Designation: F679 – 16

Standard Specification for Poly(Vinyl Chloride) (PVC) Large-Diameter Plastic Gravity Sewer Pipe and Fittings[1]

This standard is issued under the fixed designation F679; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope*

1.1 This specification covers requirements and test methods for materials, dimensions, workmanship, flattening resistance, impact resistance, pipe stiffness, extrusion quality, joining system, and a form of marking for large diameters, 18 to 60 in. poly(vinyl chloride) (PVC) sewer pipe and fittings with integral bell elastomeric seal joints or solvent cemented sockets.

1.2 The requirements of this specification are intended to provide pipe and fittings suitable for nonpressure drainage of sewage and surface water. Pipe and fittings produced to this specification should be installed in accordance with Practice D2321.

NOTE 1—Industrial waste disposal lines should be installed only with the specific approval of the governing code authority since temperatures in excess of 140°F (60°C) and chemicals not commonly found in drains and sewers may be encountered.

1.3 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.4 The following precautionary caveat pertains only to the test method portion, Section 8, of this specification: *This standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability or regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

D618 Practice for Conditioning Plastics for Testing

D1600 Terminology for Abbreviated Terms Relating to Plastics

D1784 Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds

D2122 Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings

D2152 Test Method for Adequacy of Fusion of Extruded Poly(Vinyl Chloride) (PVC) Pipe and Molded Fittings by Acetone Immersion

D2321 Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications

D2412 Test Method for Determination of External Loading Characteristics of Plastic Pipe by Parallel-Plate Loading

D2444 Test Method for Determination of the Impact Resistance of Thermoplastic Pipe and Fittings by Means of a Tup (Falling Weight)

D2564 Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems

D2855 Practice for the Two-Step (Primer and Solvent Cement) Method of Joining Poly (Vinyl Chloride) (PVC) or Chlorinated Poly (Vinyl Chloride) (CPVC) Pipe and Piping Components with Tapered Sockets

D3212 Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals

F402 Practice for Safe Handling of Solvent Cements, Primers, and Cleaners Used for Joining Thermoplastic Pipe and Fittings

F412 Terminology Relating to Plastic Piping Systems

F477 Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe

2.2 *Federal Standard:*

Fed. Std. No. 123 Marking for Shipment (Civil Agencies)[3]

2.3 *Military Standard:*

MIL-STD-129 Marking for Shipment and Storage[3]

3. Terminology

3.1 *Definitions:*

3.1.1 *General*—Definitions used in the specification are in accordance with Terminology F412, unless otherwise indicated. The abbreviation for poly(vinyl chloride) pipe is PVC, in accordance with Terminology D1600.

[1] This specification is under the jurisdiction of ASTM Committee F17 on Plastic Piping Systems and is the direct responsibility of Subcommittee F17.62 on Sewer.

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[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

[3] Available from DLA Document Services, Building 4/D, 700 Robbins Ave., Philadelphia, PA 19111-5094, http://quicksearch.dla.mil.

***A Summary of Changes section appears at the end of this standard**

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TABLE 1 Pipe Dimensions and Minimum Pipe Stiffness

