

Σ Γ Λ Ζ Α Ι Μ Α

SOLUÇÕES DE AQUECIMENTO A BIOMASSA

# Instruction Manual

English

**Local Heating Cookers**

## Pepper 70 | Pepper 90

This product is an equipment for cooking and heat production for space heating, so you should always read the Instruction Manual carefully before you start using your new equipment.

Mod. 973 – A



**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;

\* The Local Heating Cookers are tested according to the EN12815 Standards;

\* Whenever you need assistance you should contact the supplier or installer of your equipment. You should provide the serial number of your cooker that is on the nameplate placed on the ash basket support box.

\* Technical assistance should be carried out by the installer or supplier of your equipment, except in special cases, after assessment by the installer or technician responsible for the assistance, who will contact SOLZAIMA if he deems it necessary;

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 45 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 20.000 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

**Local Heating Cookers** are equipment intended for cooking and for heating the environment where the equipment is installed. The stoves are intended for domestic use and may not be used for commercial purposes.

| Features                             | Pepper 70   | Pepper 90   | Units          |
|--------------------------------------|-------------|-------------|----------------|
| Weight                               | 110         | 125         | kg             |
| Height                               | 850         | 850         | mm             |
| Width                                | 750         | 950         | mm             |
| Depth                                | 650         | 650         | mm             |
| Oven Dimensions (WxHxD)              | 260x330x440 | 260x460x440 | mm             |
| Diameter of the fume discharge pipe  | 120         | 120         | mm             |
| Maximum heating capacity             | 150         | 175         | m <sup>3</sup> |
| Maximum wood length*                 | 250         | 250         | mm             |
| Rated thermal power                  | 6,3         | 6,8         | kW             |
| Fuel consumption                     | 1,9         | 2,05        | kg/h           |
| Thermal yield at rated thermal power | 76,4        | 76,3        | %              |
| CO Emissions 13%O <sub>2</sub>       | 0,88        | 0,96        | %              |
| Max. fume temperature                | 205         | 179         | °C             |
| Draught in the chimney               | 13          | 13          | Pa             |
| Energy classification                | A           | A           | -              |

Table 1 - Technical Specifications of each Equipment

\* The firewood should have a moisture content of less than 20%.

### 3. Knowing the equipment...



Figure 1 - Wood burning cooker Pepper

- 1. Combustion chamber door
- 2. Ash drawer door
- 3. Combustion regulator
- 4. Wooden drawer
- 5. Smoking outlet on the side
- 6. Oven door
- 7. Cleaning access door

### 4. Installation

*Attention: **all** local regulations and standards must be observed when installing this equipment.*

**Check immediately upon receipt that the product is complete and in good condition.**

**If there is any defect or malfunction, do not install the equipment and ask for the presence of the equipment supplier or a brand technician on site.**

## **4.1. Combustion Air and Gas Circulation**

### **4.1.1. Theoretical notions for chimneys installations**

There are some existing factors that can cause significant changes in the depression created in your chimney and consequently on the smoke draft that will have on your equipment.

The combustion created in your equipment, generally increases greatly the temperature at the beginning of your chimney in view of the exterior temperature. This fact causes low pressure in the inner part of your chimney (near the cooker) which conjugated with a superior pressure on the outdoor air to chimney creates the strength that causes a natural movement of the flue gases through the chimney flue, which we name of natural draft or "chimney effect", which also generates the inlet of air necessary for combustion inside the stove. The taller your chimney is, the greater the difference of pressures and therefore the greater the natural suction or chimney effect.

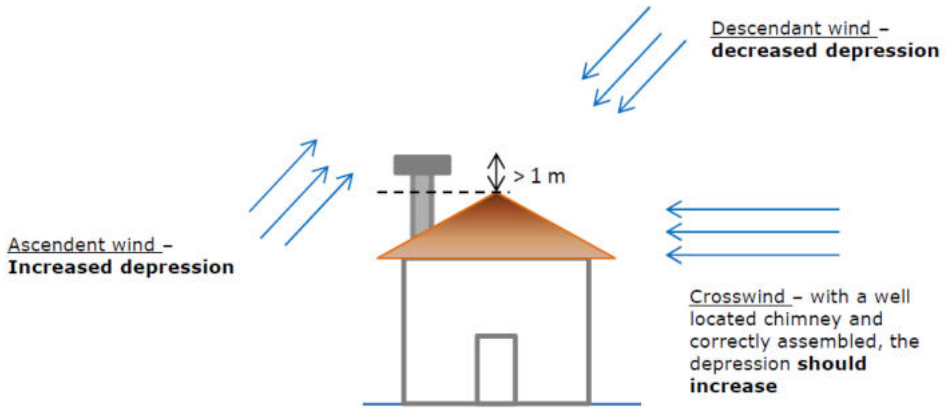
This effect has on its base a physical measuring that indicates that the minimum height of the chimneys must not be inferior to 4 metres, in relation to an average altitude of the land, to average ambient temperature differences, and to average temperatures of the wood cooker functioning. However, this measurement is not compulsory, once there can be chimneys functioning well with less height and other chimneys with superior height functioning worse. In order to install efficient chimneys, the reasons for this phenomenon must be understood. Beyond these geographic factors (altitude, exposure to the sun, direction) and of atmosphere (rain, fog, snow) that influences the chimney draft and it's depression as well as the ability to draw the smoke from the stove, there is still another factor to consider that in many cases is crucial – the wind.

In fact, the predominant wind (which depends many times on the land morphology and house implanting zones) can cause many relevant changes to the depression created in a chimney, that is, wind with a predominant arising flow, causes an increase of depression on the chimney and that justifies better drafts. Contrary, a predominant descendant wind causes decrease of the depression effects, which means that it eliminates the capacity and extraction of chimneys. A predominant crosswind has an effect that depends on how the chimney is installed.

