

ROUND INLET

CONCRETE PIPE

GENERAL DIMENSIONS										2:1 SLOPE DIMENSIONS					2:1 SLOPE EST. QUAN.		4:1 SLOPE DIMENSIONS					4:1 SLOPE EST. QUAN.	
D	T	SKEW	θ	H	J	G	E _F	E _B		W _R	K _R	W _L	K _L	Y	CLASS "A" CONCRETE	REINF. STEEL-LBS	W _R	K _R	W _L	K _L	Y	CLASS "A" CONCRETE	REINF. STEEL-LBS
15"	6"	45°	30°	10"	10"	29"	19"	29 3/4"	3 7/8"	30"	11 1/2"	16 1/2"	3 5/8"	5 4/2"	.98	158	6 7/8"	60"	3 5/8"	3 3/8"	5 4/2"	1.61	209
			45°	10"	10"	29"	19"	29 3/4"	2 9/8"	2 2"	11 1/8"	16 1/8"	3 2 5/8"	4 7/8"	.86	152	4 10 5/8"	4 3"	3 5 1/4"	3 1/4"	4 7 1/8"	1.36	187
			75°	10"	10"	29"	19"	27 3/4"	2 7/8"	2 2"	2 1/2"	17 1/2"	3 9 3/4"	5 9 3/4"	1.38	147	4 8 3/8"	4 3"	3 7 3/4"	3 2 3/4"	5 9 3/4"	1.38	187
			90°	tan ⁻¹ 4/3	10"	10"	29"	19"	27"	2 3 3/8"	1 10 1/2"	2 3 3/8"	1 10 1/2"	4 1/8"	8 4"	.84	146	4 2"	3 9"	4 2"	3 9"	6 3"	1.37
18"	6"	45°	30°	10"	10"	29"	20"	3 3/4"	4 7 5/8"	40"	2 5 1/4"	2 1/2"	4 3"	1.25	186	8 7 5/8"	80"	4 5 1/2"	4 1/2"	6 5 5/8"	2.11	247	
			45°	10"	10"	29"	20"	3 3/4"	3 5 5/8"	2 10"	2 5 1/8"	2 1/2"	3 11 1/4"	1.15	164	6 3 5/8"	5 7 7/8"	4 5 3/8"	4 3/8"	5 10 1/2"	1.78	220	
			75°	10"	10"	29"	20"	2 10 3/4"	3 3 3/4"	2 10"	2 7"	2 1 1/8"	4 8 1/2"	1.08	163	6 1 5/8"	5 7 7/8"	4 8 3/4"	4 3 3/8"	7 5"	1.79	220	
			90°	tan ⁻¹ 4/3	10"	10"	29"	20"	2 10 3/8"	2 11"	2 6"	2 11"	2 6"	5 0"	1.07	153	5 5"	5 0"	5 5"	5 0"	8 0"	1.79	219
24"	10"	45°	30°	16"	10"	29"	30"	4 3/4"	6 7 3/8"	60"	3 5 3/8"	3 3/8"	6 4 1/2"	2.38	269	12 7 3/8"	120"	6 5 3/4"	6 3/4"	9 8 3/8"	4.14	410	
			45°	16"	10"	29"	30"	4 3/4"	4 10 1/2"	4 2 3/8"	3 5 3/8"	3 1/8"	5 10 3/4"	2.08	250	9 1 1/2"	8 5 3/8"	6 5 1/2"	6 1/2"	8 9 3/8"	3.47	354	
			75°	16"	10"	29"	30"	3 10 3/4"	4 8 3/8"	4 2 3/8"	3 7 3/8"	3 2 3/8"	7 3/4"	2.10	243	8 1 1/8"	8 5 3/8"	6 10 3/8"	6 5 3/8"	11 1 1/2"	3.51	353	
			90°	tan ⁻¹ 4/3	16"	10"	29"	30"	3 10 3/8"	4 2"	3 9"	4 2"	3 9"	7 6"	2.09	244	7 11"	7 6"	7 11"	7 6"	12 0"	3.51	353
