

S = 10000		Pipe										© 2003 Pressure Vessel Engineering Ltd. www.pveng.com												
12.5% undertolerance removed, no corrosion allowance, ASME VIII-1 UG-27(c)												Phone: (519)-880-9808 Fax: (519) 880-9810												
Schedule												20	30	40	STD	60	80	XS	100	120	140	160	XXS	
0.405 OD	wall	0.035	0.049									0.057	0.068	0.068		0.095	0.095							Inch
Max PSI at E=1.00		1610	2313									2732	3330	3330		4911	4911							PSI
Max PSI at E=0.85		1368	1966									2322	2830	2830		4175	4175							PSI
1/8"	Volume	0.001	0.001									0.000	0.000	0.000		0.000	0.000							ft^3/ft
	Weight	0.138	0.187									0.212	0.245	0.245		0.315	0.315							Lb/ft cs
0.540 OD	wall	0.049	0.065									0.073	0.088	0.088		0.119	0.119							Inch
Max PSI at E=1.00		1696	2300									2613	3219	3219		4560	4560							PSI
Max PSI at E=0.85		1441	1955									2221	2736	2736		3876	3876							PSI
1/4"	Volume	0.001	0.001									0.001	0.001	0.001		0.000	0.000							ft^3/ft
	Weight	0.257	0.330									0.364	0.425	0.425		0.536	0.536							Lb/ft cs
0.675 OD	wall	0.049	0.065									0.073	0.091	0.091		0.126	0.126							Inch
Max PSI at E=1.00		1338	1807									2048	2605	2605		3758	3758							PSI
Max PSI at E=0.85		1138	1536									1740	2214	2214		3194	3194							PSI
3/8"	Volume	0.002	0.002									0.002	0.001	0.001		0.001	0.001							ft^3/ft
	Weight	0.328	0.424									0.470	0.568	0.568		0.740	0.740							Lb/ft cs
0.840 OD	wall	0.065	0.083									0.095	0.109	0.109		0.147	0.147					0.188	0.294	Inch
Max PSI at E=1.00		1432	1858									2149	2498	2498		3490	3490					4644	8113	PSI
Max PSI at E=0.85		1217	1579									1827	2123	2123		2967	2967					3948	6896	PSI
1/2"	Volume	0.003	0.002									0.002	0.002	0.002		0.002	0.002					0.001	0.000	ft^3/ft
	Weight	0.539	0.672									0.757	0.852	0.852		1.089	1.089					1.311	1.716	Lb/ft cs
1.050 OD	wall	0.065	0.083									0.095	0.113	0.113		0.154	0.154					0.219	0.308	Inch
Max PSI at E=1.00		1132	1464									1690	2037	2037		2860	2860					4274	6460	PSI
Max PSI at E=0.85		963	1245									1437	1731	1731		2431	2431					3633	5491	PSI
3/4"	Volume	0.005	0.004									0.004	0.004	0.004		0.003	0.003					0.002	0.001	ft^3/ft
	Weight	0.685	0.858									0.970	1.132	1.132		1.475	1.475					1.946	2.443	Lb/ft cs
1.315 OD	wall	0.065	0.109									0.114	0.133	0.133		0.179	0.179					0.250	0.358	Inch
Max PSI at E=1.00		896	1540									1615	1905	1905		2633	2633					3838	5886	PSI
Max PSI at E=0.85		762	1309									1373	1619	1619		2238	2238					3262	5003	PSI
1"	Volume	0.008	0.007									0.006	0.006	0.006		0.005	0.005					0.004	0.002	ft^3/ft
	Weight	0.869	1.405									1.464	1.681	1.681		2.174	2.174					2.847	3.663	Lb/ft cs
1.660 OD	wall	0.065	0.109									0.117	0.140	0.140		0.191	0.191					0.250	0.382	Inch
Max PSI at E=1.00		705	1204									1297	1569	1569		2190	2190					2946	4800	PSI
Max PSI at E=0.85		599	1024									1103	1333	1333		1861	1861					2504	4080	PSI
1 1/4"	Volume	0.013	0.011									0.011	0.010	0.010		0.009	0.009					0.007	0.004	ft^3/ft
	Weight	1.108	1.808									1.930	2.275	2.275		3.000	3.000					3.769	5.220	Lb/ft cs
