



## **Approved Document B 2006 - Single stairways - Residential uses Part 2**

Continuing the series considering the standards for single stair residential buildings including the changes brought about by the new Approved Document B 2006.

### **Single stair C Flats, maisonettes and houses in multiple occupation**

Paragraph 2.20 (a) (i) and 2.26 describes dwellings served by a single stairway. This type of building is unlimited in height. However paragraph 2.44 states that a stair may NOT connect with a basement.

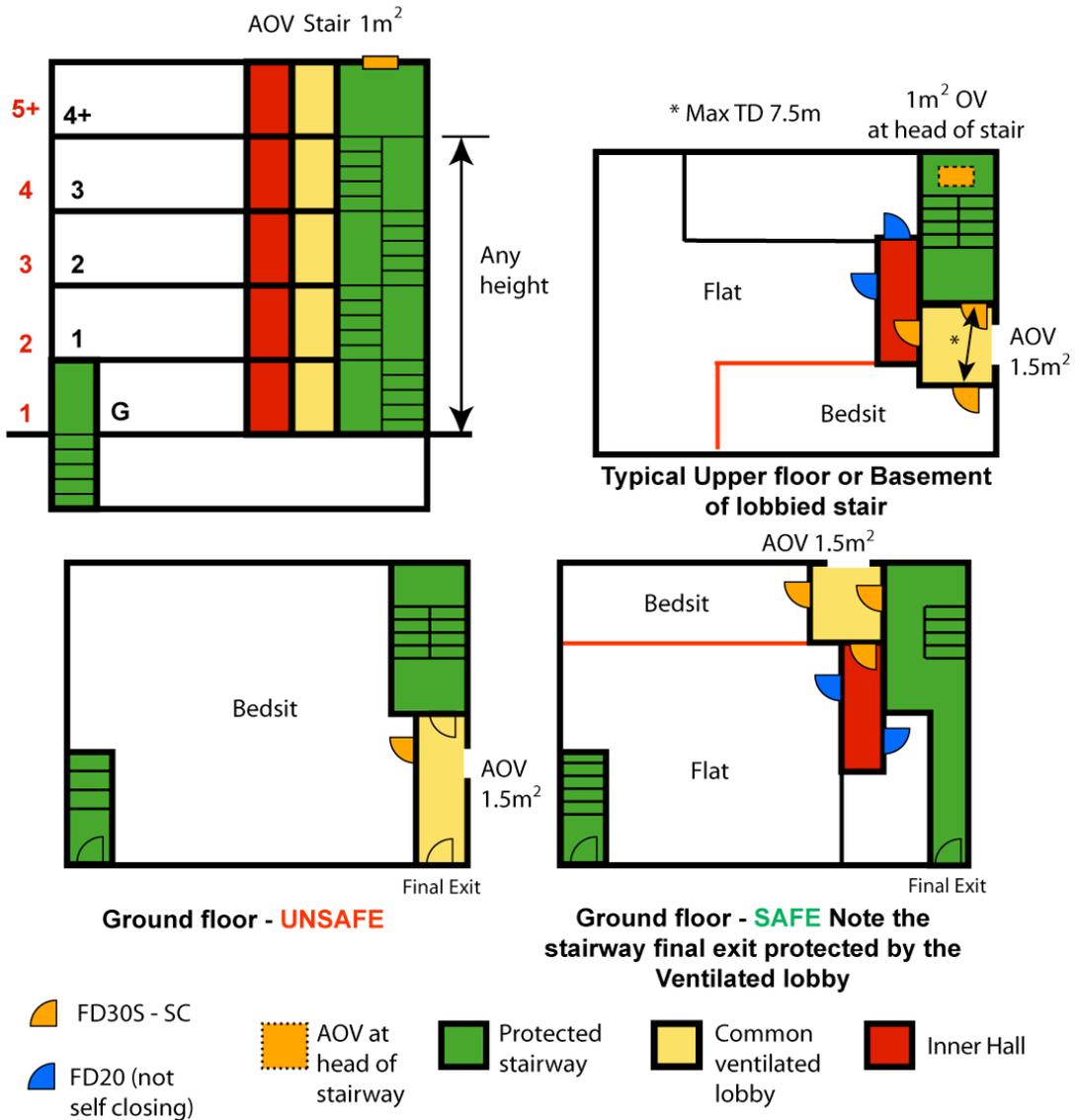
Stairway lobbies are ventilated to an extent of 1.5m<sup>2</sup> of Automatically opening ventilation (AOV). The new Approved Document B 2006 requires an AOV at the top of the stairway. Openable window ventilation at each storey level is no longer referred to. The theory is that smoke from a dwelling fire will take the path of least resistance and flow out of the lobby vent rather than into the stairway. The stairway AOV is an inlet air vent acting in a similar manner to the shaft vent system (see part 3 of this series previously issued).

