

# LAVA<sup>®</sup>

Design Glass-Radiator  
By WarmlyYours

## Installation Manual



**CAUTION: Hot Surface!**  
Can cause burns!

Read all instructions before installing or using this heater.

## IMPORTANT INSTRUCTIONS

LAVA® glass heating radiators are very versatile. They are an elegant design, featuring simple installation and easy operation. LAVA® provides great reliability and great performance.

This guide provides important information on safety, installation, use and maintenance of the equipment. Please read this information carefully.

The manufacturer is not liable if the instructions are not followed.

The packaging of your LAVA® high-quality glass radiator consists of recyclable materials.

**ATTENTION:** Operation of the heater causes high temperature on the glass surfaces. Prolonged contact may cause burns.

This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, curtains, et cetera, at least 20" (0,5m) from the front of the heater and keep them away from the sides and rear (sides and rear restrictions apply to location dedicated heaters only).

Extreme caution is necessary when any heater is used by or near children and whenever the heater is left operating while unattended.

This heater is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge of using the radiator.

Children should be supervised to ensure that they do not play with the device.

The heater must not be placed or mounted directly below a wall socket.

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**WARNING:** Covering the glass surface causes overheating danger! May cause damage to the heating element.

**WARNING:** The glass heater must not be used if the front glass is broken.

Do not operate any heater after it malfunctions. Disconnect power at service panel and have heater inspected by a reputable electrician before reusing.

Do not use the heater outdoors.

To disconnect heater, turn off power to heater circuit at main disconnect panel.

Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock or fire, or damage the heater.

To prevent a possible fire, do not block air intakes or exhaust in any manner.

Do not use unit in areas where gasoline, paint, or flammable vapors or liquids are used or stored.

Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury.

### OVERHEATING AND OVERLOAD PROTECTION

Each radiator has an overheating protection. The device automatically starts again after a cooling down to under 113° F, or 45°C.

### THESE INSTRUCTIONS MUST

- be passed to the owner/operator after the installation. In addition, ensure that the operator is trained in the operation of the glass-radiation heater.
- be stored in a secure location and transferred at change of ownership to the new owner.

### SAVE THESE INSTRUCTIONS!

## DELIVERY | PACKAGING

The LAVA® glass radiator has to be fixed only with the supplied mounting hardware. Screws and anchors must correspond with the building material of the wall (masonry, concrete, plasterboard, etc.). Drywall anchors are included. The wall must have a flat surface.

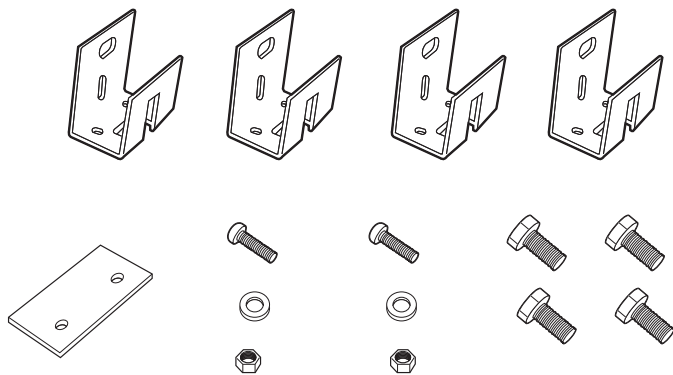


Electrical and electronic equipment frequently contain valuable materials. They may also contain harmful substances that were necessary for their function and safety. The residual waste or incorrect treatment can harm the environment. Please help protect our environment! Dispose your old unit according to the local regulations.

### Wall mounting kit:

- LAVA® Glass Radiator
- 1 x Wall mounting hardware:
  - 4 x mounting bracket
  - 2 x screw M5 x 16
  - 2 x washer
  - 2 x nut
  - 4 x hex bolt M8 x 16
  - 1 x cable clamp (not pictured)
  - 4 x wall anchor & screw (not pictured)
  - 1 x wall protection plate

After attaching hardware, do not tighten completely! Only tighten hardware when unit is assured to mount by test fitting unit.



