

Assn. Manager (C)	DESIGN PROJECTS
Design & Project	FULL SCALE SHOP
AEGCL, Kahilashahi	SECOND SUBMISSION
	SUBJECT: DESIGN PROJECTS

BILL OF MATERIALS								
ERCN MKD.	ITEM NO	DESCRIPTION	WIDTH (mm)	LENGTH (mm)	NOS	UNIT WT IN (kg)	WT/Pcs IN (kg)	Weight IN (Kg)
2ISO-1 + 1 E/S BOX + 1 MOM BOX	1	PL 16	180	180	4	125.60	4.07	16.28
	2	PL 8	72	100	16	62.80	0.45	7.20
	3	L65x65x6		3572	1	5.80	20.72	20.72
	4	L65x65x6		3572	1	5.80	20.72	20.72
	5	L65x65x6		3572	1	5.80	20.72	20.72
	6	L65x65x6		3572	1	5.80	20.72	20.72
	7	L45x45x4		493	4	2.70	1.33	5.32
	8	L45x45x4		472	4	2.70	1.27	5.08
	9	L45x45x4		513	4	2.70	1.39	5.56
	10	L45x45x4		472	20	2.70	1.27	25.40
	11	L65x65x6		470	2	5.80	2.73	5.46
	12	L65x65x6		340	2	5.80	1.97	3.94
	13	PL 12	470	470	1	94.20	20.81	20.81
	14	L65x65x6		1100	3	5.80	6.38	19.14
	15	L50x50x5		65	10	3.80	0.25	2.50
	16	L50x50x5		65	10	3.80	0.25	2.50
TENTATIVE WT OF STR. (without fastner)								202.07
NO. OF ERCN.								1
TOTAL WT.(kg) OF STR.								202.07

BOLTS & NUTS STATEMENT					
EXCLUDING 2% EXTRA					
	BOLT TYPE	SIZE	UNIT WT.	NOS	TOTAL WT
		(Length in mm)	Kg/pc		Kg
2ISO-1 + 1 E/S BOX + 1 MOM BOX		M-16 x 35 Lg.	0.117	0	0.000
		M-16 x 40 Lg.	0.125	110	13.750
		M-16 x 45 Lg.	0.133	25	3.325
		M-16 x 50 Lg.	0.141	0	0.000
		M-12 x 35 Lg.	0.062	12	0.744
	STEP BOLT	M-16 x 175 Lg.	0.417	0	0.000
	PACK WASHER FOR M-16 BOLTS				
	PW-4	M-16 x 4 TH.	0.025	10	0.250
PW-6	M-16 x 6 TH.	0.034	8	0.272	
SPRING WASHER					
		12 DIA x 2.5 mm	0.004	12	0.048
		16 DIA x 3.5 mm	0.009	135	1.215
TOTAL WT.OF FASTNERS =					19.604

BILL OF MATERIALS								
ERCN MKD.	ITEM NO	DESCRIPTION	WIDTH (mm)	LENGTH (mm)	NOS	UNIT WT IN (kg)	WT/Pcs IN (kg)	Weight IN (Kg)
2ISO-2 + 1 E/S BOX	1	PL 16	180	180	4	125.60	4.07	16.28
	2	PL 8	72	100	16	62.80	0.45	7.20
	3	L65x65x6		3572	1	5.80	20.72	20.72
	4	L65x65x6		3572	1	5.80	20.72	20.72
	5	L65x65x6		3572	1	5.80	20.72	20.72
	6	L65x65x6		3572	1	5.80	20.72	20.72
	7	L45x45x4		493	4	2.70	1.33	5.32
	8	L45x45x4		472	4	2.70	1.27	5.08
	9	L45x45x4		513	4	2.70	1.39	5.56
	10	L45x45x4		472	20	2.70	1.27	25.40
	11	L65x65x6		470	2	5.80	2.73	5.46
	12	L65x65x6		340	2	5.80	1.97	3.94
	13	PL 12	470	470	1	94.20	20.81	20.81
	17	L65x65x6		450	3	5.80	2.61	7.83
	15	L50x50x5		65	10	3.80	0.25	2.50
	16	L50x50x5		65	10	3.80	0.25	2.50
TENTATIVE WT OF STR. (without fastner)								190.76
NO. OF ERCN.								1
TOTAL WT.(kg) OF STR.								190.76

