

**SINGLE CONCRETE BOX CULVERT DIMENSIONS & QUANTITIES (EXCLUDING HEADWALLS & TOEWALLS)**

BOX SIZE				FILL HEIGHT ALLOWED	SLAB & WALL THICKNESS (INCHES)			BAR SIZES					d <sub>1</sub> <sup>▲</sup>	DIMENSIONS					QUANTITIES	
S	R	HT.	WIDTH		T <sub>t</sub>	T <sub>b</sub>	TW	t <sub>1</sub> * & b <sub>1</sub>	t <sub>2</sub>	b <sub>2</sub>	w <sub>1</sub> * & w <sub>2</sub>	c <sub>1</sub> *		c <sub>2</sub>	h <sub>1</sub>	h <sub>2</sub>	v <sub>1</sub>	v <sub>2</sub>	v <sub>3</sub>	CONCRETE
FT.	FT.	FT.-IN.	FT.-IN.	FT.-FT.				#	#	#	#	#	#	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	CU.YDS./LIN.FT.	LBS./LIN.FT.
6	7	8-5	7-8	0 TO 10	8	9	10	4	5	5	4	4	4	2-7	2-11	7-6	2-3	2-3	0.834	153
		8-7	7-8	>10 TO 15	8.5	10.5	10	4	5	5	4	4	4	2-7	3-1	7-6	2-4	2-4	0.882	154
		8-10	7-8	>15 TO 20	10	12.0	10	4	5	5	4	4	4	2-7	3-3	7-9	2-6	2-6	0.953	156
8	6	7-7.5	9-8	0 TO 10	9	10.5	10	4	6	6	4	4	4	3-4	2-10	6-7	2-4	2-4	0.952	184
		7-11	9-8	>10 TO 15	10.5	12.5	10	4	6	6	4	4	4	3-0	2-10	6-8	2-6	2-6	1.057	184
		8-3	9-8	>15 TO 20	12.5	14.5	10	4	7	7	4	4	4	3-2	2-11	6-10	2-8	2-8	1.176	207
	8	9-7.5	9-8	0 TO 10	9.0	10.5	10	4	6	6	4	5	4	4-5	3-5	8-7	2-4	2-4	1.076	224
		9-11	9-8	>10 TO 15	10.5	12.5	10	4	6	6	4	5	4	2-9	3-7	8-8	2-6	2-6	1.180	218
		10-3	9-8	>15 TO 20	12.5	14.5	10	4	6	6	4	5	4	2-9	3-9	8-10	2-8	2-8	1.299	221
10	11-8	9-8	0 TO 10	9	11	10	4	6	5	5	5	5	2-9	2-9	10-7	2-10	2-10	1.214	253	
	11-11	9-8	>10 TO 15	10.5	12.5	10	4	6	6	5	5	5	2-9	2-9	10-8	2-11	2-11	1.303	267	
	12-3	9-11	>15 TO 20	12.5	14.5	11.5	4	6	6	5	5	5	2-11	5-1	10-10	3-1	3-1	1.536	282	
10	6	7-10.5	11-8	0 TO 10	10.5	12.0	10	4	6	7	4	5	5	3-4	3-0	6-8	2-11	2-6	1.181	243
		8-3	11-8	>10 TO 15	12.5	14.5	10	4	7	7	4	5	4	3-4	2-11	6-10	3-1	2-8	1.343	248
		8-10	11-8	>15 TO 20	15.5	18.5	10	4	7	7	4	4	5	3-1	2-9	7-1	3-5	3-0	1.395	244
	8	9-10.5	11-8	0 TO 10	10.5	12.0	10	4	6	7	4	5	5	3-11	3-5	8-8	2-11	2-6	1.304	266
		10-3.5	11-8	>10 TO 15	13	14.5	10	4	7	7	4	5	5	4-1	3-6	8-11	3-1	2-8	1.484	282
