

Fire Prevention Section

Fire Safety Management of Shopping Centres with Covered Malls



Fire Safety Management

of

Shopping Centres with Covered Malls

Note:

This guidance is intended only as a summary of the subject. For further advice refer to Section 9 of BS 9999:2008.

1. Management

General

A large, crowded, shopping centre represents a significant potential for loss of life in fire. It therefore requires the highest standards of management to ensure that risks are anticipated and covered by the best possible systems for life safety and property protection. The one key factor that needs to be present if disaster is to be averted is adequate fire safety management.

Often, the one common element in multi-fatality fires is the failure of the occupants to take the right action when fire is discovered, or when the alarm is raised. Only effective management combined with adequate and appropriate training can ensure that the correct actions are likely to be taken.

The Management of the centre must also be aware of its statutory responsibilities under the Fire Services Act, 1981 (As Amended) concerning fire safety matters, including staff training and maintenance of the means of escape and fire safety systems.

Fire Safety Management Structure

The fire safety management structure should provide for:

- clear lines of responsibility, authority, accountability and resources;
- replacements during the absence of persons with specific responsibilities, and
- an emergency services liaison officer to call, and provide information to, the fire and rescue service.

The fire safety management structure should reflect changing work patterns or changing operational management structures, but frequent changes in responsibilities or procedures should be avoided.

Appointment of Fire Safety Manager and Other Fire Safety Personnel.

A competent person should be appointed as Fire Safety Manager. This person should be given sufficient stated authority, powers of sanction and resources to take responsibility for the day to day safety management of the centre and to ensure that essential repairs or maintenance are carried out.

The role of the Fire Safety Manager may be combined with other health & safety or security functions.

The Fire Safety Manager should appoint a Duty Safety Officer on every shift to be the key decision maker in responding to a fire incident. A Duty Safety Officer should be present at all times whenever the centre is occupied. The most appropriate person could be the senior operator in the control room who is likely to receive the most information about a fire incident. In the case of a fire incident, the Duty Safety Officer should hand over control to the fire service on their arrival but should be available to provide advice and other assistance on request.

Other fire and security personnel should be fully briefed as to the extent of their duties concerning fire safety matters. Guidance in relation to fire safety training is given in Annex O of BS 9999:2008.

The Fire Safety Manager should head a committee of senior staff responsible for the major facilities in the centre. These would include managers of the larger shop units, cinemas and other facilities. The purpose of the committee would be to review safety matters and exchange information on special events, changes in operations or proposals for physical alterations which could affect fire safety management.

The management of fire safety encompasses the entire life cycle of the building and includes:

- Day to day operation of the building;
- Changes to the building (e.g. material alterations / extensions / refurbishment);
- Changes of use;
- Units in disuse.

The responsibilities of the Fire Safety Manager include the following:

- Be aware of all the fire safety features provided and their purpose;
- Monitoring general maintenance and building / refurbishment works that might affect the fire safety provisions and ensuring that the building / refurbishment works have a Fire Safety Certificate prior to commencement of the works or that a 7 Day Notice has been lodged with the Building Control Authority at least 7 days prior to the commencement of the works;

- To maintain a register of Fire Safety Certificates and Compliance Certificates for all building / refurbishment works or material changes of use. This register to include shell and core, fit-outs and supporting documentation including smoke control systems;
- Be aware of any particular fire safety risks on the premises;
- Be in attendance whenever the building is occupied. In the absence of the Fire Safety Manager, a Duty Safety Officer must be in attendance;
- Liaise with and seek the advice of the Fire Authority;
- Liaise with and chair meetings with senior staff responsible for the major facilities in the complex;
- Ensure that public areas are suitably controlled;
- Ensure that tenants are appropriately briefed. This briefing to include the preparation and updating of a Tenant's Handbook (see below);
- Ensure that fire safety audits are carried out as necessary;
- Ensure that all necessary and appropriate communication systems are in place to deal with any fire incident;
- Identifying and reducing the likelihood of fire occurring;
- Training of personnel and maintaining training records;
- Inspection, maintenance and testing of potential hazards;
- Monitoring and maintenance of means of escape, evacuation procedures, monitoring the behaviour of occupants and adjusting plans accordingly;
- Maintaining access and egress and other special provisions for disabled people;
- Routine maintenance and testing of fire safety equipment, systems and procedures;
- Inspection, maintenance and testing of emergency communication systems;
- Agreeing the safe system of work for non-routine activities where these increase the risk from fire, including issuing hot work permits;
- The appointment of fire marshals / fire wardens;
- The development of the training policy for the building;
- Organising periodic audits to review:
 - current fire safety management procedures, and

