



## Pipe & Hangers Technical Industry Standards & Test Methods

Spears® products are manufactured in strict compliance with applicable industry standards and specifications to ensure strength, durability and safety. Although not inclusive, the following list of internationally recognized standards, specifications, test methods and practices relate to PVC and CPVC thermoplastic piping products and related components.

### ASTM STANDARD SPECIFICATIONS

ASTM D 1784	Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds
ASTM D 1785	Standard Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe- Schedules 40- 80 and 120
ASTM D 6263	Standard Specification for Extruded Bars Made From Rigid Poly (Vinyl Chloride) (PVC) and Chlorinated Poly (Vinyl Chloride) (CPVC)
ASTM D 2464	Standard Specification for Threaded Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings- Schedule 80
ASTM D 2467	Standard Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings- Schedule 80
ASTM D 2241	Standard Specification for Poly (Vinyl Chloride) (PVC) Pressure Rated Pipe (SDR Series)
ASTM F 441	Standard Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe- Schedules 40 and 80
ASTM F 442	Standard Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe (SDR-PR)
ASTM D 2672	Standard Specification for Joints for IPS PVC Pipe Using Solvent Cement
ASTM D 2846	Standard Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Hot- and Cold-Water Distribution Systems
ASTM D 2466	Standard Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings- Schedule 40
ASTM D 3139	Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals
ASTM D 2665	Standard Specification for Poly (Vinyl Chloride) (PVC) Plastic Drain-Waste- and Vent Pipe and Fittings
ASTM F 437	Standard Specification for Threaded Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings- Schedule 80
ASTM F 438	Standard Specification for Socket-Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings- Schedule 40
ASTM F 439	Standard Specification for Socket-Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings- Schedule 80
ASTM F 477	Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe
ASTM F 480	Standard Specification for Thermoplastic Well Casing Pipe and Couplings Made in Standard Dimension Ratios (SDR)- Schedule 40 and Schedule 80
ASTM F 493	Standard Specification for Solvent Cements for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe and Fittings
ASTM F 656	Standard Specification for Primers for Use in Solvent Cement Joints of Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings
ASTM F 913	Standard Specification for Thermoplastic Elastomeric Seals (Gaskets) for Joining Plastic Pipe
ASTM D 1866	Standard Specification for Poly (Vinyl Chloride) (PVC) Plastic Schedule 40 Drainage and DWV Fabricated Fittings

### ASTM STANDARD TEST METHODS

ASTM D 1598	Standard Test Method for Time-to-Failure of Plastic Pipe Under Constant Internal Pressure
ASTM D 1599	Standard Test Method for Resistance to Short-Time Hydraulic Pressure of Plastic Pipe & Fittings
ASTM D 2837	Standard Test Method for Obtaining Hydrostatic Design Basis for Thermoplastic Pipe Materials
ASTM D 2412	Standard Test Method for Determination of External Loading Characteristics of Plastic Pipe by Parallel-Plate Loading
ASTM D 2444	Standard Test Method for Determination of the Impact Resistance of Thermoplastic Pipe and Fittings by Means of a Tup (Falling Weight)
ASTM D 2564	Standard Specification for Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Piping Systems
ASTM D 2152	Standard Test Method for Adequacy of Fusion by Acetone Immersion
ASTM D 2122	Standard Test Method for Determining Dimensions of Thermoplastic Pipe & Fittings
ASTM F 610	Standard Test Method for Evaluating the Quality of Molded Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings by the Heat Reversion Technique

### ASTM STANDARD PRACTICES

ASTM D 2855	Standard Practice for Making Solvent-Cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings
ASTM D 2774	Standard Practice for Underground Installation of Thermoplastic Pressure Piping
ASTM D 2321	Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications
ASTM F 402	Standard Practice for Safe Handling of Solvent Cements- Primers- and Cleaners Used for Joining Thermoplastics Pipe and Fittings
ASTM F 690	Standard Practice for Underground Installation of Thermoplastic Pressure Piping Irrigation System
ASTM F 1057	Standard Practice for Evaluating the Quality of Extruded Poly (Vinyl Chloride) (PVC) Pipe by the Heat Reversion Technique
ASTM F 645	Standard Guide for Selection- Design- and Installation of Thermoplastic Water Pressure Systems

### CSA STANDARD

CSA B137.3-99	Rigid Polyvinyl Chloride (PVC) Pipe for Pressure Applications
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### FIRE PERFORMANCE

ULC-S102.2-M88	Standard Method of Test for Surface Burning Characteristics of Flooring- Floor Covering- and Miscellaneous Materials and Assemblies
UL 723	Test for Surface Burning Characteristics of Building Materials
UL1821	Thermoplastic Sprinkler Pipe and Fittings for Fire Protection Service
UL 1887	Standard for Safety for Fire Test of Plastic Sprinkler Pipe for Flame and Smoke Characteristics
UL 94	Test for Flammability of Plastic Materials for Parts in Devices and Appliances
FM1635	Plastic Pipe & Fittings for Automatic Sprinkler Systems
FM4910	Clean Room Materials Flammability Test Protocol
ASTM E 84	Standard Test Method for Surface Burning Characteristics of Building Materials
ASTM D 635	Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Manufacturing in a Horizontal Position
ASTM E 162	Standard Test Method for Surface Flammability of Materials Using a Radiant Heat Energy Source
ASTM D 2863	Standard Test Method for Measuring the Minimum Oxygen Concentration to Support Candle-Like Combustion of Manufacturing (Oxygen Index)

### TOXICOLOGY

NSF <sub>i</sub> Standard 61	Drinking Water System Components - Health Effects
NSF <sub>i</sub> Standard 14	Manufacturing Piping System Components and Related Materials
United States FDA Code of Federal Regulations	Title 21