

Date: 20/04/99

Ref: 45/1/177

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 proposed loft conversion

3. In making the following determination, the Secretary of State has not considered whether the plan conforms to any other relevant requirement.

The proposed work

4. The property to which the proposed building work relates is an existing three above ground storey, end of terrace, building plus what appears to be from the drawing a lower ground storey. The District Council state that the building consists entirely of flats and it is assumed from the drawing that these are the result of an earlier conversion from a large single dwelling. Although you have not provided any details of the flats, other than the top flat, the drawing shows this flat as located on the second floor (fourth storey). The drawing also shows that the main entrance is on the ground floor which is raised above ground level and is accessed by a number of steps. All flats are served by a single common stair.

5. You propose to construct an additional habitable room to create a bedroom and also a bathroom in the roof space above the top flat, thereby converting this flat into a maisonette which will form a new fifth storey of the building. Because of the raised ground floor the District Council state that the new top storey will be at 'a considerable height above ground level', and from the drawing the Department estimates that the new floor height will exceed 11.0 m above ground level. Your proposed access to the new loft room would be by means of a new stair constructed within the top flat and discharging into the flats entrance hall. The entrance to the top flat is shown on the drawing to be via a new fire door on the second floor landing which forms part of the fourth storey of the building.

6. Your drawing shows that the new stair within the top flat will be a protected stair in that all habitable room doors opening onto it from both levels will be 30 minutes fire resisting and self-closing, and the partitions enclosing the stair will be constructed of plasterboard.

7. These proposals have been rejected by the District Council on the grounds of non-compliance with Requirement B1 (Means of escape) of the Building Regulations. However, you consider that your proposals provide adequate escape from the new loft room in terms of Requirement B1 and it is in respect of this question that you have applied for a determination.

The applicant's case

8. You consider that a safe and effective means of escape in accordance with Requirement B1 of the Building Regulations can be achieved without the provision of an alternative exit as recommended in *paragraphs 2.14 to 2.16 of Approved Document B (Fire safety)*. To provide safe escape you propose to install a fire detection system in accordance with either *BS5446 (Specification for components of automatic fire alarm systems for residential purposes)* or *BS 5839 (Fire detection and alarm systems for buildings)*. You propose to install mains operated smoke detectors with battery back-up, in habitable rooms on both floors of the maisonette and a heat detector in the kitchen.

9. You state that you have dealt with several schemes previously where maisonettes have been created by conversions and where the top floor has been in excess of 4.5m above ground level.

The District Council's case

10. The District Council have rejected your proposals on the grounds that an alternative exit from the flat has not been provided. In support of this rejection they refer to *Approved Document B* which suggests that where a maisonette does not have its own external entrance at ground level or has a floor more than 4.5m above ground level, an alternative exit from each habitable room, which is not at entrance floor level, or an alternative exit from each floor (other than the entrance floor) should be provided.

11. The District Council also make the following points:

(i) the proposal does not comply with the recommendations given in *paragraph 10.4 of BS 5588: (Fire precautions in the design, construction and use of buildings) Part 1: 1990 (Code of practice for residential buildings)*

(ii) the proposal does not comply with the recommendations given in *DOE Circular 12/92 (Houses in multiple occupation. Guidance to local housing authorities on standards of fitness under section 352 of the Housing Act 1985)* in relation to five storey houses in multiple occupation

(iii) the provision of an automatic fire alarm system with detectors located in all rooms within the maisonette is not regarded as adequate compensation for the omission of adequately protected escape routes

(iv) BS 5839 recommends that the level of alarm coverage that has been offered should be provided but is additional to the appropriate level of structural means of escape necessary to comply with BS 5588: Part 1

(v) no provision has been offered to provide early warning to the occupants of the new fifth storey of fire occurring in other parts of the building, which could have an effect on the extended evacuation time from the new floor

(vi) if it were necessary to effect external rescue then the pitch to the front of the building could make rescue difficult and access to the rear of the property could also be difficult.

The Department's view

12. In this case the roof space of an existing second floor flat (fourth storey of the building) is being converted to form habitable accommodation and what is at issue is the safe escape of the occupants of this new third floor (fifth storey of the building). Although your proposals are similar to a standard loft conversion in that the occupants of the new floor need a similar level of protection, there is the additional factor that those occupants will have no control over the lower ground, ground and first floor flats and in this case will be using the common escape route serving all flats.

13. The Department accepts the benefits that your proposals for an automatic alarm system will have with regard to early warning of fire, but it takes the view that if alternative exits are to be dispensed with then there must also be adequate structural fire precautions in place. In this respect the Department notes that you have not provided sufficient detail to adequately assess the fire protection afforded to the stair from the lower three storeys of flats (which would remain the single escape stair).

14. The Department's main concerns with regard to the protection of the common stair relate to both the fire resistance of the elements of structure and the protection to the common stair at the lower levels. With regard to the latter, for example, *Diagram 12 of Approved Document B* shows the double door protection which is considered necessary to the common escape route in a small single stair building. Your proposals do not appear to show this level of protection to the stair. In addition, *paragraph 5.19 of the Approved Document* suggests that every escape stair and its associated landing should be constructed of materials of limited combustibility if it is the only stair serving a building in Purpose Group 1a (Flat or maisonette) and exceeds three storeys. Your building, as proposed, is a five storey building and no mention is made of the stair construction.

15. With regard to fire resistance, the Department's concern is that the fire resistance for the elements of structure for what would become a five storey building do not conform with the recommendations given in *Tables A1 and A2 of Approved Document B*. These tables suggest a 60 minute level of fire resistance for flats of the height of your building and although there is some provision made for a reduction in the level of fire resistance for flat conversions, *paragraph 7.13 of the Approved Document* suggests that where the altered building has four or more storeys then the full standard of fire resistance would normally be necessary. Your proposals do not show that the elements of structure have the correct level of fire resistance and in the

Departments view this could have a bearing on the safe escape from the new top floor if alternative exits from the maisonette were not to be provided.

The determination

16. The Secretary of State has given careful consideration to the particular circumstances of this case and the arguments advanced by both parties. On the basis of the proposals as submitted, including your proposal for an extended smoke detection system, he does not consider that your proposals make adequate provision for safe escape. He has therefore concluded and hereby determines that your proposals do not comply with Requirement B1 (Means of escape) of Schedule 1 to the Building Regulations 1991 (as amended).