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Dear client:

We would like to thank you for choosing one of our products. The insert that you have purchased is of great value. For this reason, we invite you to read carefully this instructions manual in order to make the most of your equipment. It is compulsory to install and use our products according to the instructions of the present manual in order to comply with the safety standards.

## 1. GENERAL WARNINGS

The installation of an insert must be done according to the local, national or European regulations.

**Our liability is limited to the supply of the equipment. The installation must be done according to the procedures expected for this kind of equipments, according to the indications included in this manual and the rules of the profession. The filters must be qualified, with official license and they will work for enterprises that accept responsibility of the installation.**

In the case of devices with turbine, it must be connected to a 230V - 50Hz - IP20 approved power outlet.

Bronpi Calefacción, S.L. will not be responsible for the modifications made to the original product without the prior written permission as well as for the use of non-genuine spare parts or pieces.

This stove can be used by children aged from 8 years and by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge whenever they have supervision or they have received instruction concerning the use of the stove in a safe way and understand the hazards involved. Children must not play with the stove. Cleaning and user maintenance shall not be made by children without supervision.



**IMPORTANT!!!: this product includes a spray paint can inside the combustion chamber or oven (when applicable) which must be removed before the ignition.**

## 2. GENERAL DESCRIPTION

The equipment that you have purchased contains the following pieces:

- Complete structure of the insert placed on the pallet.
- Inside the combustion chamber you can find: a box/bag with a thermal glove that allows us to handle the air controls, draft-diverter valve, door, etc, in order to avoid burns. One spray paint can to repair possible scratches. The Coliseo and Rioja models incorporate inside the smoke outlet collar, which has to be placed by the installer. A baffle plate (according to the model). In the models of the Cairo series (except in Cairo-70 which are optional), you will find inside the combustion chamber, the legs adjustable in height of the insert, so that in the case of need, proceed to its placement. See section 2.3.7
- On the Cairo series models, you will also receive a box with the inner parts of the combustion chamber (ceramic or vermiculite) to place them before the appliance is switched on. In the case of the Cairo-70 the options for the inside of the combustion chamber are vermiculite or firetek parts.

The equipment is made of several elements of steel sheets welded, with different thickness, and, depending on the model, pieces of cast iron or vermiculite (refractory material that covers the walls). It also has a door with vitro ceramic glass (resistant up to 750°C) and ceramic cord for the air tightness of the combustion chamber.

Heating is produced by:

- a. **Convection:** because the air passes through the body and sump, or the heating through the hood of the facing in which the insert is put.
- b. **Forced convection** (only insert with turbines): thanks to the turbines placed on the bottom of the insert, the air at room temperature is aspirated and it is returned to the room at a higher temperature.
- c. **Radiation:** through the vitro ceramic glass and the body the heat is irradiated towards the environment.

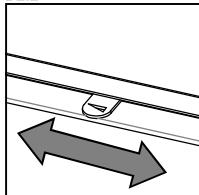
The models have some settings for a perfect combustion control:

**The primary air intake** controls the air that passes through the ash pan and the grate towards the fuel. The primary air is necessary for the combustion process.

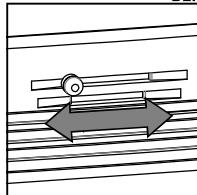
The ash pan should be emptied frequently so that the ash does not block the primary air intake for the combustion. Also, the primary air rekindles the fire.

- In Cairo series models, this regulation is located under the door. It is the regulation located in the middle (**see drawing D2.1**). The largest amount of air inlet coincides with the largest side.
- In models of the Florida series, Paris series, Londres and Madrid Visión this control is placed under the door. The higher entry air is corresponded with the higher side of the triangle (**see drawing D2.2**).
- In model Rioja and Coliseo this control is placed on the bottom of the door (**see drawing D2.3**).
- In all the other models, the control is placed at the ash pan (**see drawing D2.4**).

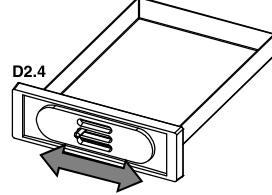
D2.2



D2.3

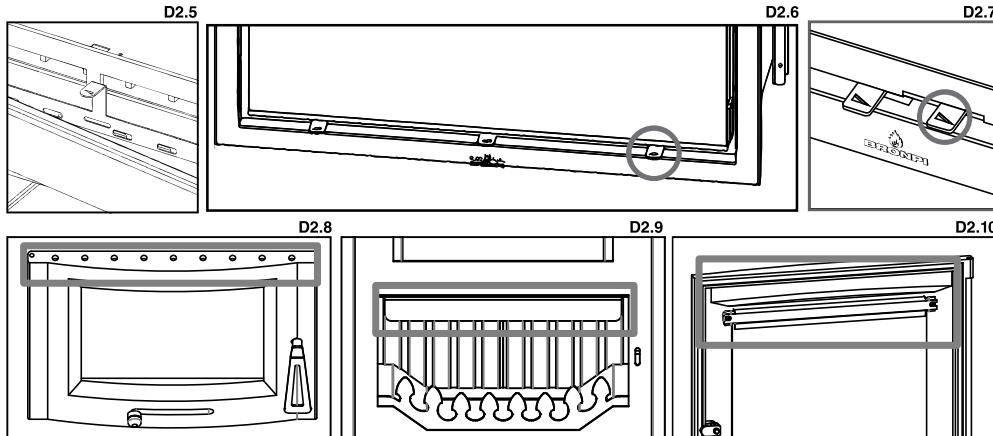


D2.4



**The secondary air intake** favours the carbon that was not burnt during the first combustion can suffer a post-combustion. This increases the efficiency and assures that the glass keeps clean.

- In models of the Paris series (except for the model with lifting door: Paris 90V-G), Rioja and Coliseo, the secondary air intake control is placed on the top of the door and its movement is from the left to the right. The higher entry air is corresponded with the higher side of the triangle (see drawing D2.5).
- In Cairo series models, this regulation is located under the door. It is the regulation located on the right of the ash pan (see drawing D2.6). The largest amount of air inlet coincides with the largest side.
- In the Londres and Londres-T models, this regulation is located under the door. It corresponds to the regulation located on the right. The entry of a larger amount of air coincides with the regulation shifted towards the greater side of the triangle (See drawing D2.7).
- In all the others models this entry of air exists but it is not adjustable. It is usually placed on the top of the inside of the door, between the door and the glass (see drawings D2.8, D2.9 and D2.10).



#### Double combustion

Some models of inserts include a double combustion. With this system we get a second preheated air input inside the combustion chamber. This allows a second combustion of the gases not burnt in the first combustion that achieves a high performance efficiency, a great fuel saving and reductions in pollutant emissions.

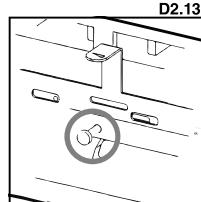
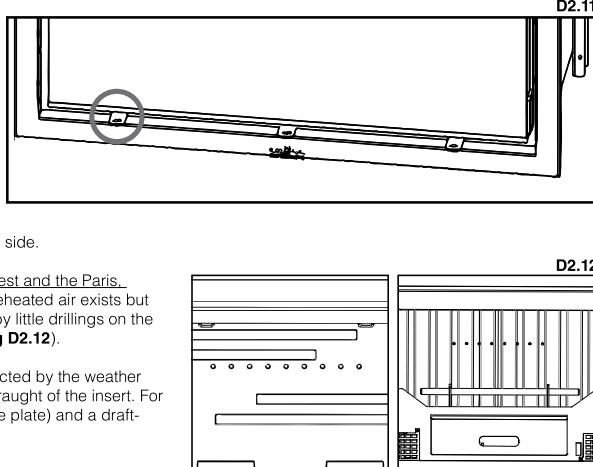
- In Cairo series models, this regulation is located under the door. It is the regulation located on the left of the ash pan (see drawing D2.11). The largest amount of air inlet coincides with the largest side.
- In all the other models such as Everest Visión, Everest and the Paris, Madrid, Florida and Londres series, this entry of preheated air exists but it is not adjustable. The air supply is usually made by little drillings on the back wall of the combustion chamber (see drawing D2.12).

The combustion is not always stable. In fact, it can be affected by the weather conditions or the outside temperature. This modifies the draught of the insert. For this reason, our inserts have a baffle plate (or double baffle plate) and a draft-diverter valve that controls and improves the draught.

#### Draught-diverter valve

The inserts of the Madrid and Cairo series (except Cairo-70 model) are provided with an adjustable draft-diverter valve, with automatic opening that allows the control of the draught.

It is possible to place properly the draught-diverter valve when we open the door thanks to the screw on the central higher of the frontal zone (turn right = open valve / turn left = close valve). The draught-diverter valve will be opened automatically at the open of the door regardless of its position in order to avoid the exit of smoke to the room (see drawing D2.13).

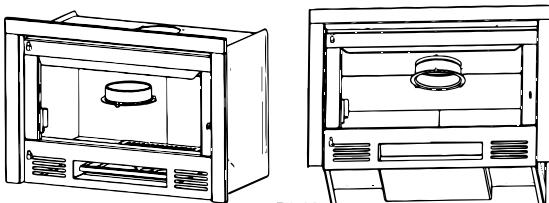


## Smoke outlet collar

In the Coliseo, Rioja and Cairo-70 models, the installer must set the smoke outlet collar. This allows the installer to get an easier installation, specially when the appliance is going to be inserted in a preexisting fireplace whose height is similar to the height of the appliance (see drawing D2.14).

In order to install it, it is necessary to access from the inside of the combustion chamber and proceed as follows:

1. Remove the baffle plate.
2. It is recommended to place ceramic glue (not supplied) on the smoke outlet collar itself, to ensure its tightness with the appliance.
3. Screw the ring to the ceiling of the insert itself with the three screws supplied.
4. Do not forget to install the baffle plate again before using the insert.



D2.14

## Baffle plate

The baffle plate is a fundamental part for the proper operation of the insert. **It must be placed in the right position and the insert must not be used without the baffle plate. This would invalidate the warranty.**



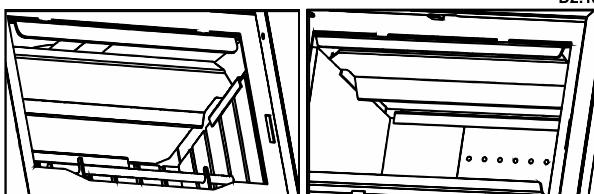
### **WARNING!**

**The lack of the baffle plate causes an excessive draught. This causes a fast combustion, excessive wood consumption and the overheating of the equipment.**

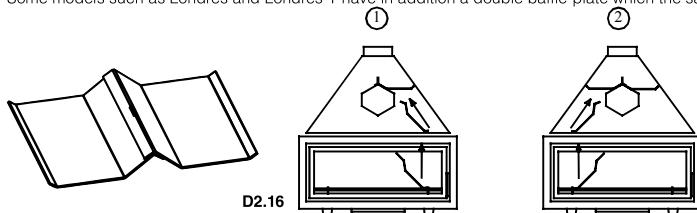
Due to safety reasons during the transport, in some models, the baffle plate is not assembled. You will find it inside the combustion chamber. The correct position should be the following one (see drawing D2.15).

For Cairo series models, refer to section 2.3.7 of this manual for proper deflector placement.

D2.15



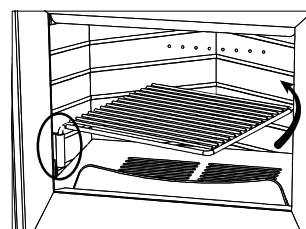
Some models such as Londres and Londres-T have in addition a double baffle-plate which the same function (see drawing D2.16).



D2.16

## Barbecue grill

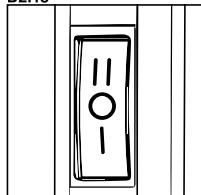
The barbecue grill is an accessory that incorporates the models of the series Paris. It is adjustable in two heights depending on the slot of the lateral guide used. To prevent its deterioration, it is advisable to remove it when not in use (see drawing D2.17).



D2.17

## Forced ventilation

D2.18



Some inserts are provided with axial fans of 160 m<sup>3</sup>/h each one, adequate to improve the heat distribution by the ventilation of the room or the room beside.

However, the model Londres-T include a tangential turbine of 680 m<sup>3</sup>/h, while the Cairo and Cairo-E models can optionally have the tangential turbine of 680 m<sup>3</sup>/h.

The Cairo models of double door (Cairo-D) have optionally the possibility of incorporating two turbines of 400 m<sup>3</sup>/h each one of them. The Cairo-70 model incorporates a 225 m<sup>3</sup>/h blower as standard.

The models of the Paris series incorporate as standard a tangential turbine can be of 225, 290 or 335 m<sup>3</sup> / h, according to the measurement of the model.

