Pellet Fire Solutions

Ravelli®
il fuoco intelligente

economical

clean air approved

leading design

Pompeii Wood Pellet Boiler Owners & Installation Manual

PLEASE READ THIS ENTIRE MANUAL BEFORE INSTALLATION, AND USE OF THIS WOOD PELLET BOILER. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN PROPERTY DAMAGE, BODILY INJURY, OR EVEN DEATH.

Contact your local building or fire official about restrictions and installation requirement in your area.

ATTENTION

If you are a not a registered pellet fire installer, and do not have legitimate access to the necessary passwords to install and program the Pompeii Wood Pellet Boiler, you MUST NOT install or attempt to install this fire.

The Pompeii Wood Pellet Boiler requires technical programming and individualised air pressure adjustments to ensure it will operate safely and efficiently, and to avoid possible damage to the fire or the home.

Installation of the Pompeii Wood Pellet Boiler by a non-registered installer will void the warranty, and may result in your local authority refusing to approve the necessary permits.

If you require a registered Pellet Fire Solutions *Installer, please contact us directly on* info@pelletfiresolutions.co.nz

Pellet Fire Solutions

Owner's Section - Table of Contents

1. Introduction

This manual is designed for both the technician and the home owner.

Please read this entire manual before installing or operating your Ravelli Pompeii Freestanding Wood Pellet Burning Stove. Failure to follow these instructions may result in property damage, bodily injury or even death. Any unauthorized modification of the appliance, or use of replacement parts not recommended by the manufacturer is prohibited. All national and local regulations shall be complied with when installing this appliance. Your local Pellet Fire Solutions dealer will be happy to assist you in obtaining information with regards to your local building codes and installation restrictions.

1.1 Specifications

1.1.1 Rating label Location

Ravelli Pompeii Freestanding: The rating label is located on the back of the unit.
* Note: Consumption will vary with the type of fuel used.

Classification	Testing Standard	Description
Class I IP-20	Efficiency: AS/NZS 5078:2007 Appliance: AS/NZS 4866:2007	Residential Wood Pellet Stove
Voltage 220- 240 Volt	Current: 2.92 – 3.18 Amps	Frequency: 50Hz
Max Power Requirement 550 watts	Unit with full hopper: 213kg	Hopper Capacity: 23kg
Mean Flue Gas Temp – High: 156 degrees	Mean Flue Gas Temp- Medium: 117 degrees	Mean Flue Gas Temp- Low: 78 degrees
Fuel Consumption – High: 4.0 kg per hour	Fuel Consumption – Medium: 2.5kg per hour	Fuel Consumption – Low: 1.0kg per hour
Heat/Power Output – High: 17.2kw	Heat/Power Output – Medium: 10.3kw	Heat/Power Output – Low: 3.4kw
Average Particular Emissions (dry weight) 0.23 gms per kg	Average Emissions Rate 14mg/MJ	Average Efficiency 84%
Gross Calorific Value of pellets (dry weight) 20.1MJ/kg	Fuel Type: Wood pellets – 6mm dia, - complying with draft standard AS/NZS 4014.6 2008	

IMPORTANT: The above values were found during testing and may vary with the fuel type, climate and installation style.

2. Safety Warnings & Recommendations

Pellet quality is important, please read the following:

Your pellet heater has been designed to burn ¼" (6mm) diameter wood pellets, manufactured to the AS/NZS 4014.6 only.

DO NOT use this appliance as an incinerator.

DO NOT use unsuitable and non recommended fuels, including liquid fuels, as this will void any warranties stated in the manual.

The performance of your pellet stove is greatly affected by the type and quality of wool pellets being burned. As the heat output of various quality wood pellets differs, so will the performance and heat output of the pellet stove.

Caution: It is important to select and use only pellets that are dry and free of dirt, or any impurities such as high salt content. Wood pellets manufactured to the AS/NZS 4014.6 standard are recommended. Dirty fuel will adversely affect the operation and performance of the unit and will void the warranty. The Pellet Fuel Industries (PFI) has established standards for wood pellet manufacturers. We recommend the use of pellets that meet or exceed these standards. Ask your dealer for a recommended pellet type.

2.1 Installation

The stove must be installed and tested by specialised personnel approved by Pellet Fire Solutions. Please read this manual before installing or operating the stove. If you require further information, please contact your Pellet Fire Solutions dealer. Installation must be performed by authorized personnel, who must give the purchaser a declaration of conformity of the appliance, and who will assume all responsibility for the final installation and consequent correct functioning of the product installed. It is also necessary to take into consideration all the laws and national, regional, provincial and local regulations present in the country in which the appliance has been installed. In the event of failure to respect these precautions, Pellet Fire Solutions declines all responsibility.

IMPORTANT:

- The place of installation of the stove must comply with local & national regulations. The stove must be fuelled only with quality pellets manufactured to standard AS/NZS4014.6. The stove cannot operate with traditional wood.
- The stove must not be used as an incinerator.
- Before connecting the stove electrically, the connection of the exhaust spigot must be completed (specifically for pellet stoves, not made from aluminum) with the flue. (All flue joins must be sealed with maniseal exhaust cement).
- The protection grill inside the pellet tank must never be removed.
- There must be sufficient circulation of air in the room where the stove is installed. Never open the door of the stove whilst it is functioning.
- When the stove is operating, the surfaces, the glass, the handle and the pipes become overheated: during functioning, these parts must only be touched with the adequate protection.
- Do not light the stove without having first performed the daily inspection as described in the MAINTENANCE & CLEANING chapter of this manual (see page 9).
- Scrupulously follow the maintenance program.
- Do not turn the stove off by disconnecting the electricity mains supply (use the remote control.

- Do not clean the stove until the structure and the ashes have cooled down completely. Carry out all operations with maximum safety.

Pompeii should be installed in a centrally located position within the home. This will assist the appliance to perform to the level required. As the Pompeii heats space by convecting air across the top of the unit, the heater should face the majority of the area to be heated.

Pompeii requires a power source to function. This is standard mains feed 240v plug - if this is unavailable in close proximity, a grounded extension lead may be used.

Pompeiii is to be installed on a non-combustible surface, which must have a forward projection of a minimum of 150mm from the glass door.

Please check all clearances to combustibles as listed on page 37 and page 38 of this Owner's/ Technical manual.

In accordance with the requirements of AS/NZS 2918:2001, Pompeii must be secured by seismic restraint.

2.2 Deciding where to locate your wood pellet burning stove

1. Do not install the pellet stove in a bedroom or room where people sleep.
2. Locate the pellet stove in a large and open room that is centrally located in the house. This will optimise heat circulation.
3. Check clearances to combustibles (refer page 37).

2.3 Ash

The ash content of the fuel and operation of your stove will directly determine the frequency of cleaning. The use of high ash fuels may result in the stove needing to be cleaned daily. A low ash fuel may allow longer intervals between cleaning.

2.4 Clinkering

Clinkers are silica (sand) or other impurities in the fuel that will form a hard mass during the burning process. This hard mass will block the air flow through the burn pot liner, and affect the performance of the stove. Any fuel, even approved types, may clinker. Check the burn pot liner daily to ensure that the holes are not blocked with clinkers. Refer to the Routine Cleaning and Maintenance section.

2.5 Filling Fuel Hopper

Check hopper for foreign objects, then empty the bag of pellets into the hopper. DO NOT OVER FILL, as miscellaneous pellets could smoke if left to rest on an operating stove.

Store pellets at least one metre (1m) away from the pellet stove.

Warning: parts of the appliance, especially the external surfaces, will be hot to touch when in operation so use due care.

2.6 Flammable Liquids

Never use gasoline, gasoline – type lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or “freshen” up a fire in the stove. Keep all such liquids well away from the stove while it is use.

2.7 Operating Instructions

The stove is completely automated and will self-regulate the ignition phase, two levels of power and the switching off phase, guaranteeing safe functioning. The burn pot used for combustion allows most of the ashes produced by the combustion of the pellets to fall into the collection drawer. However, it is recommended that you check the burn pot every day, as not all pellets have high standards of quality, and could leave residue that is difficult to remove. The glass has special air circulation for self-cleaning, however, a slight greyish film cannot be avoided after a few hours of functioning. Pellets with a diameter of 6mm, manufactured to the AS/NZ4014.6 or higher must be used with the stove.

2.8 Safety Devices

The stove is fitted with a sophisticated safety systems so that, in the case of breakage of one of the individual parts, or defects in the flue, no damage will be caused to the stove and the room in which it is installed. In any case, when a problem arises, the pellets stop falling immediately and the switch off phase is activated. The corresponding alarm will be shown on the display. The details can be seen in the chapter on the alarms (see page 28).

2.9 Responsibility

Pellet Fire Solutions declines all responsibility, both civil and criminal, with the delivery of this manual, for any accidents deriving from partial or total failure, to observe the instructions it contains.

Pellet Fire Solutions declines all responsibility deriving from the improper use of the stove, from its incorrect use by the user, by unauthorised modifications and/or repairs, or from the use of spare parts which are not original. The manufacturer declines all direct, civil or criminal responsibility due to:

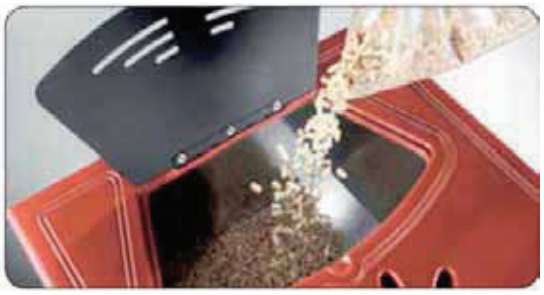
- Poor maintenance.
- Failure to observe the instructions in the manual.
- Use not compliant with the safety instructions.
- Installation that is not compliant with the regulations in force in the country.
- Installation by personnel who are not qualified or authorised.
- Modifications and repairs that are not authorized by the manufacturer.
- Use of spare parts that are not original.
- Exceptional events.

2.10 Spare Parts

Use original spare parts only. Do not wait for the components to be worn before replacing them. Replace a worn component before it is completely broken, to prevent any accidents caused by the sudden breakage of components. Perform the periodic maintenance checks as described in the dedicated chapter on “Maintenance and Cleaning” on page 9.

3. What are Wood Pellets?

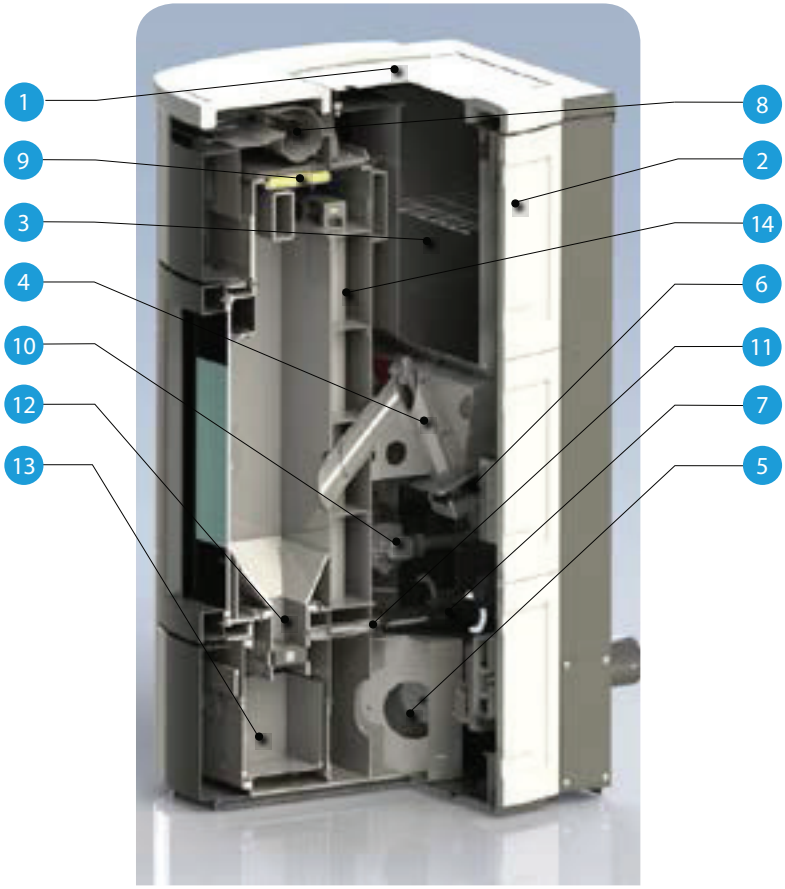
Wood pellets are made from sawdust and wood shavings. The material used cannot contain any foreign substance such as glue, varnish or synthetic substances. Subjecting it to high pressure, the wood is pressed through a plate with holes, and due to the high pressure, the sawdust is heated activating the natural binders of the wood. Thus, the pellets keep their shape even without the addition of bonding substances. The density of the wood pellet varies according to the type of wood and can be 1.5 – twice greater than that of natural wood. The diameter of the cylindrical rods is 6-10 mm and their length can vary between 10 and 50 mm. Their weight is equal to about 650 kg/m. Due to the low content of water (approx 8%) they have a high energy content. The standards AS/NZS4014.6 define the quality of the pellets:



Do not put the bag of pellets on the cast parts during the loading operations.

The pellets must be transported and stored in a dry place. They swell on contact with any moisture and cannot be used. They must always be protected from moisutre, both during transport and in storage. Ravelli recommends using a pellet with a diameter of 6 mm for the stove.

4. The Components of the Stove



1	Pellet tank cover
2	Design coating
3	Pellet tank
4	Pelelt infeed screw
5	Smoke extractor
6	Pellet gear motor
7	Air intake duct with flow meter
8	Hot air output grid
9	Vermiculite
10	Water pump
11	Ignition resistance
12	Cast iron brazier
13	Fume duct
14	Stove base
15	Heat exchange pipe

4.1 Pellet Combustion

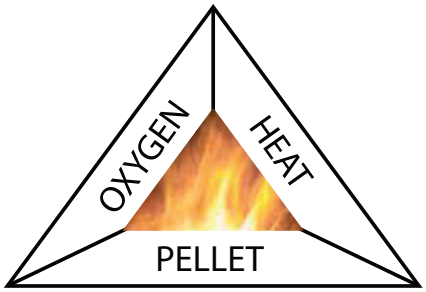
Combustion is simply a chemical reaction between combustible and carburant. The result of this reaction is the heat.

The three elements that are required for combustion are:

-Combustible (pellet)

-Carburant (oxygen available in the air)

-Ignition (electrical resistance for ignition)



To achieve combustion, the combustible and the carburant must be available in the correct proportions.

The reaction between combustible and carburant is made by an external starter. Ignition can be created by direct contact with a heat source, or by a spark. Incorret combustion is evident when the flame is too tight, and there are too many incandescent pellets in the firepot.

INCORRECT combustion - the flame is weak and there are a lot of unburned pellets in the firepot. Check first that the ash pan is properly closed. Then adjust set pellet/air increasing the air percentage (from 0 up to +5). If this doesn't work, try increasing the loading quantity of the pellet (from 0 up to -5) to reach the flame condition shown in picture 3.

If with the adjustments done, the flame is not reaching the condition shown in picture 3, contact After Sales Service.

The combustion is NOT CORRECT, the flame is weak and a lot of unburned pellet wood in the firepot. Check first that the ash pan is properly closed. Then adjust set pellet/air increasing the air percentage (from 0 up to +5); in the event this is not enough, increase the loading quantity of the pellet (from 0 up to -5) to reach the flame condition shown in picture 3.

If with the adjustments done, the flame is not reaching the condition shown in picture 3, contact After Sales Service.

The combustion IS CORRECT, full flame, yellow/white, and minimum quantity of pellet in the firepot.

The combustion is fine, and no ash.

The picture 3 shows a flame with a stove working at power P5.

5. Maintenance and Cleaning

Before carrying out any maintenance, take the following precautions:

- Make sure that the stove has been turned off, and that the general power supply has been disconnected (Ensure that the plug is disconnected from the socket, thus avoiding accidental electric shocks).
- Make sure that all parts of the pellet stove are cold.
- Make sure that the ashes have cooled completely.
- Make sure that the general switch is in the zero position (off).
- Always use appropriate tools for maintenance.
- When you have finished, re-install all safety guards before using the pellet stove again.

The pellet stove requires little maintenance if quality wood pellets are used, which is why we recommend pellet fuel that is manufactured to the AS/NZS4014.6.

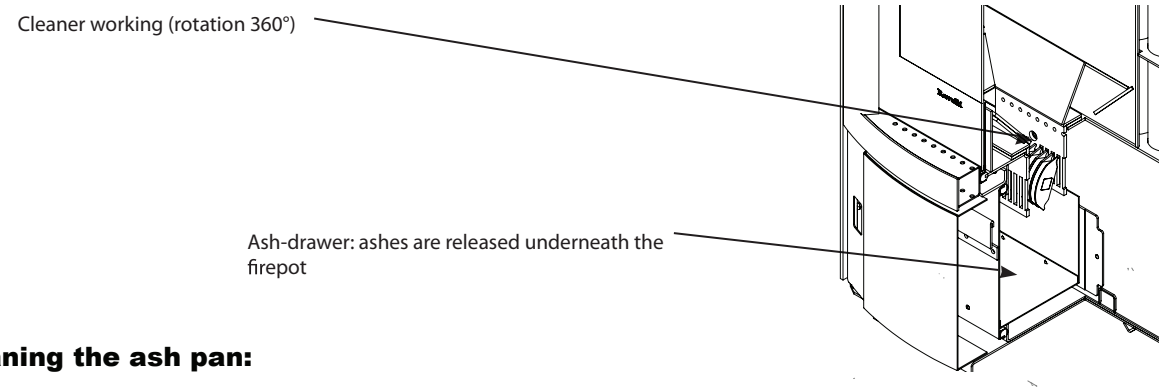
5.1 Cleaning the surfaces

To clean the surfaces on the painted metal parts, use a damp cloth.

