assisted by a second person equipped with a powder extinguisher.

NOTES:

As a result of slow combustion, large amounts of organic combustion products are emitted, resulting in the formation of creosote in the flue that can ignite. A so-called ko- min fire then occurs, from which the entire building can catch fire.

In the event of a chimney fire, the following steps should be taken:

- **Cut off the air supply to the furnace by closing the cold air intake dampers;**
- **close the rotary shaft in the chimney installation (if the installation has one);**
- **Close the oven door tightly;**
- **notify the nearest Fire Department unit phone 112 or 998.**

5. CONSERVATION

In order to maintain safe and trouble-free operation of the device, it is necessary to observe the following guidelines:

- perform periodic, and timely maintenance - at least once a year an inspection of the furnace by a specialized service;
- keep the following properly clean: the glass, the combustion chamber including the ash pan and the flue;
- systematically empty the ash pan - ash left for a long time can lead to corrosion of the ash pan;
- Adjust the frequency of cleaning and maintenance of the combustion chamber according to the type of fuel used;
- to clean steel or cast iron components inside the furnace, use appropriate tools such as a brush, scraper, poker, using protective gloves;
- **perform all maintenance operations only on an extinguished and cooled device;**
- Clean the ceramic glass of the stove with kitchen paper (paper towel). Moisten it with water, and then use it to collect some clean ash from the inside of the furnace, avoiding direct contact with steel and cast iron elements of the device. Rubbing the glass with such prepared damp paper, we can effectively dissolve the deposits - so that it is possible to wipe them off with a dry steam towel. All agents and preparations used to clean the glass must not contain abrasive materials that cause damage (scratching) to the glass;
- a minimum of twice a year, carry out, documented in the Warranty Card, cleaning of the chimney flues by an authorized chimney sweep;
- Clean the interior of the stove, check the supply and exhaust;
- Replace all gaskets before each heating season.

5.1. Recommended periodic cleaning furnace

For efficient combustion in the furnace hearth, periodically clean the combustion chamber, grate, chimney and flue pipes.

Element	Frequency	Tools and resources
Convection surfaces of the stove and pipes connecting to the flue pipe - cleaning	As needed, but at least once a year or after a prolonged break in service	Spring material brush, ash vacuum cleaner, fireplace cleaners.
Flue pipe, chimney - check patency of chimney and condition of flue system	At least twice a year, after the heating season and an extended break in operation.	Specialist chimney sweep company
Front glass	As needed	Cooled - moistened paper towel with a bit of clean ash, without abrasives that cause damage to it
The grate and the elements inside the stove	As needed	Vacuum cleaner, fireplace cleaners.
Maintenance of the exhaust throttle lever - replacement of windshield gaskets and furnace door	At least once a year, after the heating season or as needed depending on the level of consumption	Service authorized by the producer, lubrication with a small amount of graphite grease

For thorough cleaning of the stove, the design provides for an inspection hole - a cleanout, located at the rear of the furnace. To access it, using an allen wrench, unscrew the rear cover of the stove. Details are shown in the figure.

