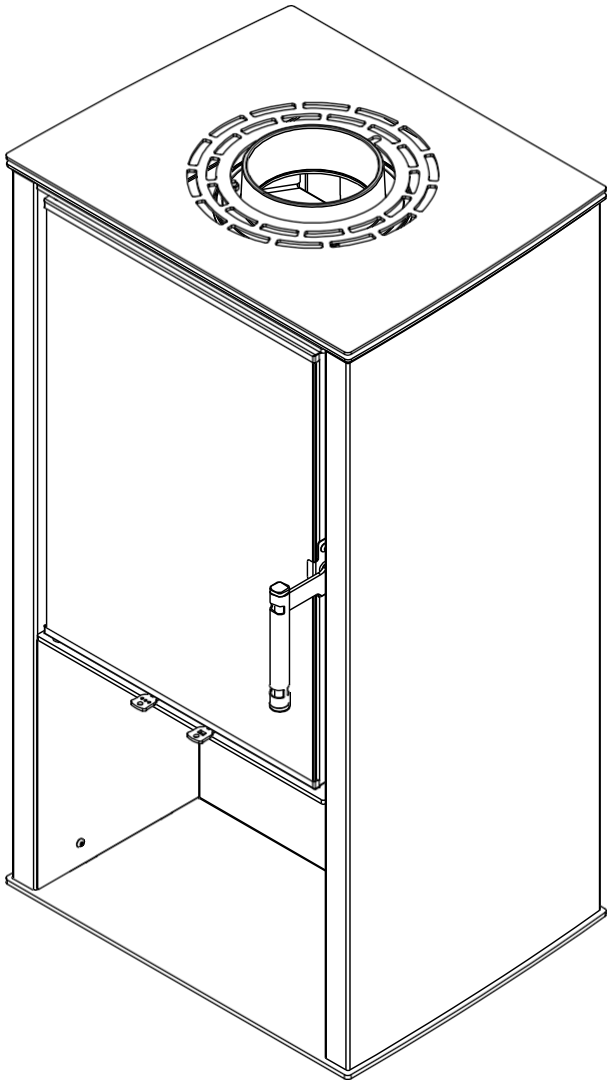
HITZE
PRODUCENT KOMINKÓW

OPERATING AND ASSEMBLY INSTRUCTIONS

Free-standing fireplace

LUPO
LYNX
CANE
ELLISSE
GATTO



In compliance with the requirements of the Ecodesign Directive within the EU Member States:
"This product cannot be used as a primary source of heating."

www.hitze.pl

Dear Customer,

Thank you for purchasing a Hitze free-standing fireplace!

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

Table of contents

1. NEWS INTRODUCTION

Warmth from Nature - these words perfectly encapsulate the Hitze brand philosophy. In line with this philosophy, we manufacture fireplaces and stoves that burn wood or wood pellets, which are the least environmentally damaging raw materials. Thanks to modern technology, we have developed innovative solutions that are characterised by their modern design and high heating efficiency.

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

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

The information contained in the Operating and Installation Instructions will ensure the correct operation of the fireplace and will help to avoid damage and accidents due to improper use.

If you have any doubts or operating problems, please contact your 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 to the drawings, photographs and descriptions, as well as to the parameters of the equipment without prior notice and at any time. It is forbidden to copy the Operating and Assembly Instructions in whole or in part without authorisation from the Manufacturer. Keep the operating and assembly instructions out of the reach of children.

In the event of destruction, loss or damage to the Operating and Installation Manual, please request a copy from the point of sale or the Manufacturer, providing the identification details of the appliance.

1.1. Information general

Security

Compliance with the following rules will enable the fireplace to operate correctly, avoiding damage and accidents caused by improper use.

1.2. To maintain the necessary safety rules :

- Before installing or maintaining the fireplace, read and understand the Operating and Installation Instructions;
- Install the fireplace in the most convenient position taking into account current building and fire regulations;
- installation, maintenance and functional testing of the system should be carried out by qualified specialists;
- use the appliance for its intended purpose;
- It is imperative that the fireplace is adequately ventilated and supplied with air at the place of installation;
- Place the clothes dryer at least 1.5 m away from the fireplace (fire hazard);
- check the permissible load on the floor (floor, ceiling) at the intended location of the fireplace (taking into account the total weight of the unit including its installation);
- provide a suitable chimney installation to guarantee safe use (e.g. a chimney made of non-combustible materials with low heat absorption);
- avoid installing the fireplace in rooms where there are B-gas appliances, hoods (with and without extractor hoods), heat pumps, collective ventilation ducts, numerous active smoke ducts, as well as

in the vicinity of stairwells and rooms with equipment capable of creating negative pressure;

- **avoid direct contact with the fireplace (the appliance gets very hot during operation) and if necessary use suitable protective equipment (clothing, heat-resistant gloves);**
- Install the fireplacein a room with fire protection, equipped with a fresh air supply and smoke extraction;
- in the event of any difficulties, contact the dealer or manufacturer (in the event of repair, request original spare parts);
- periodically check and clean the flue pipe in accordance with the regulations in force;
- Include operating and installation instructions in case the unit is sold or rented.

1.3. Never belongs:

- resist and climb on the fireplace;
- use the appliance in the event of faults or malfunctions;
- leave flammable materials within 1.5m of the fireplace;
- 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 fireplace not in accordance with the Operating and Installation Instructions;
- modification of the fireplace and unauthorised replacement of parts with non-original ones (these actions lead to immediate cancellation of the guarantee);
- injury and material damage caused by incorrect installation and maintenance (not in compliance with the Operating and Installation Instructions).

1.5. Purpose fireplace

The fireplaces provide an additional source of heat in the rooms in which they are located. These appliances have a fixed-burner hearth, with manual fuel loading, closed with a standard (hinged) door. The main fuel is seasoned hardwood (beech, hornbeam, birch) with a moisture content of less than 20%. During combustion, heat energy is released from the combustion chamber by convection and radiation.

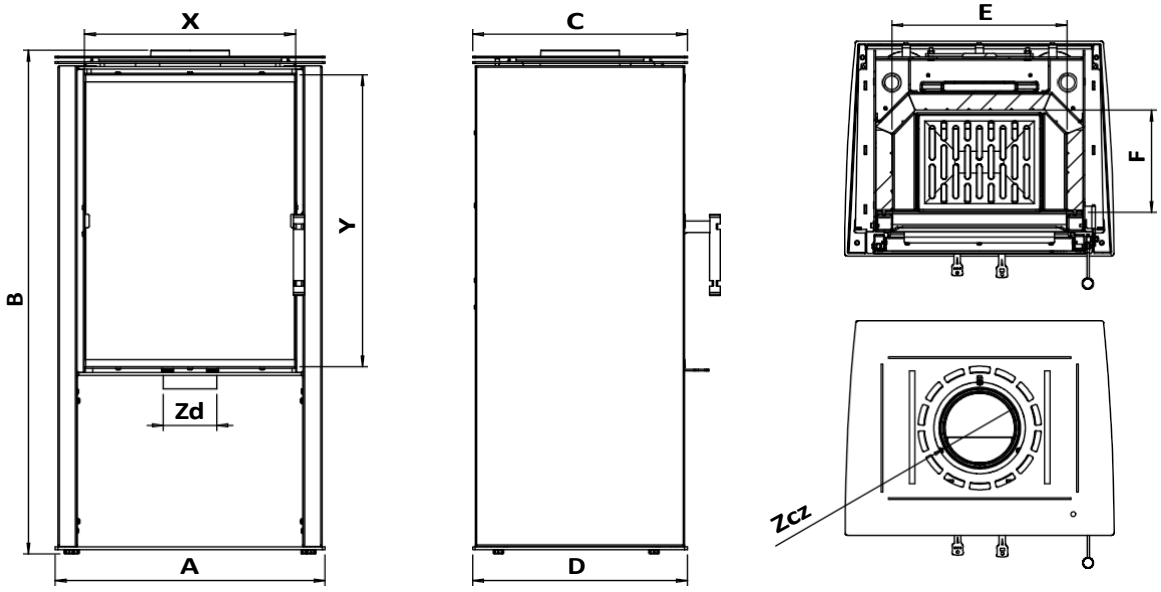


Fig. 1 **LUPO dimensions**

Dimensions [mm]		LUPO S	LUPO M	LUPO L
Width	**A**	500	657	992
Height	**B**	940	940	940
Overall depth	**C**	400	400	400
Carcase depth	**D**	400	400	400
Firebox width	**E**	326	481	816
Burner depth	**F**	190	190	190
Air intake diameter	**Zd**	100	100	100
Flue diameter	**Zcz**	150	150	150
Glazing width	**X**	390	545	880
Glazing height	**Y**	545	545	545

Table 1 **LUPO dimensions**

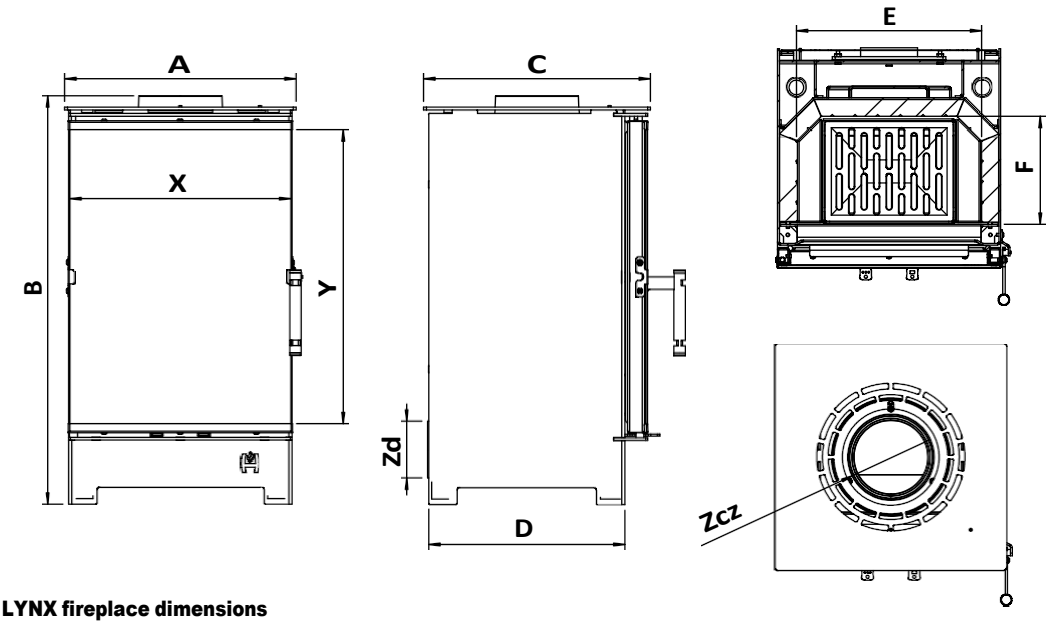


Fig. 2 **LYNX fireplace dimensions**

Dimensions [mm]		LYNX S	LYNX B	LYNX O
Width	**A**	407	453	453
Height	**B**	720	748	1154
Overall depth	**C**	400	453	453
Carcase depth	**D**	346	433	433
Firebox width	**E**	326	326	326
Burner depth	**F**	191	191	190
Air intake diameter	**Zd**	100	100	100
Flue diameter	**Zcz**	150	150	150
Glazing width	**X**	390	390	390
Glazing height	**Y**	545	545	545
Oven glass height	**W**	-	-	295x380

Table 2 **LYNX fireplace dimensions**

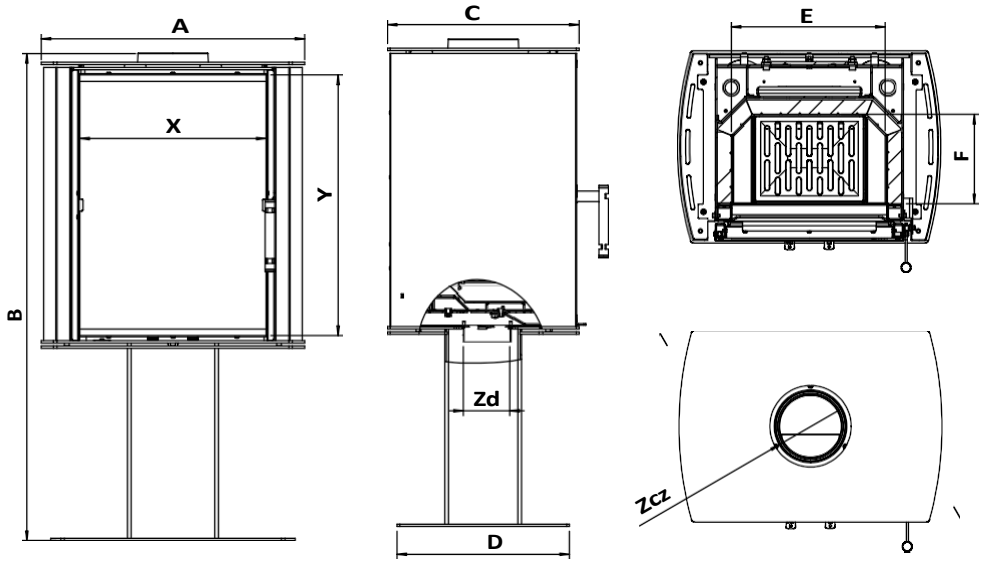


Fig. 3 **CANE dimensions**

Dimensions [mm]		CANE S	CANE SF
Width	**A**	550	550
Height	**B**	1019	1019
Overall depth	**C**	465	465
Carcase depth	**D**	400	400
Firebox width	**E**	326	326
Burner depth	**F**	190	190
Air intake diameter	**Zd**	100	100
Flue diameter	**Zcz**	150	150
Glazing width	**X**	390	390
Glazing height	**Y**	545	545