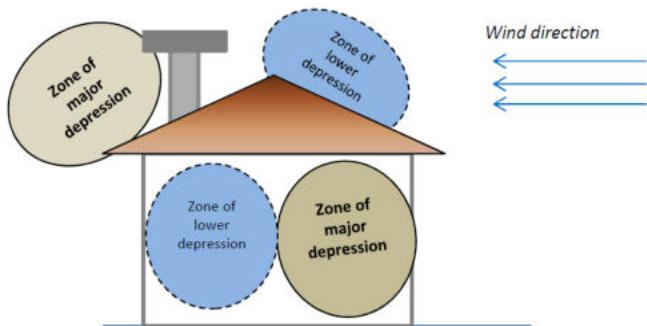
For one to understand this effect, we can evince that a descendant wind at 45° with a velocity of 8 m/s (on a wind beaufort scale from 0 (calm) to 12 (hurricane), corresponds to a wind of 5 (fresh breeze) causes a pressure increase effect about 17 Pa, which can eliminate the effect that a chimney has, for example a normal depression of 12 Pa.



Besides the direction and force of the wind and surrounding land morphology, the location and form of installing the chimney in relation to the residency is also a factor to consider.

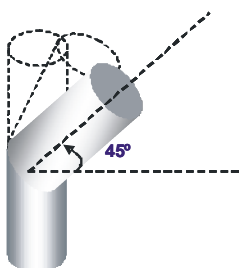


The differences of depression caused by exterior wind, are also felt inside the house and the installation of cookers on the zone exposed directly to wind can increase the depression on the chimney, fact that competes with the depression caused by the wind on the house exterior, that functions inversely, that is, the minor depression zone will be the zone directly exposed to the wind. Generally, this isn't a problem and the depression caused by the height of the chimney eliminates this effect, but every time that this situation is verified, it can be compensated by installing the chimney in a zone least exposed, increasing the capability of the chimney depression.

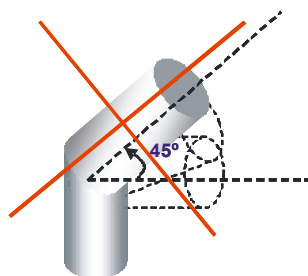


#### 4.1.2. Installation Advices

- \* This type of unit should be installed in a well-ventilated area. Any air intake grilles should be placed in locations that are not liable to become blocked, so that the place of installation has sufficient air in the order to avoid a poor draft;
- \* The combustion air enters the unit through a system that controls the burn intensity. This flow should be kept clear at all times;
- \* The ventilators that extract air from the room, must not be used;
- \* Use of this unit at the same time as other heating devices that require an air supply may necessitate additional air inlets. The installer should assess the situation in light of total air flow requirements;
- \* For your unit to function in normal conditions the combustion gas draft must create a draught of 12 Pa one metre above the throat of the flue. If this is not achieved in your chimney, your wood-burning cooker may not work properly, for example, by throwing smoke outdoors or consuming excess wood. For proper installation, at least 78,7 inches (2 metres) of metal rigid flue tube with the same diameter as the unit's smoke outlet should be fitted vertically above the unit. If this not achieved on your chimney, your unit might not function correctly, leading to smoke to the exterior or excess of wood consumption. After this section, sections of tubing with a maximum angle of 45° may be used (in this case the chimney should be cleaned once a year); the following figure illustrate correct and incorrect angles for installing a bend.

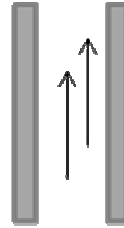


**Correct** angle for bends

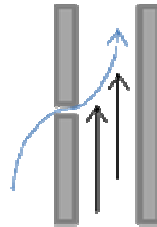
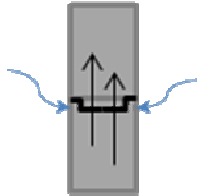


**Incorrect** angle for bends

- \* A single-walled tube installed on the outside of a building or in areas subject to thermal variations, results in the condensation of water vapour in the combustion gases. Instead, use of a double-walled, insulated tube is recommended;
- \* The tube unions must be well sealed to prevent air entering through possible gaps;

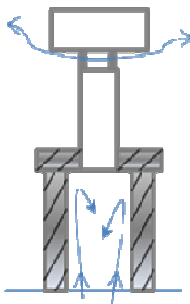


**Correct** sealing

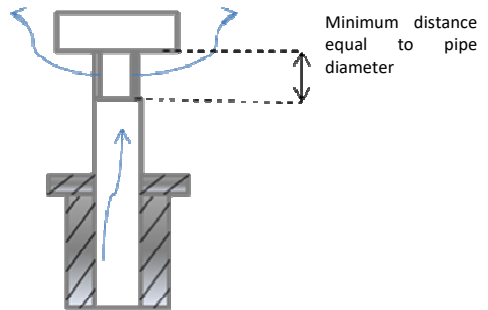


**Incorrect** sealing

\* The tube unions must not allow strangulation (reductions), therefore the inner walls must be perfectly smooth and free of obstacles. The caps must be placed correctly so as to avoid a difficult draft;

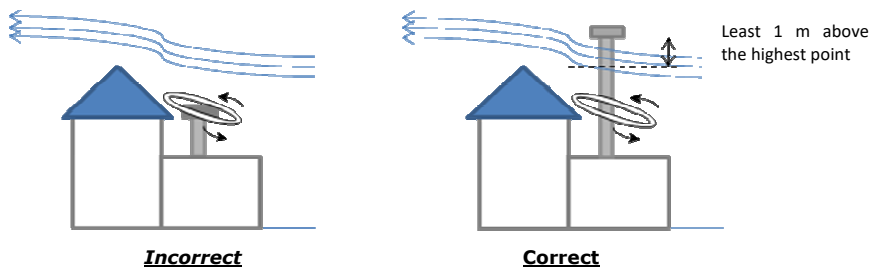


**Incorrect**



**Correct**

\* The flue outlet should allow for good air circulation and be placed at least 1 m above the top of any obstacle located within a distance of 9,8 feet (3 m); if case of a better draft is required, the height of the chimney should be increased;



- \* The same flue should not be used for more than one unit or open fireplace. With shared chimneys, each flue should reach its outlet independently and these should be at the same level to ensure that the air circulation expels the gases;
- \* Brick chimneys should not be too wide, as the smoke will cool as it disperses, reducing the draught. In case of draught problems, a revolving chimney cowl can be installed or place a metallic tube in the inner part to improve the draft.

