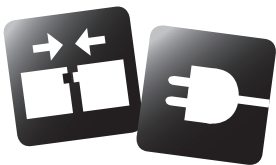




# Installation guide Veria Clickmat 55/100



The Click & Plug System





# Content

## 1 Introduction

1.1 Symbols explanation	4
1.2 General information	5

## 2 Installation of Veria Clickmat

2.1 Preparing the subfloor	6
2.2 Calculating the required electric power	6
2.3 Connecting the Veria Clickmat mats	8
2.4 Cutting the heating mat to size	9
2.5 Mounting the Veria Wireless Clickkit	10
2.6 Filling up the remaining space	11
2.7 Finalising the installation	11
2.8 Warning label	12

## 3 Technical details

3.1 Technical details - Veria Clickmat mats	13
3.2 Technical details - Veria Wireless Clickkit + Accessories	14
3.3 Layout paper	15

## 4 Safety precautions

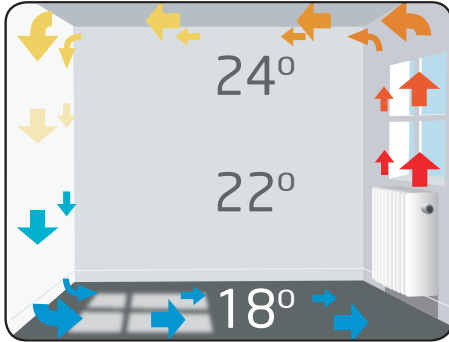
## 5 Simplified EU Declaration of Conformity

## 6 Guarantee

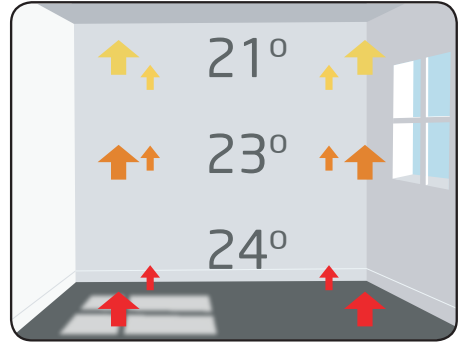
# Congratulations with your new underfloor heating system!

Veria Clickmat brings you optimum comfort with the luxury and comfort of a warm floor as well as a pleasant room temperature.

Floor heating is the most comfortable type of heating because it is based on the fact that heat travels upwards which ensures a pleasant temperature at both your feet, body and head.











Heat distribution with convector



Heat distribution with floor heating

## 1.1 Symbols explanation

	This side up
	The heating mat must be installed on top of a concrete construction (never on a wooden floor construction or embedded in concrete) ( <i>only applicable for Veria Clickmat 100</i> )
	The Veria Clickmat mat may be cut here to fit the actual area, as there are no electrical parts in this area
	The Veria Clickmat mat can't be cut here as there are electrical parts in this area
	For indoor use only
	Read the instruction manual before installation
	Double insulated
	Veria declares that Veria Clickmat is tested according to the standard for removable floors: EN/IEC 60335-1 and EN/IEC 60335-2-96

## 1.2 General information

The Veria Clickmat underfloor heating system consists of a foam/carpet heating mat with heating cables inside.

The system must always be controlled with the Veria Wireless Clickkit.

The Veria Clickmat floor heating system has been developed specifically for dry application areas requiring underfloor heating.

It is applicable on top of wooden ( $55 \text{ W/m}^2$ ) and concrete ( $55 \text{ W/m}^2$  or  $100 \text{ W/m}^2$ ) floor constructions.

The Veria Clickmat underfloor heating system is for indoor applications in dry rooms only.

The Veria Clickmat floor heating system can be used under wooden floors, parquet and laminate.

Please check the specifications with your supplier of these products.

The insulation value of the floor covering must not exceed  $0,18 \text{ m}^2 \text{ K/W}$ .

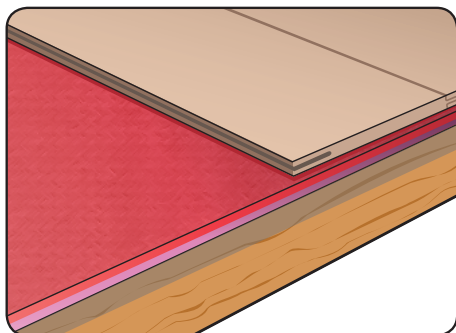
If the system is installed under carpets we recommend to full tape the mats together with duct tape (not supplied in the kit). The mats must not be fixed to the floor.