Important: the use of aggressive detergents or abrasive cleaners can damage the surfaces of the stove.

5.2 Automatic cleaning system

The main characteristic of this model is the automatic cleaning of the firepot. Consequently there is no more need to clean the firepot periodociallly or at every start of the stove.

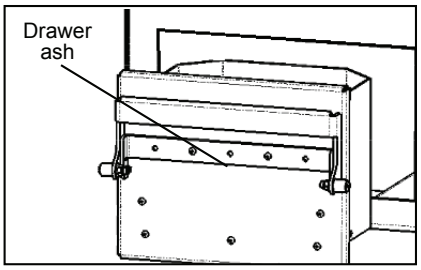


Cleaning the ash pan:

The cleaner sets every time the stove is turned on (2 rotations by default) and after 8 hours working (default value). The timing for this operation (work/cleaning/restart) takes about 10 minutes without affecting the heat exchange in the room, being its parts in cast iron.
Pull out the drawer from the stove and remove the ash using a special vacuum cleaner; be very careful to the brazier, it may still be hot and may damage the equipment used for cleaning.

Cleaning operations of the stove depend on the quality of the pellets used and the frequency of use. It may be necessary to carry out these operations on a daily basis.

Ash pan that needs to be emptied



Cleaning glass

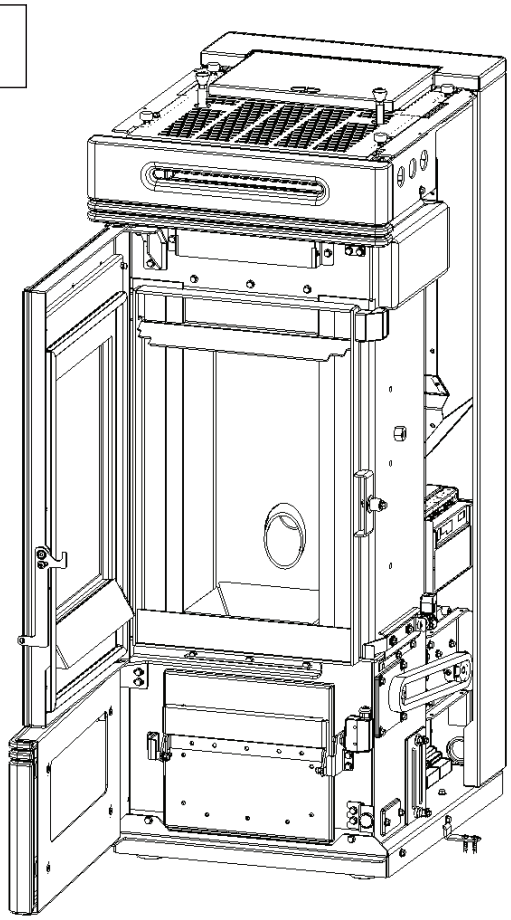
The glass of the door should be cleaned with the stove cooled down using a cotton cloth or paper towel.
Usually, we recommend you clean the glass with a damp (water) cloth and ash collected after burning (having an abrasive function).

5.8 Cleaning the Ashes Draw

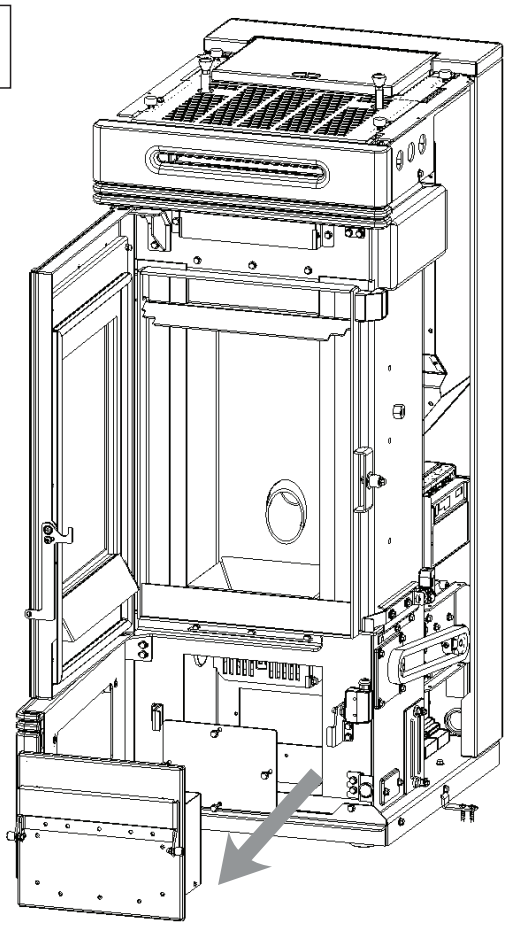
The ashes drawer must be cleaned every 2 days, depending on the length of time the stove is used, and the type of pellet used. To access the drawer, open the door (see figure 1) and extract the ashes drawer (see figure 2)

N.B.: The operation must be carried out when the stove is cold, using a drum-type vacuum cleaner.

1



2



The pellet stove is a generator of heat, with a solid fuel, and as such requires servicing by qualified personnel at least once a year at the start of the season. This maintenance has the purpose of ascertaining and ensuring the efficiency and safety of all the components.

We recommend you draw up an annual contract for maintenance of the product with your installer/dealer.

5.4 Cleaning the combustion chamber

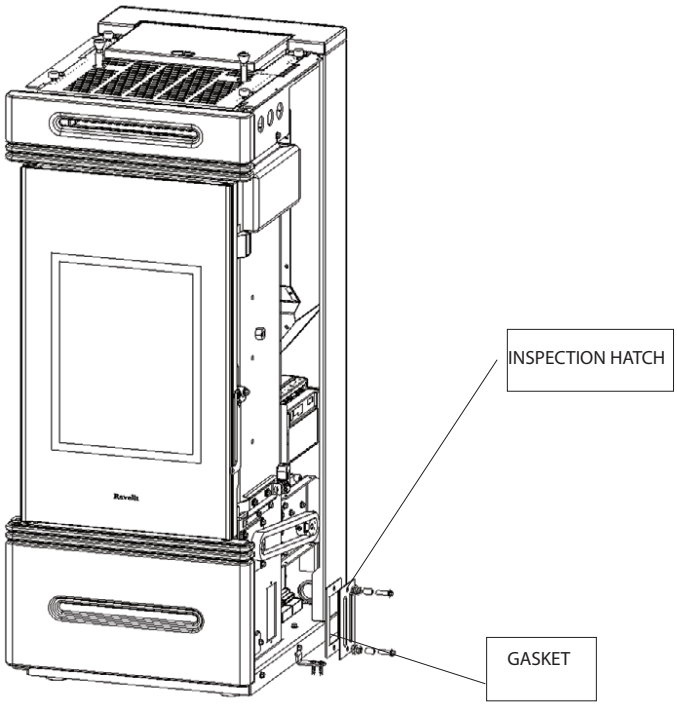
The stove requires simple but frequent cleaning to guarantee an efficient yield and correct functioning. Therefore, clean the combustion chamber every day using a drum-type vacuum cleaner, making sure that the ashes are cold first.

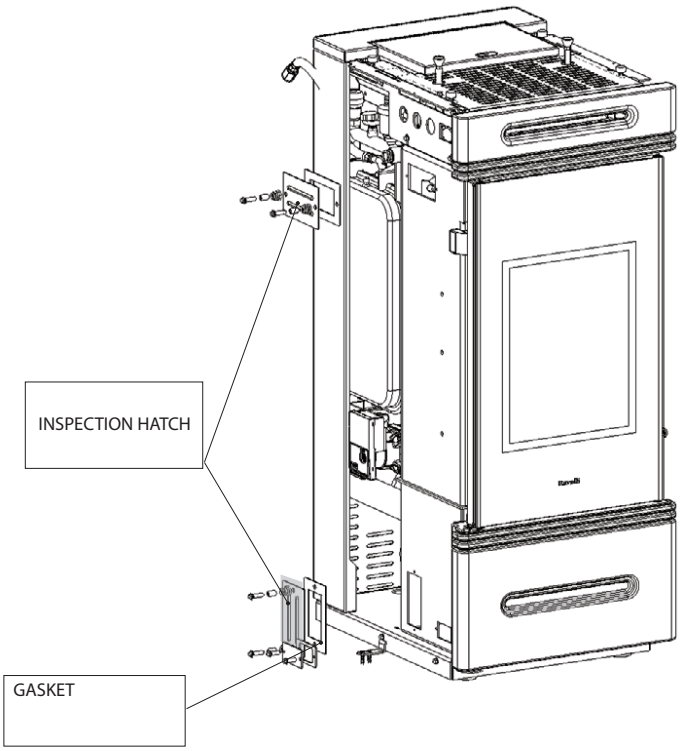
5.5 Cleaning the Flue

The flue will require cleaning only once each winter (or every 1000 hours) providing that the correct fuel is used. You should arrange for this when booking your annual service with your local Pellet Fire Solutions Service Agent. Use a drum type vacuumn cleaner only.

5.6 Access to the inspection hatches for cleaning the smoke

Remove the side panels and release the two screws that secure the hatches to the body of the pellet stove. Clean the inside using a drum type vacuum cleaner.

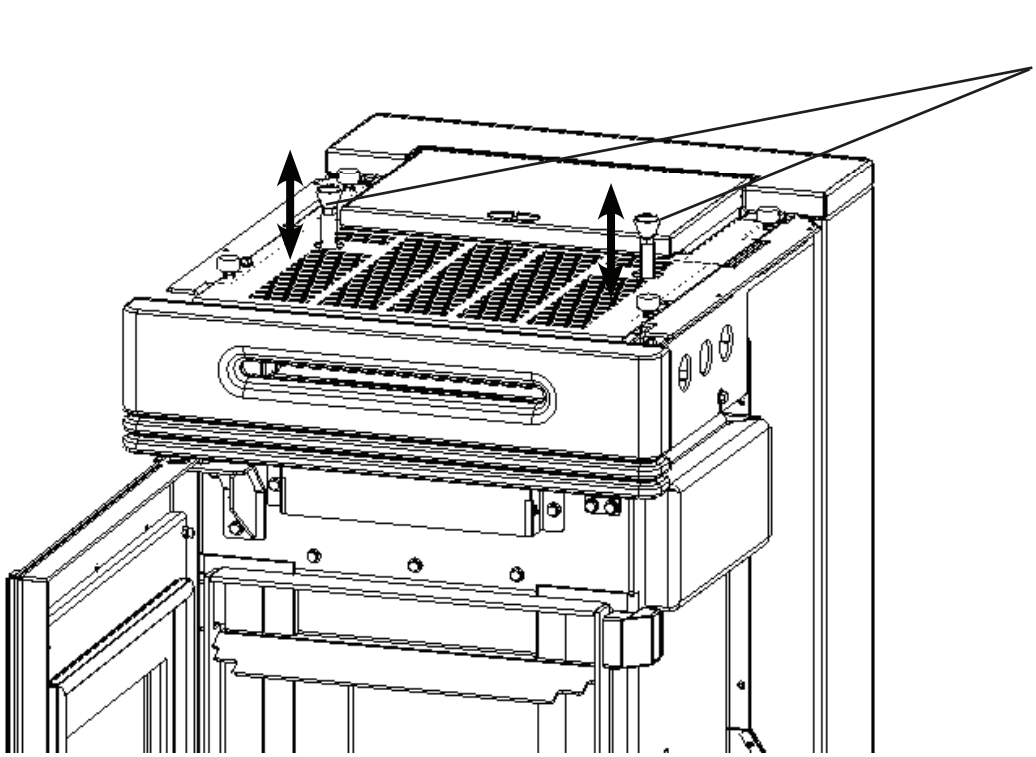




5.7 Frequency of Component Cleaning

Parts/Frequency	Daily	2-3 Days	30 Days	Yearly	Performed By
Burn pot	•				Owner
Ash Drawer		•			Owner
Glass		•			Owner
Flu				•	Technician
Door gasket				•	Technician
Tubulators scraper		•			Owner
Combustion chamber			•		Owner
Vacuum Hopper			•		Owner
Clean T discharge				•	Technician

5.8 How to Clean the Tubulators



6.1 Preliminary Operations

Wiring

Connect the power cord to the back of the stove and then to a wall socket. The I/O switch in the figure should be set to I to power the stove. If voltage is not supplied check the state of the fuse installed in the box below the switch (4A fuse). During the periods of inactivity, we recommend you disconnect the power cord of the stove.

What to check befor turning on the stove

Make sure you have removed all parts that pose the risk of burns from the combustion chamber or glass (various instructions or stickers).

Before turning on the stove, make sure you have fitted the grate on the support base and check that the door and the ash drawer are properly close.

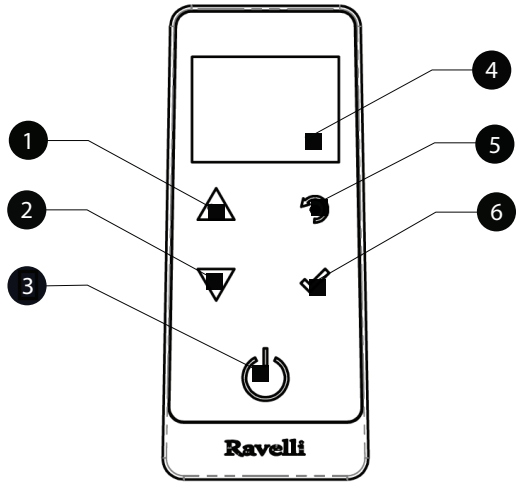
How to load the pellets

Fuel supply consists in the insertion of pellets from the top of the stove, by opening the door. During pellet loading prevent the pellet bag from coming into contact with hot surfaces.

NEVER INSERT INTO THE TANK OTHER KIND OF FUEL OTHER FROM THE PELLETS COMPLYING WITH THE SPECIFICATIONS BELOW

6.2 Description of the handheld set:

The handheld set is shown in the picture below:



1	Increase button "UP" (selection key)
2	Decrease key "DOWN" (selection key)
3	ON/OFF or reset from "Sleep" mode key.
4	Display
5	Key for accessing the MENU and back
6	Confirmation key

In "Sleep" mode, the handheld set screen is obscured, keeping however active the radio communication with the stove to reduce battery consumption.

The information below will allow you to become familiar with the product and achieve the best performance.

How to insert the batteries in the handheld set:

Remove the protective cover of the battery on the back of the remote control as shown in Figure A, and insert the 3 batteries (mini pen style battery AAA 1.5V) in the housing of the handheld set and observe the poles. Install the battery protective cover as shown in figure B

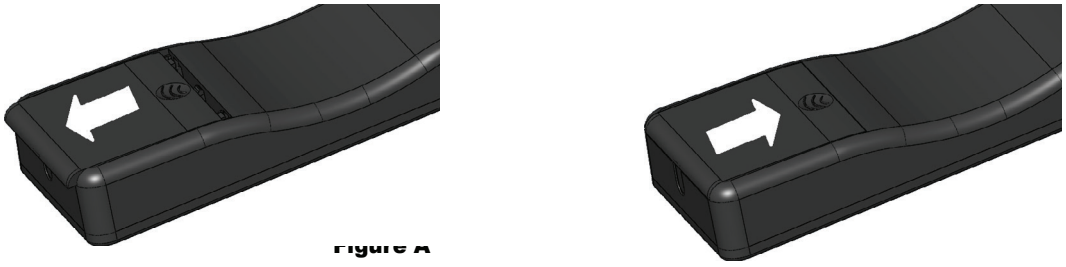


Figure A

The handheld set, after a short screen showing the Ravelli logo, will list the languages available in the menu.

ITALIANO
DEUTSCH
ENGLISH
FRANCAIS
DANSK
NEDERLANDS
ESPANICE

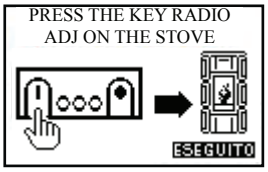
Select the desired language using the scroll keys and confirm your selection with the confirmation button.

6.3 Handheld touch radio initialization

In order to operate correctly, the handheld set should be interfaced with the electronic board installed inside the stove. For this reason, on display appears the following message:

If the handheld set is used for the first time, select **YES** using the selection keys and confirm with the dedicated key.

On the display of the handheld set appears the following:



Hold down for a few seconds the button of radio communication (RADIO ADJ) of the PCB, located on the back of the stove, to initialize the device.

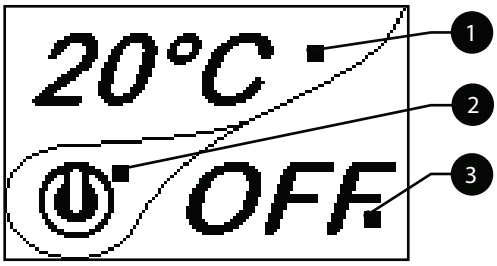
The flashing yellow LED indicates that the circuit board is waiting to receive the signal from the handheld set.

By pressing the enter key on the handheld set, the components start communicating with each other. A check sign on the display, accompanied by a sound signal, shows that the initialization of the handheld set has been completed sucessfully .

When you replace the batteries, you do not have to run the initialization procedure of the handheld set. In this case, when on display appears the message "FIRST INSTALLATION ?", select **NO** *and press the confirmation key.*

6.4 Description of the display

The display of the handheld set is described below (in stand-by mode):



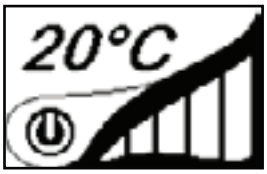
After 5 minutes of inactivity, the display of the handheld set turns dark, switching to "SLEEP" mode, while maintaining the radio connection with the stove. By pressing the key ON/OFF, the display becomes active again.

The first pressure of any key with the display active, lights up its backlight, but it is not, however , considered a command.

The display is subdivided into three parts

1 It shows the current room temperature measured by the handheld set. Moreover, if you press the DOWN scroll key you will display the temperature settings that can be changed using the two UP/DOWN keys. Any change made is confirmed automatically within 3 seconds from the change or by pressing the confirmation key. A sound signal indicates that the change has been confirmed.

