

Perks of Radiant Heating

Heated floors for a cold day? To many buyers, that sounds too good to be true. Learn about the benefits of radiant heating and why it's becoming such a sought after amenity.

FEBRUARY 2008 | BY [LESLIE BANKER](#)

Radiant heating and cooling is growing in popularity in green design, new construction, and renovations as home owners discover the advantages of these features — not to mention, how they can pay off when they go to sell a home.

These systems, where embedded pipes circulate warm (or cool) water in the floors, are particularly energy efficient, which clearly is a big selling point. But there's more to radiant heating than just being fuel efficient.

The Attraction

Here are a few additional reasons a buyer will want to pay particular attention to this method of heating and cooling:

- Radiant heat makes floors toasty and warm, which makes you feel cozier in the space. It eliminates drafty floors and provides consistent heat throughout a room.
- There's no need for air ducts, which can circulate mold and dust throughout a house. For anyone suffering from allergies, this is an important consideration.
- For ultra efficiency, renewable energy sources, such as geothermal and solar, are compatible for fueling a radiant heating and cooling system.
- Radiant heating and cooling is quiet. Unlike other systems, there are no clanging radiator pipes or air rumbling through ductwork.
- With other types of heating, the hot air rises quickly up toward the ceiling, warming the parts of a room where people rarely go. With radiant heat, the warmth stays lower in the room, closer to where you are.

- Radiant heating and cooling doesn't interfere with furniture layouts or the choice of window treatments in a room the way that radiators, baseboard heating elements, and air vents do. You don't want to hang long curtains over an electric baseboard heater, place a sofa against a radiator or over an air vent, or have a chair right in front of a through-the-wall air conditioner. With radiant heating and cooling, there is nothing visible in the room; it's all buried in the floor.
- The energy efficiency of radiant heating and cooling can save 20 percent or more on fuel bills. This is, in part, because the water being circulated through the pipes doesn't need to be heated to as high a temperature as a traditional radiator, for example.

Where to Use It

Radiant heating is typically installed into floors, but it also can be installed inside of walls and ceilings. It's possible also to have electrical heating elements embedded in the floors instead of pipes filled with water.

You can have radiant heating in the entire house, just one part of a house, or even one room. A driveway can even have radiant heating installed under it to quickly melt away snow and ice.

If a new room or wing is being added onto an older house, it would be logical to consider radiant heating for the new space. Also, when renovating just a bathroom or a kitchen, radiant heat could be installed in those rooms, too.

The pipes for radiant heating are installed under the finished floor, whether it's wood, tile, or carpeting. Basically any floor material is OK to use with radiant heat; however, carpeting does make the heating less efficient than other floor types.

It makes the most sense to install radiant heat while a space is being built. To install it into an existing space, the floor will have to be ripped up, which would be more cost effective if you're doing it anyway during a renovation.

It's possible to retrofit just the first floor of a house with radiant heat by installing the pipes onto the ceiling of the basement. This does not require ripping up the floor, but it's still relatively expensive to do. Once retrofitted, at least part of the house will reap the benefits of radiant heat.

The tubes that are embedded in the floors (and sometimes the walls and ceiling, too) are often made of flexible PEX tubing (PEX is short for cross-linked polyethylene). PEX is being used

more and more these days for radiant heating as well as for water supply pipes throughout a house.

PEX tubing is favored in green design because it's more environmentally friendly than copper pipes, which are the old standard. Also, PEX tubing is less labor intensive (i.e., less expensive) to install than rigid copper piping.

Make it a Hot Property

Anytime you're showing a property or listing a property with radiant heating or cooling, be sure to talk it up as a selling point. And if a buyer is dreaming of improving a property, knowing a thing or two about radiant heat will help you to be able to talk intelligently about the possibilities.



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