

SOLZIMA

BIOMASS HEATING SOLUTIONS

# Instruction Manual

English

**Insert Fires – *Panoramic Line***

**Trevi 850 | Trevi 1100**

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

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

\* All our products fulfil the requirements of the European Regulation (Reg UE 305/2011) and have been certified with the **CE** conformity trademark;

\* SOLZAIMA disclaims responsibility for damages to the unit if it is installed by non-qualified personnel;

\* SOLZAIMA disclaims responsibility for damages to the unit if the rules for installation and use described in this manual are not followed;

\* All local regulations, including those referring to national and European standards, should be complied with when installing the unit;

\* Our **Panoramic Line Insert Fires** have been tested according to standards EN 13229:2001 + EN 13229:2001/AC:2003 + EN 13229:2001/A1:2003 + EN 13229:2001/A2:2004 + EN 13229:2001/AC:2006 + EN 13229:2001/A2:2004/AC:2006;

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

\* Whenever you need assistance, you should contact your unit's supplier or installer. You should provide its serial number, which is on the identification plate located on the ash pan holder.

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## Solzaima

Solzaima's vision has always been to provide a clean, renewable and more cost-effective energy. This is why we've been dedicating ourselves for more than 35 years to the manufacturing of biomass heating equipment and solutions.

As a result of the persistence and unconditional support from our partner network, Solzaima is today a leading player in the production of biomass heating solutions, best illustrated by our backboiler fires for central heating.

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

Solzaima is the only manufacturer in Portugal with ISO 9001 quality certification and ISO14001 environmental certification – we believe we are a role model in this respect.

## Technical Specifications

**Panoramic Line Insert Fires** are designed to heat their surroundings. They are the perfect solution for those who want a designer fireplace for their living room while getting a high efficiency rate and considerable firewood savings – such is the case of the new designer devices with a guillotine door - TREVI 850 and TREVI 1100.

### \* Technical specifications across this range:

\* CE certified

\* Frequency: 50 Hz

\* Power: 66 W

\* Voltage: 230 V



***With optional ventilation***

\* Maximum fuel load: 11pounds (6,7 Kg)

\* Average reloading time: 45 minutes

\* Type of equipment: intermittent use

\* Fuel: Dry firewood

**Table 1 – Technical Specifications for each Stove**

| Dimensions   | Trevi<br>850        |           | Trevi<br>1100       |           |
|--|---------------------|-----------|---------------------|-----------|
|  | Width               | Height    | Width               | Height    |
| Front (inches/mm)                                    | 34.4/875            | 17.3/440  | 44.2/1125           | 17.3/440  |
| Casing (inches/mm)                                   | 40.1/1020           | 41.5/1055 | 50/1270             | 41.5/1055 |
| Total Depth (inches/mm)                              | 21.2/540            |           | 21.2/540            |           |
| Flue Ø (inches/mm)                                   | Ø 7.8/200 int.      |           | Ø 9.8/250 int.      |           |
| Rated output (kW)                                    | 21,7                |           | 21,7                |           |
| Efficiency (%)                                       | 77                  |           | 77                  |           |
| CO Emissions (13%O <sub>2</sub> ) (%)                | 0,88                |           | 0,88                |           |
| CO <sub>2</sub> Emissions (%)                        | 12,3                |           | 12,3                |           |
| Average combustion temperature (°F/°C)               | 351                 |           | 351                 |           |
| Combustion flow (g/s)                                | 14                  |           | 14                  |           |
| Power output <sup>1</sup> (kW)                       | 15,2 – 28,2         |           | 15,2 – 28,2         |           |
| Firewood consumption <sup>2</sup> (pounds/kg / h)    | 10.3/4,7 – 19.1/8,7 |           | 10.3/4,7 – 19.1/8,7 |           |
| Weight (pounds/kg)                                   | 540.1/245           |           | 637.1/289           |           |
| Maximum heated volume (m <sup>3</sup> )              | 640                 |           | 640                 |           |
| Energy efficiency rating                             | 1                   |           | 1                   |           |
| Length firewood ( inches/mm)                         | 1543/700            |           | 1543/700            |           |
| Centrifugal fan flow (optional)– (m <sup>3</sup> /h) | 430                 |           | 430                 |           |

<sup>1</sup> Power output is calculated by taking into account a variation of  $\pm 30\%$  in relation to the rated output.

<sup>2</sup> Consumption of firewood, taking into account the range of power outputs.

