

Date: 07/06/00

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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 a loft conversion in a second floor flat

The proposed work

4. The building to which the proposed building work relates is a semi-detached Victorian three storey property which was converted in 1988 to provide a total of three self contained flats with one flat being located on each floor. The first and second floor flats are accessed directly from an internal common stair and the ground floor flat is also accessed directly from the stair enclosure.

The common stair enclosure is constructed to achieve 30 minutes fire resistance with all flat entrance doors being 30 minute fire resisting and self-closing. There are no lobbies provided between the stair and each of the flat entrances but there is a 30 minute fire resisting self closing door to the kitchen of each flat.

5. The second floor flat accommodation currently comprises a hallway/landing, living room, kitchen, bathroom and two bedrooms. The proposed building work involves extending the second floor flat into the roof space by means of a loft conversion to form an additional bedroom and an en-suite shower room, creating a maisonette and a new fourth storey (third floor) to the building. Access to the new third floor will be via a new internal stairway rising from the existing second floor internal landing area of the upper flat. The drawings show that the new third floor room will incorporate two Velux rooflight escape windows on each of the front and rear elevations; although you state that reliance for escape will be placed on the front elevation windows only.

6. It is proposed to install an automatic fire detection and alarm system within the new maisonette and to the common stairway to an L1 standard, which the Department assumes will be in accordance with *BS 5839: Fire detection and alarm systems for buildings Part 1: 1988 Code of practice for system design, installation and servicing*. It is also proposed to upgrade all internal doors within the new maisonette so that they achieve 30 minutes fire resistance and you intend to construct the new compartment floor so that this also achieves 30 minutes fire resistance. The Department assumes that your reference to a new compartment floor means the floor to the new third floor of the building.

7. The above proposals were the subject of a full plans application which was rejected by the Borough Council on the grounds that there was insufficient information to determine whether your proposals complied with the Building Regulations 1991 (as amended). The Council advised that in their view compliance with Requirement B1 (Means of escape) of the Building Regulations should be achieved in this case by satisfying the recommendations relating to internal planning of maisonettes in either *Approved Document B (Fire safety) (1992 edition)* or *BS 5588: Fire precautions in the design, construction and use of buildings Part 1: 1990 Code of practice for residential buildings*. However you believe that your proposals comply with Requirement B1 and it is in respect of this question that you have therefore applied to the Secretary of State for a determination.

The applicant's case

8. You state that the Borough Council has rejected your proposals on the grounds that they consider that alternative means of escape should be provided from the new third floor via a new external stair or, alternatively, that the existing common stair should be upgraded by providing 30 minute fire resisting lobbies within each of the lower flats. You consider that the Borough Council is interpreting the guidance given in *Approved Document B* too rigidly which would require work to be carried out in the other flats which are not owned by your client. You believe that this would be totally unacceptable.

9. You argue that the proposed work, ie the new third floor extension, does not affect the occupants ability to leave the building in the event of a fire. You consider that the proposed fire detection system within the maisonette, and the common stairway, would provide early warning in the event of fire both in the maisonette and in the lower flats, and is an improvement on the current situation. In your view this provision more than compensates for the slight increase in the travel time and distance from the new third floor to the maisonette entrance door which opens onto the common stair.

10. You maintain that it is impractical to provide alternative means of escape from the new third floor and that an external stair would not receive planning permission. You point out that secondary means of escape is available from the front elevation, via the Velux roof lights.

The Borough Council's case

11. The Borough Council requires an alternative escape route to be provided from the new third floor in order to show compliance with Requirement B1 of the Building Regulations. The Council accepts your proposed smoke detection system within the maisonette and in the common stairway, but in addition the Council also requires that the entrances to the existing lower flats should be altered to provide 30 minute fire protected lobbies. This would then be considered to be an acceptable alternative solution to the provision of an external escape stair.

12. In support of their rejection of your proposals the Borough Council refers to *paragraph 2.15 of Approved Document B and Clause 10.4 of BS 5588: Part 1: 1990*. Both of these documents suggest that for a maisonette with a floor at more than 4.5m above ground level, and where alternative escape is not able to be provided from each room above the entrance floor, then alternative escape should be provided from the upper floor and with all habitable rooms entered directly from either a protected entrance or landing on that floor.

13. With regard to your proposal to use the two front elevation Velux roof windows as an alternative escape route, the Borough Council points out that these are only acceptable for escape purposes from loft conversions of existing two storey dwelling houses. The Council does not accept therefore that these escape windows constitute an effective alternative exit from the top storey of your maisonette and neither do they consider that the smoke detection system is an adequate compensatory feature in lieu of an appropriate escape route.

The Department's view

14. The Department takes the view that what needs to be considered in this case is whether your proposals make provision for the safe escape of the occupants of the new third floor in a fire situation. The Borough Council has pointed out that escape windows are only applicable where loft conversions are carried out to two storey dwelling houses and are therefore not satisfactory in your case. The Department accepts the judgement of the Borough Council on this issue because your conversion forms a new fourth storey and the concessions given for loft conversions are not appropriate in your case because of the height of the new third floor above ground level. Even though rescue may be possible from the escape window by the Fire Service it would be unreasonable to make the assumption that rescue at such a height could be guaranteed.

15. In the Department's view there are two fire scenarios that could have an effect on the safe escape of the occupants of the new third floor. The first is where a fire occurs in the maisonette itself, in particular on the lower floor of the maisonette. The second is where the fire occurs in one of the lower flats. To cover the first scenario you have provided a full smoke detection system within the maisonette and have stated that you will upgrade all internal doors within the maisonette so that they achieve 30 minutes fire resistance. The Department assumes from this, and from your drawings, that this will provide a protected internal stair and route of travel from the new third floor to the existing flat entrance on the second floor, although you have not stated that this is the case. On this assumption, the Department considers that your proposals show adequate means of escape from the new third floor to the existing entrance door to the maisonette on the second floor.

16. However, although the Department considers that the means of escape within the maisonette itself is acceptable without an alternative escape route being provided, it considers that if fire occurred in one of the lower flats the escape route provided by the common stair past these flats would not be adequate. This is due to the increased height at which habitable space is to be provided in the building and the lack of protected internal lobbies in the lower flats.

17. The Department accepts that the lower flats are existing but notes that escape or rescue might now have to be from the new third floor. This could take longer than if the building had remained as existing, ie three storeys. If escape windows are to be discounted as a viable means of alternative escape, then the only route of travel is via the common stair which should therefore be made as safe as possible. To achieve this the Department accepts the Borough Councils judgement that protected lobbies should be provided in each flat, as recommended in *Approved Document B (paragraph 2.19 and diagram 12(b))*.

18. In your case you have stated that the front doors and the doors to the kitchens of the lower flats are fire resisting but the Department does not consider that this provides an acceptable level of safety if an alternative escape route from the maisonette is to be omitted. In the Department's view therefore the lower flats should be provided with protected internal lobbies with all doors to habitable rooms being made fire resisting and self-closing. The Department notes your proposal to incorporate smoke detection in the common stairway but takes the view that, although this would provide early warning of fire, it would not prevent the stair from becoming prejudiced by smoke if a fire occurred in one of the lower flats.

The determination

19. The Secretary of State has given careful consideration to the particular circumstances of this case and the arguments presented by both parties. On the basis of the proposals as submitted, including the proposal for an automatic fire detection and alarm system, he does not consider that they make adequate provision for safe escape. He has therefore concluded and hereby determines that your proposals do not comply with Requirement B1 (Means of escape) of Schedule 1 of the Building Regulations 1991 (as amended).