

**APPEAL AGAINST REFUSAL TO RELAX REQUIREMENT B1 (MEANS WARNING AND ESCAPE) IN PART B (FIRE SAFETY) OF SCHEDULE 1 TO THE BUILDING REGULATIONS 2000 (AS AMENDED), IN RESPECT OF THE ERECTION OF FOUR, FOUR STOREY, HOUSES**

**The building work and appeal**

3. The papers submitted indicate that the building work to which this appeal relates comprises the erection of four new houses, each with four storeys, one of which is a basement. You initially deposited full plans with the Council for the work comprising the development of four, three storey, houses, which were rejected on 4 February 2008. Further plans were deposited relating to the "provision of basement and associated work" (i.e. adding a further storey) to each of the houses, which were also rejected on 28 October 2008. The Council states that both full plans applications were rejected on the basis of insufficient information under regulation 14 of the Building Regulations 2000.

4. It is not clear from the information provided if further plans were deposited, but the building work commenced in August 2008. Following site visits, the Council subsequently corresponded with your client's representatives on aspects of the work, in particular relating to a proposed change to the layout of the ground floor and the provision of a sprinkler system to all floors in the houses. The Council raised fire safety concerns about your proposals and indicated that the sprinkler system did not comply with Requirement B1 of the Building Regulations or accord with the guidance in paragraph 2.6 of Approved Document B (Fire safety, Volume1 - Dwellinghouses - hereafter referred to as "AD B").

5. As you were unable to reach agreement with the Council prior to completion of the building work in September 2010, you requested a relaxation of "the relevant part of Part B", i.e. Requirement B1, with reference to the guidance in paragraph 2.6 a. i. of AD B. This was refused by the Council in its letters of 5 and 14 July 2010 on the grounds that "no separation has been provided between the ground and first floor" of the houses. The Council considered that a person would be unable to pass from the second to the first floor with the intention of escaping from the windows in the first floor bedrooms, as smoke from a fire on the ground floor would pass into the stairway and prevent them from doing so. It is against this refusal that you have appealed to the Secretary of State.

**The appellant's case**

6. You advise that during the course of construction your client decided to alter the ground floor of the houses in question to open plan but did not consult the Council in advance. You add that, after discovering the building work would be non-compliant with Part B of the Building Regulations, you were approached by your client to provide a fire engineered strategy, a copy of which was submitted to

the Council and forms part of your appeal. You consider that this provides a better overall level of safety than the minimum required in AD B.

7. You note that the requirements of Part B are relevant to the development, but admit that, as a protected escape route from the upper floors has not been provided, the proposal for an open plan ground floor area is not fully compliant. However, you refer in detail to the guidance in AD B, particularly in paragraphs 2.6 a. ii., 2.7 b., and 2.20 b. (relating to dwellinghouses with one, or more, floors over 4.5m above ground level, and loft conversions), to support your case for an open plan ground floor arrangement, with escape windows at first floor level and sprinkler protection and upgraded smoke detection throughout each house.

8. In your view the provision of a clear compensatory measure of full fire sprinkler protection throughout each house “logically has to be considered to be far more effective than any door built into a compartmentation of the stairwell which itself may or may not be open in the event of a fire”. You make several detailed points in your correspondence to support and demonstrate the effectiveness of sprinkler installations and comment on previous appeal decisions issued by the Secretary of State relating to sprinklers.

9. You state that you are requesting a relaxation of the requirement for compartmentation on the ground floor as, having made alternative provision for sprinkler protection throughout each house, you consider this requirement to be too onerous and unnecessary.

### **The Council’s case**

10. As indicated in paragraphs 4 and 5 above, the Council considers that the building work in question does not comply with Requirement B1 of the Building Regulations and refers to paragraph 2.6 of the guidance in AD B to support this decision, which indicates that there should be a protected route to the final exit or an alternative escape route from the top floor.

11. The Council notes that the final exit route in this case is via the open plan ground floor, where there is a kitchen next to the stairway which serves the first and second floors of the houses. In the Council’s opinion, in the event of a fire on the ground floor, the escape route via the stairway could be rendered “inoperable” due to the propagation of flames and smoke.

12. The Council acknowledges your representations in relation to the guidance in AD B, and notes there are egress windows on the first floor, but is concerned that there is no stairway separation between the basement and the ground floor and between the ground floor and the first and second floors of the houses and in particular that the kitchen is not separated from the open plan ground floor. The Council believes that the sprinkler system design does not provide a compensatory solution needed to meet the functional requirements of Part B, having regard to the guidance in paragraph 2.6 of AD B, and that a separating fire-resisting door is required within the fire compartmentation of the stairway or instead a protected route to the final exit.

