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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 first floor flat to form a maisonette

The proposed work

4. The building work comprises the creation of a second floor in the roof space of a two storey semi-detached dwelling (ie a loft conversion) with an irregular floor plan area of approximately 14m depth x 8.5m width. In 1934 the building was divided into two flats - one on each floor. The proposed second floor will form an upper floor to the first floor flat, thus forming a maisonette.
5. As existing the ground floor contains the main entrance door which opens into a small common entrance hall (2.25m²) which in turn contains the two, side-by-side, inner entrance doors to both flats. The inner entrance door to the ground floor flat opens into a hallway which gives access to a lounge and, at the far end and rear of the building, to the dining room and open kitchen. The dining room gives access to the bedroom and bathroom.
6. The first floor flat is accessed from a stair which rises directly inside its inner entrance door and is located on the party wall. The accommodation of the first floor flat comprises two bedrooms, a bathroom, separate WC, lounge and combined kitchen/diner - all of which are accessed off an L-shaped landing.
7. The proposed second floor accommodation will be approximately 2.9m x 8.5m and will be between 6.0m and 6.5m above ground level. It will comprise a study to the front of the building; a bedroom to the rear; and a bathroom in the middle. The three rooms will open off of a small landing 1.6m x 1.4m. The two habitable rooms are to have 30 minute fire resisting, self-closing doors. Four rooflight windows are to be inserted in the roof pitch to provide light to the two bedrooms and the bathroom.
8. Access from the first to the second floor will be provided by a timber stair to be located over the existing ground to first floor stairwell and will rise in two short flights broken by winders turning the stair through 180 degrees.

Headroom for this stair will be achieved by breaking open the side pitch of the roof and constructing a dormer extension over the new stairwell.

9. The existing compartmentation of the ground to first floor stair is to be up-graded to 60 minutes fire resistance. All doors to habitable rooms opening on to the existing first floor landing (ie the lower floor of what would become a maisonette) will be up-graded to 30 minutes fire resistance. The square edged boarded floor of the first floor will be overlaid with hardboard to upgrade it to a minimum of 30 minutes fire resistance.

10. A mains operated inter-linked smoke alarm system is proposed with detectors to BS 5446: Part 1: 1990 *"Components of automatic fire alarm systems for residential premises: Specification for self contained smoke alarms and point type detectors"*, located in the common entrance hall, and the landings of the first floor and second floor (ie the lower and upper floors of the proposed maisonette). The two inner front doors will be upgraded to FD30S fire resisting, self-closing doors.

11. The above proposals formed the basis of a full plans application which was rejected by the Borough Council on the grounds that they did not comply with Requirement B1. The Council's primary concern was that the means of escape from the upper floors was not adequately protected from a fire at ground floor level, having regard to the existing standard of compartmentation between the flats which is comprised of both the first floor construction and the stair enclosure. However, in the circumstances, you take the view that the proposed means of escape is adequate and that on this basis a 30 minute standard of fire resistance between the two flats should be acceptable in terms of achieving compliance. It is in respect of this question that you have therefore applied to the Secretary of State for a determination.

The applicant's case

12. You believe that the Borough Council's request for the internal doors to the lounge and dining rooms of the ground floor flat to be changed to FD20 doors and a smoke detector to be positioned in the flat's hallway or, alternatively, for the walls and floor between the ground and first floor flats to be a minimum of 60 minutes fire resistance are not necessary to meet the requirements of the Building Regulations. In addition you contend that the Council is trying to retrospectively impose requirements.

13. You stress that your clients have no control over whether or not the owner of the ground floor flat will agree to the measures requested by the Borough Council. In fact, you state that the owners of the ground floor flat have confirmed that they will not allow any change to their doors as they are regarded as "being in character and to their liking" and point out that in any event should they or any future occupants decide to remove such doors the Council's request would be negated. Furthermore, the owners do not want the inter-linked smoke detector to be placed within the hallway of the ground floor flat due to the inconvenience of possible false alarms, but are content for a detector to be positioned within the ground floor common entrance hall.

However, you add that the owners have agreed that the stair enclosure can be upgraded to 60 minutes fire resistance, as indicated on the plan.

14. You also consider that the Borough Council's alternative proposal of 60 minutes fire resistance for the floor between the ground and first floor flats is too onerous. You refer to paragraphs 8.10 and 8.11 of *Approved Document B (Fire safety)* which states that where an existing house is converted into flats and the existing floors are timber, and the relevant provisions of the Building Regulations are difficult to meet, provided the means of escape conforms to Section 3 and is adequately protected, a 30 minute standard of fire resistance could be accepted for the elements of structure in a building of not more than three storeys.

15. You conclude that, in your view, your plans show an adequate means of escape through a protected stairway, which you believe slightly exceeds the required standard referred to in Section 8 of *Approved Document B* for a resultant dwelling not exceeding three storeys, and has been accepted by other local authorities in the case of similar loft conversions. You draw particular attention to the following proposed provisions to support your case:

(i) the existing wall and underside of the stairway enclosure is to be upgraded to a full 60 minutes fire resistance which, taking into account the FD30S doors to both flat entrances, provides a means of escape which leads directly to a place of safety outside;

(ii) a full mains operated inter-linked smoke detection system installed to all levels to BS 5446: Part 1: 1990;

(iii) all internal doors at first floor level to be changed to meet FD20 standard; and

(iv) the entire square edged boarded first floor to be overlaid with 6mm tempered hardboard to upgrade to a 30 minute standard of fire resistance.

