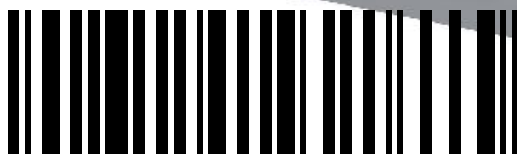


MCZ



USE AND INSTALLATION MANUAL

FORMA WOOD 65 - 75 - 95 - B95 - 115



8901155100

INTRODUCTION	4
1. WARNINGS AND WARRANTY CONDITIONS	5
1.1. SAFETY WARNINGS	5
1.2. OPERATING WARNINGS	5
1.3. WARRANTY CONDITIONS.....	6
1.3.1. Restrictions.....	6
1.3.2. Exclusions.....	6
1.4. IMPORTANT INFORMATION FOR CORRECT DISPOSAL OF THE PRODUCT IN ACCORDANCE WITH EC DIRECTIVE 2002/96/EC.....	6
2. INSTALLATION IN ACCORDANCE WITH UNI 10683.....	7
2.1. OPERATING AREA.....	7
2.2. PRECAUTIONS	7
2.3. CONNECTION TO THE EXTERNAL AIR INTAKE.....	8
2.4. CONNECTION TO THE FLUE PIPE	9
2.5. FLUE PIPE	9
2.5.1. Examples of flue pipes.....	10
2.6. COWL	11
3. DIMENSIONS AND TECHNICAL SPECIFICATIONS.....	12
3.1. Dimensions of the Forma Wood 65.....	12
3.2. Dimensions of the Forma Wood 75.....	13
3.3. Dimensions of the Forma Wood 95.....	14
3.4. Dimensions of the Forma Wood B95.....	15
3.5. Dimensions of the Forma Wood 115.....	16
3.6. Technical specifications	17
4. INSTALLATION AND ASSEMBLY	20
4.1. PREPARATION AND UNPACKING.....	20
4.2. SELECTION OF OPERATING MODE.....	20
4.2.1. Natural convection (VN).....	21
4.2.2. Forced convection (VF).....	21
4.3. RELEASE OF COUNTERWEIGHTS	21
4.4. POSITIONING.....	21
4.5. ADJUSTMENT OF HEIGHT AND BALANCING.....	22
4.6. EXTERNAL AND INTERNAL AIR INTAKE.....	23
4.6.1. Combustion air inlet	23
4.6.2. Air inlet for natural ventilation.....	23
4.6.3. Air inlet for forced ventilation	23
4.6.3.1. Ducts for kit COMFORT AIR.....	23
4.7. CONNECTION TO THE FLUE PIPE	24
4.8. INSTALLATION OF CLADDING AND HOOD LINER.....	24
4.9. INSULATING A WOODEN BEAM	25
4.10. INSULATION OF FIREPLACE STOVE	25
4.10.1. Hood ventilation nozzles.....	25
5. COMFORT AIR KIT– NATURAL VENTILATION AND FORCED VENTILATION	26
5.1.1. Components of natural ventilation kit with and without illumination.....	26
5.1.2. Components of forced ventilation kit with and without illumination	26
5.2. ACCESSORIES.....	27
5.2.1. Air outlets of natural ventilation kit with and without illumination	27
5.2.2. Air outlets for forced ventilation kit.....	28
5.3. INSTALLATION OF THE COMFORT AIR KIT.....	29
5.3.1. Variation for air outlet with container	30
5.3.2. Variation for air outlet with illumination	30
5.3.2.1. Maintenance of air outlet with illumination	31

5.4. CONTROL UNIT	32
5.4.1. Composition of control unit	32
5.4.2. Positioning of the control unit	32
5.5. GENERAL INFORMATION ON THE CONTROL UNIT	33
5.5.1. On/off	33
5.5.2. Operation	33
5.5.3. Safety function.....	34
5.5.4. Light on (if present)	34
5.5.5. Replacing the fuse of the control unit	34
5.6. INSTALLATION OF TEMPERATURE PROBE.....	35
5.7. DOOR OPEN SWITCH.....	35
5.8. CONNECTIONS	36
5.9. REPLACING THE FAN	37
6. OPERATION	38
6.1. PRE-LIGHTING WARNINGS.....	38
6.2. OPERATING TEST	38
6.2.1. Phases for first test lighting	39
6.3. CHOICE OF FUEL	39
6.4. FIRST LIGHTING.....	40
6.5. LOADING THE FUEL	41
6.6. CONTROL OF COMBUSTION	42
6.7. EMERGENCY SITUATIONS	42
7. MAINTENANCE AND CLEANING	43
7.1. CLEANING TO BE PERFORMED BY THE USER	43
7.1.1. Cleaning the glass.....	43
7.1.2. Cleaning out the ashes	43
7.1.3. Cleaning the refractory material walls (ALUTEC®).....	43
7.1.4. Lubrication and routine maintenance of the extensible guides	44
7.1.5. Maintenance of kit VF (if installed)	44
7.1.5.1. Electric fan.....	44
7.1.5.2. Control unit COMFORT AIR	45
7.1.5.3. Wiring.....	45
7.2. CLEANING TO BE DEALT WITH BY SPECIALIZED TECHNICIAN	45
7.2.1. Cleaning flue pipe	45

INTRODUCTION

Dear customer,

Thank you for choosing an MCZ product, specifically a fireplace stove of the Forma line.

We are sure that, with use, you will appreciate the quality of an attentively designed and tested product. Our goal is to combine technology with easy use and, above all, safety.

For best fireplace stove operations and to fully enjoy the heat and sense of well being it will spread throughout your home, we suggest you carefully read this booklet before use. Please contact your dealer for full assistance in resolving any doubts or problems.

Congratulations on your choice and remember, the fireplace stove **MUST NEVER** be used by children who should always be kept at a safe distance!

Revisions to the publication

In order to improve the product, the Manufacturer reserves the right to modify and update this publication without prior notice.

Reproduction, even partial, of this manual without the Manufacturer's authorisation is prohibited.



Manual preservation

- Please take care of this manual and keep it in a place that can be quickly and easily reached.
- If this manual should be lost or destroyed, or if it is in poor condition, ask for a copy from your retailer or directly from the manufacturer, providing product identification data.

How to read the manual

- An essential item or one that requires specific attention is published in **"bold"**.
- *"Italics"* are used for any additional clarification.
- **NOTE:** the "NOTE" provides the reader with additional information on the subject.

These symbols signal specific messages in this booklet

	<p>WARNING:</p> <p>This warning symbol found in various points in this manual indicates that the user should carefully read and understand the message to which it refers since neglect to follow these instructions could cause serious fireplace stove damage or injury to the user.</p>
	<p>INFORMATION:</p> <p>This symbol intends to emphasise important information for good fireplace stove operations. Failure to observe these instructions could jeopardise product use and operations may be unsatisfactory</p>

1. WARNINGS AND WARRANTY CONDITIONS

1.1. SAFETY WARNINGS

- **Installation, electrical connection, functional check and maintenance of this appliance must only be performed by qualified or authorised personnel.**
- **Install the closed fireplace in compliance with the applicable regulations in force in the place, region or country.**
- **This appliance must not be used by anyone (including children) with limited physical, sensory or mental skills or with little experience and knowledge, unless they are supervised or have been instructed to use the device by the person in charge of its safety.**
- **Only use the fuel recommended by MCZ. The appliance must not be used as an incinerator. The use of liquid fuel is strictly forbidden.**
- For correct use of the fireplace stove and accessories, and to prevent accidents, always follow the instructions in this booklet.
- Before beginning any operation, anyone who uses the stove must read and understand the entire contents of this instruction booklet.
- The fireplace stove must be used only for its intended purpose. Any other use is considered improper and therefore hazardous.
- Check the conditions of the surface that will support the weight of the stove. If it is made of flammable material such as wood, carpet, or plastic, provide suitable insulation.
- Avoid installation in rooms with B type gas devices, hoods with or without exhaust, heat pumps, collective ventilation conduits.
- Do not install several flue pipes in one room, and avoid having a stairwell in the vicinity. Check that in adjacent connected room there are not any units whose simultaneous use would create negative pressure in one of the two rooms.
- The user is fully liable for improper product use, releasing MCZ from any civil or penal liabilities.
- Any tampering with the fireplace stove, or use of non-original spare parts, may be hazardous to the user and releases MCZ from any civil or penal liability.
- Parts of the surfaces of the fireplace stove are very hot (door, handle, glass). Therefore, avoid direct contact with these parts unless wearing protective clothing or specific means such as, for

example, heat protective gloves or "cold" activation devices.

- Carefully explain this hazard to elderly people, disabled people and particularly to all children, keeping them away from the fireplace stove while it is in operation.
- Incorrect installation or poor maintenance (not compliant with the provisions of this manual) may cause damages to persons, animals or property. MCZ is not civilly or criminally liable in these cases.

1.2. OPERATING WARNINGS

- Turn off the fireplaces stove in the event of faults or poor operations.
- Never place flammable materials closer than 150 cm to the fireplace stove.
- If the chimney flue draught is poor (due to bad weather or improper installation), start the fire decisively while keeping the door slightly ajar. When you close the door, keep the air register completely open. Use small pieces of dry wood. If combustion problems continue, please contact a specialized technician.
- Install the fireplace stove in a location which is suitable for fire fighting, and equipped with all services such as air, water and electricity supply and smoke discharge.
- Do not light the fire with flammable materials.
- To clean the appliance's chimney, remove the smoke deflector. To remove it correctly, lift the front and at the same time slide it forward in order to free it from rear support.

INFORMATION:

- For any problem, please contact your dealer or MCZ qualified and authorised personnel and always request original spare parts for repairs.
- Check and periodically clean the smoke exhaust stack as foreseen by current regulations in the country of installation.
- If there is a fire in the flue pipe, keep the door of the fireplace stove and the combustion air register closed at all times. Request assistance from the competent authorities.
- Carefully conserve the instruction booklet. It must remain with the fireplace stove for its entire life cycle. If the stove is sold or transferred to another user, make sure the manual accompanies the product.
- If lost, please request a copy from your dealer or from MCZ.

1.3. WARRANTY CONDITIONS

MCZ guarantees the product, **except for the elements subject to normal wear** listed below, for two years from the date of purchase proven by a document that indicates the dealer's name and date of sale, if the completed warranty certificate was returned within 8 days and if the product was installed and inspected by a specialised installation technician and according to the detailed instructions indicated in the instruction manual supplied with the product.

The warranty includes the free replacement or repair of **parts recognised as factory defective**.

1.3.1. Restrictions

The above guarantee does not cover components relating to electrical parts, on which the guarantee period is 1 year from the purchase of the product, documented as specified above. The warranty does not cover parts subject to normal wear such as: **gaskets, glass, and all removable fire box parts**.

Replaced parts will be guaranteed for the remaining warranty period from the date of product purchase.



Specifically, glass is guaranteed from the moment the MCZ installation technician certifies its integrity when installation is completed.

1.3.2. Exclusions

The warranty does not cover any part that may be defective due to negligence or careless use, incorrect maintenance, installation non compliant with that specified by MCZ (see relevant chapters in this manual).

MCZ refuses to accept any responsibility for any damage which may be caused, directly or indirectly, by persons, animals or things as a result of the failure to observe all the provisions set forth in the instruction booklet, especially those concerning warnings on the subject of installation, use and maintenance of the appliance.

In the event of product inefficiency, please contact your dealer and/or area importer.

Damages caused by transport and handling are not covered by the warranty.

Exclusively refer to the supplied manual for product installation and use.

The warranty is null and void in the event of damage due to tampering, weather, natural calamities, lightning, fire, defective electrical and hydraulic systems and the lack or incorrect maintenance as per the manufacturer's instructions.



SERVICE REQUESTS

Service requests must be addressed to the dealer who shall forward the request to MCZ technical assistance.



MCZ is not liable in the event the product and any other accessory is improperly used or modified without authorisation.

Only original MCZ spare parts must be used for all replacements.

1.4. IMPORTANT INFORMATION FOR CORRECT DISPOSAL OF THE PRODUCT IN ACCORDANCE WITH EC DIRECTIVE 2002/96/EC



At the end of its working life, the product must not be disposed of as urban waste.

It must be taken to a special local authority differentiated waste collection centre or to a dealer providing this service.

Disposing of a appliance separately avoids possible negative consequences for the environment and health deriving from inappropriate disposal and enables the constituent materials to be recovered to obtain significant savings in energy and resources.

As a reminder of the need to dispose of appliances separately, the product is marked with a crossed-out wheeled dustbin.

2. INSTALLATION IN ACCORDANCE WITH UNI 10683

2.1. OPERATING AREA

For good operations and good heat distribution, the fireplace stove should be positioned in a place where the air required for combustion can flow (at least 60 m³/h must be available) according to installation standards and current regulations in the country of installation.

The room volume must not be less than 60 m³.

Air must enter through permanent apertures on the walls (near the fireplace stove) that open outdoors with a minimum section of 360 cm².

These apertures (air vents) must be made so as not to be obstructed in any way.

Air can also be taken from adjacent rooms as long as these are equipped with outdoor air vents and not bedrooms or bathrooms or rooms where fire hazards do not exist such as garages, wood sheds, flammable material warehouses, strictly observing the provisions of current regulations.



- **Fireplace stoves may not be installed in bedrooms, bathrooms and where another heating device is installed without autonomous air flow (fireplace, stove, etc.).**
- **Placing the fireplace stove in explosive environments is prohibited.**
- **The floor of the room where the fireplace stove is to be installed must be strong enough to support its weight.**
- **In the event of wood floors, install a protective covering in accordance with current regulations in the country of installation.**
- **If walls are not flammable, install the fireplace stove at least 5 cm from the walls.**

2.2. PRECAUTIONS

The fireplace stove must be installed in a suitable surface that permits routine opening and maintenance operations.

The room must be:

- suitable for room operating conditions
- equipped with power supply 230V 50 Hz
- equipped with an adequate smoke exhaust system
- equipped with outdoor ventilation
- provided with an earth connection complying with CEI



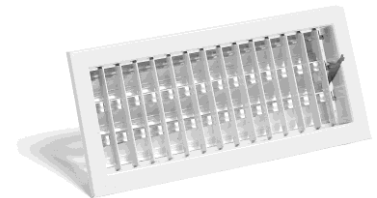
IMPORTANT!

- The fireplace stove must be installed and assembled by qualified personnel.
- The fireplace stove must be connected to a flue pipe or other vertical smoke stack that can discharge smoke at the highest point of the house.
- The fireplace stove must be connected to a flue pipe or an internal or external vertical duct conforming to current standards UNI 7129 - 7131 9615.
- Smoke is generated from burning wood and, therefore, may dirty adjacent or nearby walls.
- Before positioning the fireplace stove, you must make a hole for the intake of external air.

2.3. CONNECTION TO THE EXTERNAL AIR INTAKE

The room where the stove is installed must have at least as much air as requested by normal combustion of the equipment and by room ventilation. This may take place through permanent apertures in the room walls that lead directly outdoors or ventilated rooms according to UNI 10683 REV.

For this purpose, drill a hole with minimum 360 cm² free section near the fireplace stove (22 cm diameter or a 20x18cm rectangle), protected by an indoor and outdoor grille.



The air intake must also:

- directly communicate with the installation room
- be protected by a grill, made of metallic anti-insect mesh or a suitable protection as long as it does not reduce the minimum section.
- be installed so as to avoid obstruction
- for ducts, up to 3.5 linear metres, increase the section by about 5% while increased by 15% for larger measurements.



Remember that the ventilation grills always have a cm² useful section on one side. When selecting the grill and hole dimension, make sure the useful grill section is greater than or equal to the section required by MCZ for product operations.

Connecting the air outlet directly to the fireplace stove is not mandatory but the above mentioned section must guarantee about 50 m³/h of air. See standard UNI 10683 REV.



IMPORTANT!

Air flow may also be obtained from a room adjacent to the installation room as long as this flow is free through permanent apertures that directly communicate with the outdoors; avoid air outlets connecting with heating units, garages, kitchens or bathrooms.

