

SECTION III/A: BILL OF QUANTITIES FOR HVAC WORKS

1	2	3	4	5	6	7	8	9	10
BOQ No.	Specification Reference	Description	Qty.	Unit	Material Unit Rate	Material Cost	Installation Unit Rate	Installation Cost	Total Cost
1	2	3	4	5	6	6 x 4	8	8 x 4	7 + 9
	23 73 13 40 92 49 23 41 00	Installation of Air Handling Unit, including the cost loading, unloading and placing on each floor, material or foundation or any other material or tool and equipment which may be required complete in all respects with necessary fittings and as per schedule and specifications.							
E		AHU - UG - 01	1	No.		-	8,000	8,000	8,000
F		AHU - FF - 01	1	No.		-	8,000	8,000	8,000
		AHU - FF - 02	1	No.		-	8,000	8,000	8,000
G		AHU - FF - 03	1	No.		-	8,000	8,000	8,000
E		AHU - FF - 04	1	No.		-	8,000	8,000	8,000
F		AHU - SF - 01	1	No.		-	8,000	8,000	8,000
		AHU - SF - 02	1	No.		-	8,000	8,000	8,000
G		AHU - SF - 03	1	No.		-	8,000	8,000	8,000
		AHU - SF - 04	1	No.		-	8,000	8,000	8,000
	23 37 13	Supply, Installation and Commissioning of fresh air intake louvers with sand trap, Aluminum constructed and powder coated finished as per specifications.							
		<u>Fresh Air Intake Louvers</u>							
A		3.2 sft (with 33% free area)	1	No.	9,500	9,500	1,000	1,000	10,500
B		3.6 sft (with 33% free area)	1	No.	10,500	10,500	1,000	1,000	11,500
C		1.23 sft (with 33% free area)	1	No.	7,500	7,500	1,000	1,000	8,500
A		4.1 sft (with 33% free area)	1	No.	15,000	15,000	1,000	1,000	16,000
B		3.6 sft (with 33% free area)	1	No.	10,500	10,500	1,000	1,000	11,500
B		1.23 sft (with 33% free area)	1	No.	7,500	7,500	1,000	1,000	8,500
C		4.1 sft (with 33% free area)	1	No.	15,000	15,000	1,000	1,000	16,000
	23 31 00	Supply, Installation and Commissioning of G.I Sheet metal air ducts as per ASHRAE Standards for air ducting, plenums and other sheet fabrications including splitter dampers, take off, vanes elbows and other necessary fittings.							
E		26 Gauge	120	Sq ft.	200	24,000	65	7,800	31,800
E		24 Gauge	2,055	Sq ft.	210	431,550	65	133,575	565,125
E		22 Gauge	442	Sq ft.	220	97,240	65	28,730	125,970
A	23 07 00	Supply, Installation & Commissioning of Glass wool insulation of 1" thickness for ducts. Complete in all respect as mentioned in the schedule & specifications.	2,617	Sq ft.	110	287,870	45	117,765	405,635
B	23 07 00	Supply, installation & commissioning of 0.032" Aluminum cladding over Exposed Ducts complete with all respects as mentioned in the schedule & specifications.	2,617	Sq ft.	-	-	-	-	-
C	23 07 00	1" thick Glass Fibre sound liner for Air Ducting including accessories.	1	Job	50,000	50,000	20,000	20,000	70,000
	23 37 13	Supply, installation and commissioning to Air Devices as per drawings and specifications.							
		Sub Total (Page 01)							1,353,030

1	2	3	4	5	6	7	8	9	10
BOQ No.	Specification Reference	Description	Qty.	Unit	Material Unit Rate	Material Cost	Installation Unit Rate	Installation Cost	Total Cost
1	2	3	4	5	6	6 x 4	8	8 x 4	7 + 9
	23 37 13	Supply Air Diffuser (S.A.D) (Contd.)							
		18x18	3	Nos.	6,490	19,470	1,000	3,000	22,470
		15x15	8	Nos.	4,400	35,200	1,000	8,000	43,200
		12x12	8	Nos.	2,900	23,200	1,000	8,000	31,200
		9x9	4	Nos.	900	3,600	500	2,000	5,600
	23 37 13	Return Air Diffuser (R.A.D) (Contd.)							
		18x18	2	Nos.	6,400	12,800	1,000	2,000	14,800
		15x15	3	Nos.	4,400	13,200	1,000	3,000	16,200
		12x12	7	Nos.	2,900	20,300	1,000	7,000	27,300
		9x9	10	Nos.	900	9,000	500	5,000	14,000
	23 23 00	Supply, Installation & Commissioning of Refrigerant Copper Piping with closed cell elastomeric insulation 20mm thick with supports, fittings, and accessories.							
		1/2" diameter	43	Rft	425	18,275	200	8,600	26,875
		7/8" diameter	43	Rft	810	34,830	250	10,750	45,580
		1/2" diameter	82	Rft	425	34,850	200	16,400	51,250
		3/8" diameter	82	Rft	315	25,830	180	14,760	40,590
		1/2" diameter	47	Rft	425	19,975	200	9,400	29,375
		3/8" diameter	47	Rft	315	14,805	180	8,460	23,265
		1/2" diameter	50	Rft	425	21,250	200	10,000	31,250
		3/8" diameter	50	Rft	315	15,750	180	9,000	24,750
		1/2" diameter	84	Rft	425	35,700	200	16,800	52,500
		7/8" diameter	84	Rft	810	68,040	250	21,000	89,040
		1/2" diameter	98	Rft	425	41,650	200	19,600	61,250
		3/8" diameter	98	Rft	315	30,870	180	17,640	48,510
		1/2" diameter	75	Rft	425	31,875	200	15,000	46,875
		3/8" diameter	75	Rft	315	23,625	180	13,500	37,125
		1/2" diameter	72	Rft	425	30,600	200	14,400	45,000
		3/8" diameter	72	Rft	315	22,680	180	12,960	35,640
		1/2" diameter	105	Rft	425	44,625	200	21,000	65,625
		3/8" diameter	105	Rft	315	33,075	180	18,900	51,975
		Sub Total (Page 02)							981,245

