Pellet Insert
IK900

Instruction Manual

Read these instructions carefully before installing, using and servicing the unit. The instruction manual is an integral part of the product.

Thank you for purchasing a STANLEY appliance.

Please read this manual carefully and keep it for future reference.
* All our products fulfil the requirements of the Construction Products Directive (Directive 89/106/EEC) and have been approved with the CE conformity mark;

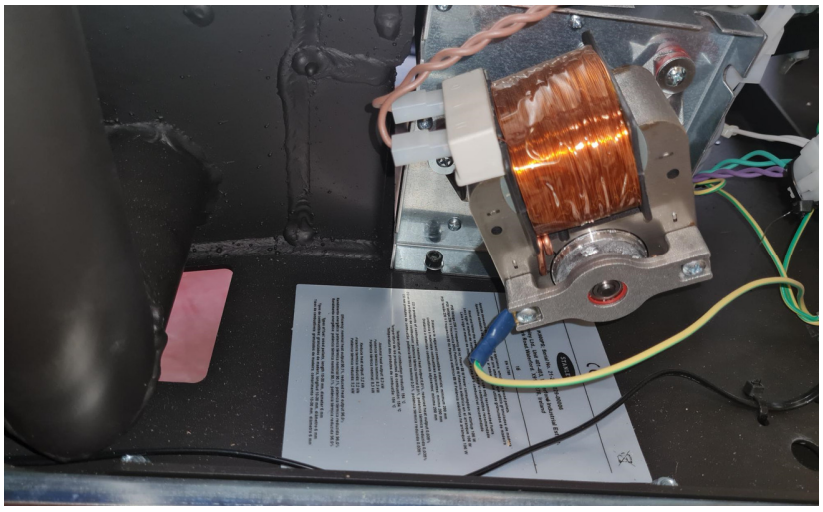
* The Pellet Burning Free Standing Fires are designed according to EN 14785:2008 Standards

* STANLEY disclaims any responsibility for damages to the unit if installed by non-qualified personnel;

* STANLEY is not responsible for any damage to units not installed and used in compliance to the instructions included in this manual;

* All local regulations, including but not limited to national and European standards, must be observed when installing, operating and servicing the unit;

* Whenever you need assistance, you should contact the supplier or installer of your equipment. You should provide the serial number of your stove that is located on the nameplate on the back of the equipment , the nameplate is located on the right hand side ,but can only be seen when the products is withdrawn from the opening. Disconnect electrical supply prior to viewing serial withdrawing the product.



*The technical service must be performed by the unit Installer or Supplier, except on situations where the assessment performed by the installer or service engineer determines that STANLEY should be contacted, if required.

Contacts for technical support:
www.waterfordstanley.com
service@waterfordstanley.com

Table of Contents

1. Warranty

Your Stanley pellet stove is guaranteed against any part that fails (under normal operating conditions) as detailed in the following table with timelines specified from the date of installation of the appliance. If the stove is not installed within six months of date of purchase, the warranty will commence six months from the date of purchase.

Warranty Period	Parts Covered (Parts & Labour unless Stated)
Up to 1 Year	Refractory materials (supply only) Rope seals, glass seals and cement seals. Surface Finish on Seno models. Grates and fire bars. Ceramic glass is covered for Thermal breakage (supply only). Rust (if reported before installation) Aesthetic Damage (provided reported on date of receipt) Electrical components under normal operation.
Up to 2 Years	All external casings & enamel finishes (excluding impact damage or damage caused by overfiring). Pictures of damage must be submitted to WS Service Department.
Up to 3 Years	Boiler - A Leaking Boiler Report must be conducted by an Authorised Stanley Service Engineer and submitted to WS Service Department for review.

All warranty claims must be reported to the Waterford Stanley Service Department and must be submitted with the product serial number (located on the data plaque at the rear of the product), date of purchase, proof of purchase (if requested) and details of the specific nature of the problem.

The warranty is given only to the original consumer/purchaser only and is non- transferable. The appliance must be installed by a suitable qualified person and installed as per the requirements of the manual. Failure to comply with the Installation requirements or Building Regulations will void your warranty. Waterford Stanley reserve the right to replace any part due to manufacturing defect that fails within the warranty period under the terms of the warranty. The stove must be used for normal domestic purposes only and in accordance with manufacturer's operation instructions.

LIMITS OF LIABILITY
The warranty does not cover:
Special, incidental or consequential damages, injury to persons or Property, or any other consequential loss.
Any issue caused by negligence, misuse, abuse or circumstances beyond Waterford Stanley's control.

2. Package Content

The packaging of the equipment has the following contents:

- Pellet Insert model, IK900 Insert Stove.
- Handle for opening the door and extracting the equipment;
- Power cable;
- Infrared remote control;

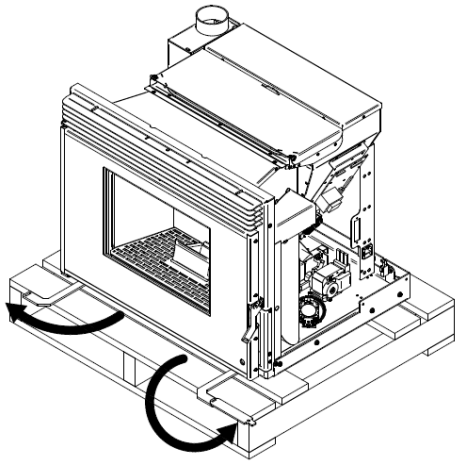
2.1 Unpacking the insert

To unpack the equipment, you must first remove the retractable bag that surrounds the carton box. Then remove the box by lifting it up and removing the bag wrapping the insert and the Styrofoam plates.

- The insert has a fixed part and a movable part which can be separated. To separate the two parts, first open the two safety latches under the door, use the accessory to make it easier to open.

Figure 1 – Open safety latches

- With the two latches open, use them as pullers to separate the movable part from the fixed part attached to the pallet.



- ⚠ **Notice.** When you open the runner system to the limit, you notice a ledge that locks the moving part, as the ledge passes, the slides are released and the equipment may fall. You have to be careful that this does not occur. The movable part of the fixed part is then separated.
- The surfaces on which the parts are supported must be protected.

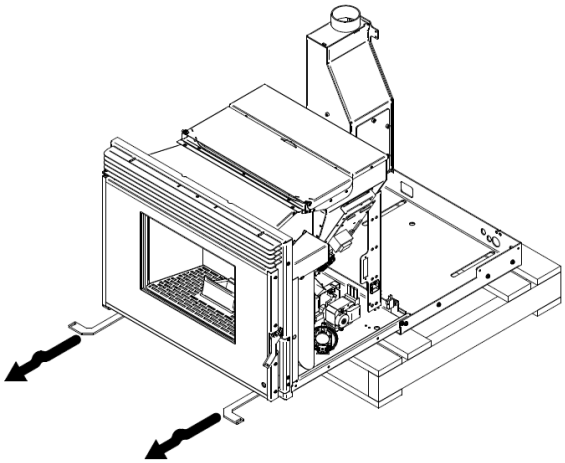


Figure 2 – Separate moving and fixed parts

- With the help of a star wrench PZ2 remove the two screws securing the fixed part to the pallet, the equipment is thus completely unpacked.

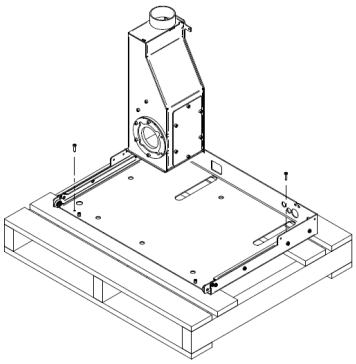


Figure 3 – Separate parts

3. Safety Precautions

- Make sure you fully read and understand the instructions contained in this manual before using the pellet insert as a biomass heating unit.
- The pellet insert is not intended for use by children or people physically and/or mentally challenged, or that are inexperienced or unfamiliar with using the unit, except when under supervision or after receiving proper training.
- Do not touch the pellet insert when barefoot or if any part of your body is wet or humid;
- Do not tamper with the safety devices or adjustment features without the STANLEY SA manufacturer's authorization;
- It is prohibited to cover or reduce the size of the ventilation openings of the installation;
- The pellet insert is an equipment that requires air to have a proper combustion, the possible Airtightness of the place where the equipment is located or the existence of other sources of air extraction in the house can prevent the correct functioning of the equipment;
- The existence of vents is a requirement for proper combustion;
- Please keep the packing materials away from children;
- During normal operation, DO NOT open the door of the unit;
- Some parts may overheat during normal operation, so the direct contact with hot parts such as the door handle and glass should be avoided;
- Check for the existence of any obstructions to the fume duct before turning on the unit after a long idle period;
- The pellet insert is designed to work inside a protected environment. Safety systems may be used to turn off the insert. If this happens, contact the after-sales service and never in any situation disarm the safety systems;
- The pellet insert is a biomass heating unit equipped with an electric fume extractor. The occurrence of a power failure during its use may prevent the fume to be extracted, consequently causing the room to be filled with smoke. For this reason, a natural fume extraction system, like a chimney, is recommended;
- NEVER turn off an operating Free Standing Pellet Fire unit by disconnecting the electric plug. The fume extractor on the Free-Standing Pellet Fire unit is a powered feature, so disconnecting the power plug will prevent the extraction of combustion fumes;
- The unit must be disconnected from the mains power before any maintenance procedures can be performed. Please allow the unit to cool down completely before any maintenance operation (if operating before);
- Never touch the interior of the unit without disconnecting it from the power mains.

4. Advice on action in the event of a fire in a chimney (including equipment)

- Try to put out the fire, without risking your life.
- If you cannot put out the fire within a minute, you should call the fire department.
- Close the doors and windows or partition where the fire has flared.
- Turn off the power and close the gas before leaving your home.
- Once outside, you must wait for the firemen and be ready to give them the following information: location of the fire, possible materials that are burning and what they can do to prevent fire progression.

5. Technical Specifications

Features	IK900	Units
Weight	114	kg
Height	606	mm
Width	688	mm
Depth	573	mm
Diameter of the fume discharge pipe	80	mm
Reservoir capacity	15	kg
Maximum heating capacity	188	m³
Maximum overall thermal power	8,3	kW
Minimum thermal power	3,2	kW
Minimum fuel consumption	0,7	kg/h
Maximum fuel consumption	1,9	kg/h
Rated electrical current	100	W
Electric power at start-up (<10 min.)	350	W
Rated voltage	230	V
Nominal frequency	50	Hz
Thermal yield at rated thermal power	90,1	%
Thermal yield at reduced thermal power	96	%
Max. smoke temperature	154	ºC
Min. smoke temperature	66,3	ºC
CO emissions at rated thermal power	0,01/0,035	%
CO emissions at reduced thermal power	10,35/8,74	%
Combustion gas mass flow	6,3/2,6	g/s
Draught in the chimney	12/10	Pa
Fan Flow	48,2	dB(A)

Table 1 – Technical specifications

Tests were performed using wood pellets with a heating capacity of 4.9 kWh/kg. The above information was obtained during product homologation tests conducted by independent laboratories accredited for pellet unit testing.

General Dimensions

Front Back Side Top

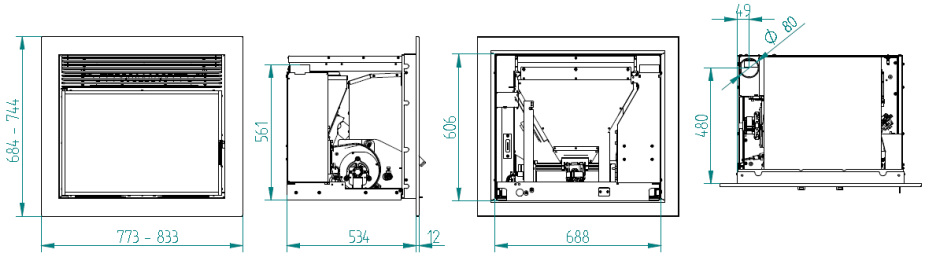


Figure 4 – Insertable dimensions to pellets

6. Installing the Free-Standing Pellet Fire

Before you begin the installation, perform the following actions:

- The recommended measures for installing the pellet insert are as follows:

Model	Width (mm)	Height (mm)	Depth (mm)
IK900	695	610	550

- As can be seen in figure the insert has two finishing frames to cover bigger openings, giving greater versatility to the insert. There are two different widths, one of 44 mm and one of 74 mm to finish the equipment's installation (see point 13).
- The surface where the base of the equipment is to be fixed must be levelled and have the necessary strength to support the entire weight of the equipment and its subsequent movements to load pellets.
- The base of the equipment has 7 holes to attach to the support.

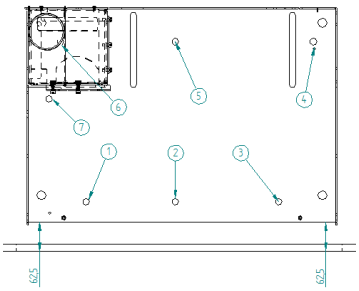


Figure 5 – Fixing base equipment

- As can be seen in Figure 5, a distance of 62.5mm from the base to the front of the wall must be left (it must be perfectly parallel).
- The equipment has an approximate weight of 100 kg and when it is extracted to the pellet / maintenance position, it exerts a high force on the base, during installation it is necessary to use anchoring material suitable for the type of base and wall (In the case of extending table), recommendations:

Material	**Type of attachment**	**Image**
Large (slab, stone)	FMS M8x60 Ø10 Metallic	
Large (brick)	FIP M8x60 Ø10 Chemical	

- It is very important that the base where the insert is installed is completely horizontal.
- If you do not have a base, the optional extendable table is available. This table is a metal structure that must be fixed to the floor and to the wall. The table can be adjustable in height between 300 mm (minimum) and 545 mm (maximum), it is very important to ensure that the top is perfectly horizontal for the correct operation of the equipment. Together with the extendable table, screws are delivered to secure the base of the insert to the table, with the same 7 screws, it is possible to attach the equipment to an existing base. Instructions given in point 6.

