

# **PELLET STOVES**

## **Instruction Manual**

**Ecologica Idro**

Read these instructions carefully before installation, use and maintenance.

The instruction booklet is an integral part of the product.

**Congratulations! You are now the owner of an EXTRAFLAME stove!**

The EXTRAFLAME pellet stove is an ideal heating solution. It utilises the most advanced technology and is manufactured to the highest standards with a contemporary design, allowing you to enjoy the ambience and warmth of a natural flame in complete safety.

This manual tells you how to use your stove correctly. Please read the entire manual carefully before using your stove.

**IMPORTANT**

Make sure that the dealer completes the following box with the details of the authorised specialist who will help you if you have any problems in using your new pellet stove.

<b>AUTHORISED SPECIALIST</b>	
<b>COMPANY</b>	_____
<b>NAME</b>	_____
<b>ADDRESS</b>	_____
<b>POST CODE</b>	<b>CITY</b> _____
<b>TEL.</b>	<b>FAX</b> _____

All Extraflame products are manufactured according to the following directives:

- **89/106 EEC (CPD)** *construction materials*
- **73/23 EEC (LVD)** *electrical safety*
- **98/37 EEC** *machinery*
- **2004/108 EEC (EMC)** *electromagnetic compatibility*

And the following standards:

- **EN14785**
- **EN60335.1 EN50165 EN50366**
- **EN292 EN294**
- **EN55014.1 EN55014.2 EN61000-3-2 EN61000-3-3**

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## 1. WARNINGS AND SAFETY

The stoves produced in our factory are built with maximum dedication to the individual components so as to protect both the user and the installer from accidents. Authorised personnel are therefore advised to pay special attention to the electrical connections, above all after any servicing operation on the product, especially with regard to the stripped part of the wires, which must not protrude in any way from the terminal block to prevent possible contact with the live parts of the wire.

**Installation must be carried out by authorised personnel, who have to provide a declaration of conformity of the appliance for the purchaser, who will then be fully responsible for the permanent installation and consequent correct operation of the installed product. It is necessary to bear in mind all the national, regional, provincial and municipal laws and regulations present in the country in which the appliance is installed.**

**Extraflame S.p.A. may not be held responsible in the event of failure to observe these precautions.**

This instruction manual constitutes an integral part of the product. It must always accompany the appliance, also when it is transferred to another owner or user or moved to another location. If the manual gets damaged or lost, ask your local service centre for another copy.

This stove must only be used for the applications for which it was expressly designed.

The manufacturer declines any responsibility, contractually or extra-contractually, for any damage caused to persons, animals or property by errors in installation, adjustment, and maintenance, or by improper use.

After removing the packaging, check to make sure that the contents are intact and complete.

If this is not the case, contact the vendor from whom the appliance was purchased.

The electrical components of the stove, to guarantee correct operation, must only be replaced with original spare parts from an authorised service centre.

General stove maintenance must be carried out at least once a year, scheduled sufficiently in advance with the service centre.

**The following safety precautions must be observed:**

Do not allow the stove to be used by children or unassisted disabled persons.

Do not touch the stove if you are bare-footed or if parts of your body are wet or damp.

Modifying the safety or adjustment devices without the manufacturer's approval or instructions is forbidden.

Never pull, detach, or twist the electrical cables coming out of the stove, even if it is disconnected from the electrical power supply.

Avoid blocking up or reducing the size of the air vents of the room in which the stove is installed.

The air vents are critical for correct combustion.

Keep the packaging materials out of the reach of children and unassisted disabled persons.

During product operation the door of the furnace must always be closed.

Avoid direct contact with parts of the appliance which tend to heat up during functioning.

Check for the presence of any obstructions before switching the appliance on following a long standstill period.

The stove has been designed to function in any climatic conditions (even critical), in particularly adverse conditions (strong wind, ice) safety systems may intervene, which switch the stove off.

If this happens, contact the after-sales service and under no circumstances disable the safety systems.

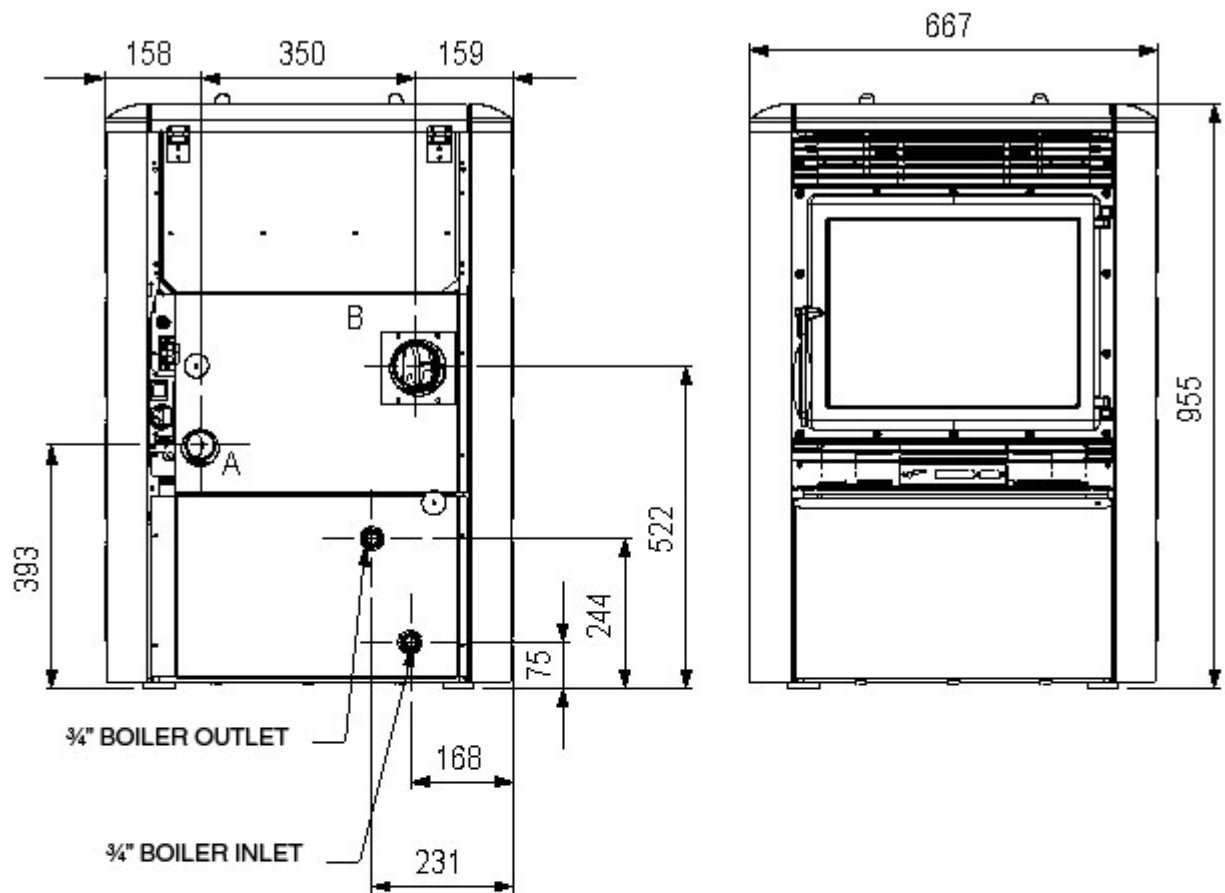
If the flue should catch fire use suitable systems to suffocate the flames or request help from the fire brigade.

## 2. TECHNICAL SPECIFICATIONS

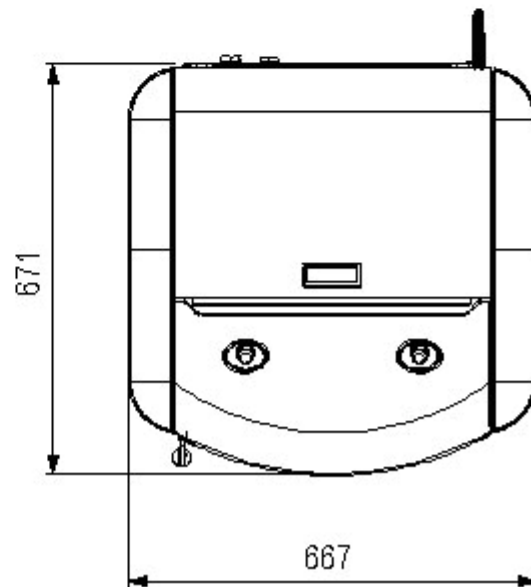
Features	Unit	Valore Value
Weight	kg	159
Height	mm	955
Width	mm	667
Depth	mm	671
Flue gas exhaust pipe diameter	mm	80
Air extraction pipe diameter	mm	50
Max. overall thermal power	kW	16
Max. useful thermal power	kW	12.5
- output air power	kW	1.0
- output water power	kW	11.5
Min. useful thermal power	kW	3.5
- output air power	kW	0.5
- output water power	kW	3.0
Min. hourly fuel consumption	kg/h	0.8
Max. hourly fuel consumption	kg/h	3.2
Tank capacity	kg	~ 30
Recommended chimney draught	Pa	~ 10
Chimney draught at max useful power	Pa	12
Chimney draught at min useful power	Pa	10
Rated electrical power	W	310
Rated voltage	Vac	230
Rated frequency	Hz	50
Water inlet/outlet pipe diameter	"	3/4
Automatic discharge pipe diameter	"	-
Pump head	m	4
Max accepted working water power	bar	1.5
CO measured at max useful power	%	0.024
CO measured at min useful power	%	0.033
Efficiency at max useful power	%	80.8
Efficiency at min useful power	%	91.5
Exhaust gas temp. at max useful power	°C	214
Exhaust gas temp. at min useful power	°C	76.8
Mass of gases emitted at max useful power	g/s	15.17
Mass of gases emitted at min useful power	g/s	6.38

Tests carried out using wooden pellets as fuel, with calorific value of 4.9 kW/h/kg.

The data stated above is a reference and not binding. The manufacturer reserves the right to carry out any modifications in order to improve the performance of the product.



A: AIR SUCTION PIPE  $\varnothing 50$   
 B: FUME DISCHARGE PIPE  $\varnothing 80$



### 3. WHAT ARE PELLETS?

Pellets are made by applying very high pressure to sawdust; i.e. the residue of raw timber (without paint) produced by sawmills, carpentry works and other activities involved in processing wood.