2 In the inactive phases (combined with the 3rd part of the display) indicates the state of the stove.
In the active phases, it indicates the operating power of the stove.
In addition, by pressing the DOWN scroll button, you can display the power settings, that can be edited using the two scroll keys
UP/DOWN: The confirmation of any change takes place automatically within 3 seconds from the change or by pressing the confirmation key. A sound signal indicates that the change has been confirmed.



6.5 Time and date setting

Below are given the steps for accessing the relative menu.

Press the key from STAND-BY mode to quickly display the real and active states of the stove as shown in the figure below:

POWER	MOD
PUMP	ON
VAL 3 VIE	RISC
PRESSURE	1.1 bar

POWER: It shows the real power that can be
- MIN: minimum settable power (see power selection menu);
- MAX: maximum settable power (see power selection menu); the stove is set to maximum power each time it is turned on
- MOD: stove modulation with set parameters reached;
- SANI: if the quick DHW kit is provided, as soon as there is a request for domestic hot water, the stove switches to DHW power automatically;

PUMP: the writing ON indicates that the circulator is active and enables water circulation within house system;

3-WAY VALVE: it shows the position of any 3-way valve installed, if there is a quick DHW heat exchanger installed or a DHW boiler

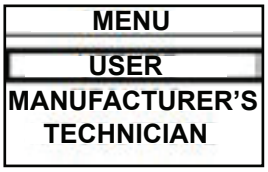
PRESSURE: it indicates the actual pressure of the system read by the transducer installed on the stove.

Press this key to return to STAND-BY page.

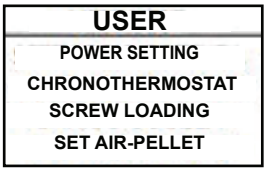
Time and date setting

Below are given the steps for accessing the relative menu.

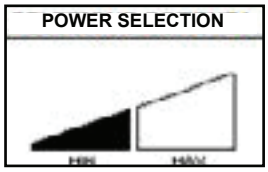
Press the key “access menu” to access the MENU page



Press the key “confirm” to access the USER page

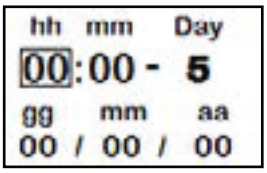


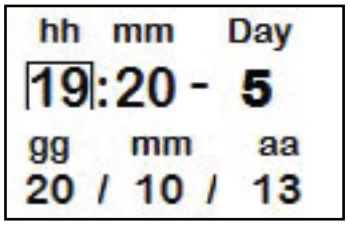
Press the key “selection” for several times to go to the second page of the USER menu and select SETTINGS.



Press the key “confirm” to access the SETUP page

Press the key “confirm” to access the page DATE-TIME





Press the increase key to change every single value

Press the increase key to change every single value

Press “confirm” to confirm the settings and switch to the next option.

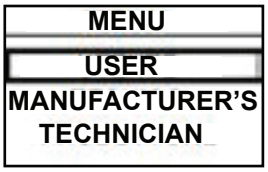
By pressing the key “back” for several times you will display the stand-by page.

6.6 Loading the auger

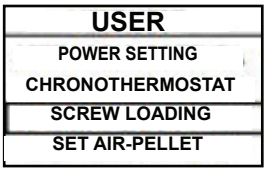
Carry out this operation to facilitate the first start-up phases of the stove; Also check that pellets have been fed into the tank and wait for the stove to reach the “SHUTDOWN” or “FINAL CLEANING” status. The the number expressed in seconds indicates the rotation time of the infeed screw during the first loading cycle. After this time, the infeed screw stops immediately and then pellets are emptied from the grate before turning on the equipment.

Below are given the steps for accessing the relative menu.

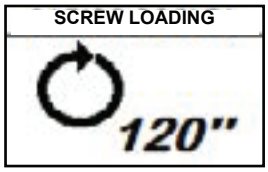
Press the key “access menu” to access the MENU page



Press the key “confirm” to access the USER page



Press the key “confirm” to enable the rotation of the infeed screw



At the end of the auger loading, the display shows 0 “and automatically switches to the USER menu page.

Press the key for several times until the Stand-by page is displayed.

UNLIKE THE MODELS PROVIDED WITH AUTOMATIC CLEANING DEVICE, IN THIS CASE ALWAYS REMEMBER TO EMPTY THE GRATE BEFORE TURNING ON THE STOVE AND CHECK THAT ALL ITS HOLES ARE FREE OF OBSTRUCTIONS. NEVER EMPTY THE GRATE INTO THE HOPPER. FIRE HAZARD.

6.7 Setting ambient and boiler water temperature:

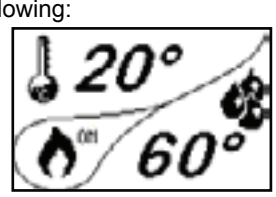
Set the two values following the indications given in the chapter "Description of the display"

6.8 Turning the device on

Keep the key ON/OFF pressed for a few seconds to turn on the stove.

The message "ADJUST THE RDS SYSTEM" indicates that the initial parameter testing and calibration procedure has been completed unsuccessfully. This indication does not block the stove (see section WARNING POP-UP).

On the display of the handheld set appears the following:

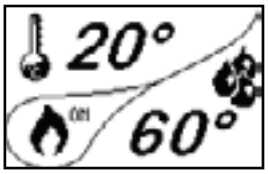


Press and hold the ON/OFF button to turn off the stove and reset any alarms triggered. If the In case the infeed screw operations described above have not been executed, the stove may fail to turn on.

Empty the brazier, reset the alarm and turn the stove on again. If the stove still fails to turn on, make sure the grate is perfectly fixed to the support base; also check that there are no deposits that prevent the air to flow correctly and promote the ignition.
If the problem persists, contact the support service.

For models with automatic cleaning system, the active stove enables a cleaning cycle of the brazier upon ignition and before IGNITION. In the event of FAILED IGNITION, it is not necessary to remove the unburnt pellet from the inside of the brazier before turning on the stove again. As soon as the user restarts the stove, the operating system runs the operation without enabling the cleaning device and without reactivating the pellet loading phase.

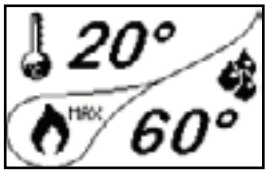
Sequence of ignition phases



SWITCH-ON- initial pellet loading phase;

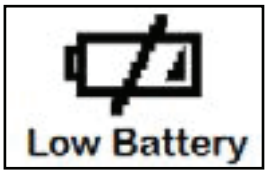
WAIT FLAME - flame development wait phase;

FLAME PHASE - flame stabilization and reduction of combustion inside the brazier;

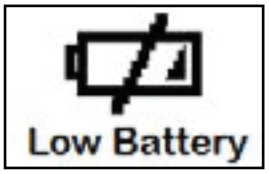


WORK - operating phase described in the dedicated chapter;

What happens if the batteries are empty?



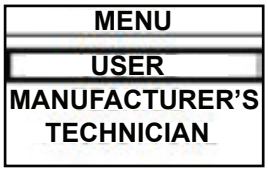
If the battery is empty, inside the "drop" will be displayed a symbol indicating the "almost empty" state of the same, maintaining the handheld unit functions active.



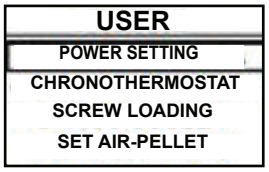
As soon as the level of the battery prevents the radio communication the handheld set displays on full screen the picture of empty battery and all device functions are locked until the batteries are replaced

Changing the power of the stove

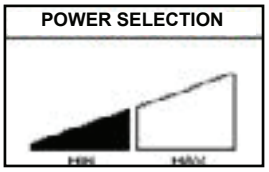
Press the key "access menu" to access the MENU page

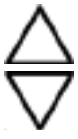


Press the key "confirm" to access the USER page



Press the key "confirm" to access the POWER SETTING page





Use the UP/DOWN keys to change the operating power.

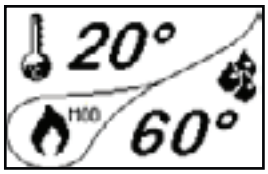
By pressing the following key you will confirm the data and go back to USER MENU

The power can be selected only when the stove is operating Upon every start-up, the stove operates with maximum power in order to ensure greater heat input to the heating system.

6.9 Operating phases of the appliance

Modulation

During the work phases, the appliance is aimed at reaching the room/water temperature set by the user;
when one of these conditions is met, the stove switches to MODULE WORK phase, in which fuel consumption is minimised.



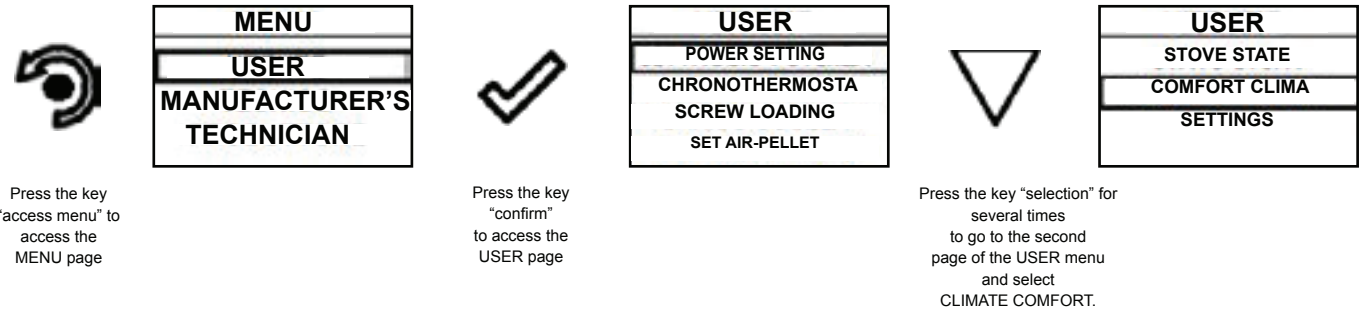
Should it be necessary to measure the room temperature using an external thermostat (optional), the latter must be connected to the dedicated connector to the rear of the stove; therefore, the user will be able to enable temperature reading in the dedicated menu "SETTINGS - ENABLE THERMOSTAT". On display appears the writing TON / TOFF based on thermostat request.

CONNECT AN EXTERNAL THERMOSTAT WITH A SIMPLE DRY CONTACT, THEREFORE, NOT POWERED.
MOREOVER, WE RECOMMEND YOU USE A THERMOSTAT WITH A MINIMUM OFFSET OF 3°C
IF YOU INTEND TO USE THE COMFORT CLIMA FUNCTION.

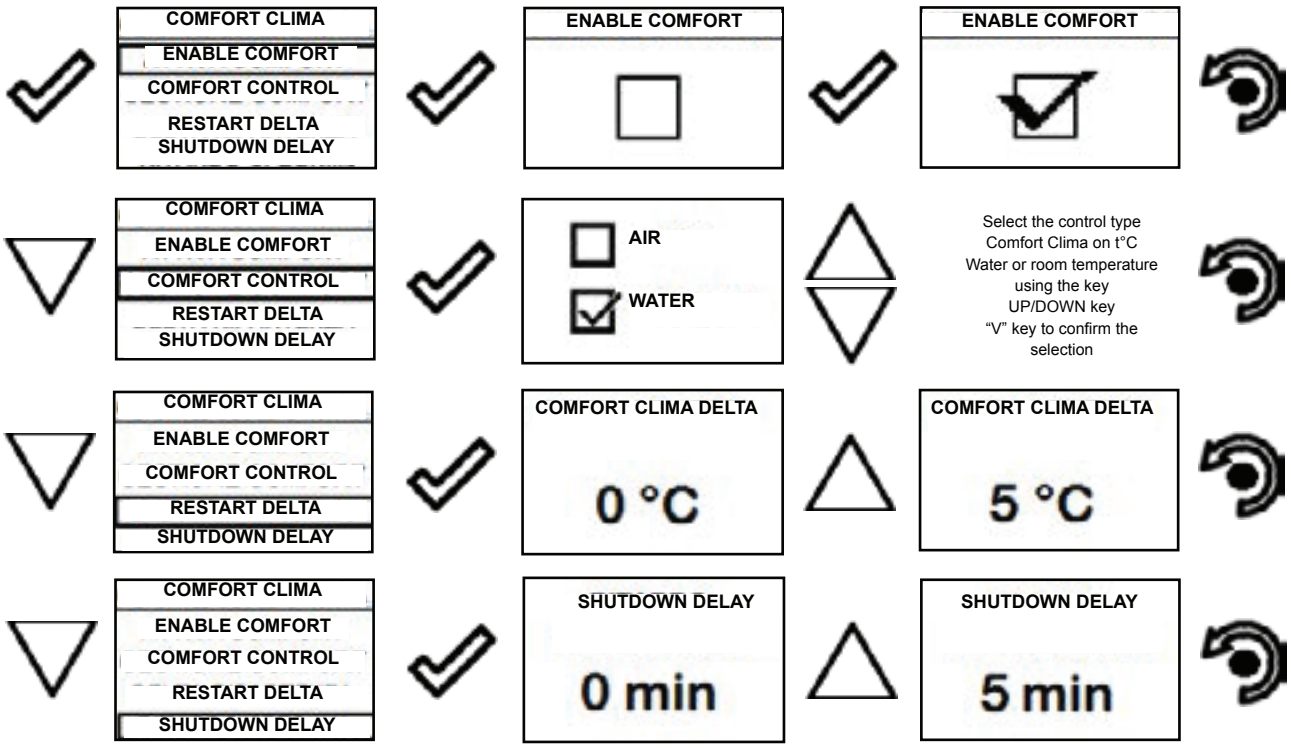
Comfort climate

The activation of this function enables the stove to reduce pellet consumption by activating the modulation phases, after the desired temperature has been reached. Subsequently, the stove checks that the temperature is maintained steady for a preset time. If this condition is met, it automatically switches off, and on display appears the writing ECO. The stove turns on again when the temperature drops below the set threshold.

Below are given the steps for accessing the relative menu.



Once you have accessed the Climate Comfort menu, it is possible to operate on the 4 types of settings dedicated to the function:



Press the key for several times until the Stand-by page is displayed.

The first setting allows you to enable the COMFORT CLIMA function which is aimed at checking that the temperature set for room/ water is maintained at the set value for a maximum period of X minutes (SHUTDOWN DELAY: 5 MIN) before switching to before switching to ECO STOP phase. The stove remains in this state until the room or water temperature drops below the set value (CLIMATE COMFORT DELTA : 5 ° C). The COMFORT CONTROL function allows the user to program the stove to switch off when the set values of AIR temperature rather than WATER temperature are reached (set by the user).
For example, with the room temperature at 21 ° C, the stove switches off when this temperature is reached and restarts when the temperature reaches 15°C (21°C - 5°C - 0.5°C tolerance).
For example, with the room temperature at 65°C, the stove switches off when this temperature is reached and restarts when the temperature reaches 59□ (21°C - 5°C - 0.5°C tolerance).
You can also activate the function using an external thermostat, keeping in mind that this does not include the value of the hysteresis.

We recommend you use an external thermostat with a histeresys value that can be set to maximum 3°C.
Stove's operation may enable the switch on/off phase for several times during the day; this may compromise the shelf life of the ignition resistance.

Stand-by

The STAND-BY mode is activated when the temperature of the water reaches 85□, this function is aimed at protecting the circuit especially when COMFORT CLIMATE function is not active on boiler H2O. If the boiler is not in this condition
, it switches to STAND-BY mode to guarantee protection of the hydraulic circuit. The boiler restarts
automatically after it cooled down, on the condition that heating is requested.

Description of menu functions

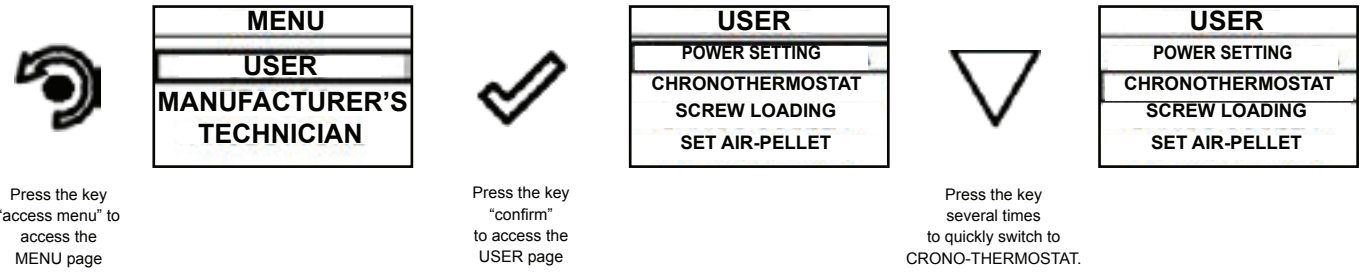
Press the key to access the MENU page

MENU
USER
MANUFACTURER'S
TECHNICIAN

The TECHNICIAN and MANUFACTURER menus are protected by password.

