



BILL OF MATERIAL									
ERRECTION MARK	DESCRIPTION	WIDTH IN MM	LENGTH IN MM	UNIT	WEIGHT PER PIECE	QTY	TOTAL WEIGHT IN KG	REMARKS	
1	L 65X65X5		5237	4.90	25.66	1	25.66		
1X	L 65X65X5		5237	4.90	25.66	1	25.66		
2	L 65X65X5		5237	4.90	25.66	1	25.66		
2X	L 65X65X5		5237	4.90	25.66	1	25.66		
3	L 65X65X5		4387	4.90	21.50	1	21.50		
3X	L 65X65X5		4387	4.90	21.50	1	21.50		
4	L 65X65X5		4387	4.90	21.50	1	21.50		
4X	L 65X65X5		4387	4.90	21.50	1	21.50		
5	L 45X45X5		906	3.40	3.08	2	6.16		
5X	L 45X45X5		906	3.40	3.08	2	6.16		
6	L 45X45X5		1015	3.40	3.45	4	13.80		
6X	L 45X45X5		1015	3.40	3.45	4	13.80		
7	L 45X45X5		1015	3.40	3.45	4	13.80		
7X	L 45X45X5		1015	3.40	3.45	4	13.80		
8	L 65X65X5		720	5.83	4.20	12	50.38		
9	L 45X45X5		1140	3.40	3.88	4	15.50		
9X	L 45X45X5		1140	3.40	3.88	4	15.50		
10	L 45X45X5		1140	3.40	3.88	4	15.50		
10X	L 45X45X5		1140	3.40	3.88	4	15.50		
11	L 45X45X5		1109	3.40	3.77	4	15.08		
11X	L 45X45X5		1109	3.40	3.77	4	15.08		
12	L 45X45X5		901	3.40	3.06	2	6.13		
12X	L 45X45X5		901	3.40	3.06	2	6.13		
13	L 45X45X5		469	3.40	1.60	6	9.87		
13X	L 45X45X5		469	3.40	1.60	6	9.87		
14	L 45X45X5		708	3.40	2.41	3	7.22		
15	12mm Plate	150	X	190	94.20	2.69	12	32.22	
16	8mm Plate	205	X	335	62.80	4.31	8	34.50	
17	L 65X65X5	256	5.80	2.07	4	8.36			
18	8mm Plate	50	X	331	62.80	1.04	8	8.31	
WEIGHT STRUCTURE							520.61		
LIST OF NUT & BOLTS, WASHERS & STEP BOLTS									
SL_NO	DESCRIPTION	LENGTH IN MM	UNIT	WT IN KG	QTY	TOTAL WEIGHT IN KGS	REMARKS		
1	16.0 DIA BOLT & NUT	40	0.126	102	12.852				
2	16.0 DIA BOLT & NUT	45	0.132	102	13.464				
3	16.0 DIA BOLT & NUT	50	0.141	3	0.423				
4	16.0 DIA BOLT & NUT	55	0.148	7	1.036				
5	3.5 MM THK SPRING WASHER FOR 16.0 DIA		0.009	214	1.926				
6	3 MM THK PLAIN WASHER FOR 16.0 DIA		0.011	214	2.418				
7	6 MM THK PACK WASHERS FOR 16.0 DIA		0.036	3	0.108				
8	8 MM THK PACK WASHERS FOR 16.0 DIA		0.036	3	0.108				
TOTAL WEIGHT OF NUT & BOLTS							32.227		

WEIGHT OF STRUCTURAL STEEL	520.610
WEIGHT OF NUT & BOLTS	32.227
TOTAL WEIGHT OF STRUCTURE	552.837

- NOTES:
1. ALL DIMENSIONS ARE IN MM.
 2. ALL HOLES ARE 17.5MM DIA. FOR 16MM DIA. BOLTS.
 3. ALL STEEL SECTIONS SHALL CONFIRM TO IS: 2062.
 4. ALL STEEL SECTIONS, BOLTS, NUTS & PACK WASHERS ARE TO BE HOT DIP GALVANIZED.
 5. ALL BOLTS SHALL CONFORM TO IS:12427(2001), WITH MECHANICAL PROPERTIES CLASS 5.6 AND NUTS SHALL CONFORM TO IS: 1367(PART-VI) OF PROPERTIES CLASS-5.
 7. DIMENSIONAL AND WEIGHT TOLERANCE $\pm 10\%$.

STATION STRUCTURE OF TYPE BEAM -1B1 (FOR 110/11KV SUBSTATIONS ONLY)



KPTCL/P&C/TECH/110KV/1B1

AEE

EE

SEE

CEE

DRAWING NO.

DRAWN/CHECKED

SUBMITTED

RECEIVED

APPROVED

Approval Ltr No.: CEE/P&C/SET/EE(TL)/AEE-9/2021-22/10039-49 Dtd:05.10.2021