

M/S Pragati International
Priced Bill of Quantities (BOQ)

Unit Rate Basis

Estimate by the Procuring Entity

Item No.	Group	Item Code (If any)	Description of Items of Works (specifications preferably built-in)	Unit	Quantity	Unit rates or prices (in figures) (BDT)	Unit rates or prices (in words) (BDT)	Amount (in figure) (BDT)	Amount (in words) (BDT)	I have seen
1	Civil	32.61	Labour for taking out C.I. sheet roofing	sqm	481.134	40.001	Forty point Zero Zero One	19245.841	Nineteen Thousand Two Hundred and Forty-Five point Eight Four One	I have seen
2	Civil	32.111	Taking out old unserviceable MS window shutter/grill etc. All completed as per direction of Engineer-in-charge.	each	20.000	202.001	Two Hundred and Two point Zero Zero One	4040.020	Four Thousand AND Forty point Zero Two	I have seen
3	Civil	10.2	Supply and installation of 0.47 mm thick zinc alum color coated profile sheet of durability class 2 with minimum warranty period of 10 years of durability, for roof, wall, capping, flashing, trimming, gutter etc. conforming to ASTM A792. Grade: 80, AZ150 gm/m ² , including the cost of necessary accessories (sheeting screws with washers, silicon sealant etc.), testing of materials etc. all complete as per drawing specification and direction of Engineer-in-charge.	sqm	481.134	322.001	Three Hundred and Twenty-Two point Zero Zero One	154925.629	One Lakh Fifty-Four Thousand Nine Hundred and Twenty-Five point Six Two Nine	I have seen
4	Civil	10.25	Supply and installation of double bubble foil insulation at wall and roof of nominal thickness of 8 mm conforming to Class A in accordance with the ASTM-E84-09 fire test standard, including the cost of lapping, costape, adhesive and necessary accessories, all complete as per drawing, specification and direction of Engineer-in-charge.	sqm	481.134	251.001	Two Hundred and Fifty-One point Zero Zero One	120765.115	One Lakh Twenty Thousand Seven Hundred and Sixty-Five point One One Five	I have seen
5	Civil	18.1.6.2	Supplying, fitting and fixing of best quality PVC board false ceiling (Drop/Plain) of size 600 mm x 600 mm of approved design, minimum PVC content of 35%, framing by aluminium/ powder coated aluminium T-bar of any colour and of natural anodized finish suspended in 600 mm x 600 mm grid from ceiling by 12 SWG double ply wire, fixed to the ceiling by rowel plug, screws, hooks, nails etc., maintaining straight lines and desired finished level at bottom face including vertical wooden strut as required, making holes in slabs or beams by electric drill machine and mending good the damages, if any during execution of the work, including the provisions of lighting arrangement, also including cost of all materials, electricity, accessories, scaffoldings, labour for installation, screws, nails, etc. all complete as per drawing, design and accepted by the engineer 8 mm thick PVC board ceiling	sqm	191.543	2622.001	Two Thousand Six Hundred and Twenty-Two point Zero Zero One	502225.938	Five Lakh Two Thousand Two Hundred and Twenty-Five point Nine Three Eight	I have seen
6	Civil	13.5.2	Supplying, fitting and fixing window grill made of 12 mm x 12 mm M.S. solid bar @ 100mm c/c with outer frame of 38 mm x 6mm F.I. bar and 25 mm x 6 mm F.I. bar for clamp as per design including fabrication, welding, cost of electricity workshop charges, labour charges for fitting and fixing grills in position, local carriage charges, cutting grooves, mending good the damages, tools and plants, finished with anti-corrosive painting (Red-Oxide) etc. complete for all floors approved and accepted by the Engineer-in-charge. (Total weight per sqm should be approx 19 kg and add or deduct @ Tk. 100.00 for each kg/sqm excess or less respectively)	sqm	33.483	275.001	Two Hundred Eight Hundred and Twenty-Five point Zero Zero One	94603.633	Ninety-Four Thousand Six Hundred and Three point Six Three Three	I have seen
7	Civil	16.3.1	Standard synthetic enamel paint of approved best quality and colour delivered from authorized local agent of the manufacturer in a sealed container, having high water resistance, high bondability, flexibility property, using specified brand thinner applying to metallic or wooden surface by brass/roller/spray in 2 coats over single coat anti-corrosive coating including cleaning, drying, making free from dirt, grease, wax, removing all chalked and scaled materials, all complete in all floors and accepted by the Engineer-in-charge.	sqm	145.814	229.001	Two Hundred and Twenty-Nine point Zero Zero One	33391.552	Thirty-Three Thousand Three Hundred and Ninety-One point Five Five Two	I have seen
8	Civil	14.7.1.1	Supplying, fitting and fixing of aluminium sliding window as per the U.S. Architectural Aluminium Manufacturer's Association (AAMA) standard specification and BDS 1879 2014 having minimum 1.2 mm thick outer bottom (size 75.50 mm, 32mm, 0.605 kg/m), minimum 1.2 mm thick outer top (size 75.50 mm, 28.50 mm, 0.705 kg/m), minimum 1.2 mm thick shutter top (size 33 mm, 26.80 mm, 0.42 kg/m), minimum 1.2 mm thick shutter bottom (size 60mm, 24.40 mm, 0.589 kg/m), minimum 1.2 mm thick outer side (size 75.50 mm, 19.90 mm, 0.52 kg/m), minimum 1.2 mm thick shutter lock (size 49.20 mm, 25.80 mm, 0.543 kg/m) and minimum 1.2 mm thick inter lock (size 34.40 mm, 32.13 mm, 0.562 kg/m) sections all aluminium members will be anodized to aluminum bronze/silver/ss/black colour with a coat not less than 15 microns in	sqm	33.488	3814.001	Three Thousand Eight Hundred and Fourteen point Zero Zero One	127723.265	One Lakh Twenty-Seven Thousand Seven Hundred and Twenty-Three point Two Six Five	I have seen

