## ASTM F1807 Crimp<sup>™</sup>

American Society for Testing and Materials (ASTM) Standard Specification for Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing.

- F1807 fittings can be made from various listed materials. See ASTM standard for acceptable brass alloys. Assure your fitting is made from a listed material.
- F1807 systems use a copper crimp ring to compress around a fitting.
- Connection is made by positioning a crimp ring over a fitting's sealing barbs and compressing it into position.
- Fittings are reusable if barbs remain undamaged.

## F1807 Installation



**1.** Cut tube at 90-degrees. Do not crush OD of tubing with cutters. Hint: Slightly rotate cutter during blade engagement.



**2.** Install PEX Crimp Ring onto OD of tubing.



**3.** Install PEX fitting into tube end.



**4.** Position ring over sealing barbs of the fitting. The ring should be positioned approximately 1/8" to 1/4" from the end of the tube.



**5.** Compress tool perpendicular to tubing run. Compress only once. Remove defective connections. Use a gauge to assure a proper joint. Test completed joint.

## **F1807 Application Problems**



Tube not cut squarely – ring not compressing tube for a secure seal.



Fitting not inserted completely into tube end.



Ring not placed over sealing barbs of fitting. Ring too far forward or too far back & not fully over sealing barbs.



Crimp joint made with an improperly calibrated tool - not providing enough compression to joint.

Ring compressed multiple times possibly developing a leak path.



Crimp Tool did not engage the Crimp Ring over the entire surface of the ring.