The operation of the Londres-T model turbine is explained in section 2.1. While the operation of the Cairo series turbine is explained in section 2.2.

In models with fans the start and the control of the ventilation is made by the three-position switch placed on the right bottom side (see drawing D2.18).

These three-positions have the following functions:

- **0 position:** the fans are turned off when there is no combustion inside the chamber due to the stove is provided with a thermostat that controls the fan according to the temperature of the insert.
- **1 position:** the fans run in a low speed.
- **2 position:** the fans run in a high speed.

The models of the Paris series lack thermostat. Therefore, the ignition and regulation is made by the switch and allows the possibility of disconnecting the turbine (position 0), even with combustion in the equipment. In the same way, if you want the turbine to operate, you must place the switch in position 1 (slow speed) or 2 (fast speed).

#### Connection

In the right side of the insert you will find the cable that connects to the network. It is mandatory to not cut it in the entire length because this section is useful when changes in the electrical components are needed.

It is obligated the correct connection of the installation to earth connection.

The installation of the system might be done by skilled labour and qualified under the current rules.

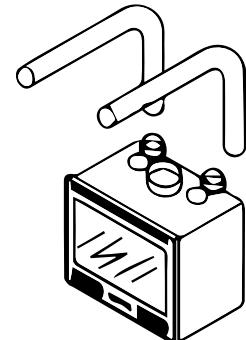
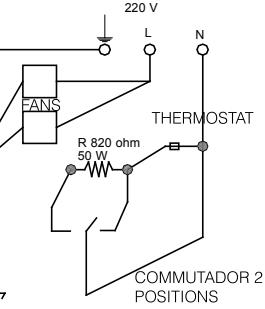
#### WARNING!!

**The insert (except Paris Series, Londres-T and Cairo Series) must be always connected to electrical network in order to, in case of a high temperature, fans could start and dissipate the heat to the room where it is installed or to any other adjacent room. The insert must never be unplugged from the network when it is burning. In this case, the warranty of the insert shall terminate.**

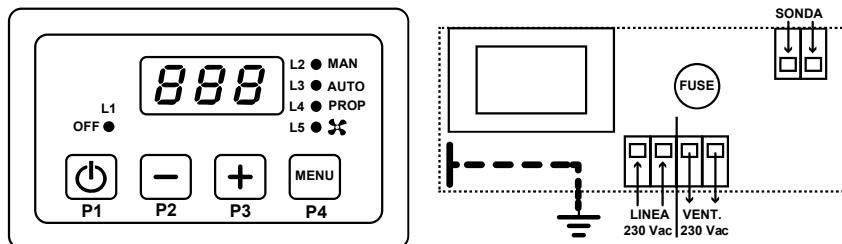
The inserts are provided with connections for two ventilation additional outputs.

To install them, follow the next steps:

- a. Remove the close covers of the air outputs placed at the high of the sump.
- b. Set the connection collars on the hole or holes.
- c. Drill the wall or existent hood to pass and install the fireproof flexible tubes (diameter of 12 cm) with their corresponding connection.
- d. Set the tubes with metallic clamps to the corresponding collars and grilles. Each pipe must not exceed recommended channelling length and it must be insulated with insulated materials to avoid noises and loss of heat.
- e. The grilles must be placed higher than 2 meters over the floor to avoid the heat air annoy the people.



## 2.1 LONDRES AND LONDRES-T VISIÓN SERIES CENTRAL UNIT



External aspect and electrical connections

#### PRODUCT COMPOSITION

- Switchboard
- Cover Plate, Inserting box
- Temperature Probe, Instructions

#### FUNCTIONING

##### • ON/OFF:

The On/Off of the controller is made by pushing the button P1

The state OFF is signaled through the led L1

##### • FUNCTIONING Modality

###### - MANUAL: advice signal MAN

The fan is at the set speed independently by the Probe's temperature

###### - AUTOMATIC: advice signal AUT

The Fan starts at the set up speed when the temperature is higher than the setted Thermostat SET

###### - PROPORTIONAL: advice signal PROP

The fan changes its speed according to the temperature in the range SET  $\div$  SET+DEL

- **STANDBY Function:** if parameter **Stb =1**

If the device is **OFF**, and the temperature is higher than the value of thermostat **TSI**

- The device goes in **ON** automatically

- **SAFETY Function:** if the parameter **SIC = 1**

If the probe's temperature is higher than value of thermostat **TSI**

And the fan is **OFF** in **MANUAL** Modality

- The device goes automatically in the Proportional Modality waiting 10 seconds.

- **SAFETY FAN Function:** if the parameter **SAF = 1**

If the probe's temperature is higher than value of thermostat **TSA**

- The Fan is **OFF**

- **ALARM Function:**

If probe's temperature is higher than the value of thermostat **TAL** and the parameter **Enb = 1**

- The acoustic signal is activated
- This signaling can be deactivated for 5 minutes by pushing a button
- After 5 minutes, if there's again the condition of alarm, it is activated again.

## MAIN MENU

- **FUNCTIONING Modality Selection**

- Press **P4** key to see the current modality: it's signaled by the display and the led
- Pressing again the **P4** key, you can select cyclically one of three functioning modality **MAN, AUT, PRP** signaled on the display and by the specific led.
- The setting is automatically memorized after 4 seconds
- The **L5** shows the status of the Fan

- **SPEED Selection**

- Pressing **P2** or **P3** keys the setting of the current fan speed is visualized or modified
- **P0**= Off (only in Manual); **P1** = Minimum Speed; **P10**= Maximum Speed
- This function is not available in the PROPORTIONAL Modality
- In the AUTOMATIC Modality the speeds that can be set are **P1 ± P10**

## FAILURE OR ALARM SIGNALS

The controller can signal the failure of the probe blinking message for the failure signal:

- **Lo:** indicates a low temperature (temperature under 0°C):**Probe Open or Disconnected**
- **Hi:** indicates a high temperature (temperature over 180°C):**Probe in Short Circuit**

## ATTENTION

- Avoid join together the probe's cables with power's cables.
- Provide the system's feeding with a bipolar switch according to the actual rules and with opening distance of the contacts of at least 3 mm for each pole.
- Installation and the electrical connection of the device have to be made by experienced personal and with appropriate equipping.
- Before the connection be aware that the electrical feeding is not connected.

## SECONDARY MENU

It allows to modify the functioning parameters of the controller.

- To enter the MENU push together buttons **P2** and **P3** for about 5 seconds.
- To scroll the code list use the button **P2** or **P3**
- To show the parameter's value push the button **P4**
- To modify the parameter's value push the buttons **P2** or **P3**
- To visualize again the code list and memorize push the button **P4**
- To exit and memorize wait for about 10 seconds.

The parameters are described in the following table

SECONDARY MENU PARAMETERS	CODE	MIN	DEFAULT	MAX
Temperature Fan Activation	SET	30°	45°	99°
Temperature Fan Activation Hysteresis	iSt	1°	2°	35°
ALARM Temperature Activation	TAL	100°	120°	180°
SAFETY Temperature Activation	TSI	80°	100°	140°
SAFETY FAN Temperature Activation	TSA	100°	135°	180°
SAFETY Function Enable	SIC	0 [off]	1 [on]	1 [on]
SAFETY FAN Function Enable	SAF	0 [off]	1 [on]	1 [on]
STANDBY Function Enable	Stb	0 [off]	1 [on]	1 [on]
BUZZER Function Enable	Enb	0 [off]	1 [on]	1 [on]
Fan Speed P01	U01	00	16	100%
Fan Speed P09	U09	00	70	100%
Fan Speed P10	U10	00	100	100%
Temperature Range of Regulation for Proportional Modality	DEL	20°	20°	100°

• **P01 / P09 / P10 Speed REGULATION (parameters U01 / U09 / U10)**

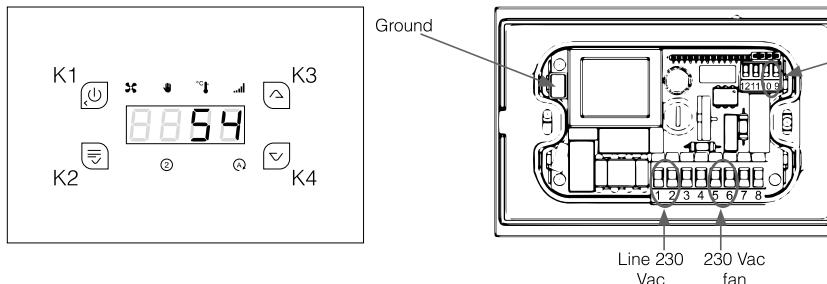
- Enter in **SECONDARY** Menu
- Select the parameter to verify/modify : the fan works automatically at the set speed
- Modify the value until the desired value : in this way it is possible to control the speed directly.
- Memorize by pushing button **P4**
- Eventually repeat the operation for the other speeds/parameters
- To exit, wait about 10 seconds.

Supply:	230 Vac $\pm 10\%$ ~ 50HZ; EMI filter on side
Protection:	Internal Fuse
Temperature Probe:	Working Temperature: -50°C / 250 °C
	Range of Measure: 0 – 180 °C; $\pm 1^\circ\text{C}$
Output:	FAN: 230 Vac I <sub>max</sub> : 0,8A/1,5A high power version
Dimensions:	Inbox Controller 120 x 80 x 50 [mm]
Applied Rules:	EN 60730-1 50081-1 EN 60730-1 A1 50081-2

EN

**2.2 OPERATION OF THE CAIRO SERIES CENTRALITE**

This control unit is included as standard in Cairo-70 model and/or optionally purchased Kit-aire-CairoEF, Kit-aire-CairoED and for the Cairo 90 and 110 series.



External appearance and electrical connections

Inputs: 1-2 = Supply voltage 230 Vac 50 Hz

(on the Cairo 70 model, this connection is made at the factory).

Inputs: 9-10 = Temperature probe

Outputs 5-6 = Channelling fan

**Product Composition**

- Switchboard
- Inserting box
- Temperature probe and fan connection wiring

**Functionalities**

**- ON/OFF**

The ON/OFF of the control unit is carried out by pressing the K1 key for a long time. The OFF status is indicated by the K1 key on. When the control unit is switched on, the following sequence of messages will appear:

o Article code F001

o Revision Article r 0.1

**- MODALITIES OF OPERATION**

There are three operating modes to choose from:

- **MANUAL:** light signalling

The fan operates at the speed chosen by the user, independently of the probe.

- **AUTOMATIC:** light signalling

The fan runs at the speed chosen by the user, if the temperature of the probe is above E01 (45°C).

- **PROPORTIONAL:** light signalling

The fan runs at the speed selected by the thermoregulator, depending on the temperature of the probe.

The temperature range within which the power change will be active ranges from E01 to E01+E50 (45 + 40°C).

**- SECURITY FUNCTION**

This function is activated by default and allows you to start the process of removing excess heat from the chimney.

If the temperature detected by the probe exceeds 100°C and the fan has been turned off in MANUAL mode, the operation switches to PROPORTIONAL mode with a delay of 10 seconds.

**- ALARM FUNCTION**

If the temperature detected by the probe exceeds 120°C, an acoustic and visual signal is activated (the temperature flashes on the display).

- **SILENCE** function: the acoustic signal can be deactivated for 5 minutes by pressing any key. If the alarm condition persists, the acoustic signal is activated again.

- Operation goes into PROPORTIONAL mode with a delay of 10 seconds.

### **STANDBY FUNCTION**

In the case that the device is OFF, if the probe temperature exceeds 100-120°C, the device automatically switches to the on state.

### **PROBES DISPLAY**

The display shows the value read by the probe.

- If the reading of the probe is below the minimum range of the sensor, the message Lo is displayed.
- If the probe reading is above the maximum range of the sensor, the message Hi is displayed.

### **Attention**

- Avoid coupling the probe cables with the power cables.
- Install a bipolar switch in the power supply system according to the standards in force and with an opening distance from the contacts of at least 3 mm per pole.
- The installation and electrical connection of the device must be carried out by qualified personnel with the appropriate equipment.
- Before making any connection, check that the mains is disconnected.

### **Main menu**

It can be accessed by pressing the K2 key for 3 seconds.

- The K2 key is used to scroll through the various parameters, indicated by the flashing of the corresponding LED.
- With the keys K3 and K4 you can modify the value of the parameters.
- Press key K2 to save the new value or wait 10 seconds.
- Press key K1 to exit without saving.

### **Fan menu**

Through this menu you can select the fan speed.

- By pressing the keys K3 and K4 it is possible to display and modify the selected fan speed (LED flashes).
- MANUAL MODE: the fan can be turned off by adjusting the speed P0, or select a speed from P1 (minimum speed) to P10 (maximum speed).
- AUTOMATIC MODE: the fan cannot be switched off, a speed can be selected from P1 (minimum speed) to P10 (maximum speed).
- PROPORTIONAL MODE: the fan cannot be turned off and the speed cannot be adjusted; only the speed selected by the thermoregulator can be displayed.
- Press key K2 to store the new value or wait 5 seconds.
- Press key K1 to exit without saving.

