



**SOLZAIMA**

BIOMASS HEATING SOLUTIONS

# **Instruction Manual**

**English**

## **TEK Free Standing Fires**

**TEK Basic | TEK Stone | TEK Round**

**TEK Unit | TEK Roll | TEK System**

**TEK Corner | TEK Wall | TEK Lumber**

**Thank you for purchasing a SOLZAIMA appliance.**

**Please read this manual carefully and retain it for future reference.**

\* All products here detailed meet the requirements of the EU Construction Products Regulation (No. 305/2011) and bear the **EC** conformity marking;

\* SOLZAIMA disclaims any responsibility for damage to the unit when installed by non-qualified personnel;

\* SOLZAIMA disclaims any responsibility for damage to units not installed and operated in compliance with the instructions included in this manual;

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

\* SOLZAIMA **free standing fire units** are tested and found to be in compliance with the EN 13240:2002 + EN 13240:2002/A2:2005 + EN 13240:2002/AC:2006 + EN 13240:2002/A2:2005/AC:2006 standards;

\* Technical support is normally provided by SOLZAIMA, except in special cases to be determined by the installer or support technician;

\* For assistance, please contact the unit's supplier or installer. Please provide the unit serial number, which can be found on the identification plate located on the back of the unit, as well as on the sticker posted on the back cover of this manual.

You may contact us via email, using the following address: [apoio.cliente@solzaima.pt](mailto:apoio.cliente@solzaima.pt).

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# 1. Solzaima

Solzaima's vision has always been to provide clean, renewable and more cost-effective energy. This is why we have been manufacturing biomass units and heaters for the past 40 years.

As a result of the persistence and unconditional support from a network of partners, Solzaima is currently the leading manufacturer of biomass heating units, especially with its range of central heating stoves with backboilers.

We provide approximately 20000 homes a year with biomass heating solutions. This market has been growing at annual rate of 20%, indicating that consumers are becoming increasingly aware of ecological and more cost-effective heating solutions.

Solzaima is the only Portuguese manufacturing company to have obtained ISO 9001 International Quality Certification and ISO 14001 International Environmental Certification– because we believe in high standards and aim to lead by example.

## 2. Technical specifications

Solzaima's **free standing fires** are designed as interior heating appliances. These units are easy to install and do not require any kind of finishing, thus promoting their seamless integration with the room setting.

\* Technical specifications across the free standing fire range:

- \* CE approved

- \* Fuel: Dry firewood

- \* Type of Equipment: Intermittent

\* The combustion chamber and external casing of all our free standing fires are made of first-rate carbon steel plate, with thicknesses varying between 4 mm and 1.5 mm, respectively.

\* Heat-resistant ceramic glass. Withstands continuous operation temperatures of up to 750°C;

\* Coated with heat-resistant paint for temperature peaks up to 900°C and operating temperatures of around 600°C;



Fig. 1 – Free standing fires: (A) Tek Basic, (B) Tek Stone, (C) TekRound, (D) Tek Unit, (E) Tek Roll, (F) Tek System, (G) Tek Corner, (H) Tek Wall, (I) Tek Lumber

