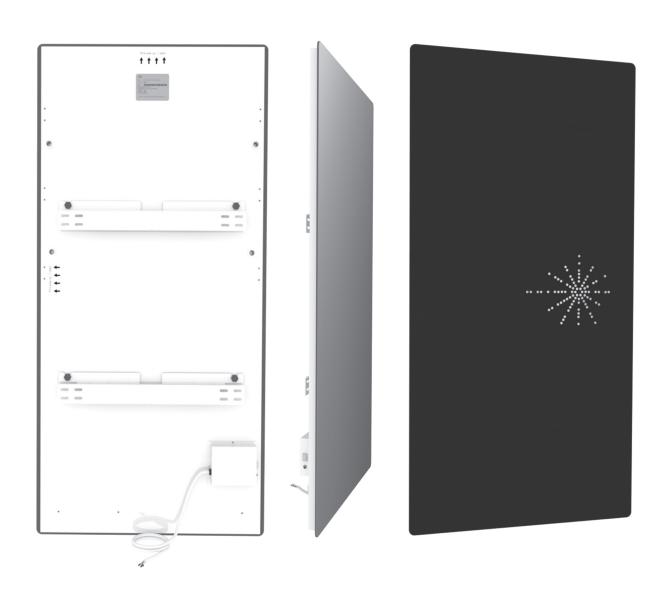


LAVA® 2.0 Infrared Heating By WarmlyYours

Installation Manual



Read all instructions before installing or using this heater.

GENERAL

ETHERMA LAVA® design infrared heaters are versatile direct heating devices. They are characterized, in particular, by their elegant design, ease of installation and operation, high reliability and maximum radiation power with minimal convection.

These instructions provide important information on safety, installation, use and maintenance of the device. Please read the information provided in these instructions carefully and keep for reference in case you have questions at a later occasion.

The manufacturer shall not be held liable if these instructions are not complied with. Devices may not be used for purposes other than the intended use.

The packaging of your high-quality LAVA® design infrared heater is made from recyclable materials.

THESE INSTRUCTIONS MUST

- be given to the operator following installation. The operator must also be instructed in the infrared heater's functionality.
- be kept safe and transferred to the new owner in case of a change in ownership.



WARNING: Covering the surface creates a danger of overheating. Overheating may occur and the heating element may be damaged by covering the front of the device, e.g. with a hand towel.

WARNING: The infrared heater may not be used if the front of the device is damaged.

OVERHEATING AND OVERLOAD PROTECTION

All heaters have overheating protection which is activated in the event of overheating. The device only resumes operation automatically again after having cooled down to below 113°F/45°C

This heating device is not intended for the use by persons (including children) with a limited physical, sensory or mental capacity or with a lack of experience and knowledge. Such individuals must be supervised by a person responsible for their safety or instructed on use of the device. Children should be supervised in order to ensure that they do not play with the device.

This device can be used by children of 8 years and older and by persons with reduced physical, sensory or mental abilities and with a lack of experience or knowledge if they are supervised or have been instructed on safe use of the device and understand the resulting risks. Children may not play with the device. Children may not clean the device or perform maintenance on it without supervision.

Children under the age of 3 should be kept away unless under constant supervision. Children between the ages of 3 and 8 may only switch the device on and off if they are supervised or have been instructed regarding safe use of the device and understand the resulting risks, as long as the device is placed or installed at its intended place of use. Children between the ages of 3 and 8 must not plug in the device, control the device, clean it and/or carry out maintenance.

The device may only be operated once installed. This heater may not be used in the immediate vicinity of a bath, shower or swimming pool. When installing the device in a bathroom, the device must be mounted so that switches or other regulators cannot be touched by persons in a bathtub or shower. The heater may not be used in small rooms occupied by persons who cannot leave the room independently, except where constant supervision is guaranteed.

Some product parts can become very hot and cause burns. Particular caution is required when children or vulnerable persons are present.



ATTENTION: Hot surface of the device may cause burn injuries. Switch off the device and let it cool down before carrying out maintenance and service works.



ATTENTION: Strain of any kind on the surface, whether from persons or objects leaning against it or from other forces, must be avoided!

NOTES

IMPORTANT NOTES:

- LAVA® infrared heating devices comply with relevant safety requirements.
- Installation and initial start-up, as well as repairs and servicing, may be carried out by a licensed specialist or qualified individual only. All safety regulations must be observed. This person must verify first whether the electrical in-house system complies with the relevant standards. The responsibility of the manufacturer is limited to supply of the device.
- > Comply with country-specific safety regulations.
- > Comply with local safety precautions.
- > The devices are suitable for the installation on walls.

