

TITAN

TITAN Wood Gasification Boiler

Engineered to comply with applicable UL/CSA B415.1 technical requirements

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1. Introduction

The TITAN Wood Gasification Boiler is a high-efficiency indoor hydronic heating system designed to deliver clean, reliable and economical heating for residential and light commercial applications. Utilizing advanced two-stage wood gasification technology with automatic ignition, oxygen sensor combustion control and an intelligent touchscreen controller, the boiler maximizes heat extraction while minimizing fuel consumption and emissions.

2. Safety Instructions

To ensure safe, reliable and efficient operation, read and follow all safety instructions before installing, operating or servicing the boiler. Failure to follow these instructions may result in personal injury, property damage, or equipment damage.

- The boiler must be installed, commissioned, and serviced only by qualified and authorized personnel in accordance with all applicable local codes and regulations.
- Read and fully understand this manual before operating the boiler. Improper installation, operation, or maintenance may create hazardous conditions and reduce system performance.
- Do not modify the boiler, control system, safety devices or flue system. Unauthorized modifications may compromise safety and void the warranty.
- Never modify the boiler, flue system or safety devices.
- Never remove or disable the pressure relief valve or other safety controls.
- Use only clean, dry, seasoned firewood. Do not burn treated wood, coal, charcoal, waste, or liquid fuels.
- Maintain the minimum safety clearances from combustible materials specified in this manual. Never store firewood, paper, cardboard, fuels, chemicals, or other combustible materials near the boiler.
- Use only clean, natural, seasoned firewood with the recommended moisture content specified by the manufacturer. Do not burn treated wood, painted wood, plywood, particle board, plastics, household waste, coal, charcoal, petroleum products, or other unauthorized fuels.
- Keep the loading and ash doors closed during normal operation. Open the loading door slowly to prevent smoke blowback.
- The boiler surfaces, doors, and flue pipe become extremely hot during operation. Wear heat-resistant gloves when handling hot components.
- Keep combustible materials at a safe distance from the boiler.
- Regularly inspect and clean the boiler, flue pipe, and chimney to prevent soot and creosote buildup.
- In the event of overheating, chimney fire, or any malfunction, stop operating the boiler, disconnect the power supply, and contact an authorized service technician.

2.1 Maintenance and Emergency Procedures

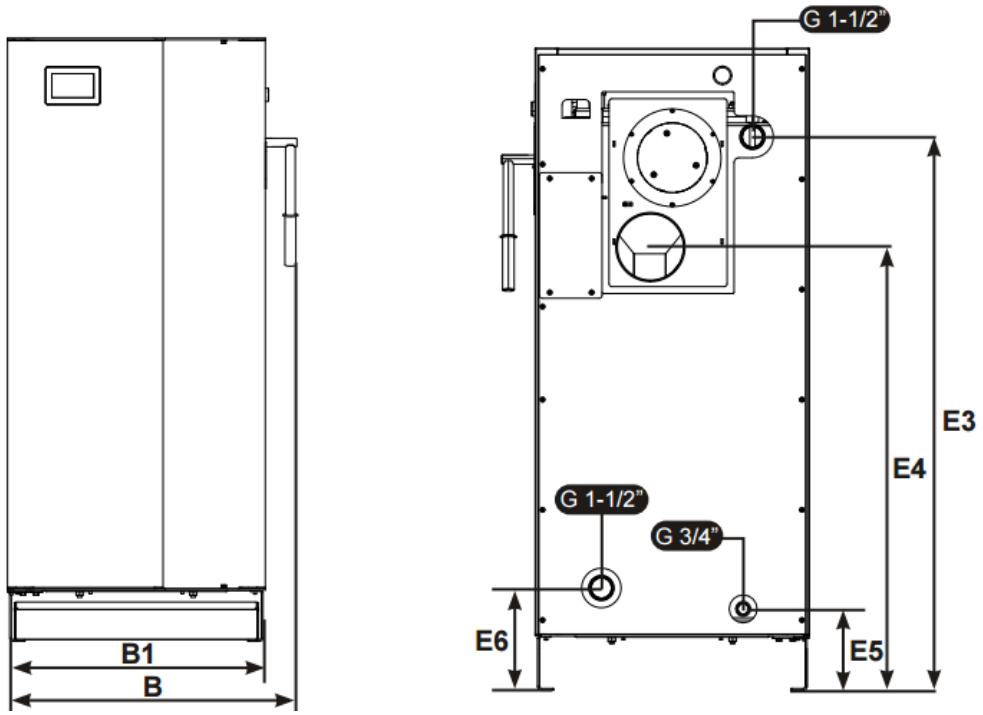
- Clean the combustion chamber, heat exchanger, ash pan, and flue passages regularly to maintain safe and efficient operation.
- Inspect the chimney and flue system periodically and remove soot or creosote buildup as required.
- Check the boiler, safety devices and water pressure regularly for proper operation.
- Have the boiler inspected and serviced annually by qualified personnel.
- In the event of overheating, smoke leakage, chimney fire, or any abnormal operation, stop adding fuel, disconnect the power supply and contact an authorized service technician. Never use water to extinguish a fire inside the boiler.

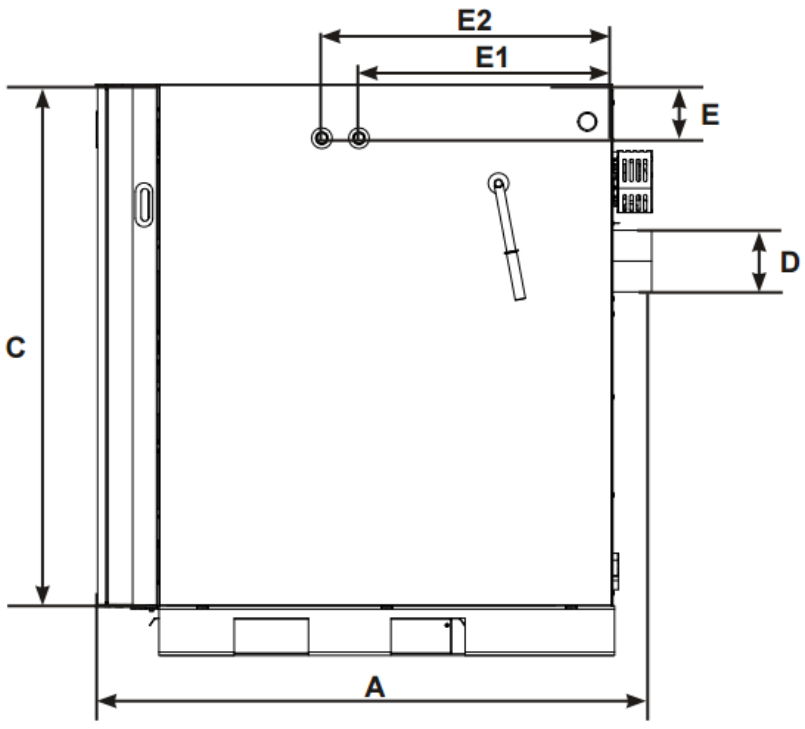
3. Technical Specifications

Feature	Specification	
	TITANL110	**TITAN175**
Heating Capacity	110K BTU	175K BTU
Chimney Draft	0.00145 – 0.00174 psi.	
Water jacket capacity	37.0 GPM	43.0 GPM
Temperature of the flue gasses maximum output	320 °F	300 °F
Temperature of the flue gasses minimum output	212 °F	203 °F
Minimum operating time at rated power	3 hours	
Minimum inlet water temperature at the boiler supply water connection	140 °F	
Maximum water temperature	194 °F	
Fuel type	Hardwood with less than 20% moisture	
Fuel length	24”	
Fuel loading chamber capacity	32 GPM	40 GPM

Feature	Specification	
	TITANL110	**TITAN175**
Combustion chamber type	Operates under pressure	
Electrical supply	120V/60 Hz	
Maximum working pressure	44 psi	
Flue gas tube external diameter	6”	
Weight	539 Kg	620
Compliance	Engineered to comply with applicable UL/CSA B415.1 technical requirements	

4. Appearance and Dimension





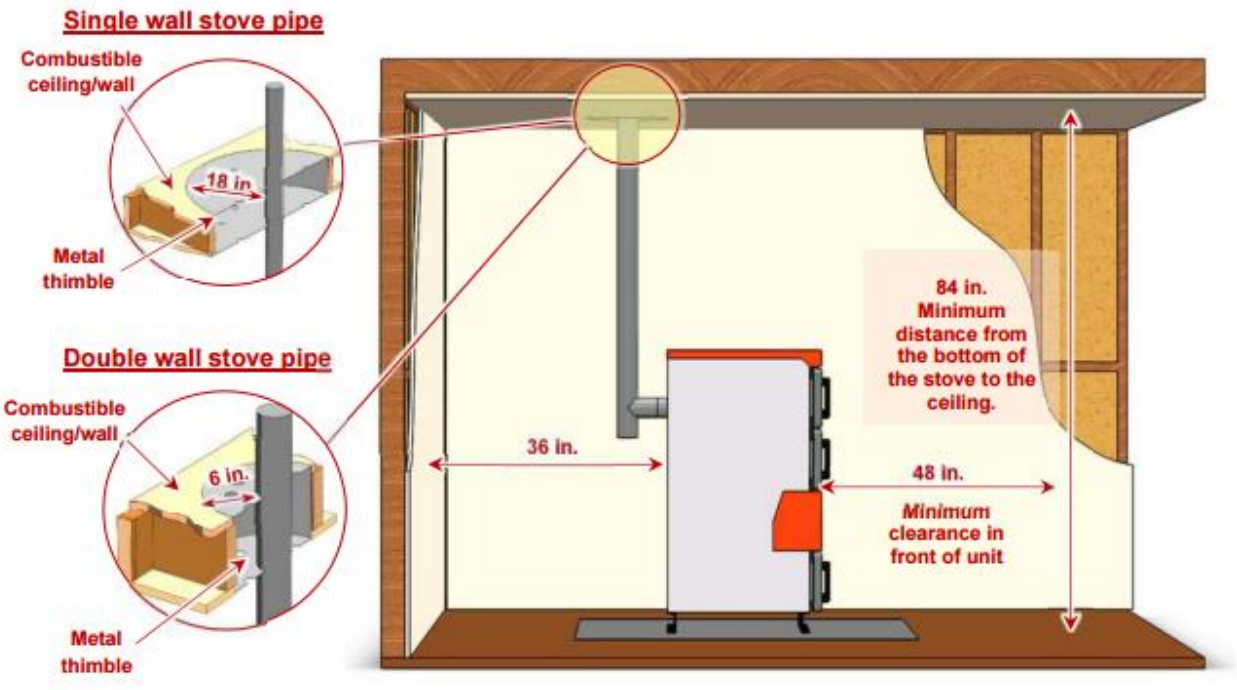
Model	A	B	B1	C	D	E	E1	E2	E3	E4	E5	E6
TITANL110	53”	26”	23”	54”	Ø 6”	5”	24”	28”	47”	37.5”	7”	8.7”
TITANL110	57”	26”	23”	60”	Ø 6”	5”	27”	30.5”	53”	43.4”	7”	8.7”

5. Installation

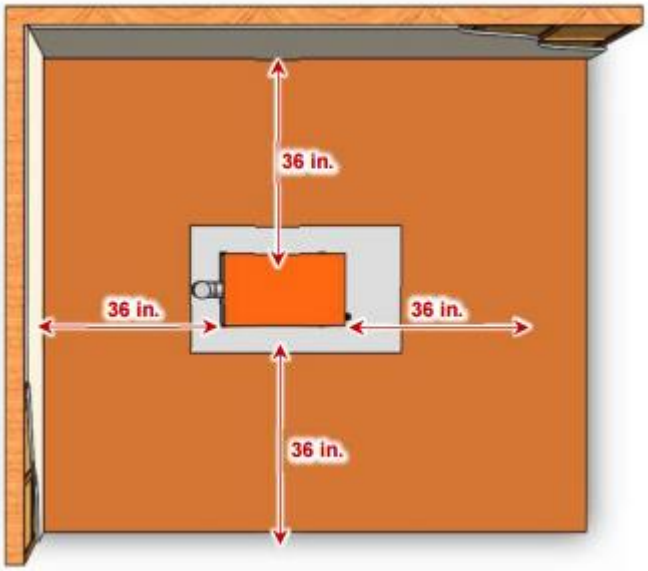
5.1 Standard Clearances Without Protection Wall

Prior to installation, load capacity of the place where the stove will be intended must be ensured. To ensure the correct and safe operation of the boiler, installed near combustible walls or ceilings, the minimum required clearance is:

- 36 in. (900 mm) — from all sides of the appliance (back, sides and corners).
- 48 in. (1219 mm) — from front of the stove.
- 84 in. (2130 mm) — minimum ceiling height, measured from floor to ceiling.
- 6 in. (150 mm) — from double-wall chimney pipe to combustibles.
- 18 in. (450 mm) — from single-wall chimney pipe to combustibles.