Chronothermostat

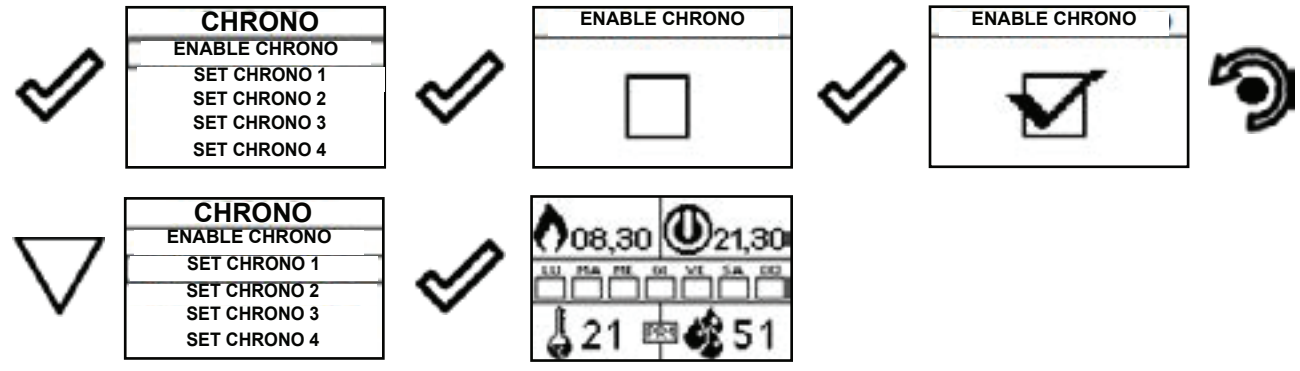
With the Chrono-thermostat function you can program the automatic switch ON/OFF of the stove for each day of the week for each day of the week in 4 independent time intervals (SET CHRONO 1-2-3-4).Below are given the steps for accessing the relative menu starting from Stand-By mode.

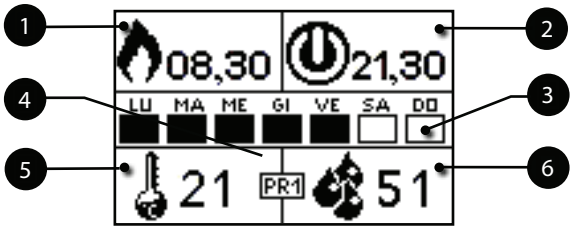


Press the key "access menu" to access the MENU page

Press the key "confirm" to access the USER page

Press the key several times to quickly switch to CRONO-THERMOSTAT.





1	Orario di accensione impostabile
2	Orario di spegnimento impostabile
3	Giorno della settimana con programma attivo
4	Numero programma "crono" (1-2-3-4)
5	Settaggio della temperatura ambiente
6	Settaggio della temperatura acqua caldaia

By pressing the Increment key you can change each value and, at step 3, enable the days of the week;

By pressing the Increment key you can change each value and, at step 3, enable the days of the week;

Press "confirm" to confirm the settings and switch to the next value;

Press the "back" button to return to the CHRONO-THERMOSTAT page.

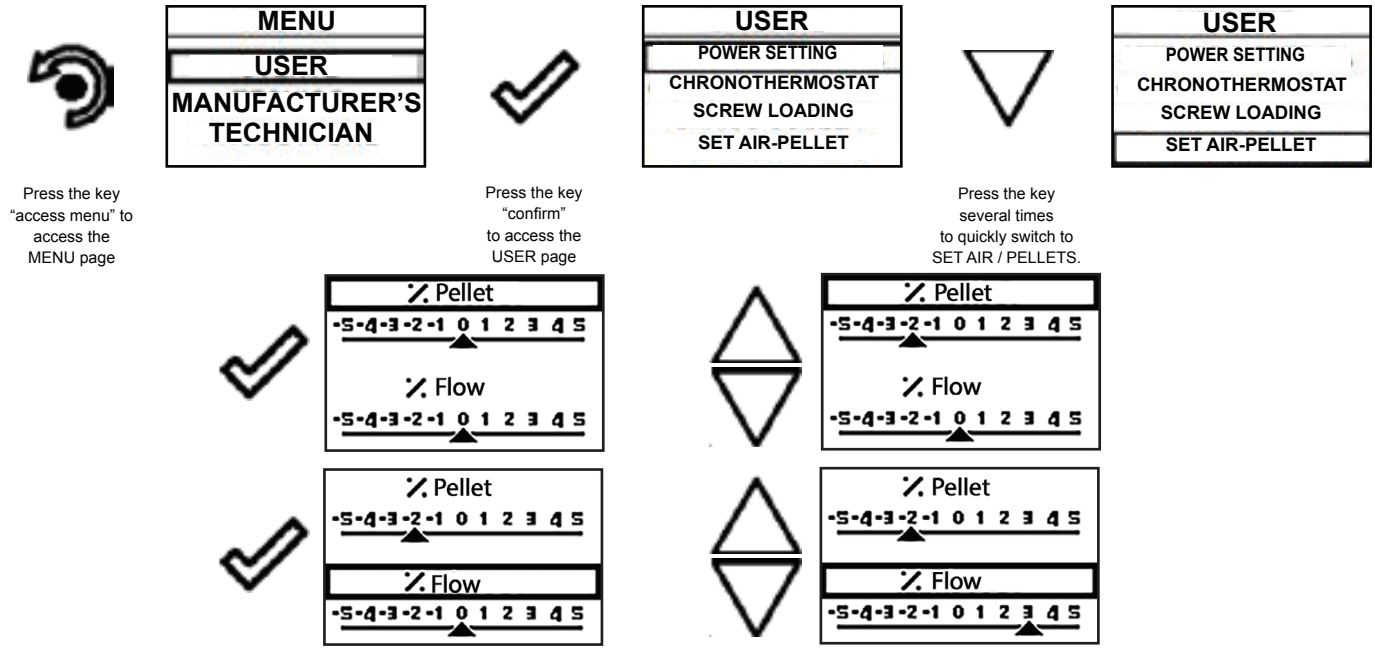
As per the above example, it has been set as CHRONO 1 an ignition from 08.30 to 21.30 from MONDAY to FRIDAY with room temperature set to 21°C and hot water temperature set to 51°C.
Follow the same steps to set the programs 2-3-4.

To exit the CHRONO-THERMOSTAT function and return to Stand-by page, press the button repeatedly.

AIR / PELLETS setting

Setting of the PELLET-FLOW mix enables you to immediately change the quantity of pellet loaded in the brazier and the air inflow.
The stove is tested and approved with DIN PLUS certified pellets. If non-certified pellets are used you may need to regulate combustion. Usually, the variation involves the FLOW percentage to regulate the air inflow and therefore combustion; if the flow regulation is not sufficient, it may be required to change PELLETS feeding rate as well.

Below are given the steps for accessing the relative menu starting from Stand-By mode.



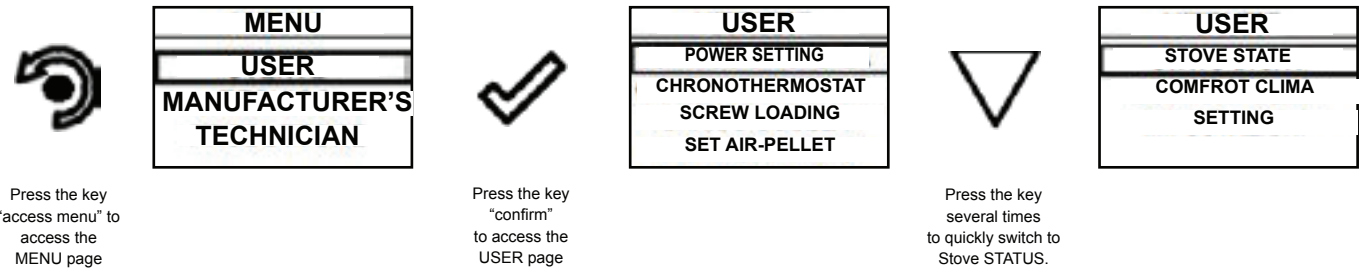
As per the above example, you have set a percentage of -2 for PELLETS and +3 for the FLOW, an indication that a setting like this is a consequence of the fact that the oxygen needed for combustion is insufficient and pellet size is smaller than the average size of 2 cm.

To exit the SET AIR - PELLET function and return to Stand-by page, press the button repeatedly.

NOTE: The number indicated during the change of parameters refers only to a percentage value that acts on the default parameters set on the electronic board (exclusively in the WORK phase). These values must be changed in the event of poor combustion, due in many cases to the purchase of pellets differing from those used during stove testing.

Stove State

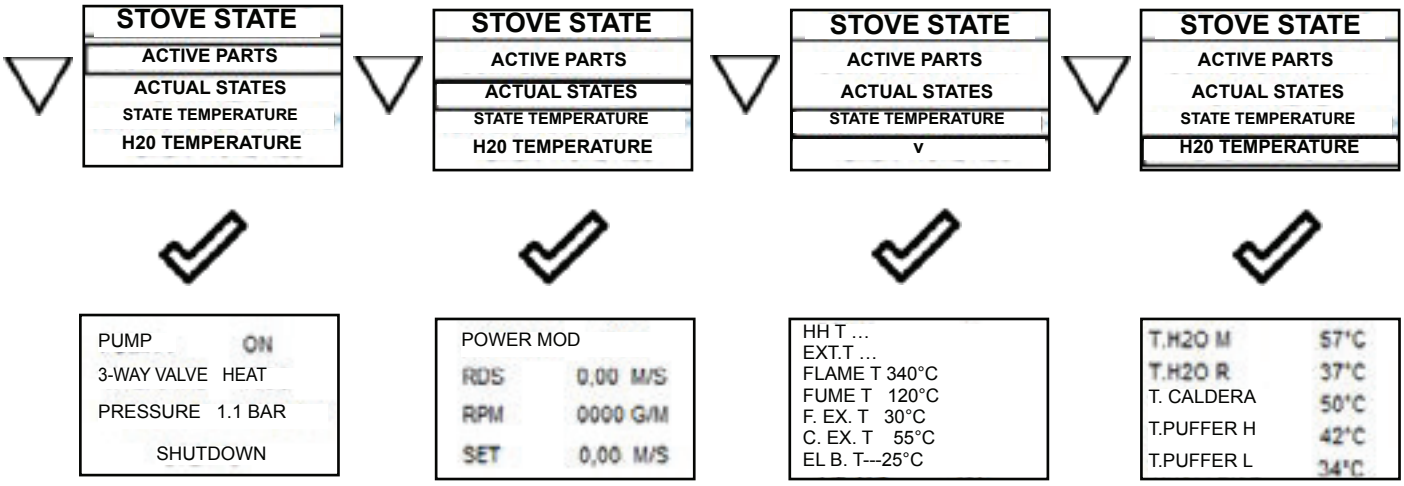
Below are given the steps for accessing the relative menu starting from Stand-By mode.



Press the key "access menu" to access the MENU page

Press the key "confirm" to access the USER page

Press the key several times to quickly switch to Stove STATUS.



In this mode you can check the proper operation of the most important parameters of the appliance. Here is a list of real data of the stove useful for service during inspection.

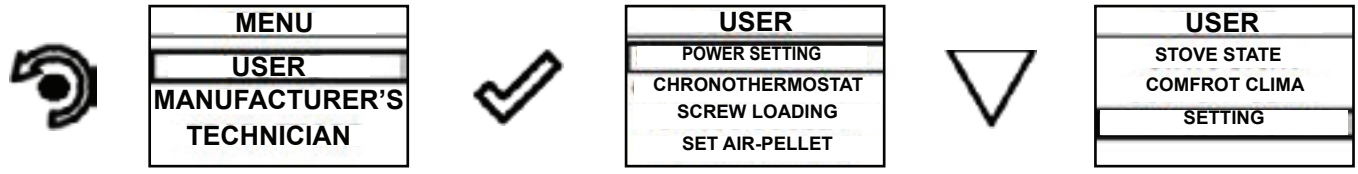
- Circulator state (ON running)
- Position of 3-way valve DHW (domestic hot water) or HEAT (heating);
- System pressure;
- Stove state;
- Current boiler power;
- Flow read by the flow meter;
- Fume extractor speed;
- Actual flow set;

- Temperature read by the handheld unit;
- External thermostat (request ON);
- Flame temperature (combustion chamber);
- Combustion fume exhaust temperature;
- Inlet flow meter temperature;
- Heated flow meter temp.;
- Electronic board temperature;
- Boiler water temperature (SUPPLY);
- Boiler water temperature (optional) - RETURN from the system;
- Boiler DHW temperature;
- Puffer temperature - average warm point;
- Puffer temperature second reading (low temp.).

To exit the STOVE STATE page and return to Stand-by page, press the button repeatedly.

Settings

Below are given the steps for accessing the relative menu starting from Stand-By mode.



Press the key "access menu" to access the MENU page

Press the key "confirm" to access the USER page

Press the key "selection" to switch to second menu page to the function SETTINGS.

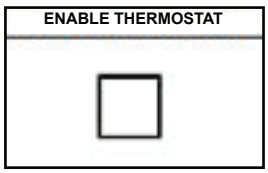
After following the procedure above step by step, you can set the following functions:

Settings > Enable thermostat

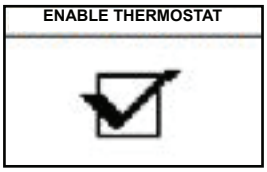
Press the “enter” key to access the SETTINGS

Press the key “selection” to switch to ENABLE THERMOSTAT.

Press the key “confirm” to access the function



Press the key “confirm” to enable the function.



Press the key for several times to return to “STAND BY” page

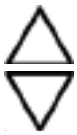
In Stand-By mode, instead of room temperature measured and settable, appears the line T ON if the room in which the thermostat is installed has not reached the temperature requested or the writing T OFF if the temperature in the room is reached.

Settings > Season

Press the key “confirm” to access the SETUP SETTINGS

Press the key “selection” to switch to the function CONTRAST.

Press the key “confirm” to access the function



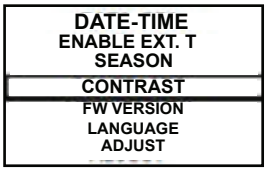
Use the UP/DOWN keys to change the WINTER/ SUMMER season. Function that can be set when working with DHW puffer (Boiler).
See chap. Evolved hydraulic diagrams

By pressing the following key you will confirm of data and switch to the page within SETTINGS menu.

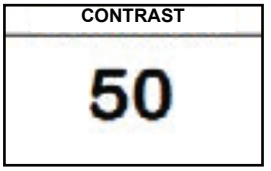
Settings > Contrast

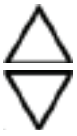
Press the key “confirm” to access the SETUP SETTINGS

Press the key “selection” to switch to the function CONTRAST.



Press the key “confirm” to access the function





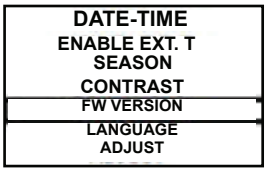
Use the UP/DOWN keys to change contrast setting and obtain a better visualisation of the information shown on the handheld set.
The value can vary from 0 to 100. 50 with respect to the standard value.

By pressing the following key you will confirm of data and switch to the page within SETTINGS menu.

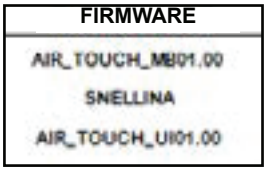
Settings > Firmware version

Press the “enter” key to access the SETTINGS

Press the key “selection” to switch to CONTRAST.



Press the key “confirm” to access the function



By pressing the button you will confirm the data and switch to the page within the SETTINGS menu.

Settings > Language

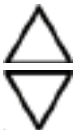
To access the next setting, follow the steps given above or simply remove and replace the batteries.
The device resets and prompts you again to select the language you want to set.

Settings > Adjust

Press the key "confirm" to access the SETUP SETTINGS

Press the key "selection" to switch to the function VERSION FW.

Press the key "confirm" to access the function



Use the UP/DOWN keys to change the value read by the room temperature probe installed inside the handheld set, with respect to a reference value.
The value can vary from -10°C to 10°C.
The standard value is 0°C.

By pressing the following key you will confirm of data and switch to the page within SETTINGS menu

VENTILATION menu (function only for models in which the same is specified in the dedicate user's manual)

The stoves equipped with ventilation system can heat the area in which are installed through the heat generated by the window and the room temperature fan installed inside them.

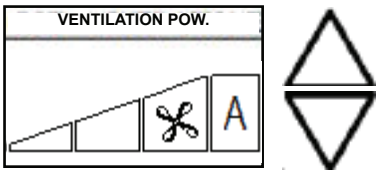
Below are the messages shown on display when the stove is equipped with ventilation system.

The temperature read by the handheld unit controls the modulation of the stove. If you want to adjust the ventilation by adjusting the stove, set the fan to A mode as shown in the relative chapter.

Press the key "access menu" to access the MENU page

Press the key "confirm" to access the USER page

Press the key "confirm" to quickly switch to VENTILATION.



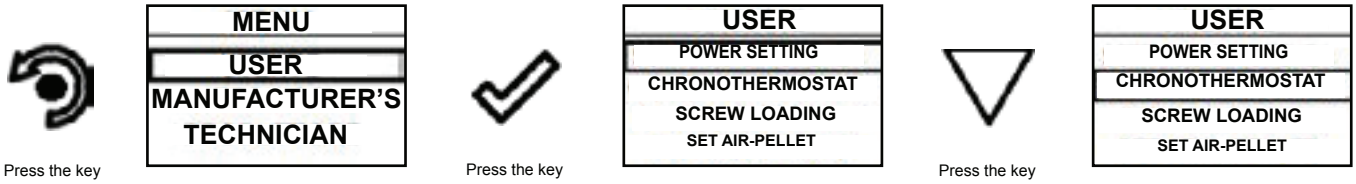
Press the increase/decrease keys "increase/decrease" to change the ventilation.

To exit the page and return to Stand-by page, press the button repeatedly.

Control: ventilation can be set from 0 to AUTO where 0 indicates that the same is disabled, setting from MIN to MAX enables selecting the heat distribution speed. If set to AUTO, the ventilation follows the power set on the stove.