30"	10"	45°	30°	20"	10"	29"	36"	4 6 3/4"	8 7 3/8"	60"	3 5 3/8"	3 3/8"	6 10 1/2"	2.66	283	12 7 5/8"	120"	6 5 3/4"	6 3/4"	10 2 1/8"	4.50	429	
			45°	20"	10"	29"	36"	4 6 3/4"	4 10 5/8"	4 3"	3 5 1/4"	3 1/4"	6 4 3/8"	2.31	263	9 1 1/2"	8 5 3/8"	6 5 1/2"	6 5/8"	9 3 3/8"	3.78	372	
			75°	20"	10"	29"	36"	4 4 3/4"	4 8 3/4"	4 3"	3 7 3/8"	3 2 3/8"	7 6 3/8"	2.33	260	8 1 1/8"	8 5 3/8"	6 10 3/8"	6 5 3/8"	11 7 1/2"	3.83	373	
			90°	tan ⁻¹ 4/3	20"	10"	29"	36"	4 4"	4 2"	3 9"	4 2"	3 9"	8 0"	2.30	260	7 11"	7 6"	7 11"	7 6"	12 6"	3.82	383
36"	10"	45°	30°	20"	10"	29"	40"	5 3/4"	8 7 3/8"	80"	4 5 1/2"	4 1/2"	8 5 3/8"	3.42	345	16 7 3/8"	160"	8 6"	8 1"	12 11 1/8"	5.98	544	
			45°	20"	10"	29"	40"	5 3/4"	6 3 3/8"	5 7 3/8"	4 5 1/4"	4 1/4"	7 10 1/2"	2.97	309	11 11 1/2"	11 3 3/8"	8 5 3/4"	8 3/4"	11 9 3/4"	4.99	466	
			75°	20"	10"	29"	40"	4 10 3/4"	6 1 3/8"	5 7 3/8"	4 8 3/8"	4 3 3/8"	9 5"	2.99	309	11 9 3/8"	11 3 3/8"	9 1 1/2"	8 7 1/2"	14 10"	5.08	467	
			90°	tan ⁻¹ 4/3	20"	10"	29"	40"	4 10"	5 5"	5 0"	5 5"	5 0"	10 0"	2.97	313	10 5"	10 0"	10 5"	10 0"	16 0"	5.09	481
42"	10"	45°	30°	20"	11 1/2"	30"	4 6"	5 6 3/4"	10 7 3/8"	100"	5 5 3/8"	5 5/8"	10 1 1/2"	4.55	416	20 7 3/8"	200"	10 6 1/4"	10 1 1/4"	15 8 3/8"	8.00	673	
			45°	20"	11 1/2"	30"	4 6"	5 6 3/4"	7 8 3/8"	7 1"	5 5 3/8"	5 3/8"	9 4 3/8"	3.88	371	14 9 1/2"	14 1 1/4"	10 6"	10 1"	14 2 1/2"	6.66	576	
			75°	20"	11 1/2"	30"	4 6"	5 4 3/4"	7 6 3/4"	7 1"	5 10 1/8"	5 4 3/8"	11 3 3/8"	3.92	365	14 7 1/2"	14 1 1/4"	11 2 3/8"	10 9 3/8"	18 5/8"	6.77	574	
			90°	tan ⁻¹ 4/3	20"	11 1/2"	30"	4 6"	5 4"	6 8"	6 3"	6 8"	6 3"	12 0"	3.91	375	12 11"	12 6"	12 11"	12 6"	19 6"	6.77	585
48"	10"	45°	30°	20"	11 1/2"	30"	5 0"	6 6 3/4"	12 7 3/8"	120"	6 6"	6 1"	11 9"	5.49	487	24 7 3/8"	240"	12 6 1/2"	12 1 1/2"	18 5 3/4"	9.75	806	
			45°	20"	11 1/2"	30"	5 0"	6 6 3/4"	9 1 1/2"	8 5 3/8"	6 5 3/8"	6 3/8"	10 9 3/8"	4.65	432	17 7 1/2"	16 1 1/4"	12 6 1/2"	12 1 1/2"	16 7 3/4"	8.09	688	
