

Also refer to Appendix1- **Figure 14** and Appendix1- **Figure 15** for cross connect cabinet mounting detail (inside Roof-Top room) and cross connect cabinet- elevation layout respectively.

The following design principles must be followed while designing a Roof-top room for buildings with G10+ floors or less:

- a)** The dedicated 3m x 3m x 3m roof-top room shall be provided on the roof of the building;
- b)** The roof-top room shall be connected to building riser through 300mm x 50mm vertical cable tray;
- c)** The doors of this room shall open outwards and have a minimum opening of 1000mm x 2100mm (WxH);
- d)** The following electromechanical must be provided while designing roof-top room:
 - 4 x13A twin sockets fed from the essential power supply with dedicated 20A circuit breaker;
 - 2 number of AC & DC earth bars connected to the dedicated earth pits with resistance less than 1ohm;
 - Add 2 x 63A TP isolator fed with dedicated feeder from essential power supply (EDB);
 - Dedicated A/C system (ducted split FCU) with duty & standby units with proper interlocking, to maintain the room temp. at $^{\circ}21C \pm ^{\circ}1C$; It is to be placed over the door.
 - Heat dissipation can be considered at 36kW for roof-top Room;
 - 2 nos. handheld CO₂ cylinder extinguishers to be provided inside the room;
 - Room should be provided with adequate lighting with minimum of 200 Lux at table level;
 - Room shall be compliant with the fire and safety requirements like smoke detector, fire alarm, emergency light etc. as per local authority standards. Any water sprinklers must be avoided.

Roof-top room design consideration:

- a)** The floors of the roof-top rooms must have a minimum distributed load rating of 10kN/m²;