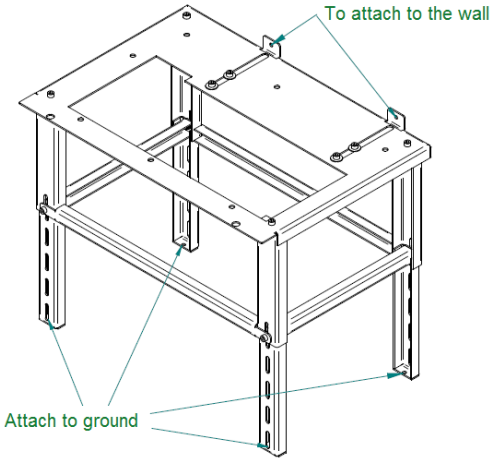


Figure 6 – Optional extendable table

- Connect the 80 mm diameter pipe between the flue gas outlet and the flue outlet to the outside of the building (e.g., fireplace) in accordance with the installation drawings.
- After securing the base of the equipment and the chimney being installed place the moving part of the equipment as shown in figure 7.

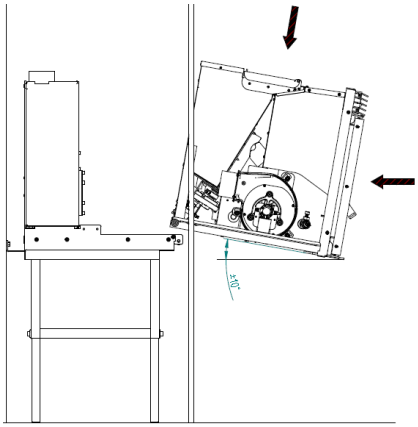


Figure 7 – Installation

- Then do a rotating motion to bring the equipment to the horizontal.

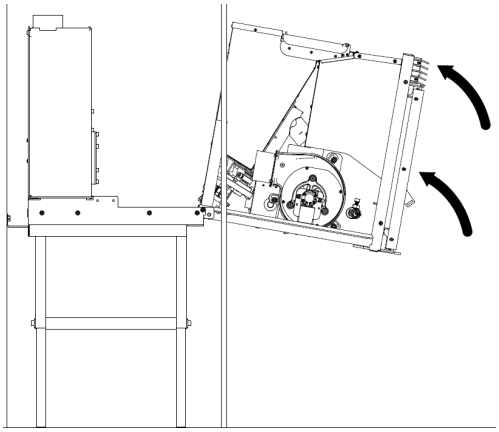


Figure 8 – Installation

- Push the movable part to the wall so that it slides on the rails. Check the correct sliding and that everything is properly attached before continuing with the installation. Move the equipment to the end of runner system with open safety latches and once in position, close them to ensure that the equipment is properly placed in the working position.

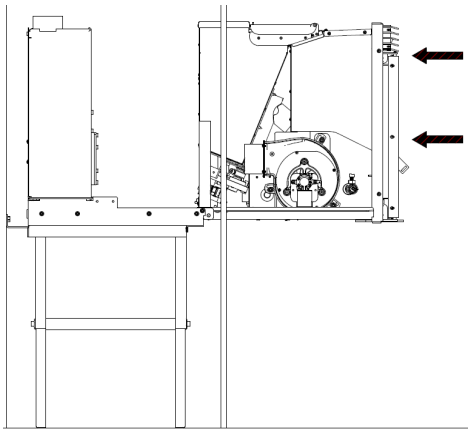


Figure 9 – Installation

- Connect the power cord to a 230V 50Hz grounded outlet.

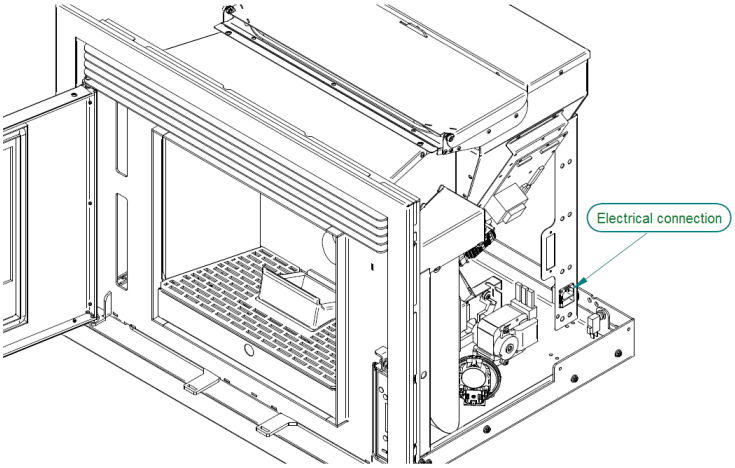


Figure 10 – Electrical connection

- After connecting the power cable to the silo column, it is necessary to attach the cable to the same column and the base, making sure to leave enough cable length, so that the equipment can make the entire route in the rails (500 mm), without the cable being stressed or touching the hot parts (Figure 11).

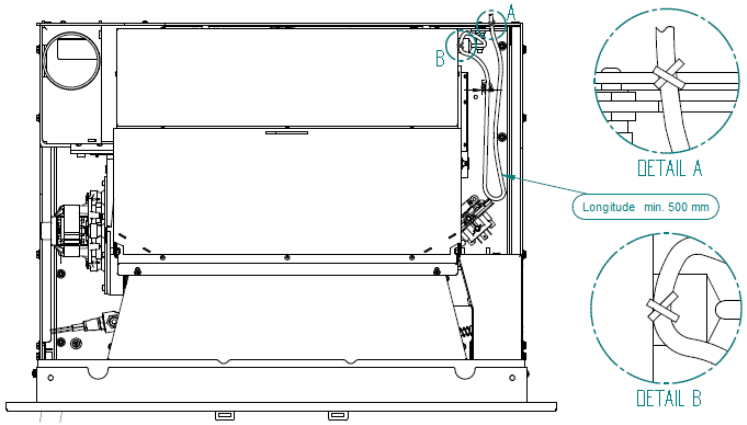


Figure 11 – Electrical connection

- Standard installation of the insert:

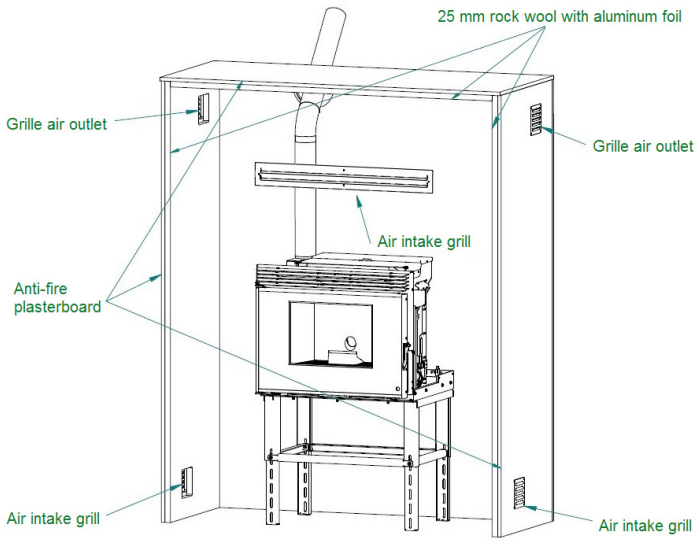


Figure 12 – Electrical connection

7. Installation of optional accessories

Installing the display outside the equipment

It is possible to install the display outside the insert. It's an option that allows the installation of the display where it is most practical, up to a maximum length of 30m using a parallel cable with a 0.75 mm^2 section. In this way, the operation of the insert can be controlled without being close to the heat source, even from another division. This installation requires two additional components: the blind cover for the insert and the frame to attach the display to the wall. Sufficient cable length must be left so that the moving part of the equipment can be removed without causing strain on the cable and does not interfere with the movement of the equipment guides. Steps for assembly:

Once you have chosen the location where the display will be installed, you should make a hole in the wall with the help of the plate that will support the display on the back. Place it next on the wall, making sure it is levelled and with the help of a pencil mark the hole as shown in the figure.

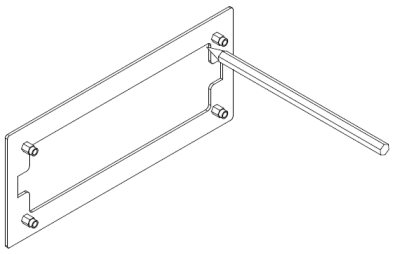


Figure 13 – Installing the display outside the insert

1. Place the outer support plate, making it coincide with the markings done previously as shown in the figure with the hole, mark the 4 holes where the screws pass.

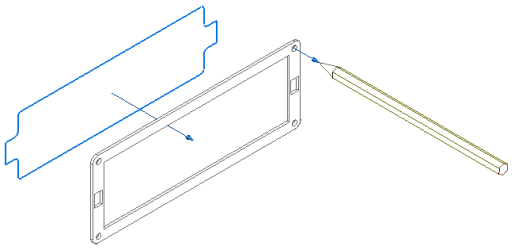


Figure 14 – Installing the display outside the device

3. With the 5 holes open, the next step is to insert the back support plate to be fixed from the inside of the wall.

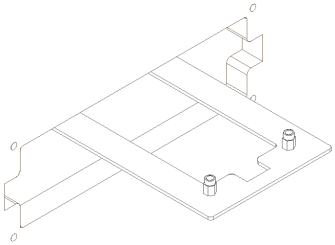


Figure 15 – Installing the display outside the device

4. On the outside, place the front support plate to match the holes previously opened, insert the screws 4x30mm DIN 7991 until it is fully threaded, leaving the two pieces together and the wall between them.

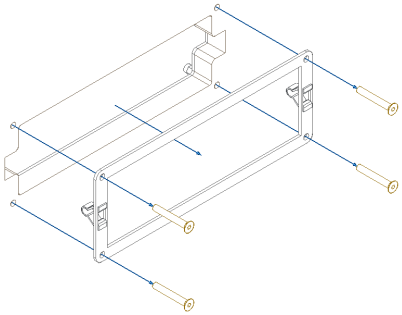


Figure 16 – Installing the display outside the device

5. With all the support fixed to the wall, the display can be placed on the finishing frame, fixing the display from the front and the box from the rear. We have to connect the two wires of the display and must take into account that the length must be enough to be able to remove without creating any problem or tension or interference of the cable. Finally, the frame must be fitted with the display by attaching the bolts to the fixing springs as shown in figure 25.

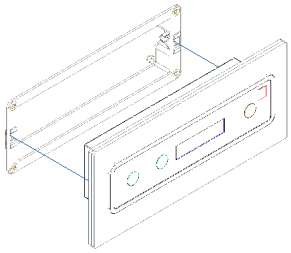


Figure 17 – Installing the display outside the device

Temperature probe installation

• The pellet inserts have a probe to measure the ambient temperature. For a correct reading of the ambient temperature, this probe must be located on the exterior in a place where it does not receive direct radiation or hot air from the equipment. It is sufficient to drill a hole in the wall and fix the box screwed or glued, leaving the end of the probe inside. Sufficient length of cable must be left so that the moving part of the equipment can be removed without causing strain on the cable and does not interfere with the movement of the equipment guides.

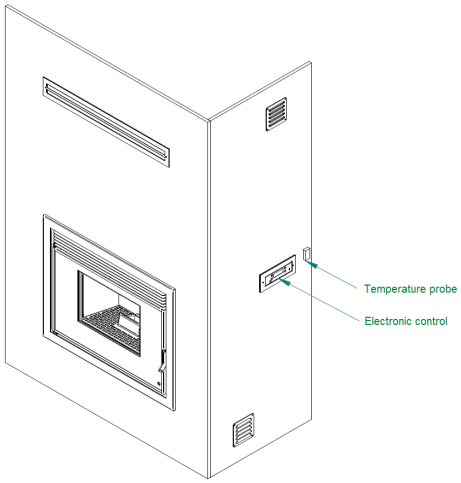


Figure 18 – Installation of the accessories

Installation of ventilation grille

1. The grate must be installed at the top of the wall where the equipment is installed to allow the exit of the hot air that accumulates inside the walls, and together with lower grates allows a natural circulation that will cool the interior walls.

Once you have chosen the place where the grill will be placed, you should drill a hole in the wall with the help of the plate that will support the back. It should be placed on the wall making sure that it is level, with the help of a pencil mark the hole as shown in the figure.

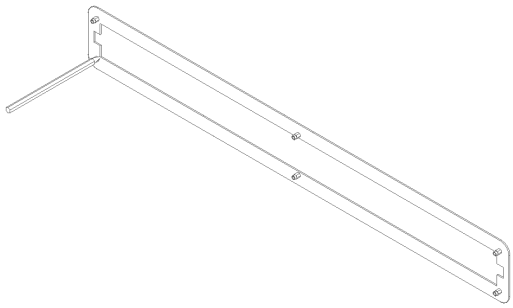


Figure 19 – Installation of the accessories

2. The outer support plate is placed making it coincide with the markings done previously as showed in the figure then mark the 6 holes.

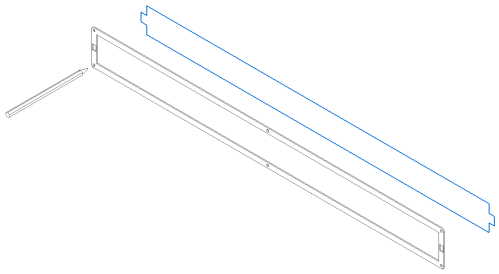


Figure 20 – Installation of the accessories

3. The **next step** is to place the rear support plate to be fixed from the interior of the wall.

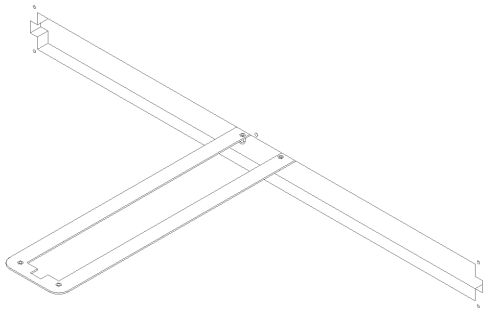


Figure 21 – Installation of the accessories

4. On the outside, place the front support plate to match the holes previously opened, insert the screws 4x30mm DIN 7991 until it is fully threaded, leaving the two pieces together and the wall between them.

