

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. To reduce physical damages and life hazards, Authorized Persons are requested to consider incorporating lightning protection systems into the design of new buildings.

2. The need for lightning protection and selection of adequate protection measures 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 should comply with relevant national/international standards such as the British Standard BS 6651, Australian/New Zealand Standard AS/NZS 1768(Int):2003 and International Electrotechnical Commission Standard IEC 62305, which also advise on the design, construction and maintenance 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 and public services 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. However, your attention is drawn to regulation 11 of the Electricity Supply Regulations (Cap. 406A) for the protection from lightning for any exposed support for any electric line.



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