

Repair & Renovation (Electrical) Works Of C Block At SBILD,Vizianagaram.

Sl.No	Description of Work / Item(s)	Units	Qty	Rate	Amount
1	SUBHEAD-I: INTERNAL ELECTRIFICATION				
2	WIRING				
3	(Colour Code of wires to be strictly maintained)				
4	Wiring for light point/ fan point/ exhaust fan/wall fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box including supplying the same and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.First Point.Group A	Point	148.00		
5	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class pvc conduit as required 2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	Metre	400.00		
6	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class pvc conduit as required .4 X 1.5 sq. mm + 2 X 1.5 sq. mm earth wire	Metre	245.00		
7	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class pvc conduit as required .2 X 4 sq. mm + 1 X 4 sq. mm earth wire	Metre	180.00		
8	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class pvc conduit as required 2 X 6 sq. mm + 1 X 6 sq. mm earth wire	Metre	10.00		
9	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class pvc conduit as required. 4 X 4 sq. mm + 2 X 4 sq. mm earth wire	Metre	100.00		
10	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class pvc conduit as required .4 X 6 sq. mm + 2 X 6 sq. mm earth wire	Metre	120.00		
11	Supplying and drawing following sizes of FR PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required. 3 x 1.5 sq. mm	Metre	5.00		
12	Supplying and drawing following sizes of FR PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required. 6 x 1.5 sq. mm	Metre	5.00		
13	Supplying and drawing following sizes of FR PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.:2 x 4 sq.mm (for earth connection of CCTV equipments)	Metre	5.00		
14	S/D following pair 0.5 sq mm FR PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as reqd.2 Pair	Metre	150.00		
15	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	Metre	150.00		
16	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.25 mm	Metre	15.00		
17	Supplying and fixing metal box of 2.0 mm thick following sizes (nominal size) on surface or in recess without cover including painting etc as required. 75 mm X 75 mm X 60 mm deep	Nos	15.00		
18	Supplying and fixing metal box of 2.0 mm thick following sizes (nominal size) on surface or in recess without cover including painting etc as required. 100 mm X 100 mm X 60 mm deep	Nos	15.00		
19	Supplying and fixing metal box of 2.0 mm thick following sizes (nominal size) on surface or in recess without cover including painting etc as required.150 mm X 75 mm X 60 mm deep	Nos	5.00		

20	Supplying and fixing metal box of 2.0 mm thick following sizes (nominal size) on surface or in recess without cover including painting etc as required. 200 mm X 125 mm X 60 mm deep	Nos	3.00		
21	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. 1-2 Module	Nos	45.00		
22	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. 3 Module	Nos	15.00		
23	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. 6 Module	Nos	20.00		
24	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. 8 Module	Nos	10.00		
25	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate, switch box etc. as required.5/6 amps switch	Nos	109.00		
26	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate, switch box etc. as required. 2 way 5/6 amps switch	Nos	10.00		
27	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate, switch box etc. as required. 5/16 amp switch	Nos	10.00		
28	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate, switch box etc. as required. 3 pin 5/6 amp socket outlet	Nos	109.00		
29	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate, switch box etc. as required. 6 pin 15/16 amp socket outlet	Nos	25.00		
30	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate, switch box etc. as required. 20 amp switch (One Module)	Nos	15.00		
31	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate, switch box etc. as required.Telephone socket outlet, RJ-11	Nos	5.00		
32	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate, switch box etc. as required. TV antenna socket outlet	Nos	5.00		
33	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate, switch box etc. as required. Ceiling rose	Nos	50.00		
34	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate, switch box etc. as required. Bell push	Nos	5.00		
35	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate, switch box etc. as required. AC starter, 25A, 2 Module	Nos	15.00		
36	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate, switch box etc. as required.20A Master switch, 2 Module, DP	Nos	10.00		
37	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	Nos	16.00		
38	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	Nos	10.00		
39	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required.	Nos	57.00		
40	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection etc. as required.	Nos	12.00		
41	Installation, testing, commissioning of wall bracket /ceiling fittings of all sizes and shapes containing upto two GLS lamps per fitting /LED lamp, complete with all accessories including connection etc. as required.	Nos	50.00		
42	Supply, fixing PVC batten / angle holder i/c connection etc as reqd	Nos	36.00		
43	Supplying and fixing call bell/ buzzer suitable for single phase, 230 volts, complete as required.	Nos	5.00		
44	Providing and fixing plain 16/0.20mm (0.50sqmm) twin circular flexible FRLS PVC insulated, PVC sheathed copper cable direct on the wall with PVC clips etc. as required.	Metre	15.00		

