

warmset 
LAMINATED HEATING TECHNOLOGY

Electric radiant heating



**Installation video
WHB and WHG**



**Installation video
WHA and WHAG**

Warmset

Read this manual before attempting to install the Warmset system. Incorrect installation could damage it and void the warranty.

warmset 
LAMINATED HEATING TECHNOLOGY

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General warnings before starting!!!



The appliance may be used by children over 8 years of age, by people with reduced physical, mental or sensory capabilities or lack of knowledge and experience if and only if they are supervised or if they have been instructed regarding the safe use of the appliance and the risks involved.



Children must not play with the appliance.



Cleaning and maintenance must not be carried out by children without supervision



Always install heating units away from other heat sources such as lighting fixtures and chimneys



Avoid air gaps in the stratigraphy when laying, optimizing the compactness and filling of the screed and the contact between the various layers in dry laying; it is necessary to lay on as flat and even a surface as possible



Allow as little time as possible between laying the heating mat and covering it, avoiding working on it with sharp metal objects, and treading as lightly as possible and with the greatest caution.



Regardless of the cover chosen, it is important to remember that furniture and furnishings that for some reason end up overlapping the heated area must have an open lower space of at least 5 cm. Failure to do so could result in excessive heating, and consequent damage, to the floor and Warmset mat.



Heating appliances/mats must be installed with a residual current device circuit breaker with a rated operating current of no more than 30 mA and a single-pole mains disconnector in overvoltage category III to be installed in the system in accordance with the applicable regulations.



Carefully read all technical documentation included with the thermostat. The temperature control settings of the probe should be within a max-min range of 24°-26° C. The setting to be used in the thermostat is the "Room/floor" setting (or combined mode in the case of other thermostat types). In the case of walls, the maximum recommended temperature must not exceed 40° C.



The labels on the product must be attached in the installation logbook.

Use a maximum resistance cover of less than 1.5 m²K/W For wooden floors use a maximum resistance of less 0.17 m²K/W.



Selection of floor covering materials compatible with the temperatures to be reached, although the manufacturer should be consulted regarding materials not specified in these instructions; the thickness of the flooring must be more than 5 mm.



FOR WALL/FRAWEALL: The covering thickness of the heating element must be the minimum necessary to completely enclose it; in the case of installation on plasterboard, only use sheets compatible with radiant systems, able to withstand the temperatures generated and guarantee effective heat transmission.

It is advisable to provide, under the heating element, a layer of insulating material with an insulating power greater than 1.5 m²K/W.



FOR FLOATING FLOORS: For a floating floor application, it is mandatory to install suitable insulation proposed by Warmset, an official Warmset dealer or approved by Warmset.

FOR RUGS, CARPETS AND VINYL FLOORING

For applications under rugs, carpets or vinyl flooring, it is mandatory to install a suitable intermediate layer, such as Heat Pak or an equivalent rigid protective board, e.g. MDF, between the Warmset heating element and the final floor covering.

In the case of units with a power output greater than 85 W/m² always use a thermostat with a floor/wall temperature limiting sensor. The sensor must be installed approximately 30 cm from a wall in the case of the floor. It is important that the sensor is positioned exactly halfway between two heating segments and 5/10 cm from the curves



Local building regulations and laws require that part or all of the installation of this product and/or the corresponding thermostat and electrical system be carried out by a qualified electrician. This manual must be handed over to the end user. The Warmset Heating System is an electrical appliance and must be installed in accordance with the IEC (International Electrotechnical Commission).



In environments subject to the presence of water (e.g. showers, baths, spas, etc.), the installation of an impermeable membrane over the heating element is mandatory.



Direct heating for underfloor indoor applications



Direct heating for under wall/ceiling indoor applications



Compliance with Ecodesign Requirements 2025 - Temperature Regulation Systems

All electric heaters must be equipped with a temperature control system that complies with the requirements of the Ecodesign Regulation (Directive 2009/125/EC and EU Regulation 2015/1188). This system must ensure high energy efficiency and intelligent control of operation.

Warmset products are fully within the scope of the regulation and are supplied with thermostats designed and certified according to the required technical criteria. The use of these devices ensures that the entire heating system meets European standards in terms of efficiency, electrical safety and electromagnetic compatibility.

