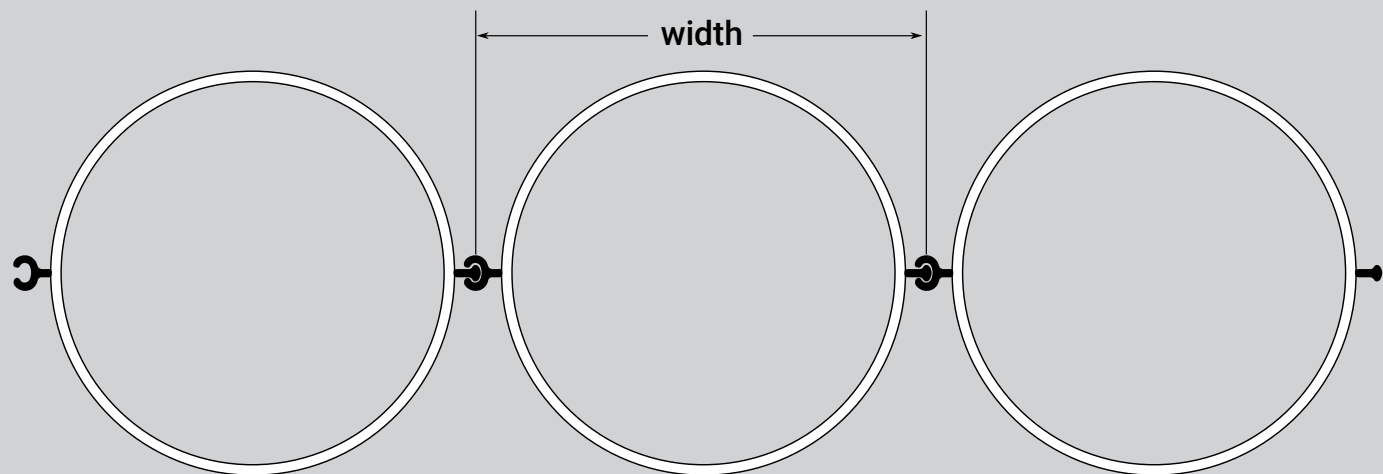


# O-Pile™

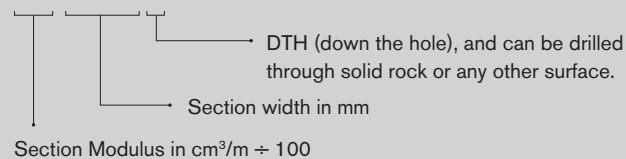
## Predictable, Quantifiable Retaining Wall System for All Soil Conditions

O-Pile systems are available for immediate shipment. These are examples from an endless variety of possible O-Pile. Please configure your own system on O-Pile.com.



### NAMING CONVENTION:

**12-3456 \***



Sheet Pile LLC is the owner and assignee of numerous patents and trademarks related to the O-Pile™ system, including, but not limited to, United States Patent Nos. 8,088,469, 8,323,765, and 7,935,406.

O-Pile	Pipe		Width in mm	Section modulus in <sup>3</sup> /ft cm <sup>3</sup> /m	Panel weight by ratio			Interlock strength k/ft kN/m	Flexi- bility ±20°	Minimum thickness in mm	Depth (Height) in mm	Moment of inertia in <sup>4</sup> /ft cm <sup>4</sup> /m	Bending moment by grade					
	Diameter	Thickness			60%	80%	100%						50	60	65	S 355 GP	S 430 GP	X70
	in mm	in mm			lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>						k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m
26 - 449	16	0.375	17.7	47.6	45.49	46.49	47.49	20	±20°	0.28	16	381.2	198.6	238.3	259.3	204.5	247.7	279.2
	406	9.5	449	2562	222.1	227	231.9	3418		7.2	406	52,060	883.2	1059.9	1153.5	909.5	1101.7	1241.8
27 - 449	16	0.39	17.7	49.8	47.55	48.55	49.55	20	±20°	0.28	16	398.8	207.7	249.3	271.3	213.9	259.1	292.1
	406	10	449	2680	232.2	237.1	241.9	3418		7.2	406	54,463	924	1108.8	1206.7	951.5	1152.5	1299.1
29 - 500	18	0.375	19.7	54.6	45.75	46.65	47.55	20	±20°	0.28	18	491.5	227.6	273.1	297.2	234.3	283.8	320
	457	9.5	500	2936	223.4	227.8	232.2	3418		7.2	457	67,122	1012.2	1214.7	1322	1042.4	1262.6	1423.2
30 - 469*	16	0.47	18.5	56.4	54.78	56.06	57.34	20	±20°	0.47	16	451.4	235.1	282.1	307.1	242.1	293.3	330.6
	406	12	469	3034	267.4	273.7	280	3418		12	406	61,647	1045.9	1255	1365.9	1077	1304.5	1470.5
31 - 843	24	0.375	33.2	58.5	39.22	40.87	42.53	20	±20°	0.28	24	702.3	243.9	292.6	318.5	251.1	304.2	342.9
	610	9.5	843	3147	191.5	199.6	207.7	3418		7.2	610	95,915	1084.8	1301.8	1416.8	1117.1	1353.1	1525.3
31 - 741	20	0.47	29.2	56.8	46.2	48.09	49.97	20	±20°	0.28	20	568.3	236.8	284.2	309.3	243.9	295.4	333
	508	12	741	3056	225.6	234.8	244	3418		7.2	508	77,617	1053.4	1264.1	1375.8	1084.8	1314	1481.2
31 - 500	18	0.39	19.7	57.1	47.85	48.75	49.65	20	±20°	0.28	18	514.4	238.2	285.8	311	245.2	297.1	334.8
	457	10	500	3073	233.6	238	242.4	3418		7.2	457	70,249	1059.4	1271.3	1383.6	1090.9	1321.4	1489.5
32 - 571*	20	0.375	22.5	59.4	45.16	46.22	47.27	20	±20°	0.47	20	594.3	247.6	297.2	323.4	255	308.9	348.2
	508	9.5	571	3196	220.5	225.7	230.8	3418		12	508	81,167	1101.6	1322	1438.7	1134.4	1374.1	1548.9
32 - 741	20	0.5	29.2	59.9	48.51	50.39	52.28	20	±20°	0.28	20	599	249.6	299.5	326	257	311.3	350.9
	508	12.7	741	3221	236.8	246	255.2	3418		7.2	508	81,803	1110.3	1332.3	1450	1143.3	1384.9	1561
32 - 449	16	0.47	17.7	58.9	56.19	57.19	58.19	20	±20°	0.28	16	471.5	245.6	294.7	320.7	252.9	306.3	345.3
	406	12	449	3169	274.4	279.2	284.1	3418		7.2	406	64,390	1092.4	1310.9	1426.7	1124.9	1362.6	1535.9
32 - 469*	16	0.5	18.5	59.4	57.65	58.93	60.22	20	±20°	0.47	16	475.2	247.5	297	323.3	254.9	308.8	348
	406	12.7	469	3194	281.5	287.7	294	3418		12	406	64,904	1101.1	1321.3	1438.1	1133.9	1373.4	1548.2
33 - 551	20	0.375	21.7	61.5	45.97	46.79	47.6	20	±20°	0.28	20	615.9	256.6	308	335.2	264.3	320.1	360.8
	508	9.5	551	3312	224.5	228.4	232.4	3418		7.2	508	84,113	1141.6	1369.9	1490.9	1175.6	1424	1605.1
33 - 571*	20	0.39	22.5	62.2	47.22	48.27	49.33	20	±20°	0.47	20	622.2	259.3	311.1	338.6	267	323.4	364.5
	508	10	571	3345	230.5	235.7	240.8	3418		12	508	84,974	1153.3	1384	1506.2	1187.6	1438.5	1621.5
33 - 688	20	0.47	27.1	61.2	47.58	48.88	50.17	20	±20°	0.28	20	612.2	255.1	306.1	333.2	262.7	318.2	358.7
	508	12	688	3292	232.3	238.6	245	3418		7.2	508	83,611	1134.8	1361.8	1482	1168.6	1415.5	1595.5
33 - 449	16	0.5	17.7	62	59.2	60.2	61.2	20	±20°	0.28	16	496.4	258.6	310.3	337.7	266.2	322.5	363.5
	406	12.7	449	3336	289	293.9	298.8	3418		7.2	406	67,792	1150.1	1380.2	1502.1	1184.4	1434.6	1617.1
34 - 790	24	0.375	31.1	62.4	39.95	41.08	42.21	20	±20°	0.28	24	749.6	260.3	312.4	339.9	268	324.7	366
	610	9.5	790	3359	195	200.6	206.1	3418		7.2	610	102,369	1157.8	1389.4	1512.1	1192.3	1444.2	1627.9

O-Pile	Pipe		Width in mm	Section modulus in <sup>3</sup> /ft cm <sup>3</sup> /m	Panel weight by ratio			Interlock strength k/ft kN/m	Flexi- bility ±20°	Minimum thickness in mm	Depth (Height) in mm	Moment of inertia in <sup>4</sup> /ft cm <sup>4</sup> /m	Bending moment by grade					
	Diameter	Thickness			60%	80%	100%						50	60	65	S 355 GP	S 430 GP	X70
	in mm	in mm			lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>						k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m
35 - 936	24	0.47	36.8	65.6	44.71	46.71	48.7	20	±20°	0.28	24	787.4	273.4	328.1	357.1	281.6	341.1	384.4
	610	12	936	3528	218.3	228	237.8	3418		7.2	610	107,537	1216.3	1459.5	1588.5	1252.5	1517.1	1710.1
35 - 551	20	0.39	21.7	64.4	48.1	48.91	49.73	20	±20°	0.28	20	644.8	268.7	322.4	350.9	276.7	335.1	377.8
	508	10	551	3467	234.8	238.8	242.8	3418		7.2	508	88,059	1195.2	1434.2	1560.9	1230.7	1490.8	1680.4
35 - 688	20	0.5	27.1	64.5	50.06	51.36	52.66	20	±20°	0.28	20	645.2	268.9	322.6	351.2	276.9	335.4	378
	508	12.7	688	3469	244.4	250.8	257.1	3418		7.2	508	88,121	1196	1435.2	1562	1231.6	1491.8	1681.6
35 - 520*	18	0.47	20.5	65	55.35	56.5	57.66	20	±20°	0.47	18	585.7	271.2	325.4	354.2	279.3	338.3	381.3
	457	12	520	3499	270.2	275.9	281.5	3418		12	457	79,993	1206.3	1447.6	1575.5	1242.2	1504.7	1696.1
35 - 469*	16	0.55	18.5	64.8	62.96	64.25	65.53	20	±20°	0.47	16	518.8	270.2	324.3	352.9	278.3	337.1	380
	406	14	469	3487	307.4	313.7	319.9	3418		12	406	70,857	1202.1	1442.6	1570	1237.9	1499.4	1690.2
36 - 622*	22	0.375	24.5	66.3	45.41	46.37	47.34	20	±20°	0.47	22	730.2	276.6	331.9	361.2	284.8	345	388.9
	559	9.5	622	3569	221.7	226.4	231.1	3418		12	559	99,718	1230.4	1476.4	1606.9	1267	1534.7	1729.9
36 - 500	18	0.47	19.7	67.6	56.64	57.54	58.44	20	±20°	0.28	18	609.2	282	338.4	368.3	290.4	351.8	396.5
	457	12	500	3639	276.6	280.9	285.3	3418		7.2	457	83,191	1254.6	1505.5	1638.4	1291.9	1564.8	1763.9
36 - 449	16	0.55	17.7	67.7	64.75	65.74	66.74	20	±20°	0.28	16	541.9	282.3	338.7	368.6	290.7	352.1	396.9
	406	14	449	3642	316.1	321	325.9	3418		7.2	406	74,011	1255.6	1506.8	1639.8	1293	1566.2	1765.4
37 - 602	22	0.375	23.7	68.5	46.15	46.9	47.65	20	±20°	0.28	22	754.4	285.8	343	373.2	294.3	356.5	401.8
	559	9.5	602	3688	225.3	229	232.6	3418		7.2	559	103,032	1271.3	1525.5	1660.3	1309.1	1585.7	1787.4
37 - 936	24	0.5	36.8	69.2	46.92	48.92	50.91	20	±20°	0.28	24	830.5	288.4	346	376.6	297	359.7	405.5
	610	12.7	936	3721	229.1	238.8	248.6	3418		7.2	610	113,416	1282.8	1539.3	1675.3	1321	1600	1803.6
37 - 622*	22	0.39	24.5	69.5	47.49	48.45	49.42	20	±20°	0.47	22	764.6	289.6	347.6	378.3	298.3	361.3	407.2
	559	10	622	3737	231.8	236.6	241.3	3418		12	559	104,423	1288.4	1546.1	1682.7	1326.8	1607.1	1811.5
37 - 520*	18	0.5	20.5	68.5	58.29	59.44	60.6	20	±20°	0.47	18	617	285.7	342.8	373.1	294.2	356.3	401.7
	457	12.7	520	3686	284.6	290.2	295.9	3418		12	457	84,268	1270.8	1525	1659.7	1308.6	1585.1	1786.7
38 - 1088	30	0.375	42.8	71.5	38.43	40.15	41.86	20	±20°	0.28	30	1072.8	298	357.6	389.2	306.9	371.7	419
	762	9.5	1088	3845	187.6	196	204.4	3418		7.2	762	146,501	1325.6	1590.7	1731.2	1365	1653.4	1863.8
38 - 500	18	0.5	19.7	71.3	59.7	60.6	61.5	20	±20°	0.28	18	641.7	297.1	356.5	388	306	370.6	417.7
	457	12.7	500	3834	291.5	295.9	300.3	3418		7.2	457	87,637	1321.6	1585.9	1726	1361	1648.5	1858.2
39 - 673*	24	0.375	26.5	73.3	45.61	46.5	47.4	20	±20°	0.47	24	880.1	305.6	366.7	399.1	314.7	381.2	429.7
	610	9.5	673	3943	222.7	227.1	231.4	3418		12	610	120,197	1359.5	1631.4	1775.5	1399.9	1695.7	1911.4
39 - 843	24	0.47	33.2	72.8	47.94	49.6	51.25	20	±20°	0.28	24	874.1	303.5	364.2	396.4	312.5	378.6	426.7
	610	12	843	3916	234.1	242.2	250.2	3418		7.2	610	119,366	1350.1	1620.1	1763.2	1390.3	1684	1898.2