As with any other underfloor heating system, it will be most effective if the underfloor is well insulated.

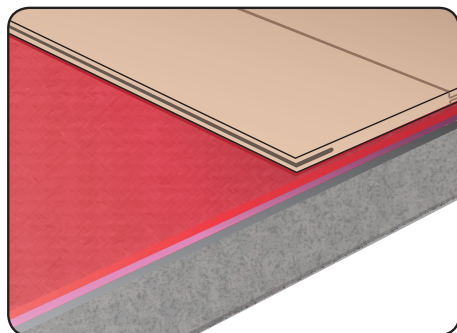
The following directions will guide you step-by-step through the installation process.

Please read the directions and the safety precautions before you start the installation process.

Your Veria Clickmat floor heating system complies with the standard for removable floors EN/IEC 60335-1 and EN/IEC 60335-2-96.



*Veria Clickmat on wooden floor construction*



*Veria Clickmat on concrete floor construction*

## 2.1 Preparing the subfloor

Before you start installing the product, please ensure that the floor is:

- Permanently inflexible
- Dry
- Flat and regular
- Dust- and fat-free
- Free from any sharp objects

Use a powerful vacuum cleaner to remove all dust from the floor.



Remember to install a 0,20 mm vapour barrier on the subfloor before rolling out the heating mats.

## 2.2 Calculating the required electric power

Always connect the Veria Clickmat Controller between the power source and the Veria Clickmat mat in accordance with national installation standards and wiring rules.

Every fuse in the mains supply distribution board has its protective value imprinted in Ampere (e.g. 10, 13 or 16 A). Multiply this number by the mains voltage (e.g. 230 Volt) to find the available output.

Example: Ampere (I) multiplied by Volt (U) equals Power (P):

$$I \times U = P$$

$$13 \text{ Amp} \times 230 \text{ V} = 2990 \text{ Watt}$$

When calculating the output available for the Veria Clickmat system, you should take all your electrical appliances on this fuse into consideration.

If you are in doubt about which fuse covers the particular floor area, you can simply turn it off one by one and see what appliances are not working.

You can typically find the power of your electric appliances imprinted as W on the back of the product.

The 'power' of your fuses minus the total power of your appliances equals the remaining power that is available for your Veria Clickmat floor heating system.

Calculate the available power for your Veria Clickmat floor heating system using the following table:

### Calculation Example

Fuse in the distribution board (e.g. 16 A x 230 V)	3.680 W
EXISTING APPLIANCES IN THE ROOM:	
TV and DVD player	80 W
Hi-fi set (radio/CD-player/amplifier)	60 W
Total lighting	180 W
Aquarium	60 W
Subtotals	380 W
Total available power for Veria Clickmat	3.300 W

### Your Calculation

Insert your fuse size from the distribution board ( ___ A x 230 V)	W
EXISTING APPLIANCES IN THE ROOM:	
TV and DVD	W
Hi-fi set (radio/CD-player/amplifier)	W
Total lighting	W
Other appliances	W
Other appliances	W
Other appliances	W
Subtotal	W
Total available power for Veria Clickmat	W

In the event that you are running short of power (total W) on one fuse, you will need to split the floor heating mats up into two (or more) zones.

Connect the second zone to a second Veria Wireless Clickkit and to a second available supply fuse.

The Veria Clickmat Controller resists up to max. 10 A at 230 V~ (equivalent to 2300 W) meaning that you to each Veria Wireless Clickkit can connect a heated area up to:

**23 m<sup>2</sup> (Clickmat 100W/m<sup>2</sup>)**

or

**42 m<sup>2</sup> (Clickmat 55W/m<sup>2</sup>)**

In the event that you need to cover a room with a heated area exceeding 23 m<sup>2</sup>/42 m<sup>2</sup>, you must split the floor heating system into two (or more) zones.

