

# LATICRETE® STRATA\_HEAT™ Frequently Asked Questions TDS 404

STRATA\_HEAT<sup>TM</sup> FAQ's
STRATA\_HEAT Mat, STRATA\_HEAT Wire and Tile Installation
STRATA HEAT Mat and STRATA HEAT Wire FAQs

# What substrates can I install STRATA HEAT Mat or STRATA HEAT Wire onto?

STRATA\_HEAT<sup>TM</sup> Mat can be laid directly over HYDRO BAN<sup>®</sup> Board, properly prepared concrete, exterior glue plywood (interior only), OSB (interior only), cement backer board, fiber cement underlayment, existing ceramic tile and stone, cement mortar beds, cement terrazzo, resilient flooring, gypsum underlayment, and lightweight concrete.

STRATA\_HEAT Wire (installed with STRATA\_HEAT Spacing Strips) can be installed over HYDRO BAN Board, 170 Sound & Crack Isolation Mat, properly prepared concrete, exterior glue plywood, cement backer board, existing ceramic tile/stone, existing ceramic tile and stone, and cement mortar beds for interior, horizontal applications only.

Please refer to DS 044.6 for more information and for installation instructions.

# Can I trowel directly over the STRATA HEAT Wire and set tile immediately?

Yes. Simply key the mortar into the wire 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. 257 TITANIUM<sup>TM</sup> or MULTIMAX<sup>TM</sup> LITE) over STRATA\_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.

# Can I pour self-leveling underlayment over STRATA HEAT Wire?

Yes. For installation over suitable substrates, lay the STRATA\_HEAT Wire onto the substrate using STRATA\_HEAT Wire Spacing Strips or the properly installed STRATA\_HEAT Mat. If using the spacing strips, prime the substrate and STRATA\_HEAT Wire with Primer Plus, or required primer based on underlayment and allow to dry to a clear film (2 – 3 hours @ 70°F [21°C]). NOTE: no primer is needed if using the STRATA\_HEAT Mat. After Primer Plus has dried properly, mix the proper NXT product, and pour over entire field. Ensure that STRATA\_HEAT Wire is completely encapsulated by self-leveling underlayment and allow to dry.

### Can I skim coat the STRATA HEAT Wire into place and then set tile at a later time?

Yes. Skim coat the STRATA\_HEAT Wire with a polymer-fortified thin-set (e.g. 257 TITANIUM, 254 Platinum, MULTIMAX LITE, etc...) 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.

## Which LATICRETE mortars can be used to install STRATA HEAT Wire?

Any LATICRETE® polymer-fortified thin-set (e.g. 257 TITANIUM, 254 Platinum, etc...) or large, heavy tile mortar (e.g. MULTIMAX LITE) can be used to install STRATA\_HEAT Wire.

# What floor finishes can I install over STRATA HEAT<sup>TM</sup> Wire?

STRATA\_HEAT<sup>TM</sup> Wire is specifically designed for installation of tile or stone only. However other surfaces are okay if they can withstand up to 180°F (82°C). Please check with the finish flooring manufacturer for guidance.

# Can STRATA\_HEAT™ Wire be used in shower applications?

Yes, however showers may only be 120V systems. When installing a STRATA\_HEAT Wire system in a shower, it must be between two non-combustible materials, and it is recommend to be a separate wire than that used on the main floor.

Install the STRATA\_HEAT Wire system on top of the sloped pan if shower base is a poured mortar bed. Then, skim-coated with thin-set and tile over. Do not install STRATA\_HEAT Wire directly over the rubber moisture membrane. We also advise against embedding STRATA\_HEAT Wire in the mortar bed as long heating times could ensue. In the case of building panels such as backer-boards or HYDRO BAN® Board, you can install STRATA\_HEAT Wire directly over the boards. Please refer to the corresponding installation manual for more information.

# Can STRATA\_HEAT<sup>TM</sup> Wire be stapled to a suitably constructed (per Tile Council of North America) exterior glue plywood substrate?

No. The STRATA\_HEAT Wire must be installed using STRATA\_HEAT Spacing Strips or STRATA\_HEAT Mat.

## How long will it take to warm the floor with STRATA HEAT Wire?

Each installation will vary due to several factors; thickness of the tile or stone, type of substrate, thickness of tile, and ambient temperature will all play roles in how fast the floor warms. A good rule of thumb is  $10-12^{\circ}F$  ( $5.6-6.7^{\circ}C$ ) an hour on average.

