

**BILLS OF QUANTITIES FOR AIR CONDITIONING WORK AT IFSC BANKING UNIT OF BANK OF BARODA  
AT GIFT CITY, GANDHINAGAR.**

| Sr.No.                   | Description  | QTY | Rate | Unit       | Amount |
|--------------------------|--|-----|------|------------|--------|
| <b>[A]</b>               | <b>MACHINE PART</b>  |     |      |            |        |
| 1                        | Supply of Chilled water Cassette type indoor units with compact cooling coil, multispeed fan motor, the blower shall be dynamically balanced and designed for silent operation, the filters shall be washable synthetic media type arranged for convenient cleaning and replacement and inbuilt drain pump. The units as specified in Schedule of Quantities shall be factory fitted with valve package comprising of 2 way pressure independent valve suitable for variable CHW flow with modulating actuator, ball with Y strainer valve at inlet & Ball valve at outlet and necessary piping connections. The actuator of modulating valve shall be provided with interface cards to receive 0-10V or 4-20 mA signal from Minxon Digital Thermostat. The unit is supplied with corded remote controller of approved as per specifications ( AC MACHINE MAKE :MIDEA OR CARRIER MAKE) |     |      |            |        |
| [a]                      | Cassette Unit having a capacity of 2.0 TR and 800 cfm against a static pressure of 15 mm WG and suitable drive motor   | 3   |      | NO         |        |
| [b]                      | Cassette Unit having a capacity of 3.0 TR and 1200 cfm against a static pressure of 15 mm WG and suitable drive  | 3   |      | NO         |        |
| <b>TOTAL FOR PART- A</b> |  |     |      | <b>Rs.</b> |        |
| <b>[B]</b>               | <b>LOW SIDE WORK</b>   |     |      |            |        |
| 1                        | Installation of IDU of 2.00 TR ceiling mounted cassette unit with Testing & commissioning etc. Rate including ceiling mounted suspension Kit etc complete  | 3   |      | NO         |        |
| 1[a]                     | Installation of IDU of 3.00 TR ceiling mounted cassette unit with Testing & commissioning etc. Rate including ceiling mounted suspension Kit etc complete  | 3   |      | NO         |        |
| 2                        | MS pipes for chilled water applications above ground with 19 mm thick nitrile rubber which bonds to the pipe, the outer casing material shall be galvanized, stainless steel or high density polyethylene tubes with vapour barrier, comply to class O fire rating standards with comprehensive strength upto 275 kPa, the PU Foam shall be CFC Free agent finished with supports/hangers as per Approved Make of TATA OR JINDAL   |     |      |            |        |
| [a]                      | 125 mm Dia MS Pipes For Chilled water  | 15  |      | RMT        |        |
| [b]                      | 100 mm Dia MS Pipes For Chilled water  | 15  |      | RMT        |        |
| [c]                      | 75 mm Dia MS Pipes For Chilled water   | 35  |      | RMT        |        |

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|--------|---|-----|------|------|--------|
| [d]    | 40 mm Dia MS Pipes For Chilled water  | 35  |      | RMT  |        |
| [e]    | 32 mm Dia MS Pipes For Chilled water  | 25  |      | RMT  |        |
| [f]    | 25 mm Dia MS Pipes For Chilled water  | 25  |      | RMT  |        |
| 3      | Supplying and Installation of Bufferfly Valves All valves are to be considered with nitrile rubber insulation finished with polyshied as per specifications<br>Butterfly valves with insulation as per Approved Make of HUDCO/ADVANCE/BONANI/Castle   |     |      |      |        |
| [a]    | 40 mm Dia Bufferfly valves  | 12  |      | NO   |        |
| [b]    | 32 mm Dia Bufferfly valves  | 6   |      | NO   |        |
| [c]    | 25 mm Dia Bufferfly valves  | 6   |      | NO   |        |
| 3      | 25/32 mm Dia UPVC <b>drain pipe with insulation</b> of Dutron/Supreme/Astral make - <b>schedule 40 pipe, white in colour, joint properly glued with UPVC adhesive</b> for water outlet from indoor unit. (drain pipe concealled in inside wall)   | 100 |      | RMT  |        |
| 4      | <b>4-WAY CASSETTE UNITS</b><br>Supplying,Installation, testing and commissioning of <b>4 WAY Chilled water CASSETTE UNITS</b> , blow thru type, each complete with 3 rows deep chilled water coil, blower with 3 speed motor, aluminium mesh metallic filters, main condensate extended drain pans with in built drain pump, casing, coil piping connections through copper pipes, condensate drain, power wiring and control wiring.Unit shall be factory fitted with complete valve package comprising of Self Balancing Valve with integrated 2 way motorised actuator in a single body and cooling thermostat provided with spring return function, set of ball valve (One with strainer & one without strainer) at inlet & outlet and necessary copper coil piping connections. The actuator shall have required shut off capability of minimum 5 bar rating. All 4 way cassette units shall be suitable for 220±6% volts, 50 cycles, single phase power supply. The valve package as described above shall be |     |      |      |        |
| a      | 2.0 TR cabins   | Nos | 4    |      |        |
|        | <b>CHW PIPE</b>   |     |      |      |        |
| 5      | <b>CHILLED WATER PIPE:ABOVE GROUND</b><br>Supply, Installation, testing and commissioning of approved make Heavy quality MS pipe (Class:C) as per IS:1289. All Bolts/ nuts used in the chilled water piping should be of GI and not MS.Pipes laid above ground with insulation and cover  |     |      |      |        |
|        | 32 NB   | Mtr | 50   |      |        |
|        | 25 NB   | Mtr | 110  |      |        |
|        | <b>Approved Makes: Tata Steel / Jindal / Surya</b>  |     |      |      |        |
| 6      | <b>Chilled water piping insulation with Class 'O' Closed Cell Elastomeric / XLPE rubber with antimicrobial properties covered with FOIL.</b>  |     |      |      |        |
|        | 32 MM dia: 25MM Thick Class O sheet   | Mtr | 220  |      |        |