Minimum clearances for uncertified stove with sheet metal jacket or casing (no protection wall)



Clearance to Combustible Walls stove with sheet metal jacket or casing (no protection wall)

5.2 Standard Clearances with a Protection Wall

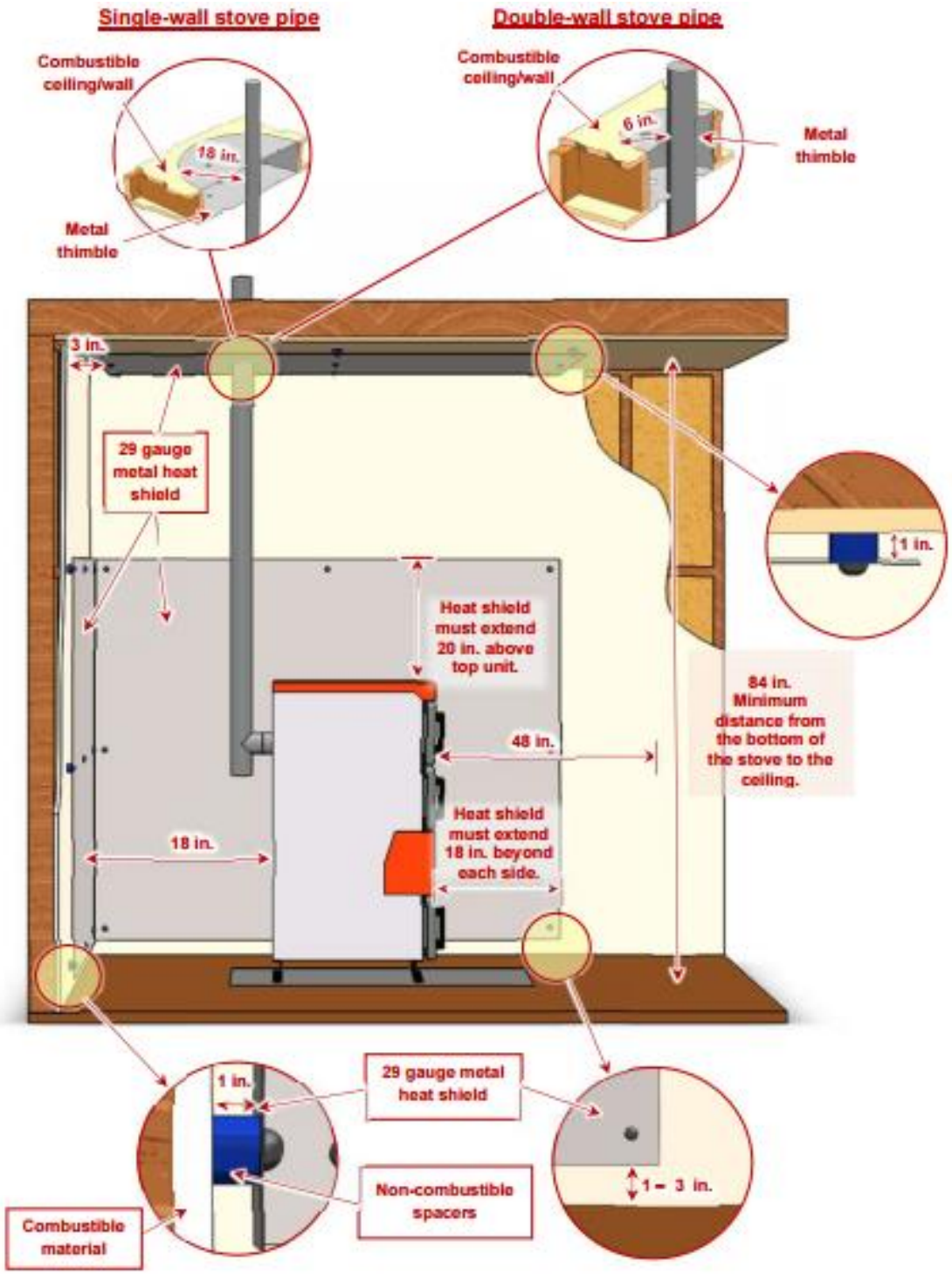
When a properly constructed 29-gauge sheet metal heat shield is installed with a 1 in. (25 mm) air gap, clearances may be reduced under CSA B365 rules.

1. Heat Shield Construction Requirements

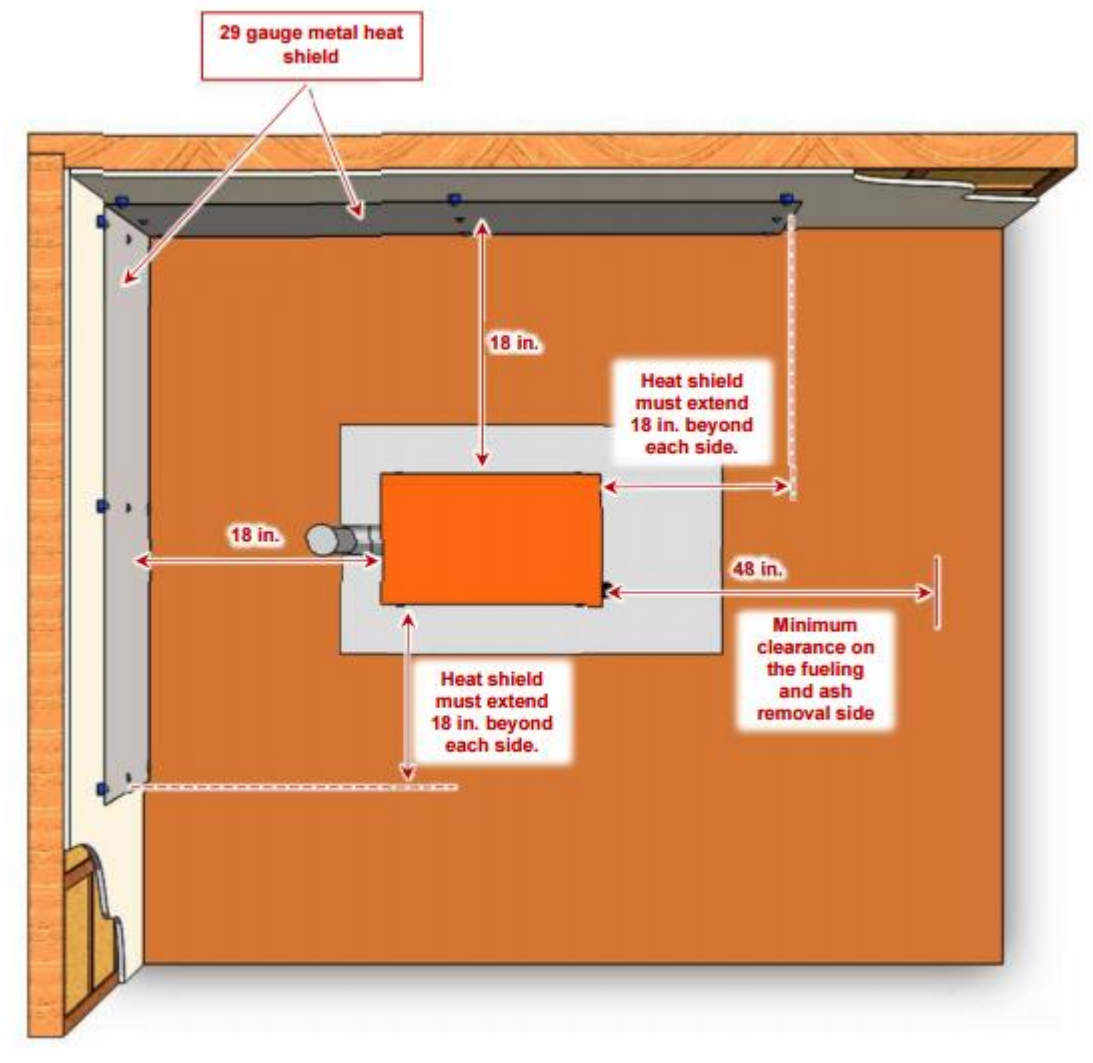
- Minimum air space between shield and wall/ceiling: 1 in. (25 mm).
- Clearance at bottom of shield: 1–3 in. (25–75 mm).
- Clearance at top of shield: minimum 3 in. (75 mm).
- Shield must extend:
- 20 in. (500 mm) above the top of the unit.
- 18 in. (450 mm) beyond each side of the unit.
- Ceiling shields: maintain 3 in. (75 mm) edge clearance.
- Mounting hardware must allow full vertical ventilation and not transfer heat directly to combustibles.

2. Functional Principle

The heat shield creates a ventilated air space, allowing heat to dissipate before reaching combustible surfaces. This reduces the minimum required clearance safely



Minimum clearances for uncertified stove with sheet metal jacket or casing (with protection wall)



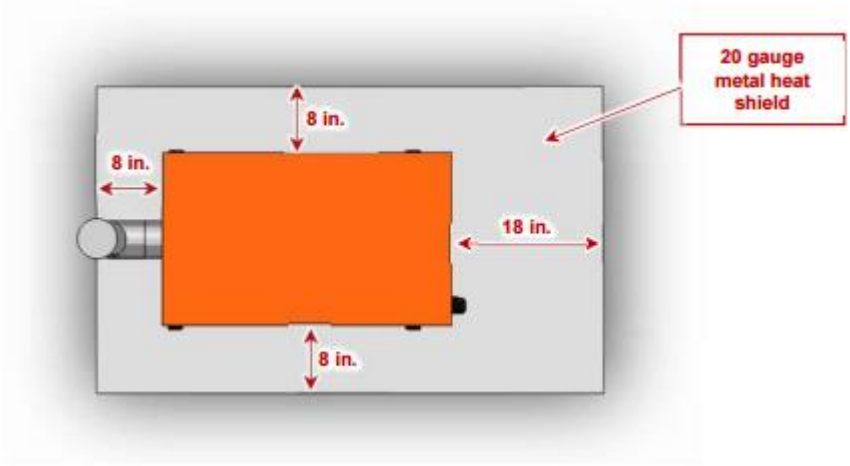
Clearance to Combustible Walls for stove with sheet metal jacket or casing (with Protection Wall)

3. Floor Protection

Ensuring proper floor protection for uncertified wood stove the floor must be protected with two elements:

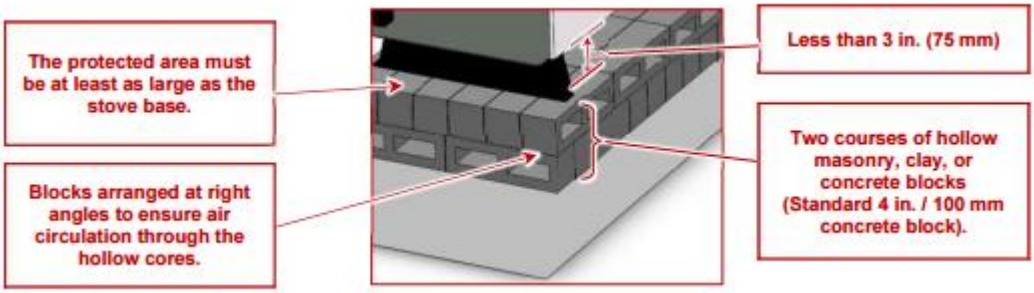
A. Floor Pad (Ember Protection): Protects against live embers and sparks that may fall during fire tending or ash removal.

