

Home Radiant Heating Systems

Radiant heating is something that would be familiar to any ancient Roman. They invented the hypocaust to beat the chill of cold weather, keep their public baths cozy, and their aristocrats free of frostbite.

Although the modern version of in-floor heating is far easier to install and run than the hypocaust systems of ancient Rome, the principles of this method of using radiant heat to warm a home remain the same.

Heated water is pumped through tubing laid in a grid pattern under the floor of the designated room. The radiant heat rises gently to warm the air, and ensures that no matter what floor covering you have, carpet, tiles, wood or even just concrete, the floor will always feel warm and inviting on bare feet.

The method used to heat the water supply can be via an existing boiler or by a boiler that has been installed exclusively for your in-floor heating system.

Free hot water is available if you choose the increasingly popular option of solar panels as a heating method. Although this may increase installation costs somewhat, the extra cost is soon overhauled because as long as the sun continues to shine then hot water is limitless.

If you have an existing tile or concrete floor, then retro-fitting a radiant heat in-floor heating system is an excellent choice. It will only increase the depth of your floor by 20 cm by the time you have laid a new floor covering over the installed system.

The way it usually works is the tubing is laid in its grid pattern and embedded within a thin layer of concrete. Aluminum heat diffusing material is then laid and finally your flooring of choice.

If you would like carpet as a floor covering, then its best to ensure a thin radiant heat friendly carpet is laid. Although wood, linoleum, vinyl or any other floor covering can be used, the most effective flooring is ceramic tiles. This is because of their heat storage and conduction properties.

There are other methods of heating your home using radiant heat such as ceiling or wall mounted heating panels. These work on the same principle as in-floor heating with piped hot water or heated electric cables.

In order to gain maximum benefit from panels you need to be within line-of-sight or at least reasonably close proximity to them. Some people also find that whilst the ceiling panels obviously don't take up valuable wall space, the radiant heat will be felt most directly on top of their heads which can prove uncomfortable.

The reason that in-floor heating remains the most popular form of radiant heating apart from its efficiency and low running costs is the fact there are no radiators or panels taking up wall space.

As in-floor heating systems can be thermostatically controlled, gather a store of heat when electric companies offer off-peak rates and then allow the radiant heating to warm your home over a period of 10-12 hours, it is little surprise that this Roman wonder is fast becoming the worlds most popular form of home heating.

About the Author

John Krell at KrellDistributing.com is an expert in [radiant heat installations](#). When [radiant heat flooring](#) is your task why not have John Krell design your system?

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