Nominal Pipe Size	Average Outside Diameter		Tolerance on Average Outside Diameter		Min Wall Thickness		Min Pipe Stiffness	
in.	in.	(mm)	in.	(mm)	in.	(mm)	psi	kPa
18	18.701	(475)	±0.028	(±0.71)	0.499	(12.7)	46	(320)
21	22.047	(560)	±0.033	(±0.84)	0.588	(14.9)	46	(320)
24	24.803	(630)	±0.037	(±0.94)	0.661	(15.5)	46	(320)
27	27.953	(710)	±0.042	(±1.07)	0.745	(18.9)	46	(320)
30 CIOD	32.000	(813)	±0.040	(±1.02)	0.853	(21.7)	46	(320)
36 CIOD	38.300	(973)	±0.050	(±1.27)	1.021	(25.9)	46	(320)
42 CIOD	44.500	(1130)	±0.060	(±1.52)	1.187	(30.1)	46	(320)
48 CIOD	50.800	(1290)	±0.075	(±1.90)	1.355	(34.4)	46	(320)
54 CIOD	57.560	(1462)	±0.085	(±2.15)	1.535	(39.0)	46	(320)
60 CIOD	61.610	(1565)	±0.090	(±2.30)	1.643	(41.7)	46	(320)
18	18.701	(475)	±0.028	(±0.71)	0.584	(14.8)	75	(517)
21	22.047	(560)	±0.033	(±0.84)	0.689	(17.5)	75	(517)
24	24.803	(630)	±0.037	(±0.94)	0.775	(19.7)	75	(517)
27	27.953	(710)	±0.042	(±1.07)	0.874	(22.2)	75	(517)
30 CIOD	32.000	(813)	±0.040	(±1.02)	1.000	(25.4)	75	(517)
36 CIOD	38.300	(973)	±0.050	(±1.27)	1.197	(30.4)	75	(517)
42 CIOD	44.500	(1130)	±0.060	(±1.52)	1.391	(35.3)	75	(517)
48 CIOD	50.800	(1290)	±0.075	(±1.90)	1.588	(40.3)	75	(517)
54 CIOD	57.560	(1462)	±0.085	(±2.15)	1.799	(45.7)	75	(517)
60 CIOD	61.610	(1565)	±0.090	(±2.30)	1.926	(48.9)	75	(517)
18	18.701	(475)	±0.028	(±0.71)	0.671	(17.0)	115	(790)
21	22.047	(560)	±0.033	(±0.84)	0.791	(20.1)	115	(790)
24	24.803	(630)	±0.037	(±0.94)	0.889	(22.6)	115	(790)
27	27.953	(710)	±0.042	(±1.07)	1.002	(25.5)	115	(790)
30 CIOD	32.000	(813)	±0.040	(±1.02)	1.148	(29.1)	115	(790)
36 CIOD	38.300	(973)	±0.050	(±1.27)	1.373	(34.1)	115	(790)
42 CIOD	44.500	(1130)	±0.060	(±1.52)	1.596	(40.5)	115	(790)
48 CIOD	50.800	(1290)	±0.075	(±1.90)	1.822	(46.3)	115	(790)
54 CIOD	57.560	(1462)	±0.085	(±2.15)	2.064	(52.4)	115	(790)
60 CIOD	61.610	(1565)	±0.090	(±2.30)	2.210	(56.1)	115	(790)

4. Materials

4.1 *Basic Materials*—The pipe shall be made of PVC plastic having a minimum cell classification of 12364 or 12454 as defined in Specification D1784. Homopolymer PVC compounds must equal or exceed the requirements of the above listed minimum cell classification number.

4.2 *Rework Material*—Clean rework material generated from the manufacturer's own pipe or fittings production may be used by the same manufacturer provided that the rework material meets the requirements of 4.1 and that the pipe or fittings produced meet all the requirements of this specification.

4.3 *Gaskets*—Rubber gaskets shall be in compliance with Specification F477.

4.4 *Lubricant*—The lubricant used for assembly shall have no detrimental effect on the gasket or pipe.

4.5 *Primer.*

4.6 *Solvent Cement.*

5. Joining System

5.1 *Integral Bell Gasketed Joint*—The joint shall be designed so that when assembled, the gasket inside the bell will be compressed radially on the pipe spigot to form a water-tight seal.

5.1.1 The joint shall be designed to avoid displacement of the gasket when installed in accordance with the manufacturer's recommendations.

5.1.2 The assembly of joints shall be in accordance with the pipe manufacturer's recommendations.

5.2 *Solvent cement joints for pipe and fittings*—In the solvent cement joint, the pipe spigot wedges into the tapered socket and the surfaces fuse together. The tapered socket may be a portion of a molded fitting or it may be a belled end of the pipe section. Formed bells shall be concentric with pipe axis.

5.2.1 The assembly of the joints shall be accordance with Practice D2855.

5.2.2 *Joint Tightness*—Joints made with pipe and fittings or with belled-end pipe shall show no signs of leakage when tested in accordance with 7.5.

6. Requirements

6.1 *Workmanship*—The pipe and fittings shall be homogeneous throughout and free from visible cracks, holes, foreign inclusions, or other injurious defects. The pipe shall be as uniform as commercially practical in color, opacity, density, and other physical properties.

6.2 *Pipe Dimensions:*

6.2.1 *Pipe Diameter*—The average outside diameter of the pipe shall meet the requirements given in Table 1, when measured in accordance with Test Method D2122.

6.2.2 *Wall Thickness*—Pipe wall thicknesses shall meet the requirements of Table 1, when measured in accordance with Test Method D2122. In the case of belled pipe and fittings fabricated from pipe sections, the thickness of the wall in the bell shall be considered satisfactory if it was formed from pipe meeting the above requirements.

NOTE 2—The wall thickness varaibility in any cross section of the pipe is normally 12% or less.