- The floor pad must be made of continuous non-combustible material (e.g., ceramic tile, flagstone, brick, or block).
- It must extend 18 in. (450 mm) beyond any side with a loading door and 8 in. (200 mm) beyond all other sides.
- All joints between tiles or stones must be properly grouted or mortared to prevent debris accumulation and ensure a continuous surface.

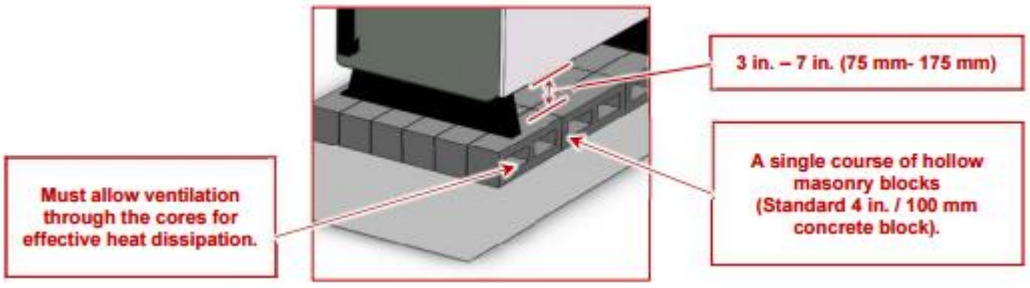


Floor Pad Dimensions for Uncertified Units (Ember Protection)

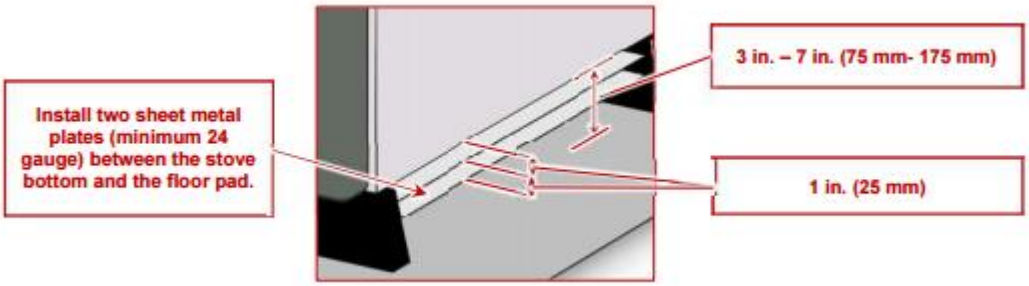
B. Heat Shield or Thermal Protection (Overheating Protection): Prevents the floor from overheating due to heat radiation from the stove's base. The required construction depends on the clearance between the bottom of the appliance and the floor.



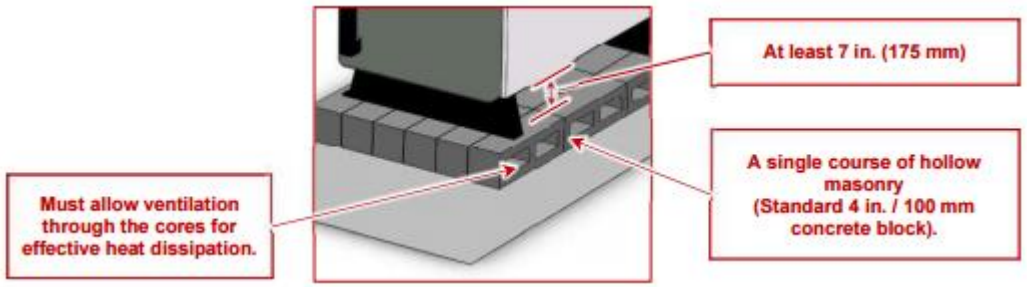
Option 1 – Clearance less than 3 in.



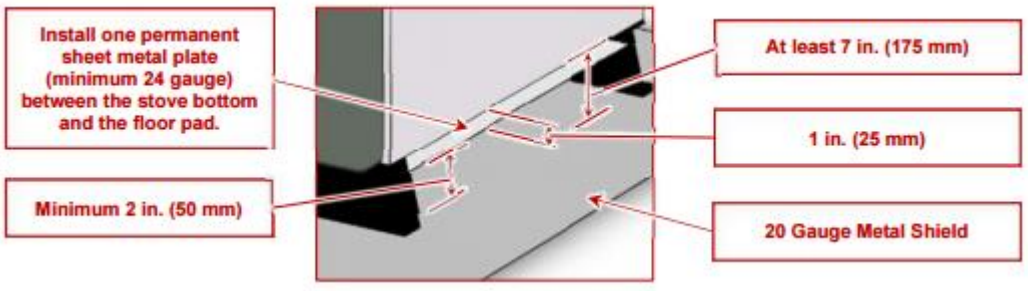
Option 2 – Clearance between 3 in. and 7 in. – Hollow Masonry



Option 2.1 – Clearance between 3 in. and 7 in. – Metal Plates



Option 3 – Clearance greater than 7 in. – Hollow Masonry



Option 3.1 – Clearance greater than 7 in. – Metal Plates

5.3 Summary

1. Summary of Clearance and Floor Protection Requirements for boilers with Sheet Metal Jacket or Casing – Burning Units.

Requirement	Without Wall Protection	With Wall Protection (29-Gauge Metal Heat Shield)	Notes
Ceiling Clearance	60 in.	84 in. from the bottom of the stove to the top of the ceiling.	No reduction permitted under 84 inches ceiling height. Heat shield must extend 20 In. above stove.
Side / Back Clearance	36 in	18 in.	Heat shield must extend 20 in. above and 18 in. beyond appliance sides.
Front Clearance (Fueling and Ash removal side)	48 in	48 in.	No reduction permitted.
Single-Wall Stove Pipe	18 in.	18 in.	Must use non-combustible thimble through walls/ceilings.
Double-Wall Stove Pipe	6 in.	6 in.	Certified double-wall Only.
Floor Pad (Ember Protection)	Extend 18 in. in front of loading door and 8 in. on other sides	Extend 18 in. in front of loading door and 8 in. on other sides	Must be continuous non-combustible surface.
Thermal Floor Protection (Overheating Protection)	Required (depends on clearance under stove)	Required (depends on clearance under stove)	Options described below.

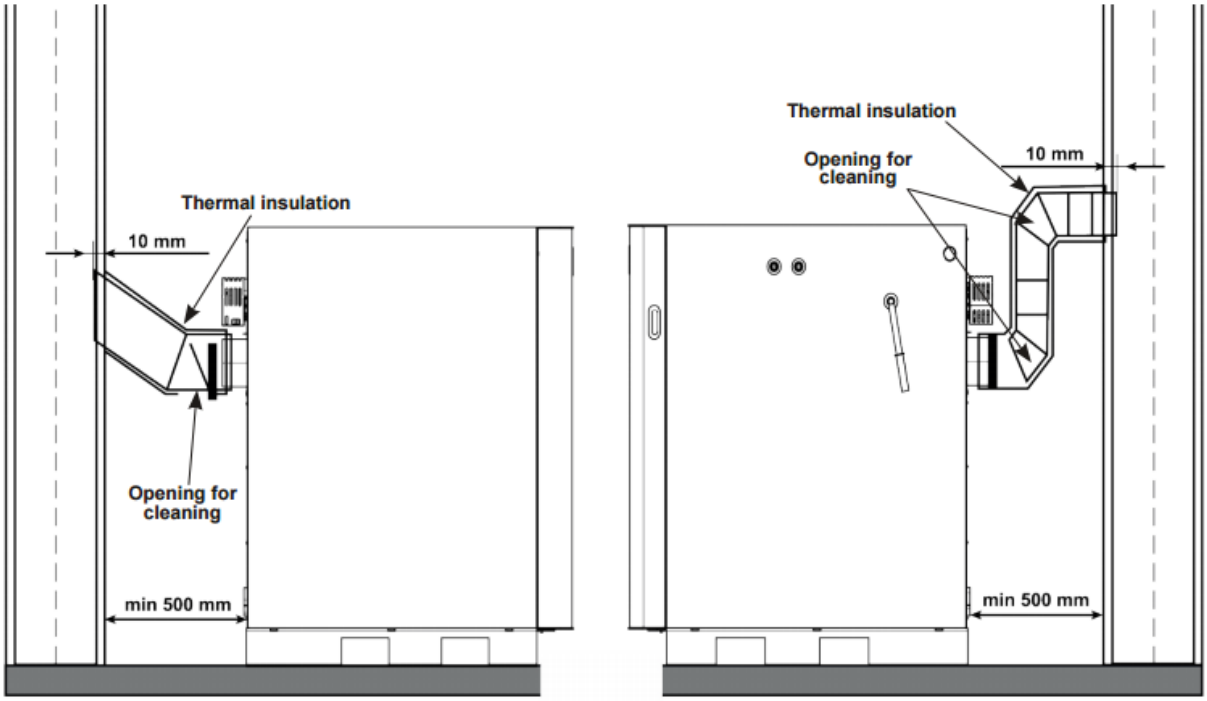
2. Floor Protection Options (Thermal Overheating Protection)

Clearance Under Stove	Protection Option	Description
Less than 3 in.	Option 1	Two courses of hollow masonry/concrete blocks (100 mm thick), arranged for airflow
3–7 in.	Option 2	Single course of hollow masonry units with ventilated cores
	Option 2.1	Two sheet metal plates (min. 24 gauge), spaced 1 in. apart
More than 7 in.	Option 3	Single course of hollow masonry units with ventilated cores
	Option 3.1	One permanent sheet metal plate (min. 24 gauge), 2 in. above floor pad and 1 in. below stove bottom

5.4 Connecting to Chimney

Properly calibrated and built chimney is the precondition for a safe operation of the boiler and economic heating.

- The chimney has to be well insulated, gas-proof and smooth. On the lower part of the chimney, a cleaning door has to be built in.
- Brick layered chimney has to have 3 layers with an stone wool thermal insulation in the middle.
- The thickness of the insulation should be 30 mm, if the chimney is situated inside the building, i.e. 50 mm if the chimney is situated outside the building. Inside chimney diameter dimensions depend on its height and on the boiler capacity.
- The temperature of the flue gases on their exit point should be minimum 86 °F higher than the temperature of their condensation point. The choice and the construction of the chimney should be performed by an authorized person. Minimal distance between boiler and the chimney is 20”.
- The flue gas tube has to have an inclination of 86 – 113 °F. In order to unable entering of the condensate from the chimney into the boiler, 10 mm of the flue gas tube length has to be inserted deeper inside the chimney.
- It is recommended to insulate the chimney connection tube with a mineral wool of 30-50 mm thickness. All installation works must be made in accordance with valid national standards.
- At connecting a boiler to the chimney, flue gas tubes and elbows must not pass behind the fan since in that case the cleaning and maintenance will not be possible.

