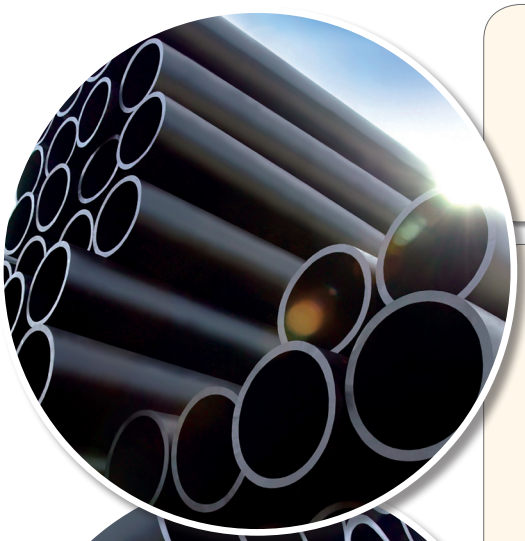
HDPE WATER & SEWER

MEETS AWWA C901/C906, ASTM D2239, ASTM D2737, ASTM D3035, ASTM F714, CELL CLASS PER ASTM D3350, PPI LISTED MATERIAL (TR-4) PE 3408/3608/4710, AND ANSI/NSF-14.

QUALITY • PERFORMANCE • LONGEVITY
50-YEAR WARRANTY on JM Eagle Plastic Pipe
GUARANTEED



APPLICATIONS

JM Eagle's high-performance high-density polyethylene water pressure pipes are suitable for municipal and industrial transmission systems for potable water, sewer, drain, mining, irrigation, and reclaimed water.

DESCRIPTION

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

Products are available in ½-inch to 63-inch diameters.

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

It can be manufactured with the color striping to identify application, such as a blue stripe for potable water, a green stripe for sewer applications and a purple stripe for reclaimed water.

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 water and sewer 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 3/28/2012. This information may have been updated. Please download the latest version at www.jmeagle.com/onesheets.

HDPE WATER & SEWER

SUBMITTAL AND DATA SHEET

JM Eagle™

Building essentials for a better tomorrow™

QUALITY • PERFORMANCE • LONGEVITY
50-YEAR WARRANTY on JM Eagle Plastic Pipe
GUARANTEED

HDPE IRON PIPE SIZE (I.P.S.) PRESSURE PIPE

ANSI/NSF-61, 14 LISTED

PE 4710		DR 7 (335 psi)			DR 9 (250 psi)			DR 11 (200 psi)		
PE 3408/3608		DR 7 (265 psi)			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	MIN. T.	AVG. I.D.	WEIGHT LB/FT
½	0.840	0.120	0.586	0.12	0.093	0.643	0.10	0.076	0.679	0.08
¾	1.050	0.150	0.732	0.18	0.117	0.802	0.15	0.095	0.849	0.12
1	1.315	0.188	0.916	0.29	0.146	1.005	0.23	0.120	1.061	0.20
1¼	1.660	0.237	1.158	0.46	0.184	1.270	0.37	0.151	1.340	0.31
1½	1.900	0.271	1.325	0.60	0.211	1.453	0.49	0.173	1.533	0.41
2	2.375	0.339	1.656	0.94	0.264	1.815	0.76	0.216	1.917	0.64
3	3.500	0.500	2.440	2.05	0.389	2.675	1.66	0.318	2.826	1.39
4	4.500	0.643	3.137	3.39	0.500	3.440	2.74	0.409	3.633	2.29
5⅜	5.375	0.768	3.747	3.75	0.597	4.109	4.11	0.489	4.338	4.34
5	5.563	0.795	3.878	5.17	0.618	4.253	4.18	0.506	4.490	3.51
6	6.625	0.946	4.619	7.33	0.736	5.065	5.93	0.602	5.349	4.97
7	7.125	0.976	5.056	8.20	0.792	5.446	6.86	0.648	5.751	5.75
8	8.625	1.232	6.013	12.43	0.958	6.594	10.05	0.784	6.963	8.43
10	10.750	1.536	7.494	19.32	1.194	8.219	15.61	0.977	8.679	13.09
12	12.750	1.821	8.889	27.16	1.417	9.746	21.97	1.159	10.293	18.41
14	14.000	2.000	9.760	32.76	1.556	10.107	26.50	1.273	11.301	22.20
16	16.000	2.286	11.154	42.79	1.778	12.231	34.60	1.455	12.915	29.00
18	18.000	2.571	12.549	54.14	2.000	13.760	43.79	1.636	14.532	36.69
20	20.000	2.857	13.943	66.85	2.222	15.289	54.05	1.818	16.146	45.30
22	22.000	3.143	15.337	80.89	2.444	16.819	65.40	2.000	17.76	54.82
24	24.000	3.429	16.732	96.27	2.667	18.346	77.85	2.182	19.374	65.24
26	26.000	—	—	—	2.889	19.875	91.36	2.364	20.988	76.57
28	28.000	—	—	—	3.111	21.405	105.95	2.545	22.605	88.78
30	30.000	—	—	—	3.333	22.934	121.62	2.727	24.219	101.92
32	32.000	—	—	—	—	—	—	2.909	25.833	115.97
34	34.000	—	—	—	—	—	—	3.091	27.447	130.93
36	36.000	—	—	—	—	—	—	3.273	29.061	146.80

