PVC SEWER-PIPE STANDARDS ASTM D3034 AND F679 COMBINED

In 2024, two PVC sewer-pipe standards (ASTM D3034 and ASTM F679) were combined into one under the D3034 designation, and F679 was withdrawn. Since PVC is the most widely used material for sewer pipes in North America, it is important for specifiers to understand the changes made to the ASTM standards.

ASTM D3034 has specified the requirements for materials, manufacturing, and testing of PVC sewer pipe and fittings for more than fifty years since its original publication in 1972. The 2024 version provides significant updates, most notably the inclusion of larger pipe sizes from 18- to 60-inch diameter. This change integrates all solid-wall PVC sewer-pipe specifications into a single document, mirroring similar consolidations in other standards.

HISTORY OF ASTM F679

The ASTM F679 standard has played a crucial role in defining the requirements for large-diameter solid-wall PVC sewer pipes. Over the years, it evolved to include larger sizes and additional pipe stiffness values:

- Sizes: In the mid-1990s, the standard was updated to include diameters up to 48-inch. In 2013, sizes up to 60-inch were added.
- Stiffness values: In 2003, a pipe stiffness value of 115 psi was added and in 2008, a 75-psi stiffness level was introduced.

NEW ASTM D3034-24 STANDARD INCLUDES DUAL CLASSIFICATION SYSTEM

The updated ASTM D3034-24 standard specifies that the newly included larger pipe sizes, ranging from 18 inches to 60 inches, will be referred to by their pipe stiffness (PS) numbers (e.g., PS 46 or PS 115) as they were in ASTM F679. This classification ensures that the larger pipes are easily identified and distinguished based on their stiffness characteristics, which are crucial for their performance in sewer applications.

Meanwhile, the smaller pipe sizes will continue to be referred to by their dimension ratio (DR) numbers (e.g., DR 35 or DR 26). This dual classification system maintains continuity and clarity within the standard, allowing for precise specification and usage of PVC sewer pipes across different size ranges.

UPDATES TO UTILITY PIPE MATERIAL SPECIFICATIONS REQUIRED

The correct reference for PVC sewer pipe is now ASTM D3034 for 3- through 60-inch sizes. All utility master and project specifications referring to ASTM F679 for 18-inch and larger PVC sewer pipe should be updated to reference D3034 instead of F679.

References: ASTM D3034 — several editions "Standard Specification for Type PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings"; ASTM F679 — several editions "Standard Specification for Polyvinyl Chloride (PVC) Large-Diameter Plastic Gravity Sewer Pipe and Fittings"