

PRICEBID FOR THE PROPOSED RENOVATION OF DEPARTMENT IN GROUND FLOOR, SBI CMP BUILDING AT GACHIBOWLI, HYDERABAD. VRF AC WORKS.

S.NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
A	PART - A - HIGH SIDE				
1	Condensing Unit (Outdoor Unit):				
	The condensing unit shall be capable of assessing the requirement of liquid refrigerant flow of each evaporating unit at all times by means of a micro computer control expansion valve and generating the required total flow of refrigerant liquid for supply to the evaporator units. The condensing unit shall be modular type, designed as per Indian atmospheric conditions and should be capable to perform for outside ambient 50 Deg. C. Outdoor Units should be modular in type and should be equipped with DIP IPM type Inverter Scroll Compressor, Inverter with variable speed compressors capable of changing the capacity in accordance to the cooling load requirement with highest COP/EEER. Provision of setting External Static Pressure up to 60Pa by on site. Unit COP/EEER should be high and designed for cooling operation for highest ambient Temperature as per Indian atmospheric conditions.				
	Set of Outdoor Unit should be able to connect up to 64 Indoor Units. Outdoor unit should consists of DC variable speed motor for condenser fan with minimum 25 steps speed control to reduce input power, auto check function for connection error, auto address setting. Unit should be equipped with a double stage highly efficient oil separation management system to ensure minimum oil entrainment and proper lubrication with high reliability and stable operation with long refrigerant piping. The noise level of the base unit shall be less than 60dB (A) when measured horizontally 1 m away from cover surface and 1.5 m above floor level during night shift. Unit should assess demand function automatically and perform with the help of Central Station. Units having Noise reduction mode will be preferred but must be having back up operation function for emergency to avoid complete stop. Outdoor unit should have feature of Rotation Operation function of Compressor to distribute load.				
	The condenser coil should be with internally grooved Cu tubes, mechanically bonded to super slit aluminum fins. The surface of the condenser coil shall be coated with suitable chemical coating to prevent deterioration due to climate. Outdoor unit must have automatic judgement function to check whether or not the refrigerant amount is sufficient in one refrigerant cycle. Reliable Transmission system should be used between outdoor and indoor units. All necessary safety devices shall be provided to ensure safe operation of the system.				
1.1	12 HP Outdoor Unit	Nos	1	350000	350000
1.2	10 HP Outdoor Unit for TFA UNIT	Nos	1	325000	325000
2	Supply ,Installation, testingand commissioning of ceiling suspended medium static Treated Fresh Air units consists of pre-filter, corded remoted, necessary supportsetcfor the belowmentioned capacities.				-
2.1	10.0HP(1000CFM) TFA UNIT	Nos	1	105000	3,60,000

3	Supply of CASSETTE UNITS type indoor units comprising with pre-filter, fan section with low noise fan multi speed motor, coil section with DX coil, outer cabinet, drain water lift-up mechanism, insulation, pipe connections etc. of various capacities as per specifications and drawings. WITH CORDLESS REMOTE CONTROL				
3.1	1.5 Ton 4 way Cassette (Compact size)	Nos	1	45000	45000
3.2	3.0 Ton 4 way Cassette	Nos	3	51000	153000
4	Multi kits for Indoor units FOR BOTH LIQUID & SUCTION LINE. (only one unit will be considered for both suction and liquid lines)	Nos	4	5000	20000
	Total Amount Part -A				1253000
B	LOW SIDE WORKS				
1	Lifting, Shifting, Positioning & Installation of VRF Outdoor units on terrace including required supporting system in MS/ RCC. (1 no 12HP & 1 no 10 HP)	Nos	2	15000	30000
2	Lifting, Shifting, Positioning, Installation , Commissioning and Testing of VRF Indoor units	Nos	4	3500	14000
3	Vacuuming the system, Gas filling and topping up with R410-Ozone Friendly and NonCFC Refrigerant, pressure testing and commissioning of above system.	Per / HP	22	2000	44000
4	Supply & installation of suction & discharge Hard copper Refrigerant piping with proper supports/hangers from ceiling/wall as required at site & approved by consultant & duly insulated with closed cell elastomeric nitrile insulation of 19mm thick for pipes above 1" and 13 mm thick for pipes below 1" as suggested by the manufacturer. (only one length will be considered for both suction and liquid lines)				
4.1	LO : 15.90 & G.O 28.58	Rmt	200	2000	400000
4.2	LO : 12.70 & G.O 25.40				
4.3	LO : 9.37 & G.O 22.20				
4.4	LO : 6.35 & G.O 15.90				
5	Supply and Erection of hard PVC condensated drain piping with 9mm thick Nitrile insulated including support and wall opening of the following sizes etc..				
5.1	25 / 32mm Dia	Rmt	150	220	33000
6	Supply and Laying of Control and communication cable and connecting the VRF IDUs and ODUs (control wiring using 3C X 1.5 Sq.mm copper cable) with conduit	Rmt	300	180	54000
7	Supply and fixing of following size GI perforated cable tray made out of 2mm thick galvanized sheet and the tray covered with 2mm thick cover including GI / MS supports for fixing the tray, anchor fasteners etc., complete as required. (For Copper pipes and PVC Pipes)				
A	300mm wide	Rmt	60	1500	90000