thickness or powder coated to any colour with a coat not less than 25 microns in thickness and density of 4 mg per square cm etc. including all accessories like sliding door key lock, sliding door wheel, sliding door mohar, sliding door neoprene, bolts and nuts including sealants, keeping provision for fitting 5 mm thick glass including labour charge for fitting of accessories, making grooves and mending good damages, carriage, and electricity complete in all respect as per drawing and accepted by the Engineer-in-charge. Size up to 1500 mm x 1400 mm. Anodized to any colour

9	Civil	14.16.1.4.1	Supplying, fitting and fixing in Aluminium door frames, windows, partitions and curtain wall distortion free glass of approved quality and shade including cost of fitting fixing all necessary accessories etc. complete in all respect as per drawing and accepted by the Engineer-in-charge. 5 mm thick reflective glass	sqm	33.488	1659.001	One Thousand Six Hundred and Fifty-Nine point Zero One	55556.625	Fifty-Five Thousand Five Hundred and Fifty-Six point Six Two Five	I have seen
10	Civil	6.3.1	Supplying, fitting and fixing country made homogeneous matt finished/ rustic floor tiles complying BDS ISO 13006: 2015, water absorption ? 0.5%, modulus of rupture (MOR) ? 27 N/mm ² , irrespective of color &/or design, with 20 mm thick cement sand (F.M. 1.2) mortar (1.4) base and raking out the joints with white cement including cutting and laying the tiles in proper way and finishing with care etc. all complete and accepted by the Engineer-in-charge. (Cement: CEM-II/B-M) In 1st floor Matt or rustic floor tiles of size 400 mm x 400 mm and below	sqm	10.233	1737.001	One Thousand Seven Hundred and Thirty-Seven point Zero One	17774.731	Seventeen Thousand Seven Hundred and Seventy-Four point Three One	I have seen
11	Civil	6.7.1	Supplying, fitting and fixing country made rustic or matt finished wall tiles complying BDS ISO 13006: 2015, irrespective of color &/or design, with 20 mm thick cement sand (F.M. 1.2) mortar (1:3) base and raking out the joints with white cement including cutting, laying and hire charge of machine and finishing with care etc. including water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/B-M). In ground floor. Matt or rustic wall tiles less than or equal to 300 mm x 600 mm size	sqm	68.837	1981.001	One Thousand Nine Hundred and Eighty-One point Zero One	136366.166	One Lakh Thirty-Six Thousand Three Hundred and Sixty-Six point One Six Six	I have seen
12	Civil	16.2.2	Interior premium acrylic emulsion painting (silky finish) of approved best quality and colour delivered from authorized local agent of the manufacturer in a sealed container; applying to interior wall and ceiling with surface preparation including cleaning drying, making free from dirt, grease, wax, removing all chalked and scaled materials, fungus, mending good the surface defects using sand paper and necessary scaffolding; applying necessary interior sealer of specified brand on prepared surface; then applying necessary interior putty of specified brand for levelling, spot filling, crack filling and cutting by sand paper/zero water paper; finally applying 2 coats of interior emulsion paint spreading by brush/roller/spray & necessary scaffolding etc. upto desired finishing, elapsing specified time for drying or recoating; all complete in all floors and accepted by the Engineer-in-charge	sqm	1024.071	283.001	Two Hundred and Eighty-Three point Zero One	289813.117	Two Lakh Eighty-Nine Thousand Eight Hundred and Thirteen point One Seven	I have seen
13	Civil	26.1.5	Supplying, fitting and fixing of European type country made best quality glazed porcelain combi closet (two piece), including plastic seat cover with soft closing, cistern system, water consumption 6 litre, siphon wash down/siphon jet single or dual flushing system which reduce water consumption, hygienic glaze in toilet bowl, glaze in inner waste line, round bowl, outlet range 280-305 mm. The sanitary ware shall conform BDS1162:2014. The glaze shall be thoroughly fused to body. The minimum thickness of body at any section shall be 5 mm. When assembled together and when examined from a distance of 60 cm, the outer surface shall not show to the unaided eye, blemishes or defects in excess of those listed in BDS standard. The mean value of water absorption shall not be greater than 0.5% of the ware when dry. When tested with chemical solutions (Acetic acid, Citric acid, Detergent, Hydrochloric acid, Sodium hydroxide, Sodium stearate and Sulfuric acid of various strength) as per BDS1162:2014 procedure, none of the test pieces should suffer any loss of reflectivity on the glaze. There shall be no crazing and no stain on the ware. The materials used for making glaze shall not contain lead compound. In case of certain coloring oxides used for making colored glaze, the lead content, if any, shall not exceed 5 percent of the weight of the glaze materials. Appliances shall be clearly and indelibly marked at a prominent place, visible even after the appliances are installed with the following: a) manufacturer's name and/or registered trademark, b) the number of Bangladesh standard and c) country of origin. Each product shall also be marked with the BSTI Certification Mark. The fixture should be placed in position preparing the base with cement concrete and with wire mesh or rods if necessary, in all floors including making holes wherever required and mending good the damages and fitting, fixing, finishing, complete with all necessary fittings and connection approved and accepted by the Engineer-in-charge. Approx. 668-750 x 356 -430 mm size, minimum 37.0 kg of weight, Equivalent to COTTO C1390/Stella Isabella /RAK Washington / RAK Jumairah or similar brand	each	2.000	15869.001	Fifteen Thousand Eight Hundred and Sixty-Nine point Zero One	31738.002	Thirty-One Thousand Seven Hundred and Thirty-Eight point Zero Two	I have seen
14	Civil	26.7.5	Supplying, fitting and fixing of Bangladesh pattern, long pan with foot-rest. The sanitary ware shall conform BDS1162 2014. The glaze shall be thoroughly fused to body. The minimum thickness of body at any section shall be 5 mm. When assembled together and when examined from a distance of 60 cm, the outer surface shall not show to the unaided eye, blemishes or defects in excess of those listed in BDS standard. The mean value of water absorption shall not be greater than 0.5% of the ware when dry. When tested with chemical solutions (Acetic acid, Citric acid, Detergent, Hydrochloric acid, Sodium hydroxide, Sodium stearate and Sulfuric acid of various strength) as per BDS1162 2014 procedure none of the test pieces should suffer any loss of reflectivity on the glaze. There shall be no crazing and no stain on the ware. The materials used for making glaze shall not contain lead compound. In case of certain coloring oxides used for making colored glaze, the lead content, if any, shall not exceed 5 percent of the weight of the glaze materials. Appliances shall be clearly and indelibly marked at a prominent place, visible even after the appliances are installed with the following: a)	each	2.000	2858.001	Two Thousand Eight Hundred and Fifty-Eight point Zero One	5716.002	Five Thousand Seven Hundred and Sixteen point Zero Two	I have seen