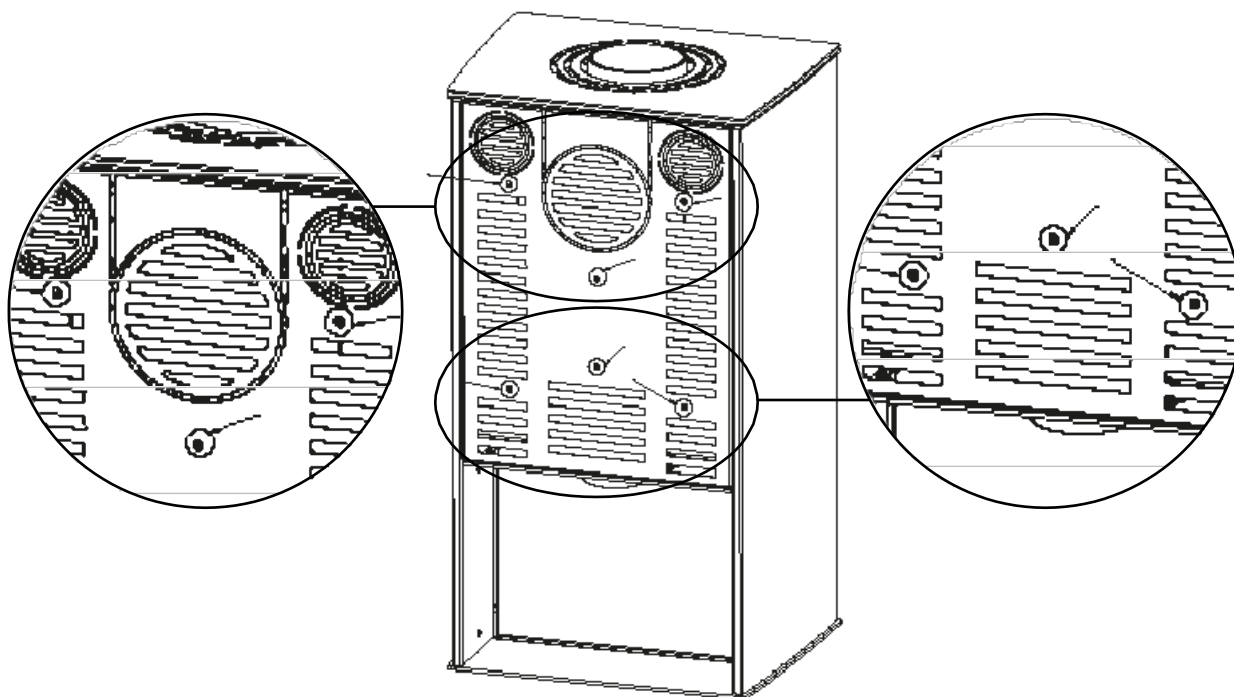


Fig. 22 Location of furnace rear cover screws

After unscrewing the cover, we will gain access to the cleanout. They are fastened with M8 nuts. For reassembly after cleaning the interior of the stove, it is recommended to use new sealing tape.

Thorough cleaning should be done once a year after the heating season, or as needed.

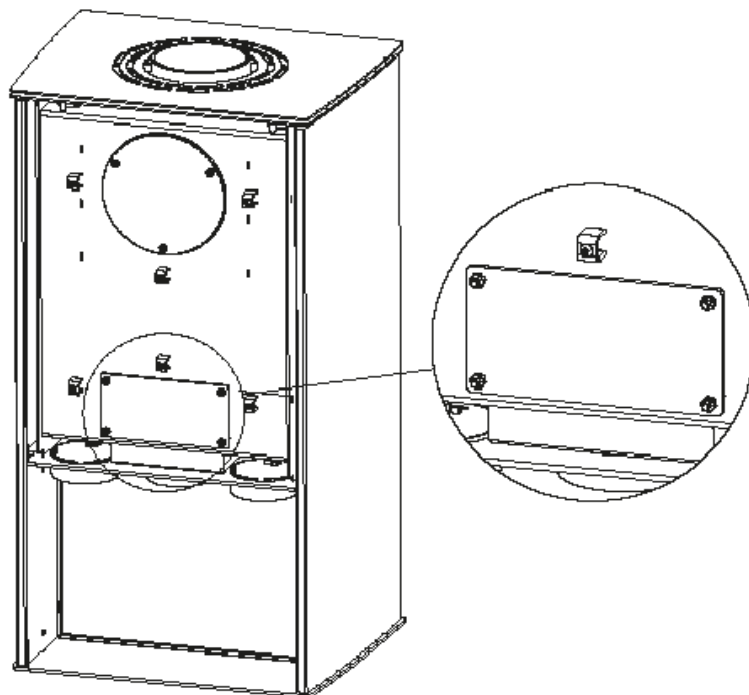


Fig. 23 | Location of the

5.2. Recommended periodic cleaning of the furnace

The stoves have an unscrewable cover over the deflector, which allows you to easily and safely check the cleanliness of the chimney and allows you to clean it if necessary. To do this, follow the steps below:

- Remove the concrete from the bottom of the cartridge.

