# INSTRUCTION MANUAL WOOD BURNING COOKERS

EN



TL4S



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T S S S Z U

01. PRODUCT SAFI	ΕΤΥ
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#### **01.1 SAFETY WARNINGS**

The stoves were built in compliance according to standard EN13240 (wood stoves), EN 14785 (pellet stoves) and EN 12815 (kitchens and wood-burning stoves)using high quality and non-polluting materials. To make better use of your stove it is advisable to follow the instructions in this booklet.

Read this manual carefully before use or any maintenance operation.

Eva Stampaggi aims to provide as much information as possible to ensure safer use and to avoid damage to persons, property or parts of the stove itself.

Each stove is subjected to internal testing before shipment and as such residues inside the appliance may be found.

# RETAIN THIS MANUAL FOR FUTURE REFERENCE

# FOR ANY REQUIREMENT OR CLARIFICATION PLEASE CONTACT

## THE AUTHORISED DEALER

- Installation and connection must be carried out by qualified staff in compliance with local regulations, national and European standards (UNI 10683 in Italy) and with the annexed installation instructions. Furthermore, these operations must be performed by personnel who are authorised and professionally trained for the task in question.
- The combustion of waste, especially of plastic materials, damages the stove and the flue pipe. Moreover, it is forbidden by the law against the emission
  of harmful substances.
- Do not use alcohol, petrol or other highly inflammable liquids to light the fire or poke it during operation.
- Do not introduce into the stove an amount of fuel greater than that recommended in this booklet.
- Do not modify the product.
- It is forbidden to use the appliance with the door open or the glass broken.
- Do not use the appliance as, for example, a clothes drying rack, a bearing surface or step etc.
- Do not install the stove in bedrooms or bathrooms if not certified as watertight.

# The wood to be used is as follows:

The wood log should have maximum 330mm in length and a maximum moisture content of 8%;

Dry wood produces more usable heat than wet wood as it produces less smoke, less soot and less carbon dioxide. Dry wood is the correct choice that allows you to get the most out of your stove. Always remember to split the firewood to make it dry quicker: the higher its moisture content, the greater the amount of heat necessary for it to ignite - heat subtracted from your well-being.

Based on the weight in kg of a cubic metre of material, the wood can be classified into "softwood" and "hardwood".

"Softwood" (300-350 kg/m3 such as spruce, pine, poplar, alder, chestnut, willow) burns rapidly, producing a stronger heat; therefore, it is great for starting a fire but to use it as fuel would require frequent refilling of the stove. "Softwood" can also produce more creosote, meaning that the chimney will require more frequent cleaning.

"Hardwood" instead (350- 400 kg/m3 such as elm, oak, beech, ash) burns at a slower rate, resulting in sustained heat output and making this type of wood ideal for domestic heating.

In terms of heating output, firewood can be divided into:

- Excellent quality: oak, ash, beech, maple.
- · Fair quality: chestnut, birch and alder
- · Acceptable quantity: lime, poplar and willow

#### THE CALORIFIC VALUE:

The calorific value depends therefore, on the density of the wood (that varies based on its type) and on its moisture content. The heat output of the stoves is directly affected by this factors. Depending on its moisture content, it can be indicated in:

% of humidity	Calorific heat output kcal/kg
15%	3490
20%	3250
25%	3010
30%	2780
35%	2450
40%	2300

On average, a well seasoned wood has a calorific value of 3200 kcal/kg.

Eva Stampaggi S.r.l. declines any criminal and/or third party liability for any damage to persons or property arising from the failure to comply with the points mentioned in this manual and from non-compliant product installation.

#### 01.2 GENERAL SAFETY PRECAUTIONS

- Use the stove only as described in this manual. Any other use not recommended by the manufacturer may cause fires or accidents to people.
- Make sure that the electrical power available corresponds to the value indicated on the data plate (230V~/50Hz).
- This appliance is not a toy. Make sure children are not left unattended and do not use the appliance as a toy.
- This device is not intended for use by persons (including children) with reduced physical or mental capacity, or without specific experience and knowledge, unless supervised or duly instructed on the use of the appliance by a person responsible for their safety.
- Disconnect the appliance from the mains when not in use or during cleaning operations.
- Never block the combustion air inlets and fume outlets.
- Since the stove is fitted with electrical components, do no touch it with wet hands
- Do not use the appliance in case of damaged cables or plugs. The device is classified as type Y: the power supply cable may only be replaced by a qualified technician. Should the power supply cable be damaged, it can be replaced only by the manufacturer or by its technical assistance service or by a similarly qualified person.
- CAUTION! DO NOT TOUCH the FIRE DOOR, the GLASS, the HANDLE OR THE FUME OUTLET PIPE DURING OPERATION if not wearing adequate protective devices as they become extremely hot!
- Keep inflammable materials, such as furniture, cushions, pillows, blankets, paper, clothing, curtains, etc., at least 1.5m away from the stove front and 30cm from the stove sides and back.
- Do not use the stove in dusty environments or wherever inflammable gases are generated (e.g. in a workshop or garage).
- The stove that is covered by or in direct contact with **flammable** materials, including curtains, blankets, etc., during normal operation may result in a fire hazard. **KEEP THE APPLIANCE AWAY FROM THE MATERIALS MENTIONED ABOVE.**
- Do not immerse the cable, plug or any other appliance component in water or other liquids.
- Do not use the stove in dusty environments or wherever inflammable gases are generated (e.g. in a workshop or garage).
- The stove is fitted with components that generate arcs and sparks. Do not install the stove in areas posing a significant fire or explosion hazard due to a high chemical substance concentration or to a high humidity level.
- Do not use the appliance close to bathtubs, showers, basins, sinks or swimming pools.
- Do not install the appliance underneath an air vent. Do not install the stove outdoors.
- Do not repair, disassemble or modify the appliance. The appliance is not fitted with components that can be repaired by users.
- Turn off the stove, disconnect it from the mains and wait until it has cooled down completely before performing any maintenance operations.
- WARNING: DISCONNECT THE STOVE FROM THE MAINS BEFORE PERFORMING ANY MAINTENANCE.
- CAUTION! This stove works exclusively with wood; DO NOT USE FUELS OTHER THAN WOOD: any other material will be burned. It will cause failure and malfunction of the appliance.
- Store the wood in a cool and dry place: storage in overly cold or humid places can result in a reduction in the heat output of the stove.
- Clean the firebox regularly each time it is used.
- Open the firebox only upon refuelling or removal of residues to prevent fumes from escaping.
- Do not use the appliance as waste incinerator or for any other purpose other than the intended one.
- Do not use liquid fuels.
- Do not modify the appliance without prior authorisation.
- Use only original spare parts recommended by the manufacturer.
- The wood log should have maximum 330mm in length and a maximum moisture content of 8%;
- Make sure that the stove is transported in compliance with safety regulations. Avoid any improper transfers or knocks that may damage the tiles, stone finishes or the structure.
- The metal structure is coated using high temperature paints. When using the appliance for the first few times, unpleasant odours may be given off due to the paint of the metal parts that is drying: this is in no way dangerous and in such case, simply ventilate the premises. After the first heating cycles, the paint will reach its maximum adhesion and all its chemical and physical features.
- CAUTION! Being a heating appliance, some parts of the stove can become extremely hot. For precisely this reason, we advise that you take extreme care during operation.

