MORETTIDESIGN

WOOD

USER MANUAL

Slot Wood 7; Slot Wood 8; Slot Wood 9; Slot Flat Wood;
Slot Flat Magic; Slot Wood Flat 49

INDEX

1 - GENERAL INFORMATION

The WOOD series stoves by MORETTI DESIGN have been conceived and created to be a source of heating inside residential environments.

The extreme care of design and the extraordinary craftsmanship quality, combined with the spectacular uniqueness of the flame developed by the wood, make MORETTI DESIGN stoves an elegant furnishing accessory capable of enhancing any environment with its aesthetics

The stoves have been designed for burning wood for heating indoor environments. The air is heated by natural convection and by radiation. In this way the stove is able to quickly heat up even very cold rooms.

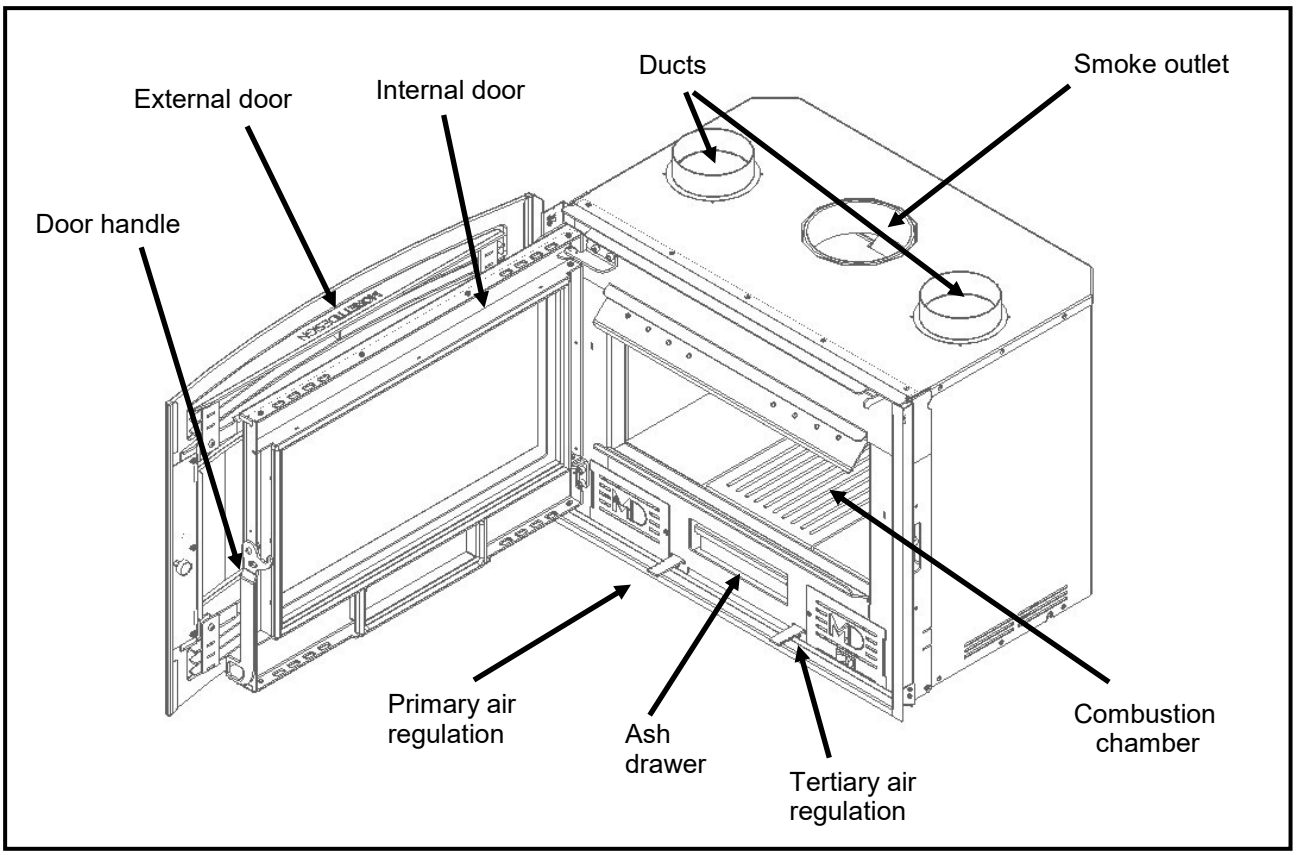
The natural convection heating principle ensures that the room air enters the lower part of the stove and is heated in the convection space consisting of a double shell coating; the air flow is then returned to the environment through the holes located in the upper part of the stove.

The heat generated by radiation is instead that released into the environment directly from the surfaces of the stove. The largest source of heat by radiation is the glass surface.

The stoves are made with a steel structure, while the interior of the combustion chamber is made of vermiculite and refractory bricks. The external surfaces are instead in steel, majolica and glass.

At the bottom of the combustion chamber there is a cast iron grid, below which there is a compartment for ash collecting.

To allow an optimal entry of combustion air into the combustion chamber, there are primary and secondary air inlets: primary air is necessary for ignition and its passage takes place through the cast iron grid; the secondary air flows on the glass and above the grid and creates a self-cleaning effect for the glass; the secondary air also passes through the upper part of the stove and burns the unburnt gases.



2 - WARNINGS

This manual provides useful information for the installation, function and maintenance of the stove, so as to allow a correct and safe use. We therefore invite you to read the manual with extreme accuracy, paying particular attention to the following warnings.

The manual is an integral part of the stove, it is recommended to keep it with care and to always near the appliance for a quick consultation, when necessary. In case of loss or damage, request a copy from your dealer.

MORETTI DESIGN wood stoves are made according to the indications contained in the European product standard (EN 13240: 2007), using absolute quality components.

The installation and maintenance of the stove must be carried out by qualified personnel according to the law (DM 22 January 2008, n. 37). All local regulations, including those referring to national and European standards, must be respected in the installation and use of the appliance.

The information contained in this manual must be observed attentively in order to ensure a safe use of the stove. The manufacturing company is not responsible for damage caused to people, animals or things deriving from an incorrect use of the appliance or from failure by the customer or the installer to comply with the indications, obligations and prohibitions established by applicable laws.

The installer will assume full responsibility for the definitive installation and consequent proper functioning of the stove.

It is forbidden to make any type of modification to the appliance without the manufacturer's prior authorization. Use only original spare parts recommended by the manufacturer.

The stove must not be used as an incinerator or in any other way other than that for which it was designed. No other fuel than those expressly recommended in this manual must be used. Do not use liquid fuels.

The use of the stove by children or people with reduced physical, sensory and mental abilities is prohibited, unless they are supervised and instructed in the use of the appliance by a person responsible for their safety. Children should be checked to make sure they don't play with the appliance.

Each stove bears an identification label plate, containing the technical data and the serial number, such as the one shown below.

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SLOT WOOD FLAT 49

APPARECCHIO PER RISCALDAMENTO DOMESTICO ALIMENTATO A CIOCCHI DI LEGNO

Moretti fire s.r.l.
C.da Tesino 50
Ripatransone
63065 (AP)
ITALY
www.morettidesign.it

Distanze minime da materiali infiammabili
LATERALE 350 mm
FRONTALE 1200 mm
POSTERIORE 350 mm
SOFFITTO >750 mm

LEGGERE E SEGUIRE LE ISTRUZIONI D'USO

POTENZA TERMICA INTRODOTTA		10,2	kW
POTENZA TERMICA NOMINALE		8,7	kW
RENDIMENTO A POTENZA NOMINALE		85,2	%
CO (13% O2) A POTENZA NOMINALE		636,0	mg/Nm³
TEMPERATURA GAS DI SCARICO		209,0	°C
PARTICOLATO PRIMARIO (13% O2)		14,0	mg/Nm³
DOP N°	SLWFT492024	CE	24
CERTIFICATO N°	CS24-0102885-01	IMQ SpA	

EN 13229:2001/A 1:2003/A2:2004/AC:2006/AC:2007
Usare solo combustibili raccomandati
Combustibile raccomandato: ciocchi di legno

3 - SAFETY DISTANCES

When a stove is installed near class B, C1 and C2 flammable substances, the safety distance from the front (as well as from the glass surfaces) must be 800 mm, the rear safety distance of a minimum of 350 mm and the lateral safety distance of at least 350 mm.

