**Issued December 2015** 

# **Maintenance of Essential Safety Measures**

This updates the previous practice note 2014-23 issued July 2014

#### 1. INTRODUCTION

An essential safety measure is an item specified by the Relevant Building Surveyor (RBS) that's provided in a building or place of pubic entertainment for the health and safety of occupants.

The term essential safety measure is defined in the Building Regulations 2006 (the Regulations) depending on when the building or place of public entertainment was constructed.

Determining whether an item is an essential safety measure or not, must be based on the application of the appropriate definition from Subdivision 1 or 2 as applicable.

Since 1 July 1994, the RBS at the time of issuing an Occupancy Permit (OP) or Certificate of Final Inspection (CFI) is required to list the specific essential safety measures in the building or place of public entertainment that need to be maintained.

The RBS must also specify the provision of the Regulations that the installation and operation of each essential safety measure must comply with, and the frequency and type of maintenance required.

Prior 1 July 1994 there was no requirement for essential safety measures to be identified individually in this manner. Despite this, essential safety measures installed in buildings and places of public entertainment prior to 1 July 1994, must be maintained to fulfil their purpose.

#### 2. SCOPE OF THE MAINTENANCE REGULATION

The maintenance provisions of Part 12 of the Regulations are divided into two Divisions. Division 1 outlines the requirements for maintenance of essential safety measures and Division 2 outlines the maintenance and operation requirements for swimming pools and spas. For swimming pool maintenance refer PN -05 "swimming pool and spa safety".

Division 1 is further divided into three subdivisions. Subdivision 1 deals with the maintenance of essential safety measures, as determined by the RBS. It applies to all building Classes except Class 1a and 10 buildings where building work is or has been carried out under the Building Act 1993 (the Act) on or after 1 July 1994. However, Subdivision 1 does not apply to smoke alarms installed in soleoccupancy units in a Class 1b, 2, and 4 part of a building.

Subdivision 2 outlines the maintenance requirements of essential safety measures for buildings and places of public entertainment constructed before 1 July 1994. This Subdivision applies to all building Classes except Class 1a, 4 (parts) and 10 buildings.

Subdivision 3 sets out the requirements for maintenance of exits and paths of travel relating



to buildings or places of Public entertainment. This Subdivision applies to all building Classes except Class 1a, 4 (parts) and 10 buildings.

Note the Regulations do not apply to Federal Government land such as airports and telephone exchanges.

### 3. SUBDIVISION 1 - MAINTENANCE OF ESSENTIAL SAFETY MEASURES IN BUILDING AND PLACES OF PUBLIC ENTERTAINMENT.

Within Subdivision 1, regulation 1203 requires the RBS issuing an OP to include a condition which:

- a. lists all the essential safety measures pertaining to that building or place of public entertainment; and
- specifies for each essential safety measure listed, the level of performance determined by the RBS to enable the essential safety measure to fulfil its purpose.

In determining the level of performance for each essential safety measure, Regulation 1203(2) also requires the RBS to specify the provision of the Regulations with which the installation and operation of the essential safety measure is to comply and the frequency and type of maintenance required.

Regulation 1204 states that where an essential safety measure is provided:

- as a result of an emergency order or a building order; or
- as a result of the carrying out of building work where an OP is not required to be issued (i.e. when a CFI is issued);

the RBS must decide, and provide in writing the level of performance required to enable the essential safety measure to fulfil its purpose and the frequency and type of maintenance required. This decision by the RBS must be documented and given to the owner of the building or place of public entertainment and is known as a maintenance determination.

## 4. DECIDING WHICH ESSENTIAL SAFETY MEASURES ARE TO BE LISTED

Under subdivision 1, where building work has been carried out on or after 1 July, 1994, the RBS must identify the specific essential safety measures provided for the building or place of public entertainment that are required to be maintained. A list of essential safety measures that may apply reflecting Schedule 9 of the regulations is provided in Appendix A, "Table 1-Source Table Schedule of Essential safety measures". However it should be noted that the RBS can add to this list.

## 5. CAPTURING REQUIREMENTS OF ALTERNATIVE SOLUTIONS

Where an alternative solution is used which requires measures other than those contained within Table 1 or which requires a varied methodology of maintenance than recommended by this schedule, or otherwise accepted, then the RBS must ensure the requirements for maintenance are listed as occupancy permit conditions or in a maintenance determination to reflect such requirements. It is recommended in this case that the RBS consult with the designer to determine the appropriate maintenance requirements and frequency.

## 6. MAINTENANCE REQUIREMENTS OF ESSENTIAL SAFETY MEASURES

For each essential safety measure listed in the OP conditions or maintenance determination, the RBS must also specify and document the standard of performance the essential safety measure must provide in order to fulfil its purpose.



To ensure that essential safety measures fulfil their purpose consistently over time, the RBS must also specify and document the way in which each essential safety measure needs to be verified, inspected and tested. The RBS should specify the edition of any documents referred to when determining the required level of performance for each essential safety measure including specifying the provision of the Regulations with which the installation and operation of the essential safety measure is to comply and the frequency and type of maintenance required.

The Regulations provide the RBS with discretion as to determining the maintenance methodology that should be applied to essential safety measures. Table 1 below provides an example of the maintenance that could be required by the RBS for each listed essential safety measure. However this is a decision for the RBS.

