



BlueRidge
Company™

RADIANT HEAT SYSTEMS

PEX Floor Panel System

Install Guide

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1. Tools Needed

- Tape Measure for measuring room dimensions, plywood ribs, and panel layout
- Chalk Line to mark straight layout lines on the plywood ribs
- Pencil or Marker for marking cuts and alignment points
- Circular Saw or Table Saw for cutting plywood ribs to size
- Tin Snips for trimming RHT Heat Transfer Plates as needed
- Hammer or Nail Gun for securing heat transfer plates to the plywood
- Nails or Screws for fastening plywood ribs and plates
- Drill for drilling or securing fasteners
- PEX Cutter for clean, square cuts of PEX tubing

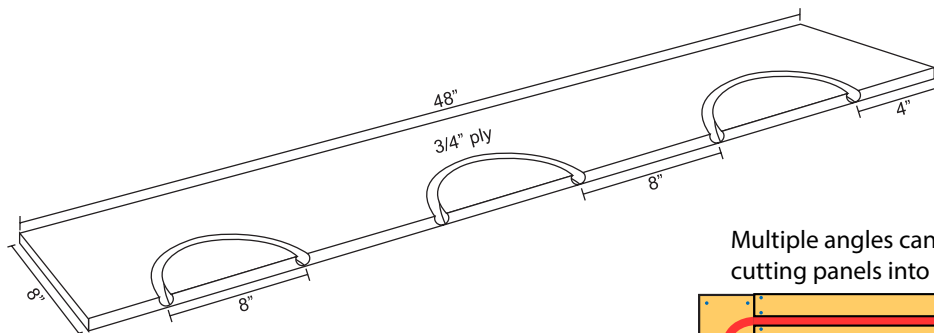
2. Lay out RHT Floor Panel System and Plywood Ribs

The first step in installing your RHT Floor Panel System is to lay out the floor panels and $\frac{3}{4}$ plywood ribs. These will hold the PEX tubing in place, so it is important that you take the necessary time to measure your room and figure out the angles carefully so that your RHT Floor Panel System works efficiently. You need to ensure that the layout allows for adequate coverage of the floor. Furthermore, you need to ensure that your RHT Floor Panel System and your plywood ribs are lined up properly to accommodate the PEX tubing. Once you've laid out every piece and are satisfied that the whole area to be heated is covered, you are ready to move on to the next step.

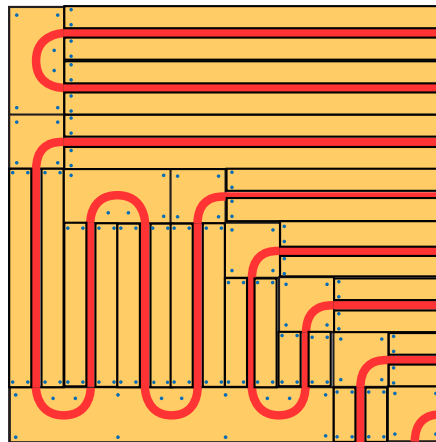


3. Secure Floor Panel Turns and Plywood Rips

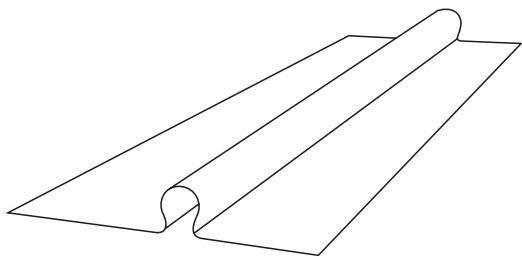
Next secure your floor panel turns and plywood rips using a light course of construction adhesive in addition to nailing, screwing, or stapling in the pattern shown below.