Chrono function

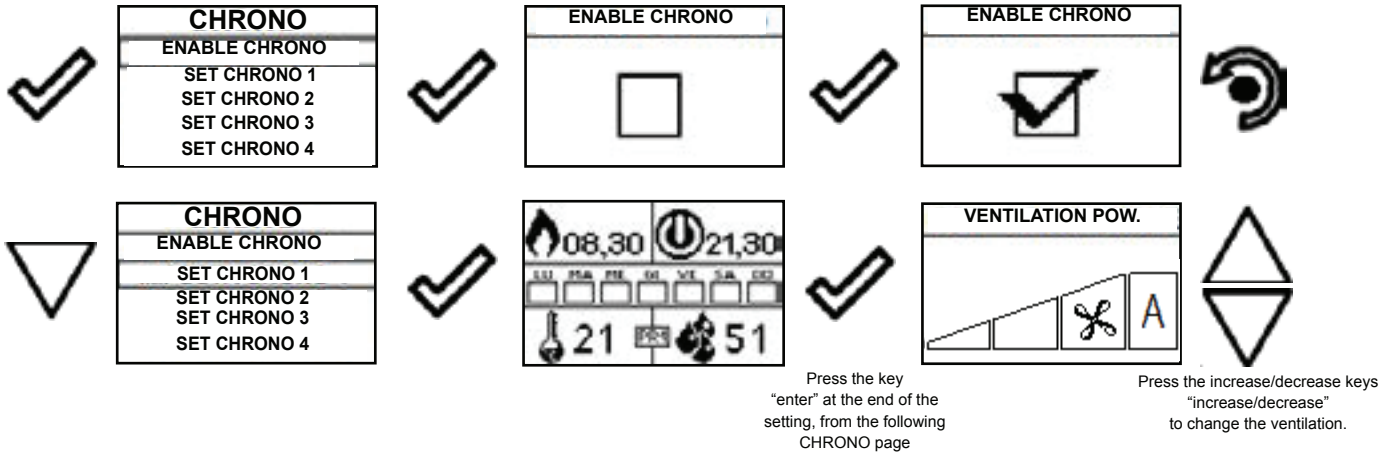
By enabling the chrono function, it is possible to control the ventilation speed for each program as shown in the logic above.



Press the key "access menu" to access the MENU page

Press the key "confirm" to access the USER page

Press the key several times to quickly switch to CRONO-THERMOSTAT.



Press the key "enter" at the end of the setting, from the following CHRONO page

Press the increase/decrease keys "increase/decrease" to change the ventilation.

The exit key shows the CHRONO menu to set other variables related to the menu functions.

To exit the page and return to Stand-by page, press the button repeatedly.

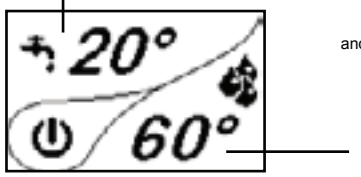
Pages displayed upon the activation of advanced layouts

By activating a layout different from the standard (layout 0), even if maintaining the same functions of the menu, the "Stand-by" page will display all connected utilities such as the temperature of the boiler of the puffer.
Below is shown the new display mode and the function of every icon for every layout, to change the various settings.

If the type of system designed requires controlling the 3-way valve (diagram 1 and 3), it is necessary to purchase the optional kit from the retailer or the authorized Ravelli dealer.

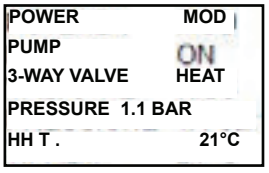
Layout 1 (DHW Boiler + heating control)

The following layout can be used when you have a boiler that is not equipped with plate heat exchanger and you intend to buy a puffer that should be connected to the circuit to produce hot domestic water.
In this type of circuit, room temperature is controlled however by the handheld unit which, being a radio device, acts as a remote chronothermostat. The boiler is managed by the thermostove through a contact or immersion probe (not supplied) connected directly to the back of the stove. Below is shown the new "Stand-by" mode.



T°C Boiler
From STAND BY mode, press the ARROW key UP to set the room T°C and DHW boiler T°C that you desire.

Boiler water T°C
From STAND BY mode, press the ARROW key DOWN to set the boiler water T°C that you desire.



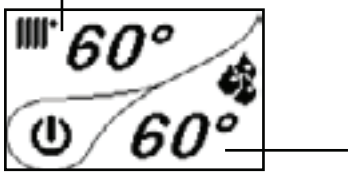
Press the key "V" from STAND BY page to display the actuale states and the room temperature

The operation is the same as for the basic layout except for the fact that in this layout, the boiler exchanges heat directly in the boiler (priority); when the temperature set is reached, the 3-way valve changes its position and the boiler starts exchanging heat within the heating circuit. From this moment, the stove is controlled by the radio handheld unit for contolling the room temperature or via H2 setting (see the operation with layout 0 to find the data on modulation, eco stop etc.).
The 3-way valve is directed again into the boiler when:
- there is a request from the Boiler;
- there is a requested from the flow switch (optional, if connected).
The stove restarts from Eco-stop or Stand by mode according to heating requests or boiler requests.

By setting the SUMMER function, the 3-way valve remains fixed in a single position, enabling the release of heat output by the stove exclusively inside the boiler. As soon as this condition is reached, the boiler switches to ECO STOP mode.

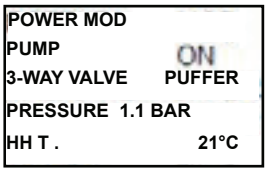
Layout 2 (storage puffer management)

In this type of circuit, the storage puffer is managed by the stove due to a contact or immersion probe (optional) connected to the back of the stove.
Below is shown the new “Stand-by” mode.



T°C Puffer
From STAND BY mode, press
the ARROW key to
set the desired puffer T°C

Boiler water T°C
CANNOT BE CHANGED

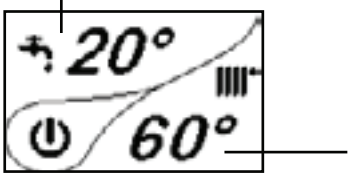


Press the key
“V” from STAND BY page
to display the actual states and
the room temperature

The operation is the same as for the basic layout except for the fact that in this layout, the boiler exchanges heat directly in the puffer; when the temperature set is reached, the stove switches to ECO STOP mode and then restarts if the temperature drops below a restart value (set by the installer upon testing).

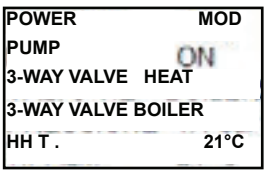
Layout 3 (DHW boiler + storage puffer management)

The following layout combines the functions of the previous layouts and is recommended to stoves provided with a puffer without internal coil preset for domestic hot water.
In this type of circuit, the boiler is managed by the stove due to a contact or immersion probe (optional) to be connected to the back of the stove. The same applies to the control of the puffer that is provided by the thermostove through a contact or immersion probe (not supplied) connected directly to the back of the stove.
Below is shown the new “Stand-by” mode.



T°C Boiler
From STAND BY mode, press
the ARROW key UP
to set the
DHW boiler T°C
that you desire.

T°C Puffer
From STAND BY mode, press
the ARROW key DOWN
to set
the desired puffer T°C

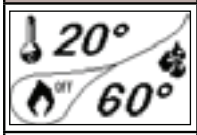
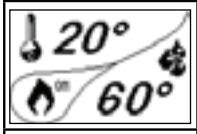
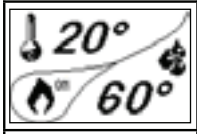
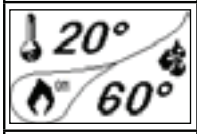
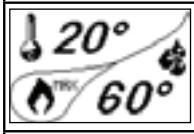
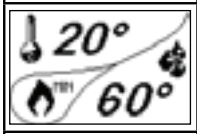
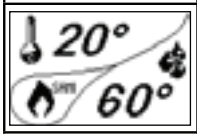
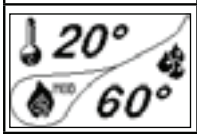
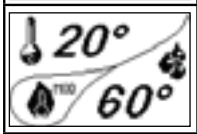
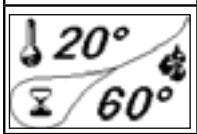
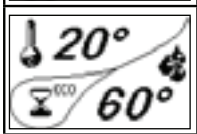
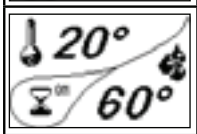
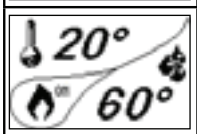
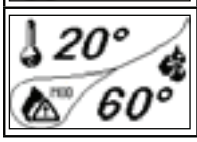


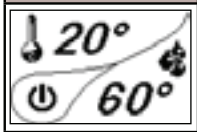
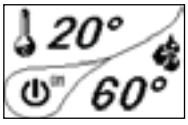
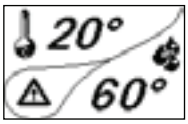
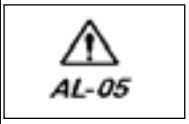
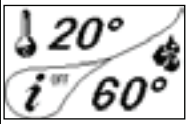
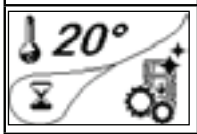
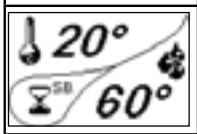
Press the key
“V” from STAND BY page
to display the actual states and
the room temperature

The operation is the same as for the basic layout except for the fact that in this layout, the boiler exchanges heat directly in the boiler (priority); when the temperature set is reached, the 3-way valve changes its position and the boiler starts exchanging heat within the puffer. When the set temperature is reached, the stove enters in ECO STOP mode; it restarts if the temperature drops below a restart value (set by the installer upon testing).
The 3-way valve is directed again into the boiler when:
- there is a request from the Boiler;
- there is a requested from the flow switch (optional, if connected).
The stove restarts from Eco-stop or Stand by mode according to storage puffer requests or boiler requests.

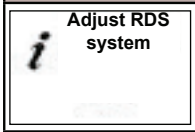
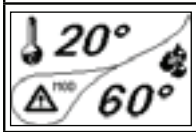
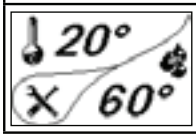
By setting the SUMMER function, the 3-way valve remains fixed in a single position, enabling the release of heat output by the stove exclusively inside the boiler. As soon as this condition is reached, the stove switches to ECO STOP mode.

Stove phase general layout

	FASE	DESCRIZIONE
	***FINAL CLEANING***	The stove is in the switch off phase and the cooling phase has not been completed yet.
	***SWITCH ON***	The heater pre-heating phase has started and the pellets start to fall into the grate.
	***WAITING FOR FLAME***	The pellets ignite and take advantage of the heat in the intake air that passes through the incandescent heater tube.
	***FLAME PHASE***	The flame develops in the grate.
	***WORK AT MAX P***	The stove has completed the switch on phase and runs at maximum set power
	***WORK AT MIN P***	The stove works at the operating power set after ignition.
	***WORK AT DHW P***	The stove works at an operating capacity dedicated to DHW (flow switch request with DHW kit or DHW boiler)
	***MODULATE H2O***	The desired boiler water set temperature has been reached.
	***ROOM TEMPERATURE MODULATION***	The room temperature set has been reached.
	***THE GRATE***	Brazier cleaning phase is active (periodic function).
	***ECO STOP***	With Climate Comfort active, the stove switches to automatic switch-off mode when the room temperature set is reached (see the dedicated section).
	***START/RESTART WAIT***	Switch-on is requested but with the stove in cooling phase; once this condition is met, it restarts automatically.
	***SWITCH ON RESTART***	The HOT restart phase is activated. Functioning is similar to the SWITCH ON phase
	***HOT SMOKE***	The maximum fume temperature threshold has been reached. To facilitate cooling, the stove brings the capacity to a minimum with ventilation at power level 5, leading to a decrease in fume temperature.

	PHASE	DESCRIPTION
	***OFF***	The stove is off
	***WAIT FOR PELLETS OUT OF***	When the switch-on request from ECO-STOP mode coincides with an automatic switch-off condition (from the TIMER), the stove turns on ensuring total cleaning of the brazier before switching to FINAL CLEANING.
	***INFEED SCREW OVERFLOW***	CONDITION: when the pellet setting (set pellets +5) is near the continuous load condition. SOLUTION: Set the value back to 0.
	***GENERIC ALARM***	The stove is in alarm state; refer to the troubleshooting chapter.
	***ANOMALY (general)***	The stove has detected an anomaly; refer to the troubleshooting chapter.
	***AUTOMATIC CLEANING SYSTEM ACTIVE***	For models with automatic cleaning system it indicates the operating state of the same.
	***STAND BY***	Forced shutdown state when the boiler water reaches 85°C. The stove restarts automatically if the restart conditions are met.

Warning Pop-Up

	ANOMALIA	DESCRIZIONE
	***RD SYSTEM REGULATION REQUEST (only if the RDS system is installed)***	It shows that the testing procedure and initial parameter calibration have been completed incorrectly. This indication, however, does not block the stove.
	***FLOW METER FAILURE (only if the RDS system is installed)***	It shows a failure of the air flow meter and the stove switches to minimum capacity disabling the RDS system.
	***SERVICE REQUEST***	The threshold value of set work hours has been reached. The symbol displayed remains active throughout the work phase. Non-routine maintenance is required on the stove.

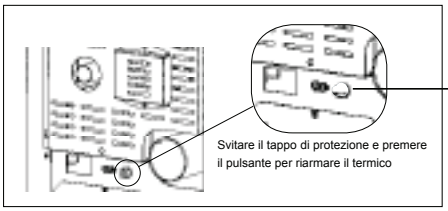
SIGNALLING	*REASON*	*SOLUTION*
CLEAN THE GRATE (only if the RDS system is installed)	• The door and the ash box are not closed correctly	**• Make sure they are closed properly.**
	• Poor combustion in grate.	**• Switch off the stove, clean the brazier and check the cleanliness of the support bench, clean the tube bundle by activating the turbolators and adjust the combustion through pellet/air settings.**
	• Presence of foreign body in air intake tube.	**• Check if present and remove foreign body**
	• The air flow meter may be dirty.	**• Clean the flow meter with the stove in "Switched off" state**
		• Contact the Support Service

The appearance of the message "ADJUST THE RDS SYSTEM" indicates that the initial parameter testing procedure and calibration has been unsuccessfully. This indication does not block the stove.

6.9.1 Alarms (table with reference codes)

TRIAL.	TITLE	REASON	SOLUTION
AL 01	BLACK OUT	- No voltage during work phase	- Press the switch off key and switch on the stove again
			- If the problem persists, contact the Support Service
AL 02	K PROBE FAILURE	- The K probe is malfunctioning	- Contact the Support Service
		- The K probe is disconnected from the electronic board	- Contact the Support Service
AL 03	OVERTEMP. K	- Combustion in the brazier is not optimal due to clogging or obstructions of internal stove ducts inside the stove	- Switch off the stove, clean the brazier and the tube bundle and adjust the combustion setting the Pellet/ Air values
		- The tangential fan (if provided) is malfunctioning or damaged	- Contact the Support Service
			- If the problem persists, contact the Support Service
AL 04	FUME EXHAUST DAMAGED	- Fume exhaust encoder is not working or is connected incorrectly	- Contact the Support Service
		- No power to fume extractor.	- Contact the Support Service
		- The fume extractor is blocked.	- Contact the Support Service
AL 05	NO SWITCH-ON	- The pellet tank is empty.	- Check for the presence of pellets in the container. Top up, if necessary.
		- Pellet calibration and suction during switch on phase is incorrect.	- Contact the Support Service
		- The ignition coil is faulty or positioned incorrectly	- Contact the Support Service
AL 06	PELLETS FINISHED	- The pellet tank is empty.	- Check for the presence of pellets in the container. Top up, if necessary.
		- The gear motor is not loading pellets.	- Empty the tank to see if there are any objects inside that may prevent proper operation of the auger.
		- Not enough pellets loaded	- Regulate pellets setting from “SET AIR/PELLETS”
			- If the problem persists, contact the Support Service
AL 07	RESETTABLE THERMAL BREAKER	- The manual reset thermostat connected to the hopper has been triggered	- Reset the thermostat by pressing the button on the back of the stove
		- Combustion in the brazier is not optimal due to clogging or obstructions of internal stove ducts inside the stove	- Switch off the stove, clean the brazier and the tube bundle and adjust the combustion setting the Pellet/ Air values
			• Contacter le Service d’Assistance
AL 08	DEPRESSION	- The flue is blocked.	- Check the flue is free and clean
		- The vacuum meter is faulty.	- Check the mains voltage.
AL 12	FUME EXHAUST SYSTEM FAILURE	- The fume exhaust system has a loss of performance due to fan obstruction or voltage drop.	- Check the mains voltage.
AL 14	SCREW PHASE	- No cable connection to power the gear motor screw	- Check the mains voltage.
AL 15	SCREW TRIAC	- An internal part of the electronic board that controls the pellet infeed screw is faulty.	- Check the flue is free and clean
		- Possible voltage drops or incorrect input voltage	- Check the mains voltage.
AL 17	NO FLOW ***(only if the RDS system is installed)***	- The flow meter does not measure an input air flow	- Check whether the door and the drawer are properly closed, correctly and check if the air inlet pipe is obstructed.
			- If the problem persists, contact the Support Service
AL 19	CLEANER FAILURE (for models equipped with cleaner)	- The cleaner did not complete the movement and is not in the correct position	- Reset the alarm and wait for the stove to switch to SHUTDOWN mode. Cut off and power again, the system reactivates the cleaner searching the correct position again.
			- If the problem persists, contact the Support Service
AL 10	OVERTEMP. H2O	• The boiler water temperature exceeds 90 °C.	- Check the mains voltage.
AL 11	H2O PROBE FAILURE	• The boiler water probe is malfunctioning.	- Check the mains voltage.
		- The boiler water probe is disconnected from the electronic board.	- Check the mains voltage.
AL16	PRESSURE	• The pressure of the system is greater or lower than a preset value, allowed values from bar to 2.5 bar. (We recommend at cold circuit a pressure of about 1.0 bar)	• Fill the system or vent it to bring the pressure to the value requested for correct operation.
			• If the problem persists, contact the Support Service

EACH ALARM CAUSES THE IMMEDIATE SWITCHING OFF OF THE STOVE. PRESS THE SWITCH-ON BUTTON TO RESET THE ALARM. BEFORE SWITCHING ON THE STOVE, MAKE SURE THE SIGNAL HAS BEEN REMOVED AND (UNLIKE MODELS EQUIPPED WITH AUTOMATIC CLEANER) THAT THE BRAZIER IS PROPERLY CLEANED TO ENSURE CORRECT RESTART.