#### WHEN THE STOVE IS WORKING:

- do not open the door;
- do not touch the door glass since it becomes extremely hot;
- keep children away from it;
- do not touch the fume outlet;
- do not pour any liquid inside the firebox;
- do not perform any maintenance operations if the stove is not cold;
- only qualified technicians are allowed to perform any operation;
- follow all the instructions contained herein.

# Cooking stove TL4S

#### **02. PRODUCT DESCRIPTION**

Completely made of steel, they consist of a boiler casing equipped with water gap that surrounds the firebox on a side and communicates with the built-in expansion tank which allows for the heating up of the water inside the heating system by means of a stainless steel coil heat exchanger. The stove can be equipped with a second exchanger for production of domestic hot water.

All these are extra options to the traditional function of the stove, which comes with an upper plate and some models even with oven, allowing you to cook your favourite meal in an effortless economical manner.

The advantages are many:

· can be used on their own or combined with a boiler

• equipped with programmable electronic control unit for safe operation

• easy to clean thanks to easy disassembly of the upper plate

We paid particular attention to the safety features during design and testing phases and therefore, all of our stoves come with:

- water level control system with automatic reset function
- boiler casing able to operate even in absence of pressure
- heat dissipation devices
- · backup water reservoir for quick achievement of the required operating conditions

TECHNICAL DRAWING

TL4S



A= Ø 150 mm Scarico Fumi / Flue / Cheminée / Rauchbzug / Evacuación de humos / Descarga de fumos TECHNICAL DATA

Technical data of the appliance:	TL4S	
Dati tecnici dell'apparecchio: Name:	Nominal bast sutnut	
	Nominal heat output	
Designazione:	Potenza termica nominale	
Fuel throughput	4.3	
Consumo orario (kg/h)		
Minimum flue draught requirements	12	
Requisiti minimi del tiraggio del camino (Pa)		
Flue gas temperature	179.6	
Temperatura fumi (°C)		
Flue gas temperature at flue spigot or socket	186.1	
Temperatura uscita fumi (°C)	100.1	
Flue gas mass flow	15.3	
Flusso massico dei fumi (g/s)	15.5	
Efficiency	85.3	
Rendimento (%)	05.5	
Total heat output	45.0	
Potenza termica (Kw)	15.8	
Water heat output	10.5	
Potenza termica resa all'acqua (Kw)	10.5	
Space heat output	5.3	
Potenza termica resa all'ambiente (Kw)	5.5	
CO emission at 13% of O <sub>2</sub>	0.0000	
Emissioni di CO al 13% di $O_2(\%)$	0.0692	
Maximum water operating pressure		
Massima pressione di esercizio dell'acqua (bar)		
Discharge control operating temperature		
Temperatura di intervento termostato sicurezza acqua (°C)		
Electrical power supply	10	
Potenza elettrica assorbita (W)	40	
Rated voltage		
Tensione nominale (V)	230	
Rated frequency		
Frequenza nominale(Hz)	50	
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# Cooking stove 100





LEGEND			
REFERENCE	DESCRIPTION	COUPLING	
А	SYSTEM FLOW	3/4 "GAS	
R	SYSTEM RETURN	3/4 " GAS	
В	BOILER DISCHARGE OUTLET	3/4 " GAS	
С	DOMESTIC COLD WATER INLET	1/2 " GAS	
D	DOMESTIC HOT WATER	1/2 " GAS	
	OUTLET		
E	BOILER DISCHARGE OUTLET	1/2 " GAS	















#### 03.1 INTRODUCTION

INSTALLATION WITH WALL FUME OUTLET IS PROHIBITED. INSTEAD THE FUME OUTLET MUST BE ROOF-TYPE AS PROVIDED FOR BY NATIONAL REGULATIONS.

#### Eva Stampaggi S.r.l. assumes no responsibility for injury to persons and/or damage to property caused by the non-observance of the point highlighted above

# for non-compliant installed products.

Install the stove according to the regulations in force in the country of use.