2.4. CONNECTION TO THE FLUE PIPE

The connection to the flue pipe is a very important element. The connection must be made with a great deal of care; in the event of erroneous or anomalous construction, it is extremely difficult to remedy without damaging the hood liner. In addition, the connection is made in a part of the stove where temperatures are very high, and for this reason it is important to use materials that are capable of resisting heat and also the acidity of the fumes produced by combustion.

Before beginning work, please note the following:

- The connection must have a maximum inclination of 45° to prevent excessive build up of condensation produced in the initial start-up stages of the closed fireplace and/ or excessive adhesion of creosote. This also prevents smoke evacuation from slowing down.
- **The unions must be made of metal and suitable for the specific operating conditions of the product and marked EC (EN1856-2). The use of flexible and extending metal pipes is not permitted.**
- The elements of the connection must be perfectly sealed.
- The connection to the flue pipe must be neither too long (to prevent obstructions) nor too short (to prevent smoke leakage).



If metal connecting pipes are used, they must be insulated with suitable material such as ceramic fibre matting, to avoid deterioration of the masonry and of the decorative hood liner.



IMPORTANT!

Any increase in the section of the connecting pipe must start immediately above the hood of the fireplace and not along the flue pipe section.

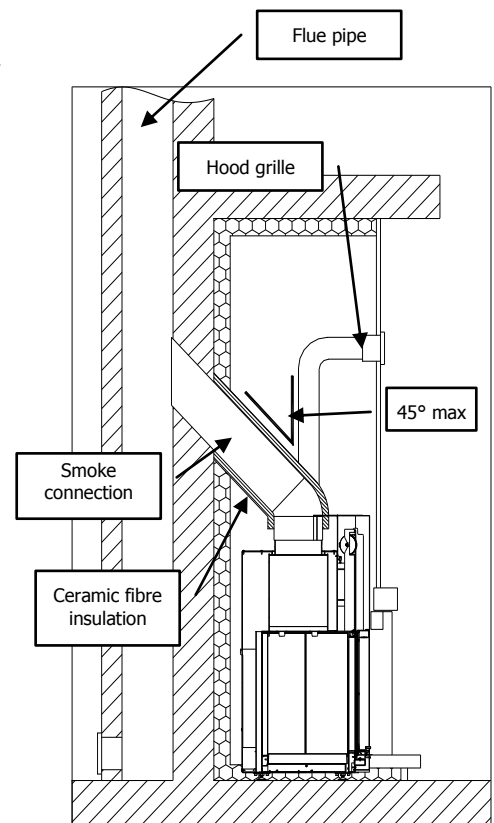
2.5. FLUE PIPE

The flue pipe is a **fundamental element** in discharging smoke and therefore must have the following requisites:

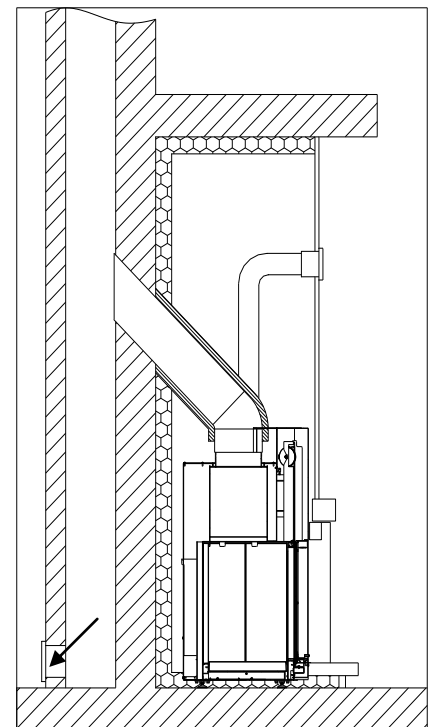
- be waterproof and thermally insulated.
- be made of suitable heat-proof materials that are resistant to the effects of combustion products and any possible condensation.
- have a vertical arrangement with deviations from the axis of no more than 45° and without kinks.
- must be suitable for the specific operating conditions of the product and marked EC (EN1856-1, EN1443).
- must be suitably sized to accommodate the draught/smoke disposal requirements necessary for the correct functioning of the product (EN13384-1).
- have an internal section which is preferably circular.
- be cleaned if pre-existing and has operated beforehand.



The flue pipe is of primary importance for the correct functioning and safety of your fireplace stove.

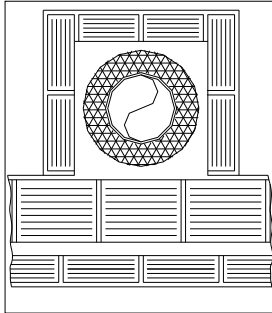


Example of fireplace stove connection



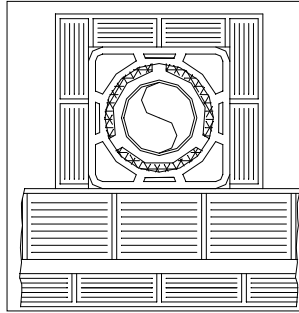
Typical diagram of a correctly laid flue pipe with a chamber including a sealed hatch to collect and remove solid materials produced during combustion positioned at the foot of the external rising section.

2.5.1. Examples of flue pipes



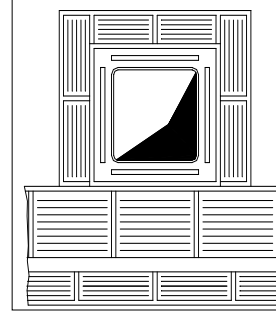
AISI 316 stainless steel flue pipe with dual chamber insulated with ceramic wool or equivalent resistant to 400°C.

EXCELLENT



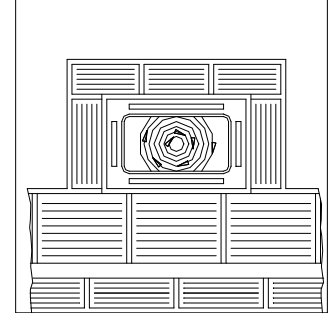
Flue pipe in refractory brick with insulated double wall and external coat of cement mix lightened with honeycomb material such as clay.

GOOD



Traditional square section clay flue pipe with insulating hollow inserts.

GOOD



Avoid flue pipes with internal rectangular sections whose larger side is double the smaller such as 20x40 or 15x30.

AVERAGE

Square or rectangular section flue pipes must have rounded internal corners with radius not less than 20mm. For the rectangular section, the ratio between internal dimensions must be ≤ 1.5 .

The sections/lengths of the flue pipe shown in the technical data table are guidelines for correct installation. Any alternative configurations must be suitably sized in accordance with EN13384-1.

The smoke duct should be equipped with a solid material collection chamber at the mouth of the smoke duct to be easily opened with an airtight door.



IMPORTANT !

In the event of doubt on your chimney flue operations or that its dimensions are different from those recommended, we highly suggest an authorised MCZ technician inspect and measure chimney flue performance (micro-gauge measurements)

MCZ s.p.a. shall not be held liable for poor operation of the fireplace stove that is due to a flue pipe of improper size or installation that does not comply with provided requirements.

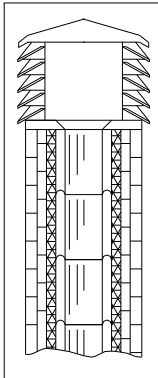
2.6. COWL

If underestimated, it is a severe impediment to correct "chimney system" operations.

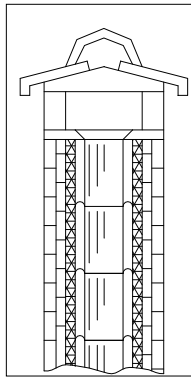
Flue pipe draught also depends on its cowl.

Therefore, if hand made, its four exhaust sections must correspond to **more than twice the internal section of the flue pipe.**

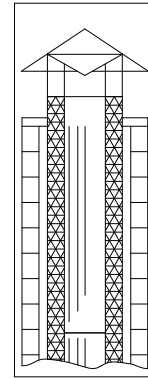
Having to exceed the peak of the roof, the cowl will be exposed to wind, therefore an industrial type is recommended.



An industrial cowl, with prefabricated sections fitting together, allows optimal disposal of the flue gases.



A traditional handmade cowl. The right exhaust section must be at least twice the internal section of the flue pipe, 2.5 times is ideal.



Steel cowl for flue pipe with internal smoke deflector cone.

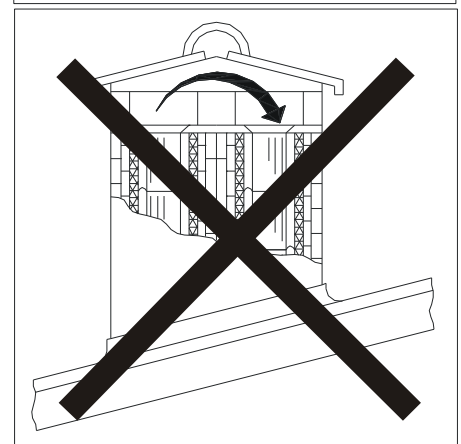
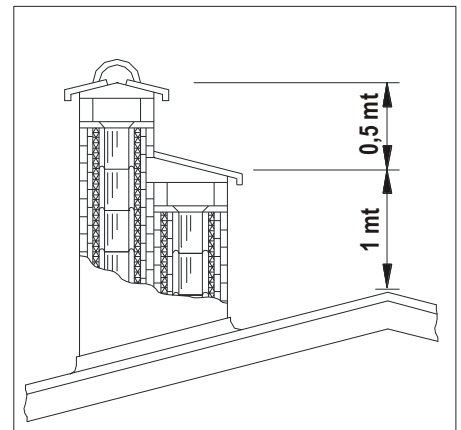
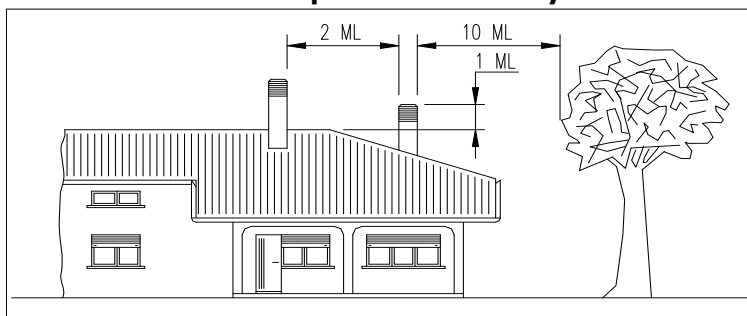
The cowl must meet the following requisites:

- It must have an internal section equal to that of the chimney.
- It must have a useful output section not less than double that of the internal section of the flue pipe.
- It must be built to prevent rain, snow and any foreign objects from getting into the flue pipe.
- They must be installed to guarantee adequate smoke dispersion and out of the reflux area where negative pressure forms.



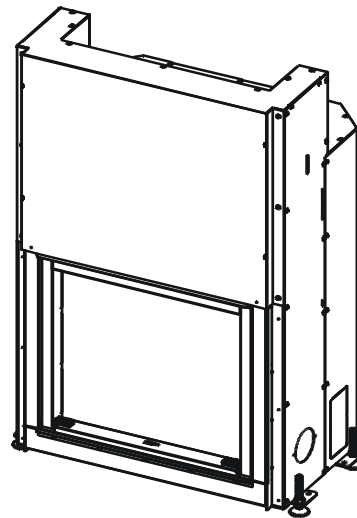
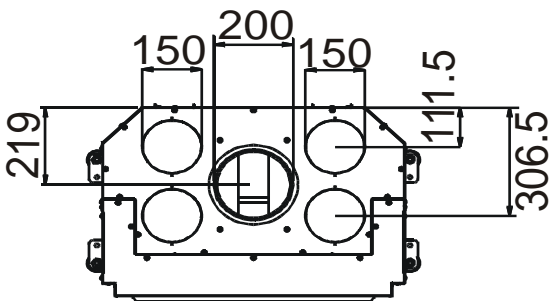
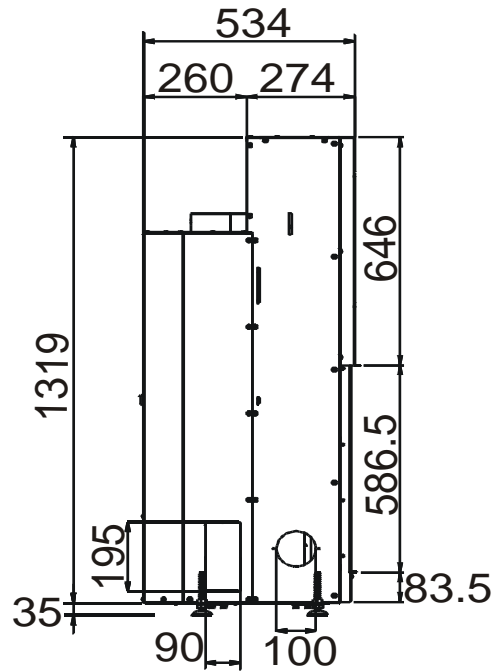
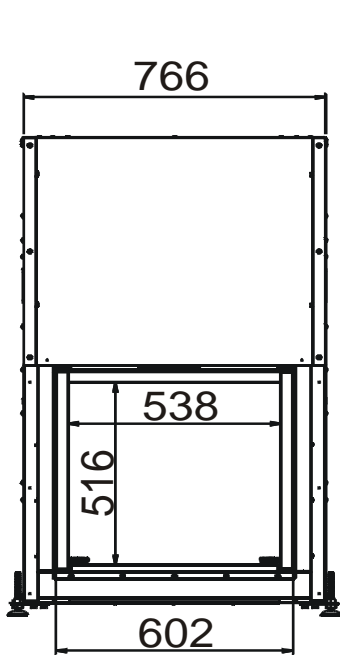
For paired flue pipes, the cowl for solid combustion and the one for the upper floor must be at least 50cm higher than the other to avoid pressure transfers between paired flues.

The cowl must not have obstacles within 10 m such as walls, roof slopes and trees. Otherwise, raise it at least 1 m over the obstacle and, in the event of other nearby cowls, keep them at least 2 m away. In any case, the cowl must exceed the peak of the roof by at least 1m.

