human. services



Capital Development Guideline — Series 7 Fire Risk Management Policy and Procedures

Secure Facilities

Fire Risk Management — 2013

7.3



Capital Development Guideline — Series 7 Fire Risk Management Policy and Procedures

Secure Facilities

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

This document is also available on the Internet at 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

Commencement

These Guidelines come into operation on 14 August 2013.

First Edition - August 2013.

Printed by Printbound, Oakleigh May 2014 [1501112]

Contents

Abbr	eviated Terms	iv	
1.	Introduction		
	1.1 General	1	
	1.2 The purpose of this Guideline	1	
	1.3 Interpretations	2	
	1.4 Definitions	2	
	1.5 Commentary	2	
	1.6 Field of Application	2	
	1.7 Determining compliance with this Guideline	3	
	1.8 Client and Staff Profiles	5	
	1.9 Security and implementation	5	
	1.10 Egress freedom levels	5	
	1.11 Supervised area	6	
	1.12 Time delays	6	
2. Ma	Mandatory Measures	7	
	2.1 Introduction	7	
	2.2 Physical Fire Safety Measures	7	
	2.3 Location of responding staff	8	
	2.4 Management in Use Measures	8	
3. Ot	Other Department specific measures	11	
	3.1 Introduction	11	
	3.2 Special provisions	11	
	3.3 BCA Deemed-to-Satisfy Provisions	11	
	3.4 Measures which may vary from the BCA DtS Provisions	11	
	3.5 Measures which are additional to the BCA DtS Provisions	12	
4.	Reporting	14	
	4.1 General	14	
	4.2 Fire Engineering Brief and Fire Engineering Report	14	
	4.3 Fire Safety Audit Report	14	
	4.4 Fire Safety Handbook	14	
Appe	endix 1: Definitions	15	
Appe	endix 2: Commentary	21	
Appe	endix 3: Client Characteristics	23	

Abbreviated Terms

The following abbreviated terms are used in this document.

ABCB Australian Building Codes Board

AFAC Australasian Fire Authorities Council

AS Australian Standard

BAB Building Appeals Board

BCA National Construction Series – Building Code of Australia

CDG Capital Development Guideline(s)

CFA Country Fire Authority Victoria

CSO Community Service Organisations

DH Department of Health Victoria

DtS Deemed-to-Satisfy

FBIM Fire Brigade Intervention Model

FEB Fire Engineering Brief

FER Fire Engineering Report

FERPTF Fire and Emergency Response Procedures and Training Framework

FIP Fire Indicator Panel

FRM Fire Risk Management

FRMU Fire Risk Management Unit of the Department of Human Services

FSE Fire Safety Engineer

IFEG International Fire Engineering Guidelines 2005

MFB Metropolitan Fire and Emergency Services Board

NGO Non-Government organisation

RBS Relevant Building Surveyor

SOU Sole Occupancy Unit

SWMS Safe Work Method Statement

1. Introduction

1.1 General

Guideline 7.3 – Secure Facilities specifies the minimum *fire risk management process* for *secure facilities* owned, operated or funded by either the Department of Human Services (DHS) or Department of Health (DH) or an *agency* that has a service agreement with the DHS or DH. The target groups for this Guideline include:

- (a) youth justice centres
- (b) youth residential centres
- (c) secure welfare services facilities
- (d) secure psychiatric and forensic facilities
- (e) disability services for people with an intellectual disability who are involved in the criminal justice system or who exhibit severe challenging behaviours.

The occupants of these facilities may present one or more of the following characteristics which may impact on the development of a *fire safety strategy*:

- (a) behavioural problems
- (b) mental illness
- (c) violent or threatening behaviour
- (d) self-harming or suicidal tendencies/behaviours
- (e) absconding risk
- (f) intellectual disability.

In addition, they may be under medication, or physically restrained.

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.

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

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 asterix (*) in the clause heading.

1.6 Field of Application

This Guideline must be applied to all buildings, both residential and non-residential, within the secure perimeter of the facility. Buildings which are not located within the secure perimeter of the facility need not be audited.