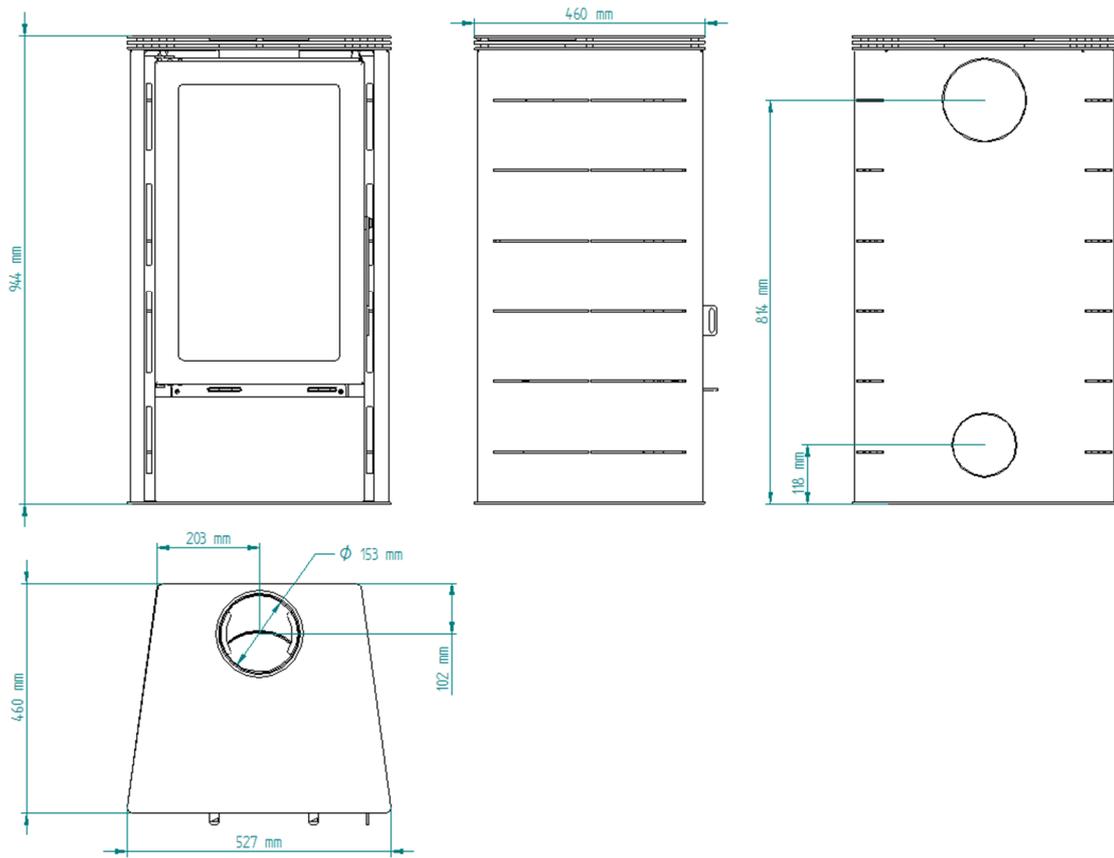


Fig. 2 – Dimensions of the Tek Basic model

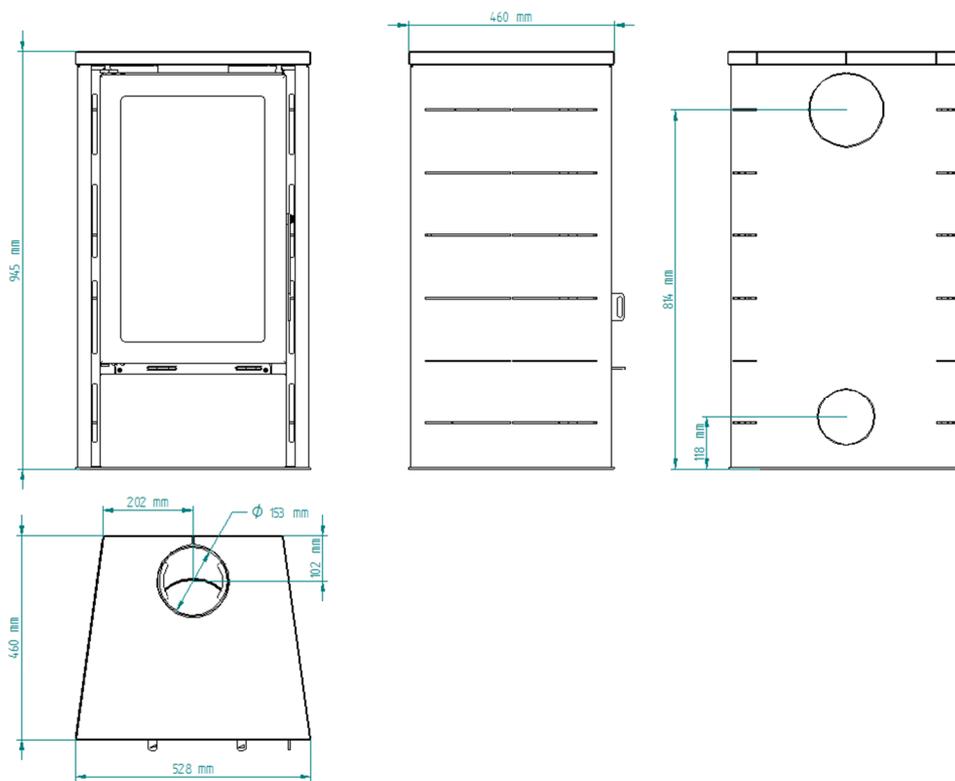


Fig. 3 – Dimensions of the Tek Stone model

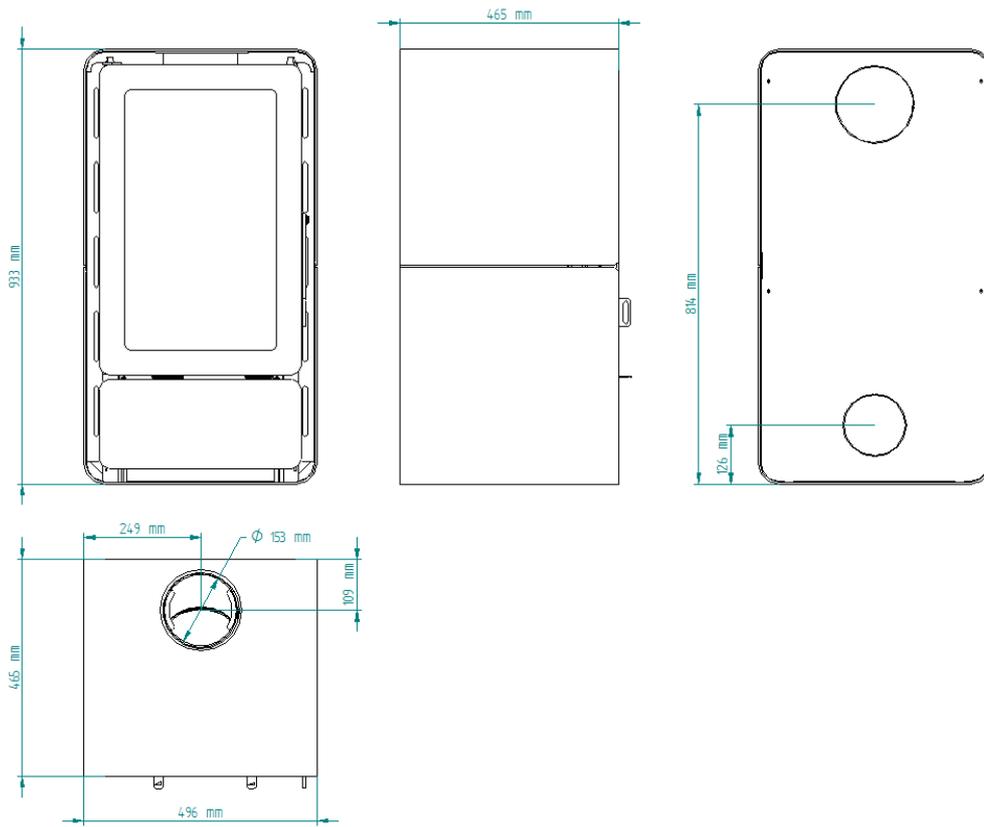


Fig. 4 – Dimensions of the Tek Round model

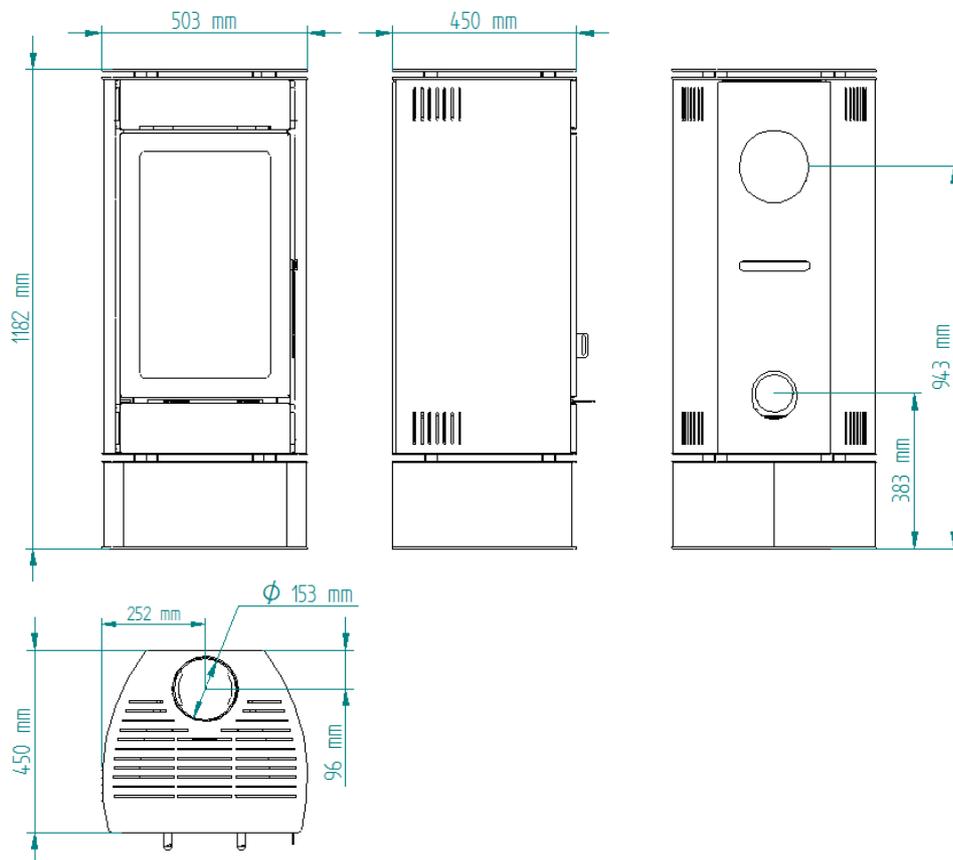


Fig. 5 – Dimensions of the Tek Unit model

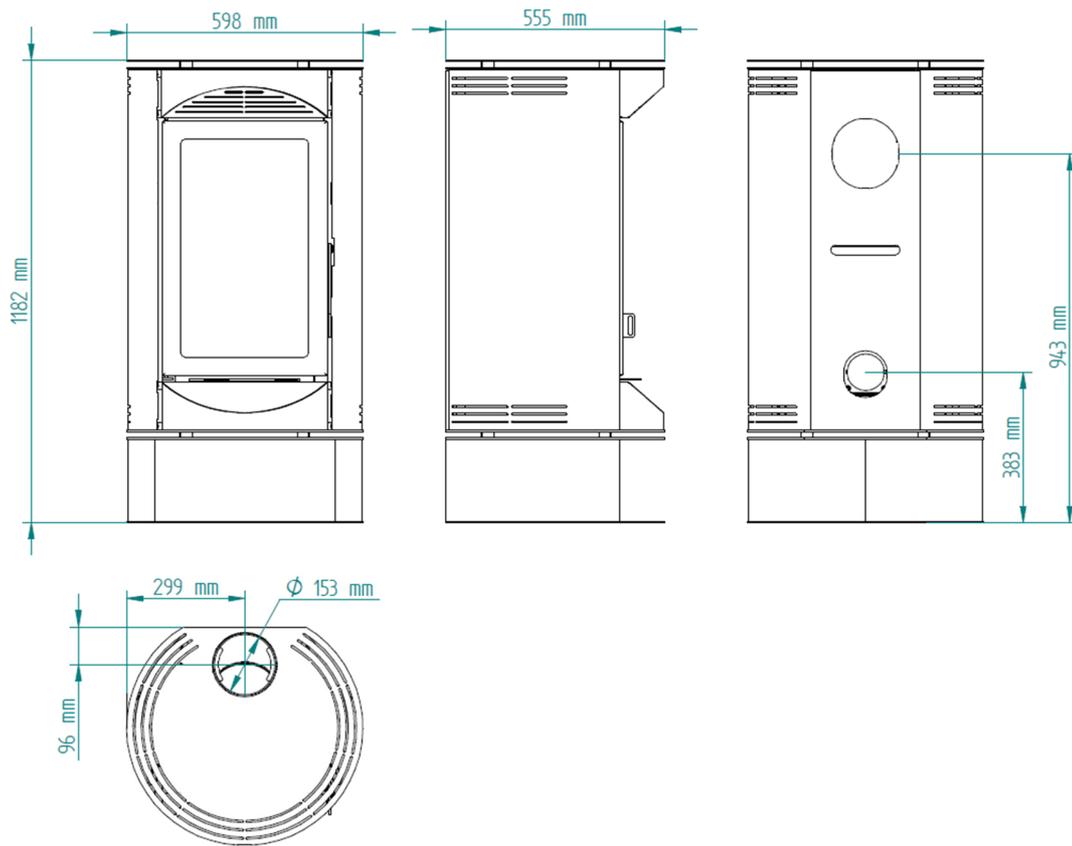


Fig. 6 – Dimensions of the Tek Roll model

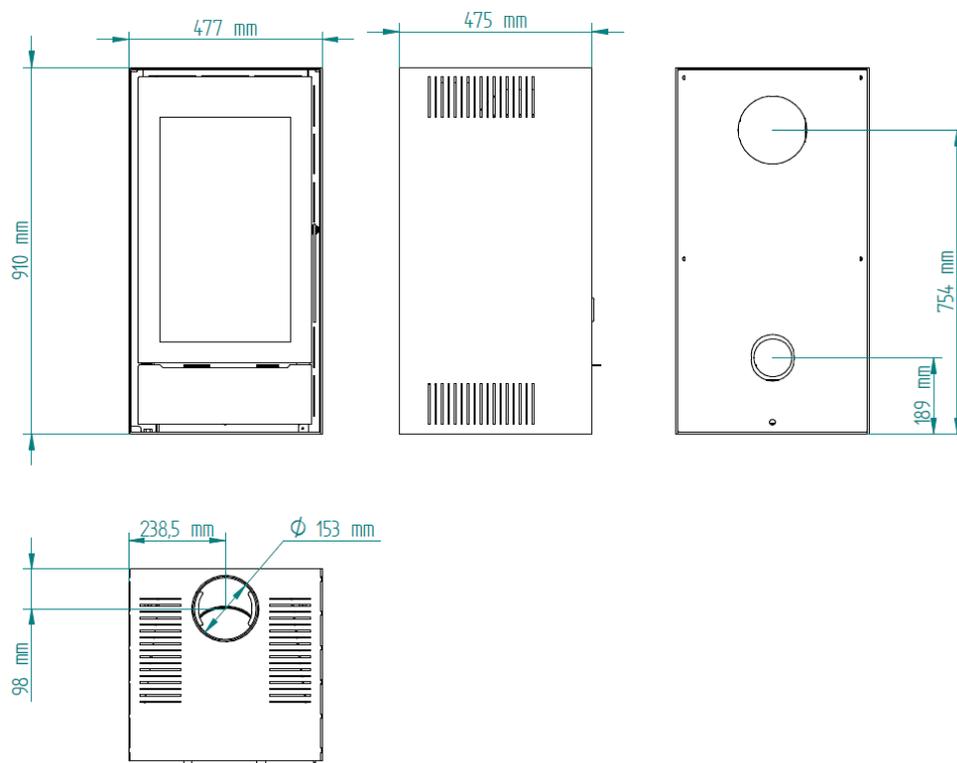


Fig. 7 – Dimensions of the Tek System model

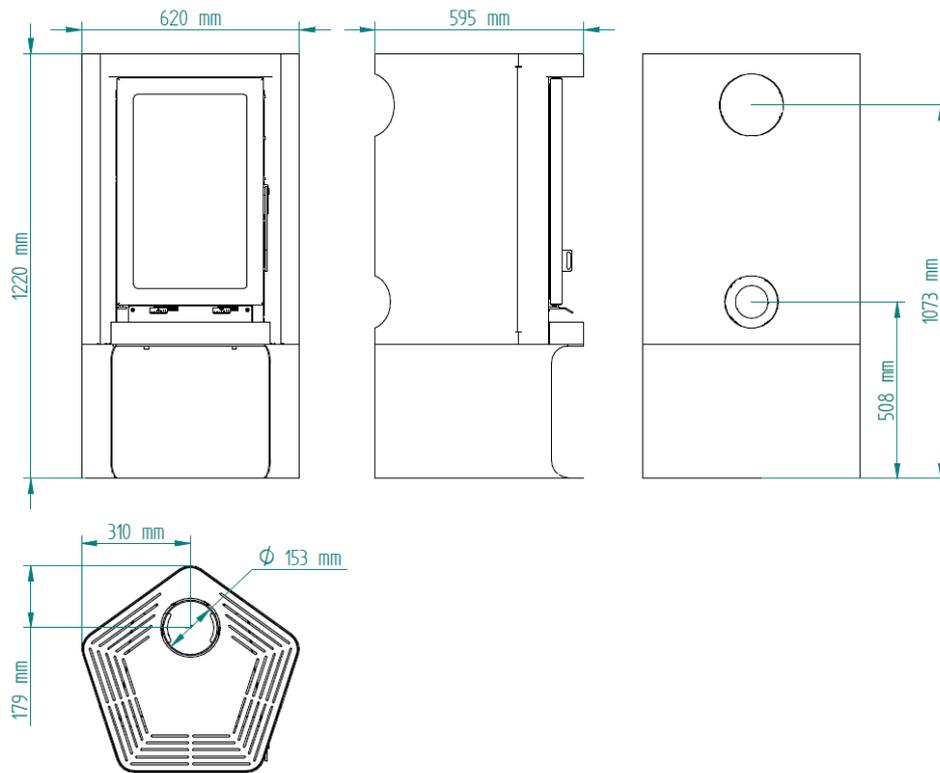


Fig. 8 – Dimensions of the Tek Corner model

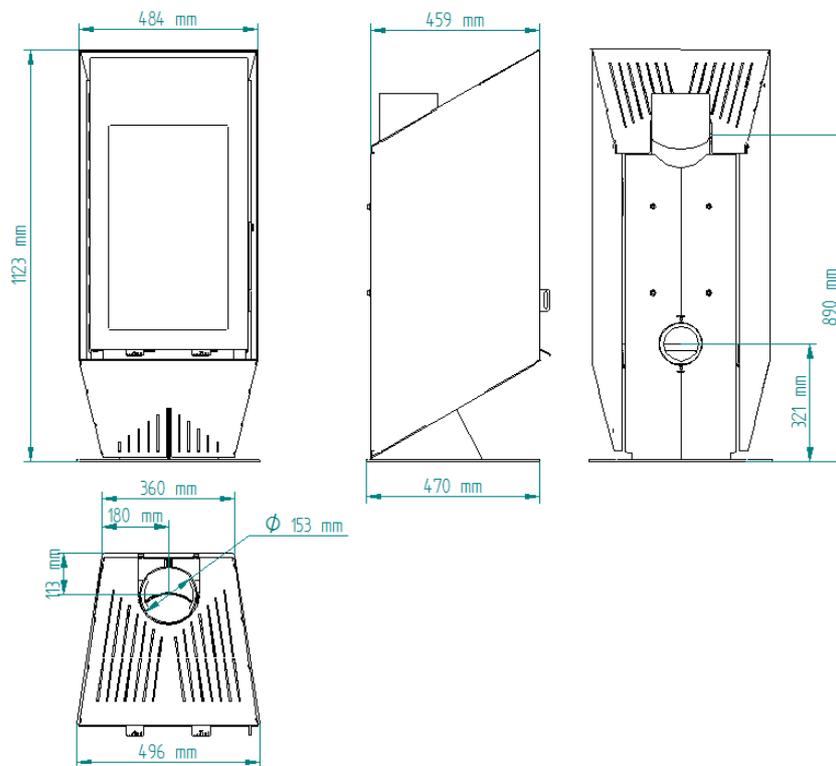


Fig. 9 – Dimensions of the Tek Wall model

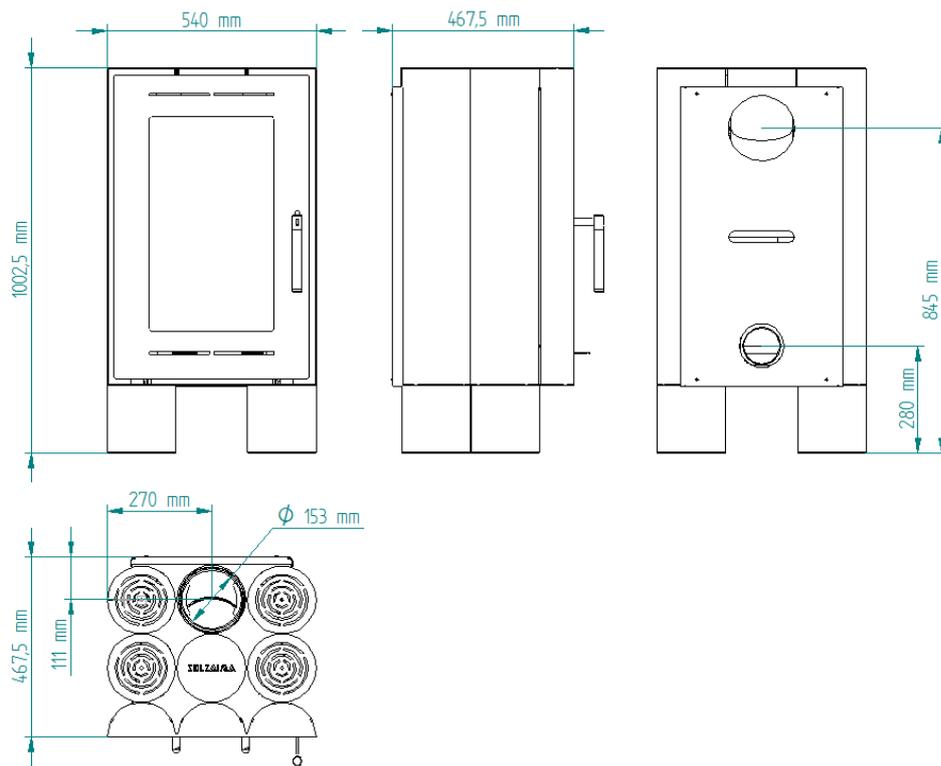


Fig. 10 – Dimensions of the Tek Lumber model

Features	Tek Basic	Tek Stone	Tek Round	Tek Unit	Tek Roll	Tek System	Tek Corner	Tek Wall	Tek Lumber
Flue Ø (mm)	Ø 150	Ø 150	Ø 150	Ø 150					
Rated power (kW)	7,3	7,3	7,3	7,3	7,3	7,3	7,3	7,3	7,3
Performance (%)	81	81	81	81	81	81	81	81	81
CO emission (13%O <sub>2</sub> ) (%)	0,073	0,073	0,073	0,073	0,073	0,073	0,073	0,073	0,073
CO emission <sub>2</sub> (vol.-%)	8,67	8,67	8,67	8,67	8,67	8,67	8,67	8,67	8,67
Average temperature of combustion products (°C)	223	223	223	223	223	223	223	223	223
Combustion flow (g/s)	7	7	7	7	7	7	7	7	7
Weight (kg)	94	96	123	109	122	120	129	117	117
Maximum heated volume (m <sup>3</sup> )	215	215	215	215	215	215	215	215	215
Firewood length (mm)	300	300	300	300	300	300	300	300	300
Power (kW)	5,1 – 9,5	5,1 – 9,5	5,1 – 9,5	5,1 – 9,5	5,1 – 9,5	5,1 – 9,5	5,1 – 9,5	5,1 – 9,5	5,1 – 9,5
Firewood consumption (kg/h)	1,1 – 2,1	1,1 – 2,1	1,1 – 2,1	1,1 – 2,1	1,1 – 2,1	1,1 – 2,1	1,1 – 2,1	1,1 – 2,1	1,1 – 2,1

