Public Guidance Note Licensing Act 2003 - Assessing maximum safe occupancy figures in licensed premises

1. Introduction

1.1 This Guidance has been prepared with the objective of providing guidance in assessing the maximum safe occupancy in licensed premises.

1.2 The guidance is relevant for persons who are considering applying for a licence under the Licensing Act 2003. The information in this guidance cannot cover every issue therefore you may need to refer to the guidance documents listed.

1.3 This guidance is primarily intended for:

- single storey
- normal risk premises
- maximum occupancy in the region of 500 people

1.4 For premises outside the above criteria it is advised that professional advice be sought from a suitably qualified fire safety expert who will supplement this guidance.

2. Assessing maximum safe occupancy figures

2.1 The Licensing Act 2003 identifies four key objectives, one of which is Public Safety. BY VIRTUE OF THIS OBJECTIVE, IN A LICENSED PREMISES, IT IS IMPERATIVE THAT THE FIRE RISK ASSESSMENT CLEARLY IDENTIFIES A MAXIMUM SAFE OCCUPANCY FIGURE (INCLUDING STAFF). Procedures must be put in place to ensure the maximum safe occupancy is not exceeded and evidence should be available to show that staff have received relevant training in respect of such procedures. In certain circumstances it may be necessary to identify occupancy figures for specific areas e.g. a mezzanine floor.

2.2 Calculating maximum safe occupancy figures may not always be a straightforward process depending on the size and layout of the premises concerned. This document provides guidance on the basic principles involved; however, as this matter is vital to the safe operation of licensed premises. IF ANY DOUBT EXISTS OVER THE ACCURACY OF SUCH CALCULATIONS, A SUITABLY QUALIFIED FIRE SAFETY EXPERT SHOULD BE CONTACTED.

2.3 If the Fire and Rescue Service audit your risk assessment and do not agree with the

maximum safe occupancy figure identified, enforcement action under the provisions of the Workplace Fire Precautions Legislation may be brought alongside a request to review the status of the licence to the Licensing Authority.

2.4 **If your premises has previously been issued a Public Entertainment Licence it may be advisable to use the occupancy figures specified as a condition of that licence unless you are planning to make alterations to the premises and the fire risk assessment can adequately justify any increase.**

2.5 When calculating maximum safe occupancy figures consideration must be given to the following:

- The usable floor space (and how this floor space is used e.g. seating, dancing etc)
- The location of designated fire exits
- The width of designated fire exits (and routes leading to and from them)
- The expected evacuation time (determined from the forgoing sections)
- The need to always discount the largest exit/s from the final calculation (as it has to be assumed that the fire may block these exits)

3. Usable floor space

3.1 Consideration should be given to how the floor space is used.

Use of room	Occupant load factor (m^2 per person)
Area for standing	0.3
Amusement Arcade, assembly hall, bingo hall, dance hall, venue for pop concert queuing area	0.5
Bar	0.3 to 0.5 *
Bowling alley, snooker room	9.3
Conference room, dining room, restaurant	1.0 to 1.5 *

** Depending on the amount of seating and tables provided*
** For guidance on seating layouts in theatres, cinemas and at sporting events the documents listed should be referenced*

3.2 The capacity of your premises can be easily determined by measuring your usable floor area (excluding toilets etc) and dividing that by the appropriate floor space indicated above (it is sometimes necessary to use different occupant load factors for different parts of the SAME room).

- E.g.150 square metres divided by 0.3 (busy public house with no seating) = potential capacity of 500 people.

3.3 This above calculation gives an indication of the potential occupancy. **It is more important to ensure that sufficient fire exits are provided** to safely allow all the occupants to escape within the two and a half-minute period (for normal fire risk areas)

4. Location of designated fire exits.

4.1 Designated fire exits should be as widely spaced as possible so as to allow occupants to turn their backs on the fire and to proceed in the opposite direction to a place of safety. Exits from the premise should lead via distinct and separate routes; a number of exits which discharge into a common area cannot be regarded as alternative to each other. In all but the smallest licensed premises (small take-away or off-licence) a minimum of two well-spaced exits are normally required.

