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INSTRUCTIONS FOR USE AND SAFETY INFORMATION FOR NATURAL DRAWER ENERGY FIREPLACES (ECO)

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1. Introduction

1.1 Company details

COMPANY NAME	MISAILIDI FOUNDRY
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1.2 Product description and technical specifications

The device must be used exclusively for heating the interior spaces of buildings (except bedrooms) that meet the provisions of the Building Regulations and other relevant legal and regulatory provisions.

The device has an inlet air adjustment lever (primary air). At the same time, on the back of the firebox as well as in the frame of the firebox there are holes for the flow of secondary and tertiary combustion air respectively.

The ceramic glass of the door is resistant up to 750°C, allowing visual contact with the combustion chamber without the need to open the door.

The device is used exclusively for heating the interior spaces of buildings (except bedrooms) that meet the provisions of the General Building Code, the ELOT Standard HD 384 and other relevant provisions.

The natural draft fireplace consists of the following main parts:
- Steel combustion chamber.
- Door with ceramic glass.
- Sliding door mechanism with sliding guides and counterweight.
- Fixed flue gas deflector inside the firebox
- Incoming air flow adjustment lever (primary combustion air).
- Secondary combustion air device, located on the back of the firebox.
- Tertiary combustion air device, located on the frame of the firebox.
- Flue gas outlet diaphragm (flap) adjustment lever.
- Ashtray under the firebox for collecting ash.

Also, the device has the ability to work with ducts for:
- The entry of primary combustion air from the external environment.
- The exit of flue gases from the combustion space to the external environment.

The types of natural flow energy fireplaces and their technical characteristics are presented in the tables below:

	ECO 65 FLAT	**ECO 45-75 FLAT**	**ECO 80 FLAT**	**ECO 90 FLAT**
NOMINAL THERMAL POWER (kW)	13,60	14,04	14,36	14,65
THERMAL POWER RANGE (kW)	6,80-20,39	7,02-21,06	7,18-21,54	7,33-21,98
EFFICIENCY (%)	74,7	74,8	74,6	74,6
NOMINAL FUEL CONSUMPTION (Kg/h)	3,86	3,97	4,08	4,16
AVERAGE FLUE GAS TEMPERATURE (o	235	230	220	245
CO CONCENTRATION AT 13% O2 (%)	0,1192	0,1185	0,1175	0,1180
FLUE DIAMETER (mm)	250	250	250	250
EXTERNAL DIMENSIONS (mm)	185x75x50	187x88x53	180x87,7x54,5	188x97x66

	ECO 55-90 FLAT	**ECO 115 FLAT**	**ECO 75 FLAT DOUBLE**	**ECO 90 FLAT DOUBLE**
NOMINAL THERMAL POWER (kW)	25,68	27,87	13,44	25,33
THERMAL POWER RANGE (kW)	12,84-38,51	13,94-41,81	6,72-20,17	12,67-38,00
EFFICIENCY (%)	74,5	74,3	74,6	74,5
NOMINAL FUEL CONSUMPTION (Kg/h)	7,30	7,30	3,81	7,20
AVERAGE FLUE GAS TEMPERATURE (o	315	350	220	315
CO CONCENTRATION AT 13% O2 (%)	0,1176	0,1156	0,1197	0,1187
FLUE DIAMETER (mm)	250	250	250	250
EXTERNAL DIMENSIONS (mm)	187x102x66	187x120x66	187x88x62	187x102x73

	ECO 115 FLAT DOUBLE	**ECO 65 PRISMA**	**ECO 80 PRISMA**	**ECO 60 CORNER**
NOMINAL THERMAL POWER (kW)	26,59	13,61	14,52	13,89
THERMAL POWER RANGE (kW)	13,30-39,89	6,80-20,41	7,26-21,78	6,94-20,83
EFFICIENCY (%)	74,3	74,9	74,7	74,7
NOMINAL FUEL CONSUMPTION (Kg/h)	7,58	3,85	4,12	3,93
AVERAGE FLUE GAS TEMPERATURE (o	335	220	230	190
CO CONCENTRATION AT 13% O2 (%)	0,1190	0,1189	0,1179	0,1193
FLUE DIAMETER (mm)	250	250	250	250
EXTERNAL DIMENSIONS (mm)	185x121x72	187x80x67	187x97x70	188x66x66

	ECO 75 CORNER 45-75	ECO 75 CORNER 45-75 BG	ECO 90 CORNER 55-90	ECO 90 CORNER 45-90 BG
NOMINAL THERMAL POWER (kW)	14,07	14,06	25,64	24,24
THERMAL POWER RANGE (kW)	7,03-21,10	7,03-21,09	12,82-38,46	12,12-36,36
EFFICIENCY (%)	74,6	74,7	74,4	74,4
NOMINAL FUEL CONSUMPTION (Kg/h)	4,00	3,99	7,30	6,90
AVERAGE FLUE GAS TEMPERATURE (o	195	205	275	275
CO CONCENTRATION AT 13% O2 (%)	0,1170	0,1177	0,1186	0,1180
FLUE DIAMETER (mm)	250	250	250	250
EXTERNAL DIMENSIONS (mm)	187x90x54	187x90x56	187x103x66	187x106x55

	ECO 75 PANORAMA	ECO 75 PANORAMA 45-75 BG	ECO 90 PANORAMA	ECO 90 PANORAMA 45-90 BG
NOMINAL THERMAL POWER (kW)	13,53	13,51	22,37	22,35
THERMAL POWER RANGE (kW)	6,77-20,30	6,76-20,27	11,19-33,56	11,17-33,52
EFFICIENCY (%)	74,8	74,6	74,4	74,4
NOMINAL FUEL CONSUMPTION (Kg/h)	3,83	3,84	6,37	6,36
AVERAGE FLUE GAS TEMPERATURE (o	210	210	280	280
CO CONCENTRATION AT 13% O2 (%)	0,1185	0,1190	0,1191	0,1191
FLUE DIAMETER (mm)	250	250	250	250
EXTERNAL DIMENSIONS (mm)	187x94x52	188x94x54	187x108x66	188x108x56

