



**GOVERNMENT OF INDIA**

**CENTRAL PUBLIC WORKS DEPARTMENT**

**DELHI SCHEDULE OF RATES  
(E & M)**

**2016**



**Directorate General, CPWD, Nirman Bhawan, New Delhi**

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Director General



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Government of India



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## FOREWORD

This Delhi Schedule of Rates (E&M) 2016 is a comprehensive document for the execution of Electrical & Mechanical Works in CPWD and is useful to other Govt. Departments and Undertakings also which follow CPWD Schedule of Rates in their works.

The First compilation of Schedule of Rates for Electrical Works took place as far back as in 1935 and thereafter number of revisions followed from time to time to bring it at par with the prevailing market rates and up gradation of technology. Till 2007, Schedule of Rates for Electrical Works was used to be published in two parts i.e. Part-I Internal & Part-II External. However in 2012, both parts were combined into one for the sake of user's convenience. Since 2013 it was renamed as Delhi Schedule of Rates (E&M) as it incorporated items related to HVAC works also.

I acknowledge the hard work put in by Sh. D.K. Tulani, SE(E)TAS, Sh. Arun Goyal, AEE(E)TAS, Sh. M.C. Sharma, AE(E)TAS and H.P.S. Tyagi, AE(E) and initial contribution of Sh. S.K. Dixit, EE(E)TAS under the guidance of Sh. Mukesh Vij, SDG(ER), Sh. P.K. Garg, ADG(ER-II), Sh. Balraj Chaddha ADG(TD) and Sh. C.K. Verma, CE(E)CSQ without which the revision would not have been possible. I also acknowledge the valuable suggestions of other members of Specification Committee and three nos. Sub-Committees as well as all those involved in the process of revision and finalization of Delhi Schedule of Rates (E&M) 2016.

I am sure that This Schedule of Rates will be useful to all concerned Engineers of CPWD and also to many other engineering organizations of Central/State Governments as well as practicing Architects and E&M Consultants.

(DIVAKAR GARG)  
DIRECTOR GENERAL, CPWD

Place : New Delhi  
Date : July 2016





**MUKESH VIJ**  
**SPECIAL DIRECTOR GENERAL(ER)**

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## PREFACE

The DSR (E&M) 2016 is the revised edition of DSR(E&M) 2014 and combines Schedule of Rates for Electrical Works Part-I Internal, Part-II External and few items of plumbing, Ducting and AHU of HVAC works. The Schedule of rates is based on the study of current Market rates of materials at Delhi collected during May-June 2016 and Labour Rates are current Market rates notified by the Government of Delhi effective from 01.04.2016.

I acknowledge the contributions of three Sub-Committees and a drafting committee formed for review of DSR and corresponding CPWD Specifications with following allocation of chapters of DSR (E&M) 2014:

- 1) Sub-Committee headed by  
Sh. S.K. Chawla, CE, with  
Sh. C.S. Mittal CE and  
Sh. N.K. Bansal, SE(E), as members - Chapter-5,6,12,13 and 16
- 2) Sub-Committee headed by  
Sh. Gurvinder Singh, CE, with  
Sh. Rajeev Sharma, SE(E) and  
Sh. Durga Prasad Konhar, SE(E), as  
members - Chapter-1,3,9,10, 14 and 15
- 3) Sub-Committee headed by  
Sh. C.K. Verma, CE(E), with  
Sh. Awdhesh Kumar, SE(E) and  
Sh. Satyender Kumar, SE(E), as  
members - Chapter-2,4,7,8, and 11
- 4) Drafting Committee headed by  
Sh. C.K. Verma, CE(E), with  
Sh. D.K. Tulani,SE(E), Sh.S.K. Dixit,  
EE(E), Sh. Arun Goyal, AEE(E), and  
Sh. M.C. Sharma, AE(E), as members - Chapter- 1 to 16

This Schedule of Rates will be read along with relevant CPWD specifications of Electrical Works. The Delhi Schedule of Rates (E&M) 2016 now replaces the Delhi Schedule of Rates (E&M) 2014. Errors, Omissions and/or suggestions for improvements if any, may be brought to the notice of Superintending Engineer (E) TAS in the office of Chief Engineer, CSQ(E), CPWD, Nirman Bhavan, New Delhi-11 (Telephone No. 011-23061418)

Place: New Delhi  
date: July 2016

(Mukesh Vij) 6/7/2016  
Spl. Director General (ER), CPWD  
Chairman Specifications Committee





बलराज चढ्ढा  
BALRAJ CHADHA

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## SALIENT NOTES FOR DSR (E&M) 2016

1. The items of works contained herein are to be executed as per CPWD General Specifications for Electrical Works Part-I Internal, Part-II External, Part- IV Sub-Station and CPWD General Specification for HVAC Works 2004, with upto date amendments/correction slips.
2. DSR 2016 is based on the prevailing market rates of materials in Delhi as on 1-04-2016. The Labour rates adopted are as per minimum wage rates issued by Govt. of Delhi w.e.f. 1-04-2016.
3. The rates in this DSR are for working height upto 4.5 meter from floor level wherever height is not specified. The rates of materials are for reputed brands, factory fabricated and tested wherever available from manufacturers as submitted by field units.
4. 18 nos. New Items like Group controlled point wiring , Loose wire boxes for DBs, Hot dipped GI Cable Trays and their accessories, Motorized butterfly Valves, Pressure Independent Balancing & Control Valves etc. have been added in this DSR.
5. The rates of AHUs have been incorporated only for four and six rows deep cooling coils. For any change in the parameter, the rates have to be analyzed by the NIT approving authority.
6. In this DSR under Chapter 16, insulation thickness of Resin bonded fibre glass pipe section on existing chilled water piping has been changed as per Analysis of Rates i.e. from 65 mm to 75 mm and a new item for 65 mm thickness has also been added.
7. For electrical panels, CPWD General Specification for Electrical Works Part-IV shall be applicable.

Place: New Delhi  
Date: July, 2016

(BALRAJ CHADHA)  
ADDL. DIRECTOR GENERAL (TD), CPWD



## MEMBERS OF SPECIFICATION COMMITTEE FOR E & M WORKS

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# CONTENTS

CHAPTER	NAME OF CHAPTER/SUBHEAD	PAGE NO.
1	WIRING	1
2	MCCB, MCB & DB'S	11
3	RISING MAINS & BUS TRUNKING	16
4	CABLE TRAYS	21
5	EARTHING	27
6	LIGHTNING CONDUCTOR	29
7	MV CABLE LAYING	30
8	HT CABLE LAYING	33
9	MV CABLE JOINTING & END TERMINATION	35
10	HV CABLE JOINTING & END TERMINATION	40
11	POLE ERECTION	42
12	MV OVER HEAD LINE WORK	43
13	HV OVER HEAD LINE WORK	47
14	MISC. CIVIL ITEMS	51
15	LIGHTING CONTROLS	54
16	HVAC (ONLY PLUMBING, DUCTING & AHU)	55
Appendix-I	BASIC RATES OF LABOUR & HIRE CHARGES	66
Appendix-II	BASIC RATES OF MATERIALS	67



## CHAPTER-1-WIRING

Code No.	Description	Unit	Rate ₹
<b>WIRING IN STEEL &amp; PVC CONDUIT</b>			
1.1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with piano type switch, phenolic laminated sheet, suitable size MS box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.		
1.1.1	Group A	Point	659
1.1.2	Group B	Point	793
1.1.3	Group C	Point	994
1.2	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, 2 way piano type switch, phenolic laminated sheet, suitable size MS box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	Point	999
1.3	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.		
1.3.1	Group A	Point	702
1.3.2	Group B	Point	836
1.3.3	Group C	Point	1037
1.4	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	Point	1094
1.5	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	meter	239
1.6	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	meter	366

Code No.	Description	Unit	Rate ₹
1.7	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required.		
1.7.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	meter	181
1.7.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	meter	206
1.7.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	meter	237
1.7.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	meter	324
1.7.5	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	meter	392
1.7.6	2 X 16 sq. mm + 1 X 6 sq. mm earth wire	meter	530
1.7.7	4 X 2.5 sq. mm + 2 X 2.5 sq. mm earth wire	meter	312
1.7.8	4 X 4 sq. mm + 2 X 4 sq. mm earth wire	meter	374
1.7.9	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	meter	518
1.7.10	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	meter	653
1.7.11	4 X 16 sq. mm + 2 X 6 sq. mm earth wire	meter	930
1.8	Wiring for light point/ fan point/ exhaust 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 piano type switch, phenolic laminated sheet, suitable size M.S. box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.		
1.8.1	Group A	Point	504
1.8.2	Group B	Point	571
1.8.3	Group C	Point	714
1.9	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way piano type switch, phenolic laminated sheet, suitable size MS box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	Point	719
1.10	Wiring for light point/ fan point/ exhaust 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 and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.		
1.10.1	Group A	Point	548
1.10.2	Group B	Point	615
1.10.3	Group C	Point	757

Code No.	Description	Unit	Rate ₹
1.11	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	Point	809
1.12	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	meter	168
1.13	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	meter	281
1.14	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.		
1.14.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	meter	112
1.14.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	meter	137
1.14.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	meter	168
1.14.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	meter	227
1.14.5	2 X 10 sq. mm + <b>1 X 6 sq.</b> mm earth wire	meter	299
1.14.6	2 X 16 sq. mm + <b>1 X 6 sq.</b> mm earth wire	meter	408
1.14.7	4 X 2.5 sq. mm + 2 X 2.5 sq. mm earth wire	meter	215
1.14.8	4 X 4 sq. mm + 2 X 4 sq. mm earth wire	meter	281
1.14.9	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	meter	395
1.14.10	4 X 10 sq. mm + <b>2 X 6 sq.</b> mm earth wire	meter	536
1.14.11	4 X 16 sq. mm + <b>2 X 6 sq.</b> mm earth wire	meter	733
1.15	Rewiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable and 1.5 sq.mm FRLS PVC insulated copper conductor single core cable as earth wire in existing surface/ recessed steel/PVC conduit including dismantling as required.		
1.15.1	Group A	Point	290
1.15.2	Group B	Point	323
1.15.3	Group C	Point	452

Code No.	Description	Unit	Rate ₹
1.16	Rewiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable and 1.5 sq.mm FRLS PVC insulated copper conductor single core cable as earth wire in existing surface/ recessed steel/PVC conduit including dismantling as required.	Point	452
1.17	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.		
1.17.1	1 x 1.5 sq. mm	meter	23
1.17.2	2 x 1.5 sq. mm	meter	37
1.17.3	3 x 1.5 sq. mm	meter	50
1.17.4	4 x 1.5 sq. mm	meter	64
1.17.5	5 x 1.5 sq. mm	meter	82
1.17.6	6 x 1.5 sq. mm	meter	96
1.17.7	7 x 1.5 sq. mm	meter	114
1.17.8	8 x 1.5 sq. mm	meter	128
1.17.9	9 x 1.5 sq. mm	meter	151
1.17.10	10 x 1.5 sq. mm	meter	165
1.17.11	2 x 2.5 sq. mm	meter	53
1.17.12	3 x 2.5 sq. mm	meter	75
1.17.13	4 x 2.5 sq. mm	meter	97
1.17.14	5 x 2.5 sq. mm	meter	124
1.17.15	6 x 2.5 sq. mm	meter	146
1.17.16	7 x 2.5 sq. mm	meter	173
1.17.17	8 x 2.5 sq. mm	meter	195
1.17.18	9 x 2.5 sq. mm	meter	226
1.17.19	10 x 2.5 sq. mm	meter	248
1.17.20	2 x 4 sq. mm	meter	79
1.17.21	3 x 4 sq. mm	meter	111
1.17.22	4 x 4 sq. mm	meter	148
1.17.23	5 x 4 sq. mm	meter	182
1.17.24	6 x 4 sq. mm	meter	214
1.17.25	7 x 4 sq. mm	meter	247
1.17.26	8 x 4 sq. mm	meter	280
1.17.27	9 x 4 sq. mm	meter	314
1.17.28	10 x 4 sq. mm	meter	351

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
1.17.29	2 x 6 sq. mm	meter	115
1.17.30	3 x 6 sq. mm	meter	162
1.17.31	4 x 6 sq. mm	meter	215
1.17.32	5 x 6 sq. mm	meter	263
1.17.33	6 x 6 sq. mm	meter	320
1.17.34	7 x 6 sq. mm	meter	368
1.17.35	8 x 6 sq. mm	meter	421
1.17.36	9 x 6 sq. mm	meter	468
1.17.37	10 x 6 sq. mm	meter	519
1.18	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.		
1.18.1	1 Pair	meter	15
1.18.2	2 Pair	meter	19
1.18.3	4 Pair	meter	28
1.19	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.	meter	29
1.20	Supplying and fixing of following sizes of steel conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.		
1.20.1	20 mm	meter	126
1.20.2	25 mm	meter	147
1.20.3	32 mm	meter	198
1.20.4	40 mm	meter	293
1.20.5	50 mm	meter	389
1.21	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.		
1.21.1	20 mm	meter	57
1.21.2	25 mm	meter	69
1.21.3	32 mm	meter	89
1.21.4	40 mm	meter	114
1.21.5	50 mm	meter	148

Code No.	Description	Unit	Rate ₹
1.22	Supplying and fixing metal box of following sizes (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc. as required.		
1.22.1	75 mm X 75 mm X 60 mm deep	Each	95
1.22.2	100 mm X 100 mm X 60 mm deep	Each	114
1.22.3	150 mm X 75 mm X 60 mm deep	Each	118
1.22.4	150 mm X 150 mm X 60 mm deep	Each	168
1.22.5	180 mm X 100 mm X 60 mm deep	Each	133
1.22.6	200 mm X 125 mm X 60 mm deep	Each	174
1.22.7	200 mm X 150 mm X 60 mm deep	Each	194
1.22.8	200 mm X 150 mm X 75 mm deep	Each	201
1.22.9	200 mm X 250 mm X 60 mm deep	Each	255
1.22.10	200 mm X 250 mm X 75 mm deep	Each	270
1.22.11	200 mm X 150 mm X 100 mm deep	Each	231
1.22.12	200 mm X 250 mm X 100 mm deep	Each	284
1.22.13	200 mm X 300 mm X 60 mm deep	Each	303
1.22.14	200 mm X 300 mm X 100 mm deep	Each	317
1.22.15	250 mm X 300 mm X 60 mm deep	Each	337
1.22.16	250 mm X 300 mm X 100 mm deep	Each	373
1.23	Supplying and fixing following piano type switch/ socket on the existing switch box/ cover including connections etc. as required.		
1.23.1	5/6 A switch	Each	34
1.23.2	2 way 5/6 A switch	Each	39
1.23.3	15/16 A switch	Each	75
1.23.4	3 pin 5/6 A socket outlet	Each	42
1.23.5	6 pin 15/16 A socket outlet	Each	86
1.23.6	Telephone socket outlet	Each	55
1.23.7	TV antenna socket outlet	Each	48
1.23.8	Bell push	Each	47
1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.		
1.24.1	5/6 A switch	Each	84
1.24.2	2 way 5/6 A switch	Each	99
1.24.3	15/16 A switch	Each	114
1.24.4	3 pin 5/6 A socket outlet	Each	81

Code No.	Description	Unit	Rate ₹
1.24.5	6 pin 15/16 A socket outlet	Each	153
1.24.6	Telephone socket outlet	Each	96
1.24.7	TV antenna socket outlet	Each	97
1.24.8	Bell push	Each	114
1.25	Supplying and fixing <b>two module</b> stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	Each	288
1.26	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	Each	24
1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.		
1.27.1	1 or 2 Module (75 mmX75 mm)	Each	175
1.27.2	3 Module (100 mmX75 mm)	Each	185
1.27.3	4 Module (125 mmX75 mm)	Each	205
1.27.4	6 Module (200 mmX75 mm)	Each	258
1.27.5	8 Module (125 mmX125 mm)	Each	297
1.27.6	12 Module (200 mmX150 mm)	Each	344
1.28	Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required.		
1.28.1	1 or 2 Module	Each	83
1.28.2	3 Module	Each	91
1.28.3	4 Module	Each	101
1.28.4	6 Module	Each	126
1.28.5	8 Module	Each	151
1.28.6	12 Module	Each	166
1.29	Supplying and fixing metal box of 150 mm X 75 mm X 60 mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 3 pin 5/6 A socket outlet and 5/6 A piano type switch, connections, painting etc. as required.	Each	205
1.30	Supplying and fixing metal box of 180 mm X 100 mm X 60 mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 5/6 A & 15/16 A socket outlet and 15/16 A piano type switch, connections, painting etc. as required.	Each	287
1.31	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing		

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
	and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	Each	313
1.32	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 A & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	Each	406
1.33	Supplying and fixing 3 pin, 5 A ceiling rose on the existing junction box/ wooden block including connections etc. as required.	Each	46
1.34	Supplying and fixing brass batten/ angle holder including connections etc. as required.	Each	75
1.35	Installation, testing and commissioning of wall bracket /ceiling fittings of all sizes and shapes containing upto two GLS/CFL/ LED lamps per fitting, complete with all accessories including connections etc. as required.	Each	58
1.36	Supplying and fixing stiff pendent with 300 mm long, 20 mm dia X 1.6 mm thick steel conduit, aluminium cast back plate and brass holder complete, including wiring the down rod with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and painting etc. as required.	Each	169
1.37	DELETED		
1.38	Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.	Each	61
1.39	Providing and fixing plain 16/0.20 mm (0.50 sq.mm) twin flat flexible, FRLS PVC insulated, copper conductor cable, in PVC sleeve of suitable size on the floor/ wall, or side of the table/ door etc. as required.	meter	22
1.40	Providing and fixing plain 16/0.20 mm (0.50 sq.mm) twin circular flexible FRLS PVC insulated, PVC sheathed copper conductor cable direct on the wall with PVC clips etc. as required.	meter	19
1.41	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube/lamp etc. directly on ceiling/ wall, including connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	100
1.42	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube etc., including supplying and fixing ball and socket arrangement, 2 Nos. down rods of 20 mm dia X 1.6 mm thick steel conduit upto 30 cm length, painting and wiring the down rods and connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	247

Code No.	Description	Unit	Rate ₹
1.43	Providing and fixing extra conduit down rod of 20 mm dia, 2 X 10 cm length, wiring with 2 X 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable including painting etc. as required. (Note: More than 5 cm length shall be rounded to the nearest 10 cm and 5 cm or less shall be ignored)	Each	32
1.44	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable etc. as required.	Each	105
1.45	Installation, testing and commissioning of ceiling fan, 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 and fixing phenolic laminated sheet cover on the fan box etc. as required.	Each	132
1.46	DELETED		
1.47	Supplying and fixing extra down rod of 10 cm length G.I. pipe, 15 mm dia, heavy gauge including painting etc. as required. (Note: More than 5 cm length shall be rounded to the nearest 10 cm and 5 cm or less shall be ignored)	Each	22
1.48	Supplying and fixing extra conduit down rod of 20 cm length G.I. pipe 15 mm dia, heavy gauge including painting etc. as required. (Note : More than 5 cm length shall be rounded to the nearest 10 cm and 5 cm or less shall be ignored)	Each	25
1.49	Numbering of ceiling fan/ exhaust fan/ fluorescent fittings as required.	Each	28
1.50	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.		
1.50.1	Upto 450 mm sweep	Each	224
1.50.2	510 mm sweep	Each	318
1.51	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	Each	99
1.52	Painting of ceiling fan in installed position with one or more coats of spray painting with synthetic enamel paint of approved brand and manufacture to give an even shade, including cleaning of surface with detergent etc. as required.	Each	89
1.53	Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.		
1.53.1	1 run of cable	meter	34
1.53.2	2 run of cable	meter	59
1.53.3	3 run of cable	meter	84

Code No.	Description	Unit	Rate ₹
1.54	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.		
1.54.1	Group A	Point	415
1.54.2	Group B	Point	510
1.54.3	Group C	Point	601
1.55	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.		
1.55.1	Group A	Point	317
1.55.2	Group B	Point	365
1.55.3	Group C	Point	415
1.56	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 2 Nos. 3 pin 5/6 A modular socket outlet and 2 Nos. 5/6 A modular switch, connections etc. as required. (For light plugs to be used in non residential buildings).	Each	504
1.57	Supplying & fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 25 A modular socket outlet and 25 A modular SP MCB, "C" curve including connections, painting etc. as required.	Each	533
1.58	Supplying and fixing PVC batten/ angle holder including connections etc. as required.	Each	62
1.59	Dismantling of ceiling fan and painting the same with with one or more coats of spray painting with synthetic enamel paint of approved brand and manufacture to give an even shade, including cleaning of surface with detergent and replacing the damaged rubber reel, nuts and bolts with washers and safety pins, reinstalling the same as required.	Each	133

## CHAPTER-2-MCCB, MCB & DB'S

Code No.	Description	Unit	Rate ₹
2.1	Providing and fixing following capacity TP&N disconnecter fuse switch unit inside the existing panel board with ISI marked HRC fuses including drilling holes in cubicle panel, making connections, etc. as required.		
2.1.1	32 A, TP&N	Each	1493
2.1.2	63 A, TP&N	Each	2110
2.1.3	100 A, TP&N	Each	4376
2.1.4	125 A, TP&N	Each	4862
2.1.5	160 A, TP&N	Each	5782
2.1.6	200 A, TP&N	Each	6618
2.1.7	315 A, TP&N	Each	10541
2.1.8	400 A, TP&N	Each	12889
2.2	Providing and fixing following rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required.		
2.2.1	100 A, 16 kA, TPMCCB	Each	3218
2.2.2	125 A, 16 kA, TPMCCB	Each	3613
2.2.3	150 A, 16 kA, TPMCCB	Each	4096
2.2.4	200 A, 16 kA, TPMCCB	Each	5535
2.2.5	200 A, 25 kA, TPMCCB	Each	7964
2.2.6	250 A, 25 kA, TPMCCB	Each	9397
2.2.7	250 A, 35 kA, TPMCCB	Each	10176
2.2.8	315 A, 35 kA, TPMCCB	Each	15672
2.2.9	400 A, 35 kA, TPMCCB	Each	15672
2.2.10	500 A, 35 kA, TPMCCB	Each	18163
2.2.11	630 A, 50 kA, TPMCCB	Each	20234
2.2.12	800 A, 50 kA, TPMCCB	Each	24679
2.2.13	100 A, 30kA, FPMCCB	Each	5360
2.2.14	125 A, 36kA, FPMCCB	Each	5449
2.2.15	200 A, 36kA, FPMCCB	Each	13133
2.2.16	250 A, 36kA, FPMCCB	Each	14660
2.2.17	250 A, 50kA, FPMCCB	Each	13694
2.2.18	400 A, 50kA, FPMCCB	Each	19089

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2.2.19	630 A, 50kA, FPMCCB	Each	23710
2.3	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, 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)		
2.3.1	6 way, Double door	Each	942
2.3.2	8 way, Double door	Each	1061
2.3.3	12 way, Double door	Each	1151
2.3.4	16 way, Double door	Each	1364
2.4	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, 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)		
2.4.1	4 way (4 + 12), Double door	Each	2198
2.4.2	6 way (4 + 18), Double door	Each	2659
2.4.3	8 way (4 + 24), Double door	Each	3171
2.5	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A, tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required. (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)		
2.5.1	4 way (4 + 12), Double door	Each	4502
2.5.2	8 way (4 + 24), Double door	Each	5664
2.5.3	12 way (4 + 36), Double door	Each	7189
2.6	Deleted		
2.7	Deleted		
2.8	Deleted		
2.9	Deleted		
2.10	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "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 required.		
2.10.1	Single pole	Each	173
2.10.2	Single pole and neutral	Each	445

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2.10.3	Double pole	Each	463
2.10.4	Triple pole	Each	700
2.10.5	Triple pole and neutral	Each	891
2.11	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	Each	7
2.12	Supplying and fixing following rating, double pole, 240 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
2.12.1	40 A	Each	222
2.12.2	63 A	Each	254
2.13	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
2.13.1	40 A	Each	667
2.13.2	63 A	Each	678
2.13.3	100 A	Each	859
2.14	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
2.14.1	25 A	Each	1650
2.14.2	40 A	Each	1719
2.14.3	63 A	Each	2242
2.15	Supplying and fixing following rating, four pole, (three phase and neutral), 415 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
2.15.1	25 A	Each	2096
2.15.2	40 A	Each	2131
2.15.3	63 A	Each	2302
2.16	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32 A, 240 V "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	each	627
2.17	Supplying and fixing TP sheet steel enclosure on surface/ recess along with 16/25/32 A, 415 V "C" curve TP MCB complete with connections, testing and commissioning etc. as required.	each	878

Code No.	Description	Unit	Rate ₹
2.18	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 A, "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	Each	980
2.19	Supplying and fixing 20 A, 415 V, TPN Industrial type socket outlet, with 4 pole and earth, metal enclosed plug top alongwith 20 A, "C" curve, TPMCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	Each	1455
2.20	Supplying and fixing 30 A, 415 V, TPN Industrial type socket outlet, with 4 pole and earth, metal enclosed plug top alongwith 30 A, "C" curve, TPMCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	Each	2488
2.21	Providing and fixing M.V. 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.	Each	149
2.22	Providing and fixing H.T. danger notice plate of 250 mm X 200 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.	Each	163
2.23	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, on surface/ recess, complete with testing and commissioning etc. as required.		
2.23.1	For 6 way, Double door SPN MCBDB	Each	382
2.23.2	For 8 way, Double door SPN MCBDB	Each	437
2.23.3	For 10 way, Double door SPN MCBDB	Each	424
2.23.4	For 14 way, Double door SPN MCBDB	Each	488
2.24	Supplying and fixing Cable End Box (Loose wire box)(IP 43) suitable for following triple pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with testing and commissioning etc. as required.		
2.24.1	For 4 way, Double door TPN MCBDB	Each	585
2.24.2	For 6 way, Double door TPN MCBDB	Each	610
2.24.3	For 8 way, Double door TPN MCBDB	Each	728

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2.25	Supplying and fixing Cable End Box (Loose wire box) suitable for triple pole and neutral, sheet steel, Vertical MCB distribution board, 415 V, on surface/ recess, complete with testing and commissioning etc. as required.	Each	433

### CHAPTER-3-RISING MAINS & BUS TRUNKING

Code No.	Description	Unit	Rate ₹
3.1	Supplying, installing on wall, testing and commissioning of following capacity rising mains made of 1.6mm thick <b>IP 42</b> sheet steel enclosure duly painted with powder coating, wall straps, fully PVC insulated 4 Nos. aluminium bus bars <b>having current density of 130 A/ sq. cm at nominal current rating</b> in convenient sections and suitable for 415 V, 3 phase, 4 wire, 50 Hz, A.C. supply with extension joints, fire proof barriers, expansion joints, thrust pads including jointing, and earthing with 2 runs of galvanised iron strips etc. as required. (Rising mains confirming to IS 8623, TEC 439)		
3.1.1	200 A, Isc = 15 kA for 1 second	meter	5203
3.1.2	300 A, Isc = 20 kA for 1 second	meter	5425
3.1.3	400 A, Isc = 25 kA for 1 second	meter	6672
3.1.4	600 A, Isc = 45 kA for 1 second	meter	7457
3.1.5	800 A, Isc = 50 kA for 1 second	meter	8983
3.2	Supplying, installing, testing and commissioning of following capacity TPN tap off box made of 1.6mm thick sheet steel enclosure duly painted with powder coating on existing rising mains complete with TPN disconnecter FSU and HRC fuses, connections, earthing etc. as required.		
3.2.1	16 A, TPN	Each	5920
3.2.2	32 A, TPN	Each	6238
3.2.3	63 A, TPN	Each	7008
3.2.4	100 A, TPN	Each	8067
3.2.5	200 A, TPN	Each	12660
3.2.6	315 A, TPN	Each	13401
3.2.7	400 A, TPN	Each	13931
3.3	Supplying, installing, testing and commissioning of following capacity TPN distribution tap off box made of 1.6mm thick sheet steel enclosure duly painted with powder coating on existing rising mains complete with HRC fuses, interconnections, earthing etc. as required.		
3.3.1	16 A, TPN, 2 way	Each	8861
3.3.2	16 A, TPN, 4 way	Each	16542
3.3.3	16 A, TPN, 6 way	Each	23446
3.3.4	16 A, TPN, 8 way	Each	32469