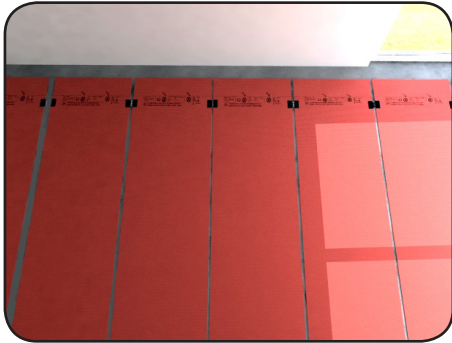
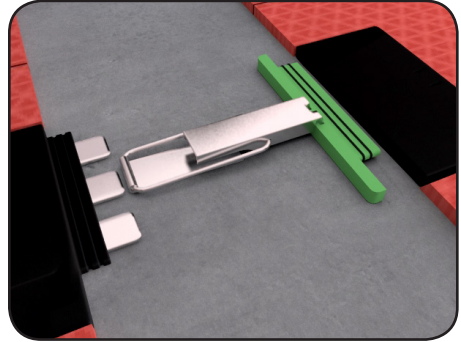
## 2.3 Connecting the Veria Clickmat mats

Unroll and align the Veria Clickmat mats where you intend to place them with the printed side upwards.



All mats have an end stop to protect the connection against pressure, moisture and for electrical protection.

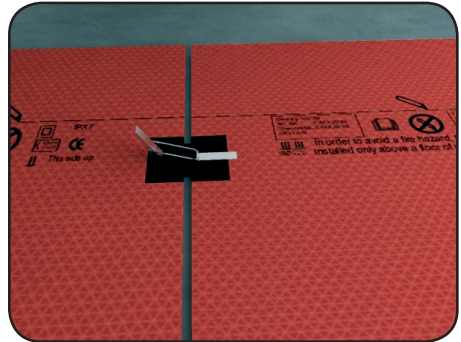
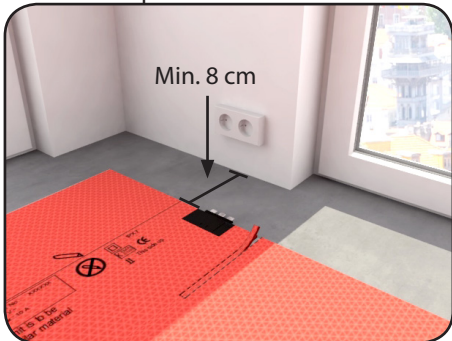
Remove the end stops with the special tool, just before making the connection with the next heating mat.



Remember to leave the end stop in the last mat.

Put the male and female connector together by hand before using the connector tool to pull the mats tight together.

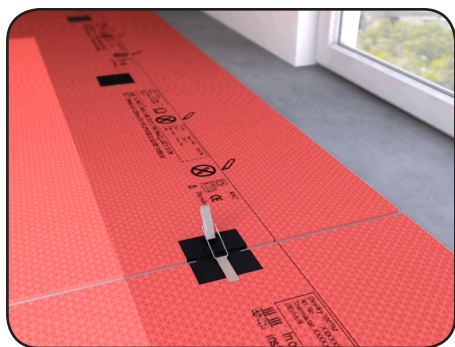
The mat, which is to be connected to the Veria Clickmat Controller is to be placed min. 8 cm from the wall in order to ensure room for the power cable.



Check that the plug-in connection fits correctly and permanently.

Continue with the subsequent mats in the same manner.





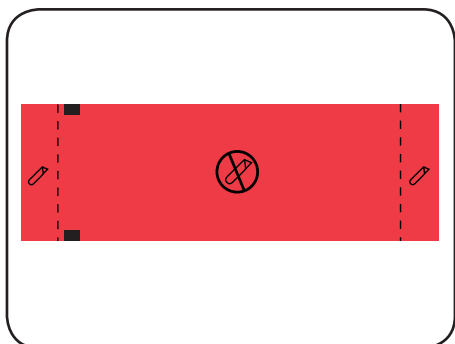
Make sure that all connections fit straight and without any mechanical stress.

Discontinue the floor heating installation process in the event of damage to one or more components.

## 2.4 Cutting the heating mat to size

Each end of the Veria Clickmat heating mats consist of 25 cm without electrical parts inside.

The Veria Clickmat heating mat must only be cut at the ends where there are no electrical parts inside as marked on the product below.



Incorrect installation may cause problems and/or defects to the floor heating mats. Make sure that the end stop in the last mat is in place before the floor covering is laid.



Keep the end stops in case you intend to remove/reposition your floor heating system later.

