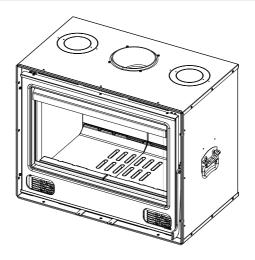
### **INSTALLATION GUIDE**



INSERT

# QBOX 60 WOOD QBOX 70 WOOD QBOX 80S WOOD QBOX 100 WOOD



**Instructions in English** 



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### INTRODUCTION

Dear Customer,

Our products are designed and manufactured in accordance with standards in force, with high quality materials and using our extensive experience in the transformation processes.

To get the best performance, we suggest you read the instructions in this manual carefully.

This installation guide is an integral part of the product: ensure that the manual is always supplied with the appliance, even if it changes owner. If the manual is lost, you can request another copy from the local Technical Dept. or download it directly from the company's website.

All local regulations, including those referring to national and European standards, must be observed when installing the appliance.

In Italy, for the installation of systems with a biomass below 35KW, refer to the Ministerial Decree 37/08 and the qualified installation technician with the suitable requirements must issue a certificate of compliance for the system installed. (By system we intend Stove+Flue+Air inlet).

#### **REVISIONS TO THE PUBLICATION**

The content of this manual is strictly technical and the property of MCZ Group Spa.

No part of this manual may be translated into other languages, adapted and/or reproduced, even in part, in other mechanical and/or electronic form or media, for photocopies, recordings or other, without the prior written authorisation of MCZ Group Spa.

The company reserves the right to make changes to the product at any time without prior notice. The owner company reserves its rights according to law.

#### CARE OF THE MANUAL AND HOW TO CONSULT IT

- Take care of this manual and store it in an easily and quickly accessible place.
- Should this manual be lost or destroyed, request a copy from your retailer or directly from the authorised Technical assistance department. It can also be downloaded from the company's website.
- "Bold text" requires special attention.
- "Text in italics" is used to draw attention to other paragraphs in the manual or for any additional clarifications.
- "Note" provides the reader with additional information.

#### SYMBOLS USED IN THE MANUAL

	ATTENTION: carefully read the relative message as failure to comply with the information provided may result in serious damage to the product and danger to the persons who use it.
Í	<b>INFORMATION:</b> failure to comply with these provisions will compromise use of the product.
	<b>OPERATING SEQUENCES:</b> sequence of buttons to be pressed to access the menus or perform adjustments.
Í	MANUAL carefully read this manual or the relative instructions.

# $riangle A ext{safety warnings} ext{ }$

- The installation, electrical connection, operating test and maintenance must only be carried out by a qualified operator.
- Install the product in compliance with the laws and regulations in force.
- Only use the fuel recommended by the manufacturer. The product must not be used as an incinerator.
- It is strictly forbidden to use alcohol, petrol, liquid fuel for lanterns, diesel, bioethanol, fluids for lighting charcoal or similar liquids to light/rekindle the flame in these devices. Keep these flammable liquids well away from the appliance when in use.
- Do not put any fuel other than wood in the hopper.
- The instructions provided in this manual must always be complied with to ensure the product and any electronic appliances connected to it are used correctly and to prevent accidents.
- This appliance can be used by children aged 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge provided they are supervised or have been given instructions regarding use of the appliance in a safe way and understand the hazards involved. Children must not play with the appliance. Cleaning and maintenance to be performed by the user must not be carried out by children without supervision.
- The user, or whoever is operating the product, must read and fully understand the contents of this installation guide before performing any operation.
- The user can only make a significant contribution to the eco-friendly operation of the heat generator if all requirements set out in the operating instructions are met.
- Dispose of combustion ash in accordance with current laws.
- Do not climb on or lean on the product.

- Do not dry laundry on the product. Any drying racks or the like must be kept at a safe distance from the product. **Fire hazard.**
- The product maintenance operations must be exclusively carried out by a qualified operator on a yearly basis.
- A non-compliant or improper/lack of maintenance of the product can cause hazardous situations and/or irregular operation.
- The manufacturer is relieved of any civil and criminal liability for damage caused by improper use and/or modification/tampering with the product and/ or its accessory.
- We do not recommend waiting for the parts to get worn out before having them replaced.
- Only use original spare parts. The retailer, service centre or qualified personnel can provide all necessary information regarding spare parts.
- Many surfaces of the product get very hot (door, handle, glass, smoke outlet pipes, etc.). Avoid coming into contact with these parts without adequate protective clothing or suitable equipment, such as gloves with thermal protection or "cold handle" operating systems.
- It is forbidden to operate the product with the door open or the glass broken. During operation, all the doors provided on the product must remain closed.
- The doors/covers on the appliance must remain closed when it is not being used.
- The product must be electrically connected to a properly earthed system.
- Switch the product off in the event of a fault or malfunction.
- Do not allow the product to come into contact with water, it contains live electrical parts.
- Do not wash the product with water (or other liquids) as they could penetrate inside the unit, damaging the electrical insulation with the risk of electrocution.
- Do not use detergents to wash the stove, they could damage the aesthetic parts of the product.
- Do not stand for a long time in front of the product in operation. Do not overheat the room you are in and where the product is installed. This may harm one's

physical conditions and cause health problems.

- Install the product in rooms that do not pose a fire hazard and are equipped with power and air supplies and smoke outlets.
- In the event of fire in the chimney, turn off the device, disconnect it from the mains and do not open the door whatsoever. Then contact the competent authorities.
- The product and the cladding must be stored in a dry place and must not be exposed to weathering.
- It is recommended not to remove the feet that support the product in order to ensure adequate insulation, especially if the flooring is made of flammable materials.
- Assess the static conditions of the surface on which the weight of the product will rest and provide suitable insulation if it is made of flammable material (e.g. wood, fitted carpet or plastic).
- In the event of a malfunction of the ignition system, do not force it on by using flammable materials.
- Live electrical parts: only power the product once it has been fully assembled.
- Disconnect the product from the 230V power supply before performing any maintenance operations. The plug must be removed in such a way that an operator can verify from any point to which he/she has access, that the plug remains unplugged.

#### **INFORMATION:**

- Please contact the retailer or qualified personnel for any information, problem or malfunction.
- Only use the fuel specified by the manufacturer.
- When the product is switched on for the first time, it is normal for it to emit smoke due to the paint heating up for the first time. Therefore make sure the room it is installed in is well-ventilated.
- Periodically check and empty the inspectionable parts of the smoke duct (e.g. Tee fitting caps)
- Have the smoke outlet system periodically checked and cleaned
- The product is not a cooking appliance.
- Always keep the cover of the fuel hopper closed.
- Store this installation and user manual with care as it must accompany the product for the duration of its useful life. If the product is sold or transferred to another user, always ensure the manual is also handed over.

#### **INTENDED USE**

The product only works with wood pellets and must be installed inside a room.

#### WARRANTY CONDITIONS

For the duration, terms, conditions, limitations of the MCZ conventional warranty, please refer to the specific warranty card that is included with the product.

#### Information for management of waste electrical and electronic equipment containing batteries and accumulators



This symbol appears on the product, on the batteries, on the accumulators or on their packaging or on their documentation; it indicates that the product and the batteries or the accumulators included must not be collected, recycled or disposed of with household waste at the end of their service life.

Improper management of waste electrical and electronic equipment, batteries or accumulators can cause the hazardous substances contained within to leak out. In order to avoid harming the environment or health, the user is required to separate this equipment, and/ or the batteries or accumulators included, from other types of waste and deliver them to the local collection centre. The distributor can be asked to collect the waste electrical and electronic equipment under the conditions and according to the procedures laid down by the WEEE Directive 2012/19/EU and relative national implementations".

Separate collection and correct treatment of waste electrical and electronic equipment, batteries and accumulators contribute to conserving natural resources, respect for the environment and ensure the protection of health.

For more information on collection centres for waste electrical and electronic equipment, batteries and accumulators, contact the competent public Authorities for issue of the authorisations.

#### WARNINGS FOR THE CORRECT DISPOSAL OF THE PRODUCT

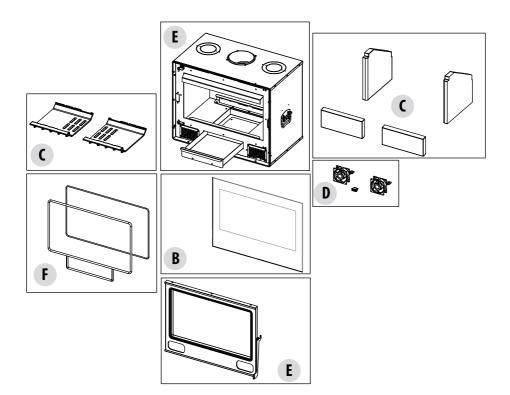
The owner is the sole party responsible for demolishing and disposing of the product. This must be performed in compliance with laws related to safety and environmental protection in force in his/her country.

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

It must be taken to a special differentiated waste collection centre set up by the local authorities or to a retailer that provides this service. Separating and recycling prevents potential negative effects on the environment and health (often caused by inappropriately disposing of product parts). It also allows materials to be recovered in order to obtain significant savings in energy and resources.

The following table and the exploded view it refers to highlight the main components that can be found in the device and indications on how to separate and dispose of them correctly when no longer used.

More specifically, the electric and electronic components must be separated and disposed of in authorised centres, in compliance with the WEEE directive 2012/19/EU and the relative national transpositions.



