



RAUBOARD™ EDGES OUT THE COMPETITION

COMPETES HEAD-TO-HEAD IN RADIANT HEATING MARKET

As homeowners have become increasingly aware of the importance of energy-efficient building practices and products, especially upon feeling the effects of rising energy costs, more and more energy-efficient products are being integrated into residential new construction and renovation.

The rise in popularity of radiant heating systems as an alternative to traditional forced-air systems is one indication of a greater awareness about the enhanced efficiency and comfort offered by such technological advancements for the home. In fact, more than 3 billion feet of hydronic radiant piping has been installed in North America over the last 10 years. Widely used in Europe for decades, radiant heating has

taken hold in the North American building market for its energy-efficient operation and for the enhanced comfort it offers homeowners.

Hydronic radiant heating works by circulating warm water through pipes located beneath or encased within a floor. While traditional forced-air heating systems blow hot, dry air around the home, causing drafts and sharp temperature swings, radiant heat quietly and continually heats a floor from within, and radiates heat upward to allow warm air to rise gently from the floor. This method enables a thermostat to be set several degrees lower than it would be with traditional hot air systems, without sacrificing comfort levels.



*From the top:
Double groove
RAUPEX® (PEXa) pipe
Return groove
Single groove*

As a low-temperature system that can use a variety of heat sources, including geothermal heat pumps, solar collection systems and condensing boiler technology, radiant heating can also offer up to a 30 percent operating cost savings when combined with such heat sources. While radiant heating systems have become increasingly popular among those involved in the design, construction and purchase of homes, radiant heating has evolved to include a number of installation options.

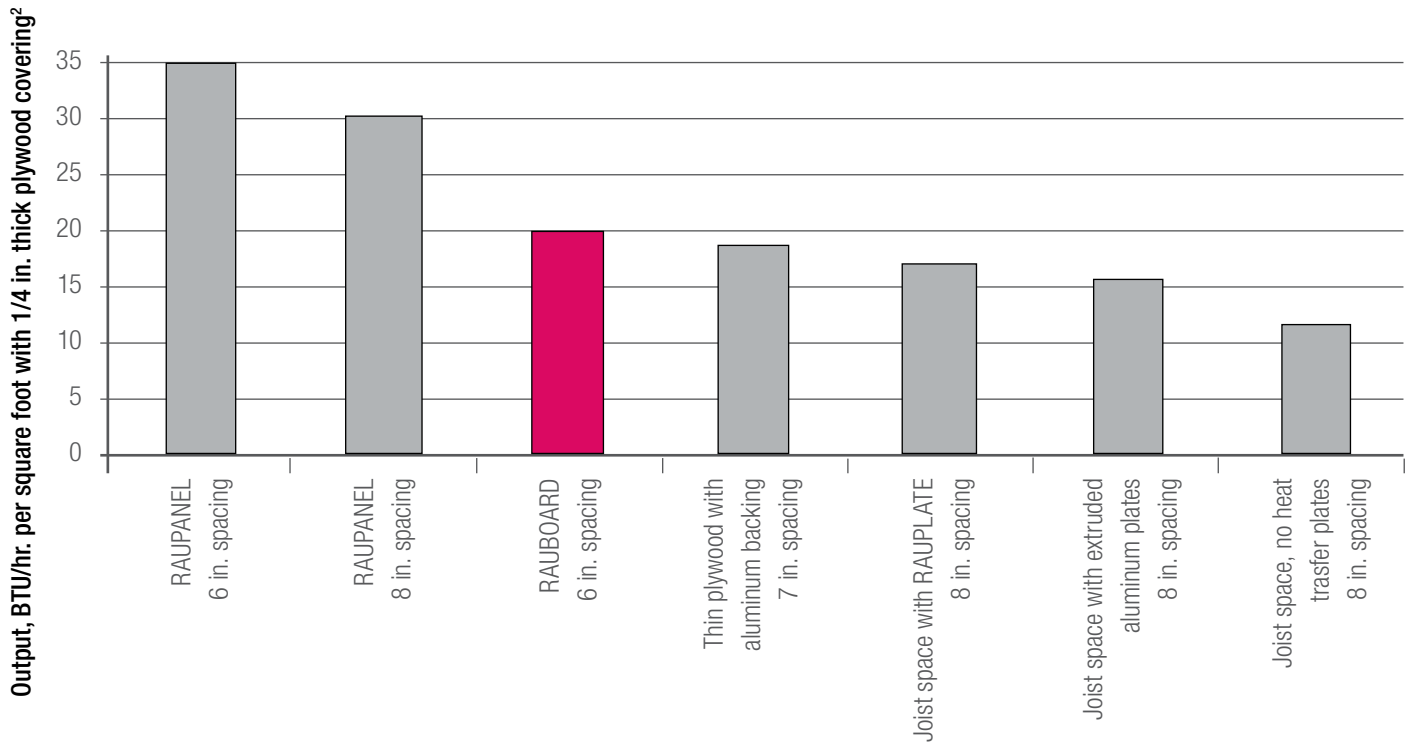
Traditionally, PEX pipe was installed in poured concrete slabs and cement overpours. The first “dry” installations used joist space plates, and more recently, radiant has moved above the floor with heat transfer panels. To satisfy this growing demand and a wide range of performance requirements, REHAU now offers RAUPANEL™ high-performance and RAUBOARD heat transfer panel systems.

By eliminating the need for a specialized concrete or gypsum cement installer, heat transfer panel systems allow for 100 percent installation by the heating contractor.

This also reduces a builder’s construction timeline as the concrete/cement drying period associated with wet systems—which typically requires putting all other building projects on hold—is not required. Complete, individual-piece above-the-floor panel systems such as RAUPANEL and RAUBOARD offer even greater installation advantages, with a simplified assembly process that translates into earlier project completion.

For typical residential heating systems, RAUBOARD offers several key benefits that make it an attractive option.

Radiant Floor Heating System Relative Output¹



Radiant Floor Heating System Tested, 120°F Supply Water Temperature, 100°F Return

An independent test lab shows, when tested alongside traditional panel systems, RAUBOARD provides better overall output per square foot.

Results by the Institut für GebäudeEnergetik IGE indicate that the REHAU RAUBOARD system exceeds traditional panel systems in thermal heat output performance by at least 5% when tested according to the international standard EN 1264 "Water based surface embedded heating and cooling systems."

At only 1.3 pounds per square foot, the system does not require structural reinforcements.

Furthermore, with only a 1/2 in. height, RAUBOARD is a low profile system that offers installation flexibility in transition areas of the home, such as between rooms or with different kinds of floor coverings.

Benefits of a heat transfer panel system are additionally experienced by the homeowner, as the low thermal mass of panel system like RAUBOARD, which is about one-tenth the weight of a typical overpour, facilitates a quicker response time. It additionally makes heating during the spring and fall "shoulder" months of the year much easier.

Comprising double, single and return groove heat transfer panels and 10.1 mm RAUPEX® cross-linked polyethylene (PEXa) pipe, RAUBOARD offers a lightweight, efficient and easy-to-install radiant heating option for retrofit and new construction applications in today's home.

To learn more about the RAUBOARD system and its benefits, visit www.na.rehau.com/heatingpanels

¹ Results based on test reports issued by IGE - University of Stuttgart, an independent test lab certified to EN ISO 17025

² Finished flooring Rλ-value 0.3125 h·ft²·°F/Btu

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