# Your Stove

## \*Trevi 850



TREVI 850



TREVI 850 with frame *(optional)*

## \*Trevi 1100



TREVI 1100



TREVI 1100 with frame *(optional)*

Fig. 1 – Trevi 850 and Trevi 1100 with and without frame

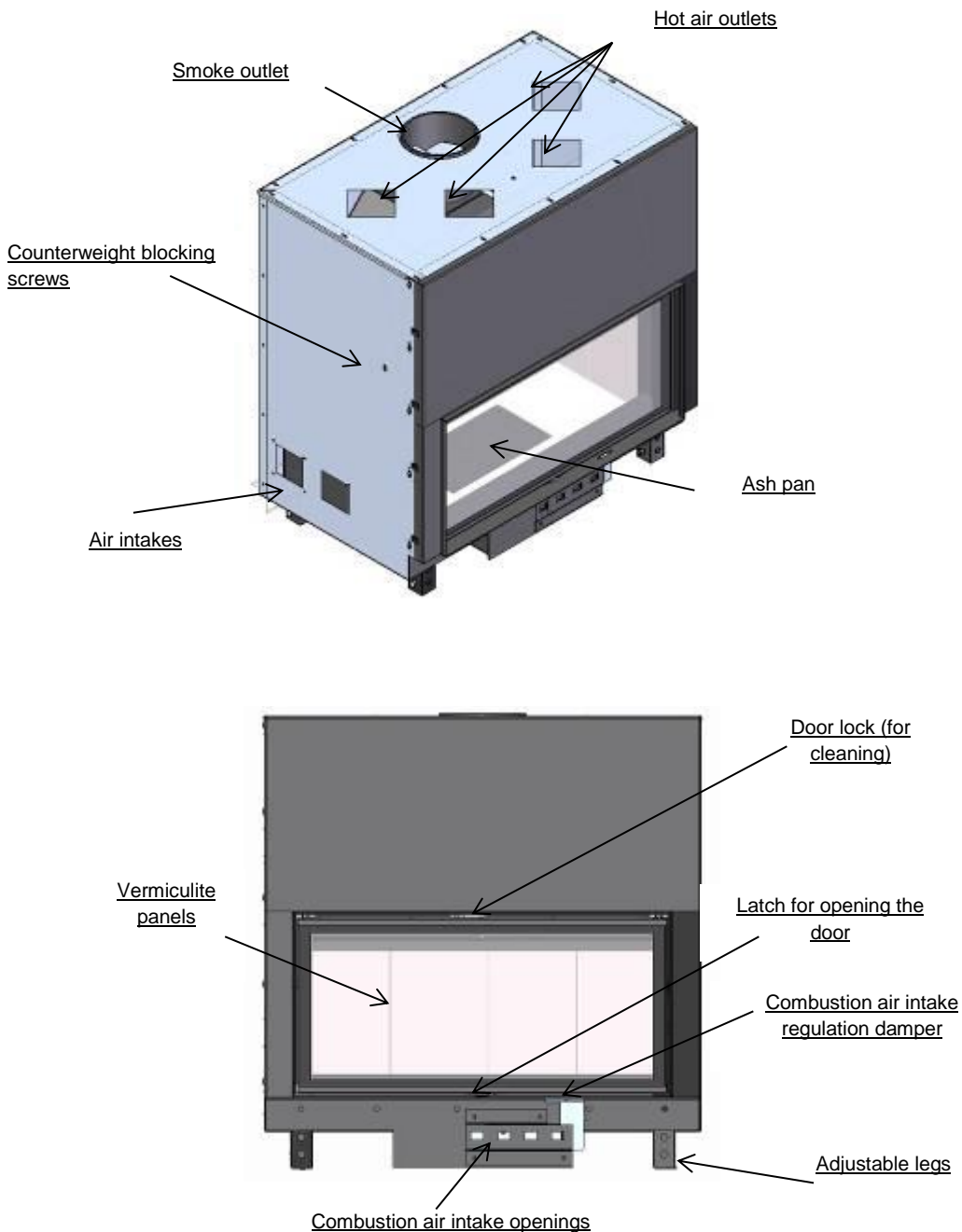


Fig. 2 – Main components of the Trevi panoramic line unit.



