



# Capital Development Guideline — Series 7

## Fire Risk Management Policy and Procedures

Multi-storey Residential Buildings

Fire Risk Management — 2013

7.9





# Capital Development Guideline — Series 7

## Fire Risk Management Policy and Procedures

Multi-storey Residential Buildings

If you would like to receive this publication in another format, please phone 1300 650 172 using the National Relay Service 13 36 77 if required, or email [fireriskmanagementunit@dhs.vic.gov.au](mailto:fireriskmanagementunit@dhs.vic.gov.au)

This document is also available on the Internet at [www.dhs.vic.gov.au](http://www.dhs.vic.gov.au)

### Acknowledgments

© Copyright State of Victoria 2013.

This publication is copyright. No part may be reproduced by any process except in accordance with the provisions of the *Copyright Act 1968*.

Authorised and published by the DHS – Fire Risk Management Unit, Property & Asset Services, Corporate Services Branch, Department of Human Services, Victorian Government.

Design and production by DHS – Fire Risk Management Unit.

ISBN: 978-0-7311-6604-6 (print)

ISBN: 978-0-7311-6604-6 (online)

July 2013 (1501112)

The following persons and/or organisations are represented on the Project Control Group (PCG)

ARUP Fire

Barry M Lee OAM

Country Fire Authority Victoria (CFA)

Design Guide Building Surveyors Pty Ltd

Department of Health

Department of Human Services, Fire Risk Management Unit

Engineers Australia – Society of Fire Safety

Exova Warringtonfire (Aust) Pty Ltd

Fire Protection Association Australia

FM Global

International Fire Protection Pty Ltd

K&L Gates - Real Estate Group

Lehr Consultants International (Australia) Pty Ltd

Metropolitan Fire and Emergency Services Board (MFB)-Victoria

Skip Consulting Pty Ltd

The Department of Human Services and organisations or individuals involved in or consulted in the preparation of these documents make no representation that the Guidelines are suitable for any particular situation, and accept no responsibility for any death, injury, loss or damage arising out of any decision to apply the Guidelines to any particular situation.

### On-line access

This publication is available at the Department of Human Services Victoria - Internet address:

[www.dhs.vic.gov.au/about-the-department/documents-and-resources/policies,-guidelines-and-legislation/fire-risk-management](http://www.dhs.vic.gov.au/about-the-department/documents-and-resources/policies,-guidelines-and-legislation/fire-risk-management)

### Commencement

These Guidelines come into operation on 14 August 2013.

### First Edition – August 2013.

Printed by Printbound, Oakleigh

May 2014

[1501112]

# Contents

<b>Abbreviated Terms</b>	<b>iv</b>
<b>1. Introduction</b>	<b>1</b>
1.1 General	1
1.2 The purpose of this Guideline	1
1.3 Interpretations	1
1.4 Definitions	2
1.5 Commentary	2
1.6 Field of Application	2
1.7 Determining compliance with this Guideline	2
1.8 Client and Staff Profiles	5
1.9 Background	5
1.10 Existing High Rise Buildings	5
<b>2. Mandatory Measures</b>	<b>6</b>
2.1 Introduction	6
2.2 Physical Fire Safety Measures	6
2.3 Management in Use Measures	7
2.4 Fire Engineering Briefs (FEB) and Fire Engineering Reports (FER)	8
2.5 Client capability	8
2.6 Fire Prevention and Fire Safety Management	8
<b>3. Other specific measures</b>	<b>10</b>
3.1 Introduction	10
3.2 BCA Deemed-to-Satisfy Provisions	10
3.3 Measures which vary from the BCA DtS Provisions	10
3.4 Measures which are additional to the BCA DtS Provisions	11
<b>4. Reporting</b>	<b>12</b>
4.1 General	12
4.2 Fire Risk Assessment/Alternative Solutions	12
4.3 System Maintenance	12
4.4 Fire Safety Handbook	12
4.5 Fire Engineering Brief and Fire Engineering Reports	13
4.6 Fire Safety Audit Report	13
<b>Appendix 1: Definitions</b>	<b>14</b>
<b>Appendix 2: Commentary</b>	<b>19</b>
<b>Appendix 3: Existing High-rise buildings</b>	<b>20</b>
Table A4.1: Existing DoH High-Rise Buildings	21

## Abbreviated Terms

The following abbreviated terms are used in this document.

<b>ABCB</b>	Australian Building Codes Board
<b>AFAC</b>	Australasian Fire Authorities Council
<b>AS</b>	Australian Standard
<b>BAB</b>	Building Appeals Board
<b>BCA</b>	National Construction Series – Building Code of Australia
<b>CDG</b>	Capital Development Guideline(s)
<b>CFA</b>	Country Fire Authority Victoria
<b>CSO</b>	Community Service Organisations
<b>DH</b>	Department of Health Victoria
<b>DtS</b>	Deemed-to-Satisfy
<b>FBIM</b>	Fire Brigade Intervention Model
<b>FEB</b>	Fire Engineering Brief
<b>FER</b>	Fire Engineering Report
<b>FERPTF</b>	Fire and Emergency Response Procedures and Training Framework
<b>FIP</b>	Fire Indicator Panel
<b>FRM</b>	Fire Risk Management
<b>FRMU</b>	Fire Risk Management Unit of the Department of Human Services
<b>FSE</b>	Fire Safety Engineer
<b>IFEG</b>	International Fire Engineering Guidelines 2005
<b>MFB</b>	Metropolitan Fire and Emergency Services Board
<b>NGO</b>	Non-Government organisation
<b>RBS</b>	Relevant Building Surveyor
<b>SOU</b>	Sole Occupancy Unit
<b>SWMS</b>	Safe Work Method Statement

# 1. Introduction

## 1.1 General

Guideline 7.9 – Multi-storey Residential Buildings specifies the minimum fire risk management requirements for all new and existing multi-storey housing owned by the Director of Housing (DoH) or the Department of Human Services (DHS).

