

devimat®

devimat® with DSVF/DTVF cables are primarily used in connection with floor renovations, (also called thin floors), where there is a demand for a low building height.

They can also be used in connection with standard concrete floor constructions.

These are the areas that will be covered by this installation instruction.

Should you wish for further information please see the heating compendiums.

Areas of use

Area of use	Maximum load per m²	
On wood with carpet, vinyl or parquet	100 W/m²	
On wood with tiles	100 W/m²	
On concrete with carpet, vinyl or parquet	150 W/m²	
On concrete with tiles	150 W/m²	
In an open wooden floor on joists	80 W/m²	

The above mentioned effects are only valid with temperature control with floor sensor (Max. 27°C).

IMPORTANT!

- The heating mat must not be cut or subjected to strain around the area of the coupling.
- The heating mat must be connected by an authorised electrician.

devimat® specifications

Cable DSVF / DTVF

Type Single / twin conductor with screen

Voltage 230 V AC

Effect 60 W/m² to 150 W/m²

Dimension (W x H) 500 mm x 2.7 mm / 4.9 mm Cold tail 4.0 m, 1.0 mm² plus screen

Conductor insulation Teflon FEP
Sheath insulation PVDF / PVC 90°C

Max. temperature 90°C

CE

Connections

Live - Black Neutral - Blue Earth - Screen

The insulation value of floors installed with devimat® DSVF and DTVF may not exceed approx. 0.125 m²K/W.

Typical insulation values:

Thin floors w. tiles, vinyl, linolium etc.

Solid floors w. vinyl, linolium etc.

Floors w. parquet, cork, carpet etc.

Solid fibre-board/hardboard and carpets

Wooden floors on joists

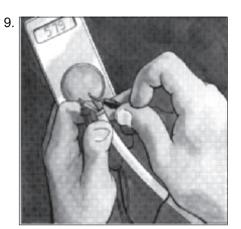
0,035 m²K/W
0,040 m²K/W
0,125 m²K/W
0,175 m²K/W

General installation instructions

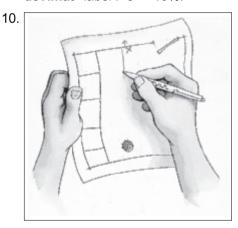
When installing **devimat**®, the following should be observed:



- The heating mat must only be used in the manners recommended by and should be properly connected to the main electrical source.
- Connection of the heating mat must be done by an authorised electrician.
- The recommended effect for the different installations and operating effects must be observed.
- 4. The heating mat must be protected against excess strain and tension.
- The area below the heating mat must be clean and free for sharp objects.
- 6. The heating mat screen must be earthed in accordance with the local electricity laws.
- The heating mat must not be cut/ shortened, or exposed to strain in the areas of the cold tail coupling.
- 8. It is recomendable not to lay out **devimat**® at temperatures lower than approx. 5°C.

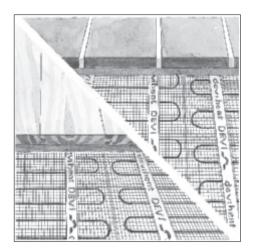


The ohmic value of the heating mats should be measured after the mat has been laid and after the compound/concrete has been cast. The ohmic value of the heating mats should be as stated on the **devimat**® label: -5 - +10%.



It is recommended to draw up a plan, showing where the heating mat, including the cold tail and end coupling, are positioned.

Installation



devimat® can be used in connection with renovation of floors (the mats can be laid on top of existing wooden or concrete floors), where there is a demand for a low building height, and in new concrete floors (the mats can cautiously be laid on the armouring, or directly on the coarse concrete layer). The result is a warm, maintenance free and dry floor.

The heating mat should usually be laid with the mesh netting facing downwards, and the cable upwards. However, if practical reasons call for it, there is nothing to be risked by turning over the heating mat.

A damp proof membrane must always be installed in connection with wet room floors.

