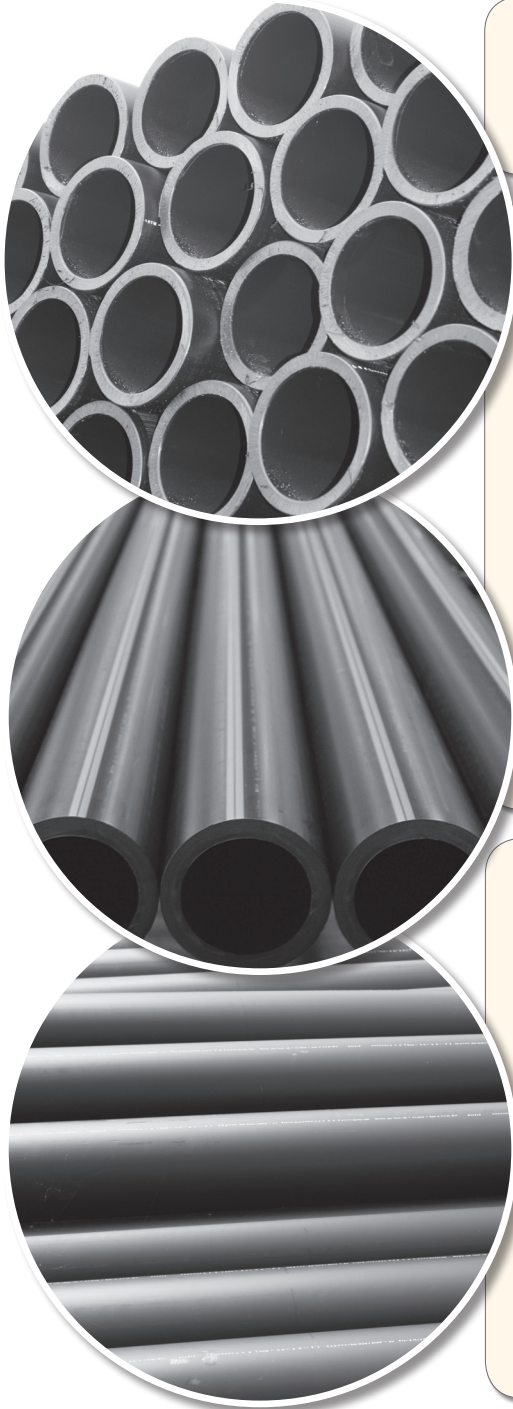




# HDPE FOR IRRIGATION & GEO-FLO WATER SYSTEMS

MEETS AWWA C901, ASTM D2239, ASTM D2737, ASTM D3035, CELL CLASS PER ASTM D3350, PPI LISTED MATERIAL (TR-4) PE 3408/3608/4710, AND ANSI/NSF-14.



## APPLICATIONS

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

## DESCRIPTION

JM Eagle's high-density polyethylene irrigation and water pipe is made from premium, highly engineered PE 3408/3608 or PE 4710 resin material for a maximum pressure rating to service today's irrigation and water needs.

Products are available in ½-inch to 12-inch diameters.

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

JM Eagle makes three specialty products under this category. Green Stripe turf pipe for irrigation is available in ¾- and 1-inch diameters. Pure-Core for water service is available in ½- through 2-inch diameters. And Geo-Flo for geothermal applications is available in ¾- to 12-inch diameters.

PE 4710 resin surpasses PE 3408/3608 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 pipe for irrigation and water is manufactured for excellent performance and a long life expectancy.

- Its butt-fused joints eliminate potential leak points, common at 10 to 20 feet with ductile iron pipe, for a zero leak rate.
- Highly resistant to corrosion and weather, recent studies conclude it will last at least 100 years.
- Its light weight and flexibility make it easy to install, eliminate the need for fittings required with directional changes, and make it highly suitable for use in earthquake-prone areas.
- Its high-strength walls give it the highest PE pressure rating, outstanding resistance to SCG and increased resistance to rapid crack propagation.
- The increased working stress rating of high-performance PE 4710 resin material makes it a superior choice over steel or ductile iron pipe, especially for the large-diameter pipe sizes.