## 4.2. Installation Location Requirements

- \* The floor on which the unit will stand must be able to support a permanent load of 2,2 pounds (1kg)/cm<sup>2</sup>. If the load capacity of the floor is insufficient, a solid plate can be used to distribute the load over an area larger than the unit's base;
- \* The equipment must be installed on a base of refractory bricks, or other type of material with non-combustible characteristics, if it is a combustible material (example: wood, etc...), a metal plate extending on the sides of the stove by 30 cm and the front by 50 cm must be placed.
- \* No combustible materials may be used near the walls of the wood-burning stove (safety distances must be observed, see Figure 2);
- \* The materials in front of the wood-burning stove must be able to withstand radiation heating through the equipment's glass and should therefore not have combustible characteristics;
- \* Refractory cement or other refractory material should be applied on the chimney walls;
- \* In order to assure a good functioning of your wood burning cooker, the air intake to the insertion zone of the equipment must be made by following the sketch bellow.

The intake 1, from the exterior of the residence must always be guaranteed and must have an area at least 100 cm<sup>2</sup> and without obstacles in such a way that the air intake is sufficient for a good function; in case this situation isn't possible, you will have to contemplate in the installation air inlet for the combustion (intake 2) from the interior of the residence, bearing mind the isolation degree of your residence and proximity of other

devices that consume air for its functioning (ex. Kitchen exhaust fans or bathroom) making the functioning of your equipment difficult on the combustion and draft.

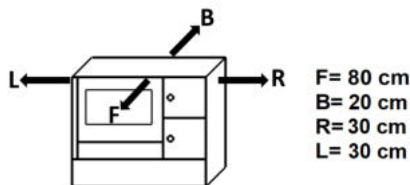


Figure 2 - Safety distances

## 5. Instructions for Use

*Attention: **all** regulations and standards must be complied with when installing this unit.*

### 5.1. Fuel

- \* Only firewood should be used in this type of unit. It may not be used as an incinerator, nor should other materials such as coal, painted wood, varnishes, thinners, liquid fuels, glues or plastics be used. Also avoid burning common combustible materials such as cardboard and straw.
- \* The firewood should have a low water content (less than 20%) in order to ensure efficient combustion and avoid creosote build-up in the smoke duct and on the glass.
- \* See Table 2, which lists some of the types of wood that can be used in these units.

**Table 2 - List of types of firewood that may be used in SOLZAIMA fires, their geographical distribution and calorific value/reactions**

| Common Name  | Scientific Name | Distribution   | Characteristics |           |           |                  |          |
|--------------|-----------------|--|-----------------|-----------|-----------|------------------|----------|
|              |                 |  | Smoke           | Heat      | Lighting  | Combustion Speed | Hardness |
| Pine         | Pinus           | Europe, except Finland; Northern Sweden and Norway.                                    | Little          | High      | Easy      | Fast             | Soft     |
| Cork Oak (+) | Quercus suber   | Southern Europe  | Little          | Very High | Easy      | Regular          | Hard     |
| Eucalyptus   | Eucalyptus      | Mediterranean Region   | Lot             | Regular   | Difficult | Slow             | Hard     |
| Holm Oak (+) | Quercus ilex    | Southern Europe  | Little          | Very High | Difficult | Slow             | Hard     |
| Olive tree   | Olea            | <i>Mediterranean Region</i>  | Little          | Very High | Difficult | Slow             | Hard     |
| Oak          | Quercus         | <i>Across Europe</i>   | Little          | High      | Difficult | Slow             | Hard     |
| Ash          | Fraxinus        | <i>Across Europe</i>   | Regular         | High      | Difficult | Slow             | Hard     |
| Birch        | Bétula          | <i>Across Europe</i>   | Little          | Very High | Easy      | Fast             | Soft     |
| Beech        | Fagus           | <i>Europe, except Iberian Peninsula and Northern Europe, including United Kingdom.</i> | Little          | High      | Difficult | Slow             | Hard     |
| Elm          | Ulmus           | <i>Across Europe</i>   | Regular         | High      | Difficult | Slow             | Hard     |
| Maple        | Acer            | <i>Across Europe</i>   | Little          | Regular   | Regular   | Slow             | Soft     |
| Poplar       | Populus         | <i>Across Europe</i>   | Little          | High      | Easy      | Fast             | Soft     |
| Chestnut     | Castanea        | <i>Across Europe</i>   | Regular         | High      | Difficult | Slow             | Hard     |

(+): greatest commercial availability

### **5.1.1. Power**

The power of your wood cooker indicates its heating capacity, i.e. the energy your equipment transfers from the firewood to your home (usually measured in kW) and is directly related to the amount of firewood that you place in it.

The rated output is the measure of a standard load of firewood when tested in laboratories during a certain amount of time.

The power output is a manufacturer's recommendation from tests to the equipment with firewood loads within a reasonable operation range. This power output range will present different firewood consumptions per hour.

### **5.2. First Use**

- \* Ask the installer to light the unit to ensure that all is functioning correctly;
- \* The equipment's paint is cured by the heat when it is first used, which may give rise to additional smoke. If this happens, you should air the room by opening external windows and doors.

### **5.3. Normal Use**

#### **\* Lighting:**

Before lighting for the first time, check that the wood-burning cooker is properly connected to the chimney, as described in the previous items.

Before starting the ignition, the primary air combustion regulator located in the ash drawer door (Figure 1, item 3) shall be open in position 3 (Figure 3).



**Figure 3**

Pull the draft control to open it (Figure 4).



**Figure 4**

The wood-burning cooker is lit with the ash drawer door and the ash grate door open. To open the ash grille door, lift it slightly and then pull the door.

After the fire is well set, you should put firewood, not overfilling the combustion chamber. When the firewood is well fired, you should place the primary air combustion regulator in a suitable position and close the chimney draught regulator (Figure 3). This operation improves the performance of the equipment. During this process, the combustion chamber door and the ash drawer door must be closed.