### **Installer menu**

Access to this Menu is INSTALLER COMPETITION or QUALIFIED PERSONNEL, because the parameters indicated, if modified, may make the product unsuitable for the application in use.

- To access the MENU, press keys K2 and K4 at the same time for about 3 seconds.
- To scroll through the parameter codes use keys K3 and K4.
- To display the parameter value and enter the modification, press the K2 key.
- To change the value press keys K3 and K4
- To save the selected value, press the K2 key.
- To exit without saving press the K1 key.
- Press the K1 key again to exit the menu or wait 60 seconds.

Description	Cod.	Min	Set	Max	U.M.
Air thermostat for fan activation	E01	30	45	100	°C
Air thermostat for safety	E02	80	100	140	°C
Air thermostat for alarm	E03	100	120	180	°C
Air thermostat for safety fan	E04	100	135	180	°C
Air thermostat for valve opening	E05	20	30	140	°C
Air thermostat for valve closure	E06	20	80	140	°C
Air thermostat for service output activation	E07	20	50	180	°C
Temperature delta for proportional operation	E50	20	40	100	°C
Hysteresis thermostat fan activation	IE01	1	2	40	°C
Hysteresis thermostat for safety	IE02	1	2	40	°C
Hysteresis thermostat for alarm	IE03	1	2	40	°C
Hysteresis thermostat for fan safety	IE04	1	2	40	°C
Hysteresis thermostat for valve opening	IE05	1	2	40	°C
Hysteresis thermostat for valve closing	IE06	1	2	40	°C
Hysteresis thermostat for activation of service output	IE07	1	2	40	°C
Hysteresis room thermostat	Ib01	0	1	20	°C
Fan speed P01 (minimum)	UA01	20	1	100	%
Fan speed P09 (ninth)	UA09	80	1	100	%
P10 fan speed (maximum)	UA10	100	1	100	%
Air valve closing delay time	t06	0	10	120	min

Description	Cod.	Min	Set	Max	U.M.
Suspension time acoustic alarm	I07	1	5	60	min
Fan start time	I08	0	2	10	sec
Input configuration S2	P01	0	0	2	n
Service output configuration	P02	0	0	3	n
Fan safety enabling	P03	0	0	1	n
Air safety enabling	P04	0	1	1	n
Air alarm enabling	P05	0	1	1	n
Enable air valve start function	P12	0	0	1	n

## 2.3 SPECIFICATIONS ACCORDING TO THE MODEL

### 2.3.1 MODEL LONDRES, LONDRES VISION, LONDRES-T AND LONDRES-T VISION

#### EN Admission of fresh air

Due to the high power of this models of inserts it is advisable to foresee an air intake coming from outside the room to avoid the overheating of the equipment.

#### Isolation of the insert: advantages and drawbacks

Some thermal insulator can be placed between the facing and the insert.

Every way, all cautions must be taken to avoid an overheating of the walls and every constructional elements nearby the equipment (for instance, wooden beam), and at the moment of the placement these materials will be insulated according to the rules.

#### Advantages:

- A lower loss of heat. This is only valid in case of the insert is beside an outer wall. Unless the case the heat will not be lost, it will be dissipated in the first step by the facing and the to the adjacent rooms.
- Reduction of temperature in case of flammable elements near the insert. You should always watch the air intakes for the convection (on the bottom, laterals and rear of the insert) are not obstructed. Ideally, ceramic fibre or Rockwool rigid panels, whose fibres are agglomerated by some bonding agent, shall be used.

#### Drawbacks:

- If the tightness of the room in masonry built around the insert is not perfectly made it is possible to find some particles of the isolating material in the convection air.

#### Placement of the insert

The insert must be freely able to dilate. The masonry or decorative materials must not be in touch with the equipment in any way. It is necessary 3 or 4 mm between the equipment and the masonry

#### Natural convection or auxiliary ventilation?

In the majority of cases, natural convection is enough. An auxiliary group of ventilation allows increase the air flow and reduce the temperature in the exits of the outputs also send it farer or even an adjacent room (in case of models with turbines).

#### Natural ventilation

##### Attention, this factor is a fundamental part for the proper operation of the insert!

In order to the highest efficiency of your equipment, we recommend you open several air intakes and outtakes.

#### Placement of the rings

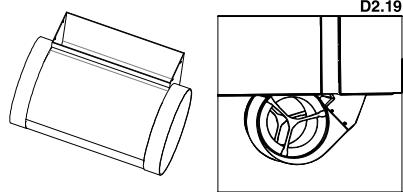
Place the commensurate rings This ring drive the hot air through a flexible tube directly to the room we want to heat without the blow of particles between the facing and the insert.

#### Auxiliary ventilation

Turbine function is to blow the air, never to aspire the hot air.

It is possible to drive one or more hot air outtakes to a different room from the place where the insert is installed. In that case, it is necessary equilibrate this air exit with a return channelling to avoid the room is in depression, with the risks involved.

- You dispose of a ventilation unity (turbine) of 680 m<sup>3</sup> to install under the insert (see drawing D2.19).
- The ventilation unity takes the air through the two lateral entries of the fan, which must be connected to a channel that takes air enough cold to avoid the overheating of the equipment. This channel must be connected to the outside of the housing, or at least, outside the masonry chamber built around the insert, to aspire the air of the room where it is installed. Do not forget the electrical connection of 220 V + ground connection of the equipment.



#### WARNING!! Attention, this factor is a fundamental part for the proper operation of the insert!

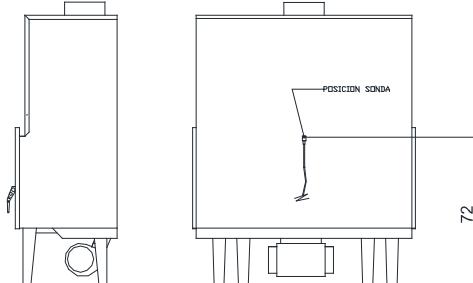
- When use an auxiliary ventilation, the air intake on the lower side of the chamber of the insert must be absolutely closed.
- With a hammer, set free at least 2 of the 4 hot air intakes (one right and another one left) at the top of the insert. Make this operation in a symmetrical way to avoid overheating zones.

## Electrical connection

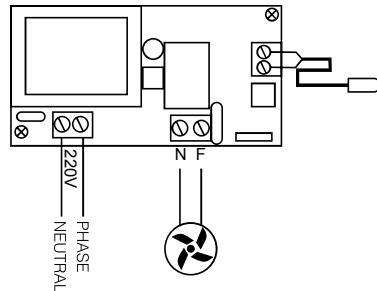
Disconnect from power before any electrical handling.

First of all, we will connect the temperature sensor which is provided with the switchboard to the insert according the attached drawing. Connect the fan with the switchboard and later connect the switchboard and the electrical network (see electrical scheme).

Probe placement



Switchboard wiring diagram



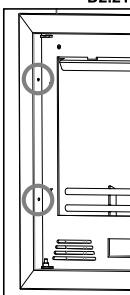
### Heat exchanger (only model Londres-V)

The heat exchanger that cross the hood of the insert must not be blocked, it is necessary to leave the holes open in order to achieve a better ventilation of the insert, increasing its performance. (see drawing D2.20).



### Replacement of the electrical components (only models Londres-T and Londres-T Visión)

It is compulsory to leave an access in the central low part of the masonry or facing to the repair / replacement of the turbine in case of breakdown. This register may be a grille with minimal measures 400x200mm (wide x high).



### 2.3.2 MODEL EVEREST

Some models include on the top an oven with an hermetic oven chamber. The base of the oven is made of refractory brick (it absorbs heat and irradiates it). Heating is produced when the smoke passes through the sides and the upper part of the oven. On the roof of the oven there is one pipe that connects the cooking chamber with the smoke outlet in order to remove the gas generated in the oven.

The oven has the following components:

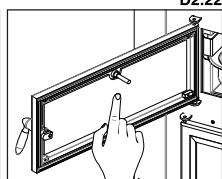
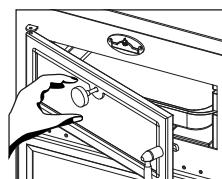
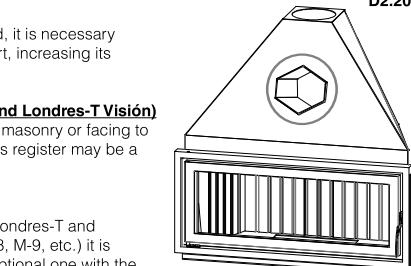
- **Thermometer** It is disassembled and you can find it in the baking tray. It shows the cooking temperature of the oven. To install it, it is necessary to introduce the sheath through the hole of the door and, then, put the nut (see drawing D2.22).



**WARNING!! The thermometer shows the cooking temperature of the oven, it never shows the combustion chamber temperature.**

The maximum cooking temperature for the oven is 200-230°C. If the thermometer shows that the oven reaches a higher temperature, this means that the equipment has been overloaded and this will invalidate the warranty.

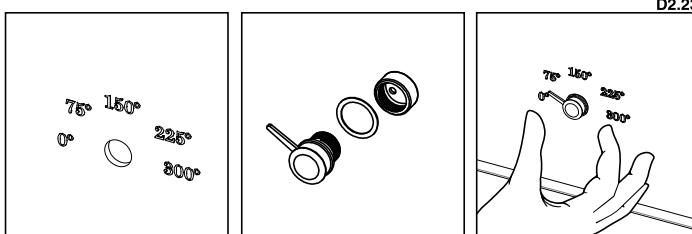
- **Tray.** It can be adjustable in two different levels according to the slot that we use. The tray must not come into contact with food. In order to avoid the damage of the tray, it is recommended to extract it outside the oven when it is not being used.
- **Refractory bricks.** They are placed on the base of the oven. Their purpose is to absorb heat and irradiate it.



This model include on the top an oven with an hermetic oven chamber. The base of the oven is made of ceramic material (it absorbs heat and irradiates it). Heating is produced when the smoke passes through the sides and the upper part of the oven. On the roof of the oven there is one pipe that connects the cooking chamber with the smoke outlet in order to remove the gas generated in the oven.

The oven has the following components:

- **Bimetallic thermometer** It is disassembled and its place is the glass of the oven. To install it, it is necessary to introduce the thermometer through the hole of the door and, then, put the rubber and the nut on the backside (see drawing D2.23).



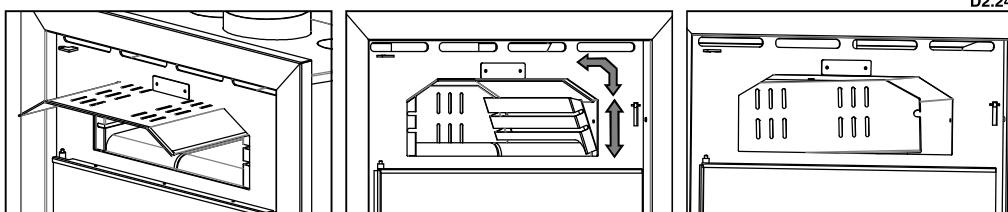
**WARNING!! The thermometer shows the cooking temperature of the oven, it never shows the combustion chamber temperature.**

The maximum cooking temperature for the oven is 200-230°C. If the thermometer shows that the oven reaches a higher temperature, this means that the equipment has been overloaded and this will invalidate the warranty.

- **Tray.** It is made of stainless steel. The tray must not come into contact with food. In order to avoid the damage of the tray, it is recommended to extract it outside the oven when it is not being used.
- **Roasting grille** If you prefer, instead of the tray you can use a roasting grille of 38x47cm. In order to avoid the damage of the tray, it is recommended to extract it outside the oven when it is not being used.
- **Ceramic pieces** They are placed on the base of the oven. Their purpose is to absorb heat and irradiate it.

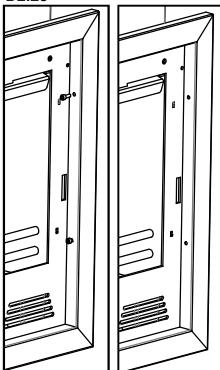
The inside of the oven of this model is composed for 4 pieces (2 guides, ceiling and rear) made in stainless steel removable to extract them and make easier the cleaning.

To remove the pieces we will follow the next steps (see drawing D2.24).



1. Remove the ceiling, slipping it out.
2. Remove the laterals guides hanging in 4 supports. To remove it you have to raise the guide and then pull it off.
3. Remove the rear hanging in two supports.