LEGENDA	WHERE TO DISPOSE	MATERIALS		
		Metal		
A	If there is any, to be disposed of separately	Glass		
OUTER CLADDING	based on the material used:	Tiles or ceramics		
		Stone		
В	If there is any, to be disposed of separately	Glass ceramic (fire door): to be disposed of with inert or mixed waste		
GLASS DOORS	based on the material used:	Tempered glass (oven door): to be disposed of with glass		
		Metal		
		Refractory materials		
		Insulating panels		
C	If there is any, to be disposed of separately	Vermiculite		
INTERIOR CLADDING	based on the material used:	Insulation, vermiculite and refractory materials that have come into contact with flames or exhaust gases (dispose of in mixed waste)		
<b>D</b> ELECTRIC AND ELECTRONIC COMPONENTS	To be disposed of separately in authorised centres, as indicated in the WEEE directive 2012/19/EU and the relative national transposition.	Wiring, motors, fans, circulators, display panels, sensors ignition plug, electronic cards, batteries.		
<b>E</b> METAL STRUCTURE	To be disposed of separately with metal			
<b>F</b> Components that cannot be recycled	To be disposed of with mixed waste	E.G.: Gaskets, rube piping, silicone or fibres, plastic.		
	Piping, fittings, expansion vessel,	Copper		
G	valves. If there are any, to be disposed	Brass		
HYDRAULIC COMPONENTS	of separately based on the material	Stainless steel		
	they are made of:	Other materials		

Our solid bio-combustible products, (hereinafter called "Products") are designed and manufactured in compliance with one of the following European standard harmonised to Regulation (UE) no. 305/2011 for construction products:

EN 14785: "Residential space heating appliances fired by wood pellets" EN 13240: "Room heaters fired by solid fuel." EN 13229: "Inset appliances including open fires fired by solid fuels" EN 12815: "Residential cookers fired by solid fuel"

The products also comply with the essential requirements of Directive 2009/125/EC (Eco Design) and, where applicable, Directives:

2014/35/EU (LVD - Low Voltage directive) 2014/30/EU (EMC - Electromagnetic Compatibility directive) 2014/53/EU (RED – Radio Equipment directive) 2011/65/EU (ROhS)

The EC Declaration of Conformity, the Declaration of Performance required by EU Regulation 305/2011 and all other product certification documents can be downloaded by scanning the QR code on this page (also found on the product label) or by accessing the website page www.mczgroup.com/support/mcz



Having specified the above, we highlight and report that:

- This manual and technical data sheet, also available on our website, bear all of the specific indications and necessary and essential information to choose the product, to install it correctly and to properly size the smoke expulsion system;
- the Products must be installed, controlled and serviced by a qualified operator, according to the instructions in this manual
  and in compliance with the laws and installation and maintenance standards in force in individual countries, so as to provide an
  efficient heating system, properly sized according to the needs of the home;
- **if the Products are thermally stressed**, constantly operating for several hours at high power (e.g. 3, 4 hours a day at outputs P4 or P5), we recommend more frequent cleaning and reducing the interval between routine maintenance operations according to the operating condition of the product. We furthermore point out that these operating conditions increase the risk of premature wear of the product, especially those parts exposed to the direct heat of the fire (e.g. combustion chamber), the original condition of which can undergo modifications and deterioration which, among other things, could generate noise during operation of the unit due to mechanical expansion.

The manufacturer will not be held liable if the above information is ignored.

#### FOREWORD

The heating system (generator + combustion air supply + combustion product expulsion system + any hydraulic/aeraulic system) must be installed in compliance with the laws and regulations in force<sup>1</sup>, and carried out by a qualified technician, who must issue a declaration of conformity of the system to the system manager and shall undertake full responsibility for final installation and consequent good operation of the product.

The manufacturer declines all responsibility in the event of installations that do not comply with the laws and regulations in force and inappropriate use of the appliance.

In particular one must ensure that:

- the environment is suitable for installing the appliance (floor load-bearing capacity, presence or possibility of creating an adequate electrical/hydrauic/aeraulic system when required, volume compatible with the appliance characteristics, etc.);
- the appliance is connected to a smoke expulsion system correctly sized according to EN 13384-1, which is resistant to soot fire and
  which complies with the distances prescribed by the combustible materials indicated on the plate data;
- there is a suitable combustion air flow to the appliance;
- other combustion appliances or extraction devices installed do not cause a negative pressure of more than 4 Pa in the room where
  the product is installed compared to the outside (only sealed appliances are allowed a maximum of 15 Pa of negative pressure in
  the room).

<sup>1</sup>The national reference standard for the installation of domestic appliances is UNI 10683 (IT) - DTU NF 24.1 (FR) - DIN 18896 (DE) - NBN B 61-002 (BE) - Real Decreto 1027/2007 (ES)

## In particular, it is recommended to strictly observe the safety distances from combustible materials to avoid serious harm to people and to the integrity of the home.

Installation of the appliance must ensure easy access to service the appliance itself, the smoke channels and the flue. Always maintain adequate distance and protection in order to prevent the product from coming into contact with water.

#### It is forbidden to install the stove in rooms with a fire hazard.

With the exception of sealed installations, it is also forbidden for liquid fuel appliances with continuous or intermittent operation that draw the combustion air from the room they are installed in or B-type gas heating appliances, with or without the production of domestic hot water, to coexist in the same room or in interconnecting rooms.



Sealed installation means that the product is certified as sealed and its installation (ducting of the combustion air and connection to the chimney) is airtight with respect to the installation environment.

A sealed installation does not consume the room's oxygen but draws all the air from the outer environment (if suitably ducted) and makes it possible to install the product, therefore, it can be installed in all houses that require a high degree of insulation such as "passive" or "high energy efficiency" houses. Thanks to this technology there is no risk of smoke emissions in the room, hence no air inlets and relevant ventilation grilles are required in the installation premises.

Consequently, there will be no more draughts of cold air in the room, which would otherwise make it less comfortable and reduce the overall efficiency of the system. The sealed stove may even be installed in a sealed installation that is compatible with the presence of forced ventilation or in premises that might have negative pressure with respect to the outside.

#### Air inlet

It is mandatory to provide an adequate external air inlet that supplies the combustion air required for the product to work properly. The flow of air between the outside and the installation room can take place with a free air inlet or by channelling the air directly to the outside<sup>3</sup>.

The free air inlet must:

- be made at floor level
- always be protected with an outer grille and in such a way that it cannot be obstructed by any object
- have a minimum total free area of 80 cm2 (net of the grille)

The presence of other suction devices (e.g.: vmc, electric fan for stale air extraction, kitchen hood, other stoves, etc.), in the same room could cause negative pressure in the room. In this case, with the exception of sealed installations, one must verify that, with all the equipment on, no more than 4 Pa of negative pressure is created inside the installation room with respect to the outside. If necessary, increase the air inlet section.

It is possible to duct the air required for combustion to the outside by connecting the external air inlet directly with the combustion air inlet which is usually found on the back of the appliance.

The duct must comply with the following dimensions (each 90° bend is equivalent to one linear metre):

<sup>3</sup> in the event the combustion air is ducted on unsealed products, still verify that no more than 4 Pa of negative pressure is created inside the installation room with respect to the outside, otherwise provide for an additional air intake in the room.

Below 15kW:

Air duct diameter	Maximum length (smooth duct)	Maximum length (corrugated duct)
50mm	2m	1m
60mm	3m	2m
80mm	7m	4m
100mm	12m	9m

Above 15kW:

Air duct diameter	Maximum length (smooth duct)	Maximum length (corrugated duct)
50mm	-	-
60mm	1m	-
80mm	3m	1m
100mm	7m	4m

#### Preparing the smoke expulsion system

The combustion product expulsion system is a particularly important element for the proper operation of the appliance and must be correctly sized according to EN 13384-1.

Its creation/adaptation/verification must always be carried out by a legally qualified operator and must comply with the regulations in force in the country where the appliance is installed.

The Manufacturer declines all liability for malfunctions caused by a badly sized and non-compliant smoke expulsion system.

#### Smoke duct (smoke fitting)

The smoke duct is the pipe that connects the appliance to the flue.

This smoke fitting must comply in particular with the following requirements:

- comply with product standard EN 1856-2;
- its cross-section must be of constant diameter and no less than that of the appliance outlet, from the firebox outlet up to the connection in the flue;
- the horizontal section must be as short as possible and extend no more than 4 metres;
- the horizontal sections must have a minimum upward slope of 3%;
- changes of direction must have an angle no greater than 90° and be easy to inspect
- the number of changes of direction, including that for entry into the flue, and exclusion of the T in the event of a side or rear outlet, must not exceed 3;
- it must be insulated if it passes outside the installation room
- it must not in any case cross rooms in which it is forbidden to install combustion appliances.
- the use of flexible metal and fibre cement or aluminium hoses is forbidden;

In any case, smoke ducts must be sealed against combustion products and any condensation. For this reason, it is recommended to use pipes with silicone gaskets or similar sealing devices that withstand the operating temperatures of the appliance (e.g. T200 P1) and that by removing the gaskets, are still T400 N1 G certified.

#### Flue (chimney or piped duct)

When creating the flue, in particular comply with the following requirements:

- comply with the applicable product standard (EN 1856, EN 1857 EN 1457, EN 1806, EN 13063..);
- be made with suitable materials to ensure resistance to normal mechanical, chemical, thermal stresses and have adequate thermal
  insulation in order to limit the formation of condensate;
- have a predominantly vertical configuration and be free of choke points along its entire length;
- be correctly spaced by air gaps and isolated from combustible materials;
- the flue inside the house must still be insulated and can be inserted in an air shaft provided it complies with the regulations for piping;
- the smoke duct must be connected to the flue by means of a Tee fitting with an inspectable collection chamber for the collection of soot and any condensate.
- where the sizing provides for wet operation, a suitable condensate collection and siphon discharge system must be set up.



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We recommend checking the data plates of the flue for the safety distances that must be observed in the presence of combustible materials and, if necessary, the type of insulating material to be used.
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It is forbidden to connect the stove to a collective or shared flue (\*) with other combustion appliances or with hood outlets.

It is forbidden to use the direct drain on the wall or towards indoor spaces and any other form of drain not provided for by the regulation in force in the country of installation.

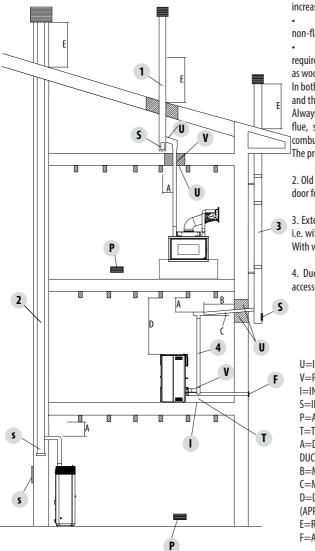
#### Chimneypot

The chimneypot, meaning the end part of the flue, must meet the following characteristics:

- the smoke outlet section must be at least double the internal section of the chimney;
- prevent the penetration of rain or snow;
- ensure the outlet of smoke even in the event of wind (windproof chimneypot);
- the height of outflow must be beyond the reflux area (\*) (refer to national regulations to identify the reflux area);
- always be built at a distance from antennas or dishes, and never be used as a support.

(\*) unless there are specific national derogations (clearly specified in the corresponding instruction manual in English) which under appropriate conditions allow it; in this case, strictly follow the product/installation requirements of the relative regulations/technical specifications/legislation in force in that country.

#### EXAMPLES OF INSTALLATION<sup>4</sup> (DIAMETERS AND LENGTHS TO BE SIZED)



1. Flue installation with hole for the passage of the pipe increased by:

• minimum 100mm around the pipe if next to non-flammable parts such as cement, brick, etc.; or

• minimum 300mm around the pipe (or as required by plate data) if next to flammable parts such as wood etc.