1.6.1 BCA Classification*

A secure facility is a detention centre as defined in the *Building Code of Australia* (BCA). Buildings containing sleeping accommodation are a Class 3 building as described in the BCA. Other buildings within the secure perimeter will need to be classified according to their primary use. Typical examples include:

i. Gatehouse/Administration:	Class 5	v. Maintenance Workshop:	Class 8
ii. Recreation Buildings:	Class 9b	vi. Generator Buildings:	Class 10
iii. Educational Buildings:	Class 9b	vii. Commercial Kitchen:	Class 8
iv. Stores Buildings:	Class 7b		

Note: The above classifications apply where the buildings are separate stand-alone buildings or appropriate separation is provided in accordance with the BCA.

1.6.2 Sole Occupancy Unit

Within buildings containing sleeping accommodation, a SOU is taken to include each bedroom or seclusion room, recreation areas and offices within the confines of the said building.

1.7 Determining compliance with this Guideline

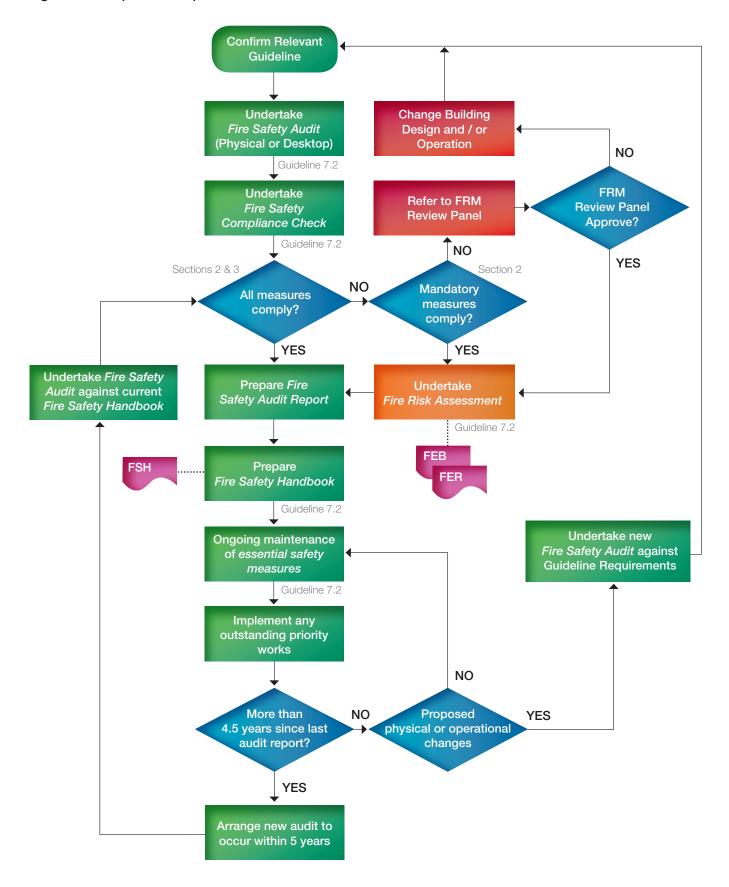
If the building complies with the BCA DtS provisions, and the matters in sections 2 and 3 of this Guideline, then compliance with this Guideline is achieved. The process for determining compliance is detailed in CDG 7.1 and CDG 7.2 and summarised in the process below.

- (a) Confirm applicable Guidelines to the building being assessed.
- (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 with the BCA or Guidelines. 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 Guideline 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 Guideline 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 Guideline 7.2.

The process is simplified in the following flowchart Figure 1.1.

4

Figure 1.1: Simplified Compliance Process



1.8 Client and Staff Profiles

A guide to determining client profile and staff profile is set out in CDG 7.2.

The typical range of *client profiles* expected in a building covered by this Guideline is Type 2 to Type 5. The *staff profile* must not be less than Type 4.

1.9 Security and implementation

1.9.1 General

The occupancy characteristics and building types vary considerably for *secure facilities*. A *fire safety audit* and *fire risk assessment* must therefore be undertaken in accordance with the CDG 7.2: Fire Risk Management Engineering Guideline to determine the appropriate *fire safety strategy* at each building.

