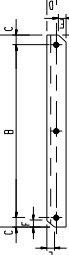


LACING / BRACING SCHEDULE

MARK	NO	OFF	A	B	C	D	E	F
8	2		100 x 100 x 8	3338	3258	40	50	
9	2		100 x 100 x 8	3239	3159	40	50	20
10	2		100 x 100 x 8	3241	3161	40	50	
11	2		100 x 100 x 8	3044	2964	40	50	20
12	2		100 x 100 x 8	2943	2863	40	50	
13	2		100 x 100 x 8	2864	2784	40	50	20
14	2		100 x 100 x 8	2782	2702	40	50	
15	2		100 x 100 x 8	2671	2591	40	50	20
16	2		100 x 100 x 10	2582	2502	40	50	
17	2		100 x 100 x 10	2486	2406	40	50	15
18	2		100 x 100 x 10	2411	2331	40	50	
19	2		100 x 100 x 10	2330	2250	40	50	15
20	1	(NC2)	60 x 60 x 5	1843	1783	30	32	15
21	2		60 x 60 x 5	2200	2140	30	32	15
22	2		60 x 60 x 5	2133	2073	30	32	
23	2		60 x 60 x 5	2063	2003	30	32	15
24	2		60 x 60 x 5	1998	1938	30	32	
25	2		80 x 80 x 8	1978	1898	40	40	
26	2		80 x 80 x 8	1978	1898	40	40	20
27	10		80 x 80 x 6	1978	1898	40	40	
28	10		80 x 80 x 6	1978	1898	40	40	20
29	2		60 x 60 x 5	1973	1913	30	32	15
30	4		60 x 60 x 5	1979	1919	30	32	
31	2		60 x 60 x 5	1979	1919	30	32	15



NOTES

- 1) QUANTITIES SHOWN ARE FOR ONE COLUMN ONLY.
- 2) ALL STRUCTURAL STEEL TO BE GRADE 50.
- 3) ALL WELDS TO BE FULL PENETRATION WELDS TO SABS 763.
- 4) ALL HOLES TO BE 32 DIAMETER UNLESS OTHERWISE NOTED.
- 5) OPEN HOLES AND SITE BOLTS INDICATED THUS:
- 6) THE CONTRACTOR SHALL SUPPLY ALL NUTS, BOLTS, WASHERS, ETC. REQUIRED FOR ERECTION.
- 7) ALL BOLTS TO BE SUPPLIED WITH NUTS AND WASHERS.
- 8) ALL PORTIONS OF WELDED JOINTS NOT SEALED BY STRUCTURAL WELD SHALL BE SEAL WELDED.
- 9) ALL MARKS TO BE STAMPED ONTO STEELWORK AND SHALL BE CLEARLY LEGIBLE AFTER GALVANIZING.
- 10) ALL MARKS TO BE PREVIEWED: 4EP
- 11) LIMITATIONS OF GENERAL USAGE:
- 12) ALL CONNECTIONS HAVE BEEN DESIGNED TO SAFELY WITHSTAND THE FOLLOWING LOADING CONDITIONS:
- 13) ALLOW CONDUCTOR LOADS OF 28 kN PER PHASE AT -10 DEGREES CENTIGRADE.
- 14) NOTE: NOMINAL STRINGING TENSION TO BE 18 kN PER PHASE AT 20 DEGREES CENTIGRADE.
- 15) B. AND L. LOADS RESULTING FROM A FREE STREAM VELOCITY PRESSURE (q) OF 1000 Pa AS DEFINED IN CLAUSE 4.5.3 OF SABS 0160-1980. THIS DESIGN PRESSURE IS APPLICABLE FOR TERRAIN CATEGORY 2 LOCATIONS THROUGHOUT SOUTH AFRICA WITH THE EXCEPTION OF THE AREA BOUNDED BY THE TOWNS OF EPENING, LAMBEREY, COLESBURG AND LANSBURG INCLUDING WHERE THE STRUCTURES ARE TO BE LOCATED WITHIN THIS AREA, OR ANYWHERE WITHIN SOUTH AFRICA AT A LOCATION CATEGORY 1 LOCATION (i.e. IN A RURAL AREA).
- 16) FOR STRUCTURAL ENGINEERING DIVISION USE: THESE STRUCTURES MUST BE OBTAINED FROM ECONOMIC STRUCTURAL ENGINEERING DIVISION.
- 17) C. SHORP - CIRCUIT LOADS DUE TO PHASE-TO-PHASE AND PHASE-TO-EARTH FAILURES.

BOLT SCHEDULE

MARK	TYPE	NO	OFF	LENGTH
a	M20	8		35
b	M20	75		40
c	M20	18	(NC2)	45
d	M20	18	(NC2)	50
e	M20	36		60
f	M20	32		65

COLUMN TYPE	NC1	NC2
MASS OF STEELWORK (BOLTS EXCLUDED)	4693 kg	4667 kg
MASS OF GRADE 4.6 STEP BOLTS	19 kg	19 kg
MASS OF GRADE 8.8 BOLTS	294	274
MASS OF GRADE 8.8 U-BOLTS	4	4

THIS DRAWING HAS BEEN CREATED ON I-CAS SYSTEM
AND WILL BE USED FOR THE I-CAS SYSTEM
SCALE: REFERENCE No 003, 043, 053, 060, 062, 064, 065, 066, 067, 068, 069, 070, 071, 072, 073, 074, 075, 076, 077, 078, 079, 080, 081, 082, 083, 084, 085, 086, 087, 088, 089, 090, 091, 092, 093, 094, 095, 096, 097, 098, 099, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 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455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 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