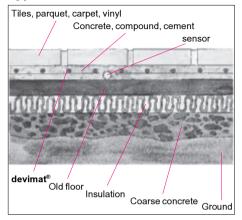
Measurement of the required effect

The necessary effect naturally depends on the climatic and insulation conditions. The table on page 2 is a guideline for choosing the appropriate heating mat.

In connection with thin floors and wooden floors the effect should be max 100 W/m²

The floor manufacturerer's recommendations for maximum floor temperature must always be observed and carried out by means of using an effective regulator.

Typical floor construction



Installation of the heating mat

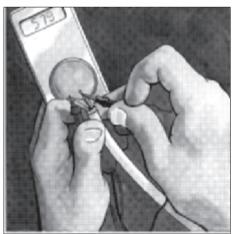
There are several different methods which can be used in connection with embedding of the heating mat. Here, two of them are described:

- The floor is primed and the tile glue is applied with a 6 mm tooth scraper. The heating mat is pressed down into the glue with the cables facing down towards the floors. Then, the tile glue is levelled.
- The floor is primed and the mat is attached to the floor. Then, the heating mat is levelled with moulding compound. If selflevelling moulding compound is used, the mat must be secured carefully to the floor otherwise the mat will float on top of the moulding compound.

The heating mat can be laid on top of existing wooden or concrete floors.



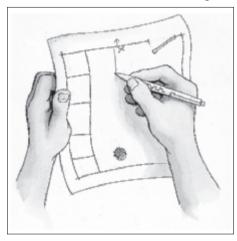
If necessary a fire resistant layer between surface and heating cable can be achieved, by first laying out a layer of compound, a plaster board or a wire mesh netting (Ø 1 mm, mesh 20 x 20 mm).



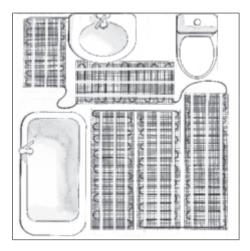
Before the heating mat is laid out, the ohmic value of the heating mats should be measured. The ohmic value of the heating mats should be as stated on the **devimat**® label: -5 - +10%.



The Warranty Certificate must be filled in with relevant data before casting.

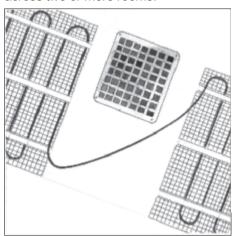


It is recommended to draw up a plan of the cable-layout showing where the cable mat, the cold tail and the connection box have been laid.



The heating mat must be laid with even spacing over the entire floor area and be guided around areas with pipes, bath tubs and cupboards etc. It is, however, allowed to lay heating mats below suspended cupboards, wash basins, etc.

Heating mats must NOT be installed across two or more rooms.



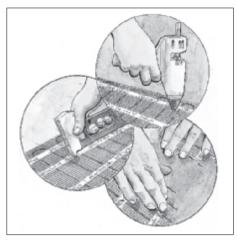
Furthermore, the heating mat must be guided around drains, basins and other obstacles where objects are attached to floor to avoid having to drill holes in the heating mat at a later stage.



If the length of the **devimat**® exceeds the required floor area, the mat must be turned when reaching the end wall. This is done by cutting the mesh netting (NOT THE CABLE), and the mat is then turned and placed parallel with the first lane.

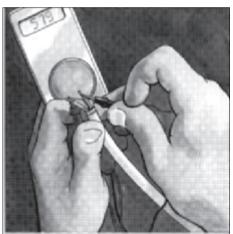
The **devimat**® must not be shortened in any way.

Any exceeding length of heating mat can be placed at cold zones i.e at entrance doors, outer walls and large glass fronts. This must be calculated before the installation, if possible.



The heating mat is attached to the floor by means of glue gun, nails or clamps etc.

The heating mat should be attached to the floor at regular intervals (20-25 cm in both directions), if the mat is to be covered by self-levelling moulding compound as the mat otherwise could float on top of the material.

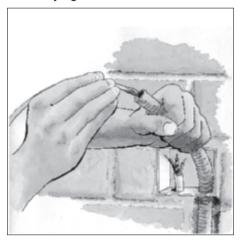


The resistance and the insulating resistance of the heating cable must be checked before and after casting. The ohmic value should be as stated on the **devimat**® label: -5 - +10%.



