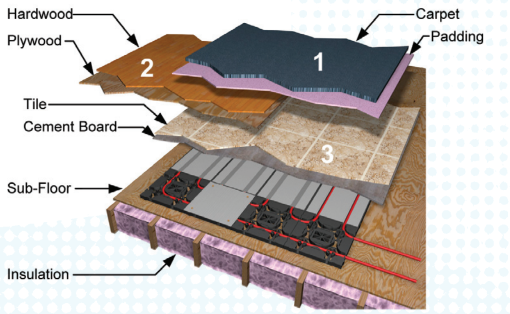
Typical Upper Level Installation:

1) Carpet and Pad: RetroPanels "float" unattached over the top of the wood sub-floor; tack strips for carpet are installed on plywood filler pieces around the perimeter of the room between the RetroPanels and the wall; carpet and pad are installed as normal on top of the RetroPanel layer.

2) Floating Floor Systems (engineered wood laminates): RetroPanels "float" un-attached over the top of the wood sub-floor; engineered floor system is installed as normal on top of the RetroPanel layer.

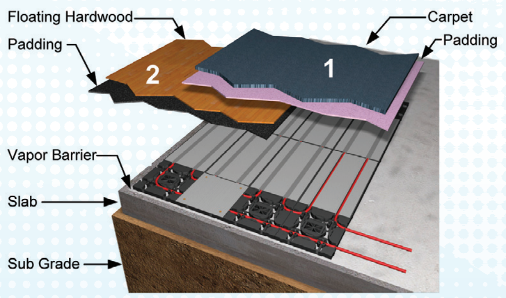
3) Ceramic Tile: RetroPanels are "Sandwiched" between the wood subfloor and cement board; 2" screws fasten cement board down through the RetroPanels into the wood sub-floor (mark and avoid tubing locations); ceramic tile is installed as normal on top of the cement board and isolation membrane.



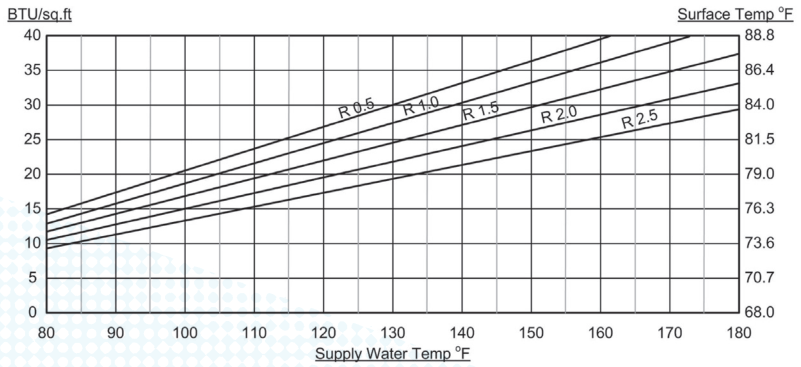
Typical Basement Installation:

1) Carpet and Pad: RetroPanels "float" un-attached over the top of the existing concrete slab and vapor barrier; tack strips for carpet are installed on green treated plywood filler pieces around the perimeter of the room between the RetroPanels and the wall; carpet and pad are installed as normal on top of the RetroPanel layer.

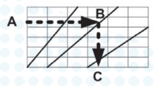
2) Floating Floor Systems (engineered wood laminates): RetroPanels "float" un-attached over the top of the existing concrete slab and vapor barrier; engineered floor system is installed as normal on top of the RetroPanel layer.



Water Temperature and Output for RetroPanel on Subfloor or Concrete 8" O.C.

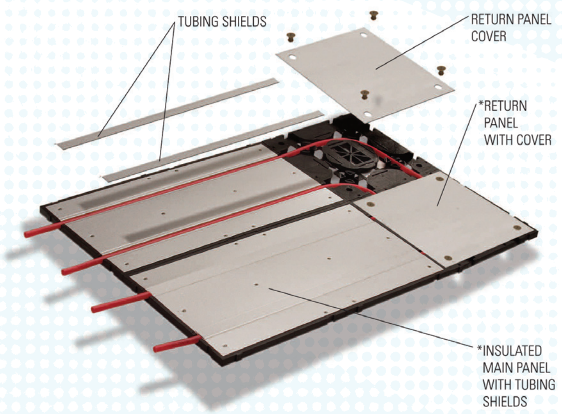


Using the Chart:
- Find the btu/sq.ft to the left
- Move horizontally to the right until the intersection with floor covering r-value
- Go down vertically and read the supply water temperature



