



APPLICATIONS

Pipeline Plastics PE4710 Gray Pipe is a solid gray pipe, not gray lined, produced from a high performance bimodal, high density polyethylene (HDPE) pipe designed for raw water transmission, gravity and force sewer mains, or storm water. Our PE4710 Gray Pipe's heat fused joints provide a leak free system which is corrosion and seismic resistant. It is available in IPS and DIPS sizes. Striping is available upon request.

CONFORMANCE

- ASTM F714, “Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter.”
- ANSI/AWWA C906, “Polyethylene Pressure Pipe and Fittings, 4” through 65”, for Water Works.”
- Cell Classification PE445574E per ASTM D3350
- Protected from damaging effects of UV from outdoor storage for 3 years in average conditions.
- Plastics Pipe Institute (PPI) TR-4 Listing as PE4710 / PE3408
- 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 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	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
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

* Nominal values are typical results and are not guaranteed or intended to be used as a product specification or engineering values.

IPS	DR	13.5			17			19			21		
	PR ^A /PC ^B	160			125			110			100		
Size	OD (in)	Min Wall (in)	ID ^C (in)	Wt / Ft ^D	Min Wall (in)	ID ^C (in)	Wt / Ft ^D	Min Wall (in)	ID ^C (in)	Wt / Ft ^D	Min Wall (in)	ID ^C (in)	Wt / Ft ^D
6"	6.625	0.491	5.585	4.151	0.390	5.799	3.354	0.349	5.886	3.026	0.315	5.956	2.747
8"	8.625	0.639	7.271	7.035	0.507	7.549	5.689	0.454	7.663	5.122	0.411	7.754	4.658
10"	10.75	0.796	9.062	10.931	0.632	9.409	8.830	0.566	9.551	7.963	0.512	9.665	7.247
12"	12.75	0.944	10.748	15.377	0.750	11.160	12.427	0.671	11.327	11.192	0.607	11.463	10.193
14"	14.00	1.037	11.801	18.538	0.824	12.254	14.984	0.737	12.438	13.498	0.667	12.587	12.288
16"	16.00	1.185	13.487	24.213	0.941	14.005	19.576	0.842	14.215	17.639	0.762	14.385	16.050

DIPS	DR	13.5			17			19			21		
	PR ^A /PC ^B	160			125			110			100		
Size	OD (in)	Min Wall (in)	ID ^C (in)	Wt / Ft ^D	Min Wall (in)	ID ^C (in)	Wt / Ft ^D	Min Wall (in)	ID ^C (in)	Lb / Ft ^D	Min Wall (in)	ID ^C (in)	Wt / Ft ^D
6"	6.90	0.511	5.816	4.506	0.406	6.040	3.638	0.363	6.130	3.280	0.329	6.203	2.981
8"	9.05	0.670	7.629	7.752	0.532	7.921	6.258	0.476	8.040	5.642	0.431	8.136	5.134
10"	11.10	0.822	9.357	11.661	0.653	9.716	9.417	0.584	9.861	8.483	0.529	9.979	7.717
12"	13.20	0.978	11.127	16.477	0.776	11.554	13.318	0.695	11.727	11.994	0.629	11.867	10.914
14"	15.30	1.133	12.897	22.139	0.900	13.392	17.894	0.805	13.593	16.130	0.729	13.755	14.664

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 AWWA C906 Water up to 80°F. See temperature factors for higher operating temperatures.

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

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