



Floor Heat Mat

0800 Series

DS-605.0-0314

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

Floor Heat Mat

2. MANUFACTURER

LATICRETE International, Inc.
1 LATICRETE Park North
Bethany, CT 06524-3423 USA

Telephone: +1.203.393.0010, ext. 235
Toll Free: 1.800.243.4788, ext. 235
Fax: +1.203.393.1684
Internet: www.laticrete.com

3. PRODUCT DESCRIPTION

Floor Heat Mat is a versatile floor warming mat designed for use under many types of finished floor coverings to provide luxury and comfort. The product includes adhesive backing for easy installation. All electrical connections must be made by a licensed electrician. Failure to do so will void all warranties and claims. Comply with all applicable building and electrical codes. Designed for use with Floor Warming Thermostat.

Advantages

- Component of LATICRETE® 25 Year Tile and Stone System Warranty (DS-025.0) and LATICRETE Lifetime Tile and Stone System Warranty (DS-230.99).
- Self-adhesive mesh backing.
- Intertwined Heating element and mesh construction.
- This appliance wiring material component (wire style 21427) is recognized by Underwriters Laboratories, Inc. Representative samples have been evaluated by UL and meet applicable UL requirements.

Suitable Substrates (Interior Dry Area Only)

- Concrete†
- Mortar Beds
- Exterior Glue Plywood*
- Existing Ceramic Tile and Stone
- Cement Terrazzo
- Cement Backer Board

* Over TCNA approved constructs using plastic lath when using portland cement based self-leveling underlayments.

† Use 170 Sound & Crack Isolation Mat under Floor Heat as a thermal barrier to prevent Heat loss.

Limitations

- Interior floor installations only.
- Not for use in showers, tubs or steam rooms.
- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not replacements for waterproofing membranes. When a waterproofing membrane is required use a LATICRETE Waterproofing Membrane (see Section 10 FILING SYSTEMS).

Note: Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick and similar finishes. Substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/360 for thin-bed ceramic tile/brick installations or L/480 for thin-bed stone installations where L=length of span.

Cautions

Consult MSDS for more safety information.

- Do not turn Floor Heat on until entire installation of tile and grout has for a minimum of 72 hours at 70°F (21°C) cured.
- During cold weather, protect finished work from traffic until fully cured.
- Keep out of reach of children.
- Do not staple Heating elements directly.
- Do not allow Floor Heat to come into contact with water or moisture.
- Use only appropriate size of Floor Heat for specified area of floor to be Heated. DO NOT TUCK/INSTALL/FOLD EXCESS MAT INTO WALL CAVITY.

4. TECHNICAL DATA

120 VAC Standard Mat Specifications (Mat Only)

Product (W x L)	Sq. Ft.	Model Number	Watts	Amps	Ohms
1' x 10'	10'	0800-1210-2	150	1.3	96
1' x 12'	12'	0800-1212-2	180	1.5	80
1' x 15'	15'	0800-1215-2	225	1.9	64
1' x 20'	20'	0800-1220-2	300	2.5	48
1' x 23'	23'	0800-1223-2	345	2.9	42
1' x 25'	25'	0800-1225-2	375	3.1	38
1' x 30'	30'	0800-1230-2	450	3.8	32
1' x 35'	35'	0800-1235-2	525	4.4	27
1' x 40'	40'	0800-1240-2	600	5.0	24
1' x 45'	45'	0800-1245-2	675	5.6	21
1' x 50'	50'	0800-1250-2	750	6.3	19
1.5' x 37'	55.5'	0800-1837-2	832.5	6.9	17

120 VAC Standard Mat Specifications (Mat Only) continued

Product (W x L)	Sq. Ft.	Model Number	Watts	Amps	Ohms
1.5' x 40'	60'	0800-1840-2	900	7.5	16
1.5' x 44'	66'	0800-1844-2	990	8.3	15
1.5' x 47'	70.5'	0800-1847-2	1057.5	8.8	14
1.5' x 50'	75'	0800-1850-2	1125	9.4	13
1.5' x 54'	81'	0800-1854-2	1215	10.1	12
3' x 2'	6'	0800-3602-2	90	0.8	160
3' x 5'	15'	0800-3605-2	225	1.9	64
3' x 7'	21'	0800-3607-2	315	2.6	46
3' x 30'	90'	0800-3630-2	1350	11.3	11