O-Pile	Pipe		Width in mm	Section modulus in <sup>3</sup> /ft cm <sup>3</sup> /m	Panel weight by ratio			Interlock strength k/ft kN/m	Flexi- bility ±20°	Minimum thickness in mm	Depth (Height) in mm	Moment of inertia in <sup>4</sup> /ft cm <sup>4</sup> /m	Bending moment by grade					
	Diameter	Thickness			60%	80%	100%						50	60	65	S 355 GP	S 430 GP	X70
	in mm	in mm			lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>						k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m
39 - 602	22	0.39	23.7	71.8	48.3	49.05	49.8	20	±20°	0.28	22	790	299.3	359.1	390.8	308.2	373.3	420.8
	559	10	602	3862	235.8	239.5	243.1	3418		7.2	559	107,893	1331.2	1597.5	1738.6	1370.9	1660.5	1871.7
39 - 469*	16	0.625	18.5	72.5	70.56	71.84	73.13	20	±20°	0.47	16	580.2	302.2	362.6	394.6	311.2	376.9	424.9
	406	15.9	469	3899	344.5	350.8	357	3418		12	406	79,231	1344.2	1613	1755.5	1384.2	1676.6	1889.9
40 - 571*	20	0.47	22.5	73.7	55.82	56.87	57.92	20	±20°	0.47	20	737.8	307.4	368.9	401.5	316.6	383.5	432.3
	508	12	571	3967	272.5	277.7	282.8	3418		12	508	100,764	1367.6	1641.1	1786.1	1408.3	1705.8	1922.8
40 - 520*	18	0.55	20.5	74.9	63.72	64.88	66.04	20	±20°	0.47	18	674.4	312.2	374.7	407.8	321.5	389.4	439
	457	14	520	4029	311.1	316.8	322.4	3418		12	457	92,098	1388.9	1666.6	1813.9	1430.2	1732.4	1952.8
41 - 653	24	0.375	25.7	75.6	46.3	46.99	47.68	20	±20°	0.28	24	907.1	315	378	411.4	324.4	392.9	442.9
	610	9.5	653	4064	226.1	229.4	232.8	3418		7.2	610	123,881	1401.1	1681.4	1829.9	1442.8	1747.7	1970
41 - 673*	24	0.39	26.5	76.8	47.71	48.61	49.5	20	±20°	0.47	24	921.9	320.1	384.1	418.1	329.6	399.3	450.1
	610	10	673	4130	233	237.3	241.7	3418		12	610	125,895	1423.9	1708.7	1859.6	1466.3	1776.1	2002
41 - 843	24	0.5	33.2	76.8	50.4	52.05	53.71	20	±20°	0.28	24	921.8	320.1	384.1	418	329.6	399.3	450.1
	610	12.7	843	4130	246	254.1	262.2	3418		7.2	610	125,892	1423.9	1708.7	1859.6	1466.3	1776	2002
41 - 551	20	0.47	21.7	76.4	57.01	57.82	58.64	20	±20°	0.28	20	764.6	318.6	382.3	416.1	328.1	397.4	448
	508	12	551	4111	278.3	282.3	286.3	3418		7.2	508	104,421	1417.2	1700.7	1850.9	1459.4	1767.8	1992.6
41 - 449	16	0.625	17.7	75.7	72.68	73.68	74.68	20	±20°	0.28	16	606	315.6	378.8	412.2	325	393.7	443.8
	406	15.9	449	4073	354.9	359.7	364.6	3418		7.2	406	82,757	1404	1684.8	1833.6	1445.8	1751.2	1974
42 - 995	30	0.375	39.2	78.1	40.58	41.98	43.39	20	±20°	0.28	30	1172.7	325.8	390.9	425.4	335.5	406.3	458
	762	9.5	995	4203	198.1	205	211.8	3418		7.2	762	160,149	1449.1	1738.9	1892.5	1492.2	1807.5	2037.4
42 - 790	24	0.47	31.1	77.7	49.26	50.39	51.52	20	±20°	0.28	24	932.9	323.9	388.7	423	333.6	404	455.4
	610	12	790	4180	240.5	246	251.5	3418		7.2	610	127,398	1440.9	1729.1	1881.8	1483.8	1797.3	2025.9
42 - 571*	20	0.5	22.5	77.7	58.81	59.86	60.92	20	±20°	0.47	20	777.6	324	388.8	423.2	333.7	404.2	455.6
	508	12.7	571	4181	287.1	292.3	297.4	3418		12	508	106,198	1441.4	1729.6	1882.4	1484.3	1797.8	2026.6
42 - 500	18	0.55	19.7	77.9	65.35	66.25	67.15	20	±20°	0.28	18	701.3	324.7	389.7	424.1	334.4	405	456.6
	457	14	500	4190	319.1	323.5	327.8	3418		7.2	457	95,780	1444.4	1733.3	1886.4	1487.4	1801.6	2030.8
43 - 653	24	0.39	25.7	79.1	48.47	49.16	49.85	20	±20°	0.28	24	950.1	329.9	395.9	430.9	339.7	411.5	463.9
	610	10	653	4257	236.7	240	243.4	3418		7.2	610	129,753	1467.6	1761.1	1916.6	1511.2	1830.5	2063.4
43 - 551	20	0.5	21.7	80.5	60.11	60.93	61.74	20	±20°	0.28	20	805.9	335.8	403	438.6	345.8	418.8	472.1
	508	12.7	551	4333	293.5	297.5	301.4	3418		7.2	508	110,053	1493.7	1792.4	1950.8	1538.1	1863.1	2100.1
44 - 942	30	0.375	37.1	82.5	41.27	42.21	43.16	20	±20°	0.28	30	1238.9	344.1	413	449.4	354.4	429.2	483.9
	762	9.5	942	4440	201.5	206.1	210.7	3418		7.2	762	169,182	1530.8	1837	1999.2	1576.4	1909.4	2152.3

O-Pile	Pipe		Width in mm	Section modulus in <sup>3</sup> /ft cm <sup>3</sup> /m	Panel weight by ratio			Interlock strength k/ft kN/m	Flexi- bility ±20°	Minimum thickness in mm	Depth (Height) in mm	Moment of inertia in <sup>4</sup> /ft cm <sup>4</sup> /m	Bending moment by grade					
	Diameter	Thickness			60%	80%	100%						50	60	65	S 355 GP	S 430 GP	X70
	in mm	in mm			lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>						k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m
44 - 790	24	0.5	31.1	81.9	51.87	53	54.13	20	±20°	0.28	24	983.9	341.6	410	446.2	351.8	426.1	480.4
	610	12.7	790	4408	253.3	258.8	264.3	3418		7.2	610	134,363	1519.7	1823.6	1984.7	1564.9	1895.6	2136.7
44 - 622*	22	0.47	24.5	82.5	56.21	57.18	58.14	20	±20°	0.47	22	907.7	343.8	412.6	449.1	354.1	428.9	483.4
	559	12	622	4437	274.4	279.2	283.9	3418		12	559	123,961	1529.5	1835.4	1997.5	1575	1907.8	2150.5
44 - 469*	16	0.71	18.5	80.9	79.08	80.36	81.64	20	±20°	0.47	16	647.5	337.2	404.7	440.4	347.3	420.6	474.2
	406	18	469	4351	386.1	392.4	398.6	3418		12	406	88,422	1500.1	1800.1	1959.2	1544.8	1871.1	2109.2
45 - 520*	18	0.625	20.5	83.9	71.5	72.66	73.82	20	±20°	0.47	18	755.3	349.7	419.6	456.7	360.1	436.2	491.6
	457	15.9	520	4512	349.1	354.7	360.4	3418		12	457	103,143	1555.4	1866.5	2031.4	1601.7	1940.1	2187
45 - 449	16	0.71	17.7	84.5	81.58	82.58	83.58	20	±20°	0.28	16	676.3	352.2	422.7	460	362.7	439.4	495.3
	406	18	449	4545	398.3	403.2	408.1	3418		7.2	406	92,357	1566.9	1880.2	2046.3	1613.5	1954.4	2203
46 - 936	24	0.625	36.8	85.1	56.88	58.88	60.87	20	±20°	0.28	24	1021.9	354.8	425.8	463.4	365.4	442.6	498.9
	610	15.9	936	4579	277.7	287.5	297.2	3418		7.2	610	139,556	1578.4	1894.1	2061.4	1625.4	1968.8	2219.3
46 - 602	22	0.47	23.7	85.2	57.31	58.06	58.81	20	±20°	0.28	22	937.9	355.3	426.3	464	365.8	443.1	499.5
	559	12	602	4584	279.8	283.5	287.1	3418		7.2	559	128,081	1580.3	1896.4	2063.9	1627.4	1971.2	2221.9
46 - 571*	20	0.55	22.5	85	64.34	65.4	66.45	20	±20°	0.47	20	850.6	354.4	425.3	462.9	365	442.1	498.4
	508	14	571	4573	314.1	319.3	324.4	3418		12	508	116,167	1576.6	1892	2059.1	1623.6	1966.6	2216.8
46 - 469*	16	0.75	18.5	84.9	83.25	84.53	85.82	20	±20°	0.47	16	679.9	354.1	424.9	462.5	364.7	441.7	497.9
	406	19.05	469	4569	406.5	412.7	419	3418		12	406	92,848	1575.2	1890.2	2057.2	1622.1	1964.8	2214.7
47 - 622*	22	0.5	24.5	87	59.24	60.21	61.18	20	±20°	0.47	22	957	362.5	435	473.5	373.3	452.2	509.7
	559	12.7	622	4678	289.3	294	298.7	3418		12	559	130,697	1612.6	1935.1	2106.1	1660.6	2011.4	2267.3
47 - 551	20	0.55	21.7	88.1	65.85	66.66	67.48	20	±20°	0.28	20	881.5	367.3	440.8	479.7	378.2	458.2	516.4
	508	14	551	4739	321.5	325.5	329.4	3418		7.2	508	120,383	1633.9	1960.7	2133.8	1682.5	2038	2297.2
47 - 500	18	0.625	19.7	87.2	73.44	74.34	75.24	20	±20°	0.28	18	785.5	363.7	436.4	474.9	374.5	453.6	511.3
	457	15.9	500	4692	358.6	363	367.3	3418		7.2	457	107,267	1617.6	1941.2	2112.6	1665.8	2017.7	2274.4
48 - 1088	30	0.47	42.8	89.2	46.94	48.65	50.37	20	±20°	0.28	30	1338.4	371.8	446.1	485.5	382.8	463.7	522.7
	762	12	1088	4797	229.2	237.5	245.9	3418		7.2	762	182,771	1653.8	1984.5	2159.8	1703	2062.8	2325.2
48 - 602	22	0.5	23.7	89.9	60.45	61.2	61.94	20	±20°	0.28	22	988.8	374.6	449.5	489.2	385.7	467.2	526.6
	559	12.7	602	4833	295.1	298.8	302.4	3418		7.2	559	135,040	1666.2	1999.4	2176	1715.8	2078.3	2342.7
48 - 449	16	0.75	17.7	88.7	85.94	86.94	87.94	20	±20°	0.28	16	710.1	369.9	443.9	483.1	380.9	461.4	520
	406	19.05	449	4773	419.6	424.5	429.3	3418		7.2	406	96,980	1645.3	1974.4	2148.8	1694.3	2052.2	2313.3
48 - 469*	16	0.79	18.5	88.6	87.01	88.29	89.57	20	±20°	0.47	16	708.7	369.2	443	482.1	380.1	460.4	519
	406	20	469	4763	424.8	431.1	437.3	3418		12	406	96,788	1642	1970.5	2144.5	1690.9	2048.2	2308.7

