

**Table B4 Continued**

Purpose group of building	Minimum periods of fire resistance <sup>(1)</sup> (minutes) in a:					
	Basement storey* including floor over		Ground or upper storey			
	Depth (m) of the lowest basement		Height (m) of top floor above ground, in a building or separated part of a building			
	More than 10	Up to 10	Up to 5	Up to 18	Up to 30	More than 30
b. car park for light vehicles:						
i. open sided car park <sup>(7)</sup>	Not applicable	Not applicable	15 min <sup>#</sup>	15 min <sup>†#(8)</sup>	15 min <sup>†#(8)</sup>	60 min
ii. any other car park	90 min	60 min	30 min <sup>†</sup>	60 min	90 min	120 min <sup>†</sup>

**NOTES:**

For single storey buildings, the periods under the heading 'Up to 5' apply. If single storey buildings have basements, for the basement storeys the period appropriate to their depth applies.

\* For the floor over a basement or, if there is more than one basement, the floor over the topmost basement, the higher of the period for the basement storey and the period for the ground or upper storey applies.

† For compartment walls that separate buildings, the period is increased to a minimum of 60 minutes.

+ For any floor that does not contribute to the support of the building within a flat of more than one storey, the period is reduced to 30 minutes.

§ For flat conversions, refer to paragraphs 6.5 to 6.7 regarding the acceptability of 30 minutes.

‡ For elements that do not form part of the structural frame, the period is reduced to 90 minutes.

# For elements that protect the means of escape, the period is increased to 30 minutes.

1. Refer to note 1, Table B3 for the specific provisions of test.

2. Blocks of flats with a floor more than 30m above ground level should be fitted with a sprinkler system in accordance with Appendix E.

**NOTE:** Sprinklers only need to be provided within the individual flats, they are not required in the common areas such as stairs, corridors or landings when these areas are fire sterile.

3. 'With sprinkler system' means that the building is fitted throughout with an automatic sprinkler system in accordance with Appendix E.

4. Very large (over 18m in height or with a 10m deep basement) or unusual dwellinghouses are outside the scope of the guidance provided with regard to dwellinghouses.

5. A minimum of 30 minutes in the case of three storey dwellinghouses, increased to 60 minutes minimum for compartment walls separating buildings.

6. Buildings within the 'office', 'shop and commercial', 'assembly and recreation', 'industrial' and 'storage and other non-residential' (except car parks for light vehicles) purpose groups (purpose groups 3 to 7(a)) require sprinklers where there is a top storey above 30m. The sprinkler system should be provided in accordance with Appendix E.

7. The car park should comply with the relevant provisions in the guidance on requirement B3, Section 11 of Approved Document B Volume 2.

8. For the purposes of meeting the Building Regulations, the following types of steel elements are deemed to have satisfied the minimum period of fire resistance of 15 minutes when tested to the European test method.

i. Beams supporting concrete floors, maximum  $H_p/A=230m^{-1}$  operating under full design load.

ii. Free-standing columns, maximum  $H_p/A=180m^{-1}$  operating under full design load.

iii. Wind bracing and struts, maximum  $H_p/A=210m^{-1}$  operating under full design load.

Guidance is also available in **BS EN 1993-1-2**.