In both cases, install suitable insulation between the flue and the ceiling.

Always check and comply with the plate data of the flue, specifically the minimum safety distances from combustible materials.

The previous rules also apply for holes made in walls.

2. Old flue, pipe with the inclusion of an external access door for chimney cleaning.

3. External flue made of insulated stainless-steel pipes, i.e. with double walls: all securely mounted on the wall. With windproof chimneypot.

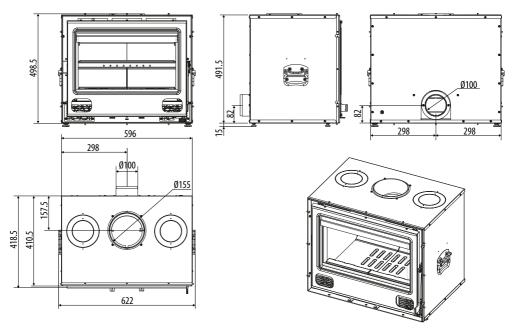
4. Ducting system using Tee fittings that allow easy access for cleaning without having to remove the pipes

U=INSULATION V=POSSIBLE DIAMETER INCREASE I=INSPECTION CAP S=INSPECTION ACCESS PANEL P=AIR INLET T=TFF FITTING WITH INSPECTION CAP A=DISTANCE FROM FLAMMABLE MATERIAL (SMOKE DUCT PLATE) **B=MAXIMUM 4 M** C=MINIMUM 3° SLOPE D=DISTANCE FROM FLAMMABLE MATERIAL (APPLIANCE PLATE) E=REFLUX AREA F=AIR DUCTING

<sup>4</sup>The figure shows typical, but not exhaustive, examples of all possible installations (which must always be approved by a qualified technician)

### **DRAWINGS AND CHARACTERISTICS**

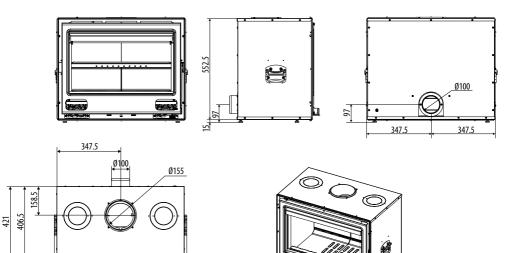
#### QBOX 60 WOOD (dimensions in mm) DIMENSIONS



#### QBOX 70 WOOD (dimensions in mm) DIMENSIONS

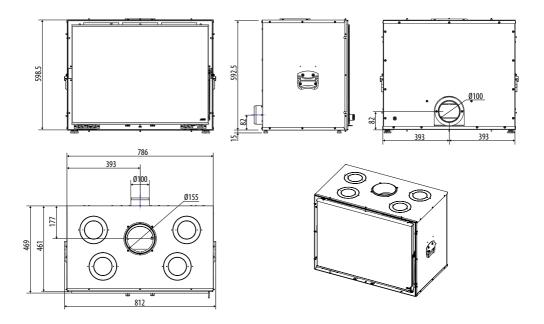
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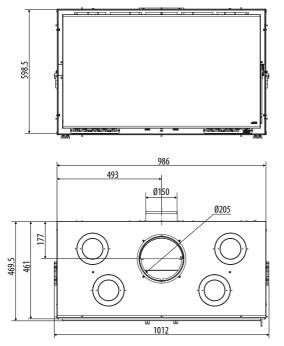


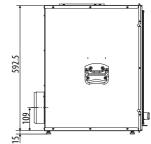


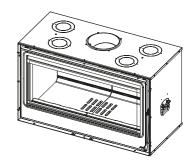
#### QBOX 80S WOOD (dimensions in mm) DIMENSIONS



#### QBOX 100 WOOD (dimensions in mm) DIMENSIONS







TECHNICAL CHARACTERISTICS	QBOX 60 WOOD	
Energy Efficiency Class	A+	
Type of fuel	Wood	
Hourly consumption	1.77 kg/h	
Reloading/load time	42 min / 1.7 kg	
Nominal output power:	6.6 kW (5676 Kcal/h)	
Minimum power output:		
Efficiency	85.1%	
CO emission in fumes (13% $O_2$ )	0.077%	
Particulate/OGC/Nox (13% 0 <sub>2</sub> )	24 - 65 - 130 mg/Nm3	
Smoke mass flow rate	5.1 g/s	
Smoke temperature	200 °C	
Recommended draught	12 Pa / 0.12 mbar	
Heatable volume m <sup>3</sup>	120/55-189/35-330/20*	
Smoke outlet	Ø 15 cm	
Net weight	91 kg	
External air inlet	100 cm <sup>2</sup>	
Distance from flammable material (back) - <b>dR</b>	150 mm + 30 mm insulation	
Distance from flammable material (side) - <b>dS</b>	100 mm + 30 mm insulation	
Distance from flammable material (underneath) - <b>dB</b>	200 mm	

\* Volume that can be heated, according to the power requirement per m<sup>3</sup> (respectively 55-35-20 W per m<sup>3</sup>) For symbols dR/dB ..... see chapter on "Positioning".

TECHNICAL CHARACTERISTICS	QBOX 70 WOOD
Energy Efficiency Class	A+
Type of fuel	Wood
Hourly consumption	2.41 kg/h
Reloading/load time	43 min / 1.7 kg
Nominal output power:	8.8 kW (7568 Kcal/h)
Minimum power output:	
Efficiency	85.3%
CO emission in fumes (13% $O_2$ )	0.076%
Particulate/OGC/Nox (13% 0 <sub>2</sub> )	11 - 58 - 121 mg/Nm3
Smoke mass flow rate	6.8 g/s
Smoke temperature	218 °C
Recommended draught	12 Pa / 0.12 mbar
Heatable volume m <sup>3</sup>	160/55-251/35-440/20*
Smoke outlet	Ø 15 cm
Net weight	120 kg
External air inlet	100 cm <sup>2</sup>
Distance from flammable material (back) - <b>dR</b>	150 mm + 30 mm insulation
Distance from flammable material (side) - <b>dS</b>	200 mm + 30 mm insulation
Distance from flammable material (underneath) - <b>dB</b>	200 mm
Notes Intermittent combustion appliance.	

Intermittent combustion appliance. \* Volume that can be heated, according to the power requirement per m<sup>3</sup> (respectively 55-35-20 W per m<sup>3</sup>) For symbols dR/dB ..... see chapter on "Positioning".

TECHNICAL CHARACTERISTICS	QBOX 80S WOOD	
Energy Efficiency Class	A+	
Type of fuel	Wood	
Hourly consumption	2.54 kg/h	
Reloading/load time	43 min / 1.8 kg	
Nominal output power:	9.5 kW (8170 Kcal/h)	
Minimum power output:		
Efficiency	85.1%	
CO emission in fumes (13% 0 <sub>2</sub> )	0.077%	
Particulate/OGC/Nox (13% 0 <sub>2</sub> )	24 - 65 - 130 mg/Nm3	
Smoke mass flow rate	6.8 g/s	
Smoke temperature	226 °C	
Recommended draught	12 Pa / 0.12 mbar	
Heatable volume m <sup>3</sup>	173/55–271/35–475/20*	
Smoke outlet	Ø 15 cm	
Net weight	138 kg	
External air inlet	100 cm <sup>2</sup>	
Distance from flammable material (back) - <b>dR</b>	150 mm + 30 mm insulation	
Distance from flammable material (side) - <b>dS</b>	200 mm + 30 mm insulation	
Distance from flammable material (underneath) - <b>dB</b>	200 mm	

\* Volume that can be heated, according to the power requirement per m<sup>3</sup> (respectively 55-35-20 W per m<sup>3</sup>) For symbols dR/dB ..... see chapter on "Positioning".

TECHNICAL CHARACTERISTICS	QBOX 100 WOOD	
Energy Efficiency Class	A+	
Type of fuel	Wood	
Hourly consumption	3.15 kg/h	
Reloading/load time	43 min / 2.3 kg	
Nominal output power:	11,8 kW (10148 Kcal/h)	
Minimum power output:		
Efficiency	85.2%	
CO emission in fumes (13% O <sub>2</sub> )	0.086%	
Particulate/OGC/Nox (13% 0 <sub>2</sub> )	19 - 67 - 130 mg/Nm3	
Smoke mass flow rate	8.9 g/s	
Smoke temperature	223 °C	
Recommended draught	12 Pa / 0.12 mbar	
Heatable volume m <sup>3</sup>	215/55-337/35-590/20*	
Smoke outlet	Ø 15 cm	
Net weight	165 kg	
External air inlet	100 cm <sup>2</sup>	
Distance from flammable material (back) - <b>dR</b>	150 mm + 30 mm insulation	
Distance from flammable material (side) - <b>dS</b>	250 mm + 30 mm insulation	
Distance from flammable material (underneath) - <b>dB</b>	200 mm	

\* Volume that can be heated, according to the power requirement per m<sup>3</sup> (respectively 55-35-20 W per m<sup>3</sup>) For symbols dR/dB ..... see chapter on "Positioning".

MCZ GROUP

INFORMATION REQUIREMENTS FOR SOLID FUEL LOCAL SPACE HEATERS

ACCORDING TO COMMISSION REGULATIONS (EU) 2015/1185 - (EU) 2015/1186 (PRODUCT FICHE)

Manufacturer:	MCZ GROUP SpA
Trademak:	MCZ
Model Identifier:	QBOX 60 WOOD
Indirect heating functionality:	NO
Direct heat output (space heat output):	6,6 kW
Indirect heat output (water heat output):	kW
CPR harmonised standard:	EN 13229:2001/A1:2003/AC:2003/A2:2004/AC:2006
Product description:	Manually fed closed inset appliance burning wood logs

Notified Body:

ACTECO SRL (N.B. 1880) Via Amman 41, 33084 Cordenons (PN), IT

Fuel	Preferred fuel:	Other suitable fuel(s):	ηs [%]	EEI [%]
Log wood, moisture content ≤ 25 %	YES	NO	75,0	113
Compressed wood with moisture content < 12 %	NO	NO		
Other woody biomass	NO	NO		

Observe the specific precautions for installation, assembly and maintenance indicated in the manual accompanying the product, and the national and local rules in force

Energy Efficiency Class

(A++ / G scale)

A+

#### Characteristics when operating with the preferred fuel:

Space heating emissions (mg/Nm3 at 13% O2)	со	NO <sub>x</sub>	OGC	PM
at Nominal heat output	956	130	65	24
at Minimum heat output				

