

Date: 28/03/00

Ref: 45/1/184

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) of the Building Regulations 1991 (as amended) in respect of alterations relating to retail and office accommodation

The proposed work

4. The proposed building work to which this determination relates involves alterations to two premises forming part of a terrace building which comprises four above ground storeys, plus a basement storey. The basement and ground floor of the two premises concerned have openings in the party wall enabling both floors to be used as one retail area. The first, second and third floors of both premises are currently divided by the party wall and comprise small offices.

5. All the storeys in the left hand premises are connected by a main staircase located on the party wall. In addition there is a stair located against the back wall connecting the ground and first floors. The storeys in the right hand premises are connected by a lift and stairs shaft which is lobbied and located against the further party wall. In addition there is a lobbied stair in the centre rear of the right hand premises connecting the ground and basement floors.

6. The building work as originally proposed for approval by the City Council comprises alterations to change and unite the existing office accommodation on the first floor of both premises, by constructing openings in the party wall, to form a further retail space to be used in common with the existing basement and ground floor retail areas of the united premises. The office and storage areas in the left hand premises on the second and third floors are to be replaced by open plan office space; and the roof space of the left hand premises is to be altered to form a new fourth floor containing offices with dormer windows in the roof. The areas of the floors to be so altered/constructed will be as follows:

Basement - 201 square metres - Retail (both premises)
Ground - 205 square metre - Retail (both premises)
First - 185 square metres - Retail (both premises)
Second - 79 square metres - Office (left hand premises)
Third - 79 square metres - Office (left hand premises)
Fourth - 61 square metres - Office (left hand premises).

7. The main staircase in the left hand premises located on the party wall will be completely removed. A new protected staircase will be built at the rear extending from the basement level up to the new fourth floor level, with discharge to a final exit at ground level. Access to the stair is to be provided from the basement, and the first, second, third and fourth floors. Separate escape routes are available from the ground floor retail area and no access to this stair is proposed at this level.

8. The new stair will form one of the designated escape routes from the basement retail area and double fire door protection to the stair is to be provided at this level. The new stair will also form one of the two designated escape routes from the first floor retail area and single fire door protection only to the stair at this level is shown on the drawings. The new stair will form the only means of escape route from the offices on the second, third and new fourth floor, and single fire door protection to the stair only is proposed at these levels.

9. Fire compartmentation between the floors and the new stair in the left hand premises will be a minimum of 60 minutes standard of fire resistance. The doors opening onto the new staircase are intended to have 30 minutes fire resistance but you have stated that your client would be prepared to upgrade these to 60 minute fire resisting doors if required. A full automatic fire detection system installed to an L1 standard in accordance with *BS 5839: Fire detection and alarm systems for buildings: Part 1: 1988 Code of practice for system design, installation and servicing*, is to be provided.

10. The proposals, originally incorporating fire resisting lobbies, ie two door protection, at each level of the new main stair in the left hand premises were conditionally approved. However, in your letter of you had earlier requested that the need for protected lobbies on the office floors to the new main stair be re-considered. The City Council took the view that the occupancy level of the premises at the upper levels would be such that a lack of physical protection could not be compensated for by an automatic detection system. However, you do not accept this view and believe that your proposals (ie to install an L1 standard automatic fire detection system and to omit the fire resisting lobbies to the main stair on the second, third and fourth floors) would be in compliance with Requirement B1 (Means of escape) of the Building Regulations 1991 (as amended), and it is in respect of that question that you have applied for a determination.

The applicant's case

11. You consider that it would be reasonable in your case to omit the fire check lobbies, ie double fire door protection, to the new stair that forms the sole means of escape from the second, third and fourth floor offices in the left hand premises. You make the following points in support of this:

- (i) there is no access to the staircase from the ground floor retail area
- (ii) a fire check lobby comprising 60 minute doors will be provided to separate the basement level from the staircase
- (iii) access to the staircase from the first floor retail area is acceptable because if a fire occurred on this floor near to the door to the stair, then in your view the door is unlikely to be opened because persons would escape via the second escape stair available to the first floor in the right hand premises
- (iv) the direct travel distance in the second, third and fourth floor offices is 12m which is within the recommended maximum given in *Approved Document B (Fire safety)*
- (v) the floor area of the second, third and fourth floor offices is relatively small and could only be expected to accommodate about 8 to 9 persons on each floor
- (vi) a full L1 standard automatic fire detection system is to be installed to compensate for the omission of fire check lobbies
- (vii) fire compartmentation between the floors and the new stair will be a minimum of 60 minutes standard of fire resistance. You would be prepared to upgrade the 30 minutes fire resisting doors to the stair to 60 minutes
- (viii) no sleeping accommodation is provided in the premises.

12. In addition to the above you state that the local Fire Authority was consulted and has given approval to the omission of the lobby protection to the new stair subject to the installation of a full alarm and detection system throughout the premises. You have provided a copy of the Fire Authority's consent for certification as part of your submission. You have also referred in correspondence to the City Council to a previous similar determination, the circumstances of which, in your opinion, are similar to this case and which was accepted.