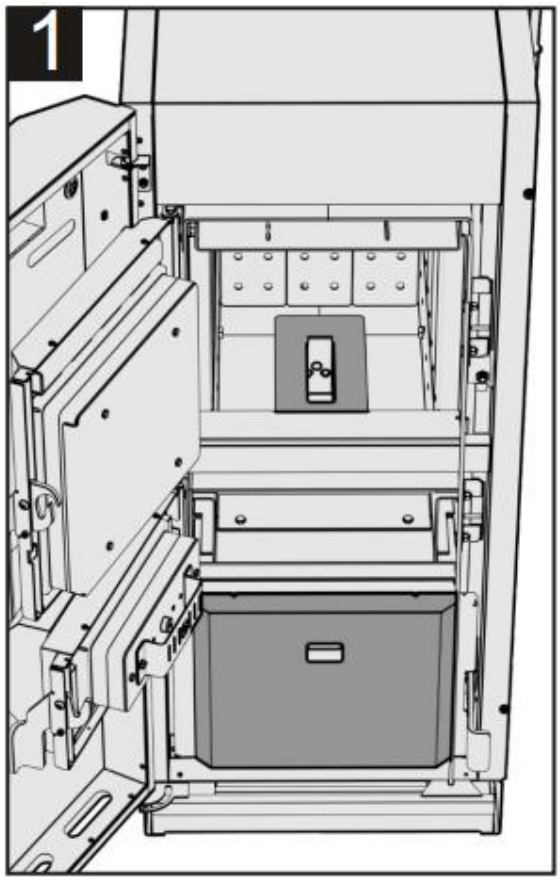


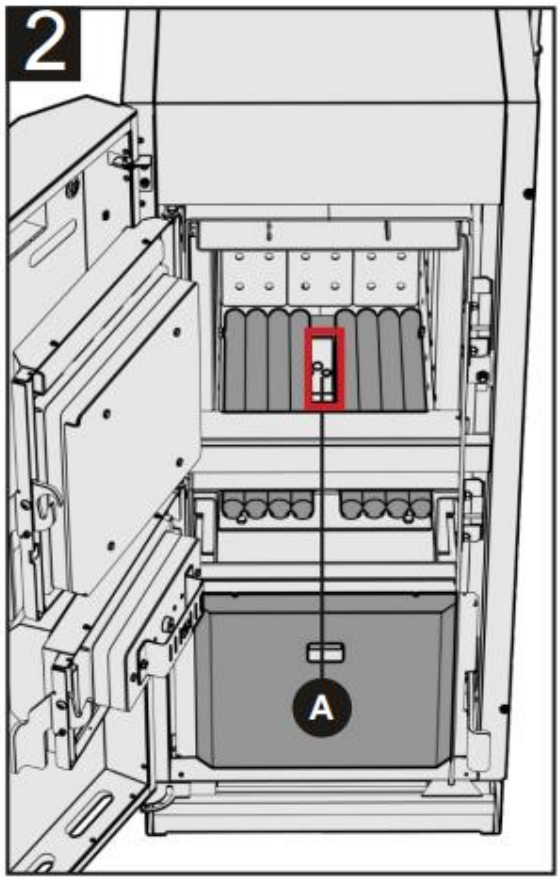
5.5 Air Inlet

Each boiler room must be equipped with an opening for supply of make up air which is dimensioned in accordance with boiler output (minimum opening area according to the below shown equation). Such opening must be protected with a net or grate. All installation works have to be performed in accordance with valid national standards. Boiler must not operate in flammable and explosive environment.

6. Ignition Procedure

1. **Prepare the Boiler**
   - Open the fuel loading door and the middle service door.
   - Check the ash level in the combustion chamber and empty it if necessary.
   - Do not remove ash after every firing cycle. Leave a thin layer of ash until the middle row of holes in the combustion chamber guards is no longer visible, as this helps protect the refractory chamber.
2. **Load the Initial Firewood**
   - Place one layer of small, dry firewood into the fuel loading chamber.
   - Use firewood with a maximum length of 24 in. and arrange it lengthwise.
   - Do not completely cover the burner opening.

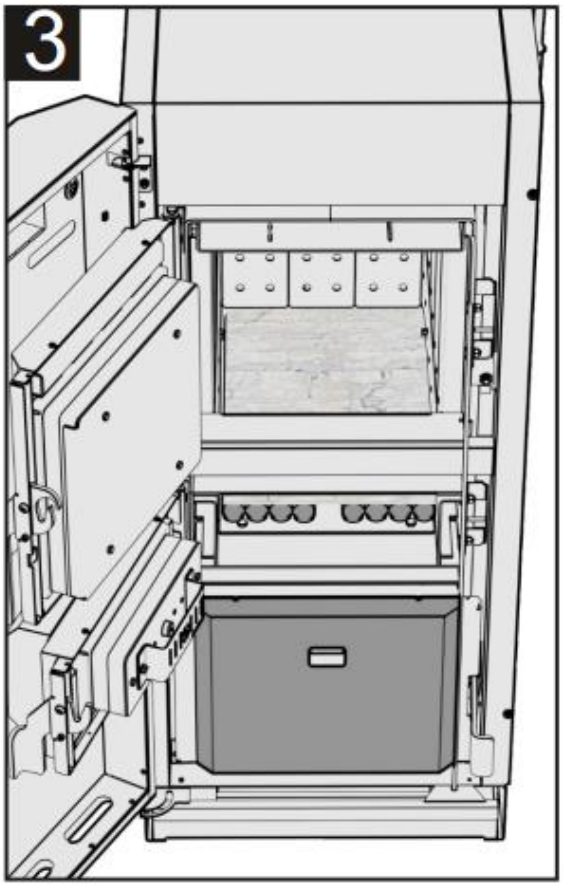


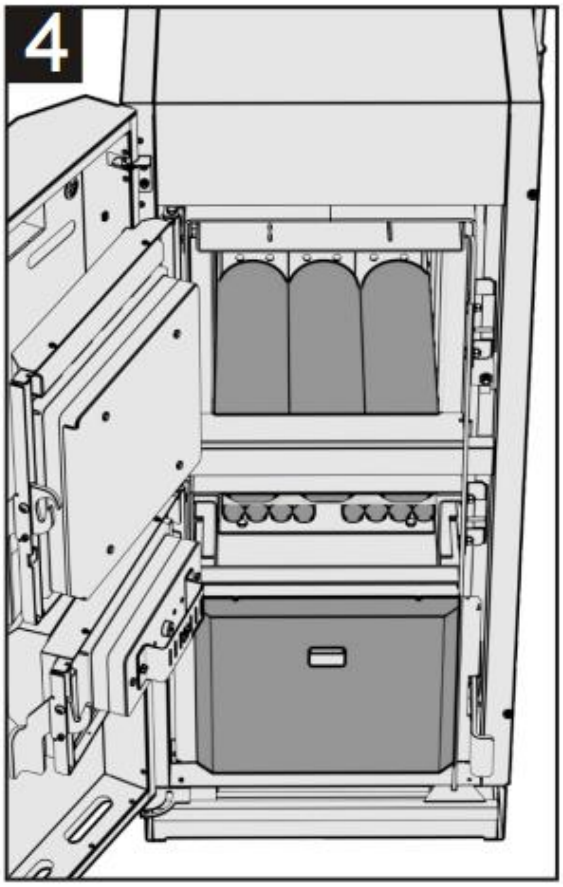


3.
   - Place a layer of cardboard evenly over the first layer of firewood to promote reliable ignition.

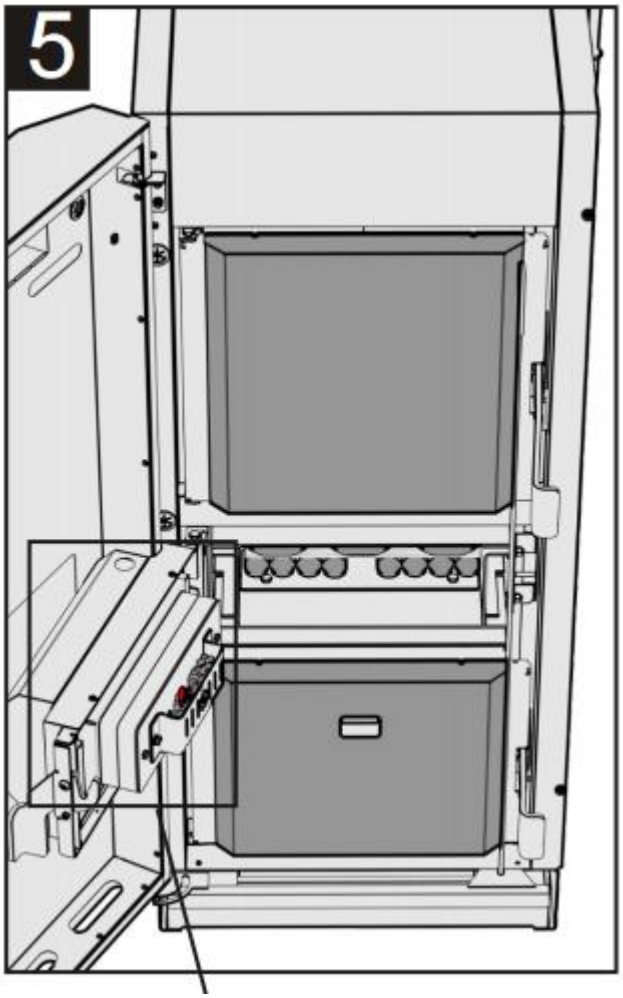
4. Fill the Fuel Chamber

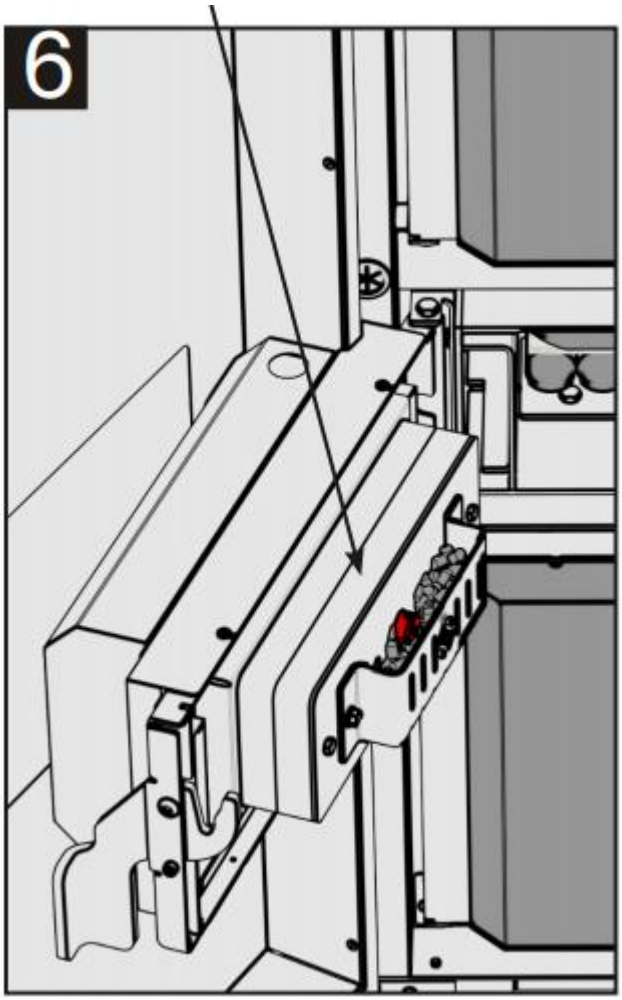
- Load the remaining firewood into the fuel loading chamber.
- Close the fuel loading door securely.