Revised 4/9/2012. This information may have been updated. Please download the latest version at [www.jmeagle.com/onesheets](http://www.jmeagle.com/onesheets).



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## SUBMITTAL AND DATA SHEET

### S.I.D.R. PRESSURE PIPE ASTM D2239

PE 4710		DR 9 (250 psi)			DR 11.5 (190 psi)		
PE 3408/3608		DR 9 (160 psi)			DR 11.5 (125 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	0.069	0.760	0.07	0.060	0.742	0.06
¾	0.824	0.092	1.008	0.12	0.072	0.968	0.09
1	1.049	0.117	1.283	0.19	0.091	1.231	0.14
1¼	1.380	0.153	1.686	0.33	0.120	1.620	0.25
1½	1.610	0.179	1.968	0.44	0.140	1.890	0.34
2	2.067	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)		
PE 3408/3608		DR 15 (100 psi)			DR 19 (80 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

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

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

### COPPER TUBING SIZES (C.T.S.) PRESSURE PIPE ASTM D2737

PE 3408/3608		DR 9 (200 psi)			DR 11 (160 psi)		
PIPE SIZE	AVG. O.D.	MIN. T.	AVG. I.D.	WEIGHT LB/FT	MIN. T.	AVG. I.D.	WEIGHT LB/FT
½	0.625	0.069	0.479	0.05	0.062	0.494	0.05
¾	0.875	0.097	0.669	0.10	0.080	0.705	0.09
1	1.125	0.125	0.860	0.17	0.102	0.909	0.14
1¼	1.375	0.153	1.051	0.26	0.125	1.110	0.21
1½	1.625	0.181	1.241	0.36	0.148	1.311	0.30
2	2.125	0.236	1.625	0.61	0.193	1.716	0.51

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### GEO-FLO HDPE GEOTHERMAL PIPE AND TUBING

Geo-flo HDPE Geothermal Pipe and tubing is produced to ASTM D3035 for smaller diameters and ASTM F714 for sizes 3" through 12".

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NOMINAL PIPE SIZE (IN)	AVERAGE O.D. (IN)	APPROX. I.D. (IN)	MIN. WALL THICKNESS (IN)	APPROX. WEIGHT (LBS/FT)
HDPE SDR 7 - P.R. 265 psi				
¾	1.050	0.730	0.150	0.18
1	1.315	0.910	0.188	0.28
1¼	1.660	1.150	0.237	0.45
1½	1.900	1.320	0.271	0.59
2	2.375	1.650	0.339	0.92
HDPE SDR 9 - P.R. 200 psi				
¾	1.050	0.800	0.117	0.15
1	1.315	1.000	0.146	0.23
1¼	1.660	1.270	0.184	0.36
1½	1.900	1.450	0.211	0.48
2	2.375	1.810	0.264	0.75
3	3.500	2.670	0.389	1.62
4	4.500	3.450	0.500	2.67
6	6.625	5.030	0.736	5.79
8	8.625	6.593	0.958	10.05
10	10.750	8.218	1.194	15.61
12	12.750	9.747	1.417	21.97
HDPE SDR 11 - P.R. 160 psi				
¾	1.050	0.850	0.095	0.12
1	1.315	1.060	0.120	0.19
1¼	1.660	1.340	0.151	0.30
1½	1.900	1.530	0.173	0.40
2	2.375	1.910	0.216	0.62
3	3.500	2.820	0.318	1.35
4	4.500	3.640	0.409	2.24
6	6.625	5.360	0.602	4.85
8	8.625	6.960	0.784	8.42
10	10.750	8.680	0.977	13.09
12	12.750	10.290	1.159	18.41

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