If required, cut a channel in the wall for the sensing cable and cold tail tubes.

Naturally, it is a great advantage to prepare the holes and joints before the cable-laying.





It is important to choose a moulding compound that is suited for heated floors, and that the suppliers recommendations are followed accordingly.

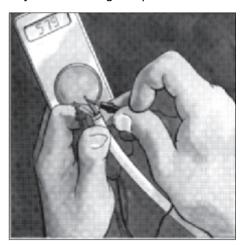
Remember that the floor needs primer before the compound is poured.

If tiles are to be laid, it is possible to apply adhesive directly on top of the heating mat provided that the mat is entirely encircled by the adhesive substance.



It is important to follow the supplier's recommendations closely to ensure that the concrete has fully dried out.

Approx. 30 days for concrete and 7 days for moulding compound.

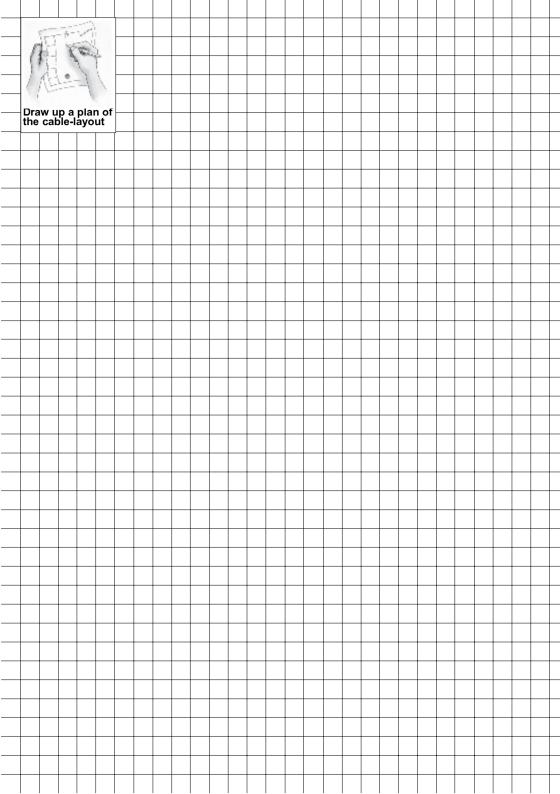


The resistance and the insulating resistance of the cable mat must be checked after installation.

The ohmic value of the heating mats should be as stated on the **devimat**® label: -5 - +10%.

The maximum temperature under a wooden floor laid directly on concrete is 27°C. The manufacturer of the floor dressing should be informed about the floor heating system if advice is required concerning glue types etc.

The heating mat must be connected by an authorised electrician.





It is important that the Warranty Certificate is filled in properly after installation.

The Warranty Certificate must be kept and used in connection with complaints. The guarantee is only granted by on the condition that the Warranty Certificate is filled in properly as described on the following page.

The Warranty:

You have purchased a **deviheat**[®] system, which we are certain will improve your home comfort and economy.

deviheat® provides complete heating solutions with **deviflex®** heating cables or **devimat®** heating mats, **devireg®** thermostats and **devifast** fitting bands.

If, however, contrary to all expectations, a problem should occur with your heating system, we at , with manufacturing units in Denmark, are, as European Union suppliers, subject to general product liability rules, as stated in Directive 85/374/CEE, and all relevant national laws which implies that:

provides a warranty for deviflex® heating cables and devimat® heating mats for a 10 year period and all other products for a 2 year period against defects in material and production.

The guarantee is granted on the condition that the WARRANTY
CERTIFICATE on the overleaf is filled out properly in accordance to instructions and that the defect is inspected by, or presented to, or authorised distributor.

Please note that the wording of the WARRANTY CERTIFICATE must be provided in English or local language with the ISO code for your country in the upper left corner of the front page

of the installation instructions in order to release the warranty.

