

Date: 22/07/98

Ref: 45/1/162

Note: The following letter 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 16 (10)(a)

Determination of compliance with Requirement B1 (means of escape) and B3 (internal fire spread (Structure)) of the Building Regulations 1991 (as amended) in respect of the fitting out of the retail area and installation of a mezzanine storage platform at an existing single storey superstore.

3. In making the following determination, the Secretary of State has not considered whether the plans conform to any other relevant requirements.

The proposed work

4. The building to which the proposed building work relates is an existing single storey retail unit. Your client is a high street retailer trading predominantly in large domestic appliances and bulky goods. Approximately 75 per cent of the premises comprise a retail area, whilst the remaining 25 per cent back of house area contains staff, administrative and storage facilities. Because the stock area occupies less than one third of the floor area, the dividing partition between the two areas is not fully compartmented. You estimate that the retail area can accommodate a maximum of 185 persons and the back of house area a maximum of 20 persons. The surface spread of flame rating is Class 1 for the retail area and Class 0 for the stock area.

5. In addition to the main exit, the premises are served by three storey exits. A corridor passing through the stock area provides an alternative means of escape for members of the public. A digital lock on the door leading to the corridor prevents unauthorised access but this can be overridden in an emergency by operating an adjacent break glass point. The front entrance to the unit is fitted with sliding doors which can open as swing doors when pushed.

6. The proposed building work comprises the fitting out of the retail area of the unit and installation of a raised mezzanine floor of unprotected steel for storage purposes above the back of house area. The raised floor will measure approximately 12m x 29m and will be served by two stairways, one of which discharges to within 4.5m of a final exit from the building. There will be limited staff access to the area and no public access. Smoke detectors of BS 5839 Part 1 standard will be provided throughout the space below this area.

7. These proposals were the subject of a full plans application which was rejected by the borough council on grounds of non-compliance with Requirements B1 (means of escape) and B3 (internal fire spread (structure)). The borough council were not prepared to accept that the proposal to adopt a lower standard of fire resistance for the raised storage area, whilst not installing compensatory compartmentation to protect the means of escape for customers using the retail area, would be in compliance with requirements B1 and B3. However, you believe that these proposals would be in compliance and it is in respect of this question that you have applied for this determination.

The applicant's case

8. You are proposing neither to provide fire protection to the raised storage area described above, nor to provide fire separation between the storage area and the general public areas of the store. In support of your case you refer to paragraph 7.10 of *Approved Document B (Fire safety)* and contend in your Notes to accompany the fitting out of the superstore that the recommendations given in this paragraph have been complied with.

9. You have supplied the borough council and the department with details of 11 previous case histories where your design approach has been accepted and approved. You also state that you are close to achieving type approval for this type of store.

The borough council's case

10. The borough council have rejected your proposals on the grounds that requirements B1 and B3 have not been complied with. In their opinion paragraph 7.10 of *Approved Document B* should not be read in isolation and they consider that paragraph 7.8 is also relevant. Moreover, they consider that the inference of the section in the Approved Document on raised storage areas appears to be to allow a lower standard of fire resistance to the first floor structure where installed in a building whose occupants are familiar with their surroundings.

11. The borough council has accepted that a compartment wall may not be required because the storage area was not greater than one third of the shop area. However their view is that if you do not wish to provide fire resistance to the floor and supports of the raised storage area, then the intention of the guidance can only be achieved by separating the storage area from the public area. The borough council regards this separation as a reasonable compensatory feature vis a vis the potential for the rapid development of fire and smoke which could adversely affect the means of escape for members of the public.

12. The borough council considered that an acceptable level of separation would be achieved if the partition was fire stopped where it meets the underside of the roof. In addition they would require that where ductwork penetrates the partition it should either be provided with fire dampers or the arrangement should be such that fire spread would be prevented for 30 minutes. The borough council maintains that this solution, following inquiry checks with other local authorities, has been proposed and subsequently approved. You dispute the validity of this statement.

The Department's view

13. As part of your submission you have mentioned eleven previous similar cases which you state have received approval. However, each determination must be considered on the basis of its individual merit.

14. In this case the borough council have agreed that a compartment wall between the raised storage area and the public area need not be provided. However they are asking for fire separation between the two areas on the basis that fire protection to the floor and supports of the storage area is not being provided. Such separation includes the provision of preventing fire spread via the ductwork should there be a need for this to pass through this fire separating wall.

15. The Department's understanding is that the borough council would not be asking for fire separation between the storage and public areas if fire protection to the elements of structure for the storage area had been provided. The department Does not share the concerns of the borough council on this issue because the risk to members of the public from the open storage area will not be reduced if the elements of structure of the storage area are fire protected. In the Department's view the fire loading contained in the open storage area will remain the same whether or not the elements of structure are fire protected.

16. The Department also considers it reasonable to assume that members of the public would have been evacuated before the storage area collapsed. The department therefore considers, after taking all these issues into account, that your proposals satisfy Requirement B1.

17. The borough council have made particular reference to paragraph 7.8 of *Approved Document B* which suggests that the fire resistance of the elements of structure of raised storage areas should follow the guidance given in Table A1. However paragraphs 7.10 and 7.11 refer to the exceptions which permit reduced levels of fire resistance, (or even little fire resistance so as to permit an unprotected steel structure). You have indicated that you are proposing to follow the guidance given in these two paragraphs. On this basis therefore the Department considers that your proposals to leave the elements of structure of the raised storage area unprotected, and not to fire separate the storage area from the retail area, comply with Requirement B3.

The determination

18. The Secretary of State has given careful consideration to the particular circumstances of this case and the arguments put forward by both parties. You do not propose to provide fire resistance to the elements of structure of the raised storage area or to provide fire separation between the storage area and the general public area of the store; but you do propose to apply the recommendations given in paragraphs 7.10 and 7.11 of *Approved Document B*. In the circumstances of this particular case the Secretary of State has concluded, and hereby determines, that your proposals comply with Requirements B1 and B3 of Schedule 1 to the Building Regulations 1991.