

Requirement K1: Appeal against refusal in respect of a proposed spiral stair, forming part of a loft conversion (Ref 45/3/193)

Text of Communities and Local Government 'appeal' letter dated 28 April 2008 (Reference 45/3/193)

BUILDING ACT 1984 - SECTION 39

APPEAL AGAINST REFUSAL BY THE COUNCIL TO RELAX OR DISPENSE WITH REQUIREMENT K1 (STAIRS, LADDERS AND RAMPS) IN PART K (PROTECTION FROM FALLING, COLLISION AND IMPACT) OF SCHEDULE 1 TO THE BUILDING REGULATIONS 2000 (AS AMENDED), IN RESPECT OF A PROPOSED SPIRAL STAIR, FORMING PART OF A LOFT CONVERSION.

The building work and appeal

3. The papers submitted indicate that the building work to which this appeal relates is virtually complete and comprised the conversion of the roof space, i.e. the loft, of a two storey, two bedroom, terraced house to form an additional bedroom with dressing and en-suite facilities. You propose to provide access to the loft room on the new second floor by installing a spiral stair on the first floor, which will be the sole means of access.

4. The building work was the subject of a full plans application which was rejected by the Council on 10 January and 22 March 2005 primarily on the grounds of non-compliance with regulation 14 of the Building Regulations. You subsequently applied for a relaxation or dispensation of Requirement K1 of the Building Regulations in relation to the proposed spiral stair, which was refused by the Council on 18 September 2007. The Council took the view that the design of the stair did not provide for the safe passage of people between the two floors and that no acceptable means of passing between the floors was proposed. It is against this refusal that you have appealed to the Secretary of State.

The appellant's case

5. You make the following points to support your case in a statement attached to your original appeal letter of 12 October 2007:

- (i) Paragraph 1.21 of Approved Document K (Protection from falling, collision and impact) refers to BS 5395-2:1984 (Stairs, ladders and walkways. Code of practice for the design of helical and spiral stairs) (hereafter referred to as BS 5395-2) and states that "Stairs with goings less than shown in this standard may be considered in conversion work when space is limited and the stair does not serve more than one habitable room". You say the Council has ignored this and is "seeking to apply the standard regulations for spiral stairs serving more than one room rather than a case where only one room is served in a conversion".

- (ii) Your plans indicate that only one habitable room is served by the proposed stair in this case and that being a narrow two storey terrace property the space is limited and prevents use of standard conventional stairs. You add that the loft room has two main means of emergency egress.
- (iii) The proposed stair is a compact spiral on a square (fitting into a 1.2m x 1.2m square opening) rather than round plan form where the latter type would give a smaller and more restrictive 'footprint' for the user. Its design enables its use in the most difficult of loft conversions serving one habitable room without the necessity of using less desirable and safe options referred to in building regulations guidance, e.g. the space saver alternating tread stair or a fixed loft ladder. From your personal experience, being in a small shaft and narrow width, the close proximity of being able to use the centre post and wall for support at the same time, with both hands if needed, gives assurance and restricts any opportunity for falls.
- (iv) You point out that the legal requirement of the Building Regulations relating to stairs is not contained within an approved document but in the simple statement derived from Requirement K1 "Stairs, ladders and ramps shall offer safety to users moving between levels of the building". You add that the proposed stair is designed not necessarily to match the basic guidance in Approved Document K, which you are not obliged to adopt, but to comply with the safety requirement.

6. You also give your detailed views on paragraphs 1.11 and 1.21 and Diagram 8 of Approved Document K and BS 5395-2, which you say are used as the basis of the design for the proposed stair. In your view, this demonstrates that the actual requirement of the Building Regulations in question - Requirement K1 - has been complied with, even though you have appealed against the Council's refusal of your application to relax or dispense with the requirement. You compare the proposed stair with other options given in Approved Document K and refer to other locations in the UK where you believe a similar stair has been installed and deemed acceptable by local authorities.

7. You also provided a detailed response to the Council's representations to the Secretary of State, in your letter of 10 December 2007. Amongst other things, you refer to your extensive experience of using a similar circular stair in Florida, USA, which has not caused any difficulties, and you dispute whether any other form of stairs could be used in this case.

The Council's case

8. The Council provided a statement with its letter of 21 November 2007 outlining its case, which indicated that the proposed spiral stair does not follow the guidance in Approved Document K or BS 5395-2 in that the goings are less than recommended.