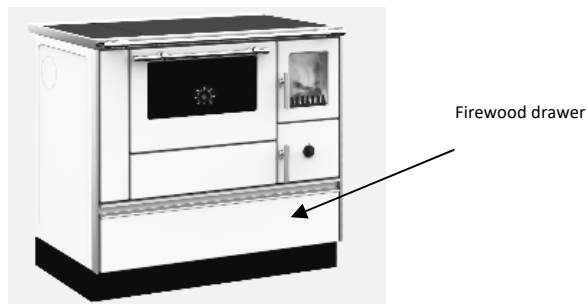
The wood-fired cooker can also be supplied from the top, by lifting the lid of the hot plate using the key as shown in Figure 5.



**Figure 5**

The fuel can be stored in the drawer as shown in Figure 6, flammable materials should not be stored in this compartment and wood should not be in contact with the combustion chamber. Use the fuel specified in Table 2. Do not burn coal dust, sawdust, or waste that generates large amounts of smoke.





**Figure 6**

**Note:** in order to avoid overheating of the cooker, it is recommended that the fuel consumption does not exceed 1,8 kg/h.

#### **5.4. Safety**

- \* The metallic parts and the glass, accessible to the user reach high temperatures, avoiding contact with the hottest parts;
- \* Whenever you need to lay wood or are in contact with the equipment when it is in operation, you should wear a heat-resistant glove or any other protection that prevents heat transmission;
- \* In case of **fire in the flue, immediately close the door, flue damper (where applicable) and secondary air intake;**

#### **5.5. Cleaning and Maintenance**

- \* You should remove ash from the drawer on a regular basis (after the stove is switched off), so that the combustion air is not prevented from entering through the ash grate;
- \* The glass should only be cleaned when completely cold; the glass should be cleaned with a suitable product (\*\*) by following the instructions for use and not allowing the product to come into contact with the sealing ring and painted metal parts, which could trigger oxidation. The sealing ring is glued, so should not be moistened with water or cleaning products. If it becomes detached, it can be reattached with contact glue after cleaning the groove with fine sandpaper;
- \* Do not clean the enamelled surfaces and the stove structure with a brush or metal sponge, as this may damage the enamel and safety coating, but use a damp cloth, cleaning agents or neutral detergent. Clean the oven after each use while it is still hot.

After cleaning, leave the oven door open for a few minutes to avoid bad odors the next time you heat the oven;

- \* You should not clean the cast or plate iron parts with detergent or water, but rather with just a dry cloth to remove the dust, otherwise the metal elements may oxidize. You may treat the cast iron parts with a special polish if you so require (\*\*), it is recommended to clean the cooker once a month or more often if necessary;

- \* To clean the hotplate, metal mops or abrasive sponges should be used, the plate should be cleaned with a damp cloth and at the end with a dry cloth. We must make sure that the grooves on the plate remain without any kind of rubbish inside, to allow it to dilate without deforming it. Avoid leaving pans on the hot plate when it is cold;

- \* Edges can be created by corrosion, which is difficult to remove;

- \* The combustion of firewood over time causes dirt and leaves residues in the chimney pipes, so the user should clean the duct elements and the chimney outlet periodically, at least once a year, in order to avoid clogging and fires in the chimney;

- \* It is only recommended to use spare parts supplied by the Manufacturer - SOLZAIMA;

- \* If you do not use the unit for a prolonged period, check to make sure that the flue pipes are clear before lighting it.

(\*\*) Seek advice from your supplier/installer.

## 6. Troubleshooting

| Nº. | Problem  | Possible Cause  | Solution  |
|-----|--|---|---|
| 1   | Condensation in the combustion chamber         | Fuel with a high humidity content   | Use fuel with recommended humidity  |
| 2   | The wood-burning cooker doesn't burn properly? | Low draught in the chimney  | Ensuring a correct chimney circulation  |
|     |  | Incorrect sealing of wood-burning cooker (parasitic air intake on combustion) | Ensure correct sealing of wood-burning cooker (doors, chimney, etc...)                            |
| 3   | Not enough heat to bake or cook                | Combustion regulator set to a low temperature                                 | Increase the water temperature using the Combustion Regulator or briefly open the Ash Drawer door |
| 4   | Excessive heat for baking or cooking           | Combustion regulator set for high temperature                                 | Reduce the water temperature using the Combustion Regulator                                       |
| 5   | Cooker makes smoke when first used             | High temperature ink cure of the combustion chamber                           | It is normal for the wood-burning cooker to smoke during the first ignition                       |
| 6   | Cooker makes smoke when used                   | Chimney, smokestack and wood-burning cooker dirty                             | Cleaning the chimney, smoke vent and wood-burning cooker  |
|     |  | Fuel with a high humidity content   | Use fuel with recommended humidity  |
|     |  | Overfueled combustion chamber   | Putting fuel in the combustion chamber in several steps   |
|     |  | Low draught in the chimney  | Ensuring a correct chimney circulation  |

**Table 3**

## 7. End of Life of a Wood Cooker

\* Around 90% of the materials used in the manufacture of these units is recyclable, thus helping to reduce environmental impact and contributing to the sustainable development of the planet.

\* End-of-life units should be taken to licensed waste operators. We advise you to contact your local council for collection.

## 8. Sustainability

\* Solzaima designs solutions and equipment "moved" by biomass as their primary energy source. This is our contribution for the sustainability of our planet – an economically viable and environmentally-friendly alternative, following environmental best management practices to ensure an efficient carbon cycle management.

\* Solzaima cares about being up to date with and assessing the existing forest area while efficiently responding to energetic demands, with a constant watch on biodiversity and natural wealth, critical aspects to the quality of life in our planet.

\* 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.

## 9. Glossary

\* **bar**: unit of pressure equal to exactly 100 000 Pa. This pressure is very close to standard atmospheric pressure.

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

\* **Groove**: housing for the sealing ring.

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

\* **CO** (carbon monoxide): Lightly flammable, colourless, odourless and very dangerous gas, due to its toxicity.

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

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

\* **Oxidant**: chemical substance that feeds combustion (essentially oxygen) and is essential for it to take place.