If the stove is installed in a room with class C3 flammable substances, the measures indicated above must be doubled.

The correct safety distances for the installation are shown on the label plate of each product. Table 1 shows some materials with their respective classes.

Table - Information regarding the flammability levels of some materials.

Degree of flammability	***Building materials***
A - Not inflammable	Granite, sandstone, Strongly porous concrete, bricks, ceramic tiles, special plasters
B - Almost flammable	Wood-concrete
C1 - Hardly flammable	Plywood
C2 - Medium flammable	Chipboard, cork, rubber
C3 - highly flammable	Polystyrene, polyurethane, wood fibres

4 - INSTALLATION

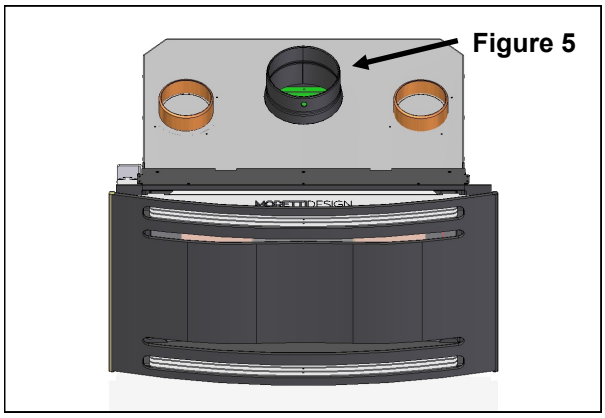
4.1 - UNPACKING

All operations involving the movement of the insert must be carried out by two or more people (in compliance with standard regulations) and with the appropriate means.

It is recommended to perform each procedure with extreme caution (do not tilt, perform slow and gradual movements, etcH), making sure that in the vicinity there are no unauthorized persons.

For the packaging, non-pollutant, environment-friendly and recyclable materials are used, therefore pleasecooperate by disposing properly at local collection and recycling points.

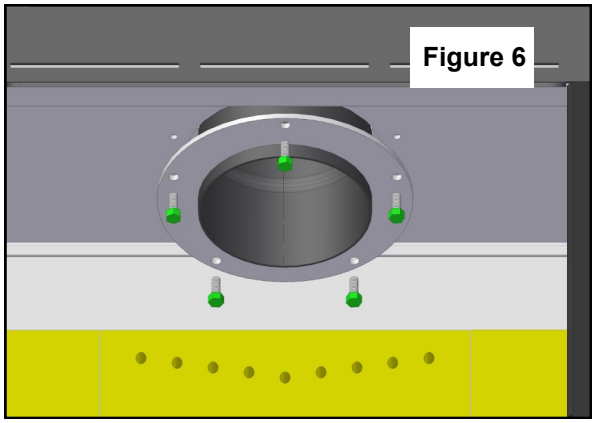
To facilitate the handling and installation of the insert, the smoke outlet comes with a hole drilled on its side, which allows the insertion of a hook used for lifting and moving the appliance (Figure 5), chains or any accessories necessary for this type of handling must be adequate to support the weight.



4.2 - DISASSEMBLING THE SMOKE OUTLET

ATTENTION! ONLY for models slot wood 7, slot wood 8, slot wood 9, slot flat wood, slot flat magic

To facilitate the positioning of the insert into the fireplace, the smoke outlet can be temporarily lowered, unscrew the five support screws as shown in Figure 7 and lower the outlet so to allow the insertion of the insert. Once the insert has been positioned, screw the smoke outlet back to place.



4.3 - THE CHIMNEY

The chimney draft allows the evacuation of fumes. When it comes to the height of the chimney, we are referring to the evacuation rings and exclude the final measure of the rain cap.

An appropriate dimensioning of the chimney is crucial for a proper draft. In this regard, the outlet section of the chimney must not be less than twice the outlet section of the flue. While the inner section must be identical to that of the smoke outlet of the fireplace. The chimney must also be rendered in a way so that it is easily inspected in order to perform maintenance and cleaning procedures.

The chimney also protects the flue and the fireplace from rainwater and it must continue its function even in the presence of wind from every direction. The figuresbelow show the correct positions for the chimney (Figure 7-8-9 and on page 5 - 6).

4.4 - CONNECTION TO THE FLUE

For the connection to the chimney flue it is advisable to use stainless steel tubes supplied by the MORETTI company; built according to regulation standards, they have no choked sections and are also available with a maximum 45° inclination angle. If other tubes are used, it is recommended not to use flexible metallic materials and/or fibre-cement.

It is recommended touse a stainless steel flue pipe insulated with 400 °Ctemperature resistant material (high density rock wool).

It is forbidden to use expanded clay materials for isolation.

The chimney must have a proper height and size to ensure an optimal depression in order to dispose of the combustion smoke.

It must be installed vertically with a minimized number of curves whose maximum inclination can not however be more than 45°.

One should avoid to use choked sections and different size tubes, because they can produce turbulence and pressure loss.

The stove must be connected to a flue with a draft of not less than 12 Pascal. The installer or the maintenance technician must ensure that the flue and the connection to the same are carried out correctly, in accordance with the regulations of the sector (UNI 10683 and UNI EN 13501-1).

The stove must have a dedicated flue: it is forbidden to connect the stove to a chimney already in service of another appliance. Below are some examples of flue installations.