#### D2.25



#### 2.3.4 ALL THE MODELS FLORIDA SERIES

The standard frame included with the inserts is removable to make easier the installation and the repair / replacement of the electrical components (fan, thermostat, etc.).

To remove the standard frame it is necessary unscrew the 4 screws located on the upper and lower edge (2 on each edge) (see drawing D2.25).



**WARNING!! To be able to repair / replace the electrical components of the insert it is essential to have an easy way to uninstall the frame.**

**PLACING THE DEFLECTOR**

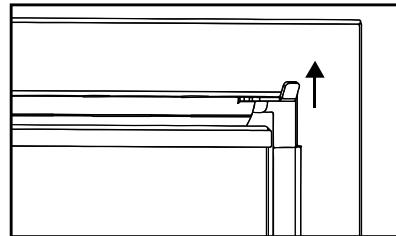
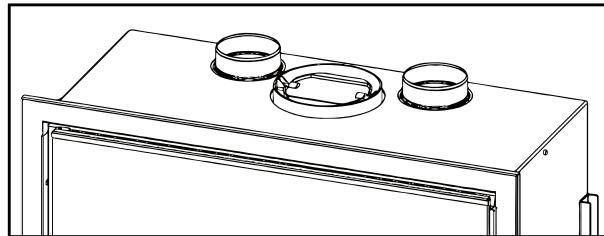
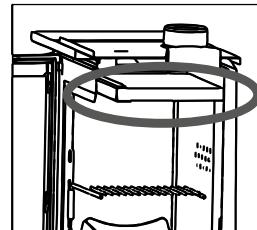
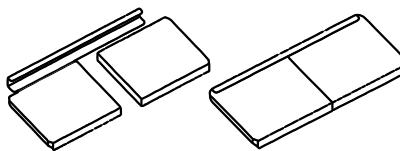
Due to safety reasons during the transport, the baffle plate is not assembled. You will find it inside the combustion chamber. To place it properly, follow the next steps:

**BLADE AIR REGULATION**

If you want to channel air to other rooms, use a hammer to release the 2 hot air outlets at the top of the insert (see diagram D2.27).

Otherwise, with the two upper outlets closed, the air will come out through the front of the appliance, for this you must have the adjustment blade open at the front of the insert. (see drawing D2.27) In the Paris 90V-G model, air can only exit through the channeling exits (not through the front), so this model does not have such a regulation blade.

D2.26



D2.27

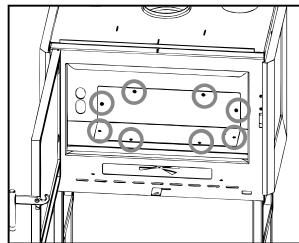
**TURBINE REPLACEMENT**

In case of replacement of one of the electrical components, in the models of the series Paris frontal, and models with lifting door (Paris 90V-G), the operation of substitution can be made without uninstalling the insert because they are placed under the base. It is possible to access the components through the combustion chamber by following the next steps. (see drawing D2.28)

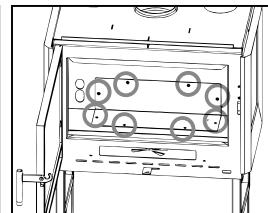
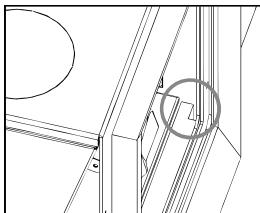
1. Remove the vermiculite baffle plate.
2. Remove the cast-iron back and side plates.
3. Remove the cast iron grate.
4. Remove the screws from the fan bracket, lift it from the left side and remove it. Be careful with the cables of the installation.

In the case of the corner and three-sided inserts of the Paris and Versailles series, the steps would be as follows (see drawing D2.29):

1. Remove the vermiculite side plates by pulling upwards from the front.
2. Remove the baffle plate.
3. Remove the cast iron grate pulling it out from the sides.
4. Remove rear cast iron plates.
5. Remove the screws from the fan bracket, lift from the left side and remove it. Be careful with the cables of the installation.



D2.28



D2.29

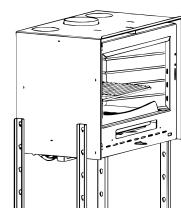
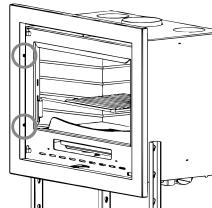
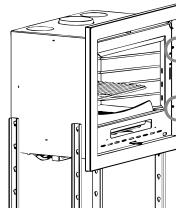
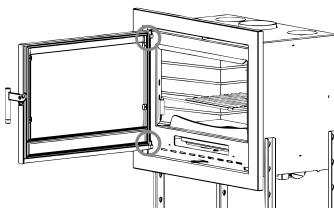
**PLACING / REPLACING THE STANDARD FRAME**

All inserts in this series incorporate a standard frame. The standard frame is detachable for an easy installation.

To uninstall the standard frame, proceed as follows:

Front models (see drawing D2.30):

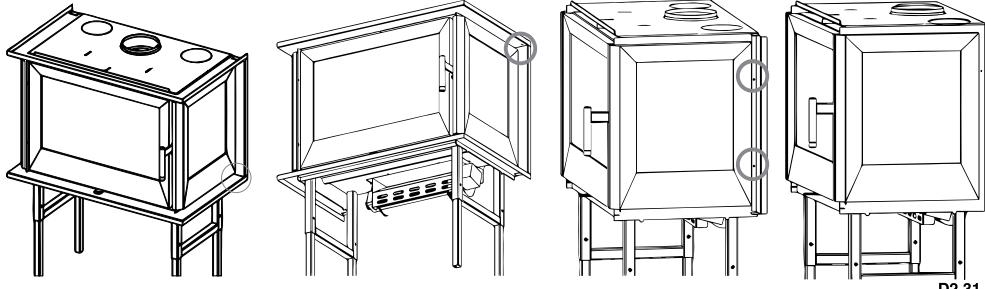
1. Remove the door, opening it and pulling it upwards.
2. Unscrew the frame screws, as indicated in the drawing.
3. Remove the frame and install the insert, fix it and reassemble the frame and the door.



D2.30

## Corner and three-sided models (see drawing D2.31):

1. Remove the rear screws from both the top and bottom frames and pull them out.
2. Remove the screws from the vertical frames and remove frames.
3. Install the insert, fix it and reassemble the frames.



D2.31

## OUTDOOR AIR INTAKE

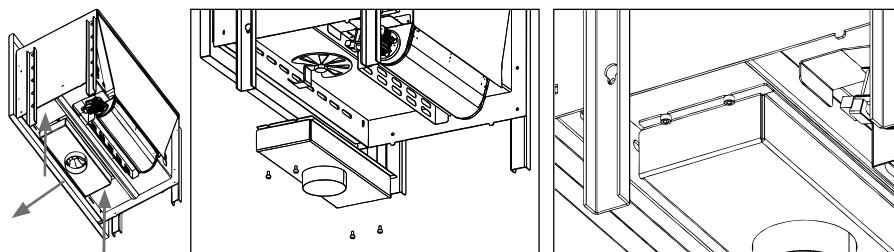
In the models of the Paris series, it is possible to choose that the entrance of primary air comes from a contiguous place or even from outside of the house.

In the case of providing air from outside or from a contiguous place, you must purchase the optional kit (KIT-AIR2) for external air intake (airtight). Simply connect the KIT with a 100 mm diameter pipe to the chosen place. Keep in mind that a too long pipe or with too many deviations (elbows), far from benefiting the intake of air, causes a great loss of load and, therefore, can cause combustion problems.

Do not forget that this external air intake is independent and different from the input needed for the ventilation unit (turbine), so the decoration or masonry made to the insert, must have a sufficient air circulation for the flow of the turbine (see drawing D2.32).

The procedure for placing the optional external air intake kit is as follows:

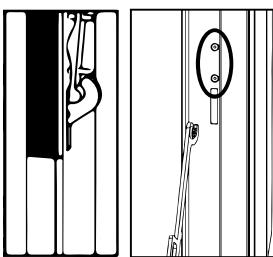
- Position the kit below the plane of fire. You must center the kit and position it on the front (inner face) as indicated in the image.
- With the supplied self-drilling screws, connect the kit to the base of the appliance.
- Connect the air intake to the exterior or selected environment through a 100 mm diameter pipe.



D2.32

## DOOR CLOSURE ADJUSTMENT

It is advisable to check the effective state of the door seals because if they are not perfectly intact (i.e. they no longer fit with the front and/or door), they do not ensure the correct functioning of the insert! You can control the adjustment of the door according to the progressive wear of the seals through the screws found on the front; by tightening and loosening these screws will get the correct adjustment of the door. (See drawing D2.33)



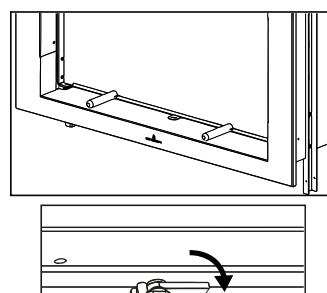
D2.33

## OPERATION: FUEL RECHARGEING ON PARIS 90V-G MODEL

In the Paris 90V-G model, the door can be raised, thanks to a system of counterweights and pulleys, the door can be easily opened. Two handles are integrated in the door to facilitate its lifting. Do not

forget to use the supplied glove or the "cold hands" accessory provided in the accessory box to manipulate the door opening when the appliance is hot and there is a risk of burns.

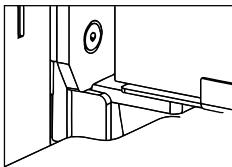
Also, at the top of the door is a safety system that must remain open to allow the door to be raised and lowered.



D2.34

**ATTENTION!!!!** The appliance will be received with the system closed to prevent the door from being lifted during transport. Don't forget to open the handle so that you can lift the door.

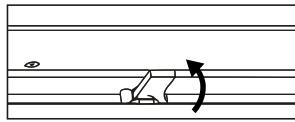
For refuelling, the use of the lifting door is recommended to facilitate operation.



D2.36

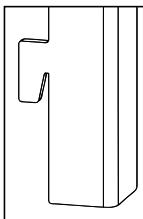
**NOTE:** It is MANDATORY to disconnect the operation of the turbine (position 0) when the lift door of the insert is opened, since depending on the smoke installation it is possible that small turbulences are created in the combustion chamber, causing the exit of smoke and/or ashes to the room where the device is installed.

When lowering the door to close it, we can observe that just before reaching the final closing position, the door will move towards the front so that the combustion chamber is sealed. Then, you should lower a few millimeters more, sliding against the front until it hits the lower stops. (see drawing D2.36)



D2.35

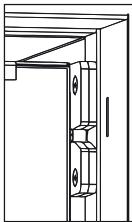
#### CLEANING AND/OR REPLACEMENT OF THE GLASS IN MODEL PARIS 90V-G



D2.37

In order to facilitate the cleaning and/or replacement of the glass, the option of lifting the door is ruled out; the door must be opened in a folding manner (from right to left). In this case, the safety handle should be closed to prevent accidental lifting of the door this point is very important, because if we do not perform the blockage and knock down the door, we can seriously damage the supports. Proceed to the opening of the door using the handle that you will find in the accessory box.

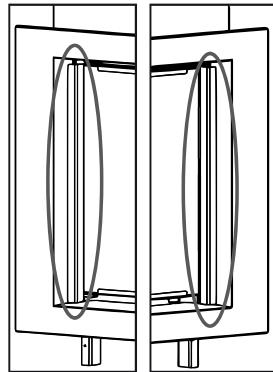
To do this, first of all, remove the trims that are on each side of the inside face of the frame (see drawing D2.37), raise the door to access the trims with more comfort, you must pull up to save the hook with which they are fastened. (see drawing D2.38)



D2.39

After cleaning and/or replacing the glass, you must close the door again and proceed in reverse:

- Push the door towards the front to close it. When the right part of the door is close to the closing, we will raise it slightly so that the anchors enter the hole more smoothly. Once you have entered the holes (see drawing D2.39), push the door hard against the front to make sure it has completely closed.
- Close the door hook.
- Proceed to open the safety handle, for the use of the lifting door.
- Raise the door and place the frame trims.



D2.38

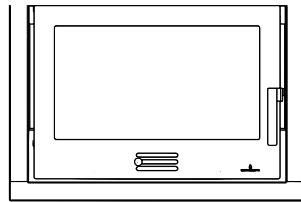
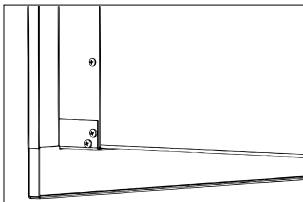
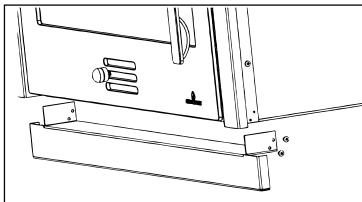
**IMPORTANT:** The cleaning of the glass must be carried out with the device cold. Special care should be taken when opening the door to ensure that the door handle is closed and that there is no accidental lifting of the door that could cause the glass to break.