The ventilated lobby cannot be located inside the flats as in category A buildings and serve also as the inner hall protection. Cases do however arise where the inner hall is not needed such as bed sits (where there are no inner 'habitable rooms', bedrooms etc).

### **The self closing devices debate**

The omission of self closing devices to inner halls and stairway lobbies (where the inner hall can be used to protect the stairway - single stair A below), has been questioned by some people as being a lowering of standards. However let's be honest - have we not been fooling ourselves that occupant of flats and houses keep these doors closed? Surely it is better to consider the reality and factor this into the design. I recall during the early part of my career in means of escape, a former tutor said to me that he thought we had made a mistake when we started to try to enforce self closing devices past the front door of the dwelling – how right he was. Human behaviour is something that we have to accept and build means of escape schemes around. It is reasonable to suggest occupants close doors at night when they are not in use, and try to encourage that as part of the bedtime routine, but during the day – lets now be realistic.

**C**



**C - Single stair unlimited height. Basement connection NOT permitted**

Automatic Opening Vent (AOV) 1m<sup>2</sup> at head of stair.  
Automatic Opening Vent (AOV) to lobby 1.5m<sup>2</sup>.

ADB 2.20 (a) (i) and 2.44. Ventilated Lobbies req'd by 2.26.

**Ancillary accomodation** – See item 4 under Generally at the end of the article.

**Single stair D Flats, maisonettes and houses in multiple occupation**

This category has now been removed from Approved Document B 2006. It referred to a system where the vent lobby was located at dead end portions of the floor area.

**Lobby arrangement at Ground level**

The layout of the lobby at Ground floor level is different from the upper floors. The important point is that the whole of the escape route to the street from the stairway is protected by the lobby, as shown in the illustrations above. This is probably one of the most common errors made by applicants. This is emphasised in the new Approved Document 2006 by specifically referring to the need to lobby final exits from stairs.

## Generally

The usual requirements apply in respect of the following:-

1. Self contained early warning smoke detection provided in each dwelling to BS 5839-6:2004 at least Grade D LD3 standard, with a standby power supply. A higher standard of system and a backup power supply is now a requirement of Approved Document B 2006 (ADB 2006 Vol. 2 - 1.4 and 1.5).
2. Travel distances are complied with (9m in entrance hall – bedsits, HMO's restricted distance in rooms (9m in bedrooms, 18m in other rooms) but no restriction for any rooms in flats and maisonettes unless bedsits) (ADB 2006 Vol. 2 - 2.13, 2.14 and 2.16).
3. Access to ancillary accommodation is addressed\*.

\*Approved Document B 2006 Volume 2 suggests that ancillary accommodation cannot open into the stairway or ventilated lobby (paragraph 2.30), however BS 5588: Part 1 does permit a connection with the common escape routes provided it is not on the same floor as residential accommodation (19.1.2) and maintains ventilated lobby separation (14.6.2 c) and d). This code generally states ventilated lobby separation is needed for car parks and 'higher fire risk areas' for multi and single stair situations, but as we are dealing with only single stair situations here it is clearer to say that the 1.5 m<sup>2</sup> shaft ventilated lobby protection is needed for all connections whether low or high risk ancillary accommodation, but they should not be on the same level as residential uses.

2.40 of Approved Document B 2006 Vol. 2 permits electricity meters in single stairways provided they are enclosed with fire resisting construction within a secure cupboard. Paragraph 24 of BS 5588: Part 1 covers gas.

Where buildings exceed four storeys, the Approved Document to H 6 (item 1.6) of the Building Regulations recommends that a common refuse chute can be used as a means of refuse disposal. Approved Document B 2006 5.55 recommends refuse chutes and rooms are not located in the stairway or common lobby. However it is unclear from this document how access can be provided to the building, apart from inside an apartment. However BS 5588: Part 1 clarifies this in item 21.2 c) and states the refuse chutes or rooms containing refuse storage can access a common lobby via a further small lobby having a 0.2m<sup>2</sup> permanent ventilation.

## Next

This amendment to Part 2 completes the updating of the single stair residential series. The entire series can be downloaded from the archive website:-

<http://moebuildingcontrol.co.uk/thefirecolumn.html>

In the next article I will be starting to look at more amendments to Approved Document B.