



AWSEBI (*ow-suh-bee*)

Means hauls water in the Potawatomi language.

APPLICATIONS

Awsebi Water Pipe is a high-performance bimodal, high-density polyethylene (HDPE) pipe designed for raw water transmission, potable and municipal water applications, as well as gravity and force sewer mains. Our water pipe's heat-fused joints provide a leak-free, NSF-certified, quality water system that is corrosion and seismic-resistant to ensure a lifetime of safe and clean water.

CONFORMANCE

- ASTM F714, "Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter"
- ANSI/AWWA C906, "Polyethylene (PE) Pressure Pipe and Fittings, 4" to 65" (100mm to 1650mm), for Waterworks"
- Cell Classification PE445574C per ASTM D3350
- NSF/ANSI Standard 61 Certified for Potable Water Contact
- Plastics Pipe Institute (PPI) TR-4 Listing as PE4710 / PE100
- Hydrostatic Design Basis 1,600 psi @ 73°F (23°C) and 1,000 psi @ 140°F (60°C) per ASTM D2837
- Color & UV Stabilizer: (C) Black with 2% min Carbon Black per ASTM D3350
- Heat Fusion Joining as per ASTM F2620 and PPI TR-33/TR-41
- Installation as per AWWA M55 and PPI PE Pipe Handbook, 2nd ed.



Physical Properties	Nominal Value*	Test Method	Physical Properties	Nominal Value*	Test Method
Density	0.960 g/cm ³	ASTM D1505	Elongation @ Break	>500 %	ASTM D638
Melt Index (MI) 190°C/2.16kg	0.07 g/10 min	ASTM D1238	Flexural Modulus (2% secant)	150,000 psi	ASTM D790
High Load Melt Index (190°C/21.6kg)	7-16 g/10 min	ASTM D1238	Brittleness Temperature	< -103°F	ASTM D746
SCG Resistance (PENT)	>500 hours	ASTM F1473	Hardness	62 Shore D	ASTM D2240
Tensile Stress @ Yield	3,500 psi	ASTM D638	Vicat Softening Temperature	256°F	ASTM D1525
Tensile Stress @ Break	5,000 psi	ASTM D638	Thermal Expansion	1.0 x 10 ⁻⁴ in/in/°F	ASTM D696

IPS		PR ^A / PC ^B	335	250	200	160	125	100
Size	OD (in)	DR	7	9	11	13.5	17	21
4"	4.5	Min Wall (in)	0.643	0.500	0.409	0.333	0.265	0.214
		ID ^c (in)	3.137	3.440	3.633	3.793	3.939	4.046
		Lb / Ft ^o	3.402	2.751	2.307	1.914	1.548	1.268
6"	6.625	Min Wall (in)	0.946	0.736	0.602	0.491	0.390	0.315
		ID ^c (in)	4.619	5.065	5.348	5.585	5.799	5.956
		Lb / Ft ^o	7.373	5.961	4.994	4.151	3.354	2.747
8"	8.625	Min Wall (in)	1.232	0.958	0.784	0.639	0.507	0.411
		ID ^c (in)	6.013	6.594	6.960	7.270	7.550	7.750
		Lb / Ft ^o	12.498	10.108	8.468	7.035	5.689	4.658
10"	10.75	Min Wall (in)	1.536	1.194	0.977	0.796	0.632	0.512
		ID ^c (in)	7.494	8.219	8.680	9.060	9.410	9.660
		Lb / Ft ^o	19.417	15.699	13.158	10.931	8.834	7.247
12"	12.75	Min Wall (in)	1.821	1.417	1.159	0.944	0.750	0.607
		ID ^c (in)	8.889	9.746	10.290	10.750	11.160	11.460
		Lb / Ft ^o	27.315	22.089	18.513	15.377	12.427	10.193
14"	14	Min Wall (in)	2.000	1.556	1.273	1.037	0.824	0.667
		ID ^c (in)	9.760	10.701	11.300	11.800	12.250	12.590
		Lb / Ft ^o	32.930	26.629	22.314	18.538	14.984	12.288
16"	16	Min Wall (in)	2.286	1.778	1.455	1.185	0.941	0.762
		ID ^c (in)	11.154	12.231	12.920	13.490	14.000	14.380
		Lb / Ft ^o	43.012	34.772	29.149	24.213	19.576	16.042
18"	18	Min Wall (in)	2.571	2.000	1.636	1.333	1.059	0.857
		ID ^c (in)	12.549	13.760	14.530	15.170	15.760	16.180
		Lb / Ft ^o	54.435	44.017	36.897	30.644	24.767	20.313
20"	20	Min Wall (in)	2.857	2.222	1.818	1.481	1.176	0.952
		ID ^c (in)	13.943	15.289	16.150	16.860	17.510	17.980
		Lb / Ft ^o	67.211	54.351	45.535	37.832	30.575	25.077
22"	22	Min Wall (in)	3.143	2.444	2.000	1.630	1.294	1.048
		ID ^c (in)	15.337	16.819	17.760	18.550	19.260	19.780
		Lb / Ft ^o	81.308	65.752	55.105	45.777	37.004	30.318
24"	24	Min Wall (in)	3.429	2.667	2.182	1.778	1.412	1.143
		ID ^c (in)	16.731	18.346	19.370	20.230	21.010	21.580
		Lb / Ft ^o	96.767	78.261	65.586	54.478	44.018	36.083
26"	26	Min Wall (in)		2.889	2.364	1.926	1.529	1.238
		ID ^c (in)		19.875	20.990	21.920	22.760	23.380
		Lb / Ft ^o		91.832	76.952	63.936	51.675	42.362
28"	28	Min Wall (in)		3.111	2.545	2.074	1.647	1.333
		ID ^c (in)		21.405	22.600	23.600	24.510	25.170
		Lb / Ft ^o		106.517	89.255	74.182	59.934	49.119
30"	30	Min Wall (in)		3.333	2.727	2.222	1.765	1.429
		ID ^c (in)		22.934	24.220	25.290	26.260	26.970
		Lb / Ft ^o		122.260	102.470	85.155	68.812	56.389
32"	32	Min Wall (in)			2.909	2.370	1.882	1.524
		ID ^c (in)			25.830	26.970	28.010	28.770
		Lb / Ft ^o			116.597	96.885	78.266	64.169
34"	34	Min Wall (in)			3.091	2.519	2.000	1.619
		ID ^c (in)			27.450	28.660	29.760	30.570
		Lb / Ft ^o			131.600	109.372	88.370	72.430
36"	36	Min Wall (in)			3.273	2.667	2.118	1.714
		ID ^c (in)			29.060	30.350	31.510	32.370
		Lb / Ft ^o			147.549	122.616	99.081	81.208
42"	42	Min Wall (in)			3.818	3.111	2.471	2.000
		ID ^c (in)			33.910	35.400	36.760	37.760
		Lb / Ft ^o			200.836	166.886	134.852	110.542
48"	48	Min Wall (in)				3.556	2.824	2.286
		ID ^c (in)				40.460	42.010	43.150
		Lb / Ft ^o				217.960	176.126	144.389