#### 2.3.6 RIOJA AND COLISEO MODELS

##### PLACING / REPLACING THE STANDARD FRAME

The Rioja and Coliseo models incorporate a standard three-sided frame. Optionally you can purchase the lower profile of the frame to convert it into 4 sides. Its installation is quite simple (see drawing D2.40):

1. In order to place the lower profile, it is not necessary to remove the standard frame.
2. On each side of the insert, you will find 2 holes.
3. You must place the lower profile on the holes and screw the supplied screws.
4. The profile must be perfectly adjusted either frontally or laterally to the standard frame.



D2.40

#### 2.3.7 CAIRO SERIES

##### PLACEMENT OF INTERIOR PARTS OF THE COMBUSTION CHAMBER

Optionally, on the Cairo-90 or Cairo-110 models, the interior of the combustion chamber can be made of vermiculite or ceramic. Therefore, together with your appliance you will receive a box with all the parts of the interior of the combustion chamber of the chosen material. **Before switching on the appliance, you must correctly place all the parts:**

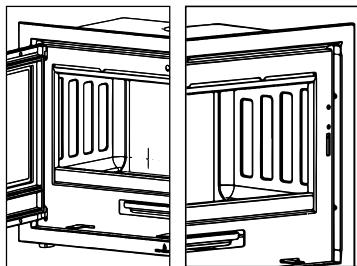
- First of all, you must place the side parts (see drawing D2.41). Obviously in the Cairo-E models, you will only have one side part.

- Subsequently place the rear parts (see drawing D2.42), in this case the Cairo-D models lack rear parts.
- With the placement of the deflector, all the interior parts will be correctly placed, preventing their movement.

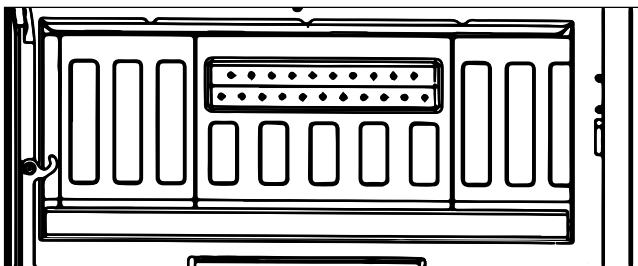


**WARNING:**

Switching on the appliance in the absence of internal parts will cause the structure of the appliance to overheat and may cause damage to the appliance, which will be exempt from the product warranty.



D2.41



D2.42

In the Cairo-70 model, you can choose between vermiculite or firetek inside the combustion chamber, therefore, you will receive the parts inside a box. Before lighting the device, all the parts must be correctly positioned, by following the above steps.

**ADJUSTMENT OF THE CERAMIC PIECES INSIDE THE COMBUSTION CHAMBER (for Cairo 90 and 110 models)**

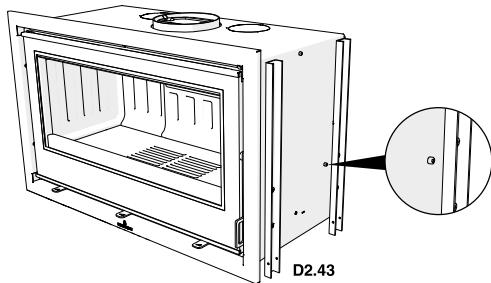
The Cairo series of inserts has the possibility of choosing the interior of the combustion chamber in the VERMICULITE option or the CERAMIC option.

The ceramic pieces may have slight differences in size from one to another.

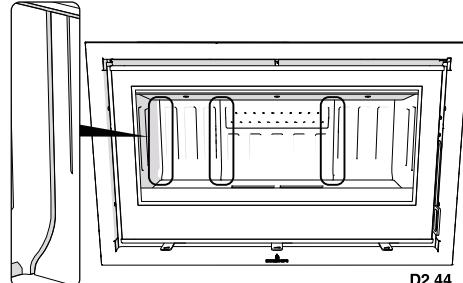
To make a perfect coupling of the pieces that compose the interior in the ceramic option, an adjustment system has been incorporated that consists of a screw that will be turned from the outside of the combustion chamber, which will bring the pieces closer together to eliminate the separation that may appear between them.

**Adjustment procedure:**

1. The first step is to prepare the interior of the combustion chamber, so all the accessories originally incorporated in the insert must be removed, leaving the fire base free.
2. Initially, the screw must be flush with the interior face of the combustion chamber in order to install the ceramic pieces.
3. The interior is mounted with the ceramic pieces. If the pieces remain together, without spaces, this part of the assembly can be considered as completed.
4. If there are spaces between the pieces, turn the side screws clockwise to push the side pieces, reducing the space between them.
5. Once there is no space left between the parts, the adjusting screws must be turned half a turn anticlockwise, to release the tensions so that the ceramic parts can be dismantled if it's necessary to access the fan support at any time.



D2.43



D2.44

**PLACING THE DEFLECTOR**

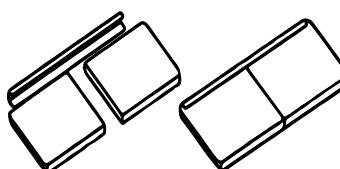
As indicated above, the deflector is a fundamental part for the proper functioning of the insert. It must be in the correct position and the insert must never be used without the deflector in place, which would result in the loss of the warranty.



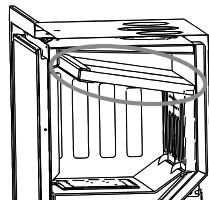
**WARNING:**

The absence of the deflector causes excessive draught, which causes too rapid combustion, excessive wood consumption and the consequent overheating of the appliance.

The baffle plate in the Cairo-70 model is disassembled. You will find it inside the combustion chamber. To fit it, proceed as explained below: (see drawing D2.45):

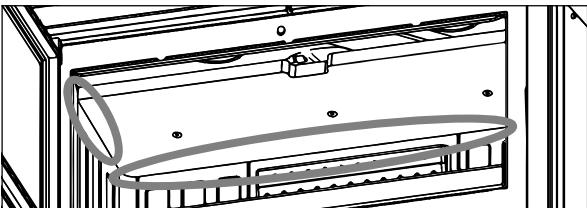


D2.45

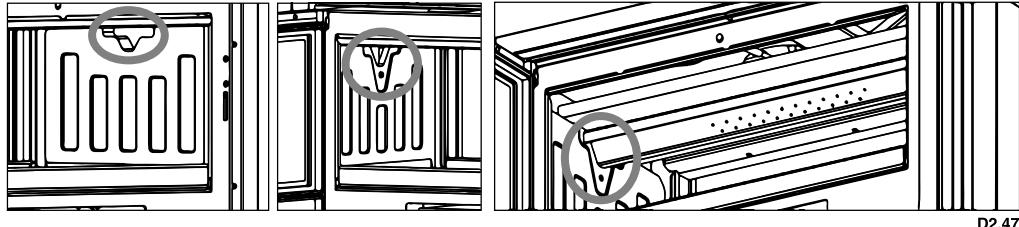


The baffle plate on 90 and 110 models of the Cairo and Cairo-E series is supported on the side parts and on the rear parts (see drawing D2.46):

In the Cairo-D models, after placing the side parts, the set formed by the deflector and the double combustion tube must be introduced. First, you must adjust the right side in its position, exceeding with the deflector the height of the right side piece, then adjust the left side of the deflector and move it to the left, to insert it in its correct position. You must place and screw the screw that assures its positioning, observe the existing recess in the left side piece to notice the correct position of the deflector. See drawing D2.47



D2.46



D2.47

**AUXILIARY VENTILATION (OPTIONAL: KIT AIRE CAIRO EF AND KIT AIRE CAIRO D for models of the Cairo-90 and Cairo-110 series) INCLUDED AS STANDARD for model Cairo-70**



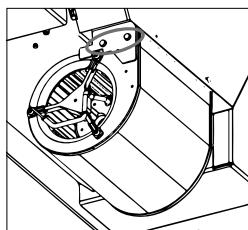
**ATTENTION:**

In order to facilitate the installation of the auxiliary fan(s), the installation and electrical connection of the auxiliary fan(s) must be carried out before installing and/or covering the appliance. With the appliance installed and coated, the ease of connection will depend on the coating made, so as to allow easy access to the rear of the appliance.

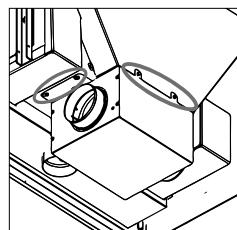
The Cairo-70 model incorporates a 225 m<sup>3</sup>/h blower as standard, the Cairo and Cairo-E models can optionally incorporate a 680 m<sup>3</sup>/h tangential turbine, whereas the Cairo-D would incorporate 2 turbines of 400 m<sup>3</sup>/h. In all cases you can disable the operation of the turbine from the control unit of the equipment, leaving it with natural convection. However, if the insert reaches a temperature above TSI (by default 100°C), the turbine/turbines will work in automatic mode for cooling. The turbine serves to propel the air, never to suck the hot air.

In the Cairo-70 model the blower is installed as standard, therefore, you do not have to keep in mind the following considerations about the installation of the blower, which are exclusively for the models of the Cairo 90 and 110 series. Regarding the connection of the canalisation pipe, you must follow the same indications:

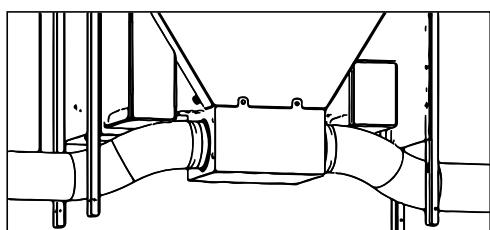
- To install the CairoEF air kit, follow these steps:
  - First of all, the fan must be screwed to the appliance, the screws required for this operation are supplied with the kit. (See drawing D2.48).
  - Place the plate plenum that will cover the ventilator, whose screws will be placed in the plane of fire of the insert itself. (See drawing D2.49)
  - Connect the ventilation unit to the outside of the house or at least outside the masonry enclosure built around the insert. This operation can be carried out with flexible pipe of 120 mm in diameter. (See drawing D2.50)
  - Make the electrical connection from the fan to the control unit (outputs 5-6), see electrical connection diagram.
  - Position the temperature probe in the correct location and connect the probe to the control unit (input 9-10), see electrical connection diagram.
  - Place the control unit in the cover of the insert, as far away as possible from the heat source, and protect it thermally to prevent damage.
  - Make the electrical connection between the control unit and the mains socket of the house (input 1-2), see electrical connection diagram.
  - Finally, if you wish to channel air to other rooms, use a hammer to release the 2 hot air outlets at the top of the insert (see diagram D2.51). Otherwise, with the two upper outlets closed, the air will exit through the front of the appliance. For this, you must have the regulation blade open located at the front of the insert. (See drawing D2.52)



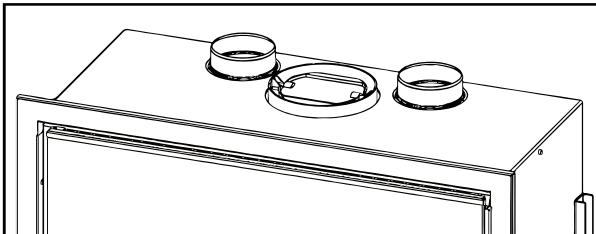
D2.48



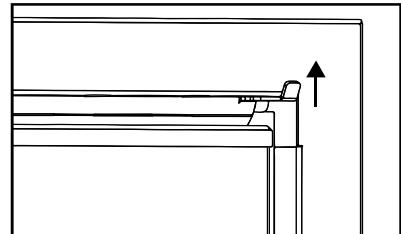
D2.49



D2.50

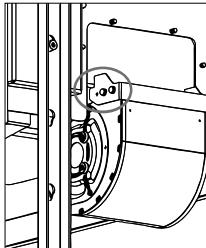


D2.51

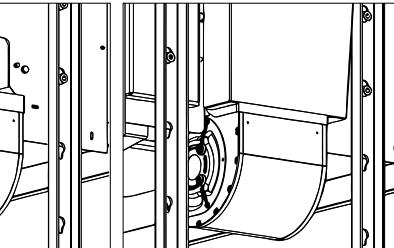


D2.52

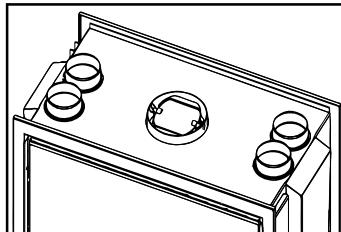
- On the other hand, to connect the CairoD air-kit, the steps to follow are:
- Screw the two 400 m<sup>3</sup>/h fans to the appliance, one on each side, the screws required for this operation are supplied with the kit. (See drawing D2.53). In order to facilitate this operation it is advisable to remove (unscrew) the air chamber of the device, so you can screw the fan better and then replace it (See drawing D2.54).
- Connect the two fans to the quick connectors to allow them to be connected to the control unit.
- Make the electrical connection of the fans to the control unit (outputs 5-6), see electrical connection diagram.
- Position the temperature probe in the correct location and connect the probe to the control unit (input 9-10), see electrical connection diagram.
- Place the control unit in the insert cover, as far away as possible from the heat source, and protect it thermally to prevent damage.
- Make the electrical connection between the control unit and the mains socket of the house (input 1-2), see electrical connection diagram.
- Finally, if you wish to channel air to other rooms, use a hammer to release at least 2 of the 4 hot air outlets at the top of the insert (see drawing D2.55). Perform this operation symmetrically to avoid overheating of the insert. Otherwise, with the upper outputs closed, the air will come out through the front of the device, for which purpose the regulating blade on the front of the device must be open (See drawing D2.56).