Heat output							
Item	Symbol	Value	Unit				
Nominal heat output	P <sub>nom</sub>	6,6	kW				
Minimum heat output (indicative)	$P_{\min}$		kW				
Useful efficiency	Useful efficiency (NCV as received)						
Useful efficiency at nominal heat output	$\eta_{th,nom}$	85,1	%				
Useful efficiency at minimum heat output (indicative)	$\eta_{\text{th,min}}$		%				
Auxiliary electric	Auxiliary electricity consumption						
At nominal heat output	$el_max$	0,028	kW				
At minimum heat output	el <sub>min</sub>		kW				
In standby mode	el <sub>sb</sub>		kW				

Type of heat output/room temperature control (select one)			
single stage heat output, no room temperature control	YES		
two or more manual stages, no room temperature control	NO		
with mechanic thermostat room temperature control	NO		
with electronic room temperature control	NO		
with electronic room temperature control plus day timer	NO		
with electronic room temperature control plus week timer	NO		
Other control options (multiple selections possible)			
room temperature control, with presence detection	NO		
room temperature control, with open window detection	NO		
with distance control option	NO		

**MCZ GROUP** 

INFORMATION REQUIREMENTS FOR SOLID FUEL LOCAL SPACE HEATERS
ACCORDING TO COMMISSION REGULATIONS (EU) 2015/1185 - (EU) 2015/1186 (PRODUCT FICHE)
MCZ GROUP SpA
MCZ
QBOX 70 WOOD

Indirect heating functionality:	NO	
Direct heat output (space heat output):	8,8	kW
Indirect heat output (water heat output):		kW
CPR harmonised standard:	EN 1322	9:2001/A1:2003/AC:2003/A2:2004/AC:2006
Product description:	Manual	ly fed closed inset appliance burning wood logs

Notified Body:

Manufacturer: Trademak: Model Identifier:

> ACTECO SRL (N.B. 1880) Via Amman 41, 33084 Cordenons (PN), IT

Fuel	Preferred fuel:	Other suitable fuel(s):	ηs [%]	EEI [%]
Log wood, moisture content ≤ 25 %	YES	NO	75,0	114
Compressed wood with moisture content < 12 %	NO	NO		
Other woody biomass	NO	NO		

Observe the specific precautions for installation, assembly and maintenance indicated in the manual accompanying the product, and the national and local rules in force

Energy Efficiency Class

(A++ / G scale)

A+

#### Characteristics when operating with the preferred fuel:

Space heating emissions (mg/Nm3 at 13% O2)	CO	NOx	OGC	PM
at Nominal heat output	944	121	58	11
at Minimum heat output	4372	84	690	35

Heat output					
Item	Symbol	Value	Unit		
Nominal heat output	P <sub>nom</sub>	8,8	kW		
Minimum heat output (indicative)	P <sub>min</sub>	4,2	kW		
Useful efficiency	/ (NCV as rece	eived)			
Useful efficiency at nominal heat output	$\eta_{th,nom}$	85,3	%		
Useful efficiency at minimum heat output (indicative)	$\eta_{th,min}$	80,2	%		
Auxiliary electr	icity consum	otion			
At nominal heat output	el <sub>max</sub>	0,022	kW		
At minimum heat output	$el_{min}$		kW		
In standby mode	el <sub>sb</sub>		kW		

Type of heat output/room temperature control (select one)			
single stage heat output, no room temperature control	YES		
two or more manual stages, no room temperature control	NO		
with mechanic thermostat room temperature control	NO		
with electronic room temperature control	NO		
with electronic room temperature control plus day timer	NO		
with electronic room temperature control plus week timer	NO		
Other control options (multiple selections possible)			
room temperature control, with presence detection	NO		
room temperature control, with open window detection	NO		
with distance control option	NO		

**MCZ GROUP** 

INFORMATION REQUIREMENTS FOR SOLID FUEL LOCAL SPACE HEATERS
ACCORDING TO COMMISSION REGULATIONS (EU) 2015/1185 - (EU) 2015/1186 (PRODUCT FICHE)

Manufacturer:	MCZ GROUP SPA
Trademak:	MCZ
Model Identifier:	QBOX 805 WOOD
Indirect heating functionality:	NO
Direct heat output (space heat output):	9,5 kW
Indirect heat output (water heat output):	kW
CPR harmonised standard:	EN 13229:2001/A1:2003/AC:2003/A2:2004/AC:2006
Product description:	Manually fed closed inset appliance burning wood logs

Notified Body:

ACTECO SRL (N.B. 1880) Via Amman 41, 33084 Cordenons (PN), IT

Preferred fuel:	Other suitable fuel(s):	ηs [%]	EEI [%]
YES	NO	75,0	113
NO	NO		
NO	NO		
	YES	YES NO NO NO	YES         NO         75,0           NO         NO         NO

Observe the specific precautions for installation, assembly and maintenance indicated in the manual accompanying the product, and the national and local rules in force

**Energy Efficiency Class** 

(A++ / G scale)

A+

#### Characteristics when operating with the preferred fuel:

Space heating emissions (mg/Nm3 at 13% O2)	со	NOx	OGC	PM
at Nominal heat output	956	130	65	24
at Minimum heat output	2151	110	194	24

111				
Heat	output			
Item	Symbol	Value	Unit	
Nominal heat output	P <sub>nom</sub>	9,5	kW	
Minimum heat output (indicative)	P <sub>min</sub>	5,6	kW	
Useful efficiency (NCV as received)				
Useful efficiency at nominal heat output	$\eta_{th,nom}$	85,1	%	
Useful efficiency at minimum heat output (indicative)	$\eta_{\text{th,min}}$	84,6	%	
Auxiliary electricity consumption				
At nominal heat output	el <sub>max</sub>	0,028	kW	
At minimum heat output	$el_{min}$		kW	
In standby mode	$el_sb$		kW	

Type of heat output/room temperature control (select one)			
single stage heat output, no room temperature control	YES		
two or more manual stages, no room temperature control	NO		
with mechanic thermostat room temperature control	NO		
with electronic room temperature control	NO		
with electronic room temperature control plus day timer	NO		
with electronic room temperature control plus week timer	NO		
Other control options (multiple selections possible)			
room temperature control, with presence detection	NO		
room temperature control, with open window detection	NO		
with distance control option NO			

EN

INF	ORMATION REQUIREMENTS FOR SOLID FUEL LOCAL SPACE HEATERS
ACCORDING TO	COMMISSION REGULATIONS (EU) 2015/1185 - (EU) 2015/1186 (PRODUCT FICHE)
	MCZ GROUP SpA
	MCZ

Trademak:	MCZ		
Model Identifier:	QBOX 100 WOOD		
Indirect heating functionality: Direct heat output (space heat output): Indirect heat output (water heat output): CPR harmonised standard: Product description:		kW kW 29:2001/A1:2003/AC:2003/A2:2004/AC:200 Ily fed closed inset appliance burning wood	

Notified Body:

Manufacturer:

ACTECO SRL (N.B. 1880) Via Amman 41, 33084 Cordenons (PN), IT

Fuel	Preferred fuel:	Other suitable fuel(s):	ηs [%]	EEI [%]
Log wood, moisture content ≤ 25 %	YES	NO	75,0	113
Compressed wood with moisture content < 12 %	NO	NO		
Other woody biomass	NO	NO		

Observe the specific precautions for installation, assembly and maintenance indicated in the manual accompanying the product, and the national and local rules in force

Energy Efficiency Class

(A++ / G scale)

A+

#### Characteristics when operating with the preferred fuel:

Space heating emissions (mg/Nm3 at 13% O2)	CO	NOx	OGC	PM
at Nominal heat output	1070	130	67	19
at Minimum heat output	2861	110	265	22

Heat output					
Symbol	Value	Unit			
P <sub>nom</sub>	11,8	kW			
P <sub>min</sub>	5,8	kW			
Useful efficiency (NCV as received)					
$\eta_{\text{th,nom}}$	85,2	%			
$\eta_{\text{th,min}}$	83,8	%			
Auxiliary electricity consumption					
el <sub>max</sub>	0,057	kW			
$el_{min}$		kW			
$el_sb$		kW			
	Symbol Pnom Pmin (NCV as reco Ntb,nom Ntb,nom Ntb,nom Ott,nom Ott,nom Ott,nom Ott,nom Ott,nom Ott,nom Ott,nom Ott,nom Ott,nom	Symbol         Value           Pnom         11,8           Pmin         5,8           (NCV as received)         1           ntb,nom         85,2           ntb,nom         83,8           city consumption         1           elmax         0,057           elman         5			

Type of heat output/room temperature control (select one)			
single stage heat output, no room temperature control	YES		
two or more manual stages, no room temperature control	NO		
with mechanic thermostat room temperature control	NO		
with electronic room temperature control	NO		
with electronic room temperature control plus day timer	NO		
with electronic room temperature control plus week timer	NO		
Other control options (multiple selections possible)			
room temperature control, with presence detection	NO		
room temperature control, with open window detection	NO		
with distance control option	NO		

### **4-UNPACKING**

#### INSTRUCTIONS FOR PACKAGING DISPOSAL

The material that the appliance's packaging is made of must be managed correctly, in order to make collection, reuse, recovery and recycling easier, where possible.

The table below illustrates the possible components that the packaging is made of, and the relative instructions for correct disposal.

DESCRIPTION	CODE MATERIAL	SYMBOL	DIRECTIONS FOR COLLECTION		
WOOD BED	WOOD FOR 50	Δ	SORTED waste collection		
WOOD CAGE		50	WOOD		
WOOD PALLET		FOR	Check with the competent body on how to dispose of this packaging at the recycling depot		
CARDBOARD BOX	CORRUGATED CARDBOARD PAP	Δ	SORTED waste collection		
CARDBOARD CORNER	20	20	PAPER		
CARDBOARD SHEET		PAP	Check the instructions of the competent body		
APPLIANCE BAG	POLYETHYLENE LD-PE 04	^	SORTED waste collection		
BAG OF ACCESSORIES			PLASTIC		
BUBBLE WRAP		Check the instruction body	Check the instructions of the competent body		
PROTECTIVE SHEET					
LABELS					
POLYSTYRENE	POLYSTYRENE PS 06		SORTED waste collection		
FOAM PEANUTS			PLASTIC		
		PS	Check the instructions of the competent body		
STRAP	POLYPROPYLENE PP 05	^	SORTED waste collection		
ТАРЕ	POLYESTER PET 01		PLASTIC		
			Check the instructions of the competent body.		
SCREWS	IRON FE 40		SORTED waste collection		
STAPLES FOR STRAP			METAL		
FASTENING BRACKET		FE FE	Check with the competent body on how to dispose of this packaging at the recycling depot		

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#### **4-UNPACKING**



#### IMPORTANT!

The product must be installed and connected to the smoke duct exclusively by a specialised technician, so that every local or national regulation is complied with. Installation must nevertheless be carried out in accordance with regulation UNI 10683.