O-Pile	Pipe		Width in mm	Section modulus in <sup>3</sup> /ft cm <sup>3</sup> /m	Panel weight by ratio			Interlock strength k/ft kN/m	Flexi- bility ±20°	Minimum thickness in mm	Depth (Height) in mm	Moment of inertia in <sup>4</sup> /ft cm <sup>4</sup> /m	Bending moment by grade					
	Diameter	Thickness			60%	80%	100%						50	60	65	S 355 GP	S 430 GP	X70
	in mm	in mm			lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>						k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m
49 - 1240	36	0.375	48.8	90.9	39.62	41.12	42.63	20	±20°	0.28	36	1636.2	378.8	454.5	494.7	390	472.4	532.6
	914	9.5	1240	4887	193.4	200.8	208.1	3418		7.2	914	223,448	1684.8	2021.8	2200.4	1735	2101.6	2368.9
49 - 673*	24	0.47	26.5	91.2	56.54	57.44	58.33	20	±20°	0.47	24	1095.4	380.4	456.4	496.7	391.7	474.4	534.8
	610	12	673	4908	276.1	280.4	284.8	3418		12	610	149,586	1691.9	2030.2	2209.6	1742.2	2110.3	2378.8
50 - 520*	18	0.71	20.5	93.8	80.24	81.39	82.55	20	±20°	0.47	18	844.4	390.9	469.1	510.6	402.6	487.6	549.6
	457	18	520	5044	391.7	397.4	403	3418		12	457	115,313	1739	2086.8	2271.1	1790.7	2169	2445
50 - 449	16	0.79	17.7	92.5	89.86	90.86	91.86	20	±20°	0.28	16	740.3	385.6	462.7	503.6	397	480.9	542.1
	406	20	449	4975	438.7	443.6	448.5	3418		7.2	406	101,095	1715.1	2058.2	2240	1766.2	2139.3	2411.5
51 - 825*	30	0.375	32.5	94.3	46.07	46.8	47.53	20	±20°	0.47	30	1414.8	393	471.6	513.3	404.7	490.2	552.6
	762	9.5	825	5071	224.9	228.5	232.1	3418		12	762	193,204	1748.2	2097.8	2283.1	1800.2	2180.5	2457.9
51 - 1088	30	0.5	42.8	94.1	49.33	51.05	52.77	20	±20°	0.28	30	1412.5	392.4	470.8	512.4	404.1	489.4	551.7
	762	12.7	1088	5063	240.9	249.2	257.6	3418		7.2	762	192,898	1745.4	2094.5	2279.5	1797.3	2177.1	2454
51 - 653	24	0.47	25.7	94	57.57	58.26	58.95	20	±20°	0.28	24	1128.9	392	470.4	512	403.7	489	551.2
	610	12	653	5058	281.1	284.4	287.8	3418		7.2	610	154,170	1743.7	2092.5	2277.3	1795.6	2175	2451.7
51 - 843	24	0.625	33.2	94.5	61.45	63.11	64.76	20	±20°	0.28	24	1134.3	393.9	472.6	514.4	405.6	491.3	553.8
	610	15.9	843	5082	300	308.1	316.2	3418		7.2	610	154,908	1752.1	2102.5	2288.2	1804.2	2185.4	2463.4
51 - 622*	22	0.55	24.5	95.2	64.86	65.83	66.8	20	±20°	0.47	22	1047.6	396.8	476.2	518.3	408.6	495	558
	559	14	622	5120	316.7	321.4	326.1	3418		12	559	143,066	1765.2	2118.3	2305.4	1817.8	2201.8	2481.9
51 - 571*	20	0.625	22.5	95.3	72.27	73.33	74.38	20	±20°	0.47	20	953.8	397.4	476.9	519.1	409.3	495.8	558.8
	508	15.9	571	5128	352.9	358	363.2	3418		12	508	130,261	1768	2121.5	2309	1820.6	2205.2	2485.7
52 - 805	30	0.375	31.7	96.6	46.65	47.2	47.76	20	±20°	0.28	30	1449.9	402.8	483.3	526	414.8	502.4	566.3
	762	9.5	805	5197	227.7	230.5	233.2	3418		7.2	762	198,004	1791.6	2149.9	2339.8	1844.9	2234.7	2519
52 - 995	30	0.47	39.2	97.5	49.88	51.28	52.69	20	±20°	0.28	30	1463	406.4	487.7	530.8	418.5	506.9	571.4
	762	12	995	5244	243.5	250.4	257.2	3418		7.2	762	199,798	1807.8	2169.4	2361	1861.6	2254.9	2541.8
52 - 673*	24	0.5	26.5	96.2	59.61	60.51	61.41	20	±20°	0.47	24	1155.2	401.1	481.4	523.9	413.1	500.4	564
	610	12.7	673	5176	291.1	295.4	299.8	3418		12	610	157,764	1784.4	2141.2	2330.4	1837.5	2225.7	2508.8
52 - 500	18	0.71	19.7	97.5	82.53	83.42	84.32	20	±20°	0.28	18	878.1	406.6	487.9	531	418.7	507.1	571.6
	457	18	500	5246	402.9	407.3	411.7	3418		7.2	457	119,924	1808.5	2170.2	2361.9	1862.3	2255.8	2542.7
53 - 1148	36	0.375	45.2	98.2	41.58	42.8	44.01	20	±20°	0.28	36	1768.4	409.4	491.2	534.6	421.6	510.6	575.6
	914	9.5	1148	5282	203	209	214.9	3418		7.2	914	241,500	1821	2185.2	2378.2	1875.2	2271.3	2560.3
53 - 825*	30	0.39	32.5	98.8	48.23	48.96	49.69	20	±20°	0.47	30	1482.5	411.8	494.2	537.8	424.1	513.7	579
	762	10	825	5314	235.5	239	242.6	3418		12	762	202,459	1831.9	2198.3	2392.4	1886.4	2285	2575.6

O-Pile	Pipe		Width in mm	Section modulus in <sup>3</sup> /ft cm <sup>3</sup> /m	Panel weight by ratio			Interlock strength k/ft kN/m	Flexi- bility ±20°	Minimum thickness in mm	Depth (Height) in mm	Moment of inertia in <sup>4</sup> /ft cm <sup>4</sup> /m	Bending moment by grade					
	Diameter	Thickness			60%	80%	100%						50	60	65	S 355 GP	S 430 GP	X70
	in mm	in mm			lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>						k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m
53 - 1088	30	0.53	42.8	99.3	51.85	53.57	55.28	20	±20°	0.28	30	1490.1	413.9	496.7	540.6	426.2	516.3	582
	762	13.4	1088	5341	253.1	261.5	269.9	3418		7.2	762	203,491	1841.2	2209.5	2404.7	1896	2296.6	2588.8
53 - 653	24	0.5	25.7	99.2	60.74	61.43	62.12	20	±20°	0.28	24	1190.6	413.4	496.1	539.9	425.7	515.7	581.3
	610	12.7	653	5335	296.6	299.9	303.3	3418		7.2	610	162,599	1839	2206.8	2401.8	1893.8	2293.9	2585.7
53 - 602	22	0.55	23.7	98.4	66.26	67	67.75	20	±20°	0.28	22	1082.4	410	492	535.5	422.2	511.4	576.5
	559	14	602	5291	323.5	327.1	330.8	3418		7.2	559	147,820	1823.9	2188.7	2382	1878.2	2275	2564.4
53 - 551	20	0.625	21.7	98.8	74.06	74.88	75.69	20	±20°	0.28	20	988.5	411.9	494.2	537.9	424.1	513.8	579.1
	508	15.9	551	5315	361.6	365.6	369.6	3418		7.2	508	134,989	1832.1	2198.6	2392.8	1886.7	2285.3	2576
53 - 520*	18	0.75	20.5	98.6	84.52	85.68	86.83	20	±20°	0.47	18	887.4	410.9	493	536.6	423.1	512.5	577.7
	457	19.05	520	5301	412.7	418.3	424	3418		12	457	121,192	1827.6	2193.1	2386.9	1882	2279.6	2569.6
54 - 805	30	0.39	31.7	101.2	48.86	49.42	49.98	20	±20°	0.28	30	1519.4	422.1	506.5	551.2	434.6	526.4	593.4
	762	10	805	5446	238.6	241.3	244	3418		7.2	762	207,489	1877.4	2252.9	2451.9	1933.3	2341.7	2639.6
54 - 790	24	0.625	31.1	100.8	63.67	64.8	65.93	20	±20°	0.28	24	1210.7	420.4	504.5	549	432.9	524.4	591.1
	610	15.9	790	5424	310.9	316.4	321.9	3418		7.2	610	165,332	1870	2243.9	2442.2	1925.6	2332.4	2629.2
54 - 936	24	0.75	36.8	100.6	66.73	68.73	70.72	20	±20°	0.28	24	1207.1	419.2	503	547.4	431.6	522.8	589.3
	610	19.05	936	5408	325.8	335.6	345.3	3418		7.2	610	164,849	1864.5	2237.4	2435	1920	2325.6	2621.5
55 - 1095	36	0.375	43.1	103	42.22	43.04	43.85	20	±20°	0.28	36	1854.3	429.2	515.1	560.6	442	535.4	603.5
	914	9.5	1095	5539	206.1	210.1	214.1	3418		7.2	914	253,225	1909.4	2291.2	2493.6	1966.2	2381.6	2684.6
55 - 942	30	0.47	37.1	103	51.09	52.04	52.99	20	±20°	0.28	30	1545.6	429.3	515.2	560.7	442.1	535.5	603.6
	762	12	942	5540	249.5	254.1	258.7	3418		7.2	762	211,067	1909.8	2291.7	2494.2	1966.6	2382.1	2685.2
55 - 995	30	0.5	39.2	102.9	52.5	53.9	55.31	20	±20°	0.28	30	1544.1	428.9	514.7	560.2	441.7	535	603.1
	762	12.7	995	5535	256.3	263.2	270	3418		7.2	762	210,868	1908	2289.6	2491.8	1964.8	2379.9	2682.6
55 - 500	18	0.75	19.7	102.5	86.98	87.88	88.78	20	±20°	0.28	18	922.9	427.3	512.8	558	440	533	600.8
	457	19.05	500	5513	424.7	429.1	433.4	3418		7.2	457	126,038	1900.7	2280.8	2482.3	1957.3	2370.8	2672.4
55 - 520*	18	0.79	20.5	102.8	88.38	89.53	90.69	20	±20°	0.47	18	925.8	428.6	514.4	559.8	441.4	534.7	602.7
	457	20	520	5531	431.5	437.1	442.8	3418		12	457	126,435	1906.7	2288	2490.1	1963.4	2378.3	2680.8
57 - 1088	30	0.56	42.8	105.3	54.79	56.51	58.23	20	±20°	0.28	30	1580.5	439	526.8	573.4	452.1	547.6	617.3
	762	14.3	1088	5665	267.5	275.9	284.3	3418		7.2	762	215,831	1952.9	2343.5	2550.5	2011	2435.9	2745.8
57 - 673*	24	0.55	26.5	105.4	65.31	66.2	67.1	20	±20°	0.47	24	1265.3	439.4	527.2	573.8	452.4	548	617.7
	610	14	673	5669	318.8	323.2	327.6	3418		12	610	172,797	1954.4	2345.3	2552.4	2012.6	2437.8	2747.9
57 - 622*	22	0.625	24.5	106.9	72.92	73.89	74.86	20	±20°	0.47	22	1175.9	445.4	534.5	581.8	458.7	555.6	626.3
	559	15.9	622	5748	356	360.8	365.5	3418		12	559	160,588	1981.4	2377.7	2587.7	2040.4	2471.5	2785.9

