

ADS POTABLE WATER SERVICE PIPE (IPS) PIPE SPECIFICATIONS

Scope

This specification describes ADS Potable Water Service Pipe (IPS) pipe SIDR 19, SIDR 15, SIDR 11.5, SIDR 9, and SIDR 7 for use in potable water service applications.

Pipe Requirements

ADS potable water service pipe shall meet the requirements of ASTM D2239, AWWA C901 and NSF Standards 14 and 61. Pipe dimensions shall meet ID controlled Iron Pipe Size (IPS) standards.

Material Properties

Pipe material shall be high-density polyethylene conforming to the minimum requirements of cell classification 445574C or 445574E as defined and described in ASTM D3350, except that carbon black content should not exceed 3.0%. The resin shall have a material designation code of PE4710 by the Plastic Pipe Institute.

Disinfection/Maintenance

The active chlorine content of disinfecting solutions shall not exceed 12%. All disinfecting solution must be flushed from all lines within the system. Industry accepted procedures, like ANSI/AWWA C651 *Disinfecting Water Mains*, should be followed for both new and repaired potable water lines.

Installation

Installation is similar to other flexible pipe products. Methods including direct bury, plowing or pulling are applicable per local, state or federal guidelines for the application.

Pipe Properties

		1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
SIDR 19	Inside Diameter in (mm)	0.622 ±0.01 (15.8 ±0.25)	0.824 ±0.015 (20.9 ±0.38)	1.049 ±0.02 (26.6 ±0.51)	1.380 ±0.02 (35.1 ±0.51)	1.610 ±0.02 (40.9 ±0.51)	2.067 ±0.02 (52.5 ±0.51)
	Wall Thickness in (mm)	0.060 +0.02 (1.5 +0.51)	0.060 +0.02 (1.5 +0.51)	0.060 +0.02 (1.5 +0.51)	0.073 +0.02 (1.9 +0.51)	0.085 +0.02 (2.2 +0.51)	0.109 +0.020 (2.8 +0.51)
	Pressure Rating @ 73°F psi (kPa)	100 (689)	100 (689)	100 (689)	100 (689)	100 (689)	100 (689)
	Weight gm/ft (gm/m)	28 ±2 (92 ±7)	38 ±2 (125 ±7)	47 ±2 (154 ±7)	80 ±3 (262 ±10)	96 ±3 (315 ±10)	190 ±5 (623 ±16)
SIDR 15	Inside Diameter in (mm)	0.622 ±0.01 (15.8 ±0.25)	0.824 ±0.015 (20.9 ±0.38)	1.049 ±0.02 (26.6 ±0.51)	1.380 ±0.02 (35.1 ±0.51)	1.610 ±0.02 (40.9 ±0.51)	2.067 ±0.02 (52.5 ±0.51)
	Wall Thickness in (mm)	0.060 +0.02 (1.5 +0.51)	0.060 +0.02 (1.5 +0.51)	0.070 +0.02 (1.8 +0.51)	0.092 +0.02 (2.3 +0.51)	0.107 +0.02 (2.7 +0.51)	0.138 +0.020 (3.5 +0.51)
	Pressure Rating @ 73°F psi (kPa)	125 (862)	125 (862)	125 (862)	125 (862)	125 (862)	125 (862)
	Weight gm/ft (gm/m)	30 ±2 (98 ±7)	39 ±2 (128 ±7)	56 ±2 (184 ±7)	97 ±3 (318 ±10)	129 ±3 (423 ±10)	200 ±5 (656 ±16)
SIDR 11.5	Inside Diameter in (mm)	0.622 ±0.01 (15.8 ±0.25)	0.824 ±0.015 (20.9 ±0.381)	1.049 ±0.02 (26.6 ±0.51)	1.380 ±0.02 (35.1 ±0.51)	1.610 ±0.02 (40.9 ±0.51)	2.067 ±0.02 (52.5 ±0.51)
	Wall Thickness in (mm)	0.060 +0.02 (1.5 +0.51)	0.072 +0.02 (1.8 +0.51)	0.091 +0.02 (2.3 +0.51)	0.120 +0.02 (3.0 +0.51)	0.140 +0.02 (3.6 +0.51)	0.180 +0.020 (4.6 +0.51)
	Pressure Rating @ 73°F psi (kPa)	160 (1103)	160 (1103)	160 (1103)	160 (1103)	160 (1103)	160 (1103)
	Weight gm/ft (gm/m)	30 ±2 (98 ±7)	50 ±2 (164 ±7)	72 ±2 (236 ±7)	125 ±3 (410 ±10)	146 ±3 (479 ±10)	248 ±5 (814 ±16)

Pipe Properties (continued)