240 VAC Standard Mat Specifications (Mat Only)

Product (W x L)	Sq. Ft.	Model Number	Watts	Amps	Ohms
1.5' x 13'	19.5'	0800-1813-4	292.5	1.2	197
1.5' x 20'	30'	0800-1820-4	450	1.9	128
1.5' x 27'	40.5'	0800-1827-4	607.5	2.5	95
1.5' x 33'	49.5'	0800-1833-4	742.5	3.1	78
1.5' x 40'	60'	0800-1840-4	900	3.8	64
1.5' x 47'	70.5'	0800-1847-4	1057.5	4.4	54
1.5' x 53'	79.5'	0800-1853-4	1192.5	5.0	48
3' x 30'	90'	0800-3630-4	1350	5.6	43
3' x 35'	105'	0800-3635-4	1575	6.6	37
3' x 40'	120'	0800-3640-4	1800	7.5	32
3' x 45'	135'	0800-3645-4	2025	8.4	28
3' x 50'	150'	0800-3650-4	2250	9.4	26

5. INSTALLATION

Please refer to Floor Heat Installation Instructions DS 605.9.

Installation of Floor Heat Over 170 Sound & Crack Isolation Mat For Use As a Thermal Barrier.

Use a polymer fortified multipurpose thin-set adhesive (e.g. 254 Platinum or SURE SET™) to adhere the 170 Sound & Crack Isolation Mat to the substrate. Use 1/4" x 1/4" (6 mm x 6 mm) notched trowel and comb mortar over substrate, apply only enough mortar as can be covered within 25 minutes. Unroll the 170 Sound & Crack Isolation Mat into place, in the thin-set adhesive mortar. Install 170 Sound & Crack Isolation Mat over the area to be treated, do not overlap edges but be sure edges of each piece butt firmly together. Once installed, use a 25–45 lbs. (11.3–20 kg) roller to embed the 170 Sound & Crack Isolation Mat firmly into the thin-set adhesive mortar. Allow to cure for 24 hours at 70°F (21°C). Trim length of mat to desired length and width.

Once fully cured, install Floor Heat on top of the 170 Sound & Crack Isolation Mat. Use the flat side of a trowel or a rubber float to apply a smooth skim-coat of thin-set mortar over Floor Heat Mat. Make sure to use enough mortar to encapsulate the Heating element in its entirety. Then allow the protective layer of polymer fortified thin-set mortar to set. Once fully cured, install ceramic tile, porcelain or stone finish directly over the cured thin-set using additional polymer fortified thin-set adhesive. Refer to DS 605.9, Floor Heat Installation Manual for proper placement of Floor Heat wiring.

6. AVAILABILITY AND COST

Availability

Floor Warming products are available in North America.

For Distributor Information Call:

Toll Free: 1.800.243.4788

Telephone: +1.203.393.0010

For on-line Distributor information, visit LATICRETE at www.laticrete.com.

Cost

Contact a LATICRETE Distributor in your area.

7. WARRANTY

See 10. FILING SYSTEM

DS 230.13: LATICRETE Product Warranty (United States and Canada)

A component of:

DS 025.0APD: LATICRETE 25 Year Tile and Stone System Warranty (United States and Canada)

DS 230.99: LATICRETE Lifetime Tile and Stone System Warranty (United States and Canada)

8. MAINTENANCE

Following installation, the Floor Warming Mat does not require any maintenance.

9. TECHNICAL SERVICES

Technical Assistance

Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 235

Telephone: +1.203.393.0010, ext. 235

Fax: +1.203.393.1948

Technical and Safety Literature

To acquire technical and safety literature, please visit our website at www.laticrete.com.

10. FILING SYSTEM

Additional product information is available on our website at

www.laticrete.com. The following is a list of related documents:

DS 230.13: LATICRETE Product Warranty (United States and Canada)

DS 025.0APD: LATICRETE 25 Year Tile and Stone System Warranty (United States and Canada)

DS 230.99: LATICRETE Lifetime Tile and Stone System Warranty (United States and Canada)

DS 170.0: 170 Sound & Crack Isolation Mat

DS 236.0: 9235 Waterproofing Membrane

DS 261.0: SURE SET™

DS 604.0: WIRE EYE™

DS 606.0: Floor Warming Thermostat

DS 663.0: HYDRO BAN®

DS 677.0: 254 Platinum

DS 605.9: Floor Heat Installation Manual

DS 606.6: Floor Warming Thermostat Installation Instructions

LATICRETE International, Inc.