8	supply & installation CO2 wall mountable sensor for automatic ventilation / fresh air control with two switch outputs CO2 controlled for 2 stage control , with manual and automatic mode as well as display of switching status operating voltage 24 VDC SELV output voltage 3 x 0-10V , warning display for CO2& Sensor with fresh air fan including voltage converter and relay and labour charges concentration	Nos	6	18000	4,95,000
9	supply & installation CO2 micro controller with minimum 16 connection port	Nos	1	42000	1,60,000
10	Supply and installation of flexible FRLS power cable to provide connections between the power supply points and DDC controller / Motorized damper (4 core x 1.0 sqmm)	Rmt	100	200	29,000
11	Supply, installation, testing & commissioning of thermal insulated flexible duct of size 450mmX450mm to 300mm X 150mm duly supported at regular interval as per site requirement etc. complete as required as per specifications. Flexible ducts of gi to connect into the rectangular ducts each to be 1000mm long - complete with proper edge fasteners , C clips etc etc .	Rmt	20	800	38,500
12	Supply, installation , testing and commissioning of Extruded aluminum powder coated fresh air disk valve size 150mm X 150mm	Nos	15	900	20,800
13	Supply, installation , testing and commissioning of Butterfly dampers size 150mm X 150mm	Nos	15	700	20,800
14	supply , installation , testing and commissioning of Factory Fabricated Rectangle ducting complete with angel iron flanges, high tech supports (Vanes if reuired) as per IS 655 & Class VIII specifications. The scope of work includes covering the duct with 9mm nitrile rubber class "o "suitable insulation				
14.1	24 Gauge	Sqm	120	1450	96,000
15	Fire retardent Canvass connections with 150 mm Zip	Nos	2	4500	14,000
16	Dismantling, Decomissioning, Repositioning and Re Installation of VRF Cassette Indoor units as per the directions.	Nos	6	4500	14,000
17	Vacuuming the system, Gas filling and topping up with R410-Ozone Friendly and NonCFC Refrigerant, pressure testing and commissioning of above system.	Per / HP	60	2000	120000
16	Associated Civil works				
	Chipping, Cutting & Plastering the wall openings in cement mortar 1:6 of 15 mm thick finishing to line and level with sand facied finishing at all levels, including all leads & lifts, scaffolding, curing etc complete (for Copper & Drain openings in all areas etc.	Lot	1	10000	10000
	TOTAL AMOUNT -B				1683100
C	COMPREHENSIVE ANNUAL MAINTENANCE - C				
1	COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT FOR 1 NO'S OF 12HP, 1NO 10HP (ODU) AND 1 NO 10HP TFA IDU, 3 NO 3 TR CASSETTE AC IDU AND 1 NO 1.5 TR CASSETTE AC				
1.1	Comprehensive Annual Maintenance Contract for 1st year which starts after expiry of 1 year defect liability period	Job	1	79200	79200
1.2	Comprehensive annual Maintenance contract for 2nd year	Job	1	81400	81400

1.3	Comprehensive annual Maintenance contract for 3rd year	Job	1	83600	83600
1.4	Comprehensive annual Maintenance contract for 4th year	Job	1	85800	85800
1.5	Comprehensive annual Maintenance contract for 5th year	Job	1	88000	88000
	TOTAL AMOUNT -C				418000
	TOTAL RUPEES (A+B+C)				3354100
	QUOTE + / - %				
	GRAND TOTAL				