Date: 17/08/99 Ref: 45/3/119

Note: The following letter which has had personal details edited out 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 39**

Appeal against refusal by the Borough Council to relax Requirement B1 (Means of Escape) and Requirement K1 (Stairs, Ladders and Ramps) of the Building Regulations 1991 (as amended) in respect of an alternating tread spiral staircase giving access to a third storey loft conversion

### The appeal

- 3. The building work to which this appeal relates is complete and comprises the alteration of a roof space of a two storey end house of a former barn which had previously been converted into three dwelling units. The roof space of the property has been converted into a new third storey single habitable room, which you state will be used as an occasional bedroom.
- 4. Access from ground to first floor is via a single protected stair with all doors opening onto the stairway shown to be 30 minutes fire resisting and self-closing. Access to the new loft room is via an alternating tread spiral stair from the first floor landing and this stair is also in a protected enclosure with a 30 minutes fire resisting, self-closing door at the third storey level. The new spiral stair is shown on your drawing to be 900mm radius.
- 5. The proposals for this building work were the subject of a second full plans application which was rejected on the grounds of non-compliance with Requirement B1 and Requirement K1. Both grounds directly related to the unsuitability of the spiral alternating tread stairway; although otherwise the Borough Council stated that they were satisfied that Building Regulations compliance was shown for all other aspects of the conversion. Before you submitted your second application, and at your request, the Borough Council suggested three options whereby a stairway in this situation might achieve compliance.
- 6. However, you considered that an alternating tread spiral design stair is no more dangerous or difficult to use than a straight flight of stairs using alternating tread design. You therefore applied to the Borough Council for a relaxation of Requirements B1 and K1 in respect of the alternating tread spiral stair, which was rejected by the Council. It is against that refusal to relax that you have appealed to the Secretary of State.

## The appellant's case

- 7. You accept that paragraph 1.23 of Approved Document K (Protection from falling, collision and impact) states that alternating tread stairs should only be used in one or more straight flights for a loft conversion. However you are of the opinion, as are your clients as users of the stair, that the alternating tread spiral design is no more dangerous or difficult to use than a straight flight alternating tread design. To illustrate this you have provided a trade leaflet which has a photograph of a person using an alternating tread spiral stair. You point out that the treads are slip resistant and the stair has a handrail to both sides.
- 8. You have expressed concern that the Borough Council have referred to an article published in the technical press in March 1998 which relates to research which the Department funded with respect to the safety of stairs for loft access. Your concern relates to the fact that this report was published after the staircase in question had been installed and the information contained in the report was not available to the general public at that time. You point out that the report states "the main shortcoming of this type of laboratory study compared with a field study is that it does not allow people to become fully familiar with the stairs".
- 9. You are of the opinion that the alternating spiral tread stair which has been installed is adequately safe and has been used without accident or incident since its installation. You state that the occupants and users of the stair wish it to remain as it gives safe and attractive access to the converted loft area. In addition, you state that you have been informed by the suppliers that many of these stairs have been installed throughout the country to the satisfaction of the building control body.

# The Borough Council's case

- 10. The Borough Council accepts that Approved Documents are not prescriptive and are intended to provide guidance only. However they consider that the alternating spiral tread stair is at variance with the guidance given which specifically refers to the acceptability of straight flights of alternating tread stairs only. They do not consider the type of stair installed complies with either Requirement B1 or K1.
- 11. In support of this rejection the Borough Council refer to extensive research which the Department had commissioned into the safety of loft access stairs. The Council provided a copy of this report which was published in the technical press in March 1998, as part of their submission. The findings of the report tend to reinforce the view of the Borough Council that this type of stair is at best awkward to use and, at worst, potentially lethal if used by anyone who is not fully alert and agile. The Borough Council are of the opinion that a domestic stair should cater for people with a wide range of physical and mental capabilities.

## The Department's views

- 12. You have stated that similar stairs to the one that is the subject of this appeal have been installed in similar situations elsewhere and been considered acceptable by the building control bodies. However the Secretary of State must consider each case on its individual merits. You have also expressed concern that information given in the report on the safety of loft access stairs and which was published after the installation of the stair that is the subject of this appeal, may be taken into consideration. The Department's view on this is that the aspects of the report which are relevant to this case only tend to reinforce the guidance that is already provided in *Approved Document K*.
- 13. With regard to Requirement B1, paragraphs 1.23 to 1.28 of Approved Document B (Fire safety) give guidance on loft conversions which is intended as a concession where it would be unreasonable to expect the normal fire safety provisions for a new three storey house to be incorporated. In particular, paragraph 1.27 suggests that the new storey should be served by a stair (which may be an alternating tread stair) meeting the provisions in Approved Document K. The Department takes the view that if a loft conversion stair is expected to be safe for use as a means of escape or rescue in a fire situation, then it should follow the accepted design criteria which are permissible within the usual concessions granted for loft conversions.
- 14. Requirement K1 of the Building Regulations states that: "Stairs, ladders and ramps shall be so designed, constructed and installed as to be safe for people moving between different levels in or about the building." The guidance in Approved Document K on access to loft conversions covers alternating tread stairs and fixed ladders (see paragraphs 1.22 to 1.25) and is very specific: it is that they should only be used in one or more straight flights for a loft conversion, and then only when there is not enough space to accommodate a normal stair. This guidance was intended to discourage use of spiral alternating tread types as, in the absence of experimental evidence, it was felt at the time that they were less satisfactory than straight types. The guidance was first published in the 1992 edition of Approved Document K, and remains unchanged in the 1998 edition. It was supported by the findings of the research published in March 1998.
- 15. In view of the above, the Department considers that alternating tread spiral stairs do not comply with Requirement K1 and, as a consequence, also do not comply with Requirement B1.

## The Secretary of State's decision

- 16. The Secretary of State considers that compliance with Requirement B1 is a life safety matter and as such would not normally consider it appropriate to either relax or dispense with it. With regard to Requirement K1, he considers that compliance with this can be a life safety matter. He would therefore not normally consider it appropriate to dispense with Requirement K1; and he would not lightly consider relaxing it except in exceptional circumstances.
- 17. The Secretary of State has given careful consideration to the facts of this case and the arguments put forward by both parties. He has noted that no argument has been put forward by you as to why other options could not have been implemented in this particular case. He has concluded that there are no extenuating circumstances in this particular case which would justify consideration of a relaxation of either Requirement B1 or Requirement K1 of Schedule 1 to the Building Regulations 1991 (as amended); and that the Borough Council therefore came to the correct decision in refusing to relax either of these requirements. Accordingly, he dismisses your appeal.