Multiple angles can be achieved by cutting panels into pieces:



NOTE: Blue dots represent recommended fastening pattern



4. Complete the lay out by adding the RHT Heat Transfer Plates

Now that your RHT Floor Panels and plywood rips are in place, you need to complete your RHT Floor Panel System foundation by installing the RHT Heat Transfer Plates. This should be fairly simple, as long as your RHT Floor Panels and plywood are lined up properly. All you need to do to complete this step is to fit the RHT Heat Transfer Plates in between each plywood strip, cutting them to size as necessary and leaving a 1/2 gap from one plate to the next. Once you've laid out all heat transfer plates and are satisfied that the whole area to be heated is covered, simply nail the plates in place and you are ready for the final step.



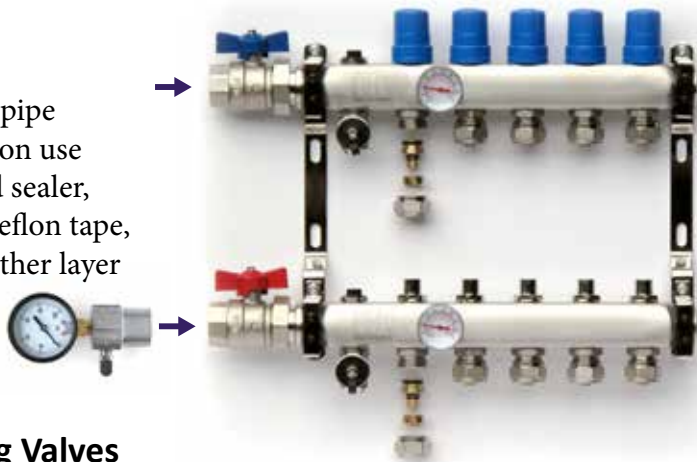
5. Install the Manifold & Prepare for Pressure Test

- Once all PEX is laid out, mount the manifold (examples shown below for mounting without a wall)
- Connect the PEX lines to the manifold adapters
- Slide the nut over the PEX
- Add the compression ring
- Push the PEX onto the barbed fitting
- Tighten the nut back onto the manifold using crescent wrench
- Attach the red and blue ball valves provided with the manifold

6. Prepare the Pressure Test Fitting

Screw the pressure test fitting into one of the manifold ball valves and close the other ball valve

For the tapered pipe thread connection use a layer of thread sealer, then a wrap of teflon tape, followed by another layer of thread sealer

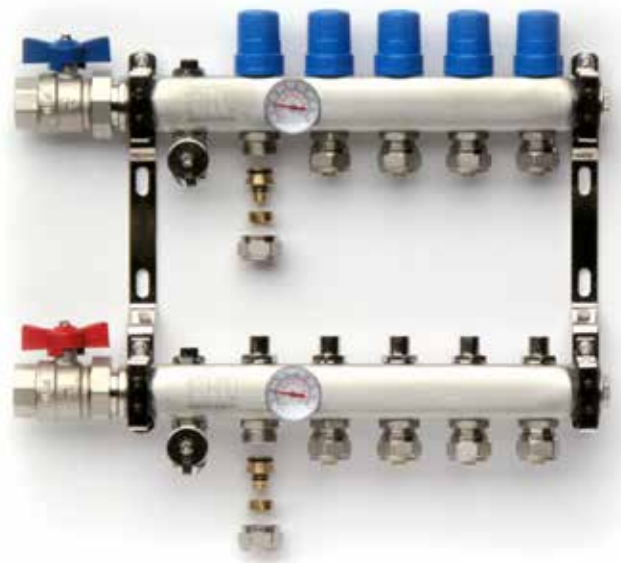


7. Open Balancing Valves

Ensure both the supply and return balancing valves on the manifold are fully open.

Supply Manifold

Turn blue valves by hand counterclockwise to open



8. Pressurize the System

- Connect the PEX circuits to the manifold using the supplied PEX adapters.
- Use an air compressor to pressurize the system to 50 PSI
- A pressure drop of up to 10 PSI can occur due to temperature changes
- If the pressure drops to zero, re-pressurize to 50 PSI and spray the manifold with soapy water to locate leaks