## Components

\* This unit's casing is made of top-quality carbon steel plate, with a thickness of 0.1 inches (5mm). Other parts of the unit use plates with thicknesses of 0.07, 0.09 and 0.11 inches (2mm, 2.5mm and 3mm). The other shell is made of 0.03 inches (1mm) thick galvanised plate and the ash grate of 0.47 inches (12mm) thick plate;

\* The combustion chamber is coated with a heat-resistant material. The insulation on the back wall, combustion bed and baffle plate is made of vermiculite, a hydrosilicate that can withstand temperatures in the order of 2012°F (1100°C). Its insulating properties allow the unit to take better advantage of the heat, increasing the temperature inside the chamber and enabling cleaner combustion (lower CO content), as well as providing greater protection for the steel plate forming the combustion chamber walls and thus prolonging the life of the equipment;

\* The specially-shaped door is made of carbon steel, making it extremely hard-wearing;

\* Heat-resistant ceramic glass. Can withstand temperatures of up to 1382°F (750°C) in continuous use;

\* Heat-resistant paint for temperature peaks up to 1652°F (900°C) and operating temperatures in the order of 1112°F (600°C);

# Installation

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

*Check that the product is complete and in good condition immediately upon receipt. Any defects should be noted before the unit is installed.*

**\* Before starting the installation, do the following:**

- a) Before assembly, remove the counterweight blocking screws that ensure the stove can be transported safely (Fig. 3);
- b) Open the hot air outlets, located on the top of the unit (Fig. 4);



Fig. 3

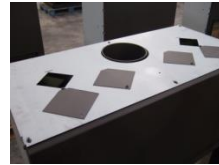


Fig. 4

- c) Check that all parts are functioning correctly before installation;
- d) Raise and lower the door, using the key provided (Figs. 5 and 6);



Fig. 5



Fig. 6

- e) Open the door to the front in cleaning mode, using the key provided (Figs. 7 and 8);



Fig. 7



Fig. 8

- f) Move the air regulation damper (Fig. 9);



Fig. 9

Check the ventilator is working, if applicable, as well as the installation of the adjustable legs. Remove the label from the glass and retain the instruction manual for future reference.

## **1. Combustion air and gas circulation**

- \* 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;
- \* The combustion air enters the stove through a set of easily visible openings, located on the front of the fire. This flow should be kept clear at all times;
- \* Additional air inlets may be needed if the stove is used in simultaneous with other devices that require an air supply. The installer should evaluate the situation according to the overall air flow requirements;
- \* Under normal operating conditions, the combustion gas flow should create a draught of 12 Pa one metre above the throat of the flue. For proper installation, at least 78.7 inches (2 metres) of metal flue tube with the same diameter as the unit's smoke outlet should be fitted vertically above the unit. After this section, sections of tubing with a maximum angle of 45° may be used; Figures 10 and 11 illustrate correct and incorrect angles for installing a bend;

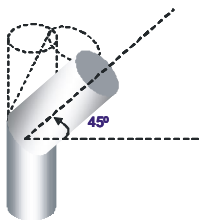


Fig. 10 – **Correct** angle for bends

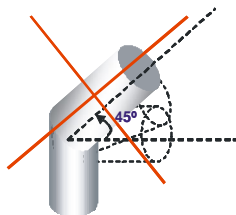


Fig.11 – **Incorrect** angle for bends

- \* A single-walled tube installed on the outside of a building results in the condensation of water vapour in the combustion gases. We therefore recommend the use of a double – walled insulated pipe;
- \* The flue outlet should allow for good air circulation and be placed at least 23.6 inches (60cm) above the top of any obstacle located within a distance of 9.8 feet (3m);
- \* Brick chimneys should not be too wide, as the smoke will cool as it disperses, reducing the draft. In case of draft problems, a revolving chimney cowl can be installed;
- \* 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;

## **2. Installation location requirements**

- \* The stove should stand on a masonry hearth made of refractory bricks or another type of non-combustible material;
- \* It is recommended for these units to be insulated with insulating material with a thickness of 1.57 inches (40mm) and a density of 154 pounds (70kg)/m<sup>3</sup>;
- \* It is recommended for all stoves should be installed at least 15.7 inches (400mm) from combustible materials;
- \* Combustible materials should not be installed close to the walls of the stoves, in the installation area or in the air convection area;
- \* Materials/objects placed in front of the stoves should be able to withstand the heat radiated from the glass of the door, so should not be combustible;
- \* 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 stove's base;
- \* Refractory cement or other refractory material should be applied on the chimney walls;
- \* The building's air intake grilles should not be obstructed;

- \* Ensure that the opening in the wall is of an appropriate size to house the stove;
- \* There should be a gap of around 0.19 inches (5mm) between the stove and ornamental stones (or any other type of finishing), to allow room for the metal to expand. The housing, whether it is stone, plasterboard or any other material, should also allow the stove to be removed without causing damage, if the need arises;
- \* The use of wood finishing may increase the risk of fire. Therefore, we recommend the use of adequate insulation or that wood not be used at all.