The obligation of will be to repair or supply a new unit, free of charge to the customer, without secondary charges linked to repairing the unit. In case of defective **devireg**® thermostats, reserves the right to repair the unit free of charge and without unreasonable delay to the customer.

The warranty does not cover installations made by unauthorised electricians, or faults caused by incorrect designs supplied by others, misuse, damage caused by others, or incorrect installation or any subsequent damage that may occur. If

is required to inspect or repair any defects caused by any of the above, then all work will be fully chargeable.

The warranty is void, if payment of the equipment is in default.

At all times, we at will respond honestly, efficiently and promptly to all queries and reasonable requests from our customers.

The above mentioned warranty concerns product liability whereas matters in relation to legislation on sale of goods shall be referred to national law.



Warranty Certificate

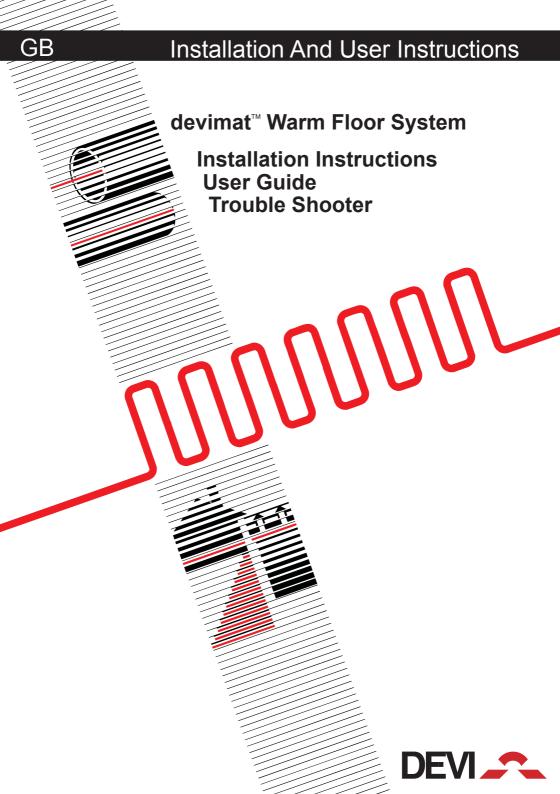
The Warranty is granted to:

Phone:	_
Postal code:	=

Please Observe!

In order to obtain the **Warranty**, the following must be carefully filled in. See other conditions on the overleaf.

devimat® layout contractor:		Lay-out date:	
Electrical Installation by:		Installation date:	
Mat length: Stock code:	Watt: Mat code:	devimat® label code:	
Application: ☐ Concrete floor ☐ Wooden floor	□ Tiles □ Vinyl	☐ Parquet ☐ Carpet	
Suppliers Stamp:			
DE-VI DK · 7100 Vejle Phone +45 76 42 47 00 Fax +45 76 42 47 03			



Existing Floor	Maximum load per m ²	
Wooden Floors	100 W/m ²	
Concrete Floors	150 W/m ²	

In all above situations, the floor temperature must be controlled with a DEVI floor sensor and devireg™ 550 thermostat/fimer

IMPORTANT!

- Before laying the mat the floor sensor (in controller box) <u>MUST</u> be installed. The sensor is fitted into a tube (in mat box) which should be laid 20-30cm across the floor under the mat between a cable loop.
- Before laying check the continuity of the cable, it should match the Ohm rating
 on the devimat[™] label with a tolerance of -5 to +10% and check the insulation
 resistance which should read infinity.
- To install the mat simply cut and turn the mat. The heating cable must NOT be cut or subjected to strain around the area of the coupling, only the blue and black cables can be cut to suit.
- When installing more than one mat, all 'cold tails' (blue/black wires) must be taken back to the connection point/controller, DO NOT wire one mat to another.
- After laying the adhesive the heating mat must be checked once again for continuity and insulation resistance, then connected by an authorised electrician.
- The blue central core is NEUTRAL and the black central core is LIVE. The outer wires on both cables are the earth screens and should be connected to earth.
- A flexible adhesive is required when installing the devimat [™] product.
- Installation on new concrete floors should not be carried out for approxi
 mately 30 days to ensure thorough drying out.

