



**State Bank of India**

**BOQ FOR AIR CONDITIONING WORKS OF SME CC VASHI TURBHE BRANCH,**

Sr. no	Particulars	Qty	Nos.	PRICE	
				Rate	Amount
1	<b>VRF OUTDOOR UNITS: Supply of Out Door Units suitable for VRF / VRV System Bluestar, Daikin, Mitsubishi, Carrier-TOSHIBA, HITACHI, Voltas, LG.</b>				
	Supply of Modulating outdoor units, with multi/single hermetically sealed scroll compressors (minimum one/two compressors) with inverter type compressor, low noise propeller type aero spiral fan, special pre-coated fins, panel, corrosion resistant (suitable for seaside installation) coated condenser, inverter-based condenser fan M.S.hot dip galvanized stands / supports, electrical & microprocessor panel, isolating valves and all the necessary accessories for proper functioning of the units, having following approximate capacities. The unit suitable for operation on R-410a/ Eco friendly refrigerant. The unit shall operate on 415 ± 10% Volts, 50 cycles, 3 phase, 4 wire AC supply. Outdoor units suitable for air over condenser temperature of 50deg.c <b>Note:</b> Fins and copper tubes of Air Cooled Condenser along with copper tubing / piping with all joints and U- Bends exposed to coastal areas corrosive atmosphere / aggressive ambient, shall be painted with special corrosion prevention coating either in factory or at site.				
a	<b>10HP VRF ODU SEPARATE UNITS FOR GR. FLOOR &amp; 1ST FLOOR</b>	2	No		
2	Supply of VRF based Indoor units complete with cord less remote control and all accessories, Vibration isolators & supports. The indoor unit shall be suitable for a power supply of 240V/ 1 phase/ 50Hz OR 415V / 3 phase / 50Hz.				
i	<b>GR FLOOR</b>				
a	3.0 TR 4-way Cassette type Indoor Unit	3	nos		
b	2.0 TR 4-way Cassette type Indoor Unit	3	nos		
3	Refnet Joints set for suction & Liquid lines				
	<b>Supply of Refnet Joints</b>	7	Sets		
4	SUPPLY of following inverter 5 star high wall SPLIT AIR CONDITIONERS of approved make having ODU & Single circuits with scroll /rotary inverter Compressors, eco friendly gas including indoor unit with fan, fan- motor, Copper cooling coil, expansion device, condensing unit, compressors, cond. coils, cond. Fans, safety cutouts, inbuilt control panel complete with contactors, relays, internal cabling, thermostat to control temperature & machine, having single Indoor unit & single Outdoor unit with display facility, cordless remote etc The price inclusive of 3mtr copper pipe.				
a	1.5 TR	4	nos		
	<b>HIGH SIDE WORKS TOTAL-A</b>				



