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Radiant Heating Design...UPSIDE DOWN or RIGHTSIDE UP...that is the question.

Humans, wildlife, fauna and flora are conditioned to and thrive on radiant energy from the sun above. The physics of the solar system work to heat the earth because the full wavelength spectrum of radiant energy travels through space and the earth's atmosphere, creating heat when it reaches earthly objects, surfaces, and life. Heat is absorbed by the earth and objects, reflected, and reradiated, warming the air in the process. At night, the process may be reversed, with reradiating of heat into the atmosphere.

The heat transfer process of the earth is best understood by considering the soil temperature and danger of frost as determinants of the planting cycle. While June 21st is the longest day of the year when the sunshine is the most direct for the most hours, safe planting date is May 15th, just a little more than five weeks before, yet, the growing season extends into mid-October, four months beyond the longest day and just two months before the shortest day of the year when the sun is weakest and shines for the least number of hours all year.

Now, most people will tell me that they have never experienced radiant heat. Yet, people seem to instinctively know that radiant heat is the most comfortable form of heat, and they've heard that 'heat rises', so they conclude that the floor is where it must be placed. Yet, in fact, we all live in a radiantly heated world, and, in fact, it isn't heat that rises, but hot air, which is a gas that expands as it is warmed, becoming lighter than the surrounding air, which pushes it up until reaching equilibrium with the surrounding air.

So, if you want Right Side Up heating, you will heat from the ceiling, just like you light a space from the ceiling, and the earth is heated by the sun from the sky. And the good news is that there are lots of additional reasons. You have full use of floor space, without concern about floor covering, furniture placement, or overheating from solar glazing or day lighting due to an already heated floor. And, ENERJOY is the only radiant heating system with US Department of Energy documented comparative sizing and operating cost data. ENERJOY is 1/3 the initial cost of concealed radiant systems, without any maintenance or performance worries for the life of the building!

For detailed energy and comfort information, please scroll to the ENERJOY URL, and click on the direct link to the ENERJOY CASE Study conducted by the National Association of Homebuilders Research Center for the U. S. Department of Energy, and posted by the Department of Housing and Urban Development on the NAHB Toobase Web site under the ADVANCED Housing Technology Program.. For more details on the ENERJOY I Radiant Ceiling Panels, please click on Specifications in the Table of Contents.