

Date: 02/02/98

Ref: 45/1/152

Note: The following letter was issued by our former department, the Department for Environment, Transport and the Regions (DETR). DETR is now Communities and Local Government - all references in the text to DETR 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 a roof level bedroom extension

3. In making the following determination, the Secretary of State has not considered whether the plans conform to any other relevant requirements.

The proposed work

4. The proposed building work relates to a roof extension to an existing 3 storey, end of terrace, single family dwelling on a corner site. The front door of the property (access level) is at first floor level via steps that lead to the street level. The pavement level is approximately 2.1m above the ground level adjacent to the property and the Borough Council state that there is a wall on top which extends 1.35m above pavement level. The gardens of the property are approximately at the level of the ground (lowest) floor which you describe as the basement and an external stairway connects the lowest level to the pavement.

5. The proposed building work comprises the addition of an extension above the flat roof at the rear of the property, in order to create a new bedroom with a floor area of approximately 24 square metres. This bedroom will be contained within the structure of a new hipped roof which will be integrated into the existing pitched roof to the front of the building. This would render the property a single family four storey dwelling with all levels connected by a single internal stair which as currently exists is unprotected because it is open to the sky on the ground/access level and the lower level dining room.

6. The house is an end-of-terrace corner one and the ground has been dug out on three sides where there are external retaining walls. As a result the front door is effectively on the first floor, however the plans you have submitted designate the floors as basement, ground floor, first floor and new second floor.

7. You submitted two proposals in your full plans application - a preferred and an alternative scheme. Both were based on the proposition that the front door level represented the ground level; that a fully protected stair need not be provided; and that inter-connected smoke alarms would provide sufficient compensatory features to ensure compliance with Requirement B1 in either scheme. Both schemes were rejected by the Borough Council on the grounds that they did not show compliance with Requirement B1. However, you believe that both your schemes would be in compliance and it is in respect of this question - and in particular with regard to your "preferred" scheme - that you have applied for this determination.

The applicant's case

8. You accept that because the existing house is three storeys then the concessions given in Approved Document B (Fire safety) for loft conversions are not strictly applicable, although you conclude that the level of safety provided by the concessions should be considered as reasonable in your case. In your view it would be highly artificial not to take account of the guidance for loft conversions because the front door is on the first floor; and you contend that had the same plans been submitted in respect of an adjacent property where the ground has not been dug out at the front, the Borough Council would have had to approve your alternative scheme notwithstanding the fact that you consider that rescue would be more difficult in the particular circumstances of that property.

9. You consider that the most important issue is the distance from the new top floor to the final exit and because the final exit is a storey above ground level then you consider it to be wrong to consider the existing house as a three storey one. You point out that the distance from the new top storey to the final exit will be no greater than the same distance in a two storey house with a loft conversion. Your interpretation of paragraph 4.4 of BS 5588: Part 1 is that it defines ground level as being the ground level or access level. You therefore submitted the following two schemes which you consider satisfy the Building Regulations.

The preferred scheme:

10. This arrangement has the following features:

- i) Mains operated interconnected smoke detectors in every room except bathrooms.
- ii) A fire door on the new second floor bedroom.
- iii) A new partition and fire door separating the entrance hall and stairway (indicated on the drawing as being on the ground floor).
- iv) All doors giving access to the stairway will be made self-closing.

v) An escape window in the new bedroom (shown on the drawing as being on the new second floor) which will allow access to rescuers equipped with a ladder.

You consider that the main element of safety in this arrangement is the provision of the fire alarm system and the major difference from the Councils requirements is the absence of fire separation between the ground floor and first floor.

The alternative scheme:

11. This arrangement has the following features:

i) A partition and fire door between ground and first floors.

ii) Mains operated interconnected smoke alarms in circulation areas only.

iii) A fire door on the new second floor bedroom.

iv) A new partition and fire door separating the entrance hall and stairway (indicated on the drawing as being on the ground floor).

v) All doors giving access to the stairway to be made self-closing.

vi) An escape window in the new bedroom (shown on the drawing as being on the new second floor) which will allow access to rescuers equipped with a ladder.

You consider that this approach is based on the loft conversion concessions given in paragraphs 1.23 to 1.31 of Approved Document B except that additionally you are providing smoke detection in circulation spaces.

