

IN CONFIDENCE

OFFICE OF THE DEPUTY PRIME MINISTER

**BUILDING REGULATIONS ADVISORY COMMITTEE
PART B WORKING PARTY**

INCLUSIVE DESIGN

PURPOSE OF PAPER

- 1 The purpose of this paper is to seek Members' support for a range of proposals covering provisions for disabled people.

BACKGROUND

- 2 With the requirements of Part M (Access and Use) and the Disability Discrimination Act the design of buildings to cater for people of all abilities has become increasingly significant. There is growing concern that the provisions for unrestricted access are not reflected in the provisions for escape in Approved Document B (AD B).
- 3 The current AD B suggests that it may not be necessary to incorporate special structural measures to aid means of escape for the disabled and that management arrangements to provide assisted escape may be all that is necessary. The guidance then goes on to refer to BS 5588 Part 8, which gives guidance on means of escape for disabled people.
- 4 More recently the Chief Fire Officers' Association (CFOA), in partnership with the Disability Rights Commission, Qequality and Salford University, held a Round Table Seminar on the issues surrounding the safety and means of escape of disabled people on 21 July 2004. The Seminar was attended by around 50 invited delegates representing a range stakeholder groups. Many of the issues raised in this paper were discussed by the delegates and this is reflected in some of the proposals.

MEANS OF ESCAPE

- 5 In practice most non-domestic multi-storey buildings are now provided with protected refuges, which are intended to allow disabled people to wait in relative safety for assistance. However there is often confusion as to the number and location of refuges and what other provisions of the British Standard should be incorporated in a building to satisfy building regulations.
- 6 This confusion was reflected in the comments made by respondents of the Forward Look. Many of the groups felt that one of the main difficulties is how people are assisted from the refuge to a final exit. This is generally regarded as a management procedure but there may be built-in solutions that could facilitate this process and therefore guidance was required.

- 7 **It is proposed that the Approved Document should, in addition to referring to BS 5588 Part 8, incorporate guidance on measures that may be necessary to facilitate the evacuation of disabled people in the event of fire. This should be included, where possible within the general guidance for means of escape rather than in a separate section.**

MANAGEMENT

- 8 Members will recall paper PTBWP(04)P11 which addressed fire safety management. It was agreed that guidance should be included in the approved document to address how the interaction between building design and building management could be considered and the need to adequate provision of information.

FIRE ALARMS

- 9 Impairment of hearing does not mean that a person is completely insensitive to sound. Many people with severe impairment have sufficiently clear perception of some types of conventional audible alarm signals to require no special provision for warning of fire. There will be, in some situations, other people present who can alert those with impaired hearing to the need for evacuation, and in this case it might be necessary to put procedures in place that rely upon others to provide the necessary warning.
- 10 However, in circumstances, such as buildings with a significant number of people with impaired hearing, buildings in which one or more persons with impaired hearing work in relative isolation, and buildings in which one or more persons with impaired hearing tend to move around the building to a significant extent, additional means of giving warning to people with impaired hearing might be appropriate.
- 11 Clause 18 of BS 5839 Fire detection and fire alarm systems for buildings: Part 1: 2002 provides detailed guidance on the design and selection of Fire alarm warnings for people with impaired hearing.
- 12 **It is proposed that guidance is provided in the Approved Document such that where it is expected that a significant number of people with impaired hearing or where one or more persons with impaired hearing may work in relative isolation that a suitable method of warning is provided in accordance with BS 5839 Part 1.**

FINAL EXITS – LEVEL THRESHOLD

- 13 To ensure adequate provisions for access to a building Part M provides that entrance doorways have level thresholds. However this provision does not apply to final exit doors which are not used for general access and circulation. It is not uncommon for escape routes at ground floor level which are otherwise free of obstacles to end at an exit door leading on to one or two steps thus impeding the escape of people who are unable to traverse steps unaided.
- 14 **It is proposed that the Approved Document is amended such that final exits which can be accessed without the need to traverse steps are provided with a level threshold.**

DOOR CLOSERS

15 Hold open devices etc.

REFUGE SIZING/PROTECTION

- 16 There are a number of alternative strategies suggested in BS 5588 Part 8 for providing means of escape from the upper stories of a building for those people who are unable to traverse a stairway unaided. Each of these includes some form of "intermediate place of safety" where it is safe to wait for assistance. It is common practice for most buildings to include refuge spaces within the enclosure of protected stairways.
- 17 Whilst in many cases this approach can be adequate this approach assumes a relatively low population of disabled persons. In situations where a larger proportion of the buildings population are unable to use a stairway then another strategy, such as subdivision of the storey into sub-compartments may be appropriate.
- 18 Where the circumstances of a building changes it may be necessary following a suitable risk assessment to carry out building work in order to meet the needs of disabled people.
- 19 **It proposed that the Approved Document provides guidance a range of escape strategies and that it warns the reader that changes in circumstance may result in the need for additional measures.**

20 COMMUNICATIONS

- 21 In order to effectively manage the assisted evacuation of people from refuges BS 5588 Part 8 recommends the provision of a suitable fixed communication system. This allows communication between the occupants of a refuge and management staff. This also provides confidence to people waiting in refuges that they have not been forgotten and that help is on the way.
- 22 BS 5839: Fire detection and fire alarm systems for buildings: Part 9: 2003 provides guidance on the design, installation, commissioning and maintenance of emergency voice communication (EVC) systems. This standard includes two types of outstation;
- Type A* – an outstation using a telephone-style handset for voice communication, so that the user's mouth and ear can be as close as possible to the microphone and ear-piece, respectively.
- Type B* – an outstation using an intercom-style fixed microphone and adjacent loudspeaker, normally mounted on a wall or other vertical surface.
- 23 **It is proposed that the guidance in the Approved Document should include the provision of an emergency voice communication system for buildings where the design incorporates a need for disabled people to wait for assistance. The EVC System should consist of Type B outstations which communicate with a master station located in the building control room (where one exists) or adjacent to the fire alarm panel.**

USE OF LIFTS

Fire Fighting Lifts

- 24 In most buildings with a floor more than 18m above ground level, fire-fighting lifts are provided. These lifts incorporate measures to ensure their safe use in the event of a fire. In the past there have been a number of cases where Building Managers have been discouraged from incorporating fire-fighting lifts into their strategies for evacuating disabled people.
- 25 **It is proposed that the Approved Document confirms that fire-fighting lifts can be used as part of a strategy for the evacuation of disabled people.**

Conventional Lifts

- 26 In discussion the use of lifts at the round table seminar (Para 5 above) some delegates felt that there were circumstances where conventional lifts which do not incorporate any special measures for use in the event of a fire, could still be used to evacuate disabled people. This would be subject to a pre-planned procedure incorporating a dynamic risk assessment.
- 27 There was support for this approach and it was felt that, whilst such procedures would not necessarily be addressed under building regulations, Approved Document B, which currently precludes the use of such lifts for means of escape, could be amended so as to differentiate between what was acceptable in design terms and what could be done procedurally.
- 28 **It is proposed that the Approved Document is amended to ensure it does not unduly discourage the use of conventional lifts for the evacuation of disabled people where a suitable procedure is in place.**

Evacuation Lifts

29 Not sure what to say here

30 **It is proposed that the Approved Document is....**

BRAC Part B Working Party Secretariat

27 August 2004