

PEX Clamp Installation Speed

The PEX plumbing system is simplistic beauty. Cut the tube to length, loose assemble with clamp and fitting, crimp the clamp, and done! What a huge time savings when compared to prepping and completing solder joints. Also, no smelly, messy, toxic or flammable cement.

When you crimp a PEX connection you should be aware of how fast or rather “slowly” the Ear is crimped. In warm weather (above 40F) the crimp should take about 2 seconds to complete. In cold weather (under 40F) you should slow down to about 3 seconds. In either case, this relatively slow speed allows time for the sealing beads of the fittings to embed deeply into the stiff PEX tubing. Slowing down the crimp-time will result in tighter connections with less stress in the clamps.

Have you ever slapped the surface of water with your hand and realized that it has a hard feel to it and the faster you go the harder it feels? This same viscous flow property is happening to the PEX tubing when it is being installed. If you crimp slowly, the tube material will flow around the sealing-beads and down into the grooves of the fitting. This will be a good tight and leak free connection with tolerable clamp stress levels.

In comparison, crimping a clamp very quickly does not allow the tubing any time to flow and it reacts like a solid (immovable) object. There is minimal tube flow around the seal-beads, it does not flow down into the grooves, and in an instant of time it appears to the clamp that the tube has an oversize OD. This can and does lead to failed clamps at installation.

Murray only approves of manually operated crimp tools such as those shown in our catalog. We have tested several of the pneumatic tools available today and their actions are all too fast. Otherwise good clamps were experiencing a 50% failure rate at installation, another 25% were structurally damaged but still intact, and only 25% installed properly.

In closing remember, go slow and let the tubing flow.