SIDR 9	Inside Diameter in (mm)	0.622 ±0.01 (15.8 ±0.25)	0.824 ±0.015 (20.9 ±0.38)	1.049 ±0.02 (26.6 ±0.51)	1.380 ±0.02 (35.1 ±0.51)	1.610 ±0.02 (40.9 ±0.51)	2.067 ±0.02 (52.5 ±0.51)
	Wall Thickness in (mm)	0.069 +0.02 (1.8 +0.51)	0.092 +0.02 (2.3 +0.51)	0.117 +0.02 (3.0 +0.51)	0.153 +0.02 (3.9 +0.51)	0.179 +0.02 (4.5 +0.51)	0.230 +0.028 (5.8 +0.71)
	Pressure Rating @ 73°F psi (kPa)	200 (1379)	200 (1379)	200 (1379)	200 (1379)	200 (1379)	200 (1379)
	Weight gm/ft (gm/m)	32 ±2 (105 ±7)	53 ±2 (174 ±7)	88 ±3 (289 ±10)	155 ±3 (509 ±10)	185 ±5 (607 ±16)	330 ±5 (1083 ±16)
SIDR 7	Inside Diameter in (mm)	0.622 ±0.01 (15.8 ±0.25)	0.824 ±0.015 (20.9 ±0.38)	1.049 ±0.02 (26.6 ±0.51)	1.380 ±0.02 (35.1 ±0.51)	1.610 ±0.02 (40.9 ±0.51)	2.067 ±0.02 (52.5 ±0.51)
	Wall Thickness in (mm)	0.089 +0.02 (2.3 +0.51)	0.118 +0.02 (3.0 +0.51)	0.150 +0.02 (3.8 +0.51)	0.197 +0.02 (5.0 +0.51)	0.230 +0.03 (5.8 +0.71)	0.295 +0.035 (7.5 +0.89)
	Pressure Rating @ 73°F psi (kPa)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)
	Weight gm/ft (gm/m)	38 ±2 (125 ±7)	71 ±2 (233 ±7)	116 ±3 (381 ±10)	210 ±5 (689 ±16)	227 ±5 (745 ±16)	440 ±8 (1443 ±26)

* Additional SDRs may be available. Contact an ADS Representative for regional availability.

ADS POLYFLEX POTABLE GRADE PIPE

SIDR 9 (200 PSI) PE4710

SIZE	PRODUCT CODE	COIL LENGTH	MAX. ALLOWABLE PRESSURE AT 73° F
¾" (19 mm)	X2-75200100	100' (30 m)	200 psi (1380 kPa)
¾" (19 mm)	X2-75200300	300' (90 m)	200 psi (1380 kPa)
¾" (19 mm)	X2-75200500	500' (150 m)	200 psi (1380 kPa)
1" (25 mm)	X2-1200100	100' (30 m)	200 psi (1380 kPa)
1" (25 mm)	X2-1200300	300' (90 m)	200 psi (1380 kPa)
1" (25 mm)	X2-1200500	500' (150 m)	200 psi (1380 kPa)
1¼" (32 mm)	X2-125200100	100' (30 m)	200 psi (1380 kPa)
1¼" (32 mm)	X2-125200300	300' (90 m)	200 psi (1380 kPa)
1½" (38 mm)	X2-150200100	100' (30 m)	200 psi (1380 kPa)
1½" (38 mm)	X2-150200300	300' (90 m)	200 psi (1380 kPa)
2" (50 mm)	X2-2200100	100' (30 m)	200 psi (1380 kPa)
2" (50 mm)	X2-2200300	300' (90 m)	200 psi (1380 kPa)



SIDR 7 (250 PSI) PE4710

SIZE	PRODUCT CODE	COIL LENGTH	MAX. ALLOWABLE PRESSURE AT 73° F
¾" (19 mm)	X2-75250100	100' (30 m)	250 psi (1724 kPa)
¾" (19 mm)	X2-75250300	300' (90 m)	250 psi (1724 kPa)
¾" (19 mm)	X2-75250500	500' (150 m)	250 psi (1724 kPa)
1" (25 mm)	X2-1250100	100' (30 m)	250 psi (1724 kPa)
1" (25 mm)	X2-1250300	300' (90 m)	250 psi (1724 kPa)
1" (25 mm)	X2-1250500	500' (150 m)	250 psi (1724 kPa)
1¼" (32 mm)	X2-125250100	100' (30 m)	250 psi (1724 kPa)
1¼" (32 mm)	X2-125250300	300' (90 m)	250 psi (1724 kPa)
1½" (38 mm)	X2-150250100	100' (30 m)	250 psi (1724 kPa)
1½" (38 mm)	X2-150250300	300' (90 m)	250 psi (1724 kPa)
2" (50 mm)	X2-2250100	100' (30 m)	250 psi (1724 kPa)
2" (50 mm)	X2-2250300	300' (90 m)	250 psi (1724 kPa)

ADS PolyFlex pipe is strong and resistant to many common causes of damage such as vibrations, surface loads and pressure surges. Can be used on landscape and agricultural irrigation systems, residential and commercial water service pipe, well/pump water systems and slurry pipelines.