6.3 *Pipe Flattening*—There shall be no evidence of splitting, cracking, or breaking, when pipe is tested in accordance with 8.4.

6.4 *Wall Thickness of Fittings*—The minimum wall thicknesses of the fittings shall be the same as the minimum wall thickness of the equivalent size of pipe as specified in Table 1. For reducing fittings or those with smaller inlets, the minimum wall thickness of each inlet shall be no less than the minimum wall thickness for that size pipe. The thickness shall be determined in accordance with Test Method D2122.

NOTE 3—Owing to the present state of technology in the industry, all fittings are fabricated fittings. Fabricated fittings with solvent-cemented components should be made in accordance with Practice D2855 and taking cognizance of Practice F402.

6.5 *Pipe Impact Strength*—The impact strength of the pipe shall be not less than 220 ft·lbf (298.3 J), when tested in accordance with 8.5.

NOTE 4—This requirement is intended only for use as a quality control test, not as a simulated service test. As aged impact data is developed, the applicable aged impact values will be included to reflect long-term performance needs.

6.6 Pipe Stiffness—Pipe stiffness values for the pipe shall comply with Table 1, when tested in accordance with 8.6.

6.6.1 The wall thickness must be increased to meet the pipe stiffness requirement PS46 or PS115 listed in Table 1 when material with modulus lower than 500,000 psi (3447 MPa) is used.

6.7 *Gaskets:*

6.7.1 All gaskets shall meet the requirements of Specification F477 and be molded into a circular form or extruded to the proper section and then spliced into circular form. Gaskets shall be made of a properly vulcanized high-grade elastomeric compound.

6.7.2 The basic polymer shall be natural rubber, synthetic elastomer, or a blend of both.

6.7.3 The gasket shall be designed with an adequate compressive force so as to effect a positive seal under all combinations of joint tolerances. The gasket shall be the only element depended upon to make the joint flexible and watertight.

6.8 *Joint Tightness*—Joints made with pipe and fittings shall show no sign of leakage, when tested in accordance with Specification D3212. All surfaces of the joint upon which the gasket may bear shall be smooth and free of imperfections, ridges, fractures, or cracks that could adversely affect sealability.

6.9 *Acetone Immersion*—The pipe shall not show excessive flaking or disintegrate, when tested in accordance with Test Method D2152.

NOTE 5—This test is intended only for use as a quality control test and not for use as a simulated service test.

7. Requirements for Solvent Cemented Pipes and Fittings

7.1 *Socket diameter*—The inside diameter of the tapered socket shall comply with dimensions listed in Table 2.

7.2 *Socket Depth*—The socket depth shall not be less than that shown in Table 2.

7.3 *Spigot Length*—The minimum distance from the spigot end to the area where the spigot diameter changes due to a socket, branch, or change in angle shall comply with the "C" dimension of Table 2.

7.4 *Solvent Cement*—The solvent cement manufacturer's recommendations should be followed in selecting the proper cement viscosity for joining the large diameter pipe.

7.5 *Joint Tightness*—Join two pieces of pipe by means of a fitting or socket in accordance with Practice D2855 and using solvent cement as described in 7.4. Allow the joined unit to stand 24 h at room temperature. Joints made with pipe and fittings shall show no sign of leakage when subjected to an internal water pressure of 170 kPa (25 psi) at room temperature for 1 h.

8. Test Methods

8.1 *Conditioning:*

8.1.1 *Referee Testing*—When conditioning is required for referee tests, condition the specimens in accordance with Procedure A of Practice D618 at 73.4 ± 3.6°F (23 ± 2°C) and 50 ± 5 % relative humidity for not less than 40 h prior to test. Conduct tests under the same conditions of temperature and humidity, unless otherwise specified.

8.1.2 *Quality Control Tests*—For quality control tests, condition specimens for a minimum of 4 h in air or 1 h in water at 73.4 ± 3.6°F (23 ± 2°C). Test the specimens at 23± 2°C without regard to relative humidity.

8.2 *Test Conditions*—Conduct tests in the Standard Laboratory Atmosphere of 73.4 ± 3.6°F (23 ± 2°C) and 50 ± 5 % relative humidity, unless otherwise specified in this specification. In cases of disagreement, the tolerances shall be ±1.8°F (±1°C) and ±2 % relative humidity.