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|              | 25 MM dia: 25MM Thick Class O sheet  | Mtr  | 150  |      |        |
|              | <b>Approved Makes: Armacell / Kflex / Aflex / Aerofoam /</b>   |      |      |      |        |
|              | <b>PN10 CI BUTTERFLY VALVE with extended Stem and SS</b>   |      |      |      |        |
| 7            | Supply, installation, testing and commissioning of following sizes for butterfly valves.   |      |      |      |        |
|              | 65 mm dia. (lever operated)  | Nos  | 1    |      |        |
|              | 80 mm dia. (lever operated)  | Nos. | 1    |      |        |
| 8            | <b>Y STAINER</b>   |      |      |      |        |
|              | Supply, installation, testing and commissioning of following sizes for Y STAINER.  |      |      |      |        |
|              | 65 mm dia.   | Nos  | 1    |      |        |
|              | 80 mm dia.   | Nos  | 1    |      |        |
|              | <b>Approved Makes: Trishul / Advance</b>   |      |      |      |        |
| 9            | <b>DRAIN PIPE</b>  |      |      |      |        |
|              | Supply, erection, testing and commissioning of FCU/CASSETTE UNIT drain CPVC pipe complete with all fittings, valves, supports etc insulated with 9mm thick closed cell Elastomeric rubber covered with 7 mil Glass cloth and UV coat for Mechanical and UV protection and painted with |      |      |      |        |
|              | 32 NB  | Mtr  | 50   |      |        |
|              | 25 NB  | Mtr  | 110  |      |        |
|              | <b>Approved Makes: Astral / Jindal</b>   |      |      |      |        |
| 10           | Supply, installation, testing and commissioning of 4TR CASSETTE AC unit with cordless remote and 4 mtr copper pipe (with nitrile insulation) complete in all respect Approved  | nos. | 2    |      |        |
| 11           | Supply, installation, testing and commissioning of 4TR CASSETTE AC extra refrigerent copper pipe with nitrile insulation as per specifications of OEM (with proper shuddling)  | nos. | 100  |      |        |
| 12           | Providing and fixing MS angle powder coated stand for mounting outdoor unit of 4TR CASSETTE AC unit.   | nos. | 2    |      |        |
| 13           | Supplying, installation of 32 Amps industrial socket with 32 Amps SPMCB (2 nos. for out going and 2 nos. for incoming) Make : Legrand / Equivalent   | nos. | 2    |      |        |
| 14           | Supplying, installation of 32 Amps industrial socket with 32 Amps SPMCB (2 nos. for out going and 2 nos. for incoming) (male female type) Make : Legrand / Equivalent  | nos. | 2    |      |        |
| 15           | Providing and fixing electrical control cable from 4TR CASSETTE AC indoor unit to outdoor unit (as per the specification of OEM) Make : PLOYCAB/SKYTONE/KEI  | Mtr  | 100  |      |        |
| <b>Total</b> |  |      |      |      |        |
| [1]          | 1 Years of M/C warranty with 6 free services and 5 years warranty for compressor shall be provided by the supplier.  |      |      |      |        |

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| [2]    | All Civil work such as Masonary works like breaking away and making good of walls,floors slab etc. Required to be executed in the A.C system installation is the part of the scope of project. ( <b>Rate quoted shall included in Low side work items</b> ) |     |      |      |        |
| [3]    | The Entire Job Shall be Excuted in Total Co. Ordination with the Other Agencies Working on this Project more particlulary with the False Ceiling and Electrical work.   |     |      |      |        |