		10-9	11-8	>15 TO 20	15.5	17.5	10	4	7	7	4	5	5	3-6	2-11	9-1	3-4	2-11	1.682	280
10	11-11	11-8	0 TO 10	10.5	12.5	10	4	6	6	4	5	5	2-11	4-6	10-8	2-11	2-6	1.445	270	
	12-3.5	11-8	>10 TO 15	12.5	15.0	10	4	7	7	5	6	5	3-4	4-10	10-10	3-7	3-2	1.608	354	
	12-8	11-11	>15 TO 20	15.0	17.5	11.5	4	7	7	5	5	5	3-8	3-4	11-1	3-4	3-4	1.905	328	
12	6	7-11	13-8	0 TO 8	10.5	12.5	10	4	7	7	4	6	5	3-11	3-8	6-8	3-4	2-6	1.341	306
		8-4	13-8	>8 TO 12	13	15	10	4	8	8	4	5	5	2-10	2-9	6-11	3-2	2-9	1.551	313
		8-9.5	13-8	>12 TO 16	15.5	18	10	4	8	8	4	5	5	3-6	2-9	7-1	3-5	3-0	1.783	319
	8	9-3.5	13-8	>16 TO 20	19.0	20.5	10	4	8	9	4	5	5	3-6	2-9	7-5	3-7	3-2	2.037	341
		9-11	13-8	0 TO 8	10.5	12.5	10	4	7	7	5	6	5	4-1	3-9	8-8	3-4	2-11	1.464	351
		10-4	13-8	>8 TO 12	13	15	10	4	8	8	4	6	5	3-4	2-9	8-11	3-6	2-9	1.675	358
10	10-9.5	13-8	>12 TO 16	15.5	18	10	4	8	8	4	5	5	3-6	2-10	9-1	3-5	3-0	1.907	338	
	11-3.5	13-8	>16 TO 20	18.5	21	10	4	8	8	4	5	5	3-6	3-0	9-4	3-8	3-3	2.160	342	
	12-0	13-8	0 TO 8	11	13	10	4	7	7	4	6	5	5-3	4-4	10-8	3-5	2-7	1.630	360	
	12-4.5	13-8	>8 TO 12	13	15.5	10	4	8	8	4	6	6	3-4	3-4	10-11	3-7	2-9	1.819	393	
	12-9.5	13-9	>12 TO 16	15.5	18	10.5	4	8	8	4	6	5	4-3	3-2	11-1	3-10	3-0	2.070	390	
	13-2	13-11	>16 TO 20	18	20	11.5	4	8	8	4	6	5	4-4	3-5	11-4	4-0	3-2	2.342	396	
14	6	7-11.5	15-8	0 TO 6	11	12.5	10	4	8	8	5	6	6	4-3	4-0	6-9	3-4	2-11	1.507	408
		8-2	15-8	>6 TO 8	12	14	10	4	8	8	4	6	6	4-1	3-4	6-10	3-6	2-8	1.628	386
		8-5	15-8	>8 TO 10	13.5	15.5	10	4	8	8	4	6	5	3-4	2-9	6-11	3-7	2-9	1.773	368
	8	8-9	15-8	>10 TO 12	15.5	17.5	10	4	9	9	4	6	5	4-3	2-10	7-1	3-9	2-11	1.966	421
		9-4.5	15-8	>12 TO 16	19.5	21	10	4	9	9	4	5	5	3-6	2-10	7-5	3-8	3-3	2.329	400
		9-7.5	15-8	>16 TO 18	21	22.5	10	4	9	9	4	5	5	3-6	2-11	7-7	3-9	3-4	2.474	402
10	10-0	15-8	0 TO 6	11	13	10	4	8	8	5	6	6	4-4	4-1	8-9	3-5	3-0	1.654	435	
	10-2	15-8	>6 TO 8	12	14	10	4	8	8	4	6	6	4-2	3-7	8-10	3-6	2-8	1.751	410	