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ঢাকা এয়াসা।

manufacturer's name and/or registered trademark, b) the number of Bangladesh standard and c) country of origin. Each product shall also be marked with the BSTI Certification Mark. The fixture should be placed in position preparing the base of pan with cement mortar (1:4) and with wire mesh or rods, if necessary in all floors including making holes wherever required and mending good the damages and fitting, fixing, finishing etc. complete with all necessary fittings and connections approved and accepted by the Engineer-in-charge. Approx. 540 X 470 X 290 mm size, minimum 16 kg of weight

15	Civil	26.9	Supplying, fitting and fixing of plastic low-down of any color, on walls or directly over water closet with necessary accessories, making holes wherever required and mending good the damages and fitting, fixing & finishing etc. complete with all necessary fittings and connections approved and accepted by the Engineer-in-charge.	each	2.000	2430.001	Two Thousand Four Hundred and Thirty point Zero Zero One	4860.002	Four Thousand Eight Hundred and Sixty point Zero Zero Two	I have seen
16	Civil	26.13.24	Supplying of country made glazed vitreous W/H wash basin of any color including pedestal. The sanitary ware shall conform BDS1162:2014. The glaze shall be thoroughly fused to body. The minimum thickness of body at any section shall be 5 mm. When assembled together and when examined from a distance of 60 cm, the outer surface shall not show to the unaided eye, blemishes or defects in excess of those listed in BDS standard. The mean value of water absorption shall not be greater than 0.5% of the ware when dry. When tested with chemical solutions (Acetic acid, Citric acid, Detergent, Hydrochloric acid, Sodium hydroxide, Sodium stearate and Sulfuric acid of various strength) as per BDS1162:2014 procedure, none of the test pieces should suffer any loss of reflectivity on the glaze. There shall be no crazing and no stain on the ware. The materials used for making glaze shall not contain lead compound. In case of certain coloring oxides used for making colored glaze, the lead content, if any, shall not exceed 5 percent of the weight of the glaze materials. Appliances shall be clearly and indelibly marked at a prominent place, visible even after the appliances are installed with the following: a) manufacturer's name and/or registered trademark, b) the number of Bangladesh standard and c) country of origin. Each product shall also be marked with the BSTI Certification Mark. The fixture should be placed in position with heavy type C.I. Brackets. 30 mm dia PVC waste water pipe with brass coupling (not exceeding 750 mm in length), basin waste with chain plug including making holes in walls and floors and fitting with wall, screws and mending good the damages, finishing etc. all complete approved and accepted by the Engineer-in-charge. Approx. 550 x 470 mm, minimum weight 34 kg	each	2.000	10357.001	Ten Thousand Three Hundred and Fifty-Seven point Zero Zero One	20714.002	Twenty Thousand Seven Hundred and Fourteen point Zero Zero Two	I have seen
17	Civil	26.21	Supplying, fitting and fixing of super quality 600 x 125 mm white glass (plate) shelf having 5 mm thickness with fancy C.P. brackets, screws and frames including making holes in walls and mending good the damages with cement mortar (1:4) etc. all complete approved and accepted by the Engineer-in-charge.	each	2.000	10357.001	One Thousand AND Thirty-Two point Zero Zero One	2064.002	Two Thousand AND Sixty-Four point Zero Zero Two	I have seen
18	Civil	26.22.3	Supplying, fitting and fixing of country made best quality towel rail/ring/shelf minimum 20 mm in dia with C.P. holder including making holes in walls and mending good the damages with cement mortar (1:4) etc. all complete approved and accepted by the Engineer-in-charge. 600 mm long C.P. double towel rail	each	2.000	1264.001	One Thousand Two Hundred and Sixty-Four point Zero Zero One	2528.002	Two Thousand Five Hundred and Twenty-Eight point Zero Zero Two	I have seen
19	Civil	26.24.4	Supplying, fitting and fixing of standard size country made soap tray including making holes in walls and mending good the damages with cement mortar (1:4) etc. all complete approved and accepted by the Engineer-in-charge. Stainless steel soap tray	each	6.000	628.001	Six Hundred and Twenty-Eight point Zero Zero One	3768.006	Three Thousand Seven Hundred and Sixty-Eight point Zero Zero Six	I have seen
20	Civil	26.19.1	Supplying, fitting and fixing of 5 mm thick unframed super quality double coated mirror with all necessary fitting including making holes in walls and mending good the damages with cement mortar (1:4) etc. all complete approved and accepted by the Engineer-in-charge. Local Mirror, 5 mm thickness	sqm	1.115	2590.001	Two Thousand Five Hundred and Ninety point Zero Zero One	2887.851	Two Thousand Eight Hundred and Eighty-Seven point Eight Five One	I have seen
21	Civil	26.31.4	Supplying, fitting and fixing of best quality pillar cock made from copper or copper alloy, chromium plated materials. The faucet conforms BDS EN 200:2009. The faucet tap shall be free from any leakage, permeation and other abnormalities. The water hammer value shall be 1.47 Mpa or under. The faucet after it has been operated 100000 times it shall be free from a seat-leakage and shall satisfy the reverse flow preventing performance. The inside and outside surfaces of the faucet shall be smooth and be free from blowholes, fissures, remarkable flows or injurious defects. The chromium plating on the faucet shall be of class 2 grade 1. The final coating should be done with chromium of minimum 0.1 micron. The faucet shall be made leak proof and fixing in position with selected tape etc. all complete approved and accepted by the Engineer-in-charge. CP Single lever pillar cock (High top 12")	each	2.000	4050.001	Four Thousand AND Fifty point Zero Zero One	8100.002	Eight Thousand One Hundred point Zero Zero Two	I have seen
22	Civil	26.39.2	Supplying and fitting-fixing stainless steel hand / push shower for ablution including holder etc. all complete approved and accepted by the Engineer-in-charge. Moving type push shower	each	2.000	1049.001	One Thousand AND Forty-Nine point Zero Zero One	2098.002	Two Thousand AND Ninety-Eight point Zero Zero Two	I have seen