## **The Secretary of State's consideration**

13. The Secretary of State has given careful consideration to the particular circumstances of this case and the arguments presented by both parties. He notes that you have commented on previous appeal decisions as part of your submission but he is required to consider each case on its own merits.

14. The Secretary of State takes the view that the main consideration in this case is the effect of your decision to omit the partition at ground floor level of the newly erected houses on the safety of the occupants of the upper floors if a fire occurs on the ground floor.

15. As indicated in AD B, in the case of a dwellinghouse with one floor more than 4.5m above ground level, it is normally considered reasonable to provide a protected stairway (protected at all levels) which extends to the final exit or gives access to at least two escape routes at ground level, delivering to alternative exits and separated by fire-resisting construction.

16. However, you consider that your decision to provide a domestic sprinkler system throughout the houses, together with the upgrading of the smoke detection system, is an adequate alternative to the physical enclosure of the stairway at ground level. Conversely, the Council takes the view that this is not adequate.

17. The Secretary of State considers that sprinkler protection cannot generally be regarded as an alternative to a physical separation between a potential fire and an escape route. Whilst sprinklers can significantly reduce the hazards presented by a fire they are unlikely to be able to prevent an escape route being obstructed by smoke. However, no safety system is entirely infallible and there will always be scenarios where either active or passive systems will not perform as intended. It is, therefore, necessary to make a subjective assessment of the overall level of safety offered by an alternative approach in a particular case in comparison to the conventional solutions offered in AD B.

18. The Secretary of State is of the opinion that, although it appears from the information you have provided that the protected stairway serves all other storeys, the omission of the fire resisting construction at ground floor level in this particular case would increase the potential for the occupants of the upper floors to become trapped if a fire were to occur on the ground floor. He notes that the primary escape route is via the open plan ground floor, where there is a kitchen next to the stairway which serves the first and second floors and that the Council is concerned that this route may become inoperable if flames and smoke are present in this area.

19. In so far as the occupants of the first floor were concerned it would be necessary to ensure that the windows at first floor level (to all habitable rooms) are suitable for use as an alternative escape route, which would appear to be the position in your case. In doing this, escape from the first floor could be regarded as adequate with or without the provision of either a ground floor enclosure or sprinkler protection.

20. However, to ensure the safety of the occupants on the second floor, measures must be provided to safeguard them from becoming trapped. The Secretary of State considers that the principle objective is to provide a safe route to the final exit at ground floor. It might be reasonable to accept an open plan layout at ground floor if steps are taken to reduce the fire risk at that level. An example of this approach is given in AD B, paragraph 2.20 b. and subsequent notes, to address the situation where a new storey is added to an existing two storey, open plan, house. This uses a combination of active and passive protection measures and takes account of the relative risks associated with cooking.

21. The layout of the houses in this case results in the stair delivering at ground floor level into the middle of the open plan space immediately adjacent to the cooking area. The Secretary of State acknowledges that the inclusion of sprinklers would restrict and in some cases extinguish a potential fire. However, there would still be significant amounts of smoke produced both before and after activation of the sprinklers. Whilst you have gone to some lengths to set out the advantages of sprinkler systems you have provided no evidence or analysis, specific to this case, of how they would impact on the opportunity to escape. On that basis, the Secretary of State is of the view that an appropriate means of escape in case of fire, for the purpose of compliance with Requirement B1 of the Building Regulations, has not been demonstrated and that a case has not been made to relax the requirement.

### **The Secretary of State's decision**

22. The Secretary of State considers that compliance with Requirement B1 is a life safety matter and, as such, he would not normally consider it appropriate to either relax or dispense with it, except in exceptional circumstances which do not apply in this case. As indicated in paragraph 21 above, the Secretary of State has concluded that it would not be appropriate to relax Requirement B1 (Means of warning and escape) in Part B (Fire safety) of Schedule 1 to the Building Regulations 2000 (as amended) in relation to the erection of the four houses in question. Accordingly, he dismisses your appeal.

23. Please note that although the Building Regulations 2010 came into force on 1 October 2010, the Building Regulations 2000 (as amended) will continue to apply to building work which was started before that date in accordance with full plans deposited with a local authority.

24. Please also note that the Secretary of State has no further jurisdiction in this case and that any matters that follow should be taken up with the building control body.