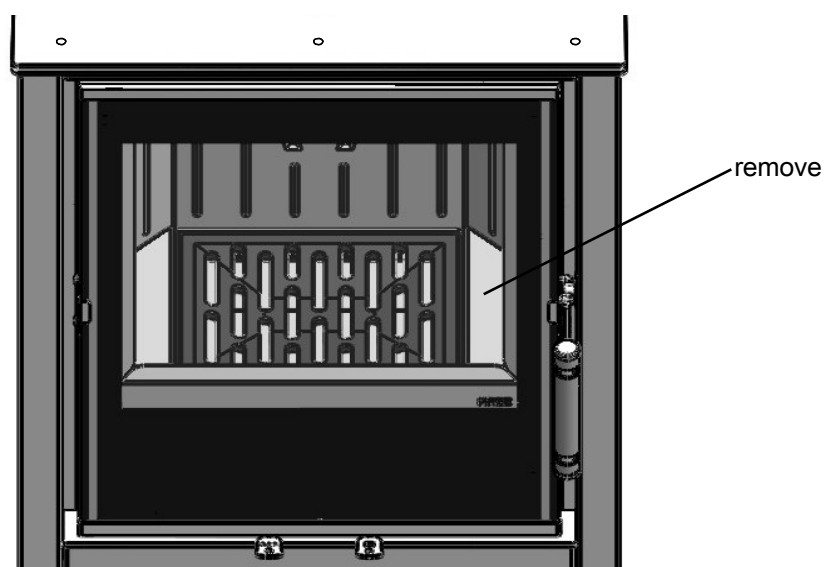


Fig. 24 | Location of concrete

- Unscrew the allen bolt M5x10, and then remove the concretes numbered 1 and 2

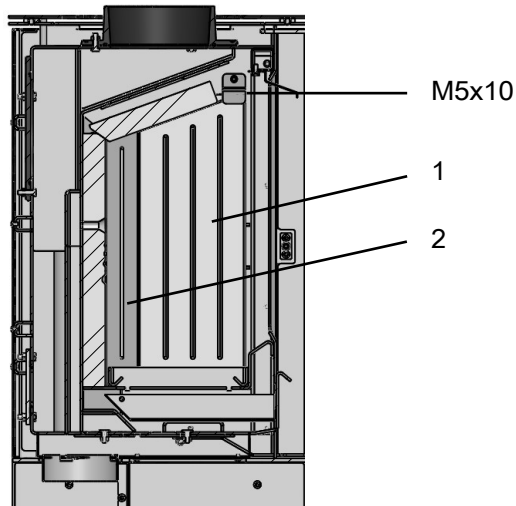


Fig. 25 Location of bolt and concretes

- We now have the option of removing the upper deflector.

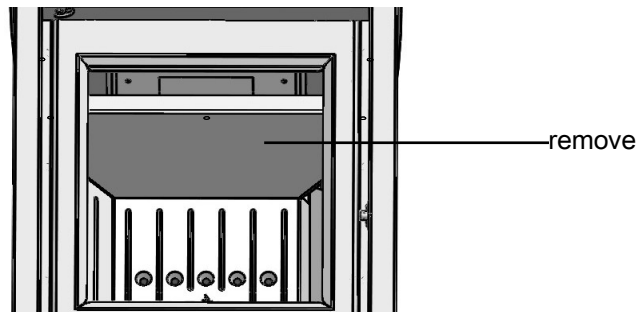


Fig. 26 Location of deflector

- Using a socket wrench, unscrew the 5 M5x10 screws.

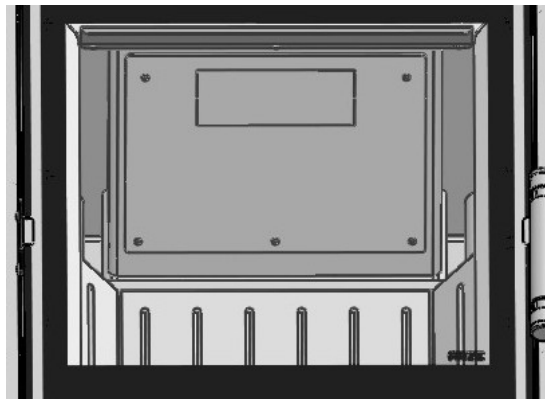


Fig. 27 Location of screws

- After unscrewing, we have access to the exhaust outlet (chimney).