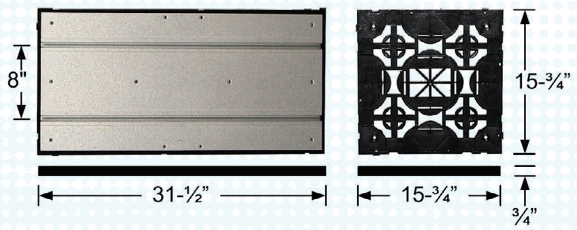
NOTE: Chart output requirements based on 68°F room setpoint.

CONSTRUCTION NOTE: R-value represents all layers installed on top of RetroPanel. Verify heat-loss and construction prior to installation. Performance may be greatly reduced for; subfloor installations with inadequate insulation below, and slab installations without insulation below, with highly conductive soil or high water table. This chart is to be used as a guide. Mr PEX does not take responsibility for inaccurate design or calculations.



Material Quick Estimate:

- » Floor area (sq.ft.) x 0.9 = Net Floor Area
- » Net Floor Area x 0.75 / 3.44 = Qty of Straight Panels (#6114001)
- » Net Floor Area x 0.25 / 1.72 = Qty of Return Panels (#6114002)



Note: The percent split between straight panels and return panels is for rough estimating only. For an accurate material quote, the project needs to have a design performed, and a drawing created.

Before installation of the RetroPanels, MrPEX® requires that an accurate heat-loss and system design is completed for verification of performance. For questions or help please contact your local rep or MrPEX®.

MrPEX® SYSTEMS

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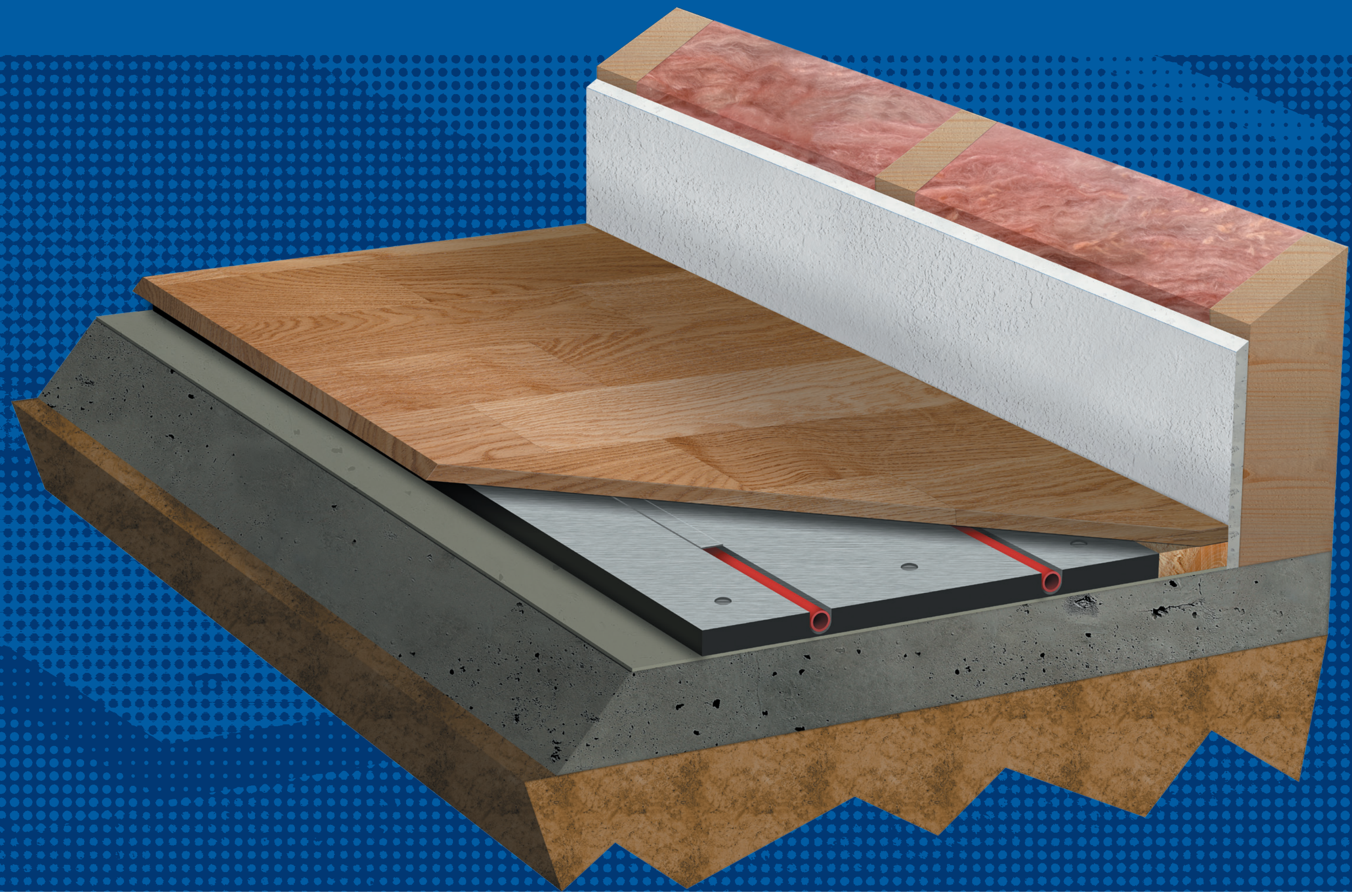
#L142