5. The width of designated exits.

5.1 The width of an escape route determines the number of people that can safely be expected to use it. Each designated exit should be assessed based on the following guidance (Alternative guidance exists in The Building Regulations 2000, Approved Document B: Fire Safety)

Exit Capacity - number of people (this is based on evacuation time of 2.5 minutes at a flow rate of 40 people per minute)			
Per **unit** of exit width			Maximum number for one exit (4 units=1950mm+)
1 unit (525mm)	2 units (1050mm)	3 units (1500mm)	
100	200	300	400

- The normal minimum width of a single exit door should not be less than 750mm.
- Revolving doors should not be considered in the calculation of available exit widths.
- Fire exit doors should normally open in the direction of escape unless they are to be used by less than 60 people.
- When only one exit is available from the room, tier, or storey, a maximum of 60 persons may be accommodated.
- It should be noted that exit doors which may be utilised by wheelchair users require a minimum width of not less than 900mm.

6. The need to discount at least one designated fire exit.

6.1 When an assessment of exit capacity for each individual designated exit has been undertaken, it would appear that the final maximum occupancy figure should be obtained by adding together these totals. THIS WOULD NOT PROVIDE AN ACCURATE SAFE OCCUPANCY FIGURE, AS IT DOES NOT ALLOW FOR THE FACT THAT ONE (OR MORE) EXITS MAY BE UNAVAILABLE FOR USE DUE TO THE LOCATION OF THE FIRE. Therefore it is essential that, prior to calculating the total figure, the number of people expected to use the largest exit (and any exits in close proximity) be discounted from the final total.

7. Examples.

Example 1 For a normal risk building with 3 * well separated designated fire exits:

Capacity of Door A (750mm)	= 100 people
Capacity of Door B (1050mm)	= 200 people
Capacity of Door C (2200mm)	= 400 people (THIS EXIT EXCLUDED FROM CALCULATION)
Total Maximum Safe Occupancy Figure	= A + B
	= 100 + 200
	= 300 TOTAL

Example 2 For a normal risk building with 4 designated fire exits (but Door A and Door D are not *well separated):

Capacity of Door A (750mm)	= 100 people (THIS EXIT EXCLUDED FROM CALCULATION)
Capacity of Door B (1050mm)	= 200 people
Capacity of Door C (1500mm)	= 300 people
Capacity of Door D (2200mm)	= 400 people (THIS EXIT EXCLUDED FROM CALCULATION)
Total Maximum Safe Occupancy Figure	= B + C
	= 200 + 300
	= 500 TOTAL

** Well separated: In lay terms this is taken to mean that two exits are far enough apart so that a fire can not make them both unusable*.

7.1 **The overriding factor when determining a maximum safe occupancy figure is the capacity of the designated fire exits, regardless of the floor area available.** Therefore, as a general principle, it is advisable to ensure the exit capacity matches the potential occupancy based on the floor space available. If it is not possible to achieve this (i.e. the floor capacity will accommodate a greater number of people than the exits will safely allow to escape within the designated time limit) then; IT IS ESSENTIAL THAT OCCUPANT NUMBERS ARE MANAGED TO THE SAFE CAPACITY DICTATED BY THE EXIT WIDTH CALCULATION.

8. Guidance documents.

- Fire Safety: An Employers Guide. ISBN 0-11-341229-0
- Guide to Fire Precautions in Existing Places of Entertainment & Like Premises. ISBN 0-11-340907-9
- British Standard 5588-11:1997-Fire Precautions in the design, construction and use of buildings code of practice for shops, offices, industrial, storage and other similar buildings
- British Standard 5588-6:1991- Fire Precautions in the design, construction and use of buildings code of practice for places of assembly
- The Building Regulations 2000, Approved Document B: Fire Safety
- District Surveyors Association guide – Technical standards for places of entertainment ISBN 0 953 1229 2 1