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.

HDPE IRON PIPE SIZE (I.P.S.) PRESSURE PIPE

ANSI/NSF-61, 14 LISTED

PE 4710		DR 21 (100 psi)			DR 26 (80 psi)			DR 32.5 (63 psi)		
PE 3408/3608		DR 21 (80 psi)			DR 26 (64 psi)			DR 32.5 (50 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
3	3.500	0.167	3.146	0.77	0.135	3.214	0.63	0.108	3.271	0.50
4	4.500	0.214	4.046	1.26	0.173	4.133	1.03	0.138	4.207	0.83
5⅜	5.375	0.256	4.832	1.80	0.207	4.936	1.47	0.165	5.025	1.18
5	5.563	0.265	5.001	1.93	0.214	5.109	1.57	0.171	5.200	1.27
6	6.625	0.315	5.957	2.73	0.255	6.084	2.23	0.204	6.193	1.80
7	7.125	0.339	6.406	3.16	0.274	6.544	2.58	0.219	6.661	2.08
8	8.625	0.411	7.754	4.64	0.332	7.921	3.79	0.265	8.063	3.05
10	10.750	0.512	9.665	7.21	0.413	9.874	5.87	0.331	10.048	4.75
12	12.750	0.607	11.463	10.13	0.490	11.711	8.26	0.392	11.919	6.67
14	14.000	0.667	12.586	12.22	0.538	12.859	9.96	0.431	13.086	8.05
16	16.000	0.762	14.385	15.96	0.615	14.696	13.01	0.492	14.957	10.50
18	18.000	0.857	16.183	20.20	0.692	16.533	16.47	0.554	16.826	13.30
20	20.000	0.952	17.982	24.93	0.769	18.370	20.34	0.615	18.696	16.41
22	22.000	1.048	19.778	30.18	0.846	20.206	24.61	0.677	20.565	19.86
24	24.000	1.143	21.577	35.19	0.923	22.043	29.30	0.738	22.435	23.62
26	26.000	1.238	23.375	42.14	1.000	23.880	34.39	0.800	24.304	27.74
28	28.000	1.333	25.174	48.86	1.077	25.717	39.88	0.862	26.173	32.19
30	30.000	1.429	26.971	56.12	1.154	27.554	45.79	0.923	28.043	36.93
32	32.000	1.542	28.730	63.84	1.231	29.390	52.10	0.985	29.912	42.04
34	34.000	1.619	30.568	72.06	1.308	31.227	58.81	1.046	31.782	47.43
36	36.000	1.714	32.366	80.78	1.385	33.064	65.94	1.108	33.651	53.20
42	42.000	2.000	37.760	109.97	1.615	38.576	89.71	1.292	39.261	72.37
48	48.000	2.286	43.154	143.65	1.846	44.086	117.18	1.477	44.869	94.56
54	54.000	2.571	48.549	181.75	2.077	49.597	148.33	1.662	50.477	119.70
63	63.000	3.000	56.640	247.42	2.423	57.863	201.88	1.938	58.891	162.84

* For custom DR, perforated pipe, please contact JM Eagle™ PE sales at (800) 621-4404 for availability.
* All dimensions are in inches unless noted otherwise.