Table 3 **CANE dimensions**

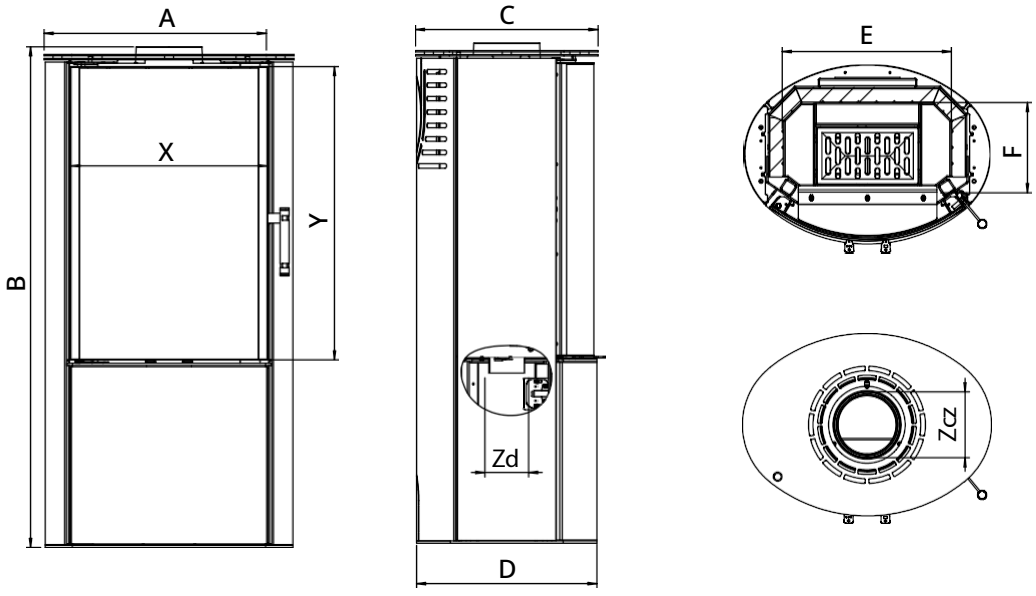


Fig. 4 **ELLISSE oven dimensions**

Dimensions [mm]		ELLISSE S	ELLISSE SF	ELLISSE SB
Width	**A**	555	555	555
Height	**B**	1115	1115	1115
Overall depth	**C**	405	405	405
Carcase depth	**D**	400	400	400
Firebox width	**E**	377	377	377
Burner depth	**F**	200	200	200
Air intake diameter	**Zd**	100	100	100
Flue diameter	**Zcz**	146	146	146
Glazing width	**X**	461	461	461
Glazing height	**Y**	648	648	648

Table 4 **ELLISSE oven dimensions**

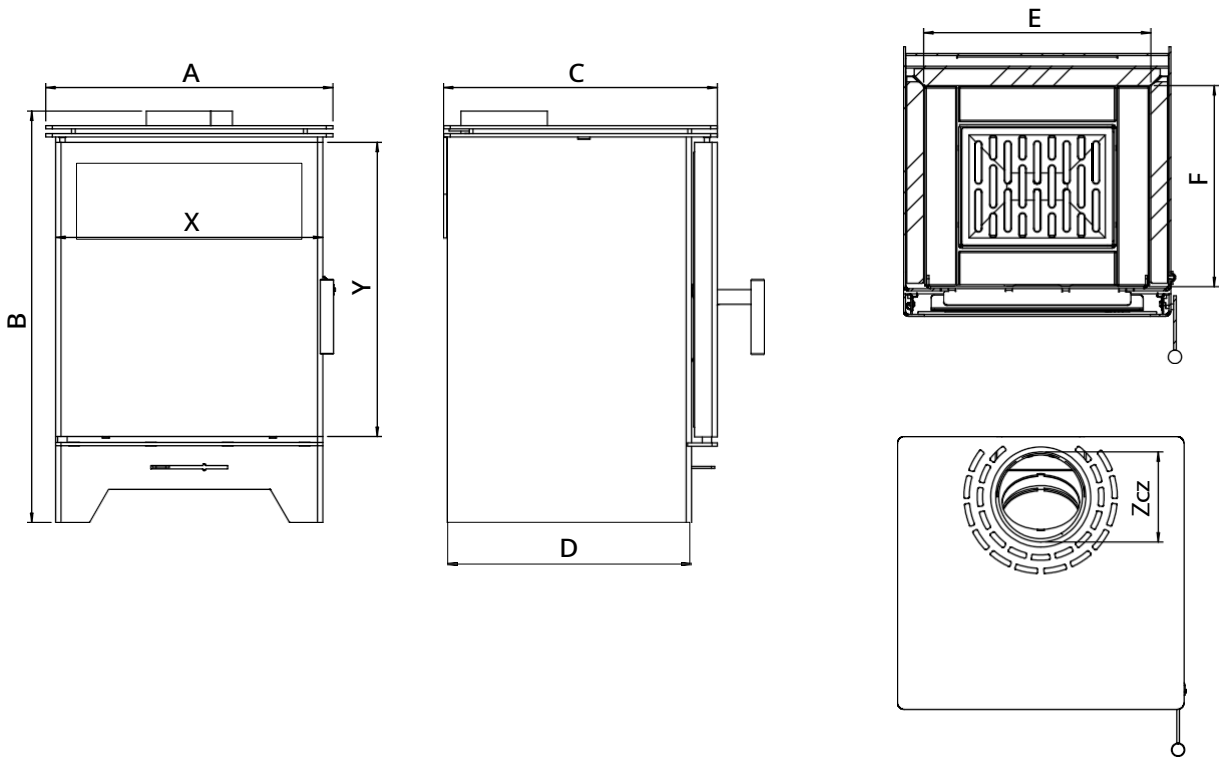


Fig. 5 **GATTO fireplace dimensions**

Dimensions [mm]		GATTO S	GATTO SE	GATTO M	GATTO ME
Width	**A**	430	430	555	525
Height	**B**	617	617	617	617
Overall depth	**C**	409	344	409	344
Carcase depth	**D**	365	300	365	300
Firebox width	**E**	340	340	465	465
Burner depth	**F**	300	236	300	236
Flue diameter	**Zcz**	129	129	129	129
Glazing width	**X**	409	338	482	398
Glazing height	**Y**	357	273	409	338

Table 5 **GATTO fireplace dimensions**

Technical data:

parameters	unit	LUPO S	LUPO M	LUPO L	CANE S	CANE SF
Rated power	**kW**	6,5	8,7	11	6,5	6,5
Heating load range	**kW**	3-8,5	4-11	5,5-14	3-8,5	3-8,5
Maximum fuel loading weight	**kg**	1,5	2	2,5	1,5	1,5
Average fuel consumption	**kg/h**	1,9	2,4	3,3	1,9	1,9
Thermal efficiency	**%**	83	82	82	83	83
CO emissions (at 13% O2)	**g/m3**	1,08	1,159	0,921	1,08	1,08
Pollen emissions (at 13% O2)	**g/m3**	0,038	0,034	0,028	0,038	0,038
Average flue gas temperature	**˚C**	239	234	230	239	239
Dimensions of the fireplace glass	**mm**	390x540	540x540	880x540	390x540	390x540
Maximum length of billets	**mm**	350	400	400	350	350
Weight	**kg**	112	137	190	118	120
Fuel type		Recommended seasoned hardwoods (beech, birch, hornbeam)				
Fuel moisture		between 12 and 20				

Table 6a **Technical data**

parameters	unit	LYNX S	LYNX B	LYNX O
Rated power	**kW**	6,5	6,5	6,5
Heating load range	**kW**	3-8,5	3-8,5	3-8,5
Maximum fuel loading weight	**kg**	1,5	1,5	1,5
Average fuel consumption	**kg/h**	1,9	1,9	1,9
Thermal efficiency	**%**	83	83	83
CO emissions (at 13% O2)	**g/m3**	1,08	1,08	1,08
Pollen emissions (at 13% O2)	**g/m3**	0,038	0,038	0,038
Average flue gas temperature	**˚C**	239	239	239
Dimensions of the fireplace glass	**mm**	390x540	390x540	390x540
Maximum length of billets	**mm**	350	350	350
Weight	**kg**	84	92	132
Fuel type	Recommended seasoned hardwoods (beech, birch, hornbeam)			
Fuel moisture	between 12 and 20			

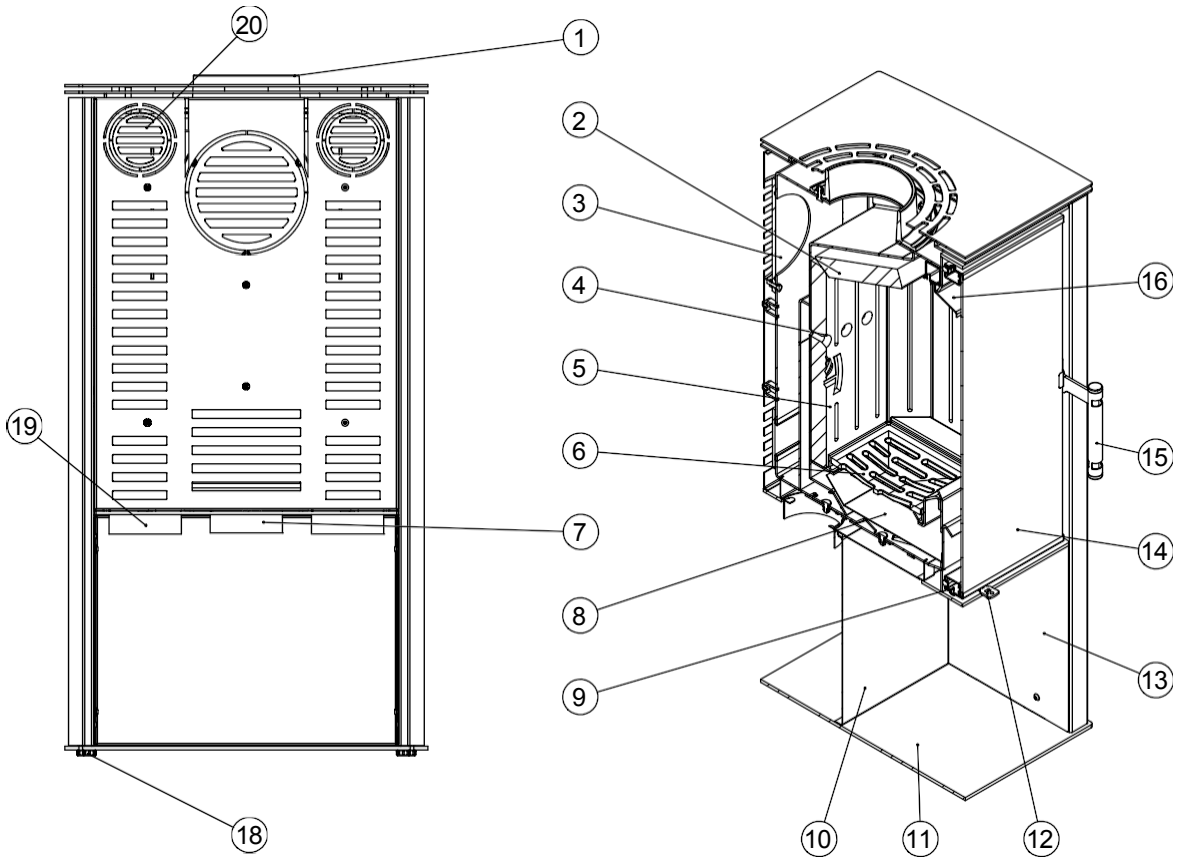
Table 6b **Technical data**

parameters	unit	ELLISSE S, ELLISSE SF, ELLISSE SB	GATTO S	GATTO SE	GATTO M	GATTO ME
Rated power	**kW**	5	5,5	5,4	5,3	5,5
Heating load range	**kW**	2,5-7	2,5-7	2,5-7	2,7-7	2,7-7
Maximum fuel loading weight	**kg**	1,3	1,3	1,2	1,3	1,3
Average fuel consumption	**kg/h**	1,7	1,7	1,6	1,6	1,8
Thermal efficiency	**%**	80,6	84	85	84	79
CO emissions (at 13% O2)	**g/m3**	0,952	1,329	1,216	0,933	1,212
Pollen emissions (at 13% O2)	**g/m3**	0,032	0,036	0,02	0,02	0,017
Average flue gas temperature	**˚C**	247	212	201	192	221
Dimensions of the fireplace glass	**mm**	461x648	409x357	338x273	482x409	398x338
Maximum length of billets	**mm**	375	340	340	400	400
Weight	**kg**	117	82	62	100	75
Fuel type	Recommended seasoned hardwoods (beech, birch, hornbeam)					
Fuel moisture	between 12 and 20					

