

Date: 14/02/03

Ref: 45/1/203

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 in respect of the provision of an enlarged gallery area at third floor level, forming part of building work in a maisonette

The proposed work

4. The building to which this determination relates is a four storey building approximately 80m² in plan area comprising two flats at ground floor level; and two maisonettes with accommodation at first, second, and third floor levels. The maisonettes are accessed from the rear of the building at ground floor level from where a common stair leads to the entrance of both maisonettes at first floor level.

5. No. 8 is one of these maisonettes and currently comprises at the first floor level of the building three bedrooms (one with an en-suite bathroom), a separate bathroom, and a cupboard containing a balanced flue gas boiler and hot water storage tank. The second floor comprises an open plan space containing a kitchen, dining and lounge areas - and an external balcony. The third floor comprises a narrow gallery walkway approximately 1.1m wide x 5.8m running the full length of one side of the maisonette and from which French doors open onto a roof terrace approximately 4m x 5m. There is an adjoining roof terrace of identical area belonging to the other maisonette - No. 7. On the party wall side of the terrace to No. 8 there is a light well which serves the lounge area of the second floor below. The parapet surrounds to the well extend out at right angles from the side of the maisonette to approximately 2.7m.

6. The second floor is accessed from the first floor by a stair which is enclosed at first floor level only. The gallery is accessed from the second floor dining area via an unprotected flight of timber stairs with winders providing a 90 Degrees turn at the foot of the stair which discharges diagonally opposite the unprotected top of the first to second floor stair.

7. The plans indicate that there is an existing mains wired smoke detection system. The positions indicated for the detectors are in the entrance hall to the maisonette adjacent to the door to the stair enclosure, and at the head of the stair to the open plan second floor area.

8. The proposed building work comprises the following. On the first floor the two bedrooms, the cupboard and en-suite bathroom are to be re-configured so as to form a master bedroom suite, including a dressing room, and a larger en-suite bathroom. The balanced flue gas boiler and hot water storage tank are to be relocated in the other separate bathroom. On the second floor the timber stair to the gallery walkway is to be removed, together with a small section of that walkway, in order to install a new spiral stair immediately below the top landing of the existing stair. At third floor level the existing gallery walkway is to be extended at the opposite end to the spiral stair, directly above the kitchen area, to form a habitable area measuring 3.2m x 2.2m in plan area.

9. These proposals were the subject of a full plans application which was deposited with the Borough Council. The Council responded stating that your proposals did not provide an adequate means of escape in case of fire from the proposed extended gallery area on the third floor, thus indicating non-compliance with Requirement B1 (Means of warning and escape) of the Building Regulations. You therefore deposited revised plans with the gallery area removed which were conditionally approved by the Council. However, you believe that the proposed gallery area would in your words not be "any more onerous a situation than exists at present, and possibly less so". You therefore applied to the Secretary of State for a determination in respect of the question as to whether your original proposals comply with Requirement B1.

The applicant's case

10. You accept that the proposed extended gallery area will be utilised as habitable accommodation as your clients intend to use this area as an extension of the second floor living/dining area. However, you do not agree with the Borough Council's assumption that the area will be used for sleeping purposes as the location and the open plan nature does not lend itself to this type of accommodation.

11. You do not consider the proposed gallery area to be any more onerous a situation than exists at present, and possibly less so. Your representations accept that the roof terrace is substantial in size and that as a result the occupants using the terrace at present would be unaware of any fire occurring in the maisonette because of the restricted views back into the interior. The most likely source of fire would be from the kitchen on the second floor. You consider that, in the event of fire, the occupants using the terrace would be likely to move to the adjoining owner's terrace as a place of relative safety, to await either rescue from the fire brigade or access into the adjacent maisonette - No. 7. You contend that the original design solution for the building was to allow for a relative place of safety, or possible alternative escape from the roof terrace, via the adjoining owners as permitted under

CP3: Chapter IV: Part 1: 1971 (Precautions against fire: Flats and maisonettes (in blocks over two storeys)).

