Warmup

Installation Manual

Mirror Demister

Technical Helpline

0345 345 2288

Bathroom
Heating

IMPORTANT!
Please read this manual before attempting to install your Warmup product. Complete and submit your warranty form online at **www.warmup.co.uk**

CE UKCA

5 YEAR LIMITED WARRANTY

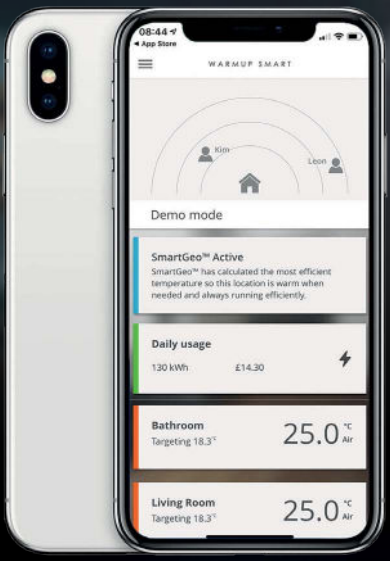
www.warmup.co.uk

Warmup®

The world's **best-selling** floor heating brand™

Over 2.5 million installations in more than 72 countries

Experience MyHeating™



SmartGeo™

Unique **SmartGeo™** automatically turns down the heating when you're out.

Easy to use

Simple and secure setup using **WiFi, with 24/7 technical support**.

AutoSwitch™

Always on the best tariff, automatically. **Reduce energy bills by over £400**

Download now for iOS and Android

Available on the App Store

GET IT ON Google Play

6iE OB WiFi Thermostat

www.warmup.co.uk

WARNING

Your Warmup® Mirror Demister has been designed so that installation is quick and straight forward, but as with all electrical systems, certain procedures must be strictly followed. Warmup plc, accepts no liability, expressed or implied, for any loss or consequential damage suffered as a result of installations which in any way contravene the instructions that follow.

It is important that before, during and after installation that all requirements are met and understood. If the instructions are followed, you should have no problems. If you require help at any stage, please contact our helpline.

You may also find a copy of this manual and other helpful information on our website:

www.warmup.co.uk

Components available from Warmup

Warmup Mirror Demister

Additional components needed as part of your Warmup heating installation:

- ☑ 30 mA Residual Current Device (RCD), required as part of all installations.
- ☑ Digital Multi-meter required for testing the resistance of the mirror demister.
- ☑ Electrical tape.
- ☑ Electrical housing, back boxes and junction boxes.
- ☑ Scissors.
- ☑ Silicone.

DO

- Install the Warmup Mirror Demister in line with these instructions. The demister is designed to warm bathroom mirrors only.
- Ensure that the control card at the back of the manual is completed and fixed at the consumer unit as per the current edition of BS 7671.
- Adhere the demister to the mirror only, not to the wall.
- Remove any air pockets when you are installing the demister onto the back of the mirror.
- Ensure there is a minimum 10 mm gap between the demister edge and fixing points or the mirror edge.
- Allow a 2 mm gap between the mirror and any hard surfaces to allow for mirror expansion and contraction when heating.
- Ensure any metal parts which are accessible and are in contact with the mirror are earthed/grounded in compliance with BS 7671.
- Ensure the mirror being used is suitable for use with the Warmup Demister. Contact mirror manufacturer for guidance.
- Ensure that the edges of the demisters are at are at least 5 mm apart.

DON'T

- Cut or puncture the demister at any time.
- Use a demister that is too large for the mirror being heated.
- Connect two demisters in series, only connect demisters in parallel.
- Attempt a DIY repair if you damage the demister, it must be replaced.
- DO NOT overlap demisters if two or more are installed.
- Pull on the power supply cable as it may cause damage to the demister.
- Use the demister on vanity cabinets as it will heat the contents of the cabinet.

