

Fire safety approach for other residential

Building Standards Guidance Note 1

Purpose & introduction

Purpose

This Guidance Note gives guidance on considerations to be made when assessing compliance with Requirements B1 - B5 for Other Residential uses.

Introduction

The guidance in Approved Documents B is often proposed to be used in part to justify certain aspects of fire safety in a design without reflecting whether the whole proposal has followed all the guidance or whether not AD B is the appropriate guidance to follow. Typically, the designer may use AD B to justify not providing sprinklers in a building over 30m, where one or a combination of the following features can be found:

- The rooms have increased risk through cooking facilities;
- There has been extension of travel distances; and/or
- The building has mixed use features.

This guidance note gives some consideration to make in deciding what is an acceptable approach.

General points for preliminary discussions with design team

The client should be made aware and understand where a hotel over 30m fully meets the guidance in AD B and has no suppression it is likely that the fire brigade will strongly object through the statutory consultation.

Although we would be able to support the approval of the scheme contrary to the Fire Authorities advice this will have implications when the building is operation that they are accountable for.

On speculative builds has the developer considered Brand standards in developing their requirements for the design?

Hotels (not apartment hotels) 11m+

AD B is only considered appropriate guidance if it is followed in its entirety and no variations are proposed.

In other circumstances, including conventional hotels incorporated in a mixed-use building or a hotel to be constructed using modern methods of construction, it would generally be expected that a fire strategy would be developed based on BS 9999, BS 9991 or fire engineered in accordance with BS 7674.

It should be noted that rooms that are specifically designed as accessible, additional consideration would need to be made for the potential significantly increased pre movement time.

The heading for this section is Hotels (not apartment hotels) 11m+, despite the threshold for sprinklers in the guidance being 30m, this is because 11m is the maximum height for a single stair building. If this guidance is not followed and a single stair hotel over 11m in height is proposed AD B would be inappropriate to substantiate any other aspect of the proposals fire safety.

Apartment Hotels / Student Accommodation

AD B is not appropriate guidance for the fire precautions in these buildings. Also "hybrid" solutions developed using clauses from a mix of guidance is not appropriate. It is often the case a narrative strategy will be developed in part based on BS 9991 and part BS 9999 for this type of use. The Fire Authority will object to this "hybrid" solution. As a consequence, the design team should be advised against a "narrative hybrid strategy" and to either base the design on only one of BS 9991 or BS 9999 or to fully fire engineer the design to BS 7674, the first stage of which would be to carry out a Qualitative Design Review for consideration.

For both uses the guidance in AD B that allows Other Residential uses over 30m to not have sprinklers is inappropriate as we do not believe the requirement will be met for the increased risk presented by these types of occupations.

Provision of cooking facilities

If the initial positioning of cooking appliances does not follow guidance and is not sited away from the escape routes. The acceptability of the positioning will be dependent on several design factors:

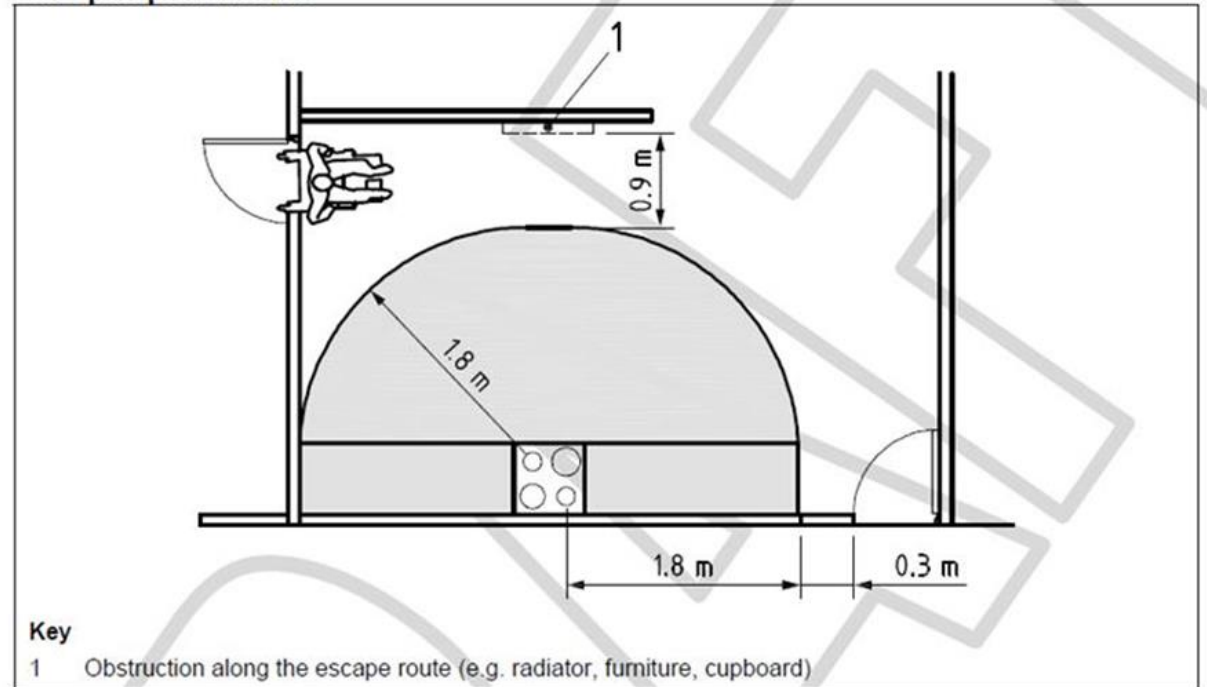
- General suppression provision;
- Potential use of cooker hood suppression;
- Automatic cut off; and/or
- Provision of radiant heat calculations.

It would be expected that the position will give at least 1.8m clear plus 900m route space. The Draft BS 9991 had a useful diagram that is likely to be commonly referred to if it is carried through to the final version.

Guidance

(Note the 300mm leading edge consideration for people with disabilities)

Figure 1 – Minimum separation distances of cooking facilities from escape routes in an open plan kitchen



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