This type of fuel is completely environmentally friendly, as no binders of any kind are used to keep it compact. In fact, the compactness of the pellets over time is guaranteed by lignite, a natural substance found in the wood itself.

As well as being an environmentally friendly fuel, since wood residues are exploited to the maximum, pellets also have technical advantages.

While the heating power of wood is 4.4 kW/kg (with 15% humidity, after about 18 months seasoning), the power of pellets is 5.3 kW/kg.

The density of the pellet is 650kg/m<sup>3</sup> and the water content is 8% of its weight. For this reason, pellets do not need to be seasoned to obtain a sufficient heating yield.

The pellet used must conform to the characteristics of the following regulations:

- Ö-Norm M 7135
- DIN plus 51731
- UNI CEN/TS 14961

Extraflame recommends always using 6 mm pellets for its products.

#### 3.1 Pellet storage

To guarantee problem-free combustion, the pellets must be stored in a dry place.

#### 3.2 Pellet loading

To load the pellets, open the tank cover positioned on the upper part of the stove and empty the bag of pellets, paying attention not to let them escape.



#### **WARNING**

THE USE OF POOR QUALITY PELLETS OR ANY OTHER MATERIAL MAY DAMAGE YOUR STOVE AND MAY LEAD TO THE INVALIDATION OF THE WARRANTY AND THE RELATED RESPONSIBILITIES OF THE MANUFACTURER.

## 4. SAFETY DEVICES

### 4.1 Breakdown of hot air distribution fan

If the blower stops for any reason, the stove automatically shuts down to prevent overheating

### 4.2 Breakdown of flue gas extractor

If the extractor stops, the electronic unit immediately prevents pellet feeding.

### 4.3 Breakdown of pellet load motor

If the motor stops, the stove continues to operate until the minimum cooling level is reached.

### 4.4 Failed ignition

If no flame develops during the ignition phase, the appliance automatically attempts a new ignition, this time, though, without loading pellets.

If, after this attempt, the stove still has no flame, the stove display shows "FAILED IGNITION". If you attempt to light the stove again, the display shows "COOLING WAIT" which means "WAIT".

**This function reminds you that before lighting the stove, you must be sure that the brazier is free of dirt and debris.**

### 4.5 Temporary power cut

The appliance will re-light automatically after a brief power failure. When the power goes off, the stove may emit a minute quantity of smoke inside the house for a period of 3 to 5 minutes.

THIS DOES NOT POSE ANY SAFETY RISK.

### 4.6 Electrical safety device

The stove is protected against violent changes in power by a master fuse on the rear of the stove (2A 250V delayed).

### 4.7 Flue gas exhaust safety device

If the exhaust system fails, an electronic pressure switch stops the stove and an alarm is signalled.

### 4.8 Pellet temperature safety device

In case of overheating inside the pellet tank, this safety device blocks stove operation; resetting is manual and must be performed by an authorised technician.

### 4.9 System pressure safety device

A mechanical pressure switch blocks any over-pressure in the system.

Resetting is manual and must be carried out by an authorised technician.

### 4.10 Boiling water safety device

In the event of a lack or minimum quantity of water, this device blocks the pellet feed. Reset is manual and must be carried out by an authorised technician.

### 4.11 External devices

During stove installation, it is MANDATORY to adapt the system with a pressure gauge for viewing the water pressure and an automatic discharge valve calibrated at 3 bar pressure.

#### **4.12 Installation and safety devices**

The installation and respective system connections, the start-up and final testing for correct operation must be carried out with all due diligence by authorised professional technicians (Italian Law no. 46 of 5 March 1990), in full respect for the regulations in force, both national and regional, as well as for the instructions given in this manual.

**Extraflame S.p.A. declines any responsibility for damage to objects and/or persons caused by the system.**

#### **4.13 Safety devices for open expansion tank system**

According to the UNI 10412-2 (2006) regulation, in force in Italy, systems with open expansion tank must be equipped with:

- Open expansion tank
- Safety tube
- Loading tube
- Thermostat for circulator control (excluded for systems with natural circulation)
- Circulation system (excluded for systems with natural circulation)
- Device for acoustic alarm activation
- Acoustic alarm
- Temperature indicator
- Pressure indicator
- Automatic cut-out switch (cut-out thermostat)

The temperature safety sensors must be on-board the heat generator or at a distance no greater than 30 cm from the delivery connection.

If the heat generators are not equipped with all the devices, the missing ones can be installed on the delivery piping of the generator, at a distance of no more than 1 m from it.

#### **4.14 Safety devices for closed tank system**

According to the UNI 10412-2 (2006) regulation, in force in Italy, closed systems must be equipped with:

- Safety valve
- Circulator control thermostat
- Acoustic alarm activation thermostat
- Temperature indicator
- Pressure indicator
- Acoustic alarm
- Automatic thermal adjustment switch
- Automatic thermal cut-out switch (cut-out thermostat)
- Circulation system
- Expansion system
- Safety dissipation system incorporated into the generator with the blowdown valve (self-operated), if the appliance is not equipped with a self-regulating temperature system

The temperature safety sensors must be on-board the heat generator or at a distance no greater than 30 cm from the delivery connection.

If the generators are not equipped with all the devices, the missing ones can be installed on the delivery piping of the generator, at a distance of no more than 1 m from the machine.

Domestic type automatic loading heating appliances must be equipped with a fuel blocking thermostat or a cooling circuit provided by the manufacturer of the appliance, activated by a thermal safety valve in order to guarantee that the temperature limit imposed by the regulation is not exceeded. The connection between the power supply unit and the valve must not have interceptions. The pressure upstream from the cooling circuit must be at least 1.5 bar.

## 5. ASSEMBLY AND INSTALLATION INSTRUCTIONS

The installation must comply with:

*UNI 10683 (2005) heat generators fed with wood and other solid fuels: installation.*

The chimneys must comply with:

*UNI 9731 (1990) chimneys: classification according to thermal resistance.*

*EN 13384-1 (2006) calculation method of the thermal and fluid-dynamic features of the chimney.*

*UNI 7129 point 4.3.3 provisions, local rules and prescriptions of the fire brigade.*

*UNI 1443 (2005) chimneys: general requirements.*

*UNI 1457 (2004) chimneys: internal ducts in terracotta and ceramics.*

### 5.1 Glossary

#### **CLOSED HEARTH DEVICE**

Heat generator that can only be opened to load fuel during use.

#### **BIOMASS**

Material of organic origin, excluding the material incorporated in geological formations and fossilised.

#### **BIOFUEL**

Fuel produced directly or indirectly from biomass.

#### **FLUE or CHIMNEY**

Vertical pipe for collecting and expelling combustion products from a single appliance at a suitable height from the floor.

#### **EXHAUST PIPE or FITTING**

Pipe or connecting element between the heat generating device and the chimney for extracting the combustion products.

#### **INSULATION**

The series of measures taken and materials used to prevent heat transmission through a wall dividing rooms at different temperatures.

#### **CHIMNEY CAP**

Device located at the top of the chimney that facilitates dispersion of the combustion products in the atmosphere.

#### **CONDENSATE**

Liquid products that form when the temperature of the combustion gas is lower than or equal to the dew point of the water.

#### **HEAT GENERATOR**

Device that permits the production of thermal energy (heat) by the rapid transformation of the chemical energy of the fuel by means of combustion.

#### **AIR LOCK**

Mechanism for modifying the dynamic resistance of the combustion gases.

### **FLUE GAS VENTING SYSTEM**

A system for flue gas exhaust venting that is independent from the appliance, composed of a pipe or channel, chimney or single flue, and chimney cap.

### **FORCED DRAUGHT**

Air circulation by means of a fan driven by an electric motor.

### **NATURAL DRAUGHT**

Draught resulting in a chimney/flue due to the difference in the volume mass existing between the (hot) fumes and the surrounding atmospheric air, without any mechanical suction aid installed inside or on top of it.

### **RADIANCE AREA**

Area immediately adjacent to the hearth in which the heat produced by combustion is diffused; this area must not contain any objects made of combustible material.

### **REFLUX AREA**

Area in which the combustion products come out from the appliance towards the room in which it is installed.

## **5.2 Installation**

Before carrying out installation, it is necessary to check the positioning of the chimneys, flues or exhaust terminal ducts of the appliance, bearing in mind the following:

- Installation prohibitions
- Legal clearances
- Limitations set out by local administrative regulations or specific regulations of the authorities.
- Common limitations deriving from building regulations, and easement or contract regulations.

### **Admissible installations**

In the room in which the heat generator is to be installed, any existing or installed appliances must be airtight to the room and must not cause depression in the room with respect to the external environment.

Appliances used for cooking foods and the related hoods without extractor can only be installed in rooms used as kitchens.

### **Prohibited installations**

The room in which the heat generator is to be installed must not contain any of the following devices, either pre-existing or installed:

- Hoods with or without extractor;
- Ventilation ducts of the collective type.

Should these devices be located in adjacent rooms communicating with the installation room, it is forbidden to use the heat generator simultaneously where there is the risk that one of the two rooms may be subject to depression with respect to the other.

## 5.2.1 Connection to the flue gas venting system

### Exhaust pipe or fitting

For the assembly of the exhaust pipes it is imperative to use non-flammable materials that are resistant to combustion products and any condensates.

It is forbidden to use flexible metal pipes and asbestos cement for connecting the stove to the flue, also for pre-existing exhaust channels.

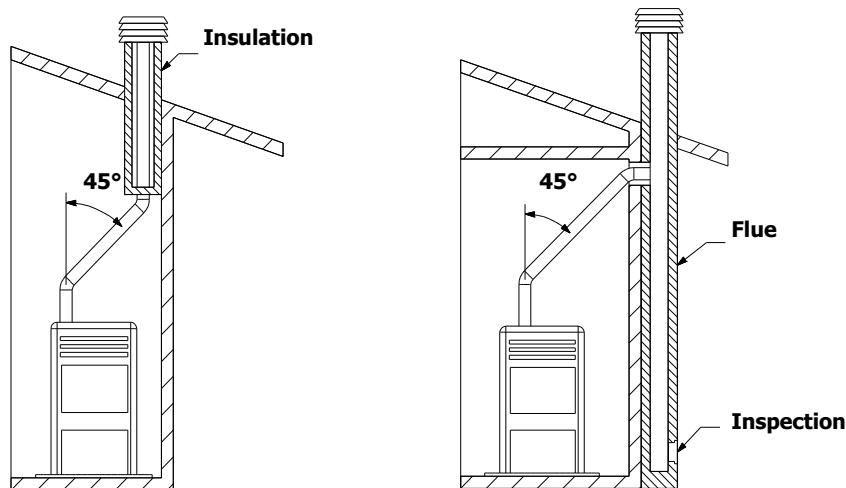
There must be continuity between the exhaust pipe and the flue so that the flue does not lean on the stove.

