

BILL OF QUANTITIES (ELECTRICAL WORKS)

Name of work:- Refurbishment works of Duty Free Shop in Phuentsholing

(Sub Head:- Internal Electrification, Telephone & LAN works)

Sl.No.	Item Description	Quantity	Unit	Rate (Nu.)	Amount (In Figure)	Amount (In Words)
A. POINT WIRING						
1	Wiring for light points,exhaust fan and call bell points with 1.5 sq.mm 1.1kV grade, PVC insulated copper conductor cable in recessed HDPE conduit including connections, painting, testing and commissioning etc. as required					
i)	Short point	1	Point			
ii)	Medium point	2	Point			
iii)	Long point	80	Point			
2	Wiring for lighting circuit with 1.1kV grade, PVC insulated copper conductor cable in recessed HDPE conduit pipe including connections, painting, testing and commissioning etc. as required					
i)	2x2.5sq.mm	400	Mtrs.			
3	Wiring for 5/6 pin, 16 Ampere plug point with 4 sq.mm 1.1kV grade, PVC insulated copper conductor cable and 2.5 sq.mm 1.1kV grade, PVC insulated copper conductor cable for earth continuity in recessed HDPE conduit with providing and fixing 3/6 pin, 16 ampere socket outlet and switch including earthing third pin and connections, painting, testing and commissioning etc. as required					
i)	Short point	1	Point			
ii)	Medium point	1	Point			
iii)	Long point	31	Point			
4	Wiring for points in excess length above long points with 1.1kV grade, PVC insulated copper conductor cable in recessed HDPE conduit pipe including copper wire 2.5 sq.mm for earth continuity along with power point, connections, painting, testing and commissioning etc. as required					
i)	2 x 1.5 sq.mm	300	Mtrs.			
ii)	2 x 4 sq.mm	300	Mtrs.			
B. SUPPLYING & FIXING OF FITTINGS & LAMPS						
1	Supplying & fixing of prewired indoor recessed ceiling mounted 6' LED DOWNLIGHT luminaires of 3000/4000/6000k, complete with all accessories with necessary testing & commissioning & cutting & painting as required.					
i)	15 W	62	Each			

2	Supplying & fixing of prewired indoor recessed ceiling mounted Pendant light LED luminaires of 3000/4000/6000k, complete with all accessories with necessary testing & commissioning & cutting & painting as required.					
i)	15 W	2	Each			
3	Supplying & fixing of 2 mtrs.track light indoor recessed ceiling mounted LED luminaires of 3000/4000/6000k, complete with all accessories with necessary testing & commissioning & cutting & painting as required.					
i)	15 W	1	Each			
4	Supplying & fixing of prewired indoor recessed ceiling mounted round sleek panel LED luminaires of 3000/4000/6000k, complete with all accessories with necessary testing & commissioning & cutting & painting as required.					
i)	18W	5	Each			
5	Supplying, installation, testing & commissioning of exhaust fan 240 volt A.C 900 rpm with all accessories such as frame with arm 3 Nos., sweep 3 Nos., condenser and fan body etc. complete as required					
i)	300mm sweep	3	Each			
6	Supplying & fixing of prewired indoor recessed ceiling mounted T8 Fluorescent light (6 feet), (1X36 watts) of 3000/4000/6000k, complete with all accessories with necessary testing & commissioning & cutting & painting as required.	18	Each			
C. SUPPLY, FIXING & INSTALLATION OF CONTROL GEARS						
1	Supply & fixing of TPN distribution board (DIN type, horizontal) with metal door, 230 volt A.C complete with all accessories without MCB/isolator/RCCB out going or incoming etc. as required.					
i)	12 Ways	1	Each			
2	Supply & Installation, testing and commissioning of Miniature Circuit Breaker [MCB] single pole, C-series, 230 volts A.C in sub distribution board complete with all accessories suitable to fix on a din bar etc. complete as required					
i)	MCB -SP; 6A	3	Each			
ii)	MCB -SP; 16A	33	Each			
3	Supply & Installation, testing & commissioning of residual current circuit breaker (RCCB) four pole, sensitivity 100mA, 415 volt A.C complete with all accessories suitable to fix on a din-bar etc. as required					
i)	80 A	1	Each			

