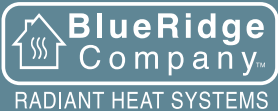


PEX Staple Up to Subfloor

Install Guide

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1. Tools

- PEX Cutter to cut your circuits.
- Pressure Test Fitting to check for leaks
- Air compressor for pressure-testing PEX
- Crescent wrench for tightening PEX adapter nut
- Drill and 1-3/8" drill bit for joist penetrations
- Ladder for accessing joist bays

2. Drilling Joists and Running Supply and Return Tubing

Drill the joists with a 1-3/8" drill bit for the supply and return. Be sure to follow any and all applicable local code requirements for acceptable drilling areas in joists. Carefully uncoil the tubing in long sections, avoiding kinks, then feed the tubing through joists as shown in fig. 1.

3. Installing Tubing and Heat Transfer Plates

Continue pulling the tubing into the farthest joist bay as shown in fig. 2, securing the tubing with RHT Heat Transfer Plates (as shown in fig. 6) as you go. Space plates out with 1" gap between plates. Use Sioux Chief Suspensulators to secure tubing wherever it penetrates a joist.

Figure 1

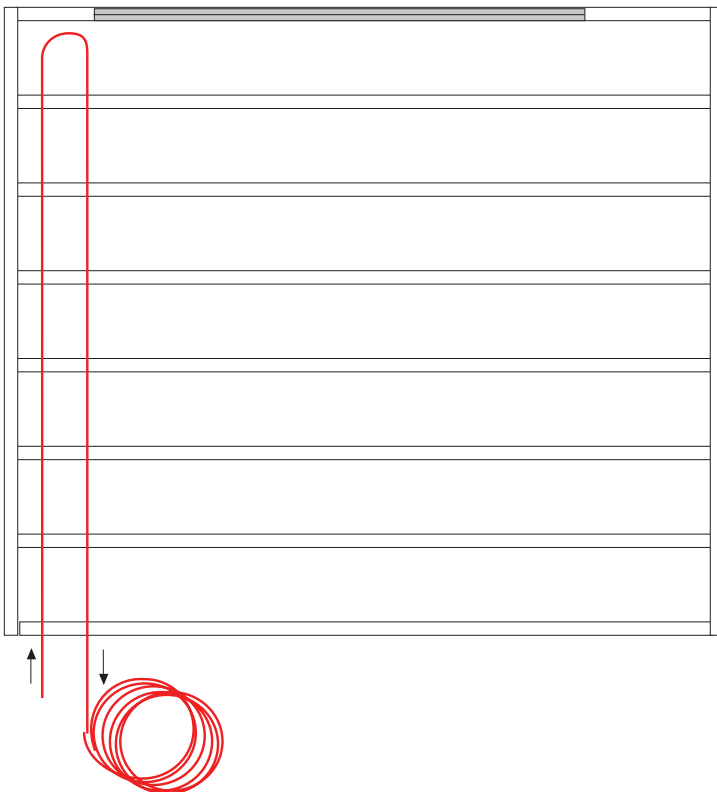
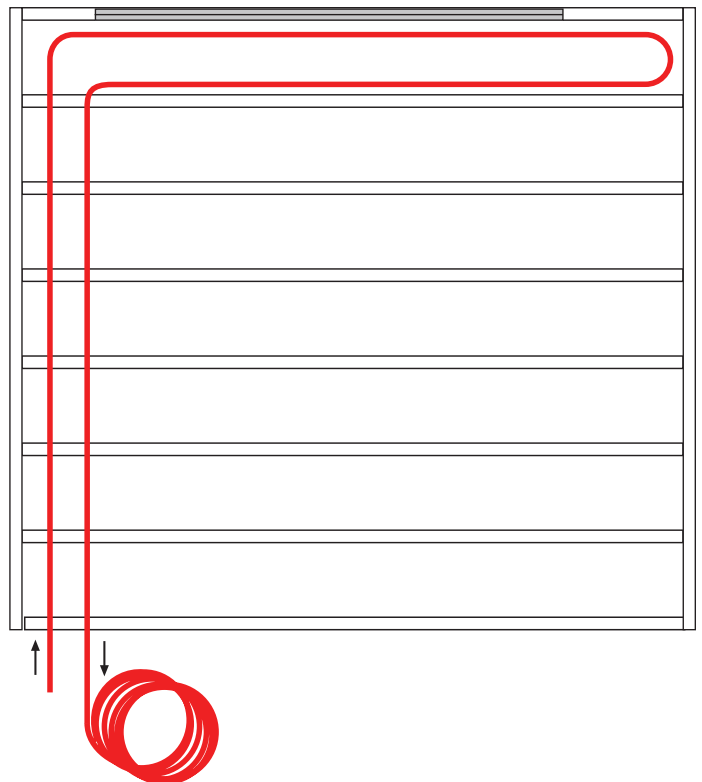