The exhaust pipes must not pass through rooms in which the installation of combustion devices is forbidden.

The assembly of the exhaust pipes must be carried out in such a way as to ensure that they are airtight for the operating conditions of the appliance, as well as to limit the formation of condensates and prevent them from being conveyed towards the appliance.

The assembly of horizontal sections must be avoided where possible.

Where roof or wall exhaust outlets have to be reached that are not coaxial in relation to the exhaust outlet from the appliance, the direction changes must be made using open elbows no greater than 45° (see figures below).



For heat generating devices equipped with an electric exhaust fan, i.e. all products made by Extraflame, it is necessary to observe the following instructions:

- Horizontal sections must have a minimum slope of 3% upwards.
- The length of the horizontal section must be as short as possible, and in any case no greater than 3 metres.
- No more than four direction changes may be used, including the one resulting from the use of the "T"-element. (When four bends are used, use double wall piping with a 100 mm diameter.)

In any case, exhaust pipes must be sealed in relation to combustion products and condensates, as well as insulated, if they pass outside the installation room.

It is forbidden to use elements in counter-slope.

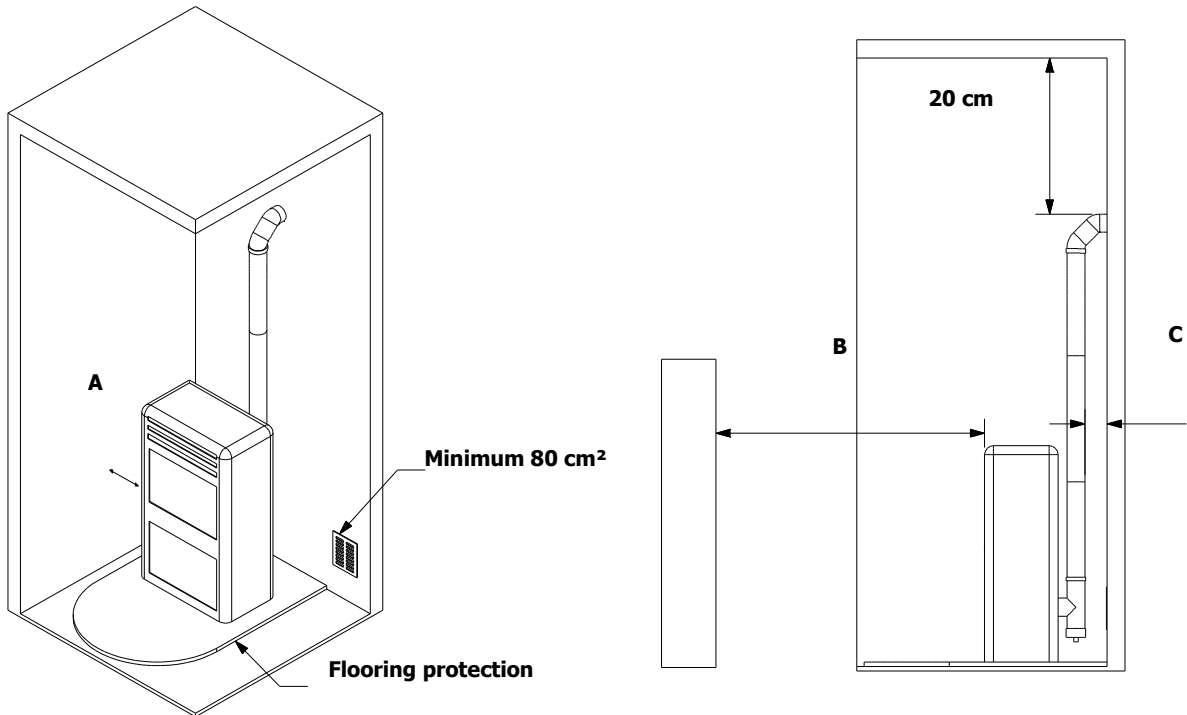
The exhaust channel must allow soot recovery and cleaning using a swab.

The exhaust channel must have a constant cross-section. Any changes in cross-section are allowed only at the flue connection. It is forbidden to run other air feed channels or piping for utilities inside the exhaust channels, even if they are oversized. No manual draught regulation devices can be mounted on forced draught appliances.

**5.2.2 Chimney or single flue**

The chimney or flue must meet the following requirements:

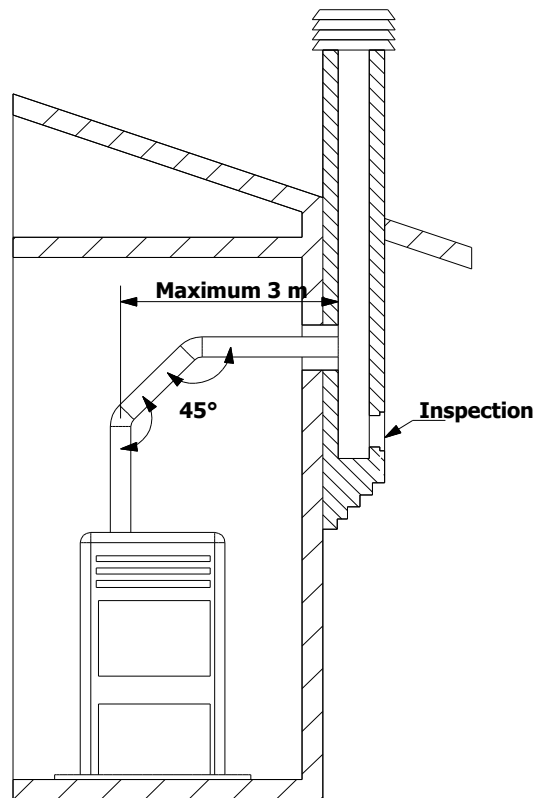
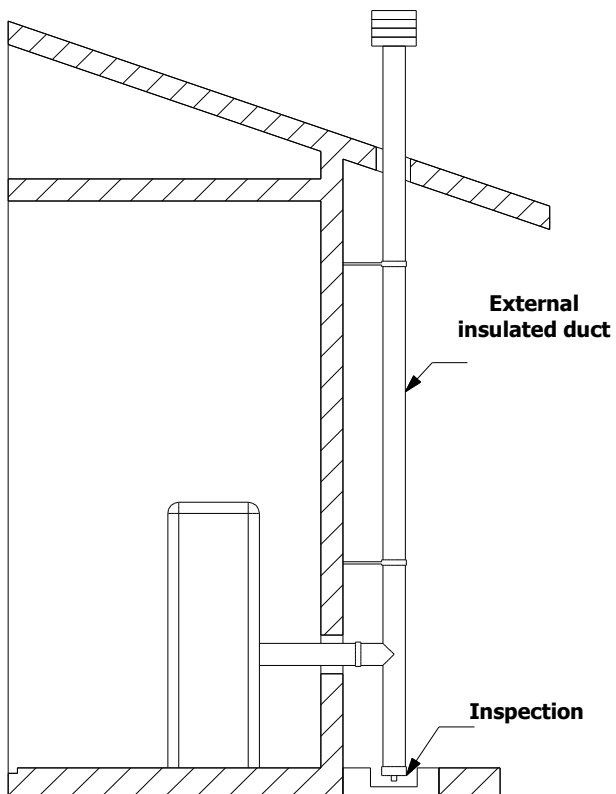
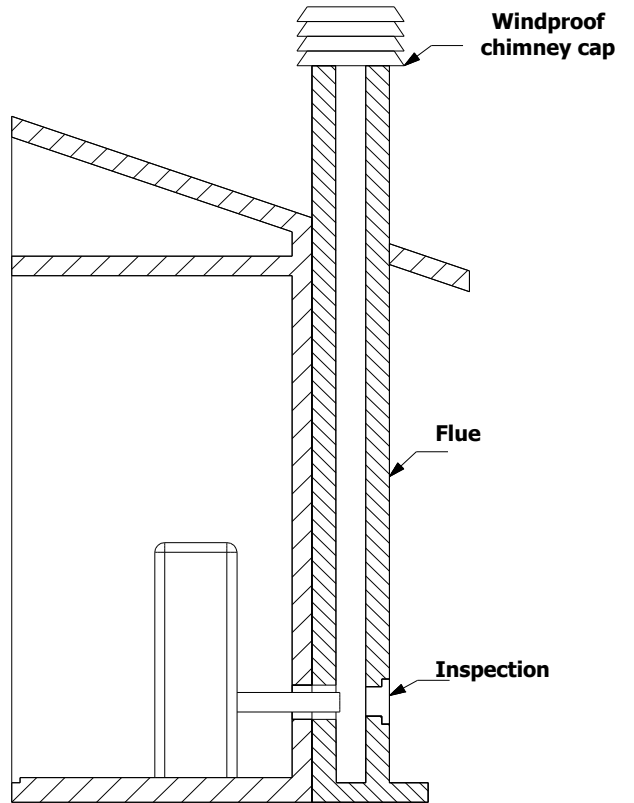
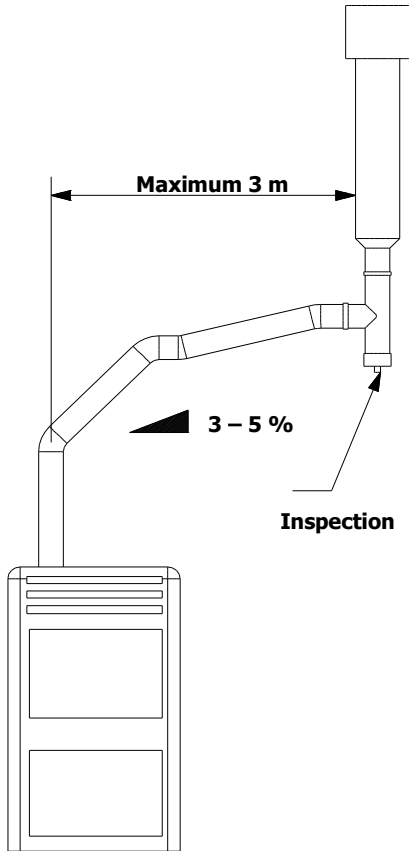
- be sealed to combustion products, waterproof and properly insulated according to the usage conditions;
- be made of materials suitable to resist normal mechanical stress, as well as heat and the action of combustion products and any condensates;
- have a predominantly vertical layout with deviations from the axis no greater than 45°;
- be situated at a proper distance from combustible or flammable materials by means of an air gap or suitable insulation material;



REFERENCES	Flammable objects	Non-flammable objects
A	200	100
B	1500	750
C	200	100

- preferably have a round internal section: square or rectangular sections must have rounded edges with radius no less than 20 mm;
- have a constant, free and independent internal section;
- have rectangular sections with a maximum ratio between sides of 1.5.

