

Date: 05/04/05

Ref: 45/1/218

*Note: The following letter was issued by our former department, the Office of the Deputy Prime Minister (ODPM). ODPM became Communities and Local Government on 5 May 2006 - all references in the text to ODPM now refer to Communities and Local Government.*

## **Building Act 1984 - Section 16(10)(a)**

### **Determination of compliance with Requirement B1 (Means of warning and escape) of the Building Regulations 2000 (as amended) in respect of a loft conversion in a second floor flat.**

#### **The proposed work**

4. The building work to which this determination relates comprises the conversion of the roof space (ie the loft) of a second floor flat into a third bedroom and bathroom, thus forming a two storey flat or "maisonette". The building, comprising the second floor flat, currently consists of three storeys and is part of a development of two, three and four storey blocks of flats, which were built in 1996/97. The plan dimensions of the building are approximately 16m by 10m with two flats on each storey.

5. The second floor flat currently comprises two bedrooms, a living room, kitchen and a bathroom. The front door opens onto a protected lobby between the flat and the common stair. A new internal stair is proposed within the second floor flat rising to the new third floor. The new internal stair will lead to a narrow gallery / landing giving access to the proposed third floor accommodation via a self-closing FD30 fire door. The third floor will consist of a bedroom and an en-suite bathroom. The bedroom will have a set of patio doors leading directly onto an open balcony. The proposed internal stairway will be protected with self-closing FD30 fire doors (excluding the bathroom) and fire resisting construction.

6. You propose to install an automatic fire detection and alarm system in the second floor flat and in the internal stairway to an L1 standard in accordance with *BS 5839: Part 1: 2002 (Fire detection and fire alarm systems for buildings: Code of practice for system design, installation, commissioning and maintenance)*. Your plans indicate that it is also proposed to extend this alarm system to the common stairway.

7. Your plans also indicate that there are two existing similar flats on each of the lower floors of the building, which are accessed via a common protected lobby from a single common stairway.

8. The above proposals formed the basis of a full plans application which was rejected by the District Council on the grounds that the proposals do not comply with Requirement B1 of the Building Regulations, as they do not provide for an alternative means of escape from the newly formed third floor level of the building. However, you consider that your proposals provide a high degree of protection and warning for the occupants of the second floor flat, and an adequate means of escape in case of fire, and thereby achieve compliance with Requirement B1. It is in respect of this question that you have applied to the Secretary of State for a determination.

### **The applicant's case**

9. You refer to the details of a previous determination made by the Secretary of State in June 2000 (Ref: 45/1/186). Although the previous case was rejected, you consider that many of the comments and conclusions reached in that similar case support your case. Furthermore, you take the view that your proposals provide a far higher standard of protection and warning and escape than the previous case for the following reasons:

(i) the building in question was constructed in the late 1990's and offers a considerably higher degree of fire protection than was provided in the previous case. For example, the floors are of concrete construction, not timber.

(ii) you propose to provide a set of patio doors leading directly onto an open balcony. You consider that these would be easier and quicker to use, in the event of an emergency, than roof windows as a means of secondary escape and it would also be possible to climb down to the balconies immediately below. Moreover, access for emergency services to the rear of the building is clear, wide and unobstructed.

(iii) your client would be willing to glaze the patio doors between the balconies and habitable rooms with fire resisting glass to afford at least 30 minutes fire protection to the balcony areas.

(iv) you draw attention to your proposed automatic fire detection and alarm system in the flat and internal stairway, and also the interconnected smoke detectors and emergency lighting in the common stairway.

(v) you also draw particular attention to the protected lobbies which already exist on all floors between the flats and the common stairway and which were not present in the previous case.

10. You subsequently provided further comments as follows, in response to the District Council's representations to the Secretary of State below:

(i) you stress that the proposed third floor gallery will not be open to the second floor kitchen area. It is open to the entrance hall area only which itself is separated from the kitchen, and all other second floor rooms, with 30 minutes fire rated partitions and doors.