If the installer chooses to use a thermostat other than those supplied by Warmset, it is the installer's responsibility to verify that the alternative device complies with current regulations.

This includes the ability to automatically regulate heating based on room temperature, the achievement of an energy class of at least Class A, and the presence of advanced features such as programming, presence or open window detection, and remote control.

Finally, any control system installed must comply with the European directives 2014/35/EU for electrical safety and 2014/30/EU for electromagnetic compatibility.

If all instructions in this manual are followed, the installation should present no problems.

In any case, should you require assistance at any stage, please contact our technical support service on: +39 0444 212511

Warmset accepts no liability for damage to property or personal injury resulting from installation not in accordance with the instructions in this manual.

What you need for installation

Components/Tools NOT included

- A thermostat with floor probe
- Differentials appropriate to the power
- Appropriately sized connection boxes
- Junction box (if required)
- Electrical conduit (if necessary)
- Power cables of suitable cross-section
- Digital multi-ohm meter
- Scissors
- Cable stripper
- Tape for fixing
- All necessary small hand tools (drills, screwdrivers, tape measure, marker pen, etc.).

Attention!

IN NO EVENT

- Install the Warmset mat under closed furniture or cupboards without bottom ventilation.
- Turn on the mat before installation is complete.
- Leave sharp tools or sharp objects near the mat: they can damage the mat and invalidate the warranty.
- Cut the heating ribbon. Cutting it may cause fire or electric shock. You can shorten the power cable, removing it completely from the mesh if necessary.
- Connect two pieces of mat together to obtain a longer length. If there is more than one mat in the same room, they must be connected in parallel.
- Use Warmset floor mat on walls or ceilings.
- Reverse the cable connections or different Warmset products.
- Cover the heating mat (in wall or ceiling installations) with furniture, pictures, chandeliers or other objects that hinder heat dissipation or may damage it.
- Drilling holes, driving nails or dowels near the heating mat.
- Make adhesive labels inaccessible or not visible after installation.

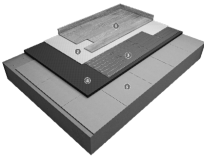
ALWAYS

- Integrate the circuit into an electrical system that is correctly sized in terms of amperage, respecting the power limitations of the switch and thermostat. Check that voltage and current are within the prescribed parameters.
- Refer electrical installation work to qualified personnel in accordance with local regulations.
- Ask the seller for assistance if in doubt or if the product appears damaged, before proceeding with installation.
- Keep heating units away from other heat sources, such as lamps or similar devices.
- Install a ground leakage circuit breaker to protect the heating system.

Electrical Considerations

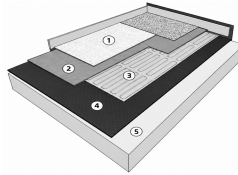
- Electrical connections must be made by a qualified electrician and in accordance with current regulations.
- A 30 mA residual current circuit breaker (RCD) must be installed. For systems over 3 kW, use several RCDs or one 100/300 mA RCD.
- The system can be connected to an existing circuit, if suitable for the required load.
- Use a 25-40 mm deep flush-mounted box for the thermostat.
- If more than two heating elements are installed, a junction box is required.
- Cables must be protected with conduit or corrugated pipe if required by standards

Type of floor installation



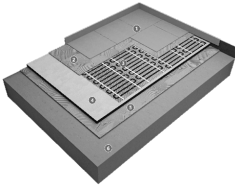
FLOATING FLOORS

1. Floating floor type
2. Underlay (optional)
3. WHA-WHAG
4. Warmfoam insulation or similar (mandatory)
5. Existing floor/concrete



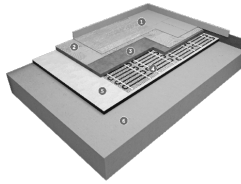
VINYL FLOORS, RUGS, CARPET

1. Vinyl floors / Rugs / Carpet
2. Heat Pak/MDF layer (mandatory)
3. WHA-WHAG
4. Warmduplex Foam insulation (mandatory)
5. Cement or wood foundation