The exhaust pipe should be equipped with a chamber for the collection of solid materials and any condensates located below the mouth of the exhaust pipe, so that it is easy to open and inspect from the airtight hatch.



## 5.2.3 Connecting the appliance to the flue and evacuation of combustion products

The flue must receive exhaust from a single heat generator.

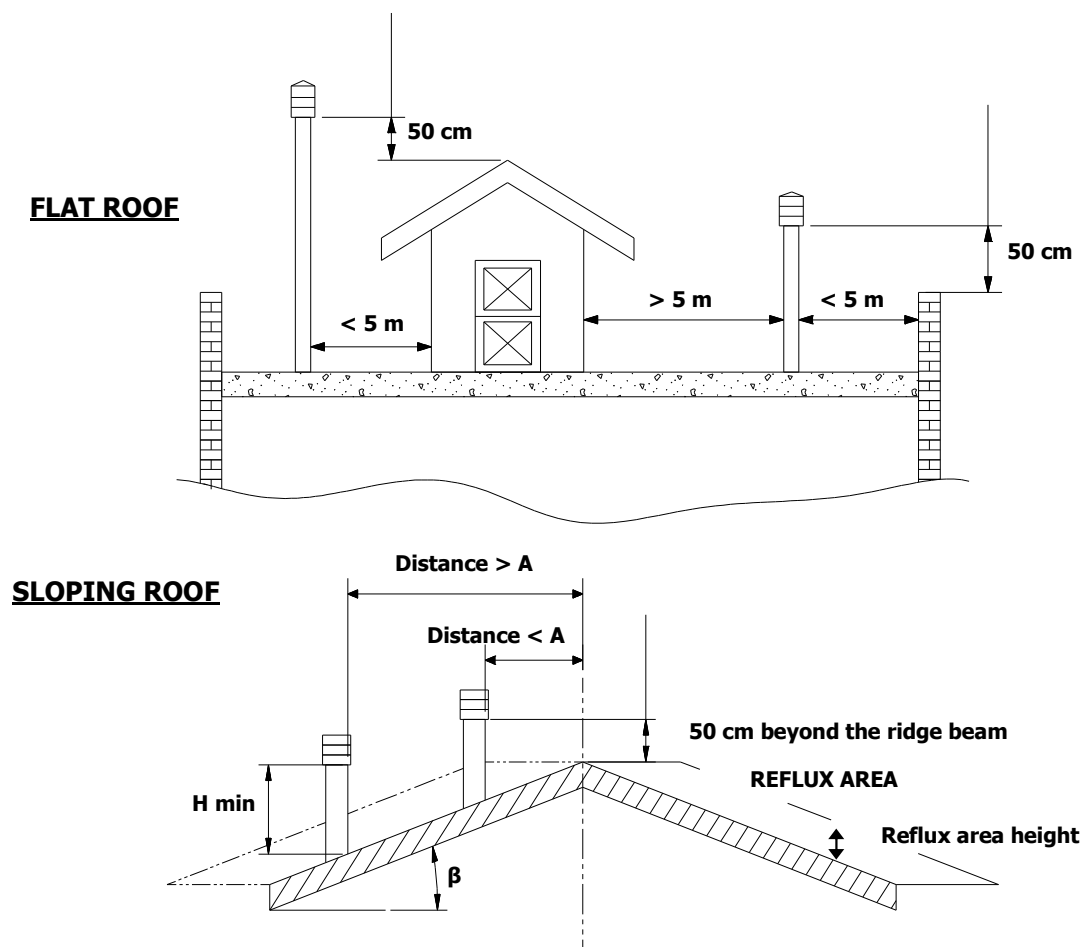
Direct discharge towards enclosed areas, even when roofless, is forbidden.

Direct discharge of combustion products must take place on the roof and the exhaust pipe must have the features set out in the section "Chimney or single flue".

## 5.2.4 Chimney cap

The chimney cap must meet the following requirements:

- have an internal section equivalent to that of the chimney;
  - have a useful outlet section no less than twice the internal section of the chimney;
  - be constructed in such a way as to prevent the penetration of rain, snow and foreign bodies into the chimney, as well as to assure the discharge of the combustion products also in the presence of winds coming from any direction and at any angle.
  - be positioned in such a way as to assure proper dispersion and dilution of the combustion products and, in any case, outside the reflux area in which the formation of counter-pressure is most likely to occur. This area has different sizes and shapes depending on the slope of the roof; therefore, it is necessary to use the minimum heights indicated in the figures below.
- The chimney cap must not have any mechanical suction devices.



<b>CHIMNEYS, DISTANCES AND POSITIONING</b>		
<b>Roof pitch</b>	<b>Distance between the crown and the chimney</b>	<b>Minimum height of the chimney (measured from the outlet)</b>
<b><math>\beta</math></b>	<b>A (m)</b>	<b>H (m)</b>
15°	< 1.85	0.50 m beyond the crown
	> 1.85	1.00 m from the roof
30°	< 1.50	0.50 m beyond the crown
	> 1.50	1.30 m from the roof
45°	< 1.30	0.50 m beyond the crown
	> 1.30	2.00 m from the roof
60°	< 1.20	0.50 m beyond the crown
	> 1.20	2.60 m from the roof

### 5.2.5 Connection to external air inlets

To ensure correct operation, the appliance must have sufficient air available by means of external air inlets, which must meet the following requirements:

- They must have a total free section of at least 80 cm<sup>2</sup>.
- They must be protected by a grate, metal mesh, or other suitable protection provided that it does not reduce the minimum section as per point a) and that it is positioned in such a way as to prevent the intakes from being obstructed.

If the combustion air is collected directly from the outside by means of a pipe, it is necessary to fit a downward bend or a wind hood on the outside. In addition, no grating or similar device should be positioned. (Extraflame S.p.A. suggests creating an air intake directly communicating with the installation room, even if air is collected from outside by means of a pipe). Air inflow can also be obtained from a room adjacent to the installation room, provided that the flow can occur freely through permanent openings communicating with the outside.

The adjacent room must not be subject to depression with respect to the outside as a result of the opposing draught caused by the presence of another utility device or suction device in this room.

In the adjacent room, the permanent openings must meet the requirements described above.

The adjacent room cannot be used as a garage, storage area for combustible material, or for activities involving fire hazards.

### 5.2.6 Insulation, trims, facings, and safety precautions

The facings, no matter what type of material they are made of, must constitute a self-bearing structure with reference to the heating assembly and not in contact with it.

The beam and the trims in wood or combustible materials must be positioned outside of the radiant area of the hearth or be properly insulated.

If the space above the heat generator has coverings made of combustible or heat-sensitive material, a protective membrane made of non-combustible insulating material must be placed between it and the generator.

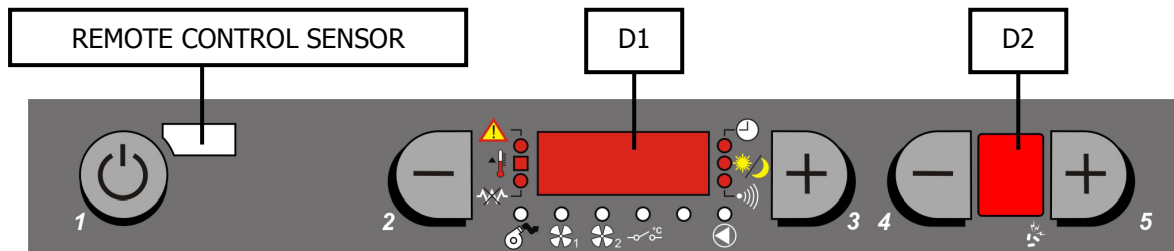
All elements made of combustible or flammable material, such as wooden furnishings, curtains, etc., which are directly exposed to the radiance of the hearth, must be placed at a safe distance.

The installation of the appliance must guarantee easy access for cleaning the appliance itself, of the exhaust gas pipes and the flue.

### 5.2.7 National, regional, provincial and municipal laws

All the national, regional, provincial and municipal laws of the country where the appliance has been installed must be taken into consideration

## 6. CONTROL PANEL



### **1 → ON/OFF BUTTON**

The stove can be turned on and off automatically by pressing button **1**.

### **2-3 → AIR TEMPERATURE SETTING**

Buttons **2** and **3** are used to adjust the room temperature inside the house.

### **4-5 → OPERATING POWER**

Buttons **4** and **5** are used to adjust the heating power and warm air ventilation.

**D1** Display for showing the various messages

**D2** Display for showing the heat setting

## 7. CURRENT TIME AND DAY SETTINGS

To adjust these parameters follow the procedure below:

1. Disconnect and reconnect the power supply from the stove using the master switch or the power cable.
2. The stove will firstly visualise the microprocessor version (**Id\_40** or later), "**TIME**", "**Li 3**" and then "**OFF**".
3. When "**TIME**" appears, press button **5** to access the adjustment mode.
4. Display **D1** will show the current time, the hours flash while the minutes are fixed: use keys **2** and **3** to adjust the hours and then confirm using key **5**.
5. At this point the hours are fixed and the minutes will start to flash: using keys **2** and **3**, adjust the minutes.

To go back to hour selection press button **4** again or exit and confirm using key **1**.