12. With regard to occupants using the proposed gallery area, your opinion is that they would be immediately aware of any fire occurring at second floor level, and would therefore be able to escape to the maisonette's entrance door at first floor level, or alternatively onto the roof terrace.

13. In response to the Borough Council's concern that a barrier could be erected between the roof terraces of Nos. 7 & 8 to prevent inter-access between the two properties (see paragraph 17 below), you state that you have established that there is a covenant in the lease which prevents the erection of such a barrier.

14. You note that the Borough Council also refers to *BS 5588: Part 1: 1990 (Fire precautions in the design, construction and use of buildings: Code of practice for residential buildings)* which you acknowledge no longer permits alternative means of escape via adjoining premises. However, you point out that the building in question was erected post 1988 and the Fire Authority at the time must have deemed the means of escape, and/or a relative place of safety, as being adequate for the building's particular circumstances.

The Borough Council's case

15. The Borough Council states that it is unable to comment on the acceptance of the original design in specific terms, relating to alternative means of escape, as an approved inspector was the building control body for the building work. The Council refers to your acceptance of the present means of alternative escape which relies on *CP3: Chapter IV: Part 1: 1971*. They point out that this was withdrawn prior to the building in question being erected and was superseded by *BS 5588: Part 1: 1990* which you acknowledge "no longer permits alternative means of escape via an adjoining premises".

16. The Borough Council also points out that the internal spiral stair on the third floor discharges directly into the open plan room on the second floor, comprising dining area, kitchen and lounge, and that this room in turn leads to another open plan stair discharging to the first floor which is enclosed only at the lower level. In the Council's view the escape via this route alone is not considered acceptable, and you do not challenge this because you are relying on the acceptability of the alternative route at third floor level.

17. With reference to *BS 5588: Part 1: 1990*, the Borough Council is concerned that escape onto the adjoining maisonette's roof terrace may not always be available and do not consider it to be a place of safety. The Council notes that you have established that a covenant prevents the erection of any barrier between the two terraces. However, notwithstanding such lease restrictions the Council's experience of such matters suggests that large planters and trellises etc. are often erected and form a barrier which adversely affects escape.

18. The Borough Council adds that your plans indicate that the opening through which escaping occupants would have to pass to reach the adjoining roof terrace is approximately 1.20m in width measured from the inside face of the roof parapet to the parapet to the light well. This light well serves the same open plan room area below into which the gallery discharges internally. The Council therefore contends that even if there was no barrier between the terraces, escaping occupants would still have to pass the edge of the light well; and that it follows that a fire in the open plan area below could affect both the roof terrace and the internal escape routes.

19. Given the possibility of the opening between the terraces being blocked in the future or it being impassable due to fire from the room below, the Borough Council also states that if the roof terrace to No.8 were to be relied upon as a place of safety then the maximum distance that escaping occupants could get away from a fire in the maisonette, without gaining access into the neighbouring maisonette, would be 5m. The Council adds that this would be at a level that appears to be more than 7.5m above ground, on a side of the building away from fire service access, and is not therefore in their view considered to be an acceptable place of safety.

20. The Borough Council has also compared your proposals with various design approaches relating to a four storey house; a loft conversion; and a gallery one floor above entrance level; but in their view in each case your proposals would not comply with Requirement B1.

21. The Borough Council concludes that to provide additional habitable accommodation at third floor level, whereby the only means of escape that would be available at all material times is via an open plan room, would pose an unacceptable risk to all occupants having to escape, particularly those that may be asleep. The Council notes your clients' intention is to use the proposed gallery area as an extension to the living room, but their experience with galleries has shown that use for sleeping accommodation is common place. The Council is also concerned that its duty of care extends to any subsequent occupier who may utilise the area for sleeping purposes. Their experience in roof top escape in similar circumstances, particularly concerning residential accommodation, has shown that such an approach to means of escape cannot be satisfactorily relied upon. The Council therefore takes the view that your proposals do not comply with Requirement B1.