FLEXIBLE ADHESIVE

1. Tile/Ceramic tile
2. Flexible adhesive
3. WHB-WHG
4. Insulation
5. Flexible adhesive
6. Existing floor/floor tile



SLAB

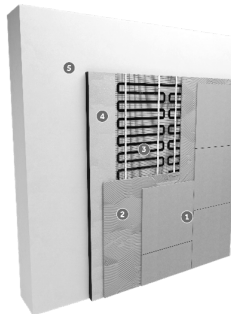
1. Tile/Wood/Marble
2. Flexible adhesive
3. Screed/Self-leveling compound
4. WHB-WHG
5. Insulation
6. Existing floor/subfloor

Type of wall installation



DRY WALL

1. Plasterboard panel
2. WHA-WHAG with adhesive
3. Insulation (optional)
4. Plasterboard wall
5. Framework



MORTAR

1. Plaster/Covering
2. Glue/Smoothing mortar
3. WHB-WHG
4. Insulation (optional)
5. Existing wall/background

The stratigraphies shown are only some of the possible application solutions. For correct planning and installation, we recommend that you always refer to the latest technical data sheets and consult your local dealer or contact person.

Installation of Warmset

Before Warmset products are installed, the floor must be thoroughly swept of debris. It is very important that there are no objects on the installation surface, such as nails or other building materials that could interfere with the Warmset system.

All Warmset mats have a width of approximately 50 cm. However, depending on the layout of the rooms, it may be necessary to adopt a flexible laying system: not all rooms are perfectly rectangular and may have columns, niches, cupboard spaces, kitchens, beds or other obstacles that prevent direct laying of the mat.

To facilitate installation around obstacles or in areas with irregular geometries, **the heating element can be removed from the mesh support**. In these cases it is essential:

- **Maintain as far as possible a constant distance** between the heating elements, similar to that of the original distance of mat.
- **Absolutely avoid overlapping** heating elements, which could cause dangerous overheating.
- **Keep this to a minimum.**
Depending on the room conditions, even large portions can be covered using the element separated from the mesh. **Bear in mind that cold spots can occur with a pitch of more than 7 cm.**

Also ensure that:

- The **power cable** is located in a peripheral area, which can be easily connected to the junction box.
- **The power cable never crosses the heating element.**
- **The mats ordered are sufficient to cover the entire intended area.**
- **The position of the thermostat has been defined in advance and is suitable for heat distribution**

Laying and fixing the Warmset mat

- **Carefully lay and tension** the Warmset mat so that it covers the entire planned area evenly.
- Carefully **check the layout of the entire system**, ensuring that the positioning is correct and free of folds and waviness.
- Install the **fiberglass mat**, preferably with the mesh over the heating tape.

Fixing to the base

- Once the system is correctly positioned, proceed with **fixing to the subfloor**.
- Fix the Warmset system to the base. If needed, the base can be stabilized using staples — be extremely careful when using staples to avoid damaging the heating elements.

⚠ Never fix the heating mat directly with staples: this could impair its functionality.

- Only the **support mesh** may be fixed or glued, never the heating element.
- Ensure that the mats **are as flat as possible**: this facilitates the laying of the mortar and allows the system to be encased in a uniform, thin layer if required.

Technical precautions

- Do not completely cover the heating element with adhesive tape.
- Once the system has been laid and fixed, check the electrical resistance of the mats and note the values in the installation logbook.

Electrical connections

- Connect the wires of the heating elements to the thermostat or junction box.
- The connections can be **extended** if necessary (see Fig. B). If this is the case, use **2.5 mm²** or other cables in accordance with national regulations.
- **Power cables** can be installed **with or without corrugated conduit**. The use of corrugated conduit is recommended for increased protection and is **compulsory if required by current regulations**.
- If required, use corrugated conduit of **at least 1.5 cm²** from the floor to the electrical box.
- In the case of several cables (laying of several pieces), use corrugated conduit **of at least 2 cm²**.
- Make a **1.5-2 cm** diameter **hole** at the base, directly underneath the thermostat or junction box.
- Feed the cable channels through this hole in the destination box

Disposal at end of life

This product must be disposed of in accordance with local regulations for waste electrical and electronic equipment. (WEEE)

Do not dispose of with household waste.

