Central Organisation for Railway Electrification
1-Nawab Yusuf Road, Civil Lines, Prayagraj (UP)-211001
Website: www.core.indianrailways.gov.in
Email: cee_mp@core.railnet.gov.in

No. ELCORE/MP/Steel Policy/Pt-III

Date: 21.05.2021

All vendors of-
Fabricators of Steel structures & SPS
(As per mailing list)

Sub: Weight of Galvanization for different OHE Structures.

Ref: RDSO letter No: TI/CIV/GCP/2020 dtd 19.05.2021. (copy enclosed).

*****

The weight of Galvanisation (Zinc) for 11 structures of Conventional OHE, 35 structures of High Rise OHE and 34 SPS Of OHE structures has been issued by RDSO vide letter under reference above. A copy of above referred letter is enclosed herewith for your information and further action please.

DA- As above.

21/05/2021

(Kalyan Singh)
Dy Chief Electrical Engineer (MP)
For CAO/CORE/Prayagraj.

Copy to: (i) All CPDs- for kind information pl.
(ii) GGM/Inspection/RITES Ltd, CR,ER,WR,SR,NR- for information and necessary action pl.

भारत सरकार - रेल मंत्रालय
अनुसंधान अभिकल्प और मानक संगठन,
मानकनगर, लखनऊ-226011
Government of India - Ministry of Railways
ResearchDesigns & Standards Organisation
Manak Nagar, Lucknow - 226011

दूरभाष/Telephone:
बीएसएनएल/BSNL:91-522-2465731
रेलवे/Railway: 42809
फैक्स/Fax : 91-522-2465731
ई मेल/E-mail: jointdirectorcivil@gmail.com

संख्या /No.:-TI/CIV/GCP/2020 दिनांक/Dated:19.05.2021

To,

1.Principal Chief Electrical Engineer

(i) Central Railway, Station Building, Mumbai CST – 400001.
(ii) Eastern Railway, Fairlie Place, Kolkata-700001.
(iii) East Central Railway, Hajipur-844101.
(iv) East Coast Railway, Bhubaneshwar-751023.
(v) Northern Railway, Baroda House, New Delhi - 110001.
(vi) North Central Railway, Allahabad-211015.
(vii) North Eastern Railway, Gorakhpur-273012.
(viii) North Frontier Railway, Mailgaon - 781011.
(ix) North Western Railway, Jaipur – 302017.
(x) Southern Railway, Park Town, Chennai- 600003.
(xi) South Central Railway, Railnilayam, Secunderabad-500371.
(xii) South Eastern Railway, Garden Reach, Kolkata-700043.
(xiii) South East Central, Railway, Bilaspur-495004.
(xiv) South West Railway, DRM's Office, Hubli-580028.
(xv) Western Railway, Church gate, Mumbai-400020.
(xvi) West Central Railway, Jabalpur - 482001.
(xvii) Konkan Railway Corporation Limited, Belapur, Navi Mumbai-400641.

2. CAO/CORE, 1, Nawab yusuf Road, Prayagraj-211001.
3. General Manager (Electrical), IRCON Ltd, C-4, District Central, Saket, New Delhi-110017.
4. ED/Electrical, RVNL, 1st Floor, August kranti Bhavan, Bhikaji Cama palace, R.K. Puram, New delhi-110066.
5. MD, DFCCIL Pragati Maidan, New Delhi-110001.
6. Director (Technical)/RITES LTD., RITES bhawan, Plot No.-1, Sector-29, Gurgaon (Haryana) – 122001.

विषय/Sub: **Weight of Galvanization for different OHE Structures (Phase-3).**

संदर्भ/Ref: **(i)** This office letter no. TI/CIV/GCP/2020 dated 22.10.2020.
(ii) This office letter no. TI/CIV/GCP/2020 dated 27.01.2021.

*****

Vide letter under ref.(i) above, in the first phase, weight of Galvanization (Zinc) for 42 OHE structures had been issued to all Zonal Railway for information and necessary action.

Vide letter under ref.(ii) above, in the second phase, weight of Galvanization (Zinc) for 36 OHE structures (S-series masts, three legged N-type Portal, Special BFB Portal, G-type Portal, P-type Portal, TTC-17, and Cover Angle/Knee bracing) had been issued to all Zonal Railway for information and necessary action.

In the Phase-3, weight of Galvanization (Zinc) for 11 structure of conventional OHE, 35 structures of high rise OHE and 34 structures of SPS is enclosed as "Annexure-A"and "Annexure-B" respectively for your kind information and necessary action.

Modification in the drawings for inclusion of weight of Galvanized steel structures will be issued by RDSO in due course.

This is issued with the approval of competent authority.

19/05/2021

(समय सिंह / Samay Singh)
संयुक्त निदेशक (सिविल) /(क.सं.)Joint Director (civil)/TI
कृते महानिदेशक (क.सं.)/For Director General (TI)

DA: - (i) Annexure-A.
(ii) Annexure-B.