	ECO PANORAMA PI 55-90
NOMINAL THERMAL POWER (kW)	17,69
THERMAL POWER RANGE (kW)	8,85-26,54
EFFICIENCY (%)	74,6
NOMINAL FUEL CONSUMPTION (Kg/h)	5,02
AVERAGE FLUE GAS TEMPERATURE (o	280
CO CONCENTRATION AT 13% O2 (%)	0,1182
FLUE DIAMETER (mm)	250
EXTERNAL DIMENSIONS (mm)	183x76,5x106

1.3 Purpose and scope

The purpose of this document is to provide detailed information and guidance to ensure safety during the various phases of the life cycle of natural draft fireplaces. It identifies risks, protective measures, and procedures required for the safe handling of these products.

Natural draft fireplaces require special care during installation, use, maintenance, as well as during dismantling or demolition, in order to ensure their safety and efficiency throughout their life. The manufacturer provides specific instructions for all these procedures, as well as for the risks associated with their operation.

1.4 Scope

The scope covers the transportation, installation, use, operation, removal, maintenance, dismantling and demolition of natural draft fireplaces, and is addressed to consumers, installers and maintainers.

1.5 Importance and safety guidelines

Safety at all stages of the product life cycle is critical to avoid accidents, damage and risks to health and the environment. Each stage must follow strict guidelines to ensure the safety of users and professionals involved.

The requirements for the safety of fireplaces concern both professionals (workers) and non-professionals (consumers, users) at all stages of the product's life cycle. During transportation, installation, maintenance, use or dismantling, strict adherence to technical specifications and safety rules is required to reduce the risks of accidents, such as fire, carbon monoxide poisoning or damage to users and the environment. In particular, professional installers and maintainers must have the necessary knowledge and certifications to ensure the correct operation and safety of fireplaces. For consumers, it is important to use the fireplace correctly, to carry out regular maintenance and to follow the operating instructions in order to avoid accidents. Also, in the case of processing the product at the end of its life cycle, attention is required to the safe dismantling and recycling of materials, in order to prevent pollution and to ensure the protection of the environment and public health.

These installation and operating instructions are intended for users and qualified technicians. We recommend that users read all the instructions carefully. Installation work and the first use of the fireplace must be carried out exclusively by a qualified technician.

Danger:

Failure to observe the safety instructions may cause serious injuries – even death – as well as material damage and environmental damage. Read the safety instructions and follow the instructions they contain.

- Read these fireplace installation and operating instructions carefully.
- Keep these instructions for future reference.

Correct installation, regular maintenance and safe use of natural draft fireplaces are essential to ensure their efficient and safe operation. It is essential to follow the manufacturer's instructions and take appropriate precautions to avoid risks such as carbon monoxide poisoning, fires and mechanical damage. In the event of damage, professional assistance should be sought to properly repair the product.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not use the appliance as a toy.

1.6 General safety recommendations

The device must be operated in accordance with this technical manual. The equipment used with the device must be suitable and have the required certifications, where required by applicable laws & regulations.

IT IS FORBIDDEN to operate the device without the guards in their intended position.

Any maintenance or repair work must be carried out only by qualified technical personnel with the approval of the manufacturer or its representative. Any maintenance or repair work must be carried out only after the device has been isolated from its power supply source and has cooled to ambient temperature.

WARNING!
Any electrical work must be carried out by a licensed electrician in accordance with applicable laws.
The spare parts that may be used must be approved by the manufacturer.

WARNING!
The installation and operation of the appliance in bedrooms should be avoided. It is recommended that the hot air ducts do NOT end in rooms used as bedrooms. Otherwise, an appropriate detection and warning system for flue gas leaks should be installed.

The fireplace can be transported safely using appropriate means.

The various parts of the appliance, especially its external surfaces, are extremely hot during operation and therefore the necessary precautions must be taken.

- Use suitable gloves.
- Inform your children about the risk of burns when the energy fireplace is in operation and make sure they remain at a safe distance, supervising them.
- Do not place objects that are not resistant to heat near the appliance.
- Do not place flammable or explosive materials near the appliance. In case you want to carry out work with flammable materials in the surrounding area, turn off the device and wait for it to cool down before carrying out these works.
- The device must not be altered or modified in any way.
- Use only genuine spare parts from the manufacturer. The company is not responsible for any damage caused by spare parts not approved by the company.

! Never leave children alone or unsupervised near the fireplace when it is in operation.
! Teach children how to handle the fireplace correctly and safely.
! Do not touch the external surfaces and glass when the fireplace is in operation, there is a high risk of burns.
! It is forbidden to use the fireplace as a waste incinerator.
! Do not burn used or painted wood.
! Dispose of the ash only after it has cooled down completely.
! Ash must be placed outdoors or disposed of in a place where there is no risk of ignition.
! Inform your local specialist dealer immediately if you detect any malfunction.
! Do not use chemicals or liquids to light a fire.
! Do not use ANY other fuels than those indicated.

1.7 Fire hazard

Fire prevention measures

1. The appliance must not be operated with the combustion chamber door open.
2. There must be no flammable or heat-sensitive objects or materials within 100cm of the fireplace.
3. Safety distances must be maintained at all times. Within these safety distances from the appliance, no flammable objects must be placed.
If the appliance is intended to be installed on a floor without fireproof properties, a fireproof substrate must be placed between the appliance and the floor, in dimensions specified by local regulations.
4. For optimal operation of the appliance and to prevent the risk of fire, the chimney must be cleaned regularly.
5. Ashes must be removed regularly. Dispose of in a fireproof container.
6. Do not operate the appliance if you notice any gas emissions.
7. Do not place flammable materials near the appliance.
8. Suitable fire extinguishers should be available in close proximity to extinguish a fire in the appliance in a dangerous situation.