Sr. no	Particulars	Qty	Nos.	PRICE	
				Rate	Amount
	<b>LOW SIDE WORKS</b>				
	<b>Installation of VRF/ VRV system</b>				
5	Installation, Testing and Commissioning of <b>10 HP VRF ODU</b> Out Door Units suitable for VRF / VRV System -Price shall inclusive of Pressure testing, Lifting, Shifting of all VRF UNITS, and other necessary accessories Pressure Testing, Nitrogen flushing, testing & commissioning of the air-conditioning system	2	nos		
6	Installation, Testing and Commissioning of Indoor Units suitable for VRF / VRV System. Costs shall include hanging / mounting arrangements for the respective IDUs and shall also include for wall mounting of remote controllers near respective units and lifting, shifting and erecting etc				
a	3.0 TR 4-way Cassette type Indoor Unit	3	nos.		
c	2.0 TR 4-way Cassette type Indoor Unit	3	nos.		
7	Installation, Testing, and Commissioning of following DX - type HIGH WALL UNITS with Scroll / Rotary compressors with inverter based type R32, R410, R22 Refrigerant.				
	1.5 TR	4	nos		
8	<b>REFRIGERANT PIPING FOR VRF-</b> Supply, installation, testing & commissioning of the insulated refrigerant piping with Copper Ref. <b>Hard</b> piping pair (Liquid+ suction) Outdoor to refnet & refnet to refnet of the required sizes for all the units with refnets as per specs. The insulation shall be of 19mm/13mm thick approved make through out the running length of Ref. piping. The piping shall be well supported at specific intervals with GI supports with insulated PUF saddles and installed on GI cable trays supported from wall / roof with anchor fasteners & C type ms angle. Both Liquid and Suction line will be measured as single line.	130	mtrs		
9	<b>REFRIGERANT PIPING FOR SPLIT AC UNIT</b> Supply & installation for additional insulated hard/soft copper refrigerant piping (Liquid+Suction) complete with fittings, elbows, bends, supporting arrangement on walls, cable trays. (separate for each unit) Hot side + cold side piping will be measured as one length existing copper Refringent piping for 1.0 TR/ 1.5 TR/ 2.0 TR Hi wall type unit will be measured beyond 3mtrs of each unit. Both Liquid and Suction line will be measured as single line.	30	mtrs		
10	<b>CONTROL CABLING FOR VRF</b> Supply, installation, testing & commissioning of the control cabling from indoor to outdoor unit with Heavy duty 25mm PVC Conduit 3CX1.5 sq. mm. shielded communication copper Cable of approved make	180	mtrs		
11	<b>CONTROL CABLING FOR SPLIT AC UNIT</b> Supply, installation, testing & commissioning of the control cabling from indoor to outdoor unit with Heavy duty 25mm PVC Conduit 3cX1.5 sq. mm. shielded communication copper Cable of approved make	50	Mtr		



Sr. no	Particulars	Qty	Nos.	PRICE	
				Rate	Amount
12	<b>DRAIN PIPING FOR VRF &amp; SPLIT AC UNIT</b> Drain water piping work out of following PVC/HDPE hard pipes covered with Hilton insulations, complete with fittings, bends, elbows, tees flanges, tappings, wall sleeves, hangers, supports, anchors				
a	25 mm PVC/HDPE hard pipes	40	Mtr		
b	32 mm PVC/HDPE hard pipes	55	Mtr		
c	40 mm PVC/HDPE hard pipes	15	Mtr		
13	M. S. Epoxy Painted Stand for <b>split</b> AC Outdoor Unit complete with screw, nut bolt anchor fastner etc. complete in all aspect.	4	Nos		
14	M. S. Epoxy Painted Stand for <b>VRV Outdoor</b> Unit with screw, nut bolt anchor fastner etc. complete in all aspect.	2	Nos		
15	Supply & Gas top up with REFREGERENT 410 GAS FOR VRF	20	Kg		
16	Core Cuttings & filling the same with cement and access	4	Nos		
17	Removing , servicing & refixing of the Existing 1.5 TR / 2 TR / 1 TR High Wall Split units & outdoor MS Stand, MS Bracket etc. filling the trenching, hole etc. As per the instructions of the Architects/ Engineer	2	Nos		
18	Gas charging & leak test after installation of old air-conditioner. As per the instructions of the Architects/ Engineer	2	Nos		
19	Supply & Installation of Digital Timer Switch alongwith suitable size enclosure box for AC etc. including all necessary hardware & accessories, etc. complete as required. (Schneider / Hager / Siemens / Legrand make as approved by client / consultant)	1	Nos		
20	Supply Installation Testing Commissioning of Drain Pump suitable for 2.0/1.5 TR Split airconditioner as approved by SBI Engineer / consultant)	1	No		
21	BUY BACK ( amount paid to the Bank) Removing and Buyback of OLD/ beyond repairable AC units 1 TR/ 1.5 TR/ 2 TR as is where is condition from Branch after obtaining permission and approval of Bank's official	-5	Nos		
22	Comprehensive Annual Maintenance Contract (CAMC) for the Air Conditioning units installed after warranty / defects liability period of one year (i.e. 20HP VRF indoor and out door units and 4 Nos of 1.5 TR Split AC ). This includes all spares, compressor, replenishing the refregerant, Bimonthly servicing, any number visits if any problem occurs and scope as specified etc. Payment will be paid quarterly.				
a	Second Year	26	TR		
b	Third Year	26	TR		
	<b>LOW SIDE WORKS TOTAL- B</b>				-
	<b>GRAND TOTAL (A+B) (Excluding GST)</b>				-