PROJECT- SBI BRANCH SIB GHATKOPAR MUMBAI

BILL OF QUANTITIES

PART A :- HI-SIDE					
SR. NO.	DESCRIPTION	UNIT	QTY.		
	VRF SYSTEM- SUPPLY VOLTAS				
	MAKES :Blue Star/Hitachi/Daikin/Mitsubisi				
	electric/Mitsubisi Heavy/Carrier (Toshiba)				
1.0	OUTDOOR UNITS				
1.1	12 HP	Nos.	2		
2.0	INDOOR UNITS				
2.1	Ceiling suspended cassette Unit with cordless remote				
2.1	controller.(4-Way Cassette Unit)				
	1.0 TR CASSETTE UNIT	Nos.	1		
2.1.2	2.6 TR CASSETTE UNIT	Nos.	5		
2.1.3	4.0 TR CASSETTE UNIT	Nos.	2		
3.0	SUPPLYING OF following CASSETTE / SPLIT (single/three phase) AIR CONDITIONERS- AIR-COOLELD TYPE having ODU & Single circuits with Scroll Compressors including indoor unit with fan, fan-motor, Copper cooling coil, expansion Device, condensing unit, compressors, cond. coils, cond. Fans, safety cutouts, inbuilt contol panel complete with contactors, relays, internal cabling, thermostat to control temperature & machine, having single Indoor unit & single				
	1.0-TR High Wall Split Unit GE rating of three STAR and above	Nos.	2		
	Supply & Installation of Refrigerant piping Joints for above mentined Indoor Units.	Nos.	7		
	COST FOR HIGH SIDE (Rs.)				

PART B	:- LOW-SIDE		
SR. NO.	DESCRIPTION	UNIT	QTY.
	VRF SYSTEM-INSTALLATION, TESTING & COMMISSIONING WITH LIFTING, SHIFTING, SAFETY FASTNER & LABOUR CHARGE		
1.0	OUTDOOR UNITS		
1.1	12 HP	Nos.	2
2.0	INDOOR UNITS		
2.1	1.0 TR CASSETTE UNIT	Nos.	1
2.2	2.8/4 TR CASSETTE UNIT	Nos.	7
2.3	1.0 TR SPLIT UNIT	Nos.	2
3.0	REFRIGERENT PIPING & ACCESSORIES.FOR VRF		
	Supply, Installation & Testing of All refrigerant piping between indoor & outdoor units duly insulated. All piping inside the room shall be properly supported with hanger with making of hole and filling the hole. All piping shall be pressure tested.Make: Mandev / Nissan / Raico / Mexflow		
3.1	Copper Ref. Hard piping 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.	Rmt.	150

with insulated PUF saddles and installed on GI cable trays supported from wall / roof with anchor fasteners & C type ms angle. 3.3 1/4" + 1/2" Refrigerant piping - For Hiwall 1.0/1.5 Tr Split AC's Rmt. 20 4.0 POWER, CONTROL CABLING & EARTHING. 4.1 Supply, Installation & Testing of Power Cabling from Local isolator to OD Unit 4.1.1 4c x 10 sqmm Rmt. Supply, Installation & Testing of Power Cabling from Local isolator / switch socket to indoor unit including supply & fixing of plug top if required to match the receptacle provided 5 3c x 1.5sqmm Rmt. 50 6.0 Supply, Installation & Testing of Communication cable between Indoor and Outdoor Unit. 6 3c x 1.0sqmm shielded cable. Rmt. 50 6 10guage Cu strip for earthing Rmt. 20 7.0 MS STAND 7.1 Supply & Installation of MS Structure for installingoutdoor unitswith 2 coats of red oxide paint and black paint. 7.2 GI CABLE TRAY 200mm wide, 22swg Mtr 30 M. S. Epoxy Painted Stand for Split Outdoor Unit complete with all the acessaries required for the installation of out door units. 8.0 DRAIN PIPING Supply, Installation & Testing of PVC with 6 mm insulated sections and including bends, elbows, tees, tappings, wall sleeves, hangers, supports etc. 8.1.1 25 mm dia. Rmt. 50 8.1.2 32 mm dia. Rmt. 51 8.1.3 40 mm dia. Rmt. 51 8.1.4 50 mm dia. Rmt. 50 Supply & Gas charging of Refrigerant Gas. Kq. 30 TOTAL AMOUNT LOW SIDE(Rs.)				
