

Requirements B1: Determination of compliance in respect of an extension to a two storey house (Ref 45/1/230)

Text of Communities and Local Government 'determination' letter dated 14 January 2008 (Reference 45/1/230)

BUILDING ACT 1984 - SECTION 16(10)(a)

DETERMINATION OF COMPLIANCE WITH REQUIREMENT B1 (MEANS OF WARNING AND ESCAPE) IN PART B (FIRE SAFETY) OF SCHEDULE 1 TO THE BUILDING REGULATIONS 2000 (AS AMENDED) IN RESPECT OF AN EXTENSION TO A TWO STOREY HOUSE

The proposed work and question arising

4. The papers submitted indicate that the building to which this determination relates is a large detached two storey, three bedroom house with a plan area of approximately 140m². The proposed building work comprises an extension on three levels. The ground floor involves an extension of the existing kitchen and utility room adjoining an existing integral garage; the new first and second floor levels will be built over the ground floor extension and garage to provide an annexe.

5. The annexe will have a separate external stairway from a door at first floor level but will also be accessed from an existing bedroom within the house on the first floor. Your client initially proposes to use the first floor as a games room and the second floor as a bedroom with an en-suite bathroom within the roof space of the house, although it is planned to use these rooms as an annexe for an elderly relative in future.

6. The above proposals were the subject of a full plans application which was initially rejected by the Council on 21 February 2007, but was approved on 28 March 2007 following resubmission of your plans. The approved plans showed a partition at first floor level which enclosed the stairway and provided a protected route to the doorway leading back into the existing house. This allowed a choice of independent escape routes from the second floor bedroom via the stairway through either the games room or the existing house.

7. Notwithstanding this, you explain that you are seeking a determination relating to an alternative means of escape proposed from the new second floor bedroom for the purpose of compliance with Requirement B1 of the Building Regulations. You now propose to enclose the stairway and incorporate a window within the enclosure at first floor level. The intention is to allow people to descend the stair and escape either through the window or the exits in the games room, as indicated in the alternative drawing attached to your email to the Council dated 19 February 2007, which you say the Council has rejected. It is in respect of this question that you have applied for a determination.

The applicant's case

8. You comment that the proposed annexe will be separated from the existing house by a new 30 minute fire door. You consider that escaping from a second floor bedroom through a first floor window would be an acceptable means of escape in this instance because the bedroom is to be used by whoever is using the room at first floor level. The current building regulations allow escape through a first floor window from a first floor habitable room and there would be a small lean-to roof under the window, which would allow a safer means of escape than a first floor window alone. As an additional measure, you propose to install a mains powered heat and smoke detection system at all levels within the new extension and the existing house to provide early warning of any fire.

9. In response to the Council's representations to the Secretary of State (see below), you reiterate that you are seeking a determination on the proposals indicated in the drawing submitted to the Council on 19 February 2007 (see paragraph 7 above) and not the open arrangement originally submitted to and rejected by the Council. To further support your case for compliance, you refer to Requirement B1 of the Building Regulations and compare your proposals to the guidance relating to 'Dwellinghouses' in paragraphs 2.7, 2.11, 2.13, 2.17 and 2.18 of Approved Document B (Fire safety - 2000 edition). You believe that your proposals comply with Requirement B1 for the following reasons:

- (i) The new rooms are to be in single occupation.
- (ii) Suitable warning devices (heat and smoke detectors) are to be provided.
- (iii) The arrangement is not that of a standard loft conversion.
- (iv) The means of escape from second to first floor will be protected.
- (v) Final exit can be effected from the first floor via three alternative exit points in the form of: a first floor window; a final exit door leading to the external stair; and a door to a secondary exit route back through the main house.

10. You explain that your approach is to regard the two new storeys of the proposed extension as that of a normal two storey house because there are alternative final exits at the lower level. You argue that a protected route to a final exit is provided in this case, which is the first floor window. You state that if this is regarded as acceptable at first floor level in the case of a two storey dwelling, then it must be acceptable here.

The Council's case

11. The Council states that, as the second floor level of the proposed extension will be located in excess of 4.5m above ground level, the guidance in paragraph 2.13 of Approved Document B (2000 edition) applies. Your original drawing submitted detailed an open plan layout at first and second floor level, resulting in the bedroom at second floor level being an inner room.

12. The Council considers that, although the ground floor accommodation is not directly connected to the two upper storeys, the new second floor accommodation requires a protected enclosure leading to a final exit to provide a

satisfactory means of escape for the occupants of this accommodation. The Council therefore believes that your proposed layout fails to satisfy Requirement B1 of the Building Regulations as it does not meet the criteria defined in paragraphs 2.17 and 2.18 of Approved Document B.

The Secretary of State's consideration

13. The Secretary of State takes the view that the issue she needs to consider in this case is the safety of the occupants of the new second floor bedroom if a fire occurs on the lower floors.

14. In normal situations it is considered necessary to provide accommodation on floors that are 4.5m above ground level with a protected escape route leading to a final exit at ground level. This is because of the greater risk that persons at this height may become trapped by fire at lower levels due to the time it may take to travel down the stairway; the reluctance of the occupants to use a longer escape route which may become obscured by smoke; and because emergency egress through windows at that height is not feasible.

15. In this case, however, you have argued that your proposed arrangement is similar to a two storey house, where the provision of escape windows and an unprotected stairway would be considered acceptable. You state that a protected route to a final exit is provided and that the final exit is a first floor window, which leads to a small lean-to roof.

16. The Secretary of State takes the view that windows are not considered to be appropriate as final exits. Escape windows provide a secondary escape route which can be of benefit where people become trapped. However, there are some parallels that can be drawn between your proposals and with two storey houses.

17. The Secretary of State considers that the proposed extension can be regarded as a two storey house set on top of a garage and that the final exit in this case is in fact the door leading to the external stairway, which the plans show to be protected from the remainder of the house by fire-resisting construction. This is different from a three storey house where the escape route from the top floor is entirely within the house.

18. Escape from the second floor accommodation to the final exit at first floor level would be via the games room. In a two storey house an inner room situation such as this would be acceptable if an escape window were provided on the upper level, however, an escape window would not be acceptable at second floor level.

19. In this case you have provided a window immediately adjacent to the foot of the stair from the second floor and within the stair enclosure at first floor level. As such, a person finding their escape from the second floor blocked by a fire in the games room would be able to make their escape via the window without having to pass through the games room.

20. Having taken all these factors into account together with the provision of smoke alarms at both levels, the Secretary of State considers that your proposals

provide the same potential for escape as would be acceptable in a two storey house and thus demonstrate compliance with Requirement B1 of the Building Regulations.

The determination

21. In coming to her decision, the Secretary of State has given careful consideration to the particular circumstances of this case and the arguments presented by both parties.

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