### Veria Clickmat extension cords

A Veria Clickmat extension cord is available as an accessory. Use the cord only in the event that you are unable to make a direct connection between two adjacent floor heating elements.

The extension cords must only be placed in the *filler material* and not on top of the *heating element*.

Markings and symbols have been printed on the Veria Clickmat heating mats:

-  Indicates where it is allowed to cut
-  Do not cut here. Electrical parts inside. If cut, the mat will be destroyed.

### To cut the mat to size:

Carefully measure the piece you wish to cut off and simply cut with your knife.

## 2.5 Mounting the Veria Wireless Clickkit

### Mount the Veria Clickmat Controller

The Veria Clickmat Controller should be mounted on the wall 10 - 30 cm above the floor (screws and plugs included).

### Install the floor sensor

If possible, the sensor should be placed in pre-cut slit of the heating mat:  
Remove the upper layer of the slit and place the sensor in the slit.



The sensor must be placed in a position where at least 30 cm of the sensor is placed on the heated mat.



If it is not possible to place the sensor in the slit, place the sensor on top of the heating mat.  
Make sure to place the end of the sensor right between two heating cables.

Fix the sensor to the heating mat with the enclosed aluminium tape.

### Connect the output cord

The output cord from the controller should now be connected to the first mat using the connection tool.

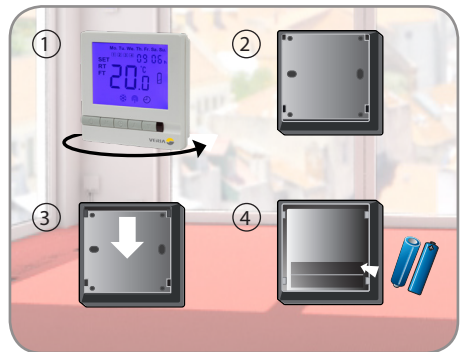


Make sure not to squeeze or bend the output cord too much. *Minimum bending diameter is 5 cm.*

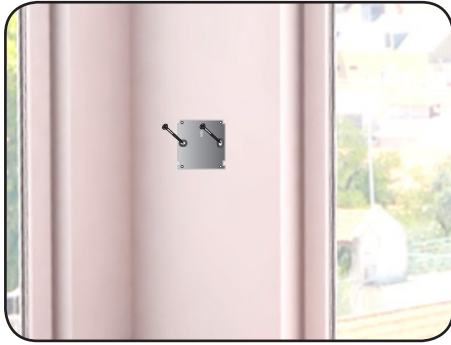
### Mount the Veria Clickmat Thermostat

For easy access, the Veria Clickmat thermostat should be mounted 130-160 cm above the floor.

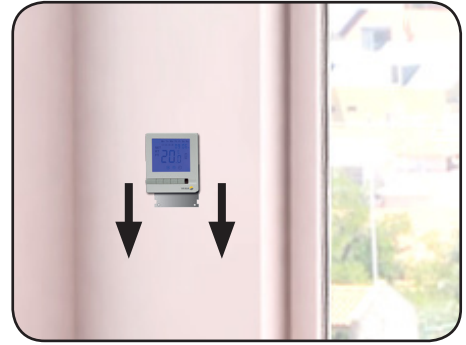
Start with removing the backplate on the thermostat and insert the batteries (included)



When done fix the back plate to the wall using the enclosed screws and plugs.



Attach the thermostat to the back plate by dragging the thermostat over the tabs.

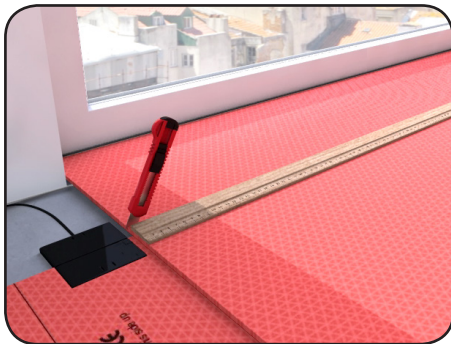


## 2.6 Filling up the remaining space

At this point all connections between the mats should be aligned and connected and as much of the floor as possible should be covered with Veria Clickmat mats.

The space without Veria Clickmat heating mats should be covered with the Veria Clickmat Fillermat to ensure an even and homogenous floor surface.

A ruler and a wooden plate is easily used when cutting the Veria Clickmat Fillermat.