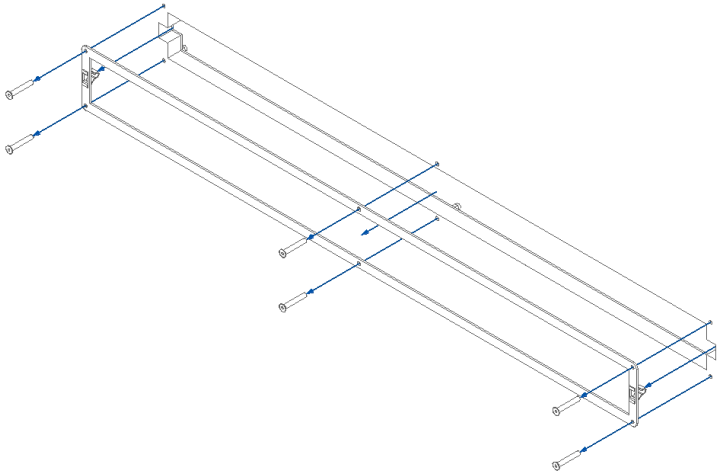


Figure 22 – Installation of the accessories

5. Finally you can place the grate on the wall by fitting the bolts into the fixing springs as shown.

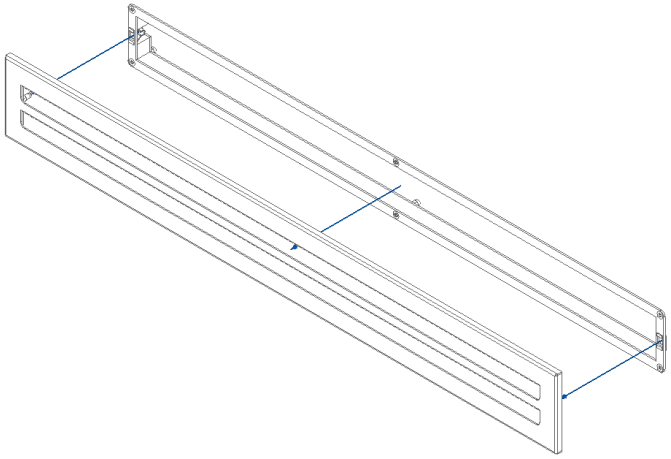


Figure 23 – Installation of the accessories

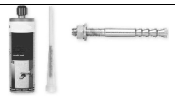
Auxiliary table installation

To perform a root installation. A height adjustable table is available to facilitate the installation of the equipment. The table is adjustable in height and has 2 components to regulate the depth and be able to fix it to the back wall. It also has holes in the lower legs to facilitate fixation to the floor.

Figure 24 – Auxiliary table installation

It is very important that the table is levelled, both in depth and width, this will facilitate the extraction of the equipment on the guides and so increasing their life span. To level the table, it is necessary to adjust the legs in height.

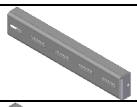
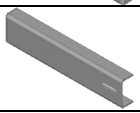
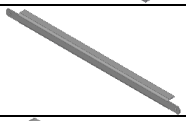
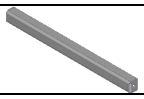
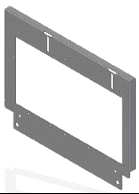
The attachment to the wall and to the floor will depend on the material from which they are made. The fastening must be very firm because the insert has a weight of about 115 kg, for this reason, the following configurations are recommended according to the material where the table will be fixed:

Material	Type of attachment	Image
Laege (slab, stone ...)	FMS M8x60 Ø10 Metallic	
Large (brick)	FIP M8x60 Ø10 Chemical	

You should select the type of configuration that best suits your needs and use the proper tools and security measures for the installation.

To assemble the table components, you need a 6 mm hex key.

The components that make up the table are as follows:

Component drawing	Quant.	Description
	21	Screw DIN 912 M8x20mm
	4	Washers DIN 9021 M8
	6	Nylon Bushing 8x40
	6	Screw AGL CE 5x40
	2	Screw DIN 933 5.6 M8x16
	4	Extension for leg
	4	Table leg
	2	Long locking
	2	Short locking
	1	Table
	2	Fixing brackets

1. Protect the surface on which you are going to work. The four legs of the table should be attached by hand with four DIN 912 M8x20mm screws as shown in figure 33. The rest of the assembly will be easier to perform. As indicated in figure 33.

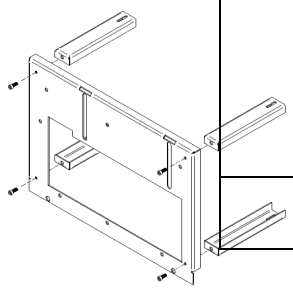


Figure 25 – Auxiliary table assembly

2. Place one of the short locks on the inside of one of the leg extensions and insert between the two leg extensions on one side, as can be seen in the image below. Place one of the long interlocks on the outside and secure the assembly with a DIN 912

M8x20mm bolt. Do not tighten the bolt tightly to make the rest of the assembly easier. The leg extensions have 5 holes, you must select which to apply as well as the total height of the table.

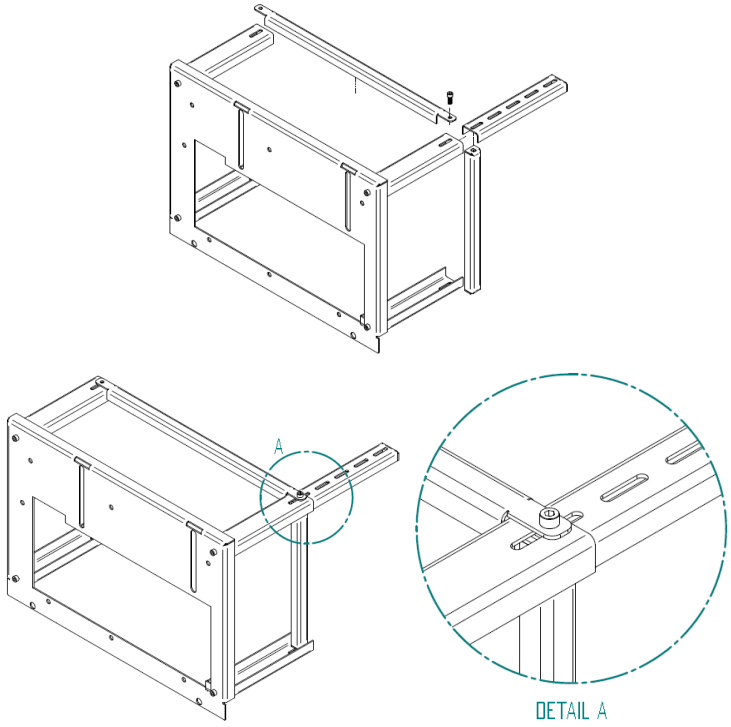


Figure 26 – Auxiliary table assembly

3. One must repeat the process for the other three legs.

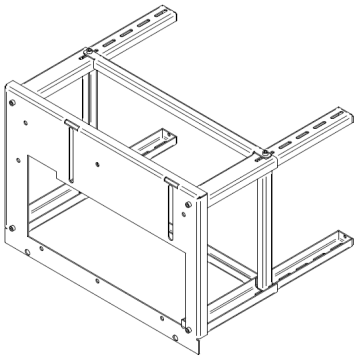


Figure 27 – Auxiliary table assembly

4. Place the two set-squares through the opening on the table and put a screw and washer in each. Do not tighten the bolts completely, just enough to allow displacement of the brackets.

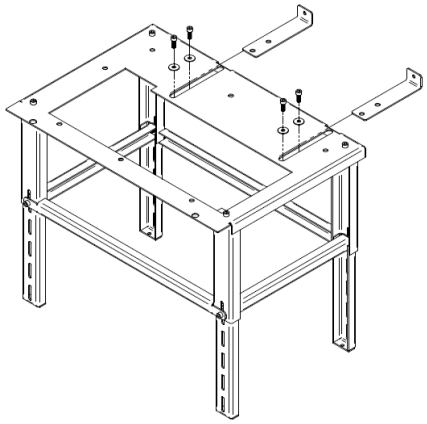


Figure 28 – Auxiliary table assembly

5. To place the auxiliary table in its final position, remember that the table has to be installed 62.5 mm from the front wall, as shown in the image. Then mark the four holes of the legs on the floor, drill the holes, you must use the necessary means of fixing as indicated previously. At the end the table should be fixed to the floor.

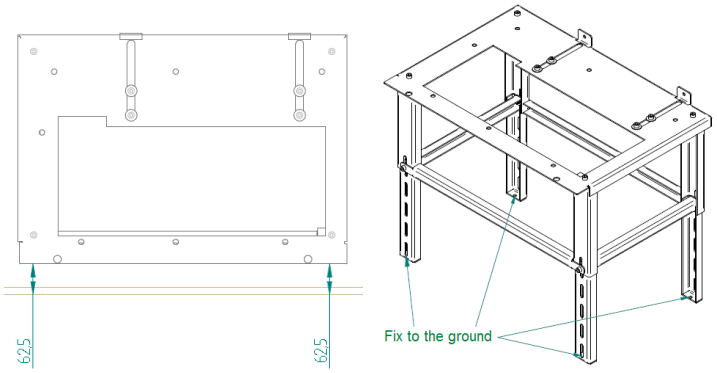


Figure 29 – Auxiliary table assembly

6. You should level the table as accurately as possible with the help of a level. Tighten all screws with a 6mm umbrako wrench. Move the squares on the back wall and mark the holes. Remove the brackets, if necessary, remove the screws and remove the assembly to make it easier to drill holes in the wall. Once done is put the necessary components to fix, place the brackets in place. Check that the table is level and that it respects the height of 62.5 millimetres. The screws that secure the table brackets must be tightened with a 6 mm umbrako table. Before finishing installation check that the table is level if necessary to correct.

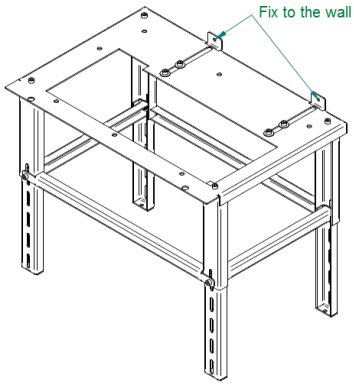
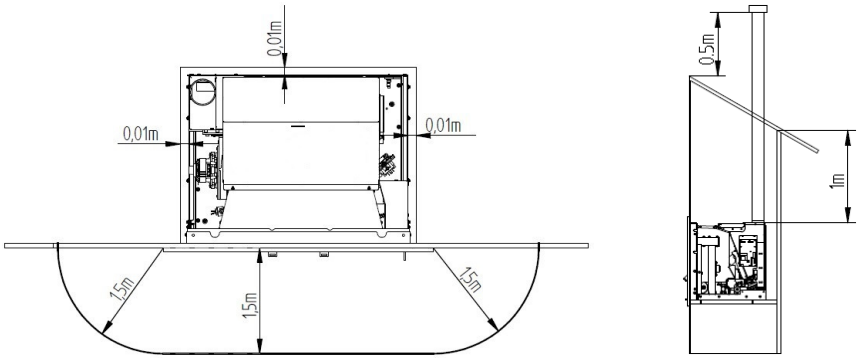


Figure 30 – Auxiliary table mounting

8. Installation requirements

The minimum distances from the pellet insert to flammable surfaces as shown in figure 39. At the top of the insert it is necessary to keep a minimum distance of 1 m from the ceiling of the room especially if they contain flammable material in their composition. The base that supports the insert cannot be made of combustible material (e.g., carpet) and adequate protection must always be provided.



a) b)

Figure 31 – Minimum distances of all surfaces: a) top view of the installation of the equipment; b) side view of the equipment installation

¡NOTICE!

Keep combustible and flammable materials at a safe distance. Never less than 5 cm from insulated surfaces and 1 cm to non-combustible surfaces.

9. Installation for exhaust gas systems:

- The construction of the exhaust pipe must be suitable for the purpose in accordance with local requirements and in compliance with the regulations in force.
- As shown in figure 40, the exhaust duct must be so arranged that cleaning and maintenance are ensured by insertion of the inspection points. The insert contains a registration cover in the smoke box for cleaning.
- Under nominal operating conditions, the buoyancy effectof the combustion gases must give rise to a flue draught of 12 Pa, measured 1 meter above the base of the chimney.
- The insert cannot share the chimney with other equipment.
- External Flue pipes must be double insulated in stainless steel, with an internal diameter of 80 mm.
- The exhaust pipe can generate condensation; in this case it is advisable to establish suitable condensate collection systems.

8.1 Installing without a Chimney

The installation of the pellet inserts when there is no chimney should occur, as in figure 40, bringing the exhaust pipe (with a minimum internal diameter of 80 mm) directly out and above the roof.

Double-walled insulated stainless-steel pipes should be used properly to avoid condensation.

Provide at the base of the tubing a T for periodic inspections and annual maintenance, as exemplified in figure 40.

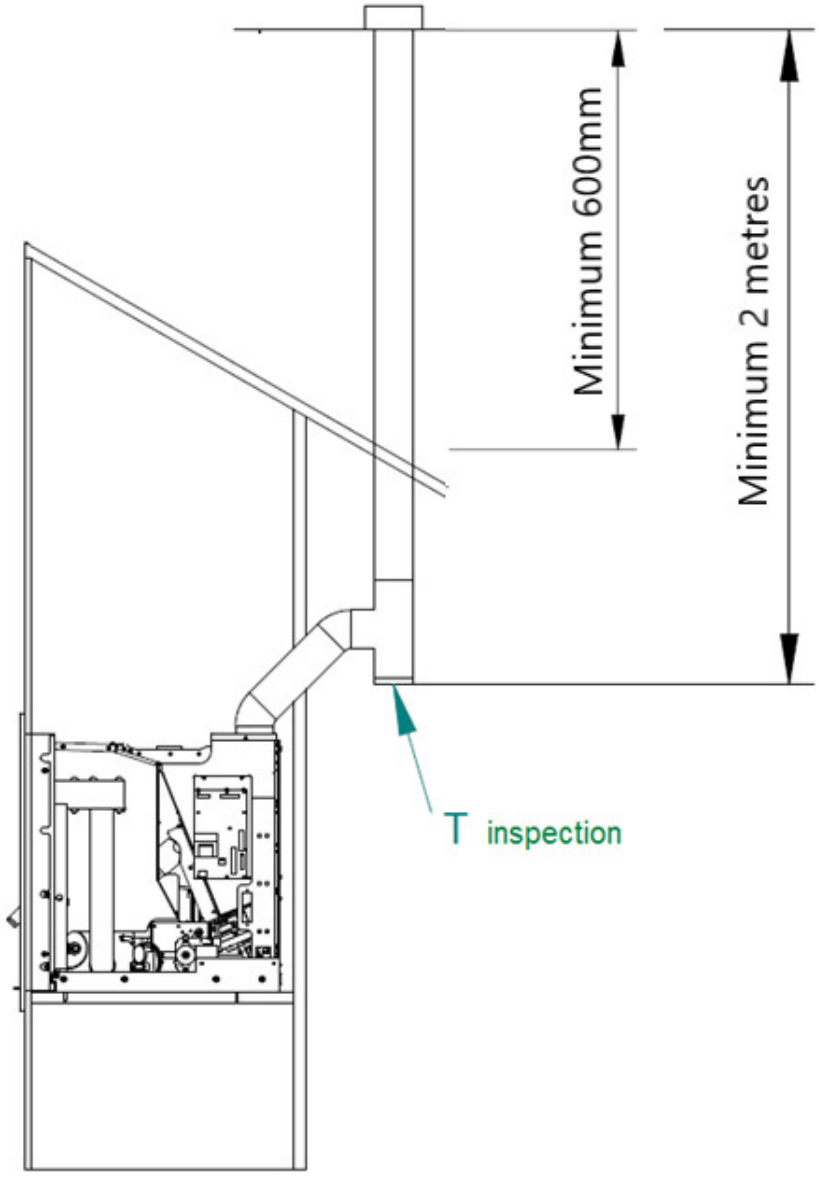


Figure 40 – Side view of the installation without chimney, example of the inspection point.