1.900 OD	wall	0.065	0.109									0.125	0.145	0.145		0.200	0.200					0.281	0.400	Inch
Max PSI at E=1.00		613	1046									1207	1411	1411		1989	1989					2887	4321	PSI
Max PSI at E=0.85		521	889									1026	1199	1199		1690	1690					2454	3673	PSI
1 1/2"	Volume	0.017	0.015									0.015	0.014	0.014		0.012	0.012					0.010	0.007	ft^3/ft
	Weight	1.275	2.087									2.372	2.721	2.721		3.635	3.635					4.864	6.415	Lb/ft cs

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Schedule									20	30	40	STD	60	80	XS	100	120	140	160	XXS		
2.375 OD	wall	0.065	0.083	0.109	0.125	0.141	0.172	0.188			0.154	0.154		0.218	0.218				0.344	0.436	Inch	
	Max PSI at E=1.00	488	627	830	956	1084	1335	1467			1189	1189		1717	1717				2821	3686	PSI	
	Max PSI at E=0.85	415	533	705	813	921	1135	1247			1010	1010		1459	1459				2398	3133	PSI	
2"	Volume	0.027	0.027	0.025	0.025	0.024	0.022	0.022			0.023	0.023		0.021	0.021				0.016	0.012	ft ³ /ft	
	Weight	1.61	2.03	2.64	3.01	3.37	4.05	4.40			3.66	3.66		5.03	5.03				7.47	9.04	Lb/ft cs	
2.875 OD	wall	0.083	0.109	0.125	0.141	0.156	0.172	0.188			0.203	0.203		0.276	0.276				0.375	0.552	Inch	
	Max PSI at E=1.00	516	682	785	889	987	1093	1199			1300	1300		1801	1801				2512	3882	PSI	
	Max PSI at E=0.85	438	579	667	755	839	929	1019			1105	1105		1531	1531				2135	3299	PSI	
2 1/2"	Volume	0.040	0.039	0.038	0.037	0.036	0.035	0.034			0.033	0.033		0.029	0.029				0.025	0.017	ft ³ /ft	
	Weight	2.48	3.22	3.68	4.12	4.54	4.97	5.40			5.80	5.80		7.67	7.67				10.02	13.71	Lb/ft cs	
3.500 OD	wall	0.083	0.109	0.125	0.141	0.156	0.172	0.188			0.216	0.216		0.300	0.300				0.438	0.600	Inch	
	Max PSI at E=1.00	422	557	641	725	805	891	977			1129	1129		1596	1596				2400	3409	PSI	
	Max PSI at E=0.85	359	474	545	617	684	757	830			959	959		1356	1356				2040	2898	PSI	
3"	Volume	0.061	0.059	0.058	0.056	0.055	0.054	0.053			0.051	0.051		0.046	0.046				0.038	0.029	ft ³ /ft	
	Weight	3.03	3.95	4.51	5.06	5.58	6.12	6.66			7.58	7.58		10.26	10.26				14.34	18.60	Lb/ft cs	
4.000 OD	wall	0.083	0.109	0.125	0.141	0.156	0.172	0.188			0.226	0.226		0.318	0.318						0.636	Inch
	Max PSI at E=1.00	368	486	559	632	702	776	850			1029	1029		1473	1473						3131	PSI
	Max PSI at E=0.85	313	413	475	538	596	659	723			875	875		1252	1252						2661	PSI
3 1/2"	Volume	0.080	0.078	0.077	0.075	0.074	0.073	0.072			0.069	0.069		0.062	0.062						0.041	ft ³ /ft
	Weight	3.48	4.53	5.18	5.82	6.41	7.04	7.66			9.12	9.12		12.52	12.52						22.88	Lb/ft cs
4.500 OD	wall	0.083	0.109	0.125	0.141	0.156	0.172	0.188			0.237	0.237	0.281	0.337	0.337		0.438		0.531	0.674	Inch	
	Max PSI at E=1.00	327	431	496	561	622	687	753			957	957	1143	1383	1383		1828		2251	2928	PSI	
	Max PSI at E=0.85	278	367	421	477	528	584	640			813	813	971	1176	1176		1554		1913	2489	PSI	
4"	Volume	0.102	0.100	0.099	0.097	0.096	0.094	0.093			0.088	0.088	0.085	0.080	0.080		0.072		0.064	0.054	ft ³ /ft	
	Weight	3.92	5.12	5.85	6.57	7.25	7.96	8.67			10.80	10.80	12.68	15.00	15.00		19.02		22.53	27.57	Lb/ft cs	
5.563 OD	wall	0.083	0.125	0.156	0.188	0.219	0.281	0.312			0.258	0.258		0.375	0.375		0.500		0.625	0.750	Inch	