Table 1– Technical specifications of each free standing fire model

### 3. Unit components

#### 3.1. Components

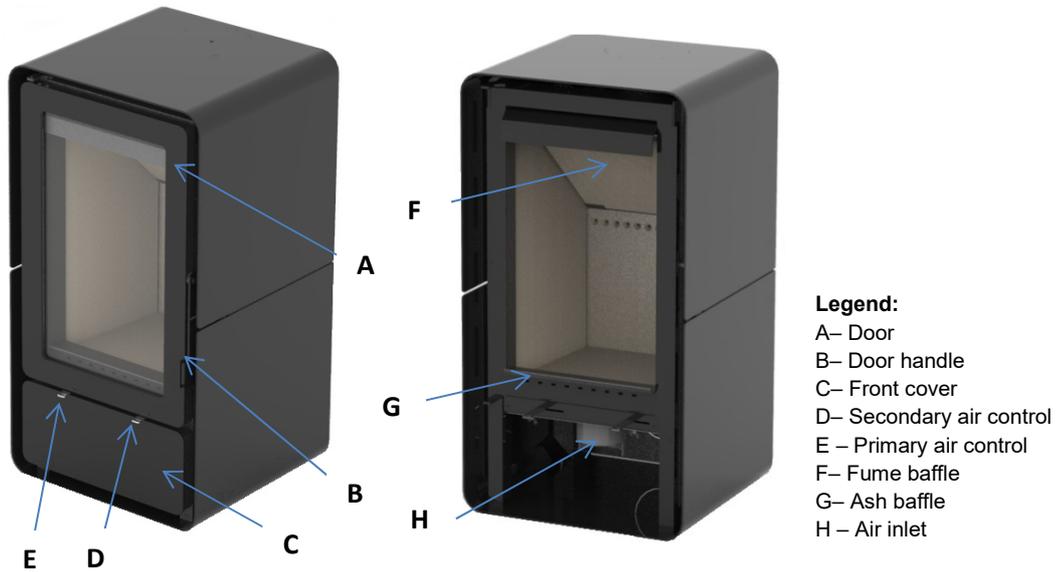


Fig. 11 – Tek Round model components

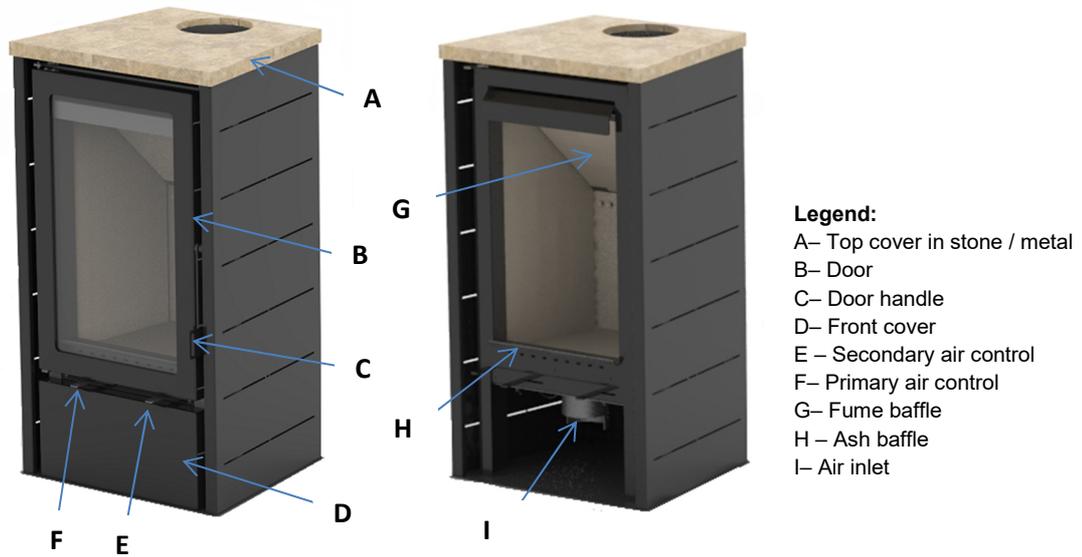


Fig.12 – Tek Basic and Tek Stone model components

## 3.2. Optional features

### 3.2.1. Vertical/horizontal fume outlet

All our free standing fire models can be provided with either a horizontal OR vertical fume outlet, at the client's choice. Please note that this unit comes pre-installed with the vertical option.

To change the fume outlet initial vertical position to the horizontal position, please follow these steps:

#### TEK Basic and TEK Stone models:

- 1- Remove the top cover of the unit by sliding it horizontally and backwards to place the guide pins in their rearmost position. With the pins in this position, carefully lift and remove the top cover. For the "Tek Stone" model, just carefully lift the top cover and remove it away from the unit. The stone cover is fixed in position on the top of the unit by its own weight;



Fig.13 – Removing the top metal cover

- 2- Remove the fume baffle (as described in section 9.2 under the "Cleaning and Maintenance" chapter) taking care not to damage any of the vermiculite plates;
- 3- On the rear side of the stove, open the section corresponding to the horizontal fume outlet. To do this, use cutting pliers to cut off the mini-joints that secure this section to the external casing of the unit;

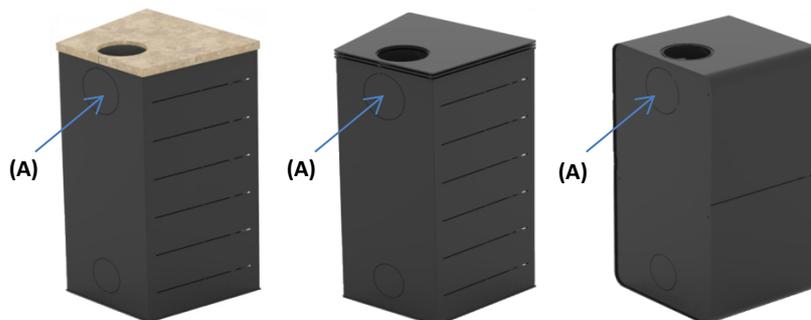


Fig. 14 – Rear view of each model; (A) Section to be removed before changing the fume outlet to the horizontal position.

- 4- In the inner roof of the combustion chamber, unfasten the 6 screws using a socket head hex wrench to release the fume outlet;

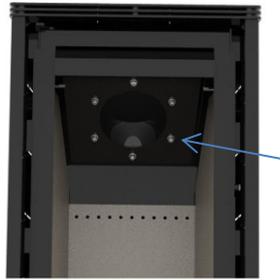


Fig. 15 – Fume outlet retaining screws

- 5- Reposition the fume outlet so that it spans horizontally through the external cover across the section you cut off previously in the casing;



Fig. 16– Fume outlet placed horizontally

- 6- Refasten the screws to the inner roof of the chamber to secure the fume outlet in the horizontal position;
- 7- Replace the fume baffle and top cover by following the steps above in reverse order;
- 8- Use the additional cover provided (metal sheet for the Tek Basic model, and stone cover for the Tek Stone model) to cover the section left open on the top of the unit resulting from the repositioning of the fume outlet. For the Tek Stone models, you must attach the additional support to the unit's external casing before using the additional cover (Fig.17-[A]). Secure the support in position using the screws provided (Fig.17-[B]).



Fig. 17– Attaching the cover support - TEK Stone model

### TEK Round model:

- 1- Release the external cover from the rear of the unit by unfastening the 4 screws. Next, lift up the cover, releasing it from the supporting props on the back of the unit;
- 2- Remove the fume baffle (as described in section 9.2 under the "Cleaning and Maintenance" chapter) taking care not to damage any of the vermiculite plates;
- 3- On the rear cover of the stove (previously removed), open the section corresponding to the horizontal fume outlet. To do this, use cutting pliers to cut off the mini-joints that secure this section to the external casing of the unit;
- 4- In the inner roof of the combustion chamber, unfasten the 6 screws using a socket head hex wrench to release the fume outlet;
- 5- Place the fume outlet in a horizontal position;
- 6- Refasten the screws to the inner roof of the chamber to secure the fume outlet in the horizontal position;
- 7- Replace the fume baffle by following the steps above in reverse order;
- 8- Reattach the rear cover by fitting the lower wedges into the grooves at the bottom of the unit. Next, refasten the 4 screws you previously removed;
- 9- Using the additional cover provided, block the section left open on the top of the unit resulting from the repositioning of the fume outlet.

### **3.2.2 - Connecting the external air inlet**

#### TEK Basic, Stone and Round models:

If you wish to use the external air inlet, please follow these steps:

- 1- Open the door of the unit, to facilitate the operation;
- 2- Unfasten the screws from the front embellisher plate, taking care not to scratch it;
- 3- On the rear side of the unit, detach the appropriate section to install the external air inlet (see Fig. 18); To do this, use cutting pliers to cut off the mini-joints that secure this section to the casing of the unit;
- 4- Direct the pipe to be used as exterior air intake by sliding it through the rear casing and connect it directly to the air inlet nozzle. Use a metallic bracket to secure the air pipe and ensure perfect sealing;
- 5- Replace the front embellisher plate in its proper position and tighten the retaining screws.

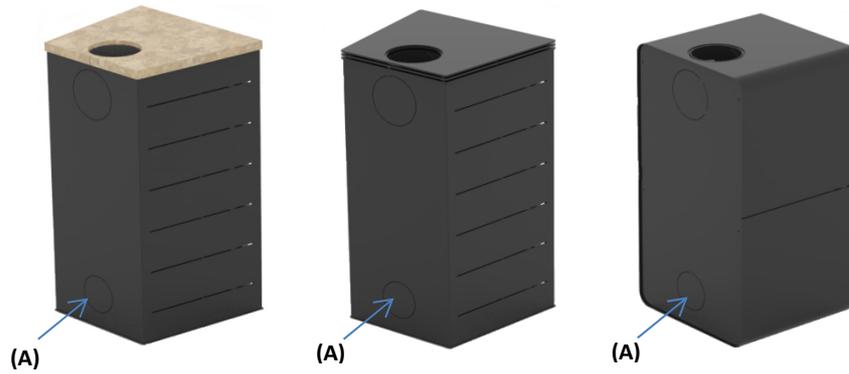


Fig. 18 – Rear view of each model; (A) Section to remove for external air inlet

### Versions Tek Unit, Roll, System, Corner, Wall and Lumber

For versions listed above, this system has to be purchased separately. For installation shall:

- 1 - Access the back of the computer and remove the back cover (A), in cases where it is applied;
- 2 - Place the outside air kit (C) in the oven, using the nuts supplied with the kit;
- 3 - Breaking the micro-connections at the bottom (B) of the cover (A) or in the outer casing of the equipment;
- 4 - Replace the cover (A) on the stove;
- 5 - Using this accessory as a point of connection to the outside ambient air by installing the appropriate pipe for this purpose.

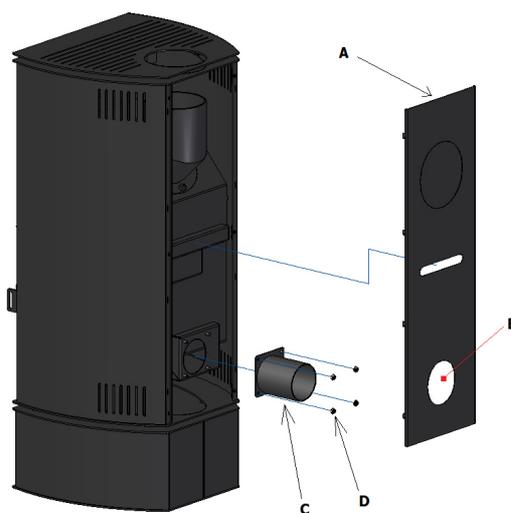


Fig. 19 – Removing section (B) for placement external air inlet (C)

### 3.2.3 – Optional Modules

#### Version Tek Unit

1- Remove the cap installed on the stove (Fig 20 [A]), running diagonally and then raise it to release the clips of equipment;

2 Install the optional module separately purchased by the reverse order that the top cover is removed from the oven, with the same support points (Figure 20 [B]).