Copy to: ED/RE/RB – For kind information please.

Weight of Galvanization for different structures of Conventional OHE				
S.N.	**Drawing Number**	**Structure Name**	**Weight of Galvanization (kg) For Suburban & lightly polluted area 610 gm/m2**	**Weight of Galvanization (kg) For marine & Chemically polluted area 1000 gm/m2**
1	ETI/C/0008 (SHEET-6)	NK	0.254	0.417
2	ETI/C/0018-2	K-100	5.889	9.654
3		K-125	6.958	11.406
4		K-150	8.036	13.173
5		K-175	8.607	14.110
6		K-200	9.181	15.050
7		K-225	9.906	16.240
8		K-250	10.475	17.172
9	ETI/OHE/G/01402	(8"x 6") RSJ DWARF MAST (STYLE-1)	2.341	3.837
10		200x200BFB DWARF MAST (STYLE-1)	2.766	4.534
11		K-200 DWARF MAST (STYLE-2)	3.747	6.142

Weight of Galvanization for different structures of High Rise OHE				
1	ETI/C/HR/0181	S-6H	7.903	12.956
2	ETI/C/HR/0182	S-7H	13.836	22.682
3	ETI/C/HR/0183	S-8H	16.649	27.294
4	TI/DRG/CIV/TTC/00001/13/0 (Sheet-2)	TTU	16.140	26.459
5	TI/DRG/CIV/TTC/00001/13/0 (Sheet-3)	TTB-HR 5.5m	6.344	10.400
6	TI/DRG/CIV/G-PORTAL/00001/13/0	GU	19.138	31.374
7		GE2	11.051	18.117
8		GE1	10.582	17.347
9		GK	0.644	1.055
10		CLEAT	0.377	0.618
11	TI/DRG/CIV/N-PORTAL/00001/13/0 sheet-2	NU	11.301	18.526
12	TI/DRG/CIV/O-PORTAL/00001/13/0 sheet-2	OU	13.712	22.479
13	TI/DRG/CIV/R-PORTAL/00001/13/0 sheet-2	RU	14.212	23.298
14	TI/DRG/CIV/P-PORTAL/00001/13/0	PU	16.136	26.452
15		PE1	4.953	8.119
16		PE2	5.347	8.765
17		PK	0.454	0.744
18	TI/DRG/CIV/BFB-PORTAL/00001/13/0 sheet-2	BFBU	13.701	22.460
19	TI/DRG/CIV/B-MAST/00001/13/0)	B-150	9.419	15.441
20		B-175	10.167	16.667
21		B-200	10.857	17.798
22		B-225	11.727	19.225
23		B-250	12.403	20.333

24	ETI/OHE/HR/G/ 01402	(8"x 6") RSJ (TYPE-1) (3850 mm conventional/5620 mm HR OHE)	3.417	5.601
25		(8"x 6") RSJ (TYPE-2) (4350 mm conventional/6120 mm HR OHE)	3.720	6.099
26		(8"x 6") RSJ (TYPE-3) (4770 mm conventional/6540 mm HR OHE)	3.976	6.518
27		200x200 BFB (TYPE-1) (3850 mm conventional/5620 mm HR OHE)	4.046	6.632
28		200x200 BFB (TYPE-2) (4350 mm conventional/6120 mm HR OHE)	4.405	7.222
29		200x200 BFB (TYPE-3) (4770 mm conventional/6540 mm HR OHE)	4.707	7.717
30		K-200 (TYPE-1) (3850 mm conventional/ 5620 mm HR OHE)	5.424	8.892
31		K-200 (TYPE-2) (4350 mm conventional/ 6120 mm HR OHE)	5.899	9.670
32		K-200 (TYPE-3) (4770 mm conventional/ 6540 mm HR OHE)	6.306	10.338
33		B-200 (TYPE-1) (3850 mm conventional/ 5620 mm HR OHE)	5.375	8.812
34		B-200 (TYPE-2) (4350 mm conventional/ 6120 mm HR OHE)	5.874	9.629
35		B-200 (TYPE-3) (4770 mm conventional/ 6540 mm HR OHE)	6.305	10.336