Firefighting instructions

If you notice a fire in the fireplace or chimney, IMMEDIATELY perform the following steps, where it is safe to do so:

1. Close the appliance door.
2. Close the primary combustion air regulator – move it to the closed position to the left.

3. Close the flue gas flow regulator – push it to the closed position.
4. Use suitable fire extinguishers to extinguish the fire.
5. Call the FIRE DEPARTMENT immediately (telephone for Greece: 199)

Avoid extinguishing the fire using water.
The use of water will likely result in the creation of cracks / distortions of the metal surfaces of the fireplace due to the sudden change in their temperature. **However, if there is no other extinguishing agent available, use water.**

CAUTION!
After successfully extinguishing the fire, contact a qualified person to check the fireplace and chimney to verify that the device is still suitable for use.

1.8 Use and Terms of Use
Use refers to the purposes for which the fireplace is designed and approved to operate. Natural draft fireplaces are used for heating indoor spaces. It is important for the user to be aware of the declared uses of the fireplace, as exceeding these uses can lead to performance problems, overheating or even dangerous situations.

Terms of use refer to the limitations and instructions that the user must follow for the safe and efficient operation of the fireplace. These terms include operating conditions (e.g. temperatures, fuel types, ventilation), limited or inappropriate uses (e.g. prohibition of the use of non-approved fuels), as well as maintenance and inspection requirements.

It is important to note that failure to comply with these conditions may result in damage to the fireplace, poor performance, and health and safety risks to users (e.g. carbon monoxide emissions or fire).

2. Transportation
2.1 Potential transportation risks
Risks include injuries due to accidents or falling products, damage to packaging, and damage to products. Workers or users who move the product are also at risk if appropriate transportation methods are not used.

2.2 Proper packaging methods
To ensure safety during transportation, the product must be properly packaged in materials that will protect it from impacts and abrasions. The use of stable wooden or plastic pallets and protective plastic or foam materials is recommended.

2.3 Precautions during installation and transportation at high altitudes
Instructions for safe handling during transportation, such as the use of lifting machinery or equipment, to avoid injury or damage to the products.

2.4 Marking and warnings of danger
Marking with signs warning of the need for caution, indicating the nature of the hazards (e.g., “Heavy product”, “Fragile”, “Risk of injury”).

3. Installation
The manufacturer's responsibility is limited to the supply of the device.

The device is delivered ready for installation without the need for assembly.

The installation of the natural flow fireplace must be carried out in accordance with applicable national legislation and regulations. The installation must comply with the rules of the art, be carried out taking into account the instructions & limitations of this Technical Manual and be carried out by specialized personnel holding the required permits.

The company that undertakes the installation of the natural flow fireplace is responsible for delivering it in a suitable position so that it is ready for use. This includes its parameterization as well as the final checks and tests to verify the safe operation of the entire assembly (fireplace).

3.1 Potential risks during installation
Risks include accidents due to improper installation, gas or smoke emissions during installation, as well as risks from contact with hazardous materials or overloading the space.

Warning:

Entrust the installation of the device to a specially trained technician.

Professional Installation: The installation of natural draft fireplaces must be carried out by a certified technician or professional who meets the applicable technical specifications and safety regulations. The technician must ensure that the fireplace is placed in a safe location, away from flammable materials and in a space with adequate ventilation.

3.2 Preparation of the installation space

It is important to check the space where the fireplace will be installed, for any defects in its structure or other risks (e.g., flammable materials, insufficient ventilation).

The space in which the fireplace is placed must meet the minimum distance requirements from walls, furniture and other objects, and have a proper ventilation system.

Caution:

The appliance is not suitable for installation in a shared flue system.

Floor

Make sure that the floor where the appliance is intended to be installed can and does withstand the load it is intended to receive (the appliance's own weight, the weight of the lining, the weight of the fuel load, etc.) as well as that it has fire-resistant properties. Otherwise, appropriate measures should be taken to enhance its strength and cover it with fire-resistant material.

Warning:

Risk of fire due to inappropriate floor covering!

In case the above conditions are not met, place the fireplace on a non-combustible base made of ceramic, steel or glass material, with dimensions that protrude from the fireplace perimeter by 30 cm and 50 cm from the firebox door.

Space

Make sure that the space where the appliance will be installed is adequately ventilated and that the air intended for combustion enters directly from the outside environment (e.g. with a suitable air inlet).
Avoid installing the appliance in a space where central ventilation ducts, hoods, type B gas appliances, heat pumps or generally appliances that can cause underpressure when operating simultaneously with the hob are operating.

Safety distances

Safety distances from flammable materials should be at a distance of 50 cm around and 80 cm in front of the appliance. Maintain the minimum clearances between the sides (sides and rear) of the appliance and adjacent surfaces (e.g. walls, partitions, etc.) when these surfaces are made of flammable materials, under the necessary condition of interposing 30mm thick insulating material and thermal conductivity of at least 0.04W/mK or improved value. For distances smaller than the declared values, the surface of the walls must be covered with a suitable non-flammable material.

Warning:

Risk of fire due to flammable objects within the safety distances!

Do not place flammable objects and materials within the safety distance.

3.3 Installation instructions

The installation of the appliance must comply with all locally applicable regulations including those referring to national and European standards.

Chimney

A key factor for the proper operation of the appliance is the choice of chimney.
Its dimensions, height, and insulation are the factors that affect the draft.

According to building regulations, each appliance must have a separate chimney. It is permitted to connect more appliances to the same chimney, if the exhaust gases are removed by mechanical means. The chimney must be made of durable and non-combustible materials and have a fire resistance index of no less than two hours. It must be securely supported along its entire length on a wall, floor or ground.