In Italy, for example, this refers to UNI 10683: 2012, which refers to 4 areas:

a. preliminary activities - are under the jurisdiction and are the responsibility of the reseller/installer at the time of the pre-installation inspection. Preliminary procedures include:

- installation site suitability verification;
- fume evacuation system suitability verification;
- external air inlet suitability verification.

At this stage, the product needs to be checked in order that it can be safely operated and that the relevant technical specifications are met.

The safety conditions must be assessed with a preventive inspection.

#### Stoves and fireplaces are heating systems and must be installed safely and comply with the manufacturer's instructions!

b. installation - under the responsibility of the installer. In this phase the installation of the product and the smoke exhaustion system are considered as well as the handling of topics such as:

- safety distance from combustible materials;
- chimney flue construction, smoke ducts, intubated systems and chimney cowls.

#### c. issuance of supplementary documentation - the responsibility of the installer.

#### The release of technical documentation must include:

- manual of use and maintenance of the appliance and of the components of the system (e.g smoke ducts, chimney flue, etc.);
- Photocopy or photograph of the chimney flue plate;
- system manual: (if applicable);
- Declaration of Conformity in relation to Ministerial Decree 37/08.

d. control and maintenance - the responsibility of the maintenance technician who must oversee protection and maintenance of the product during its operation over time. The operator responsible for checking and maintaining the systems for winter and summer climate control carries out tasks in a workmanlike manner and in observance of applicable regulations. The operator, at the end of these operations, must draw up and sign a technical inspection report in accordance with the models provided by the provisions of this decree and the implementing rules, in relation to the type and capacity of the system, to be issued to the person who signs a copy thereby confirming receipt and reading thereof".

In addition to what is specifically provided for in the following paragraphs of this Instruction Manual, the Purchaser must comply with the following minimum installation requirements:

- a) Do not invert or place the stove horizontally on one side;
- b) The power of the stove must be adapted to the size of the room where it is to be installed and the room must be ventilated from the outside;
- c) The assembly of the flue pipe must be carried out in a workmanlike manner and according to European (UNI 10683) and national regulations, local regulations and the technical specifications and warnings contained in this Instruction Manual:
- d) The smoke outlet must be connected to the flue pipe by means of telescopic fittings;
- e) The diameter of the flue must be less than 150 mm.
- f) The connection to the flue pipe must be made with an inclination connection of less than 45°;
- g) The flue pipe must be suitably insulated;
- h) The minimum length of the horizontal section must be greater than 2 metres;
- i) The minimum slope of the horizontal section must be 5%;
- j) The chimney and/or flue pipe must be waterproofed;
- k) The flue shall not have more than two changes of direction;
- ) The flue gas must be discharged directly into the flue pipe;
- m) The flue gas duct must have a length of less than 6.0 m before the flue, with a maximum horizontal section of 3.0 m;
- n) The flue and flue duct must not narrow in width from the initial diameter for its entire length. The initial diameter shall be that of the exhaust outlet of the stove body;
- o) The minimum value of the ventilation duct opening must be 80 cm<sup>2</sup>;
- p) The distance of the flammable walls must be respected, as prescribed on the "stove data plate";
- q) The fire pit must be cleaned before each ignition of the stove.

The Buyer must not make any structural changes to the stove and must not make any operating changes to the electrical board.

Installation and connection must be carried out by the Purchaser and by qualified technical personnel, in compliance with European (UNI 10683) and national regulations, local regulations and assembly instructions contained in this Instruction Manual.

Eva Stampaggi S.r.l. assumes no criminal and/or civil liability, direct and/or indirect, towards persons or property resulting from non-compliance with the aforementioned provisions of law, assembly instructions, warnings and general safety rules indicated in this Instruction Manual.

Failure to comply with the installation requirements and/or tampering with the stove may result in: inadequate power and/or abnormal product behaviour, poor flue gas draught, clogging of the fire pit, slow combustion, tank fire, overheating and fire hazard of the stove, fire hazard of the flue gas duct, lack of oxygen in the environment where the stove is located.

Eva Stampaggi S.r.l. assumes no criminal and/or civil liability, direct and/or indirect for the malfunction of the stove and for damage to persons or property caused by non-compliance with the requirements for installation of the stove and/or tampering with it.

The Buyer must request and retain the certification of compliance of the installation, and the connection of the stove, with the provisions of law. In the absence of such certification Eva Stampaggi S.r.l. assumes no criminal and/or civil liability, direct and/or indirect for the malfunction of the stove and for damage caused to persons or property, resulting from the use of the product.

# Warning: in the event of a power failure or electrical blackout, the fire pit must be emptied before repeating the operation. Failure to follow this procedure can result in the glass breaking.

#### 03.2 FLUE PIPE

# STOVE CHARACTERISTICS FOR SIZING OF THE FLUE PIPE

The stoves have the following characteristics: Chimney flue draught: 12 Pa Fume temperature: 190 °C Flue gas mass flow: 15.3 g/s

The flue pipe is one of the key features for guaranteeing the proper functioning of the stove. Thanks to the quality of the materials, the strength, the durability, the easy cleaning and maintenance, the best flue pipes are made of steel, either stainless steel or aluminised.

- Use telescopic joint connections to facilitate connection to the steel rigid flue pipe and counterbalance the thermal expansion of both the firebox and the flue pipe.
- Seal the flue pipe joint connection with high temperature silicone sealant (1,000°C). Should the existing flue opening not be perfectly perpendicular to the firebox fume outlet, use an elbow to connect them. Inclination must never exceed 45°, with respect to the vertical axis.
- No constrictions. Use 10cm-thick insulating thimbles if pipe vent passes through floors.
- The flue pipe must be insulated along its entire length. Thanks to the flue pipe insulation fume temperature will remain high optimising draught, preventing condensation and reducing build-up of barely ignited particles along the flue pipe walls. Use proper insulating materials (glass wool, ceramic fibre, Class A1 non-combustible materials).
- The flue pipe must be weather-proof and as linear as possible.
- Flexible and length-adjustable metal pipes may not be used.