devimat[™] specifications

Cable DSVF

Type Single conductor with screen

Voltage 230 V AC

Effect 100 W/m² to 150 W/m² Dimension (W x H) 460 mm x 2.7 mm

Cold tails 4.0 m, 1.0 mm² plus screen

Conductor insulation Teflon FEP
Sheath insulation PVDF/PVC 90°C

Max. temperature 90°C

Connections

Live - Black Neutral - Blue Earth - Screen

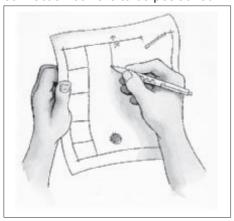


Installation - Part 1

When installing devimat[™] the following should be observed:

Clean and remove all loose particles. Remove any sharp protrusions and fill in any holes with 1:3 mixture of sand/cement. Prime the floor if the surface is contaminated with oil, etc. in accordance with the tile fixative manufacturers instructions.

It is recommended to draw up a plan showing where the heating mat, including cold tail, floor sensor and connection box are to be positioned.

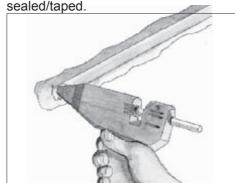


1. The flexible tubing (15mm) for the floor sensor needs to be parallel with the mat and sitting between a cable loop.

Decide on the direction of the cable loops and lay the mat on the floor so a channel for the tube can be made. The channel should be deep enough for the tube to finish flush with the floor surface. The installation of the tubing is necessary so in the unlikely event of sensor failure, it can be removed and replaced without lifting

the floor.

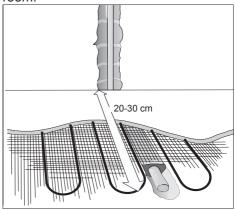
The sensor cable is then inserted in the tube and the end of the tube is



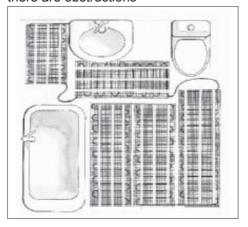
2. In situations where the thermostat is not located at low level, it is recommended that a low level connection box is installed.

This low level connection box is useful should the cold tails of the devimat[™] be too short or situations where the controller has to be located outside the room, i.e. bathroom. The connecting box is also useful in the unlikely event the sensor requires replacement. A channel should then be made from the floor to the box/thermostat.

The wiring regulations state that the controller should be located away from sources of water, ie outside the bathroom.

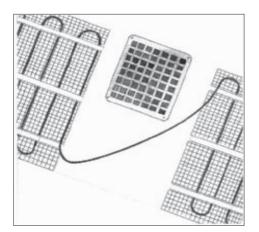


Various ways to lay devimat™ where there are obstructions

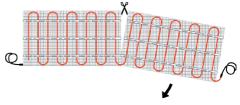


It is important to calculate the free floor area before installation begins.

It is then recommended not to lay devimat[™] at temperatures lower than approx. 5°C. The mat must be laid evenly over the floor area avoiding all obstructions like pipes, baths and cupboards. It is acceptable to lay the devimat[™] under suspended cupboards and wash basins.

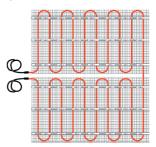


The heating mat must be guided around drains, basins and other objects which are attached to floor to avoid the risk of drilling holes in the heating mat at a later stage.



When the devimat[™] reaches an obstruction e.g. the end of a wall it can be simply turned by cutting the mesh netting (NOT THE CABLE) placing the next length parallel with the first.

When installing the mats, ensure a 50mm gap is left between the end of the loops of the mat.

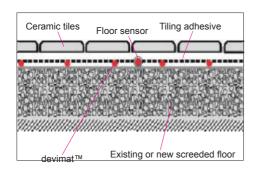


The devimat™ cable must not be shortened in any way.