The residential components of the building are classified as a Class 2 (residential), whilst ground floor may be used as a Class 5 (office), Class 6 (retail), Class 7a (carpark) or Class 9b (public building) as defined in the *Building Code of Australia* (BCA).

Multi-storey housing provides residential accommodation for the general public, who are considered to be broadly representative of the general community.

Where the DoH or DHS has established a special client management plan that identifies *clients* with potential risks related to fire, then reference must be made to the Fire Risk Management Unit (FRMU). Additional fire safety measures may be required for these *clients*.

Where it is impractical for the occupants to safely evacuate the building promptly, then additional precautions or alternative arrangements may be required.

## 1.2 The purpose of this Guideline

The purpose of this Guideline is to provide appropriate levels of fire safety for staff, *clients* (as defined) and other occupants of a building subject to the Guidelines, in part, by providing for appropriately qualified professionals such as *Fire Safety Engineers*, *Building Surveyors*, *Building Inspectors* and *Auditors* to audit, assess and recommend steps to minimise fire risk, and to assess and report on acceptable standards of fire safety, in specific settings.

The use of this Guideline is subject to the following:

- (a) The Guideline does not constitute all of the possible fire safety matters that could apply to a specific situation, but is provided for assistance in determining appropriate fire safety measures. It is up to individuals acting with appropriate professional advice to determine its application to particular situations.
- (b) This Guideline must only be used for purposes within the range set out in the 'General' section at the start of this document.
- (c) In addition to the fire safety requirements and standards in the Guideline, owners, occupiers and operators of facilities and buildings may be subject to various other statutory, common law and contractual obligations. They should seek advice, including legal advice, on the existence and scope of these obligations.

## 1.3 Interpretations

In this Guideline, unless the contrary appears:

- headings are for convenience only and do not affect interpretation
- a reference to a statute or other law includes regulations and other instruments under it and consolidations, amendments, re-enactments or replacements of any of them
- words in the singular include the plural and vice versa
- where a word or phrase is defined, its other grammatical forms have a corresponding meaning
- mentioning anything after include, includes or including does not limit what else might be included.

## 1.4 Definitions

Words and expressions used in this document and throughout the associated Guidelines that are shown in *italics* are defined terms.

Appendix 1 of this document includes definitions used in this document.

## 1.5 Commentary

Commentary is provided in Appendix 2: for some clauses of this Guideline to provide explanatory or background information in relation to the clause. Clauses that have commentary are identified with an asterisk (\*) in the clause heading.

## 1.6 Field of Application

This Guideline only applies to multi-storey residential buildings, typical of those that exist in the general community. It does not apply to residential care buildings, as defined in the BCA, or buildings (or parts of buildings) used for community housing with outreach support, or community residential facilities providing group housing.

For the purposes of this Guideline, multi-storey residential buildings are separated into three groups: low-rise (up to 3 storeys in height, as defined in the BCA); medium-rise (4 storeys to an effective height of up to 25m, as defined in the BCA); and high-rise (more than 25m in effective height as defined in the BCA).

### 1.6.1 BCA Classification\*

A multi-storey residential building is a BCA Class 2 building (a building containing 2 or more SOUs, each being a separate dwelling where the dwellings are above one another) as described in the BCA. However other classes may also form part of these buildings including Class 5 (Office), Class 6 (retail), and Class 9b (community halls), however it may not only be limited to these classes.

### 1.6.2 Sole Occupancy Unit

The SOU must be taken to be each dwelling (apartment).

## 1.7 Determining compliance with this Guideline

If the building complies with the BCA DtS provisions, and the matters in sections 2 and 3 of this Guideline, then compliance with this Guideline is achieved. The process for determining compliance is detailed in CDG 7.1 and CDG 7.2 and summarised in the process below.