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23	Civil	26.23.4	Supplying, fitting and fixing of best quality toilet paper holder of standard size including making holes in walls and mending good the damages with cement mortar (1:4) etc. all complete approved and accepted by the Engineer- in- charge. Stainless steel toilet paper holder	each	4.000	563.001	Five Hundred and Sixty-Three point Zero Zero One	2252.004	Two Thousand Two Hundred and Fifty-Two point Zero Zero Four	I have seen
24	Civil	26.27.2	Supplying, fitting and fixing of floor grating net in traps or in drains including making holes in walls/floors and mending good the damages with cement mortar (1:4) etc. all complete approved and accepted by the Engineer- in- charge. of following type Approx. 100~125 mm dia stainless steel floor grating net	each	4.000	326.001	Three Hundred and Twenty-Six point Zero Zero One	1304.004	One Thousand Three Hundred and Four point Zero Zero Four	I have seen
25	Civil	26.52.1	Supplying, fitting and fixing of best quality G.I. gate valve with sealant etc. complete approved and accepted by the Engineer- in- charge. 12 mm brass gate valve	each	16.000	459.001	Four Hundred and Fifty-Nine point Zero Zero One	7344.016	Seven Thousand Three Hundred and Forty-Four point Zero One Six	I have seen
26	Civil	26.29.1	Supplying, fitting and fixing of best quality country made 12 mm bib cock made from copper or copper alloy, chromium plated. The faucet conforms BDS EN 200:2009. The faucet tap shall be free from any leakage, permeation and other abnormalities. The water hammer value shall be 1.47 Mpa or under. The faucet after it has been operated 100000 times it shall be free from a seat- leakage and shall satisfy the reverse flow preventing performance. The inside and outside surfaces of the faucet shall be smooth and be free from blowholes, fissures, remarkable flows or injurious defects. The chromium plating on the faucet shall be of class 2 grade 1. The final coating should be done with chromium of minimum 0.1 micron. The faucet shall be made leak proof and fixing in position with selected tape etc. , all complete approved and accepted by the Engineer- in- charge. Round headed CP Conceal Bib Cock short body (Essco/coaster/star/diamond/delux/deco/orbed/delin/triple/master/classic headed or similar head)	each	6.000	1172.001	One Thousand One Hundred and Seventy-Two point Zero Zero One	7032.006	Seven Thousand AND Thirty-Two point Zero Zero Six	I have seen
27	Civil	26.30.1	Supplying, fitting and fixing of best quality surface mounted or conceal stop cock/angle stop cock (lever or round headed) with wall flange chromium plated. The faucet conforms BDS EN 200:2009. The faucet tap shall be free from any leakage, permeation and other abnormalities. The water hammer value shall be 1.47 Mpa or under. The faucet after it has been operated 100000 times it shall be free from a seat- leakage and shall satisfy the reverse flow preventing performance. The inside and outside surfaces of the faucet shall be smooth and be free from blowholes, fissures, remarkable flows or injurious defects. The chromium plating on the faucet shall be of class 2 grade 1. The final coating should be done with chromium of minimum 0.1 micron. The faucet shall be made leak proof and fixing in position with selected tape etc. , all complete approved and accepted by the Engineer- in- charge. 12 mm dia CP Concealed Stop Cock	each	10.000	1153.001	One Thousand One Hundred and Fifty-Three point Zero Zero One	11530.010	Eleven Thousand Five Hundred and Thirty point Zero One	I have seen
28	Civil	26.46.5	Supplying different inside dia best quality CPVC pressure pipe for water supply having specific gravity 1.35 - 1.45, and other physical, chemical, thermal, fire resistivity properties etc. as per BSTI approved manufacturer standards or ASTM, BS/ISO/IS standards fitting and fixing in position with sockets, bends, with all accessories such as round grating/domed roof grating, bends, sockets etc. approved and accepted by the Engineer-in-charge. 37 mm dia wall thickness 3.7 mm - 4.3 mm	m	30.585	868.001	Eight Hundred and Sixty-Eight point Zero One	31755.817	Thirty-One Thousand Seven Hundred and Fifty-Five point Eight One Seven	I have seen
29	Civil	26.46.2	Supplying different inside dia best quality CPVC pressure pipe for water supply having specific gravity 1.35 - 1.45, and other physical, chemical, thermal, fire resistivity properties etc. as per BSTI approved manufacturer standards or ASTM, BS/ISO/IS standards fitting and fixing in position with sockets, bends, with all accessories such as round grating/domed roof grating, bends, sockets etc. approved and accepted by the Engineer-in-charge. 19 mm dia wall thickness 2.9 mm - 3.4 mm	m	45.732	387.001	Three Hundred and Eighty-Seven point Zero Zero One	17698.330	Seventeen Thousand Six Hundred and Ninety-Eight point Three Three	I have seen
30	Civil	16.16	Lacquer Polish (China or equivalent) of Standard design of wooden surface Top coat, Thinner, Clear sealer, Color pigment etc. complete from authorized local agent of the manufacturer in a sealed container, including paint spray machine etc including surface cleaning from dust, oil or dirt, smoothening, finishing and polishing with sand paper and necessary tools, scaffolding, es etc. all complete in all floors approved and accepted by the Engineer.	sqm	27.881	2143.001	Two Thousand One Hundred and Forty-Three point Zero Zero One	59749.011	Fifty-Nine Thousand Seven Hundred and Forty-Nine point Zero One One	I have seen
31	EM	7.2.3.1.1	Supply, installation, testing & commissioning of split type air-cooler with inverter comprising condensing and evaporating units having following cooling capacity based on indoor temperature 27°-30°C DB / 19.5°-22°C WB and outdoor temperature 35°-40°C DB at high fan speed condition suitable for installation & operation in tropicalized country like Bangladesh & as per detailed specifications & standard as mentioned below OUTDOOR UNIT / CONDENSING UNIT (1) Type : Compact weather proof outdoor type condensing unit (2) Compressor : Hermetically sealed reciprocating / rotary compressor. (3) Refrigerant : Internationally accepted & recommended and most commonly used gas (CFC free) (4) Blower motor : Well balanced type direct driven centrifugal type blower fan (5) Power supply : (5.1) 200-250 V, single phase, 50 Hz AC supply [up to 30000 BTU/HR] (5.2) 380-440 V 3-phase, 50 Hz AC supply [above 30000 BTU/HR] (6) Condensing pipe / coil : Made of copper 7) EER/COP : For upto 60000 BTU/HR EER should be minimum 9.23 (BTU/HR)/WATT and COP Should be minimum 2.70 (W/W) For above 60000 BTU/HR EER should be minimum 10.5	each	6.000	49726.001	Forty-Nine Thousand Seven Hundred and Twenty-Six point Zero Zero One	298356.006	Two Lakh Ninety-Eight Thousand Three Hundred and Fifty-Six point Zero Zero Six	I have seen