When you unwrap the product, make sure that every part is in perfect working order and check for any damage due to transport. Any damage must be immediately reported to the carrier or dealer.

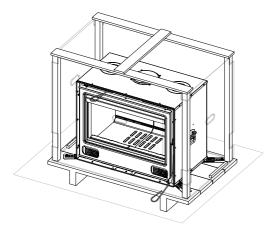
If the product is installed in an area difficult to access, its weight can be reduced by removing the internal elements of the firebox, every element should then be put correctly back in place and this operation should be carried out exclusively by specialised personnel. The producer will not be held liable if the above warning is not observed.

#### **PREPARATION AND UNPACKING**

Open the packaging, remove the product from the pallet and place it in the chosen position, ensuring it complies with the specifications.



The product must always be handled UPRIGHT only by trucks. Do not drag the product as this might damage the supporting feet.



PACKAGING QBOX 70 WOOD

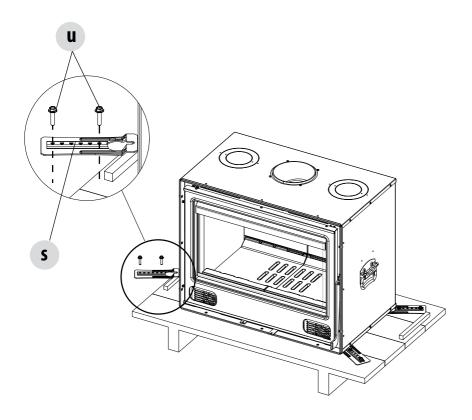
Pay particular attention to the door and its glass, protecting them from mechanical impacts that would compromise their integrity. Products must always be handled with care. If possible, unpack the product near the place of installation.

The packaging materials are neither toxic nor harmful, therefore no particular disposal measures are required.

The end user is responsible for product storage, disposal or possible recycling in compliance with the relative applicable laws in force. Before assembling the product, ensure you have removed all items that might burn (polystyrene, instructions and various stickers).

### **4-UNPACKING**

To remove the product from the pallet, you must remove the two screws "u" and plate "s" from the stove's foot. There are four brackets "s".



### **5-POSITIONING**

#### PLACEMENT AND MINIMUM DISTANCES

The product can be positioned either in a corner or along a wall.

It may be installed at the desired height, by building a suitable platform on site.

Always assess the static conditions of the surface that will withstand the weight and always leave a minimum air gap of 5 cm between the product and the walls.

Dry-assemble the hearth of the cladding leaving a 1 cm gap for insulation.

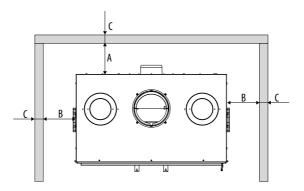
In the case of installation near flammable material adhere to the following minimum safety measurements (see technical data table):

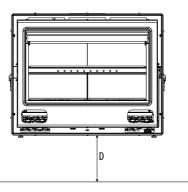
A = 150 mm (distance from the back wall - BACK)

- B = 100/200/250 mm (distance from the side walls SIDE)
- C = 30 mm (insulation material)
- D= 400 mm (distance from the floor)



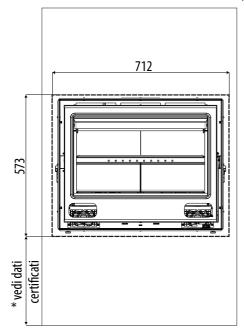
If the product is positioned on or near a flammable floor or walls, adequate insulation is recommended.





### **5-POSITIONING**

#### WALL HOLE MEASUREMENT (under frame 3/4 sides - accessory)



WALL HOLE MEASUREMENT QBOX 70 WOOD

QBOX 60 WOOD 613\*513 mm

QBOX 70 WOOD 712\*573 mm

QBOX 80S WOOD 803\*607 mm

QBOX 100 WOOD 1003\*613 mm

### **5-POSITIONING**

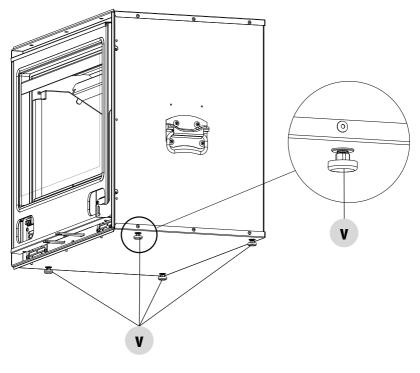
#### **PRODUCT HEIGHT AND LEVELLING ADJUSTMENT**

The product is fitted with adjustment feet "v" which are screwed to the product, and whose purpose is to adjust the levelling of the hearth; therefore, the adjustment range is minimal.

To adjust the feet, you need to lift the product slightly, tighten or loosen the screws by holding the thread with your fingers in order to level the product (the adjustment range is approximately 1 cm).

In any case do not remove the feet which are essential for levelling. Removing the feet is considered a structural modification of the product and therefore voids the warranty.

## In the event the floor should be in a flammable material, there must be at least 500 mm between the lower part of the product and the floor as per product certification.



1. Turn the feet clockwise to lower the product

2. Turn the feet anti-clockwise to raise the product

### **6-COMBUSTION AIR**

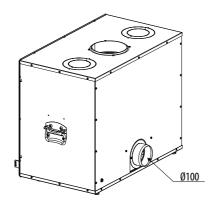
#### **COMBUSTION AIR INLET**

The product has a hole with a diameter of 100 mm for the intake of the air required for combustion.

Connect the air inlet hole to the outside using a flexible hose and a grid in the room so that the air mixes perfectly inside the installation premises.



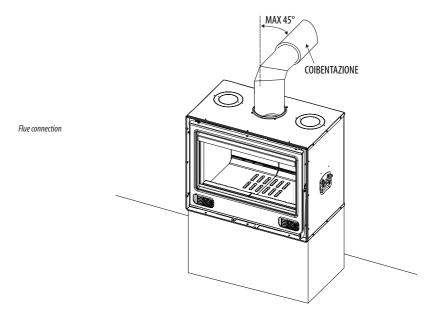
NEVER CLOSE THE COMBUSTION AIR INTAKE HOLE.



### 7-FLUE

#### **CONNECTION TO THE FLUE**

We recommend connecting the closed fireplace to the flue using aluminium-plated steel pipes and bends that are able to withstand the high temperatures of that section and smoke corrosion. These connections are available on request in various sizes (see our price list) and they simplify installation as they are assembled by fitting one inside the other.





Any increase in the cross-section of the connection must be set up directly above the hood of the closed fireplace and not along the flue.

When installation is complete, it is compulsory to insulate the smoke fittings with ceramic fibre padding or any material that is resistant to at least  $600^{\circ}$ C.

# 8-INSULATION

# **CLADDING AND COUNTER-HOOD ASSEMBLY**



# READ THE "OPERATION TEST" CHAPTER BEFORE STARTING ANY CLOSED FIREPLACE CLADDING OPERATION

The closed fireplace and parts of the cladding must be fastened to each other **WITHOUT TOUCHING THE STEEL STRUCTURE** to avoid transmitting heat to the marble and/or stone and to allow for normal thermal dilation; pay attention to wood finishes like beams or shelves.

It is recommended to construct the counter-hood in fire-retardant plasterboard, 15/20 mm thick with self-supported galvanized profile frame in order not to bear on the cladding components (wooden beams or marble architraves) which do not have a load bearing structure and to be able to operate easily in the event of faults and/or future maintenance.

Dry-assemble the hearth of the cladding leaving a 1 cm gap between closed fireplace and hearth to perform insulation.

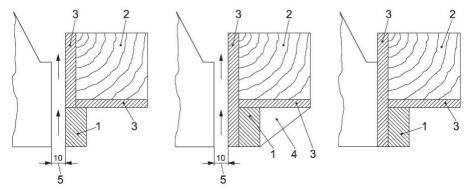
## **CLOSED FIREPLACE INSULATION**

The closed fireplace always needs to be separate from the adjacent walls and ceiling.

If necessary, use insulating materials to insulate the walls touching the closed fireplace, if they run the risk of getting damaged or even catching fire (wood walls, plasterboard, etc...).

### WOODEN BEAM INSULATION

The wooden beam must be protected with adequate insulation from hot parts in order to prevent the risk of fire or damage to the cladding.



THERMAL PROTECTION OF THE BEAM (construction examples)

- 1. MARBLE SPANDREL, OR OTHER NON-FLAMMABLE MATERIAL
- 2. Wooden beam
- 3. INSULATION TO BE APPLIED
- 4. DEFLECTOR IN NON-FLAMMABLE MATERIAL
- 5. AIR GAP (MM)

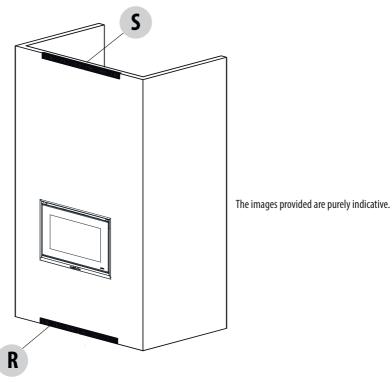
### **HOOD VENTILATION OUTLETS**

### It is mandatory to install the manufacturer's hood ventilation vents or vents that can guarantee the same kind of operation and the same air passage section.

The producer is not liable for any damage to the structure or to the electric components caused by failure to comply with this warning. For correct operation of ambient ventilation, remember that:

- Lower part "R" of the cladding must have a convective air inlet opening of no less than 400 cm<sup>2</sup>
- Upper part "S" must have a relief outlet (in addition to the ducted outlets) of at least 520 cm<sup>2</sup> to release the residual heat that has
  accumulated inside the cladding into the room.

This practice - as well as assuring perfect operation of the product - makes it possible to recover some of the structure's heat, which would be lost if it remained inside the cladding.



S - convection air outlet

R - convection air inlet

The "S" and "R" grids are indispensable for the heat trapped inside the hood to escape and it is mandatory to install them, regardless of the type of installation or cladding one wishes to install.

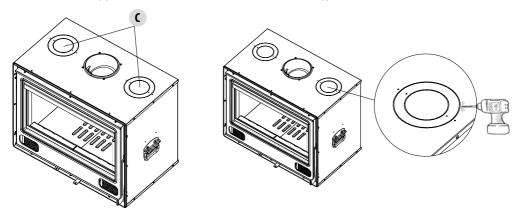
## **OPERATING MODE SELECTION**



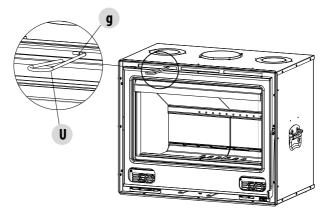
## IMPORTANT!