# EXISTING FLUE PIPE (TRADITIONAL)





# Types of flue pipe

Examples of flue pipe:



#### INCORRECT INSTALLATION

Exhaust pipes must never be fitted pointing downwards or horizontally so that fumes are discharged directly through the external wall.

# 03.3 CHIMNEY

A properly installed chimney cowl ensures optimum stove functioning. The anti-downdraught chimney cowl consists of a number of components whose outlet section sum always doubles the flue pipe section. Make sure the chimney cowl is at least 150cm above the roof rise so that it is fully exposed to the wind. The chimney cowls must:

- have useful outlet section that is at least twice that of the flue pipe.
- be made in such a way as to prevent the penetration of rain or snow.
- be constructed in such a way as to ensure, in the event of winds coming from any direction, the evacuation of combustion products.
- be free of mechanical intake auxiliaries.



Roof pitch α [°]	Horizontal width of reflux zone measured from rise A [m]	Minimum height from roof for discharging exhaust fumes H min =Z+0.50m	Height of reflux zone Z [m]
15	1.85	1.00	0.50
30	1.50	1.30	0.80
45	1.30	2.00	1.50
60	1.20	2.60	2.10

Fumes heat up during combustion, increasing their volume. Their density is therefore lower than the one of the surrounding colder air.

This difference between the inside and outside temperatures of the chimney results in a negative pressure which increases proportionally to the flue pipe length and the temperature.

The draught must be stronger than the fume circulation resistance so that all exhaust fumes generated during combustion inside the stove are drawn upwards through the outlet and the flue pipe. Many weather conditions affect the flue pipe functioning, such as rain, fog, snow, altitude, and wind being the most important as it can create both negative pressure and dynamic loading.

The wind action varies depending on whether it is ascending, descending or horizontal.

- Ascending wind always results in an increased negative pressure and draught.
- Horizontal wind results in an increased negative pressure as long as the chimney cowl was properly installed.
- Descending wind always diminishes the negative pressure, sometimes inverting it.

Excess draught causes an increase in the combustion temperature and consequently a loss in stove efficiency.

A part of the combustion fumes is drawn up through the flue pipe together with small wood particles before combustion reducing stove efficiency, increasing fuel consumption and resulting in the emission of polluting fumes.

At the same time the high fuel temperature, due to an excess amount of oxygen, wears down the combustion chamber sooner than expected.

On the other hand, poor draught slows down combustion resulting in a decrease in the stove temperature, fume spillage inside the room, a loss of stove efficiency and dangerous build-up in the flue pipe.

In order to avoid excessive draught it is appropriate to use:

-damper







Highly efficient stoves may pose difficulties for fume extraction.

In order for a flue pipe to work properly its internal temperature must increase as a consequence of the fumes generated during combustion.

Importantly, the efficiency of a heater is determined by its ability to transfer most of the heat produced to the environment to be heated: consequently, the greater the efficiency of the stove, the "colder" the residual fumes of combustion, and consequently, the lower the "draft".

A traditional chimney flue, with a rough design and insulation, is more efficient if used with a traditional open fireplace or a poor-quality stove where most of the heat is lost with the fumes.

Therefore, purchasing a quality stove often entails modifying the existing chimney flue to obtain a better insulation, even when it already works properly with old appliances. Poor draught results in the stove not operating when hot or in smoke spillage.

Connecting the stove pipe to an existing chimney flue that has already been used with an old appliance is a common mistake. In this way two solid-fuel appliances share the same chimney flue, which is wrong and dangerous.

If the two appliances are used simultaneously, the fume load might exceed the existing chimney flue capacity resulting in downdraught. If only one appliance is used, the fume heat will facilitate draught but the cold air coming from the other appliance not in use will cool down exhaust fume temperature again blocking the draught.

Besides the problems described so far, if the two appliances are placed on different levels the communicating vessel principle might be interfered with, causing combustion fumes to be drawn in an irregular and unforeseeable way.



03.6 INSTALLATION

Follow the instructions below before installing your stove.

Select the position where the stove is to be installed and:

- Arrange the connection to the flue pipe for fume extraction.
- Provide the external air intake (combustion air) and check for its presence: it must be drawn from a free space (not spaces where extractor fans exist or without ventilation) or from outside.
- Arrange a discharge pipe for the condensate resulting from boiling.
- If possible, install it near the hydraulic manifold or however, in a suitable position so that you can easily connect it to the hydraulic system.
- Place the stove on the floor in a convenient position for the connection to the flue pipe and close to the combustion air intake.
- The appliance must be installed on a floor with an adequate loading-bearing capacity. Should the existing floor not comply with the requirement above, proper measurements must be taken (for instance, the installation of a load distribution plate).
- All the structures which could catch fire if exposed to excessive heat must be protected. Floors made from wood or inflammable materials must be protected using non-combustible materials (e.g. 4mm-thick sheet metal or ceramic glass).
- The appliance installation must ensure easy access for cleaning the stove, exhaust pipes and flue pipe.
- This appliance is not suitable to be installed on a shared flue pipe.
- During normal operation, the stove draws air from the room where it is installed. Therefore, an external air intake must be positioned at the same height of
  the pipe located on the stove back. When it is operational, the stove can cause a negative pressure in the room where it is installed. Therefore there should
  not be other naked flame devices in the same room.
- If the stove is to be installed in rooms where it is surrounded by combustible materials (e.g. furniture, wood cladding, etc.), the following minimum clearances
  must be complied with:



SAFETY DISTANCE FROM COMBUSTIBLE MATERIALS: REAR WALL C = 0 mm INSULATION THICKNESS C = 80 mm SIDE WALL = 600 mm RECESS B= 5 mm FRONT R = 1000 mm • Besides complying with the minimum clearances set above, we also recommend installing heat-resistant fireproof insulating panels (rock wool, cellular concrete, etc.)