The Secretary of State's consideration

22. In this case the Secretary of State has been requested to make a determination in respect of Requirement B1 (Means of warning and escape). In common with many cases involving alterations or extensions, compliance of the escape route or routes must involve the overall provision within the building taken as a whole and not just the alteration or extension work itself. It is therefore particularly important in such cases for the Secretary of State to determine the compliance of the proposals with both regulation 4(1) and 4(2) of the Building Regulations. Regulation 4(1) requires that the proposed building work in question complies with the applicable requirements of

Schedule 1 to the regulations; and 4(2) prescribes that as a consequence of that building work being carried out the building as a whole shall comply with the applicable requirements of Schedule 1 or, where it did not comply, is no more unsatisfactory than it was before the work was carried out in respect of its compliance with those requirements.

23. The proposed building work involves the creation of a new habitable space where only a narrow walkway existed before, and the replacement of the existing timber stair by a spiral stair in a different location. In terms of compliance with regulation 4(1) therefore, what needs to be considered is whether the means of escape for the occupants of the proposed gallery area can be considered to be adequate in the context of current standards.

24. You have stated that your clients' intention is to use the proposed gallery area as an extension to the living room and not for sleeping purposes. However, the Borough Council has expressed a concern, based on their experience with galleries, that the proposed gallery area may be used for sleeping accommodation in the future.

25. The primary route of escape from the proposed gallery area is via the new spiral stair which delivers into the open-plan space at second floor level. Although the new route of travel from the foot of the new spiral stair would no longer be diagonally across the open plan second floor area and the front of the kitchen area, there remains the risk that the occupants of the proposed gallery area, whether they are awake or asleep, could become trapped by a fire in the lounge, kitchen or dining areas and a suitable alternative escape should be provided. Moreover, the spiral stair in itself may present a less safe means of descent from the balcony.

26. You have suggested that an alternative escape route exists to the roof terrace of the adjacent maisonette from where rescue by the fire service could be effected or access gained and escape achieved via the adjacent maisonette. You contend that this was how the building was originally designed. However, the Borough Council is concerned that escape onto the adjoining roof terrace may not always be available and does not consider it a place of safety.

27. The Secretary of State takes the view that other than in the accepted cases of loft conversions in respect of two storey houses only, rescue by the fire service should not be relied upon. Furthermore the use of conjoining balconies as suggested in *CP3: Chapter IV: Part 1: 1971* is no longer considered an appropriate approach, for the purposes of the Building Regulations, to means of escape from flats and maisonettes. This view is based on the practical experiences of maintaining such routes over an extended period and resulted in its removal from subsequent standards even where restrictive covenants exist.

28. Your proposals have not included any provision for extension of the existing mains wired fire alarm system. It is not unusual in such cases involving new or extended balconies and/or terraces for proposals to incorporate additional detectors as well as additional and sometimes separate sounders. However, in this case the Secretary of State takes the view that such compensatory provision would not in any event be capable of adequately compensating for an inadequate means of escape which is neither protected nor, in the case of the alternative route via the adjacent roof terrace, assured in terms of safety and provision for access.

29. It follows that in respect of regulation 4(1) your proposed building work does not comply with Requirement B1. In respect of compliance of the building as a whole judged by the criteria of regulation 4(2), you have argued that escape from the proposed gallery area would be no worse than exists at present for occupants of the roof terrace and existing balcony. However, whilst on balance the net effect of the new spiral stair and the resulting reduced travel distance may make provision for escape slightly better from the roof terrace, the proposed gallery area would still not be provided with adequate means of escape. Therefore, because the new building work would not comply with Requirement B1, it follows that the building taken as a whole after completion of the work would fail to meet the criteria of regulation 4(2).

The determination

30. The Secretary of State has given careful consideration to the particular circumstances of this case and the arguments presented by both parties. As indicated above, on the basis of your proposals as submitted he considers that they do not make appropriate provision for the early warning of fire or for appropriate means of escape in case of fire from the proposed gallery area on the third floor. He has therefore concluded and hereby determines that your proposals do not comply with Requirement B1 (Means of warning and escape) of Schedule 1 to the Building Regulations 2000 and that it follows that neither requirement of regulation 4(1) nor the criteria of regulation 4(2) have been met.