Prior to installation one needs to decide whether the warm air outlet should be through the front vents of the insert or the air should be ducted through the two top knockout holes.

Should one decide to duct the air, the top knockout holes ("C") Ø100 and Ø150 must be opened. To detach the knockout holes, use a drill with Ø4 mm bit (see image). After that, connect two pipes to the knockout holes with wall vents (NOT standard supplied) for the warm air outlet.



In this case, it is recommended to close the front air outlet using the hook "U". Attach the "U" claw on the "g" hook and pull. In this way, the air is all conveyed to the top air duct (also see following pages).



The product is equipped with fans for frontal or ducted ventilation, so there is no need to install any kit with motors or control units.

## FRONT VENTILATION CONNECTION

#### **Combustion air**

The Ø 100 combustion air inlet provided on the product must be connected to the exterior of the cladding by means of a 100 mm diameter pipe, maximum 3 metres long.

### **Smoke outlet**

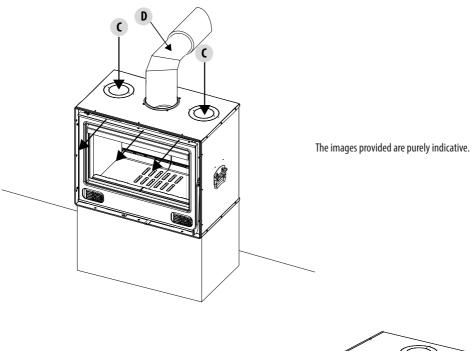
Smoke outlet "D" must be connected by a smoke fitting to a suitable flue.

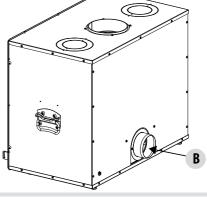
### **Convection air**

Set up a low air intake grid "R" of at least 400 sq cm net and a high outlet "S" of at least 230 sq cm net, to decompress the hood (see indications on the previous page "GOOD VENTILATION VENTS").

#### **Heating air**

In the case of front ventilation the warm air comes out at the top of the product.





## **HOT AIR DUCTING**

### **Combustion air**

The Ø 100 combustion air inlet provided on the product must be connected to the exterior of the cladding by means of a 100 mm diameter pipe, maximum 3 metres long.

#### Smoke outlet

Smoke outlet "D" must be connected by a smoke fitting to a suitable flue.

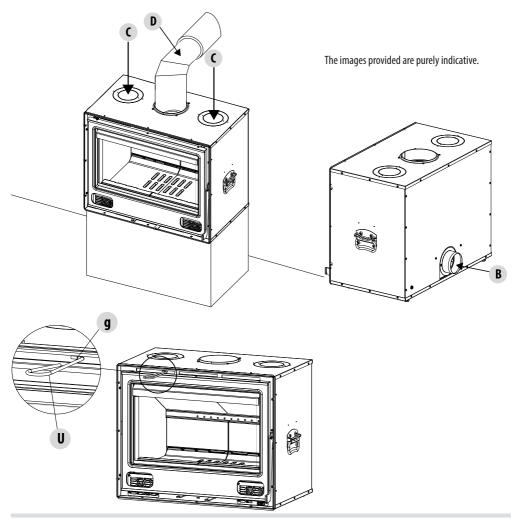
#### **Convection air**

Prepare an air intake grid at the bottom "R" of at least 400 net cm2 and a top vent "S" of at least 230 net cm2 to decompress the hood. **Heating air** 

With ducted ventilation open the two top knockout holes "C", connect two pipes with a diameter of 100/150 mm and connect them to two hot air outlets.

#### **Front air**

The front air must be closed by pulling hook "g" with claw "U".



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# **10-CHOICE OF FUEL**

The instructions in this chapter refer explicitly to the Italian installation regulation UNI 10683. In any case, always observe the regulations in force in the country of installation.

## FUEL

Below are some useful instructions for the correct use of the product

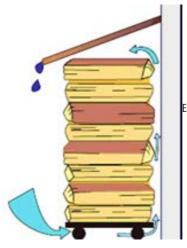
- Only burn natural, untreated wood with maximum moisture content of 20%, which corresponds to cut wood with 2 years of correct drying
- All types of wood are suitable, both hard and soft: beech, maple, oak, birch, acacia, fir, pine, larch, etc.
- Always use wood that is of the right size and not intact, because a whole log impedes the supply of air inside.
- Always burn the wood horizontally and not standing up
- For each load, always use the amount of wood indicated by the manufacturer and do not load one piece after another, because the
  flame would never reach a sufficient temperature for proper combustion.
- Do not insert an amount above that indicated to prevent excessive flames with excessively high smoke and wall temperatures.
- The thickness and length of the wood must always comply with the manufacturer's indications: the length (25 or 30 cm) depends on the size of the hearth in the combustion chamber.

Below are some useful indications for the correct storage of the wood:

- stored wood must already be sized for use.
- optimal drying requires a minimum of 2 years (longer times would not lead to increased drying).
- · the wood must be cut during the winter and stored outdoors in the summer

Storage must be:

- well ventilated and aired
- covered to protect from rain and protected from sunlight, because the wood would lose quality (DO NOT cover the wood with tarps that touch the ground as this creates a sealed cover making the wood even damper.)
- not resting directly on the floor but at a distance of about 20-30 cm to prevent rotting.
- Possibly outside, otherwise in rooms or cellars that are well ventilated, preventing the formation of mould (always leave the window open!).
- Wood must always be stored at a sufficient safe distance from the combustion unit always comply with the fire and safety
  regulations.



EXAMPLE OF WOOD STORAGE

# **10-CHOICE OF FUEL**

## FUEL: Wood

In order to achieve maximum efficiency from your product, it is of utmost importance to **use wood with suitable characteristics**. We recommend using heating wood such as **oak-beech-ash-robinia-common oak or non-resinous pressed wood logs. The latter has a high calorific value and must be used with caution to avoid harmful overheating of the product.** Fuels such as poplar-pine-lime-chestnut-eucalyptus-myrtle have a low calorific value as they are soft wood, i.e. tender. The moisture content is fundamental for all types of wood listed.

By using wood with a higher moisture content, most of the energy content of the fire will go to drying the water. Using moist wood also leads to poor combustion, soot and tar deposits in the flue which, in the worst case scenario, can catch fire. Other inconveniences are soot deposits on the glass of the product and creating an issue for the neighbours.

### Attention!

It is strictly forbidden to use fossil fuels, impregnated, painted or glued wood, sheets of particle board, plastic or colour magazines as fuel. During combustion all of the above products develop hydrochloric acid or heavy metals, which are harmful to the environment and fireplace. Hydrochloric acid can also corrode the steel or brickwork of the flue.

The table below provides the percentage of moisture and the calorific value of a burned 1 kg log. The optimal condition for use and drying time of 24 months is equal to 16% moisture, with a relative calorific value of 15350 kJ/kg. There is a significant 25% loss when the wood has a percentage of 29% with calorific value of 12200 kJ/kg.

Average moisture (%) of the wood in percentage				
	Wood placed in stor	Wood placed in storage 3 months after cutting		
Drying time	Wood	Calorific value (kJ/kg)		
0 (green wood)	75%			
3 months	44%			
6 months	29%	12200	רן	
9 months	26%			+25%
12 months	25%	13250	]	
18 months	17%		]	
24 months	16% OPTIMAL	15350	] '	
30 months	15%			

the type of wood: only use virgin wood, uncontaminated and get information on the properties of the wood and its proper seasoning;

 moisture: only use dry wood. Damp or "green" wood burns poorly, reduces the heat produced by the appliance and produces polluting emissions;

the size: split wood is better than round logs and use even sizes logs, preferably medium-small (25-33 cm long, 5-15 cm in diameter).

#### CONCLUSION

The table determines the energy loss of the wood and can be summarised in a brief consideration: losing 25% of energy is equal to losing 1 log (1 kg) out of every 4.

# **11-OPERATION**

### **PRECAUTIONS BEFORE START-UP**

Make sure you have read and fully understood the contents of this instruction manual.

Remove all components that could burn from the firebox and door (instructions and various adhesive labels).

Remove the stickers from the ceramic glass otherwise the high temperature could melt them and cause irreparable damage to the glass. The product can be positioned at in a corner or along a wall.



Avoid touching the product during the initial start-up, since the paint completes its drying process during this time and hardens. It is good practice to guarantee effective ventilation in the room during the initial start-up, as the product will emit some smoke and smell of paint, which is absolutely normal! If necessary, touch up the paint with the spray can of the specific colour.

Do not stand close to the boiler and ventilate the room as described. The smoke and smell of paint will disappear after about an hour of operation; however, they are not harmful in any case.



The product will be subject to expansion and contraction during the start-up and cooling stages, therefore slight creaking noises may be heard. This is absolutely normal as the structure is made of laminated steel and must not be considered a defect.



# **ONLY FOR FIRST TIME START-UP**

It is extremely important to make sure the product is not immediately overheated and the temperature must be increased gradually. This will prevent damage to the welds and the steel structure.

# OPERATION TEST



### ATTENTION!!

BEFORE CONTINUING WITH ANY CLADDING INSTALLATION OPERATION, PERFORM A GENERAL TEST ON THE CLOSED FIREPLACE ACCORDING TO THE FOLLOWING:

Light the fire moderately, to ensure that the smoke fitting is tight / not leaking soot.



### THE MANUFACTURER WILL NOT BE HELD LIABLE FOR DAMAGE TO THE CLADDING, IF THE ABOVE PREVENTIVE CHECKS ARE NOT CARRIED OUT AND IT ENDS UP BEING NECESSARY TO DEMOLISH THE CLADDING TO MAKE REPAIRS OR ADJUSTMENTS.

## **STEPS OF FIRST TRIAL IGNITION**

- Make sure you have read and fully understood the contents of this instruction manual.
- Remove all components that could burn from the firebox of the closed fireplace and door (instructions and various adhesive labels).
- Remove the stickers from the ceramic glass otherwise the high temperature could melt them and cause irreparable damage to the
  glass. If this is the case, the manufacturer will not guarantee the glass.
- Open the front combustion air grid register all the way using the cold handle.
- Put in wood in small pieces and thoroughly-dry (moisture of 15/20%).
- Turn the fire on at moderate rate without excessively overheating the structure. With new chimneys, you might notice a smell caused by the presence of an oily film and excess paint, which will go away after lighting the fire a few times.
- Do not close the rise and fall door right away, rather, leave it open by about 10 cm so that the wood can burn better and any moisture
  contained in it can dry. When the flame is stable, close the door all the way.