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(BTU/HR)/WATT and COP should be minimum=3.08 (W/W)(8). Others features (8.1) Well balanced in all respect having interlock with the fan coil unit (8.2) Compressor dully equipped with vibration isolator, thermostatic & overload controls, magnetic contactors and all other standard accessories complete. (8.3) Refrigerant copper pipe [From outdoor to indoor unit] with thermal insulation, refrigerant charging arrangement etc. [Minm length 10 mtr.] (8.4) Reqd. size PVC insulated & sheathed cable with ECC through water grade PVC pipe from outdoor to indoor unit. (8.5) Sound level : maximum 65 dB(A) at 1 meter INDOOR UNIT / FAN COIL UNIT Features (1). Direct expansion system fan coil unit with well balanced direct driven centrifugal type fan. (2). Fancy & adjustable air circulating louver grill, removable & washable type filter. (3). Condensing water drain out PVC flexible pipe with necessary insulation (4). Thermostatic switch and remote control switch. (5). Sound level : maximum 44 dB(A) at 1 meter Standard : Major component shall be manufactured as per relevant international standard & code. Documents : Manufacturing company shall have the following certificate : (1). ISO-9001. (2). CE Certification / UL Listing. Warranty : The bidder should provide the guaranty of compressor for at least 2 years & free service with spares for 2 years from the date of commissioning & it should be obtained from the air cooler selling agency. Any brand manufactured or assembled in BANGLADESH / CHINA / VIETNAM / TURKEY approved / accepted by the Engineer-in-charge, in accordance with fulfillment of the above specifications and having relevant certificates as mentioned. Capacity : 12000 BTU/HR Wall mounted

Supply, installation, testing & commissioning of split type air-cooler with inverter comprising condensing and evaporating units having following cooling capacity based on indoor temperature 27°-30°C DB / 19.5°-22°C WB and outdoor temperature 35°-40°C DB at high fan speed condition suitable for installation & operation in tropicalized country like Bangladesh & as per detailed specifications & standard as mentioned below : OUTDOOR UNIT / CONDENSING UNIT (1). Type : Compact weather proof outdoor type condensing unit (2). Compressor : Hermitically sealed reciprocating / rotary compressor. (3). Refrigerant : Internationally accepted & recommended and most commonly used gas (CFC free) (4). Blower motor : Well balanced type direct driven centrifugal type blower fan (5). Power supply : (5.1). 200-250 V, single phase, 50 Hz. AC supply [up to 30000 BTU/HR] (5.2). 380-440 V 3-phase, 50 Hz. AC supply [above 30000 BTU/HR] (6). Condensing pipe / coil : Made of copper (7). EER/COP : For upto 60000 BTU/HR EER should be minimum 9.23 (BTU/HR)/WATT and COP Should be minimum 2.70 (W/W) For above 60000 BTU/HR EER should be minimum 10.5 (BTU/HR)/WATT and COP should be minimum=3.08 (W/W)(8). Others features : (8.1) Well balanced in all respect having interlock with the fan coil unit (8.2) Compressor dully equipped with vibration isolator, thermostatic & overload controls, magnetic contactors and all other standard accessories complete. (8.3) Refrigerant copper pipe [From outdoor to indoor unit] with thermal insulation, refrigerant charging arrangement etc. [Minm length 10 mtr.] (8.4) Reqd. size PVC insulated & sheathed cable with ECC through water grade PVC pipe from outdoor to indoor unit. (8.5) Sound level : maximum 65 dB(A) at 1 meter INDOOR UNIT / FAN COIL UNIT Features (1). Direct expansion system fan coil unit with well balanced direct driven centrifugal type fan. (2). Fancy & adjustable air circulating louver grill, removable & washable type filter. (3). Condensing water drain out PVC flexible pipe with necessary insulation (4). Thermostatic switch and remote control switch. (5). Sound level : maximum 44 dB(A) at 1 meter Standard : Major component shall be manufactured as per relevant international standard & code. Documents : Manufacturing company shall have the following certificate : (1). ISO-9001. (2). CE Certification / UL Listing. Warranty : The bidder should provide the guaranty of compressor for at least 2 years & free service with spares for 2 years from the date of commissioning & it should be obtained from the air cooler selling agency. Any brand manufactured or assembled in BANGLADESH / CHINA / VIETNAM / TURKEY approved / accepted by the Engineer-in-charge, in accordance with fulfillment of the above specifications and having relevant certificates as mentioned. Capacity : 17000-18000 BTU/HR Wall mounted

32 EM 7.2.3.2.1

each

1.000 60770.001

Sixty
Thousand
Seven
Hundred
and
Seventy
point
Zero
Zero
One

60770.001

Sixty
Thousand
Seven
Hundred
and
Seventy
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Attested

