Summary of Substantive Changes between the 2008 and the 2015 editions of ASTM F2098 “Stainless Steel Clamps for Securing SDR9 Cross-linked Polyethylene (PEX) Tubing to Metal Insert and Plastic Insert Fittings”

Presented to the IAPMO Standards Review Committee on March 7, 2016

General: The change to this standard will likely have an impact on currently listed products. The substantive changes are:

- The scope of the standard was expanded to include an additional size of insert fitting (i.e. 5/8 in) (see Sections 1 and 4, and Tables 1 and 2)
- Added the additional marking requirement to include a lot code or date of manufacture, and to include additional text defining the applicable use of the insert fittings with ASTM F876 PEX Tubing, on the fittings package (see Section 11)

Section 1, Scope: Expanded the sizes covered by the scope from four to five and clarified that plastic and metallic insert fittings are covered as follows:

1.1 This specification covers stainless steel clamps for use with four five sizes of insert fittings that comply with F1807 or F2159, and cross-linked polyethylene (PEX) plastic tubing that complies with F876 or F877. These clamps are intended as an alternative to the copper-alloy crimp-rings of Specifications F1807 or F2159 for use in 100 psi (689.5 kPa) cold- and hot-water distribution systems operating at temperatures up to and including 180°F (82°C)...

Section 4, Classification: Increased the sizes covered from four to five as follows:

4.1 This specification covers one class of stainless steel clamps in four five sizes suitable for securing PEX tubing that meets the requirements of Specifications F876 or F877 to insert fittings that meet the requirements of Specifications F1807 and F2159.

Section 8, Workmanship, Finish, and Appearance: Added a manufacturer verification requirement for PEX Systems components as follows:

8.1.1 The manufacturer shall verify that any residual manufacturing substances on clamps are compatible with PEX System components such as PEX tube or insert fittings.

Section 9, Assembly: Added information regarding clamping tools as follows:

9.1.2 Clamping Tools—Clamps and ratcheting hand tools from different manufacturers have similar appearances. Clamps shall be installed using the tools and calibration methods recommended by the clamp manufacturer.
Section 11, Product Marking: Added the additional marking requirement to include a lot code or date of manufacture, and to include additional text defining the applicable use of the insert fittings with ASTM F876 PEX Tubing, on the fittings package as follows:

11.2.2 Marking on packaging shall include manufacturer’s name, date of manufacture or manufacturing lot code, or both; clamp size, and “ASTM F2098 for use with ASTM F1807 and F2159 insert fittings and ASTM F876 PEX Tubing.”

Figure 1, Design and Layout: Revised to include a reference drawing for after crimping on PEX tube.

Figure 2, Critical Dimensions: Moved a table that was previously included with Figure 2 to Tables 1 and 2.

Table 1, Design and Layout Dimensions: Previously included in a table under Figure 2, this table was expanded to include a column for the C Dimension indicated in Figure 1 reference drawing for after crimping on PEX tube and a row for the dimensions of an additional size (5/8 in).

Table 2, Critical Dimensions: Previously included in Figure 2 this table was expanded to include a row for the dimensions of an additional size (5/8 in).