**ATTENTION:** Packaging materials, must be disposed of properly.

### Ceiling kit:

- LAVA® Glass Radiator
- 1 x Wall mounting hardware:
  - 4 x ceiling mounting bracket
  - 4 x screw M3 x 6
  - 4 x Lava Secure - Glass safety hook
  - 4 x hex bolt M8 x 20 (optional, might already be preinstalled on the device)
  - 1 x wall protection plate

After attaching hardware, do not tighten completely! Only tighten hardware when unit is assured to mount by test fitting unit.

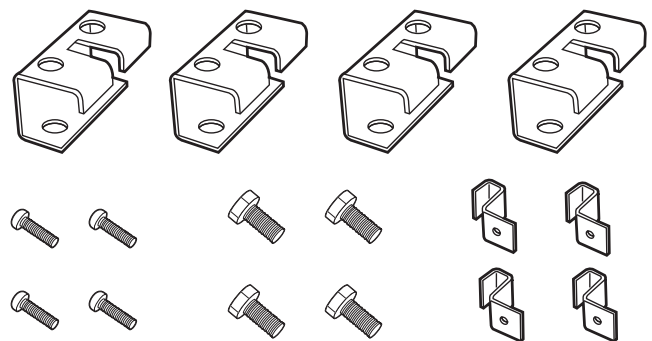


Fig. 1 = Mounting Hardware

## INSTALLATION AND USAGE INSTRUCTION FOR THE ELECTRICIAN

### IMPORTANT NOTES:

- Installation and service work must be carried out by a licensed professional or a qualified person. Verify that the electrical installation complies with the applicable local codes. The responsibility of the manufacturer is limited to the supply of the device.
- The devices are designed for wall mounting (vertical or horizontal) with the appropriate accessories (see included part list).
- Wall mounting of the glass radiators corresponds IP24 Protection.
- When installing the unit in a bathroom, note the areas of protection to local electric code regulations.
- Specified minimum distances must be respected.

### INSTALLATION AND MINIMUM DISTANCES:

LAVA® glass heaters can be mounted horizontally or vertically on the wall. They are positioned so that flammable items can not be ignited. Ensure the required minimum distances, particularly to flammable objects like curtains, and upholstered furniture are correct. Please make sure, that the glass radiator can radiate freely into open space. (See Fig. 2)

**ATTENTION:** Don't lean items against the glass or lean the radiator against other objects.

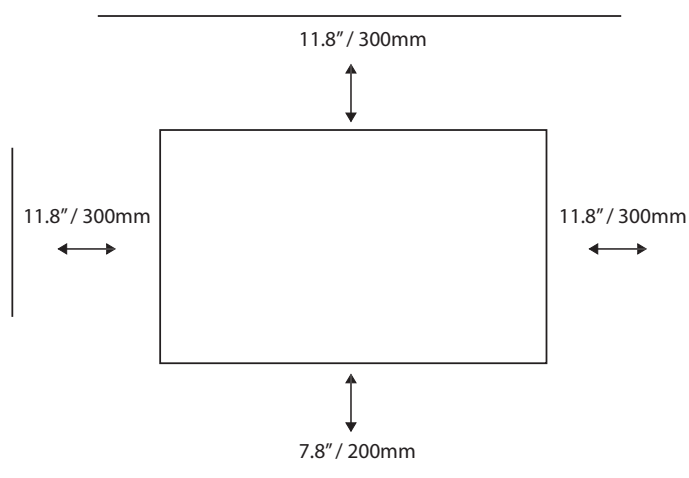


Fig. 2: Minimum mounting distances

### ASSEMBLY OF THE RADIATOR:

Please verify that no shipping or handling damage occurred before installing the power cable to the radiator.

### WALL MOUNTING:

1. Locate the area where the warming panel is going to be installed. If electric needs to be installed to panel, find a location for the electrical supply and install the proper outlet in the wall, placing it near the unit supply cord with the plug on rear of the warming panel. We recommend using a recessed duplex box (Leviton #689) **(Always turn power off at panel)**
2. Locate area for thermostat. Locate area away from the front of the warming panel for the thermostat control so it does not affect the unit from operating properly. Follow the wiring diagram located with the thermostat instruction manual.
3. Install 2 of the brackets into a stud and then install the correct type of wall anchors and mounting hardware for the other 2 mounting points - Please see the hole-patterns on page 4. (Anchors for drywall applications are included in the box. Anchors for other applications are not included and should be sourced locally.)