9. As your proposal does not follow the recommended guidance, the Council applied a risk assessment as to whether the stair satisfies Requirement K1 of the Building Regulations in providing a safe means of travelling between the first and second floor levels in your case. The Council considered:

- (i) the risks presented by the design;
- (ii) whether familiarity would not mitigate the risks;
- (iii) that the stair does not exhibit similar levels of safety to those of a ladder or alternating tread stair which are the generally accepted means of providing access in constricted situations;
- (iv) that no alternative documented, accredited or authoritative supporting information has been provided demonstrating that the stair satisfies Requirement K1.

The Council concluded that the proposed stair does not provide reasonable safety in travelling between the floors and therefore does not satisfy Requirement K1.

10. The Council explained the reasons why your application for a relaxation or dispensation of Requirement K1 was considered unjustifiable and unsound, as the health and safety risk was considered too great.

11. The Council also provided a detailed response to the points you made in your original appeal submission to support its position. Amongst other things, this gives the Council's view that the loft conversion could have been designed to accommodate a standard stairway with tapered treads, as this was not precluded by the size of the building.

The Secretary of State's consideration

12. The Secretary of State is aware that the design of stairs for use in loft conversions in existing buildings frequently causes difficulties. This is because the restricted space available precludes the use of a standard stair and that other, potentially less safe types, may therefore have to be used if the conversion is to go ahead to meet the needs of the occupants.

13. For the above reason, Approved Document K includes guidance on alternating tread stairs and fixed ladders. For situations where a spiral stair is required, the guidance in paragraph 1.21 indicates that stairs with goings less than shown in BS 5395-2 may be considered in conversion work when space is limited and the stair does not serve more than one habitable room. It should be noted that the intention of the restriction to one habitable room is to limit the number of users. The guidance in paragraph 1.21 does not suggest by how much it may be reasonable to reduce the going, nor does it refer to the minimum width of the stair, which is set in the British Standard.

14. The Secretary of State notes that this appeal concerns the use of a spiral stair which has a small square plan, a small going, and a width below that recommended in BS 5395-2. Both parties have presented well argued cases to

support their views. You argue that there is insufficient space for a more conventional design in your case, and that paragraph 1.21 of Approved Document K makes provision for unconventional types. You claim that the safety of these, and similar stairs, has been established by their use in this country and in the USA.

15. However, the Council believes that a more conventional type of stair could have been used. The Council's risk analysis indicates that the proposed spiral stair does not offer a reasonable level of safety as required by Requirement K1 of the Building Regulations, and it does not accept that there is a scale of safety – "a staircase is either safe or it is unsafe".

16. Many accidents occur each year on stairs, many of them fatal, and the Secretary of State would not therefore consider a relaxation or dispensation of Requirement K1 lightly. She considers that although the guidance in Approved Document K allows for small spiral stairs, any such consideration needs to be reasonable and based on individual merit. In situations where a more conventional stair could not easily be accommodated, the Secretary of State believes that a lower standard of geometric design safety could be acceptable where the users are familiar with the stair and compensate for its deficiencies in the way they use it. The main alternative to a spiral stair is a fixed ladder which would be difficult to use when carrying bulky objects.

17. The Secretary of State takes the view that the fundamental questions to be considered are how safe is the proposed stair and how it compares to the other types described in Approved Document K. In the absence of research information this is difficult to answer. The going is too small to accommodate an adult foot, which will increase the risk of a misstep and possibly a fall. However, because the stair is so narrow, and the user is always close to the side, it would seem to be easy to grasp the centre post or a continuous handrail - if one was fitted. Slip resistant nosing should also be considered. These provisions would help the user to regain balance in the event of a misstep. Also, it should be easier for the user to carry objects with a reduced chance of a misstep than if a fixed ladder were installed.

18. Taking these issues into consideration, particularly that a fixed ladder is the most likely alternative in such a situation, the Secretary of State's opinion is that the proposed stair in this particular case could offer an acceptable level of safety, and achieve compliance with Requirement K1, if a continuous handrail and slip resistant nosings were to be fitted.

The Secretary of State's decision

19. You have appealed to the Secretary of State in respect of the refusal by the Council to relax or dispense with Requirement K1 of the Building Regulations. As indicated above, 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.

20. The Secretary of State considers that compliance with Requirement K1 makes an essential contribution to life safety and as such she would not normally

consider it appropriate to either relax or dispense with it, except in exceptional circumstances which – in her view – do not apply in this particular case. Moreover, as stated in paragraph 18 above, she considers that the proposed stair in question could achieve compliance with Requirement K1 if a continuous handrail and slip resistant nosings are fitted. In the light of these circumstances, the Secretary of State has concluded that it would not be appropriate to relax or dispense with Requirement K1 (Stairs, ladders and ramps) in Part K (Protection from falling, collision and impact) of Schedule 1 to the Building Regulations 2000 (as amended) in this case. Accordingly, she dismisses your appeal.