# Can I use a waterproofing or anti-fracture membrane in conjunction with STRATA HEAT<sup>TM</sup> Wire?

Yes. HYDRO BAN®, 9235 Waterproofing Membrane and HYDRO BAN Quick Cure can be installed under a LATICRETE polymer fortified thin-set (e.g. 254 Platinum, TRI-LITE™, 4-XLT, etc...) which is used to encapsulate the STRATA\_HEAT system. These LATICRETE membranes must be installed on top of dry NXT® Level Plus, dry NXT Level, or other dry self-leveling underlayment prior to installation of tile or stone. These membranes can withstand temperatures up to 280°F (138°C).

# How do I layout STRATA\_HEAT<sup>TM</sup> Wire prior to installation?

Refer to the STRATA\_HEAT Wire installation guide (<u>DS 044.6</u>), contact your local LATICRETE distributor or call LATICRETE Technical Services at 1-800-243-4788 x1235 for more information.

# Is STRATA HEAT<sup>TM</sup> Wire covered by any LATICRETE Warranty?

Yes. STRATA\_HEAT Wire is provided for in the LATICRETE Lifetime Tile & Stone System Warranty (DS 230.99) and LATICRETE 25 Year System Warranty (DS 025.0), LATICRETE 10 Year 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 x1235.

# When can I turn my STRATA HEAT<sup>TM</sup> Thermostat on?

The STRATA\_HEAT Thermostat should not be turned on until the entire tile installation (including grout) has had a chance to fully cure (typically 3 days at 70°F [21°C]). Cooler temperatures require longer cure time.

# Should I have a professional electrician hook up my STRATA HEAT<sup>TM</sup> Wire 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 any LATICRETE Warranty and, quite possibly, may void any homeowner's insurance.

# What electrical requirements does STRATA HEAT<sup>TM</sup> Wire need?

STRATA\_HEAT Wire requires a minimum 20 amp dedicated circuit which must be installed and connected by a professional (licensed) electrician.

# How much does STRATA HEAT<sup>TM</sup> Wire cost to operate?

The formula to figure out much you're spending each year on using your floor mat goes like this: A watts / 1,000 = B kilowatts \* C hours per day of usage = D kWh \* (rate you pay from electricity company per kWh) = E (cost per day) \* 365 = F (cost per year).

# Is STRATA HEAT<sup>TM</sup> Wire available in a 240 Volt as well as a 120 Volt configuration?

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

# How many STRATA\_HEAT™ Wire spools can I install for one thermostat?

It depends on the size of the spools. You cannot exceed 15 total amps on one thermostat. Please consult LATICRETE Technical Services at 1-800-243-4788 x1235 or contact your professional electrician for more information.

# Can I join two (2) spools together by connecting their wires?

No. Never should any two (2) STRATA\_HEAT Wire spools be connected end to end. Applications requiring more than one STRATA\_HEAT Wire spool should be wired by a professional electrician in a parallel connection and joined in a junction box or relay, then wired into the same thermostat.

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

You cannot cut the floor heating wire for any reason. If you cut the system, you could possibly permanently damage the wire. However, if you have too much floor heating wire for your floor configuration there are some options. If you have excess wire, it is possible to adjust the spacing of your wires. For example, if the wires are spaced at 3" (76mm) apart you can adjust the spacing to be closer. Note: Make sure that you never space the wires closer than 2" (50mm).

If you used a 4" border, make it a 2" (50mm) border instead. Place the wire in sections of the room not currently covered to use up additional wire. Always remember not to place the wire under any permanent fixtures and not positioning them closer than 2" (50mm) apart.

In some cases, you may have simply miscalculated how much floor heating wire was needed and you just have too much. In this case you will have to re-measure your space and request a different size.

As a reminder, it is vital that you carefully measure your desired heating area prior to ordering your product to avoid unnecessary installation delays. Failure to comply will void any warranty or claims.

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

Repair kits are available. Please contact LATICRETE Technical Services at 1-800-243-4788 x1235 to obtain a kit and instructions on performing repairs.

# Can I lay one blue heating element (wire) over another?

No. The 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 x1235 for more information.

# I slightly nicked the wire. Do I need a repair kit?

The cable consists of two inner conductors, each insulated, then surrounded by a ground braid and a final cable jacket. A very slight scrape to the cable may only reveal the ground braid. If that is the case, it should be sufficient to shrink wrap the area tightly. However, if any damage has been made to the braid, a proper repair needs to be completed. Any damage, no matter how slight, could result in issues down the road; however, so could an improper repair, so it is up to the installer to weigh the pros and cons and the level of cable damage.

# Can I extend the cold lead of the STRATA\_HEAT Wire system?

Your electrician should be able to extend the cold tail lead using Romex cable and running the lead(s) to a junction box. This will allow you to connect your cable system to the thermostat in the location of your choice. Please refer to the installation manual for additional information.