1.9.2 Harm minimisation, safety and security

There can be a conflict between security measures in *secure facilities* and the principles of fire safety applied to other Departmental buildings/facilities (for example egress from a fire).

An integrated approach to emergency management within *secure facilities* is required that takes into account the specific security and safety requirements of the particular client group.

Fire safety equipment in secure facilities can be subject to vandalism, used for self-harm or to harm others, or used to facilitate escape or disruption. The FRM strategy must therefore address these matters. The designer of the strategy must also be aware of the potential for *clients* to construct barriers and impede access to or from fires and egress.

The extent to which security measures will affect fire safety depends on the levels of security provided. This in turn relates to the threat posed by *clients* to society, staff, other *clients* and themselves, or in some cases, protection from the risk of harm to *clients* posed by individuals in the community.

The strategy to be applied to the facility must be representative of the balance required between security and fire safety provisions.

1.10 Egress freedom levels

For convenience, the potential impact of security measures on fire safety can be expressed in terms of egress freedom levels. The following are three typical examples of egress freedom levels. These must not be considered inclusive of the egress freedom levels in all facilities.

1.10.1 Egress freedom level 1

All doors on the path of travel to an open space (including individual room doors) can be opened by a single-handed downward action without a key from the side that faces a person seeking egress. The open space may be a secure enclosure provided it is large enough to enable occupants to avoid significant exposure to heat and smoke from the fire (minimum separation distance of 10m), and that staff are readily able to facilitate evacuation to a secondary location if necessary.

1.10.2 Egress freedom level 2

Security measures restrict the movement of occupants, but secure parts of the facility can be immediately unlocked by the use of automatic release devices and/or by hand by persons properly instructed as to the duties and responsibilities involved and available at all times when the building is occupied, thereby allowing evacuation into an area which is supervised and may be enclosed in the event of any of the following:

- (a) activation of an automatic fire detection/alarm system protecting the whole building; or
- (b) automatic fire sprinklers, manual call points; or
- (c) remote release from an occupied staff work station; or
- (d) power failure to the locking mechanism of the security device.

Refer to clause 3.5.2 for provisions with respect to evacuation to secure areas.

1.10.3 Egress freedom level 3

This level of freedom is applicable to facilities where the escape of an occupant can place the community, staff and/or other occupants at significant risk. Automatic release of all doors on the path of travel to an open space may therefore not be an acceptable practice.

The priority is to maintain security of occupants at all times while minimising the fire risk to occupants. Under such restrictions, progressive evacuation into another supervised enclosed area might be an appropriate option. Refer to clause 3.5.2 for provisions with respect to evacuation to secure areas.

1.11 Supervised area

The supervised enclosed area into which *clients* may be evacuated must be unlockable by all staff properly instructed as to the duties and responsibilities involved. Staff must be available at all times when the building is occupied. Refer to clause 3.5.2 for provisions with respect to evacuation to secure areas.

1.12 Time delays

Time delays may be incorporated into the door release function for Egress Freedom Levels 2 and 3 when activated. However, the management of the facility must maintain emergency procedures, staffing and client and training levels to ensure the occupants are provided with the opportunity to safely evacuate the building.

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 Deemed-to-Satisfy (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*

In all buildings providing sleeping accommodation for *clients*, including bedrooms, seclusion rooms and holding cells, an automatic fire sprinkler system must be installed to comply with either AS2118.4 or AS2118.1.

Where a system is installed to comply with AS2118.1 and AS2118.4 it must include:

- (a) residential or institutional heads in the residential parts of the building
- (b) fast response or institutional heads in all other areas.

Consideration must be given to selection of sprinkler heads which minimise potential for self-harm or damage to the sprinkler system (e.g. 'institutional' sprinkler heads).

The occupant warning system must be activated upon operation of a sprinkler head.