The installation of the warming panel unit on the wall, must be secure.

a. The layout of the bracket locations on the wall should be level and plumb. Secure them by using a 2 1/2" (min) large screw heads.

b. Install the hanging bolts (supplied) to the back of the warming panel unit and leave them extended approximately 1/4" to 3/8".

c. Move the warming panel unit to the place of the installation and plug into outlet and hang unit on the installed brackets.

4. Position cable clamp and place LAVA® glass radiators on the wall and tighten the screws completely.

5. To protect the glass radiator against unintentional removal, etc. the protection-plate (included in kit) should be affixed to one of the 4 mounting brackets. (See pg. 2)

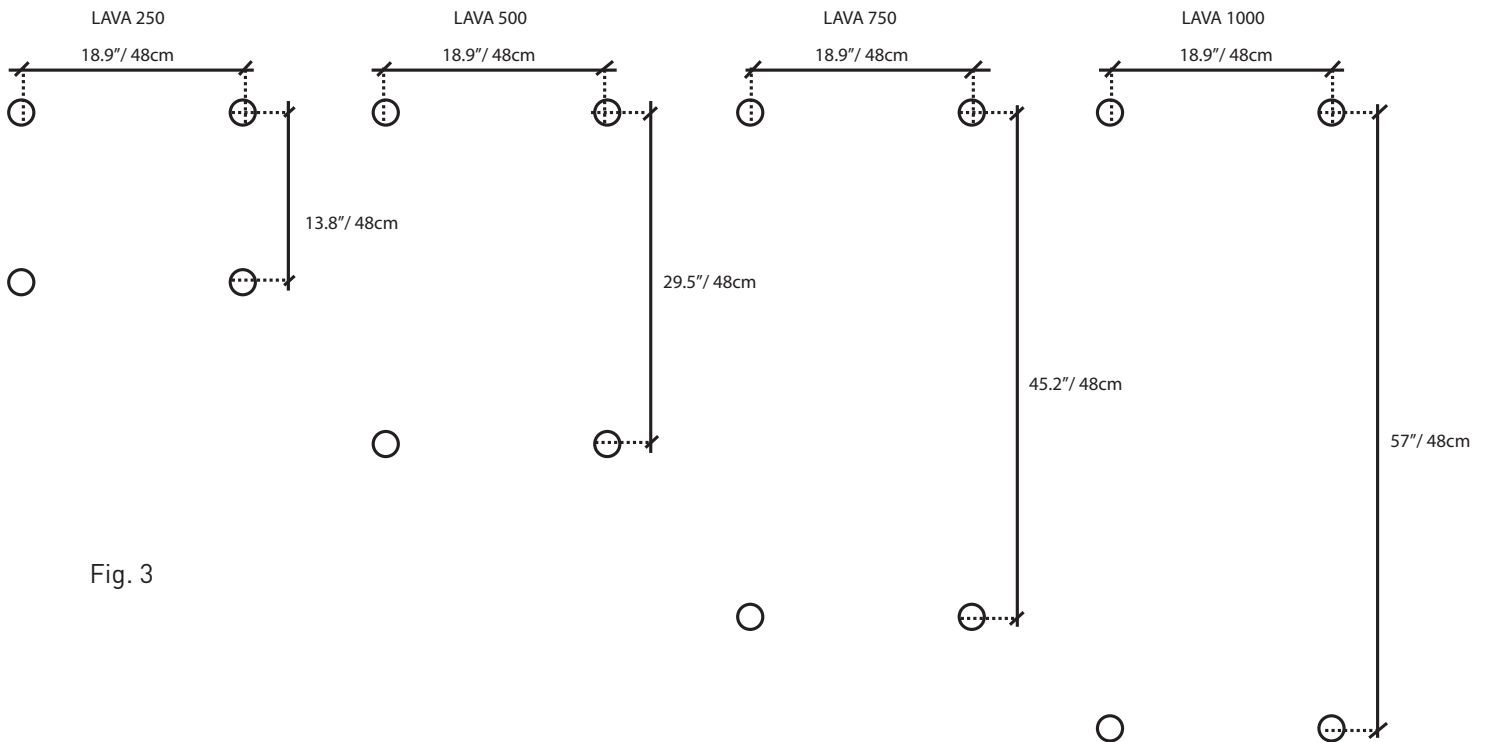


Fig. 3

Graphic: LAVA® Glass radiators 250W | 500W | 750W | 100W - Hole drilling pattern

**ATTENTION:** Verify minimum distances! Use required mounting holes and anchors!

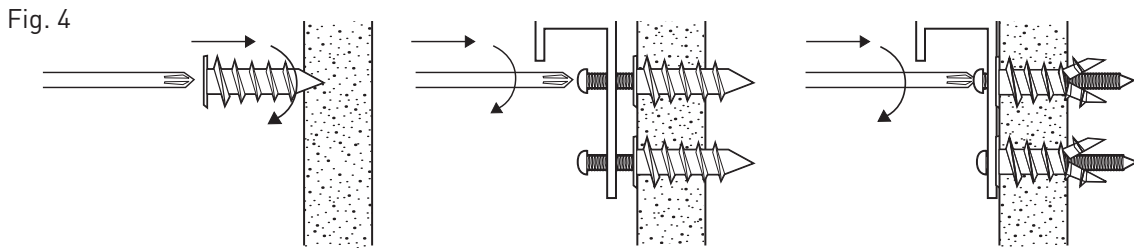


Fig. 4