## 8. USE

### BASIC INSTRUCTIONS

The stove you have purchased uses pellets as fuel. This type of material is produced from natural waste from woodworking. By means of a special process, which does not require the use of any binders or additives, the shavings are compressed in industrial machines under high pressure and become solid wooden pellets. IT IS STRICTLY FORBIDDEN to burn any other material besides pellets in our stove.

Failure to respect these instructions will void all warranties and may jeopardise the safety of the appliance.

The first two or three times the stove is lit, the following recommendations should be observed:

- No children should be present, as the vapours emitted can be harmful for health. Adults, too, should not stay in the vicinity for very long.
- Do not touch the surfaces, as they could still be unstable.
- Air the room thoroughly several times.
- The hardening of the surfaces is completed after several heating processes.
- This stove **must not** be used as a waste incinerator.

## 9. IGNITION

1. Before proceeding, check to make sure that:
  - a. the tank is loaded with pellets
  - b. the combustion chamber is clean
  - c. the brazier is clean and free
  - d. the fire door and the ash drawer are sealed
  - e. the power cable is connected correctly
  - f. the two-way switch on the back of the stove is in position 1
2. Press button **1** for three seconds; display **D1** will show the message "**At 08**", with the numbers decreasing every second. During this stage, the stove carries out an automatic check on the efficiency of each single electrical component. When this cycle is completed, display **D1** shows the message **Ac 15** (the number of minutes for which the stove attempts the lighting stage, decreasing by 1 every minute that passes).

**NOTE:** *The first time the stove is used, even if the tank is loaded with pellets, it is possible that the pellets are not distributed to the combustion chamber for the first 15 minutes because the worm screw for loading the pellets is empty. If the stove has not developed a flame after the fifteen minutes have elapsed, the display shows the message "NO ACC". In this case, press button 1 for three seconds until D1 shows the message "OFF". Then repeat steps 1 and 2.*

3. If steps 1 and 2 are carried out correctly, as soon as the flame develops the stove enters the start-up phase ("Au 07").
4. After the start-up phase, the stove goes into normal operation: display **D1** shows the room temperature and **D2** shows the heat setting.

### **WARNING!**

**1. NEVER USE FLAMMABLE LIQUIDS FOR LIGHTING.**

**2. WHEN FILLING, DO NOT BRING THE SACK OF PELLETS INTO CONTACT WITH THE HOT STOVE.**

**N.B.:** In the event of continued lighting failures, contact an authorised technician.

## **10. STOVE OPERATION**

### **10.1 Normal operation**

Once the stove is lit, you can adjust the heat setting using buttons **4** and **5**. Pressing button **4** decreases the heat setting and hourly pellet consumption; pressing **5** increases them. In addition to the feed rate, the room temperature can be set directly from the control panel using button **2** and **3**. To set the water temperature of the system, see the "*Water temperature adjustment*" chapter.

The stove adjusts itself automatically in relation to the warm air ventilation.

The contents of the tank should be monitored to prevent the flame going out due to a lack of fuel.

### **ATTENTION!**

1. The cover of the pellet container must always be kept closed except when loading fuel.
2. The sacks of pellets must be kept at least 1.5 metres away from the stove.
3. The tank should always be kept at least half full.
4. Before refilling, make sure that the appliance is switched off.

### **10.2 Shutdown**

Press button **1** for three seconds.

When the three seconds have elapsed, the stove automatically starts the shutdown stage, cutting off the pellet feed. Display **D1** shows the message "OFF", the current time, and the room temperature in alternation.

Both the exhaust motor and warm air ventilation motor continue to run until the stove temperature has dropped sufficiently.

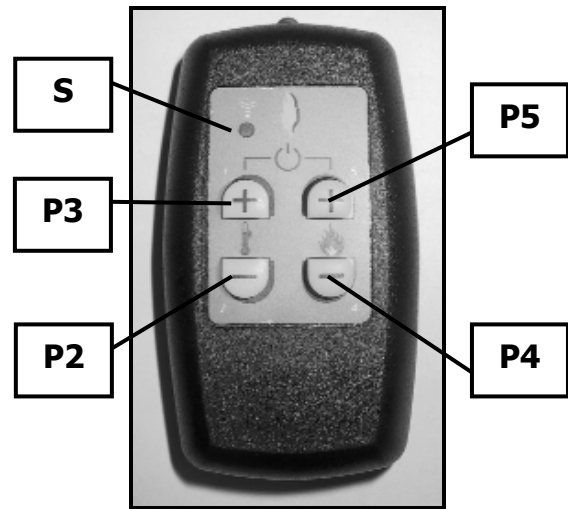
## 10.3 Remote control

The heat setting, the room temperature, and automatic start/stop of the stove can be remote controlled.

S = Light that indicates which keys have been pressed.

### Correspondence of display keys with remote control keys

- 1 = p3+p5
- 2 = p2
- 3 = p3
- 4 = p4
- 5 = p5



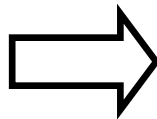
To light the stove, press buttons 3 and 5 at the same time and hold for three seconds (Fig. 21); the stove automatically enters the lighting stage. This is followed by the start-up phase, which allows the stove to develop and settle the flame.

When the lighting stage is complete, the stove goes into normal operation. The heat setting can be adjusted using the buttons 4 and 5, and the room temperature setting can be adjusted using buttons 2 and 3.

To switch off the stove, press buttons 3 and 5 at the same time and hold for three seconds. Display **D1** will show the message "OFF".

The remote control operates with an MN21 12V battery (the kind used for gate opening remote controls).

To replace the batteries, open the cover in the rear part as illustrated below.



Open by pressing the part circled in the figure

## 11. ROOM THERMOSTAT

### 11.1 Digital thermostat (standard)

The stove can control the room temperature by means of a digital thermostat whose function is to lower the heating power to the minimum when a pre-set temperature is reached.

1. When the stove has been started and has entered normal operating mode, a number (e.g. 21°C ) appears on display **D1** indicating the room temperature.
2. The thermostat can be set using button **2** or **3**. A message appears on the display which alternates the word "**Set**" with the temperature set each time one of the buttons is pressed. Pressing **2** decreases the value and pressing **3** increases it.
3. Wait until the message "**Set**" disappears from the display.
4. Use buttons **4** and **5** to adjust the heat setting as desired.

When the appliance reaches the set temperature, it automatically goes to the minimum operating condition and LED 1 on display **D1** goes off.

If you wish to exclude the digital thermostat, use button **3** to set the temperature to the maximum until "**HOT**" appears on display **D1**.

The same functions can be obtained by remote control.

### 11.2 Mechanical thermostat (optional)

*N.B.: Installation must be carried out by an authorised technician.*

A thermostat can be placed in a room adjacent to the one in which the stove is installed. Just connect a mechanical thermostat (like those used for boilers) following the procedure described below. (We recommend positioning the optional thermostat at a height of 1.50 m above floor level.)

#### 11.2.1 Installing a mechanical thermostat (optional)

*N.B.: Installation must be carried out by an authorised technician.*

1. Switch off the appliance using the master switch on the back of the stove.
2. Disconnect the plug from the socket.
3. Referring to the electrical wiring diagram, connect the two thermostat wires to the respective terminals on the back side of the stove, one red and one black

#### 11.2.2 Mechanical thermostat operation

1. Light the stove using button **1**.
2. Set the desired heating power using buttons **4** and **5**.
3. Bring the room temperature to minimum using button **2**; the display will show "**Lou**".
4. Set the desired room temperature on the thermostat (e.g. 21°C°); the display will show "**t on**".
5. When the stove reaches the desired temperature, it goes to the minimum operating condition ("**Lou**" appears on **D1**). If the temperature drops, the stove will pass to "**t on**" again, returning to the setting previously made.

### 11.2.3 Mechanical thermostat operation in Standby mode (to be used also for remote actuator)

The Standby function is used to further reduce pellet consumption by switching off the stove when the desired temperature has been reached.

As the temperature drops, the stove will automatically switch on again.

1. Set the desired temperature using buttons **4** and **5**.
2. Using button **2**, set the room temperature at the minimum position until display D1 shows "**Lou**" with "**Set**" flashing.
3. While "**Lou**" and "**Set**" are flashing, press button **1** for three seconds; the display shows **Stby**, which means that the energy saving function is on.

At this point the thermostat will control the stove as described below:

- Thermostat with closed contact: the stove switches on and operates at the power set. Display D1 shows "**t on**".
- Thermostat with open contact: the stove switches off or stays off, and display D1 shows "**Stby**".

This function can also be suspended temporarily by pressing button **1** for three seconds.

- If the stove is in "**Stby**" phase, the stove remains off. Display D1 shows "**Stby**", "**off**" and the current time.
- If the stove is in "**t on**" phase, the stove switches off. Display D1 shows "**t on**", "**off**" and the current time.

To return to using this function, press button **1** again.

To exclude this function altogether, just raise the stove thermostat temperature using button **3**.



Before programming this function, you have to set the current time using “*setting current day and time*” in order to provide a reference for the programming function.

To access programming press and hold button **3**, then press button **5** and then release the 2 buttons at the same time. Using button **5**, scroll until display D2 shows “**0**” flashing. The table below shows all the parameters of the weekly programmer function.

Parameter Display D2	Function	Adjustment keys	Value Display D1	Confirm key
0	Act./ Deact. Weekly programmer	2 or 3	ON/OFF	5
1	1st ignition time	2 or 3	OFF or from 00:00 to 23:50	5
2	1st switch-off time	2 or 3	OFF or from 00:00 to 23:50	5
3	Consents for 1 <sup>st</sup> ignition /switch-off for the various days	2 or 3	ON/OFF 1, ON/OFF 2, ... ON/OFF 7	5
4	Installer parameter	2 or 3	00	5
5	2nd ignition time	2 or 3	OFF or from 00:00 to 23:50	5
6	2nd switch-off time	2 or 3	OFF or from 00:00 to 23:50	5
7	Consents for 2 <sup>nd</sup> ignition/switch off for various days	2 or 3	ON/OFF 1, ON/OFF 2, ... ON/OFF 7	5
8	3 <sup>rd</sup> ignition time	2 or 3	OFF or from 00:00 to 23:50	5
9	3 <sup>rd</sup> switch-off time	2 or 3	OFF or from 00:00 to 23:50	5
A	Consents for 3 <sup>rd</sup> ignition /switch-off for the various days	2 or 3	ON/OFF 1, ON/OFF 2, ... ON/OFF 7	1

Let’s suppose that the weekly programmer is to be used and the 3 time periods are to be used in the following way:

1st time period: from 08:00 to 12:00 every day of the week excluding Saturday and Sunday

2nd time period: from 15:00 to 22:00 only Saturday and Sunday

3rd time period: not used

Let’s continue with weekly programming.