45	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting /LED fittings of all types, complete with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	Nos	21.00		
46	Installation, testing and commissioning of ceiling fan on down rod or wall fan on the existing ceiling /surface, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable including providing fixing phenolic laminated fan cover on the box etc. as required.	Nos	16.00		
47	Installation of exhaust fan with shutters/louvers in the existing opening, including making good the damage, connection, testing, commissioning etc. as required. Upto 450 mm sweep	Nos	15.00		
48	Rising main, SDB'S, MCB, ISOLATOR				
49	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 volts, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator) .4 way, Double door	Nos	1.00		
50	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 volts, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator) 8 way, Double door	Nos	1.00		
51	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 volts, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator) 4 way (4 + 12), Double door	Nos	5.00		
52	Supplying and fixing Cable End Box (Loose wire box)(IP 43) suitable for following single pole and neutral, sheet steel, MCB distribution board, 240 V/415V, on surface/ recess, complete with testing and commissioning etc. as required a) for 6 way DD SPN DB	Nos	1.00		
53	Supplying and fixing Cable End Box (Loose wire box)(IP 43) suitable for following single pole and neutral, sheet steel, MCB distribution board, 240 V/415V, on surface/ recess, complete with testing and commissioning etc. as required b) for 8 way DD SPN DB	Nos	1.00		
54	Supplying and fixing Cable End Box (Loose wire box)(IP 43) suitable for following single pole and neutral, sheet steel, MCB distribution board, 240 V/415V, on surface/ recess, complete with testing and commissioning etc. as required c) for 4 way DD TPN DB	Nos	5.00		
55	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as reqd. Single pole	Nos	65.00		
56	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as reqd .Single pole and neutral	Nos	1.00		
57	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	Nos	5.00		
58	Supplying and fixing following rating, double pole, 240 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.40 amps	Nos	5.00		
59	Supplying and fixing following rating, four pole, 415 volts, isolator/MCCB in the existing MCB DB /Tap off box complete with connections, testing and commissioning etc. as required.40 amps	Nos	5.00		
60	CABLE AND CABLE TRAY				
61	Cables Tray				
62	Supplying and installing following size of GI cable trays (galvanisation 50 micron) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required.100 mm width X 50 mm depth X 1.6 mm thickness	Metre	10.00		
63	Supplying and installing following size of perforated GI cable tray bends (galvanisation 50 micron) with perforation not more than 17.5%,, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required.100 mm width X 50 mm depth X 1.6 mm thickness	Nos	2.00		
64	Cables MV				