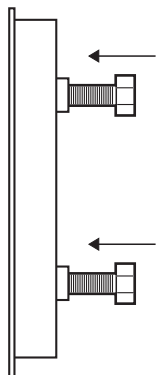


Fig. 5

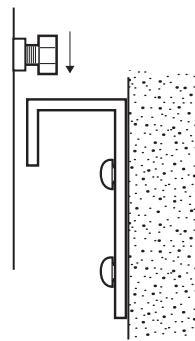


Fig. 6 = 4x

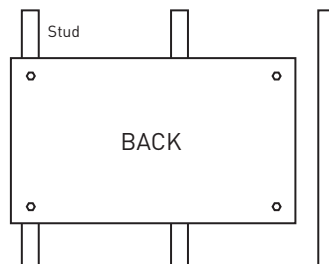


Fig. 7

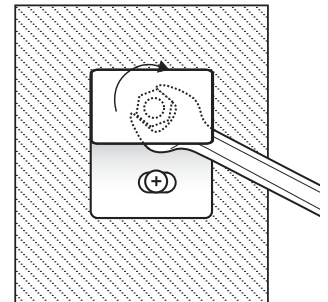


Fig. 8

## ELECTRICAL CONNECTION

The heater is designed for permanent connection to a suitable room thermostat. Please refer to the instructions of the room thermostat.

**ATTENTION:** If the power cord of the unit is damaged, it must be replaced immediately.

The device is connected with the supplied connector to a junction box supplying the AC power supply. If a longer cable is required, it can be replaced by longer one, Type H05VV-F 3x1.0mm<sup>2</sup>. A direct connection to a line is only permitted up to a diameter of 1.5 mm<sup>2</sup> (e.g. NYM-J 3x1.5mm<sup>2</sup>).

## HEATING

The heater is controlled by the externally mounted thermostat.

## GROUNDING

The heater is for use with 120 volts. The green-yellow grounding of the cord must be connected to a permanent ground inside the junction box.