- The devimat[™] must NOT be installed across two or more rooms.
- The heating cables (RED CABLE) must NOT touch or cross each other.
- The heating cables (RED CABLE) must NOT be CUT.
- All the red heating cable must be within the floor.

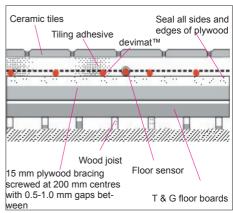
Installation - Part 2

Installing the devimat[™] on concrete floors



PRIOR TO LAYING DEVIMAT THE EXISTING FLOOR SHOULD BE PREPARED AS NORMALLY REQUIRED FOR TILING.

Installing the devimat™ on timber floors



Concrete and wooden floors using flexible adhesives

The devimat[™] is self-adhesive, so the mat should be laid with cable facing upwards. In situations where the mat has to be turned over or the mat cannot stick to the surface, the mat can be secured to the floor using: for concrete floors devipins or hot glue gun (taking care not to damage the cable) and for wooden floors a staple gun or for both double sided adhesive tape 35mm width max. using the minimum amount with maximum adhesion.

Working with a width of devimat[™] at a time, apply flexible tile adhesive through the mat with a rubber backed trowel or similar so that the cable is covered, making sure that there are no air pockets. Then another 3mm of adhesive can be applied carefully using a suitable notched trowel to comb the adhesive before applying the tiles.

Concrete and wooden floors using self levelling compounds

An alternative method is to lay the devimat[™] over the area of the floor to be warmed. A suitable self levelling compound is then applied to cover the mat. Once this has set a 3mm depth of flexible tile adhesive is spread over the compound and a suitable notched trowel is used to comb the adhesive before applying the tiles.

Regulating



- The devimat[™] system is controlled by a devireg[™] 550 combined thermostat/timer, this uses a floor sensor to monitor the floor temperature.
- Leading from the floor level to the controller should ONLY be the blue and black wires of the mat and the white sensor cable.
- The controller is a flush mounted unit and requires a 47mm deep box.

Electrical Connections

The heating mat must be connected by an authorised electrician.

It is recommended that the devimat[™] is connected to the mains via a 30mA residual current device.

After the floor tiling is complete:

 Check the continuity of the cable, it should match the Ohm rating on the devimat™ label with a tolerance of -5 to +10%.



 Check the insulation resistance between the conductor and the earth screen, this should read infinity.

Wiring The Controller

The sensor cable, heating mat and electricity supply can now be connected. Five simple steps to connecting your controller are:

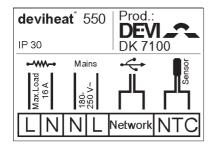
1. The mains voltage is connected to the terminals marked (Mains L & N).

L = Live N = Neutral

2. The devimat[™] is connected via terminals L and N where :

Blue Cable Central Core = Neutral Black Cable Central Core = Live

- 3. The screening around the black and blue wires of the devimat[™] should both be connected to the earth terminal within the electrical box, in accordance with the electricity regulations.
- 4. The sensor must be connected to the terminals marked NTC. This cable can be cut as required and connected either way round.
- 5. The 'Network' terminal is not used.



The Warranty Certificate should now be filled in.



The devimat™ system should not be turned on until the adhesive and tile grout has completely dried, then turn on gradually over a 48 hour period.

No close fitting objects should be laid onto or fixed to the warm floor area, for example thick mats or bean bags.

Setting up your deviheat™ 550 programmable

thermostat with your devimat™ system

If the thermostat is displaying 'CODE', initially you will ONLY be presented with step 1 and step 4, set these as described below.