DIPS		PR ^A / PC ^B	335	250	200	160	125	100
Size	OD (in)	DR	7	9	11	13.5	17	21
4"	4.80	Min Wall (in)	0.686	0.533	0.436	0.356	0.282	0.229
		ID ^c (in)	3.346	3.670	3.875	4.046	4.201	4.315
		Lb / Ft ^o	3.871	3.130	2.623	2.180	1.760	1.442
6"	6.90	Min Wall (in)	0.986	0.767	0.627	0.511	0.406	0.329
		ID ^c (in)	4.810	5.274	5.570	5.816	6.040	6.203
		Lb / Ft ^o	7.999	6.468	5.421	4.504	3.640	2.981
8"	9.05	Min Wall (in)	1.293	1.006	0.823	0.670	0.532	0.431
		ID ^c (in)	6.309	6.917	7.306	7.629	7.921	8.136
		Lb / Ft ^o	13.760	11.127	9.325	7.748	6.261	5.134
10"	11.10	Min Wall (in)	1.586	1.233	1.009	0.822	0.653	0.529
		ID ^c (in)	7.738	8.486	8.961	9.357	9.716	9.979
		Lb / Ft ^o	20.700	16.739	14.028	11.656	9.418	7.717
12"	13.20	Min Wall (in)	1.886	1.467	1.200	0.978	0.776	0.629
		ID ^c (in)	9.202	10.090	10.660	11.130	11.550	11.870
		Lb / Ft ^o	29.274	23.671	19.838	16.483	13.319	10.914
14"	15.30	Min Wall (in)	1.886	1.700	1.391	1.133	0.900	0.729
		ID ^c (in)	9.202	11.696	12.350	12.900	13.390	13.760
		Lb / Ft ^o	39.329	31.802	26.652	22.145	17.894	14.664
16"	17.40	Min Wall (in)	2.486	1.933	1.582	1.289	1.024	0.829
		ID ^c (in)	12.130	13.302	14.050	14.670	15.230	15.640
		Lb / Ft ^o	50.866	41.132	34.470	28.641	23.144	18.967
18"	19.50	Min Wall (in)	2.786	2.167	1.773	1.444	1.147	0.929
		ID ^c (in)	13.594	14.906	15.740	16.440	17.070	17.530
		Lb / Ft ^o	63.885	51.659	43.292	35.972	29.067	23.822
20"	21.60	Min Wall (in)		2.400	1.964	1.600	1.271	1.029
		ID ^c (in)		16.512	17.440	18.210	18.910	19.420
		Lb / Ft ^o		63.385	53.119	44.137	35.665	29.230
24"	25.80	Min Wall (in)		2.867	2.345	1.911	1.518	1.229
		ID ^c (in)		19.722	20.830	21.750	22.580	23.200
		Lb / Ft ^o		90.431	75.785	62.970	50.883	41.704
30"	32.00	Min Wall (in)			2.909	2.370	1.882	1.524
		ID ^c (in)			25.830	26.970	28.010	28.770
		Lb / Ft ^o			116.585	96.871	78.277	64.160
36"	38.30	Min Wall (in)			3.482	2.837	2.253	1.824
		ID ^c (in)			30.920	32.290	33.520	34.430
		Lb / Ft ^o			167.020	138.769	112.132	91.910

Note: These tables represent standard sizes. Other DRs and PCs available upon request.

- A. PR: Pressure Rating in pounds/sq. in. (psi) for ASTM F714 Water up to 80°F.
- B. PC: Pressure Class in pounds/sq. in. (psi) for ANSI / AWWA C906 Water up to 80°F.
- C. ID: Inside Diameter may vary due to manufacturing tolerances.
- D. Wt / Ft: Weight per foot in pounds may vary due to manufacturing tolerances.