

**Tender****DILIP KULKARNI & ASSOCIATES -ARCHITECTS & INTERIOR DESINGER****Address:** 15/3, METRO HOUSE, "C" WING, II FLOOR, Opp. DELHI DARBAR HOTEL, COLABA CAUSWAY, MUMBAI - 400 039.**Tel.:-** 2283 5003 / 2202 1629. **Fax :-** 2202 7315, **E-Mail -** dkulkarniasso@gmail.com / dkasso\_1942@rediffmail.com**Mobile - :**NAME OF CLIENT: - **STATE BANK OF INDIA**

ADDRESS: - CTS.No. 2295 / 2, 2295 / 3, 2295 / 4 AT MAHAD, TALUKA - MAHAD, DISTRICT - RAIGAD

NATURE OF WORK: - **AIR CONDITIONING WORK (HVAC)**

1		<b>Supply of Out Door/Indoors Units suitable for VRF / VRV System DAIKIN , MITSUBISHI , HITACHI / TOSHIBA/MISTUBISHI</b>				
		Supply of vrf 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 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				
1	1	<b>12 HP VRF ODU</b>	1	No		
	2	<b>10 HP VRF ODU</b>	1	No		
2		Supply of VRF based Indoor units complete with 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.				
		<b>Wall Mounted Split Type</b> Indoor Units, unit shall be complete with wireless remote controller				
	1	2.0 TR Split Ac	9	nos		
	2	1.5 TR Split Ac	1	nos		
3		<b>Supply, Of SPLIT Type (1 Phase, 5 STAR Inverter) Air Conditioning Units Bluestar, Daikin, Mitsubishi, HITACHI.</b>				
		SUPPLYING OF following SPLIT (single/three phase) AIR CONDITIONERS- AIR-COOLED INVERTER 5 STAR TYPE having ODU & Single circuits with Scroll/rotary Compressors 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.				
	1	1.0 TR Inverter Split Air conditioner	2	nos		
	2	1.5 TR Inverter Split Air conditioner	2	nos		
4		Refnet Joints				

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		<b>Supply of Refnet Joints</b>	8	nos		
		<b>SECTION 'A' TOTAL</b>				
		<b>B-SECTION</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 Pressure testing, LIFTING SHIFTING OF ALL VRF UNITS, and other necessary accessories Pressure Testing, Nitrogen flushing, testing & commissioning of the air-conditioning system				
	1	12 HP VRF ODU	1	No		
	2	10 HP VRF ODU	1	No		
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.				
		<b>Wall Mounted Split Type</b> Indoor Units, unit shall be complete with wireless remote controller				
	1	2.07 TR Split Ac	9	nos		
	2	1.65 TR Split Ac	1	nos		
	3	Non VRV/VRF Split AC 1.0 / 1.5 Tr	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 / soft pair Ref</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.	160	mtrs		
4		<b>REFRIGERANT PIPING FOR SPLIT AC UNIT</b>				
	1	Supply and erection of copper piping using copper (1mm thick) refrigeration pipe complete with bends, Elbows, Supports, Insulation etc. interconnecting indoor and outdoor units (both suction and discharge lines) along with necessary electrical copper wiring including earthing conductor in rigid PVC conduit.	50	mtrs		
5		<b>CONTROL CABLING FOR SPLIT AC UNIT</b>				
	1	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)	70	mtrs		
6		<b>CONTROL CABLING FOR VRF</b>				

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	1	Supply, installation, testing & commissioning of the communication cabling from indoor to outdoor unit .& from indoor to outdoors unit and from outdoor to central controller 2c X 1.0 sq. mm. shielded communication copper cable(Polycab/RR/Havells)	220	mtrs		
7		<b>DRAIN PIPING FOR VRF UNIT</b>				
		Drain water piping work out of PVC hard pipes covered with Hilton insulations, complete with fittings, bends, elbows, tees flanges, tappings, wall sleeves, hangers, supports, anchors (Price/Diamond/New India Trading)				
	1	25mm Pipe	100	Mtr		
	2	32mm Pipe	60	Mtr		
8		Exhaust air with cowl-ventilation duct	2	nos		
9		GI CABLE TRAY 200mm wide,22swg	10	mtrs		
10		M. S. Epoxy Painted Stand for <b>VRV Outdoor</b> Unit with screw, nut bolt anchor fastner etc. complete in all aspect. As per the instructions of the Architects/ Engineer				
	1	Heavy Duty Stand for VRF AC	2	Nos		
	1	Cage with platform type Heavy Duty Stand for Non VRF/split AC	4	Nos		
11		REFREGERENT 410 GAS FOR VRF	25	Kg		
12		Core Cuttings & filling the same with cement and access	8	Nos		
13		Drain pump for Split Ac Throw capacity 600mm and above ( Approved Makes :- Aspen, V Gard, Value , SICCOM , Wipcool )	5	Nos		
14		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	Lot		
15		Supply & Installation of <b>Digital Timer Switch</b> alongwith suitable size enclosure box for atm, etc. including power circuit wiring of (3x2.5 Sq.mm) FRLS flexible wires laid through PVC conduit taken from point including all necessary hardware & accessories, etc. complete as required. (Schneider / Hager / Siemens / Legrand make as approved by client / consultant)	2	Nos		
		<b>SECTION 'B' TOTAL</b>				

ANNEXURE						
		<b>TOTAL OF HIGH SIDE-A</b>				
		<b>TOTAL OF LOW SIDE-B</b>				
		<b>GRAND TOTAL (A+B) (Excluding GST)</b>				