# Why does my floor feel warmer in some spots?

Your floor can reach higher temperatures in some areas where furniture, area rugs, dog beds or other fixtures are trapping the heat. Avoid placing thick mats, rugs and floor level furniture on your heated floor, specifically in the area where the sensor probe is located. These restrict the transfer of heat away from the cables and result in the floor area beneath them being warmer than other areas.

Warmer spots can also be caused if wire spacing is closer in some parts than others. Make sure the wire is spaced consistently at the time of installation. Additionally, this can result if the installation has more mortar or self-leveling over the wires in different areas.

# Why does my floor heat unevenly?

Wire spacing and levelness of the floor can make a big difference. If wire spacing and floor height isn't consistent, your floor may not heat evenly. Avoid using area rugs, which may trap the heat causing the area where the rug is placed to be warmer than the rest of the floor.

# Where must the factory joint be installed?

The factory joint MUST be installed in the floor. If it is not installed in the floor, the joint may give and your system will no longer work. Not only will your warrantee be voided but you will have to repair the joint and place it back into the floor. To help with the height the joint adds, consider cutting a channel in the subfloor for the joint. This will help avoid adding height and maintain levelness in the floor.

# What is the Electric Magnetic Field (EMF) level of STRATA HEAT Wire?

STRATA\_HEAT Wire was tested and measured at 0.5 milligauss (mG) at 1/2" (a typical distance between the cable and your feet). This measures at 1/200th of the acceptable value of 100 mG as established by the WHO and Intertek/ETL. It therefore complies with EN50366. Any value under 100 mG is typically defined as having no measurable impact on humans.

EMF concerns were related to high frequency items such as industrial equipment and high voltage lines in residential areas. Not microwaves, cell phones or floor heating systems. Human exposure to EMF is not an issue at these very low levels.

Keeping in mind that floor heating industry products will measure around 2 to 3 mG (up to 19 mT for single-core cable) and at times below 1 mG, here are some comparative levels of EMF.

Vacuum Cleaners300 mGMicrowave Ovens200 mGDishwashers20 mGElectric Dryer3 mGSTRATA HEAT Wire0.5 mG

When measuring the EMF of floor heating cables, the reading will vary whether measured on single-conductor or dual-conductor cables. The important consideration as a consumer is whether you're considering a "single core" or "dual core" cable product. All STRATA HEAT Wire systems are dual conductors.

# STRATA HEAT Thermostat FAQs

#### How do I register my STRATA HEAT<sup>TM</sup> Thermostat on the web?

Go to www.mystrataheat.com to register your device.

## Why am I not able to register my STRATA HEAT<sup>TM</sup> Thermostat?

The only thermostats that can be registered are the Wi-Fi enabled LATICRETE STRATA HEAT Thermostats

Can I download an app for the STRATA\_HEAT<sup>TM</sup> Wi-Fi enabled thermostat onto my iPhone or Android device? Yes, look for the MySTRATA\_HEAT app in Google Play or Apple Store.

# Why won't my background picture load on my STRATA HEAT Thermostat?

Make sure that the picture file is less than 2 MB and that the LATICRETE STRATA\_HEAT Thermostat is the Wi-fi enabled version.

#### What type of security protects my data?

The LATICRETE STRATA\_HEAT Thermostat and the MySTRATA\_HEAT app server, communicate using AES128 bit encryption and SHA256 hashing. The LATAICRETE STRATA\_HEAT website, www.mystrataheat.com, is protected using SSL technology, the same type used with online banking.

The MySTRATA\_HEAT app crashed when I tried to use it, what can I do to get it working?

First, power down your phone and restart; if that doesn't work then make sure you have the latest operating system on your smart device. If the app still doesn't work then delete the app, reload it from Google Play or Apple Store (search for the MySTRATA\_HEAT app). If the issue is still not resolved, please contact LATICRETE Technical Services at 1.800.243.4788 x1235 during the hours of 8:00am – 5:00 pm ET (5:00am – 2:00pm), Monday – Friday.

# Why does my STRATA MAT<sup>TM</sup> Thermostat read a percentage?

This occurs when the LATICRETE STRATA\_HEAT Thermostat is in regulator mode. Regulator mode controls the heating in 10-minute cycles and the number you enter is the number of minutes in every cycle that the heat will be on. Regulator mode does not use the floor probe or air sensor to determine when the LATICRETE STRATA\_HEAT is turned on

To exit regulator mode, follow these steps on your LATICRETE STRATA\_HEAT Thermostat Menu>Advanced Settings>Heater Setting>Switch off by pressing up or down arrow.