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

2.2.2 Smoke Detection & Alarm*

All buildings that provide sleeping facilities for *clients* must have a smoke detection system throughout, complying with AS1670.1, except as follows:

- (a) Manual call points need not be provided in areas where *clients* may frequent.
- (b) Smoke detectors and/or smoke detection sampling points do not need to be located 25-300mm below the ceiling within secure bedrooms or seclusion rooms. For example, flush / concealed smoke detection may be used. Where smoke detection for bedrooms is installed within HVAC return air/exhaust ducts the airflow in the duct must be monitored and interfaced to the fire detection system such that failure of the fans causes a fault condition at the Fire Indicator Panel (FIP).
- (c) Heat detectors may be installed in lieu of smoke detectors in areas such as the kitchen and bathrooms which may be subject to spurious alarms.

For facilities with Egress Freedom Levels 2 and 3, the detection and alarm system must provide a means for readily identifying the position of the activated fire detection devices so that staff can respond in a timely manner. The system must be compatible with the mode of operation of the facility and emergency procedures.

2.3 Location of responding staff

If the responding staff member is located in a different building on the same site, the distance from the staff base to a unit must not exceed 125 metres. Additionally, the smoke detection and alarm facilities must alert the staff when activated and identify, as a minimum, the building in which the detector was activated.

2.4 Management in Use Measures

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

- (a) minimise the potential for fire ignition
- (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 appropriate actions for staff to take in the event of a fire.

2.4.1 Fire Safety Handbook

A fire safety handbook must exist for each building in the facility and must be in accordance with CDG 7.2.

The fire safety handbook must be prepared using the template published by the FRMU.

2.4.2 Fire Prevention & Fire Safety Management

2.4.2.1 Smoke free policy

The Department has a policy of smoke-free work places. The policy describes the phases for implementing the policy to prohibit smoking as far as is practicable, in all non-residential workplaces and restrict smoking in any residential Departmental workplace to designated external smoking areas only. However, this is not an audit requirement determining non-compliance.

2.4.2.2 Exit paths

All exit paths must be kept free of any obstruction and not be used for storage purposes. These must be checked weekly by staff, with management systems in place to ensure that immediate corrective action is taken.

2.4.2.3 Individual and portable heaters*

Individual heaters (for example, client controlled devices) that have been approved for installation by the Department must be permanently fixed in position and installed in accordance with the manufacturer's specifications and the relevant Australian Standards.

Portable heating appliances **must not** be used or stored in *secure facilities*, except where alternatives are not practicable. In these situations, oil filled column heaters or electric panel heaters, that have an over heat cut out device fitted **must** be used provided that they are securely fixed in position and the Department and *FRM Review Panel* have consented in writing to the installation. All approved heating appliances must be inspected and tested in accordance with the AS/NZS3760.

Electric blankets must not be used or stored in secure facilities.

Solid fuel burning appliances and open fireplaces must not be used in secure facilities.

2.4.3 Fire and Emergency Evacuation Plans and Emergency Procedures*

Emergency procedures, fire orders and evacuation plans must be developed, prominently displayed and maintained in each non-residential building. Additionally, emergency procedures and fire orders must be developed for residential buildings.

Staff within a secure facility must be trained in evacuation procedures and assembly points.

Due to the security risks, evacuation plans are not required to be displayed in *client* accessible areas within the *secure facility*.

2.4.4 Fire Emergency Procedures Training

All staff in secure facilities must receive adequate training in fire prevention, fire risk management and emergency procedures. The training must be repeated at regular intervals and must be documented in a Fire and Emergency Response Procedures Manual or similar document. The Department of Human Services Fire and Emergency Response Procedures and Training Framework (FERPTF) provides further details.

Staff must provide training/induction to all *clients* so that they are familiar with the appropriate fire safety and evacuation strategy.

All training must be competency-based and relevant to the facility.

2.4.5 Client Capability and Case Management

Documented client management plans must be in place to provide appropriate assessment and selection of *clients*.

All *clients* within the *secure facility* should be treated as a potential *fire safety hazard* (for example, potential for fire lighting behaviour, inflicting self-harm or causing damage) and management must conduct appropriate assessments of the *client* and implement strategies to address the hazard which will require the input of the FRMU.