⚠ Failure to comply with these requirements may prevent the correct operation of the unit, resulting in warranty void. Be sure to follow all the instructions on the diagrams.

⚠ Free Standing Fires operate with the combustion chamber in draught, which is why it is absolutely necessary that they include a fume exhaust duct to adequately extract combustion gases.

Fume duct material: The tubing must consist of 0.5mm thick rigid stainless steel, with fitting bindings to attach the different sections and accessories.

Insulation: The fume ducts must be double-walled and insulated to make sure the fumes do not cool down going outwards, which could cause an inadequate circulation and condensation that may damage the unit.

Output "T-tube": Always attach to the output of the unit a "T-tube" with a damper.

Chimney Termination: A storm cowl termination must be installed to avoid wind effects on the flue, it is also strongtly recommented that the storm cowl incorpoartaes a bird guard.

Chimney draught: The Figures below show three standard diagrams, specifying adequate lengths and diameters. Any other type of installation must guarantee a flue draught of 12 Pa (0.12 mbars) measured when hot and at the maximum power.

Ventilation: To get the optimum operation from the unit **it is necessary that the installation location has an air inlet with a minimum section of 100 cm², preferably near the back panel of the unit**.

If the house is equipped with an air exhaust system (e.g., kitchen extractor fan), a top ventilation section must be installed, suitable to accommodate the different air exhaust systems existing in the household. The installation of the unit on locations near kitchen exhaust fans or fume extractors may prevent the unit from operating properly. It is recommended that the unit is disconnected when these extractors are working.

8.2 Installation with a Chimney

As shown in figure 41, the installation of the pellet insert brings the exhaust pipe (⦰ 80 mm) directly into the chimney. Within the chimney an adaptor to a flexible liner can be fitted and a flexible flue liner can be used within the chimney.it is recommended to pipe the flue gas outlet with a flue pipe of minimum internal diameter of 80 mm.

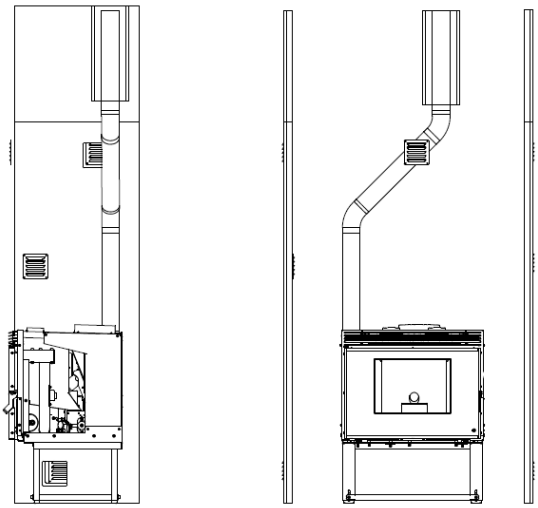


Figure 41 - View installation with chimney.

When atmospheric conditions are so adverse that they cause a significant disturbance in the flue draught of the flue gases (in particular very strong winds), it is advisable not to use the insert.
If the equipment is not used for an extended period of time, the user must ensure that there is no blockage in the chimney tubes prior to lighting.

10. Fuel

The Free-Standing Pellet Fire operates exclusively with pellets. No other fuel sources are allowed to be used.

Only use *pellets* certified by standard EN 14961-2 grade A1 with a **diameter of 6mm** and a length of **10-30mm**.

The pellets may have a maximum humidity content of 8%. To guarantee a good combustion, the pellets must maintain these characteristics so it is recommended that they should be stored in a dry place.

The use of different pellets will reduce the efficiency of the unit and cause deficient combustion.

Only certified pellets should be used and a sample must be tested before buying large bulks.

The physicochemical properties of the pellets (namely, calibre, friction, density and chemical composition) may vary within specific tolerances and across manufacturers. Please note that this may cause changes to the feeding process and, consequently, the need for different doses (more or less pellet quantity).

Consequently, it may be necessary to adjust the pellets quantity according to its quality, even if the pellets are certified.

The unit allows for an adjustment of ± 25% the pellet dosage at the start-up phase and at each power level (please see section 11.3.6 of this manual).

⚠ **WARNING!**

This unit may NOT be used as an incinerator.

11. Use of the pellet insert

Recommendations

Before starting up the unit, please check the following:

- Ensure the unit is properly connected to the power mains using the 230V AC power cable.

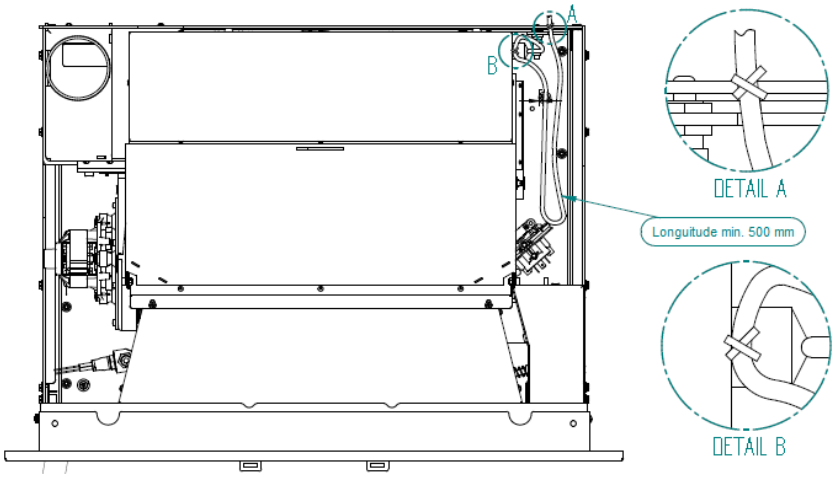


Figure 32 – Electrical connection plug

- Check that the pellet hopper is filled. Inside the pellet reservoir is a safety grid to prevent users from reaching the worm screw.

⚠ **The unit's combustion chamber and panel door are made of iron plate painted with high temperature resistant paint which releases fumes during the initial burn due to the paint's curing process. Avoid touching the unit during its first burn to prevent leaving permanent marks on the paint. The paint goes through a more plastic phase during the curing process. The curing of the paint occurs at approximately 300ºC for 30 minutes.**

Please make sure the room where the unit is installed has adequate air circulation; otherwise, the unit will not work properly. For this reason, it is important to check if there are any other air-consuming heating appliances present in the room (e.g., gas units, braziers, extractors, etc.); these should not be used simultaneously with the unit.

12. Start-up

After loading the pellets into the deposit (see chapter 13), press and hold the ON/OFF button for 3s, to start the Free-Standing Fire. During the lighting phase, the display will show the message **"Ativação" (Activation) until this phase is completed**.

The *pellets* are fed through the supply channel to the burning basket (combustion chamber), where they will be ignited using a heat resistor. This process may take 5 to 10 minutes, depending on whether the worm screw used to push through the pellets has been previously filled with fuel or is empty. Once the ignition phase is completed, the message "On" appears on the display. The heating power can be adjusted at any time by pressing the power selection button for approximately 1 second. You can select from the five pre-set power levels that are available. The selected power is indicated on the display. The initial power status at each start-up will correspond to the power level set before the last stop.

⚠ **Important notice: Before starting up the unit, please check to determine if the deflector plate is in place.**

12.1 Stop

The stop sequence of the unit is started by pressing the ON/OFF button for 3 sec.
The display will show **"Desativação"** (Disabling) until full completion of this phase. The extractor will operate until the fume temperature of 64ºC is reached, to guarantee that all the material has been burnt.

12.2 Turning Off the Unit

The unit should only be disconnected after its full stop. Make sure the **"Off"** shows on the display before disconnecting the unit. If necessary, disconnect the power cable from the mains.

13. Control and Display –

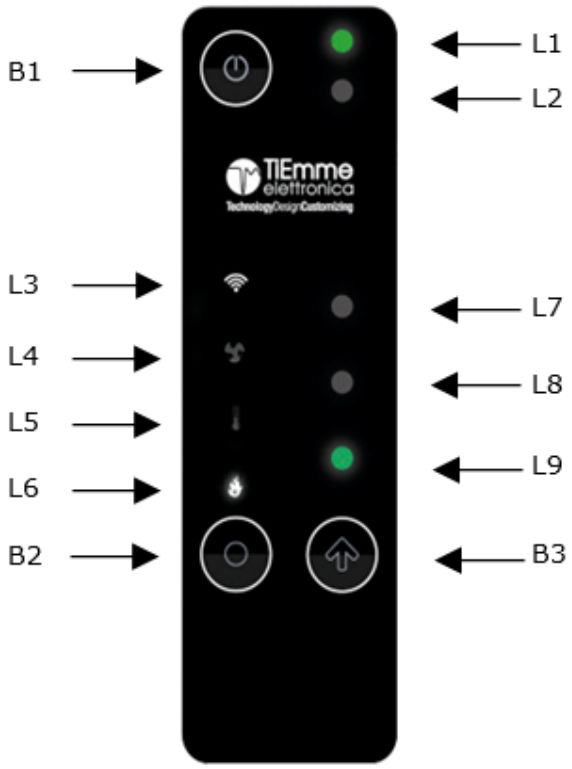
The equipment contains 2 displays, one incorporated in the equipment, the other wireless (radio remote control) that generate several functions and allow programming and interaction with the device.
The internal display must be used only in case of failure (display without battery) of the external display/command via radio.

Device	Functionality
	• Internal display • Visualization and interaction of the device's parameters and functions
	• External radio display/control • Visualization and interaction of the appliance's parameters and functions • Serves as wireless thermostat (preferred device in the greenhouse control) • Has 3x AA 1,5 V batteries

The internal display must be used only in case of failure (display without battery) of the external display/command via radio (in this case the equipment is controlled by the thermostat temperature set on the internal display and the room probe reading).
When connecting the equipment to electricity, the device's display indicates the current time and the ambient temperature.

13.1 Internal Display

The internal display must be used only in case of failure (display without battery) of the external display/command via radio (in this case the control of the equipment goes through the thermostat temperature set on the internal display and the ambient probe reading).



Led	Operation.
L1	Blue LED - System OFF Green LED - System ON Flashing Green LED - Ignition or extinguishing system Red LED alternating with green and blue colors - System in Error
L2	Maintenance
L3	Led on - Connected to WiFi Led flashing - WiFi setting
L4	Visualization of the heating power on LEDs L7, L8 and L9 (see following table)
L5	Visualization of the local room thermostat on LED values L7, L8 and L9 (see table below)

L6	Visualization of the combustion power in leds L7, L8 and L9 (see following table)
L7 / L8 / L9	Display of the selected parameter's value (minimum, average, maximum)
B1	Press for 3 seconds - switches the heating system on / off
B2	Selection of the parameter to be displayed (heating power, room thermostat, combustion power). If pressed for 3 seconds, enters the WIFI LAN configuration mode (L7, L8, L9 flash).
B3	Allows you to modify the selected parameter (the led corresponding to the parameter, blinks, while the leds L7, L8, L9 show its value). If the key is pressed again, the parameter value is modified. If pressed during the local WIFI network configuration mode, allows you to start the configuration process, and if pressed for a few seconds, allows you to restart the configuration.

Change the value of a parameter

- Select the parameter to be modified with the B2 key.
- Press the K3 key to enter and modify the value, the led corresponding to the parameter, blinks while the L7, L8 and L9 leds show its value.
- Press B3 again to change the value. The data will be saved after 5 seconds if no key is pressed or if you move to the next parameter by pressing B2.

Led	0	Mimimum	Average	Maximum	Auto (apenas para potências)
L7	●	○	○	●	●
L8	○	○	●	●	●
L9	○	●	●	●	●

NOTE: The user can, via a 2WAYS2+ device, set the minimum, average and maximum value of the local room thermostat.

14. External Display

The external display should preferably only be used in case of a fault (e.g., display without battery).

When the external controller is turned on by pressing the standby button (B1), the unit's display shows the date and time, room temperature, whether a time clock is set and its mode, the target temperature, wireless room thermostat, combustion power and room ventilation level, the status of the unit (including any error that may exist) and the status of the controller's battery.

Home Menu - Columbus Electronics

Symbol	Meaning
	Time and day of the week
	Battery level
	Active Time Chrono
	Ambient Temperature
	Target temperature
	Combustion power
	Ventilation level

In the Home Menu by pressing the key:

- "B1" Removes radio command from Sleep mode. Puts the remote control in Sleep mode. Put radio remote control in Standby (3s).
- "B2" Turns the unit on and off (3s). Reset errors (3s). Double click when radio command in Standby reactivates it.
- "B3" Exit menus.
- "B4" and "B5" Change the ambient thermostat of the device. Navigate menus and submenus.
- "B6" Enter Menu, submenu and validate changes.

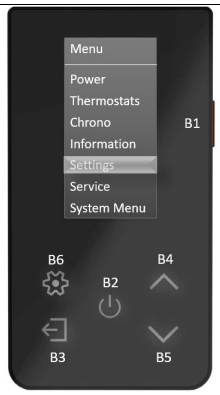
THE INSERTABLE MUST ALWAYS BE DEACTIVATED BY THE SAME METHOD AS IT WAS ACTIVATED. DURING THE ACTIVATION PROCESS THE EQUIPMENT MUST NEVER BE UNPLUGGED.