Table 6c **Technical data**

1.6. Construction and operation of fireplace

1.7. LUPO, LYNX S, LYNX B, CANE



1. flue
2. deflector
3. flue cap
4. afterburning system
5. combustion chamber with ceramic insert
6. cast iron grate
7. air intake
8. ashtray
9. special profile doors
10. back plate
11. base plate
12. adjustment lever secondary air damper
13. throttle control lever primary air
14. side protection
15. decor glass
16. handle
17. air curtain
18. levelling screws
19. connection of the DGP system
20. connection of the DGP system

Fig. 6 **Construction of the LUPO furnace (LYNX, CANE)**

Construction:

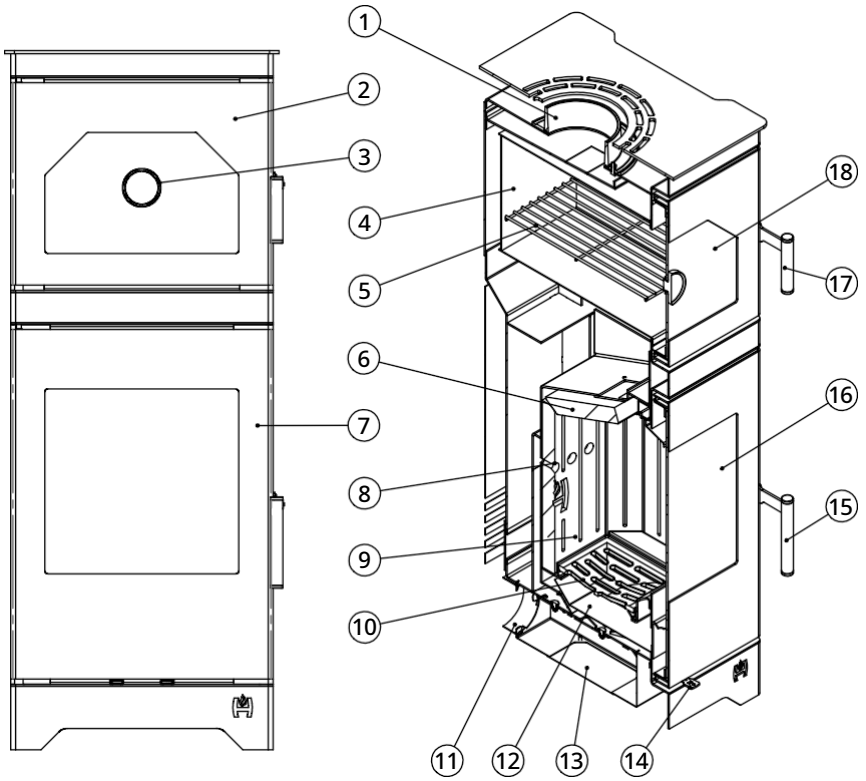
The fireplace is made of boiler steel grade P256GH, 3 mm thick. The inside of the combustion chamber is lined with a ceramic heat preserving insert **5**. The design allows the flue gases to be led out through the upper or rear wall of the fireplace. The air intake **7** is 100mm in diameter, the flue **1** 150mm. The fireplace is suitable for use with a hot air distribution system (DGP) **18,19**. The front of the fireplace consists of a steel door made of 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 fixed to the fireplace body.

Activity description:

The air enters the fireplacethrough an intake grille **7**. There are two air inlet systems - primary and secondary. The amount of incoming primary air is regulated by the right-hand regulation lever on the front of the fireplace 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 fireplace. The air is directed to the upper part of the combustion chamber **4** in order to postcombust the flue gases which improves thermal efficiency and reduces the amount of pollutants. The air control is adjusted by pulling the lever to open the air inlet, and pulling it in to close the air inlet.
The fireplace is also equipped with an air curtain **17** to help keep the glass clean. Above the combustion chamber there is a special ceramic plate called deflector **2**, which enhances the heat exchange. During combustion, the hot gases flow around the deflector and then through the flue **1** and the ducts into the chimney. The environment around the fireplace is heated in two ways - the air surrounding the insert is heated (convection) and escapes through the ventilation slots in the fireplace casing. In addition, heat radiates directly from all the hot parts of the fireplace.

1.8. LYNX O



1. flue
2. oven door
3. thermometer
4. oven compartment
5. grate
6. ceramic deflector
7. fireplace door
8. afterburning system
9. combustion chamber with ceramic insert
10. cast iron grate
11. air intake
12. ashtray
13. air inlet cap
14. air volume control lever
15. fireplace handle
16. fireplace glass
17. oven handle
18. oven glass

Fig. 7 **Construction of the LYNX O furnace**

Construction:

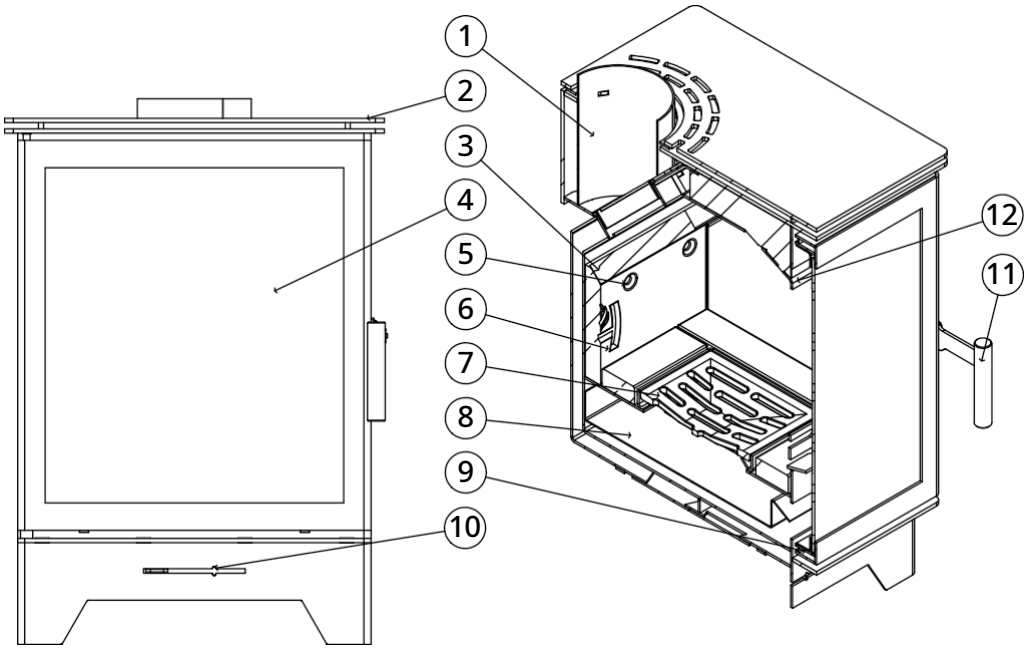
The fireplace is made of boiler steel grade P256GH, 3 mm thick. The inside of the combustion chamber is lined with a ceramic insert to keep **the** heat **7**. The design allows the flue gases to be led out through the upper wall of the fireplace. Flue diameter **1** 146mm. The front of the fireplace consists of a steel door made of a special profile **7** and profiled sheet metal, heat resistant glass **16**, and a handle **15** which, thanks to its special design, remains cool while burning. The door is bolted to slats fixed to the fireplace body. The oven front is composed of a steel door made of a special profile **2** and profiled sheet metal, heat-resistant glass **18**, thermometer **3**, handle **17 and** grate **5**.

Activity description:

The amount of incoming primary air is regulated by the control lever on the front of the fireplace under the door **14**. The air then flows through the ash pan **12** and into the combustion chamber **9** through the grate **10**. The amount of air is regulated by the control lever **14** on the front of the fireplace. The air is directed to the upper part of the combustion chamber **8** in order to burn the flue gases, which improves the thermal efficiency and reduces the amount of impurities. The air volume is adjusted by pulling the lever to open the air inlet, and pressing to close the air inlet. Increasing the air volume results in faster combustion and a higher temperature in the oven **4**.
The fireplace is also equipped with an air curtain to help keep the glass clean. Above the combustion chamber there is a special ceramic plate called deflector **6**, which enhances the heat exchange. During combustion, the hot gases flow around the deflector **6** and the oven chamber **4**, before entering the chimney through the flue **1** and ducts. The environment around the oven is heated by heat radiation directly from all the hot parts of the oven.
We regulate the temperature in the oven by changing the intensity of the fire in the wood-burning fireplace. We can also increase the amount of heat transferred to the oven by breaking off the plate located above deflector **6** of the oven. This will result in faster heating and higher temperatures in the oven itself. A detailed description of how to break the plate can be found in point "4.6. "**4.6 In case of poor draught, it is recommended to break out the plate located above the oven deflector**."

NOTE!
The thermometer at the centre of the door may be lower than the temperature in the central part of the oven.

1.9. GATTO



1. flue
2. top cover
3. deflector
4. glass
5. afterburning system
6. combustion chamber with ceramic insert
7. cast iron grate
8. ashtray
9. special profile doors
10. adjustment lever air dampers
11. handle
12. air curtain

Fig. 8 **Construction of the GATTO furnace**

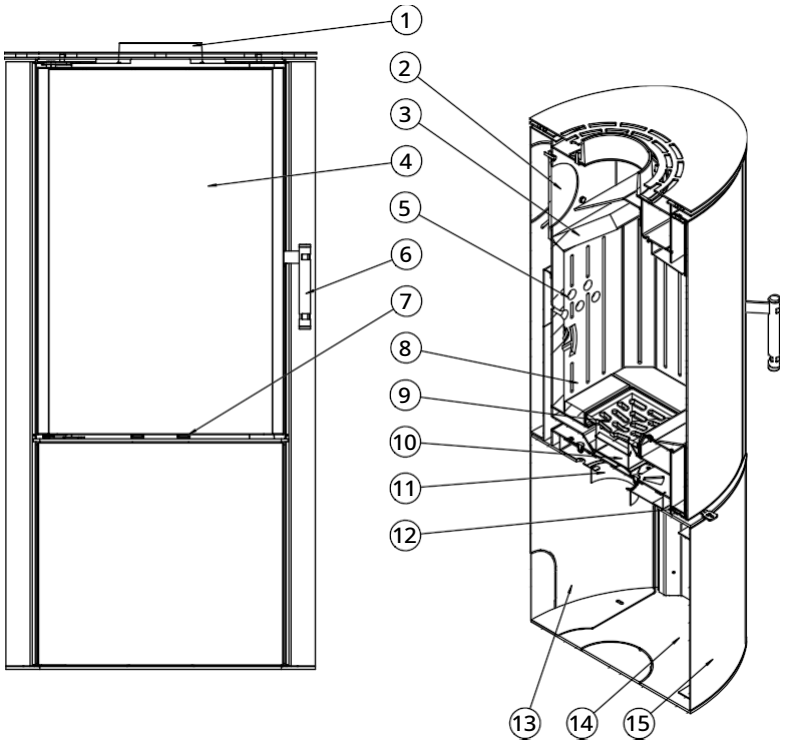
Construction:

The fireplace is made of boiler steel grade P256GH, 3 mm thick. The inside of the combustion chamber is lined with a ceramic insert to keep the heat **6**. The design allows the flue gases to be led out through the upper or rear wall of the fireplace. Flue diameter **1** 129mm. The front of the fireplaceconsists of a steel door made of a special profile **9** and profiled sheet metal, heat resistant glass **4**, and a handle **11** which stays cool while burning thanks to its special design. The door is screwed onto slats attached to the fireplace body.

Activity description:

The amount of incoming primary air is regulated by the control lever on the front of the fireplace under the door **10**. The air then flows through the ash pan **8** and into the combustion chamber **6** through the grate **7**. The amount of air is regulated by the control lever **10** on the front of the fireplace. The air is directed to the upper part of the combustion chamber **5** in order to burn the flue gases which improves the thermal efficiency and reduces the amount of impurities. The air quantity is adjusted by pulling the lever to open the air inlet, and pressing it to close the air inlet.
The fireplace is also equipped with an air curtain **12** to help keep the glass clean. Above the combustion chamber there is a special ceramic plate called deflector **3**, which enhances the heat exchange. During combustion, the hot gases flow around the deflector and then through the flue **1** and the ducts into the chimney. The environment around the fireplace is heated by radiant heat directly from all the hot parts of the fireplace.

1.10. ELLISSE



1. flue
2. cast iron lid
3. deflector
4. glass
5. afterburning system
6. handle
7. air adjustment lever
8. combustion chamber with ceramic insert
9. cast iron grate
10. ashtray
11. air intake
12. special profile doors
13. rear cover
14. basis
15. front cover

Fig. 9 **Construction of the GATTO furnace**

Construction:

The fireplace is made of boiler steel grade P256GH, 3 mm thick. The inside of the combustion chamber is lined with a ceramic heat preserving insert **8**. The design allows the flue gases to be led out through the upper or rear wall of the fireplace. The air intake **11** is 97mm in diameter, the flue **1** 146mm. The front of the fireplace consists of a steel door made of a special profile **12** and profiled sheet metal, heat resistant glass **4**, and a handle **6** which, thanks to its special design, remains cool while burning**.** The door is bolted to slats fixed to the fireplace body.

