

**Hywel Davies**Chair of the Building Regulations
Advisory Committee

Department for Levelling Up, Housing and Communities Fry Building 2 Marsham Street London SW1P 4DF

Lord Stephen Greenhalgh
Minister of State for Building Safety and Fire
Department for Levelling Up, Housing and Communities
Fry Building
2 Marsham Street
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25th March 2022

# Dear Lord Greenhalgh

### Safety on staircases

I am writing on behalf of the Building Regulations Advisory Committee (BRAC) with our advice on two aspects of staircase safety following our meeting with you on 16th March. We discussed the proposed amendment to the Building Safety Bill to reference BS 5395-1 Stairs – Part 1: Code of practice for the design of stairs with straight flights and winders. We also discussed stairs in tall residential buildings.

We recognise the concern about trips and falls on staircases and significant number of deaths and serious injuries due to these incidents. We agreed that it is more appropriate to seek to address this problem through Building Regulations and associated Statutory Guidance than in primary legislation. Part K of the Building Regulations covers protection from falling, collision and impact. Requirement K1 specifically addresses safety and usability of stairs, ladders and ramps, including handrails. The guidance for requirement K1 already cites BS 5395-2 and 5395-3 for spiral and industrial staircases respectively.

BS 5395-1 was fully updated in 2010, has been reviewed every five years and remains current. The British Standards Institution supports key material from the standard being incorporated into the Statutory Guidance in Approved Document K (AD K). Additional industry guidance produced by the National House Building Council (NHBC). In the interests of expediency BRAC recommends a focussed review of AD K section 1. Further detail on the potential scope of a review of AD K is set out in Annex 1.

#### Staircases in tall buildings

We discussed concerns over proposals for tall residential buildings with single staircases. The committee shares these concerns and agrees that such proposals are highly unlikely to be able to show compliance with the current Regulations. Nor do we think they are consistent with the arrangements that you are steering through parliament. Proposals for new higher risk buildings (HRBs) must meet the Building Regulations and also be submitted to Planning Gateway One. Local planning policies will also need to be considered (e.g. London Plan Policies D5 Inclusive Design and D12 Fire Safety). These proposals will also come fully under the new regime for HRBs and have to pass through Gateways 2 (design) and 3 to obtain a certificate of occupation.

All new HRBs must show full compliance with the functional requirements of the Building Regulations. Functional requirement B1 stipulates that the building must be designed with appropriate means of warning and escape. Requirement B5 stipulates that the building must be equipped with appropriate provision to assist firefighters in the protection of life. Whilst both volumes of AD B give guidance to support the requirements, the Statutory Guidance clearly states that it is for "common building situations and that compliance with the guidance set out in the approved documents does not provide a guarantee of compliance with the requirements of the regulations because the approved documents cannot cater for all circumstances, variations and innovations". The Manual to the Building Regulations provides further detail where responsible designers should look. The committee questioned whether all tall residential towers could be treated as a common building type to which the guidance in the ADs is applicable.

BRAC share your view that proposals are coming forward which seem to be based on an incorrect understanding and selective reading of the Approved Documents and lack the necessary robust evidence to demonstrate compliance with the functional requirements of the Building Regulations. In particular we are concerned that (HRBs) might be designed on the incorrect premise that the guidance in the ADs is adequate for all tall buildings and offers a 'deemed to satisfy' approach.

To address concerns that some still seek to interpret the regulations or statutory guidance or both to suit their purposes, **BRAC recommends that you write to building control bodies, local authorities and the wider industry**, reminding them that all building projects must show compliance with the full Building Regulations and stressing that the Statutory Guidance and the further guidance in the Manual to the Building Regulations (which was revised in 2020) is intended for common types of building. In your letter you may wish to say that you would not expect ADB alone to justify single stair designs on tall buildings and that the relevant building control body should consider seeking (from those responsible for the building) relevant fire engineered solutions.

Where proposals are not for common building types then building control bodies should be clear about that view from the earliest opportunity and emphasise that a more rigorous approach to design and to evaluation of compliance, particularly for fire and structural safety, are required.