			75°	20"	11 1/2"	30"	5 0"	5 10 3/4"	8 1 1/8"	8 5 3/8"	6 10 3/4"	6 5 3/4"	13 1 1/2"	4.71	421	17 5 1/2"	16 1 1/4"	13 4 1/4"	12 1 1/2"	21 3"	8.24	700	
			90°	tan ⁻¹ 4/3	20"	11 1/2"	30"	5 0"	5 10"	7 11"	7 6"	7 11"	7 6"	14 0"	4.71	436	15 5"	15 0"	15 5"	15 0"	23 0"	8.25	708
54"	10"	45°	30°	20"	11 1/2"	30"	5 6"	6 6 3/4"	14 7 3/8"	140"	7 5 3/8"	7 3/8"	13 4 1/2"	6.47	569	28 7 3/8"	280"	14 6 3/4"	14 1 3/4"	21 2 3/4"	11.59	882	
			45°	20"	11 1/2"	30"	5 6"	6 6 3/4"	10 6 3/8"	9 10 3/8"	7 5 1/2"	7 1/2"	12 3 3/8"	5.49	498	20 5 3/8"	19 9 3/8"	14 6 3/8"	14 1 3/8"	19 1 1/8"	9.60	785	
			75°	20"	11 1/2"	30"	5 6"	6 4 3/4"	10 4 3/8"	9 10 3/8"	7 11 3/8"	7 6 3/4"	14 1 1/8"	5.55	491	20 3 1/2"	19 9 3/8"	15 6 1/4"	15 1 1/4"	24 5 1/2"	9.35	821	
			90°	tan ⁻¹ 4/3	20"	11 1/2"	30"	5 6"	6 4 3/8"	9 2"	8 9"	9 2"	8 9"	16 0"	5.40	514	17 11"	17 6"	17 11"	17 6"	26 6"	9.66	824
60"	13"	45°	30°	20"	13"	33"	6 3"	7 3 3/4"	17 7 3/8"	170"	9 1 3/8"	8 7 3/8"	15 9 3/8"	8.96	697	34 7 3/8"	340"	17 7 1/8"	17 2"	25 4 3/8"	16.55	1,192	
			45°	20"	13"	33"	6 3"	7 3 3/4"	12 8"	12 3/8"	8 11 1/2"	8 6 1/2"	14 5 3/8"	7.55	597	24 8 3/8"	24 3/8"	17 6 3/8"	17 1 1/2"	22 9 3/8"	13.32	998	
			75°	20"	13"	33"	6 3"	7 1 3/4"	12 8"	12 3/8"	9 7 1/4"	9 2 1/8"	17 9 3/4"	7.63	614	24 6 1/2"	24 3/8"	18 8 3/8"	18 3 3/8"	29 8 3/8"	13.61	1,019	
			90°	tan ⁻¹ 4/3	20"	13"	33"	6 3"	7 1 1/8"	11 5/8"	10 7 1/2"	11 5/8"	10 7 1/2"	19 3/8"	7.67	621	21 8"	21 3"	21 8"	21 3"	31 9"	13.62	1,020
66"	13"	45°	30°	20"	14 1/2"	36"	6 9"	7 9 3/4"	19 7 3/8"	190"	10 1/4"	9 7 1/4"	17 5 3/8"	10.62	837	38 7 3/8"	380"	19 7 3/8"	19 2 1/4"	28 1 1/4"	19.18	1,452	
			45°	20"	14 1/2"	36"	6 9"	7 9 3/4"	14 1"	13 5 1/4"	9 11 3/8"	9 6 3/8"	15 11 1/2"	8.93	711	27 6 3/8"	26 10 3/8"	19 6 3/4"	19 1 3/8"	25 2 1/4"	15.84	1,211	