### Fit the output cord

Cut a piece of material from the filler material to embed the output cord between the Veria Clickmat Controller and the Veria Clickmat mat.

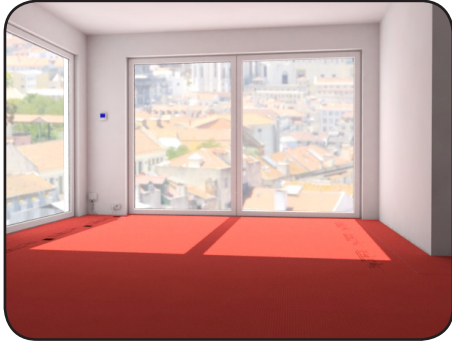


Once you have correctly positioned all floor heating mats and you have cut the filler material to size, you can proceed with the installation.

## 2.7 Finalising the installation

Check that all work has been carried out in accordance with this installation guide before testing the Veria Clickmat floor heating system.

Testing may commence when everything has been correctly connected.



Read the Quickguide for the thermostat before you proceed.

Connect the power, turn on the thermostat

and set the temperature at maximum temperatures (30 °C for Clickkit 55 and 35 °C for Clickkit 100). After a short while (5-10 minutes) you can feel the Veria Clickmat floor heating mats are warming up.

Please ensure that all connected mats are heating up before you proceed.

If the floor heating mats are not warming up to the temperature set point, connections should be checked once again.

Remember to first unplug the Veria Clickmat system from the mains, before inspecting the system.

### Finalising the flooring

The final floor covering (laminare, carpet or loose parquet) can be laid when the system has been tested.

Please refer to the installation guidelines of the flooring producer and ensure that the top flooring is suitable for floor heating.

## 2.8 Warning label

The warning label that is included in the Veria Wireless Clickkit must be filled out and installed in the distribution board.

For future reference it is important to fill in, which room and how many Veria

Clickmat mats that have been installed, by whom and the installation date.

Furthermore, the room should be drawn in the manual (see page 15) so it is easy to see how the mats have been positioned within the room.

### Warning

Heating element type Veria Clickmat 100 installed in:  
**Room:** \_\_\_\_\_  
**By:** \_\_\_\_\_ **Date:** \_\_\_\_\_


It is not allowed to drill or to insert nails or screws in the floor. This could short circuit the element or cause damage to the electrical insulation on the heating element. The floor must not be covered with covering which will restrict the heat transfer more than 0,18 m<sup>2</sup>K/W. Please refer to the installation instruction for the drawing of the layout of the heating element.

Supply voltage: 230 VAC



Output Power ENG


Number of mats	Mat type and output		Output pr type
x	1m <sup>2</sup> at 40 watt	=	watt
x	2m <sup>2</sup> at 140 watt	=	watt
x	3m <sup>2</sup> at 240 watt	=	watt
x	4m <sup>2</sup> at 340 watt	=	watt
x	5m <sup>2</sup> at 440 watt	=	watt
Total output power			watt

### 3.1 Technical details - Veria Clickmat mats

<b>Technical details of Veria Clickmat mats:</b>				
Height			8 mm	
Mains voltage			230V (50Hz)	
Max. load per Veria Clickmat system			10 A	
IP rating for Veria Clickmat mat			IP x7	
Output			55W/m <sup>2</sup> or 100W/m <sup>2</sup>	
Sound reduction value			17 dB	
Insulation value $\mu$			8 W/m <sup>2</sup> K	
<b>Heating mats:</b>				
Width x length:	Covering area	Heated area	Total output	Amp
1 m x 1 m	1 m <sup>2</sup>	0,4 m <sup>2</sup>	22 W (Clickmat 55)	0,1 A (Clickmat 55)
			40 W (Clickmat 100)	0,17 A (Clickmat 100)
1 m x 2 m	2 m <sup>2</sup>	1,4 m <sup>2</sup>	77 W (Clickmat 55)	0,33 A (Clickmat 55)
			140 W (Clickmat 100)	0,61A (Clickmat 100)
1 m x 3 m	3 m <sup>2</sup>	2,4 m <sup>2</sup>	132 W (Clickmat 55)	0,57 A (Clickmat 55)
			240 W (Clickmat 100)	1,04 A (Clickmat 100)
1 m x 4 m	4 m <sup>2</sup>	3,4 m <sup>2</sup>	187 W (Clickmat 55)	0,81 A (Clickmat 55)
			340 W (Clickmat 100)	1,48 A (Clickmat 100)
1 m x 5 m	5 m <sup>2</sup>	4,4 m <sup>2</sup>	242 W (Clickmat 55)	1,05 A (Clickmat 55)
			440 W (Clickmat 100)	1,91 A (Clickmat 100)
<b>Filler mat:</b>				
1 m x 1 m	1 m <sup>2</sup>	-	-	-
1 m x 2 m	2 m <sup>2</sup>	-	-	-