# Why is my STRATA HEAT<sup>TM</sup> Thermostat displaying "connecting" on the connect to Wi-Fi screen?

Press "back" and reconnect your LATICRETE STRATA HEAT Thermostat to your Wi-Fi network. The thermostat should take no longer than 45 seconds to connect. You can also access the LATICRETE STRATA\_HEAT Wi-Fi Thermostat Troubleshooting Guide by going to https://cdn.laticrete.com/~/media/product-documents/installation-information/ds0448-sh-wifi-thermostat-trouble-shooting-guide.ashx for more information.

# I have registered my STRATA\_HEAT<sup>TM</sup> Thermostat and I have the latest software yet I still have an "!" on the screen.

It is most likely an issue with your router or firewall, which is preventing a connection. Contact your internet provider to see what has to be done to ensure proper connection of the Wi-Fi to the LATICRETE® STRATA\_HEAT™ Thermostat. You can also access the LATICRETE STRATA\_HEAT Wi-Fi Thermostat Troubleshooting Guide by clicking this https://cdn.laticrete.com/~/media/product-documents/installation-information/ds0448-sh-wifi-thermostat-trouble-shooting-guide.ashx for more information.

# How do I connect my STRATA HEAT<sup>TM</sup> Thermostat to the internet?

Find your wireless network on the LATICRETE STRATA\_HEAT Thermostat, enter your Wi-Fi password and connect. Go to https://cdn.laticrete.com/~/media/product-documents/installation-information/ds0464-sh-smart-wifi-thermostat-easy-setup-guide-\_engfrsp.ashx for the Smart Wi-Fi Thermostat Easy Setup Guide.

#### How can I upload my own background onto my STRATA HEAT<sup>TM</sup> Thermostat?

You can change the background by going to www.mystrataheat.com. Select your thermostat in the rooms tab. Click on the setting icon in the top right corner. Go to display settings and find background. You can choose the wallpaper for the thermostat or upload a new picture of your choosing.

# How can I set my STRATA HEAT<sup>TM</sup> to program itself?

The LATICRETE STRATA\_ HEAT Thermostat requires 2 weeks of use to accurately learn your schedule and temperature requirements. Go to www.mystrataheat.com In the Program tab, select your thermostat and select "Auto Schedule".

# Does my STRATA HEAT<sup>TM</sup> Thermostat work on Android / iPhone / Mac / Windows / Firefox / Chrome browsers?

Yes, you can use www.mystrataheat.com to control your thermostat with any popular internet browser. Ensure you have the latest version of your browser to display the page properly and for the best security.

# Can I connect my STRATA HEAT<sup>TM</sup> Thermostat to my smart home system?

Your LATICRETE STRATA\_HEAT Thermostat can be used with many smart phone systems. However, due to the differences between systems and operating system of the device we cannot ensure compatibility.

# Which STRATA HEAT<sup>TM</sup> Thermostat features are only available through the MySTRATA HEAT portal?

The following features are only available in the MySTRATA\_HEAT portal: Room Settings (Room attributes, displays and audio, heating preferences and advanced settings), Add Location, Add Room, Create Account (option on app but takes you to the MySTRATA HEAT portal), Deleting Accounts, and Deleting Rooms.

# How do I program my thermostat to stay on all night?

Important: If you want your thermostat to heat all day and all night, you should go back and select fixed temperature under "Set Program".

Period One:

Have period 1 start at 12:00 AM (dot on the bottom) and end whenever you leave the space for the day. Period Two and On:

This will be the next time the system is on after the period 1 end time. If you are using the space throughout the day, for example, lunch or post-workout, you'll put this time in as period 2. If you leave the space all day and do not return again until night, you can program using the two periods provided. If necessary, you can add a period easily in the bottom right corner.

No matter how many periods you have, the final period listed should start 30 minutes before you utilize the space at night and end at 11:45 PM (dot on the top). The next day's program starting at 12:00 AM will keep the floor warm throughout the night.

# Can my STRATA HEAT floor sensor be extended?

Yes. If the floor sensor is not long enough, it can be extended. The floor sensor is 10' long and can be extended up to 164'.

The floor sensor can be extended using American Wire Gauge 20 for extensions up to 65'. For extensions over, 65' American Wire Gauge 18 is recommended. The sensor cannot pass through study unless running through a conduit. The splice made must comply with code. Laticrete recommends a maximum extension of 164'.

Technical Data Sheets are subject to change without notice. For latest revision, check our website at <a href="https://laticrete..com">https://laticrete..com</a>
TDS 404.doc

R 04 January 2024



**LATICRETE INTERNATIONAL, INC.** • 1 LATICRETE Park North • Bethany, CT 06524-3423 USA 800.243.4788 • support@laticrete.com • www.laticrete.com

©2014 LATICRETE INTERNATIONAL, INC. All trademarks shown are the intellectual properties of their respective owners.