Activity description:

The air enters the fireplace through the inlet port **11**. There are two air inlet systems - primary and secondary. The primary air inlet is regulated by the right hand regulation lever on the front of the fireplace under the door **12**. The air then flows around the ash pan **10** and enters the combustion chamber **8** through the grate **9**. The amount of secondary air is regulated by the left lever **12** on the front of the fireplace. The air is directed to the upper part of the combustion chamber **5** to postcombust the flue gases, which improves the thermal efficiency and reduces the amount of pollutant-.
The air volume is adjusted by pulling the lever to open the air inlet and pressing it to close the air inlet. The air volume is adjusted by pulling the lever to open the air supply and pressing it in to close the air supply.
The fireplace is also equipped with an air curtain to help keep the glass clean. Above the combustion chamber there is a special ceramic plate called deflector **3**, which enhances the heat exchange. During combustion, the hot gases flow around the deflector and then through the flue **1** and the ducts into the chimney. The environment around the fireplace is heated in two ways - the air surrounding the insert is heated (convection) and escapes through the ventilation slots located

2. TRANSPORT, ASSEMBLY, INSTALLATION FIREPLACE

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

Before assembling, installing and operating the fireplace, read the following Operating and Installation Instructions carefully and follow the instructions given therein. This will ensure a safe and efficient operation of the fireplace. Failure to observe these Operating and Installation Instructions may invalidate the warranty and endanger the user's life and limb.

National and local regulations and standards must be observed during assembly, installation and operation, in particular:

- Regulation of the Minister of Infrastructure of 12.04.2002. Dz.U.Nr75, poz. 690 with amendments of 07.05.2004. r. Dz.U.Nr109, pos. 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 fires for solid fuels. Requirements and tests".

It is a requirement that the fireplace is installed by a qualified person or company and that technical acceptance is carried out by a master chimney sweep and a fire specialist.

Sequence of work for fireplace installation:

- Preparing the location where the fireplace is to be installed, checking the load-bearing capacity of the ground
- connecting the fireplace to the chimney and making an air intake;
- using the fireplace and observing for faults and anomalies (approximately 2 weeks).

2.1. Transport and handling

- The fireplace is delivered pre-assembled, fixed to a pallet and wrapped in stretch foil;
- transportation of the fireplace should be done in an upright position;
- After unpacking, check the fireplace for transport damage;
- Unpack the fireplace close to the installation site; take care when moving it (preferably with a trolley) (pay attention to the door and the glass);
- fireplace packaging materials are not toxic or harmful; they should be recycled or stored by the user;
- in order to relieve strain on the fireplace, in the event of installation in a difficult location, the ceramic inserts (which cover the firebox) may be removed; after installation, each element must be correctly re-positioned.

2.2. Assembly

The design of the fireplace allows for 2 configurations (LUPO, LYNX, CANE, ELLISSE, GATTO). The flue can be on the rear or top wall.

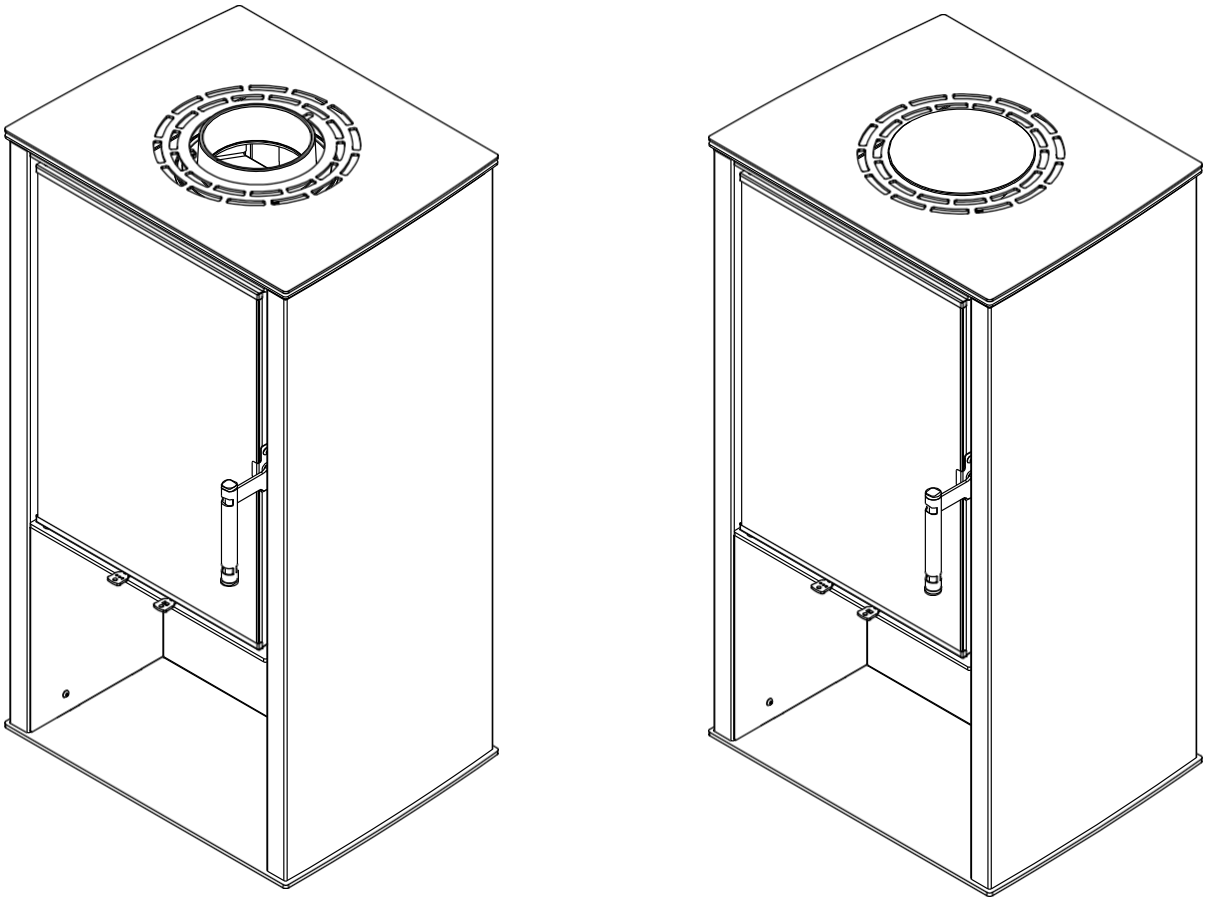
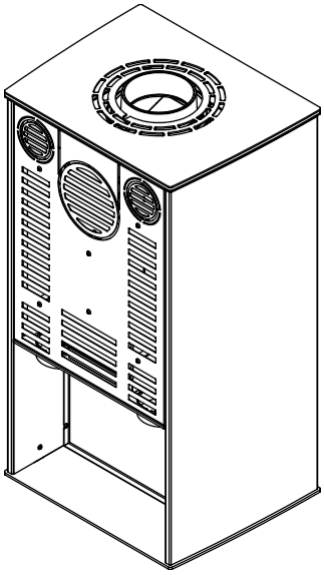
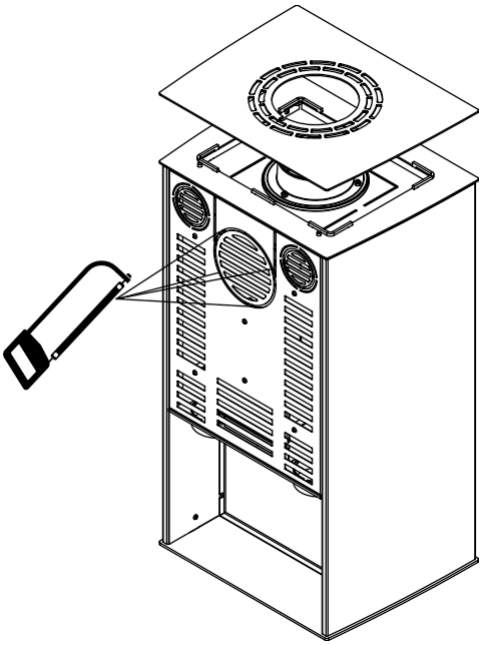


Fig. 10 **Fireplace configuration**

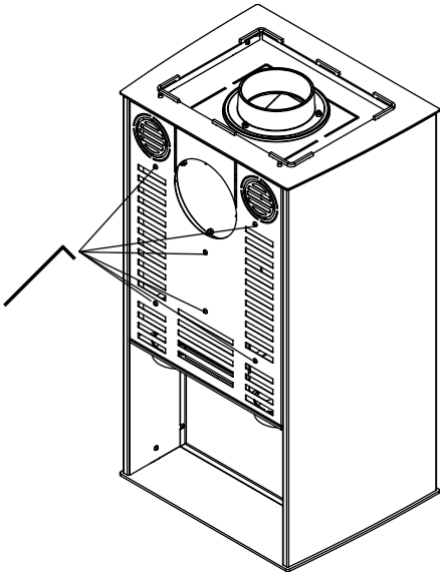
The operation of transferring the flue from the top plate to the rear wall is shown in the drawing.



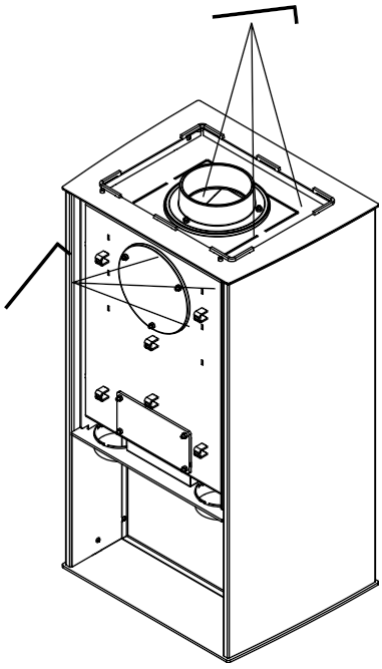
1. view of the fireplace in its factory configuration,



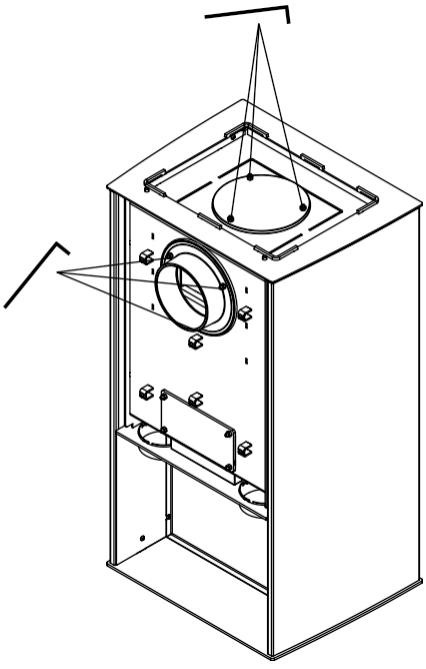
2. remove the top cover, cut a hole in the rear panel with a hacksaw or cut a hole for the flue with pliers,



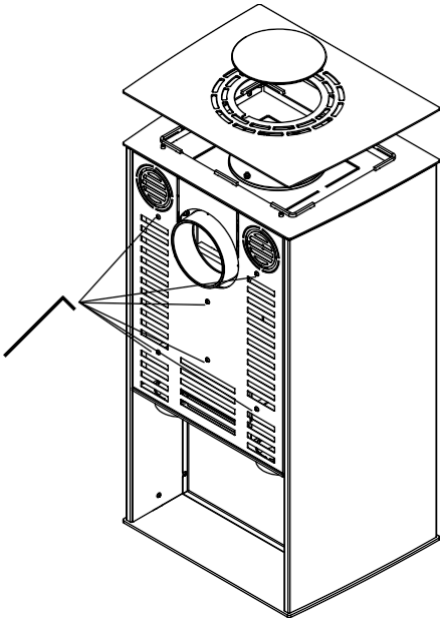
3. Using an allen key, unscrew the back plate,



4. using an allen key, unscrew the flue and cap.
in the rear wall of the fireplace,



5. put the flue and the cap in place and screw them on,



6. screw the rear panel in place, put the top cover in place together with the hob.

