## CONTRACTOR «

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## Radiant wall heating is not just for the bathrooms any more

BY JOE FIEDRICH Hydronic heating authority

PEOPLE HAVE installed radiant heating surfaces pretty much everywhere. In ceilings, floors, walls, benches in soccer and football stadiums, ship decks, dog tracks, stairs, patios, zoo cages, or even in beds. It's really up to someone's imagination as to how to utilize flexible warm water tubing.

Installing warm water tubing in wall surfaces to achieve the radiant warming effect and the associated

feeling of comfort our bodies are longing for, is probably the most practical and cost effective way to get the desired results. Radiant wall heating can be applied anywhere humans and animals are enjoying the shelter of their habitat from their harsh and cold environment.

Practically all wall heating applications have been used in bathrooms to provide compensatory surface areas for the limited floor space which is so common in bathrooms because of the placement of tubs, shower stalls, and toilets. Supplementary wall heating provides the means to maintain elevated bathroom temperatures during design temperature conditions, even when two outside walls, large windows, and a sky light are present.

In the same vein, indoor swimming pool areas have been a popular application, as is any application where radiant floor space is limited and circulating air patterns exist. In these applications radiant wall heating is a logical alternative.

Since it works so beautifully in bathrooms and pool areas why not use it in bedrooms where floor heating is always a challenge with heavy carpeting; or in retrofit remodeling

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> jobs where existing finished floors cannot be touched? You can avoid installing tubing from below the subfloor with cumbersome installation methods. You won't need to smoke the floor with 200°F water temperatures to barely get enough Btuh output. Put it in the wall.

> Wall heating can be used as a supplementary heat distribution system to a floor tempering system

where 35 Btuh/sq.ft. is usually the output limit in high heat loss areas. Use it in jobs where floor heating is not practical and too expensive for your client's budget.

You can offer a radiant wall heating system, new or retrofit, for at least half the cost to your customer because only half the labor and material are required. However you are still giving your client what he is looking for: Unsurpassed comfort and an invisible heating system.

The lower half of the walls is the second most logical place to put the heat distribution system, after the floor area, and definitely before the ceiling, from the heating comfort aspect. I like to refer to it as the "poor man's radiant system" and, in many

instances, technically the only and closest alternative to floor heating.

I have lived with wall heating in certain rooms of my home for several years and my experiences have been excellent. From the installation point

of view, I must say, it's easier than hanging baseboard and it does not raise any problems with Sheetrock, concrete boards, tiles, stucco, or skim coats. There's no shrinkage or expansion cracking.

Keep the tubing below the 4 ft. to 5 ft. level off the floor and it won't squirt when you hang a picture. And when you get into Btuh output trouble during those few extreme

cold winter days, just bump up the aquastat like on baseboard. Sometimes 180°F to 200°F might just take you over the hump. We are not really concerned about 100°F wall surface temperatures because your clients won't be walking on it barefoot.

For different wall heating installation techniques please refer to my article in the Oct. 1994 issue of CON-TRACTOR (pg. 68) or call or fax me.

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