Zone Chart

Install the RCD

Install a dedicated 30 mA RCD or use an existing RCD. No more than 7.5 kW of heating may be connected to each 30 milliamp RCD. For larger loads, use multiple RCD's.

NOTE: It is possible to run the demister(s) from a existing lighting circuit protected by a 30 mA RCD. It should be calculated whether or not the circuit can handle the additional load.

NOTE: In the case of bathroom installations, electrical regulations prohibit the installation of Mains Voltage products such as thermostats, contactors, fused spurs, isolators or junction boxes, within Zones 0 or 1.

This mirror demister has an IP rating of IP65 and is suitable for installation within Zone 2, Zone 3 or outside of any Zones.

All electrical connections must conform to the current BS 7671 Wiring Regulations. Final connections to the main electricity supply MUST be completed by a Part P qualified electrician.

Before you begin

- Determine the location of the mirror demister, marking its intended position of the on the wall.
- Also mark the demister power cable position on the wall.

- The demister must not be cut, shortened, punctured or creased, however the supply cable may be shortened if required.

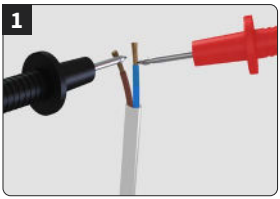
- If the mirror is mounted within the plane of the tiles, ensure that it is surrounded with a minimum 3 mm bead of silicone to allow for mirror expansion and contraction when heating.

- If the mirror is going to be mounted within a rigid (metal/ wood/moulded resin) frame it should be able to expand and contract independently of the frame.

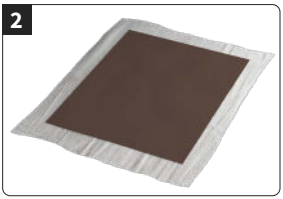
- If fixing the mirror to the wall using adhesive or screws ensure flexible fittings are used, either in the form of a flexible mirror adhesive or flexible bushings in the fixing holes if screwed to the wall.

NOTE: If using adhesive to mount the mirror to the wall ensure that it is suitable for use with heated mirror demisters. Please contact mirror adhesive manufacturer for guidance.

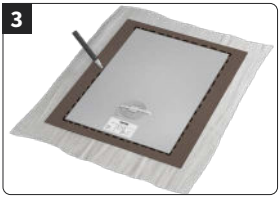
NOTE: Take care not to screw through the demister if mounting the mirror with screws.



- Measure and record the resistance of the demister in the “Resistance Before” column of the control card, supplied as part of this installation guide on Page 16.
- Stop installation immediately and contact Warmup if its resistance falls outside the range set out in the Reference Resistance Band table on Page 18.



- Always handle mirrors with care. Lay the mirror face down on a protective soft surface.
- The back of the mirror must be clean, dry and free from grease, detergents or polish.



- Position the demister on the back of your mirror so that it matches the markings previously made on the wall.
- Draw the outline of the demister on the back of the mirror.

- Peel 50 mm off the protective backing and position it so that it lines up with your markings on the mirror back.
- Press the demister into the back of the mirror smoothing out any air pockets between the demister and mirror using a soft cloth or a sponge.
- Gradually remove the rest of the protective backing repeating the previous step, removing any air pockets, ensuring you keep the demister in line with the markings you made on the back of the mirror.

The Warmup Mirror Demisters electrical connection must conform to the current BS 7671 Wiring Regulations. Final connections to the main electricity supply MUST be completed by a Part P qualified electrician.

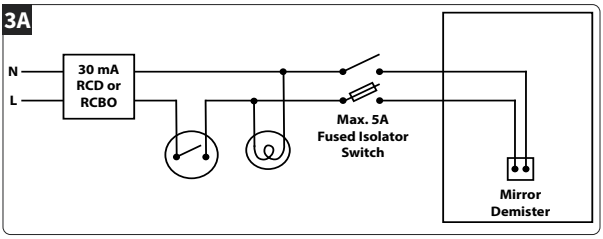
- Channel out a recess in the wall for the connector block and power supply cable of the demister. This location should have been marked on the wall in Step 2.