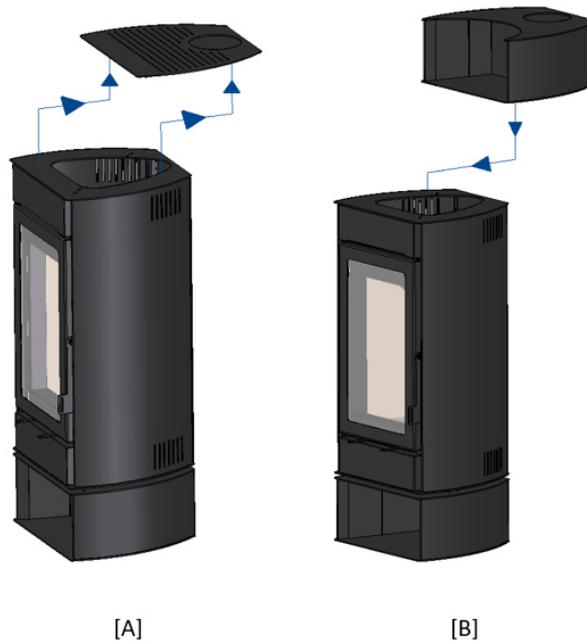


Fig. 20 – [A] Remove stove top; [B] Installation of optional module

#### Version Tek Unit

##### System 1 (Figure 21)

1 - Placement of the module (A) in the desired location and position the stove in the top of the same ensure that the side and the front of the stove are aligned with the side and the front of the module;

2 - Using screws (B) and washers (C) included in the kit, secure the module to the stove through existing holes in the top of the module by the inner part;

### System 2 (Figure 22)

- 1 - Placement of the module (A) in the desired location and position the stove in the top of the same ensure that the side and the front of the stove are aligned with the side and the front of the module;
- 2 - Using screws (C) and washers (D) included in the kit, secure the module to the stove through existing holes in the top of the module by the upper inner part thereof;
3. Remove the container (B) within the module to access the area of the screws fixing the module.

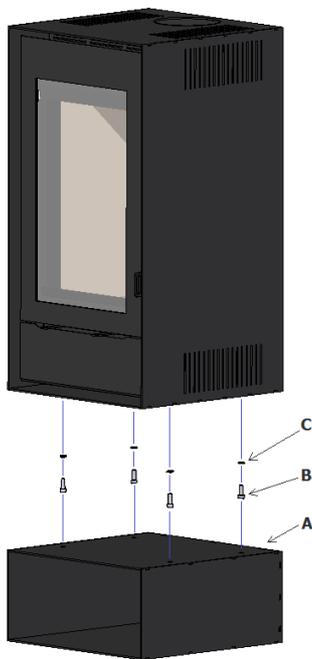


Fig. 21 – Fixing System 1

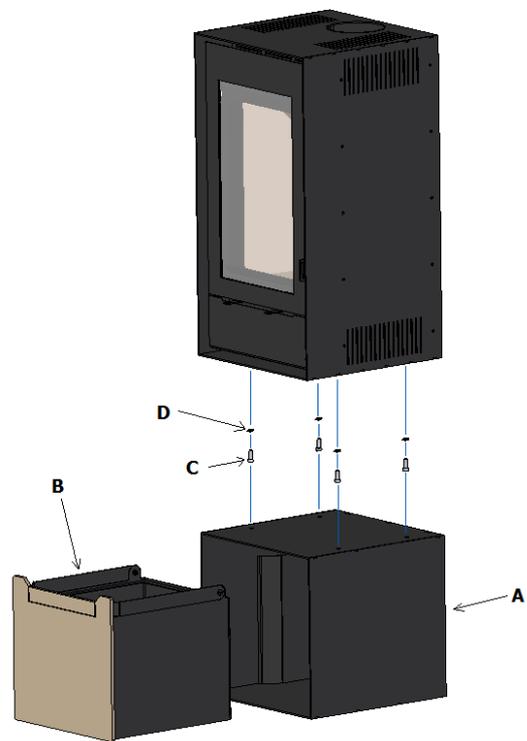


Fig. 22 – Fixing System 2

### System 3 (Figures 23, 24 and 25)

- 1- Placing the module (A) in the desired location and position the stove in the top of the same ensure that the side and the front of the stove are aligned with the side and the front of the module;
- 2- Using the screw (B), washer (C) and security support (D) included in the kit, connect the module to the stove through the existing hole in the top of the module and at the bottom of the stove;

3 - Fixing (D) must get into the groove of the stove and the module, slide laterally between the two components. Then use the screw and washer supplied, tighten the clip to the stove in the nut welded to the bottom of it;

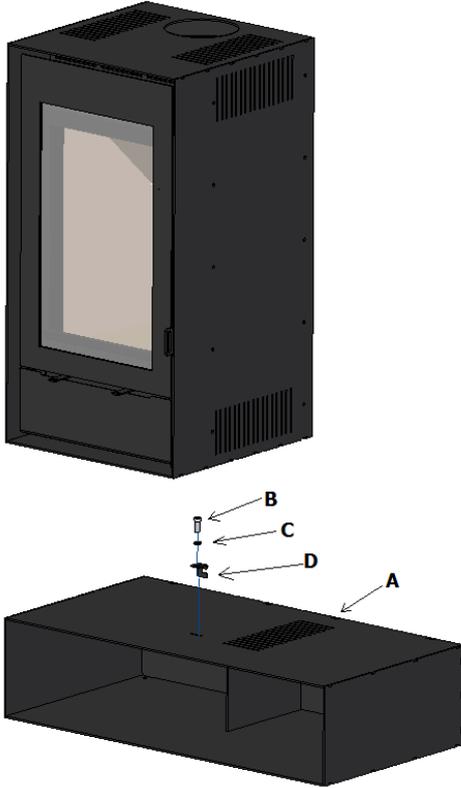


Fig. 23 – Fixing System 3



Fig. 24 – holder System 3

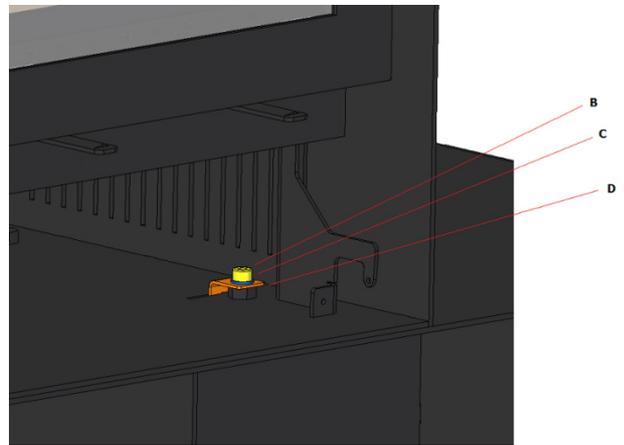


Fig. 25 – Clamp the fastener placement the stove

### Version Tek Wall

To proceed with the installation kit optional wall of this range must follow these steps:

- 1 - Remove the bracket (A) installed on the heater, unscrew the screws (B).  
Warning: When removing the screws, the stove no longer has the support (A) is the only foothold that the stove has the floor. Before removing all the screws should ensure that the stove is safe and will not fall see Figure 26.
- 2 - Install wall bracket (Figure 27 [D]) using the supplied components according to the height at which to place the stove. Use the wall bracket (Figure 27 [A]) as a way to verify the correct position of the supports;

- 3 - Followed must replace the floor support (Fig 26 [A]) for the wall mount (Figure 27 [A]) provided in the kit purchased, using the same screws and washers from the previous operation;
- 4 - Finally, put the stove on the wall brackets (Figure 27 [D]) pre-installed. To do this you must first put the stove in the 2 supports simultaneously and then fit the stove into the slots on both brackets. Figure 28.

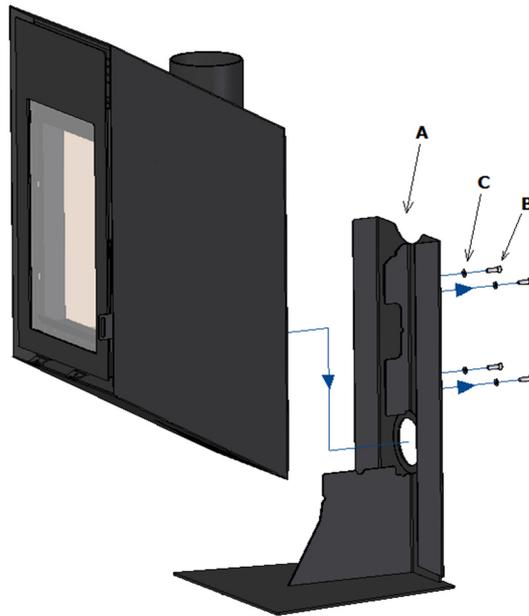


Fig. 26 – Removing floor support

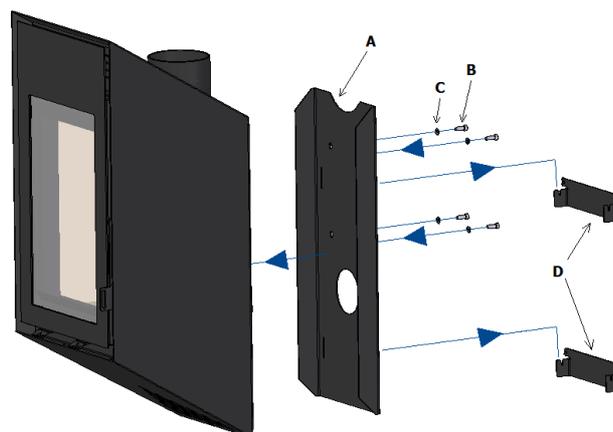


Fig. 27 – Install wall bracket

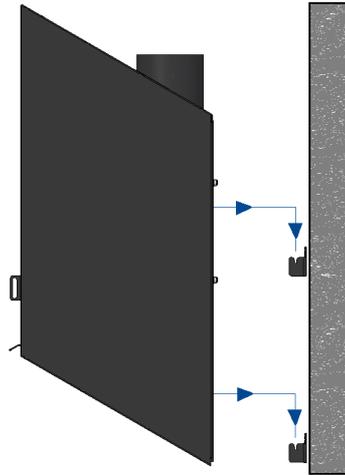


Fig. 28 – Positioning of the stove wall brackets

## 4. Installation

*Warning: when installing this unit, be sure to follow **all** model-specific information, warnings, safety notices and local codes.*

### 4.1. Combustion air and gas circulation

- \* This heating appliance must be installed in a well-ventilated area. Any required air inlet vents must be installed where not prone to becoming blocked;
- \* The air for combustion goes into the unit through the combustion air inlet located at the bottom of the unit. This air flow should be kept clear of obstacles at all times;
- \* Additional air inlets may be needed if the unit is used concurrently with other appliances that require an air supply. The installer should assess this need, according to the existing appliances overall air flow requirements;
- \* The Tek units cannot be installed in areas where air extraction appliances, such as kitchen extractor fans, may operate simultaneously, as this may prevent the correct operation of the unit;
- \* Under rated operating conditions, the circulation of combustion gases should create a draught of 12 Pa about one metre above the chimney throat. For proper installation, at least 2 metres of metal flue tubing, with the same diameter as the unit's smoke outlet, should be fitted vertically above the unit. Additional lengths to this tubing may use piping sections with a max angle of 45°. Figures 29 and 30 illustrate the correct and incorrect angles for pipe elbows, should they need to be installed.

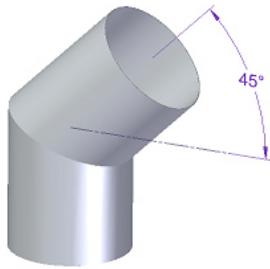


Fig. 29– **Correct** elbow angle

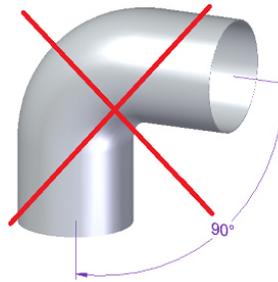


Fig. 30– **Incorrect** elbow angle

\* Single-walled tubes installed on the exterior of a building results in the condensation of water vapour in the combustion gases. To prevent this, we recommend that you use a double-walled, insulated tube.

\* All tube bindings should be properly sealed to prevent the admission of air through any existing fissures;

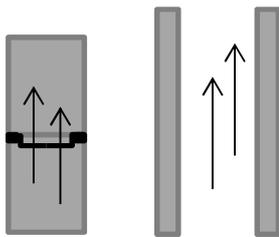


Fig.31- **Correct** sealing

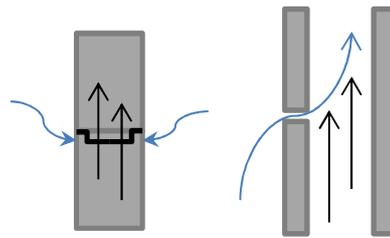


Fig.32- **Incorrect** sealing

\* Ensure that the tube bindings do not strangle the tube (narrowing the flow), the inner tube walls are smooth and free of obstacles, and that the caps do not disturb the air circulation;

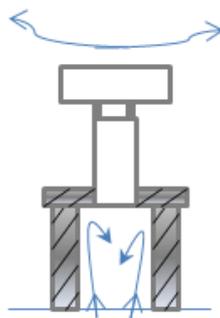


Fig. 33– **Incorrect** binding

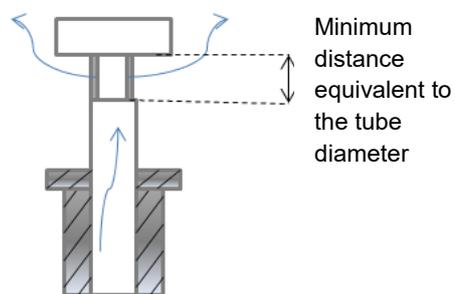


Fig. 34– **Correct** binding

\* The chimney dome should allow proper air circulation and be placed at least 1 m above the roof peak or 3 m away from other obstacles. If you need to increase the air circulation, you should extend the height of the flue;

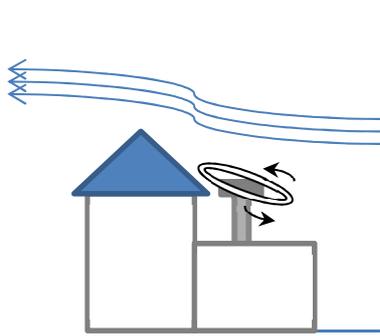


Fig. 35– **Incorrect** chimney height

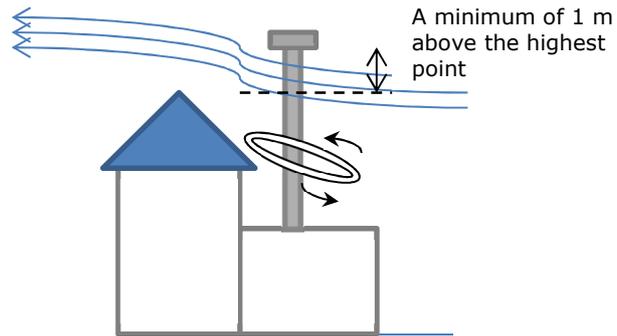


Fig. 36– **Correct** chimney height

\* Never use the same chimney flue for more than one unit or open fireplace. For shared chimneys, each flue should individually reach the external outlets at the same level, to ensure that the air circulation adequately expels the exhaust fumes;

\* If the chimney is made of brick, the flue should extend up to the very top, preferably in isolation. Otherwise, the fume temperature will drop, impairing air circulation. A suitable cap should be installed at the top of your chimney in accordance with its air circulation condition. Depending on atmospheric conditions, other types of chimney caps may be installed, such as the rooster cap.