4	Supply & Installation of miniature circuit breaker (MCB) four Pole & neutral, 415 volt A.C complete with all accessories suitable to fix on a din-bar etc. as required 63A					
i)	80 A	1	Each			
D. POWER CABLE SUPPLY & COMPRESSION GLAND						
1	Supplying of power cables (1.1kV) 4- Core copper armoured 16 sq. mm PVC insulated and sheathed from BPC to main control Panel board (Actual length as per site condition)	80	Meter			
2	Laying of one number PVC insulated and sheathed power cable copper/aluminium, armoured/un-armoured 1.1KV single core to four core in the existing RCC/Hume/Stone ware/G.I/HDPE pipes as required					
i)	Above 6sq.mm to 25sq.mm	80	Meter			
E. EARTHING						
1	Supplying & fixing of earthing including all accessories, machinery enclosure, C.I cover plate having lock arrangement, watering pipe with excavation and refilling work including charcoal or coke and salt complete as required as per standard earthing drawing.					
i)	with copper plate 600x600x3mm	1.00	Each			
2	Providing & laying of earth connection from earth electrodes in 15 mm dia G.I pipe to main control panel board and distribution board as required as per standard earthing drawing.					
i)	with 4.06mm dia. Copper wire (8 SWG)	150.00	Mtrs.			
F. TELEPHONE NETWORKS						
1	Supplying and fixing of telephone sockets outlet on the wall including necessary cutting, connection and testing etc. as required.					
i)	RJ - 11 telephone sockets	3	Each			

2	Supplying and drawing of telephone wire 0.5 mm dia PVC insulated copper conductor cable to respective telephone point in existing recessed HDPE pipe					
i)	2 pairs	60	Meter			
3	Supplying and fixing of HDPE pipe for telephone point including all accessories such as screws, bends, elbows, tees, corners etc. as required.					
i)	25mm dia.	60	Meter			
4	Supplying & installation of standard Telephone Terminal Cabinet (TTC-3 ways) dust & vermin proof with punch holes to all the four sizes along with connection and assembly complete in all respect.	1	Each			
G LAN NETWORKS						
1	Supply and Fixing of Internet Switch DNQLINK 8NPort including necessary cutting, connections, testing etc. as required.	1	Each			
2	Supplying & fixing of socket outlet on existing PVC /metal/ moulded tough surface box/ metal box (recessed or surface) including necessary cutting, connections, testing etc. as required. - RJ 45 computer socket					
i)	RJ 45	3	Each			
3	Supplying and fixing of HDPE pipe on recessed including all accessories such as screws, bends, elbows, Tees, corners, etc. complete as required					
i)	25mm	60	Meter			
4	SUPPLYING & drawing OF UTP CAT 6 COMPUTER LAN CABLE 305M, Electrolytic grade solid annealed bare copper conductor, 4 pair unshielded twisted pair (UTP) industrial cables for LAN network,					
i)	UTP CAT 6 COMPUTER LAN CABLE	60	Meter			

H	AIR CONDITIONERS					
1	Providing & fixing Ceiling Cassette Split Type Air Conditioners (cooling), ceiling mounted complete as required.					
i)	1.5 tonne	7	Each			
I	MISCELLANEOUS ITEMS					
1	Supplying and laying of HDPE pipe pressure class 10kg/sq.cm for main control board lines in drain crossing complete as required					
i)	32 mm dia for Telephone Service Lines	5	Meter			
ii)	50 mm dia. For main control board service lines	5	Meter			
2	Providing and installation of three phase energy meters	1	Each			
Total Quoted Amount..... Nu:						
Rebate if Any.....Nu.:						
Total Quoted Amount with rebate....Nu.:						