Fig. 11 **Replacement of flue pipe**

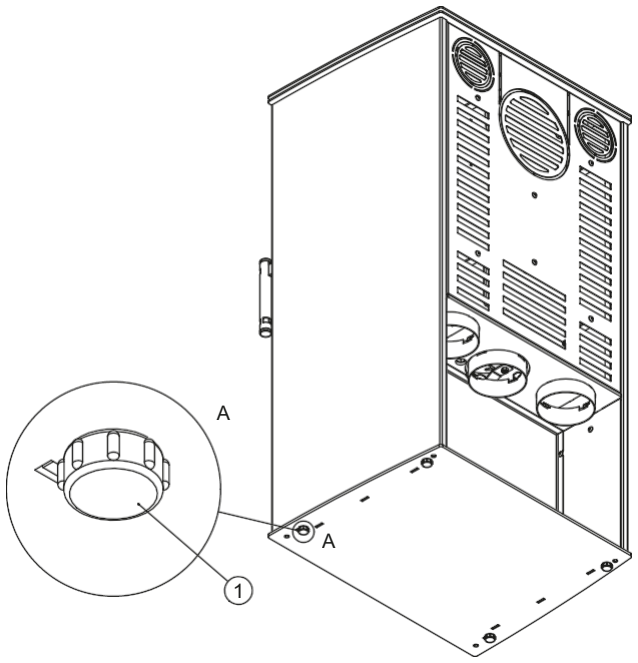


Fig. 12 **Tightening the feet**

2.3. Recommendations for substrates:

- Before installing the fireplace, check the load-bearing capacity of the floor (whether it meets the load-bearing conditions for the type of appliance depending on its weight);
- the floor must be made of a non-combustible material at least 30 cm thick, with a strip of space in front of the fireplace door, at least 60 cm wide and extending beyond the edges of the door by at least 30 cm.

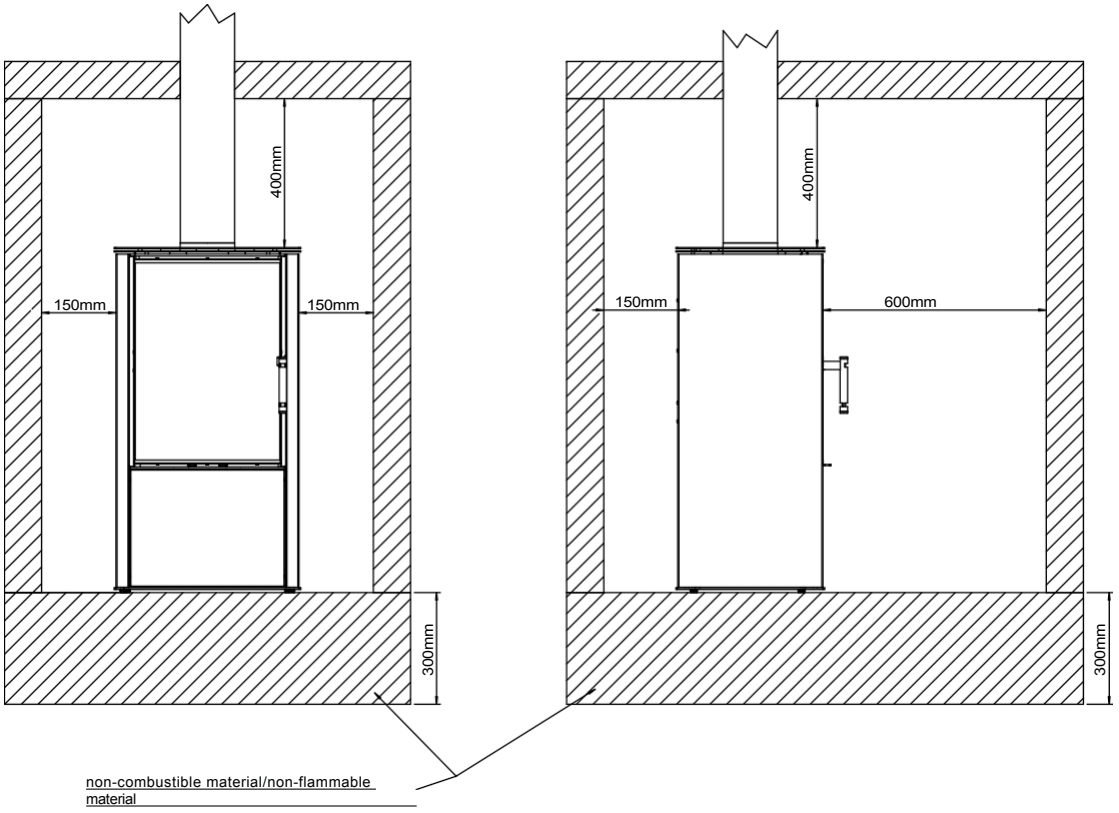


Fig. 13 **Recommendations for substrate and space**

2.4. flue

The fireplace requires a suitable cross-section of the flue pipe (flue duct) and a suitable 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 smoke duct [m2]; Q - rated thermal output 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. Stoves with a higher output require a larger flue pipe cross-section. The cross-section also depends on the height of the chimney.

The fireplace must be connected to a flue pipe or a riser pipe conforming to current national standards.

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:

For proper fireplace operation it is necessary to ensure a correct draught in the flue outlet:

- Insufficient chimney draught causes poor operation of the fireplace, excessive burial of glass and excessive contamination of the flue gas ducts; the overall heat output of the fireplace is reduced (smoke leakage into the room can occur);
- A draught that is too strong can contribute to over-intensive combustion, high fuel consumption and lead to permanent damage to the fireplace.

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

2.5. Connection to the flue:

- Before proceeding with the installation of the fireplace, the flue pipe must be examined and selected with regard to its technical parameters and condition;
- The installation of the fireplace may be carried out following a positive chimney sweep test of the flue pipe.

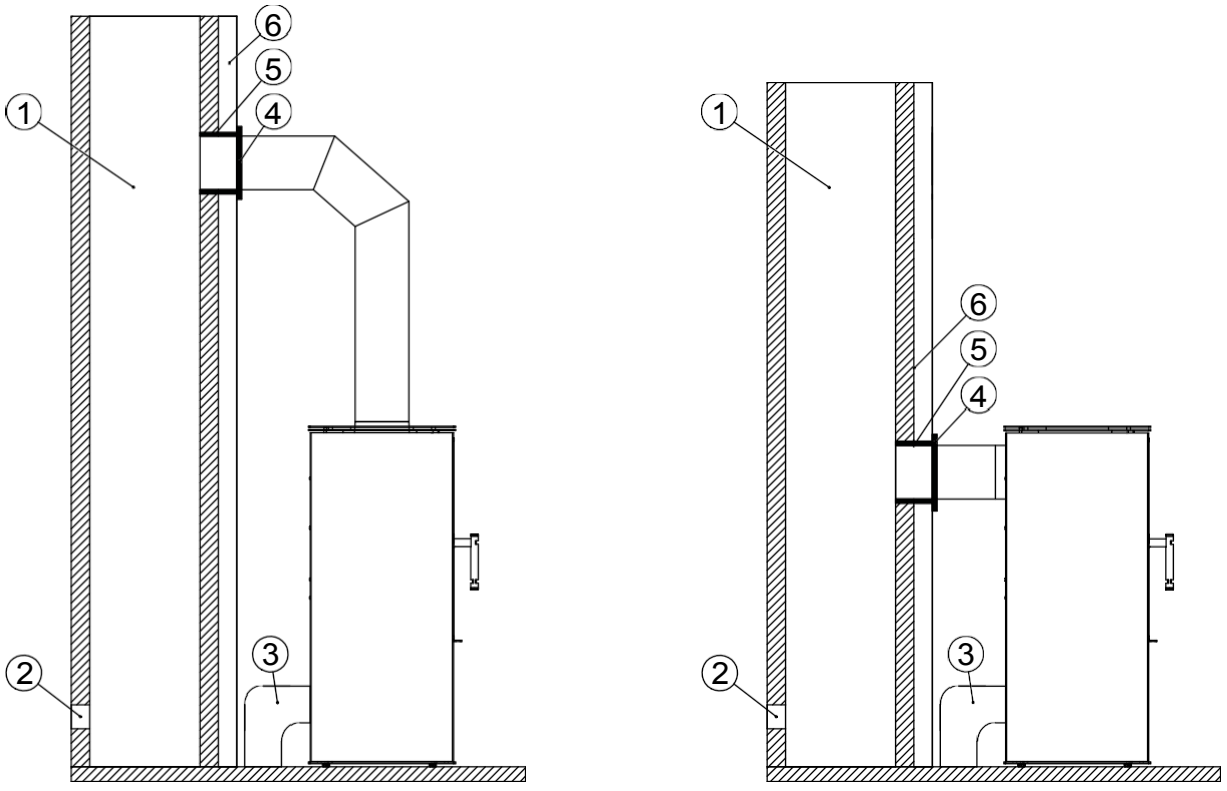
The flue pipe must comply with the applicable national or European standards.

In accordance with the operating and installation instructions provided, fit and connect the fireplace to the chimney (including installation of screen plates - if used - and insulation of the flue pipe).

The manufacturer **does not recommend** assembling and installing the appliance yourself. In order to ensure a proper and safe start-up of the appliance and the fulfilment of the guarantee conditions, the assembly and start-up of the appliance must be commissioned by a person or a firm having the appropriate installation qualifications. The installer is obliged to confirm in the guarantee card (entry and stamp) that the installation has been carried out in accordance with the art. and valid legal regulations. Failure to do so will void the manufacturer's warranty.

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

- the cross-section of the flue pipe must not be smaller than that of the flue pipe and must not narrow towards the chimney (adapters may be used to increase the diameter from the flue pipe to the chimney);
- the flue pipe should be as short as possible and have as few bends as possible (increase flow resistance, avoid condensation build-up);
- The fireplace must not be connected to a flue pipe which is shared with another heating appliance;
- it is advisable to connect the fireplace to a separate flue;
- the flue pipe may not have more than two inclinations of 45° up to a pipe height of 5m and 20° for pipe heights of over 5m;
- the flue pipe must be made of non-combustible materials and be thermally insulated;
- the flue pipe insulation should have a fire resistance of at least 60 minutes;
- a straight section of pipe at least twice the diameter of the fireplace flue should be used at the exit from the flue;
- the joint should be made tight;
- The end of the chimney should allow for a smooth exit of the flue gases and be located at least 60 cm above the highest point of the roof;
- the connectors must be made of stainless steel 1.4401 (316), heat-resistant or fire-resistant steel adequately painted with a special paint and of an appropriate sheet thickness (heat-resistant and stainless steel 1 mm thick and fire-resistant 2 mm thick) - the material should be characterised by resistance to heat, acidity of the flue gas and condensate.



1. flue pipe,
2. the cleanout,
3. external air intake,
4. rosette,
5. sealing mortar,
6. non-combustible material.

Fig. 14 **Diagram of the connection of the fireplace to the flue pipe**

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

- **It is necessary to provide fresh air from outside by unsealing the windows so that there is a constant supply of air. Too little fresh air from outside can cause poor combustion (production of carbon monoxide) and, in the worst case scenario, air with carbon monoxide can backflow through the ventilation ducts when the windows are tightly closed and there is a risk of fume poisoning;**
- The design of the fireplace allows fresh air to be brought in from the outside (an air pipe with a diameter of 100mm is used). The pipe can be led from the wall behind the back of the fireplace or, after breaking the plate, from the bottom of the fireplace. It is also possible to bring the air in directly from the room where the fireplace is located, provided that adequate ventilation is provided to prevent the air supply from closing off automatically.
- it is assumed that the amount of air required to burn 1kg of wood is approximately 8 m^3;
- when using an air distribution system to other rooms, in order to circulate the air freely, ensure that the cooled air is returned to the room where the fireplace is installed (otherwise the operating cycle of the fireplace may be disrupted and the heat distribution process may be impaired);
- When determining the location and installation of the unit, attention should be paid to the principles of correct air circulation and air balance in the room;
- Ventilation must be provided in the room where the fireplace is installed;
- To ensure adequate convection space (cooling of the fireplace, heating of the air) the fireplace should be positioned at least 80 cm away from materials that could be distorted or damaged by the heat (furniture, panelling, wallpaper, etc.).

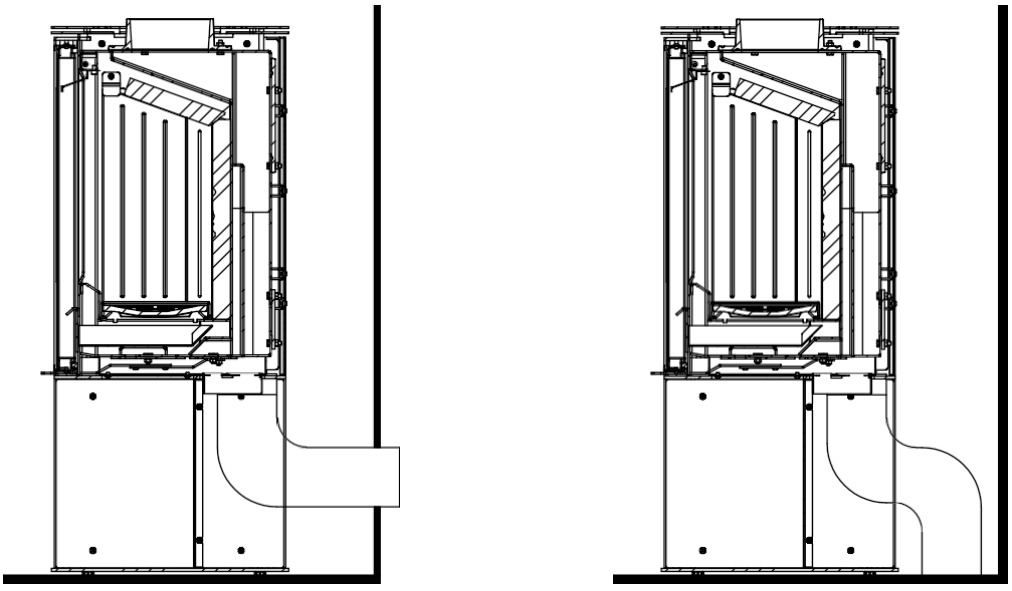


Fig. 15 **Air intake connection diagram**

NOTE!