**BRAC recommends that this departmental letter is issued without delay,** to alert industry to the need for robust design and compliance checking by suitably competent professionals, particularly in relation to fire and structural safety issues. This can be prepared by the Technical Policy Team, who can advise on the detailed procedure, and issued quickly, without the need for consultation. Further details of the ongoing review of Part B review and the research into means of escape are set out in Annex 2.

Thank you for meeting with us last week and we look forward to seeing you when BRAC next meets, in Marsham St. on 10<sup>th</sup> May.

Your sincerely,

Myrel Davies

Dr Hywel Davies CChem CSci MRSC

Chair of the Building Regulations Advisory

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## Annex 1: Considerations for review of Approved Document K

- 1. BRAC recommends that that any changes to legislation on staircases should not be through primary legislation, because changes need to undergo regular analysis of the evidence. It is far easier to update a statutory Approved Document than primary or even secondary legislation.
- 2. BRAC recommends that Approved Document K (AD K) should be reviewed. There are two options for the review:
  - A targeted review of AD K to consider the shape and size of staircases (and provision of handrails) only.
  - A fuller review of AD K to consider stairs and handrails and to include any other safety issues such as glazing.
- 3. The first option will be quicker and less resource intensive. However, there are concerns relating to glazing that have safety implications and will need to be addressed at some point and a fuller review would facilitate that. A "best of both technical worlds" option would be to conduct a full review but to prioritise the staircase issues. Officials will be able to advise on the procedure and timeline more fully, having regard to other issues that may require consultation in the near future and resources available.
- 4. Any proposed changes to AD K will require consultation with BRAC and a formal public consultation. They will also require development of an impact assessment which will need to consider potential reduction in falls that might be anticipated from improvements to new dwellings (and relevant extensions to existing buildings) and associated costs.
- 5. The review of AD K would also need to consider the ongoing review of AD M (access to and use of buildings) and consider any insights gained from the current research commissioned for the AD M review, including demographics, mobility levels and prevalence of ambulatory impairment.
- 6. AD K already refers to the British Standard and these could be expanded, if appropriate, and key elements of the BS brought into the Statutory Guidance.
- 7. Expectations do need to be managed. Although the numbers of accidents from falls on stairs are high, some 700 a year, the proportion from newer homes will be a lot lower. Given the ONS statistics on the age of those who fall on stairs and that changes to AD K will only affect 2% of the building stock each year, methods to improve staircases and associated handrails in existing homes should also be sought through other relevant mechanisms, such as the Housing Health and Safety Rating System (HHSRS), community health and social care visits and the NFCC Community Risk Programme. This will require further investigation in developing the consultation proposals.
- 8. Adopting the RoSPA recommendations would increase the length of a typical stairwell by 400mm, which would require most housebuilders to modify standard designs. Early indications are that given a regulatory approach that applies across the whole sector and a reasonable transition period to allow for designs to be modified this would be accepted.
- 9. Greater standardisation of staircases may lead to supply side benefits, although this will need to be tested during the development of the impact assessment.
- 10. Changes to AD K need to consider the work on accessible and adaptable housing for older and disabled people and wheelchair users under Part M of the regulations.

## Annex 2: Technical Review of Approved Document B

- 1. Under the 'Approved Document B Technical Review' the Department is currently undertaking focussed research on means of escape in blocks of flats, which aims to provide the necessary evidence before proposing any changes to the guidance with regards to fire safety and stair provisions. The report is due by the end of 2022.
- 2. Research into whether the relevant provisions in ADB on means of escape for disabled people are fit for purpose, grounded in realistic expectations of management and building use, recognise up to date evidence and are effective in meeting the minimum requirements under Schedule 1 Part B1 of the Building Regulations 2010 is also underway. The report is due to be submitted shortly.
- 3. BRAC are actively involved in this research and the wider technical review through the Part B fire safety working group. Once the evidence is available and published it will be incorporated into the Part B review.
- 4. The technical policy team recently submitted a full schedule of the ongoing research being undertaken for the technical review and the timescales for reporting.
- 5. BRAC strongly recommend early publication of the research findings, in particular the findings on means of escape for disabled people, to inform disabled residents and to enable industry and responsible designers to draw upon the findings when forming their designs. It will also inform review of other relevant standards and guidance.
- 6. Other international guidance, e.g. by the International Building Council or National Fire Protection Association, covers very tall buildings specifically, and could also be consulted by designers in the interim.