5. **Prepare for Ignition**
   - Keep the middle service door open.
6. **Fill the Pellet Ignition Container**
   - Fill the pellet ignition container with the recommended ignition pellets.
   - Close the middle service door.





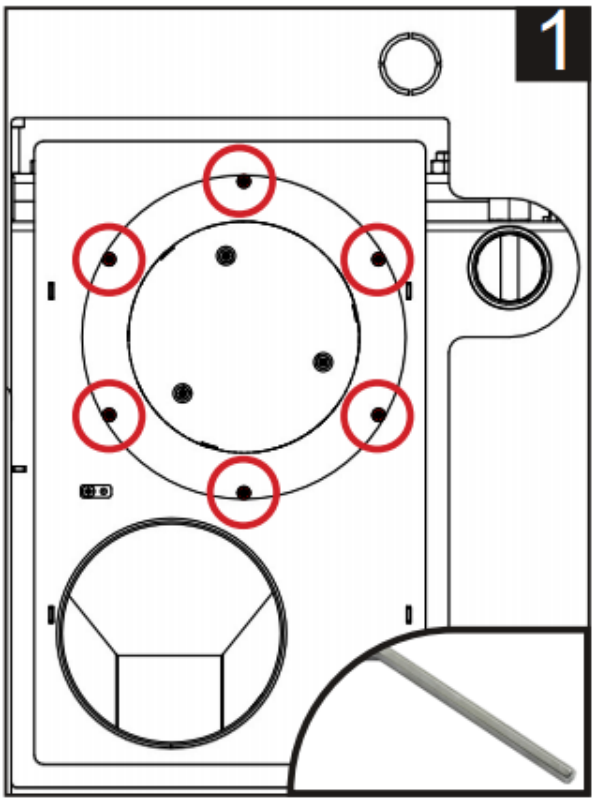
7. **Start the Ignition Cycle**
   - Activate the automatic ignition process using the touchscreen controller.

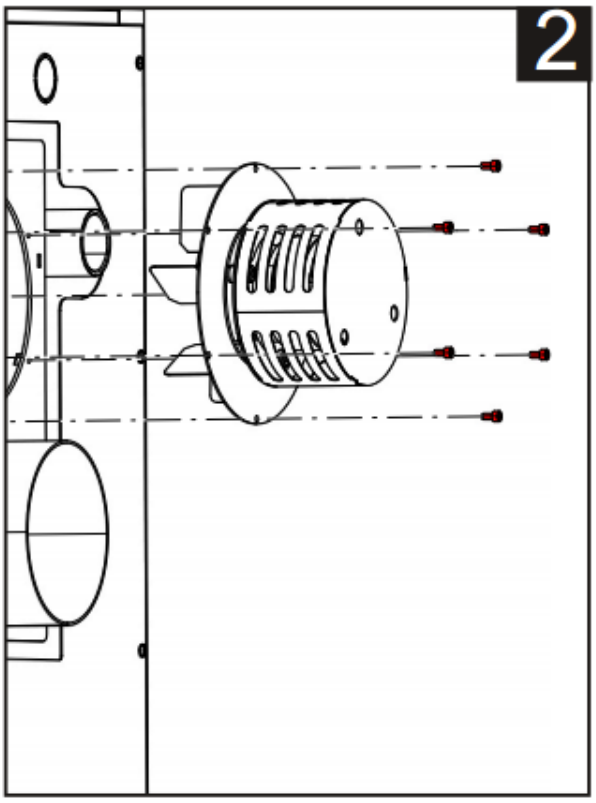
Note: When the fire is ignited for a first time, a smell occurs as a result of the paint being heated. The fireplace is painted with heat-resistant paint, which achieves maximum resistance after being heated multiple times.

7. Cleaning

Ash remaining in boiler after solid fuel firing should be disposed into metal containers with a cover. As through the wood gasification principle the fuel burns out totally, the cleaning of the boiler is limited to the upper and lower combustion chamber once in a week and the cleaning of flue gas tubes on the back side of the boiler is necessary only after the heating season, i.e. min. once in one heating season. Cleaning the fan blade and fan box has to be performed when necessary.

Remove the combustion fan from the connection points by unscrewing the 6 socket head cap screw ISO 762 M5 x 10 holding it in place.





CRITICAL SAFETY WARNING

Before executing any maintenance or cleaning procedures, ensure that the boiler is completely switched off, disconnected from the primary power grid and fully cooled down to ambient room temperature. Always use a specialized ash vacuum cleaner designed for biomass systems, never use a standard household vacuum cleaner.

1. Before Refilling of Fuel/Before Ignition

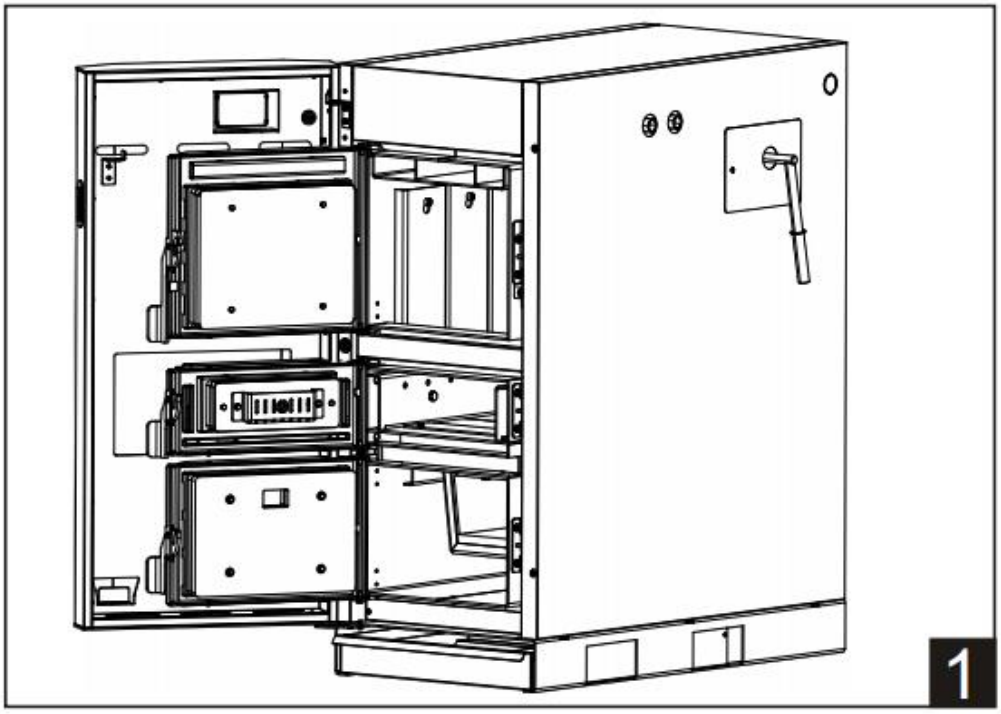
For flue gas tubes cleaning, it is necessary to pull lever left to right a few times. Cleaning of area over heat exchanger pipes with turbulators.

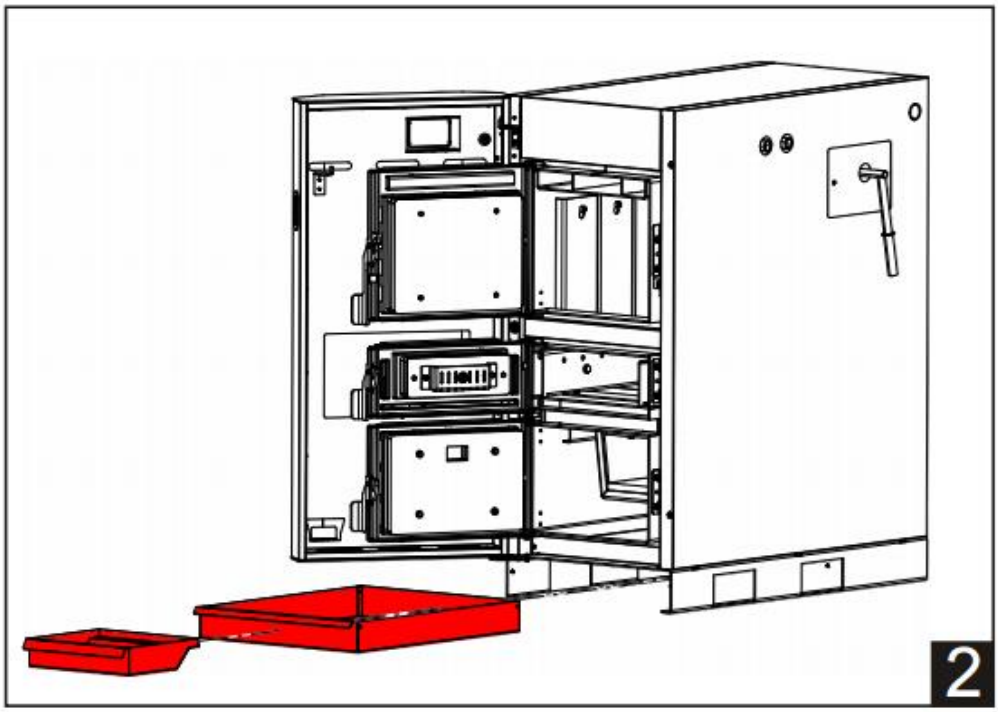
1 - Switch off the boiler and disconnect from power.

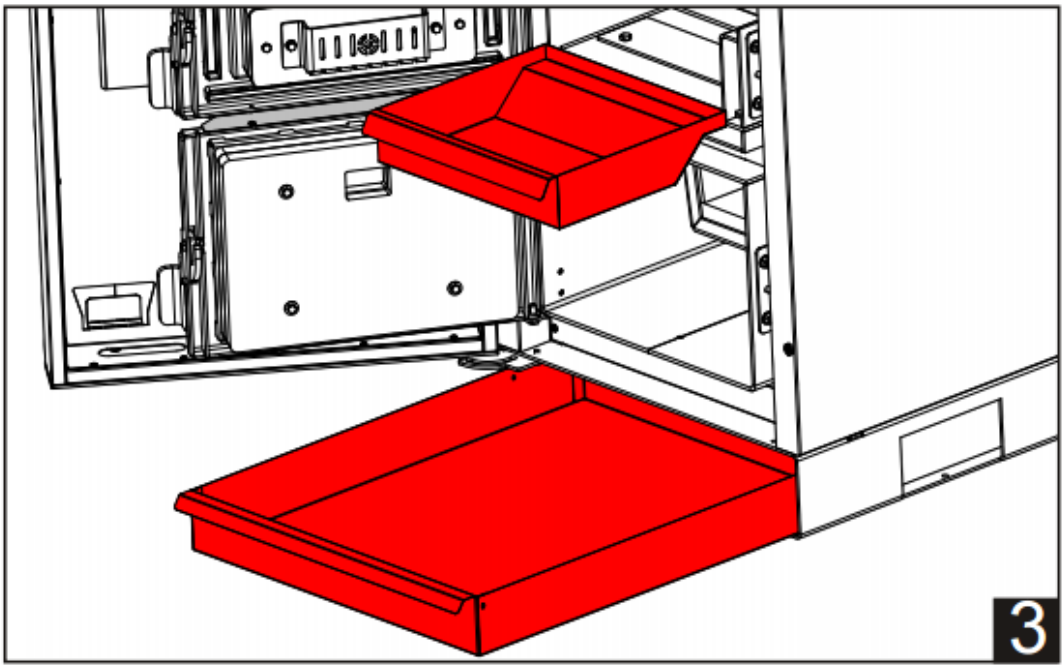
2 - Remove the top cover.