Figure 7

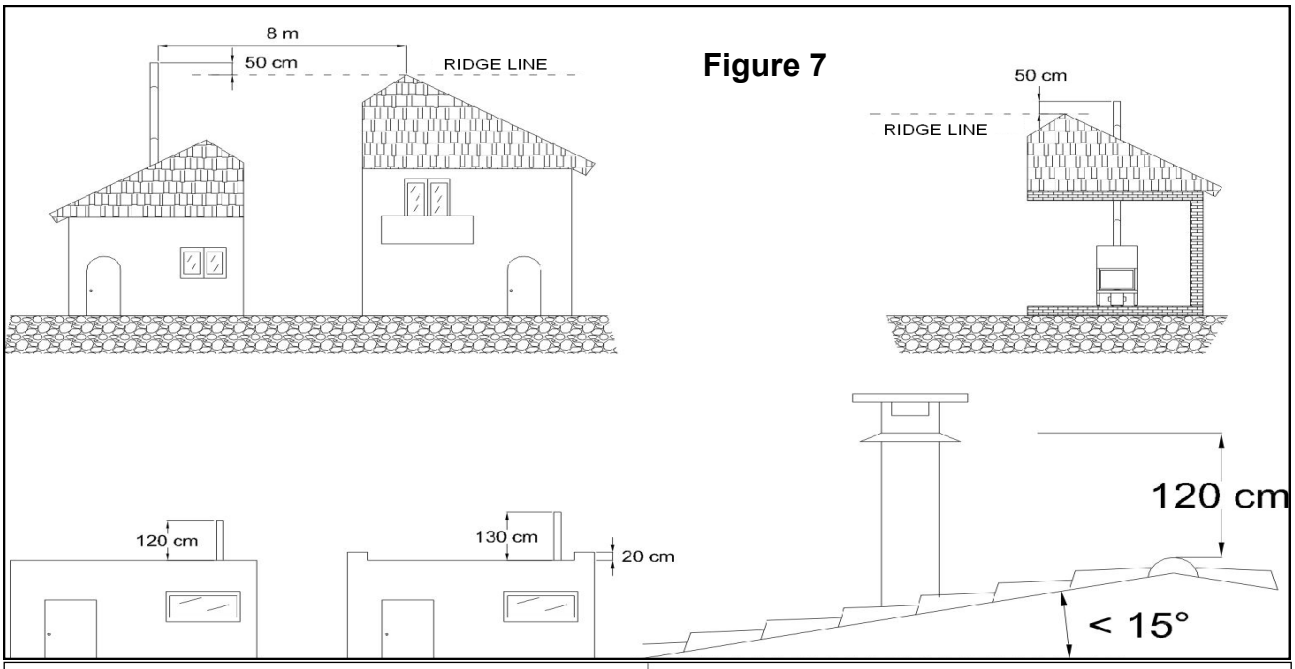
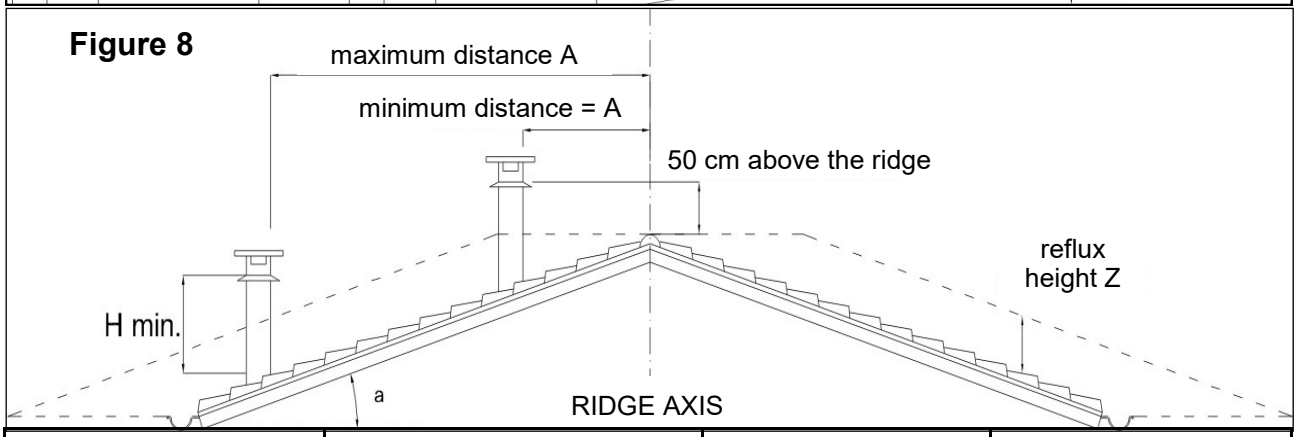
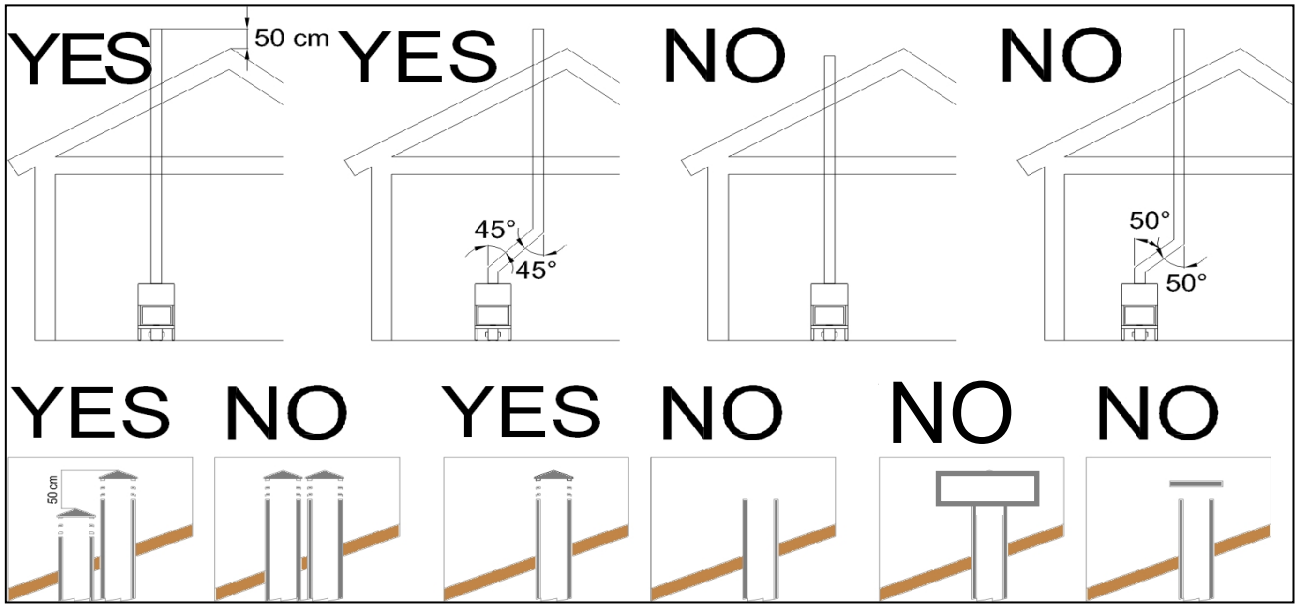


Figure 8



α	A	H	Z
Roof pitch	Distance between the roof axis (ridge) and upstream side of chimney	Minimum height from roof outlet (h minimum)	Reflux area height
15°	1,85 m	1,00 m	0,50 m
30°	1,50 m	1,30 m	0,80 m
45°	1,30 m	2,00 m	1,50 m
60°	1,20 m	2,60 m	2,10 m



The chimney flue must be constructed preferably using circular sections in order to minimize pressure drops and to facilitate the evacuation of combustion fumes. If square or rectangular sections are used, it is preferable that the corners are rounded off with a side ratio of 1,5.

The interior parts must be smooth and water resistant in order to avoid the deposit of unburned materials and the absorption of moisture.

Contact between the chimney and flammable or combustible materials shall be avoided, either by using suitable insulating materials or by creating an air gap.

It is extremely important to check the exit of the chimney to the roof. Refer to the figures and the table on page 6.

In order to ensure sufficient air exchange at the installation site and optimum oxygenation for combustion, an external air intake with a minimum diameter of 120 mm shall be provided. The air intake can be placed in the immediate vicinity of the fireplace or directly inside the lining cavity.

WARNING: If the external air intake is made inside the coating, it is advisable to **directly connect the outlet to the product through a hose** (which is supplied separately). For connection of the socket see figure 9.

The external air intake shall be covered and positioned in such a way that it is not clogged and shall be protected by a grid, while ensuring that the minimum ventilation area is not reduced.

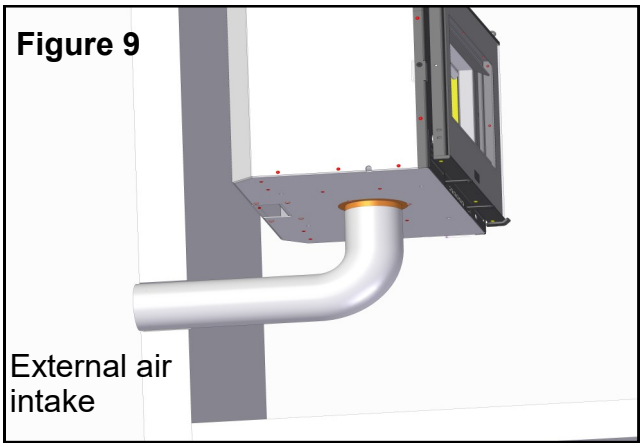
WARNING: If the external air intake is connected to adjacent rooms, they must not be kitchens, bathrooms, garages and thermal power plants.

4.5 - COMBURENT AIR

The combustion air inlet can also be connected directly to the outside, to improve the air supply and to prevent smoke from escaping into the indoor environment in case of return of wind in the chimney.

Adequate space must be provided for the installation of the stove to allow normal maintenance and cleaning and access to the chimney.

Figure 9



5 - VENTILATORS AND REGULATIONS

5.1 - TANGENTIAL VENTILATORS

ATTENTION! ONLY for models slot wood 7, slot wood 8, slot wood 9, slot flat wood, slot flat magic

The insert is equipped with two ventilators (Figure 10) placed in the lower corners of the appliance behind the aeration grids. The two ventilators, with a maximum output of 160 m³/h, allow to warm up in standard mode (without ventilation kit) medium-sized environments byducting air through the two flexible tubes connected tothe output sections located on top of the insert (see Figure 11).