MrPEX® SYSTEMS

RetroPanel™

THE RADIANT HEATING SOLUTION
for New Construction & Renovations



MrPEX® RetroPanel™

...for new construction and renovations.

The RetroPanel system is unlike any radiant system on the market!

The panels snap together in minutes, saving significant labor costs. Basement and upper floor retrofits are easy because the panels are pre-insulated, as well as water-resistant. The use of 1/2" tubing allows for fewer loops and smaller manifolds. The tubing is protected by metal covers reducing the possibility of puncture and damage during and after installation of the floor covering.

The highly conductive metal surface maximizes system output and promotes an even temperature distribution across the entire floor surface. The panels are only 3/4" thick, minimizing construction issues common in over-pour installations.

RetroPanel panels easily snap together and are self-contained.

Heat transfer plates, insulation, and channels for the tubing are all built-in. Panels snap together, tubing is installed, and then metal cover plates are attached. IT'S DONE!

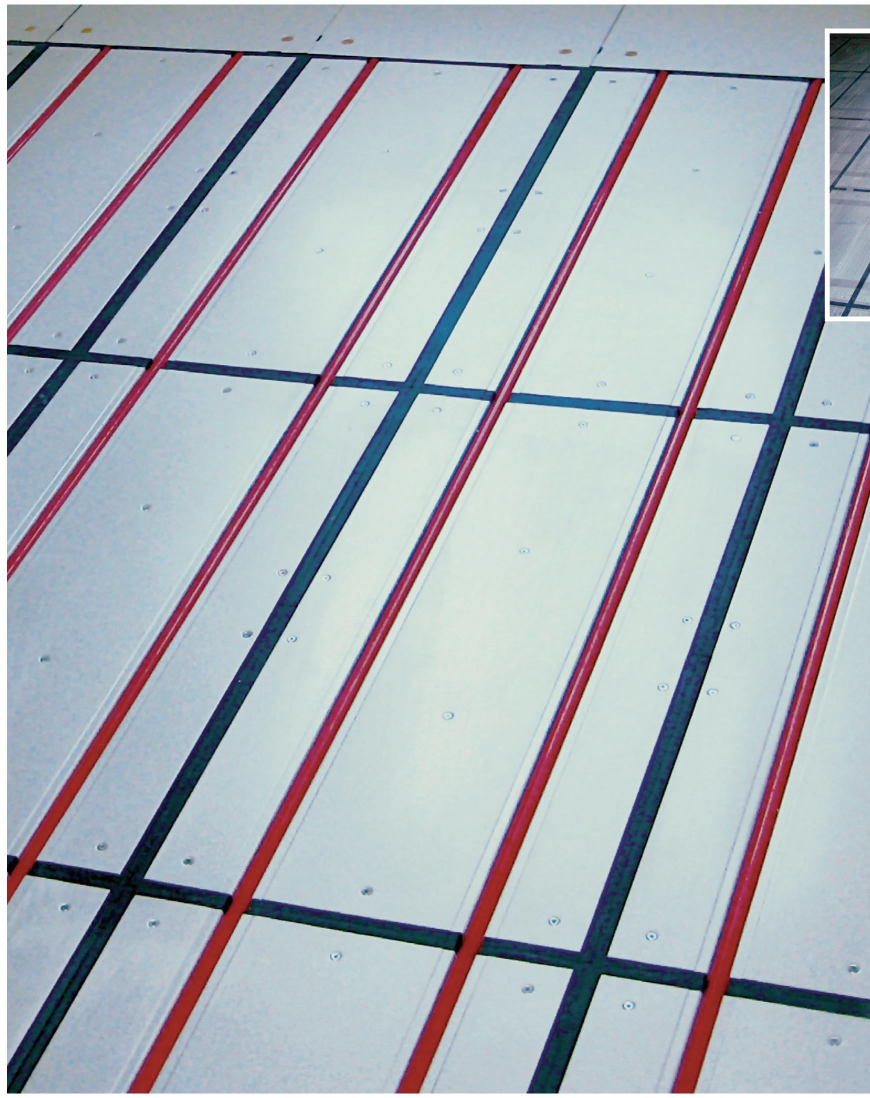
Installation is simple and easy because the panels are light weight, easy to handle and have a low profile at only 3/4 of an inch tall. No additional structural reinforcement is required and floor height issues are minimized which means "prep-work" is significantly reduced. They are made of moisture and mold resistant materials: Plastic, foam and galvanized steel. Cutting (if any) is limited to the returns at the end of each row, so RetroPanel can be installed much faster, saving labor and cost compared to other systems.