Figure 2



4. Routing Tubing Through Remaining Joists

Continue routing the tubing through the remaining joists by twisting a loop in the tubing and pulling it into each joist bay. Twisting the tubing in this way allows it to enter each bay and reach the far side smoothly, increasing the bend radius and reducing the risk of kinks for easier installation. In rooms with multiple circuits, additional supply and return lines will be necessary.

5. "Walking"

In staple-up installations it is important to attach the tubing securely to prevent drifting over time as the tubing expands and contracts. This phenomenon is known as "walking."

Figure 3

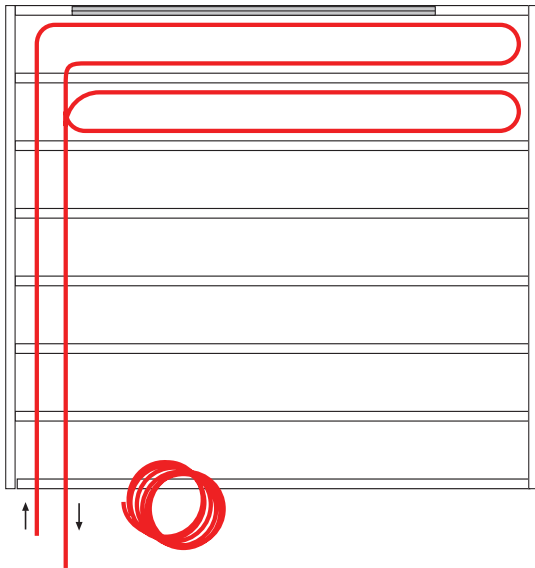


Figure 4

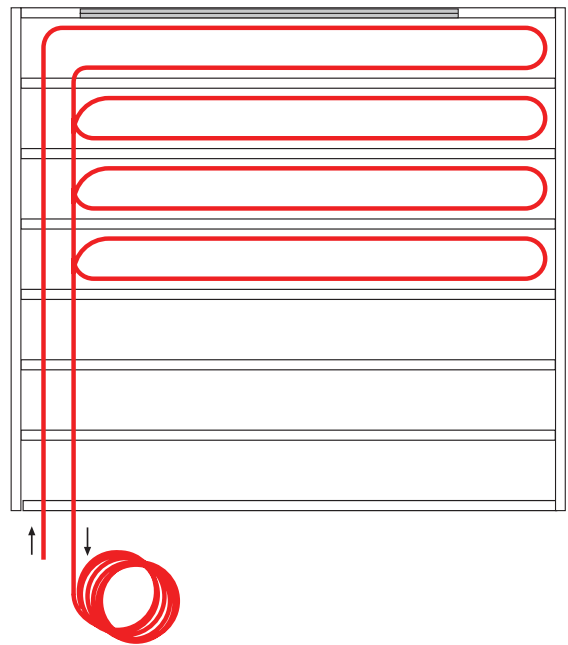


Figure 5

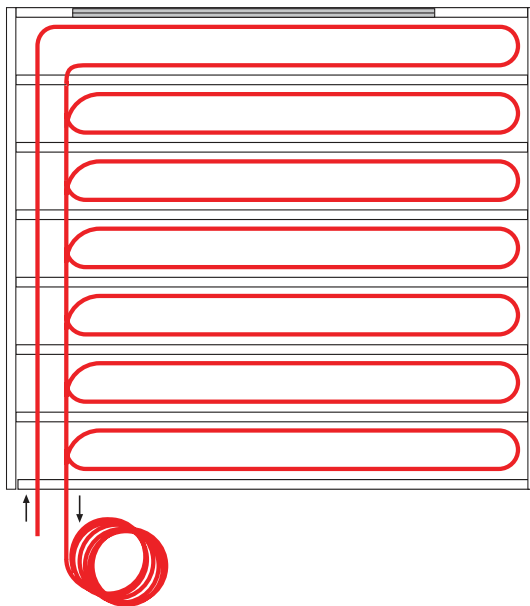
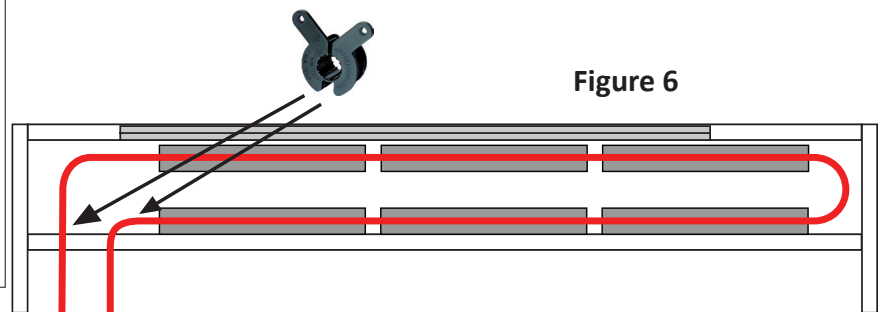


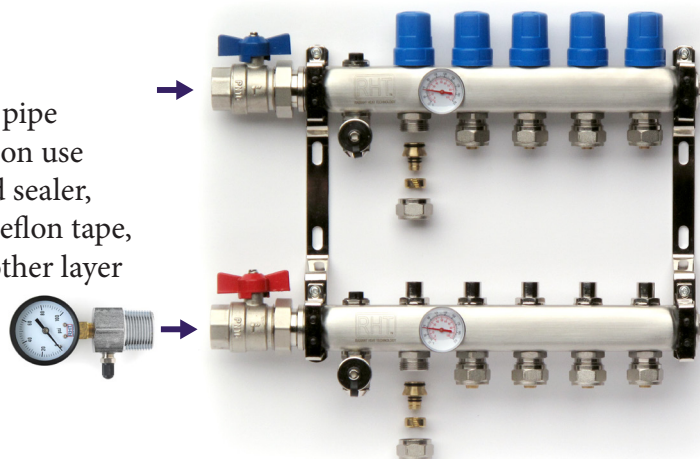
Figure 6



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

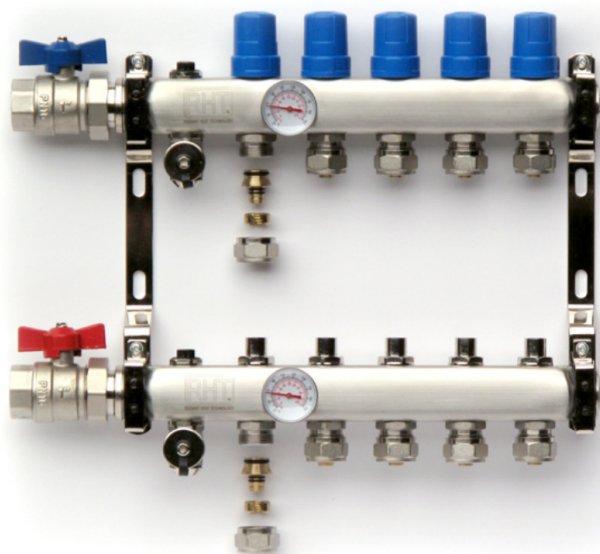


7. Open Balancing Valves

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

- 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