Floor HEAT
Frequently Asked Questions
TDS 404

Floor HEAT FAQ's
Floor HEAT Mat, Floor Heat Wire and Tile Installation

1. **What substrates can I install Floor HEAT onto?**
   LATICRETE® Floor HEAT Mat and Floor HEAT Wire can be laid directly over properly prepared concrete, exterior glue plywood, cement backer board, fiber cement underlayment, existing ceramic tile/stone, existing ceramic tile and stone, or cement mortar beds for interior use only.

2. **Can I trowel directly over the Floor HEAT and set tile immediately? ***
   Yes. Simply key the mortar into the Mat and substrate using the flat side of a trowel, or a rubber float, to apply a smooth skim coat of a latex or polymer fortified thin-set or medium bed mortar (e.g. 254 Platinum or 255 MULTIMAX™) over Floor HEAT Mat or Floor HEAT Wire. Make sure to use enough mortar to cover and protect the heating element wire in its entirety. Trowel additional thin-set mortar and set the tile or stone in one step.

3. **Can I pour self-leveling underlayment over Floor HEAT? ***
   Yes. For installation over concrete or cement mortar beds - Lay the Floor HEAT Mat or Floor HEAT Wire onto the substrate. Prime the substrate and Floor HEAT Mat with NXT™ Primer, DRYTEK® Multi-Purpose Primer, or required primer based on underlayment and allow to dry to a clear film (2 – 3 hours @ 70˚F [21˚C]). After NXT Primer has dried properly, mix NXT Level Plus, NXT Level, DRYTEK® self-leveling underlayment (e.g. DRYTEK LEVELEX, DRYTEK LEVELEX Plus, etc…), or other self-leveling underlayment and pour over entire field. Ensure that Floor HEAT Mat or Floor HEAT Wire is completely encapsulated by self-leveling underlayment and allow to dry.

   For installation over exterior glue plywood, cement backer board or fiber cement underlayment – Lay the Floor HEAT Mat or Floor HEAT Wire onto the substrate. Prime the substrate with NXT Primer, DRYTEK LEVELEX Primer, or required primer based on underlayment and allow to dry to a clear film (2 – 3 hours @ 70˚F [21˚C]). After NXT Primer has dried properly, mix NXT Level Plus, NXT Level, DRYTEK self-leveling underlayment, or other self-leveling underlayment and pour over entire field. Ensure that Floor HEAT Mat or Floor HEAT Wire is completely encapsulated by self-leveling underlayment and allow to dry.

   For installation over existing ceramic tile or stone – skim coat existing tile or stone installation with a rapid, polymer fortified thin-set mortar (e.g. 254R Platinum Rapid) and allow to dry for 2 - 4 hours @ 70˚F (21˚C). Lay the Floor HEAT Mat or Floor HEAT Wire onto the hardened skim coat. Prime the substrate with NXT Primer, DRYTEK LEVELEX Primer, or required primer based on underlayment and allow to dry to a clear film (2 – 3 hours @ 70˚F [21˚C]). After NXT Primer has dried properly, mix NXT Level Plus, NXT Level, DRYTEK self-leveling underlayment, or other self-leveling underlayment and pour over entire field. Ensure that Floor HEAT Mat or Floor HEAT Wire is completely encapsulated by self-leveling underlayment and allow to dry.

4. **Can I skim coat the Floor HEAT into place and then set tile at a later time? ***
   Yes. Skim coat the Floor HEAT Mat or Floor HEAT Wire with a polymer-fortified thin-set (e.g. 254 Platinum) using the flat side of a trowel or a rubber float and allow to dry. Tile can be installed directly to the skim coat the next day.

5. **What LATICRETE mortars can be used to install Floor HEAT?**
   Any LATICRETE® polymer-fortified (e.g. 254 Platinum) or medium bed mortar (e.g. 4-XLT or 255 MULTIMAX™) can be used to install Floor HEAT Mat or Floor HEAT Wire.

6. **What floor finishes can I install over Floor HEAT?**
   Floor HEAT is specifically designed for installation of tile and stone only.

7. **Can Floor HEAT be used in a shower or for exterior applications?**
   No. Floor HEAT is not designed to be used in showers or any exterior application.

8. Can Floor HEAT Mat be stapled to a suitably constructed (per Tile Council of North America) exterior glue plywood substrate?

Yes. However, be sure to only staple the white mesh and not any of the blue wires. Mesh can also be hot glued over dense, hard surfaces such as concrete.

9. How long will it take to warm the floor with Floor HEAT?

Each installation will vary due to several factors; thickness of the tile or stone, type of substrate, size of tile, and ambient temperature will all play roles in how fast the floor warms. A good rule of thumb is 30 – 45 minutes on average.