## 4.2. Installation space requirements

\* The unit should stand on a masonry hearth made of refractory bricks or other type of non-combustible material;

\* Keep any combustible materials away from this appliance. For safety reasons, you should maintain a minimum clearance distance around the unit of 20 cm from the back, 30 cm from the sides and 120 cm from the front (Fig.37);

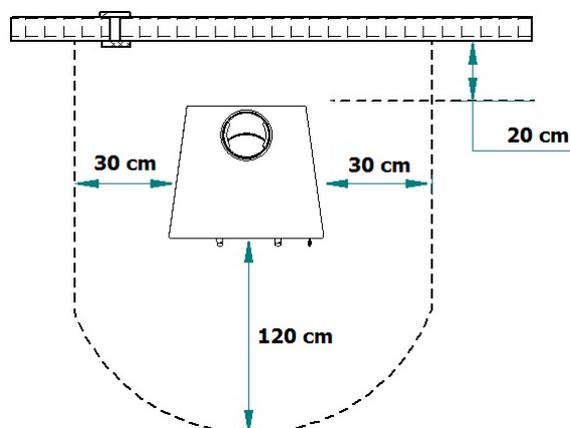


Fig. 37 – Minimum safety distances

- \* The floor on which the unit will stand must be capable of supporting a permanent load of 1 kg (2.2 lbs)/cm<sup>2</sup>. If the floor's bearing capacity is insufficient, a solid plate may be used to distribute the load over an area larger than the base of the unit;
- \* Before proceeding with the installation, please check whether the intended location allows an easy access to the unit, to facilitate any cleaning procedures as well as the inspection of the fume outlet connection;
- \* Please make sure the air intake vents from the building are not obstructed;
- \* Ensure that the structure built into the wall is of an appropriate size to house the unit;
- \* Any materials/objects placed near the unit should be capable of withstanding the heat radiated through the glass and walls of the appliance, so no combustible materials are allowed;
- \* A refractory material - refractory cement or other - should be applied around the chimney gasket.
- \* The use of wood in the finishing may increase the risk of fire. We therefore recommend that any wood used be adequately insulated, or that no wood be used at all.

## **5. Instructions for use**

### **5.1. Fuel**

- \* Only firewood should be used in this type of appliance. The unit cannot be used as an incinerator, nor should other materials such as coal, painted wood, varnishes, thinners, liquid fuels, glues or plastics be used as fuel. Also avoid burning common combustible materials, such as cardboard and straw;
- \* Do not use exotic firewood as fuel;
- \* The firewood used with this appliance should have low water content (less than 20%). We recommend that it should be placed under covered storage for around 2 years after felling, in order to ensure efficient combustion and avoid creosote build-up in the smoke duct, combustion chamber and on the glass. See the list in Table 2, for additional information on the types of wood that can be used in these units;

Table 2– Types of firewood that may be used in SOLZAIMA heat exchanger appliances, their geographical distribution and respective calorific value/reactions.

Common name	Scientific name	Distribution (total: 18 districts)	Notes	Features				
				Smoke	Heat	Lighting	Combustion Speed	Hardness
Pine	Pinus	Bragança, Castelo Branco, Coimbra, Guarda, Leiria, Viana do Castelo, Vila Real and Viseu	Predominant species	Little	High	Easy	Fast	Soft
Cork Oak	Quercus suber	Évora, Faro, Portalegre, Santarém and Setúbal	Predominant species	Little	Very High	Easy	Regular	Hard
Eucalyptus	Eucalyptus	Aveiro, Porto and Lisbon	Predominant species	A lot	Regular	Difficult	Slow	Hard
Holm Oak	Quercus ilex	Beja and Évora	Predominant species	Little	Very High	Difficult	Slow	Hard
Olive tree	Olea	Entire country except mountainous regions	Less predominant than above	Little	Very High	Difficult	Slow	Hard
Oak	Quercus	Entire country, with range of subspecies	Less predominant than above	Little	High	Difficult	Slow	Hard
Ash	Fraxinus	Riverbank areas (Lower Vouga)	Small numbers distributed around the country	Regular	High	Difficult	Slow	Hard
Birch	Betula	High ground (Serra da Estrela)	Smaller numbers distributed around the country	Little	Very High	Easy	Fast	Soft
Beech	Fagus	Cold, humid regions (North of Portugal – - Serra do Gerês)	Smaller numbers distributed around the country	Little	High	Difficult	Slow	Hard
Maple	Acer	Minho, Beira Litoral and Serra de Sintra	Smaller numbers distributed around the country	Little	Regular	Regular	Slow	Soft
Poplar	Populus	Entire country, but mainly in the Centre	Smaller numbers distributed around the country	Little	High	Easy	Fast	Soft
Chestnut	Castanea	Northern and centre part of Portugal, and mountain regions	Smaller numbers distributed around the country	Regular	High	Difficult	Slow	Hard

## 5.2. Power

\* The power of your unit translates its heating capacity, i.e. the heat transfer your unit gets from the energy of the firewood used (usually measured in kW), which is directly dependent on the amount of firewood placed in the units.

\* The rated power is measured for standard load of firewood when tested in laboratory conditions over a specific period of time.

### 5.3. Energetic efficiency and performance ratings

\* The implementation of solutions promoting greater energy efficiency results in a substantial reduction in energy needs, which in turn helps reduce our current dependence on fossil fuels and other non-renewable sources of energy. Energy efficiency therefore encourages significant savings, both economically and environmentally speaking.

\* Solzaima's commitment to developing energy efficient heating units results in products that can claim to have an efficiency rate equal or above 70%.

A 70% efficiency rate means that 70% of the energy contained in the firewood is used to warm your home or, in other words, you are able to produce the same amount of energy with much less firewood.

A Solzaima unit of 5kW with an efficiency rate of 75% is expected to consume approximately 1.6 kg (3.5 lbs) of firewood per hour to heat a 35 m<sup>2</sup>(377 sq ft) room.

\* Generally, the efficiency rate of a traditional fireplace is only about 10%, which means it will need to consume approximately 12 kg (26.5 lbs) of firewood to produce the same 5kW required to warm the same 35 m<sup>2</sup>(377 sq ft) room.

#### FIREWOOD CONSUMED IN ONE HOUR TO HEAT A SPACE OF APPROXIMATELY 35 m<sup>2</sup> (377 sq ft) USING A 5 kW STOVE



A traditional fireplace with an efficiency rate of 10% consumes 26.5 pounds (12kg) of firewood



A fireplace fitted with a fire stove system that has an efficiency rate of 30%, will need to consume 4 kg (8.8 lbs) of firewood.



A fire stove with an efficiency rate of 50% will need to consume 2.4 kg (5.3 lbs) of firewood.



A Solzaima fire stove appliance with an efficiency rate of 75% only needs to consume 1.6 kg (3.5 lbs) of firewood.

## 6. Using the unit for the first time

- \* Ask the installation technician to turn on and start-up the unit to check its proper operation;
- \* The first time the unit is used, the paint finish is cured by the heat, which may generate additional fumes. If this happens, ventilate the room by opening windows and any doors leading to the exterior;
- \* Avoid touching the unit during its first burn to prevent leaving permanent marks on the paint. The paint goes through a more plastic phase during the curing process. The curing of the paint occurs at approximately 300°C and for 30 minutes.

## 7. Normal usage

### \* Lighting:

- 1 - Fully open the door of the unit;
- 2 - Place pine cones (preferentially) on the vermiculite plates at the base of the combustion chamber;
- 3 - Place kindling on top of the pine cones, piled horizontally;
- 4 - Open the primary and secondary controls to allow the admission of combustion air, leaving the door ajar for more rapid lighting;
- 5 - The lighting period is completed when the unit chassis reaches a stable temperature. At this point, close the door and adjust the admission flow of combustion air to ensure a slow burn;
- 6 - If, while the door is ajar, there is smoke leakage from the unit, this means that you have insufficient chimney draught or that the firewood used has a high moisture content.

\* You MUST make sure the room where the unit is installed is adequately ventilated; otherwise, the unit will not work properly. For this reason, it is important to also check whether any other air-consuming heating appliance is present in the room (e.g. gas-fuelled heating appliances, braziers, among others). We recommend that you do not operate these devices concurrently;

\* Before refuelling the stove, please verify whether the previous load is completely burned down. If the firewood has burned down, only embers should remain. These will help to ignite the fresh load of firewood. As such, do not allow the embers to die down to mere ash, seeing as it will not produce sufficient heat to ignite the new load. Next, slowly open the door of the unit, leaving it slightly ajar for a few seconds. Wait a while to ensure that the fumes are being exhausted before opening the door completely and slowly to prevent smoke from entering the room;

\* The door of the unit should only be opened during the reloading process. Under normal operating conditions, the door must remain closed;

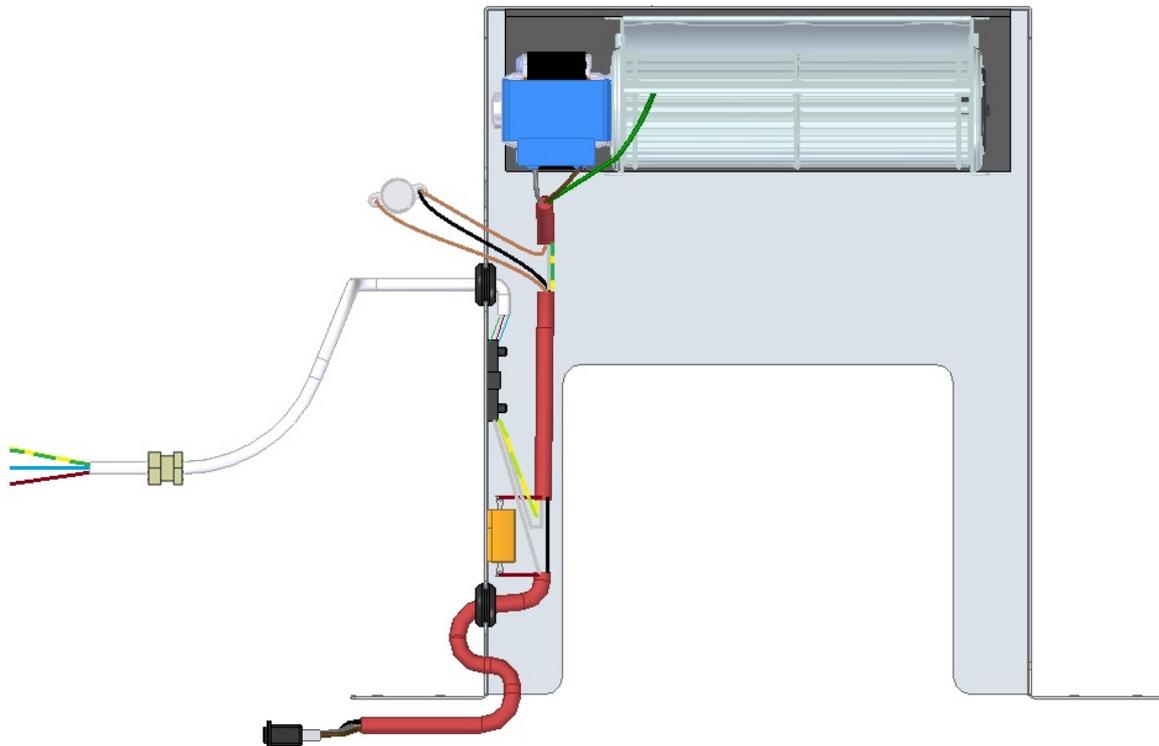
\* Remember to reload the unit before the previous load has burned down to ash, in order to ensure continuous combustion;

\* We do not recommend that you use the unit during adverse weather conditions that may seriously affect the fume draught (especially under strong wind conditions).