- > Protective areas must be observed in accordance with DIN VDE 0100, part 701, when installing the device in bathrooms.
- > Minimum distances must be adhered to.
- In bathrooms, the device must be mounted so that switches or other regulators cannot be touched by persons in a bathtub or shower.
- > Due to the low surface temperature at the rear side (up to 104°F/40°C)theinfraredheatermayalsobemountedonwooden panelling.
- The device is not intended for the use in wardrobes and beneath church benches.

SCOPE OF DELIVERY | PACKAGING

The LAVA® infrared heater must be mounted exclusively using the fixing components included in the package.

Screws and anchors (not included in the scope of delivery) must

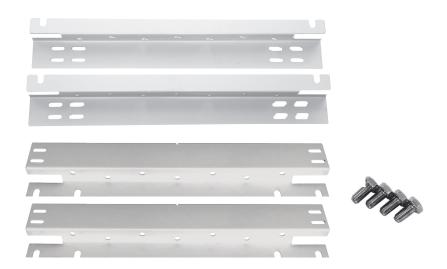
correspond to the construction material of the wall (masonry, concrete, plasterboard, etc.). The surface of the wall must be even.

STANDARD SCOPE OF DELIVERY FOR WALL MOUNTING:

- > LAVA® 2.0 INFRARED HEATING
 - 2 x mounting brackets
 - 4 x hexagon bolts M8 x 16



ATTENTION: The wall must be even. Otherwise damage of the surface of the LAVA® infrared heating device may occur.



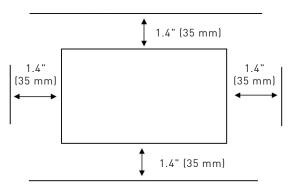
CLEARANCES

INSTALLATION AND MINIMUM DISTANCES:

LAVA® infrared heating devices have to be mounted so that flammable objects cannot catch fire. Be absolutely sure to comply with minimum clearances, in particular to highly combustible objects such as curtains, upholstered furniture, etc. Please also make sure that the infrared heater can radiate freely into the room.



ATTENTION: Strain of any kind on the surface, whether from persons or objects leaning against it or from other forces, must be avoided!



Dimensional drawing: minimum mounting clearances

WALL MOUNTING

INSTALLING THE INFRARED HEATER:

Please inspect the power supply cord to the heater and the surface before installation.

These must not show any signs of damage.

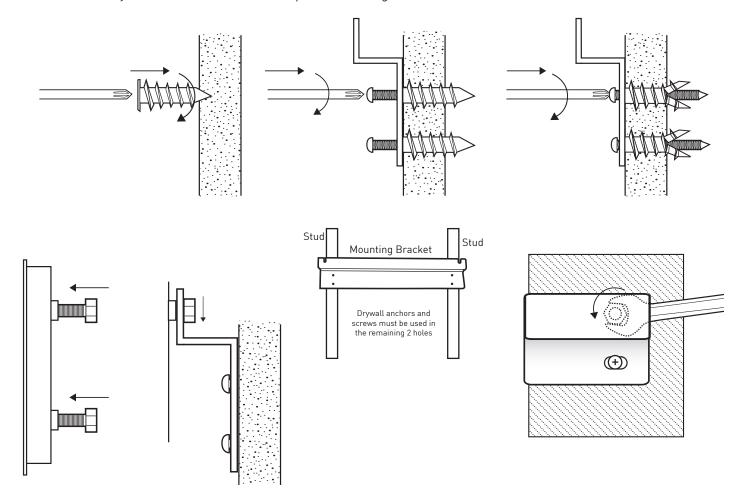
Fasten hexagon bolts loosely on the rear side of the device.

- 1. Select a position for the mounting brackets according to the illustrations on page 5, depending on the product type.
- 2. Drill the holes according to the hole clearances specified on page 13 or the drill template enclosed in the shipping box.
- 3. Screw on the mounting brackets using suitable anchors and screws.
- 4. Place the LAVA® infrared heater on the mounting brackets and tighten the screws.

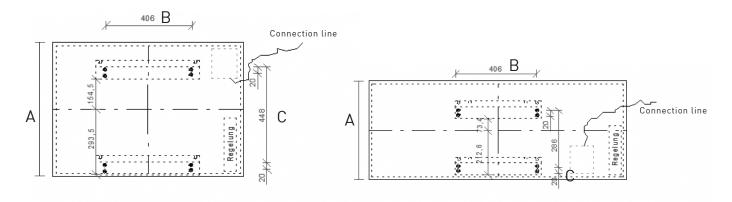


ATTENTION: Screws and anchors are not included in the scope of delivery and must correspond to the construction material of the wall.

