



MOWECH (mow-watch)

Means sewer in the Potawatomi language.

APPLICATIONS

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

CONFORMANCE

- ASTM F714, "Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR Based on Outside Diameter)." Plastics Pipe Institute (PPI) TR-4 Listing as PE4710/PE100
- Plastics Pipe Institute (PPI) TR-4 Listing as PE4710
- Hydrostatic Design Basis 1,600 psi @ 73°F (23°C) and 1,000 psi @ 140°F (60°C) per ASTM D2837
- Heat Fusion Joining as per ASTM F2620 and PPI TR-33/TR-41
- Installation as per PPI PE Pipe Handbook, 2nd ed.

Mowech Sewer Pipe Technical Data

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
6"	6.625	Min Wall	0.946	0.736	0.602	0.491	0.390	0.315
		(in)	4.619	5.065	5.348	5.585	5.799	5.956
		ID ^C (in)	7.373	5.961	4.994	4.151	3.354	2.747
8"	8.625	Lb / Ft ^D	1.232	0.958	0.784	0.639	0.507	0.411
		Min Wall	6.013	6.594	6.960	7.270	7.550	7.750
		(in)	12.498	10.108	8.468	7.035	5.689	4.658
10"	10.75	ID ^C (in)	1.536	1.194	0.977	0.796	0.632	0.512
		Lb / Ft ^D	7.494	8.219	8.680	9.060	9.410	9.660
		Min Wall	19.417	15.699	13.158	10.931	8.834	7.247
12"	12.75	(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 ^D	27.315	22.089	18.513	15.377	12.427	10.193
14"	14	Min Wall	2.000	1.556	1.273	1.037	0.824	0.667
		(in)	9.760	10.701	11.300	11.800	12.250	12.590
		ID ^C (in)	32.930	26.629	22.314	18.538	14.984	12.288
16"	16	Lb / Ft ^D	2.286	1.778	1.455	1.185	0.941	0.762
		Min Wall	11.154	12.231	12.920	13.490	14.000	14.380
		(in)	43.012	34.772	29.149	24.213	19.576	16.042
18"	18	ID ^C (in)	2.571	2.000	1.636	1.333	1.059	0.857
		Lb / Ft ^D	12.549	13.760	14.530	15.170	15.760	16.180
		Min Wall	54.435	44.017	36.897	30.644	24.767	20.313
20"	20	(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 ^D	67.211	54.351	45.535	37.832	30.575	25.077
22"	22	Min Wall	3.143	2.444	2.000	1.630	1.294	1.048
		(in)	15.337	16.819	17.760	18.550	19.260	19.780
		ID ^C (in)	81.308	65.752	55.105	45.777	37.004	30.318
24"	24	Lb / Ft ^D	3.429	2.667	2.182	1.778	1.412	1.143
		Min Wall	16.731	18.346	19.370	20.230	21.010	21.580
		(in)	96.767	78.261	65.586	54.478	44.018	36.083

DIPS	PR ^A / PC ^B	335	250	200	160	125	100	
Size	OD (in)	DR	7	9	11	13.5	17	21
6"	6.90	Min Wall	0.986	0.767	0.627	0.511	0.406	0.329
		(in)	4.810	5.274	5.570	5.816	6.040	6.203
		ID ^C (in)	7.999	6.468	5.421	4.504	3.640	2.981
8"	9.05	Lb / Ft ^D	1.293	1.006	0.823	0.670	0.532	0.431
		Min Wall	6.309	6.917	7.306	7.629	7.921	8.136
		(in)	13.760	11.127	9.325	7.748	6.261	5.134
10"	11.10	ID ^C (in)	1.586	1.233	1.009	0.822	0.653	0.529
		Lb / Ft ^D	7.738	8.486	8.961	9.357	9.716	9.979
		Min Wall	20.700	16.739	14.028	11.656	9.418	7.717
12"	13.20	(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 ^D	29.274	23.671	19.838	16.483	13.319	10.914
14"	15.30	Min Wall	1.886	1.700	1.391	1.133	0.900	0.729
		(in)	9.202	11.696	12.350	12.900	13.390	13.760
		ID ^C (in)	29.274	31.802	26.652	22.145	17.894	14.664
16"	17.40	Lb / Ft ^D	2.486	1.933	1.582	1.289	1.024	0.829
		Min Wall	12.130	13.302	14.050	14.670	15.230	15.640
		(in)	50.866	41.132	34.470	28.641	23.144	18.967

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. ID: Inside Diameter may vary due to manufacturing tolerances.

C. Wt / Ft: Weight per foot in pounds may vary due to manufacturing tolerances.

Revised June 2024