Date: 01/06/01 Ref: 45/1/194

Note: The following letter was issued by our former department, the Department for Transport, Local Government and the Regions Department for Environment, Transport and the Regions (DTLR). DTLR is now Communities and Local Government - all references in the text to DTLR 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 1991 (as amended) in respect of a loft conversion

The proposed work

- 4. The building work to which this determination relates is the conversion of the roof space of a two storey, end of terrace dwelling into a new (second) floor, comprising a fourth bedroom, and WC and shower room. The original dwelling is described as a two-up, two-down Victorian cottage approximately 5m x 7.5m built in the late 19th century, to which a relatively large two storey extension was added to the rear in the late 1980s comprising a kitchen and WC facilities on the ground floor; and a bathroom and new third bedroom with en suite facilities on the first floor. Access to the new bedroom etc on the first floor was achieved by relinquishing the original rear bedroom and integrating this area into that of the landing.
- 5. The plans show that the existing stair to the first floor lies in the centre of the dwelling, rising at right angles to the party/flank walls. There are two single bedrooms at the front of the house which are accessed on opposite ends of the landing enclosure.
- 6. The new accommodation on the second floor will be accessed by a new stair aligned to and passing over the existing ground to first floor stair. In order to achieve fire separation of the second floor from the rest of the house, the new stair will be separated from the existing first floor accommodation by a fire resisting partition and a self-closing fire door at first floor level. The existing access doors on to the stair enclosure at ground and first floor levels, are shown as being made self-closing and new doors are shown as being 20 minute fire resisting.

- 7. A new doorway is to be formed in the side wall at the foot of the stair at ground floor level to provide a final exit. It will then become the main entrance door with the existing one being fixed shut. The foot of the stair is already separated from the dining room by an existing door, and it is proposed also to separate the lounge from the stair by the addition of a 20 minute fire resisting door, thus forming a lobby inside the new front door. Aside from the provision of a new dormer window, the alterations include the installation of two roof lights to the side roof slope one of which will be to escape window specifications.
- 8. The first floor landing area is approximately 5m long by 3m wide and in order to provide a primary means of escape from the new loft room a 30 minute fire resisting partition, with a fire resisting self-closing door, was proposed. This partition was to run the width of the dwelling across the landing forming a passage, approximately 700mm wide, within the stair enclosure, and thus forming a new enclosed space between the back bedroom and the stair.
- 9.An interlinked mains wired alarm system was proposed at the ground, first and second floor landings. The block plan shows that there appears to be potential for external access to the side elevation for rescue purposes.
- 10. These proposals formed the basis of a full plans application which was approved by the Borough Council on condition that, in order to achieve compliance with Requirement B1 of the Building Regulations, all fire doors were to be self-closing and that a smoke detector was to be installed on the first floor level (in addition to those proposed). However, your client considered that there were disadvantages to the provision of the fire resisting partition on the first floor landing which outweighed its intended purpose of securing a safe primary means of escape in case of fire via the first floor. You therefore submitted an amended drawing to the Borough Council showing omission of the partition but inclusion of interlinked mains smoke alarms in all bedrooms and living rooms, plus a heat detector in the kitchen. The Borough Council responded that omission of the partition would put the escape route at risk and given that the Building Regulations provide a lesser standard of safety to loft conversions than dwellings generally, it would be unacceptable to reduce these further by omission of the partition. You therefore sought a determination on behalf of your client. The material date for your determination is .. (the date your full plans application was registered) and it therefore falls to be considered in respect of the Building Regulations 1991 (as amended).

The applicant's case

- 11. You suggest that the dispute arises from the fact that the Borough Council feels that the large landing area may be used for habitable purposes and their insistence on a partition across the landing. You believe that your latest proposal outlined in your amended drawing provides a safe passage and that the addition of a full fire detection system (ie interlinked mains smoke alarms in all bedrooms and living rooms, plus a heat detector in the kitchen) will provide early warning of fire to facilitate escape before fire takes hold.
- 12. You and your client are also concerned that the introduction of the partition across the existing large landing would form an additional hazard by creating an inner room situation in respect of escape from the rear bedroom; and would further separate the room in which the adults of the house will sleep from those in which the children will sleep thus delaying their assistance and rescue in case of fire.
- 13. Your client contests that the space in question is, by necessity, a landing area that was originally a bedroom, until the addition of a two storey extension to the rear of the property in the late 1980s, since when it has been used solely as a means of access to the new rear bedroom. Your client also states that this area can now only function as a landing and offers assurance that it will remain as a thoroughfare only, not a habitable room. Your client has no desire to have a walk-through bedroom with four doors leading from it.