Figure 10

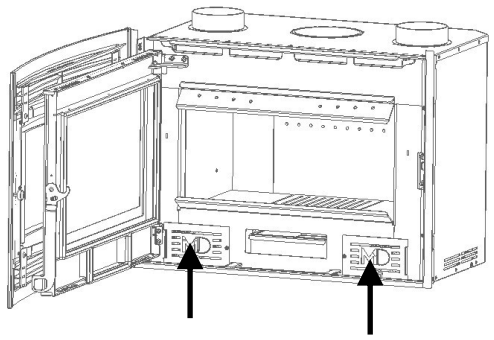
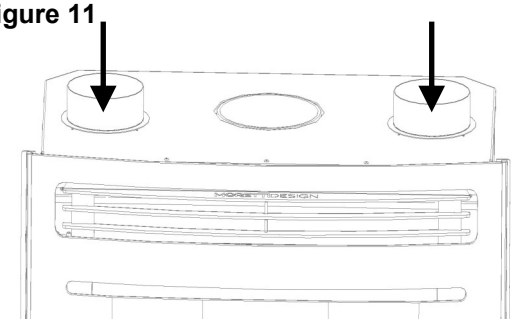


Figure 11



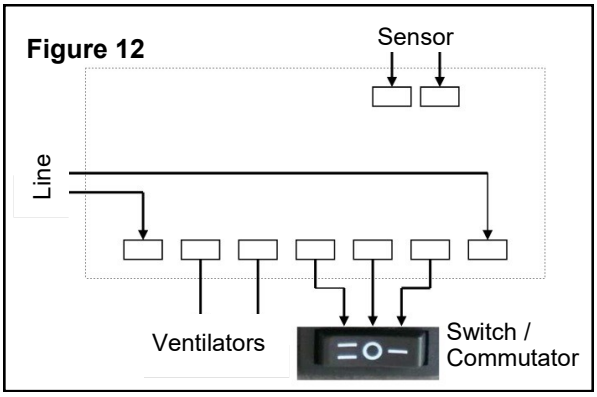
Under the right grid there is a small switch with three positions (0, I and II) as shown in Figure 12, which allows to set the ventilators on automatic (position 0) or manual (positions I and II).

On “0” the motors activate only when the air inside the structure of the insert has reached a certain temperature (about 45 °C) and stop once the temperature has returned below this threshold. When the switch is on “I” or ”II”, the ventilators are activated manually and will turn off when the switch is on “0”. For the connections of the ventilators see Figure 12.

WARNING: The MORETTI company recommends the installation of a switch (such as a double pole switch) on the main power supply in order to exclude the insert during a non-use period.

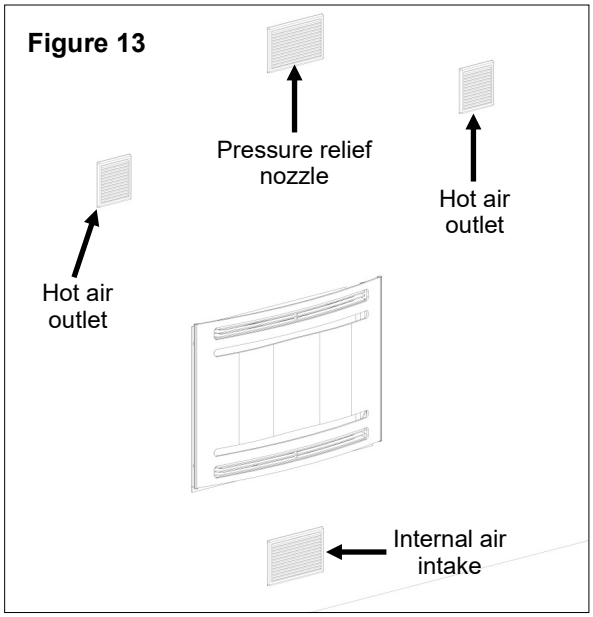
Never use the product without electricity.

Figure 12



In the upper part of the hood of the coating should be made a pressure relief nozzle to avoid excessive heating of the hood itself. The pressure relief nozzle shall be installed at a minimum distance of 30 cm from the side walls and 50 cm from the ceiling. It must be placed on the coating and must not be connected to any piping (figure 13).

Figure 13



5.2 TANGENTIAL VENTILATORS

ATTENTION! ONLY for slot wood flat 49

The insert is equipped with a motor with two tangential fans, installed on the bottom of the appliance. The air is conveyed through the perforated grille in the lower area of the front side.

In the grille there is a three-position switch (0, I and II) like the one shown in figure 12, which allows the fans to operate automatically (position 0) or manually (positions I and II).

At “0” the motors start only when the air inside the insert structure has reached a certain temperature (about 45°C) and stop once the temperature has returned below this threshold. When the switch is at speed I or II, however, the fans are activated manually and will only turn off when the user returns the switch to “0”. For the connection of the fans, see figure 13/A.

WARNING: It is recommended to install, upstream of the connection of the product to the electrical network, a switch (for example a bipolar switch) that allows you to exclude the fireplace during the period of non-use.

Never use the product in the absence of electricity.

A decompression vent must be made in the upper part of the hood of the covering to avoid excessive heating of the hood itself. The decompression vent must be installed at a minimum distance of 30 cm from the side walls and 50 cm from the ceiling. It must be positioned on the covering created and must not be connected to any pipes (figure 13).

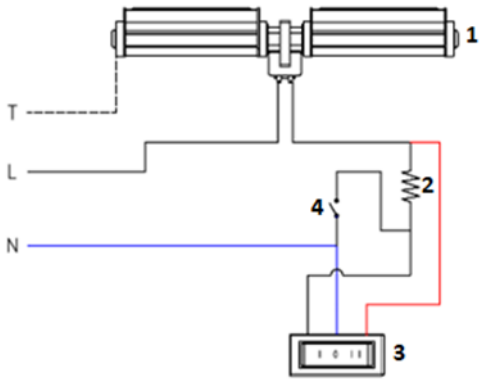
Figure 13/A

1 - Ventilators

2 - Resistor

3 - Switch

4 - Thermostat



5.3 ADJUSTMENT OF DOOR CLOSING

ATTENTION! ONLY for slot wood flat 49

The door tightening adjustment must be done when the machine is cold.

It must be checked in advance at the first ignition.

A 4 mm hex key is required.

Open the door and adjust the distance of the pin by unscrewing or screwing the screw in figure 14, testing the closing with the door lever. In the correct position the door must adhere perfectly to the hearth so that the gasket seals and does not allow the gases to escape and there is no need to apply force on the lever to close.

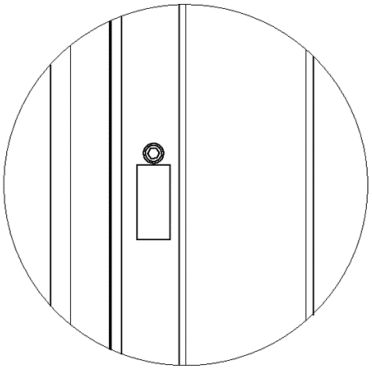


Figure 14: door lock adjustment screw SLOT WOOD FLAT 49

6 - PERMITTED FUELS

The stoves are designed for using wood. For a high efficiency, the use of wood with humidity lower than 20% is recommended. For drying wet wood, storage in a well-ventilated room for a period of 2 years is recommended.

If wooden logs are used, they must be kept in a dry environment so as not to compromise them with excessive humidity. The use of excessively damp wood or logs leads to a loss of efficiency of at least 20%, to a higher fuel consumption and to tar production which further reduces the efficiency of the stove.

7 - WARNINGS FOR SAFE USE OF THE PRODUCT

It is absolutely forbidden to use flammable liquids for lighting up and using the stove. It is also forbidden to burn any type of plastic, wood containing chemical materials and other chemically treated wood waste. Use only the permitted fuels listed in paragraph 6.

Some surfaces of the stove, especially the front glass areas, are subject to severe overheating and can cause serious burns on touch. It is therefore recommended to handle the stove with the utmost attention when it is lit up or during the minutes immediately after the flame is put out.

It is prohibited to place flammable materials on the stove when in use or when it is still hot, it can ignite and cause a fire. It is forbidden to place any type of container containing cold water on top of the stove.

It is recommended to be extremely cautious when removing hot ash. Hot ash must not come into contact with flammable substances, for example when they are emptied into a dustbin.

In the event the chimney catches fire, immediately extinguish the flame in the stove by closing the combustion air inlet through the special levers, remove the hot ashes with a small shovel and deposit them in a non-flammable container. Contact the fire brigade immediately.

MORETTI DESIGN will not be held responsible for any damage to people, animals or things resulting from unauthorized modifications to the appliance or from failure to comply with the indications provided here.

8 - USE OF THE PRODUCT

8.1 - COMBUSTION

For an optimal combustion, it is essential that there is a sufficient intake of combustion air inside the combustion chamber. Therefore, it is appropriate to verify that the external air intake is present and is not obstructed, and that the combustion air inlet tube on the rear of the stove is free from obstructions.

For a more efficient combustion, there are several combustion air inlets inside the combustion chamber: one primary air inlet and one secondary air inlet.

