Refer to the **Appendix1- Figure 13** , **Appendix1- Figure 14** and **Appendix1- Figure 15** for cross connect cabinet mounting detail and cross connect cabinet elevation layout.

3.8 CAT6 Copper Cabling

To deliver services from the consolidation points to the building outlets unshielded twisted pair (UTP) copper cables must be provided. The full design is the responsibility of the building developer, however, the following minimum requirements must be followed for the efficient and effective provision of services:

a) The cables must conform to a minimum of CAT6 with 23 AWG and as per TIA/EIA-568-B specification;

b) The wiring must be in a 'star' topology fanning out from the consolidation point;

c) Dual RJ45 outlets with spring load sliding shutters must be provided where ever service is required;

d) Each socket in the dual RJ45 outlet must be wired back to the consolidation point;

e) Outlets must not be cascaded or looped and there must be no splitting of cable pairs;

f) The maximum cable length from consolidation point to outlet must not exceed 90 m;

g) At the consolidation point the cables must be terminated on an RJ45 patch panel and labelled with the socket and outlet served;

h) In each outlet each cable must be terminated to maintain the twists in each pair up to 5 mm of the termination;

i) Proper strain relief must be provided at the terminated ends of the cable;

j) The components of the CAT6 system must compatible and it is preferred that they are from a single manufacturer to insure optimum performance;

k) Design must incorporate built-in flexibility to meet the growing needs of the occupants;

l) Test result for CAT6 to be saved and recorded for reference purpose in future, the Operators to maintain the records for future reference