### 3. Forced Ventilation (optional)

\* Units equipped with forced ventilation include one 66W ventilator and a circuit board that enables you to control its functioning.

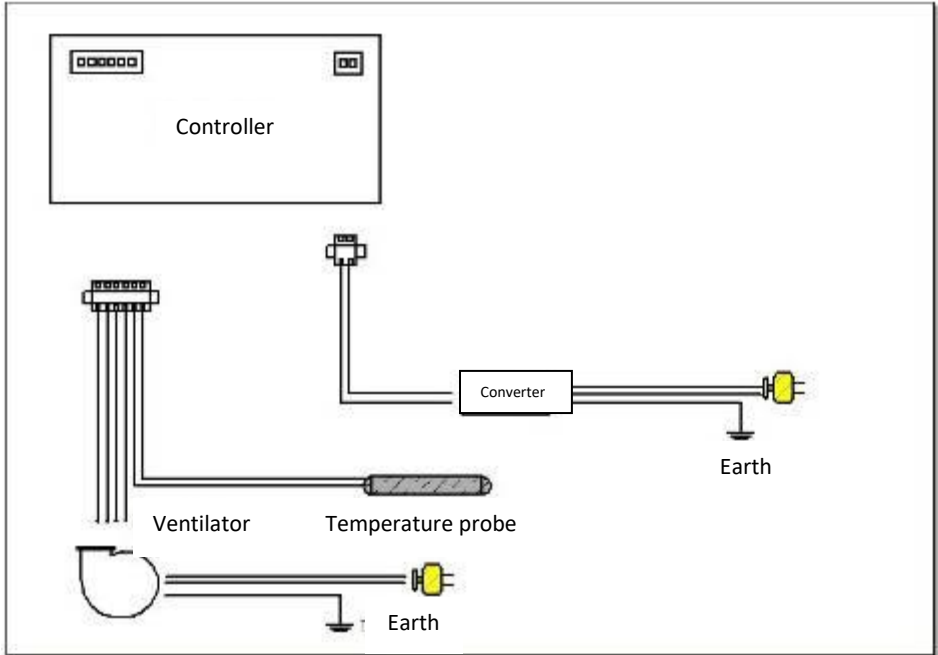


Fig.12 – Circuit diagram

**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 stove off, with a minimum separation of 0.118 inches (3mm) between the contacts, pursuant to the applicable legislation in force.<sup>3</sup>

## Instructions for Use

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

### 4. 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 (on the next page), which lists some of the types of wood that can be used in these units;

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<sup>3</sup> We recommend the use of a 30 mA differential switch and a 0.5 A circuit breaker for the unit's electrical installation.



**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 (total: 18 districts)   | Smoke   | Heat      | Characteristics |                  |          |
|--------------|-----------------|--|---------|-----------|-----------------|------------------|----------|
|              |                 |  |         |           | 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            | Mediterranean Region   | 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        | Betula          | <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     |

**(+): most availability from firewood sellers**

## **1.1. Power**

The power of your unit indicates its heating capacity, i.e. the energy your stove 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.

## **1.2. Energy Efficiency and Performance Ratings**

Implementing solutions that seek to achieve greater energy efficiency allows for substantial reductions in energy needs, and thus reduces our current dependence on fossil fuels and other non-renewable sources of energy.

Energy efficiency enables you to make large savings from both an economic and an environmental point of view.

As a result of Solzaima's commitment towards the equipment's efficiency, most of our products are classified as efficiency class 1, i.e., with an efficiency rate equal to or greater than 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.

| EFFICIENCY RATING* | EFFICIENCY RATE*<br>(fire door closed) |
|--------------------|--|
| 1                  | ≥ 70 %                                 |
| 2                  | ≥ 60% < 70 %                           |
| 3                  | ≥ 50% < 60 %                           |
| 4                  | ≥ 30% < 50 %                           |

\*in accordance with EC classification standards for insert fires.