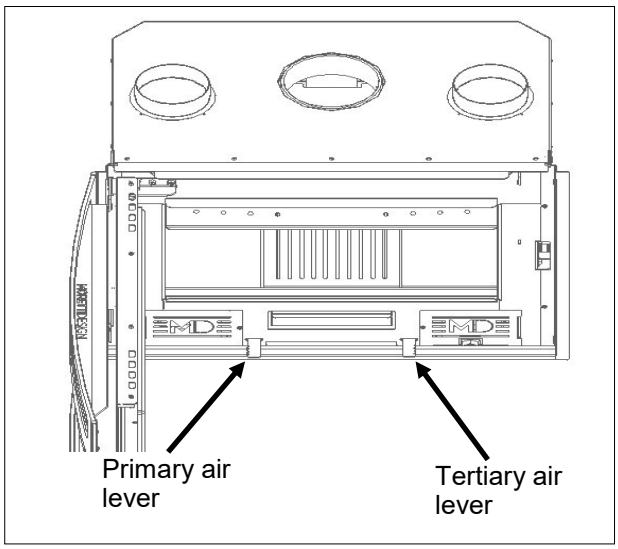
The primary air is essential during the lighting up phase and is fed into the lower part of the combustion chamber; The secondary air is instead fed into the upper part of the combustion chamber and serves to improve combustion itself and help keep the door glass clean.

Both primary and secondary air are adjustable. For an efficient combustion it is essential to regulate the right amount of air in the combustion chamber, so as to also reduce emissions of harmful gases into the environment. To best adjust primary and secondary air, act on the levers shown in the figure below.

To open the air to the maximum, position the levers towards the outside of the stove.

To completely close the air, position the levers towards the center of the stove.

Figure 15: combustion air regulation for slot wood 7, slot wood 8, slot wood 9, slot flat wood, slot flat magic



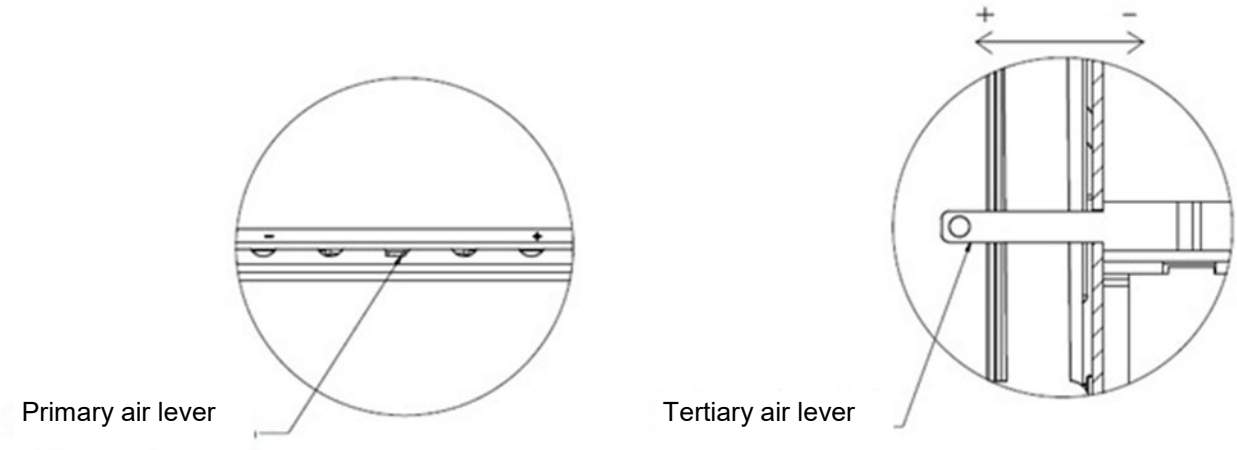
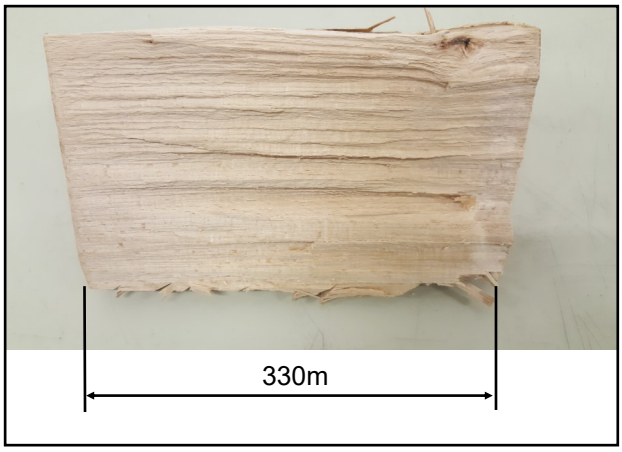
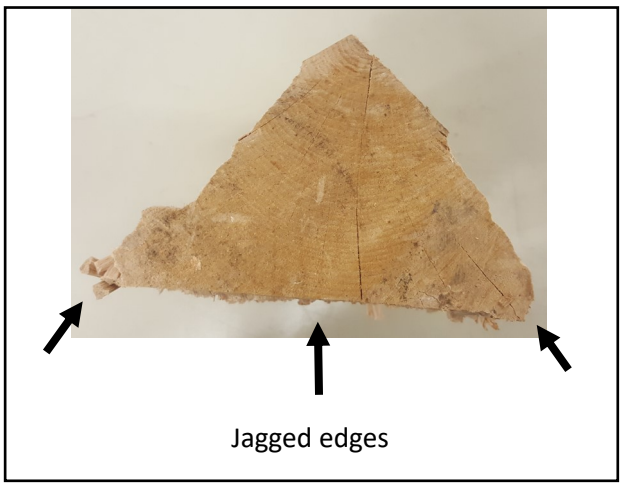


Figure 16: combustion air regulation for slot wood flat 49

The exact setting of the levers for the adjustment of the combustion process can not be determined uniquely. The optimal amount of combustion air is influenced by a series of factors: the type and humidity of the fuel, the draft of the chimney, the conditions of external pressure, etc. Therefore the user must adjust the combustion process (flame intensity and quality) according to the existing conditions.





To obtain maximum efficiency, the right lever must be positioned all the way back (towards the stove) to completely close the primary air and the left lever all the way forward to fully open the secondary air. Use a triangular shaped log weighing about 2.5 kg and about 330 mm long with jagged edges and support part that leans on the grid (see images). The technical data (see page 13) contains the recommended hourly wood consumption.

8.2 - FIRST IGNITION

The first ignition of the stove must be done using soft wood, so that the temperature rises slowly. It is important, once the stove is lit, that a live flame is maintained for at least an hour.

In this span of time, the applied coating is burned, stabilized and the adequate strength, hardness and abrasion resistance is obtained.

During this process, the room must be intensely ventilated to disperse the fumes. Do not touch the stoves surface during combustion, the paint may be damaged.

8.3 - SUBSEQUENT IGNITIONS

Before each ignition, clean the ash grid; then, put crumpled paper, wood chips or small logs on the base of the combustion chamber. Solid firelighters can also be used. Never use liquid gasoline-type flammable substances to light.

Place wood in quantities not exceeding 2 kg. Ignite the paper or wood chips and close the door tightly.

When igniting, we recommend that you keep both the primary air lever and the secondary air lever fully open (positioned towards the outside of the stove). This will help develop earlier the flame.

Once the stove is lit, in order to control the flame, and then the combustion air inlet, first act on the primary lever until it is eventually closed, and secondly act on the secondary air. In particular, the primary air must be reduced to a minimum when the stove has reached an efficient combustion state, and the flame must be regulated by opening or closing the secondary air lever.