2.4.6 Record Keeping and Documentation

In addition to information kept in the Fire and Emergency Response Procedures Manuals, records must be kept of:

- (a) all fire safety installations, including schematics of fire protection systems
- (b) fire training and exercises
- (c) DHS Fire Damage to Asset forms
- (d) any maintenance and testing undertaken
- (e) inspection and checks carried out by staff
- (f) details of fire safety issues reported (for example, blocked exits or faulty fire protection equipment), action required and evidence that actions have been completed satisfactorily
- (g) essential safety measures records/reports
- (h) other information required by CDG 7.1, CDG 7.2 or resulting from the fire risk assessment.

2.4.7 Maintenance

All essential safety measures must be regularly checked and maintained in accordance with the *fire safety handbook*.

Appliances (including ducted heating appliances) must be regularly serviced, cleaned and maintained in accordance with manufacturer's specifications.

Equipment that is inoperable, appears faulty or is otherwise not performing as designed and is subsequently installed, may present a risk of ignition or fire hazard. It must be withdrawn from service until 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 fire safety measures, BCA DtS measures, measures arising from any BCA alternative solutions and other Department specific measures.

Staff must undertake regular inspections of exit paths and exit doors between scheduled maintenance visits and report any defects in any essential safety measure to the maintenance contractor.

3. Other Department 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 prescriptive requirements.

Although adoption of these measures (including BCA 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 Special provisions

All fire safety measures provided must be installed in such a way that vandalism of, and tampering with, the fire safety equipment and the potential to inflict self-harm are minimised.

Appropriate measures must be taken to minimise the risk to *clients* associated with adopting the nominated fire safety measures. For example, if *clients* are prone to inflicting self-harm, care must be taken in the selection and installation of fire protection equipment to reduce hazards and minimise harm to *clients* during evacuation.

3.3 BCA Deemed-to-Satisfy Provisions

The BCA DtS provisions must be complied with, unless as varied in section 3.4 below, or as varied by a *fire risk assessment* in accordance with CDG 7.2. The following sub-sections identify physical measures which vary from, or are in addition to, the relevant DtS provisions.

3.4 Measures which may vary from the BCA DtS Provisions

3.4.1 Mounting of Portable Fire Extinguishers

Due to potential vandalism and theft, it may be necessary to secure extinguishers in selected locations with means for them to be readily available to staff through the use of a key and/or electronic access card in a fire emergency.

When an extinguisher is installed in a secure location, it must be installed so that the base of the extinguisher is not less than 100mm from the finished floor level and the handle is located not more than 1200mm from the finished floor level.

Location signage for fire extinguishers in client accessible areas does not need to be provided.

3.4.2 Fire Hose Reels

Fire hose reels may be installed within the building, and if installed within the building, they can be in locked enclosures that are accessible by all staff through the use of a key and/or electronic access card in a fire emergency.

3.4.3 Automatic Fire Detection and Emergency Warning

Automatic fire detection must be provided in accordance with AS1670.1 to all buildings located within the secure perimeter of the secure facility. Smoke detectors must be used, except where they are likely be subject to unwanted/spurious alarms (for example, within kitchens, indoor pool areas, maintenance workshops). In areas subject to spurious alarms, heat detection or other appropriate detection technology may be used, unless fire sprinklers are installed, in which case, detection may be omitted from those areas.

A building occupant warning system or sound system for emergency purposes must be installed in all buildings provided with either sprinkler protection or automatic fire detection.

3.5 Measures which are additional to the BCA DtS Provisions

3.5.1 Compartmentation

Parts of a building containing sleeping accommodation must be separated from the kitchens by smoke or fire resistant construction.

Where practicable, every sleeping room should have a door leading directly to a corridor, hallway, passageway, etc.

Door hardware fitted to fire/smoke doors (including closers and automatic hold open devices) must be approved by the secure facility for durability and resistance to vandalism.

3.5.2 Egress Provisions*

There must be at least 2 exits paths from each building or smoke or fire compartment containing *clients*.

For many buildings in secure facilities, egress to secure external areas in lieu of a road or open space maybe necessary in order to maintain the safety of the *clients* and the community without necessarily compromising fire safety. Advice must be sought from the Department or Program area if a secure external area is required. If adopted, such areas must permit *clients* to collectively assemble and be at least 10m from the nearest part of the building. Additionally, access from the area to a road or open space within the confines of the *secure facility* must be available by use of a master key or access card carried by supervising staff or secure override.