The following is recommended

Promasil 1000 Classification temperature: 1000 °C Density: 245 kg/m<sup>3</sup> Shrinkage at reference temperature, 12 h: 1.3/1000°C % Cold crushing strength: 1.4 MPa Bending strength: 0.5 MPa Reversible thermal expansion: 5.4x10<sup>-6</sup> m/mK

Specific heat capacity: 1.03 kJ/kg K Thermal conductivity  $\lambda$ : 200 °C  $\rightarrow$  0.07 W/mK 400 °C  $\rightarrow$  0.10 W/mK 600 °C  $\rightarrow$  0.14 W/mK 800 °C  $\rightarrow$  0.17 W/mK Thickness: 40 mm

- When it is operational, the stove can cause a negative pressure in the room where it is installed. Therefore there should not be in the same room other naked flame devices, with the exception only of type c stoves (airtight).
- Make sure that the stove can draw the necessary quantity of combustion air: this must be from an open space (i.e. a space without exhaust blowers or providing adequate ventilation) or directly from outside.
- Do not install the stove in bedrooms or bathrooms.
- Unpack the stove: be careful not to damage the product at the time of unpacking.
- Check the stove's legs and adjust them so that the stove is stable.
- Place the stove so that the door and any window openings are not against the walls.
- Join the coupling device to the flue pipe.
- The exhaust fume pipes must be suitable for wood-burning stoves and must therefore be made from coated steel or stainless steel, with a diameter of 150 mm and fitted with adequate seals.

#### CONNECTION EXAMPLES, SYSTEM DRAWINGS

#### Diagram 1 - Wood heating stove for the production of domestic hot water



In this type of installation, the stove works independently: the pump starts automatically when the temperature inside the stove reaches the threshold set under parameter T1.

Diagram 2 - Wood-burning stove fitted with Eva Calòr boiler for the production of domestic hot water



In this case the stove will be connected to the Eva Calòr boiler. You must install a 3-way valve and a contact or a sensor that can control the valve.





In this case the stove will be connected to a boiler. You must install a contact or a sensor to control the boiler when the stove is off.

Diagram 4 - Wood-burning stove with puffer and various heating sources.



Esquemas representados de modo simplificado; as instalações devem ser realizadas por profissionais qualificados respeitando todas as normas de segurança em vigor.

In this case the stove will be connected to various sources of heat. You must install a contact or a sensor to control the various heating appliances or any valves or pumps.

#### HYDRAULIC CONNECTION

The hydraulic connection of the stove must be carried out by qualified staff, who must ensure the conformity of the entire system.

Particular attention should be paid when installing the stove in an existing system (see hydraulic diagram) to make sure that it will operate in perfect safety, in compliance with the regulation in force.

The interior of the hydraulic system must be washed before connecting the stove. You need to install a expansion tank suitable for the system and adequate safety valves.

ATTENTION: the average flow temperature is 55°C: take this value into consideration when choosing the heating system. The maximum operating pressure is 1.5 bar.

Upstream of the hydraulic connections of the stove you should provide some gate valves so that you can disconnect it from the system if necessary.

The condensate resulting from boiling must be suitably conveyed and collected to protect the floor.

If the KIT for the production of Domestic Hot Water is installed, the water used should have suitable characteristics so as to prevent the formation of limestone inside the exchanger; water hardness > 25° French degrees, appropriate water softener.

The manufacturer declines any liability for any damage to persons or property arising from non-compliant product installation.

#### ELECTRICAL CONNECTION

The electrical connection must be performed by qualified personnel who install circuit breakers upstream of the appliance.

Special attention should be paid when the stove is parts of the system and all equipment must operate as planned.

Avoid installations with electric cables that run close to fume pipes or hot components that are suitably insulated.

The voltage is 230 V while the frequency is 50 Hz.

The electrical system where it is connected must be fitted with a conductor as required by the Regulations 73/23 EEC and 93/98 EEC.

#### 04.1 DISPLAY

The electronic control unit installed on the stove controls the operation of the pump, of the automatic fill valve, of the sensor and of the 3-way valves installed on the system.



Buttons:

P1- MENU/EXIT: press this button to access or exit the menus.

P2- Summer/Winter or Scroll menu: press this button to toggle between summer and winter modes. The difference between summer and winter is the pump enabling threshold.

- P3-DHW PLUS: this button stops the pump and allows for maximum production of DHW for 15 minutes.
- P4- Delete alarm/confirm: press this button to silence an alarm or to confirm the menu.

Led:

- L1- General Alarm: this led flashes when there are ongoing failures. The display shows the alarm type.
- L2- Summer: indicates that summer mode is on.
- L3- Winter: indicates that winter mode is on.
- L4- AutoFill: indicates that the automatic fill valve is working.
- L5- Pump: indicates that the pump is working.
- L6- Valve: indicates that a 3-way valve is working.

#### **Connections:**



#### Menu:

-User menu: the user menu contains:

- T1: PUMP THERMOSTAT: the degrees at which the pump switches on. We recommend that you do not set this parameter to less than 58°C.
- T3: 3-WAY VALVE THERMOSTAT or other user: the degrees at which the 3-way valve with spring return returns to stand-by position. It can be used to enable a secondary pump or another user.
- BUZZER: Buzzer volume.
- DEGREES: possibility of choosing between °C and °F.
- LANGUAGE: possibility of choosing the display language between Italian and English.
- BRIGHTNESS: possibility of setting the brightness of the display.