	10-5.5	15-8	>8 TO 10	13.5	16	10	4	8	8	4	6	5	3-4	2-11	8-11	3-8	2-10	1.920	394	
	10-10	15-8	>10 TO 12	15.5	18.5	10	4	9	9	4	6	5	4-3	2-11	9-1	3-10	3-0	2.138	444	
	11-3.5	15-9	>12 TO 16	18.5	21	10.5	4	9	9	4	5	5	3-7	3-1	9-4	3-8	3-3	2.439	421	
	11-6.5	15-8	>16 TO 18	20	22.5	10	4	9	9	4	5	5	3-6	3-1	9-6	3-9	3-4	2.549	419	
16	6	8-2.5	17-9	0 TO 6	12.5	14	10.5	4	8	8	4	7	6	4-10	4-4	10-9	3-5	3-0	1.778	455
		8-5.5	17-11	>6 TO 8	13.5	16	11.5	4	8	8	4	6	6	4-10	4-3	10-10	3-6	2-8	1.899	439
		8-9	17-10	>8 TO 10	15.5	17.5	11	4	9	9	5	7	6	3-4	3-5	10-11	3-8	2-10	2.082	426
	8	10-3.5	17-9	0 TO 6	12.5	15	10.5	4	8	8	5	7	6	4-7	3-10	8-10	3-7	3-2	2.025	497
		10-6.5	17-10	>6 TO 8	14.0	16.5	11.0	4	9	9	4	7	6	3-8	3-4	9-0	4-2	2-10	2.189	522
		10-11	17-9	>8 TO 10	16.5	18.5	10.5	4	9	9	4	6	5	4-3	3-2	9-2	3-10	3-0	2.436	484
10	12-4.5	17-8	0 TO 6	13.5	15	10	4	8	9	5	7	6	4-9	4-3	10-11	3-7	3-2	2.171	554	
	12-8	17-9	>6 TO 8	15	17	10.5	4	9	9	4	6	6	4-3	3-4	11-1	3-9	2-11	2.401	515	
	12-11	17-9	>8 TO 10	16.5	18.5	10.5	4	9	9	4	6	6	4-3	3-4	11-2	3-10	3-0	2.566	516	
18	8	10-5	19-11	0 TO 5	13.5	15.5	11.5	4	8	9	5	7	7	5-2	4-5	8-11	4-1	3-2	2.351	588
	10-9	19-10	>5 TO 7	15.5	17.7	11	4	9	9	4	7	6	4-10	3-11	9-1	3-9	2-11	2.563	565	
	12-6	19-10	0 TO 5	14	16	11	4	9	9	4	7	6	5-1	4-6	11-0	3-8	2-10	2.515	598	
20	8	10-3.5	22-0	0 TO 3	13.5	15	12	5	9	9	5	7	8	5-9	5-2	8-11	4-1	3-2	2.528	700
		10-9.5	22-2	>3 TO 6	16	17.5	13	4	9	9	4	7	7	5-5	4-9	9-2	4-3	2-11	2.934	646
		11-0.5	22-3	>6 TO 8	17	19.5	13.5	4	9	10	4	8	7	5-8	4-7	9-3	4-5	3-1	3.173	727
	10	11-5.5	22-2	>8 TO 10	19.5	22	13	4	10	10	4	7	6	5-0	4-4	9-4	4-2	3-4	3.481	702
		12-5.5	21-11	0 TO 3	15	15.5	11.5	4	9	9	5	7	7	5-4	4-11	11-1	4-1	3-2	2.773	692
		12-9	22-1	>3 TO 6	15	18	12.5	4	9	10	4	8	7	5-8	4-9	11-1	4-4	3-0	3.021	751
10	13-0.5	22-1	>6 TO 8	17	19.5	12.5	4	10	10	4	8	7	5-7	4-7	11-3	4-5	3-1	3.259	792	
	13-5.5	22-2	>8 TO 10	19.5	22	13	4	10	10	4	7	6	5-1	4-7	11-5	4-2	3-4	3.642	728	

**HEADW**