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

\* **Creosote**: chemical compound created by combustion. This compound is sometimes deposited on the glass and flue of an insert fire.

- \* **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% 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 1000 watts.
- \* **l/h:** liters per hour
- \* **mm** (millimetres): unit of measurement.
- \* **Pa** (Pascal): standard SI unit of pressure and tension. This unit is named after Blaise Pascal, eminent French mathematician, physicist and philosopher.
- \* **Calorific Value:** also known as specific combustion heat. Represents the quantity of heat released when a certain quantity of fuel is completely burned. Calorific value is expressed in calories (or kilocalories) per unit of weight of fuel.
- \* **Inch:** unit of length used in the British imperial system of measurement. One inch is 2,54 centimetres or 25,4 millimetres.
- \* **Rated output:** Electric power consumed by an energy source. Measured in watts.
- \* **Nominal heat output:** heating capacity, i.e. the heat energy the unit transfers from energy present in the firewood – measured for a standard load of firewood over a given period of time.
- \* **Power output:** a manufacturer's recommendation from tests on the equipment with firewood loads within a reasonable operating range. This power output range will present different firewood consumptions per hour.
- \* **Efficiency:** 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.
- \* **Ceramic glass:** Highly resistant ceramic material produced through controlled crystallisation of vitreous materials. Used widely in industrial applications.
- \* **W (Watt):** SI unit of power.

## **10. Warranty**

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

Solzaima, S.A.

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. Product warranty terms**

3.1 Solzaima, S.A., responds to the Buyer, for the lack of conformity of the Product with the respective contract of sale, within the following periods:

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, save the provisions of the following number regarding the intensive use;

3.1.2 A term of 6 months from the date of delivery of the goods, in the case of professional, or industrial, or intensive use of the products - Solzaima means by professional, industrial or intensive use of all products installed in industrial spaces, commercial, or whose use exceeds 1500 hours per calendar year;

3.2 A functional test of the product must be performed before finishing the installation (plaster, masonry, coatings, paintings, among others);

3.3 No equipment can be replaced after the 1st Burn without the express authorization of the producer;

3.4 Any product must be repaired on the site of installation without causing serious inconvenience to the parties, save, if this proves impossible, or disproportionate;

3.5 In order to exercise its rights, and provided that the term indicated in 3.1 is not exceeded, the Buyer must report in writing to Solzaima, S.A., the lack of conformity of the Product within a maximum period of:

3.5.1 60 (sixty) days after the date on which it has detected it in the case of domestic use of the product;

3.5.2 Thirty (30) days from the date of its detection, in the case of professional use of the Product.

3.6 In the pellet range equipment's, the commissioning service is required to activate the warranty. It must be registered up to 3 months after the date of invoice, or, 100 hours of work of the product (whichever occurs first);

3.7 During the Warranty period referred to in paragraph 3.1 (and for this to remain valid), repairs to the Product must be performed exclusively by the Official Technical Services of the Brand. All services provided under this Guarantee will be performed Monday through Friday within the working time and calendar legally established in each region.

3.8 All requests for assistance must be submitted to the Solzaima, S.A. Customer support service, by means of a proper form present on the Website [www.solzaima.co.uk](http://www.solzaima.co.uk), or, e-mail: [support.cliente@solzaima.pt](mailto:support.cliente@solzaima.pt). At the time of the technical assistance to the Product, the Buyer must present, as proof of the Product Warranty, the purchase invoice of the same or another document demonstrating its acquisition. In any case, the document proving the acquisition of the Product must contain the identification of the Product (as mentioned in point 2 above) and its date of acquisition. Alternatively, and in order to validate the Product Warranty, the PSR - document certifying the commissioning of the machine (when applicable)).

3.9 The Product will have to be installed by a qualified professional for the purpose, in accordance with the regulations in force in each geographical area, for the installation of these Products and complying with all the regulations in force, especially regarding chimneys, as well as other applicable regulations for aspects such as water supply, electricity and / or other related to the equipment or sector and as described in the instruction manual.

A product installation that does not conform to the manufacturer's specifications and / or does not comply with the legal regulations on this subject will not give rise to the application of this Warranty. Whenever a product is installed outdoors, it must be protected against weather effects such as rain and wind. In these cases, it may be necessary to protect the appliance by means of a cabinet, or a properly ventilated protective case. Appliances should not be installed in places that contain chemicals in their atmosphere, in saline or high humidity environments, as mixing them with air may produce rapid corrosion in the combustion chamber. In this type of environment, it is especially recommended that the appliance be protected with anti-corrosion products for this purpose, especially during times of operation. As a suggestion it is indicated the application of graphite greases indicated for high temperatures with function of lubrication and anti-corrosion protection.

3.10 In equipment belonging to the pellet family, in addition to the daily and weekly maintenance contained in the instruction manual, it is also obligatory to carry out the cleaning inside and in the respective chimney for the evacuation of fumes. These tasks should be carried out every 600-800 kg of pellets consumed, in the case of stoves (air and water) and compact boilers, and every 2000-3000 kg of pellets consumed in the case of automatic boilers. In the event that these quantities are not consumed, at least one systematic preventive maintenance must be carried out annually.

3.11 It is the Buyer's responsibility to ensure that periodic maintenance is carried out, as indicated in the instruction and handling manuals accompanying the Product. Whenever requested, it must be proved by submitting the technical report of the entity responsible for it, or alternatively by registering them in the instruction manual in the dedicated section.

3.12 In order to avoid damage to the equipment caused by overpressure, safety elements such as pressure relief valves and / or thermal discharge valves, if applicable, as well as an expansion vessel fitted to the installation, shall be ensured at the time of installation and its correct functioning must be ensured. It should be noted that: the valves referenced must have a value equal to or less than the pressure supported by the equipment; there shall be no cut-off valve between the equipment and its safety valve; provision should be made for a systematic preventive maintenance plan to attest to the correct functioning of the said safety features; irrespective of the type of appliance, all safety valves shall be channelled to drained sewage to prevent damage to the dwelling by water discharges. Product Warranty does not include damages caused by non-channelling of water discharged by said valve.



