

<b>STATE BANK OF INDIA</b>					
<b>AIR CONDITIONING WORKS FOR SHIFTING OF ADMONISTRATIVE OFFICE SOUTH MUMBAI</b>					
<b>AT MUMBA MAIN BRANCH, FORT, MUMBAI</b>					
Sr. no	Particulars	Qty	Unit	Rate	Amount
1	<b>Blue star , Carrier ,Mitsubishi,Toshiba, Hitachi ,Daikin.</b>				
	Supply of Modulating outdoor units, with multi/single scroll compressors (minimum one/two compressors) with inverter type compressor, 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. Outdoor units suitable for following capacities				
	Note: 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				
i	<b>40 HP VRF ODU</b>	1	No		
2	Supply of VRF based Indoor units complete with remote and all accessories, Vibration isolators & supports. The indoor unit shall be suitable for a power supply of 240V/ 1 phase/ 50Hz OR 415V / 3				
	4-way Cassette Type Indoor Units, unit shall be complete with remote controller				
a	2.8/3.0 TR CASSETTE	6	nos		
	2.2/2.0 TR CASSETTE	6	nos		
b	1.2/1.0 TR COMPACT CASSETTE (CABIN)	4	nos		
c	1.0 TR Hi-Wall (Cabin)	3	nos		
d	Supply of Refnet	12	nos		
	<b>Joints</b>				
3	<b>Supply, Of DX SPLIT Type (1 Phase,3STAR) Air Conditioning Units.</b>				
	Supply, of SPLIT type (1 phase,3STAR & above for split ) air conditioning units comprising of indoor unit, outdoor unit, first fill of refrigerant gas, thermostatic control, safety cut outs, corded remote for unit operation, condenser and evaporator mounting stand, insulation of refrigerant piping, drain piping and any other accessories required for installation Note: The rates quoted above shall include the cost of indoor units, mounting brackets, first charge of gas. Materials like fittings, clamps, supports, U trap in drain piping with necessary slope etc., minor civil work like opening in the walls for piping and cables and finishing the same. pipes & cables between through wall shall be taken through sleeves and plugged to avoid leakages, condenser mounting with all accessories vibration mounting pads etc., piping and cabling connections at indoor.				
a	1.0 TR HI-WALL (Server ) 1W+1ST	2	nos		

b	2.0 TR Cassette (CABIN)	1	nos		
	<b>SECTION 'A' TOTAL</b>				

<b>SECTION LOW SIDE</b>					
<b>B</b>	<b>Installation of VRF/ VRV system</b>				
1	Installation, Testing and Commissioning of Out Door Units suitable for VRF / VRV System & -Price shall inclusive of Refrigerant charge, LIFTING SHIFTING OF ALL VRF UNITS, and other necessary accessories Pressure Testing, Nitrogen flushing, gas charging (R410A), testing & commissioning of the air-conditioning system				
a	44 HP VRF ODU	1	nos		
2	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, ERECTION.				
	4-way Cassette Type Indoor Units, unit shall be complete with wireless remote controller				
a	3.0 TR CASSETTE (Lounge Area+Cabin)	6	nos		
b	2.0/1.0 TR CASSETTE (CABIN)	11	nos		
c	1.0 TR Hi-Wall (Cabin)	4	nos		
3	<b>REFRIGERANT PIPING FOR VRF</b>				
	Supply, installation, testing & commissioning of the insulated refrigerant piping for all the units as per specifications with insulation of thick Nitrile rubber throughout the running length of the refrigerant piping with supporting arrangements				
i	Copper Ref. <b>Hard</b> piping pair (Liquid + suction) of the required sizes for all the units with refnets as per specs. The insulation shall be of 19mm/13mm thick Armaflex 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.	90	mtrs		
ii	Copper Ref. <b>Soft</b> piping pair (liquid+suction) of the required sizes for all the units with refnets as per specs. The insulation shall be of 19mm/13mm thick Armaflex 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.	70	mtrs		
	<b>REFRIGERANT PIPING FOR SPLIT AC UNIT</b>				
4	Supply & installation for additional Hilton insulated hard/soft copper refrigerant piping 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 1.5/1.0TR Hi	30	mtrs		
5a	<b>CONTROL CABLING FOR VRF</b>				

	Supply, installation, testing & commissioning of the control cabling from indoor to outdoor unit .& from indoor to outdoors unit and from outdoor to central controller 3cX2.5 sq. mm. shielded communication copper cable(Polycab/RR/Havells)	250	mtrs		
<b>b</b>	<b>CONTROL CABLING FOR SPLIT AC UNIT DX</b>				
	Supply, installation, testing & commissioning of Power & control cabling required from indoor unit to outdoor unit. Power supply will be made available near the indoor unit only. Power & control cabling for 1.5TR highwall type unit(3cX1.5 sq. mm.) (Polycab/RR/Havells)	40	Mtr		
<b>6a</b>	<b>DRAIN PIPING FOR VRF &amp; SPLIT AC UNIT</b>				
	Drain water piping work out of 25/30 mm PVC/HDPE hard pipes covered with Hilton insulations, complete with fittings, bends, elbows, tees flanges, tappings, wall sleeves, hangers, supports, anchors	100	mtrs		
7	Fresh air with cowl	2	nos		
8	GI CABLE TRAY 200mm wide,22swg	10	mtrs		
9	CONDENSING UNIT STANDS FOR SPLIT & cassette AC UNIT	2	Nos		
10	CONDENSING UNIT STANDS FOR 42 HP VRF	1	lot		
11	REFREGERENT 410 GAS FOR VRF	40	KG		
	Remove & 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	1	Nos		
	Gas charging & leak test after installation of old air-conditioner. As per the instructions of the Architects/ Engineer	1	Nos		
11	Necessary civil work : Trenching work / Making & remaking of holes in walls, final finishing the same in all respects pop,cements,etc with labour charge for same including loading and unloading. charges and trenching work if required.	1	Nos		
12	Core cutting	2	Nos		
	<b>SECTION 'B' TOTAL</b>				
<b>ANNEXURE</b>					
I	TOTAL OF HIGH SIDE-A				
II	TOTAL OF LOW SIDE-B				
III	<b>GRAND TOTAL (A+B) (Excluding GST)</b>				
IV	<b>GST EXTRA</b>				