O-Pile	Pipe		Width in mm	Section modulus in <sup>3</sup> /ft cm <sup>3</sup> /m	Panel weight by ratio			Interlock strength k/ft kN/m	Flexi- bility ±20°	Minimum thickness in mm	Depth (Height) in mm	Moment of inertia in <sup>4</sup> /ft cm <sup>4</sup> /m	Bending moment by grade					
	Diameter	Thickness			60%	80%	100%						50	60	65	S 355 GP	S 430 GP	X70
	in mm	in mm			lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>						k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m
57 - 571*	20	0.71	22.5	106.7	81.19	82.24	83.29	20	±20°	0.47	20	1067.9	445	534	581.1	458.2	555	625.6
	508	18	571	5742	396.4	401.5	406.7	3418		12	508	145,838	1979.4	2375.2	2585	2038.3	2468.9	2783
58 - 942	30	0.5	37.1	108.7	53.86	54.81	55.75	20	±20°	0.28	30	1631.2	453.1	543.8	591.8	466.6	565.2	637.1
	762	12.7	942	5847	263	267.6	272.2	3418		7.2	762	222,761	2015.6	2418.7	2632.4	2075.6	2514.1	2833.9
58 - 995	30	0.53	39.2	108.6	55.25	56.65	58.06	20	±20°	0.28	30	1628.9	452.5	543	591	466	564.4	636.2
	762	13.4	995	5839	269.8	276.6	283.5	3418		7.2	762	222,449	2012.8	2415.3	2628.7	2072.7	2510.6	2830
58 - 653	24	0.55	25.7	108.6	66.6	67.29	67.98	20	±20°	0.28	24	1304.1	452.8	543.4	591.4	466.3	564.8	636.7
	610	14	653	5843	325.2	328.5	331.9	3418		7.2	610	178,092	2014.3	2417.1	2630.6	2074.2	2512.5	2832.1
58 - 500	18	0.79	19.7	106.9	90.99	91.89	92.79	20	±20°	0.28	18	962.8	445.8	534.9	582.2	459	556	626.8
	457	20	500	5752	444.3	448.6	453	3418		7.2	457	131,491	1982.9	2379.5	2589.7	2042	2473.4	2788
59 - 602	22	0.625	23.7	110.4	74.58	75.33	76.07	20	±20°	0.28	22	1215	460.2	552.3	601.1	473.9	574.1	647.1
	559	15.9	602	5939	364.1	367.8	371.4	3418		7.2	559	165,925	2047.3	2456.7	2673.7	2108.2	2553.6	2878.5
60 - 1240	36	0.46	48.8	111.8	47.93	49.44	50.94	20	±20°	0.28	36	2013.7	466.2	559.4	608.8	480	581.4	655.4
	914	11.8	1240	6015	234	241.4	248.7	3418		7.2	914	274,998	2073.5	2488.2	2708	2135.3	2586.4	2915.4
60 - 843	24	0.75	33.2	111.6	72.38	74.04	75.7	20	±20°	0.28	24	1339.9	465.3	558.3	607.6	479.1	580.3	654.2
	610	19.05	843	6003	353.4	361.5	369.6	3418		7.2	610	182,983	2069.6	2483.5	2702.9	2131.2	2581.4	2909.8
60 - 551	20	0.71	21.7	110.6	83.3	84.12	84.93	20	±20°	0.28	20	1106.7	461.1	553.4	602.2	474.9	575.2	648.4
	508	18	551	5950	406.7	410.7	414.7	3418		7.2	508	151,131	2051.2	2461.4	2678.9	2112.3	2558.5	2884
60 - 571*	20	0.75	22.5	112.3	85.56	86.61	87.67	20	±20°	0.47	20	1123.1	468	561.6	611.2	481.9	583.7	658
	508	19.05	571	6039	417.7	422.9	428	3418		12	508	153,381	2081.7	2498.1	2718.8	2143.7	2596.6	2926.9
61 - 1240	36	0.47	48.8	113.6	48.62	50.12	51.63	20	±20°	0.28	36	2044.7	473.3	568	618.2	487.4	590.4	665.5
	914	12	1240	6107	237.4	244.7	252.1	3418		7.2	914	279,224	2105.4	2526.5	2749.7	2168.1	2626.1	2960.2
62 - 977*	36	0.375	38.5	115.3	46.39	47.01	47.62	20	±20°	0.47	36	2076.5	480.7	576.8	627.8	495	599.6	675.8
	914	9.5	977	6202	226.5	229.5	232.5	3418		12	914	283,574	2138.2	2565.8	2792.5	2201.8	2667	3006.3
62 - 942	30	0.53	37.1	114.7	56.77	57.71	58.66	20	±20°	0.28	30	1720.8	478	573.6	624.3	492.2	596.2	672.1
	762	13.4	942	6168	277.2	281.8	286.4	3418		7.2	762	234,995	2126.3	2551.6	2776.9	2189.6	2652.2	2989.6
62 - 995	30	0.56	39.2	115.1	58.47	59.87	61.27	20	±20°	0.28	30	1727.7	479.9	575.9	626.8	494.2	598.6	674.8
	762	14.3	995	6193	285.5	292.3	299.2	3418		7.2	762	235,938	2134.8	2561.8	2788.1	2198.4	2662.8	3001.6
62 - 1088	30	0.625	42.8	116.2	60.14	61.86	63.58	20	±20°	0.28	30	1743.6	484.3	581.2	632.6	498.8	604.1	681
	762	15.9	1088	6250	293.6	302	310.4	3418		7.2	762	238,109	2154.5	2585.4	2813.7	2218.6	2687.3	3029.2
63 - 957	36	0.375	37.7	117.7	46.88	47.35	47.82	20	±20°	0.28	36	2119.9	490.7	588.9	640.9	505.3	612.1	690
	914	9.5	957	6332	228.9	231.2	233.5	3418		7.2	914	289,498	2182.9	2619.4	2850.8	2247.8	2722.8	3069.1



O-Pile	Pipe		Width in mm	Section modulus in <sup>3</sup> /ft cm <sup>3</sup> /m	Panel weight by ratio			Interlock strength k/ft kN/m	Flexi- bility ±20°	Minimum thickness in mm	Depth (Height) in mm	Moment of inertia in <sup>4</sup> /ft cm <sup>4</sup> /m	Bending moment by grade					
	Diameter	Thickness			60%	80%	100%						50	60	65	S 355 GP	S 430 GP	X70
	in mm	in mm			lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>						k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m
63 - 825*	30	0.47	32.5	117.6	57.29	58.02	58.75	20	±20°	0.47	30	1765	490.3	588.4	640.3	504.9	611.6	689.4
	762	12	825	6326	279.7	283.3	286.9	3418		12	762	241,036	2181	2617.1	2848.3	2245.9	2720.4	3066.4
63 - 551	20	0.75	21.7	116.4	87.83	88.65	89.46	20	±20°	0.28	20	1163.9	485	582	633.4	499.4	604.9	681.9
	508	19.05	551	6258	428.8	432.8	436.8	3418		7.2	508	158,948	2157.3	2588.8	2817.4	2221.5	2690.8	3033.2
63 - 571*	20	0.79	22.5	117.2	89.5	90.56	91.61	20	±20°	0.47	20	1172.5	488.6	586.3	638	503.1	609.4	686.9
	508	20	571	6304	437	442.1	447.3	3418		12	508	160,119	2173.2	2607.8	2838.2	2237.9	2710.7	3055.5
64 - 1240	36	0.5	48.8	119.9	51.15	52.66	54.17	20	±20°	0.28	36	2159	499.8	599.7	652.7	514.6	623.4	702.7
	914	12.7	1240	6449	249.7	257.1	264.5	3418		7.2	914	294,832	2223.1	2667.7	2903.4	2289.3	2772.9	3125.7
64 - 673*	24	0.625	26.5	118.4	73.47	74.36	75.26	20	±20°	0.47	24	1421.5	493.6	592.3	644.6	508.3	615.7	694
	610	15.9	673	6369	358.7	363.1	367.4	3418		12	610	194,126	2195.6	2634.7	2867.5	2261	2738.6	3087
64 - 790	24	0.75	31.1	119.1	75.34	76.47	77.6	20	±20°	0.28	24	1430.1	496.6	595.9	648.5	511.4	619.4	698.2
	610	19.05	790	6407	367.9	373.4	378.9	3418		7.2	610	195,296	2208.8	2650.6	2884.8	2274.6	2755.2	3105.6
64 - 622*	22	0.71	24.5	119.8	81.98	82.95	83.92	20	±20°	0.47	22	1318.1	499.3	599.1	652.1	514.2	622.8	702
	559	18	622	6442	400.3	405	409.7	3418		12	559	180,000	2220.9	2665.1	2900.5	2287	2770.2	3122.6
65 - 977*	36	0.39	38.5	120.9	48.59	49.2	49.82	20	±20°	0.47	36	2176.7	503.9	604.6	658	518.9	628.5	708.4
	914	10	977	6502	237.2	240.2	243.2	3418		12	914	297,250	2241.3	2689.6	2927.2	2308	2795.7	3151.3
65 - 1148	36	0.46	45.2	120.9	50.57	51.78	53	20	±20°	0.28	36	2176.4	503.8	604.6	658	518.8	628.4	708.4
	914	11.8	1148	6501	246.9	252.8	258.8	3418		7.2	914	297,215	2241.1	2689.3	2926.8	2307.8	2795.3	3150.9
65 - 805	30	0.47	31.7	120.5	58.15	58.7	59.26	20	±20°	0.28	30	1808.9	502.5	603	656.2	517.4	626.8	706.5
	762	12	805	6484	283.9	286.6	289.3	3418		7.2	762	247,025	2235.1	2682.2	2919.1	2301.7	2787.9	3142.6
65 - 942	30	0.56	37.1	121.6	60.17	61.11	62.06	20	±20°	0.28	30	1825.1	507	608.4	662.1	522.1	632.4	712.8
	762	14.3	942	6542	293.8	298.4	303	3418		7.2	762	249,245	2255.2	2706.3	2945.3	2322.4	2813	3170.9
65 - 551	20	0.79	21.7	121.5	91.92	92.73	93.55	20	±20°	0.28	20	1215	506.3	607.5	661.2	521.4	631.5	711.8
	508	20	551	6533	448.8	452.8	456.7	3418		7.2	508	165,931	2252.1	2702.5	2941.2	2319.1	2809.1	3166.4
66 - 957	36	0.39	37.7	123.4	49.12	49.59	50.06	20	±20°	0.28	36	2222.1	514.4	617.3	671.8	529.7	641.6	723.2
	914	10	957	6637	239.8	242.1	244.4	3418		7.2	914	303,460	2288.2	2745.8	2988.3	2356.3	2854.1	3217.1
66 - 1148	36	0.47	45.2	122.7	51.31	52.52	53.74	20	±20°	0.28	36	2209.9	511.6	613.9	668.1	526.8	638.1	719.2
	914	12	1148	6601	250.5	256.4	262.4	3418		7.2	914	301,783	2275.5	2730.6	2971.8	2343.2	2838.3	3199.4
66 - 653	24	0.625	25.7	122	75.02	75.71	76.39	20	±20°	0.28	24	1465.1	508.7	610.5	664.4	523.9	634.5	715.3
	610	15.9	653	6564	366.3	369.6	373	3418		7.2	610	200,075	2262.9	2715.5	2955.4	2330.3	2822.6	3181.6
67 - 825*	30	0.5	32.5	124.1	60.45	61.18	61.91	20	±20°	0.47	30	1862.8	517.5	621	675.8	532.9	645.4	727.6
	762	12.7	825	6677	295.2	298.7	302.3	3418		12	762	254,391	2301.8	2762.2	3006.1	2370.3	2871.1	3236.3

O-Pile	Pipe		Width in mm	Section modulus in <sup>3</sup> /ft cm <sup>3</sup> /m	Panel weight by ratio			Interlock strength k/ft kN/m	Flexi- bility ±20°	Minimum thickness in mm	Depth (Height) in mm	Moment of inertia in <sup>4</sup> /ft cm <sup>4</sup> /m	Bending moment by grade					
	Diameter	Thickness			60%	80%	100%						50	60	65	S 355 GP	S 430 GP	X70
	in mm	in mm			lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>						k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m
67 - 602	22	0.71	23.7	123.8	83.94	84.69	85.44	20	±20°	0.28	22	1361.9	515.9	619	673.7	531.2	643.5	725.3
	559	18	602	6656	409.8	413.5	417.1	3418		7.2	559	185,982	2294.7	2753.7	2996.9	2363	2862.3	3226.4
68 - 1095	36	0.46	43.1	126.7	51.64	52.46	53.27	20	±20°	0.28	36	2282.1	528.3	633.9	689.9	544	658.9	742.8
	914	11.8	1095	6816	252.1	256.1	260.1	3418		7.2	914	311,644	2349.9	2819.8	3068.9	2419.8	2931	3303.9
68 - 805	30	0.5	31.7	127.2	61.38	61.94	62.5	20	±20°	0.28	30	1909.1	530.3	636.4	692.6	546.1	661.5	745.6
	762	12.7	805	6843	299.7	302.4	305.2	3418		7.2	762	260,711	2359	2830.8	3080.8	2429.2	2942.4	3316.7
68 - 995	30	0.625	39.2	127	64.32	65.72	67.12	20	±20°	0.28	30	1906	529.5	635.4	691.5	545.2	660.4	744.4
	762	15.9	995	6832	314	320.9	327.7	3418		7.2	762	260,291	2355.2	2826.2	3075.9	2425.3	2937.7	3311.4
68 - 622*	22	0.75	24.5	126.1	86.43	87.4	88.37	20	±20°	0.47	22	1387	525.4	630.5	686.2	541	655.4	738.7
	559	19.05	622	6779	422	426.7	431.4	3418		12	559	189,419	2337.1	2804.6	3052.3	2406.7	2915.2	3286
69 - 1095	36	0.47	43.1	128.7	52.42	53.23	54.05	20	±20°	0.28	36	2317.2	536.4	643.7	700.5	552.4	669	754.2
	914	12	1095	6921	255.9	259.9	263.9	3418		7.2	914	316,434	2386	2863.2	3116.1	2457	2976.1	3354.7
70 - 1342	40	0.47	52.8	130.1	49.52	50.92	52.31	20	±20°	0.28	40	2602.7	542.2	650.7	708.2	558.4	676.4	762.4
	1016	12	1342	6997	241.8	248.6	255.4	3418		7.2	1016	355,428	2412	2894.4	3150.1	2483.8	3008.6	3391.3
70 - 1148	36	0.5	45.2	129.6	54.05	55.26	56.48	20	±20°	0.28	36	2333.4	540.2	648.2	705.4	556.2	673.7	759.4
	914	12.7	1148	6970	263.9	269.8	275.8	3418		7.2	914	318,651	2402.7	2883.2	3137.9	2474.2	2996.9	3378.2
70 - 825*	30	0.53	32.5	131	63.77	64.5	65.23	20	±20°	0.47	30	1965.1	545.9	655.1	712.9	562.1	680.9	767.5
	762	13.4	825	7044	311.4	314.9	318.5	3418		12	762	268,362	2428.2	2913.8	3171.2	2500.5	3028.8	3414
70 - 602	22	0.75	23.7	130.2	88.54	89.29	90.03	20	±20°	0.28	22	1433.1	542.9	651.4	709	559	677.1	763.3
	559	19.05	602	7005	432.3	435.9	439.6	3418		7.2	559	195,714	2414.8	2897.8	3153.8	2486.7	3012.1	3395.2
71 - 673*	24	0.71	26.5	132.9	82.66	83.55	84.45	20	±20°	0.47	24	1594.9	553.8	664.6	723.3	570.3	690.8	778.6
	610	18	673	7146	403.6	407.9	412.3	3418		12	610	217,802	2463.4	2956.1	3217.2	2536.7	3072.7	3463.6
71 - 622*	22	0.79	24.5	131.7	90.44	91.41	92.38	20	±20°	0.47	22	1448.7	548.8	658.5	716.7	565.1	684.5	771.6
	559	20	622	7081	441.6	446.3	451	3418		12	559	197,843	2441.1	2929.3	3188	2513.8	3044.8	3432.2
72 - 805	30	0.53	31.7	134.2	64.79	65.34	65.9	20	±20°	0.28	30	2014	559.4	671.3	730.6	576.1	697.8	786.6
	762	13.4	805	7219	316.3	319	321.8	3418		7.2	762	275,029	2488.5	2986.2	3250	2562.6	3104	3498.9
72 - 942	30	0.625	37.1	134.2	66.34	67.29	68.24	20	±20°	0.28	30	2013.5	559.3	671.2	730.5	576	697.7	786.4
	762	15.9	942	7217	323.9	328.5	333.2	3418		7.2	762	274,973	2488	2985.6	3249.4	2562.1	3103.4	3498.2
73 - 1095	36	0.5	43.1	135.9	55.29	56.11	56.92	20	±20°	0.28	36	2446.7	566.4	679.6	739.7	583.2	706.4	796.3
	914	12.7	1095	7308	270	273.9	277.9	3418		7.2	914	334,121	2519.3	3023.2	3290.3	2594.3	3142.4	3542.2
73 - 825*	30	0.55	32.5	136.2	66.3	67.03	67.76	20	±20°	0.47	30	2043	567.5	681	741.2	584.4	707.9	797.9
	762	14	825	7323	323.7	327.3	330.9	3418		12	762	278,991	2524.4	3029.3	3296.8	2599.5	3148.7	3549.3