3.13 In order to avoid damage to the equipment and attached pipes by galvanic corrosion, it is advisable to use dielectric separators in the connection of the equipment to metal pipes whose characteristics of the materials applied to this type of corrosion. Product Warranty does not include damages caused by non-use of such dielectric separators.

3.14 The water or thermofluid used in the heating system (hydro stoves, boilers, central heating stoves, among others) must comply with the legal requirements in force, as well as guarantee the following physical and chemical characteristics: absence of solid particles in suspension; low level of conductivity; residual hardness of 5 to 7 degrees; neutral pH, close to 7; low concentration of chlorides and iron; and absence of air inlets by depression or others. In case the installation enhances automatic water make-up, it should consider upstream a preventive treatment system composed of filtration, decalcification and preventive dosing of polyphosphates (scale and corrosion), as well as a degassing step, if necessary. If in any circumstance any of these indicators show values that are not recommended, the Warranty will cease to have effect. It is also compulsory to place a non-return valve between the automatic filling valve and the mains water supply, and that said supply always has constant pressure, even with a lack of electricity, not depending on lift pumps, autoclaves, or others.

3.15 Except as expressly provided by law, a warranty intervention does not renew the warranty period of the Product. The rights arising from the Warranty are not transferable to the purchaser of the Product.

3.16 The equipment must be installed in accessible places and without risk to the technician. The means necessary for access to them shall be made available by the Buyer, and the Buyer shall be responsible for any charges arising therefrom.

3.17 The Warranty is valid for the Products and equipment sold by Solzaima SA solely and exclusively within the geographical and territorial zone of the country where the Product was sold by Solzaima.

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

Excluded from the Warranty, being the total cost of the repair borne by the Buyer, the following cases:

4.1. Products with more than 2000 operating hours;

4.2. Refurbished and resold products.

4.3. Maintenance operations, Product settings, commissioning, cleaning, elimination of errors or anomalies that are not related to deficiencies of equipment components and replacement of the batteries

4.4. Components in direct contact with fire such as: vermiculite supports, deflector or protective plates, vermiculite, sealing lanyards, burners, ash drawers, wood chips, smoke registers, ash grates, whose wear is directly related to the conditions of use. Degradation of the paint, as well as corrosion due to degradation of the paint, due to overloading of fuel, use of an open drawer or excessive drainage of the installation chimney (the chimney must respect the drawing recommended in the Product Technical Data Sheet). Glass breakage due to improper handling or other reason not related to Product deficiency. In the pellet family, the ignitors are aware part, so they are only guaranteed for 6 months, or 1000 ignitions (whichever comes first);

4.5. Wear considered components, such as bearings and bushes;

4.6. Deficiencies of components external to the Product that may affect its correct functioning, as well as material or other damages (e.g. tiles, roofing, waterproofing, pipes, or personal injury) caused by improper use of materials in the installation or by non-execution of the product installation in accordance with the rules for the installation, applicable regulations or rules of good art, in particular when the application of suitable piping to the temperature in use, expansion vessels, non-return valves, safety valves, anti-condensation valves, among others;

4.7. Products whose operation has been affected by failures or deficiencies of external components or by poor sizing;

4.8. Defects caused by the use of accessories or replacement components other than those determined by Solzaima, S.A.;

4.9. Defects arising from non-compliance with the installation, use and operation instructions or applications not conforming to the intended use of the Product, or from abnormal climatic factors, unusual operating conditions, overload or maintenance or cleaning performed improperly;

4.10. The Products that have been modified or manipulated by people outside the Official Technical Services of the brand and consequently without the explicit authorization of Solzaima, SA.;

4.11. Damage caused by external agents (rodents, birds, spiders, etc.), atmospheric and / or geological phenomena (earthquakes, storms, frost, hailstorms, thunderstorms, etc.), humid or saline aggressive environments such as proximity of the sea or river, as well as those derived from excessive water pressure, inadequate power supply (voltage with variations greater than 10%, with a nominal value of 230V, or, neutral voltage greater than 5V, or absence of earth protection); pressure or supply of inadequate circuits, acts of vandalism, urban confrontation and armed conflict of any kind, as well as derivatives;

4.12. Failure to use the fuel recommended by the manufacturer is a condition of exclusion from the Warranty.;

Explanatory note: In the case of pellet appliances the used fuel must be certified by EN 14961-2 grade A1. Also, before buying large quantity you should test the fuel to see how it behaves. In wood equipment, this moisture content must be of less than 20%.

4.13. The appearance of condensation, either by poor installation or by the use of non-virgin fuels (such as pallets or wood impregnated with paints or varnishes, salt or other components), which may contribute to the accelerated degradation of equipment and especially to your combustion chamber;

4.14. All Products, Components or damaged components in transportation or installation;

4.15. Cleaning operations carried out on the appliance or its components due to condensation, fuel quality, bad settings or other circumstances of the installation location. Also excluded from the Warranty are interventions for the descalsification of the Product (the removal of limestone or other materials deposited inside the apparatus and produced by the quality of the water supply). Also excluded from this warranty are air bleeding interventions of the circuit or unblocking of circulating pumps.

4.16. The installation of the equipment supplied by Solzaima, S.A. should contemplate the possibility of their easy removal, as well as points of access to the mechanical,

hydraulic and electronic components of the equipment and the installation. When the installation does not allow immediate and safe access to the equipment, the additional cost of access and security will always be borne by the Buyer. The cost of disassembling and assembling boxes of plasterboard or masonry walls, insulation or other elements such as chimneys and hydraulic connections that prevent free access to the Product (if the Product is installed inside a carton of plasterboard , masonry or other dedicated space must comply with the dimensions and characteristics indicated in the instruction manual and use accompanying the appliance).

4.17. Interventions of information or clarification at home about the use of its heating system, programming and / or reprogramming of control and regulating elements, such as thermostats, regulators, programmers, etc.;

4.18. Interventions for the adjustment of fuel recipes in pellet devices, cleaning, detection of water leaks in pipes external to the apparatus, damage caused due to the need to clean the gas evacuation machinery or flues;

4.19. Urgency interventions not included in the provision of Warranty i.e., weekend and holiday interventions because they are special interventions not included in the Guarantee coverage and which therefore have an additional cost, will be carried out exclusively on request expressed by the Buyer and upon the availability of the Producer.