#### -Technical menu: the technical menu is reserved for the cooker stove installer.

-Alarms: in this section of the menus is displayed any ongoing alarm. The alarm can be disabled by pressing the buttons P1 and P4. Alarm deletion is confirmed by a long beep. The alarms are:

- Sensor 1 open: the sensor is not connected.
- Sensor 1 short-circuit: the sensor is damaged.
- Sensor 2 open: the sensor is not connected.
- Sensor 2 short-circuit: the sensor is damaged.
- H2O level sensor failure: if the sensor does not switch off within a given period of time T after the tank is fed with water, due to boiling or any other reason, the stove enters the H2O level sensor failure alarm condition.
- Hot water: the temperature of the water inside the boiler exceeded the maximum threshold.

#### Installation with Contact (external thermostat):

For the version with contact (valid for diagram 2,3,4): the display shows the temperature of the boiler. When the contact opens, the display shows T OFF and output V2 is powered. When the contact closes, the display shows T ON.

#### EXAMPLE:

When the contact opens because the boiler requires hot water, the three-way valve switches towards the boiler and the display shows T OFF. Once the stove meets the water requirement, the contact closes and the display shows T ON.

#### Installation with Probe:

For the version with sensor (valid for diagram 2,3,4): the display shows the boiler temperature and the measured temperature alternately. The sensor is adjusted by T3. Therefore, if the temperature measured by the sensor is below T3, output V2 is enabled. If the temperature measured by the sensor is above T3, the 3-way valve returns to its stand-by position.

#### EXAMPLE:

If the temperature measured by the sensor is lower than T3, a 3-way valve is enabled and it switches towards the boiler. If the temperature measured by the sensor is above T3, the 3-way valve returns to its stand-by position.

#### 04.2 IGNITION

#### CHECKS BEFORE START-UP

After connecting the stove to the hydraulic system and the electrical system you need to:

- Fill the system slowly, with the cap of the automatic release valve open. The system must be filled slowly so as to allow any air bubbles to come out of the stove exchangers.
  - If necessary, bleed the radiators.
- Fill the boiler tank: you can use a container or wait for it to be filled by means of the automatic fill valve (after 5 minutes of operation of the automatic valve, the display might show the H2O LEVEL SENSOR FAULT alarm. Reset the alarm by pressing buttons P1 and P4 at the same time).
- The water should cover the exchangers but it should not exceed the limit of the discharge pipe.
- Do not start the stove if the tank is empty: you will not be able to heat your home and you also might damage the stove.

To light the cooking stove, small (dry) logs and possibly ecological fire-lighters are required. Open the primary air register located on the front of the ash drawer and place the wood logs. After positioning the logs, place the fire starters below the wood and light them up. Close the door and wait for the flame to reach all the wood logs. Good ignition depends very much on the draught of your flue pipe: if the ignition is difficult, the flue pipe will not have the recommended draught due to the fact that it is cold and the stove will require more time to reach the intended operating conditions. In this case, we recommend that you open the ash drawer or keep the fire door slightly open. Make sure the internal fume diverter/register (if provided) is open (turn counter-clockwise).



# CAUTION:

Never use flammable liquids to ignite the wood logs. Also, after turning the stove on, keep in mind to close the primary air register. If you fail to close it, the stove might overheat and might get damaged. Also, the paint might still be fresh and it might release intense odours. Therefore, you should make sure that the room is properly ventilated before igniting the stove for the first time. Open the doors and windows to remove any odours from the room. The product might also suffer slight deformations as its structure is made of steel; therefore you might hear slight noises or crunches. This is absolutely normal and should not be considered a defect.

The display is off during the ignition phase. It will turn on once the temperature of the water inside the boiler exceeds 30°C.

#### 04.3 COMBUSTION

To obtain the best combustion, follow the parameters below:

	Stove
Amount of wood (kg/h)	4.3 (3 logs)
Primary air register	CHECKING FOR SIGNS
Fumes div. register	Closed
Refuelling interval (min)	50
Wood log length (cm)	30
Draught (Pa)	12
Wood arrangement	See photo below

# Do not introduce into the stove an amount of fuel greater than that recommended in this manual.

When reloading the wood it would be advisable to open the primary air adjustment device or even the ash drawer, slightly open the door so that the stove takes in oxygen, load the wood and close the firebox door



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# CAUTION:

## • Do not introduce into the stove an amount of fuel greater than that recommended in this manual.

- Don't smother the fire by closing the air vents.
- Do not leave the primary air register open during normal operation to prevent the device and the water inside the boiler from overheating, subsequently deforming the stove.
- Do not leave the firebox door open.
- Use proper protective equipment during refuelling: the firebox door handle and the registers might be very hot when the stove is running.
- If the coals are extinguished, light them up with new wood shims to start the fire.
- It's your job to find the perfect combination between ignition and amount of air (by adjusting the register) so that your stove functions properly, according
  to the characteristics of the chimney flue and of the wood.
- The top plate has been treated with food grade Vaseline. It's role is to protect the material against oxidation. This product is non-toxic and it will evaporate on his own at the first ignition.

The pump starts once the water inside the boiler reaches 55 °C and makes the water circulate inside the hydraulic system through the immersed coils. We recommend that you never set T1 at a value below 55°C to prevent the formation of condensate inside the boiler. The oven is heated by the fumes surrounding it. After the fire is properly started, if you want to increase the temperature inside the oven you have to rotate the lever installed above the plate clockwise and close the internal fumes diverter so that they can circulate around the oven, increasing the temperature inside it.

