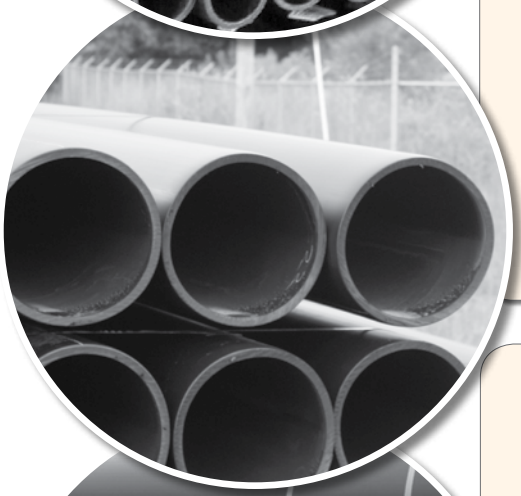
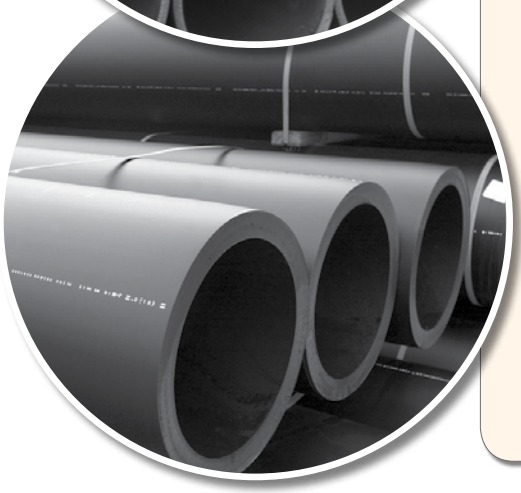
HDPE HI-PRO FOR IRRIGATION & WATER SYSTEMS

MEETS AWWA C901, ASTM D2239, ASTM D2737, ASTM D3035, CELL CLASS PER ASTM D3350, PPI LISTED MATERIAL (TR-4) PE 3408/4710 AND ANSI/NSF-14.





APPLICATIONS

JM Eagle's high-density polyethylene water pressure pipes are suitable for irrigation and water service applications.

DESCRIPTION

JM Eagle's Hi-Pro high-density polyethylene water and sewer pipe is made from premium, highly engineered PE 4710 resin material for a maximum pressure rating to service today's irrigation and water needs.

Products are available in ½- to 6-inch diameters.

The product's physical properties make it applicable to open-trench, trenchless and slip-lining applications.

PE 4710 surpasses PE 3408 in the following high-performance designations:

- Density class 4 (0.947 – 0.955 g/cc) vs. density cell class 3 (> 0.940 – 0.947 g/cc).
- SCG (slow crack growth) cell class 7 or PENT value of 500 hours vs. SCG cell class 4 or PENT value of 10 hours.
- 1,000 psi HDS (hydrostatic design stress) vs. 800 psi HDS.

BENEFITS

JM Eagle's HDPE Hi-Pro pipe for irrigation and water is manufactured for superior performance and an extended life expectancy.

- Its high-strength walls give it the highest PE pressure rating, outstanding resistance to slow crack growth and increased resistance to rapid crack propagation.
- The increased working stress rating of high-performance PE 4710 resin material allows use of a larger inside diameter (thinner wall) for a given operating pressure, making it a superior choice over steel or ductile iron pipe, especially for the large-diameter pipe sizes.
- The larger inside diameter of JM Eagle Hi-Pro pipe not only improves system capability and flow, but it also lowers the cost of the pipe and its handling and installation, making it a more cost-effective choice over the same competing products.

Revised 7/28/2011. This information may have been updated. Please download the latest version at www.jmeagle.com/onesheets.