The construction of the chimney must be such as to ensure:

- The smooth flow of exhaust gases under normal operating conditions.
- Its construction ensures its resistance to high temperature, combustion products and possible condensate.
- It is insulated and watertight.
- The tightness of the walls, so that gases do not escape.
- The resistance to the loads it receives.
- The resistance to conditions created by any ignition of deposits inside the chimneys.
- Their resistance to chemical attacks caused by combustion products.
- The thermal insulation, so that the external surface temperature is below 50 degrees C at the base of the chimney, regardless of whether it is accessible or not.
- The internal walls of the chimney must be smooth without cracks and corrosion.
- It is vertical and does not show a reduction in the internal cross-section at any point.
- If there is a change in direction, this does not exceed 45 degrees.
- In internal chimneys, its free expansion must be ensured. The chimney should be located as much as possible inside the building and exit at the highest point of the building. Bends should be avoided in the chimney route. The connection of the horizontal part of the chimney with its vertical part should be made at an angle of at least 100 degrees.

The chimney should protrude from the highest point of the roof at least 1m. Around the head and within a radius of 10 meters, there should be no obstacles such as walls, slopes and trees. If this is not possible, then the head should be raised at least one meter above the obstacle. In case there are side chimneys, the end of one should be at least 50cm higher than the other, in order to avoid pressure transfer between them.

The minimum chimney draft must be 12 Pa or 0.12 mbar

Before installing the appliance, make sure that the chimney meets the following:
1. Its construction ensures its resistance to high temperature, combustion products and possible condensate.
2. It is insulated and watertight.
3. It is vertical and does not show a reduction in the internal cross-section at any point.
4. If there is a change in direction, this does not exceed 450.
5. Its construction must meet any technical specifications of the European Union Directives and the relevant national provisions (Regulation 305/2011, etc.). 4.2 Chimney termination

Chimneys installed outside the building must have sufficient insulation along their entire length.

It is PROHIBITED to connect two or more devices to one chimney. It is PROHIBITED to pass air supply ducts through the interior of the chimney.

In case of a chimney fire

The chimney can catch fire if unsuitable or liquid fuels are used.

If you notice a fire in the fireplace or chimney, **IMMEDIATELY** perform the following steps, where it is safe to do so:
1. Close the appliance door.
2. Close the primary combustion air regulator – move it to the closed position to the left
3. Close the flue gas flow regulator – push it to the closed position
4. Use appropriate fire extinguishers to extinguish the fire.
5. Call the FIRE DEPARTMENT immediately (telephone for Greece: 199).

Avoid extinguishing the fire with water.
The use of water will likely result in cracks/warping of the metal surfaces of the fireplace due to the sudden change in their temperature. **However, if no other extinguishing agent is available, use water.**

WARNING!
After successfully extinguishing the fire, contact a qualified person to check the fireplace and chimney to verify that the appliance is still suitable for use.

The following standard measures must be taken to avoid a fire:
1. The appliance must not be operated with the combustion chamber door open.
2. There must be no flammable or heat-sensitive objects or materials within a distance of less than 100cm in front of the fireplace.
3. The specified safety distances must be maintained at all times. Within these safety distances from the appliance, flammable objects must not be placed.
4. If the appliance is intended to be installed on a non-combustible floor, a fireproof substrate must be placed between the appliance and the floor, in dimensions specified by local regulations.
5. For optimal operation of the appliance and to prevent the risk of fire, the chimney must be cleaned regularly.
6. Ashes must be removed regularly. Dispose of in a container with fireproof properties.
7. The appliance must not be operated if gas emissions are observed.
8. Flammable materials must not be placed near the appliance.
9. Suitable fire extinguishers must be available in close proximity in order to extinguish a fire in the appliance in a dangerous situation.

Flue gas exhaust duct
At the installation location of the appliance, oxygen must be supplied to start and maintain the combustion of the wood logs, directly from the external environment and not indirectly from the space where the appliance is installed. This is achieved by installing a suitable air intake. The opening of the intake that communicates with the external environment must be covered with a suitable louver that, on the one hand, allows air intake and, on the other hand, prevents the entry of birds, rodents or other animals.

The air intake must be positioned so that it cannot be covered and is protected by suitable louver. Where the outlet cannot communicate directly with the external environment, it may communicate with adjacent spaces, provided that these adjacent spaces are not used as garages, kitchens, toilets, engine rooms and boiler rooms.

Καπναγωγός εξαγωγής καυσαερίων
The flue that will be used to connect the appliance to the chimney must be suitable for this use (meet the technical specifications of the Building Regulations and the relevant national provisions) and bear the required CE certification.

The flue must not have a slope greater than 45° (with respect to the vertical axis) and must be connected to the chimney in a completely airtight manner. The flue is connected to the top of the appliance at the central outlet of circular cross-section. When connecting, appropriate fire-resistant material must be used and the necessary tightness must be ensured. The flue must be properly insulated and must not come into contact with flammable materials.

CAUTION!
If the flue is not connected to the appliance with absolute tightness, then the release of dangerous gases from the combustion of the wooden logs (e.g. CO, CO2) and/or a fire may occur.

Natural flow hot air exhaust (expansion) louver
The space around the appliance, within the decorative lining of the fireplace, must be constantly and adequately ventilated. Ventilation helps prevent the appliance from overheating, while the heated air is diffused into the interior spaces with natural flow, through the expansion louver that must be placed on the

ceiling of the decorative lining of the fireplace. The cold air that enters through the lower louver will be heated within the lining and will exit through the upper expansion louver, creating a hot air flow circuit that will

Decorative fireplace lining
The material used to make the decorative lining must be suitable (sufficiently fireproof) for the high temperatures expected to develop inside the lining.

It is FORBIDDEN for the decorative fireplace lining to be supported on the hearth. The support must be ensured with a metal independent frame, which will spread the load directly to the ground and not through the hearth.

