

Date: 19/04/99

Ref: 45/3/129

*Note: The following letter which has had personal details edited out was issued by our former department, the Department for Environment, Transport and the Regions (DETR). DETR is now Communities and Local Government - all references in the text to DETR now refer to Communities and Local Government.*

## **Building Act 1984 - Section 39**

### **Appeal against refusal by the Borough Council to relax Requirement B5 (Access and Facilities for the Fire Service) of the Building Regulations 1991 (as amended) in respect of the need for a second fire fighting shaft in a proposed office development**

#### **The appeal**

3. The proposed building work to which this appeal relates is a new office block which it is understood constitutes a speculative development. The accommodation is to comprise a mixture of open plan and cellular offices with a gross internal area stated to be 1742m<sup>2</sup> for each floor. The number of storeys has not been given but the height of the upper floors is stated to be between 7.5 metres and not above 18 metres. In addition there is a 170m<sup>2</sup> plant room at roof level. The building has a central core comprising an atrium, and a lift lobby, escape stairs and toilet facilities to one side of this atrium on each floor.

4. The atrium will have a glazed roof and will be open at all levels to the surrounding office spaces. Minutes of a meeting state that in accordance with BS 5588: Fire precautions in the design, construction and use of buildings Part 7: Code of practice for the incorporation of atria in buildings there would be a raised smoke reservoir at the top of the atrium with an automatic clearance system linked to an L2 fire alarm system with the possibility of make-up air required at the lower level being introduced via openable windows at ground floor level.

5. The escape stairs are contained in a protected shaft with stair lobbies between the stairs and lift lobbies. On the opposite side of the building it is proposed to provide a firefighting shaft which contains stairs but not a firefighting lift.

6. These proposals have formed the basis of discussions with the Borough Council but at the time of lodging your appeal had yet to be formalised as a full plans application. The Borough Council do not accept that, having regard to the area of each floor, one firefighting shaft is sufficient to achieve compliance with Requirement B5 as indicated in the guidance given in *Approved Document B (Fire safety)* and *BS 5588 (Fire precautions in the design, construction and use of buildings)*. The Borough Council take the view that there should be a second firefighting shaft.

7. However, you take the view that a single shaft provision is reasonable for this particular development and that the floor areas will be completely accessible to fire fighters with 60 m hose runs. You therefore applied for "a waiver to the requirement under the Building Regulations Part B, section 17, for two fire fighting shafts within the building". This was taken by the Borough Council as an application for a relaxation of Requirement B5 which was refused. It is against that decision that you appealed to the Secretary of State.

### **The appellant's case**

8. In support of your judgement that a single fire fighting shaft is a reasonable provision in this development, you make the following points:

i) the primary requirement for fire fighting shafts is such that the floor area is completely accessible to fire fighters with a 60m run of hose. You have provided a drawing showing 60 m hose runs from the door of the fire fighting shaft and which demonstrates that even by taking the longest route around the proposed corridor, all parts of the floor are covered

ii) you have also provided a comparison at a scale of 1:1000 of the two criteria given in *Approved Document B(Fire safety)* - ie a 900 m<sup>2</sup> floor plate and an area covered by a 60 m hose and you suggest that the difference between the two areas is not justified

iii) you refer to and have supplied plans of a number of previous similar projects where you claim that a dispensation was given to reduce the number of fire fighting shafts. You also refer to the following two documents:

a) a fire consultants report for another project which refers to fire fighting shafts and states that in this context accessibility is judged by the ability of the fire service to reach any point on the floor plate with a 60 m hose line extending from the stair enclosure.

b) the Department's publication *Design Principals of Fire Safety* which states: "*The hose length alone could be considered as sufficient to provide for a sufficient number of shafts*".

iv) you accept that the Borough Council were prepared to consider a single fire fighting shaft as adequate if your proposals were to incorporate a sprinkler system, but your view is that there is no basis for needing to provide a sprinkler system in a building of this size and type

v) with regard to the issue raised by the Borough Council of coverage of the roof plant room you point out that all parts of the plant room are covered by a 60 m hose from the fire fighting shaft

9. Finally, you acknowledge the difficulty which fire fighters have as they approach the 60 m distance from the protected fire fighting lobby, but you argue that the 60 m hose is standard equipment and that the fire fighters skill and training is directed to coping successfully with this situation.

### **The Borough Council's case**

10. The Borough Council state that the plans of the proposed building do not show compliance with the recommendations in Section 17 of Approved Document B (pages 89 and 90) because the floor plans are 1742 m<sup>2</sup> compared with the recommendation in the document of one shaft per 900 m<sup>2</sup> or part thereof.