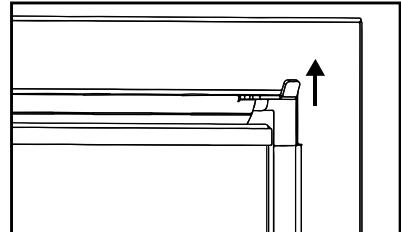
D2.53



D2.54



D2.55



D2.56

It is possible to direct one or more hot air exits to a different room and not to the one where the insert is installed.

In that case, it is necessary to compensate this exit with a return canalization in order to prevent the room is in depression, with the risks that this would entail.

The models Cairo and Cairo-E have a ventilation unit (turbine) of 680 m<sup>3</sup>/h incorporated in the bottom.

The ventilation unit takes air through the two side entrances (Ø120 mm) of the fan which must be necessarily connected to a duct that takes air cold enough in order to avoid the overheating of the equipment. This duct must be connected to the outside of the house or at least outside the masonry built around the insert, aspirating the air of the room where it is installed.

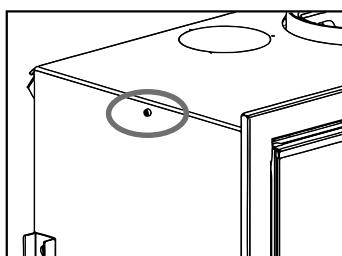
Otherwise, the combustion of the equipment may not be appropriate because the turbine will take the O<sub>2</sub> of the air intakes 1 and 2, diminishing the correct combustion of the equipment. The turbines of the Cairo-D model lack this connection Ø120 of the turbine.

**Do not forget the electrical connection of 220V and the grounding of the equipment.**

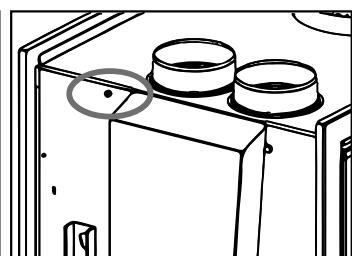
**ATTENTION! This factor is crucial for the proper operation.**

#### PROBE PLACEMENT

The position of the probe is shown in drawings D2.57 (Cairo and Cairo-E) D2.58 (Cairo-D)



D2.57



D2.58

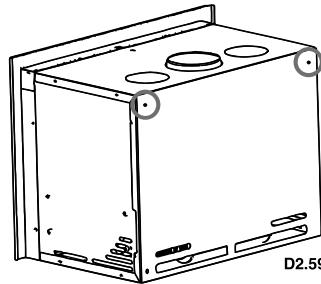
In the Cairo-70 model, the positioning of the probe is as shown in **drawing D2.59** on the back of the insert, you can choose one of the two options, depending on where the control unit is placed (to the right or to the left of the device):

#### REPLACEMENT OF ELECTRICAL COMPONENTS

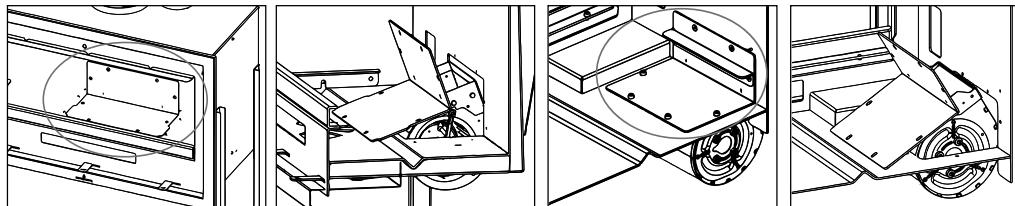
In order to be able to access the repair/replacement of the fan(s), in case of failure, you can do it in two ways:

- a. During the installation, provide a register at the bottom-centre of the cladding or masonry. This register can be a grid of minimum dimensions 400x250 mm (width x height). In this way you can unscrew the box where the fan is housed and proceed to change it.
- b. The replacement operation can be carried out by accessing the components through the combustion chamber by following the next steps (**see drawing D2.60**):

1. Remove the deflector.
2. Remove the rear and side plates.
3. Remove the fire plane.
4. Remove the screws from the fan support, and remove the fan, taking care with the connection cables.



D2.59

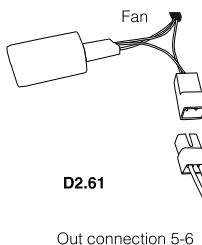


D2.60

#### ELECTRICAL CONNECTION

**WARNING.** First, disconnect power before any electrical handling.

The different elements of the ventilation kit must be connected (**see drawing D2.61**):



D2.61

Inputs: 1-2 = Supply voltage 230 Vac 50 Hz

Inputs: 9-10 = Temperature probe

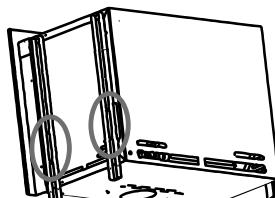
Outputs 5-6 = Fan/channels

On the Cairo-D models, you must connect both fans to the quick-connection cards to allow them to be connected to the control unit (**see drawing D2.62**). Do not forget to ground the appliance.

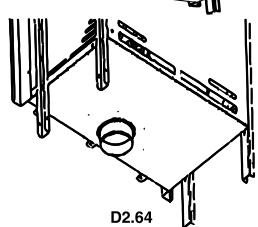
#### EXTERNAL AIR INTAKE

All models of the Cairo series, have the possibility of choosing that the primary and secondary air intake comes from an adjacent room (or even from outside the house) or from the same room where the insert is installed.

The air intakes of this model are located in the bottom, so in case that the insert is not channelled to the outside, on the Cairo-90 and Cairo-110 models (the Cairo-70 model does not have this cover as a standard feature) we recommend unscrewing the different screws of the connection cover and remove it so that the air flows through their respective intakes (**see drawing D2.63**).



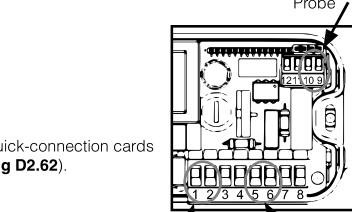
On the other hand, in the Cairo-D model, it is **COMPULSORY** to connect the primary and secondary air inlet to an environment adjacent or to the outside of the house. However, in the model it is compulsory to connect the primary and secondary air intake to an adjacent environment or outside the house.



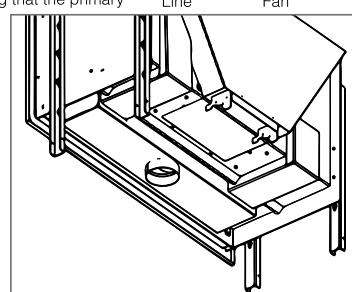
D2.64

In the Cairo-70 model, in order to connect the air inlet to the outside, the insert must be raised in height. To do this, together with the connection ring, you will have the 4 legs of the insert (KIT-AIR-5). The 4 legs must be screwed onto the screws located on both sides of the insert (**see drawing D2.64**). To place the ring, you must first remove the pre-cut piece at the bottom of the insert and screw the ring to the base (**see drawing D2.64**).

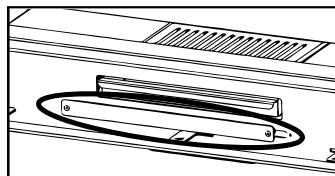
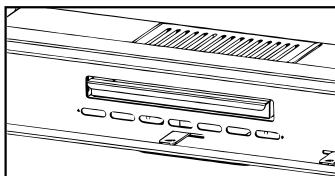
In the Cairo-70 model, finally, the cover supplied in the KIT-AIR-5 must be screwed onto the front of the appliance to prevent the appliance from taking primary air from the room in which it is installed, and only from the outside or adjacent environment. With the screws supplied, you will be able to carry out the connection of the cover, the procedure for the optional external air intake connection is as follows (**see drawing D2.65**):



D2.62



D2.63



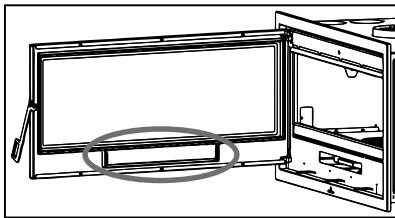
D2.65

In the case of deciding bring air from the outside or from an adjacent room, simply connect this intake through a pipe of diameter 100mm for the Cairo-90 and Cairo-110 models, and 120 mm for the Cairo-70 model. Note that a connection too long or with too many deviations (elbows), far from benefiting the contribution of air intake, causes a high load loss and, therefore, may cause combustion problems. Do not forget that this air intake is separate and distinct from the one necessary of the ventilation unit (turbine of 680 m<sup>3</sup>/h) of the Cairo-90 and Cairo-110 models of its turbine/turbines with an ambient cold enough (outside the house or outside the masonry built around the insert).

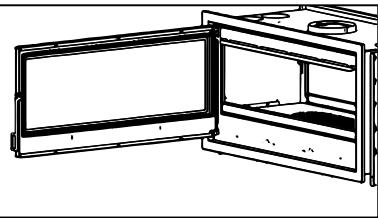
#### PLACEMENT OF DOORS IN CAIRO-D

The Cairo-D model has two doors. If you need to remove these doors to facilitate the installation process of the insert, remember to place the doors later in the correct position, to ensure the correct operation of the equipment. These doors are not interchangeable. It should be noted that the door that is placed on the side with the air regulations as well as the ash drawer has a ceramic cord in the bottom to generate the sealing with the ash drawer (see drawing D2.66).

The door on the other side of the insert only has a ceramic cord to ensure the sealing of the combustion chamber (see drawing D2.67).



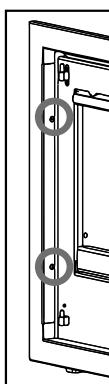
D2.66



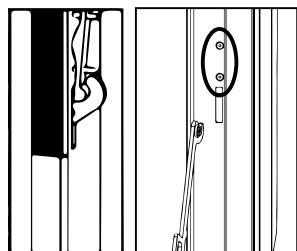
D2.67

#### DOOR CLOSING ADJUSTMENT

It is advisable to check the effective state of the door seals because if they are not perfectly intact (i.e. they no longer fit with the front and/or door), they do not ensure the correct functioning of the chimney! In the Cairo and Cairo-D models, you can adjust the adjustment of the door according to the progressive wear of the joints through the screws found in the front, tightening and loosening these screws will get the correct adjustment of the door. (See drawings D2.68).



D2.68

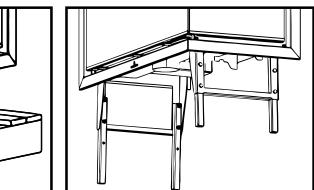
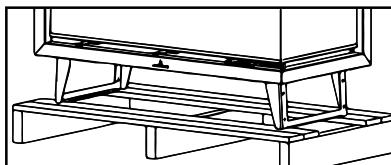


D2.69

#### PLACEMENT/REPLACEMENT FRAME

All inserts in this series have a standard 3-sided frame (for Cairo-70 model) or 4 (for Cairo-90 and Cairo-110 models). The standard frame is removable for easy installation. To dismantle the standard frame, proceed as follows (see drawing D2.69):

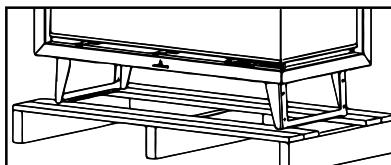
1. Remove the door by opening it and pulling it upwards.
2. Unscrew the frame screws indicated in the drawing, two on each side of the frame.
3. Remove the frame and place the insert, fix and reassemble the frame and the door.



