

NOTE: Existing buildings may have been designed to comply with all of the following guidance, which is also acceptable.

- a. The column members are fixed rigidly to a base of sufficient size and depth to resist overturning.
- b. There is brick, block or concrete protection to the columns up to a protected ring beam providing lateral support.
- c. There is some form of roof venting to give early heat release. (The roof venting could be, for example, PVC rooflights covering some 10% of the floor area and evenly spaced over the floor area.)

Methods for calculating acceptable unprotected area

13.17 Two simple methods are given for calculating the acceptable amount of unprotected area in an external wall that is a minimum of 1000mm from any point on the relevant boundary. More precise methods are described in BRE report BR 187 and may be used instead. When using BR 187 the following radiation intensity at each unprotected area should be assumed.

- a. 84kW/m² if the purpose group of the building is ‘residential’ (purpose groups 1 or 2), ‘office’ (purpose group 3) or ‘assembly and recreation’ (purpose group 5) or if the building is an open-sided multi-storey car park (purpose group 7(b)).
- b. 168kW/m² if the purpose group of the building is ‘shop and commercial’ (purpose group 4), ‘industrial’ (purpose group 6) or ‘storage and other non-residential’ (purpose group 7(a)).

Method 1

13.18 This method applies to small buildings intended to be used for ‘residential (other)’ purposes.

13.19 The building should not exceed three storeys in height (excluding basements) or 24m in length. Each side of the building should meet the limits stated in Diagram 13.7. Any small unprotected areas falling within the limits shown in Diagram 13.5 can be ignored.