BOLTS & NUTS STATEMENT					
EXCLUDING 2% EXTRA					
BOLT TYPE	SIZE	UNIT WT.	NOS	TOTAL WT	
	(Length in mm)	Kg/pc		Kg	
2ISO-2 + 1 E/S BOX		M-16 x 35 Lg.	0.117	0	0.000
		M-16 x 40 Lg.	0.125	110	13.750
		M-16 x 45 Lg.	0.133	25	3.325
		M-16 x 50 Lg.	0.141	0	0.000
		M-12 x 35 Lg.	0.062	12	0.744
	STEP BOLT	M-16 x 175 Lg.	0.417	0	0.000
	PACK WASHER FOR M-16 BOLTS				
	PW-4	M-16 x 4 TH.	0.025	10	0.250
	PW-6	M-16 x 6 TH.	0.034	8	0.272
	SPRING WASHER				
	12 DIA x 2.5 mm	0.004	12	0.048	
	16 DIA x 3.5 mm	0.009	135	1.215	
TOTAL WT.OF FASTNERS =				19.604	

BILL OF MATERIALS								
ERCN MKD.	ITEM NO	DESCRIPTION	WIDTH (mm)	LENGTH (mm)	NOS	UNIT WT IN (kg)	WT/Pcs IN (kg)	Weight IN (Kg)
2ISO-3	1	PL 16	180	180	4	125.60	4.07	16.28
	2	PL 8	72	100	16	62.80	0.45	7.20
	3	L65x65x6		3572	1	5.80	20.72	20.72
	4	L65x65x6		3572	1	5.80	20.72	20.72
	5	L65x65x6		3572	1	5.80	20.72	20.72
	6	L65x65x6		3572	1	5.80	20.72	20.72
	7	L45x45x4		493	4	2.70	1.33	5.32
	8	L45x45x4		472	4	2.70	1.27	5.08
	9	L45x45x4		513	4	2.70	1.39	5.56
	10	L45x45x4		472	20	2.70	1.27	25.40
	11	L65x65x6		470	2	5.80	2.73	5.46
	12	L65x65x6		340	2	5.80	1.97	3.94
	13	PL 12	470	470	1	94.20	20.81	20.81
	15	L50x50x5		65	10	3.80	0.25	2.50
	16	L50x50x5		65	10	3.80	0.25	2.50
TENTATIVE WT OF STR. (without fastner)								182.93
NO. OF ERCN.								1
TOTAL WT.(kg) OF STR.								182.93

BOLTS & NUTS STATEMENT					
EXCLUDING 2% EXTRA					
2ISO-3	BOLT TYPE	SIZE	UNIT WT.	NOS	TOTAL WT
		(Length in mm)	Kg/pc		Kg
		M-16 x 35 Lg.	0.117	0	0.000
		M-16 x 40 Lg.	0.125	105	13.125
		M-16 x 45 Lg.	0.133	20	2.660
		M-16 x 50 Lg.	0.141	0	0.000
		M-12 x 35 Lg.	0.062	12	0.744
	STEP BOLT	M-16 x 175 Lg.	0.417	0	0.000
	PACK WASHER FOR M-16 BOLTS				
	PW-4	M-16 x 4 TH.	0.025	10	0.250
	PW-6	M-16 x 6 TH.	0.034	8	0.272
SPRING WASHER					
12 DIA x 2.5 mm		0.004	12	0.048	
16 DIA x 3.5 mm		0.009	125	1.125	
TOTAL WT.OF FASTNERS =				18.224	



Asstt. General Manager (C)
Design & Project
AEGCL, Kahilipara, Ghy-19

Asstt. Manager (C)
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Civil Expert
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APPROVED BY

General manager (C)
O/o the M.D, AEGCL, Bijulee Bhawan
Paltanbazar, Guwahati-1

1	SECOND SUBMISSION	D.S	D.S	S.C	01.11.2025
0	FIRST SUBMISSION	P.P	D.S	S.C	15.10.2025
REV	DESCRIPTION	PREP.	CHKD.	APPD.	DATE
OWNER		ASSAM ELECTRICTY GRID CORPORATION LIMITED			
EPC		TECHNO ELECTRIC & ENGG. CO. LTD.			
CONTRACT :		AEGCL/MD/AIIB/400kv/Sonapur/Tender/PkgH/2023-24/Extn-2/71 Dtd: 13.09.2024			
PROJECT		CONSTRUCTION OF 400/220KV, GIS AT SONAPUR AND ASSOCIATED TRANSMISSION LINES AND BAY EXTENSION WORKS AT EXISTING 220KV SONAPUR GIS			
SUBSTATION		400/220KV, GIS AT SONAPUR, ASSAM			
DRG. TITLE		SONAPUR SS - 220KV ISOLATER - FABRICATION DRAWING & BILL OF MATERIAL OF SUPPORT STRUCTURE			
DRG. NO. :		AEGCL-SONA-0816SN-CIV-2ISOSFAB-143			
SCALE :		1:50	JOB NO: 0816SN	SHEET	2 OF 2