Code No.	Description	Unit	Rate ₹
3.3.5	32 A, TPN, 2 way	Each	9126
3.3.6	32 A, TPN, 4 way	Each	18660
3.3.7	32 A, TPN, 6 way	Each	24505
3.3.8	32 A, TPN, 8 way	Each	34058
3.3.9	63 A, TPN, 2 way	Each	10397
3.3.10	63 A, TPN, 4 way	Each	17601
3.3.11	63 A, TPN, 6 way	Each	18997
3.3.12	63 A, TPN, 8 way	Each	32681
3.4	Supplying, installing, testing and commissioning of following capacity End Feed Unit made of 1.6mm thick sheet steel enclosure duly painted with powder coating to existing rising mains complete with TPN disconnecter FSU and HRC fuses, mounting stands, cable end box, brass compression gland, connections, earthing etc. as required.		
3.4.1	200 A, TPN	Each	14871
3.4.2	300 A, TPN	Each	16341
3.4.3	400 A, TPN	Each	18107
3.4.4	600 A, TPN	Each	19598
3.4.5	800 A, TPN	Each	22081
3.5	Supplying, installation, including suspension, testing and commissioning of following capacity bus trunking with aluminium bus bars <b>having current density of 130 A/ sq. cm at nominal current rating</b> in 1.6mm thick <b>IP 42</b> sheet steel enclosure in convenient sections for use on, 3 phase, 4 wire, 415 V, 50 Hz, A.C. supply including jointing of sections, flexible joints, expansion joints, bends and earthing with 2 runs of galvanised iron strips, suspenders, angle iron bracket, steel fasteners, connecting to earthing system etc. as required.		
3.5.1	800 A	meter	8482
3.5.2	1000 A	meter	10018
3.5.3	1250 A	meter	12875
3.5.4	1400 A	meter	16053
3.5.5	1600 A	meter	16095
3.6	Supplying, installation, testing and commissioning of following capacity overhead distribution bus trunking with aluminium bus bars <b>having current density of 130 A/ sq. cm at nominal current rating</b> in 1.6mm thick <b>IP 42</b> sheet steel enclosure in convenient sections with provision of tapping points for use on,		

Code No.	Description	Unit	Rate ₹
	3 phase, 4 wire, 415 V, 50 Hz, A.C. supply including jointing of sections, bends, earthing with 2 runs of galvanised iron strips, all installation accessories etc. as required.		
3.6.1	200 A	meter	4933
3.6.2	400 A	meter	6310
3.7	Supplying, installing, testing and commissioning of following capacity TPN tap off box / plug-in box made of 1.6mm thick sheet steel enclosure duly painted with powder coating on existing overhead bus bar system complete with TPN disconnecter FSU and HRC fuses, connections, earthing etc. as required.		
3.7.1	32 A	Each	5360
3.7.2	63 A	Each	6024
3.7.3	100 A	Each	6932
3.8	Supplying, installing on wall, testing and commissioning of following capacity Air Insulated Compact Type Rising Mains for use on 3 phase 4 wire 415 V, 50Hz A.C. supply with enclosure <b>having IP-54 rating after fixing the tap off boxes and all accessories</b> , made of 1.6mm thick steel sheet duly powder coated in convenient sections complete with 4 Nos. aluminium bus bars <b>having current density of 130 A/ sq cm at nominal current rating</b> , necessary joints & expansion joints, fire barrier at each floor, provision of tapping at every meter, continuous earthing with 2 Nos. aluminium strip of suitable size (one on each side) including, G.I. clamping brackets, angle iron bracket, steel fasteners, connecting to earthing system etc. as required.		
3.8.1	200 A, Isc = 15 kA for 1 second	meter	5382
3.8.2	315 A, Isc = 25 kA for 1 second	meter	5806
3.8.3	400 A, Isc = 30 kA for 1 second	meter	6446
3.8.4	500 A, Isc = 35 kA for 1 second	meter	7401
3.8.5	630 A, Isc = 50 kA for 1 second	meter	8814
3.8.6	800 A, Isc = 50 kA for 1 second	meter	12104
3.8.7	1000 A, Isc = 50 kA for 1 second	meter	14003
3.8.8	1250 A, Isc = 50 kA for 1 second	meter	16634
3.9	Supplying, installing on wall <b>or suspension on ceiling</b> , testing and commissioning of following capacity Air Insulated Compact Type Bus Trunking for use on 3 phase 4 wire 415 V, 50Hz A.C. supply with metal clad enclosure <b>having IP-54 rating after fixing the tap off boxes and all accessories</b> , made of 1.6mm thick steel sheet duly powder coated in convenient sections		

Code No.	Description	Unit	Rate ₹
	complete with 4 Nos. aluminium bus bars <b>having current density of 130 A/ sq. cm at nominal current rating</b> , necessary joints, elbow joints & expansion joints, fire barrier at each floor, continuous earthing with 2 Nos. aluminium strip of suitable size (one on each side) including, G.I. clamping brackets, <b>suspenders</b> , angle iron bracket, steel fasteners, connecting to earthing system etc. as required.		
3.9.1	200 A, Isc = 15 kA for 1 second	meter	5467
3.9.2	315 A, Isc = 25 kA for 1 second	meter	5819
3.9.3	400 A, Isc = 30 kA for 1 second	meter	6459
3.9.4	500 A, Isc = 35 kA for 1 second	meter	7453
3.9.5	630 A, Isc = 50 kA for 1 second	meter	8799
3.9.6	800 A, Isc = 50 kA for 1 second	meter	11357
3.9.7	1000 A, Isc = 50 kA for 1 second	meter	13121
3.9.8	1250 A, Isc = 50 kA for 1 second	meter	15326
3.10	DELETED		
3.11	Supplying, installation, testing & commissioning of following capacity End Feed Unit for the existing Air Insulated Compact Type bus trunking/ rising mains for use on 3 phase 4 wire 415 V, 50Hz A.C. supply made with 1.6mm thick steel sheet enclosure (IP54) duly powder coated with provision of MCCB/ ACB (but without MCCB/ACB) complete with necessary joints including clamping brackets, angle iron bracket, steel fasteners, connecting to earthing system etc. as required		
3.11.1	200 A, Isc = 15 kA for 1 second	Each	4004
3.11.2	315 A, Isc = 25 kA for 1 second	Each	4169
3.11.3	400 A, Isc = 30 kA for 1 second	Each	5308
3.11.4	500 A, Isc = 35 kA for 1 second	Each	5555
3.11.5	630 A, Isc = 50 kA for 1 second	Each	6786
3.11.6	800 A, Isc = 50 kA for 1 second	Each	8009
3.11.7	1000 A, Isc = 50 kA for 1 second	Each	8968
3.11.8	1250 A, Isc = 50 kA for 1 second	Each	9462
3.12	Supplying, installation, testing & commissioning of following capacity Plug In/ tap off box on the existing Air Insulated Compact Type bus trunking/ rising mains for use on 3 phase 4 wire 415 V, 50Hz A.C. supply made with 1.6mm thick sheet steel enclosure (IP54) duly powder coated with provision of MCCB (but without MCCB) complete etc. as required		

Code No.	Description	Unit	Rate ₹
3.12.1	125 A, Isc = 15 kA for 1 second	Each	4621
3.12.2	200 A, Isc = 25 kA for 1 second	Each	5856
3.12.3	315 A, Isc = 30 kA for 1 second	Each	7531
3.12.4	400 A, Isc = 35 kA for 1 second	Each	7531
3.12.5	500 A, Isc = 50 kA for 1 second	Each	10861
3.12.6	630 A, Isc = 50 kA for 1 second	Each	10860
<b>3.13</b>	Supplying, installing by suspension on ceiling/along the wall, testing and commissioning of following capacity Sandwich Type Rising Mains for use on 3 phase 4 wire 415 V, 50Hz A.C. supply with metal clad enclosure <b>having IP-54 rating after fixing the tap off boxes and all accessories</b> , made of 1.6mm thick steel sheet duly powder coated in convenient sections complete with 4 Nos. aluminium bus bars <b>having current density of 130 A/sq. cm at nominal current rating</b> , necessary joints, elbow joints & expansion joints and bends, fire barrier at each floor, provision of tapping at every meter, adopter box and copper flexible for joints, continuous earthing with 2 Nos. aluminium strip of suitable size (one on each side) including, G.I. clamping brackets, suspenders, angle iron bracket, steel fasteners, connecting to earthing system etc. as required		
3.13.1	400 A, Isc = 25 kA for 1 second	meter	8708
3.13.2	500 A, Isc = 30 kA for 1 second	meter	9304
3.13.3	630 A, Isc = 50 kA for 1 second	meter	10032
3.13.4	800 A, Isc = 50 kA for 1 second	meter	11288
3.13.5	1000 A, Isc = 50 kA for 1 second	meter	12618
3.13.6	1250 A, Isc = 50 kA for 1 second	meter	14067
3.13.7	1600 A, Isc = 50 kA for 1 second	meter	17044
3.13.8	2000 A, Isc = 50 kA for 1 second	meter	20219
3.13.9	2500 A, Isc = 50 kA for 1 second	meter	26000
3.13.10	3200 A, Isc = 50 kA for 1 second	meter	28686
3.13.11	4000 A, Isc = 50 kA for 1 second	meter	49763

**Note:- This item of sandwich type rising mains & rates can be used by field units for sandwich type bus trunking also by making suitable modifications in nomenclature & rates etc.**

## CHAPTER-4-CABLE TRAYS

Code No.	Description	Unit	Rate ₹
4.1	Supplying and installing following size of perforated painted with powder coating M.S. cable trays 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.		
4.1.1	100 mm width X 50 mm depth X 1.6 mm thickness	meter	348
4.1.2	150 mm width X 50 mm depth X 1.6 mm thickness	meter	393
4.1.3	225 mm width X 50 mm depth X 1.6 mm thickness	meter	460
4.1.4	300 mm width X 50 mm depth X 1.6 mm thickness	meter	526
4.1.5	375 mm width X 50 mm depth X 2.0 mm thickness	meter	692
4.1.6	450 mm width X 50 mm depth X 2.0 mm thickness	meter	782
4.1.7	600 mm width X 50 mm depth X 2.0 mm thickness	meter	950
4.1.8	300 mm width X 62.5 mm depth X 2.0 mm thickness	meter	629
4.1.9	375 mm width X 62.5 mm depth X 2.0 mm thickness	meter	722
4.1.10	450 mm width X 62.5 mm depth X 2.0 mm thickness	meter	832
4.1.11	600 mm width X 62.5 mm depth X 2.0 mm thickness	meter	1008
4.1.12	750 mm width X 62.5 mm depth X 2.0 mm thickness	meter	1198
4.1.13	900 mm width X 62.5 mm depth X 2.0 mm thickness	meter	1396
4.1.14	600 mm width X 75 mm depth X 2.0 mm thickness	meter	1032
4.1.15	750 mm width X 75 mm depth X 2.0 mm thickness	meter	1225
4.1.16	900 mm width X 75 mm depth X 2.0 mm thickness	meter	1423
4.2	Supplying and installing following size of perforated painted with powder coating M.S. cable trays bends 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.		
4.2.1	100 mm width X 50 mm depth X 1.6 mm thickness	Each	604
4.2.2	150 mm width X 50 mm depth X 1.6 mm thickness	Each	714
4.2.3	225 mm width X 50 mm depth X 1.6 mm thickness	Each	868
4.2.4	300 mm width X 50 mm depth X 1.6 mm thickness	Each	1023
4.2.5	375 mm width X 50 mm depth X 2.0 mm thickness	Each	1408
4.2.6	450 mm width X 50 mm depth X 2.0 mm thickness	Each	1617
4.2.7	600 mm width X 50 mm depth X 2.0 mm thickness	Each	2006
4.2.8	300 mm width X 62.5 mm depth X 2.0 mm thickness	Each	1267

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
4.2.9	375 mm width X 62.5 mm depth X 2.0 mm thickness	Each	1479
4.2.10	450 mm width X 62.5 mm depth X 2.0 mm thickness	Each	1722
4.2.11	600 mm width X 62.5 mm depth X 2.0 mm thickness	Each	2129
4.2.12	750 mm width X 62.5 mm depth X 2.0 mm thickness	Each	2574
4.2.13	900 mm width X 62.5 mm depth X 2.0 mm thickness	Each	2985
4.2.14	600 mm width X 75 mm depth X 2.0 mm thickness	Each	2181
4.2.15	750 mm width X 75 mm depth X 2.0 mm thickness	Each	2640
4.2.16	900 mm width X 75 mm depth X 2.0 mm thickness	Each	3050
4.3	Supplying and installing following size of perforated painted with powder coating M.S. cable trays Tee 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.		
4.3.1	100 mm width X 50 mm depth X 1.6 mm thickness	Each	683
4.3.2	150 mm width X 50 mm depth X 1.6 mm thickness	Each	812
4.3.3	225 mm width X 50 mm depth X 1.6 mm thickness	Each	998
4.3.4	300 mm width X 50 mm depth X 1.6 mm thickness	Each	1186
4.3.5	375 mm width X 50 mm depth X 2.0 mm thickness	Each	1637
4.3.6	450 mm width X 50 mm depth X 2.0 mm thickness	Each	1884
4.3.7	600 mm width X 50 mm depth X 2.0 mm thickness	Each	2345
4.3.8	300 mm width X 62.5 mm depth X 2.0 mm thickness	Each	1476
4.3.9	375 mm width X 62.5 mm depth X 2.0 mm thickness	Each	1721
4.3.10	450 mm width X 62.5 mm depth X 2.0 mm thickness	Each	2003
4.3.11	600 mm width X 62.5 mm depth X 2.0 mm thickness	Each	2482
4.3.12	750 mm width X 62.5 mm depth X 2.0 mm thickness	Each	3012
4.3.13	900 mm width X 62.5 mm depth X 2.0 mm thickness	Each	3501
4.3.14	600 mm width X 75 mm depth X 2.0 mm thickness	Each	2554
4.3.15	750 mm width X 75 mm depth X 2.0 mm thickness	Each	3058
4.3.16	900 mm width X 75 mm depth X 2.0 mm thickness	Each	3574
4.4	Supplying and installing following size of perforated painted with powder coating M.S. cable trays Cross Member 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.		
4.4.1	100 mm width X 50 mm depth X 1.6 mm thickness	Each	683
4.4.2	150 mm width X 50 mm depth X 1.6 mm thickness	Each	812

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
4.4.3	225 mm width X 50 mm depth X 1.6 mm thickness	Each	998
4.4.4	300 mm width X 50 mm depth X 1.6 mm thickness	Each	1186
4.4.5	375 mm width X 50 mm depth X 2.0 mm thickness	Each	1637
4.4.6	450 mm width X 50 mm depth X 2.0 mm thickness	Each	1884
4.4.7	600 mm width X 50 mm depth X 2.0 mm thickness	Each	2345
4.4.8	300 mm width X 62.5 mm depth X 2.0 mm thickness	Each	1476
4.4.9	375 mm width X 62.5 mm depth X 2.0 mm thickness	Each	1721
4.4.10	450 mm width X 62.5 mm depth X 2.0 mm thickness	Each	2003
4.4.11	600 mm width X 62.5 mm depth X 2.0 mm thickness	Each	2482
4.4.12	750 mm width X 62.5 mm depth X 2.0 mm thickness	Each	3012
4.4.13	900 mm width X 62.5 mm depth X 2.0 mm thickness	Each	3501
4.4.14	600 mm width X 75 mm depth X 2.0 mm thickness	Each	2554
4.4.15	750 mm width X 75 mm depth X 2.0 mm thickness	Each	3058
4.4.16	900 mm width X 75 mm depth X 2.0 mm thickness	Each	3574
4.5	Supplying and installing following size of perforated painted with powder coating M.S. cable trays Reducer 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.		
4.5.1	100 mm width X 50 mm depth X 1.6 mm thickness	Each	661
4.5.2	150 mm width X 50 mm depth X 1.6 mm thickness	Each	774
4.5.3	225 mm width X 50 mm depth X 1.6 mm thickness	Each	966
4.5.4	300 mm width X 50 mm depth X 1.6 mm thickness	Each	1153
4.5.5	375 mm width X 50 mm depth X 2.0 mm thickness	Each	1434
4.5.6	450 mm width X 50 mm depth X 2.0 mm thickness	Each	1660
4.5.7	600 mm width X 50 mm depth X 2.0 mm thickness	Each	2020
4.5.8	300 mm width X 62.5 mm depth X 2.0 mm thickness	Each	1288
4.5.9	375 mm width X 62.5 mm depth X 2.0 mm thickness	Each	1505
4.5.10	450 mm width X 62.5 mm depth X 2.0 mm thickness	Each	1756
4.5.11	600 mm width X 62.5 mm depth X 2.0 mm thickness	Each	2173
4.5.12	750 mm width X 62.5 mm depth X 2.0 mm thickness	Each	2537
4.5.13	900 mm width X 62.5 mm depth X 2.0 mm thickness	Each	2995
4.5.14	600 mm width X 75 mm depth X 2.0 mm thickness	Each	2235
4.5.15	750 mm width X 75 mm depth X 2.0 mm thickness	Each	2591
4.5.16	900 mm width X 75 mm depth X 2.0 mm thickness	Each	3057

Code No.	Description	Unit	Rate ₹
	<b>Hot Dipped Galvanized Iron Cable Tray</b>		
4.6	Supplying and installing following size of perforated Hot Dipped Galvanized Iron cable tray (galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.		
4.6.1	100 mm width X 50 mm depth X 1.6 mm thickness	meter	436
4.6.2	150 mm width X 50 mm depth X 1.6 mm thickness	meter	504
4.6.3	225 mm width X 50 mm depth X 1.6 mm thickness	meter	604
4.6.4	300 mm width X 50 mm depth X 1.6 mm thickness	meter	703
4.6.5	375 mm width X 50 mm depth X 2.0 mm thickness	meter	900
4.6.6	450 mm width X 50 mm depth X 2.0 mm thickness	meter	1024
4.6.7	600 mm width X 50 mm depth X 2.0 mm thickness	meter	1257
4.6.8	300 mm width X 62.5 mm depth X 2.0 mm thickness	meter	816
4.6.9	375 mm width X 62.5 mm depth X 2.0 mm thickness	meter	940
4.6.10	450 mm width X 62.5 mm depth X 2.0 mm thickness	meter	1082
4.6.11	600 mm width X 62.5 mm depth X 2.0 mm thickness	meter	1326
4.6.12	750 mm width X 62.5 mm depth X 2.0 mm thickness	meter	1582
4.6.13	900 mm width X 62.5 mm depth X 2.0 mm thickness	meter	1846
4.6.14	600 mm width X 75 mm depth X 2.0 mm thickness	meter	1360
4.6.15	750 mm width X 75 mm depth X 2.0 mm thickness	meter	1616
4.6.16	900 mm width X 75 mm depth X 2.0 mm thickness	meter	1881
4.7	Supplying and installing following size of perforated Hot Dipped Galvanized Iron cable tray "bends" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.		
4.7.1	100 mm width X 50 mm depth X 1.6 mm thickness	Each	817
4.7.2	150 mm width X 50 mm depth X 1.6 mm thickness	Each	976
4.7.3	225 mm width X 50 mm depth X 1.6 mm thickness	Each	1213
4.7.4	300 mm width X 50 mm depth X 1.6 mm thickness	Each	1447
4.7.5	375 mm width X 50 mm depth X 2.0 mm thickness	Each	1906
4.7.6	450 mm width X 50 mm depth X 2.0 mm thickness	Each	2184
4.7.7	600 mm width X 50 mm depth X 2.0 mm thickness	Each	2731
4.7.8	300 mm width X 62.5 mm depth X 2.0 mm thickness	Each	1713
4.7.9	375 mm width X 62.5 mm depth X 2.0 mm thickness	Each	1995

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
4.7.10	450 mm width X 62.5 mm depth X 2.0 mm thickness	Each	2318
4.7.11	600 mm width X 62.5 mm depth X 2.0 mm thickness	Each	2667
4.7.12	750 mm width X 62.5 mm depth X 2.0 mm thickness	Each	3477
4.7.13	900 mm width X 62.5 mm depth X 2.0 mm thickness	Each	4046
4.7.14	600 mm width X 75 mm depth X 2.0 mm thickness	Each	2962
4.7.15	750 mm width X 75 mm depth X 2.0 mm thickness	Each	3562
4.7.16	900 mm width X 75 mm depth X 2.0 mm thickness	Each	4138
4.8	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "Tee" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.		
4.8.1	100 mm width X 50 mm depth X 1.6 mm thickness	Each	941
4.8.2	150 mm width X 50 mm depth X 1.6 mm thickness	Each	976
4.8.3	225 mm width X 50 mm depth X 1.6 mm thickness	Each	1416
4.8.4	300 mm width X 50 mm depth X 1.6 mm thickness	Each	1695
4.8.5	375 mm width X 50 mm depth X 2.0 mm thickness	Each	2239
4.8.6	450 mm width X 50 mm depth X 2.0 mm thickness	Each	2576
4.8.7	600 mm width X 50 mm depth X 2.0 mm thickness	Each	3228
4.8.8	300 mm width X 62.5 mm depth X 2.0 mm thickness	Each	2013
4.8.9	375 mm width X 62.5 mm depth X 2.0 mm thickness	Each	2387
4.8.10	450 mm width X 62.5 mm depth X 2.0 mm thickness	Each	2724
4.8.11	600 mm width X 62.5 mm depth X 2.0 mm thickness	Each	3451
4.8.12	750 mm width X 62.5 mm depth X 2.0 mm thickness	Each	4104
4.8.13	900 mm width X 62.5 mm depth X 2.0 mm thickness	Each	4784
4.8.14	600 mm width X 75 mm depth X 2.0 mm thickness	Each	3490
4.8.15	750 mm width X 75 mm depth X 2.0 mm thickness	Each	4209
4.8.16	900 mm width X 75 mm depth X 2.0 mm thickness	Each	4889
4.9	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "Cross member" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.		
4.9.1	100 mm width X 50 mm depth X 1.6 mm thickness	Each	941
4.9.2	150 mm width X 50 mm depth X 1.6 mm thickness	Each	976
4.9.3	225 mm width X 50 mm depth X 1.6 mm thickness	Each	1416

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
4.9.4	300 mm width X 50 mm depth X 1.6 mm thickness	Each	1695
4.9.5	375 mm width X 50 mm depth X 2.0 mm thickness	Each	2239
4.9.6	450 mm width X 50 mm depth X 2.0 mm thickness	Each	2576
4.9.7	600 mm width X 50 mm depth X 2.0 mm thickness	Each	3227
4.9.8	300 mm width X 62.5 mm depth X 2.0 mm thickness	Each	2013
4.9.9	375 mm width X 62.5 mm depth X 2.0 mm thickness	Each	2348
4.9.10	450 mm width X 62.5 mm depth X 2.0 mm thickness	Each	2724
4.9.11	600 mm width X 62.5 mm depth X 2.0 mm thickness	Each	3392
4.9.12	750 mm width X 62.5 mm depth X 2 mm thickness	Each	4104
4.9.13	900 mm width X 62.5 mm depth X 2.0 mm thickness	Each	4784
4.9.14	600 mm width X 75 mm depth X 2.0 mm thickness	Each	3490
4.9.15	750 mm width X 75 mm depth X 2.0 mm thickness	Each	3045
4.9.16	900 mm width X 75 mm depth X 2.0 mm thickness	Each	3531
4.10	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "Reducer" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.		
4.10.1	100 mm width X 50 mm depth X 1.6 mm thickness	Each	1594
4.10.2	150 mm width X 50 mm depth X 1.6 mm thickness	Each	1988
4.10.3	225 mm width X 50 mm depth X 1.6 mm thickness	Each	2459
4.10.4	300 mm width X 50 mm depth X 1.6 mm thickness	Each	2954
4.10.5	375 mm width X 50 mm depth X 2.0 mm thickness	Each	3498
4.10.6	450 mm width X 50 mm depth X 2.0 mm thickness	Each	3776
4.10.7	600 mm width X 50 mm depth X 2.0 mm thickness	Each	5227
4.10.8	300 mm width X 62.5 mm depth X 2.0 mm thickness	Each	3477
4.10.9	375 mm width X 62.5 mm depth X 2.0 mm thickness	Each	4027
4.10.10	450 mm width X 62.5 mm depth X 2.0 mm thickness	Each	4880
4.10.11	600 mm width X 62.5 mm depth X 2.0 mm thickness	Each	6032
4.10.12	750 mm width X 62.5 mm depth X 2 mm thickness	Each	6208
4.10.13	900 mm width X 62.5 mm depth X 2.0 mm thickness	Each	7208
4.10.14	600 mm width X 75 mm depth X 2.0 mm thickness	Each	5150
4.10.15	750 mm width X 75 mm depth X 2.0 mm thickness	Each	6502
4.10.16	900 mm width X 75 mm depth X 2.0 mm thickness	Each	7548

## CHAPTER -5- EARTHING

Code No.	Description	Unit	Rate ₹
5.1	Earthing with G.I. earth pipe 4.5 meter long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. (but without charcoal/ coke and salt) as required.	Set	2846
5.2	Earthing with G.I. earth pipe 4.5 meter long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	Each	3672
5.3	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 meter long etc. (but without charcoal/ coke and salt) as required.	Set	3583
5.4	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 meter long etc. with charcoal/ coke and salt as required.	Set	4327
5.5	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 meter long etc. (but without charcoal/ coke and salt) as required.	Set	7546
5.6	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 meter long etc. with charcoal/ coke and salt as required.	Set	8289
5.7	Supplying and laying 6 SWG G.I. wire at 0.50 meter below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	meter	28
5.8	Supplying and laying 25 mm X 5 mm copper strip at 0.50 meter below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50 mm)	meter	595
5.9	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 meter below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50 mm)	meter	85

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
5.10	Providing and fixing 25 mm X 5 mm copper strip in 40 mm dia G.I. pipe from earth electrode including connection with brass nut, bolt, spring, washer excavation and re-filling etc. as required.	meter	872
5.11	Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.	meter	351
5.12	Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.	meter	134
5.13	Providing and laying earth connection from earth electrode with 4.00 mm dia copper wire in 15 mm dia G.I. pipe from earth electrode including connection with copper thimble excavation and re-filling as required.	meter	182
5.14	Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required.	meter	698
5.15	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	meter	129
5.16	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	meter	37
5.17	Providing and fixing 4.00 mm dia copper wire on surface or in recess for loop earthing as required.	meter	87
5.18	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	meter	23
5.19	Providing and fixing 4.00 mm dia copper wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	meter	73
5.20	Providing and fixing earth bus of 50 mm X 5 mm copper strip on surface for connections etc. as required.	meter	1283