3.5.3 Fire Blankets

A fire blanket complying with AS 3504 must be provided in each kitchen area and may be located in a secure enclosure so that it remains readily available to staff in a fire emergency.

Location signage for fire blankets in client accessible areas need not be provided.

3.5.4 Emergency lighting

In addition to the BCA DtS provisions, emergency lighting must be provided:

- (a) in every room with a floor area of more than 120 square metres, to which *clients* have access
- (b) to a fire control area and/or staff area from which public address announcements are made, client lists are maintained and the position of the fire can be identified (for example, at a mimic panel)
- (c) where manual overrides for electronically controlled doors are provided
- (d) in every secure courtyard.

3.5.5 Exit signs*

Exits signs are required to be installed in the building in accordance with the DtS provisions of the BCA. However, illuminated exit signs are not required to be installed in residential buildings, as evacuation from such buildings is highly controlled and risk of vandalism is high.

3.5.6 Protection against external environmental hazards*

If a new building is located in a designated bushfire prone area (as defined in the *Building Regulations*), or in a wildfire or bushfire management overlay in any planning scheme, the DtS provisions of the BCA for bushfire (including AS 3959) must be complied with.

For existing buildings if the site has been classified as a BAL of Low or higher in designated bushfire prone area (as defined in the *Building Regulations*), or in a wildfire or bushfire management overlay in any planning scheme, then it must be referred to the Department for any additional requirements.

If a building is located (where works are being proposed) in an alpine area (as defined in the building regulations and the BCA), the requirements of BCA Volume 2 for alpine areas must be complied with, if required by the Regulations or the BCA.

3.5.7 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 must utilise nominated templates published by the FRMU using *accredited* practitioners available from the FRMU. Refer to website:

www.dhs.vic.gov.au/about-the-department/documents-and-resources/policies,-guidelines-and-legislation/fire-risk-management

4.2 Fire Engineering Brief and Fire Engineering Report

The fire engineering brief (FEB) and fire engineering report (FER) must be prepared in accordance with the *International Fire Engineering Guidelines 2005*, utilising templates published by the FRMU and in compliance with section 5.2 of CDG 7.2.

4.3 Fire Safety Audit Report

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

4.4 Fire Safety Handbook

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

The *fire safety handbook* shall be a continually updated document as required which consolidates the requirements from all *fire risk assessments*, audits and changes undertaken to the building over time in compliance with section 5.4 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 DHS in relation to application or interpretation of the Guidelines. Advisory notes are not mandatory but must be taken into account in any assessment process.

Agency

A third party organisation provided with funding or support by the Department to provide care for *clients*. Often also referred to as a Community Service Organisation (CSO) or Non-Government Organisation (NGO).

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*.

Client Profile

Means one or more of the following:

- Ambulant (Type 1) A client who is able to understand and respond to an alarm and able to
 independently evacuate without staff present in the building.
- Ambulant (Type 2) A client, who is able to understand and respond to an alarm, can
 evacuate with staff intervention or can evacuate independently with a delay. For example,
 staff implement the evacuation plan including providing verbal instructions, coordination,
 supervision and limited physical assistance, such as hand or arm holding.
- Ambulant (Type 3) A client who is not able to understand and respond to an alarm but, can evacuate with staff intervention. For example, staff implement the evacuation plan including providing verbal instructions, coordination, supervision and limited physical assistance, such as hand or arm holding.
- Ambulant (Type 4) A client who is able to understand and respond to an alarm but, may
 not be able to evacuate independently or, will take extra time to evacuate independently.
 They will require verbal instructions and substantial physical assistance from staff to
 evacuate. For example, removal from bed and placement in a wheelchair or stretcher.
- Non-ambulant (Type 5) A client who is not able to understand or respond to an alarm and not able to evacuate without physical assistance. The client will require verbal instructions and substantial physical assistance from staff to evacuate. For example, removal from bed and placement in a wheelchair or stretcher.

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.

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.

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.

Essential Safety Measures

Means same as definition in the Building Regulations.