13. From the earlier correspondence provided it appears that your original intentions were to deviate from the original conditional approval by omitting fire checked lobbies to the first (ie retail) floor as well as the second, third and fourth floors (ie office floors). It appears also that this was the proposal put to the fire authority on However, your letter of to the Department states that a full 30 minutes fire check lobby is to be provided between the first floor

retail shop and the new stair. Therefore, to overcome this apparent confusion this element has been taken as forming part of your proposal for which you have sought a determination (see last sentence of paragraph 10 above).

The City Council's case

14. The City Council makes the following points in support of their rejection of your original proposal to omit fire check lobbies to the stair on the first to fourth floors in the left hand premises:

(i) in the City Council's opinion, the previous determination case accepted by the Secretary of State is not relevant to this case with regard to either the numbers of occupants or the height of the building

(ii) the number of occupants is likely to be higher than that stated by you. The City Council calculate that there could be a combined total of 44 occupants on the second, third and fourth floors; and a possible 90 persons on the first floor of the retail unit who, in a worst case scenario if the alternate stair was blocked, would need to use this stair for escape

(iii) the provision of an automatic fire alarm system is not sufficient compensation for the lack of physical protection afforded by fire resistant lobbies where the upper floors are occupied by a number of persons such as in this case.

The Department's view

15. The Department takes the view that what needs to be considered in this case is the safety of the occupants on the upper floors in a fire situation if the protected lobbies, ie double fire door protection, are omitted to the stair in the left hand premises. The Department notes that at basement level a protected lobby is to be provided and that there is no access into the stairway at ground floor level. It also notes that you have subsequently indicated that a protected lobby will be provided at first floor level. The issue of the acceptability of single fire door protection therefore relates only to the second, third, and fourth floors; although consideration is given below to the issue of the first floor access as well. Because of the different circumstances and associated risks, each floor is considered separately.

16. The relevant part of *paragraph 4.26 of Approved Document B* suggests that a protected lobby should be provided where the stair is the only one serving a building (or part of a building) which has more than one storey above the ground storey. The paragraph ends by suggesting that in situations where the guidance in the paragraph is applicable then protected lobbies are needed at all levels except the top storey. The purpose of the lobby is to give added protection to persons needing to escape past the fire floor. In this case the fourth floor is the top floor and no one will be escaping past it. The Department therefore considers that it is unreasonable to ask for lobby protection to the top (fourth) floor, particularly since the Approved Document suggests that it is unnecessary.

17. With regard to the second and third floors there is clearly a risk if the fire is on one of these floors because since the stair is the only stair serving this part of the building persons will need to escape past the floor. If the fire is on the second floor then the occupants of both the fourth and third floors will need to escape past it. You have suggested that there could be 8 to 9 persons on each of these upper floors and the City Council is suggesting that more realistically this figure could be 12 to 13 persons. The Department considers that the difference between these two sets of figures is of no real significance in escape terms. You are proposing a comprehensive alarm system to give early warning of fire and the Department accepts that this is a reasonable approach given the relatively low numbers of persons and short travel distances. The Department therefore takes the view in the circumstances that it would be reasonable to omit the protected lobby on both the second and third floors. However, where there is no lobby protection, the risk to persons is considerably increased if any of the single fire doors protecting the stair are wedged open. The Department considers that you have an obligation to make your client aware of the need to have suitable management procedures in place to obviate such circumstances.

18. With regard to the first floor (retail floor) the Department takes the view that the potential number of occupants on this floor is likely to be considerably greater than that of the upper floors. The City Council is suggesting that there could be up to 90 persons and the Department accepts this judgement. The Department notes that persons on the first floor have alternative means of escape. However as has been pointed out by the City Council, the alternative route could be prejudiced by fire making it necessary for the occupants of this floor to escape into the proposed new stair in the left hand premises which also must provide the single route of escape for persons from the upper floors. Because of the numbers of persons that could be using the stair in question for escape if the fire was on the first floor, the Department therefore supports the City Council's view that a protected lobby, ie two door protection, should be provided to the stair at first floor level.

The determination

19. The Secretary of State has given careful consideration to your proposals and the particular circumstances of this case. He has also noted your reference to a previous determination decision which you contend constitutes a similar one to this. However, the Secretary of State is required to consider all cases on their individual merits, and issues specific to previous cases will not necessarily be relevant to subsequent ones.

20. The Secretary of State has concluded, and hereby determines, that your proposals to provide fire resisting double door (ie lobby) protection at basement and first floor level and to provide single door protection to the second, third and fourth floors in the left hand premises, coupled with the installation of a full automatic fire detection system installed to an L1 standard, will be in compliance with Requirement B1 of Schedule 1 to the Building Regulations 1991 (as amended). In making this determination the Secretary of State particularly draws your attention to your clients obligations to ensure

suitable management procedures are in place with respect to the single door protection on the second and third floors.