	Max PSI at E=1.00	264	400	501	606	708	916	1022			839	839		1238	1238		1678		2134	2605	PSI	
	Max PSI at E=0.85	224	340	425	515	602	779	868			713	713		1052	1052		1427		1814	2214	PSI	
5"	Volume	0.159	0.154	0.150	0.147	0.143	0.136	0.133			0.139	0.139		0.126	0.126		0.114		0.101	0.090	ft ³ /ft	
	Weight	4.86	7.27	9.02	10.80	12.51	15.87	17.52			14.63	14.63		20.80	20.80		27.07		33.00	38.59	Lb/ft cs	
6.625 OD	wall	0.083	0.109	0.125	0.141	0.156	0.172	0.188			0.280	0.280		0.432	0.432		0.562		0.719	0.864	Inch	
	Max PSI at E=1.00	221	291	335	378	419	463	507			762	762		1196	1196		1578		2055	2512	PSI	
	Max PSI at E=0.85	188	248	284	321	356	393	431			648	648		1016	1016		1342		1747	2135	PSI	
6"	Volume	0.228	0.224	0.222	0.219	0.217	0.215	0.213			0.201	0.201		0.181	0.181		0.165		0.147	0.131	ft ³ /ft	
	Weight	5.81	7.59	8.69	9.77	10.79	11.87	12.94			19.00	19.00		28.60	28.60		36.43		45.40	53.22	Lb/ft cs	
8.625 OD	wall	0.125	0.156	0.188	0.203	0.219	0.312	0.344	0.250	0.277	0.322	0.322	0.406	0.500	0.500	0.594	0.719	0.812	0.906	0.875	Inch	
	Max PSI at E=1.00	256	321	387	419	452	649	718	518	575	671	671	852	1057	1057	1266	1549	1764	1984	1911	PSI	
	Max PSI at E=0.85	218	272	329	356	385	552	610	440	489	570	570	724	899	899	1076	1317	1499	1687	1624	PSI	
8"	Volume	0.383	0.377	0.371	0.368	0.366	0.349	0.344	0.360	0.355	0.347	0.347	0.333	0.317	0.317	0.302	0.282	0.267	0.253	0.258	ft ³ /ft	
	Weight	11.36	14.13	16.96	18.28	19.68	27.73	30.46	22.39	24.72	28.59	28.59	35.68	43.44	43.44	51.00	60.78	67.83	74.77	72.50	Lb/ft cs	

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Schedule									20	30	40	STD	60	80	XS	100	120	140	160	XXS	
10.750 OD	wall	0.156	0.188	0.203	0.219	0.279	0.344	0.438	0.250	0.307	0.365	0.365	0.500	0.594	0.500	0.719	0.844	1.000	1.125	1.000	Inch
	Max PSI at E=1.00	257	310	335	362	463	573	734	414	510	609	609	841	1006	841	1228	1454	1741	1976	1741	PSI
	Max PSI at E=0.85	218	263	285	307	393	487	624	352	433	517	517	715	855	715	1044	1236	1480	1680	1480	PSI
10"	Volume	0.594	0.587	0.584	0.580	0.567	0.552	0.532	0.573	0.560	0.548	0.548	0.518	0.499	0.518	0.473	0.448	0.418	0.394	0.418	ft ³ /ft
	Weight	17.7	21.2	22.9	24.7	31.2	38.3	48.3	28.1	34.3	40.5	40.5	54.8	64.5	54.8	77.1	89.4	104.2	115.8	104.2	Lb/ft cs
12.750 OD	wall	0.172	0.188	0.203	0.219	0.281	0.312	0.344	0.250	0.330	0.406	0.375	0.562	0.688	0.500	0.844	1.000	1.125	1.312	1.000	Inch
	Max PSI at E=1.00	238	261	282	304	392	436	481	348	461	570	526	796	981	706	1215	1452	1646	1941	1452	PSI
	Max PSI at E=0.85	203	222	240	259	333	370	409	296	392	484	447	677	834	600	1033	1234	1399	1649	1234	PSI
12"	Volume	0.839	0.835	0.831	0.827	0.810	0.802	0.794	0.818	0.797	0.777	0.785	0.737	0.706	0.753	0.667	0.630	0.601	0.559	0.630	ft ³ /ft
	Weight	23.1	25.3	27.2	29.3	37.5	41.5	45.6	33.4	43.8	53.6	49.6	73.2	88.7	65.5	107.4	125.6	139.8	160.4	125.6	Lb/ft cs
14.000 OD	wall	0.188	0.203	0.210	0.219	0.250	0.281	0.344	0.312	0.375	0.438	0.375	0.594	0.750	0.500	0.938	1.094	1.250	1.406		Inch
	Max PSI at E=1.00	237	256	265	277	316	356	438	396	478	560	478	765	974	641	1230	1447	1667	1890		PSI
