Summary of Substantive Changes  
between the 2010 and the 2015 editions of  
ASTM F2389 “Pressure-rated Polypropylene (PP) Piping Systems”  

Presented to the IAPMO Standards Review Committee on September 14, 2015  

General: The changes to this standard may have an impact on currently listed products. The changes are:  
- The hydrostatic test requirements for pipe and fittings were clarified and new test methods and requirements for valves, panels and other appurtenances were specified (see Section 9.1)  
- A new table was added for the hydrostatic test conditions for panels and appurtenances (see Table 12)  

Section 2, Referenced Documents: Added the new referenced standard ISO 9393–2 as follows:  
2.2 International Organization for Standardization (ISO) Standards:  
ISO 9080 Plastics Piping and Ducting Systems—Determination of the Long-Term Hydrostatic Strength of Thermoplastics Materials in Pipe Form by Extrapolation  
ISO 9393–2 Thermoplastics valves for industrial applications - Pressure test methods and requirements — Part 2: Test conditions and basic requirements  

Section 9.1, Hydrostatic Tests: The hydrostatic test requirements for pipe and fittings were clarified and new test methods and requirements for valves, panels and other appurtenances were specified as follows:  
9.1 Hydrostatic Tests—Test pipe and fitting assemblies in accordance with Test Method D1598, at the hoop stresses and temperatures given in Table 11. An assembly shall consist of at least 4 pipe specimens and 6 fitting joints. For testing valves, the assembly shall include at least 3 valves in the shut-off position (seat test) and 3 valves in the open or partially open position (shell test). Assemblies used in testing of manifolds shall include a minimum of 6 of each type of manifold connection.  
9.1.1 Valves shall be tested in accordance with, and comply with the requirements of each of the following tests of ISO 9393-2.  
9.1.1.1 Shell Test,  
9.1.1.2 Long-term Behavior Test on Complete Valve, and  
9.1.1.3 Seat and Packing Tests.  
9.1.2 Hydrostatic test of panels and other appurtenances—Polypropylene radiant panels and other appurtenances shall be tested in accordance with Test Method D1598 at the conditions specified in Table 12. A minimum of three representative samples shall be tested.
The following table was added:

*Table 12, Hydrostatic Test Conditions for Panels and Appurtenances*