## 3.2 Technical details - Veria Wireless Clickkit + Accessories

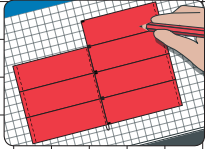
<b>Technical details of Veria Wireless Clickkit:</b>  <b>Content in kit:</b> Controller Thermostat Aluminum tape for sensor fixing Connection tool	<b>Controller:</b>  	<b>Thermostat:</b>  
Set point range	n/a	5°C- 30°C/35°C
Temp. indication accuracy	n/a	±1 °C
Hysteresis	2 °C	n/a
Temperature display and setting unit	n/a	1° C /Step
Operating temperature	0° C to 45° C	0° C to 45° C
Storage temperature	-20° C to + 60° C	-20° C to + 60° C
IP rating	IP 30	IP 30
Transmission frequency	Wireless 868.199 - 869.999 MHz	Wireless 868.199 - 869.999 MHz
Maximum radio-frequency power transmitted	7 dBm/5 mW	7 dBm/5 mW
Transmission range	Up to 30 m	Up to 30 m
Voltage supply	230 V~	3V --- (2 x AA battery)
Max. Amps	10 Amps	No switching
Max. output	2300 W	n/a
Humidity	5% - 95% RH (non-condensing)	5% - 95% RH (non-condensing)
Control pollution situation	Pollution degree 2 (Domestic)	Pollution degree 2 (Domestic)
Ball hardness	75 °C	75 °C
Rated impulse voltage	2,5 kV	n/a
Software class	A	A

<b>Veria Clickmat extension cord:</b>  The extension cords are used to connect mats where the female and male connectors between 2 mats due to lay out reasons are separated.	
<b>Name:</b>	<b>Length:</b>
Veria Clickmat extension cord 0,25m	0,25 m
Veria Clickmat extension cord 1,0m	1,0 m
Veria Clickmat extension cord 2,0m	2,0 m

### 3.3 Layout paper

Please draw the room on the page below and position the heating mats that you are installing (for future reference).

These products are installed in Room: \_\_\_\_\_



The form consists of a large grid of graph paper, approximately 20 columns wide and 25 rows high. In the top right corner of this grid, there is a small, rounded rectangular inset. This inset shows a smaller grid of graph paper with a hand holding a pencil, drawing several red rectangles. These rectangles represent the heating mats mentioned in the text above.


## 4. Safety precautions

- Use the floor heating mat for the purposes described in the directions only.
- Veria Clickmat must always be installed with the Veria Wireless Clickkit.
- Mount and connect the Veria Wireless Clickkit (controller + thermostat) to the mains following the installation instructions.
- Do not connect mats with different output/m<sup>2</sup> (55W/m<sup>2</sup> and 100/m<sup>2</sup>) to each other.
- Veria Clickmat 100 mats must be controlled with Veria Wireless Clickkit 100 and Veria Clickmat 55 mats must be controlled with Veria Wireless Clickkit 55.
- The Veria Clickmat underfloor heating system is to be supplied through a residual current device having a rated residual operating current not exceeding 30 mA.
- The Veria Clickmat mats are not to be installed on irregular surfaces.
- Do not fold or sharply bend the floor heating mats.
- Veria Clickmat heating mat must be separated from other heat sources.
- The Veria Clickmat heating mat must not be installed at ambient temperatures below 5°C.
- The Veria Clickmat floor heating system is only for indoor use.
- Do not install or use the floor heating system after one or more components have been damaged.
- Do not allow home repairs under any circumstances. Repairs must be carried out by qualified electricians. Faulty repairs may cause personal injury or damage to property.
- Do not use the floor heating in combination with parts that are not recommended, installed or supplied by Veria.
- Use original parts of the Veria Clickmat floor heating system only. The warranty for the entire system and for the separate parts becomes null and void if parts from other manufacturers have been used.
- Make sure that no hot spots develop when using the floor heating system. Do not install the floor heating mat under permanent or built-in cupboards (full floor covering furniture).