In the case of alarm 07 THERMAL BREAKER below shows the location where to operate to reset the thermal switch with manual reset.

7. Maintenance Record

DATE	WORK CARRIED OUT	SIGNATURE

8. Warranty Information

Pellet Fire Solutions and its partner Ravelli , manufacturers of the Ravelli range of pellet fires extends the following warranty for their wood pellet fires when purchased from an authorised Pellet Fire Solutions dealer.

8.1 Warranty Coverage

Pellet Fire Solutions warrants to the original owner of the pellet fire at the site of installation, and to any transferee taking ownership of the pellet fire at the original site of installation within two years following the date of original purchase, that the pellet fire will be free from defects in materials and workmanship at the time of manufacture. After installation, if any covered components manufactured by Ravelli are found to be defective in materials or workmanship during the applicable warranty period, Pellet Fire Solutions will, at its option, repair or replace the covered components. Pellet Fire Solutions, at its own discretion, may fully discharge all of its obligations under such warranties by replacing the product itself or refunding the verified purchase price of the product itself. The maximum amount recoverable under this warranty is limited to the purchase price of the product. This warranty is subject to conditions, exclusions and limitations as described below.

This warranty only covers pellet fires that are purchased and installed through an authorised Pellet Fire Solutions dealer or distributor. A list of authorised dealers is available on the Pellet Fire Solutions website (www.pelletfiresolutions.co.nz).

This warranty is only valid while the pellet fire remains at the site of original installation.

Contact your installing dealer for warranty service. If the installing dealer is unable to provide necessary parts, contact the nearest authorised Pellet Fire Solutions dealer or supplier. Additional service fees may apply if you are seeking warranty service from a dealer other than the dealer from whom you originally purchased the product.

Check with your dealer in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this warranty.

8.2 Warranty Period

Warranty coverage begins at the date of installation. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling, or six months after the sale of the product by an independent, authorised, Pellet Fire Solutions dealer/distributor, whichever occurs earlier. The warranty period for parts and labour for covered components is explained in the following table.

Component(s)	Parts	Period	Comments
Fireplace, stovebody and parts covering: Firebox, firebox panel, & burnpot Heat exchanger Pedestals, Panels & Legs	Full replacement	5 years parts 2 years labour	Surface finishes, burnpot liner and ceramic panels are covered separately (see clarifications and exclusions below).
Electrical items covering			
Ignitor (including tube) Auger Motor Circuit Board, decal & mounting bracket Blowers (Convection and Combustion) Timers Sensors Vacuum Switch Wire harness	Full replacement	2 years parts & labour	
Replacement/spare Parts			
All replacement parts beyond their original warranty period or purchased new from a Dealer	Full replacement	1 year parts only	Evidence of the original purchase date will be required e.g. a copy of the original invoice.
Clarifications and exceptions			
Burnpot Liner and Brick Liner	Full replacement	1 years parts & labour	Paint on the brick firebox lining may peel over time due to the extreme conditions and is not a flaw.
Exterior surface finishes (including plating, enamel or paint)	Full replacement	1 years parts & labour	Colour changes with heating and tarnish, discolourisation and wear (including scratches, fingerprints etc.) are not covered under warranty.
Exclusions			
Glass			No warranty
Vermiculite (Firex 600) & ceramic panels (cast majolica)			No warranty
Fibreglass rope gaskets			No warranty

8.3 Warranty Exclusions

This warranty does not cover the following:

- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in colour of interior and exterior surfaces may occur. This is not a flaw and is not covered under warranty.
- Damage to printed, plated, or enamelled surfaces caused by fingerprints, accidents, misuse, scratches, melted items, or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the warranty period. These parts include: paint, gaskets, FIREX, flame guides, and the discolouration of glass.
- Minor expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to noise are not covered by this warranty.
- Damages resulting from: (1) failure to install, operate or maintain the pellet fire in accordance with the installation instructions, operating instructions and data plate furnished with the pellet fire; (2) failure to install the pellet fire in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/incorrectly performed repairs; (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operating instructions; (7) installation or use of components not supplied with the pellet fire or any appliance not expressly authorised and approved by Pellet Fire Solutions / Ravelli; (8) modification of, interruptions to or fluctuations of the electrical power supply to the pellet fire.
- Non Pellet Fire Solutions approved venting components, hearth components or other accessories used in conjunction with the appliance.
- Any part of a pre-existing fireplace system
- Pellet Fire Solutions / Ravelli's obligation under this warranty does not extend to the pellet fires' capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper appliance for the application. Consideration must be given to appliance location and configuration, environmental conditions, insulation and air tightness of the structure.

The warranty is void if:

The pellet fire has been over-fired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over firing can be identified by, but not limited to, warped plates or tubes, rust coloured cast iron, bubbling, cracking and discolouration of steel or enamel finishes.

The pellet fire is subjected to prolonged periods of dampness or condensation.

There is any damage to the pellet fire or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

The owner's exclusive remedy and Pellet Fire Solutions / Ravelli's sole obligation under this warranty, under any other warranty, express or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above. In no event will Pellet Fire Solutions / Ravelli be liable for any incidental or consequential damages caused by defects in the appliance. Some countries do not allow exclusions or limitation of incidental or consequential damages, so these limitations may not apply to you. This warranty gives you specific rights, you may also have other rights, which vary from country to country. EXCEPT TO THE EXTENT PROVIDED BY LAW, Pellet Fire Solutions / Ravelli MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATIONOF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE.

9. Proof of Purchase/Warranty

Use this page to note down the details of your wood pellet fire purchase, and attach the receipt and any other documents/ business cards from the retailer that sold you the fire.

Name of Store where Pellet fire was purchased: .....

Date of Purchase: .....

Amount Paid: $.....

Payment Method: ☐ **Credit Card** ☐ **EFTPOS** ☐ **Cash** ☐ **Other**

Attach receipt and other documents here

Installation Section

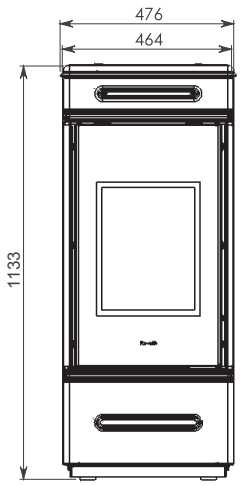
Table of Contents

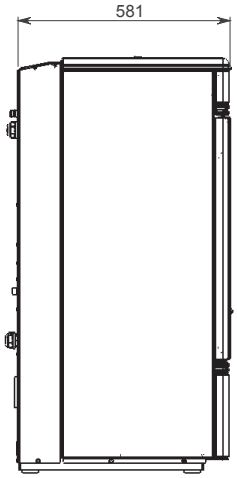
NOTE TO INSTALLER - PLEASE ENSURE THE “INSTALLATION DATA SHEET” ON PAGE 47 IS COMPLETED ONCE THE UNIT IS INSTALLED.

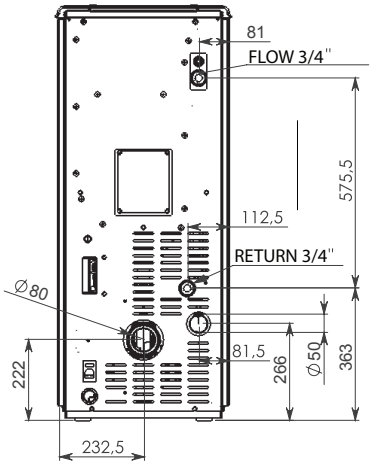
1. Dimensions (Ravelli Pompeii)

	Unit of Measurement	
Height	mm	1133
Width	mm	476
Depth	mm	581
Weight	Kg	190
Diameter of smoke exhaust duct	mm	80
Min.-max.calorific power	kW	3.4 - 17.2
Min.-max. hourly consumption of pellets	Kg/h	1.0 – 4.0
Electrical power absorbed during operation	W	240
Supply	V - Hz	220 – 50
Tank capacity	Kg	23
Space Heating Efficiency	%	84

The data shown above are indicative and not binding. Ravelli reserves the right to make any modifications for the purpose of improving the performances of the product.







1.1 Deciding where to locate your wood pellet burning stove:

1. Do not install the pellet stove in a bedroom or room where people sleep.
2. Locate the pellet stove in a large and open room that is centrally located in the house. This will optimize heat circulation.
3. Check clearances to combustibles.

1.2 Clearances to Combustibles – Ravelli Pompeii Freestanding

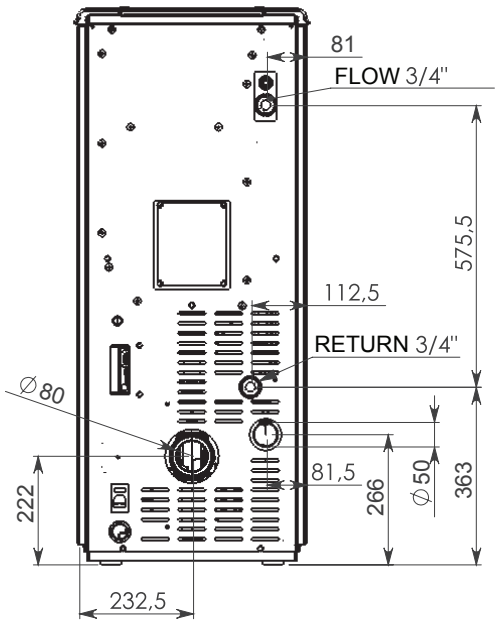
This pellet stove requires floor protection which must be non-combustible, extending beneath the stove the full width and depth of the unit including (150mm) in front for ember protection.

AS/NZS 2918:2001 states that a 300mm forward projecting and 200mm side projecting floor protector must be used from any door opening extremity as an absolute minimum. Due to the operating nature of the Pompeii pellet stove, where opening the door causes a loss of vacuum and the fire will shut down completely, meaning the likelihood of any hot embers or burning fuel escaping from the combustion chamber is extremely minimal. Therefore a 150mm forward projecting floor protector will be sufficeint.
Hearth testing of the Ravelli Pompeii (SR 0484) showed that on exposed combustible surfaces front of the freestanding stove, no measured locations exceeded the temperture limits specified in AS/NZS 2918:2001

From the body of the stove to the side wall	100mm
From the rear of the stove to wall (external flue)	100mm
From the rear of unlined flue to wall (internal flue)	50mm
Rear corners to wall (corner installation)	100mm

1.3 Exhaust and Fresh Air Intake Locations

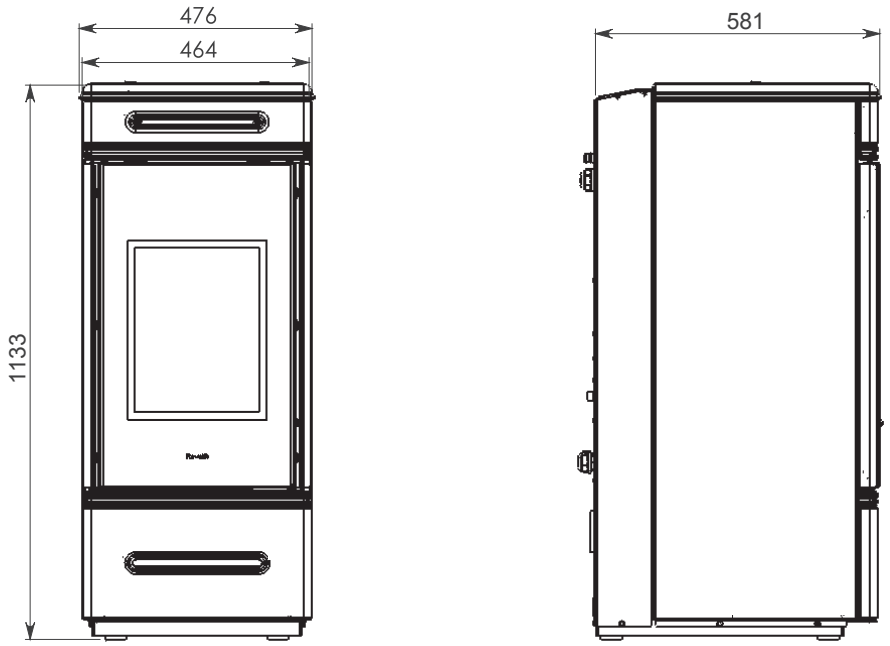
Exhaust	**Insert**
Hearth to centre of exhaust outlet	222mm
Side of unit to centre of exhaust outlet	233mm
Centre of unit to centre of exhaust outlet	centre
Fresh Air Intake	
Hearth to centre of intake	266mm
Side of unit to centre of intake	82mm
Centre of unit to center of intake	150mm



IMPORTANT	**INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENTING MANUFACTURER**

2. Installation

2.1 Dimensions – Pompeii Freestanding



Refer to Safety Test SR 0484 for all clearances to combustible.

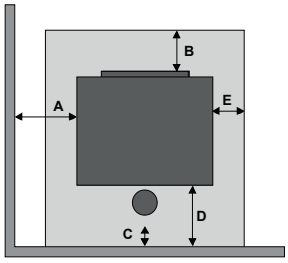
2.2 Clearances & Specifications

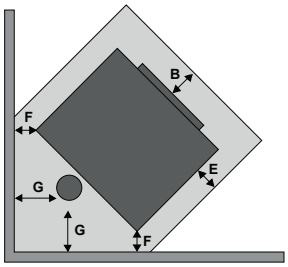
Minimum clearances shown are in millimetres. All Ravelli fires are tested to AS/NZS 2918:2001. Specifications were correct at time of printing but may alter, and those detailed below should be used as a guide only. Refer to the Installation and Operation Manual supplied with every Ravelli Pellet Fire or if in doubt, consult your Pellet Fire Solutions Retailer.

Pompeii Pellet Fire
Clearance to Combustibles

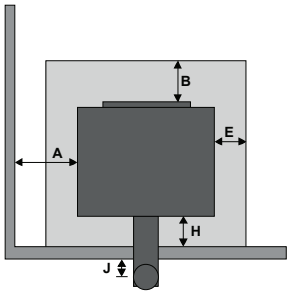
Ravelli
il fuoco intelligente

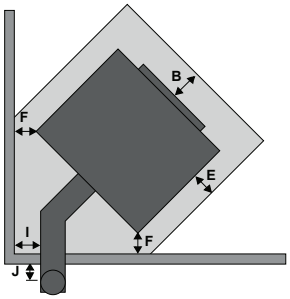
Internal Flue





External Flue





Freestanding Clearances

Location	Dimension (mm)
A	100
B	150
C*	50
D	n/a
E	100
F	100
G*	50
H	100
I*	50
J*	25

* from shielded flue
* 75mm to unlined flue

Note: AS/NZS 2918 requires a minimum of 100mm clearance for any side requiring access.

Note: These are minimum clearances to combustibles. Actual installation distances may be greater.

Note: The above clearance to combustibles on the flue are only applicable within the fire envelope. Clearance outside this e.g.at a ceiling / wall thimble reverts to 25mm as per ARS flue test 05/1185.

2.3 Minimum Clearance to Combustibles

Side of Unit (A)	100mm
Rear wall to Lined Flue (C, G, I)	25mm
Rear wall to Unlined Flu (C,G, I)	75mm
Rear of Unit (H)	100mm
Rear corners (Corner Installation) (F)	100mm
Floor protection (from glass) (B)	150mm

2.4 Location of the Pellet Fire

Installation of the Ravelli Pompeii Freestanding Wood Pellet Burning Stove should be undertaken by an experienced installer. Please read the Pompeii Owners/Technical Manual thoroughly before commencing installation, as failure to follow the instruction could cause damage to the pellet stove or property.