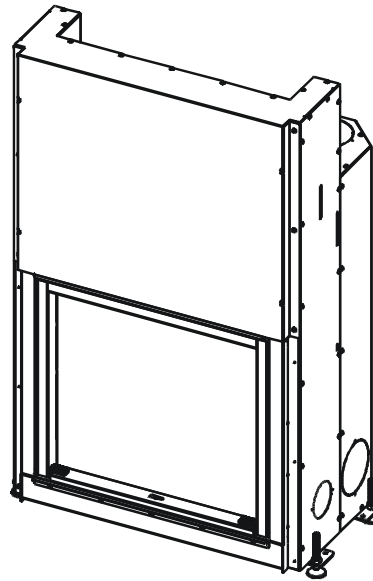
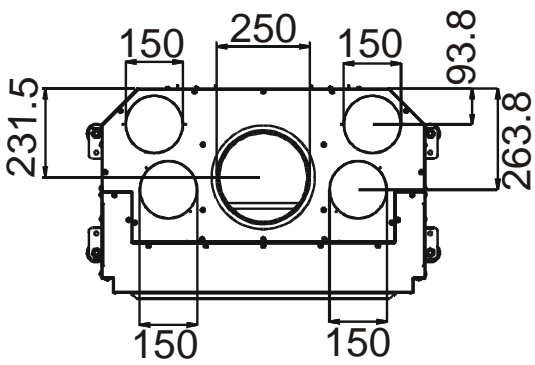
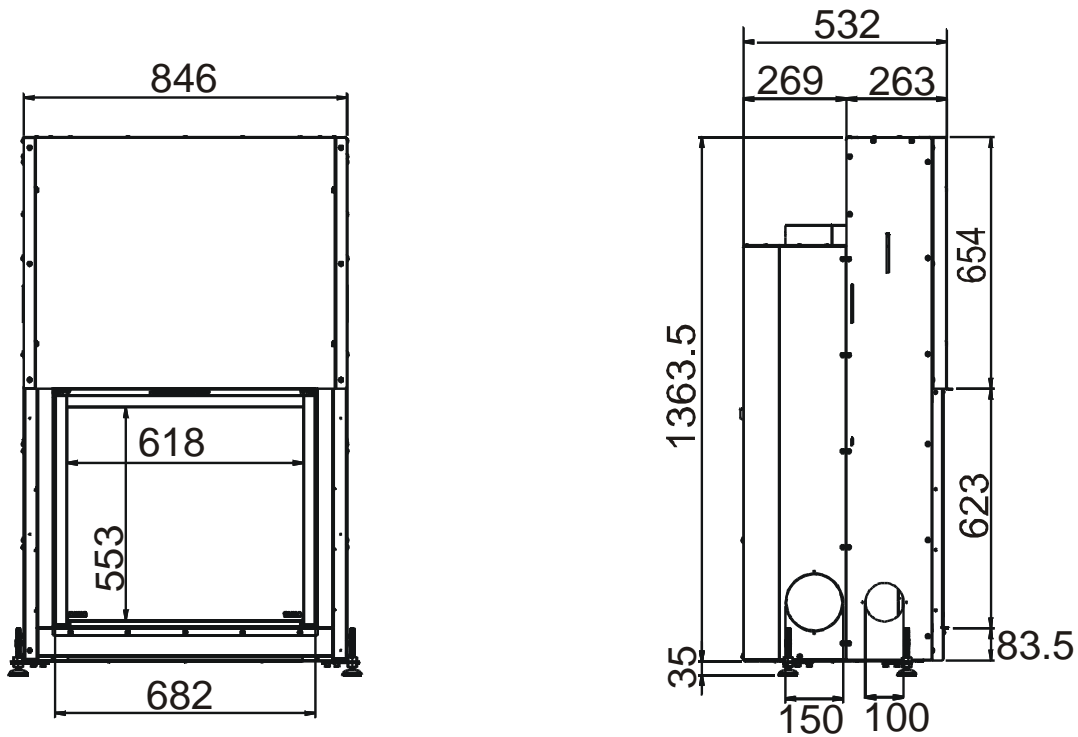


3. DIMENSIONS AND TECHNICAL SPECIFICATIONS

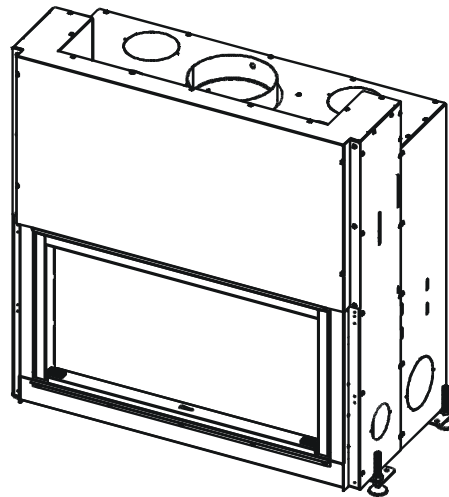
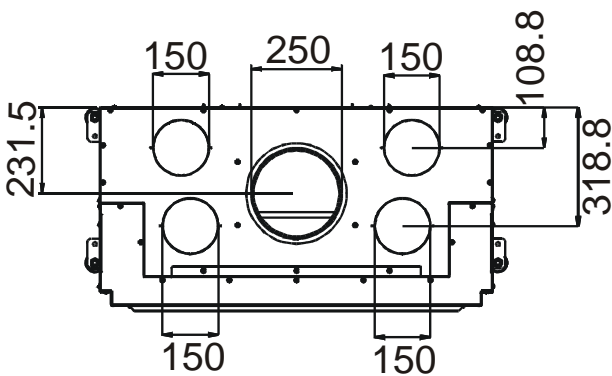
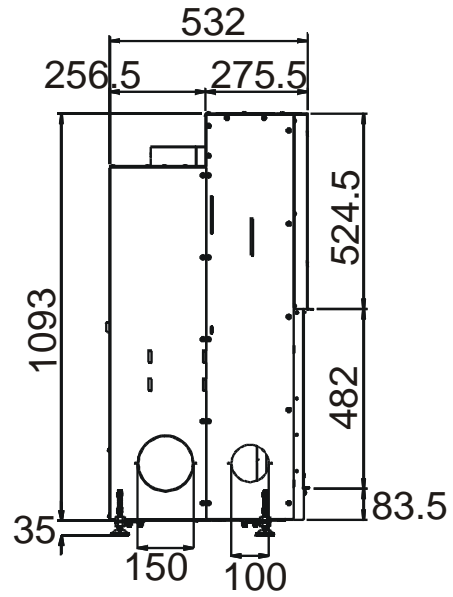
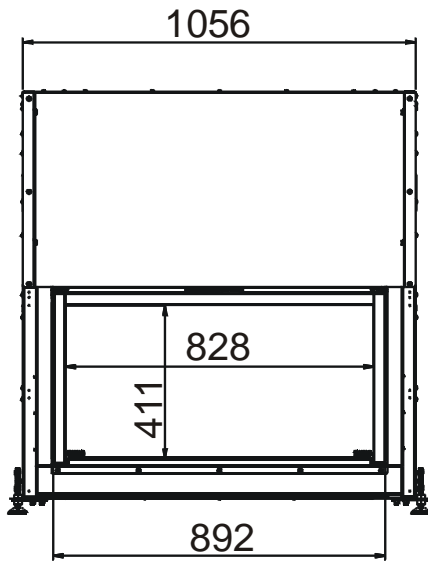
3.1. Dimensions of the Forma Wood 65



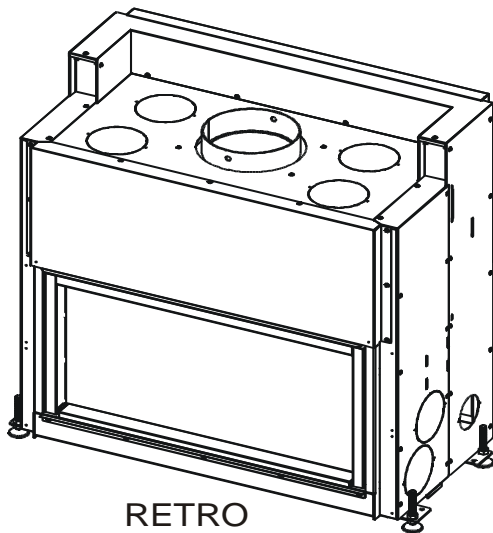
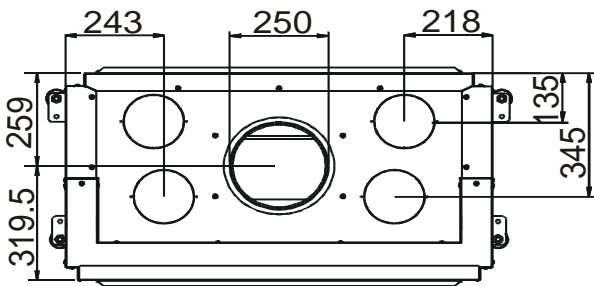
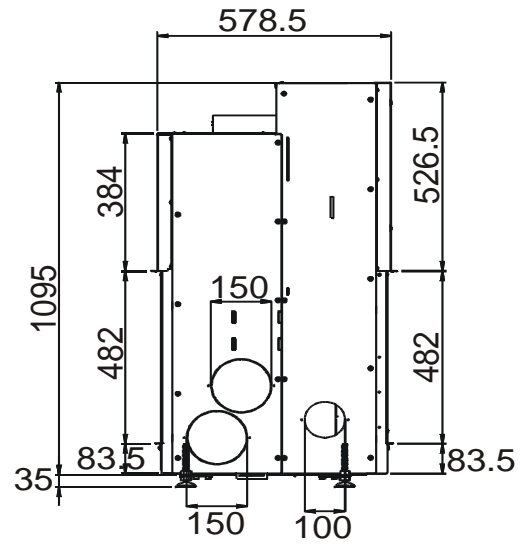
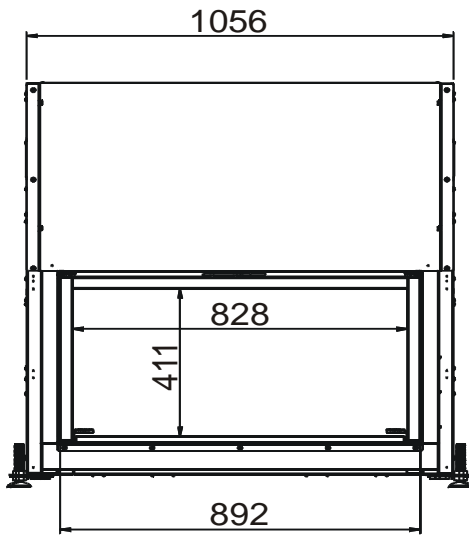
3.2. Dimensions of the Forma Wood 75



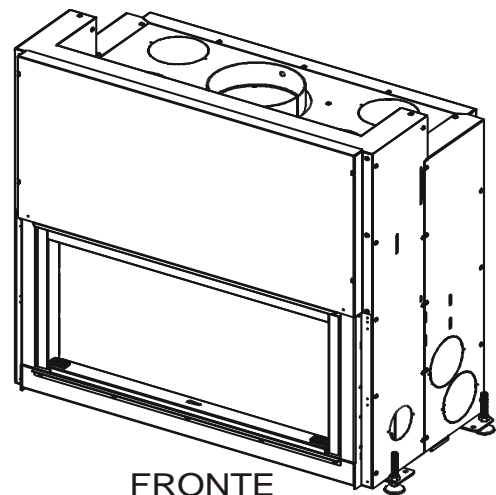
3.3. Dimensions of the Forma Wood 95



3.4. Dimensions of the Forma Wood B95

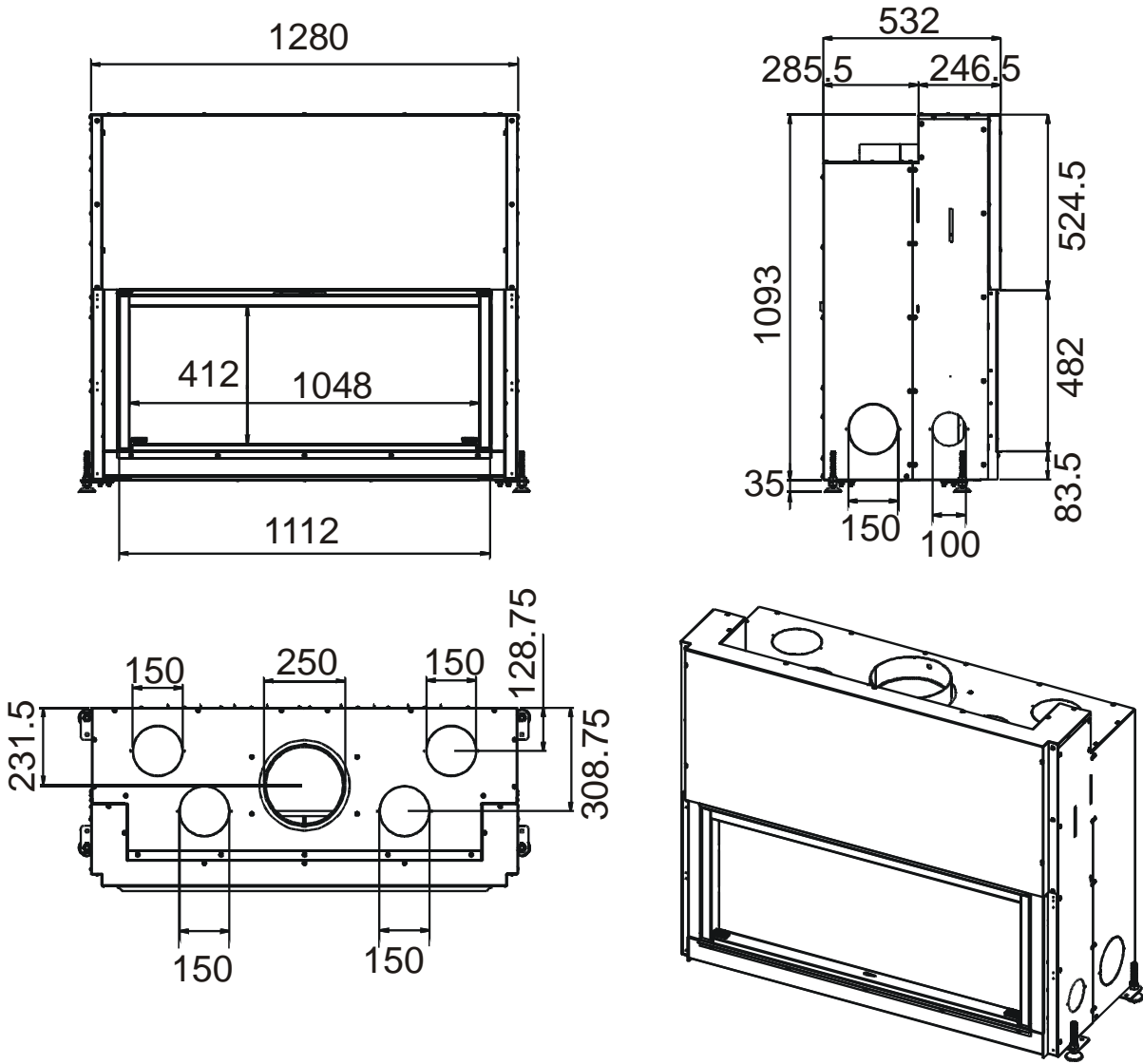


RETRO



FRONTE

3.5. Dimensions of the Forma Wood 115



3.6. Technical specifications

Technical specifications	FORMA WOOD 65
Fuel type	Wood
Hourly consumption	2,9 kg/h – 1,2 kg/h
Reloading/load time	50 min / 2,4 kg
Nominal output power	10,5 kW (9030 Kcal/h)
Minimum output power	5,1 kW (4386 Kcal/h)
Efficiency	83,4%
CO emission in the smoke (13% O ₂)	0,12 %
Particulate/OGC/Nox (13%O ₂)	39 mg/Nm ³ -84 mg/Nm ³ -143 mg/Nm ³
Smoke flow rate	13,5 g/s
Smoke temperature	260 °C
Recommended draught	0,12 mbar – 12 Pa
Heatable volume m ³	226/40-258/35-301/30*
Smoke outlet	Ø 20 cm
Firebox dimensions	55x35 h59
Net weight	235 Kg
External combustion air inlet	cm ² 150
Flue Pipe	
Up to 5 m.	30x30 cm diameter 30
Over 5 m.	25x25 cm diameter 25
Notes	
Intermittent combustion appliance * These data may vary according to the type of fuel used	

Tested according to EN 13229 in accordance with Directive 89/106/EC (Construction Products).

Technical specifications	FORMA WOOD 75
Fuel type	Wood
Hourly consumption	3,1 kg/h – 1,2 kg/h
Reloading/load time	50 min / 2,6 kg
Nominal output power	11,1 kW (9546 Kcal/h)
Minimum output power	5,1 kW (4386 Kcal/h)
Efficiency	83,4%
CO emission in the smoke (13% O ₂)	0,12 %
Particulate/OGC/Nox (13%O ₂)	39 mg/Nm ³ -84 mg/Nm ³ -143 mg/Nm ³
Smoke flow rate	13,5 g/s
Smoke temperature	270 °C
Recommended draught	0,12 mbar – 12 Pa
Heatable volume m ³	239/40-273/35-318/30*
Smoke outlet	Ø 25 cm
Firebox dimensions	63x35 h62
Net weight	248 Kg
External combustion air inlet	cm ² 150
Flue Pipe	
Up to 5 m.	30x30 cm diameter 30
Over 5 m.	25x25 cm diameter 25
Notes	
Intermittent combustion appliance * These data may vary according to the type of fuel used	

Tested according to EN 13229 in accordance with Directive 89/106/EC (Construction Products).