65	Supplying the following Size PVC/ XLPE insulated PVC sheathed Alluminium/copper unarmoured/ armour cable of 1.1 kV as per IS 1554 etc as reqd. a) 3.5 core 25 sq.mm, Alluminium (floor Panels)	Metre	50.00		
66	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required. a) Upto 35 sq. mm (clamped with 1mm thick saddle)	Metre	10.00		
67	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required .a) Upto 35 sq. mm (clamped with 1mm thick saddle)	Metre	40.00		
68	Supplying and making end termination with brass compression gland and aluminium lugs/copper for following size of PVC insulated and PVC sheathed / XLPE aluminium/copper conductor cable of 1.1 KV grade as required.a) 3.5 core 25 sq.mm	Nos	2.00		
69	Providing brick work (in width 225 mm or more) with F.P.S. bricks of class designation 7.5 in cement mortar 1:4 (1 cement : 4 coarse sand) at all levels for cable chamber, trench, PLINTH side wall etc as reqd.	Cum	1.00		
70	Earthing for PANELS & Computer				
71	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Set	6.00		
72	Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe (with supply of pipe)from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.	Metre	10.00		
73	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for loop earth connections along with cables etc. as required.	Metre	10.00		
74	SAFETY				
75	Providing and fixing MV danger notice plate of 200 mm X 150 mm, made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	Nos	1.00		
76	Supplying and fixing 3 nos GI fire bucket of 9 ltr capacity with suitable pedestal arrangement for each transformer sub-station yard etc as reqd.	Set	1.00		
77	Supplying and Laying 3 mm thick, 11kV rated rubber mat of ISI marked and of approved etc as reqd.	Sqm	2.00		
78	Supplying and fixing shock treatment chart bonded with glass frame of bigger size on the existing surface with suitable clamp /hook arrangement etc as reqd.	Set	1.00		
79	PANELS				
80	Design, supply, installation, testing and commissioning of cubicle main panel for indoor installation of weather proof design as per IP 54 class, made out of 2 mm thick CRCA sheet as per the drawing with cubicle type internal arrangement of 2.0 mm thick sheet and with front & back opening system suitable for mounting following switch gears, busbars, metering unit, including painting with powder coated paint of approved colour and shed with earthing the body etc as reqd. (drawing shall be approved by engineer -in charge) (MAIN PANEL)	Set	1.00		
81	Incommer				
82	a) 100A, 4 pole MCCB, 25kA (Model D sine DN0-100D of L&T or Similar Superior make) - 1 no				
83	Outgoing				
84	a) Metering cubicle suitable for 3 phase KWH meter 10-60A with tamper proof arrangement- 5 nos and for 1ph-kWH meter-1 no.				
85	b) 25A, DP MCB 10kA, C-Series - 2 no				
86	c) 40A, FP MCB 10kA, C-Series - 5 no				
87	d) 4 strip Al. Bus bar suitable for 100A (preferably 25mm x 5mm x 1 nos Al flat) with heat shrinkable tube as per the drawing)				
88	e) VAF Meter Digital, 0.5 class- 1 set				
89	f) RYB Neon/ LED indicating lamp -1 set				
90	g) 100A ammeter with selector switch and CT - 1 set				
91	h) Inter connection of Bus bar and switch gears shall be made through suitable size Alluminium flats. Copper multi core cable shall be used for ineter connection upto 63A capacity.				
92	i) 25x 5 mm Alluminium Earth bus with insulation.				
93	j) The Cubicle should have front openeable system				
94	k) All other required accessories, wirings, as per SLD				
95	Incommer				
96	a) 100A, 3P+N MCCB, 36kA, with thermal release 80-100A (Model DPX ³ Legrand or SS make) - 1no				
97	Outgoing				
98	a) 32-100A, 4p MCCB, 36kA, with thermal release 50-63A (Model DPX ³ Legrand or SS make) - 2no				
99	a) 63A, 4 pole MCB, 10kA, C -Series with - 3 no				