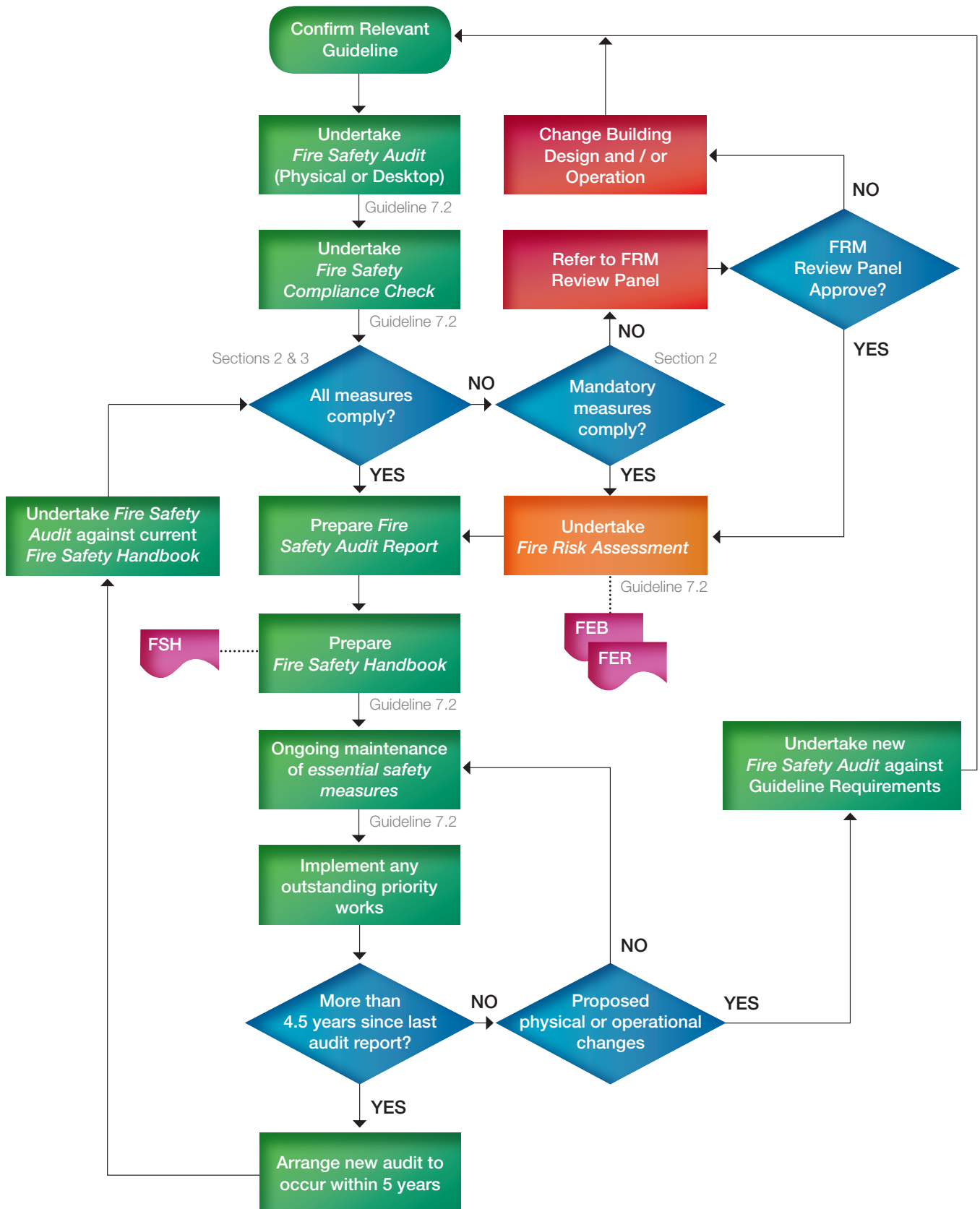
- (a) Confirm the applicable Guideline to the building being considered.
- (b) Undertake a *fire safety audit* of the building or a *desktop audit* of relevant design documentation for buildings not yet constructed.
- (c) Undertake a *fire safety compliance check* of the building against the relevant BCA DtS provisions and the matters in sections 2 and 3 of this Guideline from the information obtained during the audit.



- (d) Undertake a *fire risk assessment* where the building does not comply and/or cannot be modified to comply. The *fire risk assessment* must be signed off by an *accredited fire safety engineer* who is responsible for the *fire risk assessment* in accordance with CDG 7.2.
- (e) Refer any *mandatory measures* (section 2 of the Guideline) which are not proposed to be complied with to the *FRM Review Panel* for a determination.
- (f) Prepare a *fire safety audit* report documenting the *fire safety compliance check* at least once every 5 years in accordance with CDG 7.2.
- (g) Prepare a *fire safety handbook* for the building documenting the *fire safety strategy*, including any alternative solutions produced by the *accredited fire safety engineer* and approved by the *accredited building surveyor* in accordance with CDG 7.2.

The process is simplified in the following flowchart in figure 1.1.

Figure 1.1: Simplified Compliance Process



## 1.8 Client and Staff Profiles

A guide to determining *client profile* and *staff profile* are set out in the Department's CDG 7.2.

The typical *client profile* expected in a building covered by this Guideline is Type 1. The *staff profile* is Type 1 (no staff present).

A *fire risk assessment* must be undertaken to determine if any additional fire safety measures are required for that building where a tenant or *client* (or someone on their behalf) submits a special accommodation requirements form that includes a report from their treating practitioner, occupational therapist, carer or disability care provider that highlights that the person has a particular risk to fire arising from their disability and/or fire risk behaviours.

## 1.9 Background

Most buildings used for public housing are not places of work, rather residences in which people live without any support from DoH or other Department staff. The following criteria needs to be considered when determining if it is practicable to address a particular hazard:

- (a) Rights of the tenants to quiet enjoyment of the property.
- (b) Limited control that the DoH can exercise over the activities of its tenants. To a certain degree, tenants have the right to set their own fire safety standards within their own home and must therefore take some responsibility for the safety of themselves and their families.

The *building regulations* have evolved over the years, reflecting higher community expectations for fire safety and developments in building and fire safety technology. Generally, the *building regulations* have not required retrospective upgrades unless significant building works are undertaken or the building use changes.

## 1.10 Existing High Rise Buildings

There are 44 existing *high rise buildings* that were constructed prior to 1988. These buildings are subject to a separate *fire risk assessment* and *fire safety strategy* and are only required to comply with the FEB dated 12 June 2012. Refer to Appendix 3 for details.

## 2. Mandatory Measures

### 2.1 Introduction

*Mandatory measures* must comply with the nominated design codes and standards, in addition to any requirements of the BCA DtS provisions or any alternative solutions.

Should a *mandatory measure* be considered inapplicable or inappropriate to adopt in full, then a written application outlining the reasons and including supporting justification must be made to the FRM Review Panel, for its consideration. Unless there are exceptional or very specific circumstances, the *FRM Review Panel* is unlikely to approve a variation to any of the mandatory measures.

### 2.2 Physical Fire Safety Measures

#### 2.2.1 Automatic Fire Sprinklers

The installation of a sprinkler system must comply with either AS2118.1, AS2118.4 or as a combined sprinkler and hydrant system in accordance with AS2118.6 as applicable. Concealed residential heads must (except where it is not possible) be used in all proposed buildings and where building permits have not been issued or where a new sprinkler installation is proposed or required to be installed.

**Note:** Refer to the requirements of clause 4.5 of CDG 7.2 for installation and design of sprinkler systems.

##### 2.2.1.1 Low-rise buildings

An automatic fire sprinkler system is not required.