Once you have either completed steps 1 and 4, or the controller is displaying something other than 'CODE', you must press and hold the button <u>until</u> the word 'CODE' is displayed and follow the steps below:

Step 1-Setup code	Rotate button to select code 0044 and th button once.	nen press	0044
Step 2-Operating mode	Rotate button to select 'ALO' and then probutton.	ress	
Step 3-Temperature readout	Rotate button to select °C and then pres	s button.	
Step 4-Sensor selection	Rotate button to select 'FS' to activate th sensor, then press button (not rFs or rs).		FS
Step 5-Maximum floor temperature selection	At 'nt' rotate button to select either of the lowing temperature selection maximum f temperatures, then press button.		29°C
	Tiles on concrete based floors	29°C 40°C 27°C	
Step 6-Off periods	'LO' should be displayed, you should rote to select -15°C, then press button.		_O (-15°C)
Step 7-Clock display	Rotate button to select clock display as a hours or 12 hours AM/PM.		24 12
Step 8-Save settings	Press button once.		

(If the controller is now displaying 'CODE', disconnect the power to the controller and then reconnect)

Now you can set the time and day on the controller.

Step 9-Setting of clock

Press and hold button until

is displayed in bottom left corner. The display now shows the time and day (number 1 represents Monday, number 7 is Sunday).

Rotate the dial to show the correct time and day of the week and then press the button to save the correct time setting.

^{*}If any steps are skipped, hold button until word 'CODE' is displayed to reset controller and start again at step 1.

Finally you can now set how you wish the controller to operate.

You can operate the controller in either Manual or Timer Mode, by pressing the button you can toggle between these two modes. Manual In this mode the temperature set on the display is maintained 24 Mode hours a day, i.e. no timing facility and therefore no 'O' displayed. Whilst in manual mode, if you rotate the dial to level 1.0 then turn the dial further anti-clockwise, the thermostat will switch off and display 'OFF'. Timer On the timer program, the controller switches on and off as pro-Mode grammed. With this mode you tell the controller at what time of day you want a warm floor and then using its intelligence, the controller learns how long your floor takes to warm up. Enter timer Press and hold button until (1) is displayed in Step 10 1234567 mode bottom right corner. Select first day Step 11 Rotate button to display the first day you wish to program and then press button. 06:00First start time Rotate button to indicate the start of the first time Step 12 period when you want a warm floor (i.e. 06:00) and then press the button. Step 13 First end time Rotate button to highlight duration of first warm floor period, then press button to indicate the end of first time period (i.e. 07:30). Continue Step 14 Rotate button to indicate next warm floor start time, press the button, rotate to the end of the period and press button again. Continue this through the whole week. Step 15 Save program To save programs, press and hold the button to return to the normal display. By pressing the button once you can now toggle between manual and timer modes. Step 16 The button now controls the heat level of your devimat™ system. The controller can be adjusted to the required heat level on a range from 1-10, level

10 being the maximum floor heat. The displayed heat level is what the controller will provide at the times programmed. It is recommended that you initially set to level 5, then adjust to suit.

devimat™ Trouble Shooter

Should you experience any problems with the devimat $^{\text{TM}}$ not warming the floor, call a qualified electrician to carry out the following tests:

No.	Test	Expected Outcome	Action
1	Check for a 230V supply to the thermostat on terminals 1 and 2.	230V	If no voltage present, connect supply.
2	Rotate thermostat dial to position 10 and test for a 230V output on terminals 3 and 4. This may take a few minutes to switch on.	230V	Firstly, check resistance of floor sensor first (step 3). If floor sensor is normal, the thermostat is faulty-contact your supplier.
3	Turn off power to thermostat and test resistance of floor sensor.	10-20kΩ, depending on temperature of floor.	If sensor is faulty, call your supplier for replacement.
4	Turn off power to thermostat and test resistance of the devimat™.	$35-550\Omega$, depending on mat size (see mat label).	If mat is faulty, the mat has been damaged, contact your supplier.
5	Turn off power to thermostat and ensure there is no continuity between the conductors and the earth screen.	No continuity.	If there is continuity between the conductor and screen, the mat has been damaged, contact your supplier.

devireg[™] 550 Controller Trouble Shooter

If the outer ring on the devireg[™] 550 controller is flashing you have a fault, note the small number at the bottom of the display and follow the procedures below:

