

Tile & Stone Installation Systems

Mapeheat™ floor-heating systems

What are the main considerations for a successful underfloor heating installation?

The top three factors are:

- **Even heat distribution:** Hot spots and cold spots detract from the experience of a heated floor, so consistent watt density is critical. Accomplishing this can be easier thanks to pre-built custom mats designed specifically for the individual floor shape or a floor-heating membrane with heating cable that has flexible layout requirements (i.e. no restrictions on run length and no requirement for tension loops).
- **Technology upgrading:** “Future-proof” the installation with WiFi thermostats featuring connectivity with multiple connected home systems (such as Google Assistant, Amazon Alexa, IFTTT, Nest, Control4, etc.) and also offering an Open API for custom smart-home integrations.
- **Excellent support:** Choose manufacturers that will back their products and the completed installation for 25 years, or more. Also, make sure the warranty is not pro-rated; in other words, make sure the coverage isn't for half the value after half of the warranty period has passed. Finally, ensure that the manufacturers have a knowledgeable technical support team that offers on-site and telephone consultation.

Are there special considerations when installing underfloor heating under stone vs. tile?

Make sure you follow the flooring manufacturer's instructions. Plus, choose a heating system that is flexible and able to be used under multiple surfaces (quality heating systems can be installed under tile, stone, laminate, engineered wood or luxury vinyl, and in both wet and dry environments).

Are there specific mortars and grouts that provide better long-term performance with underfloor heating systems?

MAPEI has a wide array of polymer-modified mortars approved for use with underfloor heating systems. One of the best from a contractor application perspective, as well as from a premier performance perspective, is *Keraflex™ Super*. This polymer-modified mortar works in conjunction with membranes like *Mapeheat Membrane*, offering a smooth, creamy application consistency that allows the mortar to fill the voids of the membrane with minimal effort, while providing superior bonding characteristics.

What's the most common mistake that tile contractors make when installing underfloor heating systems and how can that be avoided?

One common error is installing the flooring prematurely, before installing the thermostat probe and before testing for insulation, resistance and conductivity. Any of these problems are much easier to fix before the tile goes down.

The biggest misstep is not installing a floor-heating system in the first place. Cost-wise, it's a relatively small extra expense to add floor heating during a renovation. A homeowner is likely to regret not heating their new tile floor, and doing so adds outstanding value to their living space for years to come.

How can tile contractors and electricians best work in tandem to ensure a smooth installation?

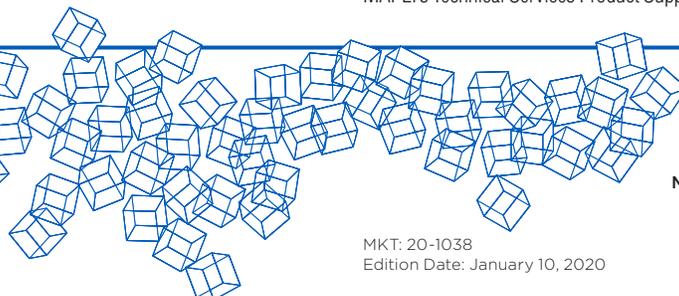
Communication is key. Also, work with manufacturers that have experience in dealing with both trades, ensuring that both trades are on-site when needed and are not wasting time waiting on one another. The best certification programs will cater to tile contractors and electricians alike.

Are there types or formats of tile that lend themselves better to an underfloor heating installation?

As long as the substrate is sound, any tile or stone floor is an excellent choice for heat. Tile and stone are great thermal conductors.

For additional helpful tips and product information, visit www.mapei.com or contact MAPEI's Technical Services Product Support Team.

Technology from



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MKT: 20-1038
Edition Date: January 10, 2020