##### 2.2.1.2 Medium-rise buildings

An automatic fire sprinkler system must be installed to comply with AS2118.1, AS2118.4 or AS2118.6, noting that AS2118.4 is limited in the number of storeys without a *fire risk assessment*.

- (a) Where a system is already installed, it must comply with either AS2118.1, AS2118.4 or AS2118.6 and include:
  - i. residential heads in the residential parts of the building; and/or
  - ii. fast response heads in all other areas.
- (b) Where a system is to be installed, it must comply with either AS2118.1, AS2118.4 or AS2118.6 and include:
  - i. concealed residential heads in the residential parts of the building; and/or
  - ii. concealed fast response heads in all other areas.

### 2.2.1.3 High-rise buildings

An automatic fire sprinkler system must be installed to comply with AS2118.1, or AS2118.6.

- (a) Where a system is already installed, it must comply with either AS2118.1, AS2118.4 or AS2118.6 and include:
  - i. residential heads in the residential parts of the building
  - ii. fast response heads in all other areas.
- (b) Where a system is to be installed, it must comply with either AS2118.1 or AS2118.6 and include:
  - i. concealed residential heads in the residential parts of the building;
  - ii. concealed fast response heads in all other areas.

### 2.2.2 Smoke Detection and Alarm (all buildings)

Each SOU must have at least one smoke alarm (located on or near the ceiling in any storey) that complies with AS 3786 and is located between each part of the SOU containing bedrooms as well as where bedrooms are served by a hallway, in the hallway and in any other storey containing bedrooms and as determined in BCA Volume 1.

Smoke alarms must be powered directly from the 240v main power supply with battery backup. The battery backup must be rechargeable, non-removable, and have a minimum lifespan of 10 years. Alternatively, a smoke detector system can comply with AS1670.1.

Smoke detectors and/or alarms system are required to comply with Specification E2.2a of the BCA Volume 1 for the applicable class of building.

### 2.2.3 Protection of Openings (all buildings)

Doors to SOUs must be fire doors complying with AS 1905.1 with an FRL of -/60/30, unless otherwise approved through a *fire risk assessment* in which case, the door must not be less than a solid core door having a minimum thickness of 35mm. Self-closing mechanisms to SOU doors are not required.

Doors to other rooms opening to public corridors must comply with the DtS requirements of the BCA Volume 1, unless otherwise approved through a *fire risk assessment*.

## 2.3 Management in Use Measures

Management in use measures are operational systems, procedures and policies which:

- (a) minimise the potential for fire starts
- (b) minimise the potential fire growth and fire severity
- (c) maintain the reliability of physical fire safety measures so they are likely to operate in the event of fire
- (d) provide ongoing fire safety awareness to building *clients* and staff of appropriate actions to take in the event of a fire.

## 2.4 Fire Engineering Briefs (FEB) and Fire Engineering Reports (FER)

The FEB and FER must be prepared in accordance with the IFEG, utilising templates published by the FRMU and comply with 5.2 of CDG 7.2 for all new or proposed buildings, or alteration to any existing buildings. Refer to website:-

[www.dhs.vic.gov.au/about-the-department/documents-and-resources/policies,-guidelines-and-legislation/fire-risk-management](http://www.dhs.vic.gov.au/about-the-department/documents-and-resources/policies,-guidelines-and-legislation/fire-risk-management)

## 2.5 Client capability

*Clients/tenants/residents* in the SOUs are considered to be representative of the general population housed in rental accommodation, and may include a higher proportion of non-English speaking residents in DoH buildings. Therefore, information on fire safety precautions and responsibilities to be exercised by *clients/tenants/residents* must be made available in the most common community languages within each building.

## 2.6 Fire Prevention and Fire Safety Management

### 2.6.1 Fire and Emergency Evacuation Plans and Emergency Response Procedures

An Emergency plan, including emergency response procedures, fire orders and evacuation diagrams must be developed and prominently displayed and maintained.

### 2.6.2 Individual and portable heaters

The DoH is unable to effectively control portable appliances brought into single SOUs by *clients*, and therefore these are the responsibility of the *client*.

### 2.6.3 Record Keeping and Documentation

DoH and/or the DHS must keep records of:

- (a) reported fire incidents (Fire Damage to Asset Form)
- (b) DHS Fire Damage to Asset forms
- (c) any maintenance and testing of fire safety equipment
- (d) any electrical inspections
- (e) other inspections and checks carried out
- (f) details of any fire safety issues reported, action required and evidence that actions have been completed satisfactorily.

#### 2.6.4 Maintenance

All essential safety measures within the building that is not within a client's SOU must be regularly checked and maintained in accordance with the *fire safety handbook*.

Equipment that is inoperable, appears faulty or is otherwise not performing as designed and installed may present a risk of ignition or fire hazard. In these cases, it must be withdrawn from service until it has been checked and/or repaired by an appropriately qualified person, or it must be replaced.

Maintenance contracts must be in place for all essential safety measures identified in the *fire safety handbook*, including mandatory essential safety measures, BCA DtS measures, measures arising from any BCA alternative solutions and other DoH specific measures.

## 3. Other specific measures

### 3.1 Introduction

In addition to the *mandatory measures*, there are a range of other fire safety measures that must be provided within the building to satisfy the Department's and DoH prescriptive requirements for multi-storey residential buildings.

Although adoption of these measures (including DtS provisions) is not mandatory, a *fire risk assessment* must be undertaken which addresses the measures which are not proposed to be implemented in full or in part. The *fire risk assessment* must be submitted to the FRMU for approval prior to implementation of the final design solution.