### **Parameter 0 (D2=0(flashing); D1=on)**

Using buttons 2 or 3, activate the weekly programmer, setting the value to ON.

### **Parameter 1 (D2=1(flashing); D1=E.g. “08:00”)**

Using buttons **2 or 3**, set the time “08:00” which corresponds to the switching on time of the 1<sup>st</sup> time period. To confirm and continue programming press button **5**.

To return to the previous parameter press button **4**.

### **Parameter 2 (D2=2(flashing); D1=E.g. “12:00”)**

Using buttons **2 or 3**, set the time “12:00” which corresponds to the switching-off time of the 1<sup>st</sup> time period. To confirm and continue programming press button **5**.

To return to the previous parameter press button **4**.

### **Parameter 3 (D2=3(flashing); D1= “off 1”)**

Activate the 1<sup>st</sup> time period for every day of the week excluding Saturday and Sunday. To do this, use buttons **2** and **3** in the following way:

- a. button **3** – scrolls through the various days
- b. button **2** – enabled/disabled(ON/OFF) the 1<sup>st</sup> time period for that day

Example:

Day	Initial value	Function button 2	Final value	Function button 3
MONDAY	OFF 1	OFF 1 → ON 1 and vice versa	ON 1(period active)	Passes to the following day
TUESDAY	OFF 2	OFF 2 → ON 2 and vice versa	ON 2(period active)	Passes to the following day
WEDNESDAY	OFF 3	OFF 3 → ON 3 and vice versa	ON 3(period active)	Passes to the following day
THURSDAY	OFF 4	OFF 4 → ON 4 and vice versa	ON 4(period active)	Passes to the following day
FRIDAY	OFF 5	OFF 5 → ON 5 and vice versa	ON 5(period active)	Passes to the following day
SATURDAY	OFF 6	OFF 6 → ON 6 and vice versa	OFF 6(period deact.)	Passes to the following day
SUNDAY	OFF 7	OFF 7 → ON 7 and vice versa	OFF 7(period deact.)	Passes to the following day

To confirm and continue programming press button **5**.

To return to the previous parameter press button **4**.

#### **Parameter 4 (D2=4(flashing); D1= "00")**

N.B. This parameter reserved for the assistance service and must not be modified.

#### **Parameter 5 (D2=5(flashing); D1=E.g. "15:00")**

Using buttons **2 or 3** set the time "15:00" which corresponds to the switching-on time of the 2<sup>nd</sup> time period. To confirm and continue programming press button **5**.

To return to the previous parameter press button **4**.

#### **Parameter 6 (D2=6(flashing); D1=E.g. "22:00")**

Using buttons **2 or 3** set the time "22:00" which corresponds to the switching-off time of the 2<sup>nd</sup> time period. To confirm and continue programming press button **5**.

To return to the previous parameter press button **4**.

#### **Parameter 7 (D2=7(flashing); D1=E.g. "off 1")**

Activate the 2<sup>nd</sup> time period only Saturday and Sunday. To do this, use buttons **2** and **3** in the following way:

- a. button **3** – scrolls through the various days
- b. button **2** – enabled/disabled (ON/OFF) the 1<sup>st</sup> time period for that day

Example:

Day	Initial value	Function button 2	Final value	Function button 3
MONDAY	OFF 1	OFF 1 → ON 1 and vice versa	ON 1(period deact.)	Passes to the following day
TUESDAY	OFF 2	OFF 2 → ON 2 and vice versa	ON 2(period deact.)	Passes to the following day
WEDNESDAY	OFF 3	OFF 3 → ON 3 and vice versa	ON 3(period deact.)	Passes to the following day
THURSDAY	OFF 4	OFF 4 → ON 4 and vice versa	ON 4(period deact.)	Passes to the following day
FRIDAY	OFF 5	OFF 5 → ON 5 and vice versa	ON 5(period deact.)	Passes to the following day
SATURDAY	OFF 6	OFF 6 → ON 6 and vice versa	OFF 6(period active.)	Passes to the following day
SUNDAY	OFF 7	OFF 7 → ON 7 and vice versa	OFF 7(period active)	Passes to the following day

To confirm and continue programming press button **5**.

To return to the previous parameter press button **4**.

#### **Parameter 8 (D2=8(flashing); D1=E.g. "off")**

Using buttons **2 or 3** set "off", which can be found before "00:00", in order to disable the switching on of the 3<sup>rd</sup> time period.

To confirm and continue programming press button **5**.

To return to the previous parameter press button **4**.

**Parameter 9 (D2=9(flashing); D1=E.g. "off")**

Using buttons **2** or **3** set "off", which can be found before "00:00", in order to disable the switching on of the 3<sup>rd</sup> time period.

To confirm and continue programming press button **5**.

To return to the previous parameter press button **4**.

**Parameter A (D2=A(flashing); D1=E.g. "off 1")**

At this point, the values entered in this parameter no longer have any value as both the switching-on and -off of the 3<sup>rd</sup> time period have been disabled.

To confirm and continue programming press button **5**.

To return to the previous parameter press button **4**.

To exit press button **1**.

*N.B.: When the weekly programmer is active on the control panel, the respective light will come on (see display message table description).*

**TO DEACTIVATE THE WEEKLY PROGRAMMER** enter in to programming mode by pressing button **3** and holding down button **5**, display **D2** shows "0" flashing, and set "off" on display **D1** using buttons **2** and **3**. Then press button **1** to confirm and exit.

Manual commands, from the display or using remote control, are always given priority compared to the programming.

### **12.3 Day/Night temperature function**

The day/night temperature function makes it possible to switch the stove on/off automatically based on two selected temperatures.

This function is particularly useful when the stove heat exceeds the setting of the room thermostat (e.g. due to mid-season temperatures or a stove that is oversized compared to the space).

This system enables you to select one temperature for daytime and one for night.

Before programming this function, you have to set the current day and time using the "*current day and time setting*" instructions to provide a reference for the programming function.

To access the parameters of the day/night temperature function, press button **3** and hold it down, then press button **5** and release both buttons at the same time. When you have entered the function, press button **5** to move to parameter b (D2= b)

**Parameter b (D2 = b, D1 =Ex. "06.00" )**

Press button **2** or **3** to set the day period start/night period end.

Press button **5** to confirm and go to the next parameter.

**Parameter c (D2 = c, D1 =Ex. "22.00" )**

Press button **2** or **3** to set the day period end/night period start.

Press button **5** to confirm and go to the next parameter.

**Parameter d (D2 = d, D1 =Ex. "25°C" )**

Press button **2** or **3** to set the maximum temperature for the day period.

Press button **5** to confirm and go to the next parameter.

**Parameter E (D2 = e, D1 =Ex. "20°C" )**

Press button **2** or **3** to set the maximum temperature for the night period.

Press button **1** to confirm and exit.

When you have exited from the programming, to activate/deactivate the function, press button **4** and hold it down, press button **5**, then release both buttons at the same time.

The corresponding LED on the control panel will light up/go off (see description in the display messages table).

***N.B. The stove must always be shut down while setting parameters.***

### Summary table

Display D1	Display D2	Function
<b>06:00</b>	<b>B</b>	Start day phase/end night phase
<b>22:00</b>	<b>C</b>	Start night phase/end day phase
<b>25°C</b>	<b>D</b>	Day phase max. temperature
<b>20°C</b>	<b>E</b>	Night phase max. temperature

Once this function is active, it is still necessary to light the stove using button 1. When the stove switches off because the maximum temperature has been reached, the message **"doff"** appears on **D1**. The stove will switch on again automatically when the room temperature is **3°C** lower than the maximum temperature set.

e.g. Status of the stove – **doff**  
Max. temperature set – 25°C

When the room temperature goes below 22°C ( $25 - 3 = 22^\circ\text{C}$ ), the stove will automatically start again.

**N.B.: This only occurs if the stove is in "doff" status, not in "off" status.**

Manual controls via the front panel or remote control take precedence over any programmed settings.

## 12.4 Pellet loading adjustment

If the stove has operating problems due to the quantity of pellets, you can adjust the pellet load directly from the control panel.

Problems related to the quantity of pellets fall into one of two categories:

### 1 - LACK OF PELLETS

- The stove cannot develop a suitable flame, tending to burn very poorly even at high speeds.
- At the lowest speed, the stove tends to almost burn out, causing the stove to go into "**NO PELL**" alarm status.
- When "**NO PELL**" is displayed, there may still be some unburned pellets in the brazier.

### 2 - EXCESS PELLETS

- The stove develops a very high flame even at low speeds.
- The flame tends to soil the stove window, darkening it almost completely.
- The brazier tends to get incrustated, blocking the air intake holes, due to the excessive pellet load that is only partially burned.

*N.B.: If this problem occurs just a few months after installation, check to make sure that the user is correctly carrying out the regular cleaning schedule described in the instruction manual.*

The adjustment is made on a percentage basis, and therefore any change of this parameter leads to a proportional variation on all loading speeds of the stove.

To access the percentage adjustment of pellet feeding, you have to enter the user programming by pressing button **3**, and while keeping it pressed, press button **5**.

At this point use button **5** to move through the menu until you see "**F**" flashing on **D2**.

If you go beyond this parameter unintentionally, exit by pressing button **1** and repeat the procedure.

The value "**00**" will be shown on **D1**: using buttons **2** and **3**, you can set an increased/decreased percentage at 5 point intervals (the parameter can be modified with a maximum scale from -50 to +50).

### Adjustment table

<b>LACK OF PELLETS</b>	Increase the percentage by 5 percent and try the stove with this new setting for at least half an hour. If the problem is reduced but not resolved, increase by a further 5 percent. Repeat this process until the problem is resolved. If the problem cannot be resolved, contact the service centre.
<b>EXCESS PELLETS</b>	Decrease the value by 5 percent and try the stove with this new setting for at least half an hour. If the problem is reduced but not resolved, decrease by a further 5 percent. Repeat this process until the problem is resolved. If the problem cannot be resolved, contact the service centre.