Evacuation Capability

The ability of the occupants (including *clients*, residents, visitors and staff), to evacuate a building. The evacuation capability takes account of the ability of staff and residents to assist each other during the evacuation.

Evacuation exercises

Real-time, full scale practice evacuations done to test and record actual evacuation capability and time.

Exercises

Training programs that are given to staff and/or residents to explain, promote and understand the emergency evacuation system. Examples could be walking residents through the egress system, explaining waiting areas, listening to alert and evacuation tones and practising door closing. Usually exercises are not done in real time as a 'test' evacuation, but are a training process. For example, additional exercises might be done to assist improving the drill time for a building.

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.

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 full 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.

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.

Mandatory Measures

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

Nominated Fire Risk Management Officer

A senior manager normally reporting directly to a CEO who has overall responsibility for fire risk management. The nominated fire risk management officer may have responsibility for more than one building or facility and may carry out other duties in addition to those required of the nominated fire risk management officer.

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 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*.

Secondary Exit

An alternative means of escape, which can be used if the primary means of escape is not available. Windows that can open and the like may be used as a secondary means of escape but not as a primary means of escape.

Secure Facility

A building or group of buildings within the confines of a complex for which egress to a street is required through a secure control centre or any other building that has a functional relationship to it. This includes a building or part of a building that provides sleeping facilities and is occupied by persons who are generally prevented from taking self-preservation action, due to security measures not under their control. A secure facility includes an educational/ training building, recreational building, work shed or office within the secure perimeter of the facility. Examples include correctional institutions, detention centres, secure welfare facilities, prisons, community residential centres, training centres and substance abuse centres.

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).

Statutory client

Persons for whom the Department of Human Services, Department of Health or any other Department have custody, or guardianship, or protection order of, and persons having any other order pursuant to either the *Children Youth and Families Act 2005* and/or *Disability Act 2006* and/or *Mental Health Act 1986* or a person on an order of the Courts.

24 Hour Support or Supervision

Staff support or supervision is provided whenever *clients* are in residence and includes active night rosters, sleepover rosters and the 24 hour worker model.

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. However, 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

It is clarified that secure facilities are considered as Detention Centres such that the relevant BCA DtS provisions apply (e.g. Clause D2.21(a)(iii)).

Residential parts of secure facility will be Class 3, as per item (f) of the Class 3 definition in Clause A3.2 of the BCA.

The proposed classifications for other buildings are based on the use of those areas as standalone buildings. Where such areas are incorporated into other buildings, the predominant classification will apply. For example, recreational & kitchen areas within residential buildings will most likely classified as ancillary to the Class 3 use.

Clause 2.2.1

Residential sprinkler heads are specified where an AS2118.1 system is utilised as AS2118.1 does not require the use of such sprinkler heads.

Institutional sprinkler heads are preferred in residential areas of secure facilities where *clients* may be unattended. The 2013 BCA referenced versions of AS2118.1 and AS2118.4 presently do not specifically recognise 'Institutional' sprinkler heads and thus, where used, will comprise an alternative solution. This is xxx addressed in the revised/updated version.

Clause 2.2.2

Clause 5.1.1 of AS1670.1–2004 specifies that the sensing element of smoke detectors be normally located a minimum of 25mm and not more than 300mm below the ceiling of the room being protected. Within bedrooms of secure welfare facilities, this can be problematic due to vandalism and the detector can introduce means for self harm by the occupant. Thus the use of concealed smoke detection is required.

Clause 2.4.2.3

If solid fuel burning appliances and fire places are installed within existing buildings they must not be used. The Department or Agency is not precluded from purchasing an existing building that has such an appliance or fire place installed. However, they must not be used.

Clause 2.4.3

Fire and Emergency Plans and Evacuation procedures are not required to be displayed in residential buildings and client access areas, as evacuation from such buildings is highly controlled and the risk of vandalism is high.

Clause 3.5.2

The secure space must provide room for all occupants (*clients* and staff) to assemble collectively and be located such that no occupant is closer than 10m to the external wall of the building. 10m is selected for consistency with requirements for external hydrants. While the BCA DtS provisions would permit 6m.