The Borough Council's case

- 14.Following conditional approval of the proposed loft conversion, the Borough Council was asked to consider the amendment of the approved plans which would provide for the omission of the fire resisting partition on the first floor landing and the provision of interlinked mains smoke alarms in all bedrooms and living rooms, plus a heat detector in the kitchen. Having given consideration to this proposed amendment, the Council is not satisfied that it shows appropriate provisions for the early warning of fire and appropriate means of escape in case of fire from the building.
- 15. The Borough Council believes that the omission of the partition puts at risk the means of escape from any fire/ignition occurring within that area, as use of the enlarged landing area in question cannot be controlled. In response to your clients concerns about being able to reach his children to assist in their rescue in emergency situations, the Council accepts that the omission of the partition would reduce the number of doors between the bedrooms, but believes that this would also remove the relative safety provided by a sterile escape route. The Council also accepts that the partition will create an inner room situation to the rear bedroom and that this is not ideal. On the other hand they argue that the partition would provide protection to the majority use of the stairway.

16. With regard to the additional fire detection, the Borough Council suggests that the use of the fire detection system, although providing early warning of a fire, will not protect the escape route and would also rely on regular maintenance. The Council states that the Building Regulations provide a minimum standard of safety to dwellings and an even lesser standard to loft conversions. They therefore believe that the passive fire protection they have already approved should not be sacrificed in this case.

17. The Borough Council concludes that they have a duty of care not only to the current owners of the property, but also to any future owners or occupiers of the property.

The Secretary of State's consideration

18.In considering this case the primary concern of the Secretary of State is the safety of the buildings occupants who may have to escape or be rescued from the building in an emergency situation. Although you have raised concern over some of the practical obstructions which the partition may create, where there is potential conflict with life safety issues the latter must prevail in terms of compliance with the Building Regulations.

19. The Secretary of State believes the fundamental issue in this case is whether or not the large first floor area at the head of the original stair is a landing or a space likely to be regularly used for habitable purposes by the occupants, in such a way as to be a potential fire risk. There is no definitive way of deciding this. However, the Secretary of State believes some guidance can be taken from the scale of the building; the number of rooms and the usability of the space; and the number and position of the doors which open off the area. It has already been stated in your clients submission that the space in question was originally a bedroom and the drawings show that it is approximately the same size as the ground floor dining room and is larger than the two existing front bedrooms. Therefore the Secretary of State believes it is a reasonable assumption that the space is likely to be used as more than a landing and therefore, as an open-plan first floor layout, could present a considerable fire risk and threat to the occupants of the building.

- 20. Your client has stated that the first floor area in question is used solely as a landing area, but the Building Regulations do not provide continuing control over the current or future use of any area of a dwelling. The Secretary of State therefore does not consider this to be relevant to the case.
- 21. The other significant issue for consideration is whether or not the provision of an extended fire detection system, with smoke alarms in all bedrooms and living rooms, plus a heat detector in the kitchen is sufficient compensation for having an open-plan first floor layout where passive protection would normally be provided. In the Secretary of States opinion this should be judged against the need for there always to be an adequate primary internal route for means of escape available from rooms, including those in a loft conversion.

22. The extended fire detection system covers all habitable rooms and is intended to compensate for the lack of passive protection which would be created by an open-plan layout at first floor. Although there is a considerable advantage to be gained from having such an extensive alarm system, it is only the detector in the open-plan area which is of direct relevance when considering the compensation, as all other additional detectors are in rooms which are not necessarily considered to pose a threat to the primary escape route over and above that which is normally acceptable. In this context, the Secretary of State does not believe the smoke detector proposed in the first floor open-plan area would be sufficient compensation for the lack of a passive enclosure. Without the latter, notwithstanding early warning, the primary escape from the second floor could be compromised very quickly should a fire occur, and the products of combustion could readily compromise the only door separating the new room from the rest of the dwelling.

23.If the partition is to be retained, it is accepted that this will create an inner room situation in respect of the existing rear bedroom. The Borough Council has suggested that, whilst this is not ideal, the partition would provide protection to the majority users of the stairway. However, the Secretary of State considers that this is only part of the argument in favour of retaining the partition. He takes the view that all three bedrooms, at first floor level, were already inner rooms and that the provision of the partition wall will, in addition, to some extent improve this situation.

24. You will also wish to note that whilst the Secretary of State considers that your original plans as approved by the Borough Council (ie with the partition in place) comply with regulation 4(2) of the Building Regulations insofar as the partition will improve the existing means of escape from the inner room situations for the two bedrooms at the front of the house on the first floor - it is his view that there may be potential for further improvement of provision for means of escape from all three bedrooms on the first floor by ensuring that the windows in all three are suitable for escape purposes, depending upon whether this matter has been considered and reviewed earlier. *Paragraph 2.11 of Approved Document B (Fire safety)* gives advice on the provision of escape windows for inner room situations.

The determination

25. The Secretary of State has given careful consideration to the particular circumstances of this case and the arguments presented by both parties. On the basis of your amended proposals - namely, to omit the partition on the first floor landing and to install smoke alarms in all bedrooms and living rooms, plus a heat detector in the kitchen - he does not consider that they make adequate provision for safe escape. He has therefore concluded and hereby determines that your amended proposals do not comply with Requirement B1 (Means of warning and escape) of Schedule 1 to the Building Regulations 1991 (as amended).