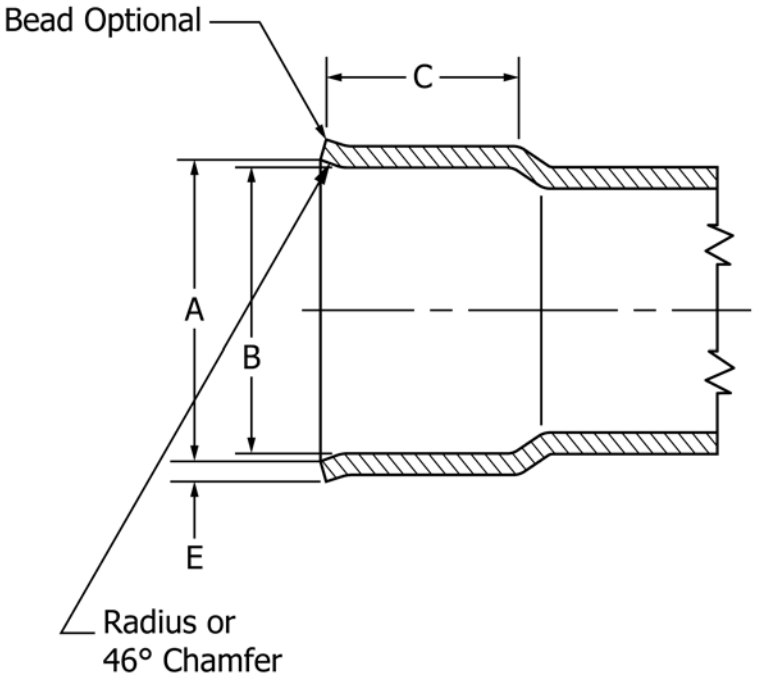
8.3 *Sampling*—The selection of the sample or samples of pipe shall be as agreed upon between the purchaser and seller. In case of no prior agreement, any sample selected by the testing laboratory shall be deemed adequate.

8.4 *Flattening*—Flatten three specimens of pipe, each 6 in. (152 mm) in length, between parallel plates in a suitable press until the distance between the plates is 40 % of the outside diameter of the pipe. The rate of loading shall be uniform and such that the compression is completed within 2 to 5 min. The specimen shall pass if no splitting, cracking, or breaking is observed under normal light with the unaided eye.

8.5 *Impact Resistance*—Determine the impact resistance of the pipe in accordance with Test Method D2444, using a 30-lb (15-kg) or 20-lb (10-kg) Tup B and flat-plate holder B. Test six specimens. All shall pass. If one fails, test another six specimens; 11 passes out of 12 tested shall be acceptable. If two or more specimens fail, results shall be considered unacceptable and the test shall be recorded as a failure with no further retesting allowed.

NOTE 6—Sections shorter than those specified in Test Method D2444, but not less than 6 in. (152 mm) in length, may be tested to accommodate

TABLE 2 Solvent Cement Socket Dimensions



Solvent Cement Socket Dimensions							
Nominal Size, in.	A			B			C
18	18.757	±	0.028	18.673	±	0.028	9.000
21	22.113	±	0.033	22.014	±	0.033	10.500
24	24.877	±	0.037	24.766	±	0.037	12.000
27	28.037	±	0.042	27.911	±	0.042	13.500
30	32.080	±	0.040	31.960	±	0.040	15.000
36	38.400	±	0.050	38.250	±	0.050	18.000
42	44.620	±	0.060	44.440	±	0.060	21.000
48	50.950	±	0.075	50.725	±	0.075	24.000
54	57.730	±	0.085	57.475	±	0.085	27.000
60	61.790	±	0.090	61.520	±	0.090	30.000

the impact-testing machine since this will be a more severe impact-resistance test.

8.6 *Pipe Stiffness*—Determine the pipe stiffness at 5 % deflection datum in accordance with Test Method D2412. Test three specimens, each 6 in. (152 mm) in length, and determine the average pipe stiffness at 5 % deflection in accordance with Test Method D2412. The pipe stiffness shall equal or exceed the minimum value listed in Table 1.

NOTE 7—The 5 % deflection criterion, which was arbitrarily selected for testing convenience, should not be considered as a limitation with respect to in-use deflection. The engineer is responsible for establishing the acceptable deflection limit.

8.7 *Acetone Immersion*—This test shall be conducted in accordance with Test Method D2152. This procedure is used for determining the degree of fusion of extruded PVC plastic pipe as indicated by reaction to immersion in anhydrous acetone. It is applicable only for distinguishing between unfused and properly fused PVC.