100	b) 32A, 4 pole MCB, 10kA, C - 3 no				
101	c) DOL starter , 7-13A thermal release- 2 nos				
102	h) 4 strip Alluminium Bus bar suitable for 200A (preferably 40mm x 5 mm x 1 nos Al flat) with heat shrinkable tube as per the drawing)				
103	h) VAF Digital meter- 1 set with CT and accessories				
104	i) RYB Neon/ LED indicating lamp - 1 set				
105	k) 100A/5A ammeter with selector switch and CT - 1 set				
106	l) All MCCB shall have rotary operating mechanism.				
107	m) Inter connection of Bus bar and switch gears shall be made through suitable size Alluminium flats. Copper multi core cable shall be used for ineter connection upto 63A capacity.				
108	n) 25 x 5 mm GI Earth bus with insulation.				
109	o) The Cubicle should have 2-part hinged door with front openeable system				
110	p) All other required accessories, wirings, as per SLD				
111	Supplying and fixing of 3ph, 415V, Digital meter, 10-60A for energy monitoring as sub meter including connection, testing etc as reqd. (All mters shall be tested in MRT/ Authorised testing laboratory as reqd. (with BLE communication facility) (Secure/L&T/ Similar Superior make	Nos	5.00		
112	Supplying and fixing of 1ph, 240V, Digital meter, 10-60A for energy monitoring as sub meter including connection, testing etc as reqd. (All mters shall be tested in MRT/ Authorised testing laboratory as reqd. (with BLE communication facility) (Secure/L&T/ Similar Superior make	Nos	1.00		
113	Fitting and Accessories				
114	Supply, Testing, and commissioning of Exhaust fan 300mm dia suitable to work on 230/250 volts, 50HZ complete with mounting frame and louvers in the existing opening, making good the damage, connections,etc as required.	Nos	5.00		
115	Supply, Testing, and commissioning of Ventilator/ Exhaust fan 250 mm dia suitable to work on 230/250 volts, 50HZ complete with mounting frame and louvers in the existing opening, making good the damage, connections,etc as required.	Nos	10.00		
116	Supplying of 1200 mm sweep ceiling mounted energy efficient 5 star rated fan, ISI marked of metal blade of approved make etc as reqd. (Orient/Usha/Havells or Similar Superior make to be approved by Engineer In Charge)	Nos	16.00		
117	Supply, Testing & commissioning of recess mounted energy efficiency White LED down lighter suitable for following LED confirming to LM-80 catagory with a special diffuser of approved make etc as reqd. a) 15 Watt Square/round (Model LD80 of Wipro/SS make of Philips /Halonex)	Nos	12.00		
118	Supply, Testing & commissioning of recess mounted energy efficiency White LED down lighter suitable for following LED confirming to LM-80 catagory with a special diffuser of approved make etc as reqd. c) Decorative Wall fitting for 1 nos GLS/LED lamp, B-22, Model JNL-CHR-MB160275211A of Jaguar or Similar Superior make	Nos	15.00		
119	Supply, Testing & commissioning of recess mounted energy efficiency White LED down lighter suitable for following LED confirming to LM-80 catagory with a special diffuser of approved make etc as reqd. d) LED Mirror light suitable upto 9W (K lite or Similar superior Model to be approved by EIC) Model - JNL-BRG-WLCONESIE14 of Jaguar or Similar Superior make	Nos	10.00		
120	Supply, Testing & commissioning of recess mounted energy efficiency White LED down lighter suitable for following LED confirming to LM-80 catagory with a special diffuser of approved make etc as reqd. e) LED BH fitting suitable for 9W-12 LED lamp with lamp LW07 of Wirpo or Similar Superior make	Nos	13.00		
121	Supply, Testing & commissioning of surface type energy efficiency LED tube light fitting, alluminium linier batten suitable for 1 x 18 /20 watt LED lamp (with lamp) of approved make (With BIS certification)etc as reqd. (Model Trim LED LL20 of Wipro or SS make)	Nos	21.00		
122	Lightning Arrestor				
123	Providing and fixing of lightning conductor finial, made of 25 mm dia 300 mm long, G.I. tube, having single prong at top, with 85 mm dia 6 mm thick G.I. base plate including holes etc. complete as required.	Nos	12.00		
124	Jointing copper / G.I. tape (with another copper/ G I tape, base of the finial or any other metallic object) by riveting / nut bolting/ sweating and soldering etc as required.	Nos	46.00		
125	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required. (For horizontal run)	Metre	75.00		
126	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required. (For vertical run)	Metre	30.00		

127	Providing and fixing testing joint, made of 20 mm X 3 mm thick G.I. strip, 125 mm long, with 4 nos. of G.I. bolts, nuts, chuck nuts and spring washers etc. complete as required.	Nos	2.00		
128	Providing and laying G.I. tape 32 mm X 6 mm from earth electrode directly in ground as required.	Metre	10.00		
129	S/F 50 mm dia Light duty GI pipe, 3 mtr long in ground for protection of GI conductor etc as reqd.	Set	1.00		
130	Total of Subhead				