## CHAPTER 6-LIGHTNING CONDUCTOR

Code No.	Description	Unit	Rate ₹
6.1	DELETED		
6.2	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.	Each	304
6.3	Fixing of lightning conductor finial (single prong) with base plate including holes etc. complete as required.	Each	170
6.4	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.	Each	57
6.5	DELETED		
6.6	DELETED		
6.7	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or on surface of wall for lightning conductor complete as required.(For horizontal run)	meter	66
6.8	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or on surface of wall for lightning conductor complete as required. (For vertical run)	meter	100
6.9	Fixing of copper/ G.I. tape 20 mm X 3 mm thick on parapet or on surface of wall for lightning conductor complete as required. (For horizontal run)	meter	39
6.10	Fixing of copper/ G.I. tape 20 mm X 3 mm thick on parapet or on surface of wall for lightning conductor complete as required. (For vertical run)	meter	79
6.11	DELETED		
6.12	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.	Each	73
6.13	DELETED		
6.14	Providing and laying G.I. tape 32 mm X 6 mm from earth electrode directly in ground as required.	meter	112
6.15	Laying copper/ G.I. tape 32 mm X 6 mm from earth electrode directly in ground as required.	meter	37

## CHAPTER 7-MV CABLE LAYING

Code No.	Description	Unit	Rate ₹
7.1	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. as required.		
7.1.1	Upto 35 sq. mm	meter	206
7.1.2	Above 35 sq. mm and upto 95 sq. mm	meter	214
7.1.3	Above 95 sq. mm and upto 185 sq. mm	meter	223
7.1.4	Above 185 sq. mm and upto 400 sq. mm	meter	248
7.2	Laying of one number additional PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following size direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering and refilling the trench etc. as required.		
7.2.1	Upto 35 sq. mm	meter	141
7.2.2	Above 35 sq. mm and upto 95 sq. mm	meter	149
7.2.3	Above 95 sq. mm and upto 185 sq. mm	meter	158
7.2.4	Above 185 sq. mm and upto 400 sq. mm	meter	183
7.3	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following size direct in ground including excavation and refilling the trench etc. as required, but excluding sand cushioning and protective covering.		
7.3.1	Upto 35 sq. mm	meter	97
7.3.2	Above 35 sq. mm and upto 95 sq. mm	meter	106
7.3.3	Above 95 sq. mm and upto 185 sq. mm	meter	114
7.3.4	Above 185 sq. mm and upto 400 sq. mm	meter	139
7.4	Laying of one number additional PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following size direct in ground in the same trench in one tier horizontal formation including excavation and refilling the trench etc. as required, but excluding sand cushioning and protective covering.		
7.4.1	Upto 35 sq. mm	meter	61
7.4.2	Above 35 sq. mm and upto 95 sq. mm	meter	70
7.4.3	Above 95 sq. mm and upto 185 sq. mm	meter	78
7.4.4	Above 185 sq. mm and upto 400 sq. mm	meter	104

Code No.	Description	Unit	Rate ₹
7.5	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following size in the existing RCC/ HUME/ METAL pipe as required.		
7.5.1	Upto 35 sq. mm	meter	18
7.5.2	Above 35 sq. mm and upto 95 sq. mm	meter	28
7.5.3	Above 95 sq. mm and upto 185 sq. mm	meter	37
7.5.4	Above 185 sq. mm and upto 400 sq. mm	meter	65
7.6	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following size in the existing masonry open duct as required.		
7.6.1	Upto 35 sq. mm	meter	14
7.6.2	Above 35 sq. mm and upto 95 sq. mm	meter	22
7.6.3	Above 95 sq. mm and upto 185 sq. mm	meter	31
7.6.4	Above 185 sq. mm and upto 400 sq. mm	meter	56
7.7	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.		
7.7.1	Upto 35 sq. mm (clamped with 1mm thick saddle)	meter	25
7.7.2	Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)	meter	72
7.7.3	Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp)	meter	84
7.7.4	Above 185 sq. mm and upto 400 sq. mm (clamped with 40x3mm MS flat clamp)	meter	120
7.8	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.		
7.8.1	Upto 35 sq. mm (clamped with 1mm thick saddle)	meter	21
7.8.2	Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)	meter	49
7.8.3	Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp)	meter	61
7.8.4	Above 185 sq. mm and upto 400 sq. mm (clamped with 40x3mm MS flat clamp)	meter	96

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
7.9	Supplying and making cable route marker with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) of size 60 cm X 60 cm at the bottom and 50 cm X 50 cm at the top with a thickness of 10cm including inscription duly engraved as required.	each	333
7.10	Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.	each	269

## CHAPTER 8-HT CABLE LAYING

Code No.	Description	Unit	Rate ₹
8.1	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 kV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. as required.		
8.1.1	Upto 120 sq. mm	meter	273
8.1.2	Above 120 sq. mm and upto 400 sq. mm	meter	298
8.2	Laying of one number additional PVC insulated and PVC sheathed / XLPE power cable of 11 kV grade of following size direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering and refilling the trench etc. as required.		
8.2.1	Upto 120 sq. mm	meter	186
8.2.2	Above 120 sq. mm and upto 400 sq. mm	meter	212
8.3	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 kV grade of following size in the existing RCC/ HUME/ METAL pipe as required.		
8.3.1	Upto 120 sq. mm	meter	37
8.3.2	Above 120 sq. mm and upto 400 sq. mm	meter	65
8.4	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 kV grade of following size in the existing masonry open duct as required.		
8.4.1	Upto 120 sq. mm	meter	31
8.4.2	Above 120 sq. mm and upto 400 sq. mm	meter	56
8.5	Laying of one number XLPE power cable of 33 kV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. as required.		
8.5.1	Upto 120 sq. mm	meter	275
8.5.2	Above 120 sq. mm and upto 400 sq. mm	meter	301
8.6	Laying of one number additional XLPE power cable of 33 kV grade of following size direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering and refilling the trench etc. as required.		
8.6.1	Upto 120 sq. mm	meter	189
8.6.2	Above 120 sq. mm and upto 400 sq. mm	meter	214

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
8.7	Laying of one number XLPE power cable of 33 kV grade of following size in the existing RCC/ HUME/ METAL pipe as required.		
8.7.1	Upto 120 sq. mm	meter	40
8.7.2	Above 120 sq. mm and upto 400 sq. mm	meter	68
8.8	Laying of one number XLPE power cable of 33 kV grade of following size in the existing masonry open duct as required.		
8.8.1	Upto 120 sq. mm	meter	33
8.8.2	Above 120 sq. mm and upto 400 sq. mm	meter	58

## CHAPTER 9-MV CABLE JOINTING & END TERMINATION

Code No.	Description	Unit	Rate ₹
9.1	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 kV grade as required.		
9.1.1	2 X 6 sq. mm (19mm)	Each	157
9.1.2	2 X 10 sq. mm (19mm)	Each	158
9.1.3	2 X 16 sq. mm (22mm)	Each	170
9.1.4	2 X 25 sq. mm (22mm)	Each	171
9.1.5	2 X 35 sq. mm (25 mm)	Each	222
9.1.6	2 X 50 sq. mm (28mm)	Each	276
9.1.7	3 X 10 sq. mm (22mm)	Each	171
9.1.8	3 X 16 sq. mm (25 mm)	Each	202
9.1.9	3 X 25 sq. mm (25 mm)	Each	205
9.1.10	3 X 35 sq. mm (28mm)	Each	276
9.1.11	3 X 50 sq. mm (32mm)	Each	286
9.1.12	3 X 70 sq. mm (35 mm)	Each	361
9.1.13	3 X 95 sq. mm (38mm)	Each	431
9.1.14	3 X 120 sq. mm (45 mm)	Each	489
9.1.15	3 X 150 sq. mm (50 mm)	Each	580
9.1.16	3 X 185 sq. mm (57mm)	Each	792
9.1.17	3 X 225 sq. mm (62mm)	Each	947
9.1.18	3 X 240 sq. mm (62mm)	Each	973
9.1.19	3 X 300 sq. mm (70 mm)	Each	1084
9.1.20	3½ X 25 sq. mm (28mm)	Each	257
9.1.21	3½ X 35 sq. mm (32mm)	Each	282
9.1.22	3½ X 50 sq. mm (35 mm)	Each	354
9.1.23	3½ X 70 sq. mm (38mm)	Each	394
9.1.24	3½ X 95 sq. mm (45 mm)	Each	482
9.1.25	3½ X 120 sq. mm (45 mm)	Each	500
9.1.26	3½ X 150 sq. mm (50 mm)	Each	592
9.1.27	3½ X 185 sq. mm (57mm)	Each	804
9.1.28	3½ X 225 sq. mm (62mm)	Each	964

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
9.1.29	3½ X 240 sq. mm (62mm)	Each	989
9.1.30	3½ X 300 sq. mm (70 mm)	Each	1106
9.1.31	3½ X 400 sq. mm (82mm)	Each	1389
9.1.32	4 X 10 sq. mm (25 mm)	Each	203
9.1.33	4 X 16 sq. mm (28mm)	Each	255
9.1.34	4 X 25 sq. mm (28mm)	Each	258
9.1.35	4 X 35 sq. mm (32mm)	Each	283
9.1.36	4 X 50 sq. mm (35 mm)	Each	358
9.2	Supplying and making outdoor end termination with cast resin compound including aluminium lugs and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 kV grade as required.		
9.2.1	2 X 16 sq. mm	Each	617
9.2.2	2 X 25 sq. mm	Each	663
9.2.3	2 X 35 sq. mm	Each	663
9.2.4	2 X 50 sq. mm	Each	663
9.2.5	3 X 16 sq. mm	Each	663
9.2.6	3 X 25 sq. mm	Each	663
9.2.7	3 X 35 sq. mm	Each	663
9.2.8	3 X 50 sq. mm	Each	706
9.2.9	3 X 70 sq. mm	Each	706
9.2.10	3 X 95 sq. mm	Each	846
9.2.11	3 X 120 sq. mm	Each	846
9.2.12	3 X 150 sq. mm	Each	846
9.2.13	3 X 185 sq. mm	Each	1120
9.2.14	3 X 225 sq. mm	Each	1120
9.2.15	3 X 240 sq. mm	Each	1290
9.2.16	3 X 300 sq. mm	Each	1290
9.2.17	3½ X 25 sq. mm	Each	663
9.2.18	3½ X 35 sq. mm	Each	706
9.2.19	3½ X 50 sq. mm	Each	706
9.2.20	3½ X 70 sq. mm	Each	771
9.2.21	3½ X 95 sq. mm	Each	846
9.2.22	3½ X 120 sq. mm	Each	846

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
9.2.23	3½ X 150 sq. mm	Each	1120
9.2.24	3½ X 185 sq. mm	Each	1120
9.2.25	3½ X 225 sq. mm	Each	1290
9.2.26	3½ X 240 sq. mm	Each	1290
9.2.27	3½ X 300 sq. mm	Each	1449
9.2.28	3½ X 400 sq. mm	Each	1649
9.2.29	4 X 16 sq. mm	Each	663
9.2.30	4 X 25 sq. mm	Each	663
9.2.31	4 X 35 sq. mm	Each	706
9.2.32	4 X 50 sq. mm	Each	706
9.3	Supplying and making straight through joint with cast resin compound including ferrules and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 kV grade as required.		
9.3.1	2 X 16 sq. mm	Each	1245
9.3.2	2 X 25 sq. mm	Each	1245
9.3.3	2 X 35 sq. mm	Each	1245
9.3.4	2 X 50 sq. mm	Each	1415
9.3.5	3 X 16 sq. mm	Each	1415
9.3.6	3 X 25 sq. mm	Each	1245
9.3.7	3 X 35 sq. mm	Each	1245
9.3.8	3 X 50 sq. mm	Each	1415
9.3.9	3 X 70 sq. mm	Each	1647
9.3.10	3 X 95 sq. mm	Each	1760
9.3.11	3 X 120 sq. mm	Each	1969
9.3.12	3 X 150 sq. mm	Each	1969
9.3.13	3 X 185 sq. mm	Each	2331
9.3.14	3 X 225 sq. mm	Each	2632
9.3.15	3 X 240 sq. mm	Each	2632
9.3.16	3 X 300 sq. mm	Each	3393
9.3.17	3½ X 25 sq. mm	Each	1415
9.3.18	3½ X 35 sq. mm	Each	1415
9.3.19	3½ X 50 sq. mm	Each	1647
9.3.20	3½ X 70 sq. mm	Each	1661

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
9.3.21	3½ X 95 sq. mm	Each	1969
9.3.22	3½ X 120 sq. mm	Each	2331
9.3.23	3½ X 150 sq. mm	Each	2331
9.3.24	3½ X 185 sq. mm	Each	2632
9.3.25	3½ X 225 sq. mm	Each	2678
9.3.26	3½ X 240 sq. mm	Each	3233
9.3.27	3½ X 300 sq. mm	Each	3971
9.3.28	3½ X 400 sq. mm	Each	2349
9.3.29	4 X 16 sq. mm	Each	1245
9.3.30	4 X 25 sq. mm	Each	1415
9.3.31	4 X 35 sq. mm	Each	1415
9.3.32	4 X 50 sq. mm	Each	1647
9.4	Supplying and making straight through joint with heat shrinkable kit including ferrules and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 kV grade as required.		
9.4.1	2 X 16 sq. mm	Each	1245
9.4.2	2 X 25 sq. mm	Each	1245
9.4.3	2 X 35 sq. mm	Each	1245
9.4.4	2 X 50 sq. mm	Each	1415
9.4.5	3 X 16 sq. mm	Each	1245
9.4.6	3 X 25 sq. mm	Each	1245
9.4.7	3 X 35 sq. mm	Each	1415
9.4.8	3 X 50 sq. mm	Each	1415
9.4.9	3 X 70 sq. mm	Each	1685
9.4.10	3 X 95 sq. mm	Each	1969
9.4.11	3 X 120 sq. mm	Each	1969
9.4.12	3 X 150 sq. mm	Each	1969
9.4.13	3 X 185 sq. mm	Each	2331
9.4.14	3 X 225 sq. mm	Each	2632
9.4.15	3 X 240 sq. mm	Each	2678
9.4.16	3 X 300 sq. mm	Each	3393
9.4.17	3½ X 25 sq. mm	Each	1415
9.4.18	3½ X 35 sq. mm	Each	1415

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
9.4.19	3½ X 50 sq. mm	Each	1647
9.4.20	3½ X 70 sq. mm	Each	1685
9.4.21	3½ X 95 sq. mm	Each	1969
9.4.22	3½ X 120 sq. mm	Each	2331
9.4.23	3½ X 150 sq. mm	Each	2331
9.4.24	3½ X 185 sq. mm	Each	2632
9.4.25	3½ X 225 sq. mm	Each	2632
9.4.26	3½ X 240 sq. mm	Each	2678
9.4.27	3½ X 300 sq. mm	Each	3393
9.4.28	3½ X 400 sq. mm	Each	4788
9.4.29	4 X 16 sq. mm	Each	1245
9.4.30	4 X 25 sq. mm	Each	1415
9.4.31	4 X 35 sq. mm	Each	1415
9.4.32	4 X 50 sq. mm	Each	1647

## CHAPTER 10-HV CABLE JOINTING & END TERMINATION

Code No.	Description	Unit	Rate ₹
10.1	Supplying and making indoor cable end jointing with cast resin compound, including lugs and other jointing materials, for following size of 3 core, XLPE aluminium conductor cable of 11 kV grade as required.		
10.1.1	70 sq. mm	Each	1078
10.1.2	120 sq. mm	Each	1359
10.1.3	240 sq. mm	Each	1826
10.1.4	300 sq. mm	Each	1859
10.2	Supplying and making outdoor cable end jointing with cast resin compound, including lugs and other jointing materials, for following size of 3 core, XLPE aluminium conductor cable of 11 kV grade as required.		
10.2.1	70 sq. mm	Each	2554
10.2.2	120 sq. mm	Each	2863
10.2.3	240 sq. mm	Each	3330
10.2.4	300 sq. mm	Each	3330
10.3	Supplying and making straight through cable jointing with cast resin compound, including ferrule and other jointing materials, for following size of 3 core, XLPE aluminium conductor cable of 11 kV grade as required.		
10.3.1	70 sq. mm	Each	2385
10.3.2	120 sq. mm	Each	2720
10.3.3	240 sq. mm	Each	4054
10.3.4	300 sq. mm	Each	4631
10.4	supplying and making indoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminium conductor cable of 11 kV grade as required.		
10.4.1	70 sq. mm	Each	4667
10.4.2	120 sq. mm	Each	4948
10.4.3	240 sq. mm	Each	6457
10.4.4	300 sq. mm	Each	6457
10.5	Supplying and making outdoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminium conductor cable of 11 kV grade as required.		

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
10.5.1	70 sq. mm	Each	7984
10.5.2	120 sq. mm	Each	8265
10.5.3	240 sq. mm	Each	9464
10.5.4	300 sq. mm	Each	9464
10.6	Supplying and making straight through cable jointing with heat shrinkable jointing kit complete with all accessories including ferrules suitable for following size of 3 core, XLPE aluminium conductor cable of 11 kV grade as required.		
10.6.1	70 sq. mm	Each	9250
10.6.2	120 sq. mm	Each	9955
10.6.3	240 sq. mm	Each	10640
10.6.4	300 sq. mm	Each	10640
10.7	Supplying and making indoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminium conductor cable of 33 kV grade as required.		
10.7.1	70 sq. mm	Each	10369
10.7.2	120 sq. mm	Each	14283
10.7.3	240 sq. mm	Each	15518
10.8	Supplying and making outdoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminium conductor cable of 33 kV grade as required.		
10.8.1	70 sq. mm	Each	15479
10.8.2	120 sq. mm	Each	18777
10.8.3	240 sq. mm	Each	21224
10.9	Supplying and making straight through cable jointing with heat shrinkable jointing kit complete with all accessories including ferrules suitable for following size of 3 core, XLPE aluminium conductor cable of 33 kV grade as required.		
10.9.1	70 sq. mm	Each	24311
10.9.2	120 sq. mm	Each	30911
10.9.3	240 sq. mm	Each	43180

## CHAPTER 11-POLE ERECTION

Code No.	Description	Unit	Rate ₹
11.1	Erection of RCC/ PCC pole of following length in brick ballast and ramming the foundation, finishing with 150 mm thick cement concrete (1:3:6) layer on top with including excavation and refilling etc. as required.		
11.1.1	Above 4.5 meter and upto 6.5 meter	Each	2878
11.1.2	Above 6.5 meter and upto 8.0 meter	Each	3200
11.1.3	Above 8.0 meter and upto 11.0 meter	Each	3826
11.1.4	Above 11.00 meter and upto 13.00 meter	Each	4209
11.2	Erection of RCC/ PCC pole strut in brick ballast and ramming the foundation including excavation and refilling and secured with holding clamps, bolts, nuts, etc. as required.	Each	4891
11.3	Erection of metallic pole of following length in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling etc. as required.		
11.3.1	Above 4.5 meter and upto 6.5 meter	Each	2760
11.3.2	Above 6.5 meter and upto 8.0 meter	Each	3322
11.3.3	Above 8.0 meter and upto 10.0 meter	Each	3930
11.3.4	Above 10.00 meter and upto 12.00 meter	Each	4593
11.4	Erection of steel tubular or rail pole strut in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling and secured with holding clamps, bolts, nuts, etc. as required.	Each	4688
11.5	Providing and making steel pole collar with cement concrete (1 cement : 3 coarse sand : 6 stone aggregate 20 mm) of specified size and shape including form work, plastering if required, curing etc. as required. (volume of pole/ pipe not to be deducted)	cum	4693
11.6	Supplying and embedding following dia G.I. pipe (medium class) in pole collar/ foundation (during casting) for cable entry including bending the pipe to the required shape complete as required.		
11.6.1	32 mm dia	meter	243
11.6.2	40 mm dia	meter	276

## CHAPTER 12-MV OVER HEAD LINE WORK

Code No.	Description	Unit	Rate ₹
12.1	Supplying and erection of stay set complete (galvanised) with 19/20 mm dia X 1.8 meter long stay rod, anchor plate of size 45 cm X 45 cm X 7.5 mm, thimble, stay clamps, turn buckle (20 mm X 60 cm), 7/ 4.00 mm dia G.I. stay wire and strain insulator etc. in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling etc. as required.	Each	3770
12.2	Supplying and erection of stay set complete (galvanised) with 19/20 mm dia X 1.8 meter long stay rod, anchor plate of size 45 cm X 45 cm X 7.5 mm, thimble, stay clamps, turn buckle (20 mm X 60 cm), 7/ 3.15 mm dia G.I. stay wire and strain insulator etc. in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling etc. as required.	Each	3624
12.3	Supplying and erection of stay set complete (galvanised) with 19/20 mm dia X 1.8 meter long stay rod, anchor plate of size 45 cm X 45 cm X 7.5 mm, thimble, stay clamps, bow tightener, 7/ 4.00 mm dia G.I. stay wire and strain insulator etc. in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling etc. as required.	Each	3563
12.4	Supplying and erection of stay set complete (galvanised) with 19/20 mm dia X 1.8 meter long stay rod, anchor plate of size 45 cm X 45 cm X 7.5 mm, thimble, stay clamps, bow tightener, 7/ 3.15 mm dia G.I. stay wire and strain insulator etc. in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling etc. as required.	Each	3411
12.5	Supplying and erection of bow stay set complete (galvanised) with 19/20 mm dia X 1.8 meter long stay rod, anchor plate of size 45 cm X 45 cm X 7.5 mm, thimble, stay clamps, turn buckle (20 mm X 60 cm), 7/ 4.00 mm dia G.I. stay wire and strain insulator etc. in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling and also with 0.6 m long brace of size 50 mm X 50 mm X 6 mm angle iron with 50 mm dia pulley fixed at one end of the brace as required.	Each	4097
12.6	Supplying and erection of bow stay set complete (galvanised) with 19/20 mm dia X 1.8 meter long stay rod, anchor plate of size 45 cm X 45 cm X 7.5 mm, thimble, stay clamps, turn buckle (20 mm X 60 cm), 7/ 3.15 mm dia G.I. stay wire and strain		

Code No.	Description	Unit	Rate ₹
	insulator etc. in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling and also with 0.6 m long brace of size 50 mm X 50 mm X 6 mm angle iron with 50 mm dia pulley fixed at one end of the brace as required.	Each	3946
12.7	Supplying and erection of bow stay set complete (galvanised) with 19/20 mm dia X 1.8 meter long stay rod, anchor plate of size 45 cm X 45 cm X 7.5 mm, thimble, stay clamps, bow tightener), 7/ 4.00 mm dia G.I. stay wire and strain insulator etc. in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling and also with 0.6 m long brace of size 50 mm X 50 mm X 6 mm angle iron with 50 mm dia pulley fixed at one end of the brace as required.	Each	3890
12.8	Supplying and erection of bow stay set complete (galvanised) with 19/20 mm dia X 1.8 meter long stay rod, anchor plate of size 45 cm X 45 cm X 7.5 mm, thimble, stay clamps, bow tightener), 7/ 3.15 mm dia G.I. stay wire and strain insulator etc. in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling and also with 0.6 m long brace of size 50 mm X 50 mm X 6 mm angle iron with 50 mm dia pulley fixed at one end of the brace as required.	Each	3739
12.9	Erection of stay set complete (galvanised) in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling etc. as required.	Each	2381
12.10	Supplying of channel iron 75 mm X 40 mm X 6 mm (7.14 kg per meter) cross arm for 2 wire over head line complete with clamps, bolts, nuts and washer etc. including drilling of holes for insulator pins etc. (as per drawing) and painting with primer and finished paint as required.	Set	437
12.11	Supplying of channel iron 75 mm X 40 mm X 6 mm (7.14 kg per meter) cross arm for 4 wire over head line complete with clamps, bolts, nuts and washer etc. including drilling of holes for insulator pins etc. (as per drawing) and painting with primer and finished paint as required.	Set	728
12.12	Erection of angle iron/ channel iron cross arm on wood/ RCC/ PCC/ steel tubular/ rail pole etc. as required.	set	150
12.13	Supplying and erection of galvanised 'D' iron clamps complete with shackle insulator (75 mm X 90 mm), G. I. bolts, nuts and washers, coach screws etc. as required.	Set	204

Code No.	Description	Unit	Rate ₹
12.14	Supplying and erection of galvanised 'D' iron clamps complete with shackle insulator (100 mm X 110 mm), G.I. bolts, nuts and washers, coach screws etc. as required.	Set	235
12.15	Erection of galvanised 'D' iron clamps and insulator on pole as required.	Set	37
12.16	Supplying and erection of 75 mm X 90 mm shackle insulator with G. I. Bolt, nuts and straps etc. as required.	Set	146
12.17	Supplying and erection of 100 mm X 110 mm shackle insulator with G. I. Bolt, nuts and straps etc. as required.	Set	177
12.18	Supplying and erection of 100 mm X 65 mm pin insulator complete with G. I. Spindle and nuts etc. as required.	Set	81
12.19	Supplying and erection of 100 mm X 80 mm pin insulator complete with G. I. Spindle and nuts etc. as required.	Set	83
12.20	Erection of LV/MV shackle/pin insulator etc. as required.	Set	41
12.21	Erection of ACSR conductor of 7/2.11 mm to 7/3.00 mm diameter including binding etc. as required.	kg	99
12.22	Erection of ACSR conductor of 7/3.35 mm to 7/4.00 diameter and above including binding etc. as required.	kg	130
12.23	Erection of all aluminium conductor of 7/1.96 mm to 7/3.10 mm diameter including binding etc. as required.	kg	130
12.24	Erection of all aluminium conductor of 7/3.40 mm to 7/4.00 mm diameter and above including binding etc. as required.	kg	100
12.25	Erection of G.I. Wire No.. 8 SWG including binding etc. as required.	kg	20
12.26	Erection of hexagonal type guard as required.	Each	107
12.27	Erection of ring type guard as required.	Each	36
12.28	Erection of cradle guard as required.	Each	71
12.29	Supplying and erection of 15 A aerial fuse complete as required.	Each	73
12.30	Supplying and erection of 30 A aerial fuse complete as required.	Each	84
12.31	Erection of aerial fuse as required.	Each	54
12.32	Supplying and fixing MV horn gap lightning arrestor as required.	Each	197
12.33	Fixing of MV lightning arrestor as required.	Each	82
12.34	Supplying and fixing of 32 mm dia X 2.00 meter long G.I. pipe (medium class) bracket for mounting of fluorescent / HPMV / HPSV street light fitting on pole including bending the pipe to the required shape, 2 Nos. 40 mm X 3 mm flat iron clamps with nuts, bolts and washer, painting the flat iron with primer and finish paint etc. as required.	Each	733