- the best way to provide the right amount of air for the fireplace is to feed it through a special air intake duct directly from outside the building under the floor
- It is also possible to connect the fireplace to an inlet located in the wall of the building in which the fireplace is installed using fire-resistant pipes;
- when using close air intakes, we recommend that you turn off the pipe under the fireplace before connecting it to 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 the fireplace, which can cause increased moisture in the fireplace chamber. This can lead to rapid corrosion of the fireplace;
- To prevent this phenomenon, we can connect the fireplace under a slight slope to the outside, insulate the air intake pipe and use an additional damper to close the air intake when the fireplace fireplace is not in use;
- If the draught is too strong to regulate combustion, use an additional damper to further prevent the fireplace fireplace from being exposed to too much air flow into the combustion chamber when the fireplace is in use, or to close off the air flow completely when the fireplace is not in use;

Failure to comply with the above conditions may lead to malfunctioning of the fireplace, corrosion or air control problems which are not subject to complaint.

2.8. Installation fireplace

The unit must be installed in accordance with current building code standards.
Installation and assembly of the fireplace must be carried out by qualified professionals.

- The fireplace must be positioned at a safe distance from any flammable products (it may be necessary to protect the walls surrounding the fireplace);
- The space in front of the fireplace should be protected to prevent sparks which may fall out of the firebox when adding fuel. The minimum safe area is 60 cm in front of the fireplace 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 fireplace in bedrooms, bathrooms or rooms where there is another heating appliance without an independent air supply;
- The fireplace is a unitary structure and does not require additional supports;
- The height (levelling) of the fireplace can be adjusted by means of the feet (a maximum of 20 mm can be unscrewed);
- If it is necessary to raise the fireplace above the feet adjustment, make a brick base and place the appliance on it (do not remove the feet needed for levelling);
- If the door is not properly levelled, it will not work properly (it will not close properly);

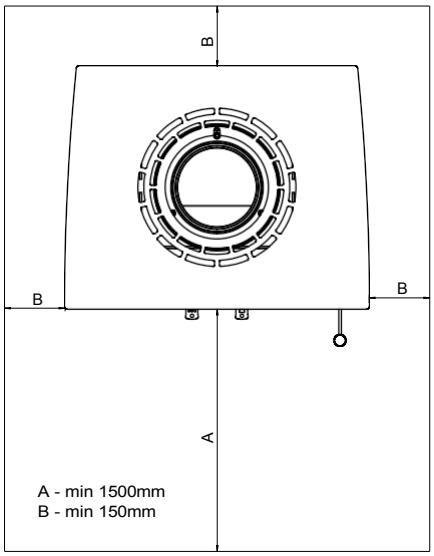


Fig. 16 **Safe area for flammable materials**

2.9. Connection of hot air distribution system (DGP) (LUPO, LYNX, LYNX O, CANE)

The hot air distribution system (DGP) allows the convection heat generated by the fireplace to be used to heat other rooms. Different solutions are used depending on the output of the appliance and the installation conditions. The choice of the right one should be left to a person or company with experience in this field. In small single-storey houses, a simple gravity system works well. In larger areas, it is sometimes necessary to use forced-air blowers in the system.

Free-standing fireplaces allow the DGP system to be connected to the fireplace in two ways: from above (LUPO, CANE, LYNX) or from below (LUPO, CANE). When installing from above, it is necessary to cut out sections of the rear cover at the locations marked on the drawing. Unobstructed airflow is gained. When assembling the pipes from below, a blower is required in the system to extract the heated air. Pipe installation takes place

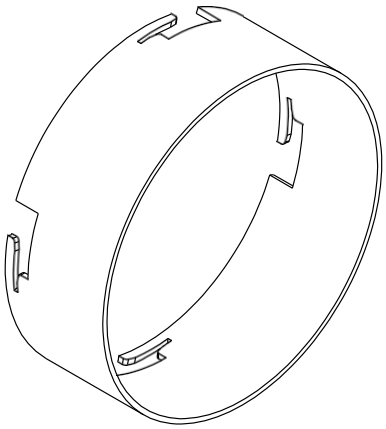


Fig. 17 **Mounting connection with a diameter of 100 mm**

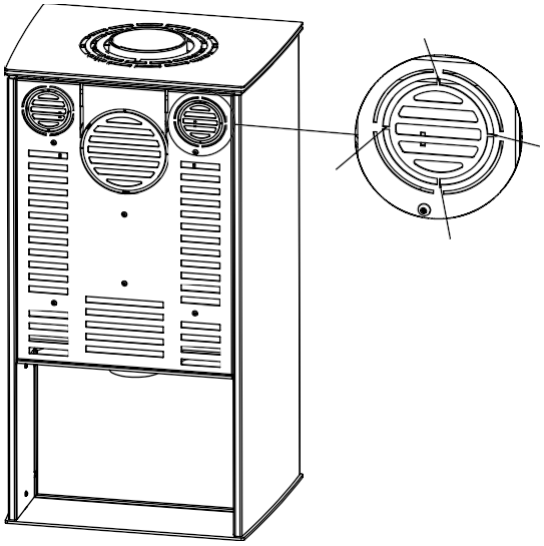


Fig. 18 **The arrows indicate the cutting points before fitting the connectors when connecting from above**

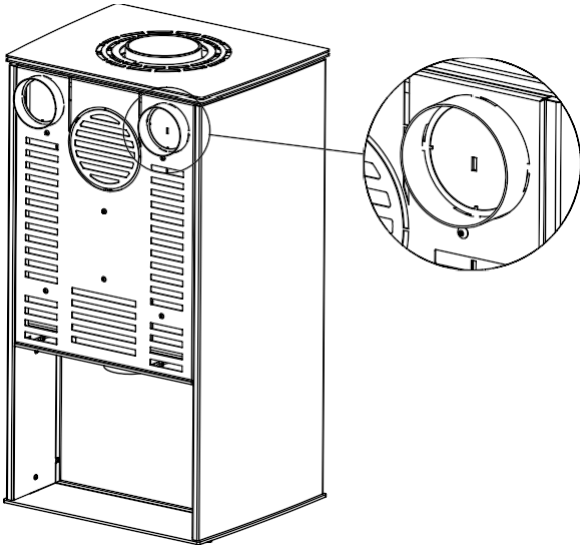


Fig. 19 **Correctly installed connectors when connected from the top of the fireplace**

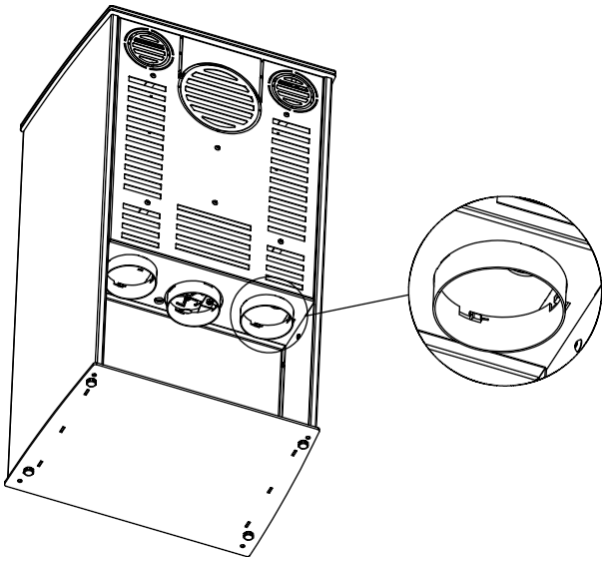


Fig. 20 **Correctly installed connectors when connected from the bottom of the fireplace**

via special connectors with a diameter of 100mm. The cut-outs allow mounting to thin or thick sheet metal. Pipes carrying the heated air to other rooms are placed on the properly installed connectors. For proper operation of the system, cool air must be returned to the room where the fireplace is located.

3. STARTING UP

The initial start-up of the fireplace, after it has been seated and properly connected to the chimney, must be carried out by the installer or an authorised service technician. The user must be present during commissioning so that he/she can be trained by the installer. The installer must refuse to commission the fireplace if he discovers an installation fault which endangers the safety of the user. Correct commissioning must be confirmed in writing on the guarantee card.

3.1. Preparation for launch

Before firing up for the first time:

- remove any stickers and other paper labels and accessories from the mantle body, ash pan or firebox that could be the cause of a fire, this also applies to transport protection;
- Check that the deflector(s), ceramic pieces and grate are properly seated, and that they have not fallen out of position during installation (If any seating faults are found, correct them. Otherwise the fireplace may not operate correctly. In fireplace types where the door is fitted with a multi-paned glass, check that during transport or use of the fireplace the various parts of the glass have not come apart);
- check operation:
  - mechanism for regulating the air supply to the combustion chamber (cold-air dampers);
  - front door locking mechanism (hinges, handle);

3.2. Firing up the fireplace

Before firing up the fireplace:

- place the thicker logs first in the firebox, then the smaller wood, and finally the small pieces (sub- sticks) - light with fireplace matches or a lighter;
- open the primary air control to maximum and the secondary air control to minimum;
- **the fireplace door must be closed after lighting**;
- When the fire is burning well, use the air regulators to adjust the combustion air to a rather damped level (only a small portion of the primary air is supplied under the fireplace grate; the secondary air damper is set at maximum - the greater amount of air is supplied to the air curtain system, which protects the glass from scorching, and to the post-combustion system at the front of the fireplace; opening the air damper to 100% -as far as possible, results in very intensive combustion of the fire);
- it is advisable, in the final stage of combustion, to open the door and burn the remaining embers on the grate with a poker in order to burn the fuel better;

NOTES:

As 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 a temporary sooting of the glass.

If the throttle is moved to the right as far as possible, the air supply to the combustion chamber is completely cut off, resulting in a gradual extinguishing of the firebox.

If necessary, the grate is unclogged with a poker.

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

The first ignition may be accompanied by condensation on the inner walls of the combustion chamber. This phenomenon is normal and results from condensation of the water vapour contained in the flue gases. It should-

should cease once the chamber has warmed up.

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

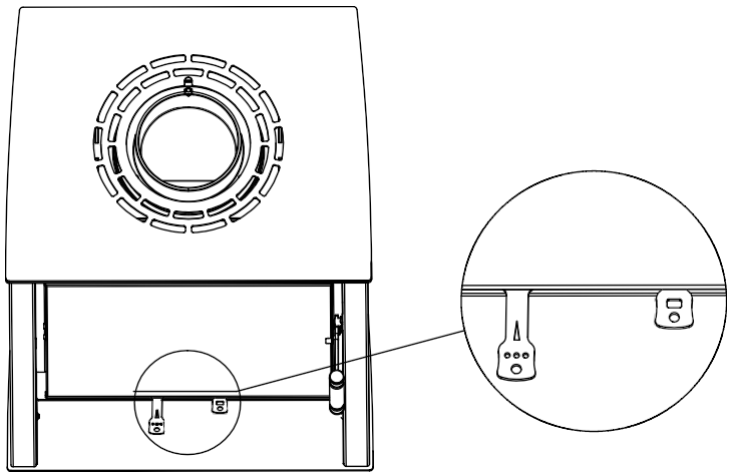


Fig. 21 **Throttle operation - pressed in - air supply closed, pulled out - air supply open**

Clean the hearth of ash residue before the next lighting.

4. USE

The surface of the fireplace is coated with a special heat-resistant paint which, when the fireplace is lit, first becomes soft (care should be taken not to scratch it) and then hardens. This process may cause an unpleasant odour during the first few burns. The manufacturer recommends ventilating the room intensively. If there are pets or birds in the room, relocate them temporarily. The manufacturer recommends that you keep the flame low and burn less fuel at a lower temperature for the first few days (approximately 2 weeks). This is to prevent cracks forming in the ceramic cladding, deformation of the structure, and damage to the cooker's protective coating (paint).

4.1. Types of fuel

Due to the design of our appliances, the recommended fuel to be used is hardwoods such as oak, hornbeam, ash, beech and birch. **We particularly recommend birch.** The best fuel is seasoned wood (at least 2 years in an airy and dry place), in cut and split billets. We discourage the use of coniferous wood. Fresh wood or badly dried wood is not a good fuel, as it has limited energy properties. Burning improperly dried wood can lead to increased emissions of creosote deposited in the flue, which can result in chimney fires, overheating of the fireplace, and broken glass.

NOTES:

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

The manufacturer strictly forbids the use of coal, tropical wood, any type of product containing chemical compounds such as petrol, alcohol, naphthalene, oil, od- pads and laminated panels containing adhesives, varnishes, etc. as fuel for the fireplace.

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 supply sufficient air from under the grate for the flame to appear) and to add the wood chunks;
- do not place embers on the grate in one plane, as this considerably reduces the air supply

The gas in the firebox may be too high, resulting in gasification of the fireplace and possible explosion;

- Wood billets in the combustion chamber must be laid parallel to the plane of the door.
- before loading the fireplace with a fresh batch of fuel, the grate should be ash-free and the ash container emptied if necessary.

