Lightning Protection for Buildings

Hong Kong experiences lightning strikes every year, particularly during the rainy season. These may cause panic, fire, damage to property and injury to persons. Authorized persons are therefore requested to consider incorporating lightning protection systems into the design of new buildings.

2. The need for lightning protection may be assessed by a risk factor which varies according to the size (particularly the height), the use and the location (whether isolated) of the building and the number of thunderstorm days per year. Methods of assessing the risk are provided in technical standards such as British Standard 6651: 1990 and Australian Standard 1768-1983, which also advise on the design and construction of lightning protection systems.

3. Lightning protection is particularly important for very tall or isolated buildings and for buildings where large numbers congregate, where users are mainly children, elderly or infirm persons or where essential public utilities/facilities/services are accommodated. As a general rule, therefore, the following types of building should be provided with lightning protection:

   (a) very tall or isolated buildings;
   (b) exhibition centres and assembly halls;
   (c) schools, hospitals, old people's home and child care centres;
   (d) public utility buildings; and
   (e) swimming pools in open areas.

4. As for other types of building, similar protection is advisable for the safety and benefit of their users.

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Index under : Lightning Protection for Buildings