4. Tips for proper operation
The fireplace is not a household waste combustion unit. Anyone who uses it to burn household waste, chemically treated wood residues, old paper, pollutes the environment and may be prosecuted.
The fireplace is not suitable for burning liquid fuels.

In addition to uncontrolled air pollution and the emission of harmful pollutants, the burning of unsuitable fuels has a negative effect on the operation and lifespan of the fireplace and chimney.

The burning of unsuitable fuels can also cause a fire in the chimney and in the house.

Acceptable fuels
Only dry wooden logs with a moisture content of approximately 8%, with a length of approximately 30cm and a maximum circumference of 30cm are allowed to be burned. Smaller pieces of wood can be used for kindling.

The burning of compressed pieces of wood without resin is allowed. These should be used with particular care. This type of fuel has a high calorific value and if used in large quantities, it may cause the appliance to overheat.

It is dangerous and FORBIDDEN to use as fuel: charcoal, paper, pieces of bark and panels, green or painted wood and plastic materials. In case of damage to the device caused by the use of non-permitted fuels, the manufacturer does not bear any responsibility. The warranty provided with the purchase of the device is void in these cases.

The use of paper and cardboard is **permitted** only as kindling.

Caution!
Paper and cardboard with prints on their surfaces are dangerous as dangerous chemicals contained in the ink are released during their combustion.

NOTE!
It must be taken into account that it is not possible to continuously heat the space from the stove during the night without regular fuel supply.

Tip:
Do not cut firewood too small because very thin wood burns for only a very short time.

Different types of wood have different calorific values. Hardwoods, such as oak and beech, are particularly suitable for burning, as they burn slowly with a low flame and create a longer burning time. Resinous woods, which are rich in resin, burn faster and tend to create sparks.

Warning:

Never burn plastics, household waste, chemically treated wood waste, bark and chipboard waste.

The use of unsuitable fuels can cause damage to the appliance's chimney and can also cause harm to health and the environment.

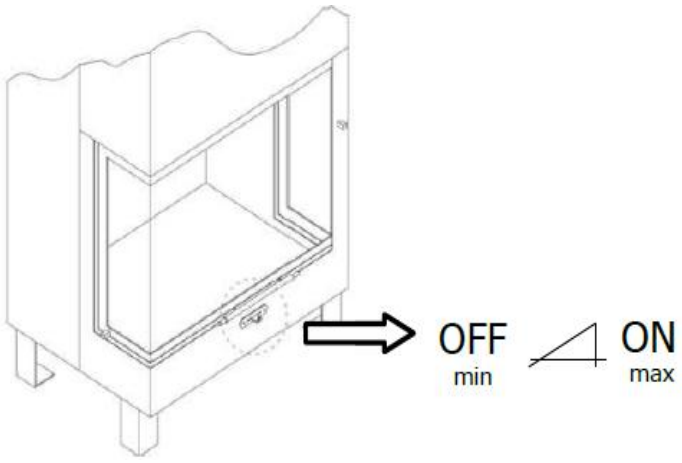
Caution:

Only use dry firewood.

5. Controls

5.1 Adjusting the combustion air flow

The device located in the middle, under the flame door, regulates the flow of intake air. The intake air enters the combustion chamber, under the combustion bed, through the lower grate. It is recommended that when lighting the stove, the device be placed in its fully open position (ON) in order to ensure the inflow of a large amount of combustion air. During combustion and depending on the heating needs of the space, the device can be moved from its fully open position (ON) to its fully closed position (OFF) and/or vice versa, regulating (increasing or decreasing respectively) the amount of air entering the combustion chamber and, by extension, the intensity of the combustion of the wood logs.

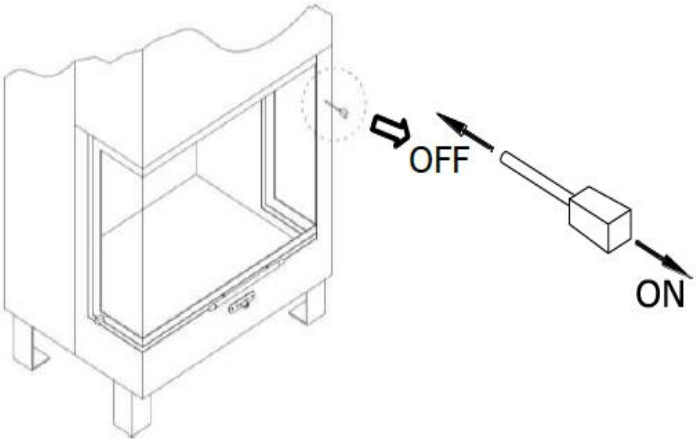


During normal operation of the fireplace, this lever should not be in its fully closed position (OFF), in order to achieve a constant air flow to maintain combustion.

5.2 Flue gas flow adjustment

The lever achieves regulation of the flow of flue gases exiting the mouth. During combustion and depending on the heating needs of the space, the lever can be moved from its fully open position (ON) to its fully closed position (OFF) and/or vice versa, respectively increasing or decreasing the rate of escape of flue gases towards the flue and the chimney afterwards.

The adjustment position of the lever affects the time the hot flue gases remain inside the fireplace for a longer or shorter period of time respectively. Thus, the air in the air chambers of the fireplace is heated more or less before it exits into the building through the air ducts with the louvers.



The exhaust gas flow adjustment device is constructed in such a way that even when the relevant lever is in its fully closed position (OFF), the exhaust gases are allowed to escape through the chimney, ensuring in any case that the combustion chamber will not be filled with smoke.

6. Operation of the device

6.1 Lighting instructions

During the first uses of the device, a characteristic odor may develop due to the drying of the device's paint and its sealing adhesive. After a short use, no odor will be noticeable.
The area where the device is used must be adequately ventilated. Never light the device when there are flammable gases in the room.