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Floor Warming Thermostat

DS-606.0-0314

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

Floor Warming Thermostat

2. MANUFACTURER

LATICRETE International, Inc.

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Bethany, CT 06524-3423, USA

Telephone: +1.203.393.0010, ext. 235

Toll Free: 1.800.243.4788, ext. 235

Fax: +1.203.393.1684

Internet: www.laticrete.com

3. PRODUCT DESCRIPTION

Floor Warming Thermostat is a simple to use digital programmable thermostat designed to be used with floor warming mats. Thermostats are available with a 5 mA built-in GFCI and 120 V or 240 V configurations.

All electrical connections must be made by a licensed electrician. Failure to do so will void all warranties and claims. Comply with all applicable building and electrical codes.

Features

- Advanced floor control maximizes comfort and energy savings
- 15 A (res.), 50/60 Hz
- 4 wires/DPST with full double-pole disconnect
- 15 ft. sensor (4.5 m) included
- Easily accessible floor sensor connector
- Built-in GFCI with test light
- 7-day programmable
- Epoxy soundproofed
- On/Standby switch

Parts

- Floor sensor probe
- One (1) power base
- Two (2) screws
- Four (4) solderless connectors for copper wires

4. TECHNICAL DATA

Model	Supply	Max. Load	Power	Wiring	GFCI
120 V, 5 mA GFCI	120 VAC, 50/60Hz	15 A	1800 W	4w/DP	5 mA
240 V, 5 mA GFCI	240 VAC, 50/60Hz 280 VAC, 50/60Hz	15 A	3600 W 3120 W	4w/DP	5 mA

Storage: -4°F to 120°F (-20°C to 50°C)

Size (H x W x D) 4.89 x 2.76 x 0.91 in. (124 x 70 x 23 mm)

5. INSTALLATION

Guidelines

Turn off power to the heating system at the main electrical panel to avoid electrical shock. The installation should be carried out by an electrician.

- High voltage thermostats must be installed onto an electrical box.
- For a new installation, choose a location about 5 ft. above the floor and on an inside wall.

Procedure

For complete installation instructions, refer to Floor Warming Install Manual DS 608.9

- Connect the power base wires to the power supply and load using solderless connectors for copper wires.
- Insert the floor sensor wires through one of the two holes below the terminals and connect the wires to terminals 3 and 4 (no polarity).
- If you wish to use a remote controller insert the cable (use 18 to 22 gauge flexible wires) into one of the two holes available below the terminal board and connect to terminals 2 and 3 of the base.
- Push the excess length of the high-voltage wires back into the electrical box.
- Secure the power base to the electrical box using the provided screws.
- If necessary, set the configuration switches on the control module (refer to control module user guide, DS 606.5)
- Install the control module onto the base.
- Apply power to the heating system.

6. AVAILABILITY AND COST

Availability

Floor Warming products are available in North America.

For Distributor Information, Call:

Toll Free: 1.800.243.4788

Telephone: +1.203.393.0010

For on-line Distributor information, visit LATICRETE at www.laticrete.com.

Cost

Contact a LATICRETE Distributor in your area.

7. WARRANTY

See 10. FILING SYSTEM

DS 230.13: LATICRETE® Product Warranty (United States and Canada)

8. MAINTENANCE

The Internal Floor Warming Thermostat GFCI (Ground Fault Circuit Interrupt) should be tested monthly to ensure continued safe operation. If an external GFCI is utilized, it should also be tested monthly.

9. TECHNICAL SERVICES

Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 235

Telephone: +1.203.393.0010, ext. 235

Fax: +1.203.393.1948

Technical and Safety Literature

To acquire technical and safety literature, please visit our website at www.laticrete.com.

