


A Thiru Moolan BSc (Hons) CEng MICE FRICS
Head of Building Control
London Borough of Wandsworth



Fire Safety in Buildings
Role of Building Control

Building Regulations

- Technical Requirements
- New Regulation 16B

Technical Requirements

- Approved Document B
- Alternatives – (e.g. BS5588 Pt1, BS9999)
- Fire Engineered Solutions

Requirements

- B1 - Means of Warning & Escape
- B2 - Internal Fire Spread (Linings)
- B3 - Internal Fire Spread (Structure)
- B4 - External Fire Spread
- B5 - Access & Facilities for the Fire Service

Requirement B1

Requirement

Limits on application

Means of warning and escape

B1. The building shall be designed and constructed so that there are appropriate provisions for the early warning of fire, and appropriate means of escape in case of fire from the building to a place of safety outside the building capable of being safely and effectively used at all material times.

Requirement B1 does not apply to any prison provided under Section 33 of the Prison Act 1952 (power to provide prisons, etc.).

Requirement B2

Requirement

Internal fire spread (linings)

B2. (1) To inhibit the spread of fire within the building, the internal linings shall:

- (a) adequately resist the spread of flame over their surfaces; and
- (b) have, if ignited, a rate of heat release or a rate of fire growth, which is reasonable in the circumstances.

(2) In this paragraph 'internal linings' mean the materials or products used in lining any partition, wall, ceiling or other internal structure.

Limits on application



Requirement B3

Requirement

Internal fire spread (structure)

B3. (1) The building shall be designed and constructed so that, in the event of fire, its stability will be maintained for a reasonable period.

(2) A wall common to two or more buildings shall be designed and constructed so that it adequately resists the spread of fire between those buildings. For the purposes of this sub-paragraph a house in a terrace and a semi-detached house are each to be treated as a separate building.

(3) Where reasonably necessary to inhibit the spread of fire within the building, measures shall be taken, to an extent appropriate to the size and intended use of the building, comprising either or both of the following:

- (a) sub-division of the building with fire-resisting construction;
- (b) installation of suitable automatic fire suppression systems.

(4) The building shall be designed and constructed so that the unseen spread of fire and smoke within concealed spaces in its structure and fabric is inhibited.



Simple Guidance

Approved Documents

- Standard solutions
- Common situations

BS 5588 Part 1 & BS 9999

- Cover wide spectrum
- Variety of solutions

Fire Engineered Solution

- May include compensatory features
- Assumptions must be reasonable
- Modelling based on agreed conditions
- Size of fire must be appropriate

Consultation with Fire Authority

- Carried out by Building Control Body
- Part of statutory process

Regulation 16B

- ◆ Applies to extensions and new buildings where the building affected will be covered by the Regulatory Reform (Fire Safety) Order 2005.
- ◆ The person carrying out the work must provide sufficient information for persons to operate and maintain the building in reasonable safety.
- ◆ The amount of information and level of detail necessary will vary depending on the nature and complexity of the building's design. Completion certificates not issued until confirmation is received.

Importance of key information

- Design principles
- Design assumptions
- Designed capacity
- Anticipated management regime
- Etc.

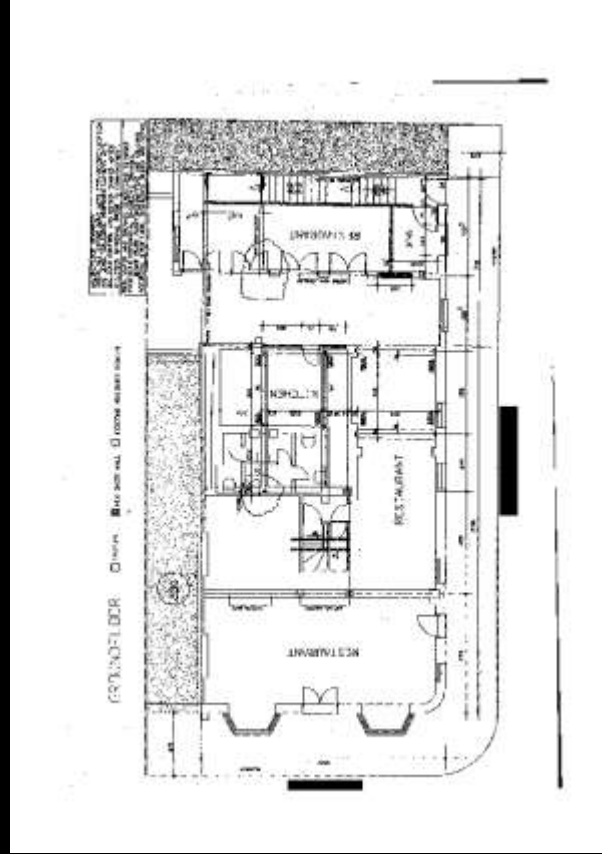
Case Study








Plans



A Thiru Moolan BSc (Hons) CEng MICE FRICS
Head of Building Control
London Borough of Wandsworth



Thank you

Questions later?