#### 04.4 PRODUCTION OF DHW PLUS

The models with built-in water heating system can produce domestic hot water instantaneously. Press the P3 button if you want to use all the power of the stove to heat water. This way, the pump will be locked for 15 minutes to prevent it from changing the heating circuit. That period may be interrupted by pressing the same button for 5 seconds. The pump restarts automatically when the water inside the boiler exceeds 85°C.



#### 04.5 ICE ANTI-BLOCK FUNCTION

The pump cycles start automatically to ensure the perfect efficiency of the stove at any time, preventing its deterioration and any possible malfunction. When the temperature inside the boiler drops below 6°C, the system starts the pump to prevent the formation of ice.

#### 04.6 AUTOMATIC FILLING VALVE

Inside the stove is installed an automatic fill valve. It is enabled in the following cases:

- Low water level: the level sensor detects when there is very little water inside the boiler due to evaporation. The sensor sends a signal to the control unit which controls the solenoid valve.
  - Thermal safety: it keeps the temperature inside the boiler under control in case of overheating.

#### **05 CLEANING AND MAINTENANCE**

#### **05.1 INTRODUCTION**

The stove requires a simple yet constant cleaning to guarantee top efficiency and proper functioning.

Constant maintenance by a qualified technician is recommended.

The stove should be cleaned before the cold season because it can sometimes get clogged during the summer (by nests for example) preventing exhaust fumes to flow regularly.

At the beginning of the season and in case of wind, a build-up of residue in the pipe may lead to fires. Should this happen, find below a few pieces of advice to follow:

- Block air supply to the pipe immediately;
- Throw sand or kitchen salt, and not water, to extinguish fire and coals;
- Keep objects and furniture away from the burning pipe.

ALSO TO PREVENT THIS TYPE OF FAULT YEARLY CLEANING OF THE FLUE PIPE IS ESSENTIAL, REMOVING DEPOSITS OR ANY POCKETS OR OBSTRUCTIONS.

#### **05.2 DAILY CLEANING**

Any cleaning operation must be performed when the stove is completely cold:

- Empty the ash drawer: vacuum it out or dispose of the ashes in a waste bin.
- Vacuum the combustion chamber: check that there are no embers that may still be lit. In this case your dust vacuum cleaner will catch fire.
- Remove the ash inside firebox and on door.
- Clean the glass with a damp cloth or with a ball of damp newspaper dipped in ash. If the operation is performed with the stove hot there is a risk of the
  glass exploding.

# CAUTION: USE A DRY CLOTH TO CLEAN THE STOVE EXTERNALLY. DO NOT USE ABRASIVE MATERIALS OR PRODUCTS THAT COULD CORRODE OR WHITEN THE SURFACES.

#### 05.3 MANUFACTURER'S RESPONSIBILIES

The manufacturer shall not be held liable against any direct and/or indirect, criminal and/or third party liability arising from:

- failure to abide by the instructions contained herein.
- non authorised repair operations or changes.
- use not compliant with safety rules.
- installation not compliant with national current regulations and safety rules.
- insufficient maintenance.
- the use of spare parts that are not original or which are not specific to the stove model.

#### 06 TROUBLE-SHOOTING

- The stove does not heat: the wood is too wet or of poor quality; insufficient chimney flue draught.
- The stove heats too: excessive chimney flue draught; door or drawer gaskets replacement.
- Bottom grate locked: check the grate and make sure there are no nails or wood pieces stuck in it.
- Blackened glass: wood too wet or of poor quality, poor draught, insufficient combustion air, register closed too quick.

# CERTIFICATE OF INSTALLATION AND TESTING

CUSTOMER:		Dealer Stamp:
STREET/ROAD:		
CITY:		Installer stamp:
POSTAL CODE:		
PROVINCE:		
TEL:		First name:
Delivery date:		Last Name:
Delivery date:		Address:Postcode:
Equipment mod.:		Location:
Serial number:	Year:	Tel.:

The customer acknowledges that, upon completion of the installation of the device, the works were carried out professionally and in accordance with the instructions in this user manual. The same also states that they acknowledge perfect functioning and are aware of the information needed to correctly use, operate and perform maintenance on the appliance.

CUSTOMER Signature DEALER / INSTALLER Signature

# 08 YEARLY SCHEDULED MAINTENANCE

(Technical Assistance Centre stamp)	Date 1st maintenance	/	/	
	(Technical Assistance Centre s	tamp)		

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Date 2nd maintenance	//
(Technical Assistance Centre stamp)	
Date 3rd maintenance	/

(Technical Assistance Centre stamp)

#### Warranty

Eva Stampaggi S.r.I. guarantees that the stove is built in accordance with EN 13240 (wood-burning stoves) EN 14785 (pellet stoves) and EN 12815 (wood-burning stoves and stoves), using high quality and non-polluting materials.

Eva Stampaggi S.r.l. guarantees that the stove is free from defects that make it unsuitable for its intended use or significantly reduce its value. The rules of the Italian Civil Code or applicable national law governing the guarantee in the sales contract, or applicable national law ex D. Int.

Any non-conformity can be claimed under the guarantees and procedures provided for in Legislative Decree 206/2005, provided that the Buyer was aware of the defect, or could not ignore it with ordinary diligence, or if the lack of conformity derives from instructions or materials provided by the same.

The warranty excludes malfunctions, defects and/or faults and consequent damages, resulting from property and/or persons, attributable to an abnormal and/or improper use of the product and/or not in compliance with safety regulations and/or the "Pellet Stove Instruction Manual", or resulting from an installation that does not comply (to which the absence of documents certifying such compliance is also equated) with current regulations and safety directives, or performed by unqualified personnel (UNI10683 and UNIEN 1443), or when, by way of example, there is a direct discharge to the wall.