			75°	20"	14 1/2"	36"	6 9"	7 7 3/4"	13 11"	13 5 1/4"	10 8 3/8"	10 3 3/8"	19 7 1/2"	9.07	732	27 4 1/2"	26 10 3/8"	20 10 3/8"	20 5 3/8"	32 5 3/4"	16.18	1,238	
			90°	tan ⁻¹ 4/3	20"	14 1/2"	36"	6 9"	7 7 1/8"	12 2 3/8"	11 10 3/8"	12 2 3/8"	11 10 3/8"	21 1/8"	9.06	727	24 2"	23 9"	24 2"	23 9"	35 3"	16.20	1,247
72"	16"	45°	30°	20"	19"	43"	7 6"	8 6 3/4"	22 7 3/8"	220"	11 6 3/8"	11 1 3/8"	19 10 3/8"	15.04	1,068	44 7 3/8"	440"	22 7 3/8"	22 2 3/8"	32 2 3/8"	27.22	1,853	
			45°	20"	19"	43"	7 6"	8 6 3/4"	16 2 1/2"	15 6 3/8"	11 5 3/8"	11 3"	18 2"	12.66	911	31 9 1/4"	31 1 1/2"	22 7 1/8"	22 2"	28 10 3/8"	22.46	1,545	
			75°	20"	19"	43"	7 6"	8 4 3/4"	16 6"	15 6 3/8"	12 3 3/8"	11 10 1/2"	22 4 3/8"	12.89	931	31 7 3/8"	31 1 1/2"	24 1 1/2"	23 8 1/2"	37 3 1/2"	22.96	1,581	
			90°	tan ⁻¹ 4/3	20"	19"	43"	7 6"	8 4 3/8"	14 2"	13 9"	14 2"	13 9"	24 0"	12.87	928	27 11"	27 6"	27 11"	27 6"	40 6"	22.99	1,576
78"	16"	45°	30°	20"	110 1/2"	46"	8 0"	9 3/4"	24 7 3/8"	240"	12 6 1/2"	12 1 1/2"	21 5 3/4"	17.22	1,185	48 7 3/8"	480"	24 7 3/8"	24 2 1/8"	34 1 1/8"	31.27	2,085	
			45°	20"	110 1/2"	46"	8 0"	9 3/4"	17 7 1/4"	16 11 3/4"	12 5 3/4"	12 3/4"	19 7 1/2"	14.46	999	34 7 1/2"	33 1 1/2"	24 7 1/4"	24 2 1/2"	31 3 1/2"	25.78	1,731	
			75°	20"	110 1/2"	46"	8 0"	8 10 3/4"	17 5 1/2"	16 11 3/4"	13 4 1/2"	12 11 1/2"	24 3 1/4"	14.75	1,029	34 5 1/2"	33 1 1/2"	26 3 3/8"	25 10 3/8"	40 6"	26.36	1,772	
			90°	tan ⁻¹ 4/3	20"	110 1/2"	46"	8 0"	8 10 3/8"	15 5"	15 0"	15 5"	15 0"	26 0"	14.73	1,030	30 5"	30 0"	30 5"	30 0"	44 0"	26.40	1,781

STEEL PIPE

GENERAL DIMENSIONS										2:1 SLOPE DIMENSIONS					2:1 SLOPE EST. QUAN.		4:1 SLOPE DIMENSIONS					4:1 SLOPE EST. QUAN.	
D	T	SKEW	θ	H	J	G	E _F	E _B		W _R	K _R	W _L	K _L	Y	CLASS "A" CONCRETE	REINF. STEEL-LBS	W _R	K _R	W _L	K _L	Y	CLASS "A" CONCRETE	REINF. STEEL-LBS
15"	6"	45°	30°	10"	10"	29"	19"	29 3/4"	3 7/8"	30"	11 1/2"	16 1/2"	3 5/8"	5 4/2"	1								