Clause 3.5.5

It should be noted that this will most likely be a variation to the BCA DtS Provisions and thus would need to be assessed as an alternative solution.

Clause 3.5.6

For new buildings this is not an additional requirement as the DtS provisions already require assessment against AS3959 and the *Building Regulations* require a minimum Bushfire Attack Level of BAL-12.5.

Appendix 3: Client Characteristics

A3.1 Introduction

The following is a summary of typical client capabilities for some of the secure facilities, related to fire safety. However, it should be noted that the capabilities of *clients* vary considerably and a site-specific assessment must be made in each case and considered in conjunction with Part 1.2 of this Guideline.

The summary is based on information provided by Department program personnel at an information seminar, and a statistical and literature review of fire incidents in Australia and the United States of America, as well as additional data provided by staff of the Department.

A3.2 General

Broad findings related to client capabilities and behavior from the statistical and literature review indicated the following:

- (a) many fires started in client sleeping areas and day/lounge areas and resulted in injuries and fatalities
- (b) many fires started from the misuse of smoking materials
- (c) a significant proportion of fire starts resulted from arson or incendiaries.

A3.3 Comments on Behavioral Patterns

Youth Justice/Youth Residential Centers

Clients consist of young men and young women between the ages of 10 and 20 who are on remand or undergoing a sentence to the following locations or gender, but not limited to these locations or properties:

Parkville YRC 10 to 14 year old males

10 to 20 year old females

Melbourne JJC 15 to 20 year old males

Malmsbury JJC 17 to 20 year old males

Young people in detention have offending behaviours, developmental needs and/or psychological characteristics that require specialised services, programs, security, living conditions and staffing practices.

Behavioural and emotional characteristics tend to make young people in custody more of a security risk than their adult counterparts.

Attempted escapes and other aberrant behaviours such as fire lighting can often simply be seen by young people as a challenge and a distraction from routine. It is not unusual for young people to attempt escapes within days of their due release.

Young people in detention may display some or all of the following characteristics:

- (a) acting out behaviours in response to the effects of abuse, neglect or dysfunctional family dynamics
- (b) a limited insight and appreciation of the consequences (legal and otherwise) of their actions
- (c) a reduced fear of danger
- (d) volatile behaviour and at times, extreme dependency needs
- (e) fitness and agility
- (f) different perceptions of time (that is, time frames seem much longer)
- (g) shorter concentration span
- (h) at times suffering from drug withdrawal and associated behaviours
- (i) increased vulnerability than older adult offenders
- (j) self-harming behaviour.

Vandalism does occur. This has required extensive testing of fire and safety systems (including sprinklers and smoke detection systems) in order to minimise the risk of damage. Security measures are provided to minimise the risks of harm and absconding.

A3.4 Secure Welfare Services

Secure Welfare Services are conducted by the Department at various sites throughout the State. These facilities provide secure short-term placements (currently maximum of 21 days with provision to extend up to a further period of 21 days) for young people aged 10 to 17 years who are at immediate and substantial risk of harm caused by themselves or others.

Significant client behaviours include:

- (a) substance abuse, with some young people physically debilitated at admission and postadmission
- (b) self-harming, self-destructive and suicidal behaviours
- (c) mental health issues, including fire lighting
- (d) absconding/attempts to abscond
- (e) subjected to sexual exploitation and involvement with prostitution
- (f) involvement in property damage which could include fire safety facilities.

A3.5 Crisis/Emergency Houses

Clients can be categorised potentially as:

- (a) 18 to 40 years old
- (b) intellectually disabled and requiring 24-hour staff supervision
- (c) having been involved in the criminal justice system
- (d) having challenging behaviours
- (e) having destructive behaviours
- (f) absconding

A3.6 Secure Psychiatric and Forensic Services

Significant client behaviours may include:

- i. delusional disorder or beliefs
- ii. elements of paranoia
- iii. confused mental state
- iv. side-effects arising from medication including sedation and being disaffected
- v. the potential for violent and destructive behaviour
- vi. self-harm and suicidal behaviour
- vii. potential risk of absconding or escaping
- viii. unpredictable behaviours.

Notes	

Notes

Notes	