- the effect of changes in personnel or in the usage of the building.
- Ensuring the effectiveness of automatic fire safety systems;
- Continuous safety system reviews and risk assessment;
- Monitoring and control of refurbishments and other building works;
- Carrying out checks prior to entry by members of the public;
- Maintaining emergency plans, including evacuation plans;
- Monitoring and reviewing the Fire Safety Manual;
- The main ‘everyday’ task is to attempt to avoid fires occurring, to work to create an environment in which fires are prevented from starting or, if they do, from developing beyond a very minor incident.

Public Areas

The intended spaciousness of public common areas could be exploited by unit managers introducing combustibles into the malls, for example, by extending sales displays beyond the line of the front of the unit. The management of the centre needs to be aware that any fire in a mall, given the opportunity for growth, threatens the safety of the public more than one which starts in a unit.

As a general rule, the Fire Safety Manager should ensure as far as possible that combustible materials are not introduced in mall areas. All proposals which include the addition or expansion of kiosks, stalls, etc, in the mall areas must comply with the Building Control Regulations, 1997 to 2009, and require that a Fire Safety Certificate or a 7 Day Notice must be submitted prior to commencement of the material alterations.

Tenant’s Handbook

It is important that tenants or concessionaires are integrated into the fire safety arrangements for the building and do not, and are not permitted to negate the fire safety arrangements for the centre. The Fire Safety Manager should advise all the tenants formally of the fire safety arrangements for the building. This information should be contained in a tenant’s handbook prepared by the Fire Safety Manager. The handbook should include information in respect of the following:

- Setting out requirements relating to:

- obtaining statutory permissions including fire safety certificates prior to carrying out any material alterations, including fit-outs, and/or material change of use, and
 - providing the Fire Safety Manager a copy of the Fire Safety Certificate and Compliance Certificate for any material alterations and / or material change of use.
- What to do to prevent fires occurring.
 - What to do in the event of a fire.
 - Issues relating to the use of sub-contractors e.g. for fit-out work.

Audit Procedures

An audit of the following should be undertaken as a matter of routine or when significant changes to personnel who have fire safety responsibilities:

- Current fire safety management procedures, and
- The effectiveness of automatic fire safety systems.

The findings of the audit should be included in the fire safety manual. The audit may be part of the testing of the fire safety manual.

Communications

The potential for loss of life in fire is greater in large crowded complex buildings. Effective communication is therefore an essential part of successful fire safety management.

The Fire Safety Manager should ensure that all necessary and appropriate systems of communication are in place to deal with any incident, including both equipment and chains of command. Issues that should be addressed include:

- The communications structure, in particular where there is a cascade decision process involving a number of levels of management, or when it is intended to investigate fire alarms before sounding warnings, or if control room staff are taking decisions based on many channels of information;
- The need for testing and auditing the communication systems as part of the testing and auditing of the overall fire safety procedures;
- The need for routine maintenance and testing of communications;

- Alternative formats and systems to provide for blind and partially sighted people, and people who are deaf and hard of hearing;
- The use of communication systems in the early stages of a fire to inform disabled people of the situation and any appropriate routes to use, and
- Contingency planning e.g. for abnormally high numbers of persons in the premises, for absent staff or for equipment failure.