	Max PSI at E=0.85	202	218	225	235	269	303	372	337	406	476	406	650	828	545	1046	1230	1417	1607		PSI
14"	Volume	1.012	1.008	1.006	1.003	0.994	0.985	0.967	0.976	0.958	0.939	0.958	0.895	0.852	0.922	0.802	0.761	0.721	0.683		ft ³ /ft
	Weight	27.8	29.9	31.0	32.3	36.8	41.2	50.2	45.7	54.6	63.5	54.6	85.1	106.2	72.2	131.0	151.0	170.4	189.3		Lb/ft cs
16.000 OD	wall	0.188	0.203	0.219	0.281	0.344	0.406	0.438	0.312	0.375	0.500	0.375	0.656	0.844	0.500	1.031	1.219	1.438	1.594		Inch
	Max PSI at E=1.00	207	224	242	311	382	452	488	346	417	559	417	739	959	559	1181	1408	1678	1874		PSI
	Max PSI at E=0.85	176	190	206	264	325	384	415	294	354	475	354	628	815	475	1004	1197	1427	1593		PSI
16"	Volume	1.331	1.326	1.321	1.300	1.279	1.258	1.248	1.289	1.268	1.227	1.268	1.177	1.117	1.227	1.060	1.003	0.939	0.895		ft ³ /ft
	Weight	31.8	34.3	37.0	47.2	57.6	67.7	72.9	52.3	62.6	82.9	62.6	107.6	136.8	82.9	165.0	192.6	223.9	245.5		Lb/ft cs
18.000 OD	wall	0.188	0.203	0.219	0.250	0.281	0.406	0.469	0.312	0.438	0.562	0.375	0.750	0.938	0.500	1.156	1.375	1.562	1.781		Inch
	Max PSI at E=1.00	184	199	215	245	276	401	464	307	433	559	370	751	946	496	1177	1412	1617	1860		PSI
	Max PSI at E=0.85	157	169	183	209	235	341	395	261	368	475	314	638	804	421	1000	1200	1374	1581		PSI
18"	Volume	1.694	1.688	1.682	1.670	1.659	1.611	1.588	1.647	1.599	1.553	1.623	1.485	1.418	1.576	1.342	1.268	1.207	1.137		ft ³ /ft
	Weight	35.8	38.6	41.6	47.4	53.2	76.4	87.9	59.0	82.2	104.8	70.7	138.3	171.1	93.6	208.2	244.4	274.5	308.8		Lb/ft cs
20.000 OD	wall	0.188	0.203	0.219	0.250	0.281	0.312	0.344	0.375	0.500	0.594	0.375	0.812	1.031	0.500	1.281	1.500	1.750	1.969		Inch
	Max PSI at E=1.00	166	179	193	221	248	276	305	332	445	531	332	731	936	445	1173	1385	1631	1850		PSI
	Max PSI at E=0.85	141	152	164	188	211	235	259	283	378	451	283	622	796	378	997	1177	1386	1573		PSI
20"	Volume	2.100	2.094	2.087	2.074	2.061	2.048	2.034	2.021	1.969	1.930	2.021	1.842	1.755	1.969	1.659	1.576	1.485	1.407		ft ³ /ft
	Weight	39.8	43.0	46.3	52.8	59.2	65.7	72.3	78.7	104.2	123.2	78.7	166.6	209.1	104.2	256.4	296.7	341.5	379.6		Lb/ft cs
24.000 OD	wall	0.188	0.203	0.219	0.250	0.281	0.312	0.344	0.375	0.562	0.688	0.375	0.969	1.219	0.500	1.531	1.812	2.062	2.344		Inch
	Max PSI at E=1.00	138	149	161	184	207	230	253	276	417	512	276	727	922	370	1169	1395	1600	1835		PSI
	Max PSI at E=0.85	117	127	137	156	176	195	215	235	354	435	235	618	783	314	993	1186	1360	1559		PSI
24"	Volume	3.044	3.036	3.028	3.012	2.996	2.980	2.964	2.948	2.854	2.792	2.948	2.655	2.536	2.885	2.391	2.264	2.155	2.034		ft ³ /ft
	Weight	47.9	51.6	55.7	63.5	71.3	79.0	87.0	94.7	140.8	171.5	94.7	238.6	296.9	125.6	367.8	429.9	483.7	542.7		Lb/ft cs
30.000 OD	wall	0.250	0.281	0.312	0.344	0.406	0.438	0.469	0.500	0.625		0.375			0.500						Inch
	Max PSI at E=1.00	147	165	183	202	239	258	277	295	370		221			295						PSI
	Max PSI at E=0.85	125	140	156	172	203	219	235	251	314		188			251						PSI
30"	Volume	4.746	4.727	4.707	4.686	4.647	4.626	4.607	4.587	4.508		4.666			4.587						ft ³ /ft
	Weight	79.5	89.3	99.0	109.1	128.5	138.4	148.1	157.7	196.3		118.8			157.7						Lb/ft cs