4.0 POWER, CONTROL CABLING & EARTHING. 4.1 Supply, Installation & Testing of Power Cabling from Local isolator to OD Unit 4.1.1 4c x 10 sqmm Rmt. 10 Supply, Installation & Testing of Power Cabling from Local isolator/s switch socket to indoor unit including supply & fixing of plug top if required to match the receptacle provided 5 3c x 1.5sqmm Rmt. 50 Supply, Installation & Testing of Communication cable between Indoor and Outdoor Unit. 6 3c x 1.0sqmm shielded cable. Rmt. 50 10guage Cu strip for earthing Rmt. 20 7.0 MS STAND 7.1 Supply & Installation of MS Structure for installingoutdoor unitswith 2 coats of red oxide paint and black paint. 7.2 GI CABLE TRAY 200mm wide,22swg Mtr 30 M. S. Epoxy Painted Stand for Split Outdoor Unit complete with all the acessaries required for the installation of out door units. 8.0 DRAIN PIPING Supply, Installation & Testing of PVC with 6 mm insulated sections and including bends, elbows, tees, tappings, wall sleeves, hangers, supports etc. 8.1.1 25 mm dia. Rmt. 50 8.1.2 32 mm dia. Rmt. 50 8.1.3 40 mm dia. Rmt. 57 8.1.4 50 mm dia. Rmt. 57 8.1.5 Omm dia. Rmt. 57 8.1.6 Supply & Gas charging of Refrigerant Gas. Kg. 36 TOTAL AMOUNT LOW SIDE(Rs.)	3.2	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	Rmt.	100
4.1 Supply, Installation & Testing of Power Cabling from Local isolator to OD Unit 4.1.1 4c x 10 sqmm Rmt. 10 Supply, Installation & Testing of Power Cabling from Local isolator/ switch socket to indoor unit including supply & fixing of plug top if required to match the receptacle provided 5 3c x 1.5sqmm Rmt. 50 Supply, Installation & Testing of Communication cable between Indoor and Outdoor Unit. 6 3c x 1.0sqmm shielded cable. Rmt. 50 10quage Cu strip for earthing Rmt. 20 7.0 MS STAND 7.1 Supply & Installation of MS Structure for installingoutdoor unitswith 2 coats of red oxide paint and black paint. 7.2 GI CABLE TRAY 200mm wide,22swg Mtr 30 M. S. Epoxy Painted Stand for Split Outdoor Unit complete with all the acessaries required for the installation of out door units. 8.0 DRAIN PIPING Supply, Installation & Testing of PVC with 6 mm insulated sections and including bends, elbows, tees, tappings, wall sleeves, hangers, supports etc. 8.1.1 25 mm dia. Rmt. 56 8.1.2 32 mm dia. Rmt. 56 8.1.3 40 mm dia. Rmt. 56 8.1.4 50 mm dia. Rmt. 70 8.1.5 Supply & Gas charging of Refrigerant Gas. Kg. 30 TOTAL AMOUNT LOW SIDE(Rs.)	3.3	1/4" + 1/2" Refrigerant piping - For Hiwall 1.0/1.5 Tr Split AC's	Rmt.	20
4.1.1 dc x 10 sqmm	4.0	POWER, CONTROL CABLING & EARTHING.		