- The supply should be on a circuit protected by a maximum 5 amp fuse or circuit breaker. It is recommended that the mirror demisters supply is fitted with an in-line isolator to allow it to be independently isolated. Please see Page 6 for correct zoning.

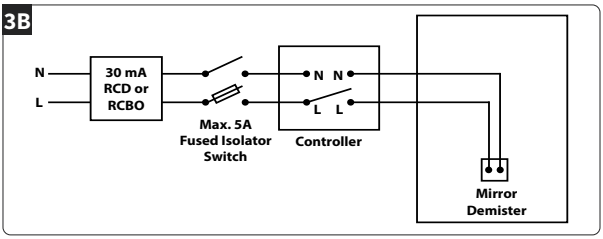
- The demister is a Class II device and does not require connection to earth.

NOTE: If installing multiple heaters, they MUST be installed in parallel, DO NOT connect in series. The power rating of the circuit should also be checked to determine that the heaters will NOT overload the circuit.

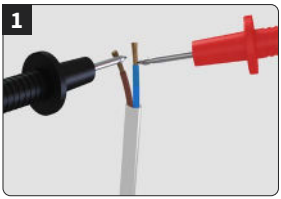
NOTE: Any metal parts which are accessible and are in contact with the mirror must be earthed in compliance with BS 7671.



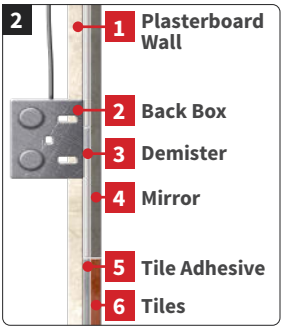
- The Warmup Mirror Demister can be connected into the rooms lighting circuit, enabling the demister when the lights are switched on.



- Alternatively they can be controlled by an independent controller that provides power on demand.



- Conduct another resistance test before mounting the mirror as described on Page 14 to ensure the demister has not been damaged and record in the control card on Page 16.
- Ensure that the wall is clean, dry and flat. The mirror should be mounted in line with the mirror manufacturers instructions.



- Ensure when mounting the mirror that the supply cable and its connections are not trapped behind the mirror, which would cause the mirror to be stressed or sit unevenly on the wall.

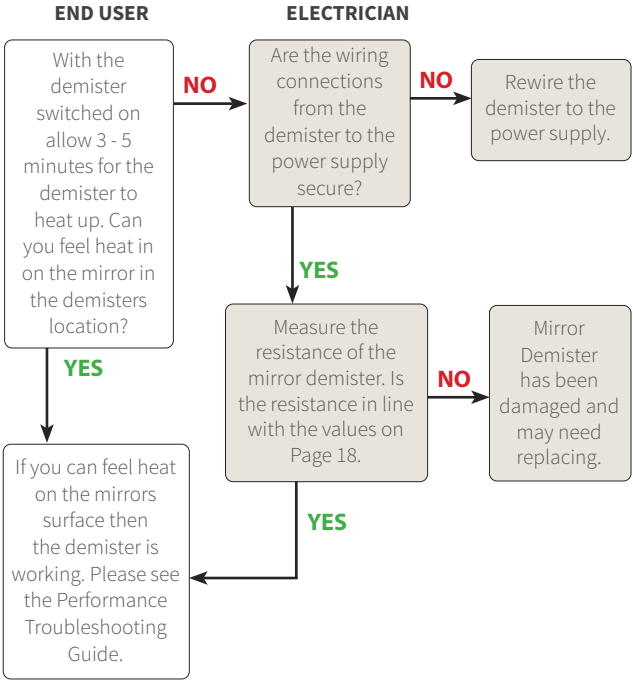
- Once mounted seal around the edge of the mirror with silicone