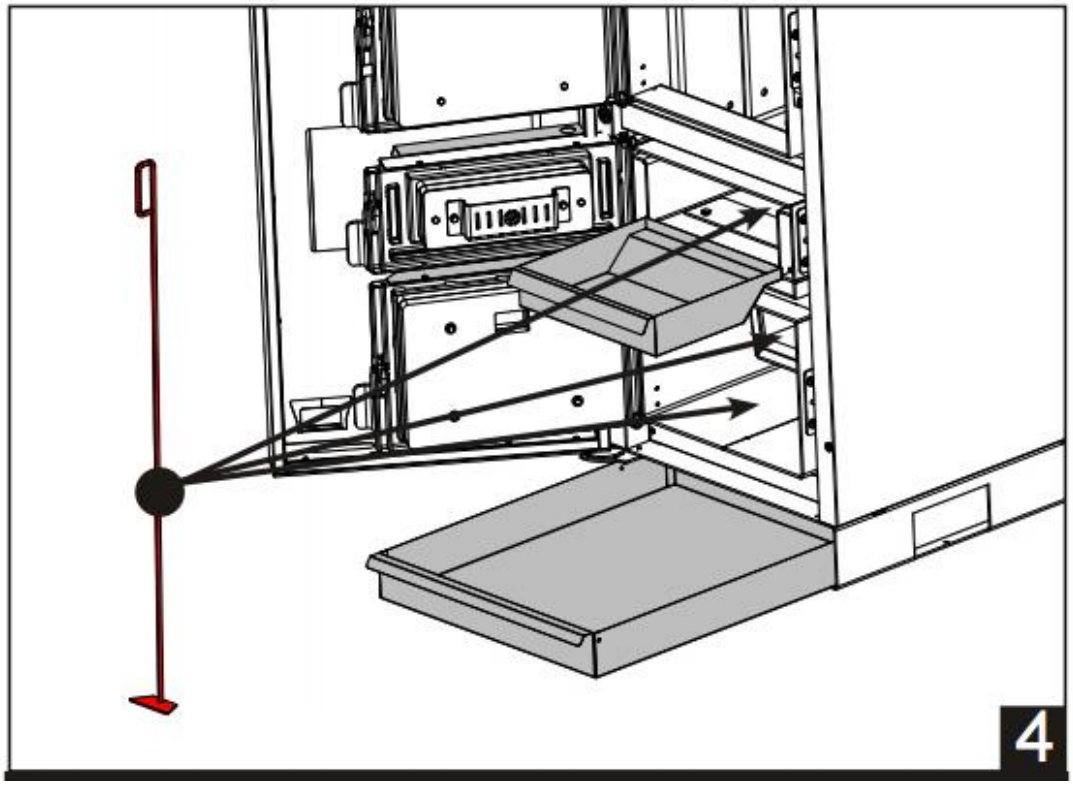
3 - Open the flue gas chamber by removing the 4 - M10 nuts.

4 - Use the metal vacuum cleaner to clean dust and ash in flue gas chamber.



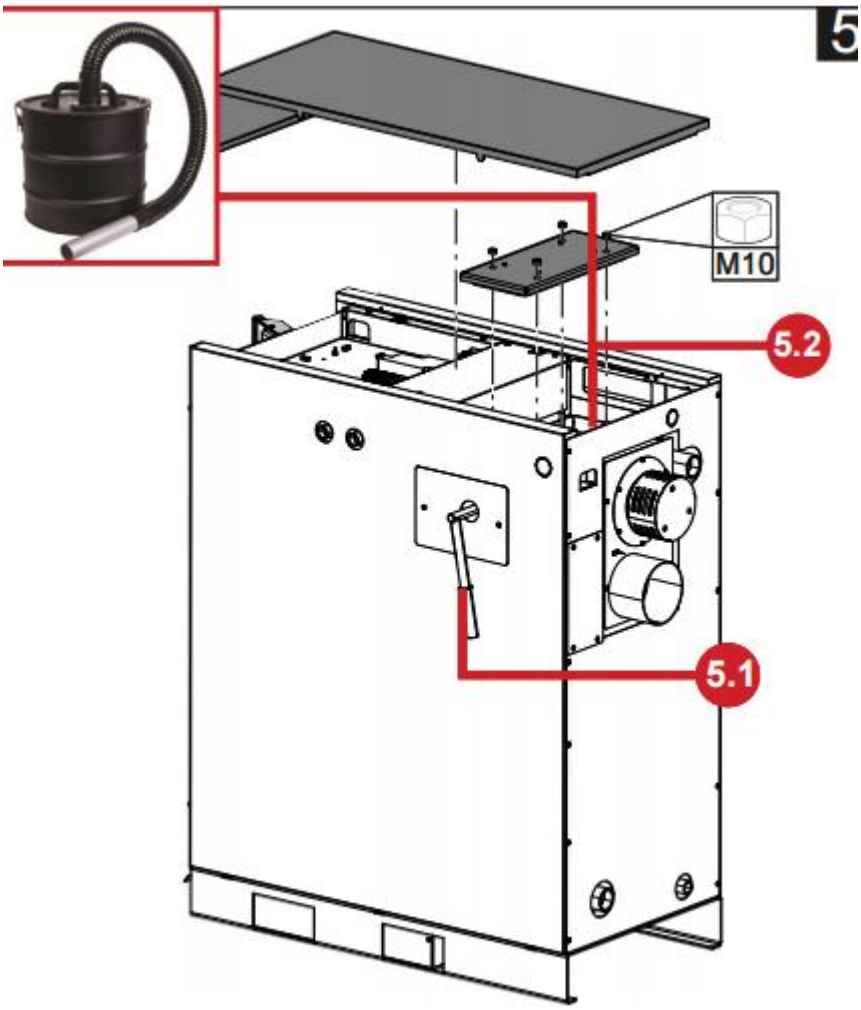



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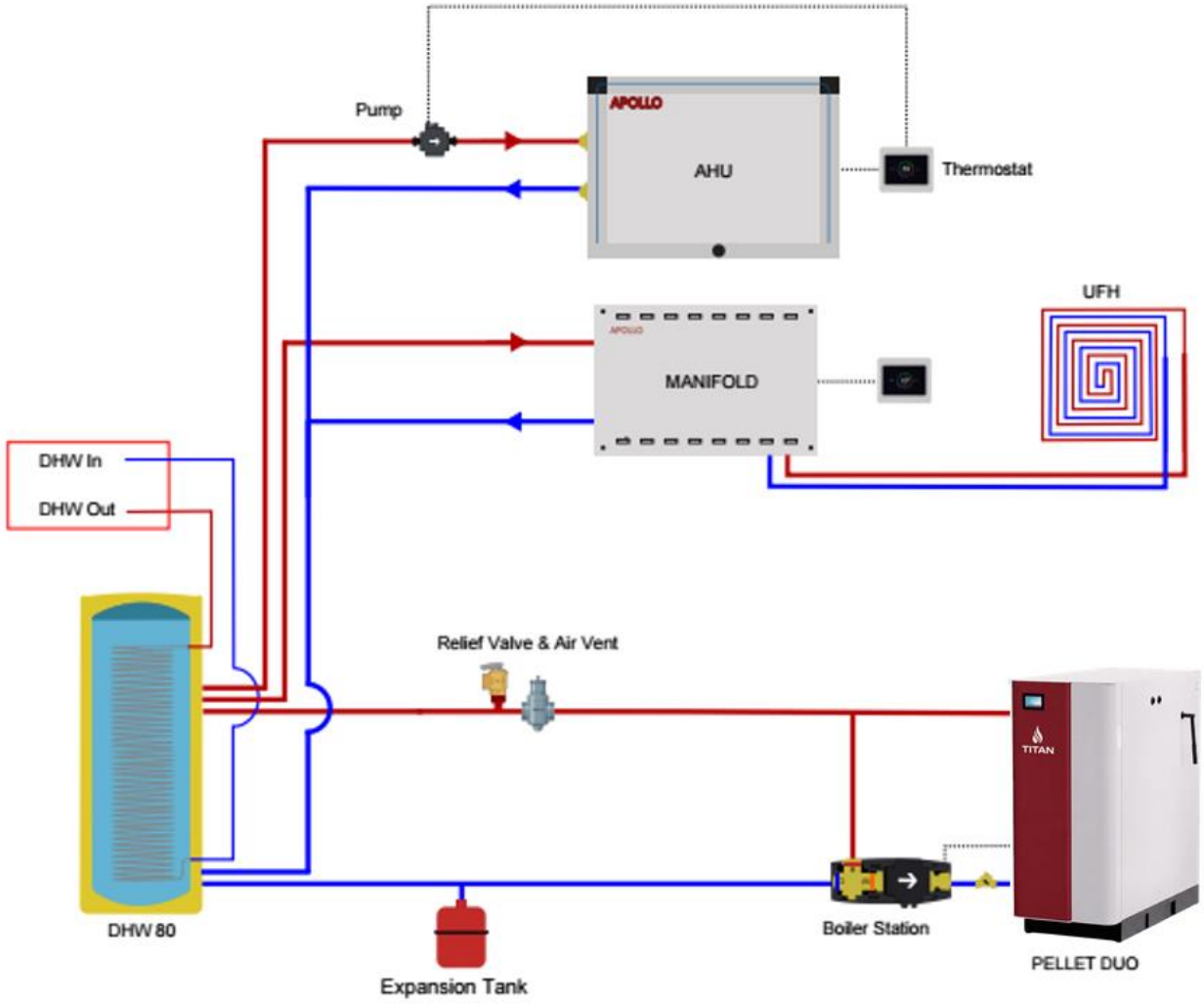
2. Hopper, Component Enclosure and Ceramic Glass Cleaning

1. Vacuum out accumulated wood pellet dust from the bottom of the fuel hopper to avoid auger motor binding.
2. Slide out the modular lower ash tray drawer, empty it into an airtight metallic waste bin, and vacuum out the surrounding inner dust compartment.
3. Wipe down the fire door viewing glass using a soft, non-abrasive microfiber cloth to ensure visibility of the internal flame core.

