

**TECHNICAL SPECIFICATION FOR CONTROL ROOM AND BAY CONTROL
ROOM ELECTRIFICATION**

A. TECHNICAL SPECIFICATION

The complete wiring of the Control Room Building is to be carried out strictly as per specifications given and as per detail layout and drawings given. No extra claim due to changes in the routes of the circuits will be entertained.

- 1.0 For Point Wiring & Independent Plug wiring – 2 x 1.0 sq.mm. Copper wire FRLS type is to be used with casing-n-caping.
- 2.0 The supply to Main DB (to be erected in Aux Room) for Control Room Electrification is to be given by 4C x 16 sq.mm. Al. Arm'd Cable.
- 3.0 The mains of 2 x 4 sq. mm. Cu. F.R.L.S. wire to be used from Main DB to Individual DB's in various rooms in Control Room. For DB in main Control Room three such mains are to be run for three phases.
- 4.0 For DC wiring mains of 2 x 1.5 sq.mm. Cu. F.R.L.S. wire is to be used. The DC fixtures are to be looped in three circuits as per drawings given. The DB for the same is to be fixed in Aux Room.
- 5.0 The switch boards in each room specially in main Control Room to be fixed in such a way that the length of any point from the switch board shall not increased beyond 10 meters. The mains 2 x 2.5 sq.mm. Cu. F.R.L.S. Wire is to be used from DB's to Switch Boards.
- 6.0 The plugs on switch boards are to be provided as per the quantity shown in abstract.
- 7.0 For the Power Plugs mains 2 x 2.5 sq.mm. Cu. F.R.L.S. wire is to be provided from DB to Power Plugs. The location of power plugs is to be fixed as per drawings given.
- 8.0 The various DB's to be provided shall be as per the specifications mentioned in the schedule and shall be fixed with suitable rating MCB's as indicated.
- 9.0 The wiring connections shall be done in such a way that the load on the all three phases shall be almost equal. In main control room the DB given is three phase in order to distribute all the fixtures on three phases equally.

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- 10.0 The 2 x 40 W & 1 x 40W Mirror Optic and 2 x 9 W CFL Mirror Optic is to be fixed in main Control Room with the help of lacquered iron chain at suitable height. These fixtures are to be fixed on the false ceiling (will be done by other agency). The proper co-ordination of the working with other air conditioning agency shall be worked out. The work of wiring on the area whwre the roof insulation will be done shall be completed on top priority so that the air conditioning works shall not hamper.
 - 11.0 The 70W HPSV fixtures to be fixed on four corners of Control Room building is to be fixed at proper height with suitable size bracket. The main switch for these fixtures to be fixed at suitable location near door entry. The mains of 2 x 2.5 sq.mm. Cu. F.R.L.S. wire is to be used for these fixtures.
 - 12.0 Suitable modifications for the 2 x 9 W CFL fixtures for using the same on DC shall be done.
 - 13.0 The provision of hooks for installation of Ceilings Fans is to be done wherever required. The ceiling Fans to be fixed with the help of down rods where the ceiling height is more.
 - 14.0 The 2 x 40W Industrial tube light fixtures & 1 x 40 W normal fixtures are to be fixed with the help of down rods wherever required to have proper illumination and avoiding the glare due to ceiling fans.
 - 15.0 The exhaust fans are to be fixed at the suitable locations in Battery Room and in Toilet. The metal cawl is also to be fixed properly as directed.
 - 16.0 The earth wire shall be laid from main DB to individual DB's and for power plug mains. The earthing for the main DB is to be done outside control room in the vicinity of the Aux Room as per specifications. The earth value of the pit is to be measured. The G.I. Wire given is also to be used if the distance of the pit from the main DB is more than 8 meters.
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