\* We recommend that you use logs of firewood with a length between 26 and 30 cms. This will allow you to place the firewood longitudinally or transversely in relation to the base of the combustion chamber;

## 8. Forced ventilation Kit (It can only be applied on Tek Basic, Stone, Round and System)

\* It is possible install a ventilation kit on some equipped with forced ventilation incorporate one tangential fan with power of 38 W and a min and max air flow of about 60 m<sup>3</sup>/h and 165 m<sup>3</sup>/h respectively, connected in parallel with a thermostat, according to the following diagram.



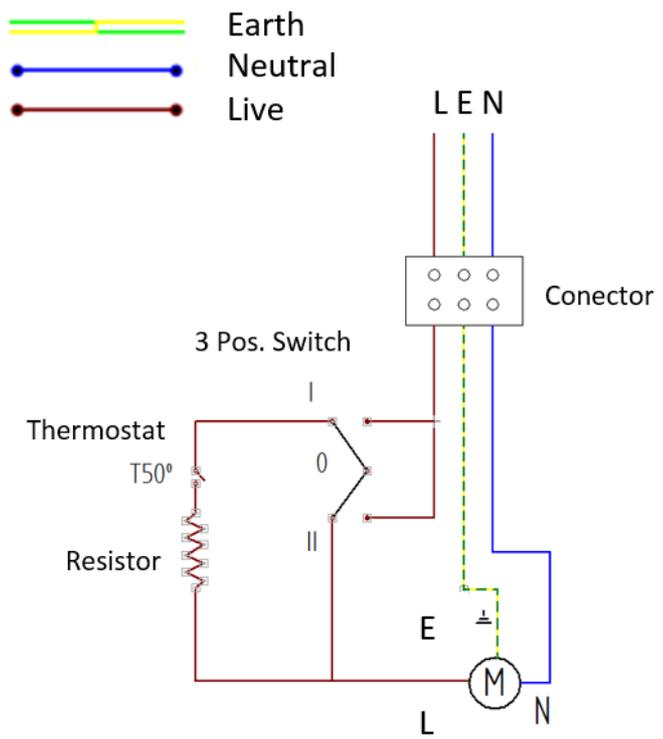
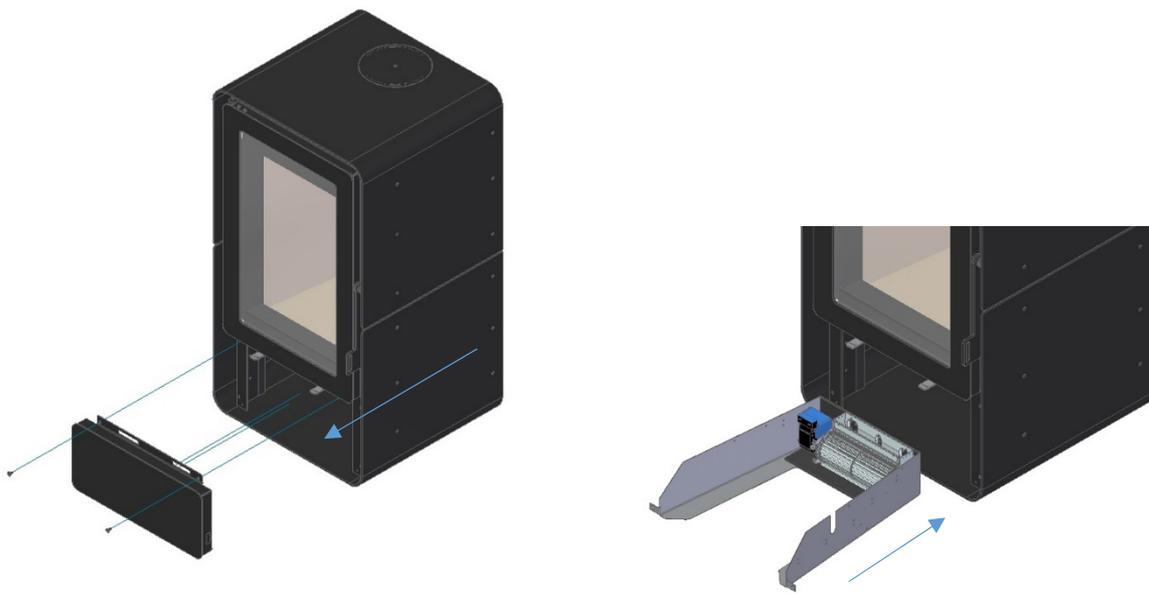


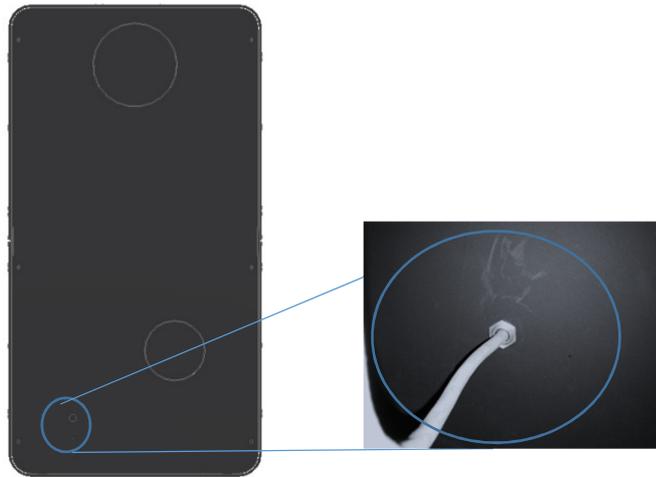
Fig. 38 – Wiring Diagram

\* Remove front cover and introducing ventilation kit (figure 39-a)



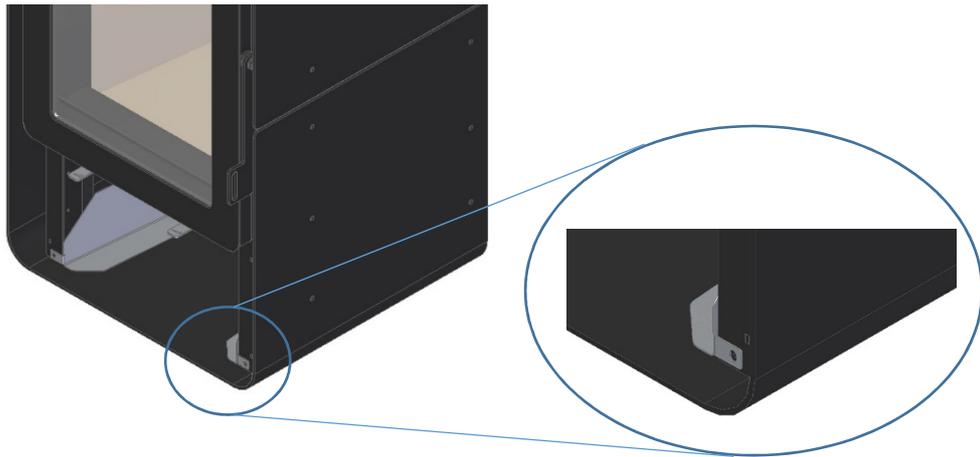
a)

\* Pass the electric cable through the hole and tighten the wire passes (figure 39-b)



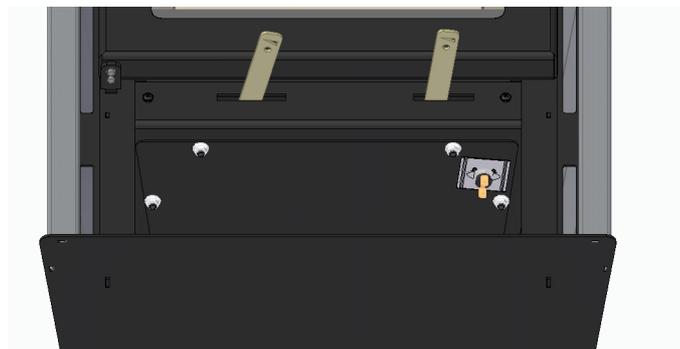
b)

\* Fix the ventilation kit (figure 39-c)



c)

\* Fix the ventilation kit thermostat ((figure 39-d)



d)

\* Before placing the front cover in place the Switch button (figure 39-e)

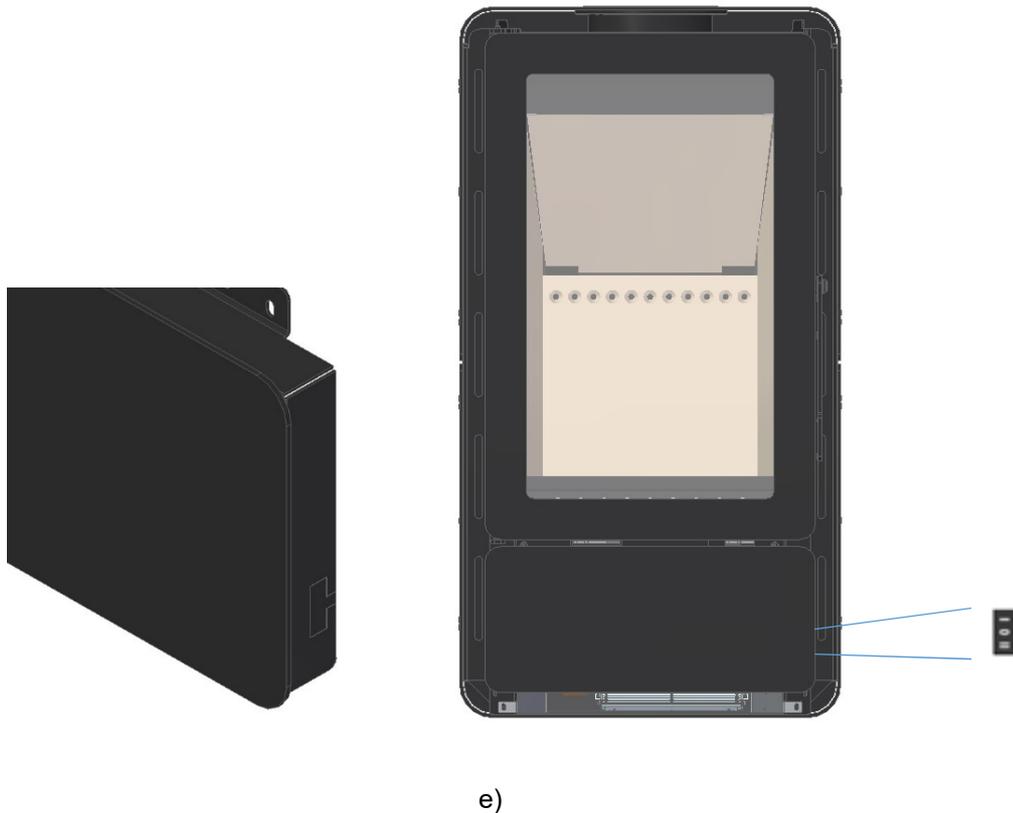


Fig. 39 – Installation of ventilation kit



**Position I** – Tangential fan automatically turns on with an air flow of 60m<sup>3</sup>/h when the thermostat reaches 50 °C.

**Position 0** – Tangential fan keeps inactive.

**Position II** – Tangential fan is activated manually with an air flow of 165m<sup>3</sup>/h.

Fig. 40 – 3 Position Switch

**Attention:** all three wires in the power feed cable – earth, neutral and live – should be connected. We take no responsibility for any damage resulting from non-compliance with this warning.

\* The electrical components should always be connected to the power supply;

\* The cable used for the electrical connection should be silicon-coated and heat-resistant to 356°F (180°C). If the power feed cable is damaged, it should only be replaced by a qualified technician;

\* **You should take care to not lay the cable where it may be crushed;**

\* The electrical installation should incorporate means to switch the unit off, with a minimum separation of 0.118 inches (3mm) between the contacts, pursuant to the applicable legislation in force.<sup>1</sup>

## 9. Safety

\* Please note that the exposed metallic parts of the unit reach very high temperatures – 100°C on the door and 60°C along the external casing. The door latch **does not** heat beyond 45°C, but avoid any contact with other parts that may be hot;

\* If any contact with the unit is necessary while it is in operation, remember to use a glove or other form of protection;

\* In case of **fire in the chimney, immediately close the door of the unit, as well as the primary and secondary air inlets;**

\* We recommend that you use only spare parts supplied by the manufacturer – (SOLZAIMA).

## 10. Cleaning and Maintenance

### 10.1. Cleaning

- Ash build up should be regularly removed from the chamber (but only after turning off the unit and allowing it to cool down);

- The glass should always be cleaned with an appropriate product<sup>2</sup>, following the instructions for use and avoiding any contact of the cleaning product with the window rope gasket OR any painted metal parts, – which can lead to oxidation. To ensure this, only apply the cleaning product on a cloth, never directly on the glass. The rope gasket is glued on to the glass, so do not expose it to the direct contact with water or any other liquids. If the rope gasket eventually becomes unglued, you can reattach it using high temperature silicone sealant or refractory glue,

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<sup>1</sup> We recommend the use of a 30 mA differential switch and a 0.5 A circuit breaker for the unit's electrical installation.

<sup>2</sup> For more information, contact the unit's installer.

but only after having carefully cleaned the groove using fine sandpaper; it is recommended to use gloves to clean the glass or other protective equipment.

- Do not use detergent to clean the metallic parts of the unit. These should be cleaned using a dry cloth to remove any accumulated dust;

- We recommend cleaning the chimney flue and its throat (located at the outlet of the unit) at least once a year. This can be done by removing the fume baffle (removable plate located in the ceiling of the combustion chamber);

- If the unit has not been used for a long time, check whether the flue pipes are free of any blockage before lighting the stove;

- We recommend regular inspections of the unit and its fume outlet by an expert technician.