9. Retest and Rejection

9.1 If the results of any test(s) do not meet the requirements of this specification, the test(s) may be conducted again in accordance with an agreement between the purchaser and the seller. There shall be no agreement to lower the minimum requirement of the specification by such means as omitting tests that are a part of the specification, substituting or modifying a test method, or by changing the specification limits. In retesting, the product requirements of this specification shall be met, and the test methods designated in the specification shall be followed. If, upon retest, failure occurs, the quantity of product represented by the test(s) does not meet the requirements of this specification.

10. Inspection

10.1 *General*—Inspection by the purchaser shall not relieve the manufacturer of the responsibility of furnishing material meeting in all respects the requirements of this specification.

10.2 *Notification*—If inspection is specified by the purchaser, the manufacturer shall notify the purchaser in advance of the date, time, and place of testing of the pipe in order that the purchaser may be represented at the test.

10.3 *Access*—The inspector shall have free access to those parts of the manufacturer's plant that are involved in work performed under this specification. The manufacturer shall

afford the inspector all reasonable facilities for determining whether the pipe meets the requirements of this standard.

11. Certification

11.1 When specified in the purchase order or contract, a manufacturer's certification shall be furnished to the purchaser that the material was manufactured, sampled, tested, and inspected in accordance with this specification, and has been found to meet the requirements. When specified in the purchase order or contract, a report of the test results shall be furnished. Each certification so furnished shall be signed by an authorized agent of the manufacturer.

12. Marking

12.1 *Pipe Marking*—Each standard and random length of pipe in compliance with this specification shall be clearly marked with the following information at intervals of 5 ft. (1.5 m) or less:

12.1.1 Manufacturer's name or trademark and code,

12.1.2 Nominal pipe size,

12.1.3 PVC minimum cell classification (as listed in Table 1),

12.1.4 Pipe stiffness designation: "PS 46 PVC Sewer Pipe", PS 75 PVC Sewer Pipe" or "PS 115 PVC Sewer Pipe," and

12.1.5 This designation: ASTM F679.

12.1.6 Gasketed pipe shall have an insertion depth mark on the spigot end.

12.2 *Fittings Marking*—Fittings in compliance with this standard shall be clearly marked with the following information:

12.2.1 Manufacturer's name or trademark and code,

12.2.2 Nominal size,

12.2.3 Material designation: "PVC", and

12.2.4 This designation: "ASTM F679".

NOTE 8—Manufacturer's code to include year, month, day, shift, plant, and extruder of manufacture.

13. Delivery

13.1 All pipe and couplings and fittings shall be packaged for standard commercial shipment, unless otherwise specified.

14. Quality Assurance

14.1 When the product is marked with this designation, F679, the manufacturer affirms that the product was manufactured, inspected, sampled, and tested in accordance with this specification and has been found to meet the requirements of this specification.

SUPPLEMENTARY REQUIREMENTS

GOVERNMENT / MILITARY PROCUREMENT

These requirements apply *only* to Federal/Military procurement, not domestic sales or transfers.

S1. *Responsibility for Inspection*—Unless otherwise specified in the contract or purchase order, the producer is responsible for the performance of all inspection and test requirements specified herein. The producer may use his own or any other suitable facilities for the performance of the inspection and test requirements specified herein, unless the purchaser disapproves. The purchaser shall have the right to perform any of the inspections and tests set forth in this specification where such inspections are deemed necessary to ensure that material conforms to prescribed requirements.

NOTE S1.1—In Federal contracts, the contractor is responsible for inspection.

S2. *Packaging and Marking for U. S. Government Procurement:*

S2.1 *Packaging*—Unless otherwise specified in the contract, the materials shall be packaged in accordance with the supplier's standard practice in a manner ensuring arrival at destination in satisfactory condition and which will be acceptable to the carrier at lowest rates. Containers and packing shall comply with Uniform Freight Classification rules or National Motor Freight Classification rules.

S2.2 *Marking*—Marking for shipment shall be in accordance with Fed. Std. No. 123 for civil agencies and MIL-STD-129 for military agencies.

NOTE S2.1—The inclusion of U. S. Government procurement requirements should not be construed as an indication that the U. S. Government uses or endorses the products described in this document.