Annexure –B

Weight of Galvanization for different SPS of OHE structures				
S.N.	Drawing Number	Structure Name	Weight of Galvanization (kg) For Suburban & lightly polluted area 610 gm/m2	Weight of Galvanization (kg) For marine & chemically polluted area 1000 gm/m2
1	ETI/C/P/8011	Short super mast channel	0.367	0.602
2	ETI/C/P/8012	Batten plate bracket type -1	0.049	0.080
3	ETI/C/P/8013	0.8m super mast cross arm	0.127	0.208
4	ETI/C/P/8014	Suspension support angle	0.060	0.098
5	ETI/C/P/8014-1	Suspension support angle (modified arrangement)	0.037	0.061
6	ETI/C/P/8014-2	Suspension support angle	0.038	0.063
7	ETI/C/P/8015	1.5m super mast cross arm	0.238	0.390
8	ETI/C/P/8016	Batten plate type -2	0.039	0.064
9	ETI/C/P/8021	Long super mast channel	0.806	1.321
10	ETI/C/P/8022	2.8m super mast cross arm	0.444	0.728
11	ETI/C/P/8031	Portal bracket attachment	0.055	0.090
12	**Front clamping angle**			
	ETI/C/P/8033	part 8032-1	0.084	0.138
		part 8032-2	0.100	0.164
		part 8032-3	0.108	0.177
		part 8032-4	0.076	0.125
		part 8032-6	0.073	0.120
13	ETI/C/P/8051	Portal super mast	1.404	2.302
14	**Base clamping angle for portal**			
	ETI/C/P/8052/4	part 8052	0.071	0.117
		part 8053	0.087	0.143
		part 8053-1	0.095	0.156
15	ETI/C/P/8071	suspension support angle for on portal for RC	0.123	0.202
16	**Cross arm (TTC and portal)**			
	ETI/C/P/8072/4/7	part 8072	0.124	0.203
		part 8074	0.171	0.281
		part 8076	0.187	0.307
17	**SPS for RC suspension (TTC and portal)**			
	ETI/C/P/8073/5/8	part 8073-1	0.059	0.098
		part 8073-2	0.064	0.105
		part 8075-1	0.052	0.085
		part 8075-2	0.056	0.092
		part 8077-1	0.067	0.111
		part 8077-2	0.072	0.118
18	**SPS for RC suspension (TTC and portal)**			
	ETI/C/P/8079	part 8078-1	0.081	0.133
		part 8078-2	0.085	0.139
		part 8078-3	0.073	0.120
		part 8078-4	0.077	0.126

		part 8078-5	0.089	0.146
		part 8078-6	0.093	0.152
19	**Special guide bracket angle for CC counter weight**			
	ETI/C/P/8101	part P-9047-1	0.076	0.125
		part P-9047-2	0.092	0.151
		part P-9047-3	0.108	0.177
		part P-9047-4	0.116	0.190
20	**Guide tube bracket angle for CC counter weight**			
	ETI/C/P/8102	part 9049-1	0.132	0.216
		part 9049-2	0.159	0.261
		part 9049-3	0.187	0.306
		part 9049-4	0.200	0.329
21	**Guide tube support angle for CC counter weight**			
	ETI/C/P/8103	part P/5064-3	0.162	0.265
		part P/5064-4	0.172	0.283
		part P/5064-5	0.197	0.323
		part P/5064-6	0.220	0.360
		part P/5064-7	0.236	0.386
		part P/5064-8	0.243	0.399
22	**special Guide tube support angle for CC counter weight**			
	ETI/C/P/8104	part P/5065-1	0.088	0.144
		part P/5065-2	0.106	0.174
		part P/5065-3	0.124	0.204
		part P/5065-4	0.134	0.219
23	ETI/C/P/8111	portal super mast 2x25kv At system	1.139	1.867
24	ETI/C/P/8112	1.3m feeder super mast cross arm for 2x25 kv	0.206	0.338
25	ETI/C/P/8113	Feeder support mast channel (2x25 kv at)	0.912	1.495
26	ETI/C/P/8114	2.3m portal super mast cross arm feeder	0.365	0.598
27	ETI/C/P/8115	Batten plate type-3 2x25 kv at	0.048	0.078
28	ETI/C/P/8116	cleat angle 2x25	0.044	0.073
29	ETI/C/P/8117	suspension support angel 2x25	0.068	0.111
30	ETI/C/P/8118	feeder support clamp (2x25 kv at)	0.103	0.169
31	**SPS details for double pole isolator on mast**			
	ETI/C/P/8119 sheet-2	Part.8119-1	1.098	1.800
		Part.8119-2	0.289	0.474
		Part.8119-3	0.351	0.575
		Part.8119-4	0.144	0.236
		Part.8119-4A	0.144	0.236
32	**SPS details for double pole isolator on portal**			
	ETI/C/P/8119 sheet-3	Part.1	0.900	1.475
		Part.2	0.966	1.583
		Part.3	0.319	0.523
33	**short super mast assembly for TM series**			
	ETI/C/P/8120	part no. 8120-1	0.354	0.581

	sheet-3	part no. 8120-2	0.121	0.198
		part no. 8120-3	0.238	0.390
34	**(TTC -17) SPS details**			
	ETI/C/0077 sheet-6	part A	0.006	0.010
		part B	0.026	0.043
		part C	0.205	0.336
		part D	0.177	0.290
		part E	0.044	0.072
		part F	0.105	0.172
		part G	0.213	0.350