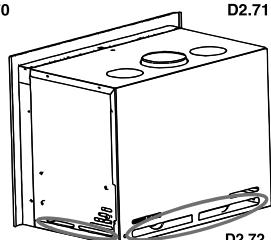
D2.70

#### PLACING HEIGHT ADJUSTABLE FEET

The models of the Cairo-90 and Cairo-110 are screwed onto the wooden pallet for easy transport (see drawing D2.70). Inside the combustion chamber you will find the two legs of the insert, which are adjustable in height according to your need. The positioning of the same is very simple: you only have to screw these legs with the 8 screws that are supplied to the structure of the appliance, choosing previously the desired height. (See drawing D2.71)



D2.70



D2.71

#### DISTANCE BETWEEN THE INSERT AND THE CLADDING WALLS

In the Cairo-70 model, there are ventilation slots both on the sides and at the rear (see drawing D2.72). These slots are important to guarantee the air flow of the blower, as well as for the ventilation of the insert itself. The installer must respect a minimum safety distance between the cladding walls and the side and rear walls of at least 8/10 cm, as well as not covering the slots of the insert, otherwise the blower flow rate would be reduced and there is a possibility of overheating in the body of the insert, which could cause structural damage to the device itself, which would not be covered by the warranty that Brondum Calefacción offers for its products.

### 3. INSTALLATION AND SAFETY INSTRUCTIONS

The way of installing the insert will affect the safety and the proper operation. For this reason, it is recommendable that the installation is carried out by people who are qualified and informed about the compliance with the installation and safety norms. **If an insert is not properly installed it may cause serious damage.**

Before the installation, follow the next verifications:

- Make sure that the floor can sustain the weight of the equipment and make a proper isolation in the case that it is made of flammable material (wood) or a material that can be affected by a thermal shock (plaster cast, for example). If the equipment is installed on a floor which is not completely refractory or inflammable such as parquet, carpet, etc, it is necessary to replace this part or introduce a fire-resistant base so that it protrudes out the fireplace 30 cm. Example of materials include steel flooring, glass base or any other type of fire-resistant material.
- Make sure that there is proper ventilation in the place where it is installed (air intake) (see section 5 of the manual).
- Avoid the installation in places where there are collective ventilation pipes, hoods with or without extractor, B type gas equipments, heat pumps or equipments that can cause that the draw of the chimney is not good if they are used at the same time.
- Make sure that the smoke duct and the pipes used for the chimney are suitable for the operation of the insert.
- We recommend that you call your fitter in order to check both the chimney as well as the air flow for the combustion.
- This product can be installed near the walls as long as the they comply with the following requirements:
- The fitter must assure that the wall is completely made of brick masonry, thermo-clay block, concrete, bricks, etc, and that it is coated by materials that can support high temperature.
- Therefore, for any other type of material (drywall, wood, non-ceramic glass, etc), the fitter must provide sufficient insulation or keep a minimum safety distance to the wall of 80-100 cm.
- Keep any flammable or heat sensitive materials (furniture, curtains, and clothing) at a minimum distance of about 100cm, including the area in front of the loading door. Measurements below the minimum distances should not be used.

#### 3.1. SAFETY MEASURES

During the installation of the equipment, there are risks to be taken into account, so you should follow the next safety measures:

- a. Do not place flammable objects above.
- b. Do not place the insert near combustible walls.
- c. The insert should only be used when the ash pan is inserted.
- d. It is recommended to install carbon monoxide detector (CO) in the room where the equipment is installed.
- e. Use the glove included for opening and closing the door as well as manipulating the controls as these can be very hot.
- f. Solid combustion residues (ashes) should be collected in an airtight container and resistant to fire.
- g. The appliance should never be turned on in the presence of emission of gases or vapours (e.g., linoleum glue, gasoline, etc).
- h. Do not place nearby flammable materials.



#### **WARNING!!**

**If is noted that both the insert and the glass get very hot and should not be touched.**

#### 3.2

#### INTERVENTION IN CASE OF EMERGENCY

If there is fire in the chimney:

- a. Close the loading door.
- b. Close primary and secondary air intakes.
- c. Put the fire out by using carbon dioxide extinguishers (CO2 powder).
- d. Request for the immediate intervention of the fire-fighters.

#### **DO NOT PUT THE FIRE OFF WITH WATER.**

#### **WARNING:**

**The manufacturer declines any responsibility for the malfunction of an installation not subject to the requirements of these instructions or the use of additional products not appropriate.**

### 4. CHIMNEY

The chimney is of basic importance in the proper functioning of the insert and primarily has two functions:

- Evacuate the smoke and the gas safely out of the house.
- Provide sufficient draft to the insert in order to keep the fire.

Therefore, it is essential that it is made perfectly and that it is subjected to maintenance operations in order to keep it in good condition (many of the claims due to malfunctioning reasons refer exclusively to a bad draft). The chimney can be made of masonry or metallic pipe compound.

It is necessary to comply with the following requirements for the proper operation of the stove:

- The interior section must be perfectly circular.
- It must be thermally insulated along its entire length in order to prevent condensation (the smoke is liquefied by heat shock) and even more if the installation is outside the house.
- If we use metallic pipe for the installation outside the house, it is compulsory to use thermal insulated pipe. It consist of two concentric pipes and, between them, there is a thermal insulator. Moreover, we will avoid condensation problems.
- It should not have bottlenecks (enlargements or reductions) and it must be vertical with deviations not higher than 45°.
- Do not use horizontal sections.
- If it has been used previously, it must be clean.
- Respect the technical data of the instructions manual.

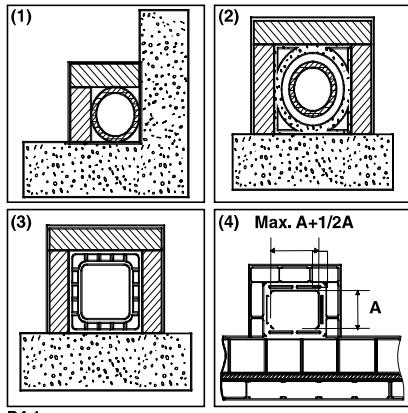
## \*\* For the fitter

The optimum draft for the inserts vary between 12+/-2 Pa (1.0–1.4 mm water column). We recommend checking the technical information of the product.

A lower value causes a bad combustion causing carbonic deposits and excessive smoke generation, having leaks and, even worse, an increase of the temperature that could damage the structural components of the insert, while a higher value leads to a too rapid combustion with the heat dispersion through the flue.

Materials that are prohibited for the chimney and, therefore, damage the proper functioning of the equipment are: fibre cement, galvanized steel (at least in the first few meters) and rough and porous interior surfaces. **Drawing D4.1** shows some examples of solution.

All inserts that send smoke to the exterior should have their own chimney.



D4.1

(1) Stainless steel AISI 316 chimney with double insulated chamber and material resistant up to 400°C. **Efficiency 100% optimum.**

(2) Traditional clay chimney with square section and holes. **Efficiency 80% optimum.**

(3) Chimney with refractory material and double insulated chamber and exterior coating made of lightweight concrete. **Efficiency 100% optimum.**

(4) Avoid chimneys with rectangular interior section different to the one of the drawing. **Efficiency 40% poor.**  
Not recommended

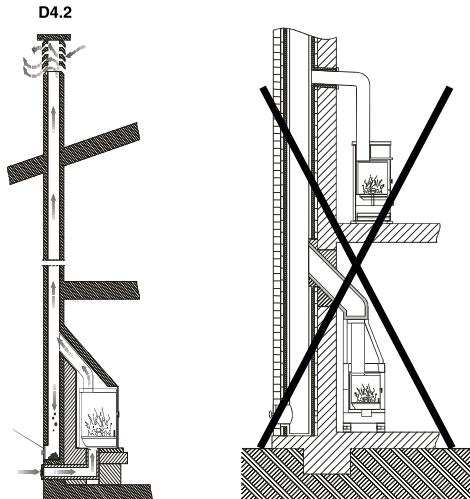


Never use the same chimney for several equipments at the same time (see drawing D4.2).

The minimum diameter must be 4 dm<sup>2</sup> (for example, 20 x 20 cm) for inserts with a diameter below 200 mm or 6.25 dm<sup>2</sup> (for example, 25 x 25 cm) for equipments with a diameter higher than 200 mm.

A big section of the chimney (for example, diameter of the pipe superior to the one recommended) may results in a volume too large to be heated and, therefore, it can cause difficulties for the proper operation of the equipment. In order to avoid this problem, it is necessary to enclose the chimney in its entire length. However, a small section (for example, diameter of the pipe inferior to the one recommended) may cause a reduction of the draft.

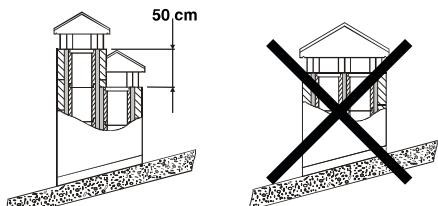
**The flue must be away from flammable or combustible materials through an appropriate insulation or an air chamber. In the case that they pass through flammable materials compounds, they should be eliminated.**



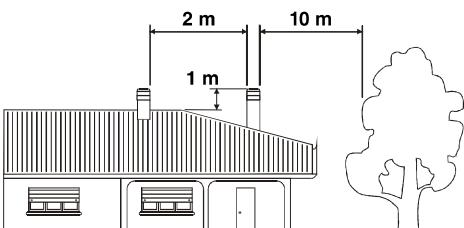
**Inside, it is forbidden that there are pipes of installations or air abduction channels.** It is also prohibited to do mobile or fixed openings for connecting other different equipments..

**If we use metallic pipes inside a masonry duct, it is essential that they are well insulated and with appropriate materials (insulating fibre coatings) in order to avoid the deterioration of the masonry or the interior coating.**

D4.3



(1) In the case that there are chimneys placed side by side, one of them must exceed to the other at least 50 cm in order to avoid pressure movements among them



(1) The chimney can't have obstacles around 10 m towards walls or trees. Otherwise, raise it at least 1 m above the obstacle. The chimney must exceed the top of the roof at least 1 m.

## 4.1 CONNECTION OF THE INSERT TO THE CHIMNEY

The connection to the insert for the smoke evacuation must be done with rigid aluminized steel pipes or stainless steel pipes.

**It is forbidden the use of flexible metallic pipes or fibre cement pipes because they damage the safety of the connection because they are subject to jerks and breaks, which causes smoke losses.**

The chimney must be fixed hermetically to the smoke outlet of the insert. It should be rectilinear and with a material that supports high temperatures (minimum 300°C). It can have a maximum inclination of 45° whereby excessive deposits of condensation produced in the initial stages of ignition and / or excessive soot formation is avoided. Moreover, it avoids the slowing down of the smoke when it comes out. The lack of sealing of the connection may cause the malfunction of the equipment.

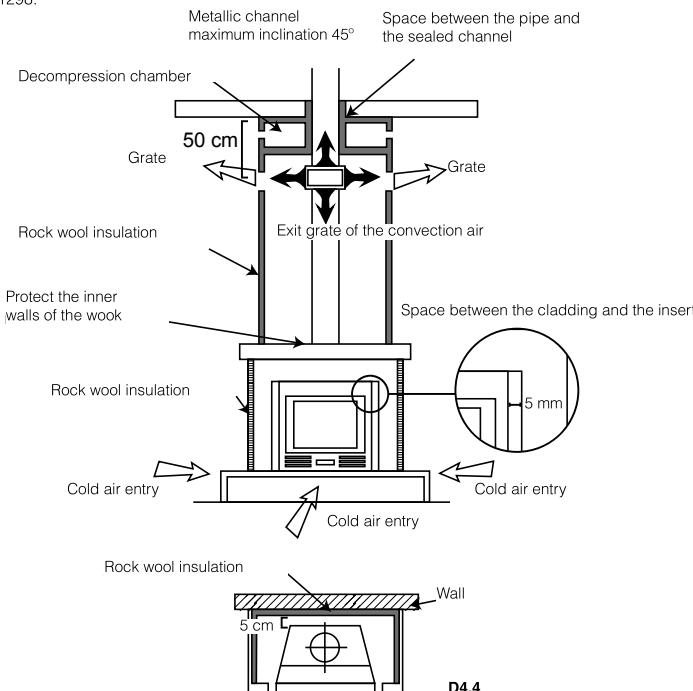
The internal diameter of the connection pipe should correspond to the external diameter of the chimney of the equipment. This service is assured by the pipes complying with DIN 1298.

## 4.2 COATING AND INSTALLATION OF THE INSERT

When the insert is installed in a facing or an old chimney it is essential the space among the top and the sides of the equipment and the fireproof material of the hood (which block the base of the chimney) will be constantly ventilated.

For this reason, it is necessary to keep an fresh air entry on the bottom of the facing and an exit on the top (hot air exit) by the hood. The function will be improved due to there is a natural convection circuit.