APPENDIXES

(Nonmandatory Information)

X1. APPLICABLE DOCUMENT

X1.1 The following ASTM standard applies to this specification:

D2564 Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Pipe and Fittings

X2. BASE INSIDE DIAMETER FOR CALCULATION OF DEFLECTION LIMIT

X2.1 Table X2.1 is provided to establish a uniform number representing the inside diameter to be used as a base for calculation of deflection limits. For the purpose of monitoring the quality of installation, a specifier may apply a deflection limit that he deems appropriate to the base inside diameter to arrive at a mandrel dimension for a go/no-go gage. For economy in fabrication of mandrels, it is suggested that the outside diameter of each mandrel be rounded to the nearest 0.01 in. or 0.2 mm for machining purposes. This procedure is demonstrated here for the 7½ % recommended limit of Appendix X3 (Example: (100 − 7.5 %)/100× 5.800 = 5.37).

X2.2 This base inside diameter is not a product quality control requirement, nor should it be used for flow calculations.

X3. RECOMMENDED LIMIT FOR INSTALLED DEFLECTION

TABLE X2.1 Base Inside Diameters and 7½ % Deflection Mandrel Dimensions[A]

	PS 46			PS 115		
Nominal Size, in.	Average Inside Diameter, in. (mm)	Base Inside Diameter, in. (mm)	7½ % Deflection Mandrel	Average inside Diameter, in. (mm)	Base Inside Diameter in. (mm)	7½ % Deflection Mandrel
18	17.643 (448.13)	17.054 (433.17)	15.77	17.278 (438.86)	16.688 (423.87)	15.44
21	20.800 (528.32)	20.098 (510.49)	18.59	20.370 (517.40)	19.666 (499.52)	18.19
24	23.402 (594.41)	22.586 (573.68)	20.89	22.918 (582.12)	22.102 (561.39)	20.44
27	26.374 (669.90)	25.446 (646.33)	23.53	25.829 (656.06)	24.899 (632.43)	23.03
30 CIOD	30.192 (766.88)	29.151 (740.44)	26.96	29.566 (750.97)	28.523 (724.48)	26.38
36 CIOD	36.135 (917.83)	34.869 (885.67)	32.25	35.389 (898.88)	34.120 (866.65)	31.56
42 CIOD	41.984 (1066.39)	40.491 (1028.47)	37.45	41.116 (1044.35)	39.621 (1006.37)	36.65
48 CIOD	47.927 (1217.35)	46.209 (1173.71)	42.74	46.937 (1192.20)	45.216 (1148.49)	41.82
54 CIOD	54.306 (1379.37)	52.359 (1329.93)	48.43	53.184 (1350.87)	51.234 (1301.34)	47.39
60 CIOD	58.127 (1476.43)	55.961 (1421.41)	51.76	56.926 (1445.92)	54.756 (1390.81)	50.65

[A] Base inside diameter is a minimum pipe inside diameter derived by subtracting a statistical tolerance package from the pipe's average inside diameter. The tolerance package is defined as the square root of the sum of squared standard manufacturing tolerances.

$$\text{Average inside diameter} = \text{average outside diameter} - 2(1.06)t$$

$$\text{Tolerance package} = \sqrt{A^2 + 2B^2 + C^2}$$

where:

t = minimum wall thickness,
A = outside diameter tolerance,
B = excess wall thickness tolerance = 0.06t, and
C = out-of-roundness tolerance.

For sizes 18 through 27 the values for C were derived statistically from field measurement data and are given as follows for various sizes of pipe For sizes larger than 27, the value for C were extrapolated from the field data for the smaller sizes.

Nominal Size, in.	Value for C, in. (mm)
18	0.587 (14.91)
21	0.700 (17.78)
24	0.812 (20.62)
27	0.925 (23.50)
30 CIOD	1.038 (26.37)
36 CIOD	1.263 (32.08)
42 CIOD	1.488 (37.80)
48 CIOD	1.713 (43.51)

X3.1 Design engineers, public agencies, and others who have the responsibility to establish specifications for maximum allowable limits for deflection of installed PVC sewer pipe have requested direction relative to such a limit.

X3.2 PVC sewer piping made to this specification andinstalled in accordance with Practice D2321 can be expected to perform satisfactorily provided that the internal diameter of the barrel is not reduced by more than 7½ % of its base inside diameter when measured not less than 30 days following completion of installation.

SUMMARY OF CHANGES

Committee F17 has identified the location of selected changes to this standard since the last issue (F679 – 15) that may impact the use of this standard. (Approved August 1, 2015.)

(1) Section 1.1 - Added "Solvent cemented sockets"
(2) Added 4.5 and 4.6.
(3) Section 5 was revised.
(4) Added Table 2.
(5) Added 7.1 – 7.3.

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