Technical specifications	FORMA WOOD 95
Fuel type	Wood
Hourly consumption	3,2 kg/h – 1,5 kg/h
Reloading/load time	50 min / 2,7 kg
Nominal output power	12,3 kW (10578 Kcal/h)
Minimum output power	6,7 kW (5762 Kcal/h)
Efficiency	86,6%
CO emission in the smoke (13% O ₂)	0,12 %
Particulate/OGC/Nox (13%O ₂)	32 mg/Nm ³ -54 mg/Nm ³ -120 mg/Nm ³
Smoke flow rate	13,7 g/s
Smoke temperature	280 °C
Recommended draught	0,12 mbar – 12 Pa
Heatable volume m ³	264/40-302/35-353/30*
Smoke outlet	Ø 25 cm
Firebox dimensions	84x35 h48
Net weight	268 Kg
External combustion air inlet	cm ² 150
Flue Pipe	
Up to 5 m.	30x30 cm diameter 30
Over 5 m.	25x25 cm diameter 25
Notes	
Intermittent combustion appliance	
* These data may vary according to the type of fuel used	

Tested according to EN 13229 in accordance with Directive 89/106/EC (Construction Products).

Technical specifications	FORMA WOOD B95
Fuel type	Wood
Hourly consumption	3,0 kg/h
Reloading/load time	50 min / 2,5 kg
Nominal output power	10,2 kW (8772 Kcal/h)
Minimum output power	5 kW (4300 Kcal/h)
Efficiency	83%
CO emission in the smoke (13% O ₂)	0,23 %
Particulate/OGC/Nox (13%O ₂)	36 mg/Nm ³ -140 mg/Nm ³ -128 mg/Nm ³
Smoke flow rate	13,7 g/s
Smoke temperature	260 °C
Recommended draught	0,12 mbar – 12 Pa
Heatable volume m ³	219/40-251/35-292/30*
Smoke outlet	Ø 25 cm
Firebox dimensions	84x35 h48
Net weight	268 Kg
External combustion air inlet	cm ² 150
Flue Pipe	
Up to 5 m.	30x30 cm diameter 30
Over 5 m.	25x25 cm diameter 25
Notes	
Intermittent combustion appliance	
* These data may vary according to the type of fuel used	

Tested according to EN 13229 in accordance with Directive 89/106/EC (Construction Products).

Technical specifications	FORMA WOOD 115
Fuel type	Wood
Hourly consumption	3,6 kg/h – 1,5 kg/h
Reloading/load time	50 min / 3 kg
Nominal output power	13,5 kW (11610 Kcal/h)
Minimum output power	6,7 kW (5762 Kcal/h)
Efficiency	86,6%
CO emission in the smoke (13% O ₂)	0,12%
Particulate/OGC/Nox (13%O ₂)	32 mg/Nm ³ -54 mg/Nm ³ -120 mg/Nm ³
Smoke flow rate	13,7 g/s
Smoke temperature	290 °C
Recommended draught	0,12 mbar – 12 Pa
Heatable volume m ³	290/40-332/35-387/30*
Smoke outlet	Ø 25 cm
Firebox dimensions	106x35 h48
Net weight	308 Kg
External combustion air inlet	cm ² 150
Flue Pipe	
Up to 5 m.	30x30 cm diameter 30
Over 5 m.	25x25 cm diameter 25
Notes	
Intermittent combustion appliance * These data may vary according to the type of fuel used	

Testata secondo EN 13229 in accordo con la direttiva 89/106/CE (Prodotti da costruzione)

4. INSTALLATION AND ASSEMBLY



IMPORTANT!

The fireplace stove must be installed and connected to the smoke duct only by a specialized technician, so that all local and national regulations are complied with.

Installation must in any case be carried out in compliance with UNI 10683.

When the fireplace is unpacked, **check for perfect operation of all its parts or any damage which may have occurred during shipping. The retailer or the carrier must be immediately informed of any damage.**

If the fireplace stove is installed in a place that is difficult to reach, its weight can be reduced by removing the internal parts that make up the fire box. However, **be sure to put all of the parts back in place. This operation is to be carried out only by specialized personnel.**

MCZ shall not be held liable if the preceding warning is not complied with.

4.1. PREPARATION AND UNPACKING

Open the packaging, remove the stove unit from the pallet and position it in the chosen location, taking care that its position complies with the above instructions.



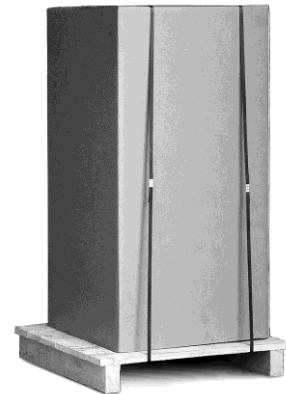
The fireplace stove must always be kept VERTICAL while moving and only using hand trucks. Do not drag the unit as this may damage the support feet.

Be especially careful that the door and its glass are protected from mechanical collisions that could jeopardise their integrity.

Moving the product must be done with care. If possible, unpack the fireplace stove in the area where it is to be installed.

The materials which make up the packaging are not toxic or harmful, so no special procedures for disposal are required.

The final user must store, dispose or recycle packaging material in accordance with local regulations.



Example of fireplace stove packing

4.2. SELECTION OF OPERATING MODE



IMPORTANT!

Before installation you will need to decide which system to adopt.

FORMA can distribute hot air either by **NATURAL CONVECTION (VN)** or by **FORCED CONVECTION (VF)** through the use a forced ventilation.

4.2.1. Natural convection (VN)

If it is decided to opt for this system, **the knockout panels** in the sides and on the back of the unit (as shown in *figure 1*) must be removed in order to facilitate heat exchange and air circulation.

The upper knockout panels are circular, Ø 150 mm. At least two of them should be opened and ducted for correct distribution of warm air.

To open the knockout panels, hit them with a rubber mallet and remove the profile that detaches from the unit.

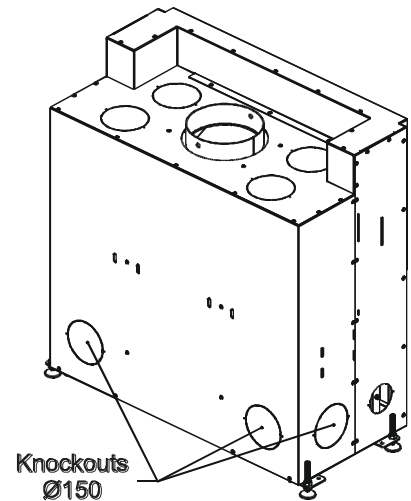


Figure 1 – Forma Line knockout panels

4.2.2. Forced convection (VF)

If you adopt this system, purchase the optional Comfort Air kit and follow the instructions in *paragraph 5.3 "Installation of comfort air kit"*.

4.3. RELEASE OF COUNTERWEIGHTS

The fireplace stove is delivered with the sliding counterweights locked in place. In this way, during shipping and handling, they will not strike and damage the sliding parts, the door and the ceramic glass.

To release the counterweights and therefore also the door, remove the screws as shown in *figure 2* from both sides of the fireplace stove.



Remove the screws that hold the counterweights only after you have positioned the fireplace stove and to ensure that the glass is in good condition.

DO NOT MOVE THE FIREPLACE STOVE WITHOUT THE SCREWS THAT HOLD THE COUNTERWEIGHTS.

Damage caused by failure to observe this rule is the responsibility of the client or his representative.

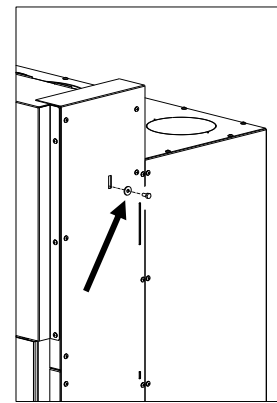


Figure 2 – Screw to hold counterweights

4.4. POSITIONING

The FORMA fireplace stove can be placed in a corner or along a wall. You can customize with MCZ claddings or install them during construction with materials that are resistant to high temperatures.

The fireplace stoves are self-supporting single-piece units that simplify installation and do not require any additional support.

To make it easier to move the unit to its place of installation, MCZ provides four swivel castors that make moving the fireplace stove easy and convenient.

The four castors, which you will find in the fire mouth along with the rest of the equipment, are to be installed in the provided holes, located near the holes for the adjustment feet (figure 3b). Once the fireplace stove is in place, the castors must be raised off the ground or removed, so that the unit is stable on the floor.

Always evaluate the structural condition of the surface which will take the weight, and always leave a minimum 5 cm airspace between the stove and any walls.

Install dry the fire bed of the cladding **leaving an opening of 1 cm** for the insulation. (*Figure 3a*)

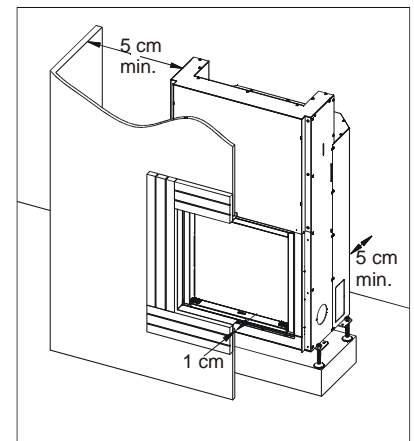


Figure 3a – Distance of unit from walls and from cladding

For installation near flammable material, comply with the following minimum safe distances: (Figure 3c)

- A = 100 mm (distance from the sides and back)
- B = 80 mm (height above floor)



If the stove is positioned over a floor or close to walls made of flammable materials, it is advisable to use sufficient insulation.

The hot air outlets must be placed at least 300 mm from other materials. (e.g. curtains)

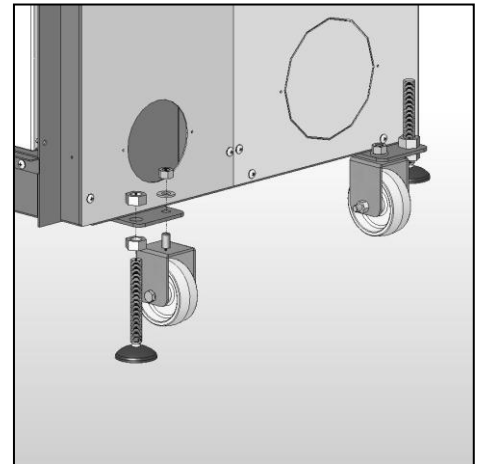


Figure 3b – Points of installation of castors and feet

4.5. ADJUSTMENT OF HEIGHT AND BALANCING

The Forma Wood fireplace stove is provided with adjustment feet that are to be screwed into the unit **after you have decided its exact position**. Their purpose is to distance the stove unit from the floor and to level the fire bed of the fireplace stove. They allow adjustment of about 10 cm.

If you want to raise the fireplace stove more than 4 cm, you need to create a masonry pedestal to set the product on. **Do not eliminate the feet. They are indispensable for levelling. Removing the feet is considered a structural modification of the product and therefore voids the guarantee.**

In the VF forced ventilation configuration (i.e. with fan), you will need to add the legs in the kit. Their purpose is to raise the fireplace stove as shown in *figure 5b*. On the legs, you will need to install the provided feet to adjust the level as described previously.

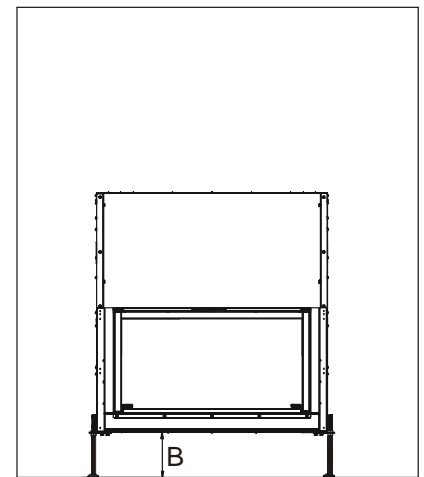
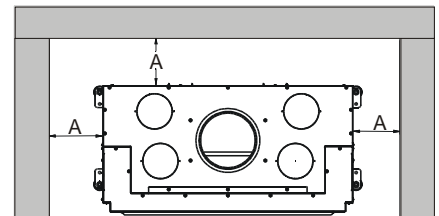


Figure 3c – Safe distances



The levelling of the fireplace stove is essential so that the fire door slides correctly.

If the floor is made of flammable material, the lower part of the fireplace stove must be kept at least 8 cm from the floor.



If the fireplace stove is not placed level, there is the risk that door will not close perfectly, and that the internal counterweights strike the structure, causing noise each time the door is raised or lowered.



CHECK THAT THE DOOR MOVES CORRECTLY SEVERAL TIMES BEFORE ENCLOSING THE FIREPLACE STOVE IN THE CLADDING.

4.6. EXTERNAL AND INTERNAL AIR INTAKE

4.6.1. Combustion air inlet

The FORMA fireplace stove is set up with two side holes \varnothing 100 mm, already opened, for the entry of air required for combustion.

Connect by flanges \varnothing 100 and hose at least one of the combustion air inlets (fig. 4) grilles inside or outside the room of installation so that the path is separate from the air of natural or forced convection.



NEVER CLOSE OFF THE COMBUSTION AIR INTAKE HOLES.

WHEN INSTALLING THE CLADDING, MAKE SURE THAT NONE OF ITS PARTS OBSTRUCT THE AIR INTAKES

CONNECT AT LEAST ONE OF THE TWO DUCTS AND ALWAYS RUN IT OUTSIDE THE CLADDING OF THE FIREPLACE STOVE. IF YOU DO NOT COMPLY WITH THIS RULE, THE COMFORT AIR KIT MAY DRAW IN THE AIR INTENDED FOR COMBUSTION

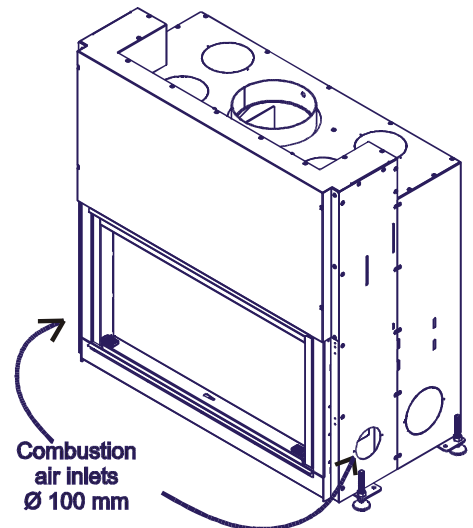


Figure 4 – Combustion air intakes.

4.6.2. Air inlet for natural ventilation

If the fireplace stove is installed with natural ventilation, i.e. with no electric fan, make an external combustion air intake of **300 cm²** net behind the unit so that fresh air always flows beneath the fireplace stove. (figure 5)

You must comply with this instruction fully, because otherwise a lack of oxygen may compromise combustion and calorific energy of the product.

4.6.3. Air inlet for forced ventilation

4.6.3.1. Ducts for kit COMFORT AIR

If the fireplace stove is installed with forced ventilation, i.e. using the Comfort Air kit, place air intakes and ducts as follows:

for proper air circulation in the room, it is advisable to arrange one external air intake **A** of **150 cm²**, in order to draw in clean, fresh air; place the other **B** in the room where the fireplace stove is installed (also of **150 cm²**).

This mode allows a proper mix of the air in the room of installation and better cooling of the structure of the fireplace stove. (Figure 6)

If you cannot make this kind of connection, you will still need to arrange both air intakes; whether they are both directed to the exterior or the interior. Depending on the selection, you will have operating temperatures that are slightly above or below average but which do not compromise proper operation of the product.