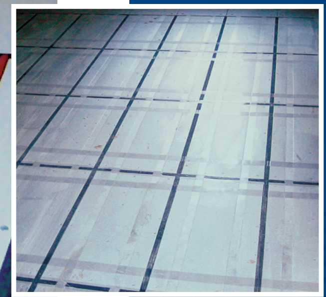
The tubing channels in RetroPanel are designed to readily accept 1/2" tubing by "walking it in", but tight enough to prevent the tubing from easily coming out. No silicone, filler or adhesive is required.

RetroPanel is designed to be used with 1/2" MrPEX® Barrier PEX Tubing.

RetroPanel is a high performance system but does not sacrifice efficiency.

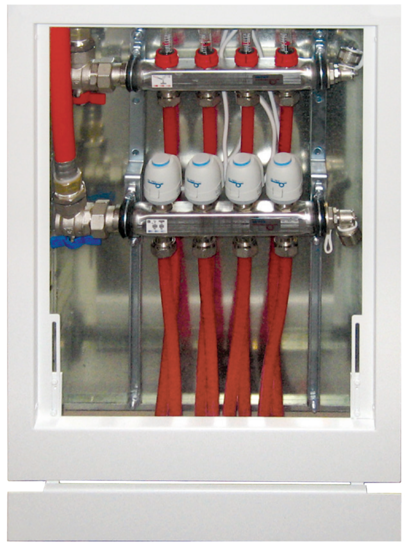
It uses the combination of metal on the surface, with high thermal conductivity and built-in insulation underneath, to maximize the heat output at low water temperatures. The metal surface also promotes an even temperature distribution across the floor, minimizing cold spots. The low thermal mass allows for a quick response to changing load requirements. RetroPanel is unmatched in its ability to optimize system efficiency.





RetroPanel installs almost anywhere.

It is easy to install on upper levels or in basements, and is well-suited for renovations or new construction. Carpet and floating floor systems can be directly installed over RetroPanel.



NOTE: Before installation of the RetroPanel panels, the radiant tubing or any part of the radiant system; MrPEX® highly recommends that a system design be completed for the project. The installing contractor should also thoroughly review the system design and the RetroPanel Installation Instructions before beginning installation.

Just a few of RetroPanel's benefits:

- **Snaps together:** labor saving
- **1/2" tubing:** longer loops, fewer circuits
- **Tubing is protected against damage**
- **Pre-insulated and low profile (3/4"):** great for retrofits
- **Highly conductive surface:** high heat output and even temperature distribution
- **Water-resistant:** great for basements
- **Easy to cut if necessary:** to fit tight spaces and around obstructions
- **Low thermal mass:** quick output response

MrPEX® SYSTEMS