## **5. Warranty Inclusion**

Solzaima, S.A. will correct without any charge to the Buyer the defects covered by the Warranty through the repair of the Product. The replaced Products or Components shall become the property of Solzaima, S.A.

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

Notwithstanding legally established, Solzaima, S.A., liability in respect of warranty is limited to that established in the present warranty conditions.

## **7. Cost of Services performed outside the scope of the warranty**

The interventions carried out outside the scope of the warranty are subject to the application of the current tariff.

#### **8. Warranty Services performed out of scope Warranty**

The interventions carried out outside the scope of the Warranty and carried out by the official technical assistance service of Solzaima have a 6-month guarantee.

#### **9. Warranty Spare Parts provided by Solzaima**

The parts supplied by Solzaima, as part of the commercial sale of spare parts, i.e., not incorporated in the equipment, have no guarantee.

#### **10. Replaced Parts under the of Scope Technical Service**

From the moment they are removed from the equipment, the Parts used are considered as waste. Solzaima as a producer of waste in the scope of its activity is obliged by the legislation in force to deliver them to a licensed entity that performs the proper waste management operations under the law and therefore is prevented from giving them another destination, whatever. Therefore, the customer will be able to see the used parts resulting from the assistance, but cannot keep them in their possession.

#### **11. Administrative expenses**

In the case of invoices for services rendered, they are not processed in any stipulated period with default interest at the maximum legal rate in force.

#### **12. 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 the district of Águeda, with express waiver of any other.

## 11. Statement of Performance

**DECLARAÇÃO DE DESEMPENHO | DECLARACIÓN PRESTACIONES | DECLARATION OF PERFORMANCE |**

**DÉCLARATION DE PERFORMANCE | DICHIARAZIONE DELLE PRESTAZIONI**

Nº DD-053

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

PEPPER 70 L - BRANCO – EAN 05600990456082

PEPPER 70 L - ANTRACITE– EAN 05600990456099

2.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

3. Utilização prevista | Uso previsto | Intended use | Utilisation prevue | Destinazione d'uso

COZINHA DE CARGA MANUAL, PARA QUEIMAR COMBUSTÍVEL SÓLIDO, CUJA FUNÇÃO É AQUECER O ESPAÇO EM QUE ESTÁ INSTALADO | COCINA DE CARGA MANUAL, PARA QUEMAR COMBUSTIBLE SÓLIDO, CUYA FUNCION ES CALENTAR EL ESPACIO EN EL QUE ESTÁ INSTALADO | MANUAL LOAD KITCHEN, TO BURN SOLID FUEL, WHOSE FUNCTION IS TO HEAT THE SPACE IN WHICH IT IS INSTALLED | CUISINE À CHARGEMENT MANUEL, À COMBUSTIBLE SOLIDE, AYANT POUR FONCTION DE CHAUFFER L'ESPACE DANS LEQUEL IL EST INSTALLÉ | CUCINA A CARICO MANUALE, PER BRUCIARE COMBUSTIBILE SOLIDO, LA CUI FUNZIONE È QUELLA DI RISCALDARE LO SPAZIO IN CUI È INSTALLATO

4.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

5.Sistema de avaliação e verificação da regularidade do desempenho do produto | Sistema de evaluación y verificación de constancia de las prestaciones del prodoto| 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

6.Norma Harmonizada | Estandár armonizado | Harmonized standard | Norme harmoisée | Standard armonizzata

EN 12815/A1:2005

7.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

STROJIRENSKY ZKUSEBNI USTAV S.P.

NB: 1015

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

Nº. 30-8560/2

9.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   | OK. De acordo com relatório de ensaio   De acuerdo con informe de la prueba   According to the test report   Selons le rapport d'essai   Secondo i rapporti di prova<br>Nº. 30-8560/2 | De acordo com os requisitos   De acuerdo con los requisitos   According to the requirements   Selons les exigences   Secondo i requisiti 4.2, 4.8, 4.9, 4.11, 4.14, 4.16, 4.19, 4.21, 5.1, 5.2, 6.7, 6.10 (EN12815) |
| Distância mínima de segurança para materiais combustíveis   Distancia mínima de seguridad a materiales combustibles   Minimum safety distance to combustible materials   Distance de sécurité minimale aux matériaux combustibles   Distanza minima di sicurezza da materiali combustibili | Lateral   Lateral   Side   Latéral   Laterale<br>300 mm   | ---   |
|  | Traseira   Trasera   Back   Arrière   posteriore<br>200 mm  |   |
|  | Frente   Frente   Front   Avant   Fronte<br>800 mm  |   |
| Temperatura gases combustão   Temperatura de humos   Flue gas temperature   température de gaz de combustion   Temperatura fumi  | 205 °C  | ---   |
| 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   | OK<br>CO: 0,88%   | Caudal térmico nominal   Caudal térmico nominale   Nominal heat output   Le débit calorifique nominal   Nominal heat output   Flusso termico nominale -CO < 1%  |
| Potência nominal   Potencia nominal   Nominal heat output   Puissance nominale   Potenza nominale  | 6,3 kW  | ---   |
| Temperatura de superfície   Temperatura de la superficie   Surface temperature   La température de surface   Temperatura superficiale  | OK. De acordo com relatório de ensaio   De acuerdo con informe de la prueba   According to the test report   Selons le rapport d'essai   Secondo i rapporti di prova<br>Nº. 30-8560/2 | De acordo com os requisitos   De acuerdo con los requisitos   According to the requirements   Selons les exigences   Secondo i requisiti 4.2, 5.1, 5.2, 5.3, 6.10 (EN12815)   |

|  |   |  |
|--|---|--|
| Resistência mecânica   Resistencia mecânica   Mechanical strength   résistance   Resistenza meccanico                | <b>OK.</b> De acordo com relatório de ensaio   De acuerdo con informe de la prueba   According to the test report   Selons le rapport d'essai   Secondo i rapporti di prova<br><b>Nº. 30-8560/2</b> | De acordo com os requisitos   De acuerdo con los requisitos   According to the requirements   Selons les exigences   Secondo i requisiti 4.2, 4.3, 4.4, 4.5, 4.6, 4.7 5.5, 5.6 (EN12815) |
| Rendimento energético   Eficiencia energética   Energy efficiency   L'efficacité énergétique   Efficienza energetica | <b>OK.</b><br><b>76,4%</b>  | <b>≥ 60%</b> para potência térmica nominal   de potencia térmica nominal   for rated thermal input   Pour puissance thermique nominale   di potenza termica nominale                     |