O-Pile	Pipe		Width in mm	Section modulus in <sup>3</sup> /ft cm <sup>3</sup> /m	Panel weight by ratio			Interlock strength k/ft kN/m	Flexi- bility ±20°	Minimum thickness in mm	Depth (Height) in mm	Moment of inertia in <sup>4</sup> /ft cm <sup>4</sup> /m	Bending moment by grade					
	Diameter	Thickness			60%	80%	100%						50	60	65	S 355 GP	S 430 GP	X70
	in mm	in mm			lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>						k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m
73 - 602	22	0.79	23.7	136	92.69	93.43	94.18	20	±20°	0.28	22	1496.9	567	680.4	740.5	583.9	707.2	797.2
	559	20	602	7316	452.5	456.2	459.8	3418		7.2	559	204,418	2522.2	3026.6	3294	2597.3	3146	3546.2
74 - 1393	42	0.47	54.8	138.4	49.93	51.27	52.61	20	±20°	0.28	42	2908	577	692.4	753.6	594.2	719.7	811.2
	1067	12	1393	7445	243.8	250.3	256.9	3418		7.2	1067	397,117	2566.6	3079.9	3352	2643	3201.4	3608.6
74 - 1342	40	0.5	52.8	137.4	52.14	53.53	54.92	20	±20°	0.28	40	2748.8	572.7	687.2	747.9	589.7	714.3	805.2
	1016	12.7	1342	7389	254.6	261.4	268.2	3418		7.2	1016	375,382	2547.4	3056.9	3326.9	2623.2	3177.4	3581.6
74 - 1088	30	0.75	42.8	137.7	70.86	72.58	74.3	20	±20°	0.28	30	2066.1	573.9	688.7	749.6	591	715.9	807
	762	19.05	1088	7406	346	354.4	362.7	3418		7.2	762	282,157	2553	3063.6	3334.2	2629	3184.4	3589.6
74 - 653	24	0.71	25.7	136.9	84.49	85.17	85.86	20	±20°	0.28	24	1643.8	570.8	684.9	745.4	587.8	711.9	802.5
	610	18	653	7365	412.5	415.9	419.2	3418		7.2	610	224,477	2538.9	3046.7	3315.8	2614.5	3166.8	3569.7
75 - 1249	40	0.47	49.2	139.8	52.06	53.18	54.3	20	±20°	0.28	40	2795.9	582.5	699	760.7	599.8	726.6	819
	1016	12	1249	7516	254.2	259.7	265.1	3418		7.2	1016	381,808	2591	3109.2	3383.9	2668.1	3231.8	3643
75 - 805	30	0.55	31.7	139.5	67.38	67.94	68.5	20	±20°	0.28	30	2093.7	581.6	697.9	759.6	598.9	725.4	817.7
	762	14	805	7505	329	331.7	334.4	3418		7.2	762	285,923	2587.1	3104.5	3378.8	2664.1	3227	3637.5
75 - 825*	30	0.56	32.5	138.9	67.65	68.38	69.11	20	±20°	0.47	30	2084.3	579	694.8	756.2	596.2	722.2	814
	762	14.3	825	7471	330.3	333.9	337.4	3418		12	762	284,635	2575.4	3090.5	3363.5	2652.1	3212.4	3621.1
75 - 673*	24	0.75	26.5	139.9	87.17	88.07	88.96	20	±20°	0.47	24	1679.1	583	699.7	761.5	600.4	727.3	819.8
	610	19.05	673	7523	425.6	430	434.3	3418		12	610	229,308	2593.5	3112.2	3387.2	2670.8	3235	3646.5
76 - 977*	36	0.46	38.5	141.9	56.94	57.56	58.17	20	±20°	0.47	36	2555.6	591.6	709.9	772.6	609.2	737.9	831.8
	914	11.8	977	7633	278	281	284	3418		12	914	348,995	2631.5	3157.8	3436.7	2709.8	3282.3	3699.9
77 - 805	30	0.56	31.7	142.4	68.76	69.32	69.88	20	±20°	0.28	30	2136.1	593.4	712	774.9	611	740.1	834.3
	762	14.3	805	7656	335.7	338.5	341.2	3418		7.2	762	291,707	2639.4	3167.3	3447.1	2718	3292.2	3711
78 - 1196	40	0.47	47.1	146	53.11	53.86	54.61	20	±20°	0.28	40	2920.1	608.4	730	794.5	626.5	758.8	855.4
	1016	12	1196	7850	259.3	263	266.6	3418		7.2	1016	398,770	2706.1	3247.4	3534.2	2786.7	3375.4	3804.8
78 - 957	36	0.46	37.7	144.9	57.65	58.12	58.59	20	±20°	0.28	36	2609	603.9	724.7	788.8	621.9	753.3	849.1
	914	11.8	957	7793	281.5	283.8	286.1	3418		7.2	914	356,285	2686.5	3223.8	3508.5	2766.4	3350.9	3777.2
78 - 977*	36	0.47	38.5	144.1	57.81	58.43	59.04	20	±20°	0.47	36	2594.9	600.7	720.8	784.5	618.6	749.2	844.6
	914	12	977	7751	282.3	285.3	288.3	3418		12	914	354,358	2671.9	3206.3	3489.6	2751.5	3332.8	3756.7
78 - 653	24	0.75	25.7	144.2	89.14	89.83	90.52	20	±20°	0.28	24	1730.6	600.9	721.1	784.8	618.8	749.5	844.9
	610	19.05	653	7754	435.2	438.6	441.9	3418		7.2	610	236,336	2673	3207.6	3491	2752.6	3334.1	3758.3
79 - 1444	44	0.47	56.8	146.8	50.31	51.6	52.89	20	±20°	0.28	44	3230.8	611.9	734.3	799.2	630.1	763.2	860.3
	1118	12	1444	7896	245.6	251.9	258.3	3418		7.2	1118	441,204	2721.9	3266.3	3554.8	2802.9	3395.1	3827

O-Pile	Pipe		Width in mm	Section modulus in <sup>3</sup> /ft cm <sup>3</sup> /m	Panel weight by ratio			Interlock strength k/ft kN/m	Flexi- bility ±20°	Minimum thickness in mm	Depth (Height) in mm	Moment of inertia in <sup>4</sup> /ft cm <sup>4</sup> /m	Bending moment by grade					
	Diameter	Thickness			60%	80%	100%						50	60	65	S 355 GP	S 430 GP	X70
	in mm	in mm			lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>						k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m
79 - 1393	42	0.5	54.8	146.2	52.57	53.92	55.26	20	±20°	0.28	42	3071.5	609.4	731.3	795.9	627.6	760.2	856.9
	1067	12.7	1393	7864	256.7	263.2	269.8	3418		7.2	1067	419,453	2710.9	3253.1	3540.5	2791.6	3381.4	3811.6
79 - 1249	40	0.5	49.2	147.6	54.87	55.99	57.1	20	±20°	0.28	40	2952.8	615.2	738.2	803.4	633.5	767.3	865
	1016	12.7	1249	7938	267.9	273.3	278.8	3418		7.2	1016	403,242	2736.5	3283.8	3573.8	2817.9	3413.3	3847.5
79 - 957	36	0.47	37.7	147.1	58.54	59.01	59.48	20	±20°	0.28	36	2649.1	613.2	735.9	800.9	631.5	764.9	862.2
	914	12	957	7913	285.8	288.1	290.4	3418		7.2	914	361,761	2727.8	3273.3	3562.4	2809	3402.4	3835.2
79 - 673*	24	0.79	26.5	146.2	91.24	92.14	93.03	20	±20°	0.47	24	1754.6	609.2	731.1	795.7	627.4	759.9	856.6
	610	20	673	7861	445.5	449.8	454.2	3418		12	610	239,610	2710.1	3252.1	3539.3	2790.7	3380.3	3810.3
80 - 1300	42	0.47	51.2	148.3	52.4	53.47	54.54	20	±20°	0.28	42	3115.4	618.1	741.8	807.3	636.5	771	869.1
	1067	12	1300	7976	255.8	261.1	266.3	3418		7.2	1067	425,439	2749.6	3299.6	3591	2831.5	3429.7	3866
80 - 1240	36	0.625	48.8	148.3	62.61	64.11	65.62	20	±20°	0.28	36	2670.6	618.2	741.8	807.4	636.6	771.1	869.2
	914	15.9	1240	7977	305.7	313	320.4	3418		7.2	914	364,702	2749.9	3299.9	3591.4	2831.8	3430	3866.4
81 - 995	30	0.75	39.2	150.5	76.03	77.44	78.84	20	±20°	0.28	30	2258.6	627.4	752.9	819.4	646.1	782.6	882.1
	762	19.05	995	8096	371.2	378.1	384.9	3418		7.2	762	308,442	2790.9	3349	3644.9	2873.9	3481.1	3924
81 - 653	24	0.79	25.7	150.7	93.33	94.02	94.71	20	±20°	0.28	24	1808.4	627.9	753.5	820.1	646.6	783.2	882.8
	610	20	653	8102	455.7	459.1	462.4	3418		7.2	610	246,953	2793.1	3351.7	3647.8	2876.3	3483.9	3927.1
82 - 977*	36	0.5	38.5	152.2	61.03	61.64	62.26	20	±20°	0.47	36	2739.9	634.2	761.1	828.3	653.1	791.1	891.8
	914	12.7	977	8184	298	301	304	3418		12	914	374,165	2821.3	3385.5	3684.6	2905.3	3519	3966.7
82 - 825*	30	0.625	32.5	153.3	74.71	75.44	76.17	20	±20°	0.47	30	2299.4	638.8	766.5	834.2	657.8	796.7	898.1
	762	15.9	825	8242	364.8	368.3	371.9	3418		12	762	314,015	2841.3	3409.5	3710.7	2925.9	3544	3994.8
83 - 1444	44	0.5	56.8	155.1	52.98	54.28	55.57	20	±20°	0.28	44	3412.9	646.4	775.7	844.2	665.6	806.2	908.8
	1118	12.7	1444	8340	258.7	265	271.3	3418		7.2	1118	466,061	2875.2	3450.3	3755.1	2960.8	3586.4	4042.6
83 - 1247	42	0.47	49.1	154.6	53.42	54.14	54.85	20	±20°	0.28	42	3248.2	644.5	773.4	841.7	663.7	803.9	906.1
	1067	12	1247	8316	260.8	264.3	267.8	3418		7.2	1067	443,570	2866.8	3440.2	3744	2952.1	3575.8	4030.7
83 - 1196	40	0.5	47.1	154.2	56.04	56.79	57.54	20	±20°	0.28	40	3084	642.5	771	839.1	661.6	801.4	903.4
	1016	12.7	1196	8290	273.6	277.3	280.9	3418		7.2	1016	421,157	2858	3429.6	3732.6	2943.1	3564.9	4018.4
84 - 1351	44	0.47	53.2	156.9	52.71	53.74	54.77	20	±20°	0.28	44	3452.6	653.9	784.7	854	673.4	815.6	919.4
	1118	12	1351	8437	257.3	262.4	267.4	3418		7.2	1118	471,487	2908.7	3490.5	3798.8	2995.3	3628.1	4089.7
84 - 1300	42	0.5	51.2	156.7	55.23	56.31	57.38	20	±20°	0.28	42	3290.6	652.9	783.5	852.7	672.3	814.4	918
	1067	12.7	1300	8425	269.7	274.9	280.1	3418		7.2	1067	449,368	2904.3	3485.1	3793	2990.7	3622.6	4083.4
84 - 957	36	0.5	37.7	155.4	61.82	62.29	62.76	20	±20°	0.28	36	2797.1	647.5	777	845.6	666.8	807.6	910.4
	914	12.7	957	8355	301.9	304.1	306.4	3418		7.2	914	381,982	2880.2	3456.3	3761.6	2966	3592.6	4049.6

