

Date: 24/07/01

Ref: 45/1/188

*Note: The following letter was issued by our former department, the Department for Transport, Local Government and the Regions Department for Environment, Transport and the Regions (DTLR). DTLR is now Communities and Local Government - all references in the text to DTLR 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 an inner room situation in a penthouse**

#### **The proposed work**

4. The proposed building work comprises remedial fire safety and sound insulation works to the penthouse (second floor) in a purpose built, three-storey block of flats comprising this penthouse and eight other two-bed flats (four on the ground and four on the first floor). On the south east corner of the block there is an attached three-bedroom bungalow which is independently accessed. The development was constructed during 1991/1992.

5. A common stair and lobbies serve the ground and first floors of the block of flats. The penthouse is 'T' shaped in plan and is constructed within the roof space at second floor level. It is accessed by entry at first floor level in to an entrance hall from which a stair leads up to the second floor where it gives access direct to the penthouse hall which in turn gives access to the bathroom and two bedrooms to the left and right. This accommodation forms the bar of the T. The spine of the T contains a passage from the hall to a large diner/kitchen which in turn gives unpetitioned access directly into the living area beyond at the far end of the flat. The living room is 4.4m x 4.3m and has a dormer window on the south west elevation.

6. During construction of the penthouse it appears that the living room was extended at the dormer window end into the adjacent roof space on the north west side to form an integral part of the living room, making it into an 'L' shape floor area. In contrast to the beam and block floor construction of the block of flats, this area has a timber floor. On the south east side of the living room an additional third bedroom has been created in the adjacent roof space and is also believed to have a timber floor. It is accessed by a door at the far end of the living room and therefore forms an inner room. Both extensions oversail the flat below.

7. Initial complaints to the District Council about defects from the owner of the bungalow were followed by an approach from the management company responsible for the flats regarding defects in the flats and the penthouse. After inspection by the Council, deficiencies in terms of compliance with the Building Regulations were identified. The principal of these were inadequate provision of fire doors and an inappropriate use of wooden panelling around supporting beams and in ground floor ceilings. In the penthouse the deficiencies were a lack of roof ventilation; lack of appropriate sound and thermal insulation; lack of adequate vertical and horizontal fire separation; and a lack of appropriate means of escape from the inner room.

8. Proposals to remedy the deficiencies were developed which formed the basis of a full plans application being deposited by your client for the penthouse in respect of remedial works for: upgrading floor and wall fire and sound resistance, remedial works to means of escape. The proposal to resolve the means of escape from the inner room was to provide an escape window, suitable for assisted escape (in accordance with the guidance for loft conversions in *Approved Document B (Fire safety)*), in the roof slope of the inner room overlooking the entrance to the building, and to install interlinked fire detectors in the access rooms and an alarm in the inner room to provide early warning to the occupants if a fire should occur along their only internal escape route. But the District Council considered the means of escape from the inner room to be inadequate and therefore rejected your full plans application.

9. However you believe that the combination of the proposed fire detection and alarm system; fire rated internal doors to the penthouse and fire rated front doors to the flats; and the compartmentation of the flats; means that the proposed assisted escape from the inner room would provide a level of safety for the occupants of that room similar to that for the occupants of a two-storey dwelling house with a loft conversion. It is therefore in respect of the question of compliance of your proposals with Requirement B1 (Means of escape) of the Building Regulations that you have applied to the Secretary of State for a determination. The material date for your determination is ----. (the date that your full plans application was deposited) and it therefore falls to be considered in respect of the Building Regulations 1991 (as amended up to and including SI 1999/77).

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

10. With respect to providing a solution to the means of escape problem from the inner room in question you state that the main issues are:

- (i) the height of the floor, which is greater than 4.5m above outside ground level
- (ii) the fact that it is an inner room entered from the living area
- (iii) no alternative escape is provided from the inner room

11. You argue that the provision of assisted escape is established in *Approved Document B* for loft conversions to a two storey house where the height of the converted floor could be as much as 6m above ground level.

12. You believe that the time taken for the occupant of a loft room of a two storey house, converted in accordance with *Approved Document B*, to become aware of a fire elsewhere in the house would be delayed by the time taken for smoke to spread from the room of origin to the detector located in the stairway. This time could be further extended by the time taken to wake a person sleeping in the loft room which would be exacerbated by the attenuation caused by the door to the loft room.

13. In contrast, you consider that your proposals for interlinked fire detection within the access rooms to the inner room, including an alarm within the inner room itself, will provide more efficient early warning and is more likely to rouse the occupant of the room in time to escape via the access rooms to the penthouse entrance than would be achieved in a conventional loft conversion.

14. In support of your case you have also stated the following:

(i) the inner room will be separated from the remainder of the penthouse by fire resisting construction and that the door therein will be a 30 minute self-closing fire resisting door fitted with smoke seals

(ii) the penthouse will be separated from the flats below by compartment floors with a period of fire resistance of 60 minutes and all entrance doors are 30 minutes self-closing and fire resisting. Thus a fire in another flat should be contained for considerably longer within the envelope of the area in which it originated, than would a similar fire in a dwelling house.

15. You have concluded that the inner room, with suitable separation, fire detection and a window suitable for assisted escape, does not pose any greater risk to the occupants in the event of a fire than they would be exposed to in other circumstances which are permitted by the guidance in *Approved Document B*.

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

16. The District Council does not accept your view that your proposals provide an equivalent or greater level of fire safety than that provided to a domestic loft conversion. The Council is of the opinion that even using the reduced fire safety standards applicable to domestic loft conversions given in *Approved Document B*, it is essential that there is a primary escape route from any new habitable room and that an escape window should be provided only as a compensatory feature if the primary escape route does not have the required period of fire resistance.