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
12.35	Providing and fixing 50 mm dia X 3.2 meter G.I. pipe (including accessories) complete with 50 mm X 50 mm X 6 mm angle iron bracket on wall and 75 mm X 90 mm shackle insulator with straps for house service connection including painting the angle and flat iron with primer and finish paint etc. as required.	Each	1727
12.36	Providing and fixing 50 mm dia X 5.6 meter G.I. pipe (including accessories) complete with 50 mm X 50 mm X 6 mm angle iron cross arm and 40 mm X 3mm M.S. flat iron clamps bends for guard wire, 75 mm X 90 mm shackle insulator and straps, 7/ 3.15 mm G.I. wire stay set for house service connection including painting the angle and flat iron with primer and finish paint etc. as required.	Each	2593
12.37	Supplying and fixing of light class G.I. pipe of 50 mm dia. (nominal) 3 meter length along the pole for protection of under ground cable as required.	Each	1217
12.38	Supplying and fixing of light class G.I. pipe of 80 mm dia. (nominal) 3 meter length along the pole for protection of under ground cable as required.	Each	1720
12.39	Supplying and fixing of light class G.I. pipe of 100 mm dia. (nominal) 3 meter length along the pole for protection of under ground cable as required.	Each	2256
12.40	Dismantling of over head lines comprising of copper/ aluminium over head conductor, G.I. wire, cross arms, insulators etc. as required.	kg	43
12.41	Dismantling of pole/ street light standard/ strut embedded in brick ballast foundation etc. as required.	Each	975
12.42	Dismantling of pole/ street light standard/ strut embedded in cement concrete foundation etc. as required.	Each	1295

## CHAPTER 13-HV OVER HEAD LINE WORK

Code No.	Description	Unit	Rate ₹
13.1	Supplying and erection of galvanised stay set for 11 kV over head lines complete with 19/ 20 mm dia X 1.8 meter long stay rod, anchor plate of size 45 cm X 45 cm X 7.5 mm thick, thimble, stay clamps, turn buckle (20 mm X 600 mm), 7/ 4.00 mm dia G.I. stay wire and 11 kV strain insulator etc. in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling etc. as required.	Set	3808
13.2	Supplying of channel iron 75 mm X 40 mm X 6 mm (7.14 kg per meter) pole top bracket/ cross arm for single 11 kV over head line conductor complete with 50 mm X 6mm flat iron clamp, bolts, nuts and washers including drilling holes for insulator pins, bolts and nuts etc. and painting with primer and finish paint as required.	Each	323
13.3	Supplying of 50 mm X 8 mm M.S. flat iron pole top bracket/ cross arm for single 11/22/33 kV over head line conductor complete with fixing clamps, bolts, nuts and washers drilling holes for insulator pins, bolts and nuts etc. and painting with primer and finish paint as required.	Each	368
13.4	Supplying of channel iron 75 mm X 40 mm X 6 mm (7.14 kg per meter) cross arm for two 11 kV over head line conductors complete with 50 mm X 50 mm X 6 mm (angle iron bracket welded to the channel iron and complete with 50 mm X 6mm M.S. flat iron clamps, bolts and nuts including drilling holes for insulator pins, bolts, nuts and washers etc. (as per drawing) and painting with primer and finish paint as required.	Each	1358
13.5	Supplying of channel iron 75 mm X 40 mm X 6 mm (7.14 kg per meter) V shape cross arm for two 11 kV over head line conductors complete with 50 mm X 6mm M.S. flat iron clamps, bolts and nuts including drilling holes for insulator pins, bolts, nuts and washers etc. (as per drawing) and painting with primer and finish paint as required.	Each	1163
13.6	Erection of pole top/ straight two wire/ V shape two wire, angle iron/ channel iron, cross arm on steel tubular/ rail/ PCC pole for 11/22/33 kV as required.	Set	272
13.7	Supplying of two lengths of channel iron 75 mm X 40 mm X 6 mm (7.14 kg per meter) double pole cross arm for three wire 11kV over head line conductors complete with through bolts and nuts for clamping to the poles, 50 mm X 6 mm M.S. flats welded on one side to the channel iron and with bolts and nuts on the other side for tying the cross arms together, including		

Code No.	Description	Unit	Rate ₹
	drilling holes for insulator pins/ fittings, bolts, nuts and washers etc. (as per drawing) and painting with primer and finish paint as required.	Set	2925
13.8	Supplying and erection of a set of cross bracing frame work for 11 kV over head line double pole structure having four members fabricated out of 50 mm X 50 mm X 6 mm angle iron to form a rectangle of minimum size 1400 mm width X 2500 mm height, complete with 50 mm X 6mm M.S. flat iron clamps, bolts and nuts including drilling holes for insulator pins, bolts and nuts etc. (as per drawing) and painting with primer and finish paint as required.	Set	4230
13.9	Erection of double pole 3 wire cross arm for 11kV/22kV/33 kV over head lines as required.	Each	624
13.10	Supplying and erection of 11 kV pin insulator complete with large steel head G.I. pin, nuts, washers etc. as required.	Set	225
13.11	Supplying and erection of 11 kV disc insulator for 11 kV over head lines with galvanised insulator fittings, ball and socket type and complete with galvanised strain clamps, bolts, nuts, washers etc. as required.	Set	898
13.12	Erection of disc/ pin insulator for 11 kV over head lines as required.	Set	82
13.13	Supplying and erection of three piece nonlinear resistor type lightning arrester suitable for 3 wire, 11 kV overhead lines with rated voltage 9 kV (rms) with a nominal discharge current rating of 5 kA and complete with galvanised clamping arrangement, G.I. bolts, nuts, washers etc. as required.	Set	2325
13.14	Supplying and erection of galvanised stay set for 33 kV over head lines complete with 19/ 20 mm dia X 1.8 meter long stay rod, anchor plate of size 45 cm X 45 cm X 7.5 mm thick, thimble, stay clamps, turn buckle (20 mm X 600 mm), 7/ 4.00 mm dia G.I. stay wire and 33 kV strain insulator etc. in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling etc. as required.	Set	3821
13.15	Supplying of channel iron 75 mm X 40 mm X 6 mm (7.14 kg per meter) pole top bracket/ cross arm for single 33 kV over head line conductor complete with 50 mm X 6mm flat iron clamps, bolts and nuts including drilling holes for insulator pins, bolts, nuts, washers etc. and painting with primer and finish paint as required.	Each	339
13.16	Supplying of channel iron 75 mm X 40 mm X 6 mm (7.14 kg per meter) cross arm for two 33 kV over head line conductors complete with 50 mm X 50 mm X 6 mm angle iron bracket		

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
	welded to the channel iron and complete with 50 mm X 6mm M.S. flat iron clamps, bolts and nuts including drilling holes for insulator pins, bolts, nuts, washers etc. and painting with primer and finish paint as required.	Each	1670
13.17	Supplying of channel iron 75 mm X 40 mm X 6 mm (7.14 kg per meter) V shape cross arm for two 33 kV over head line conductors complete with 50 mm X 6mm M.S. flat iron clamps, bolts and nuts including drilling holes for insulator pins, bolts and nuts etc. and painting with primer and finish paint as required.	Each	1307
13.18	Supplying of channel iron 100 mm X 50 mm X 6 mm (9.56 kg per meter), pole top bracket/ cross arm for single 33 kV over head line conductor complete with 50 mm X 6 mm M.S. flat iron clamps, bolts and nuts including drilling holes for insulator pins, bolts and nuts etc. and painting with primer and finish paint as required.	Each	416
13.19	Supplying of channel iron 100 mm X 50 mm X 6 mm (9.56 kg per meter) cross arm for two wire 33 kV over head line conductors complete with 50 mm X 50 mm X 6 mm angle iron bracket welded to the channel iron and complete with 50 mm X 6mm M.S. flat iron clamps, bolts and nuts including drilling holes for insulator pins/ fittings, bolts, nuts, washers etc. and painting with primer and finish paint as required.	Each	2060
13.20	Supplying of channel iron 100 mm X 50 mm X 6 mm (9.56 kg per meter) V shape cross arm for two 33 kV over head line conductors complete with 50 mm X 6mm M.S. flat iron clamps, bolts and nuts including drilling holes for insulator pins, bolts, nuts, washers etc. and painting with primer and finish paint as required.	Each	1611
13.21	Supplying of two lengths of channel iron 100 mm X 50 mm X 6 mm (9.56 kg per meter) double pole cross arm for three wire 33 kV over head line conductors complete with through bolts and nuts for clamping to the poles, 50 mm X 6 mm M.S. flats welded on one side to the channel iron and with bolts and nuts on the other side for tying the cross arms together, including drilling holes for insulator pins/ fittings, bolts, nuts, washers etc. and painting with primer and finish paint as required.	Set	4013
13.22	Supplying and erection of a set of cross bracing frame work for 33 kV over head line double pole structure having four members fabricated out of 65 mm X 65 mm X 6 mm angle iron to form a rectangle of minimum size 2400 mm width X 2800 mm height complete with 50 mm X 6mm M.S. flat iron clamps, bolts and nuts including drilling holes for insulator pins, bolts, nuts, washers etc. and painting with primer and finish paint as required.	Set	6027

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
13.23	Supplying and erection of 33 kV pin insulator complete with large steel head G.I. pin, nuts, washers etc. as required.	Set	728
13.24	Supplying and erection of a set of three 11 kV disc insulator for 33 kV over head lines with galvanised insulator fittings, ball and socket type and complete with galvanised strain clamps, bolts, nuts, washers etc. as required.	Set	2635
13.25	Supplying and erection of single piece nonlinear resistor type lightning arrester suitable for 3 wire, 33 kV overhead lines with rated voltage 30 kV (rms) with a nominal discharge current rating of 10 kA (station class) and complete with galvanised clamping arrangement, G.I. bolts, nuts, washers etc. as required.	Set	18575

## CHAPTER 14- MISC. CIVIL ITEMS

Code No.	Description	Unit	Rate ₹
14.1	Excavation for foundation in soft soil including dressing of sides and ramming of bottoms, lift upto 1.5 m including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 meter.	cum	192
14.2	Excavation for cable trenches of depth upto 1.2 m in soft soil including getting out the excavated soil and disposal of surplus excavated soil as directed within a lead of 50 meter.	cum	194
14.3	Filling available excavated earth (excluding rock) in trenches, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 meter.	cum	124
14.4	Excavation for cable trenches in soft soil, depth upto 1.2 m including dressing of sides lift upto 1.5 m, including getting out the excavated soil, refilling with sand and or good soil after laying of cable/ pipe etc. in layers of 20 cm, ramming, watering and disposal of surplus excavated soil as directed, within a lead of 50 meter.	cum	318
14.5	Deduct for not consolidation by ramming and watering while re-filling with sand and or good soil in cable/ pipe laying.	cum	71
14.6	Excavation of the cable trenches in hard rock not exceeding 1.5 meter in width, and lift upto 1.5 meter, including getting out the excavated soil and disposal of excavated soil as directed within a lead of 50 meter.	cum	591
14.7	Providing and laying in position cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) in foundation of pump, DG set etc. including form work etc. as required.	cum	5207
14.8	Providing and laying in position cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) in foundation of pump, DG set etc. including form work etc. as required.	cum	4689
14.9	Providing and laying in position cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) in foundation of pump, DG set etc. including form work etc. as required.	cum	4525
14.10	Providing and laying in position reinforced cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) in foundation of pump, DG set etc. including form work etc. as required (excluding reinforcement).	cum	5487

Code No.	Description	Unit	Rate ₹
14.11	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.	cum	4105
14.12	Providing 15 mm thick cement plaster of mix 1:4 (1 cement : 4 fine sand) at all levels.	sq.m	190
14.13	Providing, laying and fixing following dia G.I. pipe (medium class) in ground complete with G.I. fittings including trenching (75 cm deep) and re-filling etc. as required		
14.13.1	50 mm dia	meter	388
14.13.2	80 mm dia	meter	592
14.13.3	100 mm dia	meter	828
14.13.4	150 mm dia	meter	1265
14.14	Providing, laying and fixing following dia RCC pipe NP2 class (light duty) in ground complete with RCC collars, jointing with cement mortar 1:2 (1 cement : 2 fine sand) including trenching (75 cm deep) and refilling etc. as required.		
14.14.1	100 mm dia	meter	355
14.14.2	150 mm dia	meter	405
14.14.3	250 mm dia	meter	478
14.14.4	300 mm dia	meter	592
14.15	Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc. in the existing trench, complete as required.		
14.15.1	63 mm dia (OD-63 mm & ID-51 mm nominal)	meter	79
14.15.2	90 mm dia (OD-90 mm & ID-76 mm nominal)	meter	107
14.15.3	120 mm dia (OD-120 mm & ID-103 mm nominal)	meter	173
14.15.4	160 mm dia (OD-160 mm & ID-135 mm nominal)	meter	257
14.15.5	200 mm dia (OD-200 mm & ID-175 mm nominal)	meter	359
14.16	Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc..direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.		
14.16.1	63 mm dia (OD-63 mm & ID-51 mm nominal)	meter	135
14.16.2	90 mm dia (OD-90 mm & ID-76 mm nominal)	meter	163
14.16.3	120 mm dia (OD-120 mm & ID-103 mm nominal)	meter	229

Code No.	Description	Unit	Rate ₹
14.16.4	160 mm dia (OD-160 mm & ID-135 mm nominal)	meter	313
14.16.5	200 mm dia (OD-200 mm & ID-175 mm nominal)	meter	415

**NEW CIVIL ITEMS**

Note:- **There are few items which are contained in Civil DSR but are also required to be used in exclusive electrical works. Field units should use these items for such purposes.**

- |      |  |                                 |
|------|--|---------------------------------|
| i)   | Providing and fixing M.S. Fan clamp type I or II of 16 mm dia M.S. bar, bent to shape with hooked ends in R.C.C. slabs or beams during laying, including painting the exposed portion of loop, all as per standard design complete as required.<br>(DSR Civil-2014, Item no. 10.17)  | Rate to be taken from Civil DSR |
| ii)  | Providing and fixing circular/ Hexagonal GI box for ceiling fan clamp, of internal dia 140 mm, 73 mm height, top lid of 1.5 mm thick GI sheet with its top surface hacked for proper bonding, top lid shall be screwed into the GI box by means of 3.3 mm dia round headed screws, one lock at the corners, clamp shall be made of 12 mm dia M.S. bar bent to shape as per standard drawing.<br>(DSR Civil-2014, Item no. 10.18) | Rate to be taken from Civil DSR |
| iii) | Making hole for installation of exhaust fan of size upto 450 mm sweep by demolishing brick work manually/by mechanical means including disposal of malba within 50 meter lead and making good the wall by plastering etc. as required.<br>(DSR Civil-2014, Item no. 15.7.4 and 13.1.2)   | Rate to be taken from Civil DSR |
| iv)  | Painting with one or more coat of synthetic enamel paint of approved brand and manufacturer of required colour to give an even shade. (DSR Civil-2014, Item no. 14.54)   | Rate to be taken from Civil DSR |
| v)   | Painting with one or more coat of aluminium paint of approved brand and manufacturer to give an even shade.<br>(DSR Civil-2014, Item no. 14.55)  | Rate to be taken from Civil DSR |
| vi)  | Painting with one or more coat of black anticorrosive bituminous paint of approved brand & manufacturer to give an even shade<br>(DSR Civil-2014, Item no. 14.56)  | Rate to be taken from Civil DSR |
| vii) | Re-lettering with Black Japan paint of approved brand and manufacturer. (DSR Civil-2014, Item no. 14.60)   | Rate to be taken from Civil DSR |

## CHAPTER 15-LIGHTING CONTROLS

Code No.	Description	Unit	Rate ₹
15.1	Supplying,installation,testing and commissioning of Passive Infrared(PIR) technology based occupancy sensor having high performance, non regulating programmable type, suitable for connected load upto 10 A, for mounting height up to 2.8 meter and for 5 meter diameter coverage area along with necessary fixing arrangements i/c programming at site etc. complete as required.	Each	3193
15.2	Supplying,installation,testing and commissioning of Passive Infrared(PIR) technology based occupancy sensor with day light dimming(lighting level shall be regulated as per availability of natural day light in an area along with occupancy detection.) having high performance, regulating programmable type, suitable for connected load upto 10 A, for mounting height up to 2.8 meter and for 5 meter diameter coverage area along with necessary fixing arrangements i/c programming at site etc. complete as required.	Each	4467
15.3	Supplying,installation,testing and commissioning of Microwave technology based occupancy sensor having high performance, non regulating programmable type, suitable for connected load upto 10 A, for mounting height up to 2.6 meter and for 5m X 20m coverage area along with necessary fixing arrangements i/c programming at site etc. complete as required.	Each	6100
15.4	Supplying,installation,testing and commissioning of Astronomical time switch of following configuration to be mounted in feeder pillars / Lighting DBs for automatic switching On & OFF of street lights at sun set & sun rise or twilight(Auto ON, Auto OFF, Auto modes) with manual override facility with 12/24 hour display format with suitable battery and indication for relay status i/c programming at site complete as required.		
15.4.1	1 output per phase and suitable for single phase supply	Each	2566
15.4.2	2 output per phase and suitable for single phase supply	Each	5329
15.4.3	3 output (1output per phase) and suitable for three phase supply	Each	6254

**CHAPTER 16-HVAC (ONLY PLUMBING, DUCTING & AHU)**

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
<b>PLUMBING</b>			
<b>INSULATED CHILLED WATER PIPING (resin bonded fiber glass glass INSULATION)</b>			
16.1	Supplying, laying/ fixing, testing and commissioning of following nominal sizes of chilled water piping inside the building (with necessary clamps, vibration isolators and fittings but excluding valves, strainers, gauges etc.) duly insulated with 80 kg/cum density resin bonded fiber glass <b>or 144 Kg/ m<sup>3</sup> density mineral wool (non combustible)</b> pipe section insulation covered with a layer of 120 gm/sq.m polythene sheet (vapour barrier) and finally applying 0.63mm aluminium sheet cladding complete with type3, grade 1 roofing feltstrip(as per IS:1322 as amended up to date) at joints and repairing of damage to building etc. as per specifications and as required.		
	<b>Note:</b> The Pipes of sizes 150 mm & below shall be M.S. 'C' class as per IS : 1239 and pipes size above 150 mm shall be welded black steel pipe heavy class as per IS: 3589, from minimum 6.35 mm thick M.S. Sheet for pipes upto 350 mm dia. and from minimum 7mm thick MS sheet for pipes of 400 mm dia and above.		
16.1.1	400 mm dia. (75 mm thick insulation)	meter	10309
16.1.2	350 mm dia. (75 mm thick insulation)	meter	7120
16.1.3	300 mm dia. (75 mm thick insulation)	meter	6354
16.1.4	250 mm dia. (75 mm thick insulation)	meter	5368
16.1.5	200 mm dia. (75 mm thick insulation)	meter	4479
16.1.6	150 mm dia. (50 mm thick insulation)	meter	2939
16.1.7	125 mm dia. (50 mm thick insulation)	meter	2499
16.1.8	100 mm dia. (50 mm thick insulation)	meter	2167
16.1.9	80 mm dia. (50 mm thick insulation)	meter	1637
16.1.10	65 mm dia. (50 mm thick insulation)	meter	1412
16.1.11	50 mm dia. (50 mm thick insulation)	meter	1163
16.1.12	40 mm dia. (50 mm thick insulation)	meter	986
16.1.13	32 mm dia. (50 mm thick insulation)	meter	869
16.1.14	25 mm dia. (50 mm thick insulation)	meter	777

Code No.	Description	Unit	Rate ₹
	<b>INSULATED CHILLED WATER PIPING (Nitrile rubber insulation)</b>		
16.2	Supplying, laying/ fixing, testing and commissioning of following nominal sizes of chilled water piping inside the building (with necessary clamps, vibration isolators and fittings but excluding valves, strainers, gauges etc.) duly insulated with following closed cell elastometric nitrile rubber of <b>minimum 45 Kg / m<sup>3</sup> density, thermal conductivity 0.037 W/MK or better</b> at 20 deg mean temperature class 'O' insulation applied by suitable adhesive complete including repairing of damage to building etc. as per specifications and as required complete in all respect.  Note:-The Pipes of sizes 150 mm & below shall be M.S. 'C' class as per IS : 1239 and pipes size above 150 mm shall be welded black steel pipe heavy class as per IS: 3589, from minimum 6.35 mm thick M.S. Sheet for pipes upto 350 mm dia. and from minimum 7mm thick MS sheet for pipes of 400 mm dia and above.		
16.2.1	400 mm dia.(32 mm thick insulation)	meter	8662
16.2.2	350 mm dia. (32 mm thick insulation)	meter	5605
16.2.3	300 mm dia. (32 mm thick insulation)	meter	5074
16.2.4	250 mm dia. (32 mm thick insulation)	meter	4390
16.2.5	200 mm dia. (32 mm thick insulation)	meter	3504
16.2.6	150 mm dia. (32 mm thick insulation)	meter	2439
16.2.7	125 mm dia. (32 mm thick insulation)	meter	2142
16.2.8	100 mm dia. (32 mm thick insulation)	meter	1709
16.2.9	80 mm dia. (32 mm thick insulation)	meter	1255
16.2.10	65 mm dia. (32 mm thick insulation)	meter	1030
16.2.11	50 mm dia. (32 mm thick insulation)	meter	881
16.2.12	40 mm dia. (32 mm thick insulation)	meter	702
16.2.13	32 mm dia. (19 mm thick insulation)	meter	564
16.2.14	25 mm dia. (19 mm thick insulation)	meter	463
	<b>INSULATED CHILLED WATER PIPING (expanded polystyrene insulation)</b>		
16.3	Supplying, laying/ fixing, testing and commissioning of following nominal sizes of chilled water piping plumbing inside the building (with necessary clamps, vibration isolators and fittings but excluding valves, strainers, gauges etc.) duly insulated with fire retardant quality expanded polystyrene moulded pipe section of density 20 kg/cu.m after a thick coat of cold setting adhesive		

Code No.	Description	Unit	Rate ₹
	(CPRX compound) wrapping with 500g polythene faced hessain and finally applying 0.63mm aluminium sheet cladding complete with type3, grade 1 roofing feltstrip(as per IS:1322 as amended up to date) at joints repairing of damage to building etc. as per specifications and as required complete in all respect.		
	Note:-The Pipes of sizes 150 mm & below shall be M.S. 'C' class as per IS : 1239 and pipes size above 150 mm shall be welded black steel pipe heavy class as per IS: 3589, from minimum 6.35 mm thick M.S. Sheet for pipes upto 350 mm dia. and from minimum 7mm thick MS sheet for pipes of 400 mm dia and above.		
16.3.1	400 mm dia. (75 mm thick insulation)	meter	9497
16.3.2	350 mm dia. (75 mm thick insulation)	meter	6374
16.3.3	300 mm dia. (75 mm thick insulation)	meter	5809
16.3.4	250 mm dia. (75 mm thick insulation)	meter	4923
16.3.5	200 mm dia. (75 mm thick insulation)	meter	4120
16.3.6	150 mm dia. (75 mm thick insulation)	meter	2779
16.3.7	125 mm dia. (50 mm thick insulation)	meter	2330
16.3.8	100 mm dia. (50 mm thick insulation)	meter	1981
16.3.9	80 mm dia. (50 mm thick insulation)	meter	1555
16.3.10	65 mm dia. (50 mm thick insulation)	meter	1343
16.3.11	50 mm dia. (50 mm thick insulation)	meter	1109
16.3.12	40 mm dia. (50 mm thick insulation)	meter	944
16.3.13	32 mm dia. (50 mm thick insulation)	meter	834
16.3.14	25 mm dia. (50 mm thick insulation)	meter	749
	<b>INSULATION ON EXISTING PIPE</b>		
16.4	Supplying, laying/ fixing, testing and commissioning of following thickness resin bonded fiber glass pipe section insulation having density 80 kg/cum <b>or mineral wool (non combustible) having density of 144 Kg/ cu m</b> duly covered with a layer of 120 gm/ sq.m polythene sheet (vapour barrier) on existing pipe and finally applying 0.63mm aluminium sheet cladding complete with type3, grade 1 roofing feltstrip(as per IS:1322 as amended up to date) at joints etc. as per specifications and as required.		
16.4.1	75 mm	sq.m	2038
16.4.2	65 mm	sq.m	1963
16.4.3	50 mm	sq.m	1784
16.4.4	40 mm	sq.m	1685
16.4.5	25 mm	sq.m	1439

Code No.	Description	Unit	Rate ₹
16.5	Supplying, laying, fixing, testing and commissioning of following thickness closed cell elastometric nitrile rubber of class 'O' applied by suitable adhesive, as per specifications and as required complete in all respect.		
16.5.1	32 mm	sq.m	911
16.5.2	19 mm	sq.m	536
16.6	Supplying, laying/ fixing of following thickness insulation with fire retardant quality expanded polystyrene moulded pipe section of density 20 kg/cu.m after a thick coat of cold setting adhesive (CPRX compound) wrapping with 500g polythene faced hessain and finally applying 0.63mm aluminium sheet cladding complete with type3, grade 1 roofing feltstrip(as per IS:1322 as amended up to date) at joints repairing etc. as per specifications and as required complete in all respect..		
16.6.1	75 mm	sq.m	1512
16.6.2	50 mm	sq.m	1137
<b>INSULATED VALVES</b>			
16.7	Supplying, fixing, testing and commissioning of following valves, strainers, gauges in the chilled water plumbing duly insulated to the same specifications as the connected piping and adequately supported as per specifications.		
16.7.1	BUTTERFLY VALVE (MANUAL) with C I body SS Disc, Nitrile Rubber Seal & O- Ring PN 16 pressure rating for chilled water/ hot water circulation as specified		
16.7.1.1	200 mm dia	Each	11102
16.7.1.2	150 mm dia.	Each	6625
16.7.1.3	125 mm dia.	Each	5780
16.7.1.4	100 mm dia.	Each	5330
16.7.1.5	80 mm dia.	Each	3719
16.7.1.6	65 mm dia.	Each	3351
16.7.1.7	50 mm dia.	Each	3050
16.7.1.8	40 mm dia.	Each	2686
16.7.2	BALANCING VALVE WITH BUILT IN MEASURING FACILITY with C I body flanged construction with EPDM coated disc with long pitch with protected out pipe insulation & PN 16 pressure rating for chilled / hot water circulation as specified.		
16.7.2.1	200 mm dia	Each	48763
16.7.2.2	150 mm dia.	Each	23798
16.7.2.3	125 mm dia.	Each	18608

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
16.7.2.4	100 mm dia.	Each	11945
16.7.2.5	80 mm dia.	Each	7395
16.7.2.6	65 mm dia	Each	7101
16.7.2.7	50 mm dia.	Each	6386
16.7.2.8	40 mm dia	Each	3175
16.7.3	NON - RETURN VALVE with dual plate of C I body SS plates vulcanized NBR seal flanged end & PN 16 pressure rating for chilled / hot water circulation including insulation as specified.		
16.7.3.1	200 mm dia	Each	9655
16.7.3.2	150 mm dia.	Each	6477
16.7.3.3	125 mm dia.	Each	5163
16.7.3.4	100 mm dia	Each	3893
16.7.3.5	80 mm dia.	Each	2811
16.7.3.6	65 mm dia	Each	2443
16.7.4	Y - STRAINER of Ductile CI Body flanged ends with stainless steel strainer for chilled / hot water circulation including insulation as specified.		
16.7.4.1	200 mm dia	Each	20853
16.7.4.2	150 mm dia.	Each	10530
16.7.4.3	125 mm dia.	Each	9880
16.7.4.4	100 mm dia	Each	6918
16.7.4.5	80 mm dia	Each	5026
16.7.4.6	65 mm dia.	Each	4434
16.7.4.7	50 mm dia.	Each	3516
16.7.4.8	40 mm dia.	Each	2478
16.8	Providing and fixing in position the industrial type pressure gauges with gun metal / brass valves complete as required	Each	973
16.9	Providing & fixing in position the mercury in glass industrial type thermometres.	Each	707
<b>CONDENSER WATER PIPE</b>			
16.10	Supplying, fixing, testing and commissioning of condenser water pipes of following sizes of MS 'C' class along with necessary clamps, vibration isolators and fittings such as bends,tees etc..but excluding valves, strainers, gauges etc. adequately supported on rigid supports duly painted/buried in ground excavation and refilling etc. as per specification and as required complete in all respect.		