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

HDPE DUCTILE IRON PIPE SIZE (D.I.P.S.) PRESSURE PIPE

ANSI/NSF-61, 14 LISTED

PE 4710		DR 21 (100 psi)			DR 26 (80 psi)			DR 32.5 (50 psi)		
PE 3408/3608		DR 21 (80 psi)			DR 26 (64 psi)			DR 32.5 (50 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
4	4.800	0.229	4.315	1.44	0.185	4.408	1.17	0.148	4.486	0.95
6	6.900	0.329	6.203	2.97	0.265	6.338	2.42	0.212	6.451	1.95
8	9.050	0.431	8.136	5.11	0.348	8.312	4.17	0.278	8.461	3.36
10	11.100	0.529	9.979	7.69	0.427	10.195	6.27	0.342	10.375	5.06
12	13.200	0.629	11.867	10.87	0.508	12.123	8.87	0.406	12.339	7.15
14	15.300	0.729	13.755	14.60	0.588	14.053	11.90	0.471	14.301	9.61
16	17.400	0.829	15.643	18.88	0.669	15.982	15.39	0.536	16.264	12.44
18	19.500	0.929	17.531	23.71	0.750	17.910	19.34	0.600	18.228	15.60
20	21.600	1.029	19.419	29.10	0.831	19.838	23.74	0.665	20.190	19.16
24	25.800	1.229	23.195	41.51	0.992	23.697	33.85	0.794	24.117	27.32
30	32.000	1.524	28.769	63.84	1.231	29.390	52.10	0.985	29.912	42.04
36	38.300	1.824	34.433	91.45	1.473	35.177	74.61	1.179	35.801	60.18
42	44.500	2.119	40.008	123.44	1.712	40.871	100.75	1.370	41.596	81.25
48	50.800	2.419	45.672	160.87	1.954	46.658	131.28	1.563	47.486	105.90
54	57.100	2.719	51.336	203.25	2.196	52.444	165.83	1.757	53.375	133.81

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* All dimensions are in inches unless noted otherwise.

HDPE IRON PIPE SIZE (I.P.S.) PRESSURE PIPE

PE 4710		DR 13.5 (160 psi)			DR 17 (125 psi)			DR 19 (112 psi)		
PE 3408/3608		DR 13.5 (128 psi)			DR 17 (100 psi)			DR 19 (90 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	0.840	—	—	—	—	—	—	—	—	—
¾	1.050	0.078	0.885	0.10	—	—	—	—	—	—
1	1.315	0.097	1.109	0.16	—	—	—	—	—	—
1¼	1.660	0.123	1.399	0.26	—	—	—	—	—	—
1½	1.900	0.141	1.601	0.34	—	—	—	—	—	—
2	2.375	0.176	2.002	0.53	0.140	2.078	0.43	—	—	—
3	3.500	0.259	2.951	1.15	0.206	3.063	0.93	0.184	3.110	0.84
4	4.500	0.333	3.794	1.90	0.265	3.938	1.54	0.237	3.998	1.39
5⅜	5.375	0.398	4.531	4.53	0.316	4.705	2.20	0.283	4.775	1.98
5	5.563	0.412	4.690	2.91	0.327	4.870	2.35	0.293	4.942	2.12
6	6.625	0.491	5.584	4.13	0.390	5.798	3.34	0.349	5.885	3.01
7	7.125	0.528	6.006	4.78	0.419	6.237	3.86	0.375	6.330	3.48
8	8.625	0.639	7.270	7.00	0.507	7.550	5.65	0.454	7.663	5.10
10	10.750	0.796	9.062	10.87	0.632	9.410	8.87	0.566	9.550	7.92
12	12.750	0.944	10.749	15.29	0.750	11.160	12.36	0.671	11.327	11.14
14	14.000	1.037	11.802	18.45	0.824	12.253	14.91	0.737	12.438	13.43
16	16.000	1.185	13.488	24.09	0.941	14.005	19.46	0.842	14.215	17.54
18	18.000	1.333	15.174	30.48	1.059	15.755	24.64	0.947	15.992	22.20
20	20.000	1.481	16.860	37.63	1.176	17.507	30.41	1.053	17.768	27.41
22	22.000	1.630	18.544	45.56	1.294	19.257	36.80	1.158	19.545	33.16
24	24.000	1.778	20.231	54.21	1.412	21.007	43.81	1.263	21.322	39.47
26	26.000	1.926	21.917	63.62	1.529	22.759	51.39	1.368	23.100	46.32
28	28.000	2.074	23.603	73.78	1.647	24.508	59.62	1.474	24.875	53.72
30	30.000	2.222	25.289	84.69	1.765	26.258	68.45	1.579	26.653	61.66
32	32.000	2.370	26.976	96.35	1.882	28.010	77.86	1.684	28.430	70.16
34	34.000	2.519	28.660	108.81	2.000	29.760	87.91	1.790	30.205	79.20
36	36.000	2.667	30.346	121.98	2.118	31.510	98.57	1.895	31.983	88.80
42	42.000	—	—	—	2.471	36.761	134.16	2.211	37.314	120.86
48	48.000	—	—	—	2.824	42.013	175.23	2.526	42.644	157.86
54	54.000	—	—	—	3.177	47.265	221.71	2.842	47.975	199.79
63	63.000	—	—	—	—	—	—	—	—	—