A Solzaima 5kW unit with an efficiency rate of 75%, i.e. efficiency class 1, will consume approximately 3.5 pounds (1.6kg) of firewood per hour to warm a 389 sq ft room (35m<sup>2</sup>).

Typically, a traditional fireplace has an efficiency rate of approximately 10%, which means it will consume about 26.5 pounds (12kg) of firewood to produce the same 5kw necessary to warm the same 389 sq ft room (35m<sup>2</sup>).

FIREWOOD CONSUMED IN ONE HOUR TO WARM  
APPROXIMATELY 389 SQ FT (35 M<sup>2</sup>) WITH A 5kW UNIT



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



A fireplace equipped with a simple fire (class 4) and providing an efficiency rate of 30% consumes 8.8 pounds (4kg) of firewood



A fire with an efficiency rate of 50% (class 3) consumes 5.3 pounds (2.4kg) of firewood



A Solzaima fire with an efficiency rate of 75% (class 1) consumes only 3.5 pounds (1.6kg) of firewood

## 2. First Use

\* Ask the installer to light the unit to ensure that all is functioning correctly;

\* The stove'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.

### 3. Normal Use

**\* Lighting:**

a) Place firewood of the correct size (mentioned above) in the unit, piled horizontally;

b) Place some pine cones (preferably) on the ash grate;

c) If required to make lighting easier, open the air regulator completely to allow the inflow of combustion air and then regulate the burn intensity;

d) The lighting period is over when the body of the stove has reached a constant temperature.

\* You should check that there is sufficient ventilation in the room where the unit is installed, otherwise it will not work properly. For this reason, you should check if there are any other heating devices which consume air during operation (e.g. gas-fired equipment, braziers, etc). We recommend against using these devices all at once;

\* The air for combustion is drawn from the surrounding room, consuming oxygen. You should check that ventilation grilles and other devices for allowing air to enter from outside remain unobstructed;

\* You should only open the door during reloading. Normal conditions of use require the door to remain closed;

\* When reloading with firewood, open the door slightly and wait a little while to allow a good draught, and only then open the door completely. Reload before the previous load has burnt completely, in order to make it easier for the combustion to continue.

\* Use of the unit is not recommended when weather conditions are so bad that the draft is seriously affected (particularly when there are very strong winds).

## **4. Optional Accessories**

\* The unit can be supplied with a full 3.9in (10cm) frame and accompanying components to attach it to the wall. It also comes with adjustable legs, so you can install your unit at the height you desire.

## **5. Hot air outlets**

\* There are 4 hot air outlets on the stove's top panel. Each measures 5.1 inches (130mm) in diameter and should be used to channel the hot air into the room where the stove is installed, or to other rooms;

\* If the warm air duct always runs upwards, there is no need for a forced system. If it is for distributing the heat, you should install an aspirator to force the air to circulate. In this case, it should be installed as plumb over the unit as possible, so the thermostat can detect the rising heat immediately;

\* An air outlet grille should be placed in each room and all the ducts should be well insulated;

\* If you are interested in this form of heating, we recommend you contact a specialised installer.

## 6. Safety

- \* The electrical installation, where applicable, should incorporate means to switch the unit off, with a minimum separation of 0.11 inches (3mm) between the contacts, pursuant to the applicable legislation in force;
- \* The exposed metal parts reach high temperatures – around 302°F (150°C) on the door. The door handle does **not** reach temperatures above 113°F (45°C). Do not touch the hotter areas;
- \* You should use a glove or other protection if you have to touch the unit when it is in operation;
- \* The electrical components should always be connected to the power supply, where applicable;
- \* In case of **fire in the flue, immediately close the door of the unit and the air intake regulator**;
- \* If there is a power cut, resulting in the ventilators cutting out when the unit is in operation, if applicable, close the combustion air intake and do not load the unit with any more firewood.