8.4 - CLEANING THE GLASS

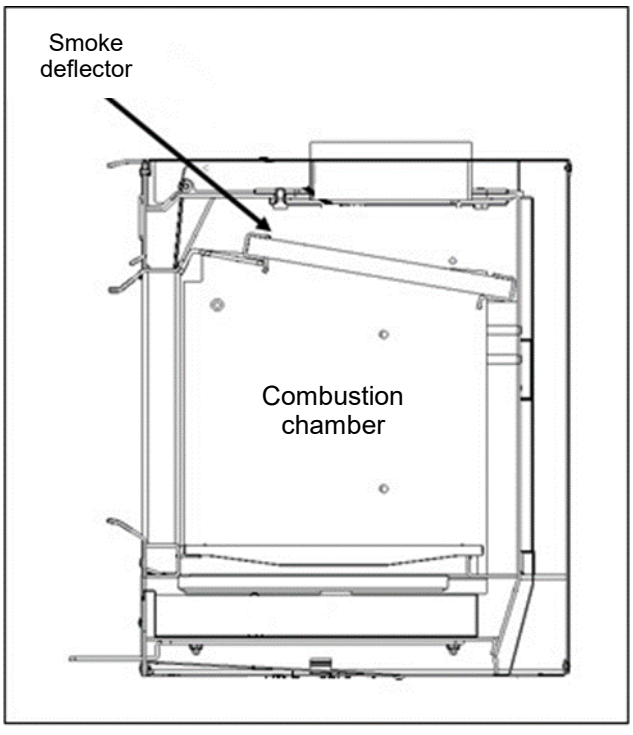
The use of a proper fuel, a sufficient air inlet for combustion (in particular secondary air) and an adequate draft in the chimney, affect the preservation and cleanness of the glass of the door.

In the case of dirty glass, clean it when the stove is cold with suitable detergents and with a soft cloth that cannot scratch the glass itself.

8.5 - REMOVAL OF THE ASHES

In the event that the stove is in operation for a long time, it is advisable to move the ash over the grid so as to allow it to fall into the drawer below. It is also recommended not to let the ash drawer become too full, which could hinder the passage of air under the grid and create subsequent combustion problems.

WARNING: Before emptying the ash drawer, check that the ash is completely cold and does not contain any lit remains of fuel, which could cause a fire in the dustbin. Burnt ash can be used for compost or as a fertilizer.



9 - CLEANING AND MAINTENANCE

At least once a month, the smoke deflector must be removed to clean it of any soot that has accumulated in its upper part.

The deflector is located in the upper part of the combustion chamber; to remove it, access it from the combustion chamber door, then lift it slightly and tilt it in order to get it out of its final position.

The stove must be serviced at least once a year (after the winter season) or more frequently in case of intensive use or use of poor quality fuel; the stove must always be cold before cleaning.

During the cleaning procedure, any soot and ash in the smoke outlet and combustion chamber must be removed. The ash grid must be cleaned and left without obstacles between the cracks. Any parts of the internal vermiculite coating that have fallen should also be repaired.

The completeness of the inner lining must also be monitored during the winter season. The gaps between the individual refractory walls are used for thermal expansion and to prevent cracks; the gaps must not be filled in any way (for example with filling).

In any case, the cracks on the vermiculite boards do not cause the loss of their functionality, unless they have fallen completely. Therefore the mere presence of small cracks is not a reason for complaint.

10 - DISPOSAL

10.1 - DISPOSAL OF THE PACKAGING

The stove is delivered assembled on top of a wooden pallet with protective packaging. You can dispose of the packaging in the following way:

- Disassemble the wooden base (can also be used to ignite the stove);
- Throw the rest of the packaging in a bag or in a separate waste collection point;
- Deliver the cardboard to a collection point.

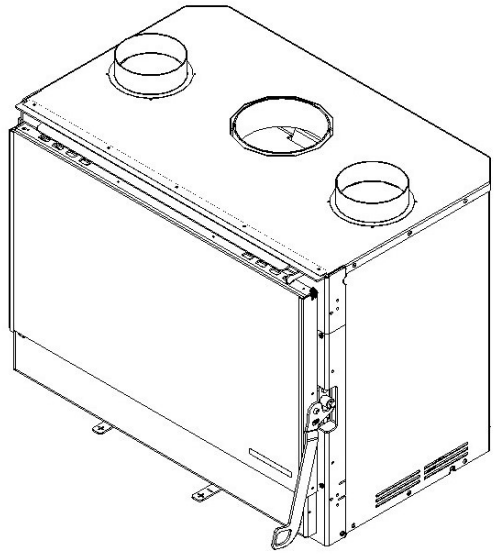
10.2 - DISPOSAL OF THE STOVE

In the event of cessation use of the stove, throw the coating, glass and gaskets in municipal waste, paying attention to differentiate different materials. The majolica tiles must be placed with building waste. The rest of the stove, i.e. the metal body together with cast iron parts, can be delivered to scrap metal collection points.

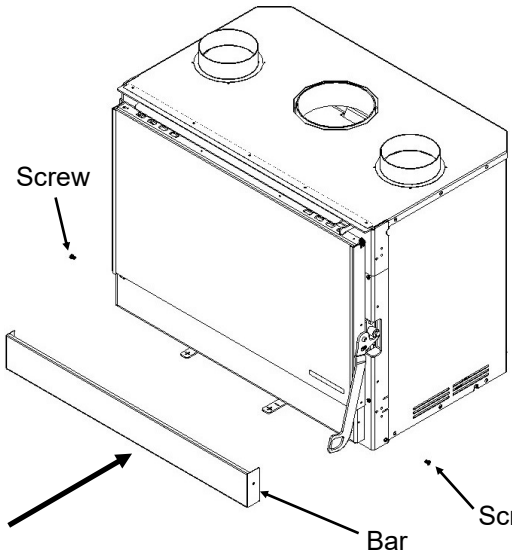
11 - ASSEMBLY OF THE AESTHETIC BAR SLOT WOOD FLAT

The aesthetic bar is supplied inside the packaging with its mounting screws.

For mounting see the following figures.



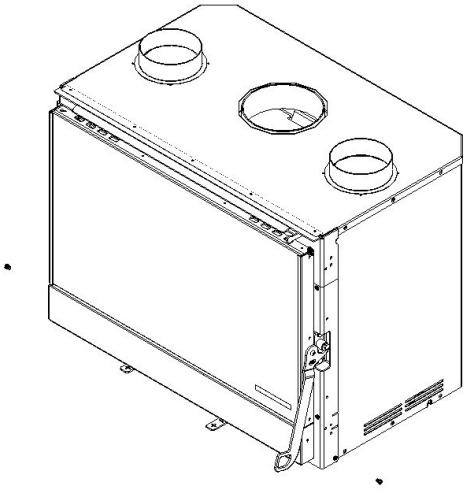
1 SLOT FLAT MAGIC without bar



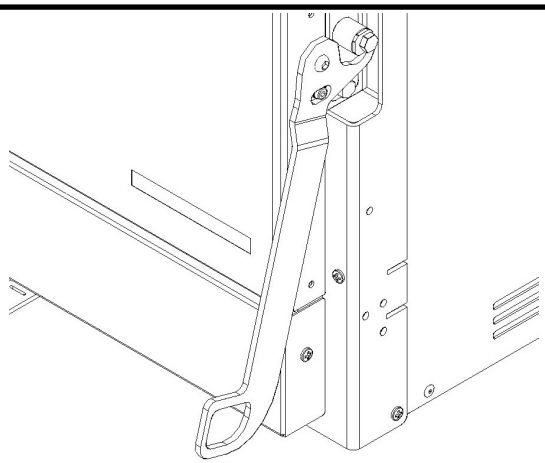
2 SLOT FLAT MAGIC with bar and screws to assemble.

Place the bar on the door as shown in the figure and tight both screws supplied.

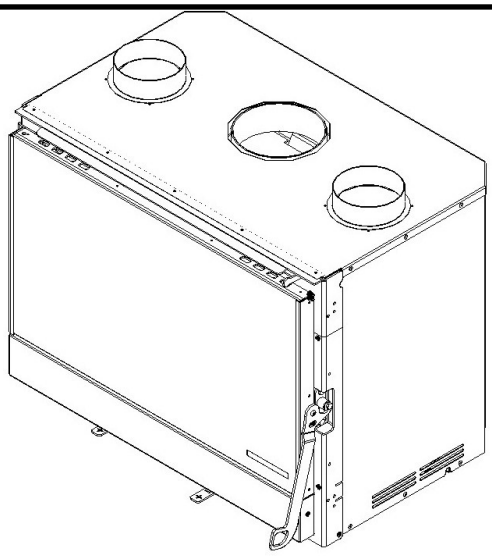
Be careful so that the bar is to knock from the bottom with the stop washers.