৩/১০/১৮
মোঃ দেলোয়ার হোসাইন
সহকারী প্রকৌশলী
নির্মাণ (সিভিল) বিভাগ
ঢাকা ওয়াশা।

33 EM 7.3.5

m

32.012 638.001

Six
Hundred
and
Thirty-
Eight
point
Zero
Zero
One

20423.688

Twenty
Thousand
Four
Hundred
and
Twenty-
Three
point
Six
Eight
Eight

I
have
seen

34 EM 7.3.6

m

32.012 773.001

Seven
Hundred
and
Seventy-
Three
point
Zero
Zero
One

24745.308

Twenty-
Four
Thousand
Seven
Hundred
and
Forty-
Five
point
Three
Zero
Eight

I
have
seen

35 EM 7.4

each

7.000 6939.001

Six
Thousand
Nine
Hundred
and
Thirty-
Nine
point
Zero
Zero
One

48573.007

Forty-
Eight
Thousand
Five
Hundred
and
Seventy-
Three
point
Zero
Zero
Seven

I
have
seen

36 EM 7.5.2

m

64.024 1550.001

One
Thousand

99237.264

Ninety-
Nine

I
have

			Rubber Foam Insulation having density of 40-70 Kg/m3, thermal conductivity of 0.037 W/mK at 200°C Mean Temp. Water Vapour Diffusion Resistance (μ) ? 7000 (without the vapour barrier) and with factory laminated aluminium foil of 12-18 micron thickness. to be applied using manufacturer's recommended rubber based adhesive. The Joints shall be sealed with 50-75mm wide self-adhesive tapes of Aluminium Foil with scrim complete as per specifications and as required. 25 mm				Five Hundred and Fifty point Zero Zero One		Thousand Two Hundred and Thirty-Seven point Two Six Four	
37	EM	1.9.1.1	Cables manufactured by Govt. of Bangladesh owned / shared company Ltd. (Eastern cables) approved by the Engineer In Charge. 1C-2x1.5 sqmm (BYM) cable with 1.5 sqmm (BYA) ECC wire	m	259.146	133.001	One Hundred and Thirty-Three point Zero Zero One	34466.677	Thirty-Four Thousand Four Hundred and Sixty-Six point Six Seven Seven	I have seen
38	EM	1.9.1.4	Cables manufactured by Govt. of Bangladesh owned / shared company Ltd. (Eastern cables) approved by the Engineer In Charge. 1C-2x6 sq. mm (BYA) cable with 6 sqmm (BYA) ECC wire	m	70.122	406.001	Four Hundred and Six point Zero Zero One	28469.602	Twenty-Eight Thousand Four Hundred and Sixty-Nine point Six Zero Two	I have seen
39	EM	4.11.1.1	Providing & fixing 250 volt single phase universal combined switch socket outlet (surface / concealed type) Manufactured/ Assembled and tested in accordance with IEC / VDE / NEMA / BS / JIS along with relevant BDS IEC standards mounted on required size 18 SWG galvanized plain sheet board / plastic board (self-extinguishing 650 degree centigrade) of 76.2 mm. (3") depth. Sample to be approved by the Engineer-in-charge. Manufacturer shall have certificate of standard which they follow. 13 / 15 / 16 / 20 Amps. Made in HONGKONG / MALAYSIA / SINGAPORE / S KOREA / THAILAND	each	7.000	942.001	Nine Hundred and Forty-Two point Zero Zero One	6594.007	Six Thousand Five Hundred and Ninety-Four point Zero Zero Seven	I have seen
40	EM	4.12.1.3	Providing & fixing 250 volts. 5 / 6 amps (minimum) concealed type following switch / switch socket Manufactured / Assembled and tested in accordance with IEC / VDE / NEMA / BS / JIS along with relevant BDS IEC standards mounted on required size 18 SWG galvanized plain sheet / PVC board (Self-extinguishing 650 Degree Centigrade) of 76.2 mm (3") depth. All electrical contacts shall be of brass / copper. MADE IN ENGLAND / GERMANY / JAPAN / USA or EU countries Three gang switch	each	16.000	1458.001	One Thousand Four Hundred and Fifty-Eight point Zero Zero One	23328.016	Twenty-Three Thousand Three Hundred and Twenty-Eight point Zero One Six	I have seen