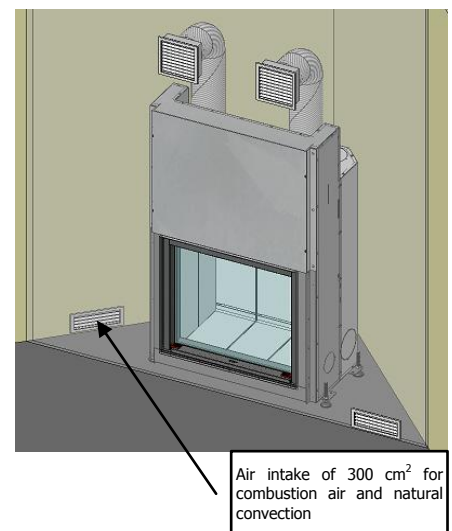


Figure 5 – Intake for external combustion air and for natural ventilation

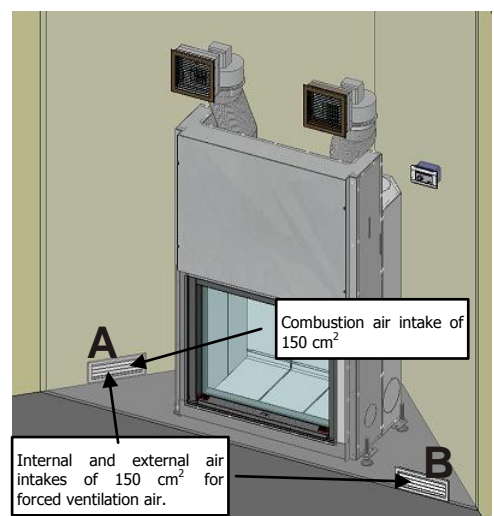


Figure 6 – Air intakes for ducts of fan and combustion air intake.

Remember that:

- All of the air intakes must be equipped with shutters than can be controlled from the outside and that are equipped with insect protection.
- The air intake section is considered net, therefore the area of any obstructions must be considered (mesh, etc.)
- The filters or meshes need to be cleaned periodically to ensure air can pass through them.
- Do not for any reason obstruct the air intakes if the fireplace stove or ventilation kit is in operation

4.7. CONNECTION TO THE FLUE PIPE

We recommend connecting the stove to the flue pipe by means of pipes and bends in aluminised steel, capable of withstanding the high temperatures which are reached in that section of pipe, and of resisting corrosion from the fumes. These connecting pipes are available on request in various sizes (see our price list), and they simplify installation, as they are assembled by fitting one into another. (figure 7)



Any increase in the section of the connecting pipe must start immediately above the hood of the fireplace and not along the flue pipe section

When installation is complete, the smoke connection must be insulated with ceramic fibre matting or material that is resistant up to at least 600°C.

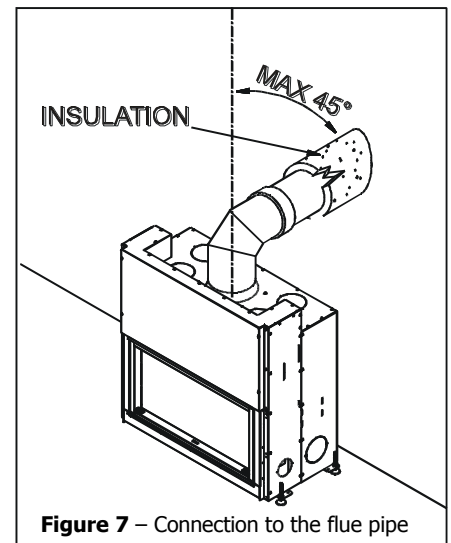


Figure 7 – Connection to the flue pipe

4.8. INSTALLATION OF CLADDING AND HOOD LINER

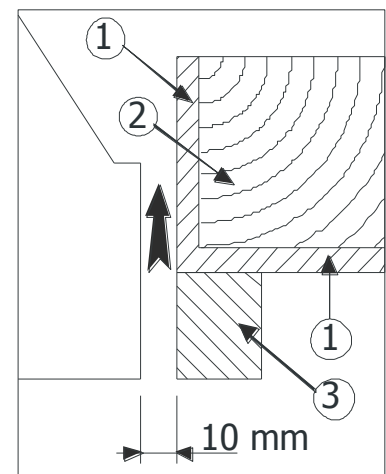


BEFORE YOU START INSTALLING THE CLADDING OF THE FIREPLACE STOVE, READ CHAPTER 6.2 "OPERATING TEST"

The fireplace stove and the parts of the cladding must be attached to one another **WITHOUT COMING INTO CONTACT WITH THE STEEL STRUCTURE** to prevent transmission of the heat to the marble and/or stone, and to allow normal thermal dilation. Use care with wood finisies such as crossbeams or shelves.

We recommend making the hood liner in fire-resistant plasterboard of 15/20 mm thickness, with a self-supporting frame in galvanised profile, so as not put weight on components of the cladding (such as wooden beams and marble architraves) which do not have a load-bearing structure and **to make it easy to work in the event of future anomalies and/or maintenance.**

Dry install the fire bed of the **cladding, leaving an aperture of 1 cm** between the fireplace stove and the fire bed to provide insulation. (figure 8)



THERMAL PROTECTION OF CROSSBEAM

1. Insulation applied or to be applied.
2. Wood beam
3. Marble or other material

Figure 8 – Insulating a wooden beam

4.9. INSULATING A WOODEN BEAM

The wood beam must be protected with adequate insulation from heated parts to prevent the risk of fire or damage of the cladding. (figure 8)

4.10. INSULATION OF FIREPLACE STOVE

The fireplace stove must also always be separated from nearby walls and ceilings.

If necessary, use **insulating materials** to insulate the walls that are in contact with the unit if they may be damaged or catch fire (walls made of wood, plasterboard, etc.). (figure 9)

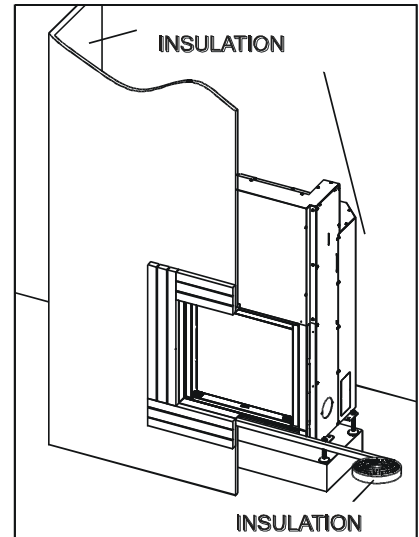


Figure 9 – Insulation of unit from walls and from cladding

4.10.1. Hood ventilation nozzles.



You must install MCZ ventilation nozzles, or nozzles that ensure the same operation and the same air passage cross section (see MCZ accessories).

MCZ non risponde di eventuali danni alla struttura o alla componentistica elettrica causati dalla mancata osservanza di questa avvertenza.

For proper operation of room ventilation remember that:

- In the lower part of the cladding, an opening for the entry of convective air must be provided that is not smaller than 400 cm²
- In the upper part it is necessary to provide a vent opening (in addition to the ducted air outlets) of at least 230 cm² to release into the room the residual heat that accumulates inside the cladding. With the COMFORT AIR kit, however, this outlet is not necessary, because the heat in the cladding is indirectly drawn in by the fans.
-

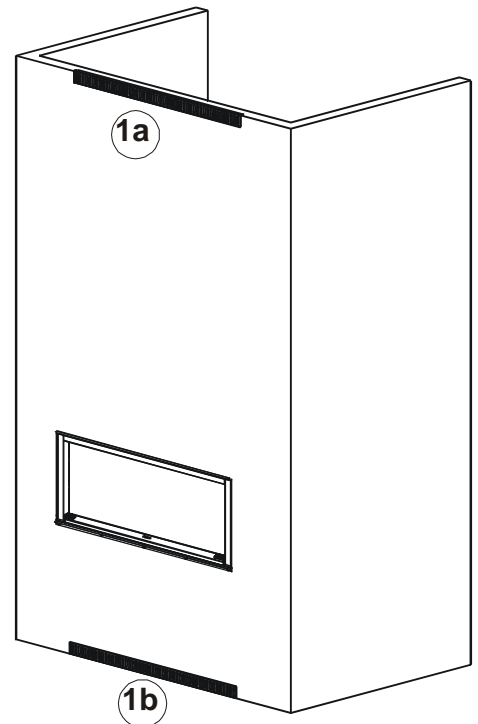
Besides ensuring perfect product operation, this action makes it possible to recover part of the heat from the structure, which would be wasted if it were left inside the cladding.

For better understanding of the number, size and function of the ventilation nozzles to be installed on the cladding, the following are some possible installation configurations with the relative nozzles.

1a) Grille for convection air outlet

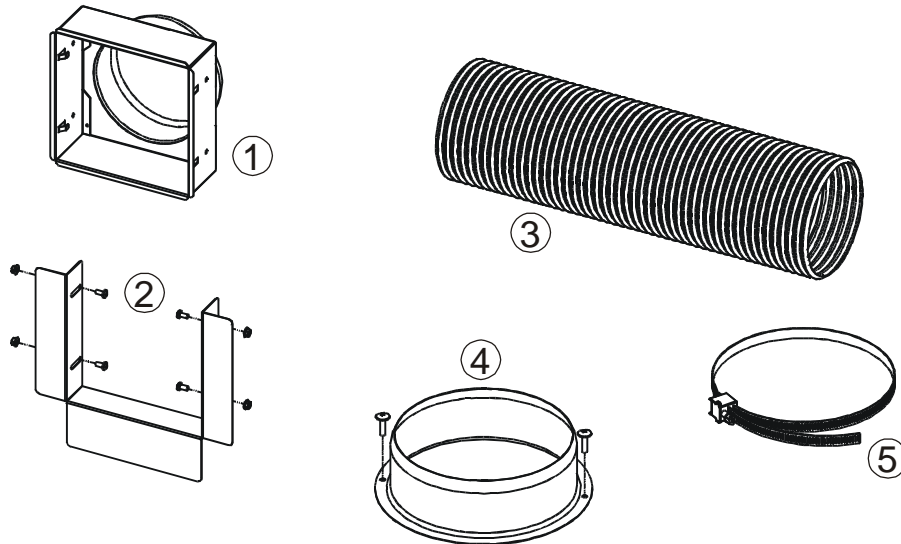
1b) Grille for intake of convection air

Grilles **1a** and **1b** are essential for releasing the heat that builds up in the hood. They **must** be installed, regardless of the type of installation or cladding to be realized.



5. COMFORT AIR KIT– NATURAL VENTILATION AND FORCED VENTILATION

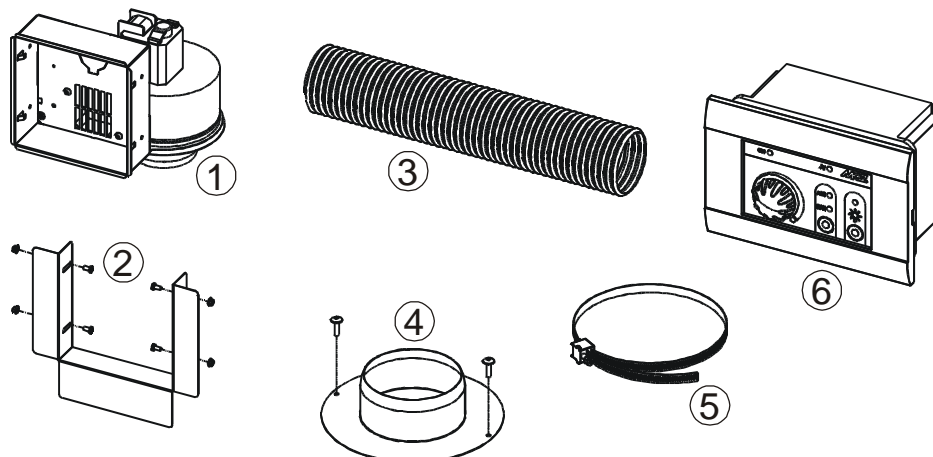
5.1.1. Components of natural ventilation kit with and without illumination