Code No.	Description	Unit	Rate ₹
	Note:-The Pipes size 150 mm & below shall be M.S. 'C' class as per IS : 1239 and pipes size above 150 mm shall be welded black steel pipe heavy class as per IS: 3589, from minimum 6.35 mm thick M.S. Sheet for pipes upto 350 mm dia. and from minimum 7mm thick MS sheet for pipes of 400 mm dia and above.		
16.10.1	300 mm dia.	meter	4187
16.10.2	250 mm dia	meter	3524
16.10.3	200 mm dia.	meter	2918
16.10.4	150 mm dia.	meter	1983
16.10.5	125 mm dia.	meter	1710
16.10.6	100 mm dia.	meter	1436
	<b>VALVES WITHOUT INSULATION</b>		
16.11	Supplying, fixing, testing and commissioning of following valves, gauges and strainers for condenser water circulation as per specifications.		
16.11.1	BUTTERFLY VALVE (MANUAL) with CI body SS disc nitrile sheet & O - ring & PN 16 pressure rating as specified.		
16.11.1.1	200 mm dia.	Each	10261
16.11.1.2	150 mm dia.	Each	5914
16.11.1.3	125 mm dia.	Each	5138
16.11.1.4	100 mm dia.	Each	4685
16.11.1.5	80 mm dia.	Each	3302
16.11.1.6	65 mm dia.	Each	2971
16.11.1.7	50 mm dia.	Each	2671
16.11.1.8	40 mm dia.	Each	2357
16.11.2	NON - RETURN VALVE with dual plate of CI body SS plates vulcanized NBR seal flanged end & PN 16 pressure rating as specified.		
16.11.2.1	200 mm dia.	Each	8805
16.11.2.2	150 mm dia.	Each	5772
16.11.2.3	125 mm dia.	Each	4553
16.11.2.4	100 mm dia.	Each	3327
16.11.2.5	80 mm dia.	Each	2392
16.11.2.6	65 mm dia.	Each	2058
16.11.3	Supplying, fixing, testing and commissioning of following sizes Motorized Butterfly Valve with CI Body, SS Disc, O - ring and		

Code No.	Description	Unit	Rate ₹
	minimum PN-16 pressure rating, conforming to BS 5155, IS 13095, with IP-55 actuator, capable of accepting upto 10V DC , and upto 20 mA electric signal and providing similar transduced feedback output to control system as required.		
16.11.3.1	350 mm dia.	Each	82172
16.11.3.2	300 mm dia.	Each	73636
16.11.3.3	250 mm dia.	Each	53014
16.11.3.4	200 mm dia.	Each	40548
16.11.3.5	150 mm dia.	Each	31436
16.11.3.6	125 mm dia.	Each	31165
16.11.3.7	100 mm dia.	Each	30586
16.11.3.8	80 mm dia.	Each	13078
16.11.3.9	65 mm dia.	Each	12952
16.11.3.10	50 mm dia.	Each	12687
16.11.4	Supply, Installation, Testing and Commissioning of following sizes electronic, self-balancing, pressure independent type dynamic balancing valve with integrated 2 way modulating control valve in a single body. The actuator shall be capable of accepting upto 10V DC and upto 20 mA electric signal and shall provide similar transduced feedback output to control system. Maximum close off pressure shall not be less than 6 Bar for upto 50 mm valves and 7 Bar for 65 mm & above. Valves should have pressure rating of 25 Bar minimum.		
16.11.4.1	150 mm dia.	Each	115421
16.11.4.2	125 mm dia.	Each	105085
16.11.4.3	100 mm dia.	Each	82690
16.11.4.4	80 mm dia.	Each	48912
16.11.4.5	65 mm dia.	Each	38431
16.11.4.6	50 mm dia.	Each	24893
16.11.4.7	40 mm dia.	Each	22709
16.11.4.8	32 mm dia.	Each	12228
16.11.4.9	25 mm dia.	Each	11529
16.11.4.10	20 mm dia.	Each	8385

#### **DUCTING, GRILLS, DIFFUSER AND INSULATION**

16.12.1	Supply, installation, balancing and commissioning of factory fabricated GSS sheet metal rectangular/round ducting complete with neoprene rubber gaskets, elbows, splitter dampers, vanes,		
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Code No.	Description	Unit	Rate ₹
	hangers, supports etc. as per approved drawings and specifications of following sheet thickness complete as required.		
16.12.1.1	Thickness 0.63 mm sheet	sq.m	739
16.12.1.2	Thickness 0.80 mm sheet	sq.m	905
16.12.1.3	Thickness 1.00 mm sheet	sq.m	1014
16.12.1.4	Thickness 1.25 mm sheet	sq.m	1278
16.12.2	Supply, installation, balancing and commissioning of fabricated at site GSS sheet metal rectangular/round ducting complete with neoprene rubber gaskets, elbows, splitter dampers, vanes, hangers, supports etc. as per approved drawings and specifications of following sheet thickness complete as required.		
16.12.2.1	Thickness 0.63 mm sheet	sq.m	630
16.12.2.2	Thickness 0.80 mm sheet	sq.m	751
16.12.2.3	Thickness 1.00 mm sheet	sq.m	983
16.12.2.4	Thickness 1.25 mm sheet	sq.m	1104
16.13	Supply, installation, testing and commissioning of GI volume control duct damper complete with neoprene rubber gaskets, nuts, bolts, screws linkages, flanges etc., as per specifications.	sq.m	5463
16.14	Supply, installation, testing and commissioning of Motorized (ON-OFF Type) duct mounted GI volume control damper with enthalpy sensor and necessary control wire (minimum 1.5 sq. mm) for integration within AHU room		
16.14.1	Damper	sq.m	6308
16.14.2	Actuator	Each	5483
16.15	Supplying & fixing of powder coated extruded aluminium Supply Air Grills with aluminium volume control dampers as per specifications.	sq.m	7132
16.16	Supplying & fixing of powder coated extruded aluminium Return Air Grills with louvers but without volume control dampers complete as required.	sq.m	4065
16.17	Supplying, fixing testing commissioning of supply air diffusers of powder coated aluminium with aluminium volume control dampers with anti smudge ring & removable core.	sq.m	8686
16.18	Supplying, fixing testing commissioning of Return air diffusers of powder coated aluminium without volume control dampers with anti smudge ring & removable core.	sq.m	5619
16.19	Supply, installation, testing & commissioning of thermal insulated flexible duct of following sizes duly supported at regular interval as per site requirement etc. complete as required as per specifications.		
16.19.1	200 mm dia.	meter	381

Code No.	Description	Unit	Rate ₹
16.20	Supplying, Fixing,testing and commissioning of fire dampers in supply air duct/main branch and return air path as and where required of required sizes i/c control wiring,the damper shall be motorized and spring return so as to close the damper in the event of power failure automatically and open the same in case of power being restored. The spring return action shall be inbuilt mechanism and not externally mounted. The damper shall also be closed in the event of fire signal complete as required and as per specifications.		
16.20.1	Fire damper	sq.m	7103
16.20.2	Actuator	Each	6604
16.21	Supply and fixing of acoustic lining of supply air duct and plenum with 25 mm thick resin bonded glass wool having density of 32 kg/m <sup>3</sup> , with 25 mm X 25 mm GI section of 1.25 mm thick, at 600 mm centre to centre covered with Reinforced Plastic tissue paper and 0.5 mm thick perforated aluminum sheet fixed to inside surface of ducts with cadmium plated nuts, bolts, stick pins, CPRX compound etc. complete as required and as per specifications.	sq.m	551
16.22	Supplying, fixing acoustic lining on wall and ceiling of AHU rooms with 50 mm thick, density 32 kg/cu.m resin bonded glass fiber insulation friction fixed in 610 mm x 610 mm frame work made of 25X50X50X50X25 mm made out of 0.6mm thick GI sheet U shaped channel and covered with reinforced fiber glass tissue and finished with 0.80 mm perforated aluminium sheet etc. complete as required and as per specifications.	sq.m	870
16.23	Supplying and fixing of following thickness duly laminated aluminum foil of mat finish closed cell Nitrile rubber (Class "O") insulation on existing duct after applying <b>suitable adhesive for Nitrile rubber</b> . The joints shall be sealed with 50 mm wide and 3 mm thick self adhesive nitrile rubber tape insulation complete as per specifications and as required.		
16.23.1	19mm	sq.m	821
16.23.2	25 mm	sq.m	1034
16.24	Supplying and fixing 50 mm thick aluminium foil faced resin bonded fibre glass insulation (on duct) of density 24 kg/cu.m <b>or mineral wool insulation(non combustible) of density 44 kg/ cu m</b> after applying two coats of cold setting adhesive (CPRX compound) sealing all joints with self adhesive aluminium tape & covering with 0.63mmx19mm GI wire mesh netting butting all joints and laced with GI wire complete as per specifications and as required. (for indoor applications).	sq.m	378
16.25	Supplying and fixing 50 mm thick aluminium foil faced resin bonded fibre glass insulation (on duct) of density 24 kg/cu.m <b>or</b>		

Code No.	Description	Unit	Rate ₹
	<b>mineral wool insulation(non combustible) of density 44 kg/cu m</b> after applying two coats of cold setting adhesive (CPRX compound) sealing all joints with self adhesive aluminium tape & covering with 0.63mmx19mm GI wire mesh netting & butting all joints and laced with GI wire complete and finally covered with one layer of tar felt stuck with hot bitumen as per specifications and as required. (for outdoor applications)	sq.m	437
	<b>AIR HANDLING UNITS</b>		
16.26	Supply, Installation, Testing and commissioning of factory built floor mounted chilled water double skin type horizontal/vertical air handling units made of 25 mm thick panels consisting of pre plasticized G.I. casing of thickness 0.8mm outside layer and 0.8 mm inside layer with polyurethane foam (PUF) insulation factory injected between them by injection moulding machine, complete with blower section with blower suitable for static pressure as required, minimum 2 bend GSS/PVC eliminators,cooling coil section with aluminium finned copper tubes (tubes thickness not less than 0.5 mm) cooling coil of 6 row deep, filter section with 50 mm thick metal viscous/ washable synthetic type air prefilters, belt drive package with TEFC drive motor <b>of efficiency class IE3</b> suitable for 415 ± 10% V, 50Hz, 3 Phase AC supply <b>suitably designed for variable frequency drive applications</b> , drain connections, stainless steel (18G) drain pan with PUF insulation, 150 mm dia. dial type pressure gauges (2 Nos.)and industrial type thermometres (2 Nos.) at the inlet and outlet of coil, auto purge valve wherever required, necessary vibration isolation arrangement etc. complete as per specification and of following capacities.		
16.26.1	4300 CMH	Set	75410
16.26.2	5100 CMH	Set	88718
16.26.3	6800 CMH	Set	100009
16.26.4	8500 CMH	Set	124770
16.26.5	10200 CMH	Set	145901
16.26.6	11900 CMH	Set	163967
16.26.7	13600 CMH	Set	182033
16.26.8	15300 CMH	Set	199212
16.26.9	17000 CMH	Set	216391
16.26.10	18700 CMH	Set	237683
16.26.11	20400 CMH	Set	258976
16.26.12	23800 CMH	Set	312241
16.26.13	28900 CMH	Set	329750

Code No.	Description	Unit	Rate ₹
16.26.14	34000 CMH	Set	365475
16.26.15	39100 CMH	Set	418828
16.27	Supply, Installation, Testing and commissioning of factory built floor mounted chilled water double skin type horizontal/vertical air handling units made of 25 mm thick panels consisting of pre plasticized G.I. casing of thickness 0.8mm outside layer and 0.8 mm inside layer with polyurethane foam (PUF) insulation factory injected between them by injection moulding machine, complete with blower section with blower suitable for static pressure as required, minimum 2 bend GSS/PVC eliminators, cooling coil section with aluminium finned copper tubes (tubes thickness not less than 0.5 mm) cooling coil of 4 row deep, filter section with 50 mm thick metal viscous/ washable synthetic type air prefilters, belt drive package with TEFC drive motor <b>of efficiency class IE3</b> suitable for 415 ± 10% V, 50Hz, 3 Phase AC supply <b>suitably designed for variable frequency drive applications</b> , drain connections, stainless steel (18G) drain pan with PUF insulation, 150 mm dia. dial type pressure gauges (2 Nos.) and industrial type thermometres (2 Nos.) at the inlet and outlet of coil, auto purge valve wherever required, necessary vibration isolation arrangement etc. complete as per specification and of following capacities.		
16.27.1	4300 CMH*	Set	68232
16.27.2	5100 CMH*	Set	80088
16.27.3	6800 CMH*	Set	89363
16.27.4	8500 CMH*	Set	110575
16.27.5	10200 CMH*	Set	129447
16.27.6	11900 CMH*	Set	144812
16.27.7	13600 CMH*	Set	160176
16.27.8	15300 CMH*	Set	174573
16.27.9	17000 CMH*	Set	188969
16.27.10	18700 CMH*	Set	204858
16.27.11	20400 CMH*	Set	226150
16.27.12	23800 CMH*	Set	236560
16.27.13	28900 CMH*	Set	301899
16.27.14	34000 CMH*	Set	334568
16.27.15	39100 CMH*	Set	383337

(\* ) Note:- This item and other items of AHUs with 4 row cooling coils should be used only for replacement of existing AHUs where hot water generator and hot water lines are not feasible to be provided because of the site constraint.

**APPENDIX-I**

**BASIC RATES OF LABOUR & HIRE CHARGES**

Code No.	Description	Unit	Rate ₹
1001	Wireman	day	447
1002	Cable jointer	day	447
1003	Lineman	day	447
1004	Fitter, Grade 1	day	447
1005	Fitter, Grade 2	day	407
1006	Painter	day	407
1007	Khallasi	day	368
1008	Carpenter, Grade 1	day	447
1009	Blacksmith, Grade 2	day	407
1010	Mason, Grade 2	day	407
1011	Stone Chiseler	day	407
1012	Beldar/ coolie	day	368
1013	Bhisti	day	368
1014	Excavator	day	368
1015	Stone Breaker	day	407
1016	Mate	day	368
1081	Hire charges for 5 ton truck	day	2200
1082	Hire charges for compressor and spray gun	day	350
1083	Drilling of 46 Nos. 12 mm dia holes on G.I. pipe	L.S.	300
1084	Drilling holes	each	6
1085	Solder jointing	each	12
1086	Welding charges	mm	0.5
1087	Welder	day	447

- Note :**
- 1) Labour rates are exclusive of contractor's profit & overhead and are inclusive of days for weekly day of rest.
  - 2) Hire Charges: These basic charges include cost of services of operating staff and supply of lubricating oil and diesel also etc.

**APPENDIX-II****BASIC RATES OF MATERIALS**

**Note :** 1) These rates are exclusive of contractor's profit & overhead and carriage but include octroi, royalty, excise duty (ED), sales tax (VAT) etc.

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
1101	1.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	meter	11.10
1102	2.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	meter	17.84
1103	4.0 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	meter	26.18
1104	6.0 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	meter	38.87
1105	10 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	meter	66.43
1106	16 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	meter	102.36
1108	16/0.20 mm (0.5 sq.mm) twin core FRLS PVC sheathed, flat flexible copper cable	meter	11.52
1109	16/0.20 mm (0.5 sq.mm) twin circular, FRLS PVC sheathed, workshop flexible copper cable	meter	11.52
1110	32/0.20 mm (1.0 sq.mm) twin circular, FRLS PVC sheathed, workshop flexible copper cable	meter	19.08
1111	1 pair, 0.5 mm dia annealed copper conductor, FRLS PVC insulated, unarmoured, telephone cable	meter	4.71
1112	2 pair, 0.5 mm dia annealed copper conductor, FRLS PVC insulated, unarmoured, telephone cable	meter	7.94
1113	4 pair, 0.5 mm dia annealed copper conductor, FRLS PVC insulated, unarmoured, telephone cable	meter	15.30
1114	Co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid protected with PVC sheath	meter	15.67
<b>CONDUIT (STEEL &amp; PVC) AND ACCESSORIES</b>			
1201	20 mm dia. ISI marked, steel conduit	meter	60.01
1202	25 mm dia. ISI marked, steel conduit	meter	75.60
1203	32 mm dia. ISI marked, steel conduit	meter	113.40
1204	40 mm dia. ISI marked, steel conduit	meter	184.28
1205	50 mm dia. ISI marked, steel conduit	meter	259.88

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
1206	20 mm inspection/ solid bends	each	7.61
1207	25 mm inspection/ solid bends	each	13.39
1208	32 mm inspection/ solid bends	each	25.20
1209	40 mm inspection/ solid bends	each	34.13
1210	50 mm inspection/ solid bends	each	49.88
1211	20 mm sockets	each	6.93
1212	25 mm sockets	each	7.56
1213	32 mm sockets	each	9.77
1214	40 mm sockets	each	13.86
1215	50 mm sockets	each	13.86
1216	20 mm junction box, one way	each	17.86
1217	20 mm junction box, two way	each	17.86
1218	20 mm iron staples/ saddles/ screws	each	1.60
1219	25 mm iron staples/ saddles/ screws	each	2.19
1220	32 mm iron staples/ saddles/ screws	each	3.34
1221	40 mm iron staples/ saddles/ screws	each	4.31
1222	50 mm iron staples/ saddles/ screws	each	5.71
1224	20 mm dia. ISI marked, PVC conduit	meter	11.81
1225	25 mm dia. ISI marked, PVC conduit	meter	20.32
1226	32 mm dia. ISI marked, PVC conduit	meter	33.59
1227	40 mm dia. ISI marked, PVC conduit	meter	47.37
1228	50 mm dia. ISI marked, PVC conduit	meter	71.35
1229	20 mm PVC bends	each	5.65
1230	25 mm PVC bends	each	7.70
1231	32 mm PVC bends	each	13.16
1232	40 mm PVC bends	each	20.98
1233	50 mm PVC bends	each	34.07
1234	20 mm PVC couplers	each	3.50
1235	25 mm PVC couplers	each	5.24
1236	32 mm PVC couplers	each	8.55
1237	40 mm PVC couplers	each	10.44
1238	50 mm PVC couplers	each	13.06
1239	20 mm PVC junction box, one way	each	15.45
1240	20 mm PVC junction box, two way	each	15.99

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
1241	75 mm X 75 mm X 50 mm PVC box	each	19.00
	<b>Metal Boxes</b>		
1300	Modular GI box for 2 module	each	28.00
1301	Modular GI box for 3 module	each	29.60
1302	Modular GI box for 4 module	each	38.40
1303	Modular GI box for 6 module	each	62.00
1304	Modular GI box for 8 module	each	74.00
1305	Modular GI box for 12 module	each	102.00
1306	75 mm X 75 mm X 60 mm deep metal box	each	20.00
1307	100 mm X 100 mm X 60 mm deep metal box	each	30.71
1308	150 mm X 75 mm X 60 mm deep metal box	each	32.55
1309	150 mm X 150 mm X 60 mm deep metal box	each	46.68
1310	180 mm X 100 mm X 60 mm deep metal box	each	39.31
1311	200 mm X 125 mm X 60 mm deep metal box	each	49.00
1312	200 mm X 150 mm X 60 mm deep metal box	each	61.00
1313	200 mm X 250 mm X 60 mm deep metal box	each	79.00
1314	200 mm X 300 mm X 60 mm deep metal box	each	110.00
1315	250 mm X 300 mm X 60 mm deep metal box	each	122.00
1316	200 mm X 150 mm X 75 mm deep metal box	each	67.00
1317	200 mm X 250 mm X 75 mm deep metal box	each	92.00
1318	200 mm X 150 mm X 100 mm deep metal box	each	81.00
1319	200 mm X 250 mm X 100 mm deep metal box	each	104.00
1320	200 mm X 300 mm X 100 mm deep metal box	each	122.00
1321	250 mm X 300 mm X 100 mm deep metal box	each	153.00
	<b>WIRING SWITCHES AND ACCESSORIES</b>		
1322	3 mm thick phenolic laminated sheet	sq.cm	0.10
1401	Ceiling rose, 3 pin, 5 A ISI marked	each	14.40
1402	S.P. 5/6 A, one way modular switch, ISI marked	each	48.00
1403	S.P. 5/6 A, two way modular switch, ISI marked	each	60.80
1404	S.P. 15/16 A, one way modular switch, ISI marked	each	73.60
1405	3 pin 5/6 A modular socket outlet, ISI marked	each	53.60
1406	6 pin 15/16 A modular socket outlet, ISI marked	each	107.60
1407	Modular bell push, ISI marked	each	73.60

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
1408	Stepped type Modular Fan regulator (2 module)	each	216.00
1409	Telephone Socket outlet modular type	each	58.50
1410	T.V. Socket outlet modular type	each	59.20
1411	Modular blanking plate	each	12.80
1412	6 pin 25 A modular type socket ISI Marked	Each	167.00
1420	Modular base & cover plate for 1 module	each	38.80
1421	Modular base & cover plate for 2 module	each	39.60
1422	Modular base & cover plate for 3 module	each	46.40
1423	Modular base & cover plate for 4 module	each	54.80
1424	Modular base & cover plate for 6 module	each	76.40
1425	Modular base & cover plate for 8 module	each	97.60
1426	Modular base & cover plate for 12 module	each	110.40
1431	S.P. 5/6 A, one way switch, piano type ISI marked	each	13.30
1432	S.P. 5/6 A, two way switch, piano type ISI marked	each	17.37
1433	S.P. 15/16 A, one way switch, piano type ISI marked	each	40.00
1434	3 pin 5/6 A socket outlet, piano type ISI marked	each	20.26
1435	6 pin 15/16 & 5/6 A socket outlet, piano type ISI marked	each	50.00
1436	Bell push, piano type	each	15.91
1437	Telephone Socket outlet piano type	each	23.15
1438	T.V. Socket outlet piano type	each	17.37
1441	Brass pendant holder	each	28.00
1442	Brass batten/ angle holder	each	31.00
1443	Brass bracket holder 16 mm	each	38.00
1444	Call bell/ buzzer, single phase	each	35.38
1445	PIR Occupancy sensor	each	2587.50
1446	PIR Occupancy sensor With Day light dimming	each	3684.37
1447	Microwave occupancy Sensor	each	5090.62
1448	Astronomical time switch suitable for 1 output per phase and suitable for single phase supply	each	2047.50
1449	Astronomical time switch suitable for 2 output per phase and suitable for single phase supply	each	4426.50
1450	Astronomical time switch suitable for 3 output (1 output per phase) and suitable for three phase supply	each	5222.75
1451	UTP 4 Pair CAT 6 LAN Cable	meter	20.77
1452	PVC Batten/ Angle Holder	Each	20.00

Code No.	Description	Unit	Rate ₹
<b>RISING MAINS BUS TRUNKING AND OVER HEAD BUS-BAR</b>			
1501	200 A, TPN, rising mains in metal enclosure with aluminium busbar including fixing clamp	meter	4213.64
1502	300 A, TPN, rising mains in metal enclosure with aluminium busbar including fixing clamp	meter	4405.17
1503	400 A, TPN, rising mains in metal enclosure with aluminium busbar including fixing clamp	meter	5458.57
1504	600 A, TPN, rising mains in metal enclosure with aluminium busbar including fixing clamp	meter	6128.92
1505	800 A, TPN, rising mains in metal enclosure with aluminium busbar including fixing clamp	meter	7421.75
1511	16 A, TPN, 2 way, distribution tap off box with ISI marked HRC fuses for rising mains	each	7524.35
1512	16 A, TPN, 4 way, distribution tap off box with ISI marked HRC fuses for rising mains	each	14136.66
1513	16 A, TPN, 6 way, distribution tap off box with ISI marked HRC fuses for rising mains	each	20064.95
1514	16 A, TPN, 8 way, distribution tap off box with ISI marked HRC fuses for rising mains	each	27817.31
1515	32 A, TPN, 2 way, distribution tap off box with ISI marked HRC fuses for rising mains	each	7752.37
1516	32 A, TPN, 4 way, distribution tap off box with ISI marked HRC fuses for rising mains	each	15960.76
1517	32 A, TPN, 6 way, distribution tap off box with ISI marked HRC fuses for rising mains	each	20976.99
1518	32 A, TPN, 8 way, distribution tap off box with ISI marked HRC fuses for rising mains	each	29185.38
1519	63 A, TPN, 2 way, distribution tap off box with ISI marked HRC fuses for rising mains	each	8846.82
1520	63 A, TPN, 4 way, distribution tap off box with ISI marked HRC fuses for rising mains	each	15048.72
1521	63 A, TPN, 6 way, distribution tap off box with ISI marked HRC fuses for rising mains	each	16234.37
1522	63 A, TPN, 8 way, distribution tap off box with ISI marked HRC fuses for rising mains	each	28000.00
1526	200 A, TPN, adaptor box with cable end box, with TPN disconnecter FSU, ISI marked HRC fuses and brass compression gland for rising mains	each	12586.19

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
1527	300 A, TPN, adaptor box with cable end box, with TPN disconnecter FSU, ISI marked HRC fuses and brass compression gland for rising mains	each	13680.65
1528	400 A, TPN, adaptor box with cable end box, with TPN disconnecter FSU, ISI marked HRC fuses and brass compression gland for rising mains	each	15048.72
1529	600 A, TPN, adaptor box with cable end box, with TPN disconnecter FSU, ISI marked HRC fuses and brass compression gland for rising mains	each	16234.37
1530	800 A, TPN, adaptor box with cable end box, with TPN disconnecter FSU, ISI marked HRC fuses and brass compression gland for rising mains	each	18058.46
1531	800 A, TPN, bus trunking with aluminium busbars	meter	7068.34
1532	1000 A, TPN, bus trunking with aluminium busbars	meter	8390.80
1533	1250 A, TPN, bus trunking with aluminium busbars	meter	10762.11
1534	1400 A, TPN, bus trunking with aluminium busbars	meter	13498.24
1535	1600 A, TPN, bus trunking with aluminium busbars	meter	13498.24
1536	200 A, TPN, overhead busbars with aluminium busbars	meter	4013.00
1537	400 A, TPN, overhead busbars with aluminium busbars	meter	5198.64
1538	32 A, TPN, plug-in-box with TPN disconnecter FSU and ISI marked HRC fuses for overhead busbars	each	4534.16
1539	63 A, TPN, plug-in-box with TPN disconnecter FSU and ISI marked HRC fuses for overhead busbars	each	5081.38
1540	100 A, TPN, plug-in-box with TPN disconnecter FSU and ISI marked HRC fuses for overhead busbars	each	5863.14
1541	16 A, TPN, one way, tap off box with TPN disconnecter FSU and ISI marked HRC fuses for rising mains	each	5016.24
1542	32 A, TPN, one way, tap off box with TPN disconnecter FSU and ISI marked HRC fuses for rising mains	each	5289.85
1543	63 A, TPN, one way, tap off box with TPN disconnecter FSU and ISI marked HRC fuses for rising mains	each	5928.28
1544	100 A, TPN, one way, tap off box with TPN disconnecter FSU and ISI marked HRC fuses for rising mains	each	6840.32
1545	200 A, TPN, one way, tap off box with TPN disconnecter FSU and ISI marked HRC fuses for rising mains	each	10762.11
1546	315 A, TPN, one way, tap off box with TPN disconnecter FSU and ISI marked HRC fuses for rising mains	No.	11400.54
1547	400 A, TPN, one way, tap off box with TPN disconnecter FSU and ISI marked HRC fuses for rising mains	No.	11856.56