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

HDPE DUCTILE IRON PIPE SIZE (D.I.P.S.) PRESSURE PIPE

ANSI/NSF-61, 14 LISTED

PE 4710		DR 7 (335 psi)			DR 9 (250 psi)			DR 11 (200 psi)		
PE 3408/3608		DR 7 (265 psi)			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	MIN. T.	AVG. I.D.	WEIGHT LB/FT
4	4.800	0.686	3.346	3.85	0.533	3.670	3.11	0.436	3.876	2.61
6	6.900	0.946	4.894	7.96	0.767	5.274	6.43	0.627	5.571	5.39
8	9.050	1.293	6.309	13.69	1.006	6.917	11.07	0.823	7.305	9.28
10	11.100	1.586	7.738	20.59	1.233	8.486	16.65	1.009	8.961	13.95
12	13.200	1.886	9.202	29.12	1.467	10.090	23.55	1.200	10.656	19.73
14	15.300	2.186	10.666	39.12	1.700	11.696	31.64	1.391	12.351	26.51
16	17.400	2.486	12.130	50.60	1.933	13.302	40.92	1.582	14.046	34.29
18	19.500	2.786	13.594	63.55	2.167	14.906	51.39	1.773	15.741	43.07
20	21.600	3.086	15.058	77.98	2.400	16.512	63.05	1.964	17.436	52.85
24	25.800	—	—	—	2.867	19.722	89.96	2.345	20.829	75.38
30	32.000	—	—	—	—	—	—	2.909	25.833	115.97
36	—	—	—	—	—	—	—	3.482	31.33	166.67
42	—	—	—	—	—	—	—	—	—	—
48	—	—	—	—	—	—	—	—	—	—
54	—	—	—	—	—	—	—	—	—	—

HDPE DUCTILE IRON PIPE SIZE (D.I.P.S.) PRESSURE PIPE

PE 4710		DR 13.5 (160 psi)			DR 17 (125 psi)			DR 19 (112 psi)		
PE 3408/3608		DR 13.5 (128 psi)			DR 17 (100 psi)			DR 19 (90 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
4	4.800	0.356	4.045	2.17	0.282	4.202	1.75	0.253	4.264	1.58
6	6.900	0.511	5.817	4.48	0.406	6.039	3.62	0.363	6.130	3.26
8	9.050	0.670	7.630	7.70	0.532	7.922	6.22	0.476	8.041	5.61
10	11.100	0.822	9.357	11.59	0.653	9.761	9.37	0.584	9.862	8.44
12	13.200	0.978	11.127	16.40	0.776	11.555	13.24	0.695	11.727	11.94
14	15.300	1.133	12.898	22.02	0.900	13.392	17.80	0.805	13.593	16.04
16	17.400	1.289	14.667	28.49	1.024	15.229	23.03	0.916	15.458	20.74
18	19.500	1.444	16.439	35.77	1.147	17.068	28.91	1.026	17.325	26.05
20	21.600	1.600	18.208	43.91	1.271	18.905	35.49	1.137	19.190	31.97
24	25.800	1.911	21.749	62.64	1.518	22.582	50.63	1.358	22.921	45.61
30	32.000	2.370	26.976	96.35	1.880	28.014	77.86	1.684	28.430	70.16
36	38.300	2.837	32.286	138.04	2.253	33.524	111.55	2.016	34.026	100.50
42	44.500	—	—	—	2.618	38.950	150.60	2.342	39.535	135.68
48	50.800	—	—	—	2.988	44.465	196.23	2.674	45.131	176.81
54	57.100	—	—	—	—	—	—	—	—	—

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Revised 3/28/2012. This information may have been updated. Please download the latest version at www.jmeagle.com/onesheets.