4.3. Preventing the escape of exhaust gases

To prevent fumes from the fireplace escaping 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 far as possible);
- Open the door slightly and, after waiting a few seconds (the time required for the smoke to be extracted), slowly open the fireplace door;
- Be very careful when opening the door and after opening the door, as pieces of burnt fuel may fall out of the firebox;
- once the correct amount of fuel has been added, close the firebox door;
- After firing up the fuel, set the air regulator to the original position;
- The optimum amount of fuel is given in the table.

NOTES:

The fireplace manufacturer warns against overloading the fireplace with fuel. Overloading may cause permanent damage to the structure of the appliance.

4.4. Clean glass

In addition to using the right fuel, keeping the glass clean is influenced by:

- to provide an adequate supply of combustion air;
- optimum chimney draught;
- how to operate the fireplace;
- use of fuel with a moisture content of less than 20%.

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

If the glass becomes dirty during heating, we recommend increasing the combustion intensity by opening the air damper, as a result of which the glass will usually clean itself.

4.5. Operation in poorer climatic conditions and in the transition period .

In the so-called transitional period or in poor weather conditions (e.g. fog, damp rainy days, strong gusty wind and when the outside temperature exceeds +15°C), the chimney draught may be impaired so that the flue gases are not fully discharged. To compensate for this adverse effect, load the fireplace with as little fuel as possible or additionally use draught re- gulators.

4.6. In case of poor draught, it is advisable to break out the plate located above the fireplace deflector (LUPO, LYNX, LYNX O, CANE).

At the top, above the deflector, there is a piece that needs to be broken by changing the position of the plate upwards downwards until it breaks completely to provide a better draught.

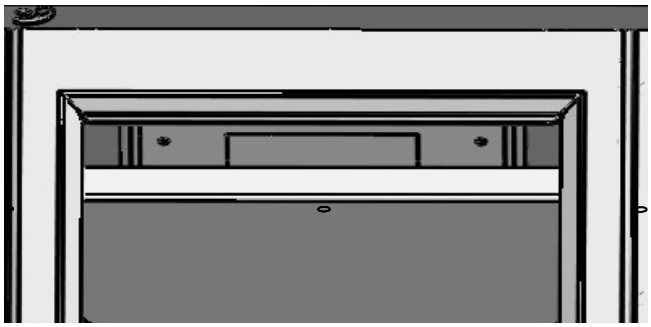


Fig. 22 **Plate view**

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

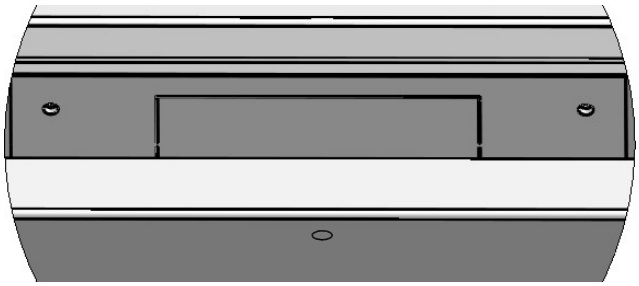


Fig. 23 **Method 1 Plate removal**

The following are ways to break it out.

METHOD 1. The easiest way is to break it off from the top if there is a possibility to provide access through the flue

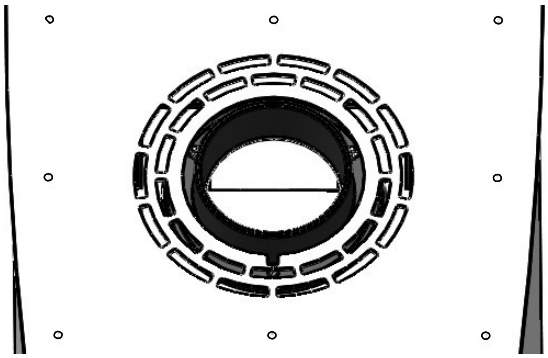


Fig. 24 **Method 2 Plate removal**

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

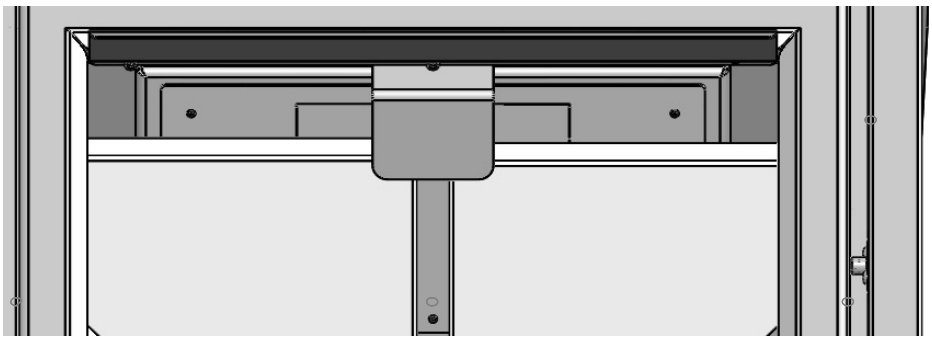


Fig. 25 **Method 3 Plate removal**

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

5.2 Cleaning the chimney

4.7. Removal of ash

Depending on the amount and type of fuel being burned:

- using a poker, scrape the ashes through the grate into the ash pan;
- After collecting the ashes, remove the ashpan and empty it;
- The ashtray can only be emptied when it is cold; we recommend that this is done before each start-up at the latest;
- Before emptying the ashpan, check that it does not contain any glowing remains of fuel that could cause a fire in the waste bin.

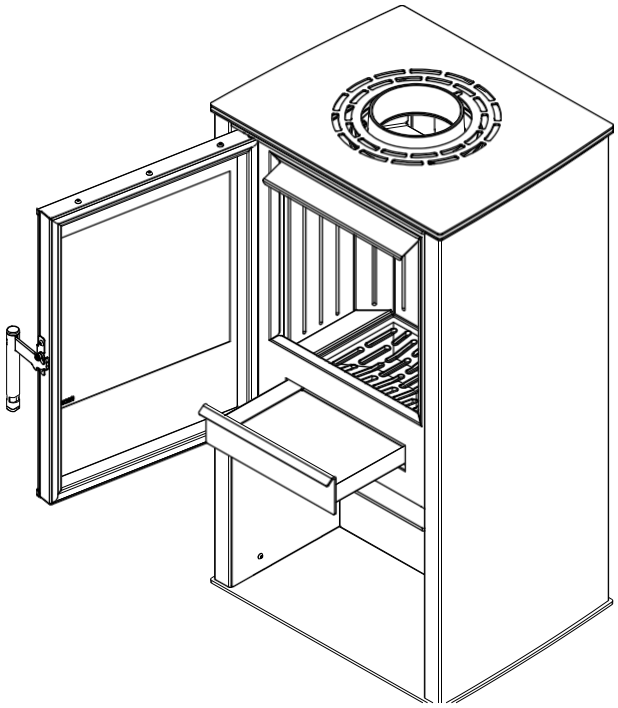


Fig. 26 **Door open, ash pan partially extended**

NOTES:

The manufacturer recommends that the ash pan should not be overfilled. The manufacturer recommends that the ash pan should not be overfilled. Overfilling the ash pan will reduce the air supply to the grate which will result in a decrease in combustion parameters and in extreme cases will make it impossible to light the fireplace.

If ash is left in the ash pan for too long, it can result in premature **corrosion**. The ash from burnt wood can be used for compost or as fertiliser.

4.8. Comments general

You should:

- make sure that **the fire door (combustion chamber) is closed** (except when operating the fireplace);
- after every prolonged break in operation, and before lighting the fireplace again, carry out a patency check on the chimney flue and firebox;
- when carrying out any operations relating to the operation and **use** of the fireplace, bear **in** mind that the fireplace components may be hot, therefore **protective gloves** should be **used** when operating the fireplace;
- Use only spare parts from the fireplace manufacturer for all repairs;
- any repairs should only be carried out by a suitably qualified installer;
- During operation and use of the fireplace, observe the rules that provide basic safety conditions.

It is forbidden to:

- leave anything flammable or heat-sensitive near the glass of the fireplace;
- operate the appliance with broken glass;
- extinguish fireplaces with water; w
- **allow children or animals to enter the appliance**;
- make any structural alterations, changes to the installation and operating principles without the manufacturer's written consent;
- **if you notice a malfunction, put the fireplace out immediately.**

NOTES:

Emergency extinguishing of the fireplace consists of filling the fuel with dry sand or cold ash.

WATER MUST NOT BE USED!

When working on a malfunctioning fireplace, it is also necessary to ensure that the room is in- tensively ventilated and the operations 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 released, resulting in the formation of creosote in the flue which can ignite. A so-called coke fire then occurs, from which the entire building can catch fire.

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

- **shut off the air supply to the fireplace by closing the cold air inlet dampers;**
- **close the rotary shaft in the flue system (if the system has one);**
- **close the oven door tightly;**
- **notify the nearest fire brigade 112 or 998.**

5. CONSERVATION

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

- carry out periodic and timely maintenance - at least once a year an inspection of the fireplace by a specialised service;
- keep the glass, combustion chamber including ash pan and flue pipe reasonably clean;
- Empty the ash pan systematically - 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 to the type of fuel used;
- To clean steel or cast iron parts inside the fireplace, use suitable tools such as a brush, scraper, poker, using protective gloves;
- **All maintenance must only be carried out on an extinguished and cooled appliance**;
- Clean the ceramic glass of the fireplace with kitchen paper (paper towel). The glass should be moistened with water and cleaned with some clean ash from the inside of the stove, avoiding direct contact with the steel and cast iron parts of the appliance. The glass should be rubbed with the damp paper to effectively dissolve the ashes so that they can be wiped off with a dry steam towel. All agents and preparations used for cleaning the glass must not contain any abrasive materials that could damage (scratch) the glass;
- at least twice a year, have the flue pipes cleaned by an authorised chimney sweep, as documented in the Warranty Card;
- clean the inside of the fireplace, check the intake and exhaust vents;
- all seals should be replaced before each heating season.

5.1. Recommended periodic cleaning of the fireplace

In order to ensure efficient combustion in the firebox of the fireplace, the combustion chamber, grate, chimney and flue pipes.

Element	Frequency	Tools and resources
Convection surfaces of the fireplace and connecting pipes to the flue pipe - cleaning	As required, but at least once a year or after a prolonged break in operation	Spring material brush, ash extractor, fireplace cleaners.
Flue pipe, chimney - check patency of chimney and condition of flue system	At least twice a year, after the heating season and a prolonged break in operation.	Specialist chimney sweep
Front glass	As required	Cooled - dampened paper towel with a little clean ash, no abrasives to damage it
Grate and components inside the fireplace	As required	Hoover, fireplace cleaners.
Maintenance of the exhaust gas throttle lever - replacement of glass gaskets and fire door	At least once a year, after the heating season or as required, depending on the level of consumption.	Service authorised by the manufacturer, lubrication with a small amount of graphite grease

For thorough cleaning of the LUPO, LYNX, LYNX O, CANE fireplaces there is an inspection hole provided in the design - a clean-out hatch, located at the rear of the fireplace. To access this hole, unscrew the rear cover of the fireplace using a spanner. Details are shown in the diagram.

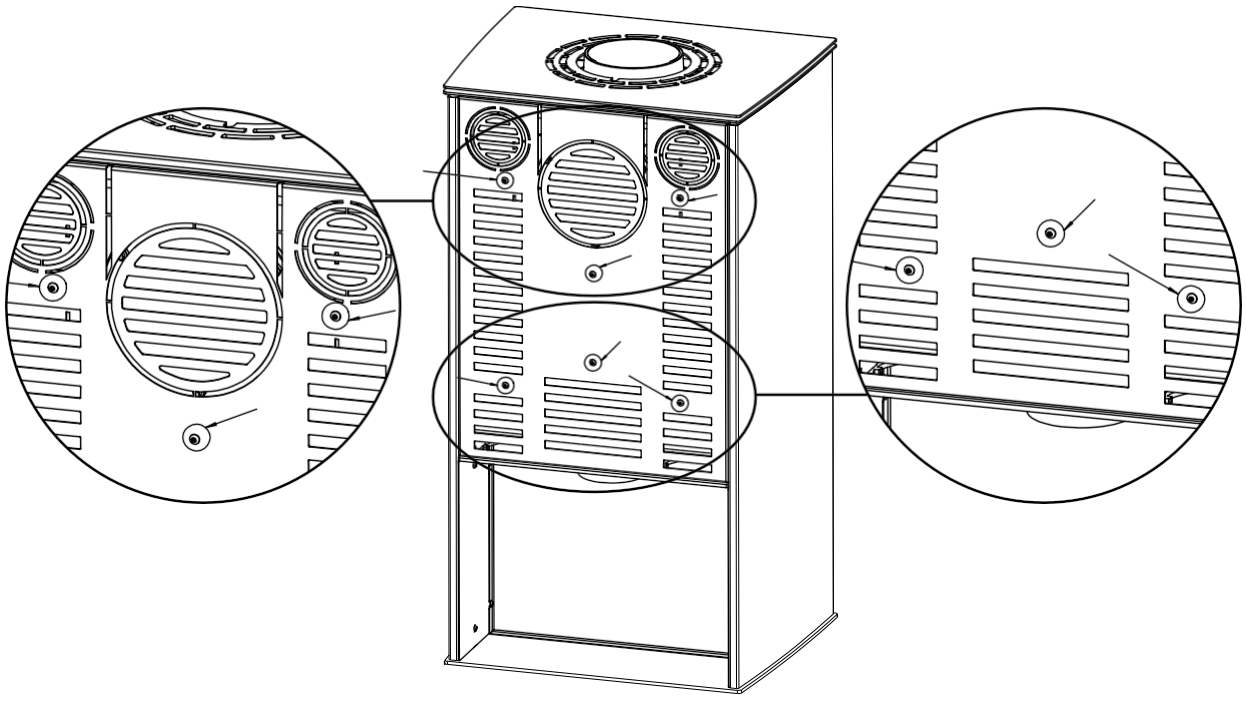


Fig. 27 **Location of screws for rear furnace cover**

Once the cover has been unscrewed, you will gain access to the cleanout. These are fastened with M8 nuts. It is advisable to use new sealing tape for reassembly after cleaning the inside of the fireplace.
Thorough cleaning should be carried out once a year after the heating season, or as needed.