10. 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

Nome e cargo | Nombre y cargo | Name and title | Nom et titre | Nome e titolo  
Belazaima do Chão, 15/01/2019

Nuno Sequeira (Director Geral | CEO)



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

PEPPER 90 L - BRANCO – EAN 05600990456129      PEPPER 90 L - ANTRACITE– EAN 05600990456136

2. 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

3. Utilização prevista | Uso previsto | Intended use | Utilisation prévue | Destinazione d'uso  
COZINHA DE CARGA MANUAL, PARA QUEIMAR COMBUSTÍVEL SÓLIDO, CUJA FUNÇÃO É AQUECER O ESPAÇO EM QUE ESTÁ INSTALADO | COCINA DE CARGA MANUAL, PARA QUEMAR COMBUSTIBLE SÓLIDO, CUYA FUNCION ES CALENTAR EL ESPACIO EN EL QUE ESTÁ INSTALADO | MANUAL LOAD KITCHEN, TO BURN SOLID FUEL, WHOSE FUNCTION IS TO HEAT THE SPACE IN WHICH IT IS INSTALLED | CUISINE À CHARGEMENT MANUEL, À COMBUSTIBLE SOLIDE, AYANT POUR FONCTION DE CHAUFFER L'ESPACE DANS LEQUEL IL EST INSTALLÉ | CUCINA A CARICO MANUALE, PER BRUCIARE COMBUSTIBILE SOLIDO, LA CUI FUNZIONE È QUELLA DI RISCALDARE LO SPAZIO IN CUI È INSTALLATO

4. 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

5. Sistema de avaliação e verificação da regularidade do desempenho do produto | Sistema de evaluación y verificación de constancia de las prestaciones del prodoto | 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

6. Norma Harmonizada | Estandár armonizado | Harmonized standard | Norme harmoisée | Standard armonizzata

EN 12815/A1:2005

7. 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

STROJIRENSKY ZKUSEBNI USTAV s.p.  
NB: 1015

8. Relatório de ensaio | Informe de la prueba | Test report | Rapport d'essai | Rapporto di prova  
Nº. 30-8560/3

9. 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.</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 rapporti di prova<br><b>Nº. 30-8560/3</b> |               | De acordo com os requisitos   De acuerdo con los requisitos   According to the requirements   Selons les exigences   Secondo i requisiti 4.2, 4.8, 4.9, 4.11, 4.14, 4.16, 4.19, 4.21, 5.1, 5.2, 6.7, 6.10 (EN12815) |
| Distância mínima de segurança para materiais combustíveis   Distancia mínima de seguridad a materiales combustibles   Minimum safety distance to combustible materials   Distance de sécurité minimale aux matériaux combustibles   Distanza minima di sicurezza da materiali combustibili | Lateral   Lateral   Side   Latéral   Laterale   | <b>300 mm</b> | ---   |
|  | Traseira   Trasera   Back   Arrière   posteriore  | <b>200 mm</b> |   |
|  | Frente   Frente   Front   Avant   Fronte  | <b>800 mm</b> |   |
| Temperatura gases combustão   Temperatura de humos   Flue gas temperature   température de gaz de combustion   Temperatura fumi  | <b>179 °C</b>   |               | ---   |
| Emissão de produtos de combustão   La emisión de productos de combustión   Emission of combustion products   Emission des produits de combustion   Emissione dei prodotti di combustione   | <b>OK</b><br><b>CO: 0,96%</b>   |               | Caudal térmico nominal   Caudal térmico nominal   Nominal heat output   Le débit calorifique nominal   Nominal heat output   Flusso termico nominale <b>-CO &lt; 1%</b>   |
| Potência nominal   Potencia nominal   Nominal heat output   Puissance nominale   Potenza nominale  | <b>6,8 kW</b>   |               | ---   |
| 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 rapporti di prova<br><b>Nº. 30-8560/3</b> |               | De acordo com os requisitos   De acuerdo con los requisitos   According to the requirements   Selons les exigences   Secondo i requisiti 4.2, 5.1, 5.2, 5.3, 6.10 (EN12815)   |
| Resistência mecânica   Resistencia   | <b>OK.</b> De acordo com relatório de ensaio  |               | De acordo com os requisitos   De acuerdo  |

|   |   |   |
|---|---|---|
| mecânica   Mechanical strength  <br>résistance   Resistenza meccanica   | De acuerdo com informe de la prueba  <br>According to the test report   Selons le<br>rapport d'essai   Secondo i rapporto di<br>prova<br><b>Nº. 30-8560/3</b> | con los requisitos   According to the<br>requirements   Selons les exigences  <br>Secondo i requisiti 4.2, 4.3, 4.4, 4.5, 4.6,<br>4.7 5.5, 5.6 (EN12815)                      |
| Rendimento energético   Eficiencia<br>energética   Energy efficiency  <br>L'efficacité énergétique   Efficienza<br>energetica | <b>OK.</b><br><br><b>76,92%</b>   | <b>≥ 60%</b> para potência térmica nominal   de<br>potencia térmica nominal   for rated thermal<br>input   Pour puissance thermique nominale<br>  di potenza termica nominale |

10. 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

Nome e cargo | Nombre y cargo | Name and title | Nom et titre | Nome e titolo  
Belazaima do Chão, 15/01/2019

Nuno Sequeira (Director Geral | CEO)

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

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

**SOLZAIMA**

SOLUÇÕES DE AQUECIMENTO A BIOMASSA

**APPROVED PRODUCT**