14.1 General Menu - Settings Menu

The Settings Menu allows you to manage the thermostat of the external controller, enable and disable the standby function, adjust contrast, keypad sound, set date and time, and change language. Changing the Language and Date and Time are shown below in detail, and the rest of the functions in this menu are explained later.

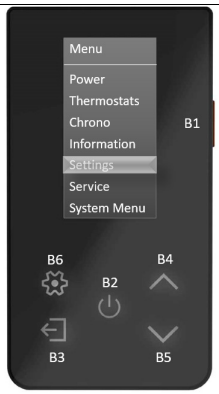
14.1.1 Settings Menu – Language

Select Language Function	Procedure
 Access the Client Menu	Press key B1 to exit Sleep mode; In the initial menu, press key B6 and the Menu appears.

 Access the Settings Menu	In the Menu with B4 and B5 select "Settings" and press B6.
 Access the Language Menu	In the Settings menu with B4 and B5 select "Language" and press B6.
 Choose Language	In the "Language" menu with B4 and B5 select the desired language and press B6 to validate.

14.1.2 Settings Menu – Date and Time

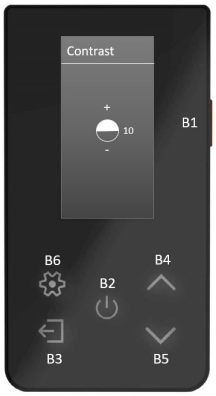
Select Date and Time function	Procedure
 Access the Client Menu	Press key B1 to exit Sleep mode; In the initial menu, press key B6 and the Menu appears.

 Access the Settings Menu	In the Menu with B4 and B5 select "Settings" and press B6.
 Accessing the Date and Time Menu	In the Settings menu with B4 and B5 select "Date and Time"; Press B6 and the "Date and Time" menu appears. In the Settings menu with B4 and B5 select "Language" and press B6.
 Choose Date and Time	In the "Date and Time" menu with B4 and B5 select Time and press B6 and the Time menu appears in editable mode with the Time flashing; With B4 and B5 select the correct Hour and press B6 to validate. With B4 and B5 select Minutes and press B6, the Minutes menu appears in editable mode with Minutes flashing; With B4 and B5 select the correct Minutes and press B6 to validate. Repeat the previous steps for the day, month, and year. **THE DAY OF THE WEEK (SUNDAY TO SATURDAY) CHANGES ACCORDING TO THE DAY OF THE WEEK SELECTED.**

14.1.3 Settings Menu - Remaining Options

Function Settings	Procedure

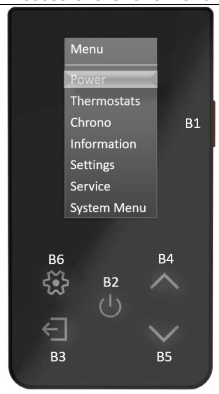
 Access the Client Menu	Press key B1 to exit Sleep mode; In the initial menu, press key B6 and the Menu appears.
 Access the Settings Menu	In the Menu with B4 and B5 select "Settings" and press B6.
 Accessing the Settings Submenus	In the "Settings" menu with B4 and B5 select the desired submenu; Press B6 and the selected menu appears.
 Accessing the Radio Thermostat Menu	In the "Settings" menu with B4 and B5 select "Radio Thermostat"; Press B6 and the menu "Radio Thermostat" appears; In this menu with B4 and B5 you can set whether you want to activate or deactivate the Thermostat for the external display, choosing between Activated or Invalid; By default, this option is active, so that the equipment is controlled by the temperature measured by the thermostat of the external controller;

	When you deactivate the choice option on the main screen by using the B4, or, B5 keys, it is also inactive.
 Activate Standby Mode	In the "Settings" menu with B4 and B5 select "Standby Radio"; Press B6 and the "Radio Standby" menu appears; In this menu with set (B6) you can alternatively activate the Standby mode of the external controller. To reactivate the external control you must press B1 followed by a double-click on B2.
 Access the Contrast Change Menu	In the "Settings" menu with B4 and B5 select "Contrast"; Press B6 and the "Contrast" menu appears; In this menu with B4 and B5 you can set the desired contrast between 0 and 30 for your display.
 Accessing the Key Sound Menu	In the "Settings" menu with B4 and B5 select "Key Sound"; Press B6 and the "Key Sound" menu appears; In this menu with B4 and B5 you can set whether you want to activate or deactivate the keyboard tones by choosing Enabled or Disabled.

The General Menu gives access to the Power, Thermostats, Chrono, Information, Settings, Service and System Menu submenus. It allows you to control combustion, control heating, develop a chrono program, observe the various operating variables on the monitor, and manually load pellets. The remaining menus are of exclusive access to the technical service and require a password to do so.

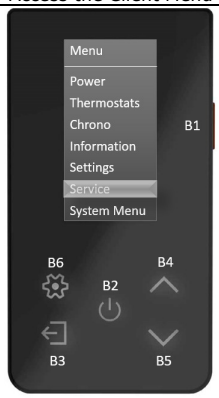
14.2 General Menu - Power Menu

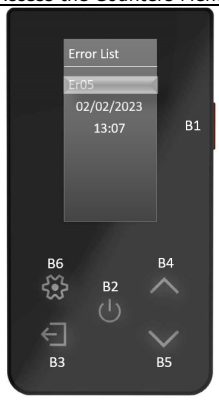
Pressing B6 gives access to the following menus, Power, Thermostats and Chrono. With the keys B4 and B5 you must select the desired menu and then press B6 to validate the choice, in this case the Power menu.

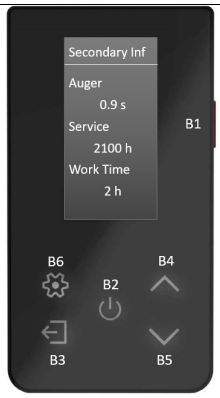
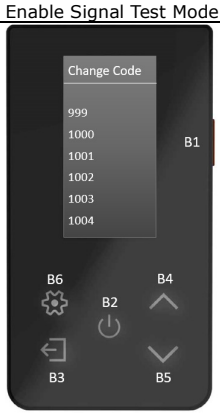
General Menu Functions	Procedure
 Access the Client Menu	Press key B1 to exit Sleep mode; In the initial menu, press key B6 and the Menu appears.
 Access the different Sub-Menus	In the "Menu" menu with B4 and B5 select the desired sub-menu; Press B6 and the selected menu appears.
 Access the Combustion Power Menu	In the "Menu" menu with B4 and B5 select "Combustion" and press B6; In the "Combustion" menu with B4 and B5 select the "Power" sub-menu; In this menu with B4 and B5 you can set the equipment's operating mode between Auto and Menu mode, and in this between power 0 to 5.
 Go to the Combustion Management Menu Worm Motor Calibration	In the "General Menu" menu with B4 and B5 select "Combustion" and press B6; In the "Combustion" menu with B4 and B5 select submenu "Calibration Auger"; In this menu with B4 and B5 you can adjust the amount of pellets to be fed between -7 (-25%) and 7 (+25%).

 Access the Combustion Management Menu Calibration Extractor Velocity	In the General menu with B4 and B5 select "Combustion" and press B6; In the "Combustion" menu with B4 and B5 select submenu "Calibration Extrator"; In this menu with B4 and B5 you can adjust the fume extractor speed between -7 (-25%) and 7 (+25%).
 Access the Room Ventilation Speed Menu	In the General menu with B4 and B5 select "Heating" and press B6; In this menu with B4 and B5 select submenu "Heating"; Here with B4 and B5 set the operating mode of the fan between Auto and Menu mode (between power 0 to 5).

14.3 General Menu - Service Menu

General Menu Functions	Procedure
 Access the Client Menu	Press key B1 to exit Sleep mode; In the start menu, press key B6 and the Client Menu appears.
 Access the different Sub-Menus	In the "Menu" menu with B4 and B5 select the desired submenu; Press B6 and the selected menu appears.

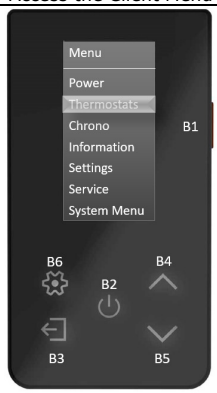
 Accessing the Service Menu	In the Service menu with B4 and B5 select the required submenu. Press B6 to go to the desired submenu.
 Access the Counters Menu	Select Counters by pressing B6 to validate the entry in this submenu. This function allows you to consult the working hours, the number of ignitions and the number of failed ignitions. With keys B4 and B5 select the submenu that you want to consult and press B6 to validate. To return to the Service menu press B3.
 Error List View	In the Service menu with B4 and B5 select the submenu Error List, pressing B6 to validate. This submenu shows the last 10 errors that occurred, on each line the error code and the date and time when it occurred are displayed. To return to the Service menu, press B3.
 Monitor Menu View	In the Service menu, select the Secondary Information submenu with B4 and B5, and then press B6. In the “Information” menu with B4 and B5 scroll through the menu to check the different variables; The value displayed is the value measured On-Line.

 Monitor Menu View	In the "Information" menu with B4 and B5 scroll down to check the different variables; The value displayed is the value measured On-Line.
 Monitor Menu View	In the "Information" menu with B4 and B5 scroll down to check the different variables; The value displayed is the value measured On-Line.
 Enable Signal Test Mode	In the "Menu Service" menu with B4 and B5 select "Test Radio"; Press B6 and the "Radio Test" menu appears; In this menu you can check the quality of the signal and its level of electromagnetic pollution. The external controller, develops a set of communications monitoring the errors that occurred.
 Access the Code Change Menu	In the "Service Menu" menu with B4 and B5 select "Change" Code; Press B6 and the "Change Code" menu appears; In this menu and keeping the learn code option active on the internal display you can change the communication frequency in order to mitigate communication errors caused by other devices.

 Access the Reset Cleaning Menu	In the "Service Menu" menu with B4 and B5 select "Reset Cleaning"; In this function you can turn this function on or off. To return to the Service menu press B3.
 Access the Cochlea Calibration Menu	In the Service menu with B4 and B5 select the Squeeze Calibration submenu, pressing on B6 to validate. In this submenu with the keys B4 and B5 you can adjust the quantity of pellets to feed, between -7 (-14%) and 7 (+14%). To return to the Service menu press B3.
 Accessing the Fan Calibration Menu	In the Service menu with B4 and B5 select the submenu Fan Calibration by pressing on B6. In this submenu with keys B4 and B5 you can adjust the fan speed, between -7 (-21%) and 7 (+21%). To return to the Service menu press B3.
 Access the Cochlear Charge Menu	Select Load Pellet, with the B6 key, to validate the entry in this submenu. This function activates manual pellet loading. Pressing the B3 key twice will take you back to the main menus, Settings, Keypad, Service and System Menu.

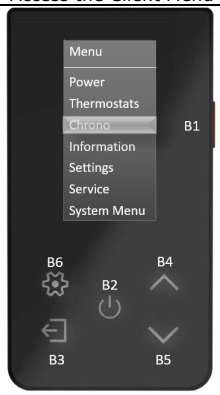
14.4 General Menu - Thermostats Menu

Functions Thermostats Menu	Procedure

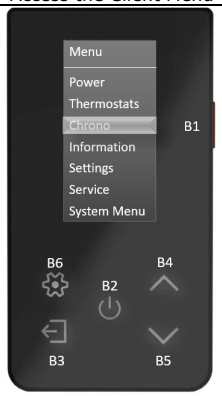
 Access the Client Menu	Press key B1 to exit Sleep mode; In the initial menu, press key B6 and the Menu appears.
 Access the different Sub-Menus	In the "Menu" menu with B4 and B5 select the submenu Thermostats; Press B6 and the selected menu appears.
 Access the Thermostats Menu	In the "Thermostats" menu with B4 and B5 select the Environment Sub-Menu. Press B6 to validate.
 Choose Ambient	You can set the target comfort temperature between 10 and 40°C, with keys B4 and B5. Press B6 to save your changes and use B3 to go back.

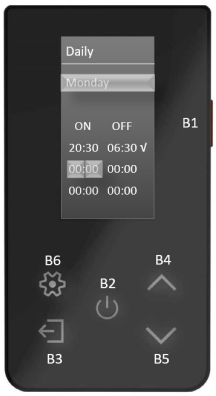
14.4 General Menu - Chrono Menu

The insertable has a time switch that is used to turn the insertable on and off. It can be Daily (you can select the day of the week you want and set up to 3 different schedules for the respective day), Weekly (you can select up to 3 schedules during a day, the same program will be applied every day of the week), and Weekend (you can select 3 schedules during the day for weekdays and weekends). After analyzing the available options select the desired modality.

Functions Chrono Menu	Procedure
 Access the Client Menu	Press key B1 to exit Sleep mode; In the start menu, press key B6 and the Client Menu appears.
 Access the different Sub-Menus	In the "Menu" menu with B4 and B5 select the desired submenu; Press B6 and the selected menu appears.
 Access the Modality Menu	In the "Chrono" menu with B4 and B5 select the Sub-Menu Mode. Press B6 to validate.
 Select Mode and activate Chrono	In the "Modality" menu with B4 and B5 select the desired mode; press B6 to validate; The chosen Program will be saved and will be signaled by the symbol <<. The display after activation will have the led active, also mentioning the active mode, Daily is symbolized by "D", Weekly "S", Weekend/Weekend by FS, respectively.

AFTER DEINITION OF THE CHRONO MODE DESIRED TO DEVELOP THE RESPECTIVE PROGRAMS.
THE FOLLOWING IS AN EXAMPLE OF THE CREATION OF A DAILY PROGRAM, IN THIS CASE, MONDAY

Functions Chrono Menu	Procedure
 Access the Client Menu	Press key B1 to exit Sleep mode; In the start menu, press key B6 and the Client Menu appears.
 Access the different Sub-Menus	In the "Menu" menu with B4 and B5 select the desired submenu; Press B6 and the selected menu appears.
 Access the Program Menu	In the "Chrono" menu with B4 and B5 select the Sub-Menu Mode. Press B6 to validate.
 Choose appropriate mode	In the menu "Chrono Program" with B4 and B5 select Daily, Weekly, or Weekend (you must respect the mode already selected; In this case the daily program is exemplified Press B6 to validate.