HDPE HI-PRO FOR IRRIGATION & WATER SYSTEMS

SUBMITTAL AND DATA SHEET

JM Eagle™
Building essentials for a better tomorrow™

COPPER TUBE SIZES (C.T.S.) PRESSURE PIPE ASTM D2737 — ANSI/NSF-61, 14 LISTED

PE 4710		DR 7 (335 psi)			DR 9 (250 psi)			DR 11 (200 psi)		
PIPE SIZE	AVG. O.D.	MIN. T.	AVG. I.D.	WEIGHT LB/FT	MIN. T.	AVG. I.D.	WEIGHT LB/FT	MIN. T.	AVG. I.D.	WEIGHT LB/FT
½	0.625	0.090	0.434	0.07	0.069	0.479	0.05	0.062	0.494	0.05
¾	0.875	0.125	0.610	0.13	0.097	0.669	0.10	0.080	0.705	0.09
1	1.125	0.160	0.786	0.21	0.125	0.860	0.17	0.102	0.909	0.14
1¼	1.375	0.196	0.959	0.32	0.153	1.051	0.26	0.125	1.110	0.21
1½	1.625	0.232	1.133	0.44	0.181	1.241	0.36	0.148	1.311	0.30
2	2.125	0.304	1.481	0.76	0.236	1.625	0.61	0.193	1.716	0.51

S.I.D.R. PRESSURE PIPE ASTM D2239 — ANSI/NSF-61, 14 LISTED

PE 4710		DR 7 (335 psi)			DR 9 (250 psi)			DR 11.5 (190 psi)		
PIPE SIZE	AVG. I.D.	MIN. T.	AVG. O.D.	WEIGHT LB/FT	MIN. T.	AVG. O.D.	WEIGHT LB/FT	MIN. T.	AVG. O.D.	WEIGHT LB/FT
½	0.622	0.089	0.800	0.09	0.069	0.760	0.07	0.060	0.742	0.06
¾	0.824	0.118	1.060	0.15	0.092	1.008	0.12	0.072	0.968	0.09
1	1.049	0.150	1.349	0.25	0.117	1.283	0.19	0.091	1.231	0.14
1¼	1.380	0.197	1.774	0.43	0.153	1.686	0.33	0.120	1.620	0.25
1½	1.610	0.230	2.070	0.59	0.179	1.968	0.44	0.140	1.890	0.34
2	2.067	0.295	2.657	0.97	0.230	2.527	0.73	0.180	2.427	0.56
2½	2.469	—	—	—	—	—	—	0.215	2.899	0.80
3	3.068	—	—	—	—	—	—	0.267	3.602	1.23
4	4.026	—	—	—	—	—	—	0.350	4.726	2.12
6	6.065	—	—	—	—	—	—	0.527	7.119	4.81

PE 4710		DR 15 (144 psi)			DR 19 (112 psi)		
PIPE SIZE	AVG. I.D.	MIN. T.	AVG. O.D.	WEIGHT LB/FT	MIN. T.	AVG. O.D.	WEIGHT LB/FT
½	0.622	0.060	0.742	0.06	0.060	0.742	0.06
¾	0.824	0.060	0.944	0.07	0.060	0.944	0.07
1	1.049	0.070	1.189	0.11	0.060	1.169	0.09
1¼	1.380	0.092	1.564	0.19	0.073	1.526	0.15
1½	1.610	0.107	1.824	0.25	0.085	1.780	0.20
2	2.067	0.138	2.343	0.42	0.109	2.285	0.33
2½	2.469	0.165	2.799	0.60	0.130	2.729	0.47
3	3.068	0.205	3.478	0.93	0.161	3.390	0.72
4	4.026	0.268	4.562	1.59	0.212	4.450	1.24
6	6.065	0.404	6.873	3.62	0.319	6.703	2.82

I.D. : Inside Diameter
O.D. : Outside Diameter
T. : Wall Thickness

* For data, sizes, or classes not reflected in these charts, please contact JM Eagle™ for assistance.

Revised 7/28/2011. This information may have been updated. Please download the latest version at www.jmeagle.com/onesheets.