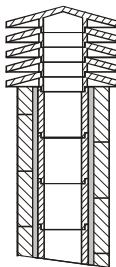
Every one of these openings must be free and not blocked with a surface of 3 dm<sup>2</sup> at least (for example, grille 30x10 cm.).



## 4.3 CHIMNEY COWL

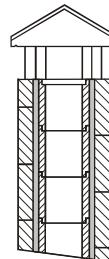
The chimney draft also depends on the chimney cowl.

The chimney cowl should assure the smoke discharge even during windy days, having into account that it must exceed the top of the roof (see drawing D4.5).



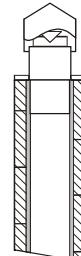
(1) Industrial chimney of prefabricated elements that allow a good smoke extraction.

D4.5



(2) Traditional chimney. The proper exit section must be, at least, two times the interior section of the chimney, the best is 2.5 times

3) Chimney with interior cone smoke deflector.



The chimney cowl must comply with the following requirements:

- It must have the same interior section of the insert.
- It must have an usable exit section that is two times the one of the interior of the chimney.
- It must be constructed so that the rain, snow or any other object do not enter inside.
- It must be easily accessible in order to do servicing and cleaning tasks.

If the chimney cowl is metallic, due to its own design adapted to the diameter of the pipe, the smoke discharge is assured. There are different models of metallic chimney cowl, fixed, anti-return, and rotary or extractor.

## 5. OUTSIDE AIR INTAKE

For the proper operation of the insert, it is essential that there is air enough for the combustion and re/oxygenation of the environment where it is installed. In the case of houses built under the requirements of "energy efficiency" with a great degree of air tightness, it is possible that the air intake is not guaranteed \*the filter must assure compliance with the Technical Building Code. This means that the air must be able to move for the combustion through some openings connected to the exterior, even when doors and windows are closed. Moreover, it must comply with the following requirements:

- It must be placed in so that it cannot be obstructed.
- It must be connected to the environment where the equipment is installed and it must be protected by a grate.
- The minimum area of the outlet should not be less than 100 cm<sup>2</sup>. Check regulations on this issue.
- When the air flow comes through openings that are connected to the exterior of adjacent environments, it is important to avoid air intakes in connection with garages, kitchens, toilets, etc.

## 6. FUELS ALLOWED/NOT ALLOWED

The fuel allowed is wood. Use only dry firewood (max. moisture content 20%, which corresponds to firewood that was cut two years ago). The length of the logs will depend on the model (you can check the technical features of each model in our web site [www.bronpi.com](http://www.bronpi.com)). Compressed wood briquettes must be used carefully in order to avoid harmful overheating of the equipment because they have a high calorific power.

The wood used as fuel must be stored in a dry place. Damp firewood has approximately 60% of water. Therefore, it is not suitable to be burnt because it makes the ignition more difficult due to the fact that the heat is used to vaporize the water. Moreover, the moisture content has also the disadvantage that, when the temperature is lower, the water condense in the fireplace and the chimney. This causes the soot accumulation and condensation, with the consequent risk of fire.



**Among others, it is not allowed to use coal, barks and panels, damp firewood or with paint or plastic materials. In these cases, the warranty of the fireplace shall terminate. It is forbidden to use waste and it would damage the equipment.**

Paper and cardboard should only be used during the ignition.

Below is an instructions table about the type of firewood and the quality for the combustion.

TYPE OF WOOD	QUALITY
HOLM OAK	OPTIMAL
ASH TREE	VERY GOOD
BIRCH TREE	GOOD
ELM TREE	GOOD
BEECH	GOOD
WILLOW	NOT ENOUGH
FIR TREE	NOT ENOUGH
WILD PINE	INSUFFICIENT
POPLAR	INSUFFICIENT

## 7. STARTUP (FIRST IGNITIONS)

In order to ignite the fire, we recommend using small wood strips with paper or other means such as fire starters. It is forbidden to use liquid substances such as alcohol, gasoline, petroleum or similar products.



**WARNING!! At the beginning, it is possible that you note smoke or smell which are typically produced when metals are subject to high temperatures or when the paint is still fresh.**

**Never ignite the equipment when there are combustible gases in the environment.**

In order to do a proper start-up of the products treated with paints used at high temperatures, it is important to consider the following conditions:

- The materials of the products are not homogenous due to the fact that there are cast-iron parts and steel parts.
- The temperature of the product-s body is not uniform: among different zones there are variable temperatures between 300°C and 500°C.
- During its lifetime, the product is subject to ignitions stoppages even in the same day, as well as intensive use or not use depending on the season.
- The equipment, at the beginning, must be subject to different start-up cycles so that all materials and the paint can complete different elastic expansions.

Therefore, it is important to adopt these measures during the ignition phase:

1. Assure that there is a good air refill in the place where the equipment is installed.
2. During the 4 o 5 first ignitions, do not load excessively the combustion chamber and keep the insert lit during at least 6-10 hours continuously.
3. Then, load it more, respecting the recommended load and try to leave the fireplace lit the maximum time as possible, trying to avoid short ignition periods.
4. During the first ignitions, you should not place any object on the equipment and, in particular, on lacquered surfaces. Lacquered surfaces should not be touched while the equipment is heated.

## 8. IGNITION AND NORMAL OPERATION

In order to do a good ignition of the insert, it is necessary to follow the next steps:

- a. Open the door. Open completely the regulator of the primary air intake and the regulator of the secondary air intake (in adjustable models) (see point. 2).

- b. Insert a fire starter or a paper ball and some wood splinters into the chamber.
- c. Light the paper or the splinter. Close the door slowly and leave it half-open 10 or 15 minutes while the glass is heated.
- d. When there is flame enough, open the door slowly in order to avoid smoke returns and load the fireplace with dry wood logs. Close the door slowly.
- e. When the logs are lit, use the regulators located on the frontal part (primary and secondary air intake) in order to control the heat emission of the insert. These regulators should be opened according to the heating needs. The best combustion (with minimum emissions) is reached when the main part of the air for the combustion passes through the secondary air regulator.

In addition to the air regulation for the combustion, the draw also affects the intensity of the combustion and the heating performance of your equipment. A good draft of the fireplace needs a reduced regulation of the air for the combustion, while a lack of draft needs a good regulation of the air for the combustion.

**Due to safety reasons, the door must remain closed when the fireplaces is being used.** You should only open the door for loading the fuel.

In order to refill the fuel, open the door slowly, open the primary air intake, introduce the wood and close the door. After 3-5 minutes, return to the combustion recommended regulation.

**Do not overload the equipment (see maximum fuel load). Too much fuel and too much air for the combustion can cause the overheating and, therefore, damage the equipment. The non-compliance of this rule shall invalidate the warranty.**

## 9. SERVICING AND CARE

The insert, the chimney and, in general, the whole installation, must be cleaned completely at least once a year or when necessary.



**WARNING!! Maintenance and servicing operations must be done when the insert is cold.**

### 9.1 CLEANING THE CHIMNEY

When the wood is burnt slowly, it produces tars and other organic vapours that combined with the humidity they create the creosote (soot). An excessive accumulation of soot may cause problems in the smoke outlet and even the smoke duct may suffer a fire. A chimney sweep should perform this task and, at the same time, examine the smoke duct. During the cleaning tasks, it is necessary to remove the ash pan, the grille and the smoke baffle plate in order to makes easier the fall of the soot.

It is recommended to use anti-soot envelopes during the operation of the insert at least once a week. These envelopes are placed directly on the fire and you can buy them in the same Bronpi distributor where you bought your fireplace.

### 9.2 CLEANING THE GLASS

#### IMPORTANT:

Clean the glass only when it is cold in order to avoid its explosion.

You can use specific products such as vitro ceramic-cleaning products. Do not use aggressive or abrasive products that stain the glass.

You can find Bronpi vitro ceramic-cleaning product in the same Bronpi distributor where you bought your fireplace.

**BREAKAGE OF GLASSES:** the glasses, as they are vitro ceramic, resist until 750°C and they are not subject to thermal shocks. The breakage can only be caused by mechanical shocks (crashes or violent closing of the door, etc). Therefore, its replacement is not included in the warranty.

### 9.3 CLEANING THE ASH

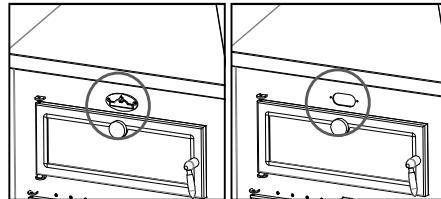
All inserts have an ash pan for the ash collection. We recommend emptying the ash pan regularly in order to avoid that it is full completely so that the grille does not overheat. Moreover, we recommend leaving 2-3 cm of ash on the base.

D9.1

### 9.4 SPECIFICATIONS FOR MODELS WITH OVEN

(Only models Everest and Everest Visión)

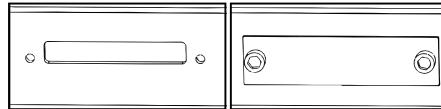
Over time and with the use, this model can create soot deposits in the external parts of the oven. These deposits can obstruct the draw and cause a malfunction of the insert. For this reason, it is important to remove them through a register that is hidden under the logo of the oven door. It is necessary to unscrew the logo and use the hole in order to proceed with the cleaning (see drawing D9.1).



**When you are cleaning the oven, please be careful and do not use aggressive products because they can wear down the paint and too much water can oxidise it.**

D9.2

In the model Everest Visión the cleaning register is hidden under the door. To cleaning it, the cover must be unscrewed and the register will appear (see drawing D9.2).



### 9.5 EXTERNAL CLEANING

Do not clean the external surface of the insert with water or abrasive products because they may damage the fireplace. Use a feather duster or a rag a bit wet.

## 10. SEASONAL STOPPAGES

After cleaning the chimney and the insert by removing the ash and other residues, close all doors and regulators.

It is recommended to clean the chimney at least once a year. Meanwhile, check the joints because if they are not in good condition (they do not adjust to the door), they do not guarantee the proper operation of the insert! For this reason, it would be necessary to change them. You can find this spare part in the same Bronpi distributor where you bought your insert.

If there is humidity in the place where the fireplace is installed, put absorbent salts inside the equipment. Protect the internal parts with neutral vaseline in order to keep the appearance along the time.

## 11. TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE REASON	SOLUTION	
The insert gives off smoke	Inappropriate use of the insert	Open the primary air intake a few minutes and then open the door	
	Smoke duct is cold	Pre-heat the insert	
	Smoke duct is obstructed	Check the duct and the connector to see if it is obstructed or has excessive soot	PROFES
	Smoke duct is oversized	Install an appropriate diameter	PROFES
	Smoke duct is tight	Install an appropriate diameter	PROFES
	The draw is not enough	Add length to the chimney	PROFES
	Smoke duct with infiltrations	Seal connections between sections	PROFES
	More than one equipment connected to the duct	Disconnect the rest of equipments and seal the entrances	PROFES
Air returns	Inappropriate use of the insert	Open completely the primary air intake one and, later, the door during a few minutes	
	Combustion range too low. Lack of draw	Use the insert with an appropriate range. Increase the primary air intake	
	Excessive ash accumulation	Empty the ash pan frequently	
	The smoke duct does not protrude the top of the roof	Add length to the chimney	PROFES
Combustion out of control	The door is not sealed properly or is open	Close the door or change the sealing cords	PROFES
	Excessive draw	Check the installation or install a draft-diverter valve	PROFES
	Refractory sealing plaster is damaged	Check the joints and use refractory putty	PROFES
	Smoke duct is oversized	Install an appropriate diameter	PROFES
	Strong winds	Install an appropriate chimney cowl	PROFES
Insufficient heat	Green or wet wood with bad quality	Use dry wood. Air dried during at least 1 year	
	Green or wet wood with bad quality	Use dry wood. Air dried during at least 2 years	
	Lack of primary air	Increase the primary air intake	
	Smoke duct with air infiltrations	Use an insulated system of chimney	
	Masonry exterior of the chimney is cold	Insulate thermally the chimney	PROFES
Low flow in channel	Heat loss in the house	Seal windows, openings, etc	
	One of the fans does not work	Check the correct operation of the fans	PROFES
	There are too many channel duct	Check the longer of the channel	PROFES
The fans do not stop even when the equipment is cold	The connections rings are not correctly placed	Check the placement of the connection rings	PROFES
	The thermostat has been blocked	The thermostat is defective and have to be replaced	PROFES
The fans do not work in automatic mode	The thermostat do not detect the temperature	The thermostat is defective and have to be replaced	PROFES
The fans always work at the same speed	The resistance is faulty	The resistance is defective and have to be replaced	PROFES
The circuit breaker / differential switch stops when the fan works	Faulty components or electrical touches	Check the components and the state of the electrical system.	PROFES

\*\* The note PROFES means that the task must be done by a professional.