 Select Day of Week	In the "Daily" menu with B4 and B5 select the desired day of the week; Press B6 to validate.
 Select Program Start and End Times	In the "Daily" menu with B4 and B5 select start time; Press B6 to edit; With B4 and B5 select the desired time; Validate with B2 the developed program line (the point "○" is filled "●"); Repeat the process with B5 for the End Time and for the remaining available times if applicable, with the B5 key.

Repeat the previous process for all desired days.

When programs are developed around midnight with the intention of starting operation the day before and ending operation the next day, it will be pertinent:

- End the last program on the previous day by 23:59;
- Start the first program the next day at 00:00.

IN THE WEEK AND WEEK/WEEKEND MODES, THE EXECUTION OF PROGRAMS FOLLOWS THE SAME LOGIC EXEMPLIFIED ABOVE.

The following table explains the meaning of each of the variables.

T. Smoke [°C]	Read in degrees Celsius (°C) it tells you the exhaust temperature monitored by the thermocouple.
Water Temperature [°C]	Read in degrees Celsius (°C) it tells you the ambient temperature monitored by the NTC probe placed outside the stove.
Extractor [rpm]	Read in revolutions per minute, it tells you the rotation speed of the extractor.
Auger Motor [s]	Read in seconds, this tells you the time within a 4-second period that the worm motor is active and feeding pellets to the burner.
Service [h]	Read in hours informs the number of hours missing to report anomalies due to lack of maintenance. These must be calibrated by the technical service during maintenance. The maintenance period must respect the kilos of burned pellets
Working Time [h]	Read in hours tells you the number of hours in On, modeling, and security.
Ignitions [nr]	Read in number of occurrences tells you how many ignitions have been performed since they were fired.
Artic. Code	Product Code.

15. List Alarms / malfunctions / recommendations

All alarms cause the machine to shut down with information about the error and activation of the alarm led. It will be necessary to reset the alarm and restart. To reset the machine, press the "On/Off" button for 3 to 4 seconds until you hear a beep, accompanied by the message "Reset alarms in progress";

If the reset is successful, there will be new information - Reset alarms successful

In the Off state if for any reason the smoke temperature rises above 85ºC (Th01) the stove enters the off mode.

Alarm	Code	Cause and Resolution	
Excess temperature in the pellet tank	Er01	110 °C, even when the equipment is off	- Room fan not working - call for service - Thermostat defective - call for service - Machine with defective ventilation
Smoke pressure switch alarm	Er02	Door open, no depression or extractor failure for 180 s Only visible if puller is set to On	- Close the door and remove the faulty pressure switch error - Faulty exhaust pipe obstruction or extractor
Exhausted flame or lack of pellets	Er03	Fume temperature below: 55°C (Th03)	- Empty pellet tank; - Broken thermocouple; - Clogged pellet channel
Excess temperature fumes	Er05	More than 300 °C	- Room fan does not work or is at a low power level - increase the level to maximum (if the problem persists call for service) - Insufficient draft - Excessive dosage of pellets - Defective smoke probe
Fume extractor error	Er07	No rpm signal. Allows unlocking and working by voltage in a provisional way P25=0	- Check connection to the encoder - Check that the fan is not blocked - After fault correction it is necessary to reselect operation mode P25=2
Fume extractor encoder error	Er08	Encoder shows signal, but failed regulation. Allows unlocking and working by voltage temporarily P25=0	- Exhaust pipe obstruction or extractor defective - After fault correction it is necessary to reselect operating mode P25=2
Ignition failure	Er12	Maximum time:900 s and Fume temperature less than 50ºC	- Empty worm channel - restart - Burned out heating element - replace heating element - Firing basket incorrectly placed - Fume temperature did not exceed the value set at switch-on
Power supply voltage cut-off	Er15	Power cut for time longer than 50 min	- Check supply voltage with the electric power supplier; - Check simultaneous use of electrical appliances - In case of a short power failure (<10s) the insert continues to work normally; - If the system was ON and the power supply failure occurs for more than 10s and less than 50 min the insertable develops an ignition after blackout
Faulty communication with LCD control	Er16		- Check connection between board and display
Pressure differential sensor damaged	Er39	The combustion regulation is interrupted and the stove will work with the factory default values entering standby until Tfumos < 85ºC (Th28)	- Check connection between plate and pressure differential sensor; - Check pressure differential reading - Check possible clogging in the measurement taps, or throttling of the same
Open door error	Er44	Door open for 60 sec	- Close the door - remove the error
Maximum value / reference for the differential sensor reached	Service	Maximum 2100 hr Hours (T66) planned for maintenance achieved	- Contact your installer or repairer for occasional preventive maintenance of the equipment.

16. Instruction for installing the frame

16.1 Choice of frame

Before installing the frame, it must be verified that the packaging is complete and in perfect condition, any damage or lack of components must be reported before installation.

On this equipment it is possible to install different finishing frames.

To install the frame you must first check that the frame is compatible with the insert:

Thin Frame

- Interior measurements: 685x596mm
  Frame width 44mm

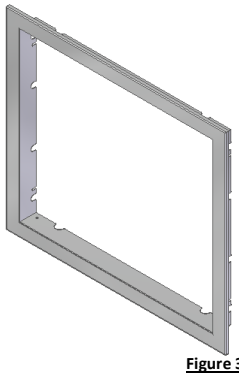


Figure 33

- **Wide frame**
- Interior measurements:685x596mm
  Frame width 74mm

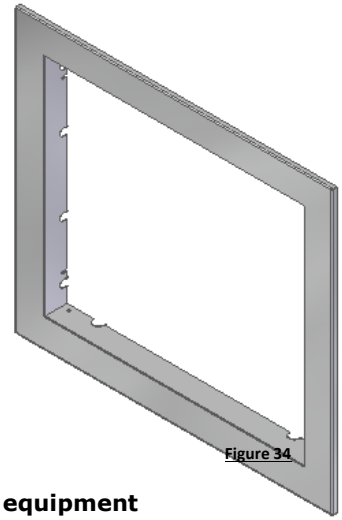


Figure 34

16.2 Installation of the frame on the equipment

With the fixed insert and the tripartite frame prepared, the next step is to assemble the two. Open the safety catch of the insert, remove the insert to work comfortably. On each side of the insert we have two screws (DIN 967 M4x8mm), it is necessary to slightly loosen these screws (see Figure 51).

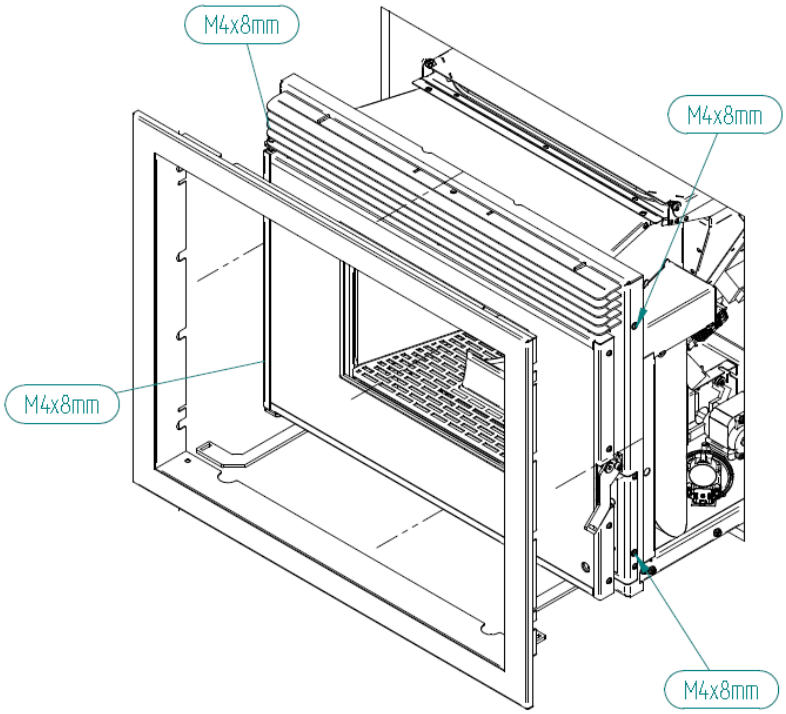


Figure 35 - Locating the screws to attach the frame to the insert

Insert the frame, aligning the insertable bolts with the frame flaps, insert the frame, line up in front of the insert and tighten the screws again to secure the rim (See Figure 51). Place the insert in its operating position and close the two safety latches, if the wall is sensitive to marks it is recommended to leave 1 or 2 mm distance between the rim and the wall.

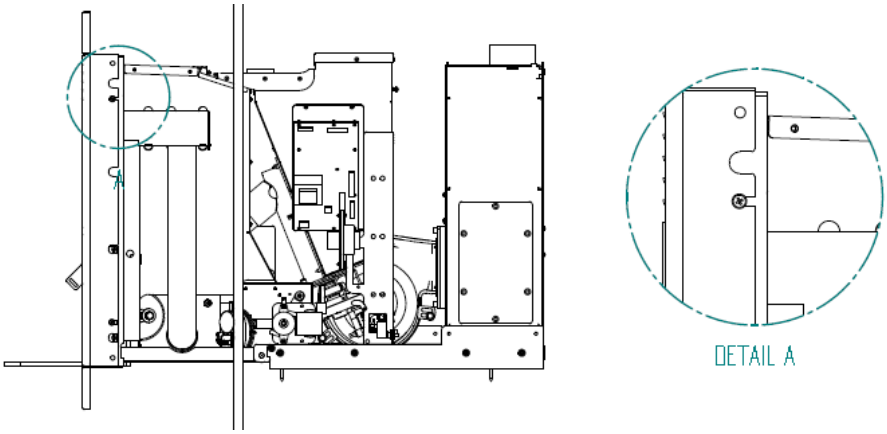


Figure 36 – Installing the frame

VERY IMPORTANT: You should always read the instruction manual of the equipment before proceeding with its installation.

17. Replenishing Pellets.

- **Insertable with refill per load drawer**

This charging system can be used with the equipment in operation, but always with care as you will be close to sources of heat.
To refill the tank, open the cargo drawer by pulling the upper grate completely. Pour the pellets into the drawer and with the aid of the accessory the pellets should be pushed to the back of the drawer. The pellets will fall into the tank. When the pellets stop

falling and begin to accumulate in the drawer stop loading.

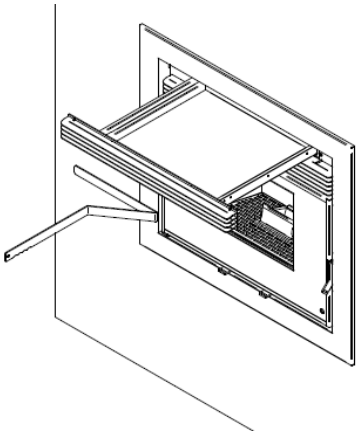


Figure 37 – Drawer for refuelling

Figure 38 – Loading head for refueling

18. Maintenance

Maintenance is a work of overhaul and mainly cleaning. The periods marked in this manual are indicative and the dirt on the equipment varies greatly according to usage and fuel.

Note: Before performing any cleaning, it is imperative that the insert is off and sufficiently cold in order to avoid accidents.

Daily Maintenance

The insertable pellet requires strict maintenance. The main care is the regular cleaning of the ashes in the pellet burning chamber. This can be done in a practical way through the aid of a simple vacuum cleaner. The cleaning operation must be performed after each firing of approximately 30 kg of pellets.

To perform this maintenance, you must open the door with the aid of the accessory. Clean the drawer and the grate. Then remove the burner and empty the ashes.

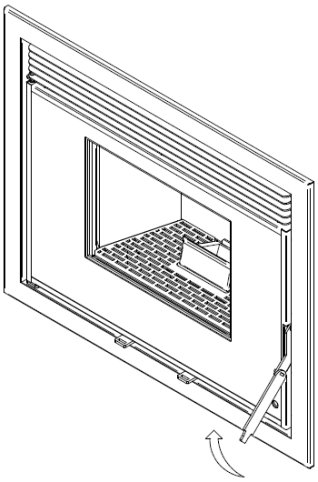


Figure 39 – Opening of the door

Weekly Maintenance

Open the door, clean the debris that may be on the grate before removing it, remove the grate, drawer and burner (Figure 43) and vacuum the ashes. Make sure all burner holes are clear, clean the inside of the insert. Finally, put the components in reverse order.

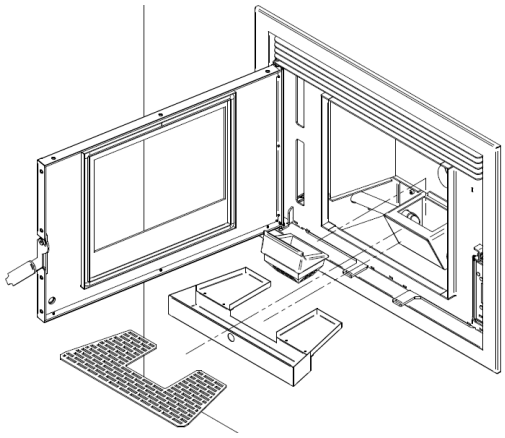


Figure 40 – Weekly cleaning

Additional Cleaning

Every 600-800 kg of pellets, an additional cleaning should be carried out. Open the door, clean the debris that may be on the grate before removing it, remove the grate, drawer and burner, once removed, remove the baffle plate, which is on top of the combustion chamber (figure 44).

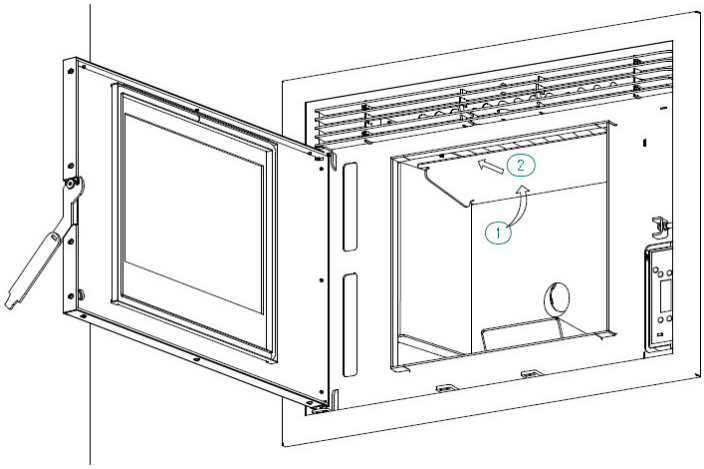


Figure 41 – Removal of the baffle plate

Remove the vermiculite plates lining the inside of the combustion chamber, first remove the sides and then the back. This shows the parts separating the combustion chamber from the smoke passage (Figure 45).

