



CI-0703

TAB 7: TECHNICAL DISCIPLINES

Electrical

SERVICE ROOMS

GENERAL REQUIREMENTS

Incoming utility services at Metrolinx facilities shall be located in the primary Substation and/or Electrical Room, kiosk, bunker, Hub and Communications Room.

All Electrical Rooms and Communications Rooms shall be dedicated and not be shared with other functions, including, but not limited to: custodial, access services, communications, electrical, mechanical and storage. Access to Electrical Rooms and Communications Rooms via (pass through) Communications, Electrical, Mechanical, Janitor's Rooms, etc., shall be avoided.

Wherever feasible, the main Electrical Room and the main Communications Room shall be located next to each other with exterior access if possible.

The Service rooms floor plan shall always be rectangular or square in shape. The room shall never be L-shaped, triangular or any other odd shape. Electrical Room, Hub and Communications Room shall always be a one level room and preferably above grade.

The room shall be sized for the known equipment with a provision for a minimum of 25% extra space to accommodate future additional equipment (on a project by project basis).

Electrical Room, Hub and Communications Room walls shall not have windows, skylights, roof access hatches/doors, etc. Locating Electrical Room and Communications Room on perimeter curtain walls where windows comprise the entire surface of walls shall be avoided.

Drawings shall indicate to scale the arrangement of allocated equipment inside Electrical Rooms, Hub and Communications Rooms, including spaces and clearances. Elevation drawings shall show to scale all related wall mounted equipment for each wall.

A minimum 1 m clear working space shall be provided in front of access points, which may occur behind equipment and patch panels, and in front of and behind racking. Racking shall not be positioned closer than 1 m from any wall.

A wall mounted, flip down work surface will be provided in each communication room. The work surface will be 1" thick, 30" wide by 24" deep, solid wood, plastic laminate on both main surfaces with a vinyl self-edge. The work surface will be mounted at a height of 36" above the finished floor. The location of the work surface will be adjacent to the main CC rack and maintain all regulatory clearances from exit and equipment as required by code when in the open position. One (1) duplex receptacle and one (1) RJ-45 data connection will be provided at the workstation and mounted above the table top in the open position. Provide heavy duty hinges, mechanism to hold the table open and blocking in the wall as required.

No liquid piping, steam piping, drainage piping and/or dry liquid piping shall pass through or within walls of any Electrical Room, Hub or Communications Room, except for refrigerant and condensate piping for