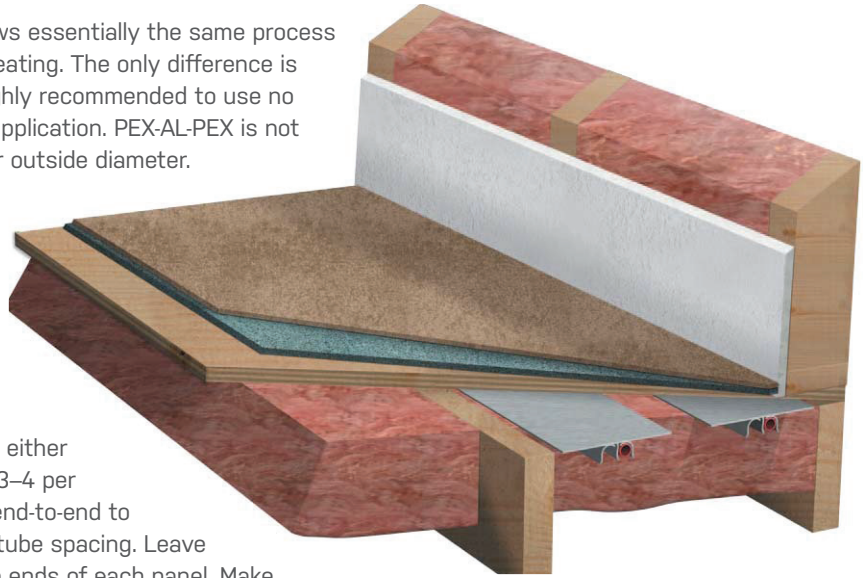


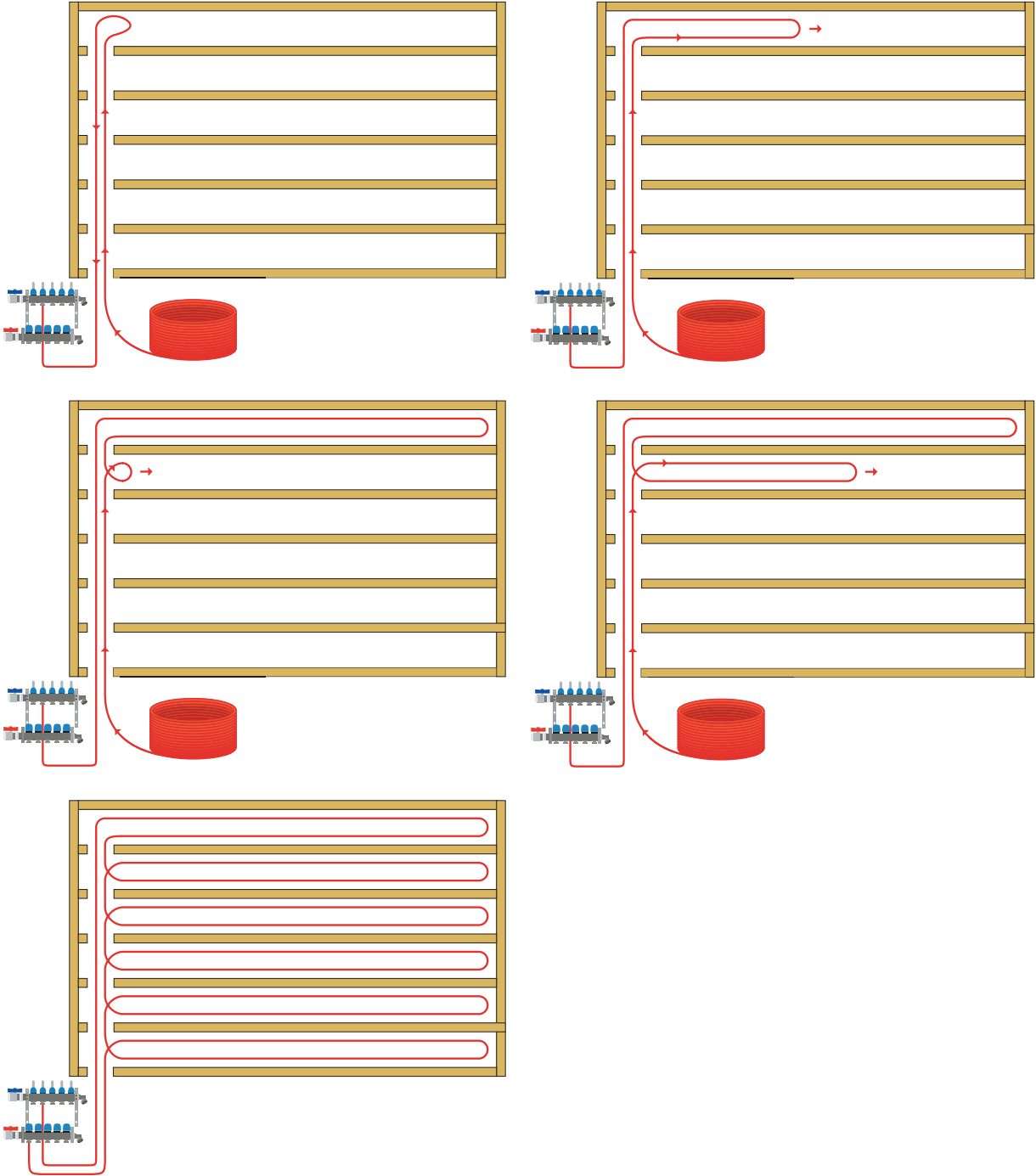
SUSPENDED FLOORS WITH ALUMINUM HEAT EMISSION PLATES BETWEEN JOISTS BELOW

Tubing installed in the joist cavity follows essentially the same process for Duo-Track, Omega Plates or Joist Heating. The only difference is the way the tubing is attached. It is highly recommended to use no larger than 1/2" MrPEX® tubing for this application. PEX-AL-PEX is not used in this application due to its larger outside diameter.