## 10.2. Removing the fume baffle

To remove the fume baffle, please follow the steps below:

1 - Hold the fume baffle using both hands, one placed under and the other above the plate (see Fig.41-[A]);

2 - Gently push up the baffle to release it from its lower support (the rear vermiculite plate) and upper brackets (steel rods). Once you release the plate, lift and pull it forward to create a proper gap between the baffle and the rear vermiculite plate (see Fig.41-[B]);

3 - Using this gap, rotate the baffle plate sideways and downwards (see Fig. 41-[C]);

4 - Remove the baffle plate away from the unit (see Fig.41-[D]);

5 - Be careful not to damage any of the unit's vermiculite plates (side, rear and back) when removing the baffle plate;

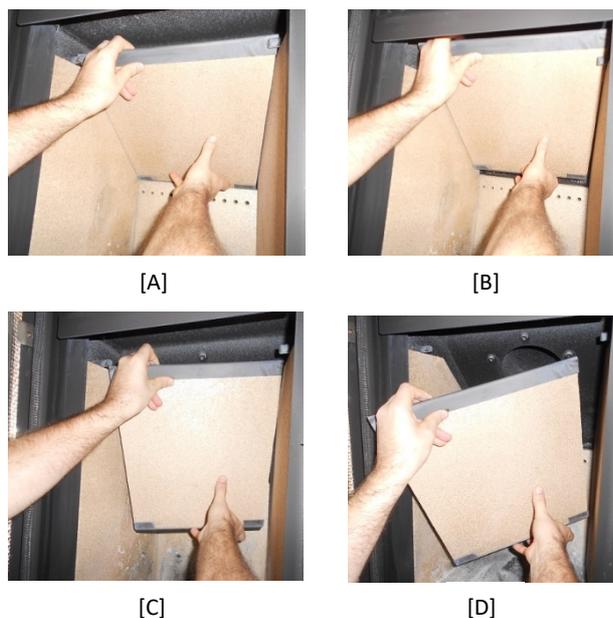


Fig. 41– Action sequence to remove the fume baffle

## 11. Troubleshooting

Table 3– Identifying potential problems and their respective solutions

Problem	Solution
Glass gets dirty quickly	<ul style="list-style-type: none"> <li>• Check moisture level of firewood</li> <li>• Check for any obstructions in the fume outlet / Check installation (insufficient draught)</li> <li>• Increase the intensity of the burn by opening the primary air intake regulator slightly more</li> </ul>
Excessive draft	<ul style="list-style-type: none"> <li>• Verify whether the combustion air inlets are at their maximum. If they are, readjust to reduce the intensity of the burn</li> <li>• If necessary, install a draught stabilizer</li> <li>• Contact the installer</li> </ul>
Weak draught, causing smoke to be expelled into the room	<ul style="list-style-type: none"> <li>• Check that the flue is clear of any obstructions</li> <li>• Clean the flue</li> <li>• Check that the fume outlet pipe reaches up to the very top of the chimney flue</li> <li>• Check that the pipe is correctly sealed from the chimney</li> <li>• Check whether the existing chimney cap is appropriate and whether it is sufficiently open</li> <li>• May be due to exceptional weather conditions</li> </ul>
Weak fire	<ul style="list-style-type: none"> <li>• Check moisture level of firewood</li> <li>• Regulate the unit's air controls to increase the intensity of the burn</li> <li>• Check whether air is entering the compartment</li> </ul>
Problems associated with the weather	<ul style="list-style-type: none"> <li>• Contact the installer</li> </ul>

## 12. End-of-life units

\* Around 90% of the materials used in the manufacture of these Solzaima units are recyclable, contributing towards a reduced environmental impact and a more sustainable planet;

\* End-of-life units should be taken to licensed waste operators. We advise contacting your local council to ensure their correct collection.

## 13. Sustainability

\* Solzaima designs and manufactures biomass heating solutions and appliances. This is our contribution towards promoting a more sustainable planet – an economically-viable and

environmentally-friendly alternative that safeguards the best environmental management practices to ensure effective carbon cycle management.

\* Solzaima seeks to discover and study Portugal's forested areas, efficiently responding to energy demands while safeguarding biodiversity and natural wealth, which are fundamental to preserving our planet's quality of life.

\* SOLZAIMA is a member of the **Sociedade Ponto Verde**, which manages waste packaging from products placed on the market by member companies; as such, the packaging that comes with your unit (i.e. plastic and cardboard) can be taken to your nearest recycling point.

\* SOLZAIMA also participates in the **Amb3E** project, responsible for collecting waste electrical and electronic equipment (WEEE); as such, end-of-life heating units with forced ventilation systems must be taken to an appropriate WEEE processing facility.



When disassembling your end-of-life unit, keep its electrical components to be delivered at your nearest WEEE collection point. For more information, visit: [www.amb3e.pt](http://www.amb3e.pt)

## 14. Glossary

\* **cal** (Calories): the amount of heat required to increase the temperature of one gramme of water by one degree centigrade.

\* **cms**(centimetres): unit of measurement.

\* **CO** (carbon monoxide): A lightly flammable, colourless, odourless gas that is very dangerous due to its high toxicity.

\* **CO<sub>2</sub>**(carbon dioxide): Gas needed by plants for photosynthesis on the one hand, and emitted into the atmosphere on the other, contributing to the greenhouse effect.

\* **Combustion**: a process for obtaining energy. Combustion is basically a chemical reaction that requires three items in order to take place: fuel, oxidant and ignition temperature.

\* **Combustion agent**: chemical substance that fuels combustion (essentially oxygen) and which is fundamental to the process.

\* **Fuel**: anything that can undergo combustion, in this case referring to wood.

\* **Creosote**: chemical compound created by combustion. This compound is sometimes deposited on the glass and shaft of the heating recovery unit.

\* **Energy efficiency**: capacity to generate large quantities of heat with the least amount of energy possible, causing the least environmental impact and reducing the energy budget.

\* **CO emissions**: emission of carbon monoxide gas into the atmosphere.

\* **CO emissions (13% of O<sub>2</sub>)**: carbon monoxide content corrected for 13% of O<sub>2</sub>.

\* **kcal** (Kilocalorie): multiple unit of measurement of calories. Equivalent to 1000 calories.

\* **kW** (Kilowatt): unit of measurement equal to 1,000 watts.

\* **mm** (millimetres): unit of measurement.

\* **Pa** (pascal): standard IS unit of pressure and tension. This unit is named after Blaise Pascal, an eminent French mathematician, physicist and philosopher.

\* **Calorific value**: also known as specific combustion heat. It represents the amount of heat released when a certain amount of fuel is completely burned. Calorific value is expressed in calories (or kilocalories) per unit of weight of fuel.

- \* **Rated calorific power:** heating capacity or, in other words, the calorific transfer extracted by the unit from the energy of the firewood– measured for a standard wood load at a given period of time.
- \* **Operating power:** manufacturer's recommendation based on tests performed on the heating units using firewood loads within a reasonable operating range. This power range, from minimum to maximum, will present different levels of firewood consumption per hour.
- \* **Performance:** expressed as a percentage of “useful energy” that can be extracted from a given system, taking into account the “total energy” of the fuel used.
- \* **Ignition temperature:** temperature above which the fuel can enter into combustion.
- \* **Heat-resistant:** resistant to high temperatures and thermal shock.
- \* **Glass ceramic:** highly resistant ceramic material produced from the controlled crystallisation of vitreous materials. Widely used in industry.

# 15. Warranty

## 1. Social name and address of the producer and Object

Solzaima, S.A.

[www.solzaima.pt](http://www.solzaima.pt)

[apoio.cliente@solzaima.pt](mailto:apoio.cliente@solzaima.pt)

Rua dos Outarelos, 111

3750-362 Belazaima do Chão

This document does not substantiate the provision by Solzaima S.A. of a voluntary warranty on its produced and marketed products (from now on mentioned as "Product (s)"), but rather a guide, intended to be enlightening for the effective activation of the legal warranty that benefits consumers (from now on mentioned as "Warranty"). This document does not affect the legal rights of warranty, emerging from the purchase agreement whose purpose is the Product(s).

## 2. Product Identification on which rests the Warranty

The activation of the warranty presupposes prior and correct identification of the product object towards Solzaima, SA, being promoted by providing the Product's packing data indicated in the purchase invoice or in the product characteristics plate (model and serial number).

## 3. Conditions of Products Warranty.

3.1 Solzaima, SA replies towards the Buyer for the lack of product's conformity with their purchase and sale agreement, on the following deadlines:

3.1.1 A period of 24 months from the date of delivery of the good, in the case of domestic use of the product;

3.1.2 A period of 6 months from the date of delivery of the good, in the case of professional use of the Product

3.2 To exercise their rights, and provided that the deadlines specified in the preceding paragraph are not exceeded, the Buyer must report in writing to Solzaima, SA the lack of the Product conformity within a maximum of:

3.2.1 sixty (60) days from the date in which these have been detected, in the case of domestic use of the product;

3.2.2 thirty (30) days from the date in which these have been detected, in the case of professional use of the Product.

3.3 During the warranty period referred to in paragraph 3.1 above (and for it to remain valid), the repairs to the Product must only be carried out by Official Technical Services of the brand. All services provided under this warranty, will be held from Monday to Friday within the legal work schedule established in each region.

3.4 All requests for assistance must be submitted to support service Customer of Solzaima, SA, via e-mail: [apoio.cliente@solzaima.pt](mailto:apoio.cliente@solzaima.pt). At the moment of technical assistance to the Product, the Purchaser shall provide, as documentary evidence of Product Warranty, the invoice or other document demonstrating the purchase. In any case, the proof of purchase of the product shall include the reference (as referred in point 2 above) and date of purchase. Alternatively and in order to validate the Product Warranty the PSR - evidence of the machine start-up (if applicable) - may be used.

3.5 The product must be installed by a qualified professional, according to the regulations in force in each geographical area, for installation of these products and complying with all regulations in force, in particular concerning chimneys and other regulations applicable to aspects such as water supply, electricity and / or other related equipment or sector and as described in the instruction manual. A product installation not in accordance with the manufacturer's specifications and / or does not comply with legal regulations on this matter, will not lead to the application of this warranty. When a product is installed outdoors, it must be protected from weather effects including rain and winds. In these cases, the device protection may be required by use of a cabinet, or a protective case properly ventilated.

3.6 Devices should not be installed in locations containing chemicals in its atmosphere, saline or with high moisture content environments, because its mixture with air can promote the combustion chamber rapid corrosion. In this type of

environment it is especially recommended that the unit is protected with anti-corrosion products for the purpose, especially between working periods. As a suggestion we advise the application of graphited greases suitable for high temperature lubrication function and anti-corrosion protection.

3.7 In the Products belonging to the pellet range, in addition to the daily and weekly maintenance detailed in the instruction manual, it's also required to clean its interior and the respective fume extraction chimney. These tasks must be performed every 600-800 kg of pellets consumed in the case of pellet stoves (air and water) and compact boilers, and every 2000-3000 kg of pellets consumed in the case of automatic boilers. In case these quantities are not consumed, at least a systematic preventive maintenance on an annual basis must be done.

3.8 It is up to the Buyer to ensure that periodic maintenances are performed as indicated in the manuals and handling instructions accompanying the product. Whenever requested it must be proven by the presentation of the technical report of the entity responsible for it, or alternatively by registering them in the instruction manual in the dedicated section.

3.9 To prevent damage to the equipment due to overpressure, it must be assured, in the installation, safety elements such as pressure relief valves or temperature pressure, if applicable, as well as expansion tank adjusted to the installation, to assure its proper operation. Please note that: the referenced valves should have a value equal to or less than the pressure supported by the equipment; there may not be any shut-off valve between the equipment and the respective safety valve; a preventive maintenance plan should be provided to certify the correct functioning of these security features; regardless of device type, all safety valves should be channeled into sewer siphon, to prevent damage to housing by discharges of water. The Product Warranty does not cover damage caused by improper channeling water discharged by the valves.

3.10 To prevent damage by galvanic corrosion to the equipment and the attached piping, it is recommended the use of dielectric tabs (cuffs) on connections between the device and metal tubes, whose characteristics potentiate this kind of corrosion. The Product Warranty does not cover damages caused by the non-use of such dielectric spacers.

3.11 The water or thermal fluid used in the heating system (Hydro stoves, boilers, fireplaces central heating, etc.) must comply with the legal requirements and ensure the following physical-chemical characteristics: absence of suspended solids; low conductivity; Residual hardness of 5 to 7 (°F) French degrees; neutral pH close to 7; low concentration chlorides and iron; no air inlets by depression or other. If the installation enhances a water automatic make-up it should consider upstream, a preventive treatment system consisting of filtration, water softening and preventive dosage of polyphosphates (fouling and corrosion) as well as a deaeration step, in case this is necessary. If in some circumstances some of these indicators present values outside the recommended, the warranty will cease its effect.

3.12 Except as expressly provided by law, an intervention in warranty does not renew the Product warranty period. The rights of warranty are not transferable to the purchaser of the product.

3.13 The equipment must be installed in accessible local and without risk to the technician. The means necessary for access to the equipment will be provided by the Buyer, as well as all the charges resulting from the process.

3.14 Guarantee is valid for products and equipment sold by Solzaima SA only and exclusively within the geographical and territorial area of the country where the Product was sold by Solzaima.