11. The Borough Council also make the following points in support of their refusal to relax Requirement B5:

i) the DOE publication referred to does make reference to hose lengths but also states that in some instances, and for practical purposes, the floor space criterion should be used. They point out that fire officers have greater difficulty as they reach the 60 m distance from the protected lobby

ii) there is a large plant room (170 m<sup>2</sup>) with a floor level 15 m above ground level which may not be within reach of the fire fighters hose

iii) no account is taken of alterations or possible sub-letting at a later stage and the Borough Council point out that the office constituted speculative development. They also point out that the floor is not fully covered by a 40 m direct distance from the fire fighting lobby, as recommended in *Approved Document B*.

12. The Borough Council finally make the point that no real compensatory feature that would have a bearing on the fire fighting process - such as the installation of a sprinkler system which would reduce the spread and intensity of the fire - has been provided.

### **The Department's views**

13. Your application to the Borough Council appears to have been couched in terms of a waiver of section 17 of *Approved Document B*. There is no statutory procedure for waiving or relaxing Approved Documents - these documents purport to give advice only on how compliance may be achieved. It is therefore neither relevant for their content to be relaxed nor is there any statutory procedure to achieve this. The Borough Council took your application to be one of a relaxation of Requirement B5 (Access and facilities for the fire service) and your appeal against that decision has been appropriately handled under section 39 of the Building Act 1984.

14. In your submission documentation you have referred to what you describe as similar office projects in which the local authority and Fire Brigade have agreed that a single fire fighting shaft is all that they require and you have enclosed a number of plans of these developments. However, the Secretary of State must consider each case on the basis of its individual merits.

15. *Paragraph 17.3 of Approved Document B* suggests that in buildings not fitted with sprinklers, fire fighting shafts should be provided where the floor area is 600 m<sup>2</sup> or more and where that floor area is 7.5 m above ground or access level. Paragraph 17.7 suggests that at least one fire fighting shaft should be provided for every 900 m<sup>2</sup> (or part thereof) of floor area. Paragraph 17.8 suggests that the location of fire fighting shafts should be such that every part of every storey (other than the fire service access level) is no more than 60 m from a fire fighting lobby entrance measured on a route suitable for laying a hose. Paragraph 17.8 continues that where the internal layout is unknown, then every part of every such storey should be no more than 40 m in a direct line from the entrance to a fire fighting lobby.

16. There are therefore two criteria which may be applied by way of guidance to determine the number of fire fighting shafts which should be provided in buildings where sprinklers are not provided - one relating to the floor area; and the other to hose length. The area of each relevant floor is 1742 m<sup>2</sup>. If the 900 m<sup>2</sup> criterion is followed then clearly two fire fighting shafts should be provided. If on the other hand the hose length criteria are used then the 40 m rule would be appropriate because it is understood that the final internal layout is still unknown. By scaling from the 1:200 drawing the Department estimates the furthest point from a fire fighting lobby entrance to be approximately 46.5 m.

17. In the Departments opinion what needs to be considered is the risk to fire fighters if only a single shaft is provided. There are three relevant factors to consider in this case. First, the building has an atrium which will be provided with automatic smoke ventilation which will therefore help disperse smoke from the fire floor. Secondly, in addition to the stairs in the firefighting shaft there will be a second protected stairway for firefighters, with lobby protection, provided by the escape stairs. It is accepted that this second stair is for means of escape and although the lobbies will not be vented as for fire fighting lobbies, this protected stair will be available for use by the fire brigade if necessary. Thirdly offices are considered to be in the low risk category.

18. Taking account of all the aspects of this case it is the Departments view that notwithstanding the fact that the direct distance to the furthest corner of the building slightly exceeds 40 m, it would be unreasonable to insist that two fire fighting shafts be provided in order to achieve compliance with Requirement B5.

## **The Secretary of State's decision**

19. Paragraphs 15 - 18 above have considered the issue of compliance of your proposed work with Requirement B5. However, you have appealed to the Secretary of State in respect of the refusal by the Borough Council to relax Requirement B5.

20. The Secretary of State considers the requirements in Part B of Schedule 1 to the Building Regulations 1991 (as amended) to be life safety matters and as such would not normally consider it appropriate to relax any of those requirements. He has given careful consideration to the facts of this case and the arguments put forward by both parties. He has also taken note of his Departments advice regarding compliance of your proposed work. In all the circumstances he does not consider there are any extenuating reasons which would justify a relaxation of Requirement B5. Accordingly, he dismisses your appeal.