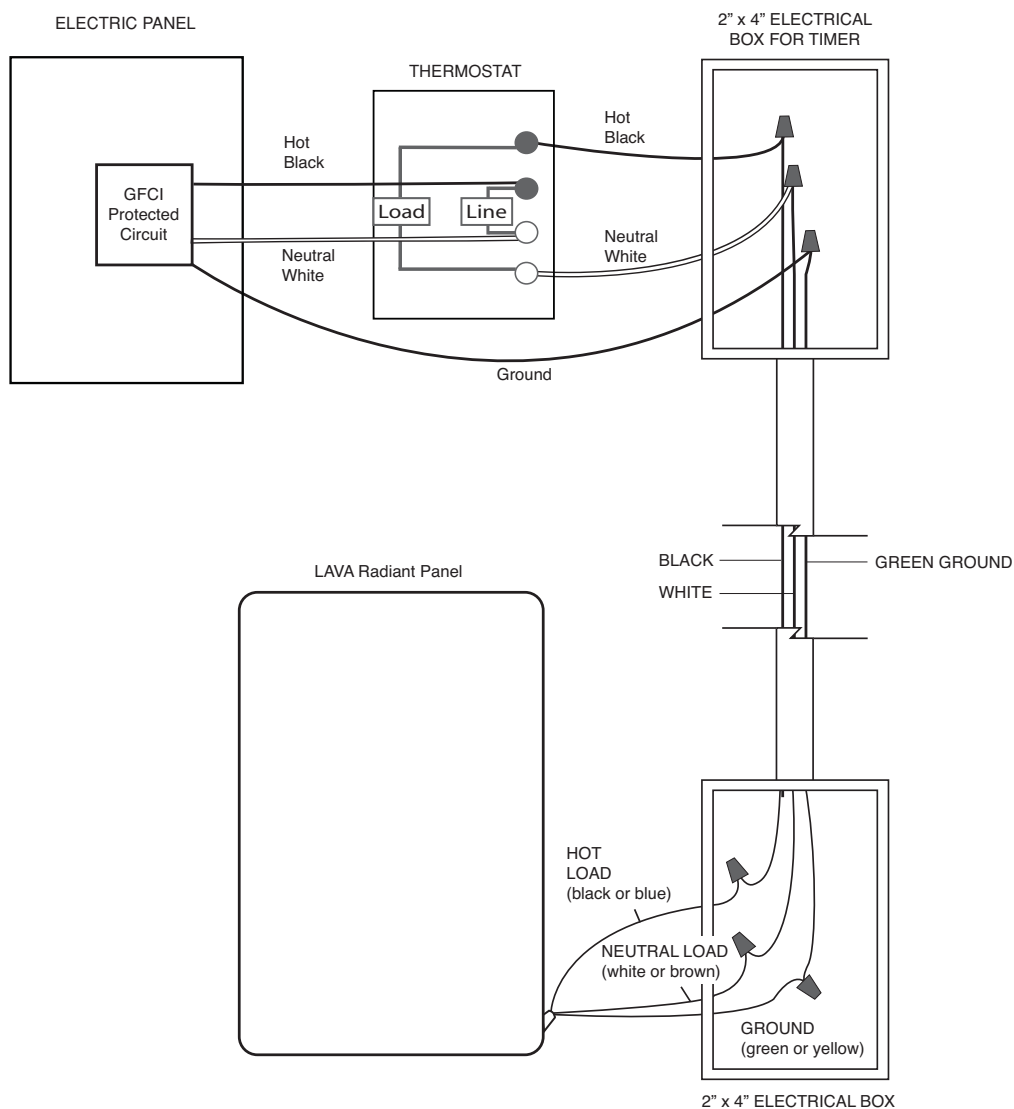


Fig 9: Connection diagram

## USER INSTRUCTION

### HEATING

Do not power-on unit until it is installed.

Depending on the thermal insulation quality in your home, the required heat output of the radiator will range from 3 to 20 W/ft<sup>2</sup> (30 to 200 W/m<sup>2</sup>). The LAVA® glass radiator has a very high radiation fraction and a low proportion of convective heat output. The surface temperature, for safety reasons, is limited to approximately 203°F / 95 °C, thus the overall performance of the device is limited. For this reason, these devices are used as a sole heating solution only in very well insulated houses.

ETHERMA LAVA® glass radiators warm predominantly solid objects and only a small proportion of the air directly, so these devices are ideal for additional temperature control. In order to achieve the same feeling of comfort as with convection heating, the indoor air temperature can be lowered by 2-3 °C/F. Each degree reduction can save about 6% in heating costs, depending on the respective heating behavior and thermal insulation in the room. The unit can be turned on when a seldomly-used room is occupied, to provide a warm, cozy feeling.

Depending on the size of the unit, the LAVA® glass radiator will require some time to reach its operating temperature. The glass sheet consists of 1/4" (6mm) toughened safety glass (ESG). This glass is much more durable than conventional glass, and is designed for significantly higher impact forces. However, you should avoid excessive use. In case of damage, ESG shatters into many small pieces with blunt edges, to minimize the risk of injury.