During the first uses of the device, a limited amount of fuel (wooden logs) should be used in order to give the device the necessary room to expand smoothly due to the increase in temperature.

Only the type of fuel stated in this Technical Manual (see Chapter 7) should be used.

The use of accelerants (alcohol, gasoline, oil, etc.) to light the device is **PROHIBITED**.

When the kindling is lit, place wooden logs (suitable fuel), close the door and regulate the combustion.

For the correct and problem-free operation of the device, the user must observe the following:

1. Ensure adequate ventilation of the room throughout the entire operation of the device.
2. Operate the device during the first ignitions (3 ~ 4 times) with a reduced amount of fuel for a sufficient period of time (6 ~ 10 hours) and adjust the exhaust gas extraction to the "ON" position (fully open)
3. In subsequent ignitions, gradually larger amounts of fuel are used, until the device operates at maximum load. During this phase, long periods of ignition and extinguishing should be maintained as much as possible so that the device can adapt smoothly.

Danger:

Do not touch the hot parts of the heater. Take precautions (fireproof gloves, etc.). Warn children of such danger and make sure they do not stay near the heater when it is in operation.

The above steps must be completed before installing the decorative lining of the fireplace, so that it is possible to check the correct connection of the flue to the fireplace and the chimney. After the above procedure has been successfully completed, the decorative lining can be installed.

When the materials and connections of the decorative lining have dried, the device can operate at normal rates, avoiding excessive loads or the use of fuels that can lead to sudden fluctuations in the temperature of the fireplace surfaces.

When the device is used, high temperatures develop that can cause burns to people or animals or cause fire to objects that are in contact with the device or are located nearby. Safety distances should be maintained for adjacent objects, measures should be taken to restrict access for children, pets or other animals, and contact with its hot surfaces should not be attempted until they have cooled sufficiently.

6.2 Operation under normal conditions

During normal operation of the appliance, the primary combustion air flow adjustment device can take any position from fully closed to fully open, depending on the heating needs of the space.

CAUTION!
The appliance must not be operated with a large amount of fuel or with an excessive inflow of combustion air, as it may overheat and cause damage.

Ash should be regularly discarded to allow combustion air to enter the combustion chamber unhindered

It is PROHIBITED to use the appliance with the combustion chamber door open because there is a risk of fire and the emission of dangerous flue gases in the area of use.

If you notice a malfunction during operation of the device (e.g. release of flue gases, overheating of the device, etc.), take the following necessary measures:
• Move the primary combustion air adjustment device to the left to the closed position
• Push the flue gas flow adjustment lever to the closed position
• Do not supply the device with additional fuel
If required, apply fire extinguishing measures

6.3 Extinguishing the fireplace

To reduce or extinguish the fire in the appliance, set the air supply lever to a low level or close it completely. In this way, the appliance is not supplied with air, so the fire decreases and gradually goes out. **DO NOT EXTINGUISH THE FIRE WITH WATER!**

Caution:

When wood burns slowly in a closed heater, moisture and tar are produced, which will create condensation and sediment in the chimney. This phenomenon can be minimized by burning the stove vigorously and for a period of 15 to 20 minutes twice a day.

WARNING:
The fireplace does not emit fumes or smoke gases into the home provided that it has been properly installed by a specialist technician, according to the installation instructions, the chimney has been correctly dimensioned and the cleaning and maintenance instructions for the heater are applied.
Occasionally during ash removal or fuel replenishment, some fumes may be present.

Danger:

Stop using the fireplace if fumes or fumes are present.

In case of smoke emission:

- Open doors and windows to ventilate the area.
- Extinguish the fire and safely remove the fuel from the fireplace.
- Check the flue and chimney for any obstructions and clean if necessary.
- Seek the assistance of specialist technicians.
- Do not attempt to operate the fireplace again unless the cause of the fumes emission has been investigated and corrected.

6.4 Operation in conditions of increased ambient temperature
In cases of increased ambient temperature (sudden temperature increases), a low degree of chimney draft may occur, even if the device was previously operating with a satisfactory degree of draft.

6.5. Refueling
To refuel the device with recommended fuel, follow the steps below:

1. Open the flame door.
2. Feed the firebox with fuel.
3. Close the flame door and secure it.
4. Repeat the procedure at regular intervals for as long as you wish to keep the device in operation

7. Maintenance
7.1 Potential hazards during maintenance
Hazards from residual heat, from handling exhaust gases or contact with hot surfaces.

7.2 Protective measures during maintenance
Use gloves, face shields and other protective equipment during cleaning and maintenance of fireplaces.

7.3 Cleaning and maintenance
It is important that the fireplace is maintained regularly and in accordance with these instructions. Maintenance should be carried out at least once a year by a qualified technician.

Danger:

The fireplace must be cleaned when it is completely cold.

Cleaning external surfaces
The external surfaces of the fireplace are painted with high-temperature resistant paint. Use a soft brush or dry cloth to clean them. Remove moisture as surface rust may form.

Cleaning the observation window glass (fire door)
The observation window glass is kept clean by the air supply. In case of contamination:

- Remove light dirt from the glass with a damp cloth.

- Use a mild detergent without active substances.
- Remove stubborn dirt from the observation window glass with a special cleaner for stove - fireplace glass. Be careful and follow the instructions for use of these products as they may damage the refractory coating.

Another solution for cleaning fireproof glass is the ashes themselves.
Place a slightly damp piece of newspaper or cloth on the white ashes of the cold stove and rub it on the glass.
Then, rub the glass with another damp piece of newspaper or cloth. Finally, wipe with a clean and dry cloth.

Cleaning the firebox lining
The firebox lining is made of refractory plates.
- Let the refractory plates cool down.
- Do not use rough metal objects for cleaning.
- Clean the firebox lining with a vacuum cleaner.

Cleaning the flue and chimney
The channels, the flue socket and the chimney should be cleaned at least once a year by a specialist.