41	EM	1.6.1.1	Concealed conduit wiring for following point looping at the switch board with earth terminal with 1C-2x1.5 sqmm PVC insulated and sheathed stranded cable (BYM) & 1C-2x1.5 sqmm PVC insulated ECC (BYA) (Green / Yellow bi-colour) including circuit wiring with (From SDB to Switch Board) 1C-2x2.5 sqmm PVC insulated and sheathed stranded cable (BYM) & 1C-2x2.5 sqmm PVC insulated ECC (BYA) Green / Yellow bi-colour through PVC conduit (one conduit from switch board to common point on Cables manufactured by Govt. of Bangladesh owned / shared company Ltd. (Eastern cables) approved by the Engineer In Charge. Light / exhaust or wall bracket fan point	each	10.000	1372.001	One Thousand Three Hundred and Seventy-Two point Zero Zero One	13720.010	Thirteen Thousand Seven Hundred and Twenty point Zero One	I have seen
42	EM	1.6.1.2	Concealed conduit wiring for following point looping at the switch board with earth terminal with 1C-2x1.5 sqmm PVC insulated and sheathed stranded cable (BYM) & 1C-2x1.5 sqmm PVC insulated ECC (BYA) (Green / Yellow bi-colour) including circuit wiring with (From SDB to Switch Board) 1C-2x2.5 sqmm PVC insulated and sheathed stranded cable (BYM) & 1C-2x2.5 sqmm PVC insulated ECC (BYA) Green / Yellow bi-colour through PVC conduit (one conduit from switch board to common point on Cables manufactured by Govt. of Bangladesh owned / shared company Ltd. (Eastern cables) approved by the Engineer In Charge. Fan point	each	8.000	1372.001	One Thousand Three Hundred and Seventy-Two point Zero Zero One	10976.008	Ten Thousand Nine Hundred and Seventy-Six point Zero Zero Eight	I have seen
43	EM	21.2.3	Providing and fixing of following axial flow AC capacitor type wall mounted exhaust fan complete with blade, steel frame standard wall louver shutter, PVC insulated connecting wire etc. complete as required including cutting wall and mending good the damages as per direction of the Engineer. 12" Exhaust fan plastic body (foreign made accepted / approved by the Engineer).	each			One Thousand Five Hundred and Eighty-Three point Zero Zero One	6332.004	Six Thousand Three Hundred and Thirty-Two point Zero Zero Four	I have seen
44	EM	6.5.2.1.3	Supply & fixing spot/Panel LED light fittings of following specifications: Luminous efficacy i) For Spot/Bracket LED Light Fittings: 80 lm/W (min). ii) For Panel/Tube Light Fittings: 100 lm/W (min) Power Factor: minimum 0.95 Colour Rendering Index(Ra) : i) For Residential building Ra70 ii) For office and other types of buildings 70?Ra< 85 Driver: Should be of IEC standard such as MEANWELL/OSRAM/ENERGY+/SIGNIFY(PHILIPS) or equivalent LED chips EPISTAR / OSRAM / SIGNIFY(PHILIPS) / CREE / BRIDGELUX or equivalent. Colour temperature : 3500K-6500K (Warm-White) Model & sample to be accepted / approved by the Engineer-in-charge (with 2 years warranty) 18 W. Approximate Dia -218 mm	each	4.000	1068.001	One Thousand AND Sixty-Eight point Zero Zero One	4272.004	Four Thousand Two Hundred and Seventy-Two point Zero Zero Four	I have seen
45	EM	6.6.1.5	Providing & fixing the 4' x 40 watt tube light Fittings with superior quality electronic driver of one year guarantee, holder, necessary wiring with 2 X 0.4 sq. mm PVC insulated (stranded) flexible FR wire, earth terminal etc. (except lamp). The fittings shall be suitable for use of LED lamp and complete sample to be accepted / approved by the Engineer-in-charge (with 2 years warranty). Light source 20W LED T-8 tube Material: MS Sheet, PC Cover & Plastic Grill L-1340mm B-104mm H-55mm Gloria cal no-GTF(LED)892x 1x 20 w Energy + EPI-4305 Cosmo Cal no-BDITCL-TLF-06 Asha Cal No ACS-TLS 307x1x40W Crescent-CTLS-225x1x40 Watt or equivalent	each	15.000	1804.001	One Thousand Eight Hundred and Four point Zero Zero One	27060.015	Twenty-Seven Thousand AND Sixty point Zero One Five	I have seen