### 3.2 BCA Deemed-to-Satisfy Provisions

The BCA DtS provisions must be complied with, unless varied by a *fire risk assessment* in accordance with CDG 7.2 or as varied below. The following sub-sections identify physical measures which vary from, or are in addition to, the relevant DtS provisions.

### 3.3 Measures which vary from the BCA DtS Provisions

#### 3.3.1 Smoke Detection and Alarm (all buildings)

Smoke detection in common public areas may be omitted if the likelihood of vandalism and/or deliberate false alarms is considered to be high and will be subject to a *fire risk assessment* in accordance with CDG 7.2.

#### 3.3.2 Doors and locks

Deadlocks must not be installed to any doors leading from a SOU of a residential building. Where a tenant requests to install a deadlock as an insurance or security requirement, the FRMU may consider this installation (at the tenant's expense) subject to a *fire safety risk assessment*. The request must be referred to the *FRM Review Panel* or DoH for a determination.

The type of deadlock installed must include a visual indication of internal deadlock status (locked or unlocked) and include a safety release which automatically unlocks on the activation of the internal lever handle being operated in a downward action.

If approval is given, it must be in writing from the DoH. Additionally, written advice must be provided to the tenant regarding the potential dangers of dead locks in the case of emergency.

#### 3.3.3 Emergency Warning System (high-rise buildings)

An emergency warning system must be provided to all high-rise residential buildings. The system must comply with AS 1670.4 as modified by the following:

- (a) A generic *fire risk assessment* and report that is specific to high-rise developments managed by the FRMU and subject to the approval of the *relevant building surveyor*.
- (b) An emergency control panel must be provided for fire brigade control.
- (c) Warden intercom points may be omitted.
- (d) The system must automatically initiate an alert tone to the floor of fire origin with a fire brigade override control to place the system into evacuation tone and/or cascade to other floors.



- (e) The system shall be designed to achieve a minimum Sound Pressure Level of 95 dBA at the door of each SOU, measured on the corridor side at a height of 1.6m above the door threshold. Where the 'Alert' and 'Evacuation' tones produce different sound pressure levels due to the change in frequency, the measurements corresponding to the 'Evacuation' tone shall be used for compliance approval.
- (f) One way communication via a public address facility must be provided for fire brigade intervention.
- (g) Information system (dedicated emergency information book or similar) must be provided at the fire indicator panel or emergency control panel to the satisfaction of the fire brigade.

For buildings with an effective height of less than 25m the following provisions apply. In addition to the smoke alarms within individual SOUs, any building occupant warning system that is provided must activate upon a sprinkler activation to warn all occupants in the building of a potential fire incident. However, the design of the system must give consideration to the potential for nuisance alarms (accidents and deliberate), which can cause conflict between tenants and disrupt their peaceful enjoyment of the building.

### 3.4 Measures which are additional to the BCA DtS Provisions

Nil.

#### 3.4.1 Electrical and Gas Safety

Whilst not forming part of these Guidelines, the following matters are assumed to be installed or included, as they form part of other legislation. However, they must still be checked by an appropriate qualified person at least once every 5 years.

##### Electrical protection

Earth leakage protection and Residual Current Device (RCD) must be installed to electrical switchboards and all electrical services in accordance with AS/NZS3000.

##### Gas Appliance Safety

Gas appliances where a sprinkler system has been installed or to be installed must include a flame-guard system so that extinguishment of the flame will stop the flow of gas. Alternatively, where appropriate appliances are not available with flame guard devices fitted, a gas safety shut-off system must be provided in accordance with Energy Safe Victoria Gas Information Sheet No. 16.

##### Meter Location

Gas and electric meters should be externally mounted.

## 4. Reporting

### 4.1 General

All reporting should utilise nominated templates published by the FRMU using *accredited* practitioners available from the FRMU.

### 4.2 Fire Risk Assessment/Alternative Solutions

A *fire risk assessment* is required to be undertaken to assess:

- (a) variations to mandatory measures (after approval by the FRMU Review Panel)
- (b) variations to non-mandatory measures
- (c) variations to BCA DtS provisions (BCA alternative solutions following approval by the *FRMU Review Panel*)
- (d) any significant fire risks identified.

Any *fire risk assessment* must be in accordance with Section 4 of CDG 7.2.

An alternative solution is a building solution that demonstrates compliance with the relevant Performance Requirements other than by using DtS provisions of the BCA. The documentation for the proposed alternative solutions must contain sufficient evidence to demonstrate that the identified performance criteria of all relevant clauses of the BCA will be met.

Where a tenant or *client* (or someone on their behalf) submits a special accommodation requirement form that includes a report from their treating practitioner, occupational therapist, carer or disability care provider that highlights that the person has a particular risk to fire arising from their disability or special needs and/or fire risk behaviours, a fire risk assessment must be undertaken by a Fire Safety Engineer appointed by the FRMU.

### 4.3 System Maintenance

All fire safety equipment must be inspected:

- (a) prior to commencement of a tenancy
- (b) as part of any upgrade works
- (c) within 24 hours of a fault being reported
- (d) at least once every five years.

For DoH and Department owned buildings will be subject to a compliance check once every five years.

### 4.4 Fire Safety Handbook

The *fire safety handbook* must be prepared using the template published by the FRMU and in accordance with 5.4 of CDG 7.2.

The *fire safety handbook* is a key document primarily aimed at end users and shall be a continually updated document which consolidates the requirements from all *fire risk assessments* and audits undertaken on the facility over time.

The *fire safety handbook* must be kept at the Divisional office responsible for the building or on a central database. A copy may be kept on site, but this is not mandatory.

## **4.5 Fire Engineering Brief and Fire Engineering Reports**

The FEB and FER must be prepared in accordance with the *International Fire Engineering Guidelines 2005*, utilising templates published by the FRMU.