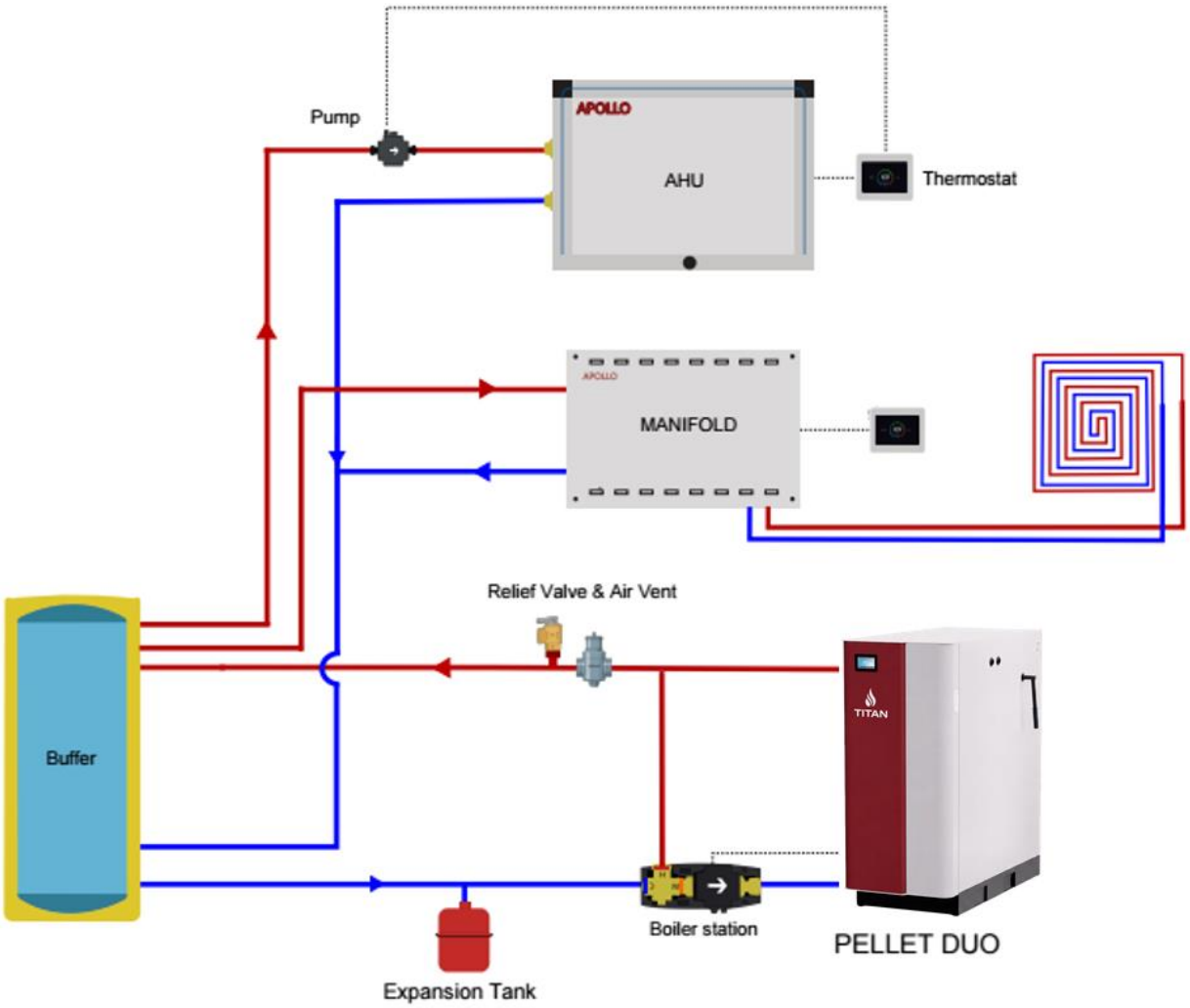


8. Schematics

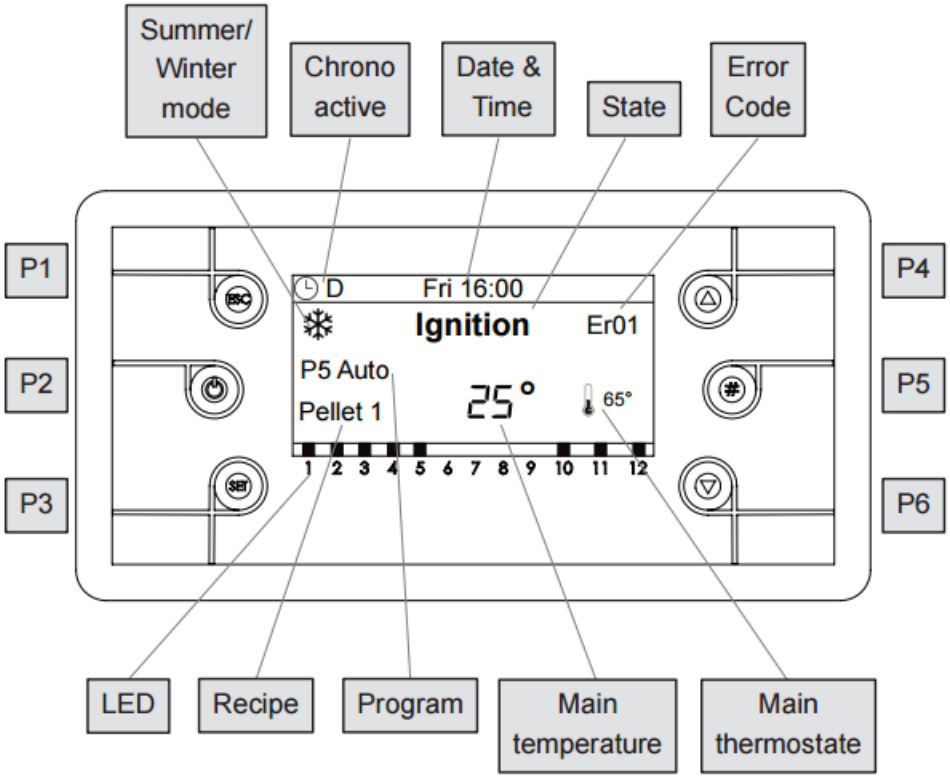
Option 1: Pallet DUO + DHW + AHU + Radiant



Option 2: Pallet DUO + BUFFER + AHU



9. Display



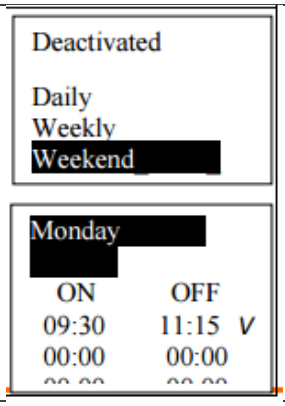
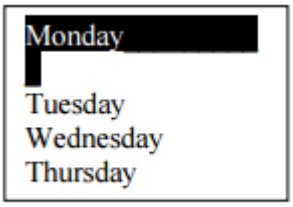
Button	Function
P1	Exit Menu/Sub-menu
P2	Ignition and extinguishing (push for 3 seconds), Reset errors (push for 3 seconds), Enable/Disable Chrono
P3	Enter in User Menu 1/sub-menu, Enter in User Menu 2 (push for 3 seconds), Save data
P4	Enter in Visualizations Menu, Increase
P5	Enable Chrono time slot
P6	Enter in Visualizations Menu, Decrease

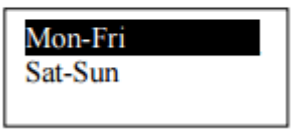
LED	Function	LED	Function
D1	Igniter ON	**D9**	Auger On
D2	Auger ON	**D10**	Lack of material in the tank
D3	Pump ON	**D11**	Room Thermostat/Remote Keyboard room thermostat reached
D4	V2 ON Output	**D12**	Domestic Hot Water Demand

9.1.1 Menu

1. **User Menu 1**

Power	**Combustion** By entering this menu you can modify the combustion power of the system. It is possible to set it in automatic or manual mode: in the first case the system selects the combustion power, in the second case the user selects the desired power.
	Heating By entering this menu you can modify the heating power. It is possible to set it in automatic or manual mode: in the first case the system selects the combustion power, in the second case the user selects the desired power. If no output has been set as Heating Fan or if you set the parameter A04 = 1 the menu is not displayed.
Thermostats	**Boiler** Menu to change the value of the Boiler Thermostat. The minimum and the maximum value can be programmed by setting the related Thermostats Th26 and Th27.
	Local Room This menu allows you to modify the value of the Room Thermostat. It is displayed only if an input has been set as Room Probe or if the radio control 2Ways2+ has been enables or if a TriKey is included.
	DHW This menu allows you to modify the DHW Thermostat. It is displayed if an input has been set as DHW/Buffer tank Probe and a hydraulic system including a DHW Buffer tank has been selected.
	Buffer Tank This menu allows you to modify the value of the Buffer tank Thermostat. It is displayed if an input has been set as DHW/Buffer tank Probe and a hydraulic plant including a Buffer tank has been selected.

<table>
<tr><td>Recipe</td><td colspan="2">This Menu allows the selection of the Combustion Recipe; if you set the parameter P04 = 1 the menu is not displayed.</td></tr>
<tr><td rowspan="3">Chrono</td><td colspan="2">It allows you to program and able the Ignitions/Extinguishings of the system. It is formed by 2 submenus.</td></tr>
<tr><td>Mode
It allows you to select the mode of your choice, or to disable all the schedules.
• Enter in edit mode by clicking P3
• Select the mode (Daily, Weekly or Weekend)
• Enable/disable the Chrono mode by clicking P2
• Save the new settings with the key P3</td><td>
</td></tr>
<tr><td>Program
The system includes three type of programming: Daily, Weekly, Weekend. After selecting the program of your choice:
• Select the programmed time clicking P6 or P4 (P5 or P4 for K100)
• Enter the edit mode (the selected time blinks) with the button P3
• Edit the times clicking P6 or P4 (P5 orP4 for K100)
• Save the new settings with the button P3
• Enable (a “V” is displayed) or disable the time slot (a “V” is not displayed) pushing the key P5 (P2 per la K100)
Daily
Select the day of the week of your choice and set the ignition and extinguishing times.
Program across midnight
Set the ON time of the previous day to the value of your choice:
Ex. 20.30
Set the OFF time of the previous day to 23:59
Set the ON time of the following day at 00:00
Set the OFF time of the following day to the value you prefer: Ex. 6:30
The system will turn on Tuesdays at 20.30 p.m. and will be extinguished on Wednesdays at 6.30 a.m.
Weekly
The programs are the same for all the days of the week.</td><td>


</td></tr>
</table>

	Weekend Choice between the slot Monday-Friday and Saturday-Sunday and set the Ignition and Extinguishing times	
Refill	This Menu allows you to calculate the used fuel and the amount of remaining pellet in the tank. You have 4 charge levels: 100% (full tank), 75%, 50%, 25%, and 0 (disabled function). For a correct functioning the manufacturer has to set the parameters P111 and P112.	
Soft Mode	Menu to switch on and off the Soft Mode. The menu is displayed if at least one of the parameters P61, P62, P63, P64, P65, and P66 is set to a value different from zero.	
Loading	The procedure activates the manual pellet loading and will stop automatically after 300 seconds. The system must be in Off for the function can be activated. Only for local control panel.	
Loading Test	Use this procedure to set the value of the parameter P112 of the Refill function. The procedure allows you to calculate the amount of pellet used in 10 minutes with the auger value of P05/2. The system must be into Off to carry out the measurement.	
Remote Keyboard (only for remote control panel; it is displayed if A52 > 0)	**Activation Thermostat** It allows switching on/off the Room Thermostat functioning. **Room Thermostat** Menu to modify the remote keyboard Room Thermostat value	

