

BAR BENDING SCHEDULE FOR BOX CULVERT AS PER MORTH STANDARDS

BOX CULVERT

LENGTH IN M (L)	BREADTH IN M (a)	DEPTH IN M (b)	TOP SLAB THICKNESS IN M (d)	BOTTOM SLAB THICKNESS IN M (e)	SIDE WALLS THICKNESS IN M (f)	Raft Offset KERB Ⓞ	Haunch bar	DEPTH OF EARTH CUSHION IN M (h)	Cover for walls Bottom Raft in m	Cover for Top Slab in m	Haunch in m (HXV)	REFERENCE DRAWING NUMBER : VCPL / NH216 / STR / BC / (nc × a × b) m NUMERATION & REINFORCEMENT DETAILS OF SINGLE CELL RCC BOX CULVERT									
12.000	2.000	2.000	0.350	0.380	0.300	0.500	0.933	0.000	0.050	0.050	0.150										
S.No.	Bar Mark No.	Bar Dia. In "mm"	Weight per Metre	Shape of the Bar	Length in "m"						MOSRT Cutting Length in "m"	Practice Cutting Length in "m"	Spacing in "mm"	No.of Bars	Multiple No.s	Total No.s	Total Length in "m"	Total Weight in "Kg"	Description of the Bar	Remarks	
					A	B	C	Deductio n = K × ϕ	Diff.	Total L each bar											
1	1	10	0.617		0.930	2.500	0.930	1.700	0.034	4.360	4.326	4.320	250	49	1	49	211.680	130.607	Raft Bottom Main Bars		
2	2	16	1.580		0.850	2.630	0.850	1.719	0.055	4.330	4.275	4.266	250	49	2	98	418.068	660.547	Outer Face Vertical Bars		
3	3	10	0.617		-	1.700	-	-	0.000	1.700	1.700	1.700	250	48	1	48	81.600	50.347	Raft Top alternative Main Bars		
4	4	16	1.580		0.280	3.500	0.280	1.719	0.055	4.060	4.005	3.996	250	49	1	49	195.804	309.370	Raft Top Main Bars		
5	5	16	1.580		0.200	2.630	0.700	0.200	0.082	3.730	3.648	3.634	250	49	2	98	356.132	562.689	Wall Inner Face Vertical Bars		
6	6	16	1.580		0.280	2.500	0.280	2.969	0.095	3.060	2.965	2.996	250	49	1	49	146.804	231.950	Slab Bottom Main bar		
7	7	10	0.617		1.700			-	0.000	1.700	1.700	1.700	250	8	2	16	27.200	16.782	Slab Bottom alternative Main Bars		
8	8	10	0.617		0.900	2.500	0.900	1.700	0.034	4.300	4.266	4.260	250	49	1	49	208.740	128.793	Slab Top Main bar		
9	9	12	0.889		0.200	0.932	0.200	1.724	0.041	1.332	1.291	1.308	250	49	2	98	128.221	113.988	Bottom Haunch Bars		
10	10	10	0.617		0.200	0.890	0.200	2.347	0.047	1.290	1.243	1.270	250	49	2	98	124.455	76.789	Top Haunch Bars		
11	11	10	0.617		0.224	11.900	0.224	1.600	0.032	12.348	12.316	12.308	250	8	2	16	196.928	121.505	Slab Distributor		
12	12	10	0.617		0.248	11.900	0.248	0.190	0.150	12.396	12.248	12.356	250	8	2	16	197.696	121.978	Raft Distributor		
13	13	10	0.617		0.200	11.900	0.200	0.160	0.112	12.300	12.188	12.260	250	8	2	16	196.160	121.031	Wall Outer Face Distributors		
14	14	10	0.617		0.200	11.900	0.200	0.160	0.112	12.300	12.188	12.260	-	12	1	12	147.120	90.773	Corner Distributors		
15	15	10	0.617		0.280	11.900	0.280	-	0.214	12.460	12.246	12.460	250	3	4	12	149.520	92.254	Raft Offset KERB Distributors		
16	16	12	0.889		11.900			-	0.000	11.900	11.900	11.900	-	5	2	10	119.000	105.791	Bracket Bar Distributors		
17	17	12	0.889		0.300	0.500	0.229	0.707	0.200	1.936	2.274	1.864	250	49	2	98	182.711	162.430	Top Slab Bracket Main Bars		
18	18	10	0.617		0.280	11.900	0.280		0.272	12.460	12.188	12.420	-	2	2	4	49.680	30.653	Raft Offset KERB Corner Extra Distributors		
19	19	10	0.617		0.630	11.900	0.630		0.974	13.160	12.188	13.120	-	4	2	8	104.960	64.760	Slab & Wall Corner Extra Distributors		
20	20	10	0.617		0.200	1.100	1.556	1.300	0.099	4.306	4.207	4.236	150	25	2	50	211.782	130.669	Shear Key Main Bars		
21	21	10	0.617		0.280	3.500	0.280		0.274	4.060	3.786	4.020	-	10	2	20	80.400	49.607	Shear Key Distributors		
22	22	10	0.617		0.280	11.900	0.280		0.274	12.460	12.186	12.420	250	8	2	16	198.720	122.610	Wall Inner Face Distributors		

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