3 SLOT FLAT MAGIC without bar on the door



4 SLOT FLAT MAGIC with tight bar



5 SLOT FLAT MAGIC

12 - WARRANTY CONDITIONS

The buyer is the owner of rights provided by the National legislation that guarantees consumer goods. Therefore the seller guarantee's the buyer against any lack of conformity which becomes apparent within a period of 2 years from the date of purchase. In case of conformity defects within 2 years from the purchase, the seller will repair or replace the product within a reasonable time, taking in account the nature of the product, the purpose for which it was acquired and the procedures that must be undertaken to restore the conformity. The resolution of any non-conformity is not applicable in the following situations:

- failed compliance in following the installation instructions and use;
- accidental causes and negligence of the buyer;
- modifications or repairs carried out by unauthorised personnel;
- improper maintenance;
- operated or stored out of specified environmental conditions for the product;
- use of accessories not sold by the seller and/or parts not designed to be used with the product.

The warranty doesn't include those parts and materials subject to wear and tampering. It doesn't cover any kind of brickwork or plumbing, including disassembly and reassembly of the product. The warranty coupon must be filled out online on the website WWW.MORETTIDESIGN.IT during the product registration phase. Moretti Design disclaims any responsibility for incorrect installation or tampering and unauthorized interventions.

Items not covered by warranty

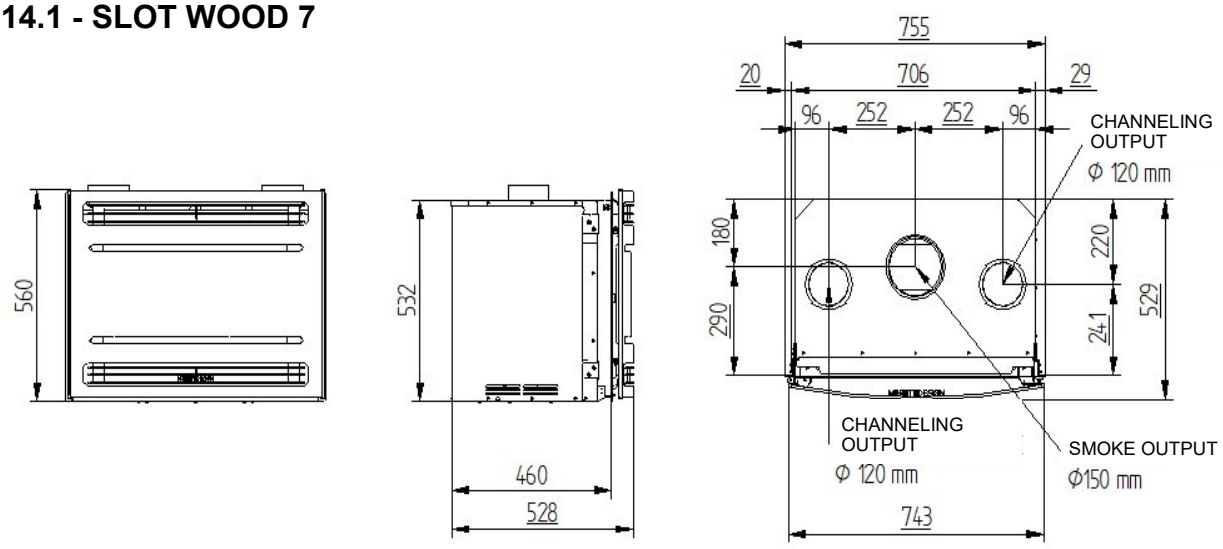
- Glass
- Majolica
- Internal refractory bricks or vermiculite

13 - TECHNICAL DATA

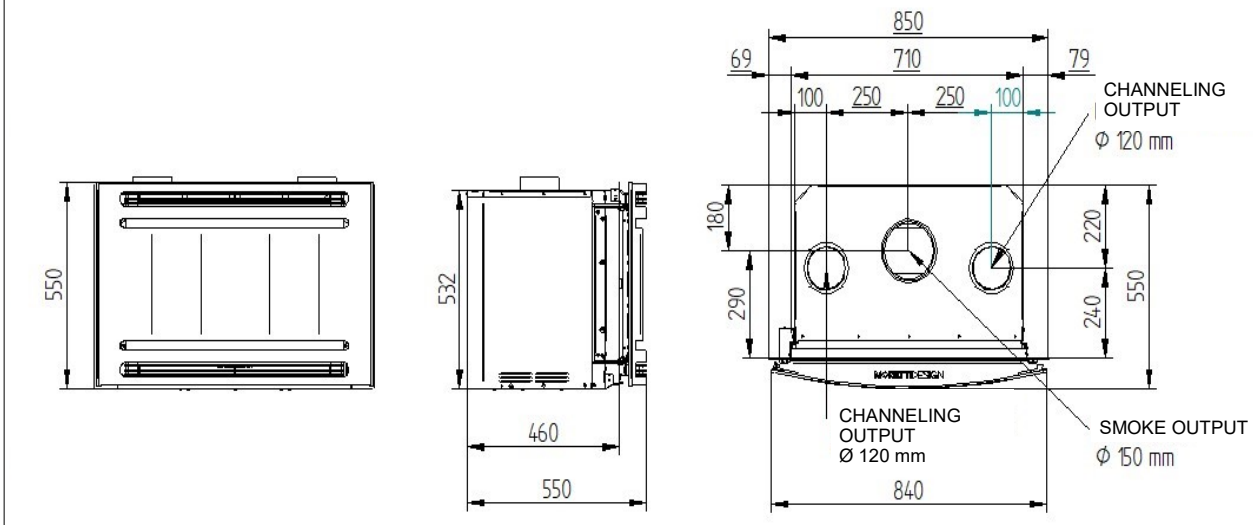
	U.M	SLOT WOOD 7	SLOT WOOD 8	SLOT WOOD 9	SLOTFLAT MAGIC	SLOTFLAT	SLOT WOOD FLAT 49
POWER INTRODUCED	kW	10,2					
NOMINAL POWER	kW	8,7					
WOOD CONSUMPTION	Kg/h	2,45					
WEIGHT	kg	92	93	94	90	90	105
SMOKE OUTLET	mm	150					
AIR INTAKE	mm	100					
HEIGHT	mm	532	532	532	555	555	495
WIDTH	mm	750	840	943	750	750	690
DEPTH	mm	527	543	555	460	460	440
EFFICIENCY	%	85,2					
CO	mg/m³ 13% O_2	636					
CO	% 13% O_2	0,0509					
NOX	mg/m³ 13% O_2	97					
OGC	mg/m³ 13% O_2	34					
DUST	mg/m³ 13% O_2	14					
MASS GAS FLOW	g/s	7					
SMOKE TEMP.	°C	209,2					
DRAUGHT	Pa	13					
SAF.DISTANCE L-P-F	mm	350 - 350 - 1000 - 340					