10. Can I use a waterproofing or anti-fracture membrane in conjunction with Floor HEAT?

Yes. HYDRO BAN®, 9235 Waterproofing Membrane and Blue 92 Anti-Fracture Membrane can be installed on top of the LATICRETE® polymer fortified thin-set, or NXT™ Level Plus, NXT Level, DRYTEK® self-leveling underlayment, or other self-leveling underlayment prior to installation of tile. These membranes can withstand temperatures up to 280°F (138°C).

11. How do I layout the Floor HEAT prior to installation?

You can visit www.laticrete.com, contact your local LATICRETE distributor or call LATICRETE Technical Services at 1-800-243-4788 x235 for more information.

12. Is Floor HEAT covered by any LATICRETE Warranty?

Yes. Floor HEAT Mat and Floor HEAT Wire is provided for in the LATICRETE® Lifetime Tile & Stone System Warranty (DS 230.99) and LATICRETE 25 Year Tile and Stone System Warranty (DS 025.0), DRYTEK® 15 Year System Warranty (DDS 230.17), LATICRETE 10 Year Tile and Stone System Warranty (DS 230.10), and LATICRETE 5 Year System Warranty (DS 230.05) as a component of a complete product system. For further information on LATICRETE Warranties please visit our website at www.laticrete.com or contact LATICRETE Technical Services at 1-800-243-4788 x235.

13. When can I turn my Floor HEAT on?

Floor HEAT Mat and Floor HEAT Wire should not be turned on until the entire tile installation (including grout) has had a chance to fully cure (typically 48 hours at 70°F [21°C]). Cooler temperatures require longer cure time.

14. What can I use as a thermal barrier to prevent heat loss from Floor HEAT into the substrate?

170 Sound & Crack Isolation Mat can be used as a thermal barrier under Floor HEAT installations.

Electrical

15. Should I have a professional electrician hook up my Floor HEAT to the thermostat and wiring? *

Yes. By most building codes, only a professional electrician should make all connections regarding any electrical wiring. Failure to have electrical connections performed by a licensed electrician will void the LATICRETE Warranty and, quite possibly, can void any homeowner's insurance.

16. What electrical requirements does Floor HEAT need? *

Floor HEAT requires a minimum 20 amp dedicated circuit and installation by a professional electrician.

17. How much does Floor HEAT cost to operate?

Consider an average kitchen lighting fixture, containing three 75 watt light bulbs, uses 225 watts of electricity. A 15 ft^2 Mat will draw the same wattage, and therefore cost the same, as the lighting fixture. With the programmable thermostat, optimum efficiency is achieved as the Mat heats up and automatically turns off. A good estimate is that the Floor HEAT will cost pennies per day when programmed to turn on and off periodically.

18. Is Floor HEAT available in a 240 Volt as well as a 120 Volt configuration?

Yes. Floor HEAT is available in both 120 Volt and 240 Volt configurations. It is essential that the voltage of the Floor HEAT components you purchase Matches the electrical supply of your house or building. The Floor HEAT Thermostat is designed for use with both 120 and 240 V.

19. How many Floor HEAT Mats can I install for one thermostat? *

For a majority of installations the number would be three. However, depending upon the size of the Mats, two may be the maximum. Please consult LATICRETE Technical Services at 1-800-243-4788 x235, or contact your professional electrician for more information.

20. Can I join two (2) Mats together by connecting their wires? *

No. Never should any 2 Floor HEAT Mats or Floor HEAT Wire be connected. Applications requiring more than one Floor HEAT Mat or Floor HEAT Wire should be wired by a professional electrician and joined in a junction box or relay, then wired into the same thermostat.

21. Can I cut the blue heating element (wire) if I have too much left over?

No. The blue heating element (wire) should not be cut under any circumstances. Depending upon the amount of Mat left over, you can cut the white mesh in between the blue wire and simply string the remaining wire along the wall (being careful not to cross the wires) to hide the excess. Excess wire and Mat should never be installed within a wall, folded over, installed vertically or placed under any appliance or fixture (e.g. cabinets, toilets, etc…). Failure to comply will void any warranty or claims. If possible purchase the correct size Mat to fit the area to be heated.

22. What happens if a wire is cut, frayed or chipped?

Repair kits are available. Please contact LATICRETE Technical Services at 1-800-243-4788 x235 to obtain a kit and instructions on performing repairs.

23. Can I lay one blue heating element (wire) over another? *

No. The blue heating elements (wire) should not be laid on top of each other or make contact in any way. Please consult with a licensed electrician or LATICRETE Technical Services, at 1-800-243-4788 x235 for more information.

*** Please refer to DS 605.9 "Floor HEAT Installation Instructions" for more information.**

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