Fault	Possible Cause	Solution
devireg [™] 550 controller indicating error No. 2.	Unit Configured as a Master,but can detect another master unit	Only one unit may be configured as a master-see 550 programming instructions.
devireg [™] 550 controller indicating error No. 3.	Unit Configured as a Slave, but cannot detect another master unit	Only one unit may be configured as a master-see 550 programming instructions.
devireg [™] 550 controller indicating error No. 4.	The thermostat is over heating	Let the thermostat cool down and have an authorised electrician to check the wiring.
devireg [™] 550 controller indicating error No. 5.	Sensor fault-floor sensor short-circuit	Have an authorised electrician check the floor sensor, resistance should be 10K- 24K Ohms.
devireg™ 550 controller indicating error No. 6.	Sensor fault-floor sensor open-cir- cuit	Have an authorised electrician check the floor sensor wiring and check for a resistance reading of 10K - 24K Ohms.
devireg™ 550 controller indicating error No. 7.	Clock not adjusted	Set the clock.
devireg [™] 550 controller not working at all.	No power Wiring incorrect or Faulty unit	Have an authorised electrician check the wiring see devimat™ Trouble Shooter.

IF AT ANY POINT THE CONTROLLER IS NOT FUNCTIONING CORRECTLY PLEASE TURN OFF THE POWER AND RESET THE CONTROLLER.

SHOULD YOUR AUTHORISED ELECTRICIAN EXPERIENCE
ANY DIFFICULTY PLEASE CONTACT YOUR SUPPLIER

The **DEVI** Warranty:

You have purchased a deviheat[™] system, which we are certain will improve your home comfort and economy.

deviheat™ provides complete heating solutions with deviflex™ heating cables or devimat™ heating mats, devireg™ thermostats and devifast fitting bands.

If, however, contrary to all expectations, a problem should occur with your heating system, we at **DEVI**, with manufacturing units in Denmark, are, as European Union suppliers, subject to general product liability rules, as stated in Directive 85/374/ CEE, and all relevant national laws which imply that:

DEVI provides a warranty for deviflex[™] heating cables and devimat[™] heating mats for a 10 year period and all other **DEVI** products for a 2 year period against defects in material and production.

The guarantee is granted on the condition that the WARRANTY CERTIFICATE overleaf is filled out properly in accordance with instructions and that the defect is inspected by, or presented to, **DEVI** or their authorised **DEVI** distributor.

Please note that the wording of the WARRANTY CERTIFICATE must be provided in English with the ISO code for your country in the upper left corner of the front page of the

installation instructions in order to release the warranty.

The obligation of **DEVI** will be to repair or supply a new unit, free of charge to the customer, without secondary charges linked to repairing the unit. In case of defective devireg™ thermostats, **DEVI** reserves the right to repair the unit free of charge and without unreasonable delay to the customer.

The **DEVI** warranty does not cover installations made by unauthorised electricians, or faults caused by incorrect designs supplied by others, misuse, damage caused by others, or incorrect installation or any subsequent damage that may occur. If **DEVI** is required to inspect or repair any defects caused by any of the above, then all work will be fully chargeable. The **DEVI** warranty is void, if pay-ment of the equipment is in default.

At all times, we at **DEVI** will respond honestly, efficiently and promptly to all queries and reasonable requests from our customers.

The above mentioned warranty concerns product liability whereas matters in relation to legislation on sale of goods shall be referred to national law.



Warranty Certificate The **DEVI** Warranty is granted to:

Name:	Phone:	
Address:	Postal code:	

Please Observe!

In order to obtain the **DEVI** Warranty, the following must be carefully filled in. See other conditions on the overleaf.

devimat™ layout contra	Lay-out date:	
Electrical Installation b	y:	Installation date:
Mat length:	Watt:	
Stock code:		
Application: ☐ Concrete floor ☐ Wooden floor	□ Tiles □ Vinyl	□ Parquet □ Carpet
Supplier Stamp:		
Phone +45 76 424700	DEVI New Zealand Phone 33 48 00 70 Fax 33 48 00 67	

DEVI United Kingdom Phone 01359 242400 01359 242525

DEVI Ireland Phone 01 460 2622 01 460 2633

Fax