## **4.6 Fire Safety Audit Report**

The fire safety audit report is prepared to provide documentary evidence of completion of the fire risk management process utilising templates published by the FRMU and in accordance with 5.3 of CDG 7.2.

# Appendix 1: Definitions

The following definitions apply where used (either in lower or upper case) in these Guidelines.

## **Accredited**

Means a person accredited by the Department of Human Services in the appropriate category to undertake a specific task.

## **Advisory Note**

Means formal advice issued by the Department of Human Services in relation to application or interpretation of the Guidelines. Advisory notes are not mandatory but must be taken into account in any assessment process.

## **Auditor**

Means a practitioner who is *accredited* to undertake *fire safety audits*. Accreditation may be limited to specific building or buildings and/or occupancy types.

## **Building Act**

Means the *Victorian Building Act 1993* or as amended.

## **Building Code of Australia (BCA)**

The National Construction Code Series – Building Code of Australia, as published from time to time by the Australian Building Codes Board.

## **Building Inspector**

A person, who is registered in the category of building inspector (unlimited) by the Building Practitioners Board of Victoria or other appropriate Statutory Body for registering practitioners in the state of Victoria and has the appropriate experience in fire safety to apply and interpret these Guidelines and has been *accredited*.

## **Building Legibility**

Relates to the complexity of the building layout which has an impact on the ease of way finding by the occupants or rescue personnel.

## **Building Regulations**

Means the *Victorian Building Regulations 2006* or as amended.

## **Building Surveyor**

A person who is registered under the category of *building surveyor* (unlimited) or *building surveyor* (limited) and be registered or eligible to be registered in the category of building inspector (unlimited) by the Building Practitioners Board of Victoria or other appropriate Statutory Body for registering practitioners in the state of Victoria and has appropriate experience in fire safety to apply and interpret these Guidelines and has been *accredited*.

### Client

Is a natural person who is:

- (a) provided with accommodation, supervision and/or care or a young person on statutory supervision in the criminal justice system or any other person on statutory supervision in the care of the Secretary of the Department of Human Services or Secretary of Department of Health; or
- (b) provided with support for accommodation, supervision or care from another Authority, organisation or agency that has a service agreement with the Department of Human Services or Department of Health; or
- (c) a tenant or resident who is housed in rental accommodation provided by the Director of Housing or Department of Human Services.

Staff members, visitors or the public are not considered *clients*.

### Competent person

Is a natural person who holds required academic qualifications relevant to the activities they are undertaking under these Guidelines and is either:

- (a) not registered as a building practitioner in Victoria; or
- (b) is registered as a building practitioner in Victoria in the relevant category but either does not have the appropriate experience, or has not yet been assessed, for *accreditation* under these Guidelines.

A *competent person* is permitted to undertake work in relation to these Guidelines under the direct supervision of an *accredited* person who takes full responsibility and liability for the assessment, report and work.

### Department

Is either the Department of Human Services (DHS) or Department of Health (DH) as appropriate that has authority to make decisions or has control, management or supervision of the subject matter or provides funding.

### Desktop audit

Used in reference to either a *fire safety audit* or a *fire safety compliance check*. This type of audit does not involve a physical site inspection and is therefore reliant on a careful examination of relevant documentation.

### Essential Safety Measures

Means same as definition in the Building Regulations.

### Existing Building

A building that existed prior to the adoption of these Guidelines, whether or not that building was used for the purpose being considered under these Guidelines.

### False alarm

Activation of an alarm system in a building that does not result from the effects of fire. For the purposes of this definition, a false alarm is alarm activation by water vapour (i.e. steam), animal hair, lint, faulty installation, wiring, corrosion or lack of maintenance. Alarm activation resulting from burnt toast, cooking appliances or heating appliances is not a false alarm for the purposes of this definition.

### Fire Brigade Intervention

Means all fire agency activities from the time of notification up until fire extinguishment and overhaul and includes fire brigade operations.

### Fire Risk Assessment

An assessment of the potential for the realisation of an unwanted fire event, which is a function of the hazard, its probability and consequences. A *fire risk assessment* is one or more, but normally a combination, of:

- a qualitative analysis;
- a quantitative analysis; and
- a regulatory assessment;

Depending upon the particular application, *fire risk assessments* can be undertaken by *accredited fire safety engineers* for specific buildings, or may form part of the specific technical outcomes of a Guideline.

### Fire Risk Management (process)

The process of determining, by *fire safety audit* and *fire risk assessments*, whether an appropriate level of fire safety is achieved in a facility or building. As a minimum, an appropriate level of fire safety means the minimum statutory requirements applicable to that building or facility and implementation of the outcomes of a *fire risk assessment* based on use, building type, *client profile*, occupant profile, *staff profile* (if any), fire prevention training and ongoing maintenance.

### Fire Safety Audit

The structured auditing of fire safety measures in a facility or building against nominated audit criteria, including those relating to life safety as described in AS 4655. Definitions in AS 4655 have the same meaning when used in these Guidelines, unless otherwise noted. For a new building, change of use of a building, or where major renovation work is proposed the *fire safety audit* can consist of a *desktop fire safety audit*.

### Fire Safety Compliance Check

A check performed by an accredited *Building Surveyor*, *Building Inspector* or *Fire Safety Engineer* in lieu of a *fire safety audit* and *fire risk assessment* on buildings that comply, or are to be brought into compliance, with the relevant Department Guidelines.

### Fire Safety Engineer

A person, who is registered in the category or engineer of class of *fire safety engineer*, by the Building Practitioners Board Victoria or other appropriate statutory body for registering practitioners in the state of Victoria, has appropriate experience in conducting *fire safety audits* and *fire risk assessments* and has been *accredited*.