## 7. Cleaning and Maintenance

- \* You should remove ash from the pan on a regular basis (after the unit is switched off), so that the combustion air is not prevented from entering through the ash grate;
- \* The baffle plate (removable plate in the ceiling of the combustion chamber) should be removed and cleaned on a regular basis, according to use, as it gathers ash and may impede the draught;
- \* To clean the glass, you need to place the key in the lock located in the centre of the top edge of the door. Rotate the lock to the left, which will then allow you to tilt the door forwards (see Fig. 9);
- \* The glass should only be cleaned when completely cold;
- \* The glass should be cleaned with a suitable product,<sup>4</sup> by following the instructions for use and not allowing the product to come into contact with the sealing string and painted metal parts, which could initiate oxidation. The sealing string 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 plate iron parts with detergent, but rather with just a dry cloth to remove the dust;
- \* We advise you to clean the flue and flue throat (at the exit of the unit) at least once a year, removing the baffle plate to do so;
  
- \* If you do not use the unit for a prolonged period, check to make sure that the flue pipes are clear before lighting it.

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<sup>4</sup> Seek advice from your supplier/installer.



# Troubleshooting

| Problem  | Solution  |
|--|---|
| Glass gets dirty                                       | <ul style="list-style-type: none"> <li>. Check moisture of firewood</li> <li>. Increase burn intensity by opening the combustion air intake regulator slightly</li> </ul>   |
| Excessive draft  | <ul style="list-style-type: none"> <li>. Close the combustion air intake regulator</li> <li>. Contact the installer</li> </ul>  |
| Weak draft, causing smoke to be expelled into the room | <ul style="list-style-type: none"> <li>. Check that the flue is clear of obstructions</li> <li>. Clean the flue</li> <li>. There may be exceptional weather conditions</li> </ul>                                       |
| Weak fire  | <ul style="list-style-type: none"> <li>. Check moisture of firewood and opening of the combustion air intake regulator</li> <li>. Check entry of air into the room</li> </ul>   |
| Ventilation stopped working                            | <ul style="list-style-type: none"> <li>. Check possible obstruction of ventilator</li> <li>. Check and/or reconnect power supply</li> <li>. The stove may not be hot enough to make the ventilator switch on</li> </ul> |
| Ventilation working but flow is weak                   | <ul style="list-style-type: none"> <li>. Clean all dust, ash or other residue that may have accumulated in the ventilator grilles</li> </ul>  |
| Problems associated with the weather                   | <ul style="list-style-type: none"> <li>. Contact the installer</li> </ul>   |

## **End of Life**

- \* Around 90% of the materials used in the manufacture of these units are 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.

## **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.

# Glossary

- \* **Ampere (A):** SI unit of measurement of electric current
- \* **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.
- \* **Circuit breaker:** Electromechanical device that protects a given electrical appliance.
- \* **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>.
- \* **Differential Switch:** protects people and property against earthing failures, preventing electric shocks and fires.

- \* **kcal** (Kilocalorie): multiple unit of measurement of calories. Equivalent to 1,000 calories.
- \* **kW** (Kilowatt): Unit of measurement equal to 1,000 watts.
- \* **mm** (millimetres): unit of measurement.
- \* **mA** (milliampere): unit of measurement of electric current.
- \* **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.
- \* **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.
- \* **Plumb**: vertically above the installation.
- \* **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.

## Warranty

\* All SOLZAIMA units have a 2 (two) year warranty from the date the invoice was issued. In order for your warranty to be valid, you must keep the invoice or receipt of purchase throughout the warranty period.

\* The warranty applies only to defects in materials or manufacture;

\* The unit's components – ventilators, thermostats, terminals, electric cables, etc. have a 2 (two) year warranty;

\* SOLZAIMA is happy to replace defective elements free of charge, following analysis and verification by a qualified agent/installer.

### **\* Exclusions:**

\* Fracture of the glass due to misuse of the unit does not fall within the scope of this warranty; the chances of natural fracture of the glass are minimal, as this would only be possible due to overheating. The glass can withstand temperatures of 1382°F (750°C) in constant operation, as well as temperature peaks of 1562°F (850°C) – temperatures which are never reached during normal operation;

\* The type of fuel used and how the unit is handled are not within SOLZAIMA's control, so the parts in direct contact with the flame – the ash grate, comb and baffle plate – are not covered by this warranty;

\* The vermiculite and sealing ring are not included in the warranty;

\* The installer bears full responsibility for all problems and/or defects resulting from the installation process;

\* Costs associate with moving, transport, labour, packaging, disassembly and immobilisation of the unit incurred during warranty operations shall be borne by the purchaser;

\* Any malfunctioning caused by mechanical or electrical parts not supplied by SOLZAIMA and which are prohibited under the instructions governing heating appliances are not covered by this warranty;

\* SOLZAIMA bears no responsibility for damage caused by the use of any fuel other than firewood.

**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**