Contact your local authority for information on proper recycling procedures.



Note on the use of the heating ribbon (without mesh support)

1. When installing the heating ribbon, apply the same general rules as for the Warmset mat.
2. Note that, in the absence of mesh support, it is essential to carefully maintain the correct spacing between ribbons, avoiding overlaps or cold zones.
3. The correct distance between ribbons must be calculated and respected based on the values indicated in the product's technical datasheet.
4. It is advisable to temporarily secure the ribbon with strong adhesive tape to ensure a straight and even installation before covering

These instructions are available in digital format at www.warmset.com

Guarantees



Lifetime warranty

Conditions applicable to Warmset's Gold line of products only.

Warmset srl warrants that, under normal use and maintenance, Warmset floor heating elements are free from defects in material or workmanship and, subject to the restrictions and conditions described below, will remain so. Warmsets/heating elements in the GOLD range are warranted for **the lifetime** of the floor covering under which they are installed, except as noted below (please pay attention to the excluded cases indicated at the end of this Warranty).

This Lifetime Warranty is only valid if all the following conditions are met:

1. There are detailed photos of the installation
2. The label booklet has been completed in its entirety.
To file a complaint, proof of purchase must be presented. Therefore, we recommend that you keep your invoice and receipt. The invoice/receipt should indicate the exact model purchased.
3. The heating element has been grounded and has been protected by a residual current device the entire time.

If the floor covering laid over the heating element(s) is damaged, lifted, replaced, repaired or covered by other layers of flooring, no warranty will apply. The warranty period commences from the date of purchase. During the guarantee period, Warmset will repair or - at its discretion - replace components free of charge. Under this guarantee, the only remedy available to the customer that does not affect his or her statutory rights is the cost of repair or replacement. Such cost shall be limited to the direct cost of repair or replacement by Warmset and shall not include the cost of installation, replacement or repair of any floor covering or flooring. No warranty is applicable if the heating element fails due to damage occurring during installation or flooring. Before flooring, therefore, it is important to check the functioning of the heating element as indicated in the installation manual. The warranty only covers traditional applications as shown in the stratigraphy above; in the case of other applications, the warranty loses its effect.



10-year warranty

Conditions applicable only to Warmset black line products.

Warmset srl warrants that, under normal use and maintenance, Warmset floor heating elements are free from defects in material workmanship and, subject to the restrictions and conditions described below, will remain so. Warmset's BLACK line of floor heating elements are warranted for **10 years** of the floor covering under which they are installed, except as noted below (please note the excluded cases listed at the end of this Warranty).

This 10-year warranty is only valid if all of the following conditions are met:

1. There are detailed photos of the installation
2. The label booklet has been filled out in every single part.
To file a claim, proof of purchase must be presented. We therefore recommend that you keep your invoice and receipt. The invoice/receipt should indicate the exact model purchased.
3. The heating element has been grounded and has been protected by a residual current device throughout.

If the floor covering laid over the heating element(s) is damaged, lifted, replaced, repaired or covered by other layers of flooring, no warranty will apply. The warranty period commences from the date of purchase. During the warranty period, Warmset will repair or - at its

at its discretion - replace the components free of charge. Under this guarantee, the only remedy available to the customer that does not affect his legal rights is the cost of repair or replacement. The guarantee only covers traditional applications as per the above stratigraphies; in the case of other applications, the guarantee loses its effect.

This cost is limited to the direct cost of repair or replacement by Warmset and does not include laying costs, replacement or repair of any floor covering or flooring. No warranty is applicable if the heating element fails to function due to damage occurring during installation or flooring. Before paving, therefore, it is important to verify the operation of the heating element as indicated in the installation manual.

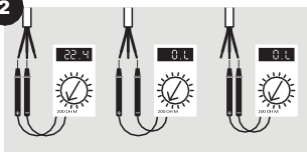
Quick Installation Guide

1



Planning: Plan the laying well so that the heating mat can be laid correctly

2



Test and Register (1st test):
Test the resistance of the mat and check for earth leakage.