NOTE: Alterations or cuts are made to the mirror may cause cracking when installed in conjunction with the Warmup Mirror Demister and are not recommended. Alterations include:

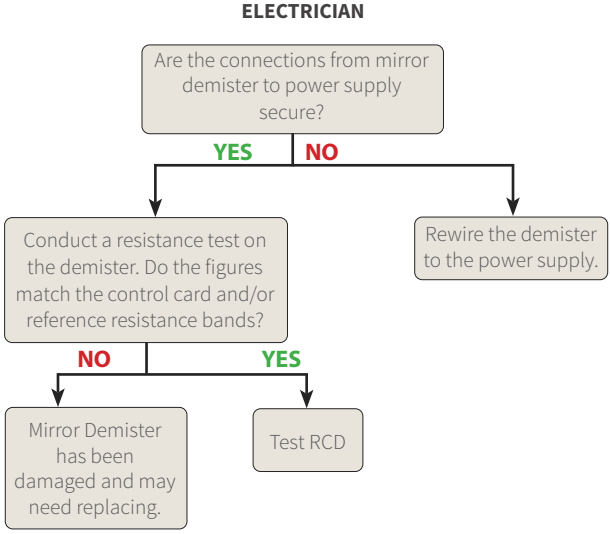
- A rectangular hole for a switch, outlet, or other appliance.
- A hole exceeding a diameter of 2" (50mm). Common for plumbing fixtures
- Inner angles cut into the mirror

Instructions which are shaded must completed by a qualified electrician.

HEATING ISSUE 1 - The demister does demist my mirror



HEATING ISSUE 2 - The demister trips the RCD



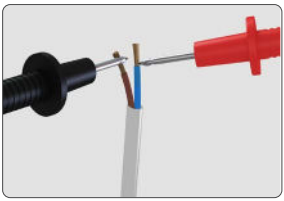
My mirror does not heat/demist my mirror

1. **The demister may be installed on a solid wall which be losing heat into the wall surface behind.**
   If your mirror has been installed on a solid wall, ensure that a gap is left between the demister and brick, tile or cement walls to avoid heat transfer away from the mirror.

My mirror has cracked.

1. **Old mirrors may not be suitable for use with Warmup Mirror Demisters.**
   Before applying a mirror demister to any mirror, its suitability with a demister should be checked with the mirror manufacturer.
2. **Check that there is suitable expansion space around the perimeter of the mirror, that fixing are flexible, not rigid and that there are no cuts formed into the mirror which are prohibited in Step 5.**

The demister must be tested before they have been installed and again before mounting the mirror. The resistance (ohms) of each demister should be measured. You should carry out the following tests and should expect the results detailed below:



Mirror Demister Resistance Test

Set a multimeter or ohmmeter to record resistance in the range of the demister. Measure the resistance across the live (brown) and neutral (blue) wires. Ensure the measured resistance is within the Reference Resistance Band shown on Page 18 for the demister being tested.

Record the readings on the control card on Page 16 in line with the installation procedure.

NOTE: Due to the high resistance of the demister, it may not be possible to get a continuity reading from the demister and as such, continuity testers are not recommended.

When checking resistance, make sure your hands do not touch the meter's probes as the measurement will include your internal body resistance and render the measurement inaccurate. If you do not get the expected results or at any time you believe there may be a problem, please contact Warmup's Technical Team for guidance.

The Warmup® Mirror Demister is guaranteed by Warmup plc ("Warmup") to be free from defects in materials and workmanship under normal use and maintenance, and is guaranteed to remain so subject to the limitations and conditions described below. The demister is guaranteed for 5 years, except as provided below (and your attention is drawn to the exclusions listed at the end of this guarantee).