1. Structure of basic natural ventilation outlet (2 pieces)
2. Fastening bracket group (2 pieces)

3. Hose Ø 150 L=1.5 m (2 pieces)
4. Flange Ø 150 (2 pieces)
5. Hose clamp D.60-170 (4 pcs.)

5.1.2. Components of forced ventilation kit with and without illumination

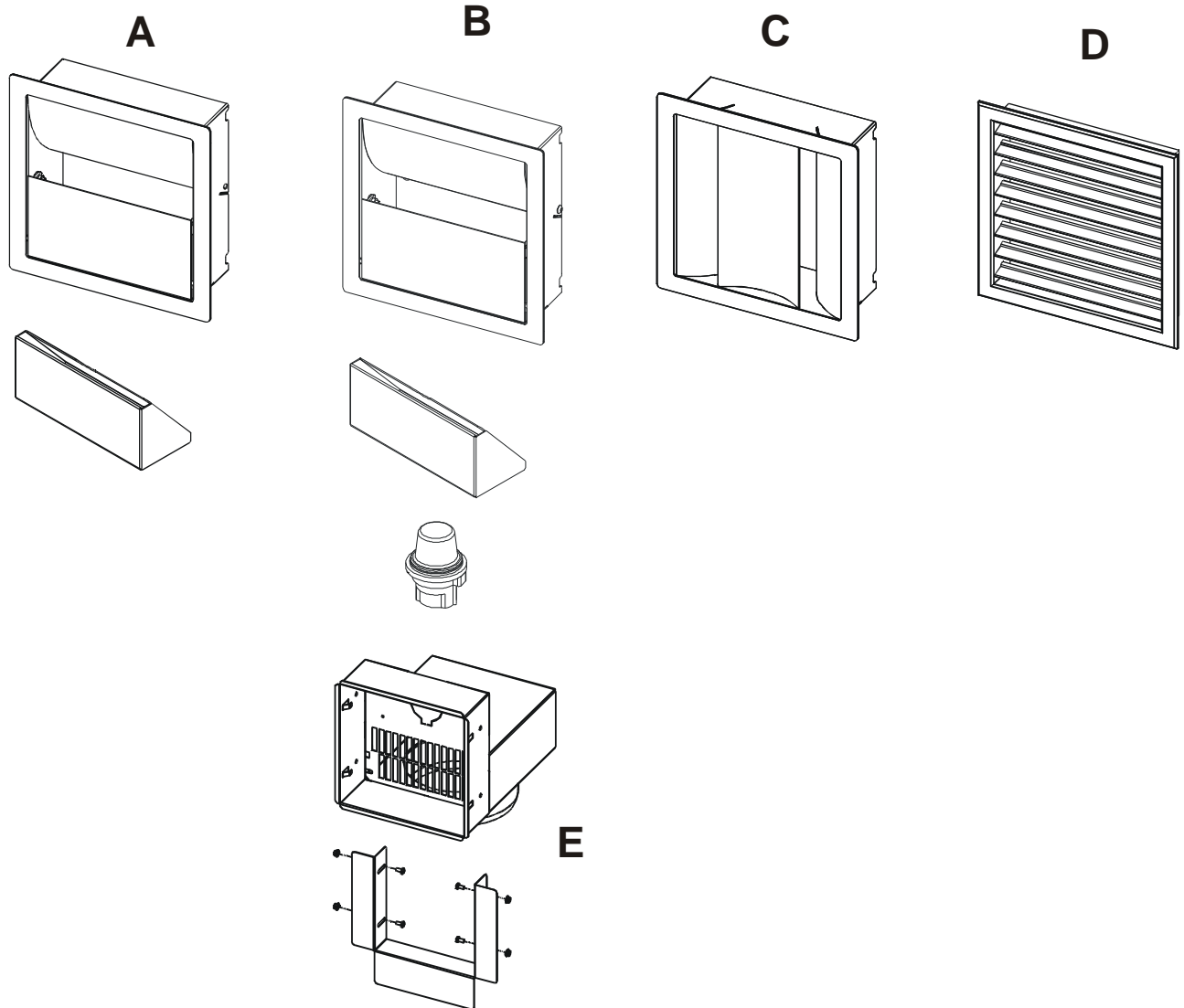


1. Outlet structure with fan with and without lighting (2 pieces)
2. Fastening bracket group (2 pieces)

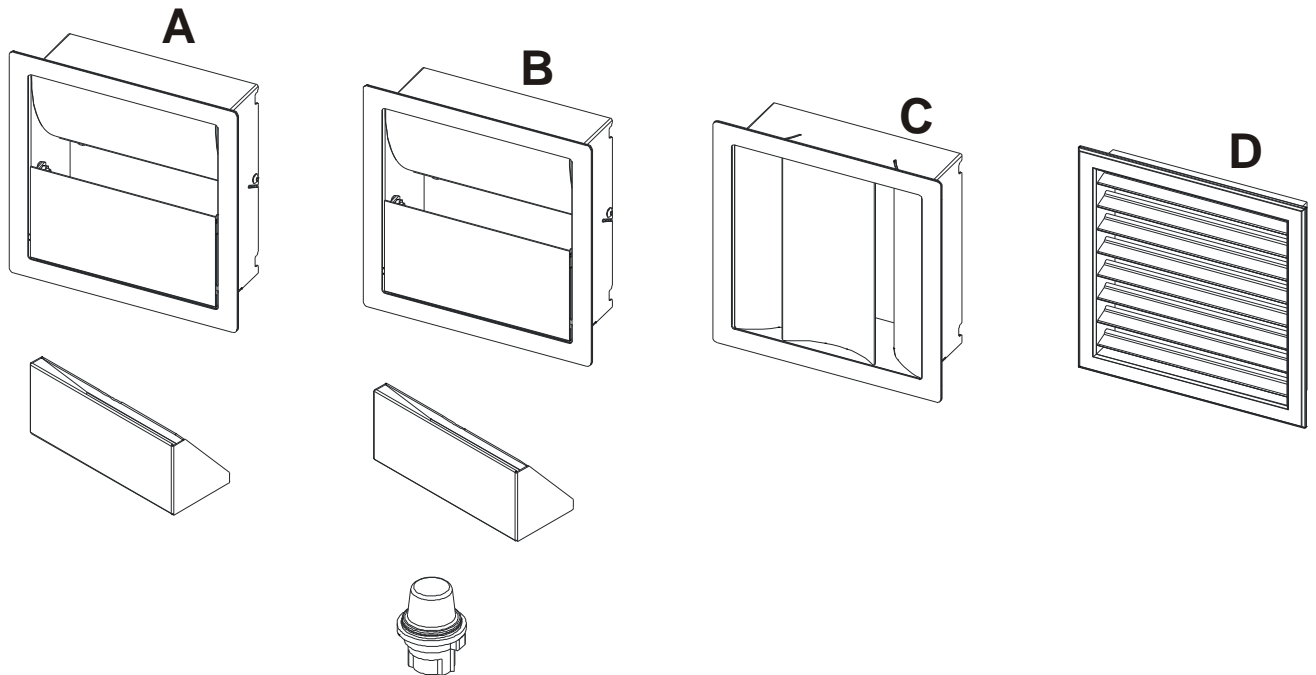
3. Hose Ø 100 L=1.5 m (2 pieces)
4. Flange Ø 100 VF (2 pieces)
5. Hose clamp D.60-170 (4 pieces)
6. Control unit

5.2. ACCESSORIES

5.2.1. Air outlets of natural ventilation kit with and without illumination



- A** – One-direction air outlet without illumination (includes container for dehumidification)
- B** – One-direction air outlet with illumination (includes light and container)
- C** – Two-direction air outlet
- D** – Multi-direction air outlet
- E** - Natural ventilation air outlet structure for illumination + Fastening bracket group (2 pieces)

5.2.2. Air outlets for forced ventilation kit

A – One-direction air outlet (includes container/without illumination)

B – One-direction air outlet (includes container and illumination)

C – Two-direction air outlet

D – Multi-direction air outlet

5.3. INSTALLATION OF THE COMFORT AIR KIT

Before installing the natural or forced ventilation COMFORT AIR kit, make sure you have the following material available (fig.1):

1. **For natural ventilation:** connect the hoses (a) and the flanges (d) $\varnothing 150$ to the connections on the upper part of the stove unit (fig.1).
For forced ventilation: connect the flanges (d) and the hoses (a) $\varnothing 100$ to the connections on the upper part of the stove unit. Forced ventilation uses hoses with a smaller diameter than those used for natural ventilation.
2. prepare on the wall (f) at the desired height two holes for the hot air outlets measuring 185 mm x 185 mm
3. Insert the structure of the selected outlet (g) in the holes of 185 x 185 mm, working from the outside towards the inside of the wall
4. on the inner part of the wall, at the structure of the air outlet (1), attach the fastening bracket group (2), using the four screws and nuts provided (fig.2)
5. connect the hose (a), previously fastened to the fireplace hose, to the connection located on the structure of the air outlet (e)
6. tighten the hose (a) on the connection (e) with the provided clamp (c)
7. **before the cladding is complete** connect the electrical cables of the light and/or fan, since everything to be done afterwards can be done from the outside.

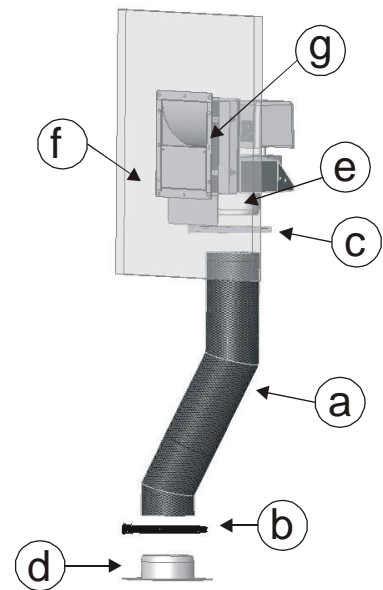


Figure 1– Hose connection

If limitations of space make it impossible to use the bracket provided, proceed in any case so that the kit is firmly fastened, using the recessed box (optional).

It is advisable to:

- **Limit the ducting to 2 linear metres for natural ventilation, and 8 linear metres for forced ventilation.**
- **For natural ventilation,** it is advisable to position the air outlets at a height of not less than 2 m above the floor. (fig.3).
- **For forced ventilation,** the kit can also be positioned at a certain distance from the fireplace stove (max 8 m). In this case, you must properly insulate the ducts so that the heat is not dispersed and heats only the masonry.
- If possible, provide ducts of the same distance to prevent different quantities of air at different outlets.
- **For both natural and forced ventilation, it is advisable to duct the front air outlets (A) where more heat accumulates than at the rear outlets (P).**

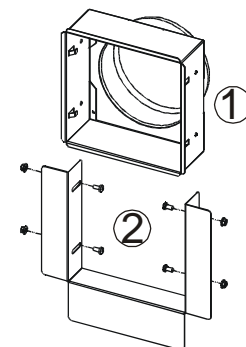


Figure 2– Kit installation

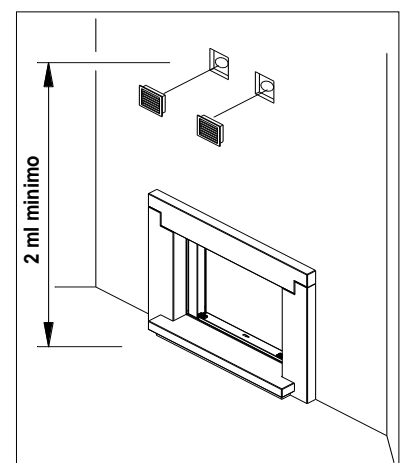
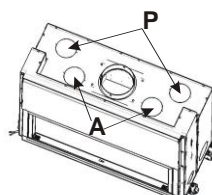


Figure 3 – Installation of hot air outlets

5.3.1. Variation for air outlet with container

The essence container (2) is available only on the one-direction air outlet with and without light. Its purpose is to humidify the air.

The container (2) can easily be removed from its seat. To do so, lift the door (1) at the bottom and extract the container (see fig.4).

Place **only water** in the container. It is possible to add essences to perfume the room.



IMPORTANT!

EXTRACT THE CONTAINER FROM ITS SEAT FOR FILLING ONLY WHEN THE AIR OUTLET IS COOL AND THE STOVE UNIT IS OFF.

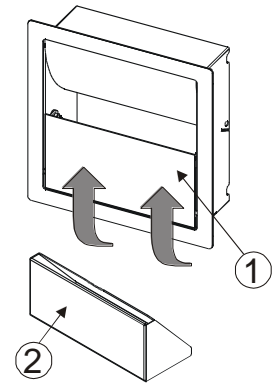


Figure 4– Container

5.3.2. Variation for air outlet with illumination

If you decide to install the ventilation kit with illumination, you must remove the knockout panel located on the structure of the air outlet (fig.5) and pre-install the light (a).

To open the pre-cut knockout panel, strike it with a rubber mallet. (fig.5).

Install the light (a) on the structure of the air outlet at the knockout panel so that it is facing the front of the structure (fig. 6). Fasten the light using the two brackets (c) with the screws (b) and bolts (d) provided.

Once you have inserted the light (a), make the electrical connections. In the rear part, insert the two female terminals on the tips of the light (fig.7)

For forced ventilation, you will need to connect the power cord of the light (included) to the control unit in the appropriate terminal. For natural ventilation, the connection must be made to a wall switch (**to be done by the installer**).

The cable provided for connection of the light is 2.5 metres. For greater lengths you will need to use an extension cord.

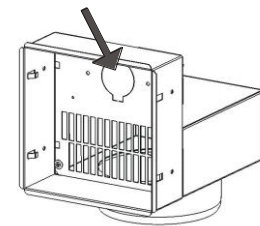


Figure 5– Knockout for insertion of light

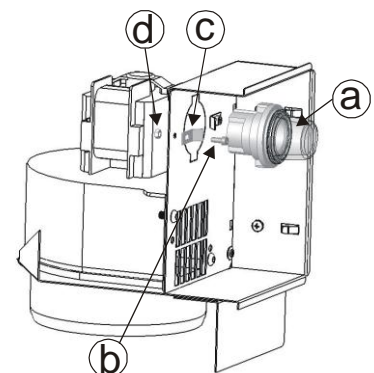


Figure 6– Fastening the light



IMPORTANT!

The cable for the connection of the light/fan is made of silicone material to withstand high temperatures. If you use extension cords (over 2.5 m) or in any other circumstance, make sure that the cord does not come into contact with the hot parts of the stove and of the air connection hoses in the cladding of the structure.

If you install the comfort air kit with illumination, it is necessary to pre-install the light on the kit before inserting it in the hole.



Figure 7-Lamp electrical connections

5.3.2.1. *Maintenance of air outlet with illumination*

**ATTENZIONE!**

DISCONNECT THE 230V POWER CORD BEFORE PERFORMING ANY MAINTENANCE.

- **Light bulb replacement**

1. remove the air outlet by pressing on its sides
2. unscrew the light bulb that has burned out
3. screw in the new light bulb (15 Watt).
4. re-insert the air outlet



Use only light bulbs that are resistant to high temperatures, such as those used in kitchen ovens.

- **Cleaning glass light fixture of the air outlet**

1. Open the door that contains the dehumidification container.
2. Remove the container
3. With the key provided, loosen the two screws, so that the bracket that supports the glass slides in the slots. Hold the glass with one and with the other free it from the bracket. Remove it and clean it.
4. Once you have cleaned the glass, re-insert it in its seat. Secure it by following the previous steps in reverse order.
5. Put the container and door back in place.

**IMPORTANT!**

When you unscrew the screws to remove the glass, hold the glass with one hand; otherwise it will fall.

5.4. CONTROL UNIT



IMPORTANT!

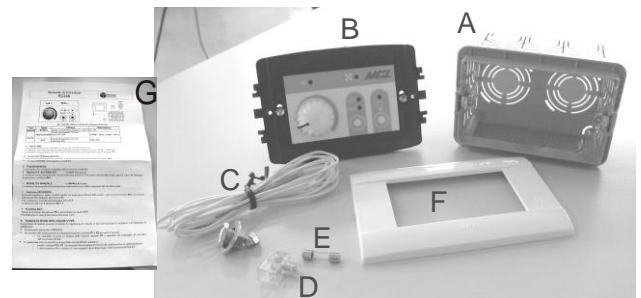
All electrical connections must be performed by qualified personnel in accordance with current laws in each nation, using suitable equipment and in compliance with the diagram indicated in this booklet. All operations must be performed with the 230V 50 Hz mains power cord disconnected.

McZ shall not be held liable for damage to persons or things due to incorrect connections or improper use of the device.

5.4.1. Composition of control unit

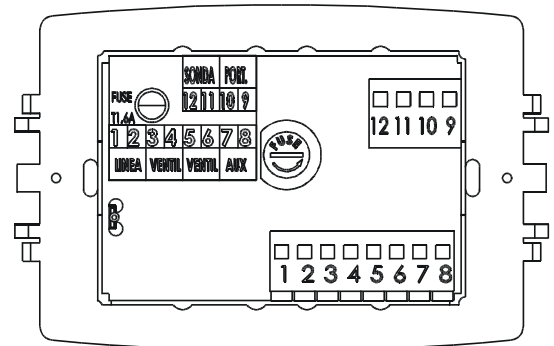
The following material is provided with the control unit:

- A. recessed box
- B. Control unit, screws for fastening and power cord
- C. Probe and cable clamp
- D. Terminal for the common earth cable
- E. Spare fuse (1.6 A)
- F. Plate
- G. Instructions



The control unit is equipped with 6 double terminals for the connection of:

- 1. Line (1-2 LINEA)
- 2. Fan 1 (3-4 VENTIL.)
- 3. Fan 2 (5-6 VENTIL.)
- 4. Light (7-8 AUX)
- 5. Switch for door opening (9-10 PORT.)
- 6. Probe (11-12 SONDA)



5.4.2. Positioning of the control unit

Make a hole in the wall (about 10X7.5 cm) for the installation of the control unit, taking into account the positioning of the probe.

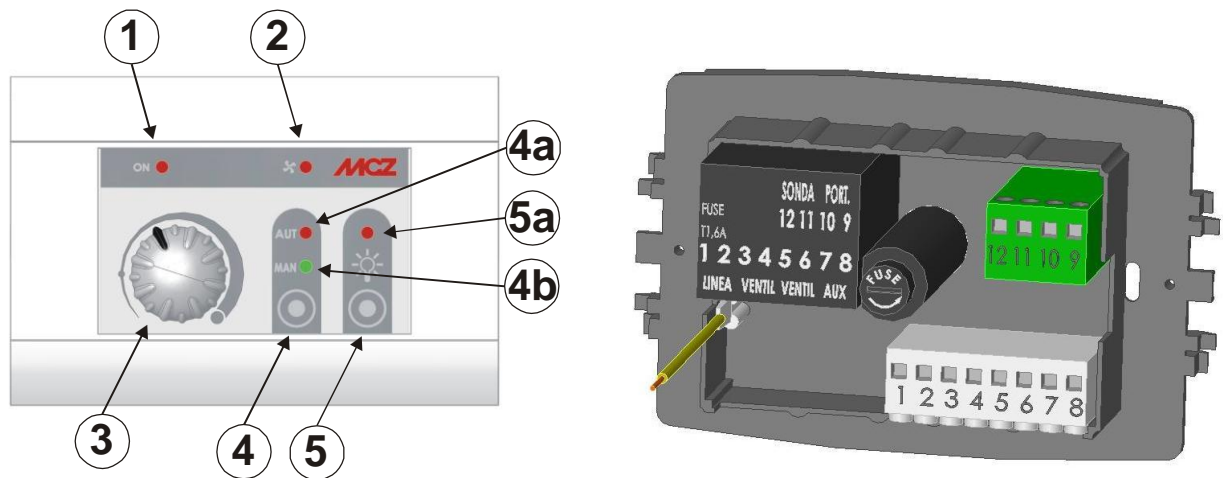
In this hole, insert the recessed box (A) without the control unit body (B). Be sure to position it **in a dry place, as far as possible from heat sources**, compatible with the position of the probe.

Run the cables (probe, power supply, fan and switch for door opening) through the recessed box (A) so that they are available for connection. Connect them to the terminals located on the control unit as shown in figure 4.14.