- › Review design to determine how tubing should be routed in the joist cavity. Drill suitable holes through the joist (follow local codes to maintain structural integrity).
- › For Duo-Track installation only, using either screws or other suitable fasteners (3–4 per side), start by attaching the plates end-to-end to the bottom of the subfloor at an 8" tube spacing. Leave about a 1/4"–1/2" space between the ends of each panel. Make sure tubing groove is free from sharp edges and burrs. Use a dowel or piece of pipe in the groove to line up the plates.
- › Place the uncoiler in an out of the way area, still close enough to easily feed the tubing to the area you are working on. Place the tubing coil on uncoiler and remove tape/straps.
- › Pull the loose end of the coil and feed the tubing through the holes in the joists from the area closest to the manifold to the joist cavity for the loop farthest away. Make a large loop with tubing and start threading the loose end back through the same holes over to the manifold leaving the large loop of tubing at the far joist cavity. You have to continually feed the tubing from the uncoiler as you thread the tubing back. Record the footage mark on tubing. Attach a bend support to the tubing as necessary. Cut the end of the tubing with a suitable tubing cutter making sure the end is square and clean. Connect to the supply of the first loop on the manifold using the correct fitting assemblies as outlined in "Connecting the Loops to the Manifold" beginning on page 46.
- › At the farthest joist cavity, start expanding the large loop by pulling on the end that is fed from the uncoiler, at the same time, carefully twist it 180 degrees to make a pig-tail. Extend the loop end all the way to end of the joist cavity. Temporarily attach the loop end to hold it in place.
 - » For Joist Heating, starting from the loop end, hang the tubing in the joist cavity using suitable clips or hangers. Leave about a 1–2" air gap between the tubing and the bottom of the subfloor. Work your way all way down to the beginning of the joist cavity. Arrange tubing, making sure everything looks professional and neat. Complete next loop cavity following steps above.
- › Once back at the manifold, record the footage mark on tubing. Attach another bend support to the tube as necessary. Cut the end of the tubing with a suitable tubing cutter making sure the end is square and clean. Connect to the return of the first loop on the manifold using the correct fitting assemblies as outlined in "Connecting the Loops to the Manifold" beginning on page 49.
- › Repeat the same process remaining loops.



INSTALLING MrPEX® TUBING IN JOIST CAVITY

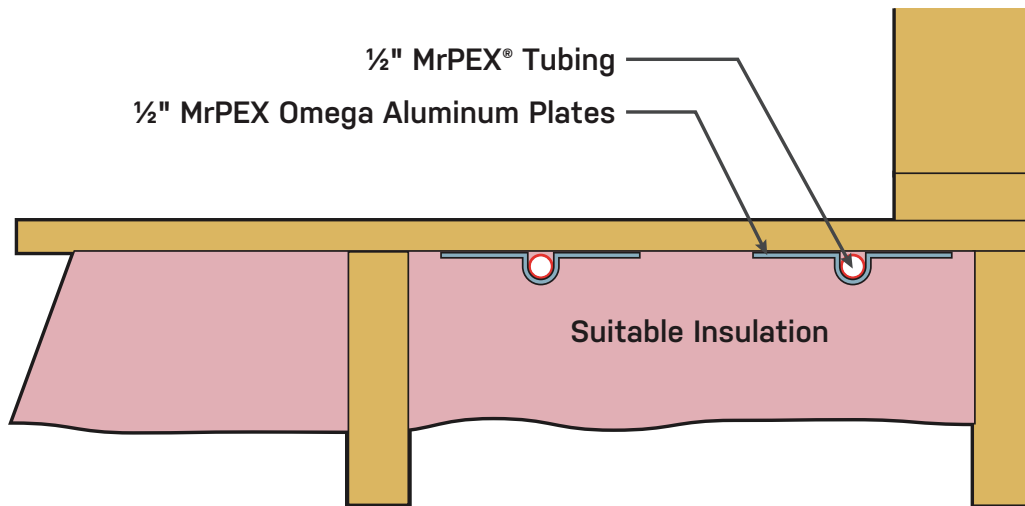


BELOW FLOORING (cont.)

NOTE: Use MrPEX® Design Software to establish heat loss for the structure, and to calculate output, surface temperature, water temperature and tubing/manifold pressure drops.

STRUCTURAL NOTE: Project Engineer, Project Architect or System Designer need to verify and approve the structural impact of the radiant system on the building prior to installation.

- › For Omega Plates, starting from the loop end, put the first Omega plate up against the subfloor at the same time snapping the tubing into the groove. Attach the plate to the subfloor using suitable fasteners such as 5/8" staples (2–3 per side). Leave about a 1/4"–1/2" space between the ends of the panels. Work your way all way down to the beginning of the joist cavity. Arrange tubing, making sure everything looks professional and neat. Make sure tubing groove is free from sharp edges and burrs. Complete next loop cavity following steps above.



DUO-TRACK

- › For Duo-Track (installed before running tubing), start from loop the end and snap tubing into the grooves using a rubber mallet or palm-nailer. Work your way all way down to the beginning of the joist cavity. Arrange tubing, making sure everything looks professional and neat. Complete next loop cavity following steps above.