When the final adjustment has been made, press button **1** to confirm and exit the program.

## 13. CLEANING

Maintenance operations guarantee correct functioning of the product through time. The lack of fulfilment of these operations can jeopardise safety of the product.

### 1. CLEANING THE BRAZIER

The brazier must be cleaned daily.

- Remove the brazier from its container and clean the holes using the supplied relevant tool (see figure 1).
- Remove the ash from the brazier using a Vacuum cleaner.
- Suck-up the ash deposited in the brazier compartment.



Figure 1

### 2. USE OF SCRAPERS

Cleaning the heat exchangers guarantees a constant heat yield over time. This type of maintenance must be carried out at least once a day. Use the relevant scrapers positioned in the upper part of the stove, by carrying out several upward and downward movements (see figure 2).



Figure 2

### 3. CLEANING OF ASH COLLECTION TANKS

The ash collection tanks must be emptied when required using a vacuum cleaner.

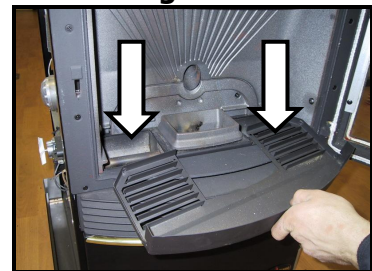


Figure 3

### 4. CLEANING THE HEAT EXCHANGER (Weekly)

The heat exchanger chamber must be cleaned weekly. Remove the mobile wall as illustrated in figures 4 and 5.

Once the heat exchanger compartment can be accessed, scrape using the supplied tool to remove the deposited soot (see figure 6) and only then use a vacuum cleaner to remove the ash completely. Once the operation has been terminated, re-mount the mobile wall, taking care to fix it correctly with the two screws- lever latches.



Figure 4



Figure 5



Figure 6

## **6. DOOR, ASH DRAWER AND BRAZIER SEALS**

The seals ensure that the stove is hermetically sealed and consequently that it operates correctly. The seals should be checked periodically and replaced immediately if worn or damaged. These operations must be carried out by an authorised technician.

**N.B.: To ensure correct operation, the stove should have general maintenance performed at least once a year by an authorised technician.**

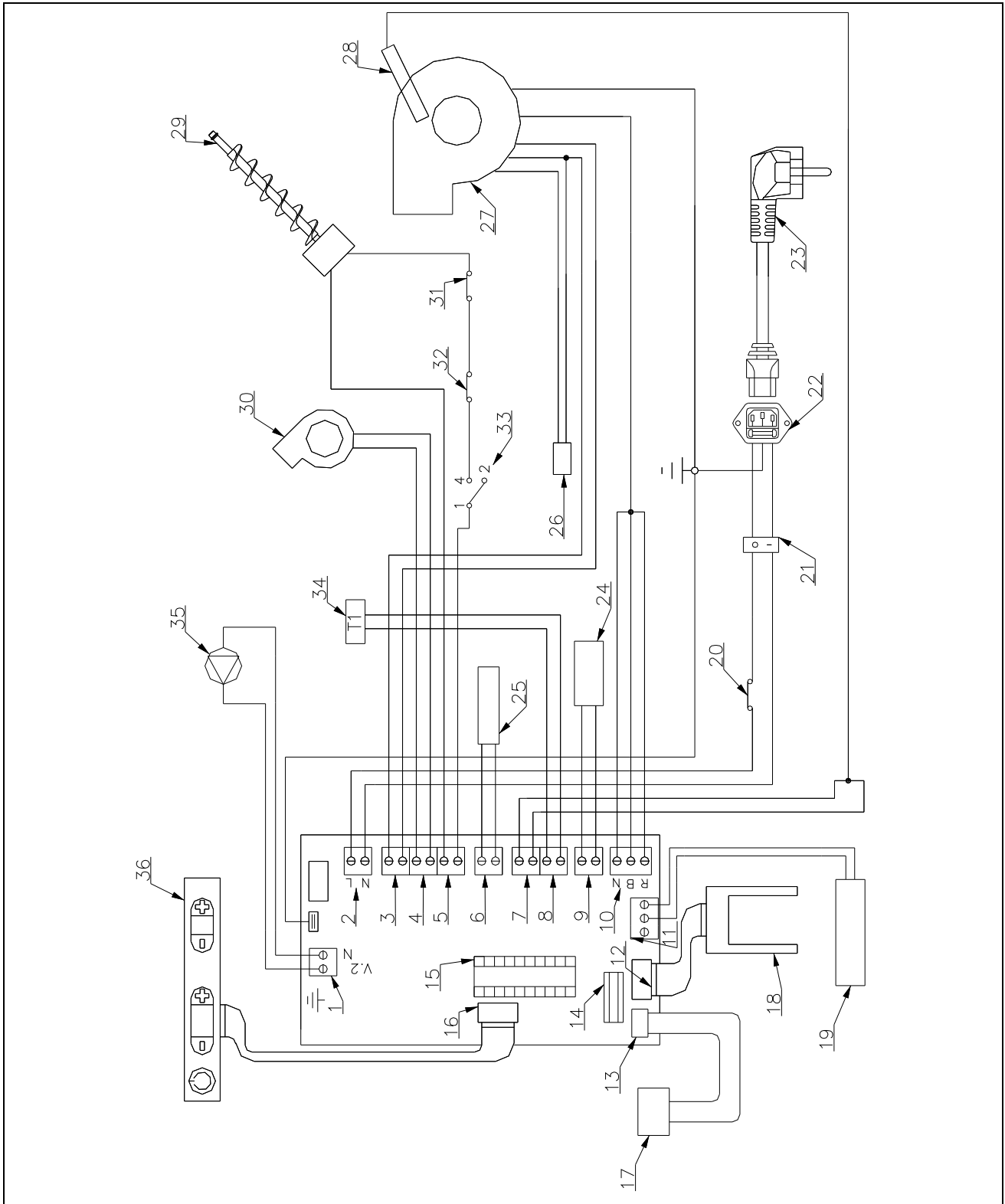
*If the power cable is damaged, it must only be replaced by the service centre or by a qualified technician, in order to avoid any risks.*

### **13.1 Chimney connection**

Once a year, or whenever needed, vacuum and clean the duct that leads to the chimney. If there are horizontal sections, remove any ash residues before they can obstruct passage of the smoke. **FAILURE TO CLEAN jeopardises safety.**

# 14. WIRING DIAGRAM

Wiring diagram




<b>Wiring Diagram</b>	
<b>Numbering</b>	<b>Description</b>
1	Pump power supply terminal
2	Circuit board power supply terminal
3	Flue gas expulsion motor power supply terminal
4	Cross-flow fan power supply terminal
5	Pellet loading geared motor power supply terminal
6	Spark plug power supply terminal
7	Flue gas probe input terminal
8	External thermostat input terminal
9	Room probe input terminal
10	Encoder input terminal
11	Water probe input terminal
12	Depression sensor input terminal
13	Serial port
14	Weekly programmer terminal
15	Microprocessor base
16	Display connector
17	Serial port
18	Depression control circuit board
19	Water probe
20	Remote bulb safety thermostat at 85°C
21	Two-way switch
22	Three-pin mains plug
23	Power supply cable
24	Room thermostat probe
25	Spark plug
26	Flue gas expulsion motor condenser
27	Flue gas expulsion motor
28	Flue gas probe
29	Pellet loading geared motor
30	Cross-flow fan
31	Remote bulb safety thermostat at 100°C
32	Min. pressure switch
33	Max. pressure switch
34	External thermostat (optional)
35	Pump
36	Display


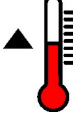









## 15. TABLE OF DISPLAY MESSAGES

<b>MESSAGES</b>		
<b>Message Display</b>	<b>Cause</b>	<b>Solution</b>
<b>Atte</b>	An attempt has been made to switch on a stove again when it has just been shut down (normal shutdown or caused by an alarm situation).	When the stove has just been shut down (normal shutdown or caused by an alarm situation), you have to wait until it is completely cold and then clean the brazier. It is possible to re-start the stove only after having carried out this operation.
<b>Hot</b>	Room thermostat set at maximum value.	In this operating mode the stove no longer has a temperature level but is working manually with all 5 power levels. To exit this function, simply lower the room temperature by pressing button 2.
<b>Lou</b>	Room thermostat set at minimum value.	In this operating mode, the stove works only at the 1 <sup>st</sup> power level no matter what power is set. To exit this function, simply raise the room temperature by pressing button 3.
<b>T on</b>	An external thermostat has been connected. The room thermostat probe is disconnected. The room thermostat probe is interrupted.	To exclude an external thermostat, just disconnect it. <b>Any other resetting operations must be carried out by an authorised technician.</b>
<b>Stby</b>	The stove is off and on standby to be re-started.	In this mode, the stove can be switched on/off by means of a supplementary thermostat (see " <i>Mechanical thermostat with energy saving</i> "). To exclude this function, simply raise the room temperature by pressing button <b>3</b> .
<b>Doff</b>	The stove is off due to the " <i>Day/Night Temperature Function</i> " and on standby to be re-started.	To stop the stove from starting again due to the " <i>Day/Night Temperature Function</i> ", press button 1 and hold for three seconds, which switches the stove off. To disable this function completely, press button 4 and hold it down, then press button 5.
<b>Hoff</b>	The temperature of the water has exceeded the set threshold by 5°C.	Check the correct functioning of the hydraulic system. When the temperature has lowered (5° under the set threshold) the machine will re-start automatically. To exclude the eventual re-ignition of the stove press button 1 for 3 seconds taking the stove to off.
<b>Raf / Blac Out</b>	No power	When the shutdown cycle is completed, the stove will light again automatically.
<b>Pul</b>	The automatic cleaning of the brazier is in progress.	The automatic cleaning of the brazier takes place at regular intervals of continuous operation. The automatic cleaning is not carried out when the stove is in power level 1 position.

