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Blooper systems can't dim floor heating's popularity

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the latest statistics reveal lineal footage numbers for hydronic radiant heating during the past year to be 600 million ft. used in Western Europe and 60 million ft. used in the United States, which has the same heating zone population.

Ten to 15 years ago Europe was approximately at the same 60 million mark. The prediction is that the U.S. floor heating market will grow at the same rate. That means that in the year 2008 alone we will install 600 million ft. of high-quality PEX within the floors of American buildings, both residential and commercial.

This number, plus all the system-related components from boilers to air vents, could mushroom significantly higher by 2008 simply because we are working in virgin hydronic territory when compared with Europe, where literally hundreds of radiator manufacturers are fighting for the same, albeit 100% hydronic, market.

European floor heating had to chip away 25% market share from radiators. We are faced with chipping away from the hot air market or we can combine hydronics with forced air, which is an easier task. Plus the commercial/industrial floor heating market, where cooling is very often not an issue, is growing much faster here in its early stages than it did in Europe.

Also the rate of acceptance by the public seems to be much faster here than overseas. There will be, however, many industry growing pains that will have to be overcome just as there were in the '80s.

A temporary setback in the growth rate will occur due to unfortunate system failures mostly due to oxygen diffusion problems and consequent mechanical component failures, as well as tubing failures.

Standrads, codes and proper installation technics will allow floor heating to grow.

The shakeout of unsuitable tubing products has already begun and will continue over the next several years. More and more of these "time bombs" will go off and installing contractors, building owners and, above all, standards organizations will become more educated about the property requirements of safe, building-lifespan floor heating tubing. However, it is my opinion, that in spite of these temporary setbacks, floor heating is here to stay and will continue to grow dramatically. As the floor heating market becomes more sophisticated, growing out of its infancy, these early blooper systems will eventually disappear. The overwhelming advantages of radiant heating will continue to drive the U.S. market to the same level of popularity as we see in Europe today.

The only potential fly in the ointment is the lack of uniform industry tubing standards, qualified testing labs and long-term testing procedures, as well as outside watchdog agencies and stringent local state codes for hydronic heating, similar Standards, codes and proper installation techniques will allow floor floating to grow in scope to those that exist for plumbing.

> The reality right now is that anyone can bury anything, including garden hose, in concrete slabs or radiant systems in almost every state of the union, and not a single building inspector would question it. There is one exception and that's the state of Rhode Island.

I don't believe in government interference, but a case can be made for establishing codes and standards like those that exist in the plumbing sector, in order to protect the floor heating industry from being damaged by shoddy products and installation methods that are bound to occur in any new, rapidly growing market. Standards and codes will help to promote hydronic heating as a stand-alone independent industry with its own set of state certification requirements.

Establishing hydronic radiant heating standards will help legitimize the floor heating industry and recognize the fact that it is no longer just an outgrowth of the plumbing industry. The goal is to establish hydronic heating as a separate but equal trade with its own training and certification programs.

As the hydronic heating industry expands, there will continue to be an expanded need for trained and competent heating contractors. In order for contractors to be competent in the modern hydronic age they must be able to obtain the basic knowledge and expand on it.

Floor heating has been the catalyst that has made the hydronic heating industry in the United States blossom. Standards, codes and proper installation techniques will allow it to grow. Trained and competent installers will make it flourish.

Hydronic heating is important to all of us in the industry and by taking a serious look at the needs of the people who install and work with hydronic heating everyday, we can prevent it from withering.

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