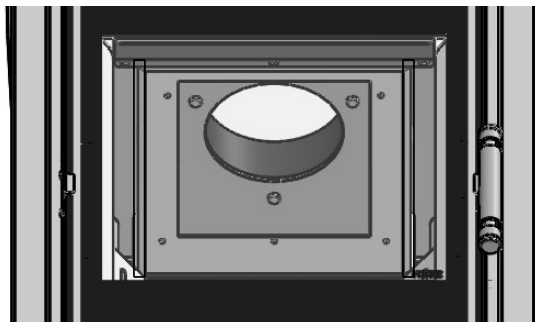


Fig. 28 View of the chimney

6. FAULTS AND IRREGULARITIES DURING OPERATION

During day-to-day operation of the stove, the malfunctions described below may become apparent, indicating that the stove was improperly installed without observing the appropriate guidelines contained in this Operating and Installation Manual and the applicable laws and regulations.

6.1. The most common abnormalities and ways

their solutions:

	Problem	Solution
Smoke backing up into the room when the stove door is opened	the door may have been opened too abruptly causing negative pressure in the combustion chamber	slow door opening
	closed adjustable chimney duct shaft (if the installation has such an option)	shaft opening
	Insufficient air supply in the room where the stove is installed	check the efficiency of the ventilation and ensure the right amount of air in the room
	atmospheric conditions	
Low productivity heating or phenomenon furnace extinction	inadequate chimney draught	check the effectiveness of the chimney installation
	insufficient fuel in the hearth	increase the amount of fuel to the required level
	fuel humidity too high	use wood with a moisture content of up to 20%
Low heating capacity with proper combustion process in the furnace	inadequate chimney draught	check the efficiency of the chimney installation
	unsuitable, low-calorie wood was used	change the species of wood burned to a more caloric one
	fuel humidity too high	use wood with a moisture content of up to 20%
Dirty glass, no self-burning windshield	used thin, fine pieces of wood that burn quickly	use to smoke other thicker glade
	too slow burning of fuel which results in low temperature in the combustion chamber	increase the amount of air in the combustion chamber, use wood with a moisture content of up to 20%
The lack of proper, correct operation of	coniferous wood with high resin content was used	change the species of wood to dry hardwoods
	tall objects too close to the chimney	increase the height of the chimney or use a "fireman" or other type of chimney cowl

the device can be caused by external factors

unsuitable atmospheric conditions, e.g., wind or lack thereof, low atmospheric pressure, high humidity, fog, etc.

use a chimney cowl, but if this does not help you should perform an expert chimney sweep to determine the source of the problem

8. CARD REVIEWS

FURNACE INSPECTION LOG	
Overview	Date, signature and stamp
Overview	Date, signature and stamp
Overview	Date, signature and stamp
Overview	Date, signature and stamp
Overview	Date, signature and stamp
Overview	Date, signature and stamp

FLUE INSPECTION REGISTER

Overview	Date, signature and stamp
Overview	Date, signature and stamp
Overview	Date, signature and stamp
Overview	Date, signature and stamp
Overview	Date, signature and stamp
Overview	Date, signature and stamp
Overview	Date, signature and stamp

HITZE

PRODUCENT KOMINKÓW



HitzeManufacturerFireplac



hitze_producer_firesplaces



HITZE Fireplace

STALKO
limited liability company limited
partnership
24/253 Solec St.
00-403 Warsaw, POLAND

Office:
Gdyńska 32
26-600 Radom
POLAND



+48 48 380 18 98
+48 800 88 00 30



info@hitze.pl

NIP 9482603545
REGON 361379132
KRS 0000836475

www.hitze.pl