The technician should brush all air intake parts and the chimney from ash residues and check the sealing sockets.

Cleaning should be assigned to a competent person and is necessary to remove the soot that accumulates in the chimney. Otherwise, it may cause a malfunction of the device and/or a fire.

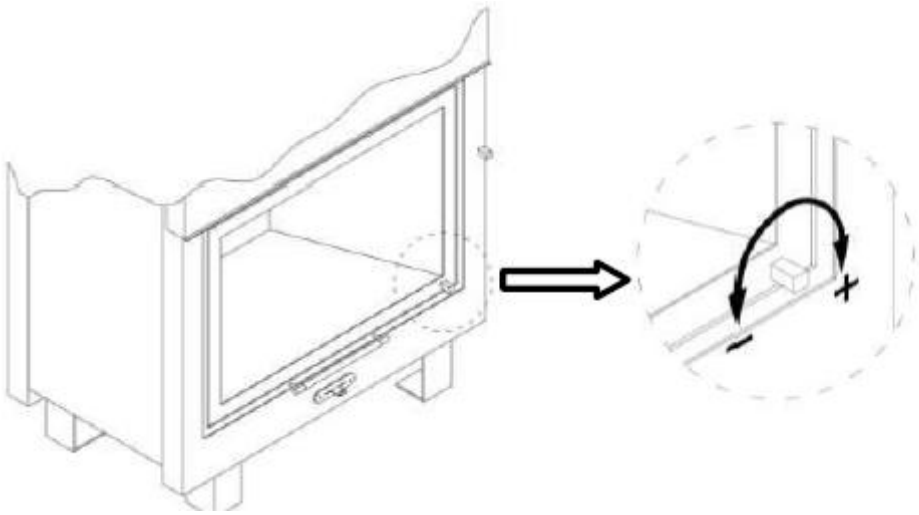
During cleaning, the device and the chimney must be sufficiently cooled. Cleaning should be carried out regularly, at least once a year and/or at shorter intervals depending on use.

To limit soot inside the firebox during the chimney cleaning process, the ash pan should be in place and the hearth door should be kept in its closed position.

Cleaning the ceramic glass
WARNING!
The glass must be cleaned after it has cooled to ambient temperature. Otherwise, it may crack and/or cause burns.

The frequency of cleaning the glass depends on:
- the quality of the fuel used and the moisture content,
- the settings selected when using the appliance and
- the frequency of use of the appliance.

To clean the glass, follow these steps:
1. Lower the door to its closed position.
2. Rotate the lever located on the right side of the door frame. To unlock, rotate counterclockwise ¼ of a full turn
3. Once unlocked, pull the lever towards you to open the door. The door will open to the left and the glass will be fully exposed towards you to facilitate cleaning.
4. After cleaning the glass, close the door and lock it by turning the lever clockwise.
5. Before lifting the door, make sure it is properly locked. You should not lift it if the door is wobbling, as there is a possibility of cracking the glass.



CAUTION!
To remove soot, you can use special cleaning products for ceramic glass and absorbent paper. If stains have formed that require rubbing to remove, a special scraper for ceramic glass is allowed, taking special care to avoid scratching the glass.

To clean the glass, do not use cloths that may scratch its surface or products (e.g. chemicals) that are not suitable for ceramic glass as they may cause the glass to fog up.

It is PROHIBITED to put the appliance into operation if the door is not properly secured. In this case, the combustion chamber is not sufficiently insulated and the appliance cannot operate properly, while flue gases may leak into the installation area.

NOTE!
The glass is made of ceramic materials that can withstand temperatures up to 7500C without creating any irregularities. Cracks may occur during cleaning if the following rules are not followed or due to mechanical causes due to misuse of the appliance (impacts with objects, violent opening or closing of the door, etc.). The warranty does not cover the replacement of the glass, as it cannot be damaged during the proper operation of the appliance in accordance with the instructions and limitations of this Technical Manual.

Ashtray cleaning
Empty the ash container at regular intervals or daily if necessary. Do not let the ash reach the height of the grate.

Ash management & disposal

WARNING!
The temperature that the ashtray develops when the stove is operating and for a certain period of time after it has stopped is extremely high.

Ash must be removed from the ashtray regularly. The appliance must not be operated when the ashtray is completely full as it makes it difficult for air to pass through and causes the grate to overheat.

The ashtray is equipped with a handle that allows it to be handled with a “bare hand” only if the appliance has stopped operating and all its parts, including the ashtray, have cooled sufficiently. Otherwise, the special glove that comes with the appliance must be used.

To clean the ash, follow the steps below:

1. Use a small broom to collect the ash in the ashtray.
2. Lift the grate located at the base of the hearth.
3. Remove the ash pan located under the grate.
4. Discard the ash (it is recommended to use a special fireplace ash cleaning broom). Before discarding the ash, make sure that the ash has cooled completely and is at ambient temperature. Otherwise, a fire may occur in the container or the space where it is to be discarded.
5. Reposition the empty ash pan in its original position.
6. Reposition the grate in its original position.

Maintenance of door sliding guides
The vertical movement of the door is carried out with the help of metal guides on which it slides, ensuring silent operation.

To maintain the correct and silent operation of the door, the lubricant must be renewed regularly. The lubricant should be suitable for the appliance. To lubricate the guides, follow these steps:

1. Lift the door until it is fully open.
2. Locate the sliding guides and apply the lubricant according to the manufacturer's instructions.
3. Lower and raise the door several times so that the lubricant spreads along the guides.
4. If the door still moves with difficulty or there is noise during operation, repeat the procedure.

CAUTION!
Do not apply a large amount of lubricant to avoid the possibility of lubricant leaking onto the stove. Prefer more repetitions by applying a small amount of lubricant.