1	2	3	4	5	6	7	8	9	10
BOQ No.	Specification Reference	Description	Qty.	Unit	Material Unit Rate	Material Cost	Installation Unit Rate	Installation Cost	Total Cost
1	2	3	4	5	6	6 x 4	8	8 x 4	7 + 9
	23 21 14	Supply, Installation and Commissioning of U-PVC piping Class- D. with closed cell elastomeric 15mm thick Insulation for condensate drain including all cutting, fixing fitting, laying, cleaning, making good and supports complete in all respect as per drawings and specifications.							
		3/4" diameter	35	Rft	160	5,600	80	2,800	8,400
		3/4" diameter	38	Rft	160	6,080	80	3,040	9,120
		3/4" diameter	10	Rft	160	1,600	80	800	2,400
		3/4" diameter	5	Rft	160	800	80	400	1,200
		3/4" diameter	28	Rft	160	4,480	80	2,240	6,720
		3/4" diameter	38	Rft	160	6,080	80	3,040	9,120
		3/4" diameter	10	Rft	160	1,600	80	800	2,400
		3/4" diameter	5	Rft	160	800	80	400	1,200
		3/4" diameter	28	Rft	160	4,480	80	2,240	6,720
		Supply, Installation and Commissioning of Dampers as per SMACNA standards and specifications.							
	23 33 13.13	<u>Voume Control Dapmers (VCD) (Contd.)</u>							
		14"x10"	3	No.	3,000	9,000	1,000	3,000	12,000
		24"x10"	2	No.	5,000	10,000	1,000	2,000	12,000
		12"x8"	3	No.	2,000	6,000	1,000	3,000	9,000
		16"x10"	5	No.	3,500	17,500	1,000	5,000	22,500
		16"x8"	2	No.	3,500	7,000	1,000	2,000	9,000
		12"x6"	4	No.	3,000	12,000	1,000	4,000	16,000
		18"x10"	6	No.	3,750	22,500	1,000	6,000	28,500
		16"x12"	1	No.	3,750	3,750	1,000	1,000	4,750
		12"x10"	2	No.	2,400	4,800	1,000	2,000	6,800
		30"x12"	1	No.	7,500	7,500	1,000	1,000	8,500
		14"x8"	2	No.	2,300	4,600	1,000	2,000	6,600
A	23 09 00	<u>MISCELLANEOUS</u>							
B		Supply, Installation & commissioning of brass tags for Equipment and system including all accessories complete in all respect.	1	Job	20,000	20,000	5,000	5,000	25,000
C		Supply, Installation & commissioning of foundation for pipes and equipment including all noise and Vibration controller as per drawings and specifications.	1	Job	60,000	60,000	20,000	20,000	80,000
D	23 09 00	Supply, Installation & commissioning of hangers and supports for pipes and equipment including all noise and Vibration controller roller type and others as per drawings and specifications.	1	Job	160,000	160,000	20,000	20,000	180,000
		Painting on equipment / Hangers, Supports, Pipe etc as per specifications.	1	Job	15,000	15,000	10,000	10,000	25,000
F		<u>Drawings</u>							
G		Shop Drawings as per specifications.	1	Job	10,000	10,000	5,000	5,000	15,000
		As Built Drawings as per specifications.	1	Job	7,000	7,000	5,000	5,000	12,000
H		<u>Testing (3 months test run) & Commissioning with Air & water balancing</u>							
		HVAC System.	1	Job	180,000	180,000	10,000	10,000	190,000
I		<u>Sundries</u>							
		Supply, installing and commissioning of items not listed in BOQ but required.	1	Job	-	-	-	-	-
		Sub Total (Page 03)							709,930
		GRAND TOTAL FOR HVAC WORKS							3,044,205
		Less Discount							344,205
		Net Total Amount							2,700,000

Note: Quoted prices are exclusive of all taxes.