This guarantee applies:

1. Only if the unit is registered with Warmup within 30 days after purchase. Registration can be completed online at www.warmup.co.uk. In the event of a claim, proof of purchase is required, so keep your invoice and receipt - such invoice and receipt should state the exact model that has been purchased;

&

2. Only if the demister has been protected by a Residual Current Device (RCD) at all times.

The guarantee is void if the mirror covering over the demister(s) is damaged, replaced, repaired or covered with any subsequent layers. The guarantee period begins on the date of purchase. During the period of the guarantee Warmup will arrange for the demister to be repaired or (at its discretion) have parts replaced free of charge. The cost of the repair or replacement is your only remedy under this guarantee which does not affect your statutory rights.

Such cost does not extend to any cost other than direct cost of repair or replacement by Warmup and does not extend to costs of replacing or repairing any mirror(s). If the demister fails due to damage caused during installation, this guarantee does not apply. It is therefore important to check that the demister is working (as specified in the installation manual) prior to mounting the mirror.

WARMUP PLC SHALL IN NO EVENT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO EXTRA UTILITY EXPENSES OR DAMAGES TO PROPERTY.

WARMUP PLC is not responsible for:

1. Damage or repairs required as a consequence of faulty installation or application.
2. Damage as a result of floods, fires, winds, lightening, accidents, corrosive atmosphere or other conditions beyond the control of Warmup plc.
3. Use of components or accessories not compatible with this unit.
4. Products installed outside the United Kingdom.
5. Normal maintenance as described in the installation and operating manual, such as cleaning the mirror.
6. Parts not supplied or designated by Warmup.
7. Damage or repairs required as a result of any improper use, maintenance, operation or servicing.
8. Failure to start due to interruption and/or inadequate electrical service.
9. Any damage caused by frozen or broken water pipes in the event of equipment failure.
10. Changes in the appearance of the product that does not affect its performance.

Register your Warmup® warranty online at www.warmup.co.uk

Demister Location

.....

.....

Total Wattage

.....

WARNING

Warmup Mirror Demister Located behind mirror - Risk of electric shock

Electric-wiring and demister panel(s) contained behind the mirror. DO NOT penetrate with nails, screws, or similar devices. DO NOT restrict the thermal emission of the heated mirror.

ATTENTION:

DO NOT cut or modify the demister at any stage.

The demister must be supplied from a circuit protected by a 30mA RCD and 5 A MCB or RCBO.

Demister Model	Resistance Before	Resistance After

....

Date Signed Company stamp/name

This form must be completed as part of the Warmup Guarantee. Ensure that the values are as per the instruction manual.

This card along with a plan showing the demister position must be situated close to the consumer unit in a visible place.

Warmup Plc 702 & 704 Tudor Estate Abbey Road
London NW10 7UW

T: 0345 345 2288 F: 0345 345 2299 www.warmup.co.uk

NOTE: Draw a plan showing the location of the demister(s) on the back of the mirror

TECHNICAL SPECIFICATIONS - Warmup Mirror Demisters	
OPERATING VOLTAGE	230 V AC : 50 Hz
IP RATING	IP65
ELECTRICAL CLASS	Class II
THICKNESS	0.4 mm
AVERAGE TEMPERATURE RISE	25 °C
INPUT POWER	200 W/m^2
CONNECTION	1.5 m LONG “COLDTAIL” CONNECTION

Mirror Size Guide

Warmup Mirror Demisters					REFERENCE RESISTANCE BANDS (Ω)
PRODUCT CODE	SIZE (mm)	POWER (W)	LOAD (A)	RESISTANCE (Ω)	
MD-SML1	260 x 360	14.1	0.06	3751	3375.9 - 4126.1
MD-MED1	360 x 560	33.3	0.14	1589	1430.1 - 1747.9
MD-LRG1	560 x 720	66.0	0.29	801	720.9 - 881.1
MD-CIRC	Ø 560	42	0.183	1259	1196 - 1322

Warmup plc
Web: www.warmup.co.uk
Email: uk@warmup.com

Tel: 0345 345 2288
Fax: 0345 345 2299