O-Pile	Pipe		Width in mm	Section modulus in <sup>3</sup> /ft cm <sup>3</sup> /m	Panel weight by ratio			Interlock strength k/ft kN/m	Flexi- bility ±20°	Minimum thickness in mm	Depth (Height) in mm	Moment of inertia in <sup>4</sup> /ft cm <sup>4</sup> /m	Bending moment by grade					
	Diameter	Thickness			60%	80%	100%						50	60	65	S 355 GP	S 430 GP	X70
	in mm	in mm			lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>						k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m
84 - 805	30	0.625	31.7	157.1	76	76.55	77.11	20	±20°	0.28	30	2356.6	654.6	785.5	854.9	674.1	816.5	920.4
	762	15.9	805	8447	371	373.8	376.5	3418		7.2	762	321,817	2911.9	3494.2	3802.9	2998.6	3632.1	4094.1
86 - 1148	36	0.625	45.2	160.3	66.43	67.64	68.86	20	±20°	0.28	36	2886.4	668.2	801.8	872.6	688	833.4	939.4
	914	15.9	1148	8621	324.3	330.3	336.2	3418		7.2	914	394,166	2972.1	3566.5	3881.6	3060.6	3707.2	4178.8
86 - 942	30	0.75	37.1	159	78.72	79.67	80.61	20	±20°	0.28	30	2386	662.8	795.4	865.6	682.5	826.7	931.9
	762	19.05	942	8552	384.3	389	393.6	3418		7.2	762	325,839	2948.3	3537.9	3850.4	3036	3677.4	4145.3
87 - 1079*	40	0.47	42.5	161.8	58.07	58.63	59.19	20	±20°	0.47	40	3237.1	674.4	809.3	880.8	694.5	841.2	948.2
	1016	12	1079	8702	283.5	286.3	289	3418		12	1016	442,062	2999.9	3599.9	3917.9	3089.2	3741.9	4217.9
88 - 1545	48	0.47	60.8	163.7	50.98	52.19	53.4	20	±20°	0.28	48	3929.3	682.2	818.6	890.9	702.5	850.9	959.1
	1219	12	1545	8802	248.9	254.8	260.7	3418		7.2	1219	536,583	3034.5	3641.4	3963	3124.8	3785	4266.4
88 - 1298	44	0.47	51.1	163.3	53.7	54.39	55.08	20	±20°	0.28	44	3594	680.7	816.8	889	701	849	957
	1118	12	1298	8783	262.2	265.5	268.9	3418		7.2	1118	490,793	3027.8	3633.4	3954.3	3118	3776.7	4257.1
88 - 1247	42	0.5	49.1	163.3	56.37	57.09	57.81	20	±20°	0.28	42	3430.8	680.7	816.9	889	701	849.1	957.1
	1067	12.7	1247	8784	275.2	278.7	282.2	3418		7.2	1067	468,518	3028	3633.7	3954.6	3118.2	3777	4257.4
89 - 1351	44	0.5	53.2	165.7	55.57	56.6	57.63	20	±20°	0.28	44	3647.1	690.8	828.9	902.1	711.3	861.6	971.2
	1118	12.7	1351	8913	271.3	276.3	281.4	3418		7.2	1118	498,050	3072.6	3687.1	4012.8	3164.1	3832.5	4320.1
89 - 1059	40	0.47	41.7	164.9	58.74	59.16	59.59	20	±20°	0.28	40	3298.2	687.1	824.6	897.4	707.6	857.1	966.1
	1016	12	1059	8866	286.8	288.9	290.9	3418		7.2	1016	450,410	3056.6	3667.9	3991.9	3147.6	3812.5	4297.5
90 - 977*	36	0.55	38.5	167	66.99	67.61	68.22	20	±20°	0.47	36	3007.5	696.2	835.4	909.2	716.9	868.4	978.8
	914	14	977	8983	327.1	330.1	333.1	3418		12	914	410,702	3096.8	3716.1	4044.4	3189	3862.7	4354.1
90 - 1095	36	0.625	43.1	168.1	68.27	69.09	69.9	20	±20°	0.28	36	3026.5	700.6	840.7	915	721.4	873.9	985
	914	15.9	1095	9040	333.3	337.3	341.3	3418		7.2	914	413,302	3116.4	3739.7	4070	3209.2	3887.1	4381.6
92 - 1130*	42	0.47	44.5	170.7	58.19	58.72	59.25	20	±20°	0.47	42	3584.9	711.3	853.6	929	732.5	887.2	1000.1
	1067	12	1130	9178	284.1	286.7	289.3	3418		12	1067	489,560	3164	3796.8	4132.2	3258.2	3946.6	4448.6
92 - 1079*	40	0.5	42.5	170.9	61.32	61.88	62.44	20	±20°	0.47	40	3418.8	712.3	854.7	930.2	733.5	888.4	1001.4
	1016	12.7	1079	9191	299.4	302.1	304.9	3418		12	1016	466,879	3168.3	3802	4137.8	3262.6	3951.9	4454.7
92 - 1342	40	0.625	52.8	170.1	63.94	65.33	66.72	20	±20°	0.28	40	3403.8	709.1	851	926.1	730.2	884.5	997
	1016	15.9	1342	9150	312.2	319	325.8	3418		7.2	1016	464,829	3154.4	3785.3	4119.7	3248.3	3934.6	4435.1
92 - 957	36	0.55	37.7	170.5	67.91	68.38	68.85	20	±20°	0.28	36	3070.3	710.7	852.9	928.2	731.9	886.5	999.3
	914	14	957	9171	331.6	333.9	336.2	3418		7.2	914	419,282	3161.5	3793.8	4128.9	3255.6	3943.4	4445
93 - 1545	48	0.5	60.8	172.9	53.72	54.93	56.14	20	±20°	0.28	48	4151.3	720.7	864.9	941.3	742.2	899	1013.3
	1219	12.7	1545	9300	262.3	268.2	274.1	3418		7.2	1219	566,903	3205.9	3847.1	4186.9	3301.4	3998.8	4507.5

O-Pile	Pipe		Width in mm	Section modulus in <sup>3</sup> /ft cm <sup>3</sup> /m	Panel weight by ratio			Interlock strength k/ft kN/m	Flexi- bility ±20°	Minimum thickness in mm	Depth (Height) in mm	Moment of inertia in <sup>4</sup> /ft cm <sup>4</sup> /m	Bending moment by grade					
	Diameter	Thickness			60%	80%	100%						50	60	65	S 355 GP	S 430 GP	X70
	in mm	in mm			lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>						k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m
93 - 1298	44	0.5	51.1	172.5	56.68	57.37	58.05	20	±20°	0.28	44	3796.4	719	862.8	939.1	740.4	896.9	1011
	1118	12.7	1298	9278	276.7	280.1	283.4	3418		7.2	1118	518,444	3198.4	3838.1	4177.1	3293.6	3989.5	4497
93 - 1110	42	0.47	43.7	173.7	58.82	59.23	59.63	20	±20°	0.28	42	3649.5	724.1	869	945.7	745.7	903.2	1018.1
	1067	12	1110	9344	287.2	289.2	291.2	3418		7.2	1067	498,383	3221.1	3865.3	4206.7	3317	4017.7	4528.8
93 - 825*	30	0.71	32.5	172.3	84.18	84.91	85.64	20	±20°	0.47	30	2585.4	718.2	861.8	937.9	739.6	895.8	1009.8
	762	18	825	9267	411	414.6	418.1	3418		12	762	353,062	3194.6	3833.5	4172.1	3289.7	3984.7	4491.6
94 - 1452	48	0.47	57.2	174.1	53.26	54.22	55.18	20	±20°	0.28	48	4180.1	725.7	870.9	947.8	747.3	905.2	1020.4
	1219	12	1452	9364	260	264.7	269.4	3418		7.2	1219	570,836	3228.2	3873.8	4216	3324.3	4026.6	4538.8
94 - 1059	40	0.5	41.7	174.1	62.05	62.47	62.9	20	±20°	0.28	40	3483.4	725.7	870.9	947.8	747.3	905.2	1020.4
	1016	12.7	1059	9364	302.9	305	307.1	3418		7.2	1016	475,696	3228.2	3873.8	4216	3324.2	4026.6	4538.8
95 - 1240	36	0.75	48.8	176.1	73.98	75.48	76.99	20	±20°	0.28	36	3171.3	734.1	880.9	958.8	756	915.7	1032.2
	914	19.05	1240	9472	361.2	368.5	375.9	3418		7.2	914	433,080	3265.5	3918.6	4264.8	3362.7	4073.2	4591.3
95 - 805	30	0.71	31.7	176.6	85.7	86.26	86.82	20	±20°	0.28	30	2649.6	736	883.2	961.2	757.9	918	1034.8
	762	18	805	9497	418.4	421.2	423.9	3418		7.2	762	361,834	3274	3928.8	4275.8	3371.4	4083.7	4603.2
97 - 1399	48	0.47	55.1	180.7	54.2	54.84	55.48	20	±20°	0.28	48	4338.8	753.3	903.9	983.8	775.7	939.6	1059.1
	1219	12	1399	9720	264.6	267.8	270.9	3418		7.2	1219	592,514	3350.8	4020.9	4376.1	3450.5	4179.5	4711.2
97 - 1130*	42	0.5	44.5	180.3	61.45	61.98	62.52	20	±20°	0.47	42	3786.6	751.3	901.6	981.2	773.7	937.1	1056.3
	1067	12.7	1130	9694	300	302.6	305.2	3418		12	1067	517,095	3342	4010.4	4364.6	3441.5	4168.6	4698.8
97 - 1393	42	0.625	54.8	181.2	64.53	65.87	67.21	20	±20°	0.28	42	3805.2	755	906	986	777.5	941.7	1061.5
	1067	15.9	1393	9742	315.1	321.6	328.2	3418		7.2	1067	519,636	3358.4	4030.1	4386.1	3458.4	4189	4721.9
98 - 1249	40	0.625	49.2	182.8	67.54	68.66	69.78	20	±20°	0.28	40	3656.5	761.8	914.1	994.9	784.4	950.2	1071
	1016	15.9	1249	9829	329.8	335.2	340.7	3418		7.2	1016	499,328	3388.5	4066.2	4425.4	3489.4	4226.6	4764.3
98 - 825*	30	0.75	32.5	181.6	88.84	89.57	90.3	20	±20°	0.47	30	2724.8	756.9	908.3	988.5	779.4	944.1	1064.2
	762	19.05	825	9767	433.8	437.3	440.9	3418		12	762	372,105	3366.9	4040.3	4397.2	3467.1	4199.6	4733.8
99 - 1452	48	0.5	57.2	184	56.17	57.13	58.09	20	±20°	0.28	48	4416.3	766.7	920.1	1001.4	789.6	956.4	1078
	1219	12.7	1452	9893	274.2	278.9	283.6	3418		7.2	1219	603,092	3410.6	4092.7	4454.2	3512.1	4254.1	4795.3
99 - 1110	42	0.5	43.7	183.5	62.14	62.55	62.95	20	±20°	0.28	42	3854.8	764.8	917.8	998.9	787.6	954	1075.4
	1067	12.7	1110	9869	303.4	305.4	307.4	3418		7.2	1067	526,414	3402.2	4082.7	4443.3	3503.5	4243.7	4783.5
100 - 805	30	0.75	31.7	186.1	90.48	91.04	91.6	20	±20°	0.28	30	2792.5	775.7	930.8	1013.1	798.8	967.6	1090.6
	762	19.05	805	10,009	441.8	444.5	447.2	3418		7.2	762	381,350	3450.5	4140.6	4506.4	3553.3	4303.9	4851.5
101 - 1079*	40	0.55	42.5	187.7	67.34	67.9	68.46	20	±20°	0.47	40	3754.3	782.2	938.6	1021.5	805.4	975.6	1099.7
	1016	14	1079	10,092	328.8	331.5	334.2	3418		12	1016	512,689	3479.2	4175	4543.8	3582.8	4339.7	4891.8