ATTENTION: Verify minimum distances! Use required mounting holes!

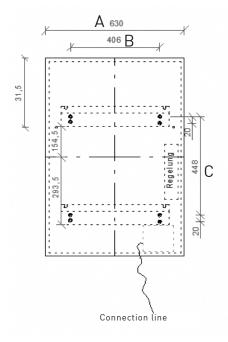


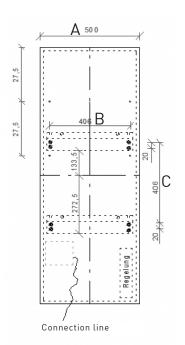
HOLE CLEARANCES FOR HORIZONTAL WALL INSTALLATION



Туре	Installation	Width A	Distance B	Distance C	Mounting brackets
LAVA® 2.0 250 W	horizontal	24.8" (630 mm)	16" (406 mm)	11.25" (286 mm)	2
LAVA® 2.0 500 W / DYL 350 W	horizontal	24.8" (630 mm)	16" (406 mm)	17.6" (448 mm)	2
LAVA® 2.0 750 W / DYL 500 W	horizontal	24.8" (630 mm)	16" (406 mm)	17.6" (448 mm)	2
LAVA® 2.0 1000 W	horizontal	24.8" (630 mm)	16" (406 mm)	17.6" (448 mm)	2

HOLE CLEARANCES FOR VERTICAL WALL INSTALLATION





Туре	Installation	Width A	Distance B	Distance C	Mounting brackets
LAVA® 2.0 250 W	vertical	24.8" (630 mm)	16" (406 mm)		1
LAVA® 2.0 500 W / DYL 350 W	vertical	24.8" (630 mm)	16" (406 mm)	17.6" (448 mm)	2
LAVA® 2.0 750 W / DYL 500 W	vertical	24.8" (630 mm)	16" (406 mm)	17.6" (448 mm)	2
LAVA® 2.0 1000 W	vertical	24.8" (630 mm)	16" (406 mm)	17.6" (448 mm)	2

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.

Fix mounted thermostats should be mounted next to the heated room's entry door at 4' or 1.3m height from floors. An alternate location is on an interior wall, not subject to direct sunlight. The thermostat should not be installed within 3 feet of the LAVA. When not using an nSpiration series thermostat, power the control with a GFCI Protected Circuit.

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, 18 AWG or Larger.

HEATING

The heater is controlled by the externally mounted thermostat, or other control.

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.

NSPIRE TOUCH

PROGRAMMABLE TOUCHSCREEN THERMOSTAT ELECTRICAL BREAKER PANEL 2" x 4" ELECTRICAL BOX (UDG4-4999) BLACK Hot Black **CHURCHURANACH** WHITE CONSULT LOCAL Neutra 15 AMP ELECTRICAL CODE White GREEN CONCERNING DESIRED BREAKER LAVA MOUNTING LOCATION Neutral White Black Ground I AVA RADIANT PANEL BLACK POWER SWITCH WHITE GREEN HOT LOAD (black or blue) NEUTRAL LOAD (white or brown) GROUND (green or yellow)

2" x 4" ELECTRICAL BOX

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/ft² (30 to 200 W/m²). 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 appoximately $203^{\circ}F$ / $95^{\circ}C$, 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 supplementary heat. 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.

Fix mounted thermostats should be mounted next to the heated room's entry door at 4' or 1.3m height from floors. An alternate location is on an interior wall, not subject to direct sunlight. The thermostat should not be installed within 3 feet of the LAVA.

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 far infrared 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, at a minimium 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 (ESG)

• 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

• Mounting:horizontal or vertical

• Serial Number....... Located near "Power" switch or on rear of unit.

Verify location and number before mounting LAVA.

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

Radiant heat oputput 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 of the unit can be found on top or on the left (depending on the vertical or horizontal orientation of the unit).

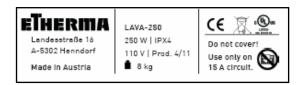


Fig 10: Nameplate

CAUTION – High temperature, risk of fire, keep electrical cords, drapery, furnishings and other combustibles at least 3 feet [0,9m] from the front of the heater and away from the side and rear.

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 purchase. The latest technologies and developments offer maximum comfort and safety. 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 trouble free enjoyment!



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