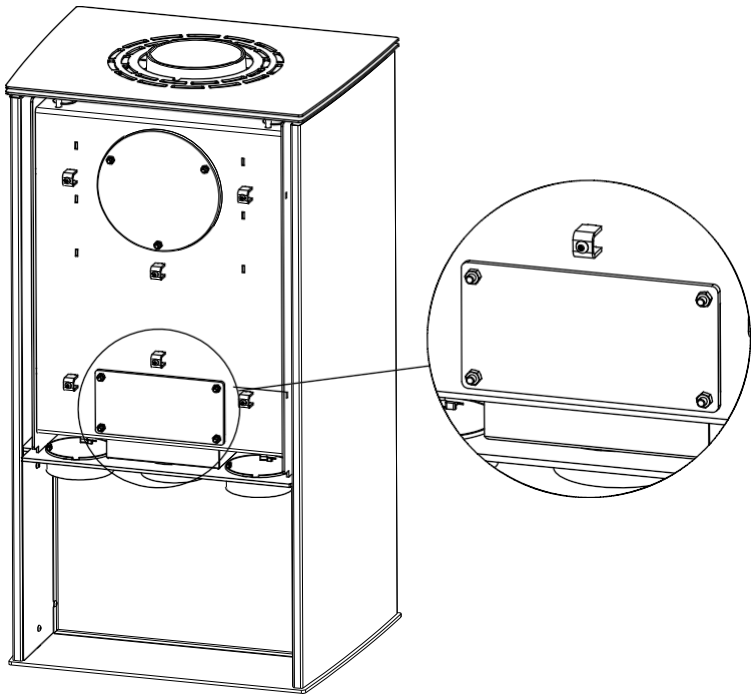


Fig. 28 **Location of the cleanout**

5.2. Recommended periodic cleaning of the fireplace (LUPO, LYNX, LYNX O, CANE)

The fireplace is equipped with an unscrewable cover over the deflector which makes it possible to check the cleanliness of the chimney in a simple and safe manner, and to clean it if necessary. To do this, follow the steps below:

- Remove the concrete from the bottom of the insert.

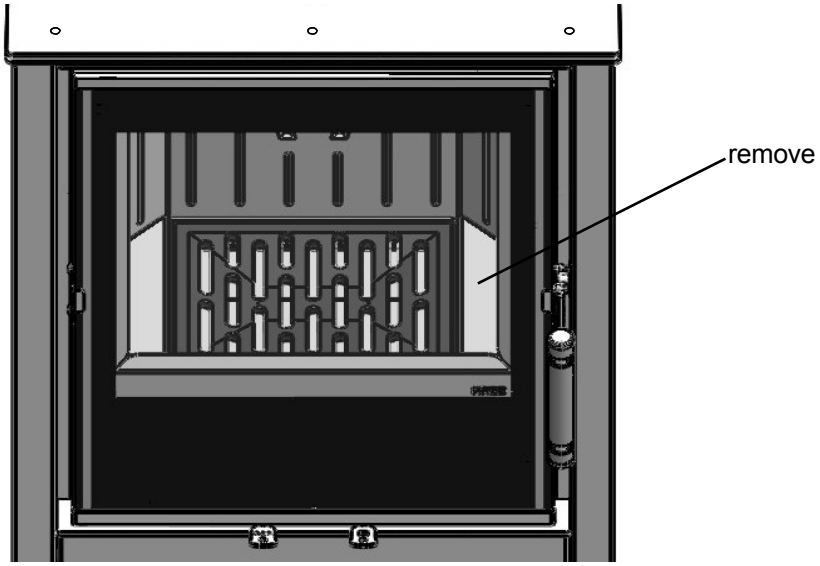


Fig. 29 **Location of concrete**

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

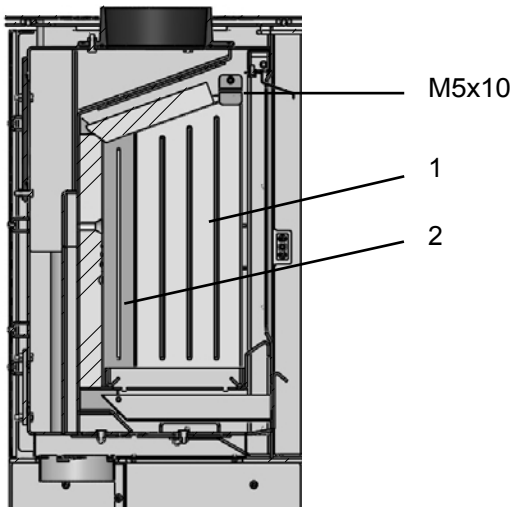


Fig. 30 **Location of bolt and concretes**

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

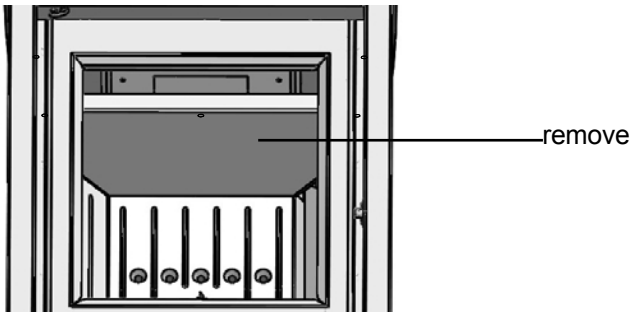


Fig. 31 **Location of deflector**

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

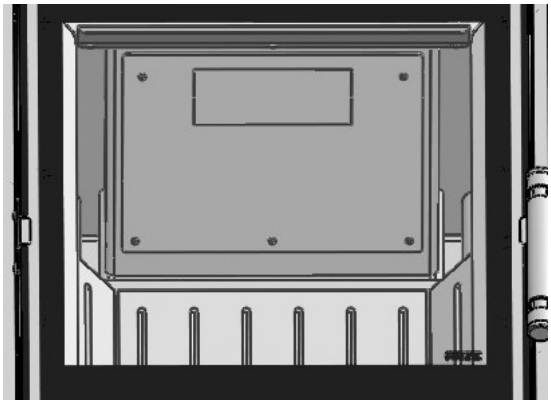


Fig. 32 **Location of screws**

- Once unscrewed, we have access to the flue outlet (chimney).

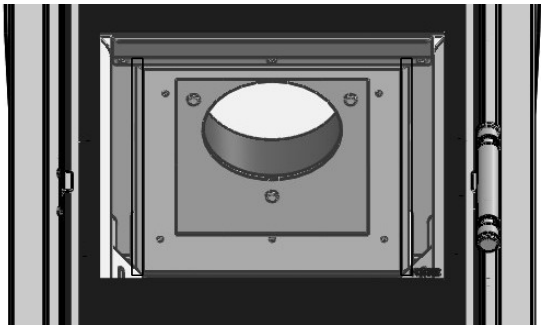


Fig. 33 **View of chimney**

6. FAULTS AND ANOMALIES DURING OPERATION

During everyday use of the fireplace, the following operating anomalies may occur, indicating that the fireplace has not been installed correctly, without observing the relevant instructions in this operating and installation manual and the applicable legal provisions.

6.1. The most common anomalies and how they can be resolved :

	Problem	Solution
Smoke drifting back into the room when the fireplace door is opened	the door may have been opened too abruptly, causing negative pressure in the combustion chamber	slow door opening
	closed adjustable flue pipe shaft (if the installation has this option)	opening the shaft
	insufficient air circulation in the room where the fireplace is installed	check the ventilation capacity and ensure that there is sufficient air in the room
	atmospheric conditions	
	inadequate flue draught	check the efficiency of the chimney installation
Low productivity heating or phenomenon furnace extinction	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%
	inadequate flue draught	check the efficiency of the chimney installation
Low heating capacity with correct combustion process in the furnace	unsuitable, low- calorific wood was used	change to a more calorific type of wood burned
	fuel humidity too high	use wood with a moisture content of up to 20%
	thin, fine pieces of wood are used which burn quickly	use for smoking other thicker clearing
Dirty glass, no self-burning glass	too slow a fuel combustion resulting in low combustion chamber temperature	increase the amount of air in the combustion chamber, use wood with a moisture content of up to 20%
	coniferous woods with high resin content were used	change wood species to dry hardwoods
Failure of the unit to operate correctly may be due to external factors	tall objects too close to the chimney	increase the height of the chimney or use a "fireman" or other type of cowl
	unsuitable atmospheric conditions, e.g. wind or lack of wind, low atmospheric pressure, high atmospheric humidity, fog, etc.	use a chimney pot, but if this does not help, a chimney sweep should be employed to determine the source of the problem

7. NAMEPLATE

The rating plate is located on the rear of the unit.

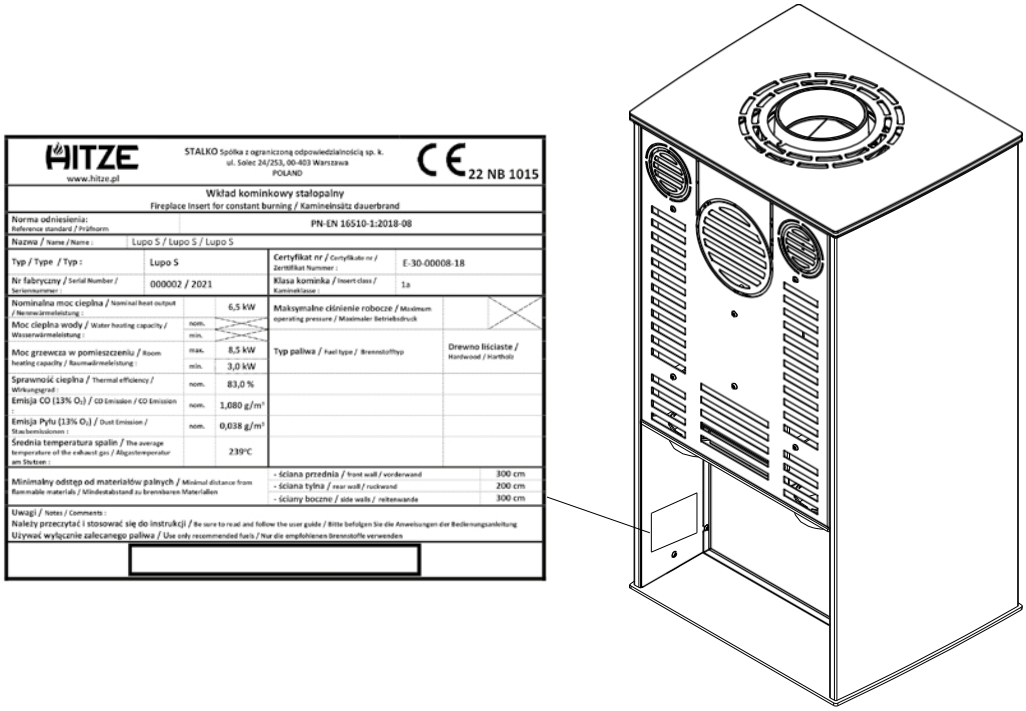


Fig. 34 **Model of rating plate and its location**

8. ENVIRONMENTAL PROTECTION AND RECYCLING

The packaging in which the heater was delivered should be disposed of in an appropriate manner. The wooden pallet, foil and cardboard packaging should be taken to a recycling centre.

After the operation period the user should hand over the used heater together with its accessories to an appropriate institution dealing with disposal of such devices. The glass of heat-resistant glass must be removed from the heater and disposed of as hazardous waste in accordance with local regulations at an authorised recycling centre. The glass in the fireplace must not be placed in the normal waste container. The steel body of the appliance should be dismantled and cleaned of silicone gaskets and then returned to the recycling centre. If the appliance is equipped with an accumulation lining, this should also be dismantled and disposed of in the waste container. All materials received should be sorted and recycled. The bins are located at the places specified by the relevant municipal or communal services.

9. 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 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

HITZE

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