- Do not use the Veria Clickmat floor heating system if the system is wet.
- Warning label must be filled out and placed next to the distribution switchboard.
- In case of need for extension of cords the Veria Clickmat floor heating system is only to be used with the Veria Clickmat extension cords. Never cut the extension cords or the output cords.
- Do not buckle the supply cord and the extension cords; do not have them run across hot and/or sharp objects.
- Unroll the cords entirely to prevent the cords from overheating.



- Remove the plug from the wall socket outlet if work is carried out at or near the floor heating system when fluids or sharp objects are being used.
- Do not pull the cord or the floor heating to undo a plug-in connection. Always hold the plug and take the unit apart with the connection tool.
- If the extension or output cord is damaged, it must be replaced by the manufacturer, its service agent or similar persons in order to avoid a hazard.
- Connect the floor heating to alternating current 230V and 50 Hz only.
- Do not allow needles, sharp objects, liquids and/or other electricity-conducting objects/fluids to make contact with the floor heating.
- The printed side of the heating mat must be visible when rolling out the mat showing the symbol:  
 THIS SIDE UP
- Save this manual together with the warranty papers for further use.

## 5. Simplified EU Declaration of Conformity

Hereby, Veria declares that the radio equipment type Veria Wireless Clickkit is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: **[veriafloorheating.com](http://veriafloorheating.com)**

## 6. 5 years Guarantee

For Veria Clickmat Veria offers the following guarantee:

<b>Veria Clickmat heating mats</b>	<b>5 years</b>
<b>Veria Wireless Clickkit</b>	<b>2 years</b>
<b>Veria Clickmat extension cord</b>	<b>2 years</b>

The guarantee is valid, counted from the date of purchase. This guarantee is effective in addition to all statutory rights.

### **GUARANTEE CONDITIONS**

The assertion of guarantee claims is subject to compliance with the following terms and conditions:

- This guarantee is valid only for consumer purchase for private use.
- The products must be used indoors in a residential area.
- The guarantee covers faults caused during production of the material. It does not extend to damage caused by third parties (e.g. transport damage).
- No guarantee is provided for damage due to abuse, misuse, accidents or force majeure, and damage arising from other circumstances not common in residential applications.
- Please read our installation instructions carefully and strictly follow the directions. The guarantee is not valid if the products are not installed properly.
- Damage arising from improper care and cleaning, overloading, inadequate floor construction or damage due to the influence of moisture is also excluded from coverage under this guarantee.
- If the products are installed despite visible defects, this will void the guarantee.
- No guarantee service shall in any event act to extend the warranty period.
- Veria reserves the right to inspect the damage on site after agreement on a reasonable inspection date in order to verify compliance with the guarantee terms and conditions.
- Veria reserves the right to perform the guarantee services step by step against return of the replaced material.
- This guarantee is in lieu of all other guarantees. Guarantee coverage is subject to the guarantee in the version effective at the time of purchase. In the USA and Canada special guarantee terms and conditions apply. This guarantee is not applicable in those countries.

### **OUR UNDERTAKING**

If a fault in accordance with this guarantee has become apparent, Veria will, at its discretion, either repair the product or deliver a new product at no cost. The cost of laying, or other costs in connection with this is not covered.

### **GUARANTEE CLAIMS**

Guarantee claims are to be submitted in writing to Veria within 30 days from the time a fault under the guarantee was discovered or ought to have been discovered. When submitting a claim the original guarantee certificate and the receipt must be produced.

**5 years Guarantee**  
**Guarantee Certificate**

**The Veria Guarantee certificate is granted to**

**Name**

---

**Full address**

---

**Post code**

---

**City**

---

**Country**

---

**Telephone**

---

---

***Attention:***

*The Guarantee Certificate must be completed correctly for the Guarantee to be valid.*

*Please read the Guarantee conditions on the previous page.*

---

**Type of product**

---

**Item number**

---



**Veria**

Ulvehavevej 61

DK-7100 Vejle

Denmark

E-mail: [mail@veria.dk](mailto:mail@veria.dk)