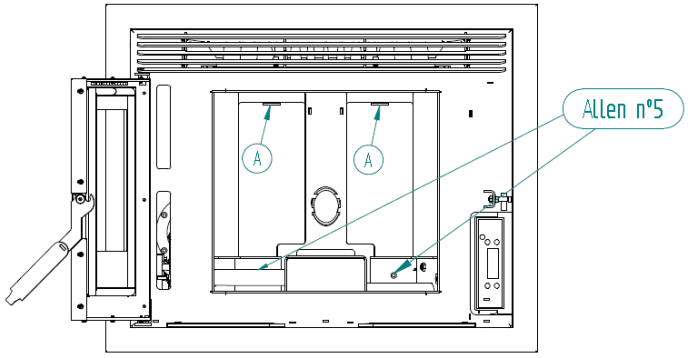


Figure 42 – Combustion chamber separators

Using a nº5 hex wrench, remove the two DIN 912 M6x12 screws securing the lower spacers (Figure 45). Once removed, the top separators are easily removed, the smoke passage in the rear of the combustion chamber should be cleaned using a vacuum cleaner and a vacuum cleaner to clean the combustion chamber, the top-floor heat exchanger, The ash basket area and the lower part of the combustion chamber.

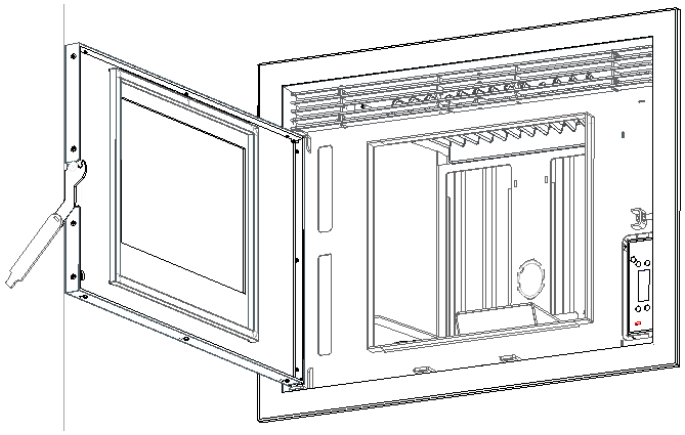


Figure 43 – Fume passage cleaning and cast-iron heat exchanger

Cleaning the Glass

Allow the unit to cool down completely before cleaning the glass. For cleaning, use a specific product following the instructions of the label. Avoid contact between the product and rope gasket and painted metal parts of the unit, as this may cause oxidation. The rope gasket is fixed with glue so any contact with water or any other liquids must be avoided.

Figure 44 – Incorrect cleaning of the glass

Figure 45 – Cleaning the glass: Applying liquid to the cloth

Figure 46 – Cleaning the glass: Cleaning the glass with the cloth

Annual cleaning

For the next cleaning task, it is necessary to remove the insert. With the door closed, open the two safety latches located under the door using the accessory (figure 50).

On the left side of the equipment, you can access the smoke extractor, as shown in figure50.

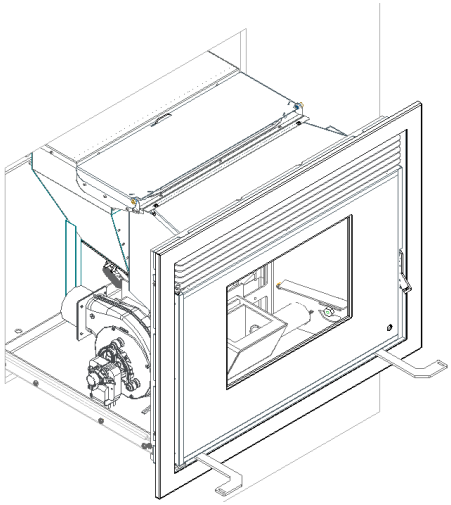


Figure 47 – Smoke extractor view

The smoke extractor is located on the left side of the equipment, it's mainly composed of two parts, the body and the motor. To clean the extractor, it is necessary to remove the cap with the motor, remove the screws as shown in Figure 51 with a Phillips screwdriver (PH2). You can use a brush and a vacuum cleaner to remove any dirt from the extractor walls and propellers.

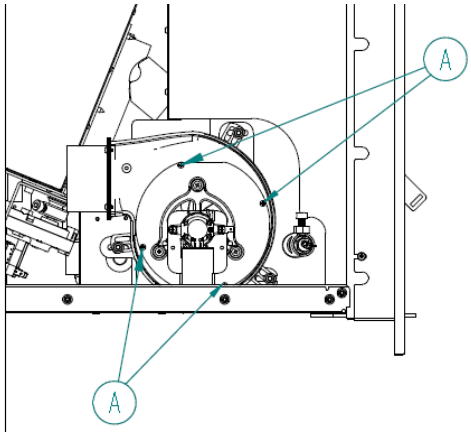


Figure 48 – Smoke extractor view

The second part of the cleaning requires the complete removal of the moving part of the equipment. The first thing to do is to disconnect the power cord and the connections if there is external probe or chrono-thermostat.
We remove the equipment from its fixed base. At the rear of the fixed base, to the left we have the smoke box that is connected to the chimney. On the front there is a red silicone gasket that is responsible for making the connection between the extractor and the smoke box, it must be checked that this gasket is in good condition. The joint can not have cracks or cuts and must be flexible, if it is not in good condition, it is necessary to replace. The smoke box on the right side has a fixed cover with screws 6 DIN912 M6x12 (see figure 52), it is necessary to remove this cover to gain access to the inside of the box and clean (see figures 68).

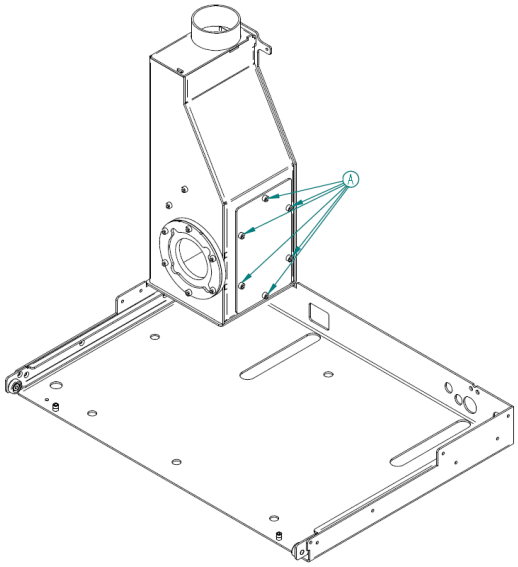


Figure 49 – Smoke box cover

Inside the box there are two smoke deflectors, positioned as shown in figure 53, to carry out a proper cleaning it is necessary to remove them.

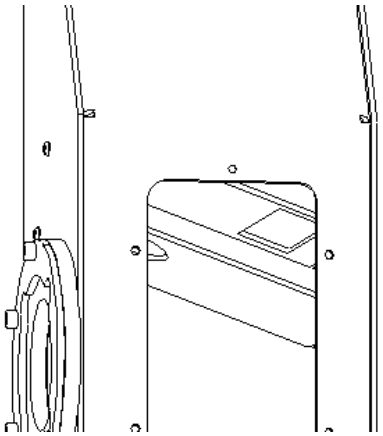


Figure 50 – Smoke box cover

To remove the baffles, you first have to remove 2 M6x20 DIN 912 screws as shown in figure 54. Clean the inside of the smoke box and replace the baffles.

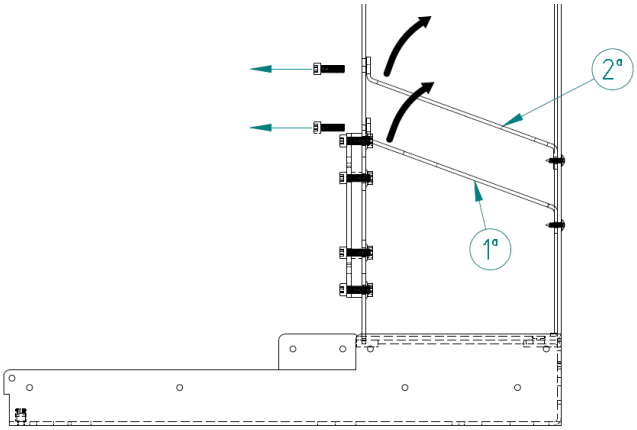


Figure 51 – Smoke box deflectors

Finally, replace all the parts in reverse order of their disassembly, finally close the safety locks under the door.

NOTICE! The frequency of maintenance tasks depends on the quality of the pellets.

19. Maintenance Plan and Log

To ensure the proper operation of the unit, maintenance operations must be performed, as described in Chapter 19 of this Instruction Manual or in the Maintenance and Cleaning Guide. There are specific maintenance tasks that must be performed by authorised technicians only. Please contact the person responsible for installing the unit. To make sure the warranty remains valid, the maintenance operations performed on this unit must comply with the frequency requirement specified in the manual, and the service technician must fill and sign the maintenance log.

Client data:

Name:	
Address:	
Telephone:	
Model:	
Serial number:	

Company/SAT:
Technical:
Dates:
Service hours of boiler:
Quantity of pellets burned:

Task	Check	Obs.
Clean burner		
Clean smoke circuit and turbulators		
Vacuum pellet tank sawdust		
Check pressure of the expansion vessel		
Check safety valve 3 bar		
Check the fluid on the hydraulic circuit		
Clean the smoke extractor		
Check and clean the inspection T		
Clean chimney		
check the tightening of the screws		
Check engine cap pellet hopper		

Signature/stamp

Company/SAT:
Technical:
Dates:
Service hours of boiler:
Quantity of pellets burned:

Task	Check	Obs.
Clean burner		
Clean smoke circuit and turbulators		
Vacuum pellet tank sawdust		
Check pressure of the expansion vessel		
Check safety valve 3 bar		
Check the fluid on the hydraulic circuit		
Clean the smoke extractor		
Check and clean the inspection T		
Clean chimney		
check the tightening of the screws		
Check engine cap pellet hopper		

Signature/stamp

Company/SAT:
Technical:
Dates:
Service hours of boiler:
Quantity of pellets burned:

Task	Check	Obs.
Clean burner		
Clean smoke circuit and turbulators		
Vacuum pellet tank sawdust		
Check pressure of the expansion vessel		
Check safety valve 3 bar		
Check the fluid on the hydraulic circuit		
Clean the smoke extractor		
Check and clean the inspection T		
Clean chimney		
check the tightening of the screws		
Check engine cap pellet hopper		

Signature/stamp

Company/SAT:
Technical:
Dates:
Service hours of boiler:
Quantity of pellets burned:

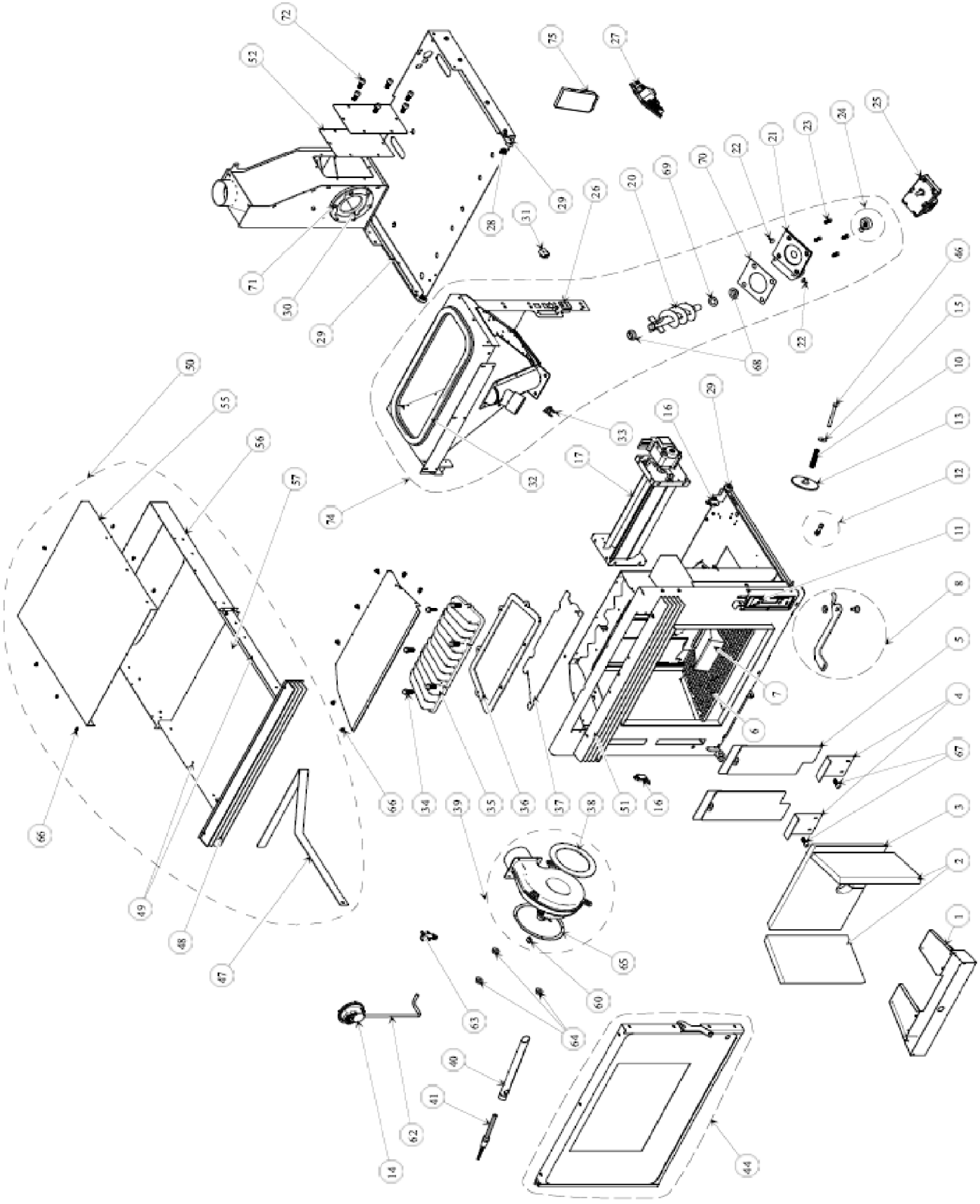
Task	Check	Obs.
Clean burner		
Clean smoke circuit and turbulators		
Vacuum pellet tank sawdust		
Check pressure of the expansion vessel		
Check safety valve 3 bar		
Check the fluid on the hydraulic circuit		
Clean the smoke extractor		
Check and clean the inspection T		
Clean chimney		
check the tightening of the screws		
Check engine cap pellet hopper		