4.1.1 4c x 10 sqmm Supply, Installation & Testing of Power Cabling from Local isolator/ switch socket to indoor unit including supply & fixing of plug top if required to match the receptacle provided 5 3c x 1.5sqmm Rmt. 50 Supply, Installation & Testing of Communication cable between Indoor and Outdoor Unit. 6 3c x 1.0sqmm shielded cable. 7.0 MS STAND Supply & Installation of MS Structure for installingoutdoor unitswith 2 coats of red oxide paint and black paint. 7.2 GI CABLE TRAY 200mm wide,22swg M. S. Epoxy Painted Stand for Split Outdoor Unit complete with all the acessaries required for the installation of out door units. 8.0 DRAIN PIPING Supply, Installation & Testing of PVC with 6 mm insulated sections and including bends, elbows, tees, tappings, wall sleeves, hangers, supports etc. 8.1.1 25 mm dia. Rmt. 50 Rmt. 70 Rmt. 10 Rm	4.1			
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5 3c x 1.5sqmm 6.0 Supply, Installation & Testing of Communication cable between Indoor and Outdoor Unit. 6 3c x 1.0sqmm shielded cable. Rmt. 5c 6 10quage Cu strip for earthing Rmt. 2c 7.0 MS STAND 7.1 Supply & Installation of MS Structure for installingoutdoor unitswith 2 coats of red oxide paint and black paint. 7.2 GI CABLE TRAY 200mm wide,22swg Mtr 3c 7.3 M. S. Epoxy Painted Stand for Split Outdoor Unit complete with all the acessaries required for the installation of out door units. 8.0 DRAIN PIPING Supply, Installation & Testing of PVC with 6 mm insulated sections and including bends, elbows, tees, tappings, wall sleeves, hangers, supports etc. 8.1.1 25 mm dia. Rmt. 0 8.1.2 32 mm dia. Rmt. 5c 8.1.3 40 mm dia. Rmt. 5c 8.1.4 50 mm dia. Rmt. 7c 8.1.4 50 mm dia. Rmt. 7c 8.1.5 Omm dia. Rmt. 7c 8.1.7 Supply & Gas charging of Refrigerant Gas. Kg. 3c TOTAL AMOUNT LOW SIDE(Rs.)		Supply, Installation & Testing of Power Cabling from Local isolator/ switch socket to indoor unit including supply & fixing of plug top if		10
Supply, Installation & Testing of Communication cable between Indoor and Outdoor Unit. 6	5		Rmt.	50
6 3c x 1.0sqmm shielded cable. 6 10guage Cu strip for earthing 7.0 MS STAND 7.1 Supply & Installation of MS Structure for installingoutdoor unitswith 2 coats of red oxide paint and black paint. 7.2 GI CABLE TRAY 200mm wide,22swg M. S. Epoxy Painted Stand for Split Outdoor Unit complete with all the acessaries required for the installation of out door units. 8.0 DRAIN PIPING Supply, Installation & Testing of PVC with 6 mm insulated sections and including bends, elbows, tees, tappings, wall sleeves, hangers, supports etc. 8.1.1 25 mm dia. 8.1.2 32 mm dia. 8.1.3 40 mm dia. 8.1.4 50 mm dia. Rmt. 70 8.1.4 50 mm dia. Rmt. 0 9.0 Supply & Gas charging of Refrigerant Gas. Kg. 30 TOTAL AMOUNT LOW SIDE(Rs.)		Supply, Installation & Testing of Communication cable between		
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8.1.2 32 mm dia. Rmt. 50 8.1.3 40 mm dia. Rmt. 70 8.1.4 50 mm dia. Rmt. 0 9.0 Supply & Gas charging of Refrigerant Gas. Kg. 30 TOTAL AMOUNT LOW SIDE(Rs.)	8.1	and including bends, elbows, tees, tappings, wall sleeves, hangers,		
8.1.3 40 mm dia. Rmt. 70 8.1.4 50 mm dia. Rmt. 0 9.0 Supply & Gas charging of Refrigerant Gas. Kg. 30 TOTAL AMOUNT LOW SIDE(Rs.)	8.1.1		Rmt.	0
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9.0 Supply & Gas charging of Refrigerant Gas. Kg. 30 TOTAL AMOUNT LOW SIDE(Rs.)				70
TOTAL AMOUNT LOW SIDE(Rs.)	8.1.4	50 mm dia.	Rmt.	0
	9.0	Supply & Gas charging of Refrigerant Gas.	Kg.	30
		TOTAL AMOUNT LOW STDE(Rs.)		
		TOTAL AMOUNT WITHOUT GST		
GST 28 % EXTRA ON A				
GST 18 % EXTRA ON B				
GRAND TOTAL		GRAND TOTAL		