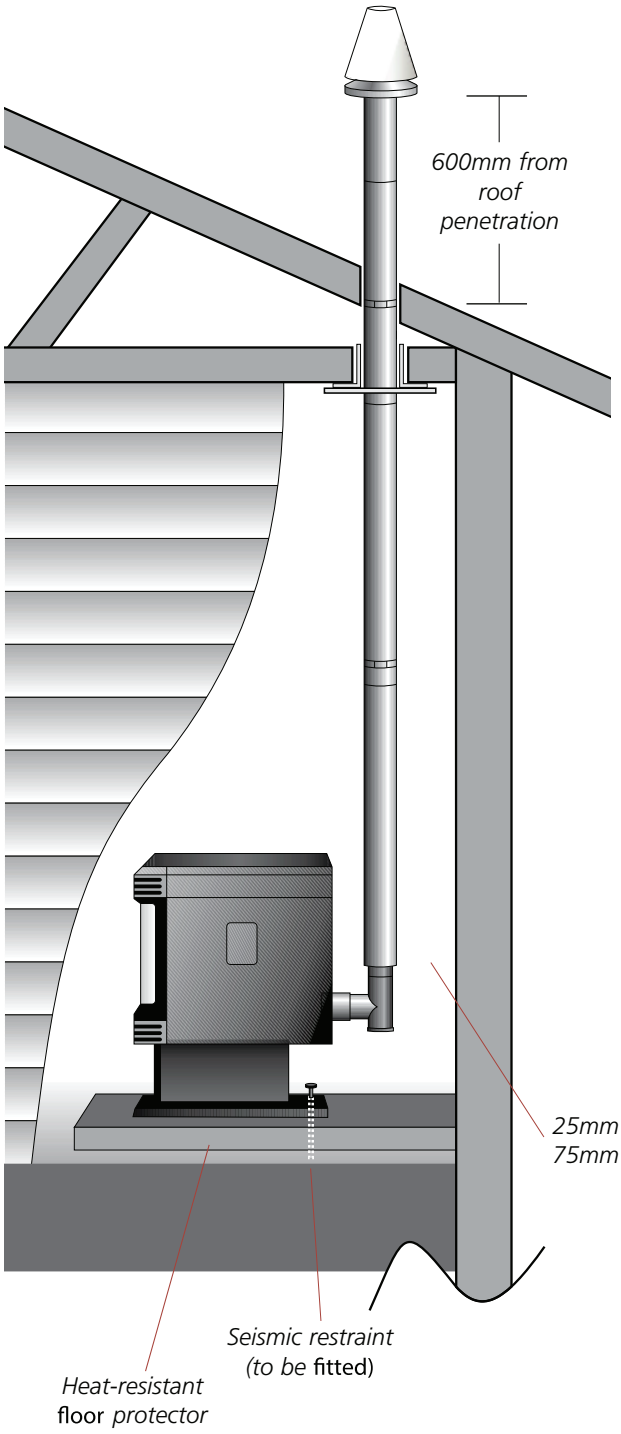
2.5 Positioning the fire:

Generally the Pompeii should be installed in a centrally located position within the home. When deciding where to position the appliance in your room, you need to consider the following:

2.6 Location of a power source

- The Pompeii has a convection fan which blows air across the top of the unit in the direction that the fire faces, for optimum performance this location should be in a large room centrally located.
- The Pompeii must be installed on a non-combustible surface. This surface must protrude 150mm from the front of the closed pellet fire door.
- The Pompeii has been Safety Tested to AS/NZS 2918:2001 using the Davins manufactured flue. Test Report ARS 05/1185. Installation is not exclusive to these nominated kits, though alternative flue should only be considered following consultation with your local council.
- Please see “Clearances & Specifications” on page 37 for the required clearances to combustible material, also ensure the position of structural elements near the proposed flue.
- Because of the positive pressure in the flue, sealing of all 75mm stainless joints is mandatory – use high temperature Maniseal. Both inner and outer flue joints must be riveted.
- Seismic Restraint: Please see “Seismic Restraint” on page 43 for requirements.
- Warranty: To validate warranty following installation a copy of the completed Warranty/ Producers Statement must be forwarded to:
  Pellet Fire Solutions - info@pelletfiresolutions.co.nz

50SBPom Internal Standard Flue Kit Pompeii



This flue kit may be used in new and replacement applications in rooms with stud height of 2.4m. The overall height of the flue is 3.6m. The visible flue is finished in black and the ceiling plate is white. The support angles for securing the liner to the ceiling are not shown. Kit is supplied in a carton.

Each 50SBPom Internal Standard Flue Kit contains:

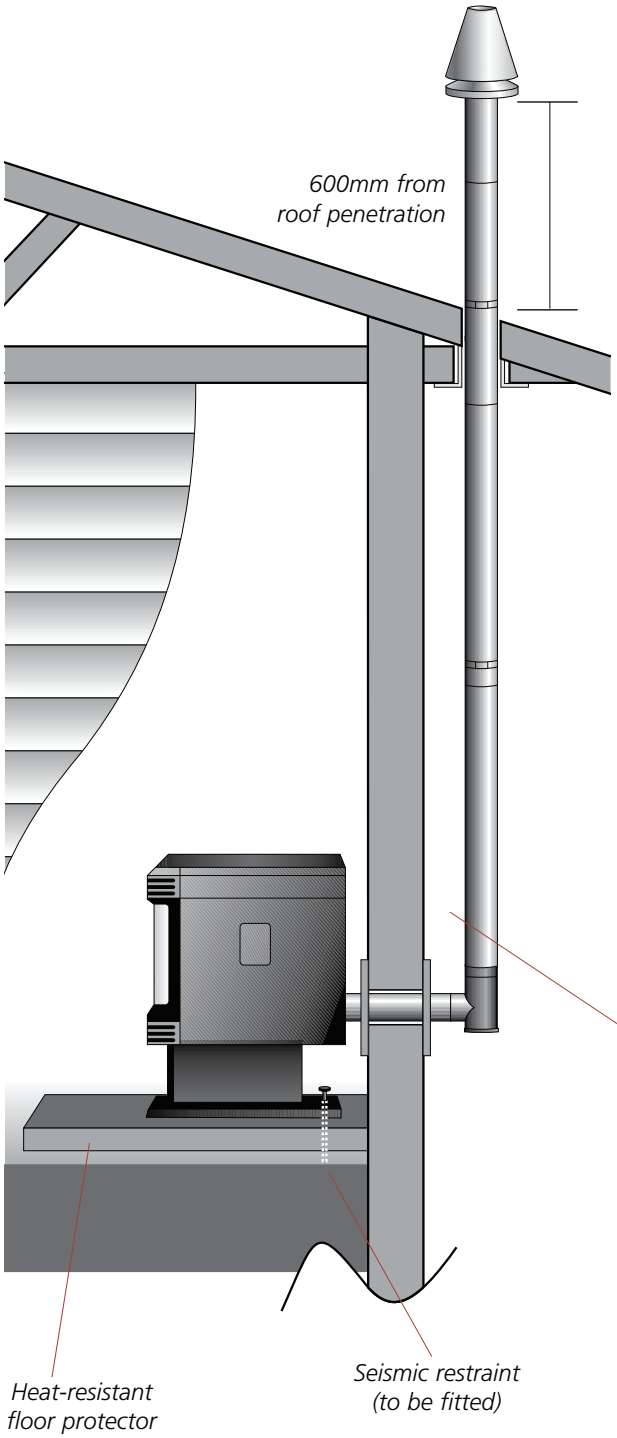
Part No	Description	Quantity
1	Galvanised outer liner ø100mm x 900mm long	1
1sb	Black Stovebright outer liner ø100mm x 900mm long	3
2	Stainless steel inner liner ø75mm x 900mm long	4
5	Inner/outer flue liner spacer	2
6c	Ceiling thimble ø107mm hole	1
7c	Ceiling decor plate ø107mm hole – white	1
46	Velocity cone	1
9	Rain Cap 100mm	1
15sb	T-adaptor/cleanout – ø75mm – black *(painted)*	1
702	Support angle 950mm long – 40mm x 40mm sides	2

Note: The Davin 50 S/B Internal Standard Flue Kit complies with AS/NZS 2918:2001 as per Applied Research Test Report 05/1185, dated 15 September 2005.

All fires must be installed by a qualified installer as per the manufacturer's instructions and AS/NZS2918:2001.

2.8 External Standard Flue Kit (51)

51 External Standard Flue Kit



This flue kit may be used in new and replacement applications with the flue penetrating the wall behind the fire, running vertically up an outside wall and penetrating the soffit. The overall height of the flue is 3.6m. All visible flue has a galvanised finish, and can be powdercoated on request. Kit is supplied in a carton.

Each 51 External Standard Flue Kit (Pompeii) contains:-

Part No	Description	Quantity
1	Galvanised outer liner ø100mm x 900mm long	4
2	Stainless steel inner liner ø75mm x 900mm long	4
5	Inner/outer flue liner spacer	2
6w	Wall thimble – 2 pieces ø102mm holes	1
6s	Soffit thimble ø102mm hole	1
7w	Wall decor plate ø102mm hole – white	1
46	Velocity cone	1
9	Rain Cap 100mm	1
26	Lined T-adaptor	1
73	76-80mm Adaptor	1

Note: The Davin 51 External Standard Flue Kit complies with AS/NZS 2918:2001 as per Applied Research Test Report 05/1185, dated 15 September 2005.

All fires must be installed by a qualified installer as per the manufacturer's instructions and AS/NZS2918:2001.

2.9 Seismic Restraint

All installation scenarios for Pompeii require the use of hold-down anchors (one on each side).

Fixing to Concrete Floor:

- Minimum M8 expansion anchors (M10 recommended) or min M8 epoxy- set anchors.
- Approved Anchors: Expansion Anchors-Ramset Dynabolt and Trubolt, Hilti HAS.
- Epoxy-set Anchors – Ramset Epcon, Ramset Chemset and Hilti HVU.

2.10 Fixing to Timber Floor Framing

Minimum 14g x 60 screws (6.3mm diameter) or M10 X 90 coach-screws. These shall be fixed a minimum of 40mm into the centre-line of the existing floor joists. If screws cannot be installed directly into an existing floor joist, solid blocking between joists (min size 90x45) shall be provided.

2.11 Installation

Pompeii should be installed in a centrally located position within the home. This will assist the appliance to perform to the level required. As Pompeii heats space by convecting air across the top of the unit, the heater should face the area the majority of the area to be heated.

Pompeii requires a power source to function. This is standard mains feed 240v plug - if this is unavailable in close proximity, a grounded extension lead may be used.

Pompeii is to be installed on a non-combustible surface which must have a forward projection of a minimum of 150mm from the glass door.

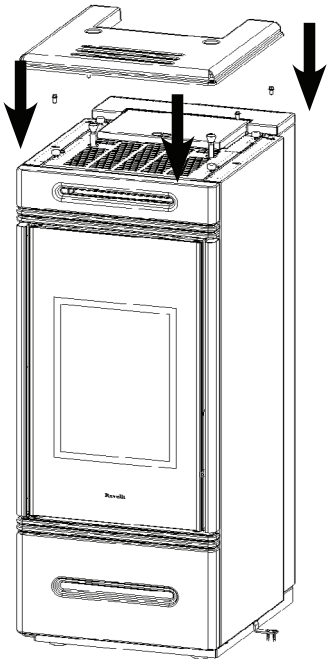
Ensure all 75mm flue joins are sealed with a high temp silicon (Maniseal).

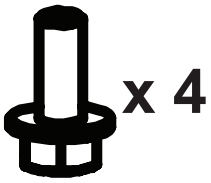
Please check all clearances to combustibles as listed on page 37 and page 38 of this Owners'/ Technical manual.

In accordance with the requirements of AS/NZS 2918:2001 Pompeii must be secured by seismic restraint.

2.12 How to mount the side panels

1





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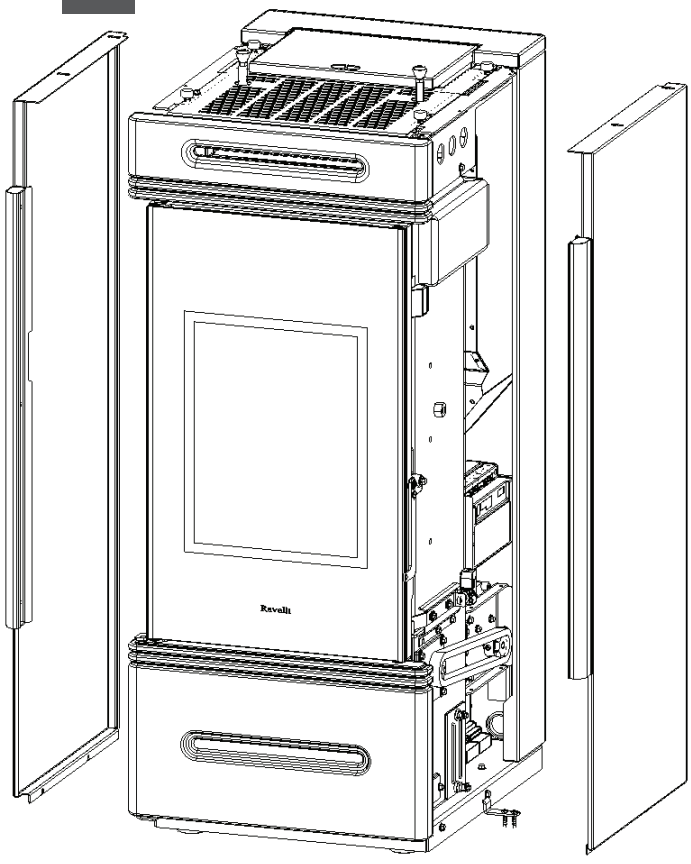
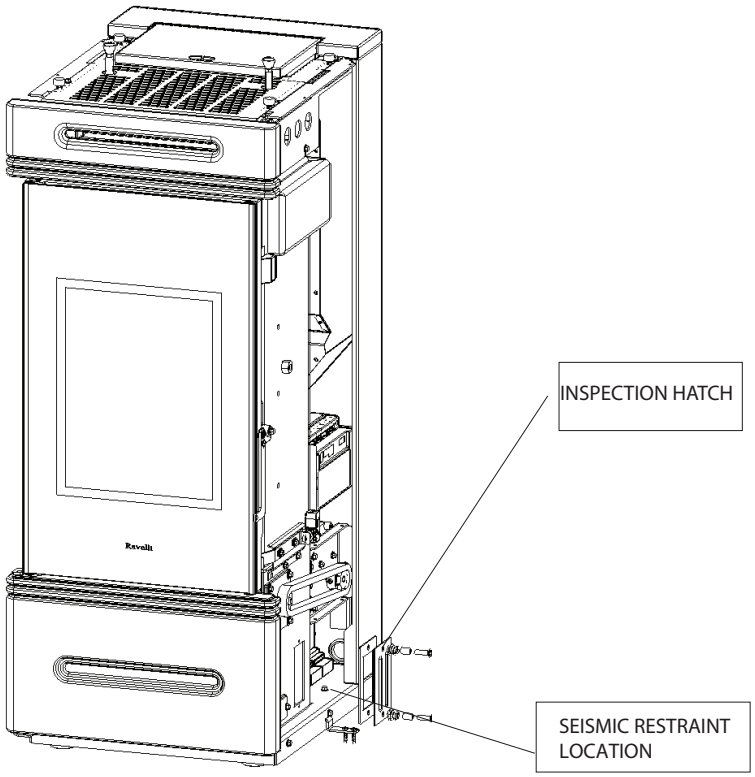
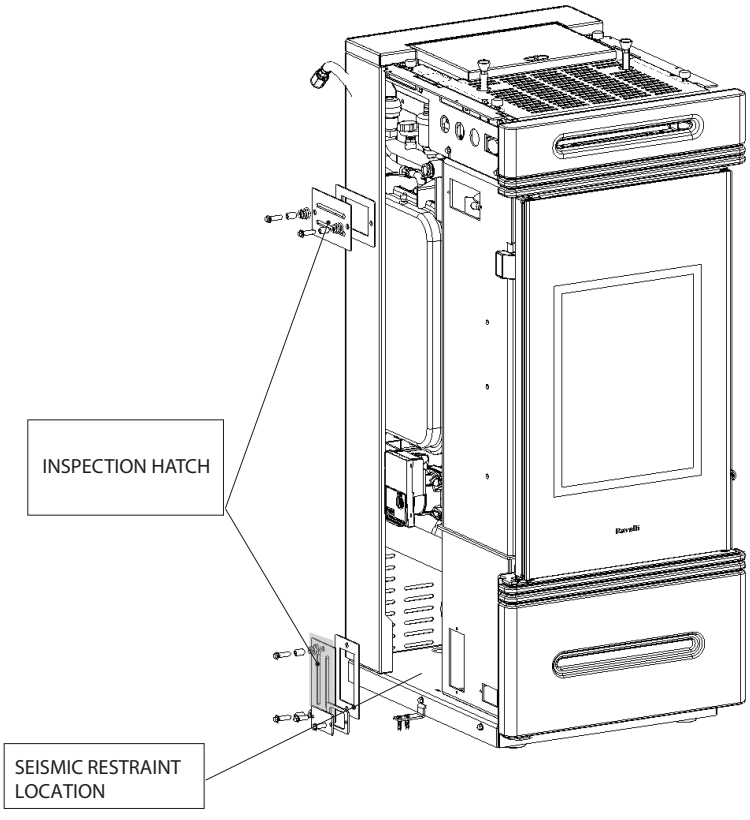


2.13 Seismic Restraint Locations





2.14 Hydraulic installation

PLUMBING MUST ALWAYS BE CARRIED OUT BY QUALIFIED PERSONNEL, ABLE TO CARRY OUT A STATE-OF-THE-ART INSTALLATION IN COMPLIANCE WITH THE LAWS IN FORCE IN THE COUNTRY OF INSTALLATION, AFTER HAVING READ THE NEXT CHAPTER. RAVELLI DENIES ALL LIABILITIES FOR DAMAGES TO PEOPLE OR PROPERTY ARISING FROM MALFUNCTIONS DUE TO FAILURE TO COMPLY WITH THIS WARNING

Pellet Fire Solutions, along with Ravelli, only recommend the use of a closed loop system when installing the Pompeii Pellet Boiler.

Safety devices for closed tank system

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

- Safety valve
- Circulator command thermostat
- Acoustic alarm activation thermostat
- Temperature indicator
- Pressure indicator
- Acoustic alarm
- Automatic regulation thermal switch
- Automatic blocking thermal switch (blocking thermostat)
- Circulation system
- Expansion system
- Safety dissipation system built into the generator with thermal safety valve (self-activated), in case the the equipment is not provided with an automatic temperature regulation system.

The appliances for domestic heating with automatic feeding system must be equipped with a block thermostat for the fuel or with a cooling circuit provided by the manufacturer of the device, activated by a thermal safety valve that ensures that the compliant temperature threhold set is not exceeded. Connection between the power supply unit and the valve must be without shut-offs. Pressure upstream of the cooling circuit must at least be 1.5 bar.

Installation advice

After placing the boiler and installing all fume exhaust pipes, you can connect the hydraulic system. It is recommended to connect the boiler to the system by means of ball valves or gate valves, in order to enable easy detachment, if needed. Before connection we strongly recommend you carry out a thorough cleaning of the system. We recommend that you connect the vent of the safety valve through a special pipe in order to prevent damage in case of overpressure or increase in temperature.

When filling the boiler, check that the Jolly valve (picture on the left) is working properly by venting the system. The maximum Loading pressure with COLD water should be of 1 bar.
In order to ensure proper operation with HOT water, the pressure in the stove should be 1.5 bar.
For installation of an additional expansion tank, remember that normally 1 litre of expansion tank compensates 10 litres of the system and at least two litres are always dedicated to the water inside the stove.

FILLING MUST BE CARRIED OUT USING A “T“ JOINT PLACED ON THE HEATING SUPPLY, LOADING TO A MAXIMUM OF 1 BAR WITH COLD WATER PERIODICALLY CHECK ON THE CONTROL CONSOLES THE PRESSURE IN THE STOVE, AND KEEP IT STEADY AT 1 BAR.

