

Requirement A3: Determination of compliance in respect of mezzanine rooms within the roof space of a new block of 28 flats/maisonettes (Ref 45/1/232)

Text of Communities and Local Government 'determination' letter dated 17 March 2008 (Reference 45/1/232)

BUILDING ACT 1984 – SECTION 16(10) (a)

DETERMINATION OF COMPLIANCE WITH REQUIREMENT A3 (DISPROPORTIONATE COLLAPSE) IN PART A (STRUCTURE) OF SCHEDULE 1 TO THE BUILDING REGULATIONS 2000 (AS AMENDED), IN RESPECT OF MEZZANINE ROOMS WITHIN THE ROOF SPACE OF A NEW BLOCK OF 28 FLATS/MAISONETTES

The proposed work and question arising

4. The papers submitted indicates that the proposed building work to which this determination relates comprises the construction of a block of 28 flats/maisonettes consisting of five storeys, (five floors) with a plan area of approximately 700m² and a height of 15.5m from ground level to the roof. The original scheme was the subject of a full plans application which was conditionally approved by the Council on 23 May 2006. However, the design was revised to include the provision of what you refer to as mezzanine rooms within the roof space, which was accepted by the Council on 7 June 2007 as an amendment to the approved scheme, subject to conditions. These 'mezzanines' and the central core areas comprise the fifth floor.

5. The proposed six maisonettes at the top of the building, which will be located on the fourth and fifth floors (finished floor levels approximately 8.2m and 10.8m respectively above external ground level), are the subject of this determination. The maisonette accommodation will comprise hall, living area, bedrooms and bathroom on the fourth floor, and another entrance hall, kitchen, dining/gallery on the fifth floor. Two of the six maisonettes will also contain an additional bedroom and WC at the upper fifth floor level. Due to the pitch of the sloping roof the fifth floor will cover over 50% of the building footprint. Internally the floors will be accessed via a spiral staircase, but both floors will also be accessible from the central communal area incorporating a protected staircase and a lift.

6. Construction of the maisonettes will be of traditional load bearing masonry external compartment and partition walls. The masonry compartment walls between the maisonettes and the communal area will continue upwards to provide support to the roof construction above. Proposed structural floor construction will be precast concrete beam and block for the ground floor, while precast concrete plank will be employed for the first, second, third, fourth and the communal fifth floor area. The fifth floor and the partitions within the maisonettes are specified as timber construction.

7. One of the conditions of the Council's acceptance of the revised scheme was that "Full structural calculations for this class 2B Building – Flats greater than

4 storeys are to be deposited and approved”. However, you question whether the proposed addition of the mezzanine rooms within the roof space raises the building class from a 2A to 2B category, as contained in Table 11 of Approved Document A (Structure), for the purpose of achieving compliance with Requirement A3 (Disproportionate collapse) of the Building Regulations. To support your view you refer to the previous limitation on the applicability of Requirement A3 in the Building Regulations relating to five or more storeys which indicated that this excluded “... a storey within the roof space where the slope does not exceed 70° to the horizontal”. You also question, if the mezzanine rooms do create a Class 2B situation, whether the floor areas of these rooms could be reduced to a size whereby Class 2A would apply. It is in respect of these questions that you have applied for a determination.

The applicant’s case

8. You take the view that elevating the structure of the building from Class 2A to Class 2B is both onerous and unjustified. You have enclosed a copy of a letter dated 15 May 2007 from your Architects in this case to the Council, which states their detailed views on this matter supporting your view, and you refer in particular to the following:

- (i) The building will remain unchanged in height with four storeys up to eaves level. The only change made from the previously agreed Class 2A category is the addition of mezzanine rooms within a smaller area of the roof space.
- (ii) The Building Regulations were previously quite specific in excluding a storey within the roof space from being accountable under Requirement A3. The current regulations do not pronounce on this particular situation but you are unaware of any new research that alters this rationale.
- (iii) The original research that forms the classification in Table 11 of Approved Document A is based on a risk assessment analysis. You contend that the risk factor associated with the building in question does not warrant it being set on a par with buildings up to 15 storeys high because:
 - it will be a relatively small development with a limited “Load Parameter”;
 - there will be no gas provision to the building thereby negating risk from gas explosion;
 - the location of the building is such that vehicle collision at any significant speed will not be feasible;
 - if there was an incident causing collapse of the disputed storey, this event would be contained within the single third storey unit, i.e. the disputed storey would carry negligible inherent risk to the building as a whole.

The Council's case

9. The Council takes the view that the proposed building work, as redesigned, will comprise a five storey block of flats/maisonettes. As such the building is classed as a 2B building "Hotels, flats, apartments and other residential buildings greater than 4 storeys, but not exceeding 15 storeys", as contained in Table 11 of Approved Document A and will be subject to the approach recommended in the guidance. The Council indicated in earlier correspondence with you that the limit on application of Requirement A3 of the Building Regulations relating to the number of storeys applicable and the exclusion of the 'room in the roof space' has now been repealed.

10. In reaching its view, the Council has also referred to a definition in Appendix E of Approved Document B (Fire safety) which says that a storey includes "...a roof, unless it is accessible only for maintenance and repair". As the roof in question will contain habitable rooms, under Part B it will be a storey and the Council feels that it is reasonable to extend this definition to Part A as well, particularly as the roof is taking support of the internal walls.

The Secretary of State's consideration

11. The Secretary of State notes that the principle behind Requirement A3 of the Building Regulations is to ensure that "in the event of an accident the building will not suffer collapse to an extent disproportionate to the cause". The "cause" is not specified and could be of many origins. The Requirement aims to ensure that certain structures are more robustly built to ensure damage is restricted to the area local to the event and that an effective means of escape is maintained.

12. The Secretary of State also notes your reference to the previous limit on application of Requirement A3 which excluded a storey within the roof space. However, it should be noted that building work is required to comply with the Building Regulations in place at the time the work is carried out. The fact that an approach was considered reasonable in the past, either in the regulations or in associated guidance, is not sufficient in itself as a justification for it to remain acceptable. It is inevitable that what is considered reasonable will change with time.

13. It is the Secretary of State's view that the proposed building in this case will clearly have five storeys, albeit the fifth floor will not cover the full floor area of the building and, as it will consist of flats and apartments, the building will therefore fall into the Class 2B category of building classes as contained in Table 11 of Approved Document A. Requirement A3 will therefore be met by following the design guidance given for Class 2B buildings within Section 5 of the guidance, including that in BS 5628 – Part 1:2005 (Code of practice for the use of masonry). You also ask whether the floor areas of the rooms on the fifth floor could be reduced to a size whereby building Class 2A would apply, however this would not appear to be viable in this case.

The determination

14. 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.

15. As indicated above, it is the Secretary of State's view that the proposed building will be five storeys high and, as it will consist of flats and apartments, it falls within the Class 2B category of building classes as contained in Table 11 of Approved Document A. The Secretary of State has therefore concluded and hereby determines that your revised proposals, as submitted, do not comply with Requirement A3 (Disproportionate Collapse) in Part A (Structure) of Schedule 1 to the Building Regulations 2000 (as amended).