(ii) with regard to the previous determination case you have referred to, you consider the District Council's reference to protected internal lobbies to be irrelevant. In the previous case, the lower flats entrance doors opened directly onto the common stairway with no protected lobbies in between. In this case, the lower flats entrance doors open onto common protected fire lobbies located between the entrance doors and the common stairway, thus providing a fully protected common stairway.

### **The District Council's case**

11. To support its view that your proposals do not comply with Requirement B1, the District Council refers to the guidance in paragraph 3.14 of *Approved Document B (Fire safety)*, which sets out two acceptable approaches for planning means of escape within a maisonette, and also clause 10.4(b) of *BS 5588: Part 1: 1990: (Fire precautions in the design, construction and use of buildings. Code of practice for residential buildings)*.

12. The District Council suggests that your plans indicate that the proposed gallery at third floor level will be open to the kitchen area below at second floor level, which would also prejudice the means of escape in the event of fire.

13. With regard to the previous determination case you have referred to, the District Council notes that the former DETR expressed its concern at the lack of protected internal lobbies within the lower flats. The Council notes that your plans also indicate that there will be no protected internal lobbies within the flats on the lower floors.

14. The District Council would not support escape via an external balcony to a lower balcony without provision of a suitable stair.

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

15. The Secretary of State takes the view that what needs to be considered in this case is whether your proposals make appropriate provision for the safe escape of the occupants of the new third floor in a fire situation. In the Secretary of State'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 within the newly formed maisonette itself, in particular on the lower floor of the maisonette. The second is where the fire occurs in one of the lower flats in the building.

16. To cover the first scenario you propose to provide an enhanced fire detection and alarm system within the maisonette and have stated that all internal doors within the maisonette will achieve 30 minutes fire resistance. 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. The Secretary of State considers that these proposals show adequate means of escape from the new third floor to the existing entrance door to the maisonette on the second floor.

17. You also refer to the potential for rescue from the third floor balcony. Whilst rescue by the Fire Service may be possible from this balcony window, it would be inappropriate to make the assumption that rescue at such a height could be guaranteed and this should not be a material consideration for achieving compliance with Requirement B1. This does not, however, alter the Secretary of State's view that the proposed internal arrangements of the maisonette as, described in paragraph 16 above, are adequate.

18. The District Council has raised concerns about the proposed third floor gallery which, in its view, is open to the kitchen area below at second floor level. You have confirmed, however, that this is not the case and that the gallery is only open to the stairwell. As such the gallery would more accurately be described as a landing.

19. In respect of the second scenario, the District Council has pointed out that in the previous determination case you have referred to (which in your view supports your proposals) it was considered that there was a need for protected internal lobbies within the lower flats to ensure adequate protection of the common stair. In this case, however, the existing common stair is provided with common protected lobbies. The Secretary of State takes the view that common lobbies are less likely to be rendered ineffective by the residents of the building than are internal lobbies and, therefore, are considered to provide a superior level of protection.

20. You have also proposed to extend the fire detection and alarm system into the common stairway. Such a provision would not offer any protection from a fire within the maisonette (scenario 1) and whilst it might be considered to provide some benefit should a fire occur in one of the other flats (scenario 2), the level of protection to the stairway afforded by the protected lobbies is considered adequate without the need for any additional compensatory

measures. Given the potential for unwanted false alarms the current *Approved Document B* suggests that interconnected alarms should not be provided to the common parts of flats and maisonettes.

21. Taking the above considerations into account, the Secretary of State has concluded that your proposals demonstrate compliance with Requirement B1.

### **The determination**

22. The Secretary of State has given careful consideration to the particular circumstances of this case and the arguments presented by both parties.

23. As indicated above, the Secretary of State considers that your proposals, as submitted, make appropriate provision for means of warning and escape in case of fire. He has therefore concluded and hereby determines that your proposals comply with Requirement B1 (Means of warning and escape) of Schedule 1 to the Building Regulations 2000 (as amended).