Likewise, any non-conformity that may be randomly attributed to a use or installation of the product that does not comply with applicable laws and regulations and/or the instructions contained in this "Pellet Stove Instruction Manual" will not be covered by warranty.

The aforementioned warranty is also excluded for defects in conformity, malfunction, defects and/or faults and the consequent damage, caused to property and/or persons, resulting from the use of the stove in a manner that does not comply with safety directives.

The warranty for malfunction, defects and/or defects and/or faults does not work and Eva Stampaggi S.r.l. assumes no responsibility for damages caused to property or persons resulting from: the lack of first ignition carried out by a specialised technician, to which the absence of such documents, proving said operation, is equated; from the violation and/or non-compliance with the provisions of this Instruction Manual; from the tampering and/or alteration of the stove and its electrical board; from the non-compliance with lights and alarms; from the failure to clean and routine maintenance; from the failure to clean and extraordinary maintenance carried out by specialised technical personnel, to which the absence of documents proving said maintenance is equated; from the improper use of the stove; from the lack of installation requirements; from the non-compliance with the procedures for reporting conformity defects provided for in Legislative Decree no. 206/2005; from the use of unsuitable or poor fuel; from modifications and/or repairs carried out without prior communication and relative authorization of Eva Stampaggi S.r.l.; from the use of non-original and/or non-specific spare parts for the stove.

The above list must be considered non-exhaustive and therefore the cases not expressly indicated but which, by virtue of analogical interpretation, can be equated with the cases listed must also be considered included among the cases of exclusion of the guarantee.

All the following differences related to the natural characteristics of the coating materials are excluded from the warranty: the grains of the stones that are the main characteristic and that guarantee their uniqueness; any small cracks or cracks that could be highlighted in ceramic/majolica coatings; any differences in shades and shades on ceramic/majolica coatings; door glass; gaskets; masonry works.

Eva Stampaggi S.r.I. assumes no responsibility for: damage to chromed and/or anodised metal parts and/or painted or otherwise with treated surfaces, if due to rubbing or impact with other metals; damage to chromed and/or anodised metal parts and/or painted or in any case with treated surfaces, if due to improper maintenance and/or cleaning with products or chemical agents (said parts must be cleaned using only water); damage to mechanical components and mechanical parts due to their improper use or installation by non-specialist personnel or, in any case, for installation that did not comply with the instructions contained in the packaging; damage to electrical or electronic components and parts due to improper use or installation by non-specialist personnel or, in the packaging.

Ignition resistors are material subject to wear and tear, the duration of which depends on the use of the stove; the relative warranty is therefore limited to the first 6 months of use of the product.

Warning: after purchase, keep the warranty certificate together with the original packaging of the product, the installation and testing certificate and the receipt issued by the seller. The date of the sales tax document will determine the actual duration of the warranty.

#### The warranty provided shall be subject to the following terms and conditions:

The after-sales procedure is managed by our staff, who may be contacted on 0438.35469 or by sending an e-mail to assistenza@evacalor.it

Our qualified staff will provide you with information concerning technical, installation or maintenance problems.

If the problem cannot be resolved over the phone, out staff will forward the issue on to the user's Technical Assistance Centre, who will guarantee service within five working days

Any parts replaced during the warranty period shall be covered for the remaining period of the purchased product warranty.

The manufacturer shall not pay the customer any indemnities for the inconvenience of not being able to use the product during the period required for repairing. Should it be necessary to replace the product, the manufacturer will deliver it to the dealer who will then deliver it to the end user following the same procedure as for the product purchase.

This guarantee is valid within Italy; in the event of sale or installation carried out elsewhere, the guarantee must be recognised by the distributor in that territory. The warranty is carried out with the repair or replacement of defective parts, or defective parts or the entire product, at the discretion of the company.

#### When requesting assistance, you must have the following to hand:

- Serial number
- Stove model
- Purchase date
- Purchase location
- Warranty goodwill certificate completed by specialised C.A.T.

**IMPORTANT:** 

# EVA STAMPAGGI ADVISES TO CONSULT WITH ITS AUTHORIZED DEALERS AND SERVICE CENTERS.

AN INSTALLATION ACCORDING TO THE LAW IS MANDATORY, EVA STAMPAGGI STRONGLY RECOMMENDS A FIRST IGNITION OF ITS PRODUCTS WITH A QUALIFIED TECHNICIAN.

EVA STAMPAGGI HAS NO LIABILITY OF ONLINE SALES AND RELATED OFFERS, BECAUSE IT DOES NOT MAKE DIRECT SALES TO THE GENERAL PUBLIC.

FOR ANY TECHNICAL PROBLEM DURING THE PERIOD OF THE LEGAL WARRANTY, THE PROCEDURE REQUIRES TO CONTACT THE DEALER OR DIRECTLY OUR AFTER SALE SERVICE.

# WARNING for proper waste disposal of electrical and electronic equipment (WEEE), according to the European Directive 2002/96 / EC and the subsequent amendment 2003/108 / EC.



The presence of this symbol applied to the product determines that it is NOT a refusal to be considered generic, but must be demolished and disposed of in compliance with the rules in force in your country, making sure that the collection centers are in accordance with the law and respectful of the environment. The responsibility for such disposal is to be borne by the owner and to not incur sanctions or adverse effects on the environment and health, we recommend you contact the local administration, the local waste disposal center or the retailer directly to get more information about places and ways of collecting.

Proper waste disposal is important not only for the environment and the health of citizens, but also because this operation leads to a recovery of materials that have significant energy and resource savings.

**Dealer Stamp and Signature** 

Eva Stampaggi S.r.I. Via Cal Longa Z.I. I - 31028 Vazzola (Treviso - Italy) Tel. +39.0438.740433 rollover lines Fax +39.0438.740821

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