#### 4. Circumstances that exclude the application of Warranty

The following cases are excluded from Warranty, being the total cost of the reparation payable by Buyer:

4.1. Maintenance operations, tuning of the product, start-ups, cleaning, elimination of errors or anomalies that are not related to deficiencies of equipment components and replacement of batteries;

4.2. Components in direct contact with fire such as: vermiculite supports, baffle or protection plates, vermiculite, sealing cords, burners, ash pans, trim wood, smoke regulators, ash grid, whose wear is directly related to the operating conditions. Paint degradation, as well as its degradation by corrosion due to fuel excess charge, open drawer use or excessive draft of the chimney installation. The glass breakage by improper handling or other reasons unrelated with the conformity of the product. In the pellets family equipment's, the combustion igniter it's a wearing part, for that reason this component only as 6 moth of warranty;

4.3. Wear components such as bearings;

4.4. Deficiencies of components external to the product that may affect its correct functioning, as well as property damage or other (eg. Tiles, roofs, waterproof covers, pipes, or damage caused by the user) originated by misuse of materials in the facility or the non-implementation of installation according to the rules of installation of the Product, the applicable regulations or good construction rules, especially when it has not promoted the application of appropriate piping temperature in use, expansion tanks, anti-return valves, safety valves or anti-condensation valves, among others;

4.5. Products whose operation has been affected by faults or deficiencies of external components or inappropriate dimensioning;

4.6. Defects caused by use of accessories or replacement of components other than those determined by Solzaima, SA;

4.7. Defects that are caused by the not following of the instruction manual and operation instructions, the use of applications non-compliant with the product application, abnormal climatic factors, abnormal operating conditions, overload or improper maintenance and cleaning;

4.8. Products that have been modified or manipulated by unauthorized personnel and therefore without explicit permission from Solzaima, SA;

4.9. Damage caused by external agents (rodents, birds, spiders, etc.), atmospheric phenomena and / or geological (earthquakes, storms, frost, hail, lightning, rain, etc.), wet, humid or saline environments (eg proximity of sea or river), as well as those derived from excessive water pressure, inadequate power supply (voltage with variations greater than 10% over the nominal value of 230V), pressure or inadequate supply of circuits, vandalism, urban confrontations and armed conflicts of any kind, as well as derivatives;

4.10. Failure to use fuel recommended by the manufacturer is reason to warranty exclusion.

Note: For pellet devices the fuel used must be certified by EN 14961-2 grade A1. Also, before buying large quantities, the user should test the fuel to see how it behaves.

In wood devices the fuel must have a moisture content below 20%.

4.11. The appearance of condensation, by faulty installation or by the use of fuels other than virgin wood (such as pallets or impregnated wood paints or varnishes, salt or other components), which can contribute to accelerated degradation of the equipment, especially the combustion chamber;

4.12. All products or components damaged in transport or installation;

4.13. Cleaning operations performed to the device or components caused by condensation, fuel quality, bad adjustment or other circumstances arising from the place of installation. Interventions for decalcification of the product (the elimination of calcium carbonate or other materials deposited inside the device and produced by the quality of water supply) are excluded from warranty. Circuit purge operations or unlocking of Circulator pumps are also excluded from warranty.

4.14. The installation of the product(s) supplied by Solzaima, SA must consider the possibility of its easy removal, as well as points of access to mechanical, hydraulic and electronic equipment and to the installation. When the installation does not allow immediate and secure access to the equipment, the additional costs of access and security measures will be Buyer responsibility. The cost of dismantling and assembling boxes of plasterboard or masonry walls, insulation or other elements such as chimneys and plumbing connections preventing free access to the product (if the product is installed inside a crate of plasterboard, masonry wall or other dedicated space it must follow the dimensions and characteristics indicated in the manual and operating instructions accompanying the product).

4.15. Information or clarification interventions done to domicile about how to operate the heating system, programming and/or reprogramming of regulation and control elements, such as thermostats, regulators, programmable devices, among others;

4.16. Fuel adjustment interventions in pellet devices, cleaning, detection of water leaks in device's external piping, damages due to the lack of cleaning of the Product or the fume extraction chimneys;

4.17. Emergency interventions are not covered by Warranty: weekend and holiday interventions; these could be performed with an additional charge, and will only be performed under the express request from the buyer and conditioned to availability of authorized technical personnel.

#### 5. Inclusion of Warranty

Solzaima, SA will fix at no charge to the Buyer, the defects covered by the warranty by repairing the product. Products or components replaced will become the property of Solzaima, SA.

#### 6. Responsibility Solzaima, S.A.

Without prejudice to legal provisions, the responsibility of Solzaima, SA, concerning warranty is limited to the established in these warranty conditions.

#### 7. Tariff Services carried out under warranty

Interventions outside the scope of the warranty are subject to the application of tariffs in force.

#### 8. Administrative Expenses

In case invoices related to services performed are not paid within the agreed payment term, interests will be applied at the maximum legal rate.

#### 9. Competent Court

For the resolution of any dispute arising from the purchase and sale agreement having as object the products covered by the warranty, the contracting parties attribute exclusive jurisdiction to the courts of Águeda, with express waiver of any other.

## 16. Statement of Performance

.DECLARAÇÃO DE DESEMPENHO | DECLARACIÓN PRESTACIONES | DECLARATION OF PERFORMANCE |  
DÉCLARATION DE PERFORMANCE | DICHIARAZIONE DELLE PRESTAZIONI

Nº DD-029

1. Código de identificação único do produto-tipo | Código de identificación único del tipo de producto | Unique identification code of the product type | Le code d'identification unique du type de produit | Codice unico di identificazione del tipo di prodotto

TEK BASIC – EAN 05600990425804    TEK STONE – EAN 05600990425811

TEK ROUND – EAN 05600990425828    TEK UNIT – EAN 05600990410749

TEK ROLL – EAN 05600990410732    TEK SYSTEM – EAN 05600990436176

TEK CORNER – EAN 05600990436183    TEK WALL – EAN 05600990436190

TEK LUMBER – EAN 05600990436206

2. Utilização prevista | Uso previsto | Intended use | Utilisation prévue | Destinazione d'uso

AQUECIMENTO DE EDIFÍCIOS DE HABITAÇÃO | CALEFACCIÓN DE EDIFICIOS RESIDENCIALES | HEATING OF RESIDENTIAL BUILDINGS | CHAUFFAGE DE BATIMENTS RESIDENTIELS | RISCALDAMENTO DEGLI EDIFICI RESIDENZIALI

3. Nome, designação comercial registada e endereço de contacto do fabricante | Nombre, marca registrada y la dirección de contacto de lo fabricante | Name, registered trade name and contact address of the manufacturer | Nom, marque déposée et l'adresse de contact du fabricant | Nome, denominazione commerciale registrata e Indirizzo del costruttore

SOLZAIMA, SA

RUA DOS OUTARELOS, Nº111

3750-362 BELAZAIMA DO CHÃO – ÁGUEDA – PORTUGAL

4. Sistema de avaliação e verificação da regularidade do desempenho do produto | Sistema de evaluación y verificación de constancia de las prestaciones del producto | System of assessment and verification of constancy of the product | Système d'évaluation et de vérification de la Constance des performances du produit | Sistema di valutazione e verifica della costanza della prestazione del prodotto

SISTEMA 3

5. Norma Harmonizada | Estandár armonizado | Harmonized standard | Norme harmonisée | Standard armonizzata

EN 13240

6. Nome e número de identificação do organismo notificado | Nombre y número de identificación del organismo notificado | Name and identification number of the notified body | Nom et numéro d'identification de l'organisme notifié | Nome e numero di identificazione dell'organismo notificato

CEIS

NB: 1722

7. Relatório de ensaio | Informe de la prueba | Test report | Rapport d'essai | Rapporto di prova

CEE-0178/17-1

8. Desempenho declarado | Desempeño declarado | Declared performance | Performance  
déclarée | Dichiarazione di prestazione

Características essenciais   Características esenciales   Essencial characteristics   Caractéristiques essentielles   Caratteristiche essenziali	Desempenho   Desempeño   Performance   Prestazione	Especificações técnicas harmonizadas   Especificaciones técnicas armonizadas   Harmonized technical specifications   Spécifications techniques harmonisées   Specifiche tecniche armonizzate
Segurança contra incêndio   Seguridad contra incendios   Fire safety   Sécurité incendie   Sicurezza antincendio	<b>OK (A1)</b> . De acordo com relatório de ensaio   De acuerdo com informe de la prueba   According to the test report   Selons le rapport d'essai   Secondo i rapporto di prova <b>CEE-0178/17-1</b>	De acordo com os requisitos   De acuerdo con los requisitos   According to the requirements   Selons les exigences   Secondo i requisiti 4.2.1, 4.2.3, 4.2.4, 4.2.6, 4.2.7, 4.2.8, 4.2.10, 4.2.12, 5.2, 5.4, 5.6, 6.1 (EN13240)
Emissão de produtos da combustão   La emisión de productos de combustión   Emission of combustion products   Emission des produits de combustion   Emissione dei prodotti di combustione	<b>OK</b> . Caudal térmico nominal   Caudal térmico nominale   Nominal heat output   Le débit calorifique nominal   Nominal heat output   Flusso termico nominale – <b>CO: 0,073%</b>	Caudal térmico nominal   Caudal térmico nominale   Nominal heat output   Le débit calorifique nominal   Nominal heat output   Flusso termico nominale – <b>CO &lt; 1,0%</b>
Libertação de substâncias perigosas   Emisión de sustancias peligrosas   Release of dangerous substances   Dégagement de substances   Rilascio di sostanze pericolose	<b>OK</b> . De acordo com relatório de ensaio   De acuerdo com informe de la prueba   According to the test report   Selons le rapport d'essai   Secondo i rapporto di prova <b>CEE-0178/17-1</b>	De acordo com o Anexo ZA.1 (EN13240)   De acuerdo con lo Anexo ZA.1 (EN13240)   According to the Annex ZA.1 (EN13240)   Selons le Annexe ZA.1 (EN13240)   Secondo l'allegato ZA.1 (EN13240)
Temperatura de superfície   Temperatura de la superficie   Surface temperature   La température de surface   Temperatura superficiale	<b>OK</b> . De acordo com relatório de ensaio   De acuerdo com informe de la prueba   According to the test report   Selons le rapport d'essai   Secondo i rapporto di prova <b>CEE-0178/17-1</b>	De acordo com os requisitos   De acuerdo con los requisitos   According to the requirements   Selons les exigences   Secondo i requisiti 4.2.1, 5.4, 5.5, 5.6 (EN13240)
Segurança eléctrica   Seguridad eléctrica   Electrical safety   Sécurité électrique   sicurezza elettrica	<b>OK</b> . De acordo com relatório de ensaio   De acuerdo com informe de la prueba   According to the test report   Selons le rapport d'essai   Secondo i rapporto di prova <b>CEE-0178/17-1</b>	De acordo com os requisitos   De acuerdo con los requisitos   According to the requirements   Selons les exigences   Secondo i requisiti 5.8 (EN13240)
Resistência mecânica   Resistencia mecânica   Mechanical strength   résistance   Resistenza meccanica	<b>OK</b> . De acordo com relatório de ensaio   De acuerdo com informe de la prueba   According to the test report   Selons le rapport d'essai   Secondo i rapporto di prova <b>CEE-0178/17-1</b>  A cada 10 m de conduta de fumos deve ser colocado um suporte de carga   cada 10 m de la salida de humos se debe colocar un soporte de carga   every 10 m of the flue should be placed a load support   tous les 10 m de conduit de fumée doit être placé un support de charge   ogni 10 m della canna fumaria deve essere posto un supporto di carico	De acordo com os requisitos   De acuerdo con los requisitos   According to the requirements   Selons les exigences   Secondo i requisiti 4.2.1, 4.2.4 (EN13240)
Rendimento energético   Eficiencia energética   Energy efficiency   L'efficacité énergétique   Efficienza energetica	<b>OK</b>  <b>81%</b>	<b>≥ 50%</b> para potência térmica nominal   de potencia térmica nominal   for rated thermal input   Pour puissance thermique nominale   di potenza termica nominale

9. O desempenho do produto declarado nos pontos 1 e 2 é conforme com o desempenho declarado no ponto 9. A presente declaração de desempenho é emitida sob exclusiva responsabilidade do fabricante identificado no ponto 4. | El funcionamiento del producto se indica en los puntos 1 y 2 es compatible con las prestaciones declaradas en el punto 9. La presente declaración se expide bajo la exclusiva responsabilidad del fabricante identificado en lo punto 4. | Performance of the product stated in points 1 and 2 is consistent with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4. | Les performances du produit indiqué dans les points 1 et 2 est compatible avec les performances declares au point 9. Cette declaration de performance est établie sous la seule responsabilité du fabricant identifié dans le point 4. | Le prestazioni dei prodotti indicati ai punti 1 e 2 è conforme alla prestazione dichiarata al punto 9. Questa dichiarazione di prestazione è rilasciata sotto l'esclusiva responsabilità del fabbricante di cui al punto 4

10. Número do tipo, lote ou série do produto | Número de tipo, lote o serie del producto | Number of type, batch or serial product | Nombre de type, de lot ou de série du produit | Numero di tipo, di lotto, di serie del prodotto

*Na contra capa deste manual*

Nome e cargo | Nombre y cargo | Name and title | Nom et titre | Nome e titolo

Belazaima do Chão, 08/02/2017

Nuno Sequeira (Director Geral | CEO)



**Please read this Instruction Manual carefully and keep it for future reference.**

**All Solzaima products come with a 2-year warranty.**

SOLZAIMA

SOLUÇÕES DE AQUECIMENTO A BIOMASSA

APPROVED PRODUCT