10. FILING SYSTEM

Additional product information is available on our website at

www.laticrete.com. The following is a list of related documents:

DS 230.13: LATICRETE Product Warranty (United States and Canada)

DS 605.0: Floor Warming Mat

DS 608.9: Floor Warming Install Manual

DS 606.3: Control Module User Guide

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WIRE EYE™

DS-604.0-0314

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

WIRE EYE™ Electric Wire Fault Indicator

2. MANUFACTURER

LATICRETE International, Inc.
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Telephone: +1.203.393.0010, ext. 235
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Internet: www.laticrete.com

3. PRODUCT DESCRIPTION

WIRE EYE Electric Wire Fault Indicator is an installation tool designed specifically to be used during the installation of floor warming products. Floor warming lead wires are attached to the WIRE EYE device allowing for continuity monitoring during the installation process. In case of lost continuity, the WIRE EYE emits an alarm to alert the installer of a potential problem.

4. TECHNICAL DATA

Requires 2 AAA Batteries (Included).

Cautions

- Floor warming lead wires should also be tested with an Ohm meter for more specific readings.
- Under no circumstances should the WIRE EYE Electric Wire Fault Indicator be connected to a live electrical current.

5. INSTALLATION

Preparation

- A. Open the battery compartment cover and insert two (2) AAA batteries. Make sure the batteries are installed in correct polarity as shown in the battery compartment. See figure 1.
- B. Replace the battery compartment cover and switch the unit to "ON".

- C. The alarm should sound and the red light should be lit when there are no connections to a mat or cable. If this does not occur, inspect the battery connection or replace the batteries.
- D. During normal use, the green light indicates WIRE EYE is monitoring the mat or cable for damage. Should the green light go out, replace the batteries before continuing work.

Operation

Make sure the mats and/or cables to be monitored are not connected to a power source. Connect the system leads at the beginning of project to detect faults. See figure 2.

WIRE EYE is designed to monitor the mats or cables individually. However, by making a temporary "series" connection of multiple mats or cables, it can monitor up to three (3) products at one time.

1. FOR A SINGLE MAT OR CABLE: Strip the insulation around the tip of the cold cable and separate the sheath ground wire. Insert each lead wire of the cold cable into the L1 and L2 terminals with the ground wire inserted into the E terminal. Tighten the terminal screws onto the wires. See Figure 2.
2. FOR UP TO THREE MATS OR CABLES: Connect one lead wire (not the ground wire) from one mat or cable into the L1 terminal. Connect one lead wire (not the ground wire) from a DIFFERENT mat or cable into the L2 terminal. Now connect the remaining lead wires so the mats or cables are in a "series" with one another. If this is not done properly, WIRE EYE may not correctly monitor the mats or cables. Lastly, connect all the ground wires from the mats or cables together to the E terminal. See Figure 3.

Figure 1



Figure 2

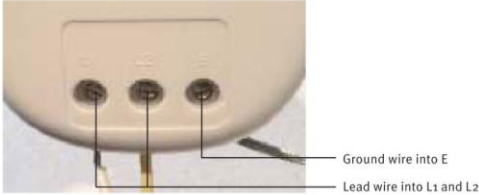
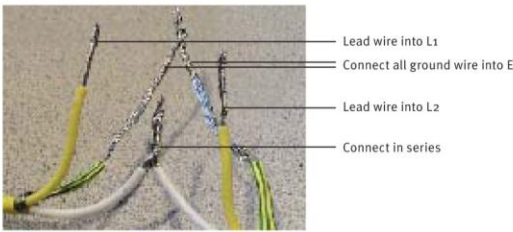


Figure 3



3. Set the switch to the "ON" position.
4. A green light indicates WIRE EYE™ is operating.
5. Hang or place WIRE EYE where it can be seen and heard during heating product installation.
6. A red light and alarm indicate lead wires have come loose from terminals or damage has occurred to the heating product.

6. AVAILABILITY AND COST

Availability

LATICRETE® and LATAPOXY materials are available worldwide.

For Distributor Information, Call:

Toll Free: 1.800.243.4788, ext 235

Telephone: +1.203.393.0010

For on-line Distributor information, visit LATICRETE at

www.laticrete.com.

Cost

Contact a LATICRETE Distributor in your area.

7. WARRANTY

See 10. FILING SYSTEM:

DS 230.13: LATICRETE Product Warranty (United States and Canada)

8. MAINTENANCE

WIRE EYE should not require any maintenance. If used multiple times, device may require replacing batteries.

9. TECHNICAL SERVICES

Technical Assistance

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DS 605.0: Floor Heat