Once connections are complete, insert the control unit body and fasten it with the provided screws to the recessed box (A).

Finally, insert the white plate provided (F) or any other one, since the control unit body is set up to house SYSTEM 45 series and VIMAR IDEA series plates using special hooks.

5.5. GENERAL INFORMATION ON THE CONTROL UNIT



1. "ON" –"OFF" indicator light
2. Fan active light
3. Fan speed control knob
4. MAN/AUT button
 - 4a. Automatic
 - 4b. Manual
5. Lamp on button
 - 5a. Lamp on/off

The device makes it possible to control the speed of the fan it is connected to. The speed is set by turning the knob to 10 speed steps: 0, V1; V9, V10.

MANUAL/AUTOMATIC mode is set using button **4**.

5.5.1. On/off

The control unit is turned on and off by turning knob **3**.

On status is indicated by LED **1**.

5.5.2. Operation

Activation of the fan is signalled by LED **2**

AUTOMATIC mode (AUT LED on 4a)

The **AUT** is generally used to turn off the fan.

For example, in the evening you can load wood for the last time and turn the selector to **AUT**. The fan, with the consent of the probe, will continue to provide hot air until the temperature drops. In this way, you will keep the room comfortable all night long. The next morning, the fire box will contain embers ready for a new load of wood or it will be out.

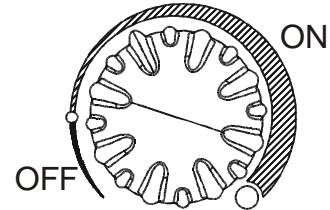
MANUAL mode (MAN LED on 4b)

The fan runs at the selected speed independently of the temperature measured by the sensor. When the stove unit is turned on, on the control unit place selector **4** in manual **4b**.

The speed of the fan is set using the knob (**3**).

With the knob turned completely to the left, the fan is off as is the indicator light (**1**). Turn the knob to the right to change from "OFF" to "ON" (indicator light **1** on). If you continue turning the knob to the right, the speed of the fan will gradually increase (indicator light **2** on).

In manual mode, the fan will operate in a mode regardless of the probe, and will therefore be controlled by the knob (**3**)



5.5.3. Safety function

When knob **3** is in the off position, the safety function is active.

If the temperature probe reaches the safety threshold, the fans come on at minimum speed to prevent overheating of the structure.

If the safety function trips frequently, contact the technical service department of **MCZ**.

5.5.4. Light on (if present)

Press button **5** to turn the light on or off.

The LED **5a** indicates the status of the light.

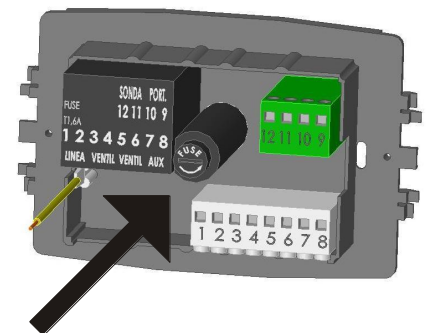
5.5.5. Replacing the fuse of the control unit

The control unit is equipped with a fuse that protects the system against voltage overloads.

When mains power is provided at 230V-50Hz, if none of the indicator lights of the control unit come on, the fuse is probably faulty.

To replace it, proceed as follows:

- remove the plate that covers the control unit
- unscrew the two screws that hold the control unit to the wall box
- carefully extract the body of the control unit
- open the plug and replace the faulty fuse with a working one (about 1 A)



IMPORTANT!

All electrical connections must be performed by qualified personnel in accordance with current laws in each nation, using suitable equipment and in compliance with the diagram indicated in this booklet. All operations must be performed with the 230V 50 Hz mains power cord disconnected.

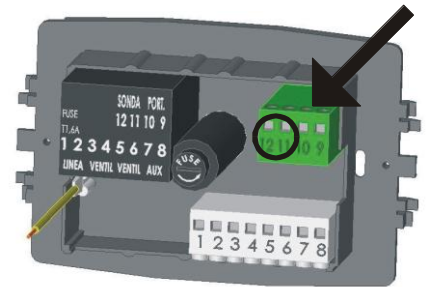
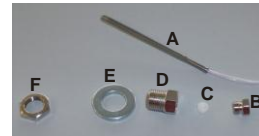
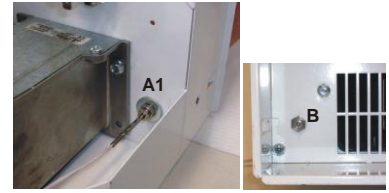
Mcz shall not be held liable for damage to persons or things due to incorrect connections or improper use of the device.

5.6. INSTALLATION OF TEMPERATURE PROBE

The temperature probe must be connected to the control unit and to the duct (1) of a kit (see diagram below) and has a length of 2.5 m. Greater distances require the use of and extension to be provided by the installer.

PROBE INSTALLATION

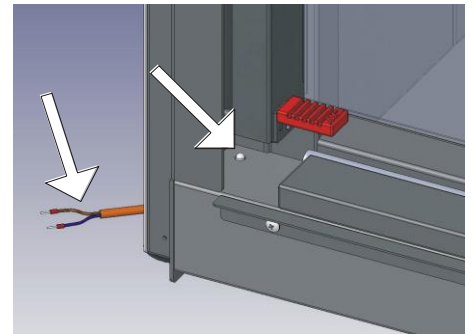
- Insert the plastic piece **C** in **D** and screw in **B** without forcing it. On the threaded part of piece **D** insert washer **E**
- The group thus formed **A1** must be inserted on the rigid part of the cable of probe **A**
- Identify the pass-through hole for insertion of the probe on the duct (1); on the grille at lower right alongside the fan.
- Insert in the hole the cable of probe **A** with the block **A1** and secure it on the other side with the nut **F**
- Insert the other end of the cable of probe **A** in the control unit in the indicated position (12-11)



5.7. DOOR OPEN SWITCH

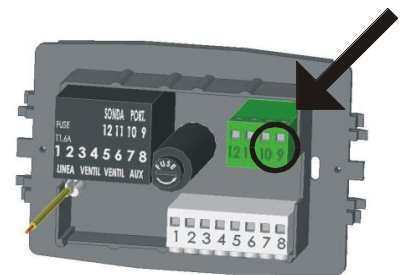
On fireplace stoves of the "Wood" line, MCZ has installed a switch which, in the case of forced ventilation, must be connected to terminals **9-10** of the control unit, after removing the connection between the 2 terminals provided by the manufacturer. To this end, place an extension of adequate length, in silicone material resistant to high temperatures. Make sure the cable does not come into contact with the hot parts of the fireplace stove.

This switch disables the fans when the door of the fireplace stove is opened. This is indicated by the flashing of the fan active indicator light (LED 2 see chap. 5.5).

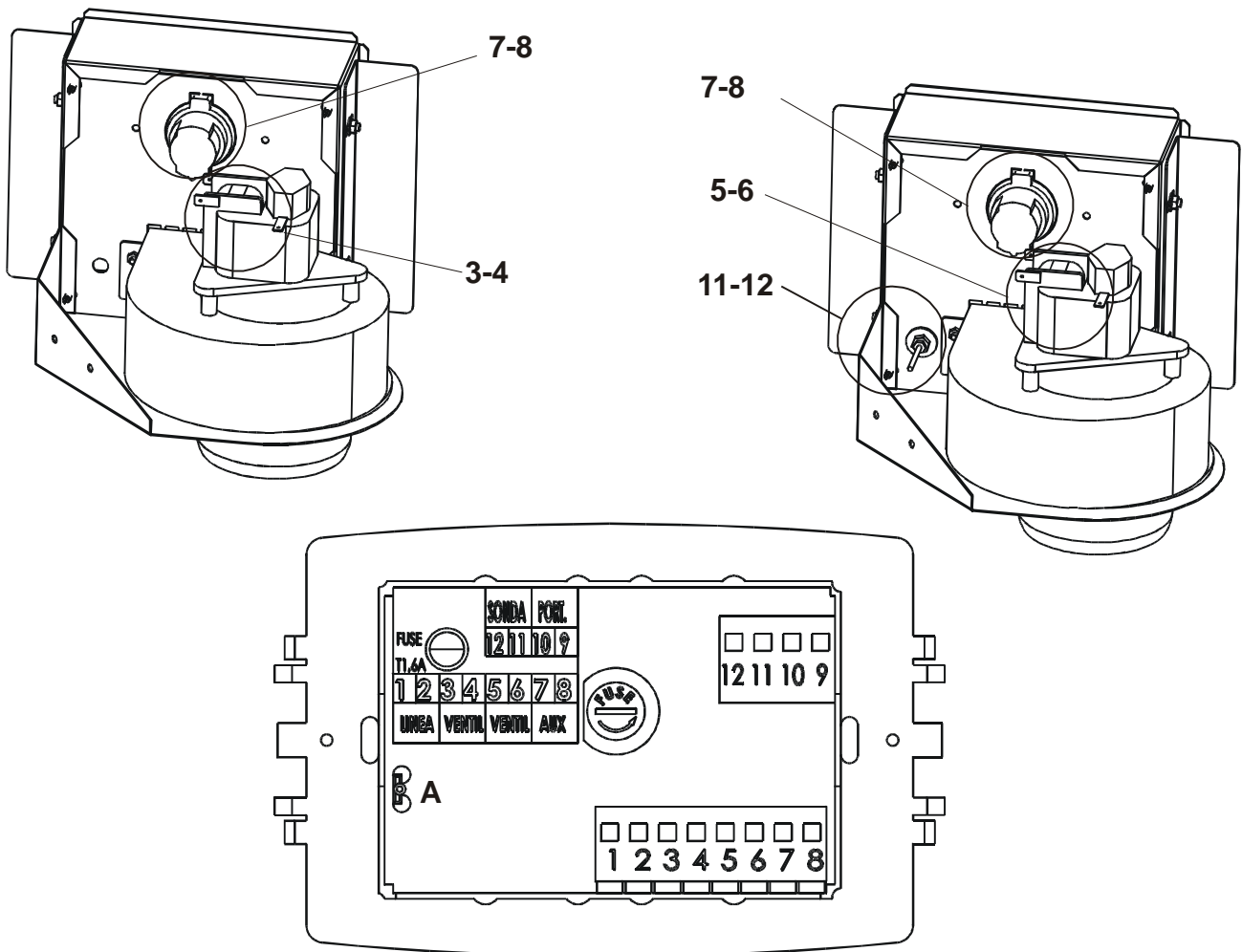


IMPORTANT!

Mcz shall not be held liable for smoke coming out of the air outlets if the switch is not properly connected to the control unit.



5.8. CONNECTIONS



- LINE (1-2 LINEA)
- FAN 1 (3-4 VENTIL.)
- FAN 2 (5-6 VENTIL.)
- LIGHT (7-8 AUX)
- SWITCH FOR DOOR OPENING (9-10 PORT.)
- PROBE (11-12 SONTA)
- TERMINAL FOR EARTHING (A)

Connect fans 1 and 2 to the corresponding terminals on the control unit (3-4 and 5-6).

Connect the probe (11-12); see paragraph 5.6.

For air outlet with light, connect the power cord to the control unit on the terminals (7-8). For air outlets with a light for natural ventilation, make the connection to a dedicated switch.

Connect the power cord of the control unit (1-2) to the 230V 50HZ mains socket.

Once the connections have been made, activate MAN operation and try turning on the fans to see if they all work. Turn the knob right and left to test the various speeds.

When connections are complete, install the selected air outlets.

5.9. REPLACING THE FAN



ATTENTION!
DISCONNECT THE 230 V POWER SUPPLY.

- Remove the air outlet
- Loosen the four screws **A** that are located on the grille on the four corners fig. 8
- Loosen the two middle screws **B** that hold the fan to the duct



ATTENTION!
WHEN THE CABLES ARE DETACHED, MAKE SURE TO SECURE THEM.

IF THEY FALL INSIDE THE CLADDING THERE IS NO WAY TO GET THEM BACK OUT.

- Extract grille **C**
- Detach the cable of the fan
- If the light fixture has a light bulb, disconnect the power cables when extracting the flange.
- It is now sufficient to turn the fan with respect to the duct to allow passage without damaging the piece.



IMPORTANT!
THE FAN MUST FACE AS SHOWN IN FIG.9. NO OTHER POSITIONS THAN THE ONE SHOWN ARE PERMITTED.



IMPORTANT!
All electrical connections must be performed by qualified personnel in accordance with current laws in each nation, using suitable equipment and in compliance with the diagram indicated in this booklet. All operations must be performed with the 230V 50 Hz mains power cord disconnected.

Mcz shall not be held liable for damage to persons or things due to incorrect connections or improper use of the device

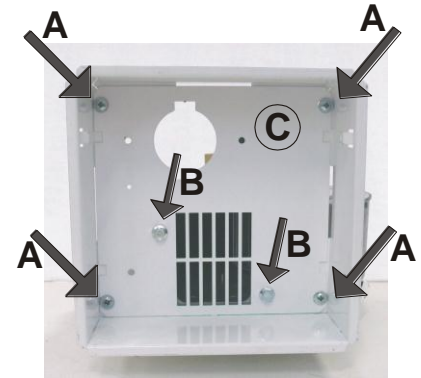


Figure 8– Fan replacement

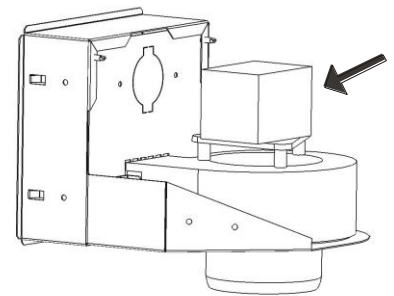


Figure 9– Fan position

6. OPERATION

6.1. PRE-LIGHTING WARNINGS



Do not touch the fireplace stove when it is lit for the first time. During this phase, the paint finishes drying and hardens. If you touch the paint, you may expose the steel surface.

It is good practice to provide plenty of ventilation in the room during the initial lighting, as the stove will give off a small amount of smoke and smell of paint.

If necessary, touch up the paint with the aerosol spray in the original colour (see "Fireplace stove accessories and inserts")

Do not stay near the fireplace stove, and as previously mentioned, ventilate the room. The smoke and the smell of paint will vanish after about one hour of operation. There are no health risks involved.

The fireplace stove will be subject to expansion and contraction during the stages of lighting and cooling down, and may therefore make slight creaking noises.

This phenomenon is absolutely normal, the structure being made of sheet steel, and must not be considered a fault.



It is very important not to bring the stove up to full heat immediately. Bring it up to temperature gradually.

This avoids damages to welds and the steel structure.

Do not demand full heating performance straight away!

6.2. OPERATING TEST



ATTENTION!!

BEFORE PROCEEDING IN ANY WAY WITH THE INSTALLATION OF THE CLADDING, CARRY OUT A GENERAL TEST OF THE FIREPLACE STOVE AS FOLLOWS:

- **Raise and lower the fire door 7-8 times to ensure fluid sliding and that the counterweights do not produce noise when they come into contact with the structure** (if this anomaly occurs, review chapter 7.1.4)
- **Check that all of the wiring and the control unit (if the kit COMFORT AIR VF is installed) are always placed at a distance from the hot body of the fireplace stove.**
- **Test the ventilation kit at all speeds and in all modes (if kit COMFORT AIR VF is installed)**
- **Light the fire at low power to ensure the smoke connections do not leak smoke or soot. Before lighting, however, read Chapter 6.**



MCZ SHALL NOT BE HELD LIABLE FOR ANY DAMAGE WHICH THE CLADDING MAY SUFFER IF THE AFOREMENTIONED CONTROLS ARE NOT PERFORMED AND IT BECOMES NECESSARY TO DEMOLISH THE CLADDING TO PERFORM REPAIRS OR ADJUSTMENTS.