3



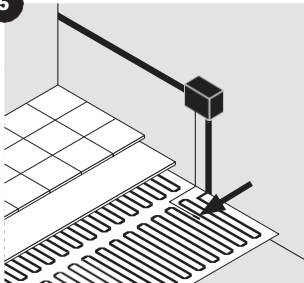
Laying of the mat: Make appropriate cuts in the support mesh, in order to respect the layout defined in step 1. Fix the heating element to the substrate with adhesive tape, double-sided tape or hot-melt glue. **DO NOT DAMAGE OR CUT THE HEATING MAT.** Photograph the installation layout.

4

Test and Register (2nd test):

Re-test the resistance of the heating element and the correct insulation to earth

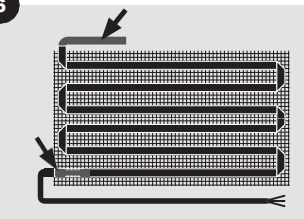
5



Preparing the electrical connection:

Make sure to install the temperature probe according to the instructions in the manual

6



Cover the Mat:

Ensure that the mat is completely covered by the laying screed/glue without damage.

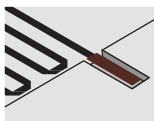
DO NOT INSERT HEAD AND TAIL CONNECTORS INSIDE THE CORRUGATIONS.

For floating floors:

Ensure that a recess has been made in the subfloor/insulation at the head and tail connectors.



Insert the tail connector into the recess.



7

Test and Register (3rd test):

Retest the resistance of the coil and the correct insulation to earth. Keep and/or send the installation logbook to info@warmset.com or your dealer.

8

Cover with the chosen floor.

9



Starting up the system: Start up the system after a qualified electrician has made the necessary connections, making sure to observe the instructions and timing of the installed floor/wall covering

For floating floors:

For floating floor application, it is mandatory to install a suitable insulation proposed by Warmset or an authorised Warmset dealer.

For rugs, carpets, vinyl floors:

For applications under rugs, carpets or vinyl flooring, it is mandatory to install a suitable intermediate layer, such as Heat Pak or an equivalent rigid protective board, e.g. MDF, between the Warmset heating element and the final floor covering.

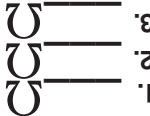
Important note for wet rooms:

In environments subject to the presence of water (e.g. showers, bathrooms, spas, etc.), the installation of a waterproofing membrane over the heating element is mandatory.

Stanza / Room

- Testare la resistenza e l'isolamento / Test the resistance and insulation: :
1. Aperta la confezione / Once the box is opened
 2. Posata la matassa / Once the mat is laid
 3. Dopo aver coperto la matassa (con massetto, colla, pavimento ecc.) / Once the mat is covered (with screed, glue, floor, etc.)

RESISTANCE

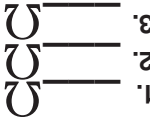


INSULATION

(>2,5 MΩ)



RESISTANCE



INSULATION

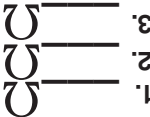
(>2,5 MΩ)



STANZA / ROOM



RESISTANCE



INSULATION

(>2,5 MΩ)



STANZA / ROOM





Warmset



®

Warmset

LAMINATED HEATING TECHNOLOGY

Floor heating system

To activate the warranty



TO ACTIVATE THE WARRANTY IT IS NECESSARY THAT THIS BOOKLET BE COMPLETED CORRECTLY IN EVERY POINT, APPLYING THE LABELS OF THE ROLLS PRESENT INSIDE THE PACKAGE IN THE CORRECT SPACES, AND FILLING IN THE TESTS:

1. ONCE THE BOX IS OPENED
2. ONCE THE SKEIN IS PLACED
3. ONCE DECKED (WITH GLUE / SCREED / FINISHED FLOOR)

IT IS ALSO NECESSARY TO RESPECT THE LAYING DIAGRAM AND / OR TAKE PHOTOS OF THE INSTALLATION TO BE PRESERVED.

It is also advisable to power the system once it has been installed and covered, checking the current using clamp. The lack of the above points entails the forfeiture of the warranty