14 - DATA SHEETS AND MEASUREMENTS

14.1 - SLOT WOOD 7

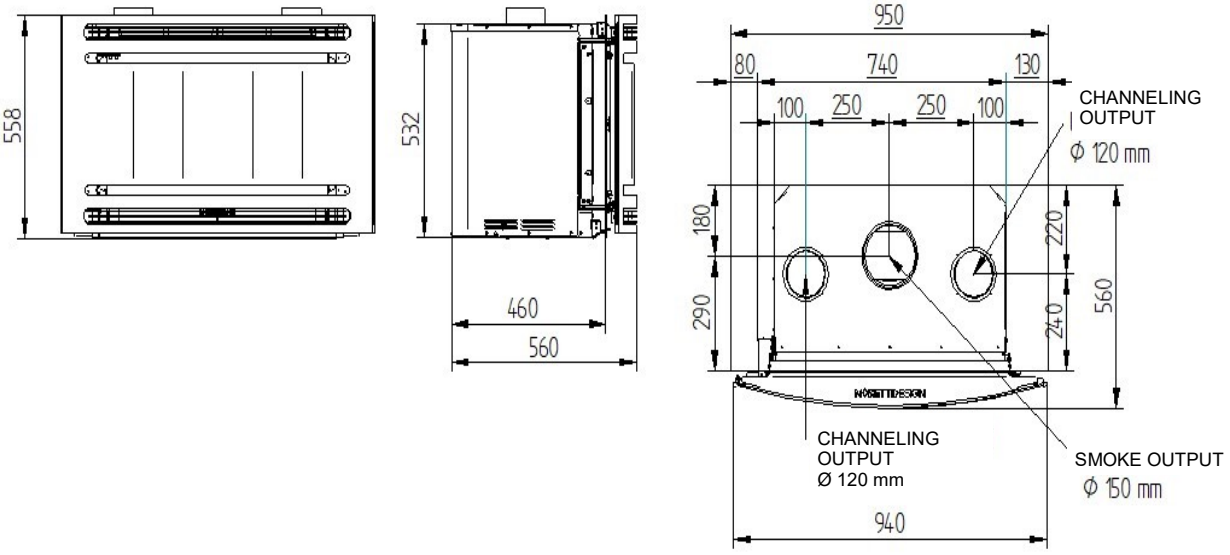


14.2 - SLOT WOOD 8

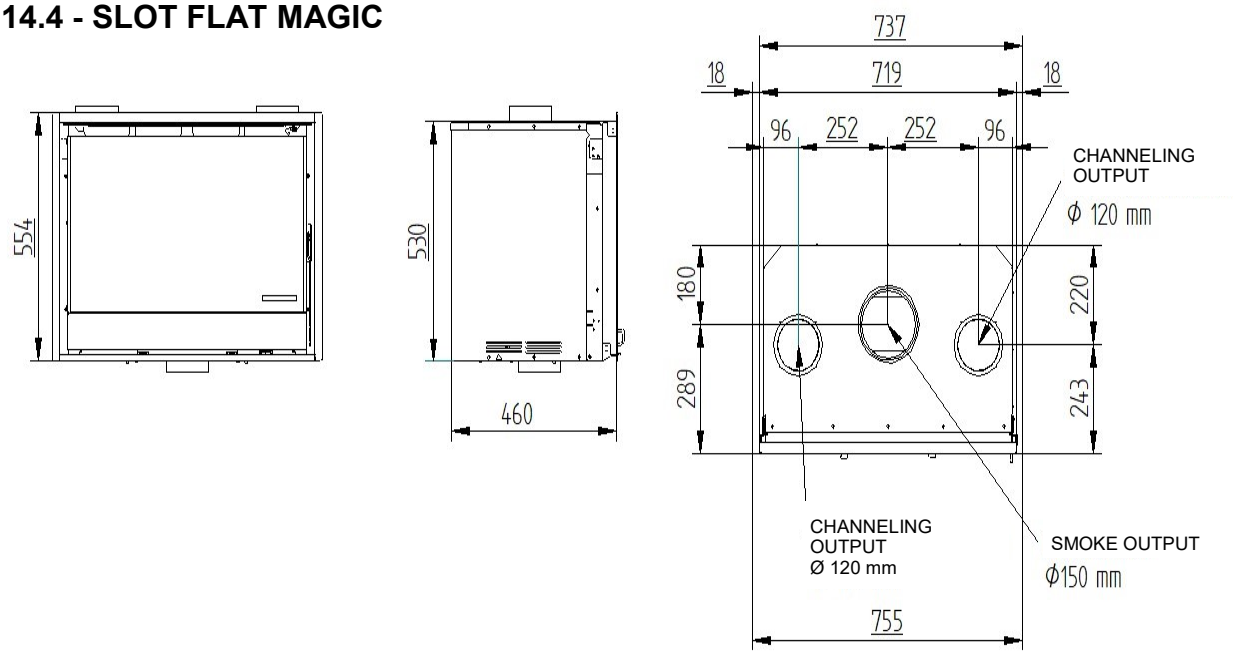


14 - DATA SHEETS AND MEASUREMENTS

14.3 - SLOT WOOD 9

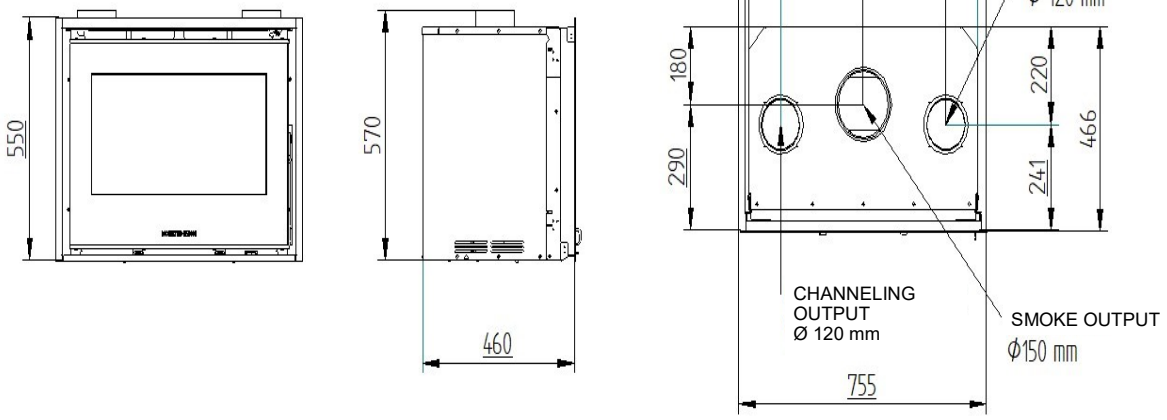


14.4 - SLOT FLAT MAGIC

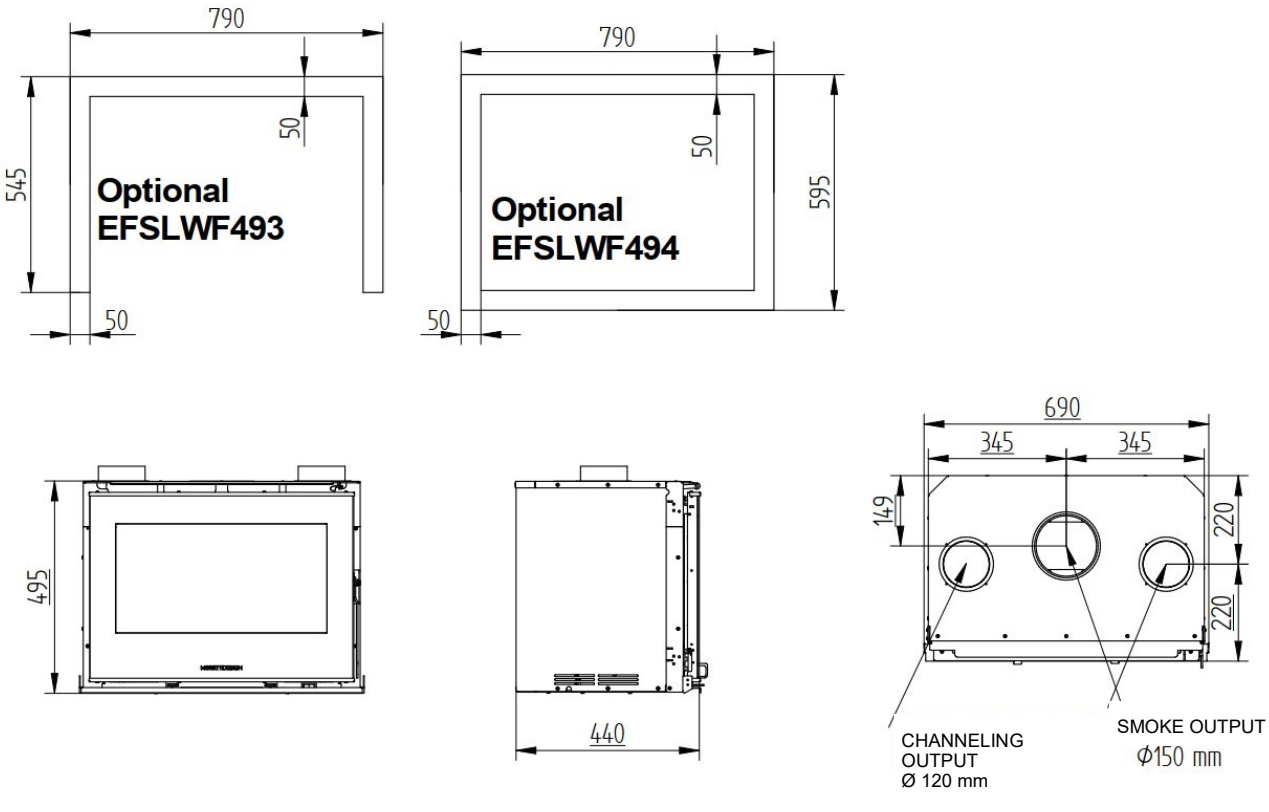


14 - DATA SHEETS AND MEASUREMENTS

14.5 - SLOT FLAT WOOD



14.6 - SLOT WOOD FLAT 49



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