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
1551	200 A, TPN, compact type rising mains with aluminium busbar including all accessories	meter	4407.53
1552	315 A, TPN, compact type rising mains with aluminium busbar including all accessories	meter	4772.54
1553	400 A, TPN, compact type rising mains with aluminium busbar including all accessories	meter	5304.11
1554	500 A, TPN, compact type rising mains with aluminium busbar including all accessories	meter	6105.88
1555	630 A, TPN, compact type rising mains with aluminium busbar including all accessories	meter	7302.78
1556	800 A, TPN, compact type rising mains with aluminium busbar including all accessories	meter	10135.13
1557	1000 A, TPN, compact type rising mains with aluminium busbar including all accessories	meter	11770.31
1558	1250 A, TPN, compact type rising mains with aluminium busbar including all accessories	meter	14035.01
1559	200 A, TPN, compact type bus trunking with aluminium busbar including elbows and other all accessories	meter	4480.31
1560	315 A, TPN, compact type bus trunking with aluminium busbar including elbows and other all accessories	meter	4784.06
1561	400 A, TPN, compact type bus trunking with aluminium busbar including elbows and other all accessories	meter	5315.63
1562	500 A, TPN, compact type bus trunking with aluminium busbar including elbows and other all accessories	meter	6150.94
1563	630 A, TPN, compact type bus trunking with aluminium busbar including elbows and other all accessories	meter	7290.00
1564	800 A, TPN, compact type bus trunking with aluminium busbar including elbows and other all accessories	meter	9492.19
1565	1000 A, TPN, compact type bus trunking with aluminium busbar including elbows and other all accessories	meter	11010.94
1566	1250 A, TPN, compact type bus trunking with aluminium busbar including elbows and other all accessories	meter	12909.38
1567	200 A, TPN, End Feed Unit for compact rising mains including all accessories	each	3366.56
1568	315 A, TPN, End Feed Unit for compact rising mains including all accessories	each	3508.31
1569	400 A, TPN, End Feed Unit for compact rising mains including all accessories	each	4465.13
1570	500 A, TPN, End Feed Unit for compact rising mains including all accessories	each	4677.75

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
1571	630 A, TPN, End Feed Unit for compact rising mains including all accessories	each	5705.44
1572	800 A, TPN, End Feed Unit for compact rising mains including all accessories	each	6758.44
1573	1000 A, TPN, End Feed Unit for compact rising mains including all accessories	each	7583.63
1574	1250 A, TPN, End Feed Unit for compact rising mains including all accessories	each	8008.88
1575	125 A, TPN, TAP OFF Box for compact rising mains including all accessories	each	3898.13
1576	200 A, TPN, TAP OFF Box for compact rising mains including all accessories	each	4961.25
1577	315 A, TPN, TAP OFF Box for compact rising mains including all accessories	each	6378.75
1578	400 A, TPN, TAP OFF Box for compact rising mains including all accessories	each	6378.75
1579	500 A, TPN, TAP OFF Box for compact rising mains including all accessories	each	9213.75
1580	630 A, TPN, TAP OFF Box for compact rising mains including all accessories	each	9213.00
<b>Sandwich Rising Mains with Aluminium bus bar</b>			
1581	400 A, Isc = 25kA for 1 second	meter	7176.09
1582	500 A, Isc = 30kA for 1 second	meter	7688.67
1583	630 A, Isc = 50kA for 1 second	meter	8315.16
1584	800 A, Isc = 50kA for 1 second	meter	9397.27
1585	1000 A, Isc = 50kA for 1 second	meter	10542.40
1586	1250 A, Isc = 50kA for 1 second	meter	11789.30
1587	1600 A, Isc = 50kA for 1 second	meter	14352.19
1588	2000 A, Isc = 50kA for 1 second	meter	17085.94
1589	2500 A, Isc = 50kA for 1 second	meter	22063.64
1590	3200 A, Isc = 50kA for 1 second	meter	24375.94
1591	4000 A, Isc = 50kA for 1 second	meter	42522.34
<b>SWITCH DISCONNECTOR SFU AND MCCB</b>			
1601	32 A, TPN, switch disconnecter fuse unit (Panel mounted type) with ISI marked HRC fuses	each	1184.00
1602	63 A, TPN, switch disconnecter fuse unit (Panel mounted type) with ISI marked HRC fuses	each	1670.63

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
1603	100 A, TPN, switch disconnecter fuse unit (Panel mounted type) with ISI marked HRC fuses	each	3621.38
1604	125 A, TPN, switch disconnecter fuse unit (Panel mounted type) with ISI marked HRC fuses	each	4024.00
1605	160 A, TPN, switch disconnecter fuse unit (Panel mounted type) with ISI marked HRC fuses	each	4816.00
1606	200 A, TPN switch fuse unit with ISI marked HRC fuses	each	5520.00
1607	315 A, TPN switch fuse unit with ISI marked HRC fuses	each	8872.88
1608	400 A, TPN switch fuse unit with ISI marked HRC fuses	each	10854.00
1610	3 pole MCCB, 100A, 16kA	each	2656.00
1611	3 pole MCCB, 125A, 16kA	each	2979.90
1612	3 pole MCCB, 150A, 16kA	each	3395.70
1613	3 pole MCCB, 200A, 16kA	each	4617.90
1614	3 pole MCCB, 200A, 25kA	each	6709.50
1615	3 pole MCCB, 250A, 25kA	each	7934.85
1616	3 pole MCCB, 250A, 35kA	each	8605.80
1617	3 pole MCCB, 315A, 35kA	each	13321.35
1618	3 pole MCCB, 400A, 35kA	each	13321.35
1619	3 pole MCCB, 500A, 35kA	each	15425.55
1620	3 pole MCCB, 630A, 50kA	each	17208.45
1621	3 pole MCCB, 800A, 50kA	each	21035.70
1622	4 pole MCCB,100A,30kA	each	4500.00
1623	4 pole MCCB, 125A, 36kA	each	4560.00
1624	4 pole MCCB, 200A, 36kA	each	11176.00
1625	4 pole MCCB,250A, 36kA	each	12474.00
1626	4 pole MCCB,250A, 50kA	each	11642.40
1627	4 pole MCCB,400A, 50kA	each	16279.20
1628	4 pole MCCB,630A, 50kA	each	20257.65
<b>MCB'S,ISOLATORS,RCCB'S AND MCB DB'S</b>			
1705	25 A modular SPMCB, 'C' curve	Each	123.50
1706	6 A to 32 A ratings, SP MCB, "C" curve, 10 kA breaking capacity	each	117.00
1707	6 A to 32 A ratings, SPN MCB, "C" curve, 10 kA breaking capacity	each	351.00
1708	6 A to 32 A ratings, DP MCB, "C" curve, 10 kA breaking capacity	each	366.00
1709	6 A to 32 A ratings, TP MCB, "C" curve, 10 kA breaking capacity	each	570.00
1710	6 A to 32 A ratings, TPN MCB, "C" curve, 10 kA breaking capacity	each	735.00
1711	Single pole, blanking plate	each	5.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
1712	40 A, 2 pole isolator	each	159.00
1713	63 A, 2 pole isolator	each	186.00
1714	40 A, 4 pole isolator	each	510.00
1715	63 A, 4 pole isolator	each	519.00
1716	100 A, 4 pole isolator	each	675.00
1717	25 A rating, 2 pole RCCB, 30mA	each	1380.00
1718	40 A rating, 2 pole RCCB, 30mA	each	1440.00
1719	63 A rating, 2 pole RCCB, 30mA	each	1890.00
1720	25 A rating, 4 pole RCCB, 30mA	each	1740.00
1721	40 A rating, 4 pole RCCB, 30mA	each	1770.00
1722	63 A rating, 4 pole RCCB, 30mA	each	1917.00
1730	20 A SPN, industrial type socket outlet, with plug top and metal chained cover in sheet steel enclosure	each	495.00
1731	20 A, TPN, industrial type socket outlet, with plug top and metal chained cover in sheet steel enclosure	each	535.50
1732	30 A, TPN, industrial type socket outlet, with plug top and metal chained cover in sheet steel enclosure	each	1425.00
1738	6 way, SPN, double door, MCB DB	each	630.00
1739	8 way, SPN, double door, MCB DB	each	732.00
1740	12 way, SPN, double door, MCB DB	each	810.00
1741	14 way, SPN, double door, MCB DB	each	993.00
1742	Sheet steel DP MCB enclosure	each	92.77
1743	Sheet steel TP MCB enclosure	each	105.50
1754	4 way (4+12), TPN, MCB DB, double door, horizontal type	each	1679.40
1755	6 way (4+18), TPN, MCB DB, double door, horizontal type	each	2076.00
1756	8 way (4+24), TPN, MCB DB, double door, horizontal type	each	2517.00
1760	4 way (4+12), TPN, vertical type, MCB DB, double door	each	3662.51
1761	8 way (4+24), TPN, vertical type, MCB DB, double door	each	4663.02
1762	12 way (4+36), TPN, vertical type, MCB DB, double door	each	5975.82
<b>CABLE END BOX</b>			
1801	Cable End Boxes for 6 Way SPN DD DB	each	215.40
1802	Cable End Boxes for 8 Way SPN DD DB	each	262.80
1803	Cable End Boxes for 10 Way SPN DD DB	each	252.00
1804	Cable End Boxes for 14 Way SPN DD DB	each	307.20

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
1805	Cable End Boxes for 4 Way TPN DD DB	each	390.60
1806	Cable End Boxes for 6 Way TPN DD DB	each	411.60
1807	Cable End Boxes for 8 Way TPN DD DB	each	513.60
1808	Cable End Boxes for Vertical TPN DD DB	each	260.00
<b>BRASS COMPRESSION GLANDS</b>			
2101	Brass compression gland (19 mm) for 2 X 6 sq. mm 1.1 kV grade cable	set	51.19
2102	Brass compression gland (19 mm) for 2 X 10 sq. mm 1.1 kV grade cable	set	51.19
2103	Brass compression gland for (22 mm) 2 X 16 sq. mm 1.1 kV grade cable	set	60.43
2104	Brass compression gland for (22 mm) 2 X 25 sq. mm 1.1 kV grade cable	set	60.43
2105	Brass compression gland for (25 mm) 2 X 35 sq. mm 1.1 kV grade cable	set	86.21
2106	Brass compression gland for (28 mm) 2 X 50 sq. mm 1.1 kV grade cable	set	128.68
2107	Brass compression gland for (22 mm) 3 X 10 sq. mm 1.1 kV grade cable	set	60.43
2108	Brass compression gland for (25 mm) 3 X 16 sq. mm 1.1 kV grade cable	set	86.21
2109	Brass compression gland for (25 mm) 3 X 25 sq. mm 1.1 kV grade cable	set	86.21
2110	Brass compression gland for (28 mm) 3 X 35 sq. mm 1.1 kV grade cable	set	128.68
2111	Brass compression gland for (32 mm) 3 X 50 sq. mm 1.1 kV grade cable	set	130.62
2112	Brass compression gland for (35 mm) 3 X 70 sq. mm 1.1 kV grade cable	set	186.27
2113	Brass compression gland for (38 mm) 3 X 95 sq. mm 1.1 kV grade cable	set	210.79
2114	Brass compression gland for (45 mm) 3 X 120 sq. mm 1.1 kV grade cable	set	248.90
2115	Brass compression gland for (50 mm) 3 X 150 sq. mm 1.1 kV grade cable	set	314.74
2116	Brass compression gland for (57 mm) 3 X 185 sq. mm 1.1 kV grade cable	set	450.45

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2117	Brass compression gland for (62 mm) 3 X 225 sq. mm 1.1 kV grade cable	set	556.71
2118	Brass compression gland for (62 mm) 3 X 240 sq. mm 1.1 kV grade cable	set	556.71
2119	Brass compression gland for (70 mm) 3 X 300 sq. mm 1.1 kV grade cable	set	604.38
2120	Brass compression gland for (28 mm) 3½ X 25 sq. mm 1.1 kV grade cable	set	128.68
2121	Brass compression gland for (32 mm) 3½ X 35 sq. mm 1.1 kV grade cable	set	130.62
2122	Brass compression gland for (35 mm) 3½ X 50 sq. mm 1.1 kV grade cable	set	186.27
2123	Brass compression gland for (38 mm) 3½ X 70 sq. mm 1.1 kV grade cable	set	210.79
2124	Brass compression gland for (45 mm) 3½ X 95 sq. mm 1.1 kV grade cable	set	248.90
2125	Brass compression gland for (45 mm) 3½ X 120 sq. mm 1.1 kV grade cable	set	248.90
2126	Brass compression gland for (50 mm) 3½ X 150 sq. mm 1.1 kV grade cable	set	314.74
2127	Brass compression gland for (57 mm) 3½ X 185 sq. mm 1.1 kV grade cable	set	450.45
2128	Brass compression gland for (62 mm) 3½ X 225 sq. mm 1.1 kV grade cable	set	556.71
2129	Brass compression gland for (62 mm) 3½ X 240 sq. mm 1.1 kV grade cable	set	556.71
2130	Brass compression gland for (70 mm) 3½ X 300 sq. mm 1.1 kV grade cable	set	604.38
2131	Brass compression gland for (82 mm) 3½ X 400 sq. mm 1.1 kV grade cable	set	760.31
2132	Brass compression gland for (25 mm) 4 X 10 sq. mm 1.1 kV grade cable	set	86.21
2133	Brass compression gland for (28 mm) 4 X 16 sq. mm 1.1 kV grade cable	set	128.68
2134	Brass compression gland for (28 mm) 4 X 25 sq. mm 1.1 kV grade cable	set	128.68
2135	Brass compression gland for (32 mm) 4 X 35 sq. mm 1.1 kV grade cable	set	130.62
2136	Brass compression gland for (35 mm) 4 X 50 sq. mm 1.1 kV grade cable	set	186.27

Code No.	Description	Unit	Rate ₹
<b>ALUMINIUM LUGS</b>			
2201	Aluminium lugs for 6 sq. mm cable	each	1.59
2202	Aluminium lugs for 10 sq. mm cable	each	2.06
2203	Aluminium lugs for 16 sq. mm cable	each	2.47
2204	Aluminium lugs for 25 sq. mm cable	each	3.10
2205	Aluminium lugs for 35 sq. mm cable	each	4.10
2206	Aluminium lugs for 50 sq. mm cable	each	6.21
2207	Aluminium lugs for 70 sq. mm cable	each	9.30
2208	Aluminium lugs for 95 sq. mm cable	each	10.27
2209	Aluminium lugs for 120 sq. mm cable	each	14.38
2210	Aluminium lugs for 150 sq. mm cable	each	18.61
2211	Aluminium lugs for 185 sq. mm cable	each	23.27
2212	Aluminium lugs for 225 sq. mm cable	each	32.55
2213	Aluminium lugs for 240 sq. mm cable	each	39.75
2214	Aluminium lugs for 300 sq. mm cable	each	55.83
2215	Aluminium lugs for 400 sq. mm cable	each	80.68
<b>MV CABLE JOINTING KITS</b>			
2300	Outdoor cable jointing kit with cast resin compound with lugs for 2 X 16 sq. mm 1.1 kV grade cable	set	329.18
2301	Outdoor cable jointing kit with cast resin compound with lugs for 2 X 25 sq. mm 1.1 kV grade cable	set	369.08
2302	Outdoor cable jointing kit with cast resin compound with lugs for 2 X 35 sq. mm 1.1 kV grade cable	set	369.08
2303	Outdoor cable jointing kit with cast resin compound with lugs for 2 X 50 sq. mm 1.1 kV grade cable	set	369.08
2304	Outdoor cable jointing kit with cast resin compound with lugs for 3 X 16 sq. mm 1.1 kV grade cable	set	369.08
2305	Outdoor cable jointing kit with cast resin compound with lugs for 3 X 25 sq. mm 1.1 kV grade cable	set	369.08
2306	Outdoor cable jointing kit with cast resin compound with lugs for 3 X 35 sq. mm 1.1 kV grade cable	set	369.08
2307	Outdoor cable jointing kit with cast resin compound with lugs for 3 X 50 sq. mm 1.1 kV grade cable	set	405.83
2308	Outdoor cable jointing kit with cast resin compound with lugs for 3 X 70 sq. mm 1.1 kV grade cable	set	405.83

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2309	Outdoor cable jointing kit with cast resin compound with lugs for 3 X 95 sq. mm 1.1 kV grade cable	set	462.00
2310	Outdoor cable jointing kit with cast resin compound with lugs for 3 X 120 sq. mm 1.1 kV grade cable	set	462.00
2311	Outdoor cable jointing kit with cast resin compound with lugs for 3 X 150 sq. mm 1.1 kV grade cable	set	462.00
2312	Outdoor cable jointing kit with cast resin compound with lugs for 3 X 185 sq. mm 1.1 kV grade cable	set	697.73
2313	Outdoor cable jointing kit with cast resin compound with lugs for 3 X 225 sq. mm 1.1 kV grade cable	set	697.73
2314	Outdoor cable jointing kit with cast resin compound with lugs for 3 X 240 sq. mm 1.1 kV grade cable	set	844.20
2315	Outdoor cable jointing kit with cast resin compound with lugs for 3 X 300 sq. mm 1.1 kV grade cable	set	844.20
2316	Outdoor cable jointing kit with cast resin compound with lugs for 3½ X 25 sq. mm 1.1 kV grade cable	set	369.08
2217	Outdoor cable jointing kit with cast resin compound with lugs for 3½ X 35 sq. mm 1.1 kV grade cable	set	405.83
2318	Outdoor cable jointing kit with cast resin compound with lugs for 3½ X 50 sq. mm 1.1 kV grade cable	set	405.83
2319	Outdoor cable jointing kit with cast resin compound with lugs for 3½ X 70 sq. mm 1.1 kV grade cable	set	462.00
2320	Outdoor cable jointing kit with cast resin compound with lugs for 3½ X 95 sq. mm 1.1 kV grade cable	set	462.00
2321	Outdoor cable jointing kit with cast resin compound with lugs for 3½ X 120 sq. mm 1.1 kV grade cable	set	462.00
2322	Outdoor cable jointing kit with cast resin compound with lugs for 3½ X 150 sq. mm 1.1 kV grade cable	set	697.73
2323	Outdoor cable jointing kit with cast resin compound with lugs for 3½ X 185 sq. mm 1.1 kV grade cable	set	697.73
2324	Outdoor cable jointing kit with cast resin compound with lugs for 3½ X 225 sq. mm 1.1 kV grade cable	set	844.20
2325	Outdoor cable jointing kit with cast resin compound with lugs for 3½ X 240 sq. mm 1.1 kV grade cable	set	844.20
2326	Outdoor cable jointing kit with cast resin compound with lugs for 3½ X 300 sq. mm 1.1 kV grade cable	set	844.20
2327	Outdoor cable jointing kit with cast resin compound with lugs for 3½ X 400 sq. mm 1.1 kV grade cable	set	1016.40
2328	Outdoor cable jointing kit with cast resin compound with lugs for 4 X 16 sq. mm 1.1 kV grade cable	set	369.08

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2329	Outdoor cable jointing kit with cast resin compound with lugs for 4 X 25 sq. mm 1.1 kV grade cable	set	369.08
2330	Outdoor cable jointing kit with cast resin compound with lugs for 4 X 35 sq. mm 1.1 kV grade cable	set	405.83
2331	Outdoor cable jointing kit with cast resin compound with lugs for 4 X 50 sq. mm 1.1 kV grade cable	set	405.83
2332	Straight through cable jointing kit with cast resin compound with ferrules for 2 X 16 sq. mm 1.1 kV grade cable	set	870.45
2333	Straight through cable jointing kit with cast resin compound with ferrules for 2 X 25 sq. mm 1.1 kV grade cable	set	870.45
2334	Straight through cable jointing kit with cast resin compound with ferrules for 2 X 35 sq. mm 1.1 kV grade cable	set	870.45
2335	Straight through cable jointing kit with cast resin compound with ferrules for 2 X 50 sq. mm 1.1 kV grade cable	set	1016.40
2336	Straight through cable jointing kit with cast resin compound with ferrules for 3 X 16 sq. mm 1.1 kV grade cable	set	1016.40
2337	Straight through cable jointing kit with cast resin compound with ferrules for 3 X 25 sq. mm 1.1 kV grade cable	set	870.45
2338	Straight through cable jointing kit with cast resin compound with ferrules for 3 X 35 sq. mm 1.1 kV grade cable	set	870.45
2339	Straight through cable jointing kit with cast resin compound with ferrules for 3 X 50 sq. mm 1.1 kV grade cable	set	1016.40
2340	Straight through cable jointing kit with cast resin compound with ferrules for 3 X 70 sq. mm 1.1 kV grade cable	set	1215.90
2341	Straight through cable jointing kit with cast resin compound with ferrules for 3 X 95 sq. mm 1.1 kV grade cable	set	1248.98
2342	Straight through cable jointing kit with cast resin compound with ferrules for 3 X 120 sq. mm 1.1 kV grade cable	set	1428.53
2343	Straight through cable jointing kit with cast resin compound with ferrules for 3 X 150 sq. mm 1.1 kV grade cable	set	1428.53
2344	Straight through cable jointing kit with cast resin compound with ferrules for 3 X 185 sq. mm 1.1 kV grade cable	set	1740.38
2345	Straight through cable jointing kit with cast resin compound with ferrules for 3 X 225 sq. mm 1.1 kV grade cable	set	1999.73
2346	Straight through cable jointing kit with cast resin compound with ferrules for 3 X 240 sq. mm 1.1 kV grade cable	set	1999.73
2347	Straight through cable jointing kit with cast resin compound with ferrules for 3 X 300 sq. mm 1.1 kV grade cable	set	2517.38
2348	Straight through cable jointing kit with cast resin compound with ferrules for 3½ X 25 sq. mm 1.1 kV grade cable	set	1016.40

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2349	Straight through cable jointing kit with cast resin compound with ferrules for 3½ X 35 sq. mm 1.1 kV grade cable	set	1016.40
2350	Straight through cable jointing kit with cast resin compound with ferrules for 3½ X 50 sq. mm 1.1 kV grade cable	set	1215.90
2351	Straight through cable jointing kit with cast resin compound with ferrules for 3½ X 70 sq. mm 1.1 kV grade cable	set	1227.98
2352	Straight through cable jointing kit with cast resin compound with ferrules for 3½ X 95 sq. mm 1.1 kV grade cable	set	1428.53
2353	Straight through cable jointing kit with cast resin compound with ferrules for 3½ X 120 sq. mm 1.1 kV grade cable	set	1740.38
2354	Straight through cable jointing kit with cast resin compound with ferrules for 3½ X 150 sq. mm 1.1 kV grade cable	set	1740.38
2355	Straight through cable jointing kit with cast resin compound with ferrules for 3½ X 185 sq. mm 1.1 kV grade cable	set	1999.73
2356	Straight through cable jointing kit with cast resin compound with ferrules for 3½ X 225 sq. mm 1.1 kV grade cable	set	2039.63
2357	Straight through cable jointing kit with cast resin compound with ferrules for 3½ X 240 sq. mm 1.1 kV grade cable	set	2517.38
2358	Straight through cable jointing kit with cast resin compound with ferrules for 3½ X 300 sq. mm 1.1 kV grade cable	set	3015.60
2359	Straight through cable jointing kit with cast resin compound with ferrules for 3½ X 400 sq. mm 1.1 kV grade cable	set	1619.10
2360	Straight through cable jointing kit with cast resin compound with ferrules for 4 X 16 sq. mm 1.1 kV grade cable	set	870.45
2361	Straight through cable jointing kit with cast resin compound with ferrules for 4 X 25 sq. mm 1.1 kV grade cable	set	1016.40
2362	Straight through cable jointing kit with cast resin compound with ferrules for 4 X 35 sq. mm 1.1 kV grade cable	set	1016.40
2363	Straight through cable jointing kit with cast resin compound with ferrules for 4 X 50 sq. mm 1.1 kV grade cable	set	1215.90
2364	Straight through cable jointing kit with heat shrinkable kit with ferrules for 2 X 16 sq. mm 1.1 kV grade cable	set	870.45
2365	Straight through cable jointing kit with heat shrinkable kit with ferrules for 2 X 25 sq. mm 1.1 kV grade cable	set	870.45
2366	Straight through cable jointing kit with heat shrinkable kit with ferrules for 2 X 35 sq. mm 1.1 kV grade cable	set	870.45
2367	Straight through cable jointing kit with heat shrinkable kit with ferrules for 2 X 50 sq. mm 1.1 kV grade cable	set	1016.40

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2368	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3 X 16 sq. mm 1.1 kV grade cable	set	870.45
2369	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3 X 25 sq. mm 1.1 kV grade cable	set	870.45
2370	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3 X 35 sq. mm 1.1 kV grade cable	set	1016.40
2371	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3 X 50 sq. mm 1.1 kV grade cable	set	1016.40
2372	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3 X 70 sq. mm 1.1 kV grade cable	set	1248.98
2373	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3 X 95 sq. mm 1.1 kV grade cable	set	1428.53
2374	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3 X 120 sq. mm 1.1 kV grade cable	set	1428.53
2375	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3 X 150 sq. mm 1.1 kV grade cable	set	1428.53
2376	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3 X 185 sq. mm 1.1 kV grade cable	set	1740.38
2377	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3 X 225 sq. mm 1.1 kV grade cable	set	1999.73
2378	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3 X 240 sq. mm 1.1 kV grade cable	set	2039.63
2379	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3 X 300 sq. mm 1.1 kV grade cable	set	2517.38
2380	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3½ X 25 sq. mm 1.1 kV grade cable	set	1016.40
2381	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3½ X 35 sq. mm 1.1 kV grade cable	set	1016.40
2382	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3½ X 50 sq. mm 1.1 kV grade cable	set	1215.90
2383	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3½ X 70 sq. mm 1.1 kV grade cable	set	1248.98
2384	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3½ X 95 sq. mm 1.1 kV grade cable	set	1428.53
2385	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3½ X 120 sq. mm 1.1 kV grade cable	set	1740.38
2386	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3½ X 150 sq. mm 1.1 kV grade cable	set	1740.38