### **Fire Safety Handbook**

A document that defines the fire safety strategy for a facility in terms of the essential safety measures and management in use requirements, levels of performance, design parameters and maintenance requirements for each physical or human measure/factor.

### **Fire Safety Strategy**

A combination of physical essential safety measures and human measures/factors including maintenance and management in use systems which have been specified to achieve the nominated *fire risk management* objectives.

### **FRM Review Panel**

The Board established in accordance the Capital Development Guidelines -Series 7, Fire Risk Management (FRM) to hear and make determinations in relation to any matter contained in the Guidelines and into the performance of any *accredited* practitioner pursuant to the Guidelines.

### **High Rise Building**

A building which has an effective height, as defined in the BCA, of more than 25m.

### **Human Factors (Measures or Precautions)**

Occupant characteristics, management practices, emergency control organisation, training and the like that may impact on fire safety. Human measures or precautions typically relate to facilities/building management issues.

### **International Fire Engineering Guidelines**

The provisions of the *International Fire Engineering Guidelines 2005* published by the Australian Building Codes Board that apply to Australia. Definitions in the *International Fire Engineering Guidelines 2005* have the same meaning when used in these Guidelines unless otherwise noted in the Guidelines.

### **Interim Fire Safety Precautions**

Temporary or permanent fire safety measures to address severe and urgent fire hazards prior to the implementation of full fire safety upgrade works. Interim measures do not, as a matter of course, ensure facilities are compliant but are required to address immediate significant risks.

### **Low Rise Building**

A building which has a rise in storeys of 3 or less, as defined in the BCA.

### **Mandatory Measures**

Provisions in the Guidelines that cannot be varied by a *fire risk assessment*, unless approved in writing by the *FRM Review Panel*.

### **Medium Rise Building**

A building which has a rise in storeys of 4 or more, but is has an effective height of less than 25m, as defined in the BCA.

### Owned, operated or funded

In relation to **owned**, means; buildings or facilities that are owned by the Department of Human Services Victoria, Department of Health or Director of Housing or the Crown in the right of the State of Victoria and are under the control or management of the Department, or Director of Housing.

In relation to **operated**, means; buildings or facilities that are operated, managed or controlled by the Department of Human Services Victoria, Department of Health, Director of Housing whether or not the building is owned by the Department or the Crown in right of the State of Victoria.

In relation to **funded**, means building or facilities that are directly or indirectly funded by the Department and for which the Department of Human Services, Department of Health or Director of Housing has a non-delegable duty of care to ensure adequate fire safety is provided.

### Practice Note

Means a *practice note* issued by the Department of Human Services in relation to an application or interpretation of the Guidelines. Compliance with *practice notes* is mandatory and may modify or enhance existing requirements of the Guidelines.

### Primary Exit

A continuous and unobstructed way of getting from any point in the building to a road or open space leading to a street which would be likely to be the first choice for an occupant in a fire emergency.

### RBS

Means the relevant building surveyor, which has the same meaning as Section 3 of the *Building Act 1993*.

### Staff Profile

Means one or more of the following:

- Staff Profile 1 no staff present.
- Staff Profile 2 at least one staff member present during part of any 24 hour period.
- Staff Profile 3 at least one staff member present during all of each 24 hour period, but staff may be asleep at night (also referred to as 'sleepover' staff).
- Staff Profile 4 at least one staff member present during all of each 24 hour period, staff awake during all shifts (also referred to as 'stand up' staffing).

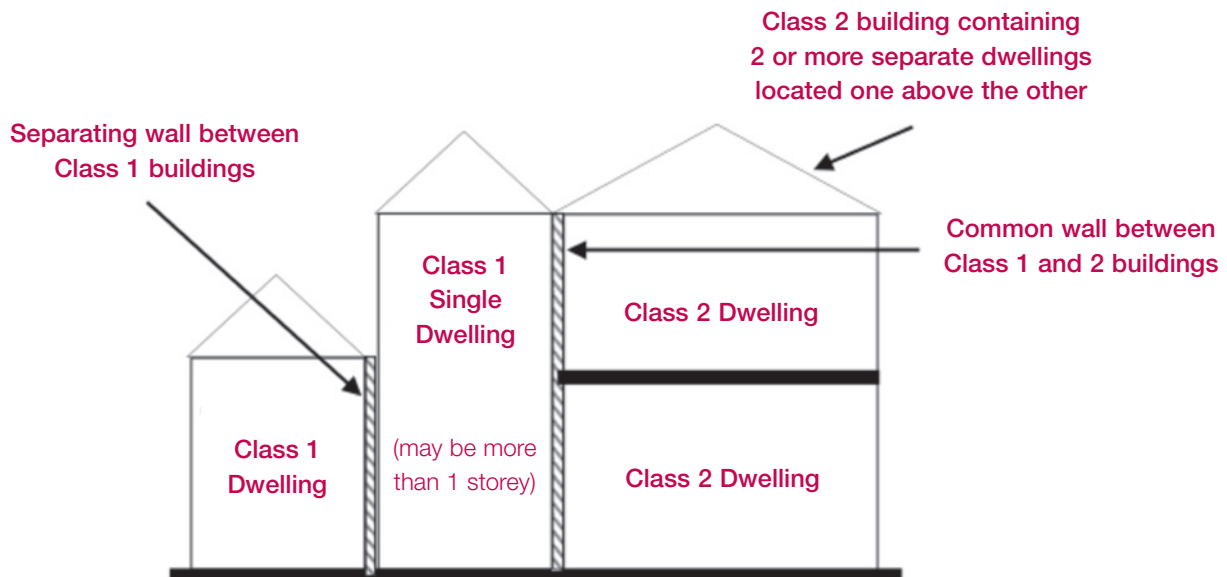


## Appendix 2: Commentary

The commentary below is provided for specific clauses in the body of this Guideline. The commentary is informative to provide explanation of specific requirements, but the commentary must not be read to modify or change any of the requirements stipulated in the body of the originating text.