O-Pile	Pipe		Width in mm	Section modulus in <sup>3</sup> /ft cm <sup>3</sup> /m	Panel weight by ratio			Interlock strength k/ft kN/m	Flexi- bility ±20°	Minimum thickness in mm	Depth (Height) in mm	Moment of inertia in <sup>4</sup> /ft cm <sup>4</sup> /m	Bending moment by grade					
	Diameter	Thickness			60%	80%	100%						50	60	65	S 355 GP	S 430 GP	X70
	in mm	in mm			lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>						k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m
101 - 977*	36	0.625	38.5	188.2	75.56	76.18	76.8	20	±20°	0.47	36	3389.2	784.6	941.5	1024.6	807.9	978.6	1103.1
	914	15.9	977	10,123	368.9	371.9	374.9	3418		12	914	462,836	3489.9	4187.8	4557.8	3593.8	4353	4906.8
102 - 1698	54	0.47	66.8	189.2	51.85	52.95	54.05	20	±20°	0.28	54	5109.2	788.5	946.2	1029.7	811.9	983.5	1108.6
	1372	12	1698	10,174	253.1	258.5	263.9	3418		7.2	1372	697,707	3507.2	4208.7	4580.4	3611.6	4374.7	4931.2
102 - 1148	36	0.75	45.2	190.4	78.72	79.93	81.15	20	±20°	0.28	36	3427.5	793.4	952.1	1036.2	817	989.7	1115.6
	914	19.05	1148	10,238	384.3	390.3	396.2	3418		7.2	914	468,068	3529.3	4235.2	4609.3	3634.4	4402.2	4962.2
102 - 825*	30	0.79	32.5	190	93.05	93.78	94.51	20	±20°	0.47	30	2849.9	791.7	950	1033.9	815.2	987.5	1113.1
	762	20	825	10,215	454.3	457.9	461.4	3418		12	762	389,191	3521.5	4225.8	4599.1	3626.3	4392.4	4951.2
103 - 1399	48	0.5	55.1	191	57.22	57.86	58.5	20	±20°	0.28	48	4584	795.8	955	1039.4	819.5	992.7	1119
	1219	12.7	1399	10,269	279.4	282.5	285.6	3418		7.2	1219	625,994	3540.1	4248.1	4623.4	3645.5	4415.6	4977.4
103 - 1444	44	0.625	56.8	192.2	65.08	66.37	67.67	20	±20°	0.28	44	4229.7	801.1	961.3	1046.2	824.9	999.2	1126.3
	1118	15.9	1444	10,337	317.7	324.1	330.4	3418		7.2	1118	577,612	3563.4	4276.1	4653.8	3669.5	4444.8	5010.2
103 - 1059	40	0.55	41.7	191.2	68.18	68.61	69.03	20	±20°	0.28	40	3825.2	796.9	956.3	1040.8	820.6	994	1120.5
	1016	14	1059	10,283	332.9	335	337	3418		7.2	1016	522,372	3544.9	4253.9	4629.6	3650.4	4421.6	4984.1
103 - 1196	40	0.625	47.1	190.9	69.28	70.03	70.78	20	±20°	0.28	40	3818.9	795.6	954.7	1039.1	819.3	992.4	1118.6
	1016	15.9	1196	10,266	338.3	341.9	345.6	3418		7.2	1016	521,511	3539.1	4246.9	4622	3644.4	4414.4	4975.9
103 - 957	36	0.625	37.7	192.2	76.66	77.13	77.6	20	±20°	0.28	36	3460	800.9	961.1	1046	824.8	999	1126.1
	914	15.9	957	10,335	374.3	376.6	378.9	3418		7.2	914	472,505	3562.8	4275.3	4653	3668.8	4443.9	5009.3
104 - 1300	42	0.625	51.2	194.1	68.04	69.11	70.19	20	±20°	0.28	42	4076.6	808.8	970.6	1056.4	832.9	1008.9	1137.2
	1067	15.9	1300	10,437	332.2	337.4	342.7	3418		7.2	1067	556,696	3597.9	4317.5	4698.9	3705	4487.8	5058.7
105 - 805	30	0.79	31.7	194.7	94.79	95.35	95.91	20	±20°	0.28	30	2920.8	811.3	973.6	1059.6	835.5	1012	1140.7
	762	20	805	10,469	462.8	465.5	468.3	3418		7.2	762	398,861	3609	4330.8	4713.3	3716.4	4501.6	5074.2
106 - 1130*	42	0.55	44.5	198	67.49	68.03	68.56	20	±20°	0.47	42	4158.9	825.2	990.2	1077.7	849.8	1029.3	1160.2
	1067	14	1130	10,648	329.5	332.1	334.7	3418		12	1067	567,938	3670.6	4404.7	4793.8	3779.9	4578.4	5160.9
107 - 1095	36	0.75	43.1	199.6	81.16	81.97	82.79	20	±20°	0.28	36	3594	832	998.3	1086.5	856.7	1037.7	1169.7
	914	19.05	1095	10,735	396.2	400.2	404.2	3418		7.2	914	490,793	3700.7	4440.8	4833.1	3810.8	4615.9	5203.2
108 - 1605	54	0.47	63.2	200.1	53.96	54.83	55.7	20	±20°	0.28	54	5404.3	834	1000.8	1089.2	858.8	1040.3	1172.6
	1372	12	1605	10,761	263.4	267.7	271.9	3418		7.2	1372	738,016	3709.9	4451.8	4845.1	3820.3	4627.4	5216.1
108 - 1110	42	0.55	43.7	201.6	68.3	68.7	69.11	20	±20°	0.28	42	4233.8	840	1008.1	1097.1	865.1	1047.8	1181.1
	1067	14	1110	10,839	333.5	335.4	337.4	3418		7.2	1067	578,173	3736.8	4484.1	4880.2	3848	4660.9	5253.9
109 - 1247	42	0.625	49.1	202.4	69.73	70.44	71.16	20	±20°	0.28	42	4250.3	843.3	1012	1101.4	868.4	1051.9	1185.7
	1067	15.9	1247	10,882	340.4	343.9	347.4	3418		7.2	1067	580,420	3751.3	4501.5	4899.2	3862.9	4679	5274.3

O-Pile	Pipe		Width	Section modulus	Panel weight by ratio			Interlock strength	Flexibility	Minimum thickness	Depth (Height)	Moment of inertia	Bending moment by grade					
	Diameter	Thickness			60%	80%	100%						50	60	65	S 355 GP	S 430 GP	X70
	in mm	in mm																
109 - 1342	40	0.75	52.8	202.3	75.66	77.05	78.45	20	±20°	0.28	40	4046.3	843	1011.6	1100.9	868.1	1051.5	1185.2
	1016	19.05	1342	10,877	369.4	376.2	383	3418		7.2	1016	552,562	3749.8	4499.7	4897.2	3861.4	4677.2	5272.2
110 - 1351	44	0.625	53.2	205.4	68.5	69.53	70.56	20	±20°	0.28	44	4520	856.1	1027.3	1118	881.6	1067.8	1203.6
	1118	15.9	1351	11,046	334.4	339.5	344.5	3418		7.2	1118	617,258	3808	4569.6	4973.3	3921.4	4749.8	5354.1
111 - 1552	54	0.47	61.1	207	54.83	55.41	55.98	20	±20°	0.28	54	5589.4	862.6	1035.1	1126.5	888.2	1075.9	1212.8
	1372	12	1552	11,130	267.7	270.5	273.3	3418		7.2	1372	763,290	3836.9	4604.3	5011	3951.1	4785.9	5394.7
114 - 1079*	40	0.625	42.5	211.6	76	76.56	77.11	20	±20°	0.47	40	4233.5	882	1058.4	1151.9	908.2	1100.1	1240.1
	1016	15.9	1079	11,380	371.1	373.8	376.5	3418		12	1016	578,129	3923.3	4707.9	5123.8	4040.1	4893.6	5516.1
114 - 977*	36	0.71	38.5	212	85.23	85.85	86.46	20	±20°	0.47	36	3816.1	883.4	1060	1153.7	909.6	1101.8	1242
	914	18	977	11,398	416.1	419.2	422.2	3418		12	914	521,124	3929.4	4715.2	5131.8	4046.3	4901.2	5524.7
115 - 1545	48	0.625	60.8	214.5	66.07	67.28	68.49	20	±20°	0.28	48	5148.6	893.9	1072.6	1167.4	920.5	1114.9	1256.8
	1219	15.9	1545	11,534	322.6	328.5	334.4	3418		7.2	1219	703,094	3976.1	4771.3	5192.8	4094.5	4959.5	5590.4
115 - 1298	44	0.625	51.1	213.8	70.14	70.82	71.51	20	±20°	0.28	44	4705.1	891.1	1069.4	1163.8	917.7	1111.5	1252.9
	1118	15.9	1298	11,498	342.4	345.8	349.2	3418		7.2	1118	642,533	3964	4756.7	5176.9	4082	4944.3	5573.3
116 - 1850	60	0.47	72.8	214.9	52.57	53.58	54.59	20	±20°	0.28	60	6448.1	895.6	1074.7	1169.6	922.2	1117.1	1259.2
	1524	12	1850	11,556	256.7	261.6	266.5	3418		7.2	1524	880,546	3983.7	4780.4	5202.7	4102.3	4969	5601.1
116 - 1393	42	0.75	54.8	215.5	76.41	77.75	79.09	20	±20°	0.28	42	4525.4	897.9	1077.5	1172.7	924.6	1120	1262.5
	1067	19.05	1393	11,586	373.1	379.6	386.2	3418		7.2	1067	617,992	3994.1	4792.9	5216.3	4113	4981.9	5615.7
116 - 1059	40	0.625	41.7	215.6	77	77.42	77.85	20	±20°	0.28	40	4313.5	898.6	1078.4	1173.6	925.4	1120.9	1263.5
	1016	15.9	1059	11,595	375.9	378	380.1	3418		7.2	1016	589,047	3997.4	4796.8	5220.6	4116.4	4986	5620.3
116 - 957	36	0.71	37.7	216.4	86.53	87	87.47	20	±20°	0.28	36	3895.8	901.8	1082.2	1177.8	928.7	1124.8	1268
	914	18	957	11,636	422.5	424.8	427.1	3418		7.2	914	532,010	4011.5	4813.8	5239	4130.9	5003.6	5640.1
117 - 1249	40	0.75	49.2	217.3	80.14	81.26	82.37	20	±20°	0.28	40	4346.6	905.6	1086.7	1182.6	932.5	1129.5	1273.2
	1016	19.05	1249	11,684	391.3	396.7	402.2	3418		7.2	1016	593,572	4028.1	4833.7	5260.7	4148	5024.3	5663.5
120 - 1130*	42	0.625	44.5	223.3	76.19	76.72	77.25	20	±20°	0.47	42	4691	930.8	1116.9	1215.6	958.5	1161	1308.6
	1067	15.9	1130	12,010	372	374.6	377.2	3418		12	1067	640,599	4140.2	4968.2	5407.1	4263.4	5164.2	5821.1
120 - 977*	36	0.75	38.5	223.6	89.99	90.61	91.23	20	±20°	0.47	36	4024.7	931.6	1118	1216.7	959.4	1162.1	1309.9
	914	19.05	977	12,021	439.4	442.4	445.4	3418		12	914	549,614	4144.2	4973	5412.3	4267.6	5169.2	5826.7
122 - 1757	60	0.47	69.2	226.2	54.54	55.33	56.12	20	±20°	0.28	60	6788.3	942.8	1131.4	1231.3	970.9	1176	1325.6
	1524	12	1757	12,165	266.3	270.1	274	3418		7.2	1524	927,007	4193.9	5032.7	5477.2	4318.7	5231.1	5896.6
122 - 1110	42	0.625	43.7	227.4	77.15	77.55	77.96	20	±20°	0.28	42	4775.5	947.5	1137	1237.5	975.7	1181.9	1332.2
	1067	15.9	1110	12,226	376.7	378.6	380.6	3418		7.2	1067	652,143	4214.8	5057.8	5504.6	4340.3	5257.2	5926