Code No.	Description	Unit	Rate ₹
2387	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3½ X 185 sq. mm 1.1 kV grade cable	set	1999.73
2388	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3½ X 225 sq. mm 1.1 kV grade cable	set	1999.73
2389	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3½ X 240 sq. mm 1.1 kV grade cable	set	2039.63
2390	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3½ X 300 sq. mm 1.1 kV grade cable	set	2517.38
2391	Straight through cable jointing kit with heat shrinkable kit with ferrules for 3½ X 400 sq. mm 1.1 kV grade cable	set	3719.10
2392	Straight through cable jointing kit with heat shrinkable kit with ferrules for 4 X 16 sq. mm 1.1 kV grade cable	set	870.45
2393	Straight through cable jointing kit with heat shrinkable kit with ferrules for 4 X 25 sq. mm 1.1 kV grade cable	set	1016.40
2394	Straight through cable jointing kit with heat shrinkable kit with ferrules for 4 X 35 sq. mm 1.1 kV grade cable	set	1016.40
2395	Straight through cable jointing kit with heat shrinkable kit with ferrules for 4 X 50 sq. mm 1.1 kV grade cable	set	1215.90
<b>11 kV &amp; 33 kV CABLE JOINTING KITS</b>			
2413	Indoor cable jointing kit with cast resin compound with lugs for 11 kV grade XLPE cable for 3 core 70 sq. mm	set	524.48
2414	Indoor cable jointing kit with cast resin compound with lugs for 11 kV grade XLPE cable for 3 core 120 sq. mm	set	524.48
2415	Indoor cable jointing kit with cast resin compound with lugs for 11 kV grade XLPE cable for 3 core 240 sq. mm	set	765.45
2416	Indoor cable jointing kit with cast resin compound with lugs for 11 kV grade XLPE cable for 3 core 300 sq. mm	set	793.80
2417	Outdoor cable jointing kit with cast resin compound with lugs for 11 kV grade XLPE cable for 3 core 70 sq. mm	set	1795.50
2418	Outdoor cable jointing kit with cast resin compound with lugs for 11 kV grade XLPE cable for 3 core 120 sq. mm	set	1819.13
2419	Outdoor cable jointing kit with cast resin compound with lugs for 11 kV grade XLPE cable for 3 core 240 sq. mm	set	2060.10
2420	Outdoor cable jointing kit with cast resin compound with lugs for 11 kV grade XLPE cable for 3 core 300 sq. mm	set	2060.10
2421	Straight through cable jointing kit with cast resin compound with ferrules for 11 kV grade XLPE cable for 3 core 70 sq. mm	set	1408.05
2422	Straight through cable jointing kit with cast resin compound with ferrules for 11 kV grade XLPE cable for 3 core 120 sq. mm	set	1696.28

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2423	Straight through cable jointing kit with cast resin compound with ferrules for 11 kV grade XLPE cable for 3 core 240 sq. mm	set	2683.80
2424	Straight through cable jointing kit with cast resin compound with ferrules for 11 kV grade XLPE cable for 3 core 300 sq. mm	set	3179.93
2437	Indoor heat shrinkable cable jointing kit with lugs for 11 kV grade XLPE cable for 3 core 70 sq. mm	set	3614.63
2438	Indoor heat shrinkable cable jointing kit with lugs for 11 kV grade XLPE cable for 3 core 120 sq. mm	set	3614.63
2439	Indoor heat shrinkable cable jointing kit with lugs for 11 kV grade XLPE cable for 3 core 240 sq. mm	set	4752.56
2440	Indoor heat shrinkable cable jointing kit with lugs for 11 kV grade XLPE cable for 3 core 300 sq. mm	set	4752.56
2441	Outdoor heat shrinkable cable jointing kit with lugs for 11 kV grade XLPE cable for 3 core 70 sq. mm	set	6470.63
2442	Outdoor heat shrinkable cable jointing kit with lugs for 11 kV grade XLPE cable for 3 core 120 sq. mm	set	6470.63
2443	Outdoor heat shrinkable cable jointing kit with lugs for 11 kV grade XLPE cable for 3 core 240 sq. mm	set	7340.81
2444	Outdoor heat shrinkable cable jointing kit with lugs for 11 kV grade XLPE cable for 3 core 300 sq. mm	set	7340.81
2445	Straight through heat shrinkable cable jointing kit with ferrules for 11 kV grade XLPE cable for 3 core 70 sq. mm	set	7318.50
2446	Straight through heat shrinkable cable jointing kit with ferrules for 11 kV grade XLPE cable for 3 core 120 sq. mm	set	7925.40
2447	Straight through heat shrinkable cable jointing kit with ferrules for 11 kV grade XLPE cable for 3 core 240 sq. mm	set	8353.80
2448	Straight through heat shrinkable cable jointing kit with ferrules for 11 kV grade XLPE cable for 3 core 300 sq. mm	set	8353.80
2528	Indoor heat shrinkable cable jointing kit with lugs for 33 kV grade XLPE cable for 3 core 70 sq. mm	set	8523.38
2529	Indoor heat shrinkable cable jointing kit with lugs for 33 kV grade XLPE cable for 3 core 120 sq. mm	set	11651.59
2530	Indoor heat shrinkable cable jointing kit with lugs for 33 kV grade XLPE cable for 3 core 240 sq. mm	set	12553.01
2531	Outdoor heat shrinkable cable jointing kit with lugs for 33 kV grade XLPE cable for 3 core 70 sq. mm	set	12923.40
2532	Outdoor heat shrinkable cable jointing kit with lugs for 33 kV grade XLPE cable for 3 core 120 sq. mm	set	15520.58

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2533	Outdoor heat shrinkable cable jointing kit with lugs for 33 kV grade XLPE cable for 3 core 240 sq. mm	set	17466.23
2534	Straight through heat shrinkable cable jointing kit with ferrules for 33 kV grade XLPE cable for 3 core 70 sq. mm	set	20527.50
2535	Straight through heat shrinkable cable jointing kit with ferrules for 33 kV grade XLPE cable for 3 core 120 sq. mm	set	25967.29
2536	Straight through heat shrinkable cable jointing kit with ferrules for 33 kV grade XLPE cable for 3 core 240 sq. mm	set	36369.38
<b>OVER HEAD LINE ACCESSORIES</b>			
2601	Stay rod (1.8 M long, 19/20 mm dia.) with anchor plate 45 cm X 45 cm X 7.5 mm complete with thimble etc.	set	540.00
2602	Stay wire (7/4.00 mm dia.)	kg	46.80
2603	Stay wire (7/3.15 mm dia.)	kg	46.80
2604	Turn buckle (20 mm X 60 cm)	each	198.00
2605	Strain insulator	each	27.00
2606	Bow tightner	each	19.80
2607	Shackle insulator (75 mm X 90 mm) with G.I. bolts and nuts	set	36.45
2608	Shackle insulator (100 mm X 110 mm) with G.I. bolts and nuts	set	63.00
2609	Pin insulator (100 mm X 65 mm) with G.I. spindle and nuts	set	34.20
2610	Pin insulator (100 mm X 80 mm) with G.I. spindle and nuts	set	36.00
2611	MV horn gap lightning arrestor with pin insulator (100 mm X 65 mm), spindle and brass metal parts etc.	set	99.00
2615	15 A aerial fuse complete with porcelain tube as required	each	16.20
2616	30 A aerial fuse complete with porcelain tube as required	each	25.20
2618	Stay clamp	set	63.00
2619	Brace (50 mm X 50 mm X 6 mm angle iron)	meter	211.50
2620	Angle iron bracket (50 mm X 50 mm X 6 mm) 65 cm long	each	139.50
2623	Eye hook	each	29.70
2624	Guy clamp	each	67.50
2635	D' iron clamp (with coach screws)	each	76.50
2643	Strain insulator 11 kV	each	23.00
2644	Strain insulator 33 kV	each	34.00
2645	11 kV pin insulator with pin washers and nuts	set	113.00
2646	11 kV disc insulator	set	506.00
2647	Galvanised insulator hardware fitting ball and socket type with strain clamps, bolts, nuts and washers	set	148.50

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2648	33 kV pin insulator with pin washers and nuts	set	506.00
2649	Galvanised insulator hardware fitting ball and socket type with strain clamps, bolts, nuts and washers for 3 Nos. 11 kV disk insulator	set	433.80
2650	3 piece lightning arrestor set for 11 kV O.H. lines complete with G.I. clamps bolts and nuts with washers	set	1800.00
2651	Single piece lightning arrestor set for 33 kV O.H. lines complete with G.I. clamps bolts and nuts with washers	set	15750.00
2665	G.I. strap for shackle insulator	set	54.00
<b>CABLE TRAYS PRE PAINTED WITH POWDER COATING</b>			
2701	MS perforated cable tray 100 X 50 X 1.6 mm	meter	140.63
2702	MS perforated cable tray 150 X 50 X 1.6 mm	meter	174.38
2703	MS perforated cable tray 225 X 50 X 1.6 mm	meter	227.25
2704	MS perforated cable tray 300 X 50 X 1.6 mm	meter	279.00
2705	MS perforated cable tray 375 X 50 X 2 mm	meter	401.63
2706	MS perforated cable tray 450 X 50 X 2 mm	meter	464.63
2707	MS perforated cable tray 600 X 50 X 2 mm	meter	590.63
2708	MS perforated cable tray 300 X 62.5 X 2 mm	meter	360.00
2709	MS perforated cable tray 375 X 62.5 X 2 mm	meter	421.88
2710	MS perforated cable tray 450 X 62.5 X 2 mm	meter	486.00
2711	MS perforated cable tray 600 X 62.5 X 2 mm	meter	613.13
2712	MS perforated cable tray 750 X 62.5 X 2 mm	meter	759.38
2713	MS perforated cable tray 900 X 62.5 X 2 mm	meter	888.75
2714	MS perforated cable tray 600 X 75 X 2 mm	meter	632.25
2715	MS perforated cable tray 750 X 75 X 2 mm	meter	781.88
2716	MS perforated cable tray 900 X 75 X 2 mm	meter	911.25
2717	MS perforated cable tray Connector 100 X 50 X 1.6 mm	each	26.85
2718	MS perforated cable tray Connector 150 X 50 X 1.6 mm	each	34.65
2719	MS perforated cable tray Connector 225 X 50 X 1.6 mm	each	35.52
2720	MS perforated cable tray Connector 300 X 50 X 1.6 mm	each	35.52
2721	MS perforated cable tray Connector 375 X 50 X 2 mm	each	38.98
2722	MS perforated cable tray Connector 450 X 50 X 2 mm	each	45.91
2723	MS perforated cable tray Connector 600 X 50 X 2 mm	each	50.25
2724	MS perforated cable tray Connector 300 X 62.5 X 2 mm	each	38.98

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2725	MS perforated cable tray Connector 375 X 62.5 X 2 mm	each	45.05
2726	MS perforated cable tray Connector 450 X 62.5 X 2 mm	each	49.38
2727	MS perforated cable tray Connector 600 X 62.5 X 2 mm	each	54.14
2728	MS perforated cable tray Connector 750 X 62.5 X 2 mm	each	60.20
2729	MS perforated cable tray Connector 900 X 62.5 X 2 mm	each	63.24
2733	MS perforated cable tray Bend 100 X 50 X 1.6 mm	each	354.38
2734	MS perforated cable tray Bend 150 X 50 X 1.6 mm	each	438.75
2735	MS perforated cable tray Bend 225 X 50 X 1.6 mm	each	568.13
2736	MS perforated cable tray Bend 300 X 50 X 1.6 mm	each	697.50
2737	MS perforated cable tray Bend 375 X 50 X 2 mm	each	1006.88
2738	MS perforated cable tray Bend 450 X 50 X 2 mm	each	1164.38
2739	MS perforated cable tray Bend 600 X 50 X 2 mm	each	1479.38
2740	MS perforated cable tray Bend 300 X 62.5 X 2 mm	each	900.00
2741	MS perforated cable tray Bend 375 X 62.5 X 2 mm	each	1057.50
2742	MS perforated cable tray Bend 450 X 62.5 X 2 mm	each	1215.00
2743	MS perforated cable tray Bend 600 X 62.5 X 2 mm	each	1535.63
2744	MS perforated cable tray Bend 750 X 62.5 X 2 mm	each	1901.25
2745	MS perforated cable tray Bend 900 X 62.5 X 2 mm	each	2221.88
2746	MS perforated cable tray Bend 600 X 75 X 2 mm	each	1580.63
2747	MS perforated cable tray Bend 750 X 75 X 2 mm	each	1957.50
2748	MS perforated cable tray Bend 900 X 75 X 2 mm	each	2278.13
2749	MS perforated cable tray Reducer 100 X 50 X 1.6 mm	each	402.81
2750	MS perforated cable tray Reducer 150 X 50 X 1.6 mm	each	490.30
2751	MS perforated cable tray Reducer 225 X 50 X 1.6 mm	each	648.82
2752	MS perforated cable tray Reducer 300 X 50 X 1.6 mm	each	805.62
2753	MS perforated cable tray Reducer 375 X 50 X 2 mm	each	1024.77
2754	MS perforated cable tray Reducer 450 X 50 X 2 mm	each	1198.02
2755	MS perforated cable tray Reducer 600 X 50 X 2 mm	each	1491.69
2756	MS perforated cable tray Reducer 300 X 62.5 X 2 mm	each	918.23
2757	MS perforated cable tray Reducer 375 X 62.5 X 2 mm	each	1080.21
2758	MS perforated cable tray Reducer 450 X 62.5 X 2 mm	each	1243.94
2759	MS perforated cable tray Reducer 600 X 62.5 X 2 mm	each	1573.11
2760	MS perforated cable tray Reducer 750 X 62.5 X 2 mm	each	1868.82

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2761	MS perforated cable tray Reducer 900 X 62.5 X 2 mm	each	2230.59
2762	MS perforated cable tray Reducer 600 X 75 X 2 mm	each	1626.82
2763	MS perforated cable tray Reducer 750 X 75 X 2 mm	each	1915.28
2764	MS perforated cable tray Reducer 900 X 75 X 2 mm	each	2284.30
2765	MS perforated cable tray Tee 100 X 50 X 1.6 mm	each	421.88
2766	MS perforated cable tray Tee 150 X 50 X 1.6 mm	each	523.13
2767	MS perforated cable tray Tee 225 X 50 X 1.6 mm	each	680.63
2768	MS perforated cable tray Tee 300 X 50 X 1.6 mm	each	838.13
2769	MS perforated cable tray Tee 375 X 50 X 2 mm	each	1203.75
2770	MS perforated cable tray Tee 450 X 50 X 2 mm	each	1395.00
2771	MS perforated cable tray Tee 600 X 50 X 2 mm	each	1771.88
2772	MS perforated cable tray Tee 300 X 62.5 X 2 mm	each	1080.00
2773	MS perforated cable tray Tee 375 X 62.5 X 2 mm	each	1265.63
2774	MS perforated cable tray Tee 450 X 62.5 X 2 mm	each	1456.88
2775	MS perforated cable tray Tee 600 X 62.5 X 2 mm	each	1839.38
2776	MS perforated cable tray Tee 750 X 62.5 X 2 mm	each	2278.13
2777	MS perforated cable tray Tee 900 X 62.5 X 2 mm	each	2666.25
2778	MS perforated cable tray Tee 600 X 75 X 2 mm	each	1901.25
2779	MS perforated cable tray Tee 750 X 75 X 2 mm	each	2317.50
2780	MS perforated cable tray Tee 900 X 75 X 2 mm	each	2729.25
2781	MS perforated cable tray Cross member 100 X 50 X 1.6 mm	each	421.88
2782	MS perforated cable tray Cross member 150 X 50 X 1.6 mm	each	523.13
2783	MS perforated cable tray Cross member 225 X 50 X 1.6 mm	each	680.63
2784	MS perforated cable tray Cross member 300 X 50 X 1.6 mm	each	838.13
2785	MS perforated cable tray Cross member 375 X 50 X 2 mm	each	1203.75
2786	MS perforated cable tray Cross member 450 X 50 X 2 mm	each	1395.00
2787	MS perforated cable tray Cross member 600 X 50 X 2 mm	each	1771.88
2788	MS perforated cable tray Cross member 300 X 62.5 X 2 mm	each	1080.00
2789	MS perforated cable tray Cross member 375 X 62.5 X 2 mm	each	1265.63
2790	MS perforated cable tray Cross member 450 X 62.5 X 2 mm	each	1456.88
2791	MS perforated cable tray Cross member 600 X 62.5 X 2 mm	each	1839.38
2792	MS perforated cable tray Cross member 750 X 62.5 X 2 mm	each	2278.13
2793	MS perforated cable tray Cross member 900 X 62.5 X 2 mm	each	2666.25

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2794	MS perforated cable tray Cross member 600 X 75 X 2 mm	each	1901.25
2795	MS perforated cable tray Cross member 750 X 75 X 2 mm	each	2317.50
2796	MS perforated cable tray Cross member 900 X 75 X 2 mm	each	2729.25
<b>ANGLE/FLAT IRON AND STEEL SHEET</b>			
2801	MS Suspender 6 mm dia 0.75 m long	each	21.00
2802	MS Suspender 8 mm dia 0.75 m long	each	25.52
2803	MS Suspender 10 mm dia 0.75 m long	each	35.91
2804	25 mm X 25 mm X 3 mm angle iron	kg	37.80
2805	35 mm X 35 mm X 4 mm angle iron	kg	37.80
2806	35 mm X 35 mm X 5 mm angle iron	kg	37.80
2807	50 mm X 50 mm X 6 mm angle iron	kg	37.80
2808	65 mm X 65 mm X 6 mm angle iron	kg	37.80
2809	20/25 mm X 3 mm flat iron	kg	37.80
2810	25 mm X 4 mm flat iron	kg	37.80
2811	25 mm X 6 mm flat iron	kg	37.80
2812	40 mm X 3 mm flat iron	kg	37.80
2813	50 mm X 6 mm flat iron	kg	37.80
2814	50 mm X 8 mm flat iron	kg	37.80
2815	100 mm X 50 mm X 6 mm channel iron (9.56 kg/ meter)	kg	37.80
2816	75 mm X 40 mm X 6 mm channel iron (7.14 kg/ meter)	kg	37.80
2817	1.6 mm thick M.S. sheet	kg	42.53
2818	3 mm thick M.S. sheet	kg	42.53
<b>GI AND RCC PIPE</b>			
2819	20 mm dia G.I. Pipe (light class)	meter	88.13
2820	32 mm dia G.I. Pipe (light class)	meter	152.25
2821	50 mm dia G.I. Pipe (light class)	meter	239.00
2822	80 mm dia G.I. Pipe (light class)	meter	380.36
2823	100 mm dia G.I. Pipe (light class)	meter	531.26
2824	15 mm dia. G.I. pipe (medium class)	meter	76.24
2825	20 mm dia. G.I. pipe (medium class)	meter	96.19
2826	40 mm dia. G.I. pipe (medium class)	meter	207.95
2827	15 mm dia. G.I. pipe (heavy class)	meter	87.46
2828	20 mm dia. G.I. pipe (heavy class)	meter	112.75
2829	Check nut 20 mm	each	4.00
2831	32 mm dia. G.I. pipe (medium class)	meter	178.79

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2832	50 mm dia. G.I. pipe (medium class)	meter	276.86
2833	80 mm dia. G.I. pipe (medium class)	meter	452.38
2834	100 mm dia. G.I. pipe (medium class)	meter	655.39
2835	150 mm dia. G.I. pipe (medium class)	meter	1031.89
2836	40 mm to 20 mm reducer	each	29.00
2837	Nipple 50 mm dia	each	51.98
2838	40 mm dia. G.I. bend (medium class)	each	51.45
2839	50 mm dia. G.I. bend (medium class)	each	90.00
2841	100 mm dia RCC pipe NP2 class	meter	141.75
2842	150 mm dia RCC pipe NP2 class	meter	162.00
2843	250 mm dia RCC pipe NP2 class	meter	197.00
2844	300 mm dia RCC pipe NP2 class	meter	274.00
2845	100 mm dia RCC collar NP2 class	each	21.00
2846	150 mm dia RCC collar NP2 class	each	26.00
2847	250 mm dia RCC collar NP2 class	each	42.00
2848	300 mm dia RCC collar NP2 class	each	51.00
<b>SCREWS, NUT BOTS AND OTHER ACCESSORIES</b>			
2851	Al. Alloy/ cadmium plated iron screws, 20 mm	each	0.40
2852	Iron screws, 35 mm X 6 mm	each	0.95
2853	Iron screws, 40 mm X 6 mm	each	0.95
2854	Iron screws, 45 mm X 6 mm	each	1.00
2855	Steel fastener 6 mm X 75 mm	each	5.00
2856	Steel fastener 8 mm X 75 mm	each	7.00
2857	PVC fastener 40 mm long	each	0.28
2858	PVC clip for fixing cable	each	0.10
2859	Rubber/ PVC bushes	each	0.50
2860	6 mm dia rivet/ stud/ bolts and nuts	each	3.00
2861	25 mm X 3mm bolts & nuts	each	2.00
2862	32mm X 8mm bolts & nuts	each	4.00
2863	38mm X 10 mm bolts & nuts	each	7.00
2864	38 mm X 7 mm, bolts and nuts	each	5.00
2865	15 mm long X 6 mm dia G.I. bolts and nuts	each	4.00
2866	10 mm X 25 mm long G.I. bolt with nut etc.	each	9.00
2867	16 mm X 50 mm bolts and nuts with washers	set	6.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2868	16 mm X 40 mm bolts and nuts with washers	set	6.00
2869	16 mm X 125 mm bolts and nuts with washers	set	20.00
2870	16 mm X 150 mm bolts and nuts with washers	set	24.00
2871	10 mm X 25 mm long tinned brass bolt with nut etc.	each	27.50
2881	GI saddles 19mm x 0.55 mm for conduit	each	0.85
2882	GI saddles 25 mm x 0.90 mmm for conduit above 25 mm	each	1.00
<b>HDPE PIPE</b>			
2891	63 mm dia	Meter	57
2892	90 mm dia	Meter	80
2893	120 mm dia	Meter	130
2894	180 mm dia	Meter	195
2895	200 mm dia	Meter	278
<b>HDPE PIPE COUPLER</b>			
2896	63 mm dia	each	14
2897	90 mm dia	each	22
2898	120 mm dia	each	27
2899	180 mm dia	each	54
2900	200 mm dia	each	73
2901	20 mm X 3 mm copper tape (0.533 kg/meter)	kg	430.50
2902	25 mm X 5 mm copper tape (1.15 kg/meter)	kg	430.50
2903	32 mm X 6 mm copper tape (1.705 kg/meter)	kg	430.50
2904	8 SWG copper wire (4.0 mm dia)	kg	435.75
2905	600 mm X 600 mm X 3 mm thick copper plate (10.5 kg)	each	4718.70
2906	Copper saddle	each	26.25
2907	50 mm X 5 mm copper strip (2.30 kg/meter)	kg	430.50
2908	Brass nipple	each	6.00
2909	Lightning finial, 25 mm dia X 300 mm long, copper	each	420.00
2910	Lightning finial, 25 mm dia X 300 mm long, G.I.	each	115.50
2911	20 mm X 3 mm G.I. Tape (0.461 kg/meter)	kg	48.30
2912	25 mm X 5 mm G.I. strip (1.0 kg/meter)	kg	44.10
2913	25 mm X 6 mm G.I. strip (1.2 kg/meter)	kg	42.00
2914	32 mm X 6 mm G.I. Tape (1.475 kg/meter)	kg	42.00
2915	600 mm X 600 mm X 6 mm thick G.I. plate	each	1307.00
2916	6 SWG G.I. wire	kg	52.50
2917	GI saddle 20 mm x 3mm	each	2.00
2918	Funnel	each	17.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2919	G.I. nuts and through bolts with washer	each	22.00
2920	Washers	each	0.17
2921	G.I. Hooks made of 8 SWG GI wire/ GI clip	each	2.00
2922	CI/MS cover plate hinged to FRL Same with Locking arrangement	each	231.00
2923	Pulley of 50 mm dia	each	72.00
2924	Clamps, bolts, nuts etc.	set	93.00
2925	Flat iron clamps (50 mm X 6 mm) for G.I. pipe	each	28.90
2926	G.I. plate (10 cm X 10 cm X 5 mm)	kg	46.00
2927	Ball and socket	each	14.00
2928	Back plate	each	6.00
2929	Check nut 20 mm	each	3.00
2930	Rubber reel, nut & bolts with washers and safety pin	Set	50.00
2931	PVC sleeve	meter	4.00
2932	250 mm X 200 mm H.T. danger notice plate	each	52.00
2933	200 mm X 150 mm M.V. danger notice plate	each	40.00
2934	Earthing thimbles and solder	L.S.	11.00
2935	Cement, paint, sand etc.	L.S.	4.50
2936	Painting with primer and finish paint	L.S.	4.00
2937	Diesel	liter	53.00
2938	Cotton waste, cleaning cloth etc.	kg	38.00
2939	Cleaning materials like soap/ detergent	kg	43.00
2940	Tin solder etc.	L.S.	5.00
2941	Charcoal	kg	6.30
2942	Coke	kg	8.20
2943	Salt	kg	7.00
2944	Paint	liter	142.00
2945	Common burnt clay F.P.S. (non modular) bricks class designation 7.5	each	3.00
2946	Fine sand	cum	672.00
2947	Bricks ballast	cum	525.00
2948	Cement	ton	5250.00
2949	Stone aggregate (single size) 40 mm nominal size	cum	1050.00
2950	Stone aggregate (single size) 20 mm nominal size	cum	1175.00
2951	Stone aggregate (single size) 10 mm nominal size	cum	1175.00
2952	Coarse sand (Zone III)	cum	1200.00
9999	Sundries/bending charges	L.S.	1.10

Code No.	Description	Unit	Rate ₹
<b>HVAC ITEMS</b>			
The Pipes of sizes 150 mm & below shall be M.S. 'C' class as per IS : 1239 and pipes size above 150 mm shall be welded black steel pipe heavy class as per IS: 3589, from minimum 6.35 mm thick M.S. Sheet for pipes upto 350 mm dia. and from minimum 7mm thick MS sheet for pipes of 400 mm dia and above.			
3001	M.S. Pipe - 400 mm dia.	Meter	5040.63
3002	M.S. Pipe - 350 mm dia.	Meter	2955.02
3003	M.S. Pipe- 300 mm dia.	Meter	2673.41
3004	M.S. Pipe - 250 mm dia.	Meter	2249.10
3005	M.S. Pipe - 200 mm dia.	Meter	1792.67
3006	M.S. Pipe - 150 mm dia.	Meter	1138.54
3007	M.S. Pipe - 125 mm dia.	Meter	958.28
3008	M.S. Pipe - 100 mm dia.	Meter	776.98
3009	M.S. Pipe - 80 mm dia.	Meter	527.40
3010	M.S. Pipe - 65 mm dia.	Meter	435.46
3011	M.S. Pipe - 50 mm dia.	Meter	332.26
3012	M.S. Pipe - 40 mm dia.	Meter	234.64
3013	M.S. Pipe - 32 mm dia	Meter	201.71
3014	M.S. Pipe - 25 mm dia	Meter	156.59
3023	Pipe aluminium Cladding 0.63mm	sq.m	300.00
BUTTERFLY VALVE (MANUAL) with C I body SS Disc, Nitrile Rubber Seal & O- Ring PN 16 pressure rating for chilled water/ hot eater circulation as specified			
3024	200 mm dia	Each	8330.00
3025	150 mm dia.	Each	4536.00
3026	125 mm dia.	Each	3864.00
3027	100 mm dia.	Each	3465.00
3028	80 mm dia.	Each	2469.60
3029	65 mm dia.	Each	2175.60
3030	50 mm dia.	Each	1999.20
3031	40 mm dia.	Each	1808.00
BALANCING VALVE WITH BUILT IN MEASURING FACILITY with C I body flanged construction with EPDM coated disc with long pitch with protected out pipe insulation & PN 16 pressure rating for chilled / hot water circulation as specified.			