# **11-OPERATION**

A high percentage of moisture causes condensation in the smoke duct, causing an alteration to the draught and generating smoke and considerable soot deposits in the firebox, on the glass of the door and on the chimney, with the subsequent risk of this catching fire. It also leads to a much lower overall efficiency.

The use of moist or treated wood releases a greater amount of smoke, which could soil the glass more quickly. Poor chimney performance can also compromise the cleanliness of the glass, as the smoke remains in the combustion chamber longer than usual.



Do not use treated fuels (painted or lacquered wood) or non-compliant fuels (plastic or derivatives), which could release toxic or polluting substances. Do not burn waste.

The gasses produced by combustion of unsuitable fuel could damage the product and the chimney, pollute and compromise your health.

# **12-FIRST IGNITION**

### NOTE REGARDING PAINT EXHALATION

It is recommended to air the room the first time the stove is switched on, to evacuate any smells and/or fumes emitted by the paint during the drying and hardening stage due to the heat.



Do not stand close to the stove and as mentioned, air the room. The smoke and smell of paint will disappear after about an hour of operation; however, they are not harmful in any case.

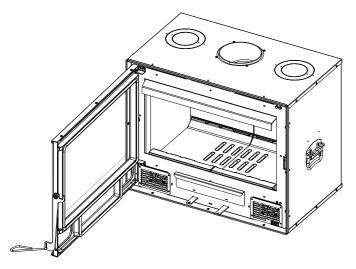
#### It is recommended to start the product for the first time using thin and seasoned wood.

The combustion air inlet must be fully open (POSITION of the lever all "pulled out"). When combustion has started up, normal sized wood can be introduced.

Each time the wood is loaded, the door must be opened slowly to prevent smoke blow back in the room.

### THE BEST WAY TO LIGHT THE FIREBOX

- We recommend doing the following:
- load the wood into the firebox;
- use very dry kindling or suitable fire lighters to rapidly reach a high temperature in the firebox, but avoid paper or cardboard that
  pollute the air when burning;

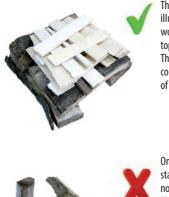


- help fresh air reach the fire at the beginning by completely opening the air vent. Close the vent when you have good base of embers (POSITION of the lever all "pulled out");
- always keep the appliance's door properly closed during operation.

It is very important to observe the ignition procedures in order to heat the structure and flue and ensure the desired level of performance, except with the first two/three start-ups for running in the new fireplace, when it is recommended not to overheat the product. To ignite, load a generous amount of mixed fuel comprising small pieces of wood and logs of medium size (6/7 Kg), and do the same also for the next load. It not advisable to use large logs for ignition as these make the process of ignition and heating longer and less efficient. Large logs can be used later when the fireplace has been run in.

This procedure allows the structure to heat up quickly and maintain an ideal internal temperature to ensure the best possible performance, the cleanliness of the glass and the whiteness of the internal refractory material.

# **12-FIRST IGNITION**



The photo on the side illustrates a tack of wood lighted from the top with dry wood. This is the most correct and clean way of starting the fire.



on the side logs lighted from the bottom with dry wood This is the most common method but not recommended due to the particulate emissions that is generates.



On the side, mixed stack of wood with no lighting module. This method must be avoided.



On the side, vertical logs lighted from underneath. This method must be avoided.

The quality of the flames and cleanliness of the internal surfaces of the flue (white Alutec and clean glass) are an excellent indicator of the internal temperature of the unit (\*). The higher the internal temperature, the better the performance and cleanliness during operation. The best performance, in fact, is obtained when a small bed of glowing embers gathers at the base of the firebox that helps to keep the internal temperature high and uniform.

After ignition and heating of the chamber, the air shutter can be used to lower the flames (set the shutter in the "CLOSED" position). For subsequent ignitions, load the amount of wood SPECIFIED in the TECHNICAL features of the product.

(\*) The quality and humidity of the wood (<20%) and quality and draught of the flue (>12 Pa when hot) strongly influence performance and reaching of the internal temperatures, as well as cleaning afterwards.

## **FUEL LOADING**

For routine fuel loading simply open the door by the cold handle provided or with the handle. **During use, the metal structure and glass reach high temperatures, therefore use suitable thermal protection (such as gloves). During normal use always keep the door fully lowered/closed**, as intermediate positions cause anomalous combustion (forge effect), quick consumption of the wood and could also create smoke leaks due to the high temperatures of the firebox.

Only open the door for fuel loading operations and only for brief amounts of time.

The closed firebox reaches its maximum output and best operation with the door closed, as the tightness of the combustion chamber and the calibrated oxygen intake makes it possible to raise the output levels.



To achieve the nominal output and optimal combustion, load the amount of wood and comply with the loading interval indicated in the technical data table (chapter 5).

# **13-COMBUSTION CONTROL**

## **PRIMARY AIR**

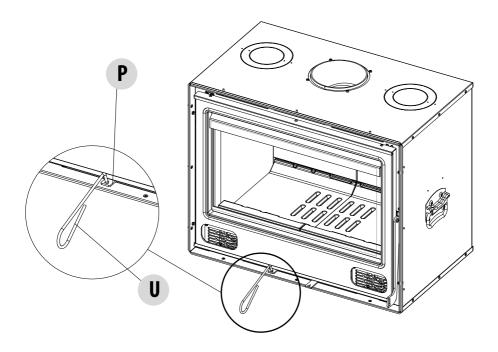
The primary air enters when the front shutter "P" is in "PULLED OUT" position. This air makes combustion possible. It is recommended to use the claw "U" supplied while adjusting the air to prevent burns. The lever "P" can be extracted completely or in incremental steps to adjust air inlet.

When the fire is going nicely, set the air adjustment lever "P" completely "CLOSED".

When the lever is turned into the "completely PULLED OUT" position, a large quantity of primary air is conveyed under the hearth of the firebox, for the fire to start rapidly and efficiently.

To achieve the best performance of the fireplace, after starting the fire and once a bed of even embers has formed, set the air shutter in position "CLOSED".

Reload as indicated in the technical data table.



# **13-COMBUSTION CONTROL**

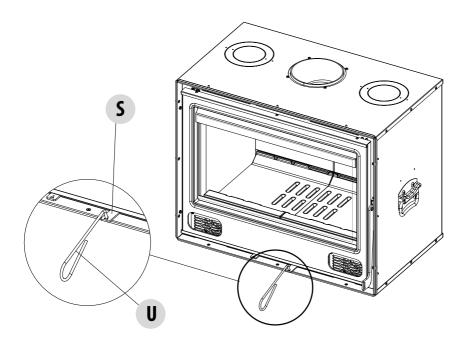
## **SECONDARY AIR**

Adjustment is carried out with the lever "5". It is recommended to use the claw "U" supplied when adjusting the air to prevent burns. Secondary air allows the completion of combustion and increases the efficiency.

When the lever is "PULLED OUT", a larger amount of air flows in, used in the ignition phase.

When the product is running smoothly, close the lever «S». In this position the amount of air in the combustion chamber decreases, therefore there is only a minimum amount of secondary air.

This position is used to prolong combustion (for instance, at night, or when you are not at home) so that the product is set to minimum for auto-combustion, to save on fuel and keep the flame burning.



Û

The use of moist or treated wood releases a greater amount of smoke, which could soil the glass more quickly. The poor performance of the flue pipe can also compromise the cleanliness of the glass, considering that the smoke remains in the combustion chamber longer than usual.

# **14-FANS**

## SWITCH

At the bottom right there is a switch that is used to switch on the two fans "V" in the lower part of the product.

The switch has three positions:

0 - minimum automatic

I - minimum speed in manual mode

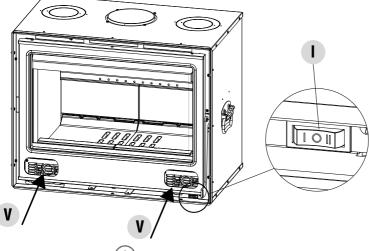
II - maximum speed in manual mode

There are three wires that need to be connected to a plug (not supplied) which must then be plugged into a wall socket.

If the switch is set to 0 the fans start up when the thermostat detects a minimum temperature.

The temperature is reached by adhering to the wood loading quantities required during the certification phase and the fans turn on in approximately 30 minutes (approximate time which depends on the type of fuel and loading).

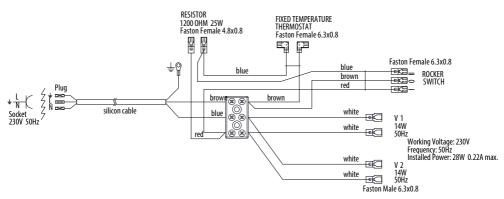
This type of ventilation works for ducted ventilation (i.e. connecting the upper holes to pipes and connected with vents) as well as in the case of front ventilation (see specific pages).



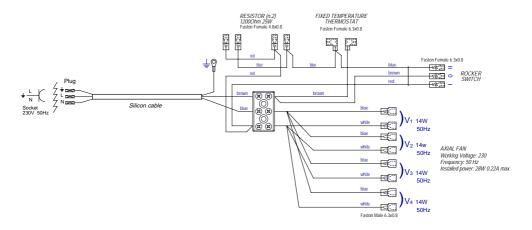
# EARTHING INSTRUCTIONS

As there are electrical parts, the fireplace must be safely connected to an earth contact, in accordance with regulations in force.

## QBOX 60/70/80S WOOD WIRING DIAGRAM



# **QBOX 100 WOOD WIRING DIAGRAM**



## **DOOR OPENING**

To open the product door "M", fit the hook "U" into the hole in the handle and pull it towards you.

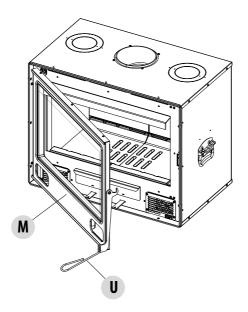
During normal use always keep the fire door always fully closed, as intermediate positions cause anomalous combustion (forge effect), quick wood consumption and also drastically reduce the appliance's heating effectiveness.

The product reaches its maximum output and optimal operation with the door closed, as the tightness of the combustion chamber and the calibrated oxygen intake enhance performance.



## Caution!

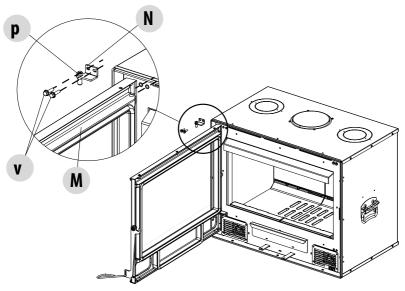
Only open the door for fuel loading operations and only for brief amounts of time.