12. In conclusion you consider that the Secretary of State must decide whether the proposals comply with the Building Regulations and in particular the limitations imposed by Regulation 8 in respect of health and safety, and not simply whether they comply with Approved Document B. You do not consider that the situation appertaining to your case is adequately dealt with in Approved Document B and that non-compliance with it should not be regarded as non-compliance with the Building Regulations.

The Borough Council's case

13. The Borough Council are of the opinion that the existing property is not a two storey dwelling and as a consequence of this they consider that the concessions given in paragraphs 1.23 to 1.31 of Approved Document B are not applicable.

14. The Borough Council also make the following points in support of their rejection of the proposals:

i) Ladder rescue of persons on the new third floor will be inhibited by the horizontal distance of approximately 3m from the building to the pavement, the boundary wall/railing and the height of the building in relation to the adjacent ground level.

ii) The building as proposed will have four storeys and will have more than one floor in excess of 4.5m above ground level. In these circumstances Approved Document B refers to the guidance given in BS 5588: Part 1:1990.

iii) The guidance given in both the British Standard and the Approved Document suggests that no inner rooms are acceptable where the floor level is in excess of 4.5m above ground level. Therefore the kitchen and dining room at the lowest level and the study at entrance level should be fire separated from the staircase. Without this separation the effects of fire could inhibit or prevent escape from the new third floor. The staircase enclosure should be constructed as a protected stairway with all doors leading onto the stairway being FD30.

iv) The guidance in BS 5588 which is referred to in Approved Document B also recommends that the new third storey be provided with an alternative escape route. However the Council recognises that the provision of a second escape stair will be impractical and are prepared to accept a full alarm and detection system as being suitable compensation for the second stair.

v) They do not accept that paragraph 4.4 of BS 5588: Part 1 defines the ground level as ground level or access level.

The Department's view

15. In assessing both your preferred and alternative schemes the Department has to consider the safety of occupants on the new floor should they need to escape or be rescued in a fire situation. The fundamental issue, therefore, is whether the house as converted is a three or four storey property for the purposes of assessing the level of fire precautions that are necessary to satisfy the Building Regulations. This in particular affects the degree of fire protection to the stairway and the required extent of an early warning system.

16. The Department accepts your points regarding the necessity of your proposals to comply with the Building Regulations, rather than necessarily complying with Approved Document B. There may well be alternative ways of achieving compliance. Thus there is no obligation to adopt any particular solution contained in an Approved Document if you prefer to meet the relevant requirement in some other way. The Department does, however, take the view that Requirement B1 is a life safety matter directly related to health and safety as prescribed by Regulation 8.

17. The Department accepts that normal access to the dwelling from the street is via steps to the main entrance door at first floor level, but also notes that in accordance with the normal measurement rules the building, as proposed, will consist of four storeys above ground level.

18. You claim that the concessions applicable to a two storey house with a loft conversion should be acceptable in this case because normal access is at first floor level. However the Department does not support this view because, as has been pointed out by the Borough Council, it too considers that there would be difficulty in providing safe ladder access from the street to the new third floor room to effect self or assisted rescue.

19. The Department also takes the view that the Borough Council were correct in their interpretation that the dwelling as proposed should be considered as a four storey house. It follows that the loft conversion concessions given in Approved Document B are not appropriate in this case and that the guidance given in both the BS 5588 and the Approved Document B should be followed. This means that a fully protected stair needs to be provided which should not be open to basement/lower ground floor accommodation.

20. The Department accepts that a smoke detection system has been offered as part of either scheme (albeit that the alternative one restricts the detection system to the circulation areas only) but takes the view that by the time this has been activated escape via an unprotected stairway could have been prejudiced by smoke. Since therefore neither the preferred scheme nor the alternative scheme provide a fully protected stair in accordance with the guidance, the Department considers that neither scheme will provide safe escape in fire.

The determination

21. The Secretary of State has given careful consideration to the facts and the particular circumstances of this case. He has concluded, and hereby determined, that neither the proposals in your preferred nor those in your alternative scheme comply with Requirement B1 of Schedule 1 to the Building Regulations 1991 (as amended).