Attested

[Signature]

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নির্মাণ (সিভিল) বিভাগ
ঢাকা ওয়ারহাউস

46

EM

21.1.1.1

Supplying & fixing AC capacitor type ceiling fan (without regulator) of following specifications and sizes complete with minimum 305 mm (1 ft) long and 0.75 -1.0" dia, 2.3 mm thickness MS pipe down rod, tempered cast aluminum blades, 2.5 µf 400V AC capacitor, canopy, double Z ball bearing, best quality silicon sheet core, best quality copper made super enamel wire, aluminum alloyed casting body / metal body having safety pin with powder coated heat / docu paint as required as per BDS 818 etc. connecting PVC wire complete as required. Rated voltage : 230 volts Rated frequency : 50 Hz Rated speed : 300 rpm $\pm$ 5 % Service value : Minimum 3.5 m³ / min / wall Temperature rise : Maximum 55°C Class of Insulation : Minimum E Noise level : Maximum 60 dB at a distance of 1 meter, 1442 mm. (56") Sweep Input power : Maximum 65 wall

each

3.000

3914.001

Three
Thousand
Nine
Hundred
and
Fourteen
point
Zero Zero
One

11742.003

Eleven
Thousand
Seven
Hundred
and Forty-
Two point
Zero Zero
Three

I
have
seen

Grand
Total: 2498636.323

Twenty-
Four Lakh
Ninety-
Eight
Thousand
Six
Hundred
and Thirty-
Six point
Three Two
Three

Attested

This Priced Bill of Quantities (BOQ) is Electronically Signed by Mr. Md Alam on behalf of M/S Progati International

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