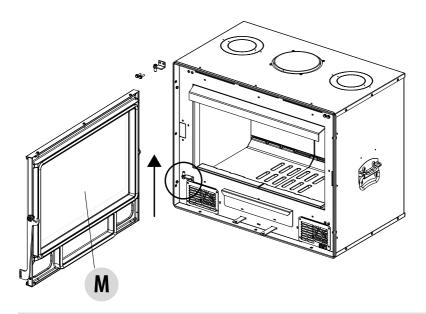
## **RIGHT SIDE DOOR ASSEMBLY**

The door can be fitted on the right side. Proceed as follows:

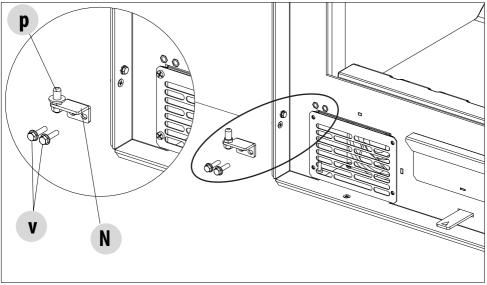
- remove the two screws "v" so that plate "N" with pin "p" comes off
- tilt the door and take the pin "p" out of the door



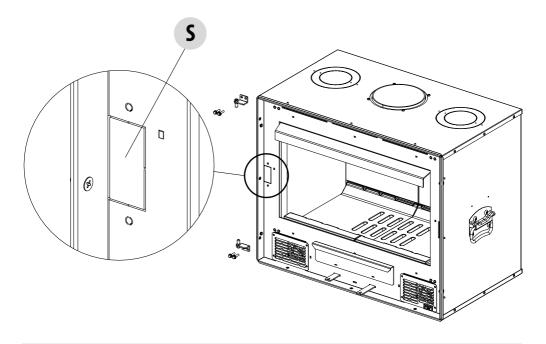
- now lift the door "M" to release it from the lower pin
- safely set the door aside



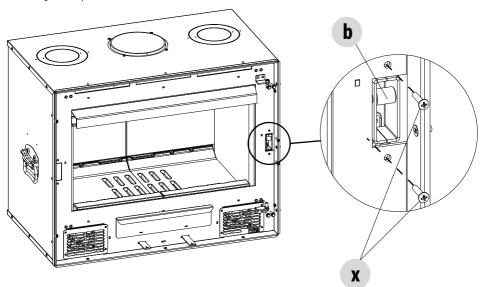
- remove the two screws "v" and remove plate "N" with pin "p"
- set plates "N" aside for assembly on the product's right side



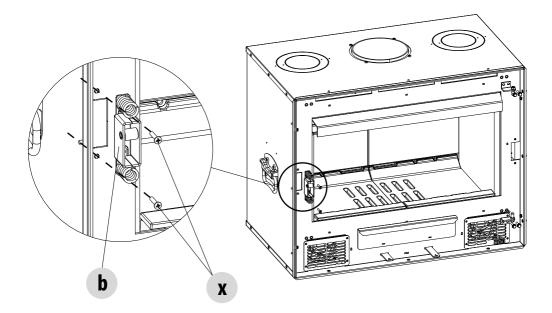
remove the knockout hole "S" to insert the door's closing block



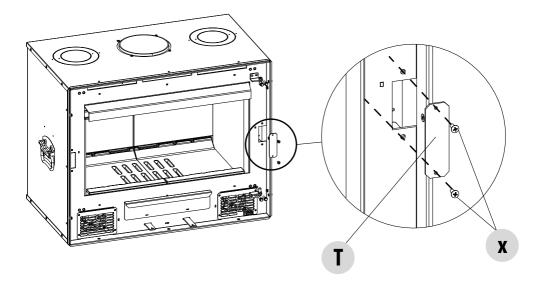
• remove the block "b" by removing the two screws "x" (to extract the block from the position use a magnet to prevent it from falling into the product)



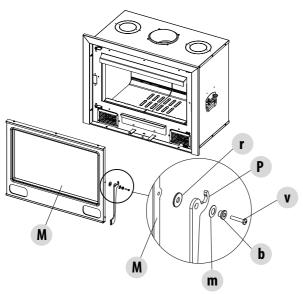
• fit the same block "b" on the opposite side, hold the block with a magnet, insert it and secure it with the two screws "x"



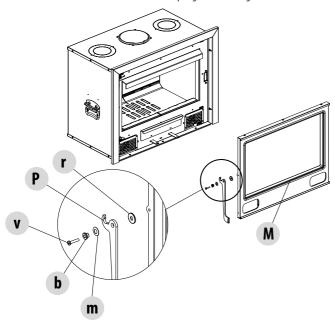
• in place of the block "b", on the right side, fit plate "T" with the two screws "x" to close the hole



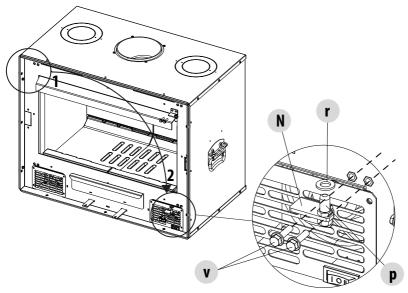
- take the door "M" and remove the handle "P" removing in sequence:
  - screw "v"- bushing "B" spring "m" handle "P"- washer "r"



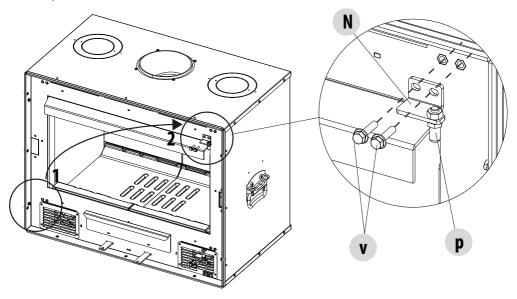
take the items you have just removed and fit them on the other side of the door operating in reverse order:
 washer "r" - handle "P" - spring "m" - bushing "B" - screw "v"



- take plate "N" which you removed in position 1 and put in position 2. The plate must be rotated so that the pin is outside and upwards.
- fasten plate "N" with screws "v" set washer "r" and engage the door on the pin



- take plate "N" which you removed in position 1 and put in position 2. The plate must be rotated so that the pin is outside and downwards.
- before fastening plate "N" insert pin "p" on the door
- fasten plate "N" with the screws "v"

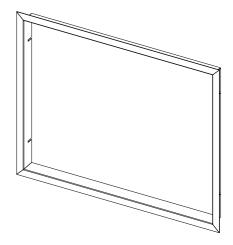


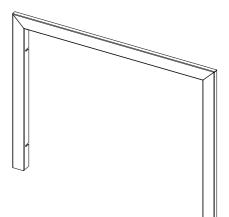
# **16-ACCESSORIES**

## ACCESSORIES

### **4-SIDED FRAME**

See the instructions attached to the product.





**3-SIDED FRAME** See the instructions attached to the product.

# **17-CLEANING**



## ATTENTION!

All cleaning operations of all parts need to be carried out when the closed fireplace is completely cold; make sure that the ashes are out, use personal protective equipment and use appropriate maintenance equipment.

## CLEANING UNDER THE USER'S RESPONSIBILITY CLEANING THE GLASS

To clean the glass, use specific products (see our price list) or a cloth dipped in water and ammonia solution or a little white ash and a sheet of newspaper.

To open the door follow the procedure set forth in the dedicated chapter.



### ATTENTION!

Do not spray the cleaner onto the painted parts or onto the seals of the door (ceramic fibre cord).

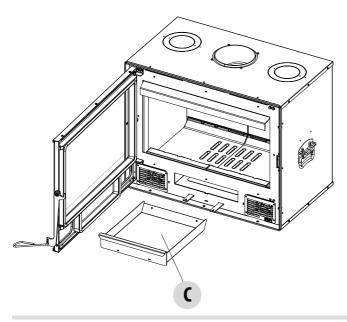
## **ASH REMOVAL**

We recommend cleaning the hearth suitably for correct combustion. Use a metal pan and a brush to remove the ash from the hearth and place the ash non-flammable containers for transport.

Hot ashes must not be stored outside unsupervised or thrown into the rubbish bin. Allow them to cool down in the open air in a metal container.

## **CLEANING THE ASH PAN**

It is recommended to empty the ash pan every 2/3 days and to vacuum the areas. Only if ash is completely cold may a vacuum cleaner be used to remove it. In this case, use a suitable vacuum cleaner to remove small sized particles.



# **17-CLEANING**

## CLEANING THE REFRACTORY WALLS (ALUTEC®)

These do not need to be cleaned because the feature of this material ( $ALUTEC^{\circ}$ ) is that it does not absorb soot, rather, it repels it when the firebox is hot. After ignition, when the firebox would normally tend to blacken, the refractory walls will tend to turn white again, starting from the base of the flam, when the combustion chamber reaches the operating temperature (~ 400° C). If this does not happen, it may be due to:

- · Moist or resin-rich wood that does not release enough heat or that soils the combustion chamber
- Chimney with poor performance and therefore the smoke stays too long in the combustion chamber, soiling the firebox
- Chimney with poor performance that does not make it possible to reach high output with the closed fireplace and therefore adequate temperature of the refractory walls.



Never clean the refractory wall with a damp cloth, or other, as this could stain it. At most use a dry paintbrush to remove large soot deposits.



The failure of Alutec to "whiten" is not considered a defect in light of the warnings and instructions provided above.

## CLEANING PERFORMED BY A QUALIFIED TECHNICIAN CLEANING THE CHIMNEY

We recommend the mechanical cleaning of the flue **at least once a year**; excess build-up of unburned waste could cause problems with the smoke outlet and start a fire in the flue pipe itself. To access flue cleaning from the appliance, remove the smoke deflector: to slide it out correctly, lift the front of it and at the same time push it forwards to detach it from the rear supports.

## **CLEANING THE FLUE**

The flue must always be kept clean, as the deposit of soot or unburnt oils reduces the cross-section blocking the draught, thus compromising efficient operation of the product and, if large build-ups accumulate, they can catch fire.

The flue and chimneypot must be cleaned and checked by a qualified chimney sweep at least once a year. Once maintenance has been performed, request a written declaration that the system is safe. Failure to clean the system jeopardises safety.

To access the flue from the appliance for cleaning, remove the smoke deflectors; to extract the smoke valve, hold it upright, lift it and move it about ten cm towards the back of the flue to free it from the clamp.



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