### Clause 1.6.1

A multi-storey residential building is a BCA Class 2 building (a building containing 2 or more SOUs each being a separate dwelling and where the dwellings are above one another. This is described pictorially below.



## Appendix 3: Existing High-rise buildings

In 2004 the DoH initiated a voluntary fire safety upgrade program for its 44 existing *high-rise buildings*, to be implemented progressively across all buildings as funds and needs dictate.

The FEB is a revision of the previous Fire Engineering Design Brief prepared for 44 *high-rise buildings* to assess the derived *fire safety strategy* against the BCA dated 12 June 2012.

This FEB was prepared in accordance with the methodology set out within the *International Fire Engineering Guidelines (ABCB 2005)* and undertaken in accordance with the Engineers Australia – Society of Fire Safety – Code of Practice.

The FEB process involves the collaborative development and agreement of an appropriate methodology, structure and trial concepts meetings and correspondence with all relevant stakeholders and authorities having jurisdiction. It forms the basis for further detailed fire safety analysis and design.

These 44 buildings are not subject to the matters in Sections 2 and 3 of this Guideline, as an alternative *fire safety strategy* has been agreed. This was because the 44 buildings are similar in construction methods, age and compliance standards and are all within the jurisdiction of the Metropolitan Fire and Emergency Services Board (MFB). This enabled the DoH to deal with these buildings as a single group with consistent specific technical requirements.

The upgrade project is staged as follows:

### ***Stage 1: Development of generic requirements and approval processes***

Development of a generic '*fire safety strategy*' for upgrade of typical *high-rise buildings* including a review of the current fire safety requirements of the BCA. The *fire safety strategy* would have regard to Regulation 608 of the *Building Regulations* to determine reasonable levels of fire safety upgrade for existing buildings.

Consultation with the Chief Officer of the MFB, FSE, the RBS and representative of the DoH to develop a generic 'Fire Safety Engineering Brief' (generally in accordance with the Fire Engineering Guidelines).

Development of Guidelines for typical 'Regulation 309 report and consent' issues that will arise so that subsequent building specific applications for a report and consent will be consistently and reliably considered and approved.

Identification of required commissioning tests and certifier reports for checking and confirmation in the final approval documents.

Approval of the final '*fire safety strategy*' within the 'Fire Safety Engineering Brief' by the MFB and the RBS.

This stage was completed in June 2012 and an agreed *fire safety strategy* and standardised MFB application forms were approved by all stakeholders.

### ***Stage 2: Application of the Fire Safety Strategy to individual buildings***

A FSER and a 'Regulation 309 consent' application for each building, is to be prepared and appended to the final FSER to confirm compliance with the *fire safety strategy*, BCA and *Building Regulations*.

Preparation of a draft 'Essential Services Schedule' based on the above for consideration by the RBS, to be appended to the FSER.

As the above-mentioned process has been agreed by all stakeholders, work on any of these 44 buildings must be directed to the FRMU of the Department to ensure that it is consistent with the agreed technical standards and procedures. The specific building locations are included below in Table A4.1.

**Table A4.1: Existing DoH High-Rise buildings**

<b>Location</b>	<b>Addresses</b>	<b>Number of storeys</b>
<b>Carlton</b>	141 Nicholson Street, Carlton	16
	20 Elgin Street, Carlton	16
	530 Lygon Street, Carlton	12
	510 Lygon Street, Carlton	12
	480 Lygon Street, Carlton	20
	478 Drummond, Carlton#	20
	351 Barkly Street, West Brunswick	12
<b>Collingwood</b>	1 Holmes Street, Northcote	12
	253 Hoddle Street, Collingwood	20
	229 Hoddle Street, Collingwood	20
	240 Wellington Street, Collingwood	20
<b>Fitzroy</b>	95 Napier Street, Fitzroy	20
	125 Napier Street, Fitzroy	20
	90 Brunswick Street, Fitzroy	20
	140 Brunswick Street, Fitzroy	20
<b>Flemington</b>	29 Crown Street, Flemington	12
	130 Racecourse Road, Flemington	20
	120 Racecourse Road, Flemington	20
	126 Racecourse Road, Flemington	20
	12 Holland Court, Flemington	20

Location	Addresses	Number of storeys
<b>Footscray</b>	127 Gordon Street, Footscray	12
	63 Hanmer Street, Williamstown	12
	235 Nelson Place, Williamstown	12
<b>Kensington</b>		
<b>Kensington</b>	94 Ormond Street, Kensington	12
	56 Derby Street, Kensington	12
<b>North Melbourne</b>		
<b>North Melbourne</b>	159 Melrose Street, North Melbourne	12
	33 Alfred Street, North Melbourne	12
	76 Canning Street, North Melbourne	20
	12 Sutton Street, North Melbourne	12
<b>Prahran</b>		
<b>Prahran</b>	150 Inkerman Street, St. Kilda	12
	49 Union Street, Prahran	12
	25 King Street, Prahran	12
	27 King Street, Prahran	12
	259 Malvern Road, Prahran	12
	2 Simmons Street, Prahran	12
	1 Surrey Road, South Yarra	12
<b>Richmond</b>		
<b>Richmond</b>	106 Elizabeth Street, Richmond	20
	108 Elizabeth Street, Richmond	20
	112 Elizabeth Street, Richmond	20
	139 Highett Street, Richmond	22
	110 Elizabeth Street, Richmond	20
<b>South Melbourne</b>		
<b>South Melbourne</b>	150 Victoria Avenue, Albert Park	12
	200 Dorcas Street, South Melbourne	15
	332 Park Street, South Melbourne	30

# previously known as 140 Neill Street, Carlton