Fire Safety Manual

The design of the centre needs to be documented for the benefit of the fire safety management of the premises. All relevant information should be included in a fire safety manual. The manual needs to set out the basis on which the fire safety design was planned, the type of management organisation envisaged for running the centre, and the consequential staff responsibilities. It also needs to explain the operation of all the mechanical and electrical systems and to give information on routine testing and maintenance requirements. The assumptions made at design stage regarding these aspects should be recorded in the manual.

Guidance in relation to the Fire Safety Manual, its contents, use and upkeep is provided in Annex H of BS 9999:2008.

Other Fire Safety Aspects

Section 9 of BS 9999:2008 provides guidance in relation to the following matters:

- Fire Prevention including Housekeeping / Crowd Control / Arson / Conflicts between Security and Means of Escape;
- Ensuring that Systems Respond Properly in an Emergency;
- Planning the Response to a Fire including The Fire Routine / Fire Control Centre Functions / Evacuation Management / False Alarms / Contingency Planning for Business Interruption;
- Emergency Actions including Action on Discovery / Warning and Evacuation Signals / Calling the Fire and Rescue Service / Evacuation Procedures / Fighting the Fire;
- Evacuation of Disabled People

2. New Works / Alterations, including Fitting-Out by Tenants

- 2.1 Minor alterations to building design can have a significant influence on the effectiveness of the fire safety strategy for the building. Any intended refurbishment or upgrading of the building needs to be referred to the Fire Authority with full details of what is proposed.

Material alterations and material changes of use must comply with the Building Control Regulations, 1997 to 2009 and the Building Regulations, 1997. A Fire Safety Certificate must be obtained or a 7 Day Notice must be submitted to the Building Control Authority prior to commencement of material alterations, including shop fit-outs, and material changes of use.

The application for a Fire Safety Certificate and 7 Day Notice should include a statement by a person who is registered under Parts 3 or 5 of the Building Control Act, 2007 or is a Chartered Engineer, that he/she has reviewed the fire safety strategy for the building and appropriate previously granted fire safety certificates for the building and stating if and to what extent the proposal conflicts with the strategy and setting out the proposed ameliorative measures, if any.

Note: For further guidance refer to 'Advice to Applicants on Making a Valid Fire Safety Certificate Application' available from Dublin City Council / Dublin Fire Brigade Fire Prevention Section.

- 2.2 Prior to the commencement of works (e.g. alterations / fit-outs) the management of the shopping complex should:
- (a) seek from the tenant a copy of the Fire Safety Certificate or in respect of a 7 Day Notice, the acknowledgement from the Building Control Authority (i.e. the Local Authority) and retain such copy on its register, [Note: In a shopping complex it is an offence to commence works, to which Part B of the Building Regulations apply, in the absence of a Fire Safety Certificate or a valid application for a 7 Day Notice.], and
 - (b) satisfy itself (and the Building Control Authority / Fire Brigade, if necessary) that the proposed works are likely to be:
 - (i) compliant with Part B of the Building Regulations, and
 - (ii) do not undermine the fire safety strategy for the shopping complex or the unit in question, or the provisions of previously granted fire safety certificates and conditions attached to them.
- 2.3 Given the life safety, technical and complex issues involved, it is advised that the management of the shopping complex engage a competent fire safety consultant who is registered under Parts 3 or 5 of the Building Control Act, 2007 or is a Chartered

Engineer and who is familiar with the fire safety strategy of the complex, to advise it and certify (if appropriate) in respect of paragraphs 2.1 and 2.2 above.

- 2.4 It is acknowledged that due to the pressure of commercial interests that stalls and kiosks may be introduced and located within the malls of shopping centres.

In order to bring flexibility to the use of the mall space in a controlled manner, a Fire Safety Certificate should be submitted for a generic layout proposal for use of the mall.

It should provide a simple plan of possible, transient, kiosks & stalls that would give the shopping centre management a template to work from of what may be put into the mall. Calculations should be done to quantify the fire loads (the kiosk /stalls) and possible locations specified, whilst staying within the existing design parameters of the shopping centre fire safety strategy.