10. Troubleshooting Guide

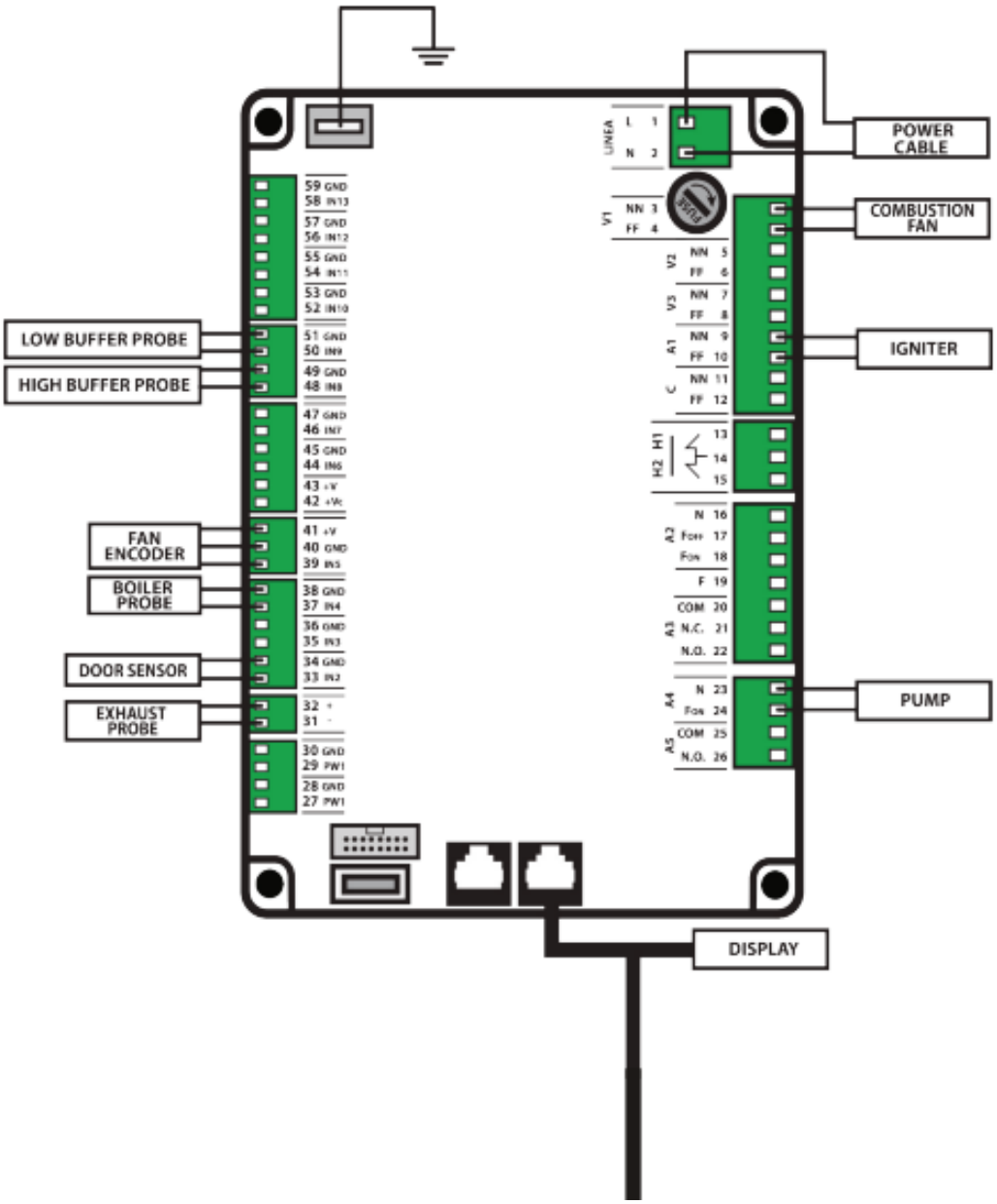
Error Code	Reason	Solution
Er01 High voltage error1	The temperature of the water is above the maximum for safety.	Boier will automatically turn off. Wait for it and check the water pump for malfunction. Check water safety protection and reboot it by pressing it. This error will not disappear or let you start the product before that.
Er02 High voltage error2	High temperature in the pellet hopper caused by poorly cleaned fire pot, sensor malfunction or backfire to the fuel bunker by any reason.	Fallow the cleaning procedure described in this manual and check for stuck fuel. If the error continues contact your technician.
Er03 Low flue gases temperature	Poor quality pellets, lack of pellets in the hopper, wet pellets.	Check the quantity and quality of the pellets. Check the fuel pot for clogging and the fuel bunker for dust.
Er04 High water temperature in the water jacket	Pressure drop in the installation. Circulation pump malfunction. Badly vented installation.	Check the system for leaks. Check the circulation pump. Check if there is something blocking the air inlet at the room.
Er05 High flue gas temperature	Uncleaned boiler. Sensor malfunction.	Fallow the cleaning procedure described in this manual. If this does not help contact your technician.
Er07 Encoder error	Encoder does not receive signal or fan failure. Broken encoder.	Check the fan cable for damage. Try to disconnect and connect the fan cable.
Er08 Encoder fan error. Fan speed control failed.	The fan cannot reach the set speed. Defective fan. Problem with the electronics. Low voltage of the power grid.	Check the fan cable for damage. Try to disconnect and connect to power grid.
Er09 Low system pressure	The pressure in the system is lower than the minimum for normal exploitation.	Check the water level in the system. Check for leaks.

Error Code	Reason	Solution
Er10 High system pressure	The pressure in the system is higher than the maximum for normal exploitation.	Check the system.
Error Code	**Reason**	**Solution**
Er11 Electronics get wrong data.	Due to a power failure the clock and date are not correct. Failure in the electronics.	Set the time and date correctly.
Er12 Ignition failed.	Igniter malfunction. Lack of pellets. Uncleaned fuel pot. Need of adjustment.	Visual inspection of the burning pot during start. Check the pellets quantity and if there is something blocking their way going down. Fallow the cleaning procedure described in this manual for the fuel pot.
Er15 No power supply	Power failure during operation.	Clear the error and check if the pot is clean to continue the work process.
Er16 Error RS485 Communication connection	Faulty connection of the control board with the display or damaged cable between them.	Check the plug and the cables between the control board and the display.
Er23 Water temperature sensor.	Some of the temperature sensors of the stove or buffer is malfunctioning.	Check the sensors are in order. Check their connection to the board.
Er41 Minimum airflow.	Open door. Uncleaned boiler. Blocked or missing draft in the chimney.	Check the door and the seal on it. Fallow the cleaning procedures described in this manual.
Er42 Maximum airflow reached	High pressure in the chimney.	Check the airflow sensor and the fresh air pipe. Please avoid to connect the fresh air pipe to exterior without a proper cap in the end.

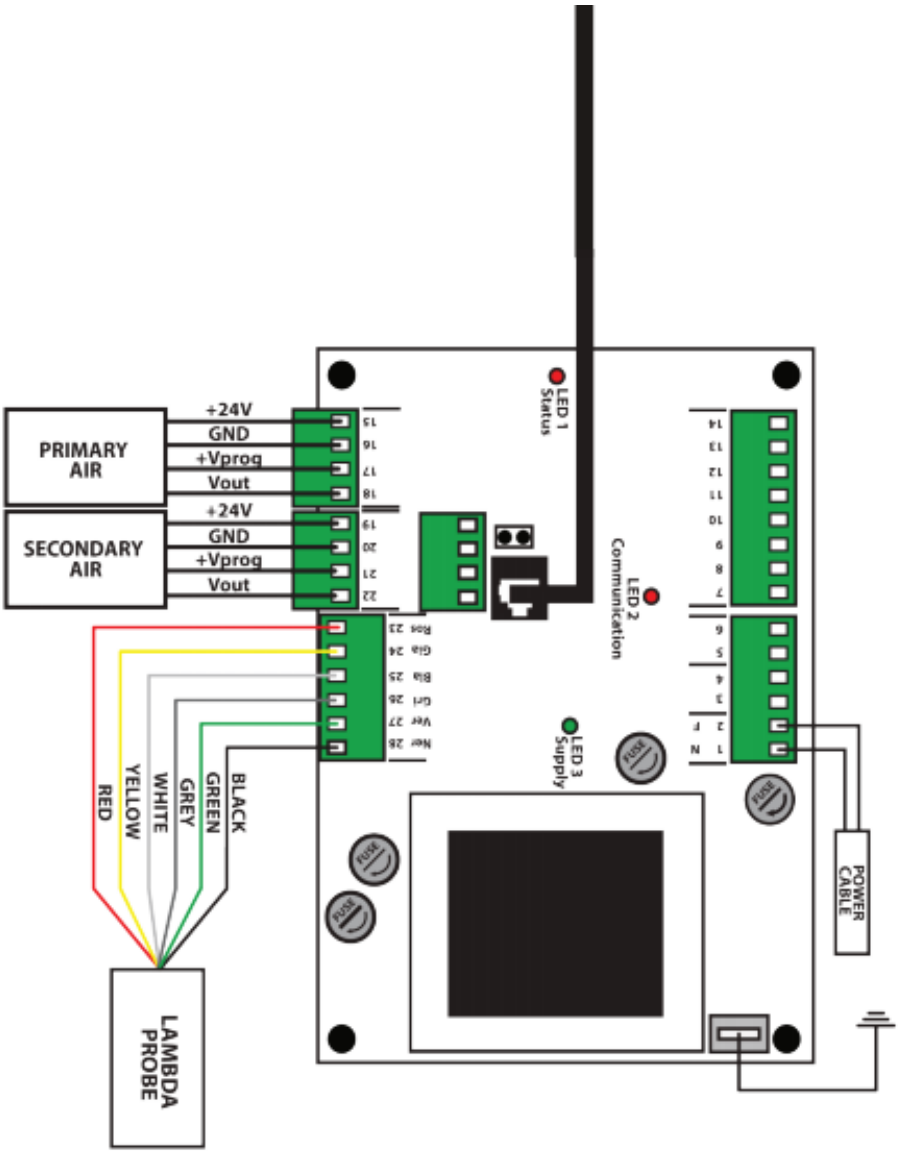
10.1 Alarms

Description	Code LCD and K
Safety Thermostat Intervention HV1: signaling even when the stove is off.	Er01
Intervention of the Safety Pressure Switch HV2: signalling with Combustion Fan On.	Er02
Extinguishing for exhaust flue gas temperature decrease.	Er03
Extinguishing for water over temperature.	Er04
Extinguishing for exhaust flue gas over temperature.	Er05
Pellet Thermostat open (backdraft in the brazier).	Er06
Combustion Fan Encoder: lack of Encoder signal (if P25 = 1 or 2).	Er07
Combustion Fan Encoder: failed speed regulation (if P25 = 1 or 2).	Er08
Low water pressure (the error is not reported if the system is in Off or Block state and P1 Pump is Off).	Er09
Water over pressure.	Er10
Date/Time values are not correct due to a continuous lack of voltage power supply.	Er11
Failed Ignition.	Er12
Lack of voltage.	Er15
Communication Error RS485.	Er16
Failed Air Regulation.	Er17
Lack of fuel.	Er18
Boiler Probe or DHW/Buffer tank Probe open.	Er23
Cleaning Motor broken.	Er25
Flow meter broken.	Er39
Min air flow in Check Up (FL20) or in Run mode and Modulation (FL19) not reached.	Er41
Max Air Flow overreached (FL40).	Er42
Door Error.	Er44
Auger Encoder: lack of Encoder signal (if P81 = 1 or 2).	Er47
Auger Encoder: failed speed regulation (if P81 = 1 or 2).	Er48
Service Error. It reports the achievement of the planned operation hours in the ‘Maintenance 1’ function (parameter T66). It is necessary to call for service.	Service Er40

11. Control Board Wiring Diagram



Control Board Wiring Diagram Contd...



12. Storage and Disposal

12.1 Disposal of Package

The package of the appliance consist of wood, cardboard and plastic wrap. They should be separated and disposed according to local regulations.

12.2 Not used for idle Periods

- If the boiler is not used for a long period (and/or at the end of each season), proceed as follows:
- Disconnect the power supply.
- Clean following the procedures in this manual and check for damaged parts. Get them replaced by qualified personnel.
- Protect the boiler from dust with suitable covering.
- Store in dry and sage place protected from atmospheric agents.

12.3 Disposal of the Appliance

Follow the operations below for boiler decommissioning:

- Disconnect the boiler from the power supply and unplug it from the socket.
- Empty any left fuel and ash
- Dispose of the boiler as required by the regulations in force in the country of installation.

Scrapping and disposal of the appliance are the sole responsibility of the owner, who must act in compliance with the applicable laws in the country, regarding safety, respect and protection of the environment. At the end of its useful life the product must not be disposed of together with municipal waste. It can be taken to the appropriate recycling centers set up by the municipalities, or to retailers that provide this service. Disposing of the product separately avoids possible negative consequences for the environment.

In particular, the electrical and electronic components must be separated and disposed of at centers authorized for this activity.

13. Warranty

This boiler is covered by a five (5) year warranty on the boiler and a one (1) year warranty on components and parts, starting from the date of installation. The warranty covers defects in materials and workmanship under normal use, provided the boiler is installed, operated and maintained as described in this manual. It does not cover damage caused by improper installation, misuse, lack of regular maintenance, unsuitable fuel or repairs and changes made by anyone other than an authorized service technician.

TITAN

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