Code No.	Description	Unit	Rate ₹
3032	200 mm dia	Each	40857.60
3033	150 mm dia.	Each	19491.15
3034	125 mm dia.	Each	13027.35
3035	100 mm dia.	Each	9301.69
3036	80 mm dia.	Each	5675.78
3037	65 mm dia	Each	5436.38
3038	50 mm dia.	Each	4887.75
3039	40 mm dia	Each	2236.00
	NON - RETURN VALVE with duel plate of C I body SS plates vulcanized NBR seal flanged end & PN 16 pressure rating for chilled / hot water circulation including insulation as specified.		
3040	200 mm dia	Each	7052.33
3041	150 mm dia.	Each	4428.90
3042	125 mm dia.	Each	3361.58
3043	100 mm dia	Each	2294.25
3044	80 mm dia.	Each	1680.79
3045	65 mm dia	Each	1386.53
	Y - STRAINER of Ductile CI Body flanged ends with stainless steel strainer for chilled / hot water circulation including insulation as specified.		
3046	200 mm dia	Each	16794.91
3047	150 mm dia.	Each	8002.94
3048	125 mm dia.	Each	7496.21
3049	100 mm dia	Each	4937.63
3050	80 mm dia	Each	3620.93
3051	65 mm dia.	Each	3127.16
3052	50 mm dia.	Each	2413.95
3053	40 mm dia.	Each	1645.88
3054	Industrial type pressure gauges with gun metal / brass valves	Each	717.00
3055	Industrial type thermometre.	Each	525.00
	Factory fabricated GSS sheet metal rectangular/round ducting of following sheet thickness		
3056	Thickness 0.63 mm sheet	sq.m	430.35
3057	Thickness 0.80 mm sheet	sq.m	548.26
3058	Thickness 1.00 mm sheet	sq.m	654.37

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
3059	Thickness 1.25 mm sheet GSS sheet metal of following sheet thickness	sq.m	766.38
3060	Thickness 0.63 mm sheet	sq.m	310.86
3061	Thickness 0.80 mm sheet	sq.m	414.48
3062	Thickness 1.00 mm sheet	sq.m	518.10
3063	Thickness 1.25 mm sheet	sq.m	627.00
3064	GI volume control duct damper	sq.m	4300.00
3015	Motorized (ON-OFF Type) duct mounted GI volume control damper with enthalpy sensor and necessary control wire (minimum 1.5 sq.mm) for integration within AHU room		9000.00
3065	Actuator	sq.m	3589.00
3066	powder coated extruded aluminium Supply Air Grills with aluminium volume control dampers	sq.m	5912.68
3067	powder coated extruded aluminium Return Air Grills with louvers but without volume control dampers	sq.m	3272.43
3068	supply air diffusers of powder coated aluminium with aluminium volume control dampers with anti smudge ring & removable core.	sq.m	7251.40
3069	Return air diffusers of powder coated aluminium without volume control dampers with anti smudge ring & removable core.	sq.m	4611.15
3070	Thermal insulated flexible duct- 200 mm dia Fire dampers in supply air duct/main branch and return air path with inbuilt mechanism of spring return action	sq.m	274.00
3071	Fire damper	sq.m	5711.87
3072	Actuator	sq.m	5255.72
3073	25 mm thick resin bonded glass wool having density of 32 kg/m <sup>3</sup> ,	sq.m	97.69
3074	50 mm thick, density 32 kg/cu.m resin bonded glass fiber insulation Duly laminated aluminum foil of mat finish closed cell Nitrile rubber (class "O") insulation for use on existing duct	sq.m	196.02
3076	19 mm thick	sq.m	605.55
3077	25 mm thick	sq.m	772.75

#### **AIR HANDLING UNITS**

Factory built floor mounted chilled water double skin type horizontal/vertical air handling units made of 25 mm thick panels consisting of pre plasticized G.I. casing of thickness 0.8mm outside layer and 0.8 mm inside layer with polyurethane foam (PUF) insulation factory injected between them by injection moulding machine, complete with blower section with blower

Code No.	Description	Unit	Rate ₹
	suitable for static pressure as required, minimum 2 bend GSS/ PVC eliminators,cooling coil section with aluminium finned copper tubes (tubes thickness not less than 0.5 mm) cooling coil of 6 row deep, filter section with 50 mm thick metal viscous/ washable synthetic type air prefilters, belt drive package with TEFC drive motor of efficiency class IE 3 suitable for 415 ± 10% V, 50Hz, 3 Phase AC supply suitably designed for VFD applications, drain connections, stainless steel (18G) drain pan with PUF insulation, 150 mm dia. dial type pressure gauges (2 Nos.)and industrial type thermometre (2 Nos.) at the inlet and outlet of coil, auto purge valve wherever required, necessary vibration isolation arrangement etc. complete as per specification and of following capacities.		
3078	4300 CMH	Each	61249.85
3079	5100 CMH	Each	72058.65
3080	6800 CMH	Each	81229.75
3081	8500 CMH	Each	101340.66
3082	10200 CMH	Each	118503.72
3083	11900 CMH	Each	133177.48
3084	13600 CMH	Each	147851.24
3085	15300 CMH	Each	161804.41
3086	17000 CMH	Each	175757.59
3087	18700 CMH	Each	193051.66
3088	20400 CMH	Each	210345.74
	Factory built floor mounted chilled water double skin type horizontal/vertical air handling units made of 25 mm thick panels consisting of pre plasticized G.I. casing of thickness 0.8mm outside layer and 0.8 mm inside layer with polyurethane foam (PUF) insulation factory injected between them by injection moulding machine, complete with blower section with blower suitable for static pressure as required, minimum 2 bend GSS/ PVC eliminators,cooling coil section with aluminium finned copper tubes (tubes thickness not less than 0.5 mm) cooling coil of 4 row deep, filter section with 50 mm thick metal viscous/ washable synthetic type air prefilters, belt drive package with TEFC drive motor of efficiency class IE 3 suitable for 415 ± 10% V, 50Hz, 3 Phase AC supply suitably designed for VFD applications, drain connections, stainless steel (18G) drain pan with PUF insulation, 150 mm dia. dial type pressure gauges (2 Nos.)and industrial type thermometre (2 Nos.) at the inlet and outlet of coil, auto purge valve wherever required, necessary		

Code No.	Description	Unit	Rate ₹
	vibration isolation arrangement etc. complete as per specification and of following capacities.		
3089	4300 CMH	Each	55419.65
3090	5100 CMH	Each	65049.30
3091	6800 CMH	Each	72582.71
3092	8500 CMH	Each	89811.28
3093	10200 CMH	Each	105140.11
3094	11900 CMH	Each	117619.36
3095	13600 CMH	Each	130098.61
3096	15300 CMH	Each	141791.76
3097	17000 CMH	Each	153484.91
3098	18700 CMH	Each	166389.96
3099	20400 CMH	Each	183684.04
	Motorized Butter fly Valves with CI Body, SS Disc,O - ring and minimum PN-16 pressure rating, conforming to BS 5155, IS 13095, with IP-55 actuator as specified.		
3101	350 mm	Each	66779.00
3102	300 mm	Each	59842.00
3103	250 mm	Each	43083.00
3104	200 mm	Each	32497.00
3105	150 mm	Each	25194.00
3106	125 mm	Each	24977.00
3107	100 mm	Each	24513.00
3108	80 mm	Each	10481.00
3109	65 mm	Each	10380.00
3110	50 mm	Each	10168.00
	Electronic, self-balancing, pressure independent type dynamic balancing valve with integrated 2 way modulating control valves in a single body, alongwith actuator as specified		
3111	150 mm	Each	93800.00
3112	125 mm	Each	85400.00
3113	100 mm	Each	67200.00
3114	80 mm	Each	39200.00
3115	65 mm	Each	30800.00
3116	50 mm	Each	19950.00

Code No.	Description	Unit	Rate ₹
3117	40 mm	Each	18200.00
3118	32 mm	Each	9800.00
3119	25 mm	Each	9240.00
3120	20 mm	Each	6720.00

#### AIR HANDLING UNIT

Factory built floor mounted chilled water double skin type horizontal/vertical air handling units made of 25 mm thick panels consisting of pre plasticized G.I. casing of thickness 0.8mm outside layer and 0.8 mm inside layer with polyurethane foam (PUF) insulation factory injected between them by injection moulding machine, complete with blower section with blower suitable for static pressure as required, minimum 2 bend GSS/PVC eliminators, cooling coil section with aluminium finned copper tubes (tubes thickness not less than 0.5 mm) cooling coil of 6 row deep, filter section with 50 mm thick metal viscous/washable synthetic type air prefilters, belt drive package with TEFC drive motor of Efficiency Class IE3 suitable for VFD 415 ± 10% V, 20- 50Hz, 3 Phase AC supply, drain connections, stainless steel (18G) drain pan with PUF insulation, 150 mm dia. dial type pressure gauges (2 Nos.) and industrial type thermometer (2 Nos.) at the inlet and outlet of coil, auto purge valve wherever required, necessary vibration isolation arrangement etc. complete as per specification and of following capacities.

3142	23800 CMH	Each	253608.75
3143	28900 CMH	Each	267830.25
3144	34000 CMH	Each	296847.00
3145	39100 CMH	Each	340181.25

Factory built floor mounted chilled water double skin type horizontal/vertical air handling units made of 25 mm thick panels consisting of pre plasticized G.I. casing of thickness 0.8mm outside layer and 0.8 mm inside layer with polyurethane foam (PUF) insulation factory injected between them by injection moulding machine, complete with blower section with blower suitable for static pressure as required, minimum 2 bend GSS/PVC eliminators, cooling coil section with aluminium finned copper tubes (tubes thickness not less than 0.5 mm) cooling coil of 4 row deep, filter section with 50 mm thick metal viscous/washable synthetic type air prefilters, belt drive package with TEFC drive motor of efficiency Class IE3 suitable for VFD, 415 ± 10% V, 20-50Hz, 3 Phase AC supply, drain connections, stainless steel (18G) drain pan with PUF insulation, 150 mm dia. dial type pressure gauges (2 Nos.) and industrial type

Code No.	Description	Unit	Rate ₹
	thermometre (2 Nos.) at the inlet and outlet of coil, auto purge valve wherever required, necessary vibration isolation arrangement etc. complete as per specification and of following capacities.		
3162	23800 CMH	Each	192139.50
3163	28900 CMH	Each	245208.75
3164	34000 CMH	Each	271743.75
3165	39100 CMH	Each	311355.00
3201	Resin bonded fiber glass insulation of density 80 kg/cu m of thickness 65 mm on existing pipe	sq meter	1052.74
<b>HOT DIPPED GALVANIZED CABLE TRAYS</b>			
3701	MS perforated cable tray Hot Dipped Galvanized 100 X 50 X 1.6 mm	meter	213.75
3702	MS perforated cable tray Hot Dipped Galvanized 150 X 50 X 1.6 mm	meter	267.75
3703	MS perforated cable tray Hot Dipped Galvanized 225 X 50 X 1.6 mm	meter	348.75
3704	MS perforated cable tray Hot Dipped Galvanized 300 X 50 X 1.6 mm	meter	427.50
3705	MS perforated cable tray Hot Dipped Galvanized 375 X 50 X 2 mm	meter	577.13
3706	MS perforated cable tray Hot Dipped Galvanized 450 X 50 X 2 mm	meter	669.38
3707	MS perforated cable tray Hot Dipped Galvanized 600 X 50 X 2 mm	meter	850.50
3708	MS perforated cable tray Hot Dipped Galvanized 300 X 62.5 X 2 mm	meter	517.50
3709	MS perforated cable tray Hot Dipped Galvanized 375 X 62.5 X 2 mm	meter	607.50
3710	MS perforated cable tray Hot Dipped Galvanized 450 X 62.5 X 2 mm	meter	698.63
3711	MS perforated cable tray Hot Dipped Galvanized 600 X 62.5 X 2 mm	meter	883.13
3712	MS perforated cable tray Hot Dipped Galvanized 750 X 62.5 X 2 mm	meter	1085.63
3713	MS perforated cable tray Hot Dipped Galvanized 900 X 62.5 X 2 mm	meter	1271.25
3714	MS perforated cable tray Hot Dipped Galvanized 600 X 75 X 2 mm	meter	911.25

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
3715	MS perforated cable tray Hot Dipped Galvanized 750 X 75 X 2 mm	meter	1113.75
3716	MS perforated cable tray Hot Dipped Galvanized 900 X 75 X 2 mm	meter	1299.38
3717	MS perforated Hot Dipped Galvanized cable tray Connector 100 X 50 X 1.6 mm	each	33.75
3718	MS perforated Hot Dipped Galvanized cable tray Connector 150 X 50 X 1.6 mm	each	33.75
3719	MS perforated Hot Dipped Galvanized cable tray Connector 225 X 50 X 1.6 mm	each	33.75
3720	MS perforated Hot Dipped Galvanized cable tray Connector 300 X 50 X 1.6 mm	each	33.75
3721	MS perforated Hot Dipped Galvanized cable tray Connector 375 X 50 X 2 mm	each	33.75
3722	MS perforated Hot Dipped Galvanized cable tray Connector 450 X 50 X 2 mm	each	33.75
3723	MS perforated Hot Dipped Galvanized cable tray Connector 600 X 50 X 2 mm	each	33.75
3724	MS perforated Hot Dipped Galvanized cable tray Connector 300 X 62.5 X 2 mm	each	33.75
3725	MS perforated Hot Dipped Galvanized cable tray Connector 375 X 62.5 X 2 mm	each	33.75
3726	MS perforated Hot Dipped Galvanized cable tray Connector 450 X 62.5 X 2 mm	each	33.75
3727	MS perforated Hot Dipped Galvanized cable tray Connector 600 X 62.5 X 2 mm	each	33.75
3728	MS perforated Hot Dipped Galvanized cable tray Connector 750 X 62.5 X 2 mm	each	33.75
3729	MS perforated Hot Dipped Galvanized cable tray Connector 900 X 62.5 X 2 mm	each	33.75
3733	MS perforated Hot Dipped Galvanized cable tray Bend 100 X 50 X 1.6 mm	each	534.38
3734	MS perforated Hot Dipped Galvanized cable tray Bend 150 X 50 X 1.6 mm	each	669.38
3735	MS perforated Hot Dipped Galvanized cable tray Bend 225 X 50 X 1.6 mm	each	871.88
3736	MS perforated Hot Dipped Galvanized cable tray Bend 300 X 50 X 1.6 mm	each	1068.75

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
3737	MS perforated Hot Dipped Galvanized cable tray Bend 375 X 50 X 2 mm	each	1445.63
3738	MS perforated Hot Dipped Galvanized cable tray Bend 450 X 50 X 2 mm	each	1670.63
3739	MS perforated Hot Dipped Galvanized cable tray Bend 600 X 50 X 2 mm	each	2126.25
3740	MS perforated Hot Dipped Galvanized cable tray Bend 300 X 62.5 X 2 mm	each	1293.75
3741	MS perforated Hot Dipped Galvanized cable tray Bend 375 X 62.5 X 2 mm	each	1518.75
3742	MS perforated Hot Dipped Galvanized cable tray Bend 450 X 62.5 X 2 mm	each	1749.38
3743	MS perforated Hot Dipped Galvanized cable tray Bend 600 X 62.5 X 2 mm	each	2025.00
3744	MS perforated Hot Dipped Galvanized cable tray Bend 750 X 62.5 X 2 mm	each	2711.25
3745	MS perforated Hot Dipped Galvanized cable tray Bend 900 X 62.5 X 2 mm	each	3172.50
3746	MS perforated Hot Dipped Galvanized cable tray Bend 600 X 75 X 2 mm	each	2278.13
3747	MS perforated Hot Dipped Galvanized cable tray Bend 750 X 75 X 2 mm	each	2784.38
3748	MS perforated Hot Dipped Galvanized cable tray Bend 900 X 75 X 2 mm	each	3251.25
3749	MS perforated Hot Dipped Galvanized cable tray Reducer 100 X 50 X 1.6 mm	each	1203.75
3750	MS perforated Hot Dipped Galvanized cable tray Reducer 150 X 50 X 1.6 mm	each	1541.25
3751	MS perforated Hot Dipped Galvanized cable tray Reducer 225 X 50 X 1.6 mm	each	1940.63
3752	MS perforated Hot Dipped Galvanized cable tray Reducer 300 X 50 X 1.6 mm	each	2362.50
3753	MS perforated Hot Dipped Galvanized cable tray Reducer 375 X 50 X 2 mm	each	2812.50
3754	MS perforated Hot Dipped Galvanized cable tray Reducer 450 X 50 X 2 mm	each	3037.50
3755	MS perforated Hot Dipped Galvanized cable tray Reducer 600 X 50 X 2 mm	each	4275.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
3756	MS perforated Hot Dipped Galvanized cable tray Reducer 300 X 62.5 X 2 mm	each	2812.50
3757	MS perforated Hot Dipped Galvanized cable tray Reducer 375 X 62.5 X 2 mm	each	3268.13
3758	MS perforated Hot Dipped Galvanized cable tray Reducer 450 X 62.5 X 2 mm	each	3954.38
3759	MS perforated Hot Dipped Galvanized cable tray Reducer 600 X 62.5 X 2 mm	each	4921.88
3760	MS perforated Hot Dipped Galvanized cable tray Reducer 750 X 62.5 X 2 mm	each	5062.50
3761	MS perforated Hot Dipped Galvanized cable tray Reducer 900 X 62.5 X 2 mm	each	5895.00
3762	MS perforated Hot Dipped Galvanized cable tray Reducer 600 X 75 X 2 mm	each	4162.50
3763	MS perforated Hot Dipped Galvanized cable tray Reducer 750 X 75 X 2 mm	each	5315.63
3764	MS perforated Hot Dipped Galvanized cable tray Reducer 900 X 75 X 2 mm	each	6187.50
3765	MS perforated Hot Dipped Galvanized cable tray Tee 100 X 50 X 1.6 mm	each	641.25
3766	MS perforated Hot Dipped Galvanized cable tray Tee 150 X 50 X 1.6 mm	each	669.38
3767	MS perforated Hot Dipped Galvanized cable tray Tee 225 X 50 X 1.6 mm	each	1046.25
3768	MS perforated Hot Dipped Galvanized cable tray Tee 300 X 50 X 1.6 mm	each	1282.50
3769	MS perforated Hot Dipped Galvanized cable tray Tee 375 X 50 X 2 mm	each	1732.50
3770	MS perforated Hot Dipped Galvanized cable tray Tee 450 X 50 X 2 mm	each	2008.13
3771	MS perforated Hot Dipped Galvanized cable tray Tee 600 X 50 X 2 mm	each	2553.75
3772	MS perforated Hot Dipped Galvanized cable tray Tee 300 X 62.5 X 2 mm	each	1552.50
3773	MS perforated Hot Dipped Galvanized cable tray Tee 375 X 62.5 X 2 mm	each	1856.25
3774	MS perforated Hot Dipped Galvanized cable tray Tee 450 X 62.5 X 2 mm	each	2098.13
3775	MS perforated Hot Dipped Galvanized cable tray Tee 600 X 62.5 X 2 mm	each	2700.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
3776	MS perforated Hot Dipped Galvanized cable tray Tee 750 X 62.5 X 2 mm	each	3251.25
3777	MS perforated Hot Dipped Galvanized cable tray Tee 900 X 62.5 X 2 mm	each	3808.13
3778	MS perforated Hot Dipped Galvanized cable tray Tee 600 X 75 X 2 mm	each	2733.75
3779	MS perforated Hot Dipped Galvanized cable tray Tee 750 X 75 X 2 mm	each	3341.25
3780	MS perforated Hot Dipped Galvanized cable tray Tee 900 X 75 X 2 mm	each	3898.13
3781	MS perforated Hot Dipped Galvanized cable tray Cross member 100 X 50 X 1.6 mm	each	641.25
3782	MS perforated Hot Dipped Galvanized cable tray Cross member 150 X 50 X 1.6 mm	each	669.38
3783	MS perforated Hot Dipped Galvanized cable tray Cross member 225 X 50 X 1.6 mm	each	1046.25
3784	MS perforated Hot Dipped Galvanized cable tray Cross member 300 X 50 X 1.6 mm	each	1282.50
3785	MS perforated Hot Dipped Galvanized cable tray Cross member 375 X 50 X 2 mm	each	1732.50
3786	MS perforated Hot Dipped Galvanized cable tray Cross member 450 X 50 X 2 mm	each	2008.13
3787	MS perforated Hot Dipped Galvanized cable tray Cross member 600 X 50 X 2 mm	each	2553.75
3788	MS perforated Hot Dipped Galvanized cable tray Cross member 300 X 62.5 X 2 mm	each	1552.50
3789	MS perforated Hot Dipped Galvanized cable tray Cross member 375 X 62.5 X 2 mm	each	1822.50
3790	MS perforated Hot Dipped Galvanized cable tray Cross member 450 X 62.5 X 2 mm	each	2098.13
3791	MS perforated Hot Dipped Galvanized cable tray Cross member 600 X 62.5 X 2 mm	each	2649.38
3792	MS perforated Hot Dipped Galvanized cable tray Cross member 750 X 62.5 X 2 mm	each	3251.25
3793	MS perforated Hot Dipped Galvanized cable tray Cross member 900 X 62.5 X 2 mm	each	3808.13
3794	MS perforated Hot Dipped Galvanized cable tray Cross member 600 X 75 X 2 mm	each	2733.75
3795	MS perforated Hot Dipped Galvanized cable tray Cross member 750 X 75 X 2 mm	each	2338.88

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
3796	MS perforated Hot Dipped Galvanized cable tray Cross member 900 X 75 X 2 mm	each	2728.69
3801	GI Suspender 6 mm dia 0.75m long	each	21
3802	GI Suspender 8 mm dia 0.75m long	each	25.52
3803	GI Suspender 10 mm dia 0.75m long	each	35.91
3804	25 mm X 25 mm X 3 mm Galvannised slotted/angle iron/ channel	kg	36.4
3805	35 mm X 55 mm X 4 mm Galvannised slotted/angle iron/ channel	kg	36.4
3806	35 mm X 35 mm X 5 mm Galvannised slotted/angle iron/ channel	kg	36.4
4001	Resin bonded fiber glass pipe section insulation having density 80 kg/cum-75 mm thickness for 400 mm dia pipe	meter	1507.13
4002	Resin bonded fiber glass pipe section insulation having density 80 kg/cum-75 mm thickness for 350 mm dia pipe	meter	1347.10
4003	Resin bonded fiber glass pipe section insulation having density 80 kg/cum-75 mm thickness for 300 mm dia pipe	meter	1104.16
4004	Resin bonded fiber glass pipe section 250 mm insulation having density 80 kg/cum-75 mm thickness for 250 mm dia pipe	meter	964.69
4005	Resin bonded fiber glass pipe section 200 mm insulation having density 80 kg/cum-75 mm thickness for 200 mm dia pipe	meter	816.87
4006	Resin bonded fiber glass pipe section 150 mm insulation having density 80 kg/cum-50 mm thickness for 150 mm dia pipe	meter	413.26
4007	Resin bonded fiber glass pipe section insulation having density 80 kg/cum-50 mm thickness for 125 mm dia pipe	meter	364.41
4008	Resin bonded fiber glass pipe section insulation having density 80 kg/cum-50 mm thickness for 100 mm dia pipe	meter	315.57
4009	Resin bonded fiber glass pipe section insulation having density 80 kg/cum-50 mm thickness for 80 mm dia pipe	meter	269.29
4010	Resin bonded fiber glass pipe section insulation having density 80 kg/cum-50 mm thickness for 65 mm dia pipe	meter	244.23
4011	Resin bonded fiber glass pipe section insulation having density 80 kg/cum-50 mm thickness for 50 mm dia pipe	meter	213.38
4012	Resin bonded fiber glass pipe section insulation having density 80 kg/cum-50 mm thickness for 40 mm dia pipe	meter	192.17
4013	Resin bonded fiber glass pipe section insulation having density 80 kg/cum-50 mm thickness for 32 mm dia pipe	meter	180.60
4014	Resin bonded fiber glass pipe section insulation having density 80 kg/cum-50 mm thickness for 25 mm dia pipe	meter	164.53
4015	Nitrile rubber (closed cell elastometric nitrile rubber of class 'O') Insulation -32 mm thickness	sq. m	658.35

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
4016	Nitrile rubber (closed cell elastometric nitrile rubber of class 'O') Insulation -19 mm thickness	sq. m	371.80
4017	Expanded polystyrene moulded pipe section of density 20kg/cum Insulation -75 mm thickness for 400 mm dia pipe	meter	852.64
4018	Expanded polystyrene moulded pipe section of density 20kg/cum Insulation -75 mm thickness for 350 mm dia pipe	meter	744.66
4019	Expanded polystyrene moulded pipe section of density 20kg/cum Insulation -75 mm thickness for 300 mm dia pipe	meter	659.02
4020	Expanded polystyrene moulded pipe section of density 20kg/cum Insulation -75 mm thickness for 250 mm dia pipe	meter	572.46
4021	Expanded polystyrene moulded pipe section of density 20kg/cum Insulation -75 mm thickness for 200 mm dia pipe	meter	488.68
4022	Expanded polystyrene moulded pipe section of density 20kg/cum Insulation -50 mm thickness for 150 mm dia pipe	meter	241.08
4023	Expanded polystyrene moulded pipe section of density 20kg/cum Insulation - 50 mm thickness for 125 mm dia pipe	meter	213.16
4024	Expanded polystyrene moulded pipe section of density 20kg/cum Insulation -50 mm thickness for 100 mm dia pipe	meter	179.65
4025	Expanded polystyrene moulded pipe section of density 20kg/cum Insulation -50 mm thickness for 80 mm dia pipe	meter	157.31
4026	Expanded polystyrene moulded pipe section of density 20kg/cum Insulation -50 mm thickness for 65 mm dia pipe	meter	143.35
4027	Expanded polystyrene moulded pipe section of density 20kg/cum Insulation -50 mm thickness for 50 mm dia pipe	meter	124.73
4028	Expanded polystyrene moulded pipe section of density 20kg/cum Insulation -50 mm thickness for 40 mm dia pipe	meter	111.70
4029	Expanded polystyrene moulded pipe section of density 20kg/cum Insulation -50 mm thickness for 32 mm dia pipe	meter	106.11
4030	Expanded polystyrene moulded pipe section of density 20kg/cum Insulation -50 mm thickness for 25 mm dia pipe	meter	95.87
4031	Resin bonded fiber glass insulation of thickness 75 mm on existing pipe	sq. m	1111.87
4032	Resin bonded fiber glass insulation of density 80 kg/cum of thickness 50 mm on existing pipe	sq. m	912.63
4033	Resin bonded fiber glass insulation of density 80 kg/cum of thickness 40 mm on existing pipe	sq. m	835.51
4034	Resin bonded fiber glass insulation of thickness 25 mm on existing pipe	sq. m	642.70

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
4037	Expanded polystyrene insulation of thickness 75 mm on existing pipe	sq. m	699.98
4038	Expanded polystyrene insulation of thickness 50 mm on existing pipe	sq. m	446.80
4069	Acoustic lining of supply air duct with 25 mm thick resin bonded glass wool having density of 32kg/cum	sq. m	152.00
4070	Reinforced fiber glass tissue and 0.08mm perforated aluminium sheet	sq. m	260.00
4071	50 mm thick resin bonded glass wool having density of 32kg/cum	sq. m	196.02
4072	50 mm thick resin bonded glass wool having density of 24 kg/cum with factory laminated aluminium foil	sq. m	193.45
4073	Resin bonded fiber glass insulation of thickness 65 mm on existing pipe	sq. m	1052.74

**REFERENCE TO AMENDMENTS**

<b>S.No</b>	<b>Reference under which Issued</b>	<b>Item No.</b>	<b>Page No.</b>	<b>Remarks</b>