Heated Floors:

business opportunity for you — safe, affordable, efficient comfort for your customer By John Vastyan



It's a moment people rarely forget: that first touch of a warm tile or stone floor, especially if it's a mid-winter experience. Many first encounters with radiant heat become the beginning of an enduring romance with home comfort. But until your customers have experienced it, it's difficult to move them toward the unexpectedly luxurious sensation that radiant heat delivers.

There's a local stone and tile installation firm that has built its business around the relationship between radiant heat and elegant flooring. They're growing at a time when many installers are struggling. Cleverly named "Hot Rocks," the Manheim, Pa., firm has positioned itself to attract higher-end business.

"Our name and logo stir curiosity about what we do and why we're different," says president Vid Pejcic who emigrated from Bosnia 10 years ago. He never dreamed of entrepreneurial success like this. "When I learned how easy it is to install electric radiant heat products – we prefer SunTouch mat and WarmWire products – I

knew it would give my stone and tile flooring company the edge it needed to be different.

"People approach me all the time, asking about the connection between stone and tile flooring, and electric radiant heat," he added. "I usually respond with a simple question for them: How comfortable were your tile floors last winter?"

If you haven't already wandered into the radiant realm, here's a brief guide: radiant floor heating works by using water-filled tubes or electric heating elements to warm interior mass. The surface of a floor gently emits energy that moves to all the objects in the room, making them – and your customer's feet – cozy warm.

Radiant heat delivers uncompromised comfort, the highest energy efficiency available (typically, 25 percent to 30 percent better that forced air), and – with no air grates, radiators or baseboard to factor-in – there's no interference with room function or furniture layout.

Lower operating costs

Radiant floor heat costs less to operate than other forms of heat. Because radiant floors offer more comfort at lower thermostat settings, most people find that they're comfortable at lower room temperatures. And, radiant heat doesn't stratify at the ceiling as it does with forced air.

Hydronic (water based) radiant floor systems are used in larger areas or for an entire home or commercial facility. Generally, hot water radiant is best for spaces of 500 square feet or more, or in a building where hot water is already used as a heat source. Hydronic tubing can be embedded in concrete slabs, in thinslabs over frame floors, stapled up between floor joists, or installed on top of the subfloor. Springfield, Mo. -based Watts Radiant sells technology for all of these options.

An electric system may be the best choice for small areas like a single master



"Hot Rocks" owner Vid Pejcic built his Manheim, Pa., business on the relationship between radiant heat and elegant tile and stone flooring.

bathroom. Of course, if electric energy is cheap, it could be used to heat, or provide floor warming, to an entire home. SunTouch offers mats that come in 1-foot, 2-foot and 3-foot wide rolls with lengths up to 40 feet. These are shaped on the jobsite to fit any floor plan. The mats contain a woven-in heating element.

According to Tracy Hall, national sales manager of SunTouch, it's the lady of the



When green goes wrong: EMF dangers

An emerging issue within the electric radiant heat industry is the issue of EMF (electromagnetic frequency) radiation. The idyllic scenes so many suppliers of this technology prefer to drive sales are women and children relaxing on a warm floor, while saving energy at the same time. But there's trouble brewing below. While some pioneering companies have developed dual wire EMF-canceling technology, others – offering only single-wire systems – are selling products that release very high levels of EMF.

EMF radiates from all electrical appliances, but studies show an average American's daily exposure is less than 1 unit (mG) of EMF. When you sit on an unshielded electric radiant floor, however, you may be exposed to 20, 40, or more times this level.

Yet, some electric floor products expose homeowners to about the same electromagnetic field radiation as putting your nose up against the door of a microwave oven and parking there for a long, long time.

Today, there is only one scientific and independent third party test to measure electromagnetic fields produced by electric radiant floor heating systems.

The new test is known as "REET" or Radiant Electric Emissions Test. The test was developed in part, and conducted by the ETL Semko division of Intertek, the global leader in the testing, inspection, and certification of products for manufacturers and retailers around the world.

The first series of tests results showed a startling variation in EMF exposure.

Those products that were tested to have the lowest levels of EMF radiation use a complex wire that is actually two sets of heating element constructions that run in parallel with a patented helical twist.

There is no practical technology for covering a heating element to minimize harm-

house who's most influential in the decision-making process. "Electric radiant – chiefly applied for floor warming – appeals romantically to a woman's natural desire for comfort and warmth," said Hall.

Electric radiant is an ideal supplemental heat source for primary hydronic or HVAC systems. "Electric radiant can also replace an old existing electric baseboard in a bathroom remodeling project," added Hall.



- Saves Money on Insurance
- Helps You Comply with OSHA & ADA Requirements
- You May Qualify for Tax Credits
- 30 Minute Treatment Time

4 YEAR GUARANTEE!

TRUSTY-STEP INTERNATIONAL (800) 323-0047 TEL: (781) 593-9800 FAX: (781) 598-4937 E-mail: safety@trusty-step.com Web Site: www.trusty-step.com ful EMF. The only successful approach is "active shielding" which means each heating element in a pair cancels the H-field



To eliminate problems with EMF radiation, be sure your floor warming system has dual wire EMF-cancelling technology, like those from Sun Touch.

of the other element. This is the design of Watts Radiant and SunTouch tile warming wires, a more costly but much more effective shielding system.

For the REET test conducted by ETL Semco Labs, five brands of radiant floor product, each covering 35-40 square feet, were

selected to represent the most common size for residential bathroom installations. The results show that single-wire products radiate dramatically more EMF than do the dual-element SunTouch mats — up to 712 times more exposure across the range of tests.

The SunTouch mats in that size range emitted less than 1/7 the average adult's daily EMF exposure. Visit www.suntouch. com for more information. – JV



Thin-set mortar can be troweled directly over the electric radiant heat mat.



Pejcic installs stone tile over the floor warming mat.

A few rules of thumb

Typically, the most popular places for electric radiant are the first room people step into in the morning: bathrooms, kitchens, sunrooms, mudrooms, entryways. The average size master bathroom installation is about 50 square feet of heated area (with electric, you can warm any space 10 square foot or larger).

Another rule of thumb is this: if you're warming an area less than 1,000 square feet, electric is ideal; if more than that – hydronic radiant has advantages. For homeowners, one of the top selling, energy-wise features is the growing popularity of programmable thermostats. These are responsive not only to ambient temperatures and heat loss, but also to time-on, time-off periods set by the homeowner. The SunStat Pro from SunTouch is ENERGY STAR® qualified.

So if you're looking to add some romance to that new addition, or simply to start your day with a bit of warmth in the master bath, give electric radiant a close look. You'll have entered the *radiant realm*.

John Vastyan is president of Common Ground, a trade communications firm based in Manheim, Pa. For 20 years, the focus of his work has been the hydronics, radiant heat, plumbing and mechanical and HVAC industries. He can be reached at (717) 664-0535.

Customers want warm feet.

Send 'em to the beach by installing SunTouch® beneath their tile.

SunTouch has three ways to warm your customer's tile floors.

Original SunTouch® Mat, WarmWire® Cable and UnderFloor™ Mat.

The mat and WarmWire® simply install in thin-set mortar, and

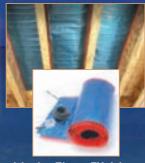
UnderFloor installs between the floor joists beneath the floor. Call or visit our website to learn more; www.suntouch.com / 888-432-8932



SunTouch® Mat



WarmWire® Cable



UnderFloor™ Mats

