

Chapter 5

ELECTRICAL POWER SUPPLIES

5.1 INSTALLATION

- 5.1.1 The installation, control and distribution of wiring of electrical equipment in buildings shall be in accordance with SS CP 5 Code of Practice for Wiring of Electrical Equipment of Buildings and SS CP 16 Code of Practice for Earthing.
(No illustration)

Electrical Power Supplies

Buildings under purpose group I are not required to provide primary and secondary source of power supplies, except in the following situations :

- a) *Electrical passenger lift is to be installed;*
- b) *Automatic fire alarm is required to be installed.*

5.2 PRIMARY AND SECONDARY SUPPLIES

- 5.2.1 Primary and secondary supplies
Where any of the following installations is required by this Code or other Codes/Regulations, its primary and secondary source of power supplies shall comply with the corresponding Code of Practice stated therein:
- (a) Where electrical passenger or goods lift is required, its electrical installations, inclusive of battery and other form of secondary power supply, shall comply with SS CP 2 Code of Practice for Installation, Operation and Maintenance of Electric Passenger and Goods Lifts. Where the provision of fire lift is required by this Code, installation of the primary and secondary supplies shall also comply with the above mentioned Code of Practice.
(No illustration)

- a. *Electrical passenger lifts*

Electrical installations, inclusive of battery and other forms of secondary power supply shall comply with SS CP 2: Code of Practice for Installation, Operation & Maintenance of Electric Passenger and Goods Lift. However, for building under purpose group I, emergency supply is not required. The power supply to the lift shall be from a sub-main circuit so that whenever there is power failure to the house, the electrical supply to the lift is still available

For lifts which are not powered by emergency generator, an Automatic Rescue Device (ARD) should be incorporated in the lift system to bring the lifts to the nearest lift landing and open its door upon power failure from the sub-main circuit. Installation of hydraulic lifts is acceptable, provided there is safety feature to bring the lift to the lowest floor, except basement upon power failure.

Where electrical fire alarm system is required, its primary power supply as well as type and capacity of battery shall comply with SS CP 10 Code of Practice for the Installation and Servicing of Electrical Fire Alarm Systems.

b Where electrical fire alarm system is required, its primary power supply as well as type and capacity of battery shall comply to SS CP 10: Code of Practice for the Installation & Servicing of Electrical Fire Alarm Systems.

- (i) Fire Indicator Board - For buildings which are provided with automatic fire alarm system, the FIB should be located near the main entrance of the building.
- (ii) Alarm Sounding - The fire alarm sounder shall have a sound that is readily distinguishable from any other alarm system. However, permission may be obtained for having a common sounding for fire alarm and burglar alarm in residential houses only.
- (iii) Connection to monitoring station - It is not a requirement to connect the automatic fire alarm system to monitoring station for residential houses.

(c) Where exit or emergency lighting system is required, its electrical wiring, type and capacity of battery or other form of secondary power supply shall comply with SS CP 19 Code of Practice for the Installation and Maintenance of Emergency Evacuation Lighting and Power Supply Systems in Buildings.
(No illustration)

The provision of exit or emergency lighting system would be required for non-residential areas, such as basement carpark in cluster housing development.