# ALARMS

Message Display D1	Cause	Solution
	Indicates the presence of an alarm	This indicator lights up when one of the alarms described below is in progress and is accompanied by the corresponding indication on display D1. To reset the alarm, press button 1 and hold for three seconds when the stove is completely cold. If the light is flashing, it indicates that the depression sensor is deactivated. <b>All resetting operations must be carried out by an authorised technician</b>
<b>Fum Fail</b>	The flue gas motor is blocked. The speed control probe is faulty. No power supply to the flue gas motor.	<b>All resetting operations must be carried out by an authorised technician</b>
<b>Fumi tc</b>	The flue gas probe is broken. The flue gas probe is disconnected from the board.	<b>All resetting operations must be carried out by an authorised technician</b>
<b>High Temp</b>	The cross-flow fan is faulty. Excessive pellet feed. No power supply to the cross-flow fan.	Adjust the flow of pellets (see " <i>Pellet Load Adjustment</i> "). <b>Other resetting operations must be carried out by an authorised technician.</b>
<b>Depr Fail</b>	The flue gas exhaust pipe is obstructed. The combustion chamber is dirty. The pressure sensor is faulty. The ash drawer is not closed properly. The door is not closed properly.	Check to make sure that the exhaust outlet and the combustion chamber are clean. Check to see if the drawer is sealed properly. Check to see if the door is sealed properly. <b>Other resetting operations must be carried out by an authorised technician.</b>
<b>No Acc</b>	The pellet tank is empty. The spark plug is faulty or out of position. Inadequate pellet load setting.	Check the level in the pellet tank. Check the procedures described in " <i>Ignition</i> ". Adjust the flow of pellets (see " <i>Pellet Load Adjustment</i> "). <b>Other resetting operations must be carried out by an authorised technician.</b>
<b>No Acc Blac Out</b>	No electricity during the lighting phase.	Press button 1 to switch off the stove and repeat the procedure described in " <i>Ignition</i> ".
<b>No pell</b>	The pellet tank is empty. Pellet feeding is insufficient. The feed motor still has to settle in. The geared motor is not loading pellets.	Check the level in the pellet tank. Adjust the flow of pellets (see " <i>Pellet Load Adjustment</i> "). <b>Other resetting operations must be carried out by an authorised technician.</b>
<b>Hight H2O</b>	The circulation pump is blocked. Insufficient system pressure. Presence of air in the system.	Check the pressure of the water system. Bleed the air from the system. <b>Other resetting operations must be carried out by an authorised technician.</b>
<b>Atte + allarme</b>	Attempt to release alarm with stove still cooling	Every time the stove visualises one of the above-listed alarms it will automatically switch off. The stove will block any attempt to release the alarm during this phase visualising the alarm itself and ATTE alternately . Release of the alarm using button 1 is only possible when the appliance is switched off.
<b>Nr. telefono -----</b>	Display of the service centre telephone number.	When an alarm occurs, the type of alarm detected and the telephone number of the service centre flash on the display in alternation. If the number has not been entered, the display shows a series of dashes.

# INDICATOR LIGHTS

LED indicator light	Meaning	Description
	<i>Weekly Programmer</i> function	This LED is on/off when <i>Weekly programmer</i> is on/ off. For all the settings regarding this function, see the section <i>Weekly programmer</i> .
	<i>Room Thermostat</i> function	This LED is on/off when the room temperature is lower/higher than the temperature set. To modify the temperature setting, use buttons 2 and 3 during normal operation.
	<i>Day/Night Temperature</i> function	This led is on/off when the <i>Day/Night Temperature</i> function is on/off. To enable/disable the <i>Day/Night Temperature</i> function, press button 4 and hold it down, then press button 5. For all settings related to this function, see the section <i>Day/Night Temperature Function</i> .
	Spark plug deactivation	This LED is on/off when the spark plug is active/inactive. <b>To reactivate the spark plug, contact an authorised technician.</b>
	Flue gas motor operation	This LED is on/off when the flue motor is running/not running.
	Pellet load motor operation	This LED is on/off when the pellet load motor is running/not running. During normal operation, this LED lights up intermittently.
	Cross-over fan operation	This LED is on/off when the cross-over fan is running/not running.
	Not used	Not used
	Not used	Not used
	Indicates pump functioning	It is switched on/off when the circulation pump is activated/deactivated.
	Communication established between remote control and stove	Each time you press a button on the remote control, this LED should light up. If it stays on, it means that communication between the remote control and the stove is blocked. <b>To reset component operation, contact an authorised technician.</b>

## 16. WARRANTY

**EXTRAFLAME S.p.A. reminds you that the manufacturer possesses the rights stated on Italian Decree no. 24 from the 2<sup>nd</sup> February, 2002, and that the following warranty does not jeopardise these rights.**

This warranty certificate by Extraflame S.p.A., with headquarters in Montecchio Precalcino (VI), Via dell'Artigianato, 10 (Italy), extends to all components of the stove supplied by Extraflame S.p.A., and includes free repair or replacement of any faulty part of the stove, on condition that:

- The defect is detected within 2 YEARS of the delivery date and is reported to an Extraflame S.p.A. Technical Assistance Centre no longer than 2 months after its detection;
- It is recognised as a defect by an Extraflame S.p.A. Technical Assistance Centre.

The client will not be charged for any costs or expenses related to interventions carried out by the Extraflame S.p.A. Technical Assistance Centre if these are covered by the warranty conditions.

### **WARRANTY CONDITIONS**

#### **The warranty is considered valid on condition that:**

1. The stove is installed according to all related norms and to the information contained in the installation, use and maintenance manual, by qualified personnel.
2. The warranty certificate has been filled in and signed by the customer and convalidated by an Extraflame S.p.A. Technical Assistance Centre or by the vendor.
3. The document which proves the warranty, filled in and accompanied by the receipt, is duly conserved and shown to Extraflame S.p.A. personnel in the event of an intervention.

#### **The warranty is not considered valid in the following cases:**

1. Warranty conditions have not been respected.
2. Installation has not been carried out respecting all related norms or the information in this manual.
3. Whenever the client is judged to have been negligent due to incorrect or absent maintenance of the stove.
4. Presence of electrical and hydraulic systems not compliant with the current norms.
5. Damage caused by atmospheric, chemical or electrochemical agents, improper use of the product, modifications or tampering with the product, unsuitability of the flue/chimney, and/or any other causes not depending on the manufacture of the product
6. Damage caused by normal corrosion phenomena or deposits typical of heating systems (condition valid for products using water).
7. Damage caused by the use of non original spare parts or due to service performed by technical personnel not authorised by Extraflame S.p.A.
8. Improper or negligent use of the stove.
9. Any damage caused by transport. We therefore recommend that you carefully inspect the goods on receipt, immediately notifying the vendor of any damage and making note of such on the shipping document and on the shipper's copy.

Extraflame S.p.A. is not liable for eventual damage which may be caused, either directly or indirectly, to people, things and pets as the result of not following the instructions indicated in this installation, use and maintenance manual or the current norms related to installation and maintenance of this product.

**The warranty excludes:**

- The gaskets, all ceramic or tempered glass, cast iron or Ironker facings or grills, painted, chromium-plated or gold-plated components, majolica, handles and electrical cables.
- Chromatic variations, cracks and slight variation in size of the majolica pieces do not constitute a reason for contestation, as they are natural characteristics of the materials themselves.
- Building works.
- Parts for the production of domestic hot water not supplied by Extraflame S.p.A. (only products using water)
- The heat exchanger is excluded from the warranty unless an anti-condensation circuit is installed (only products using water)
- The warranty excludes any calibrations or adjustments of the product relating to the type of fuel or type of installation

**Other clauses**

Should any faulty or malfunctioning part be detected during normal use, these parts will be replaced free of charge by the vendor or by our local Technical Assistance Centre.

This clause applies also to other countries, with the exception of particular conditions agreed upon during the contract-writing phase with the distribution agent abroad.

Replacement of parts does not result in warranty extension.

No compensation will be given for the period in which the product is out of use.

This is the only valid warranty and no one is authorised to supply other warranties either in the name of or on behalf of EXTRAFLAME S.p.A.

**Recommended inspection (extra charge)**

Extraflame recommends having an operational inspection of the product by an Extraflame Authorised Technical Assistance Centre which will supply all the information regarding its correct use.

**SERVICE UNDER WARRANTY**

The service request must be forwarded to the vendor.

**RESPONSIBILITY**

EXTRAFLAME S.p.A. shall not be liable for any direct or indirect damage caused by or depending on the product.

**COMPETENT COURT**

For any controversy, the competent court shall be the court of Vicenza, Italy.



## 18. COMPATIBILITY WITH RoHS AND WEEE DIRECTIVES

### European Directives

The European Union has approved new Directives with the aim of reducing the potentially hazardous substances in order to reduce risks to health and the environment, as well as guaranteeing the safe disposal of electrical and electronic appliances through re-use, recycling and energetic recovery of the waste.

### RoHS Directive

The **2002/95/EC European Directive** dated 27.01.2003 (known as the **RoHS** Directive – “*Restriction of Hazardous Substances*”), starting from **01.07.2006**, limits the use of the substances successively listed, used in electric and electronic appliances, which are considered dangerous to human health.

Substances subject to the provisions:

- Lead
- Mercury
- Hexavalent chromium
- Polybrominated biphenyls (PBB)
- Polybrominated diphenyl ether (PBDE)
- Cadmium

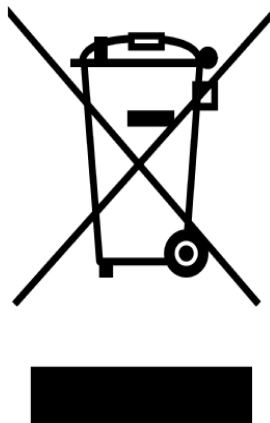
### WEEE Directive

The **2002/96/EC** European Directive dated 27.01.2003 (known as the WEEE “Waste Electrical and Electronic Equipment” Directive) uses measures and strategies for the disposal of waste deriving from electric and electronic appliances.

The directive applies the concept of the manufacturer’s extended responsibility: the manufacturers must pay for collection, storage, transport, recovery, recycling and correct disposal of their appliances once they have reached the end of the lives.

It is important to note to note that these directives are not applied to products marketed before 1 July 2006. This means that all products available in the warehouse before that date are not subject to the regulation and can be marketed without consequences.

The directive is applied to all products where the symbol shown below appears in the technical data label.



# Extraflame

## PELLET STOVES

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