



ECOBROKER International

Green Topic Pages

Radiant Floor Heat

Technology Snapshot & Benefits:

Radiant floor heating can be extremely cost-effective and comfortable. There are three types of radiant floor heat: radiant air floors, electric radiant floors, and hot water radiant floors. Hot water radiant floors, or hydronic systems, are the most cost-effective systems for homes or buildings in heating-dominated climates. Hydronic systems heat water in a boiler and pump the heated water through tubing underneath floors. Most find radiant floor heat to be one of the most comfortable types of heating, because heat is evenly distributed from the floor, warming up the feet and body first. Radiant floor heat is quiet and eliminates drafts and dust problems associated with forced air systems. Additionally, radiant floor systems are *invisible*. There are no heat registers or radiators.

Estimated Cost Savings:

Compared to other hydronic heating systems, radiant floor heating allows for lower boiler temperatures, saving energy and increasing boiler life expectancy. A 45-year life is not unusual.

Issues:

With radiant floor heat, some floor coverings perform better than others. Ceramic flooring is the most common. If you want carpeting, install a thin carpet with dense padding and use as little carpeting as possible. Some floors take longer to heat than others. If a floor is allowed to cool completely, make sure to give adequate time for the floor to heat-up.

Regional Issues:

Radiant floor systems can also be used to cool spaces. Currently, the available systems are only appropriate for dry climates.

Installation (Getting It Done):

Be sure to get two or three (or more) bids from designers and/or contractors to gain immediate perspective on the actual costs of radiant floor heat equipment installation in your area.

More Articles on This Topic:

[U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy: Energy Savers - Radiant Floor Heat](http://www.eere.energy.gov/consumerinfo/heatcool/hc_radiant_floor_heat.html)

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[U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy: Energy Savers - Radiant Floor Heating and Cooling Systems](http://www.eere.energy.gov/consumerinfo/factsheets/bc2.html)

<http://www.eere.energy.gov/consumerinfo/factsheets/bc2.html>

[Radiant Panel Association](http://www.radiantpanelassociation.org/i4a/pages/index.cfm?pageid=97)

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