6.2.1. Phases for first test lighting

- Make sure you have read and completely understood the contents of this instruction booklet.
- Remove any components which might burn from the fireplace stove and door (various instructions and adhesive labels).
- Remove the stickers from the ceramic glass or the high temperature could melt them and irreparably damage the glass. In this case, the MCZ warranty does not cover the glass.
- Completely open the front register of the combustion air using the provided hook.
- Place wood in small pieces that is well dried (humidity 15/20%). Light the fire at low power without excessively heating the structure. Any odours from manufacturing residue and/or evaporation will form the first time lighting occurs, and will disappear after a lighting at full power has occurred a few times.

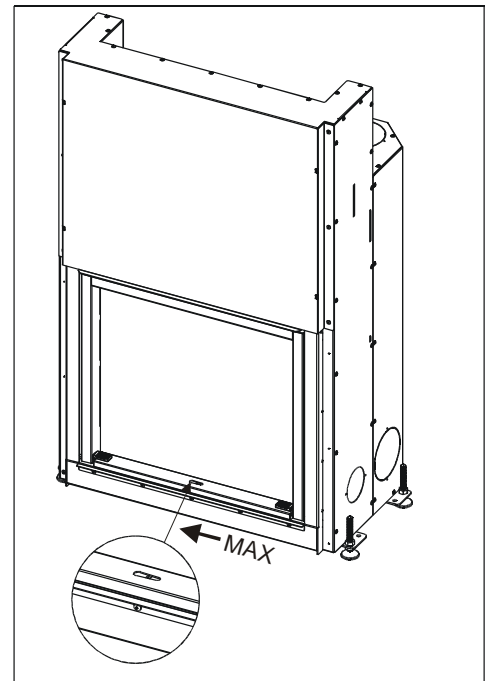


Figure 10 – Maximum adjustment of combustion air opening

6.3. CHOICE OF FUEL

To obtain the maximum performance from your FORMA fireplace stove, it is of primary importance to use **wood with suitable characteristics**.

It is advisable to use wood for heating such as **oak, beech, locust tree, or oak** with good calorific energy, or logs of pressed wood that **do not have resin. These have a high calorific power and must be used with caution to avoid overheating which could damage the stove.**

It is advisable to use fuels such as **poplar, pine, lime tree, or chestnut** which have low calorific power, since they are soft wood and also they do not burn for a long time.

Avoid using fuels such as **pine, fir, and olive** as they contain a high degree of resin and their combustion may substantially soil the fire mouth and the ceramic glass; also, they do not have an exceptional yield.

For all types of wood listed, the humidity they contain is essential because it determines the calorific energy.

Wood drying time (i.e. beech)	% humidity	Heat power Kcal/h
Freshly cut	50	/
3 months	40	2410
6 months	35	2700
9 months	30	2900
12 months	25	3150
15 months	20	3400
18 months	15	3710
21 months	10	3980

Figure 11 – Calorific energy (e.g. beech) in relation to humidity contained.



Do not use treated fuels (such as painted or varnished wood, or particle board) or unsuitable materials (such as plastics and derivatives), which could release toxic or polluting substances. Do not burn rubbish.

The gases produced by combustion due the use of unsuitable fuels cause damage to the fireplace stove and the chimney, they cause pollution and can compromise your health.



A high percentage of humidity produces condensation in the smoke duct causing an alteration in the draught and generating smoke and a significant deposit of soot on the glass of the door and in the flue pipe with a possible risk of a chimney fire later on.

6.4. FIRST LIGHTING

It is advisable to approach the first lighting with caution, using good-quality, well-seasoned wood.

The primary air inlet must be fully open. Do not use alcohol, petrol, or other volatile flammable substances. On first lighting, fumes and unpleasant smells may be given off, caused by the drying of the product; this is not hazardous, and it is sufficient to ventilate the room. Once combustion has started, pieces of wood of normal size may be added.

The flame must have as far as possible a smooth and laminar flow. **On the various occasions when the stove needs reloading, the door should be opened slowly, to avoid blowbacks of smoke into the room.**

Proceed as follows:

- Place a small amount of balled paper in the stove.
- Cover the paper with a small quantity of twigs and a few pieces of wood.
- Open the primary air register completely (lever all the way to the right).
- Light the paper, and if necessary leave the door up.
- When the twigs are burning, the door can be closed.

As the fire burns, add wood. Never overload the fireplace stove with wood (see technical specifications in the table).

As soon as the flames have died down and a bed of embers has formed, load the stove normally. Small loads of wood are preferable to large ones for combustion.



Attention

- Do not use volatile, flammable substances (petrol, alcohol etc.) for lighting the fire.
- Do not use fuels which could release toxic substances or pollutants.
- Do not put the fire out by throwing water on it.
- Check the external and internal air intakes, and the flue pipe, at least once a year, arranging for them to be cleaned.
- During use, the metal parts and the glass reach high temperatures. For all jobs of loading the stove, adjustment or cleaning the ash drawer, use the insulating glove provided.
- Never leave children unattended near the fireplace stove when it is in use.
- The risk of burns from contact with hot surfaces is very high.

6.5. LOADING THE FUEL

For normal fuel loading, open the fire door by lifting one of the handles as shown in *figure 12*. To close the door, do the opposite.

During use, the metallic structure, the handles and the glass become very hot. Use the thermal glove provided when handling these parts.

During normal use, always keep the fire door completely down and closed. Intermediate positions cause abnormal combustion (forge effect), rapid wood consumption, and may cause smoke to leak out due to the high temperature of the fire box.

Open the door only to add fuel, and only for brief periods of time.

The fireplace stove works best and provides the greatest yield when the door is closed, because the hermetic combustion chamber and the calibrated inlet of oxygen allow increased performance.



Nominal combustion has a duration of 50 min. Therefore, to obtain the nominal hourly loading set forth in the table in chapter 3, load the amount shown in parentheses in the table every 50 minutes.

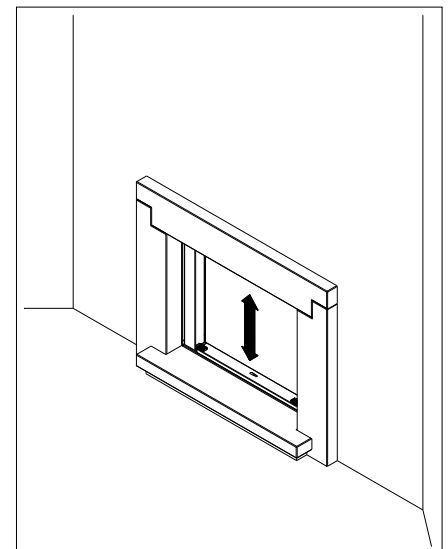


Figure 12 – Opening/closing the fire door

6.6. CONTROL OF COMBUSTION

PRIMARY AIR

The fireplace stove is equipped with two flanged side holes Ø100 mm for the inlet of primary air which ensures combustion and helps keep the glass clean.

. Moving the lever to the left provides the full aperture, and more rapid combustion, while moving it to the right closes the opening, with slower burning.

SECONDARY AIR

Adjustment is performed using the same lever as for the primary air. Secondary air comes out in proportion to the primary air. This balance is pre-calculated; the user cannot change it, as this may cause incorrect adjustment. This will prevent excessive combustion.



The use of damp or treated wood emits a higher quantity of smoke than normal that can dirty glass faster. Also the low performance of the flue pipe can jeopardise glass cleanliness since smoke remains in the combustion chamber longer than normal.

6.7. EMERGENCY SITUATIONS

If for any reason the stove fire needs to be suddenly and quickly put out or a fire in the flue pipe needs to be put out, proceed as follows:

- If time allows, remove the grate and ashes, using a metal container.
- Put the fire out rapidly by means of a dry carbon dioxide (CO₂) extinguisher.

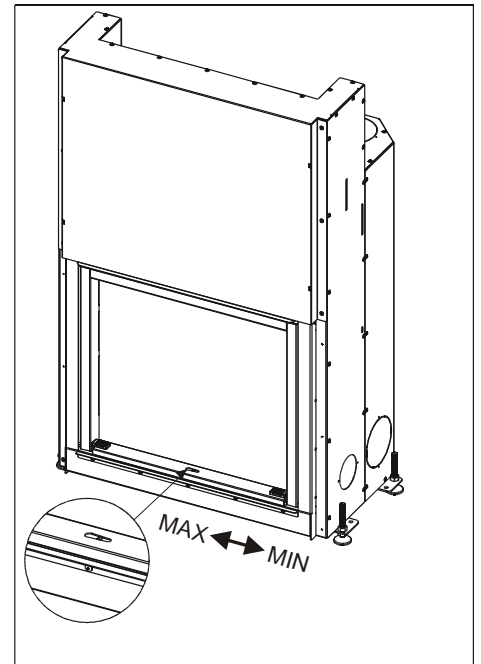


Figure 13 – Adjustment of primary/secondary air.

7. MAINTENANCE AND CLEANING



ATTENTION!

All cleaning operations of all parts should be conducted with the fireplace stove cold.

7.1. CLEANING TO BE PERFORMED BY THE USER

7.1.1. Cleaning the glass

Specific products can be used to clean the glass (see our price list), a cloth dampened with water and ammonia or a bit of white ash and a newspaper.

To open the flap door (*figure 14*) to clean the glass, **COMPLETELY LOWER THE GLASS** and open the flap door as shown in the figure using the handle. You can open this handle using your hands or with the hook provided.

To close, perform the steps listed above in reverse order.



ATTENTION!

Do not spray the product on the painted parts or on the gaskets of the door (ceramic fibre cord)

7.1.2. Cleaning out the ashes

This must be done when the fireplace stove is off and cold.

It is advisable to adequately clean the fire bed for proper combustion. To remove the ashes from the fire bed, use a metal scoop and brush. Place the ashes in a non-flammable container for transport.

Ashes which are still hot must neither be dumped outside in an uncontrolled manner nor put in the dustbin. Leave them to cool down in the open air in a metal container.

7.1.3. Cleaning the refractory material walls (ALUTEC®)

They do not require any cleaning, since the feature of this material (ALUTEC®) is that it does not absorb soot but rather repels it when the fire box is hot. During the lighting phase, during which the fire box tends to blacken, the refractory materials will turn white again, starting from the base of the flame, when the combustion chamber reaches its operating temperature (~ 400° C).

If this does not happen, it may be due to the following:

- Humid or resinous wood that does not release enough heat or that dirties the combustion chamber (*see chapter 6.3*)
- Flue pipe with poor performance resulting in smoke remaining too long in combustion chamber, dirtying the fire box.
- Flue pipe with poor performance which does not allow fireplace stove to reach high yield that results in adequate temperature of the refractory material.

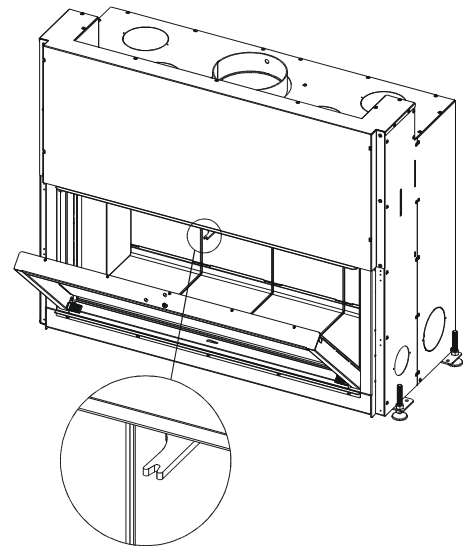
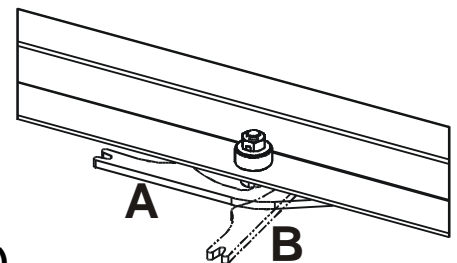


Figure 14 – Opening the flap door



Detail of handle for opening flap door

A – CLOSED POSITION

B – OPEN POSITION



Never clean the refractory material with a damp cloth or anything else, as it may be stained.

Use a dry paintbrush if necessary to remove heavy soot build-up.



If the Alutec does not whiten, it is not to be considered as a defect in light of the warnings and instructions above.

7.1.4. Lubrication and routine maintenance of the extensible guides

All of the doors of the fireplace stoves are mounted on extensible ballbearing guides that ensure a robust, sturdy system that provides silent movement.

Prolonged use and the heat of the fireplace stove gradually depletes the lubricant in the guides. This will cause them to become less efficient and noisier.

If necessary, periodically grease both runners as follows:

- Pull open the frame liner and extract the door so you can see the tracks of the guide.
- Using the provided grease gun, apply two drops of grease, about 5 mm in diameter, at the highest visible point of the runners. **Do not exceed the recommended amount!**
- Perform this operation on both guides. Keep in mind that the total amount of grease to be used is about 0.5ml (see graduated scale on grease gun).

After lubrication:

- Put the glue gun back and conserve it
- Lower and raise the door completely at least 6 or 7 times so that the grease is spread onto all of the other components of the guides to complete lubrication. You should notice a substantial improvement in ease of movement and noise reduction.



It is advisable to carry out this operation at the end of the season of use, or whenever the runners become too noisy.

Do not use other types of grease. If the grease gun runs out, request an MCZ original replacement.

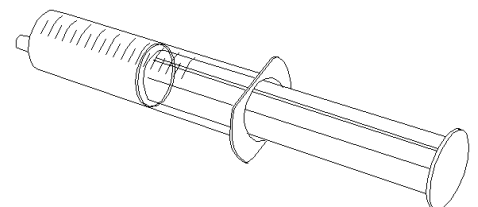
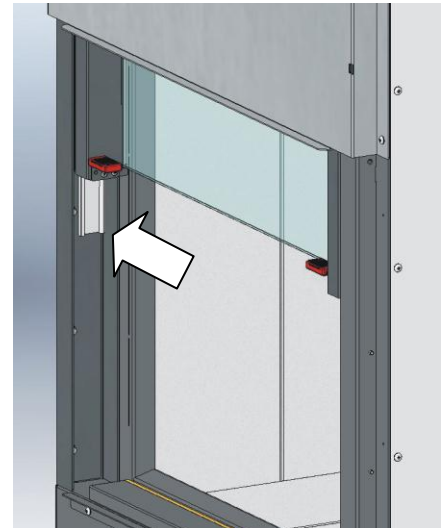


Figure 15 – Points to be greased with provided grease gun

7.1.5. Maintenance of kit VF (if installed)



The maintenance of all electrical parts (fan, control unit, etc.) must only be carried out with no electrical power supplied and with the unit unplugged.

7.1.5.1. Electric fan

Periodically, and at least at the end of each winter, it is advisable to clean the fan blades, which may have suctioned up dust or other small foreign bodies due to the static pressure exercised by the fan along the air ducts.

Clean the fan blades only with compressed air or with a vacuum cleaner. Take care not to damage the rotor or the fan blades.



Do not use any sort of rigid device which might bend the blades. When rotating, bent blades will produce more noise than normal due to off-axis rotation of the fan.

7.1.5.2. Control unit COMFORT AIR

Does not require any special maintenance if located as instructed in *chapter 5.4*. From time to time, you may want to check the condition of the fuse.

7.1.5.3. Wiring

Make sure the wiring is in good condition and that it is not near the hot body of the fireplace stove. Heat may damage it.

7.2. CLEANING TO BE DEALT WITH BY SPECIALIZED TECHNICIAN

7.2.1. Cleaning flue pipe

Mechanical cleaning of the flue pipe is recommended at least once a year. Excessive deposits of unburnt solid material can cause problems with the evacuation of smoke, and gives rise to a risk of chimney fires. To clean the appliance's chimney, remove the smoke deflector. To remove it correctly, lift the front and at the same time slide it forward in order to free it from rear support.



MCZ GROUP S.p.A.

Via La Croce n°8

33074 Vigonovo di Fontanafredda (PN) – ITALY

Telephone: +39 0434/599599 PBX

Fax: +39 0434/599598

internet: www.mcz.it

e-mail: mcz@mcz.it