Please note when choosing an installation location, that a very small percentage of toughened glass products can exhibit "spontaneous breakage", i.e. when the glass shatters. This can occur even when external influence isn't indicated. Choose the installation location of the device so that there is no danger to people or nearby objects.

**ATTENTION:** Avoid any kind of load on the glass itself, especially directly on the edges! Do not lean it against anything, or lean anything against it!

Please refrain from placing any objects between the LAVA® glass radiator and the persons to be heated. Objects between the radiator and people will block the heat from the people themselves.

### MAINTENANCE AND CARE

The LAVA® glass radiator is designed to give its heat over the glass surface in the form of radiation. There are no moving parts located on the device that require special maintenance. For care of your glass radiator, we recommend commercial glass cleaner. Please do not use abrasive cleaners, as these can cause scratches to the glass as well as the painted surface. Clean the unit before every heating season, with a minimum of once a year.

**ATTENTION:** Prior to cleaning, please ensure that the LAVA® glass radiators are turned off at the circuit breaker panel and that the unit is at room temperature!

### SPARE PARTS

Please contact WarmlyYours for any replacement parts required. Only use original spare parts.

## TECHNICAL DATA AND ACCESSORIES

### TECHNICAL DATA

- Voltage: ..... 120 V
- Power: ..... 250-1000 Watt
- Body: ..... steel case, white, powdercoated
- Surface: ..... 6 mm safety glass
- Protection: ..... IP24
- Protection class: ..... I
- Connection: ..... hot, neutral, ground
- Approvals: ..... cULus to UL2021 & CSA c22,2 no46
- Colors: ..... Pure White | Pale Green | Black | Red | Mirror:
- Surface Temp.: ..... 203°F / 95 °C (maximum)
- Depth: ..... 1.9" / 50 mm
- Mounting: ..... horizontal or vertical

| Type             | Watts | L (mm) B (mm)T (mm)      | pnds/kg       |
|------------------|-------|--------------------------|---------------|
| LAVA-250         | 250   | 24.8" x 19.7" 630x500mm  | 18 lbs / 8kg  |
| LAVA-500         | 500   | 24.8" x 35.4" 630x900mm  | 33 lbs / 15kg |
| LAVA-750         | 750   | 24.8" x 51.2" 630x1300mm | 51 lbs / 23kg |
| LAVA-1000        | 1000  | 24.8" x 63" 630x1600mm   | 73 lbs / 33kg |
| LAVA-500-Mirror  | 500   | 35.4" x 47.2" 900x1200mm | 33 lbs / 15kg |
| LAVA-750-Mirror  | 750   | 35.4" x 63" 900x1600mm   | 51 lbs / 23kg |
| LAVA-1000-Mirror | 1000  | 35.4" x 63" 900x1600mm   | 51 lbs / 23kg |

### TROUBLESHOOTING

Device does not heat:

- Circuit breaker tripped?
- Is external supply switch turned on?
- Is the temperature of the external thermostat set lower than the actual room temperature?

Radiant heat output not to expectations:

- Is the distance between glass radiation heater and person too great?
- Is the glass radiation heater undersized for the space?
- Are there objects between the person and the glass-radiation heater?

### EQUIPMENT MARKINGS

Data is included on the rating plate. The rating plate, depending on the vertical or horizontal orientation of the unit, can be found on top or on the left of the unit.



Fig 10: Nameplate

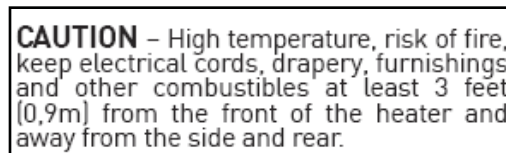


Fig 11: Warning on front side



**CONGRATULATIONS!**

You have made a wise choice by choosing the ETHERMA LAVA® glass heating radiator. Thank you for your trust. The latest technologies and developments offer maximum comfort and safety this electric glass radiator. Each unit is tested several times during the manufacturing process and tested before shipment to exacting quality control standards. If you follow these installation and operating instructions, your LAVA® glass radiator will provide many years of troublefree enjoyment!



**WARMLYOURS**  
RADIANT HEATING