Signature/stamp

20. Spare Parts List & Exploded View

Spare Parts List					
1	IC0402000030002	Ash Pan	**36**	IS0069300000E00	Gasket 402x170x4
2	IS1013200000007	Vermiculite side	**37**	IS0801030000000	Baffle Plate
3	IS1012200000005	Vermiculite Rear	**38**	IS0067000000E00	Extractor Gasket 150x110x4
4	IC0120000260019	Lower Trapdoor Set	**39**	IC0490000000008	Extractor Fan complete
5	IC0120000260020	Upper Trapdoor Set	**40**	IC0409000000007	Igniter Tube(22x227)
6	IS0703030000004	Ash Grate	**41**	CO0303000000006	Igniter Ceramic
7	IS3525000260000	burn pot	**44**	IC0420000260040	Door Assy Complete.
8	IC0123000260003	Locking handle assembly	**46**	CO0704070807024	Screw Din 931 8.8 M8x70 Z/B
10	IS0010000000E00	Spring	**47**	IS0181030300000	Tool to Push Pellets
11	CO0312000000048	WIKEY panel w/Radio & WiFi	**48**	IC0132000300007	Grill Frontsolzai Drawer
12	IC0414000000005	M6x35	**49**	CO0730009140024	Slides 40Kg 400mm
13	IC0416000260000	Safety Valve Cover	**50**	IC0419000000000	Insert Drawer Assy.
14	CO0315000000030	Pressure switch 10-20 Pa	**51**	IC0132000300005	Front Grill lower
15	IS0046800000E00	Din washer 9021 M8 Z/B	**52**	IS0068600000E00	Gasket 210x126x2
16	IS0024100000E00	Limit Switch CT 760/F	**55**	IS1116015030000	Pell Air Insertable Drawer Lid
17	IS0027500000E00	TGA 80/1-300/35 fan (148311)	**56**	IS1165020030000	Drawer Support
20	IC0415000000003	Auger Screw - P5	**57**	IC0419000000002	Drawer
21	IC0414000260001	Auger Motor Support2012-01-P78	**60**	IS0033800000E00	Encoder Board
22	IS0060900000E00	Rubber stopper C0017	**62**	IS1510080000005	Silicone Tube 8x6x220
23	IS0049200000E00	Screw Din 912 8.8 M6x20 Z/P	**63**	CO0315000000060	pressure switch support
24	IC0114000000000	T143 Bushing	**64**	IS0056900000E00	Nut Din 6923 M6 Z/B
25	IS0030700000E00	Auger Worm Motor 2 RPM	**65**	IS0067700000E00	Extract Gasket PL21 165x147x2
26	IS0039500000E00	Back Source PG500	**66**	IS0052600000E00	Screw Din 7981 4.2x9.5 Z/P
27	IS6600000000019	Circuit board	**67**	IS0048900000E00	Screw Din 912 8.8 M6x14 Z/P
28	IC0452000000001	T57A+2xT55 Insertable Shaft	**68**	IS0060800000E00	T342 Casq Worm Self-Lub 18x11
29	IS0061100000E00	Slide Bearings 100kg 500mm	**69**	IS0899012000000	Stainless washer
30	CO0510000750000	Red Silicone Seal Dia 75x145mm	**70**	IS0067400000E00	Worm Motor Gasket 109.5x100x2
31	IS0039400000E00	Panel Adapter RJ11/RJ11 &cable	**71**	IS0049300000E00	Screw Din 912 12.9 M6x25 Z/P
32	IS1610000000007	Rubber Seal 1110mm	**72**	CO0704060601424	Screw Din 912 8.8 M6x14 Z/B
33	IS0026400000E00	Hopper thermostat 110ºC	**74**	IC0408000000011	Hopper Assembly
34	IS0051900000E00	Screw Din 6921 M6x20 Z/B	**75**	IS0029900000E00	Monolite Radio control black
35	IS3526000260000	Heat Exchanger			

IK900 Exploded View.



21. Maintenance Guide Label

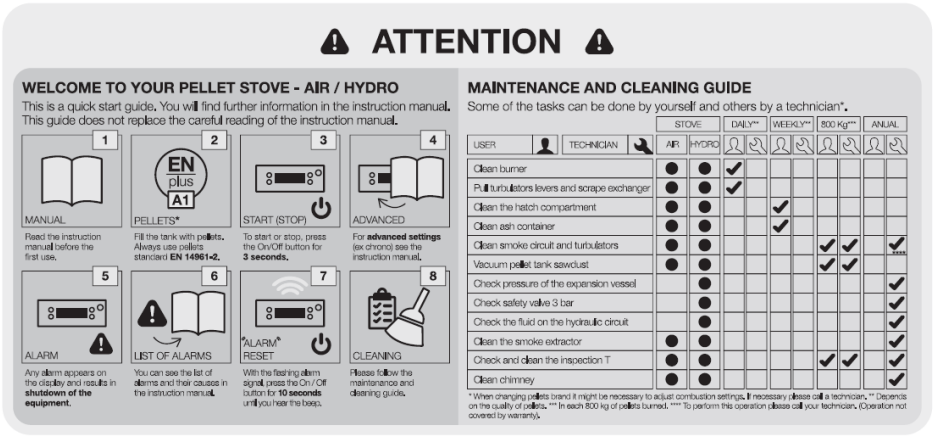


Figure 52 – Maintenance guide label

Note: The safety warnings sticker label is attached from factory to the unit's pellet lid, in the Portuguese language. Attached to the manual you will find other language versions of the sticker labels (Spanish, English, French and Italian). If necessary, remove the Portuguese language label and replace it with the label in your country's language.

22. Electrical Diagram of the Free-Standing Fire Unit

22.2 Electrical Schematic –

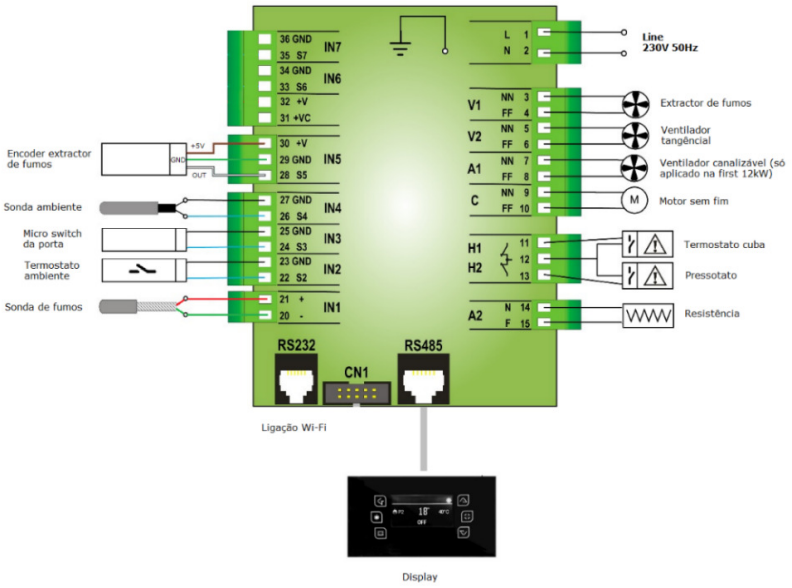


Figure 53 – Electrical diagram (Tiemme Electronics)

23. End of life of a pellet insert

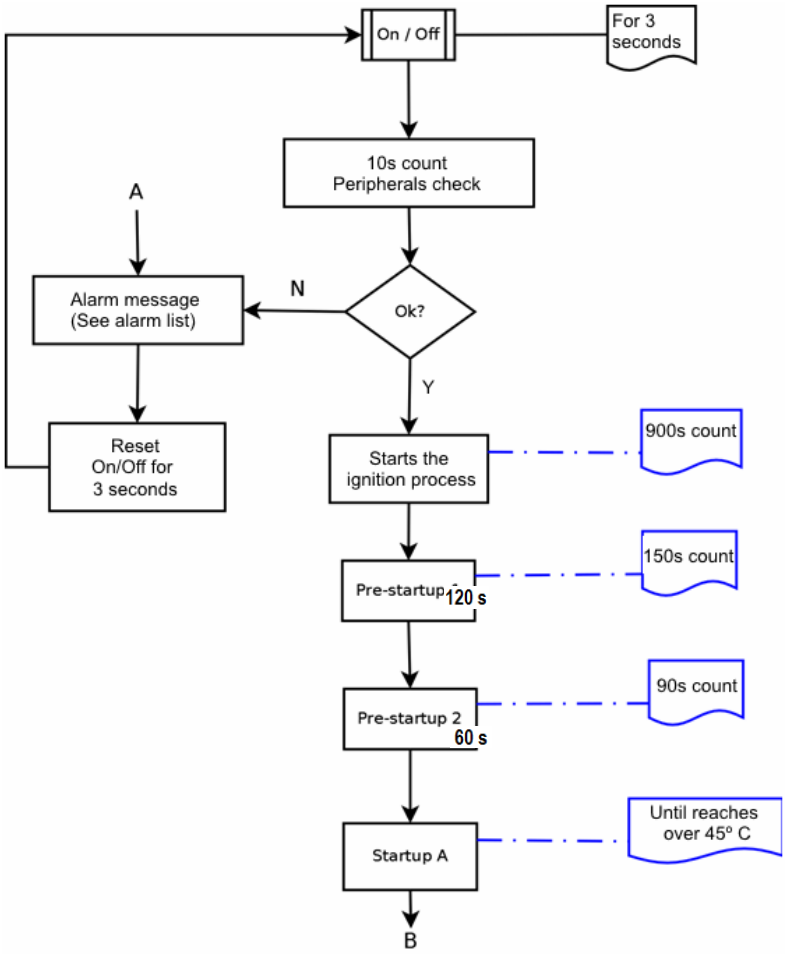
Approximately 90% of the materials used to manufacture these units are recyclable, contributing towards a reduced environmental impact and a more sustainable planet.

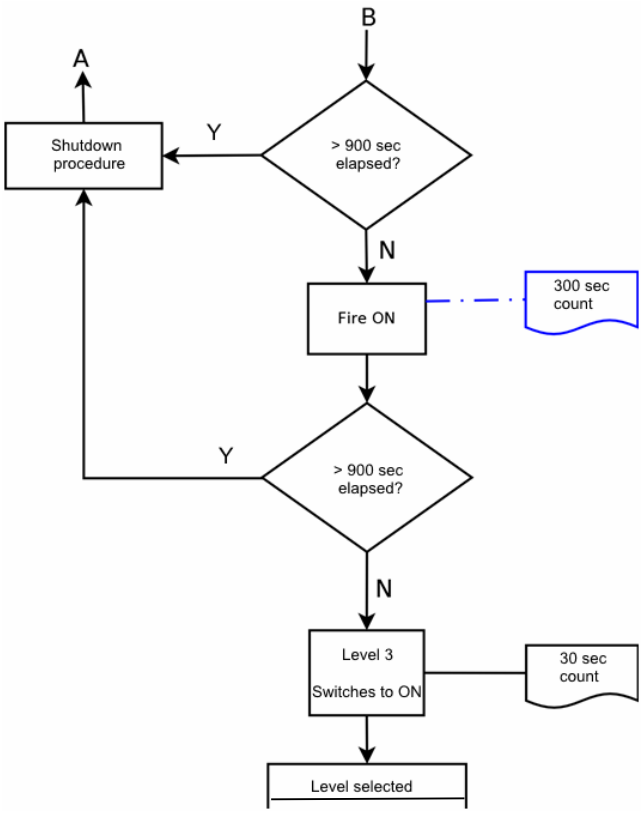
End-of-life units should be processed by licensed waste operators. We recommend contacting your local council to ensure the unit is collected and handled pursuant to any legal requirements.

24. Annexes

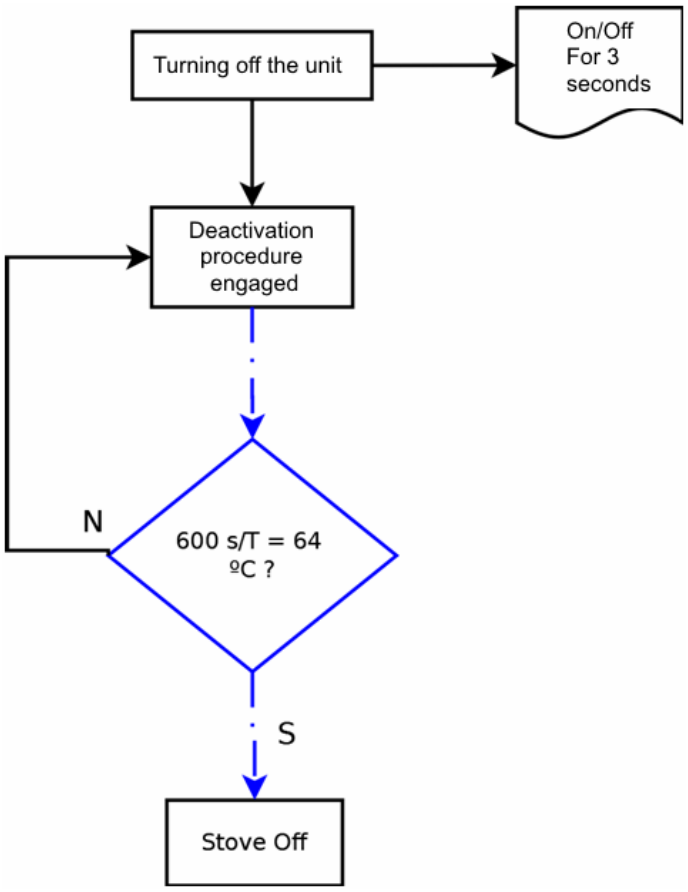
24.1 Flow chart

Lighting





Disabling



Supplied by.
Waterford Stanley Ltd.,
Unit 401-403, IDA Industrial Estate,
Cork Road,
Waterford, Ireland.