Correctly connect the stove to the hydraulic system, bringing pressure of the system to 0.8 or max 1 bar when the stove has not yet been switched on (in the event the system is not a closed tank system, but has an open tank, it is necessary to change the setting on the menu, which is reserved to authorised technician).
Now proceed to bleed the hydraulic system using the valve assembled on the boiler or using the valves assembled on the radiators. This operation can be carried out multiple times, even after activation of the boiler since, from the time the temperature of the water starts to increase, the air bubbles move towards the high part of the boiler. Once you have completed this operation, close the feeding valve.

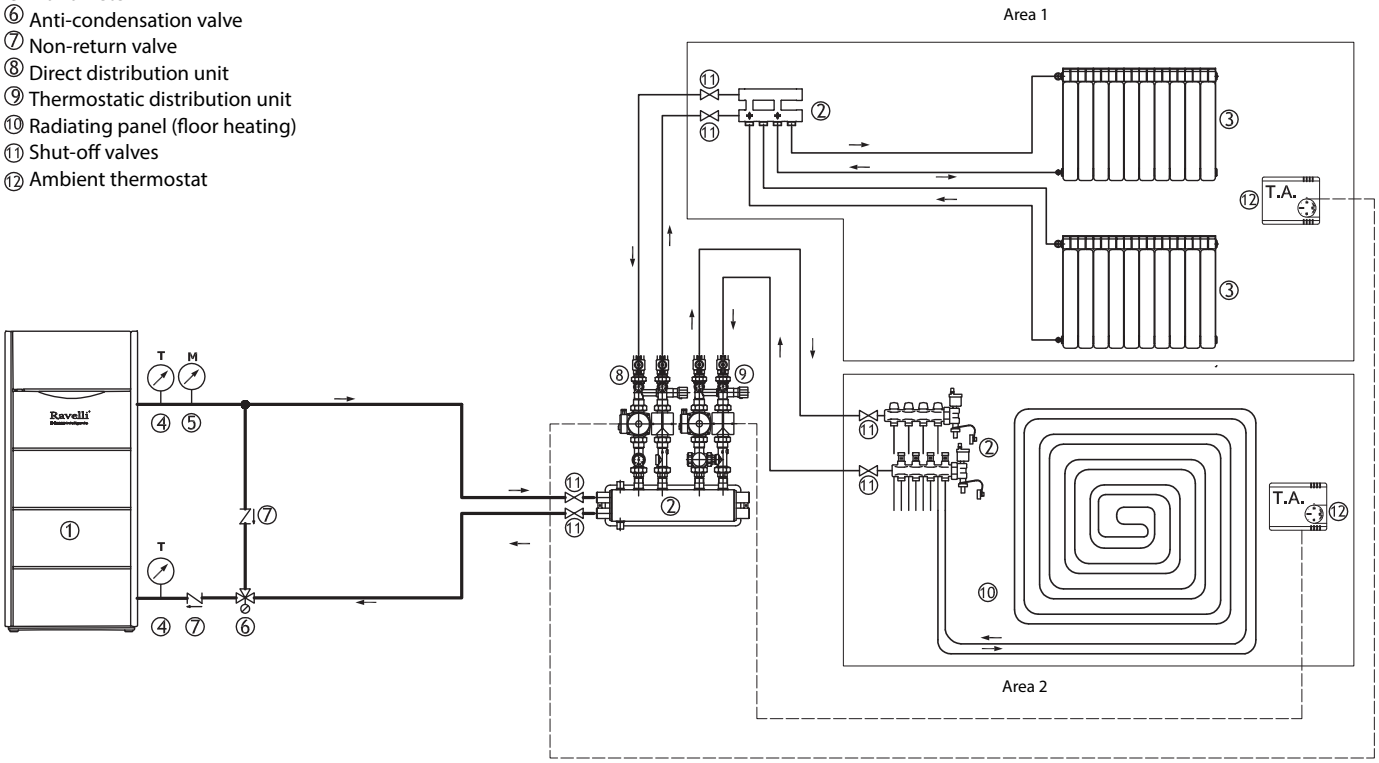
While bleeding the boiler, ensure the electrical parts near the valve are not wet!
In the event this occurs, do not turn on the boiler, but proceed to dry the electronic board using a hairdryer.

THE HYDRAULIC CONNECTION PROVIDES EXCLUSIVELY THE PRESENCE OF OUR CIRCULATOR INTO THE STOVE AT SYSTEM RETURN LINE. REFER TO THE DEDICATED SECTION TO SEE HOW TO CONNECT EVERY SINGLE MODEL.

2.15 Examples of hydraulic installation

Direct circuit to the system

① Pellet boiler
② Distribution heating collectors
③ Radiators
④ Thermometer
⑤ Manometer
⑥ Anti-condensation valve
⑦ Non-return valve
⑧ Direct distribution unit
⑨ Thermostatic distribution unit
⑩ Radiating panel (floor heating)
⑪ Shut-off valves
⑫ Ambient thermostat



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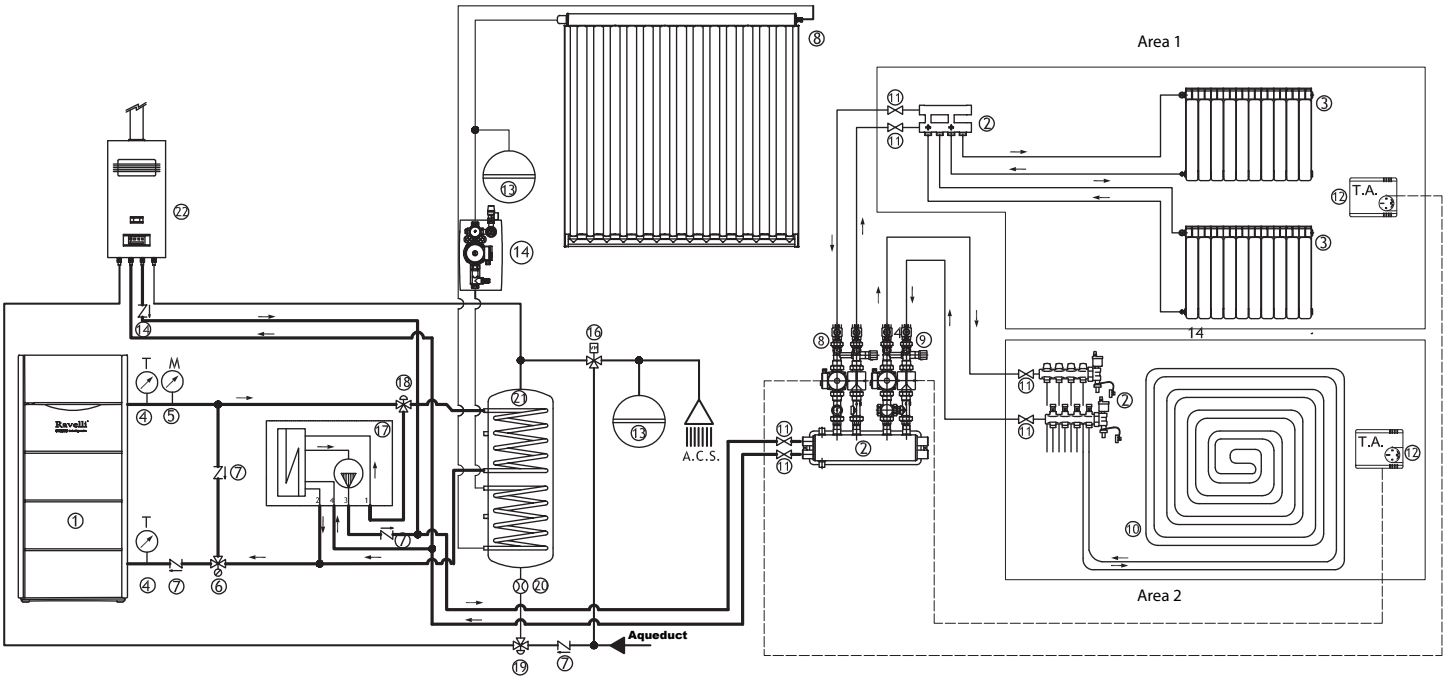
④ Thermometer
⑤ Manometer
⑥ Anti-condensation valve
⑦ Non-return valve
⑧ Direct distribution unit
⑨ Thermostatic distribution unit
⑩ Radiating panel (floor heating)
⑪ Shut-off valves
⑫ Ambient thermostat
⑬ Expansion vessel
⑭ Solar pump unit
⑮ Solar collector
⑯ Thermostatic mixing valve
⑰ Potential divider unit
⑱ Motorized three-way valve
⑲ Motorized three-way valve with spring return
⑳ Flow switch
㉑ Storage tank boiler
㉒ Gas boiler



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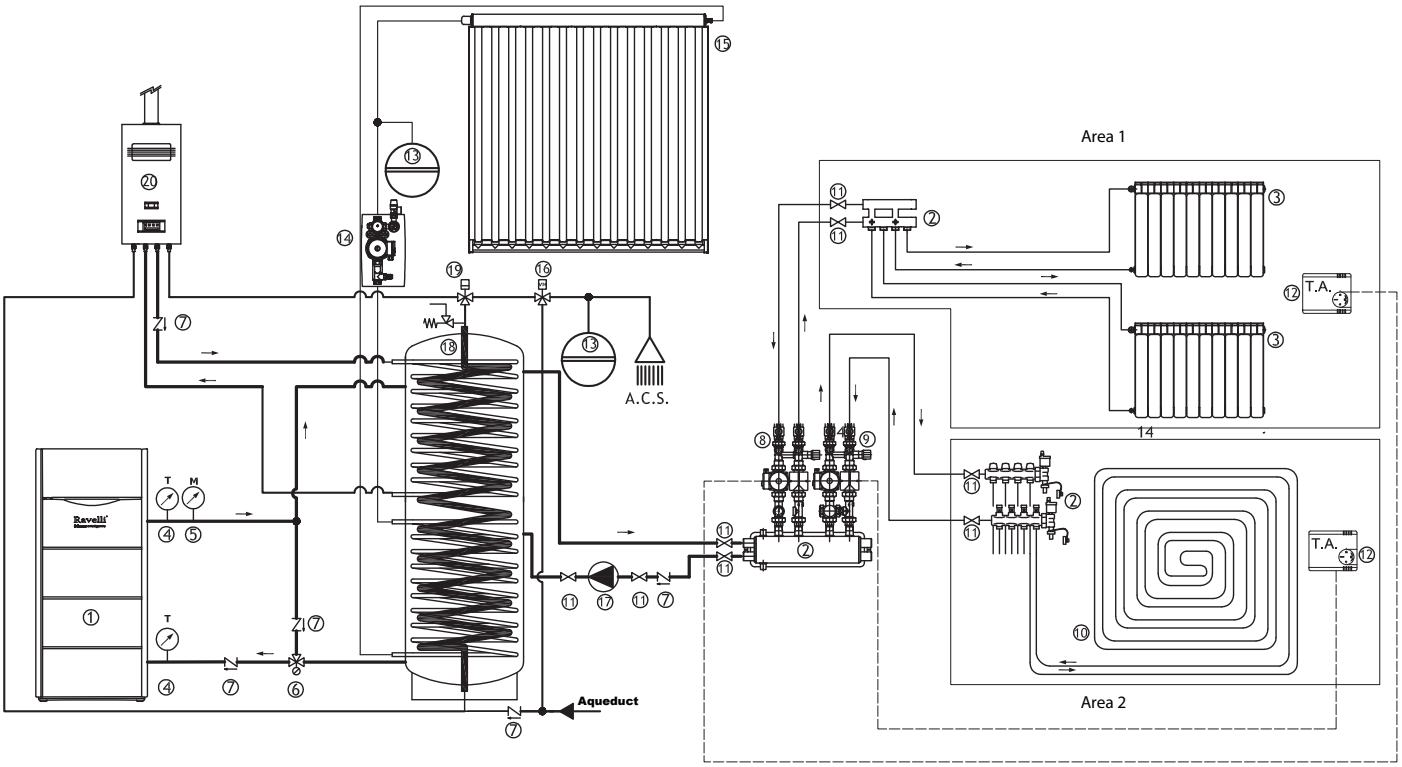
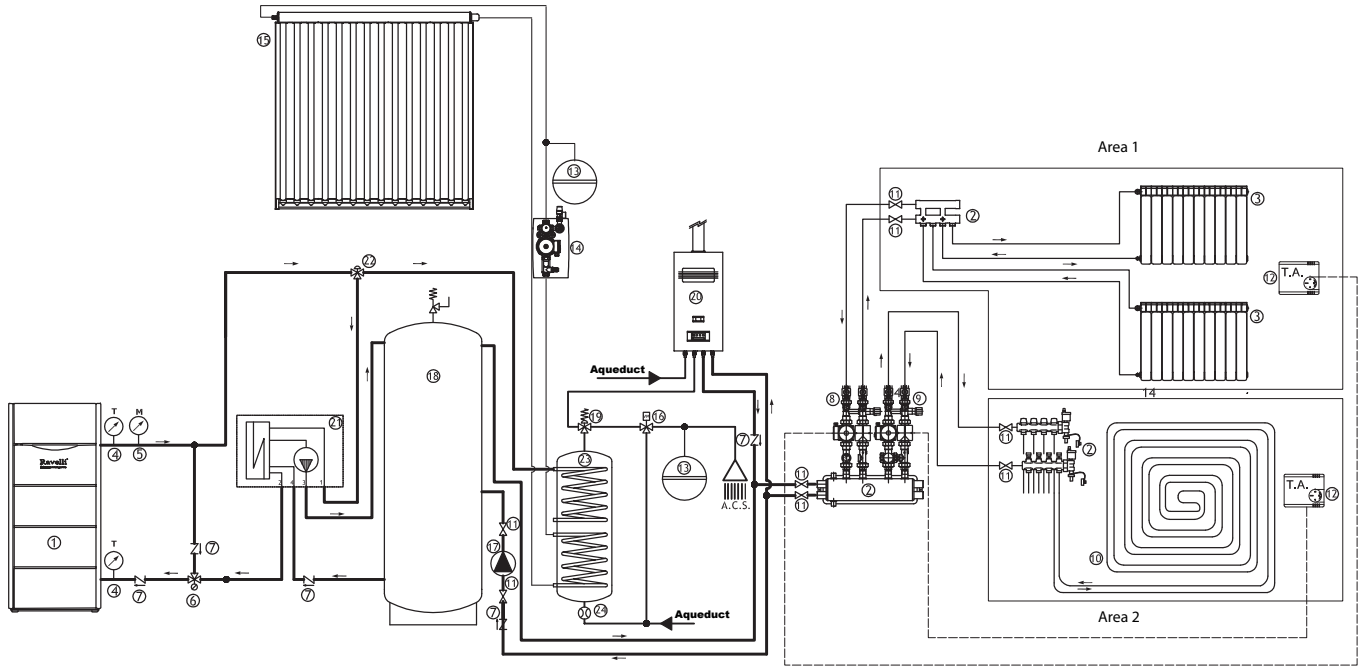
⑫ Ambient thermostat
⑬ Expansion vessel
⑭ Solar pump unit
⑮ Solar collector
⑯ Thermostatic mixing valve
⑰ Recirculation pump
⑱ Puffer pipe in tank with DHW
⑲ Motorized three-way valve with spring return
⑳ Gas boiler



① Pellet boiler
② Distribution heating collectors
③ Radiators
④ Thermometer
⑤ Manometer
⑥ Anti-condensation valve
⑦ Non-return valve
⑧ Direct distribution unit
⑨ Thermostatic distribution unit
⑩ Radiating panel (floor heating)
⑪ Shut-off valves
⑫ Ambient thermostat
⑬ Expansion vessel
⑭ Solar pump unit
⑮ Solar collector
⑯ Thermostatic mixing valve
⑰ Recirculation pump
⑱ Storage puffer
⑲ Motorized three-way valve with spring return
⑳ Gas boiler
㉑ Potential divider unit
㉒ Motorized three-way valve
㉓ Cylinder
㉔ Flow switch



3. Installation Data Sheet

Name of Owner:

_____

Address:

_____

_____

_____

_____

Phone:

_____

Name of Dealer:

_____

Address:

_____

_____

_____

_____

Phone:

_____

Model: _____

Serial Number:_____

Date of Purchase: _____ (dd/mm/yy)

Date of Installation: _____ (dd/mm/yy)

Magnehelic at Install:_____

Installer's Signature:

_____

Name of Installer:

_____

Address:

_____

_____

_____

_____

Phone:

_____

WARRANTY: If you have concerns with your unit please contact the dealer where you purchased the stove.

4. Maintenance Record

DATE	WORK CARRIED OUT	SIGNATURE

PRODUCER REGISTRATION FORM

This form must be completed and returned for every installation to qualify for warranty.
Post to: P O Box 11-245, Sockburn, Christchurch
Email to: info@pelletfiresolutions.co.nz

Customer Details:

Customer Name:_____

Postal Address:_____

Installation Address: _____

Phone Number _____ Cell Phone _____ Email Address _____

Declaration by Owner: I hereby certify the above particulars are true and correct. My Pellet Fire Technician has demonstrated to me the correct operation of my Pellet Fire.

I understand that warranty conditions require an authorised Pellet Fire Solutions Installer to complete the installation

Signed:_____ Date:_____

Installation Details:

Pellet Fire Model & Serial Number:_____

Installation Date:_____

Freestanding Flue Kit: Internal ☐ External Standard ☐

Fireplace Insert Flue Kit: Insert ☐ BIH ☐

Installer Details:_____

Installers Name:_____ Phone Number:_____

Passed Inspection Yes/No (if no, why)_____

Declaration by Approved Technician: I _____
hereby certify that the above appliance has been installed and commissioned in compliance with Manufacturers Installation requirements and appropriate New Zealand Standards/Local Council requirements.

Signed:_____ Date:_____