The Borough Council's case

16. The Borough Council refers to Table A2 1.a. (Minimum periods of fire resistance) on page 114 of *Approved Document B* which indicates that buildings which are not single dwellings and which have a floor exceeding 5 metres above ground level should have 60 minutes of fire resistance. The Council acknowledges that there is a proviso in paragraphs 8.10 and 8.11 on page 63 of the *Approved Document* which states that provided the means of escape complies, a 30 minute standard of fire resistance may be acceptable for the elements of structure in a building having not more than three storeys. In their view the means of escape in your case does not comply in full with this guidance. The Council has therefore requested a 60 minute standard of fire separation between the ground and first floor flats (but not including the new floor within the proposed maisonette).

17. With regard to the proposed internal planning to create the maisonette itself, the Borough Council has referred to paragraph 3.11, diagram 7 on page 27 of *Approved Document B* which shows self-closing fire resisting 20 minute fire doors (except for bathrooms).

18. As there is no common lobby between the ground floor flat and the common entrance hall the Borough Council requires the provision of a protected entrance hall. This would mean that the existing entrance hall within the ground floor flat would have to be upgraded with fire doors to perform that function and protect what the Council describes as the vulnerable common entrance hall which ground and upper floor escapees must use.

19. The Borough Council acknowledges your proposed fully interlinked smoke detection system to all levels which, if it were to be installed within the two flats, they accept may give rise to some nuisance due to false alarms. However, they recognise that there would be an increased speed of detection using such a system and consider that the 60 minute fire separation requested could be reduced to 30 minutes on this basis. Nevertheless, even though the common entrance hall is small and results in a very short travel distance, the Council would still like to see a protected entrance hall to the ground floor flat to protect escape through the common entrance hall.

The Secretary of State's consideration

20. The Secretary of State takes the view that what needs to be considered in this case is the safe escape of the occupants of the newly formed second floor (third storey) to the building which would result in the conversion of the first floor flat into a maisonette.

21. In this case the proposed internal planning to create the maisonette and the principle of providing for means of escape via the existing stair (as opposed to requiring an alternative escape route) are not at issue with respect to compliance with Requirement B1. However, the Borough Council considers that as proposed the means of escape does not comply with Section 3 of *Approved Document B* which is the necessary pre-requisite to applying the guidance in paragraph 8.11 of the Approved Document. In the Secretary of State's view it follows that there are therefore two matters to consider in this case. First, is the escape route itself adequate; and second, depending upon this, is the proposed fire resistance of the compartmentation to be provided by the first floor construction and the enclosure to the stair adequate.

22. With regard to the adequacy of the escape route the Secretary of State's concern is limited to that part between the entrance door of the maisonette at the bottom of the stairs, through the common entrance hall of the building, to the final exit - ie the one shared element of the escape route. Because there is no common lobby between the ground floor flat and the common entrance hall, the Borough Council requires the provision of a protected entrance hall in the ground floor flat itself. However, you have stated that you cannot replace the doors in the entrance hall of the ground floor flat with fire resisting doors

as it is in private ownership and you have no right to undertake the work which the Borough Council is suggesting.

23. The Secretary of State acknowledges the reported difficulties associated with providing additional protection to the existing common entrance hall of the ground floor flat but considers that this in itself is insufficient justification for not providing an adequate level of safety to the occupants of the newly formed accommodation in accordance with Requirement B1, as is required to comply with regulation 4(1) of the Building Regulations. In such circumstances it is appropriate to look to *Approved Document B* for alternative ways of achieving compliance with the requirements. Section 3 of the document gives guidance on means of escape in the common parts of flats and maisonettes. In the case of small single stair buildings, where flats and maisonettes share a common horizontal escape route to a storey exit, paragraph 3.19 and diagram 14 suggest this route need only be separated from each dwelling by a single fire-resisting door provided there is a maximum travel distance between the flat entrance door and the storey exit of no more than 4.5m.

24. In this case the two dwellings share only a single common entrance hall as part of the horizontal escape route, and the distance from the two entrance doors to the final exit measures approximately 1.25m. In these circumstances the Secretary of State takes the view that neither additional protection to the existing common entrance hall is required - other than the provision of fire resisting (FD30S) entrance doors as is being proposed - nor is fire detection and alarm required in the common entrance hall.

25. The second issue is the period of fire resistance required for the elements of structure (ie the compartmentation provided by the stair enclosure and by the first floor construction between the two flats). Paragraphs 8.10 and 8.11 of *Approved Document B* suggest that the fire resistance may be reduced from 60 minutes to 30 minutes where the means of escape conforms to Section 3 of the document and is adequately protected.

26. Although your proposals do not conform to Section 3 of the document, the Secretary of State considers that the means of escape via the common entrance hall is satisfactory and therefore considers that it would be reasonable to accept a reduction in the period of fire resistance for the elements of structure from 60 to 30 minutes. Moreover, although paragraph 8.11 of *Approved Document B* principally considers the possible reduction of fire resistance for elements of structure, it is the Secretary of State's view that, in this case, this guidance should also be considered to be applicable to the compartmentation provided by the existing first floor construction and the separation of the existing stair from the ground floor flat. It follows that in the Secretary of State's view the proposed up-grading of the first floor construction to a 30 minute standard of fire resistance will achieve compliance, and that a 30 minute standard of fire resistance to the stair enclosure will also achieve compliance.

The determination

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

28. As indicated above, on the basis of the your proposals as submitted the Secretary of State considers that they make adequate provision for warning and escape from the proposed accommodation at second floor level of the newly-formed maisonette. 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).