O-Pile	Pipe		Width in mm	Section modulus in <sup>3</sup> /ft cm <sup>3</sup> /m	Panel weight by ratio			Interlock strength k/ft kN/m	Flexi- bility ±20°	Minimum thickness in mm	Depth (Height) in mm	Moment of inertia in <sup>4</sup> /ft cm <sup>4</sup> /m	Bending moment by grade					
	Diameter	Thickness			60%	80%	100%						50	60	65	S 355 GP	S 430 GP	X70
	in mm	in mm			lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>						k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m
122 - 1196	40	0.75	47.1	226.9	82.44	83.18	83.93	20	±20°	0.28	40	4539.7	945.8	1134.9	1235.2	973.9	1179.7	1329.8
	1016	19.05	1196	12,204	402.5	406.1	409.8	3418		7.2	1016	619,943	4207	5048.4	5494.4	4332.3	5247.6	5915.1
123 - 1452	48	0.625	57.2	228.2	69.31	70.27	71.23	20	±20°	0.28	48	5477.3	950.9	1141.1	1241.9	979.2	1186.1	1337
	1219	15.9	1452	12,270	338.4	343.1	347.8	3418		7.2	1219	747,976	4229.9	5075.9	5524.3	4355.8	5276.1	5947.3
123 - 1444	44	0.75	56.8	228.7	77.11	78.4	79.7	20	±20°	0.28	44	5032.4	953.1	1143.7	1244.8	981.5	1188.8	1340.1
	1118	19.05	1444	12,298	376.5	382.8	389.1	3418		7.2	1118	687,224	4239.7	5087.6	5537	4365.9	5288.2	5961
123 - 957	36	0.75	37.7	228.2	91.39	91.86	92.33	20	±20°	0.28	36	4108.8	951.1	1141.3	1242.2	979.4	1186.4	1337.3
	914	19.05	957	12,272	446.2	448.5	450.8	3418		7.2	914	561,095	4230.8	5076.9	5525.4	4356.7	5277.1	5948.5
124 - 1300	42	0.75	51.2	230.8	80.77	81.84	82.91	20	±20°	0.28	42	4848.2	962	1154.3	1256.3	990.6	1199.9	1352.5
	1067	19.05	1300	12,412	394.3	399.6	404.8	3418		7.2	1067	662,066	4279	5134.7	5588.3	4406.3	5337.2	6016.2
125 - 1704	60	0.47	67.1	233.3	55.35	55.87	56.4	20	±20°	0.28	60	7000	972.2	1166.7	1269.7	1001.2	1212.7	1367
	1524	12	1704	12,545	270.2	272.8	275.4	3418		7.2	1524	955,913	4324.7	5189.6	5648	4453.4	5394.3	6080.5
126 - 977*	36	0.79	38.5	234	94.29	94.91	95.52	20	±20°	0.47	36	4212.2	975	1170.1	1273.4	1004.1	1216.2	1370.9
	914	20	977	12,581	460.4	463.4	466.4	3418		12	914	575,215	4337.2	5204.7	5664.4	4466.3	5409.9	6098.2
127 - 1399	48	0.625	55.1	236.8	70.87	71.5	72.14	20	±20°	0.28	48	5685.3	987	1184.4	1289.1	1016.4	1231.2	1387.8
	1219	15.9	1399	12,736	346	349.1	352.2	3418		7.2	1219	776,381	4390.6	5268.7	5734.1	4521.2	5476.4	6173.1
128 - 1079*	40	0.71	42.5	238.5	85.77	86.33	86.88	20	±20°	0.47	40	4770	993.8	1192.5	1297.8	1023.3	1239.5	1397.2
	1016	18	1079	12,823	418.8	421.5	424.2	3418		12	1016	651,394	4420.5	5304.6	5773.1	4552.1	5513.8	6215.2
128 - 957	36	0.79	37.7	238.9	95.78	96.25	96.72	20	±20°	0.28	36	4300.2	995.4	1194.5	1300	1025	1241.6	1399.6
	914	20	957	12,844	467.6	469.9	472.2	3418		7.2	914	587,231	4427.8	5313.4	5782.8	4559.6	5523	6225.5
129 - 1247	42	0.75	49.1	240.7	83	83.71	84.43	20	±20°	0.28	42	5054.8	1002.9	1203.5	1309.8	1032.8	1251	1410.1
	1067	19.05	1247	12,941	405.2	408.7	412.2	3418		7.2	1067	690,281	4461.3	5353.6	5826.5	4594.1	5564.7	6272.6
131 - 1351	44	0.75	53.2	244.4	81.35	82.38	83.41	20	±20°	0.28	44	5377.8	1018.5	1222.2	1330.2	1048.8	1270.4	1432
	1118	19.05	1351	13,142	397.2	402.2	407.3	3418		7.2	1118	734,392	4530.6	5436.8	5917	4665.5	5651.2	6370.1
131 - 1059	40	0.71	41.7	243	86.95	87.38	87.8	20	±20°	0.28	40	4860.1	1012.5	1215	1322.4	1042.7	1263	1423.6
	1016	18	1059	13,065	424.6	426.6	428.7	3418		7.2	1016	663,696	4504	5404.8	5882.2	4638	5617.9	6332.6
133 - 1698	54	0.625	66.8	248.2	67.34	68.44	69.54	20	±20°	0.28	54	6701.8	1034.2	1241.1	1350.7	1065	1290	1454.1
	1372	15.9	1698	13,345	328.8	334.2	339.5	3418		7.2	1372	915,193	4600.5	5520.6	6008.2	4737.4	5738.3	6468.3
135 - 1130*	42	0.71	44.5	251.7	86	86.53	87.07	20	±20°	0.47	42	5287	1049	1258.8	1370	1080.2	1308.5	1474.9
	1067	18	1130	13,536	419.9	422.5	425.1	3418		12	1067	721,999	4666.3	5599.6	6094.2	4805.2	5820.4	6560.8
135 - 1079*	40	0.75	42.5	251.6	90.58	91.14	91.7	20	±20°	0.47	40	5032.6	1048.5	1258.2	1369.3	1079.7	1307.8	1474.1
	1016	19.05	1079	13,528	442.3	445	447.7	3418		12	1016	687,246	4663.8	5596.5	6090.9	4802.6	5817.2	6557.3

O-Pile	Pipe		Width in mm	Section modulus in <sup>3</sup> /ft cm <sup>3</sup> /m	Panel weight by ratio			Interlock strength k/ft kN/m	Flexi- bility ±20°	Minimum thickness in mm	Depth (Height) in mm	Moment of inertia in <sup>4</sup> /ft cm <sup>4</sup> /m	Bending moment by grade					
	Diameter	Thickness			60%	80%	100%						50	60	65	S 355 GP	S 430 GP	X70
	in mm	in mm			lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>						k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m
137 - 1545	48	0.75	60.8	255.4	78.36	79.57	80.78	20	±20°	0.28	48	6130	1064.2	1277.1	1389.9	1095.9	1327.5	1496.3
	1219	19.05	1545	13,732	382.6	388.5	394.4	3418		7.2	1219	837,117	4734	5680.8	6182.6	4874.9	5904.9	6656
137 - 1298	44	0.75	51.1	254.4	83.52	84.2	84.89	20	±20°	0.28	44	5598	1060.2	1272.3	1384.7	1091.8	1322.5	1490.7
	1118	19.05	1298	13,680	407.8	411.1	414.5	3418		7.2	1118	764,464	4716.2	5659.4	6159.3	4856.6	5882.6	6630.9
138 - 1110	42	0.71	43.7	256.3	87.14	87.54	87.95	20	±20°	0.28	42	5382.3	1067.9	1281.5	1394.7	1099.7	1332.1	1501.5
	1067	18	1110	13,780	425.4	427.4	429.4	3418		7.2	1067	735,011	4750.4	5700.5	6204	4891.8	5925.3	6679
138 - 1059	40	0.75	41.7	256.3	91.86	92.28	92.71	20	±20°	0.28	40	5127.6	1068.3	1281.9	1395.2	1100.1	1332.5	1502
	1016	19.05	1059	13,784	448.5	450.6	452.6	3418		7.2	1016	700,225	4751.8	5702.2	6205.9	4893.3	5927.1	6681.1
141 - 1605	54	0.625	63.2	262.5	70.35	71.22	72.08	20	±20°	0.28	54	7089	1094	1312.8	1428.7	1126.6	1364.6	1538.1
	1372	15.9	1605	14,116	343.5	347.7	351.9	3418		7.2	1372	968,067	4866.3	5839.5	6355.4	5011.1	6069.8	6842
142 - 1079*	40	0.79	42.5	263.4	94.92	95.48	96.04	20	±20°	0.47	40	5268.6	1097.6	1317.2	1433.5	1130.3	1369.1	1543.3
	1016	20	1079	14,163	463.5	466.2	468.9	3418		12	1016	719,485	4882.6	5859.1	6376.6	5027.9	6090.1	6864.9
143 - 1130*	42	0.75	44.5	265.6	90.83	91.37	91.9	20	±20°	0.47	42	5578.9	1106.9	1328.3	1445.6	1139.9	1380.7	1556.3
	1067	19.05	1130	14,283	443.5	446.1	448.7	3418		12	1067	761,851	4923.9	5908.6	6430.6	5070.4	6141.6	6923
144 - 1059	40	0.79	41.7	268.4	96.28	96.71	97.13	20	±20°	0.28	40	5368.1	1118.4	1342	1460.6	1151.7	1395	1572.4
	1016	20	1059	14,431	470.1	472.2	474.2	3418		7.2	1016	733,073	4974.8	5969.7	6497	5122.8	6205.1	6994.5
145 - 1110	42	0.75	43.7	270.4	92.06	92.46	92.87	20	±20°	0.28	42	5679.4	1126.9	1352.2	1471.7	1160.4	1405.6	1584.4
	1067	19.05	1110	14,540	449.5	451.4	453.4	3418		7.2	1067	775,580	5012.6	6015.1	6546.4	5161.8	6252.3	7047.7
146 - 1552	54	0.625	61.1	271.5	71.78	72.36	72.93	20	±20°	0.28	54	7331.7	1131.4	1357.7	1477.7	1165.1	1411.3	1590.8
	1372	15.9	1552	14,599	350.5	353.3	356.1	3418		7.2	1372	1,001,219	5032.9	6039.5	6573	5182.8	6277.7	7076.3
146 - 1452	48	0.75	57.2	271.7	82.39	83.35	84.31	20	±20°	0.28	48	6521.4	1132.2	1358.6	1478.6	1165.9	1412.2	1591.9
	1219	19.05	1452	14,609	402.3	407	411.6	3418		7.2	1219	890,555	5036.2	6043.5	6577.3	5186.1	6281.8	7080.9
150 - 1130*	42	0.79	44.5	278.1	95.2	95.73	96.26	20	±20°	0.47	42	5841.4	1159	1390.8	1513.7	1193.5	1445.7	1629.6
	1067	20	1130	14,955	464.8	467.4	470	3418		12	1067	797,697	5155.5	6186.6	6733.1	5309	6430.6	7248.7
152 - 1850	60	0.625	72.8	282.1	68.4	69.41	70.42	20	±20°	0.28	60	8465.3	1175.7	1410.9	1535.5	1210.7	1466.5	1653.1
	1524	15.9	1850	15,171	334	338.9	343.8	3418		7.2	1524	1,156,011	5229.9	6275.9	6830.3	5385.6	6523.4	7353.3
152 - 1399	48	0.75	55.1	282	84.44	85.08	85.71	20	±20°	0.28	48	6769	1175.2	1410.2	1534.8	1210.2	1465.8	1652.3
	1219	19.05	1399	15,164	412.3	415.4	418.5	3418		7.2	1219	924,374	5227.5	6273	6827.1	5383.1	6520.4	7349.8
152 - 1110	42	0.79	43.7	283.1	96.5	96.91	97.31	20	±20°	0.28	42	5946.6	1179.9	1415.9	1541	1215	1471.7	1658.9
	1067	20	1110	15,224	471.2	473.1	475.1	3418		7.2	1067	812,073	5248.4	6298.1	6854.5	5404.7	6546.5	7379.3
159 - 1698	54	0.75	66.8	295.7	79.97	81.07	82.17	20	±20°	0.28	54	7986.3	1232.4	1478.9	1609.6	1269.1	1537.3	1732.8
	1372	19.05	1698	15,903	390.4	395.8	401.2	3418		7.2	1372	1,090,600	5482.2	6578.7	7159.8	5645.4	6838.1	7708

O-Pile	Pipe		Width in mm	Section modulus in <sup>3</sup> /ft cm <sup>3</sup> /m	Panel weight by ratio			Interlock strength k/ft kN/m	Flexi- bility ±20°	Minimum thickness in mm	Depth (Height) in mm	Moment of inertia in <sup>4</sup> /ft cm <sup>4</sup> /m	Bending moment by grade					
	Diameter	Thickness			60%	80%	100%						50	60	65	S 355 GP	S 430 GP	X70
	in mm	in mm			lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>	lb/ft <sup>2</sup> kg/m <sup>2</sup>						k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m	k-ft/ft kN·m/m
160 - 1757	60	0.625	69.2	297	71.2	71.99	72.79	20	±20°	0.28	60	8911.9	1237.8	1485.3	1616.5	1274.6	1543.9	1740.3
	1524	15.9	1757	15,971	347.6	351.5	355.4	3418		7.2	1524	1,217,006	5505.9	6607.1	7190.7	5669.8	6867.6	7741.3
165 - 1704	60	0.625	67.1	306.3	72.53	73.06	73.58	20	±20°	0.28	60	9189.8	1276.4	1531.6	1666.9	1314.4	1592	1794.6
	1524	15.9	1704	16,469	354.1	356.7	359.3	3418		7.2	1524	1,254,956	5677.6	6813.1	7414.9	5846.6	7081.8	7982.7
168 - 1605	54	0.75	63.2	312.8	83.7	84.57	85.44	20	±20°	0.28	54	8447.7	1303.7	1564.4	1702.6	1342.5	1626.1	1832.9
	1372	19.05	1605	16,821	408.7	412.9	417.2	3418		7.2	1372	1,153,608	5799	6958.8	7573.4	5971.6	7233.2	8153.3
174 - 1552	54	0.75	61.1	323.5	85.6	86.17	86.75	20	±20°	0.28	54	8737	1348.3	1618	1760.9	1388.4	1681.8	1895.7
	1372	19.05	1552	17,397	417.9	420.7	423.5	3418		7.2	1372	1,193,114	5997.6	7197.1	7832.8	6176.1	7480.9	8432.6
181 - 1850	60	0.75	72.8	336.4	81.31	82.32	83.33	20	±20°	0.28	60	10,094.8	1402.1	1682.5	1831.1	1443.8	1748.8	1971.3
	1524	19.05	1850	18,091	397	401.9	406.8	3418		7.2	1524	1,378,539	6236.7	7484	8145.1	6422.3	7779.2	8768.8
190 - 1757	60	0.75	69.2	354.2	84.79	85.58	86.38	20	±20°	0.28	60	10,627.4	1476	1771.2	1927.7	1520	1841.1	2075.3
	1524	19.05	1757	19,046	414	417.9	421.7	3418		7.2	1524	1,451,275	6565.7	7878.9	8574.9	6761.2	8189.6	9231.4
196 - 1704	60	0.75	67.1	365.3	86.55	87.07	87.59	20	±20°	0.28	60	10,958.8	1522.1	1826.5	1987.8	1567.4	1898.5	2140
	1524	19.05	1704	19,639	422.6	425.1	427.7	3418		7.2	1524	1,496,530	6770.5	8124.6	8842.2	6972	8445	9519.3