Do not use the fireplace during the summer months
During the summer, make sure that the heater is cleaned and that the moving parts have been lubricated. Leave the air intake lever slightly open so that air can enter the chimney through the fireplace into the flue, thus preventing moisture and condensation in the chimney.

Fireplace not in use for a long period of time
IMPORTANT: If the fireplace is not going to be used for a while, clean it carefully and leave the air control slightly open to allow air to circulate. Make sure that rainwater cannot enter the flue. Install a chimney cap, which must not completely block the flue.

These measures should ensure that there is a slight movement of air through the fireplace, and that the body of the fireplace remains dry, as well as its corners.

Ash left in a fireplace when it is not in use can absorb moisture like blotting paper. If moisture settles inside the fireplace, rust forms. As rust settles, it expands. This can cause excessive pressure on the joints of the fireplace, resulting in damage.

NOTE: It is recommended that you thoroughly clean the fireplace after its operating season is over. Adding a dehumidifier to the combustion chamber, such as cat litter, helps absorb moisture during the summer months. Be sure to remove it before the start of the operating season.

8. Removal, disassembly and demolition

Disassembly
If the fireplace needs to be dismantled, it is recommended that it be carried out by a professional to avoid risks associated with improper dismantling of the burner or chimney. The flue pipes and other parts must be dismantled carefully.

Demolition
In the event of dismantling the fireplace, local regulations for the removal and recycling of materials must be followed. Many parts of the fireplace, such as metals and refractory materials, can be recycled.

8.1 Potential risks

During dismantling, the main risks include the destruction of the connection systems, the ejection of smoke or dust, and the falling of large or heavy components.

8.2 Protective measures during dismantling

Use of protective equipment (such as gloves and safety glasses) during the process.

8.3 Materials and Tools Required for Dismantling

Tools for dismantling (e.g., wrenches, hammers) and methods for safely removing fireplace components.

8.4 Potential hazards during dismantling and demolition

Hazards include waste management, destruction of building materials, and the release of hazardous particles or gases.

9. Information in the event of a breakdown or hazard

9.1 General

Fault Identification

- **Low-Efficiency Fireplace:** If the fireplace is not heating sufficiently, it may mean that the chimney is blocked or that combustion is incomplete due to unsuitable fuel or overloading.
- **Smoke or Exhaust Gas Leakage**: If smoke or exhaust gas leakage is observed inside the room, the use of the fireplace must be stopped immediately and the chimney and door seals must be checked.
- **Temperature Higher than Normal:** Overheating can be caused by poor ventilation or poor maintenance of the system.

Repair Procedure

- **Contact a Professional:** In the event of a fireplace failure, you must contact the manufacturer or a qualified technician to check and repair the product. Do not attempt to repair the fireplace yourself, as this may worsen the damage or cause additional hazards.

Component Replacement: If any component of the fireplace (such as the chimney or door) is damaged, it must be replaced immediately to ensure its safe operation.

9.2 In the event of a chimney fire

The chimney can catch fire if unsuitable or liquid fuels are used.

The measures to be taken in the event of a chimney fire are as follows:

1. Close all air vents.
2. Call the fire department on 199.
3. Clear the access routes to the cleaning openings.
4. Move all flammable objects away from the chimney.
5. When the heater is put back into operation, a specialist technician must check the chimney and the appliance.
6. A specialist technician must investigate the cause of the chimney fire and take the necessary corrective measures.

Warning:

Do not pour water on the fire!!! You will not extinguish the fire and cracks will probably develop due to the sudden change in temperature.

9.3 In the event of a power outage

CAUTION: In the event of a power outage and when the motor is not working, there is a risk of damage to the electrical parts of the fireplace (thermostat - cables, etc.). In this case:

- ✓ Let the fireplace go out and do not supply wood.
- ✓ Close the primary and secondary air supply to reduce the intensity of the flame.
- ✓ Open the lower door that covers the thermostat to improve ventilation around it.

If the user of the device does not take the above actions, it is a given that the thermostat will be damaged due to overheating.

9.4 Possible failures and causes

PROBLEM	CAUSE	SOLUTION
The fire isn't burning	The wood is damp.	Check the wood. The moisture content must be

properly and the room isn’t heating up.		<20%.
	Incorrect fuel.	Use the appropriate type of wood.
	The chimney isn't drawing properly.	Check that the flue damper is open. Close any open vents on other appliances connected to the chimney. Close the cleaning ports. If necessary, clean the flue.
	Insufficient combustion air.	Check the air supply and open the air intake and adjustment lever. Open the fan or a window. Clear the ashes from the firebox.
Smoke nuisance.	Insufficient combustion air.	Check the air supply and open the air intake and adjustment lever Turn on the fan or open a window. Clear the ashes from the firebox.
	Unburned fuel.	Do not add more wood when the fire has an orange flame.
Fire in the chimney.	Incorrect fuel. Overloading with wood. Inadequate maintenance.	Close the air intake vents and call the fire department immediately.
The glass gets dirty very quickly.	The wood is damp.	Check the wood. The moisture content must be <20%.
	Incorrect fuel.	The pieces of wood are too large. Use the appropriate wood.
	Too much fuel.	Do not use more than 2 to 3 pieces of wood at a time.
	Insufficient combustion air.	Check the air supply and open the air intake and adjustment lever. Turn on the fan or open a window. Clear the ashes from the firebox.

10. Warranty

MISAILIDI FOUNDRY
WARRANTY

✓ Warranty 2 years from date of purchase.

The warranty ceases to be valid if:

- The product was used for a use other than that for which it was intended.
- Damage was caused by accidents, incorrect use, maintenance, etc.
- An attempt was made to use it by third parties and generally unauthorized persons, without the manufacturer's approval.
- The product was installed, maintained, used or stored in a manner other than that recommended in the instruction manual that accompanies it.
- Parts were used for a given construction of a different origin than that of the manufacturing plant.

The warranty does not include the ceramic crystals.

THE MANUFACTURER