17. The District Council also takes the view that the building in question is a modern three storey block of flats, constructed in 1991/1992 and as such it would not be unreasonable to expect the building to fully comply with the requirements of the Building Regulations. The Council was therefore disinclined to accept remedial work which in their view would still result in what they judge to be an inadequate means of escape.

18. The District Council accepts that compliance with the Building Regulations is not necessarily reliant on strict adherence to the guidance in the Approved Documents or to specifications in British Standards. However in the view of the Council, a design must still achieve a comparable level of protection. In this respect the Council has suggested that one of the following options would need to be adopted, in addition to a suitable fire alarm system, to achieve compliance:

- (i) provision of a protected escape route from the inner room through the flat;
- (ii) provision of an external escape stair from the inner room;
- (iii) alteration of the internal arrangement of the flat so that the inner room is used as a bathroom or kitchen;
- (iv) removal of the partition separating the room from the living area, thus eliminating the inner room situation and expanding the living area.

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

19. In this case the creation of an inner room, and the arrangement of the existing rooms, has meant that the single, internal, escape route is unsatisfactory for persons attempting to escape from that room. The Secretary of State considers that the question referred to him under section 16(10)(a) is based on your clients desire to carry out remedial work which will result in the penthouse as a whole (ie all the accommodation including the inner room) being fully compliant with the current standards required of Requirement B1.

20. As the proposed building work is a material alteration, the Secretary of State must make his determination having regard to regulations 4(1) and 4(2) of the Building Regulations 1991. Regulation 4(1) requires that the building work in question complies with the relevant requirements of Schedule 1 to the regulations; and regulation 4(2) requires that as a consequence of that building work being carried out, the building as a whole shall comply with the relevant requirements of Schedule 1, or where it did not comply before, shall be no more unsatisfactory than it was before the work was carried out.

21. In respect of compliance with regulation 4(1), the proposed building work comprises the provision of an inter-linked fire detection and alarm system and upgrading works to the walls and floors of the inner room. It also comprises the provision of a roof window in the inner room whose express purpose is intended to be for escape purposes. However, because of its height above

ground level it is accepted that the function of the proposed roof window would be limited to assisted escape only rather than self-escape.

22. The Secretary of State notes the view of the District Council that because this is a modern block of flats it would not be unreasonable to expect full compliance in terms of provision for both a primary and secondary escape route. In this respect he has also noted the suggested solutions made by the Council (ie. (i) to (iv) in paragraph 18 above) and apparently rejected by you. Rather you have argued that in the particular circumstances of this case the exclusive reliance on an escape window is acceptable because it compares more favourably in terms of the proposed fire resistance of the walls and compartmentation afforded by the floor, and the inter-linked fire detection and alarm system - with the situation that would pertain when a roof window is used for secondary escape purposes in a loft conversion carried out in accordance with the guidance given in Approved Document B.

23. On the basis that your client has rejected options (i), (iii) and (iv) suggested by the District Council but is seeking to provide a variant of option (ii) (ie external escape from the inner room), the Secretary of State takes the view that provision of an escape window is not a satisfactory solution in terms of fully achieving compliance with Requirement B1 given the purpose for which the plans were deposited. To achieve such compliance, whatever means of external escape is provided it should facilitate unaided self-escape. In contrast your clients proposal is for an escape window which, because of its height above ground level, will be limited to providing for assisted escape only. The Secretary of State takes the view that the provision of windows for assisted escape are normally only appropriate as a secondary escape route where there is an enclosed primary escape route; and that this approach should only be used in limited circumstances such as small loft conversions where it may be unreasonable to apply the more onerous standards which would be applicable to a new building. He therefore takes the view that this element of the proposed building work would not fully achieve compliance with Requirement B1 and therefore would not be in compliance with regulation 4(1).

24. In respect of compliance with regulation 4(2), the current position is that of an inner room with no external escape route and an unsatisfactory internal escape route. The proposed building work would provide an external means of escape which would be limited to assisted escape only. Although this could not be considered acceptable in terms of fully achieving compliance with Requirement B1 for the penthouse as a whole, it could be considered to represent some overall improvement compared with the current means of escape from the penthouse as a whole, and the inner room in particular.

25. The Secretary of State is conscious that the basis of this proposed work is to rectify an unsatisfactory existing situation and fully achieve compliance with Requirement B1 for the penthouse as a whole. If the building work did not have this as its basis it could be deemed to be compliant with the relevant requirements and therefore fall to be considered as work which did not contravene the Building Regulations. However, given that the purpose of the

work is fully to achieve compliance with Requirement B1 for the penthouse as a whole, the proposed work cannot be considered to comply. As indicated in paragraph 24, the proposed work, whilst improving the level of safety, would not result in the means of escape from the inner room being to a standard which would be considered acceptable by current standards.

## **The determination**

26. The Secretary of State has given careful consideration to your proposals and the particular circumstances of this case. On the basis that your proposals are seeking to achieve full compliance for the penthouse as a whole with Requirement B1 of the Building Regulations, he has concluded and hereby determines as follows:

(i) in respect of regulation 4(1) of the Building Regulations 1991 (as amended), that part of the proposed building work comprising the installation of a roof escape window is not in compliance with Requirement B1 (Means of escape) of Schedule 1 to the regulations (as amended up to and including SI 1999/77) because it will not be capable of fulfilling the necessary escape function which would be required of it if the purpose of the building work is to be met.

(ii) in respect of regulation 4(2) of the Building Regulations 1991 (as amended), compliance of the penthouse as a whole with Requirement B1 would be made no worse than existing insofar as the work would not affect the existing internal means of escape; and overall, the roof window might present some overall improvement in terms of means of escape from the penthouse accommodation as a whole, particularly the inner room.