# 7. DOCUMENTATION OF THE RBS DETERMINATION

The RBS documents their determination as a condition of the OP or a maintenance determination under a CFI. Where an essential safety measure is provided as a consequence of an Emergency Order or a Building Order, Regulation 1204(2) requires a copy of a maintenance determination to be provided to the owner of the building or place of public entertainment without delay after it is made.

The RBS pursuant to regulation 1007 must specify the approved location for the display of the OP and its conditions. The location should be in an approved and prominent location, accessible to the public within the building or place of public entertainment. These provisions do not apply to Maintenance Determinations. The exemption to this rule is regulation 1805 which lists the classes of buildings in which the document may be placed in an area to which access is available only with the authorisation of the owner.



### APPENDIX A

TABLE 1: SOURCE TABLE – SCHEDULE OF ESSENTIAL SAFETY MEASURES FOR NEW BUILDING WORK PART 1– BUILDING FIRE INTEGRITY

Essential safety measure	BCA provisions for determining standard of performance	Nature and or Frequency of Test or Inspection
Building elements required to satisfy prescribed fire resistance levels	Section C, D1.12	As per AS 1851-2012
Materials and assemblies required to satisfy prescribed fire hazard properties	C1.10	Annual Inspection for damage, deterioration, or unauthorised alteration
Elements required to be non- combustible, provide fire protection, compartmentation or separation	C2.5 to C2.14, C3.3, C3.11, D1.7 - D1.8, E1.3, G3.4, Spec. E2.2b	Annual Inspection for damage, deterioration, or unauthorised alteration
Wall-wetting sprinklers (including doors and windows required in conjunction with wall-wetting sprinklers)	C3.4, C3.8, C3.11, D1.7, D1.8, G3.8	As per AS 1851-2012
Fire doors (including sliding fire doors and their associated warning systems) and associated self-closing, automatic closing and latching mechanisms	C2.12 to C2.13, C3.4 to C3.8, C3.10 to C3.11, D1.7 to D1.8, D1.12	As per AS 1851-2012
Fire windows (including windows that are automatic or permanently fixed in the closed position)	C3.4, C3.8, C3.11, D1.7 to D1.8	As per AS 1851-2012
Fire shutters	C3.4, C3.5, D1.7 to D1.8	As per AS 1851-2012
Solid core doors and associated self-closing, automatic closing and latching mechanisms	C3.11	Annual Inspection for damage, deterioration, and check operation of closers, handles and electronic strikes.
Fire-protection at service penetrations through elements required to be fire-resisting with respect to integrity or insulation, or to have a resistance to the incipient spread of fire	C3.12, C3.13, C3.15	As per AS 1851-2012
Kitchen Hood Exhaust systems	F4.12	As per AS 1851-2012
Duct penetrations through smoke proof walls in Health Care and Aged Care buildings	Specification C2.5	As per AS 1851-2012



Fire protection associated with construction joints, spaces and the like in and between building elements required to be fire- resisting with respect to integrity and insulation	C3.16	As per AS 1851-2012
Smoke doors and associated self-closing, automatic closing and latching mechanisms	Specification C2.5, D2.6	As per AS 1851-2012
Proscenium walls (Fire Curtains)	H1.3	Annual Inspection for damage, deterioration or unauthorised alteration

### PART 2 – MEANS OF EGRESS

Essential safety measure	BCA provisions for determining standard of performance	Nature and or Frequency of Test or Inspection
Paths of travel to exits	D1.6	Inspection every three months to ensure there are no obstructions and no alterations
Discharge from exits (including paths of travel from open spaces to the public roads to which they are connected)	D1.7, D1.9 to D1.11, D2.12, G4.3, G4.6, G4.7	Inspection every three months to ensure there are no obstructions and no alterations
Exits (including fire-isolated stairways and ramps, non-fire isolated stairways and ramps, stair treads, balustrades and handrails associated with exits, and fir- isolated passageways)	D2.2, D2.3, D2.8 to D2.11, D2.13, D2.16, D2.17	Inspection every three months to ensure there are no obstructions and no alterations
Smoke lobbies to fire-isolated exits	D1.7, D2.6	Annual inspection for damage, deterioration, or unauthorised alteration
Open access ramps or balconies for fire-isolated exits	D2.5	Annual Inspection for damage, deterioration, or unauthorised alteration
Doors (other than fire or smoke doors) in a required exit, forming part of a required exit or in a path of travel to a required exit, and associated self-closing, automatic closing and latching mechanisms	D1.6, D2.19 to D2.21, D2.23	Inspection every three months to ensure doors are intact, operational and fitted with conforming hardware



#### Part 3 – SIGNS

Essential safety measure	BCA provisions for	Nature and or Frequency of Test
	determining standard of performance	or Inspection
Exit signs (including direction signs)	Specification D1.12 D1.12, E4.5, E4.6, E4.8	Every 6 months to AS 2293.2-1995
Photoluminescent exit signs	E4.8 and Specification E4.8	"Check monthly that signs are clean, not obstructed, have sufficient lighting levels to facilitate charging and are clearly visible to persons approaching the exit"
Signs warning against the use of lifts in the event of fire	E3.3	Annual inspection to ensure the warning sign is in place and legible
Warning signs on sliding fire doors and doors to non-required stairways, ramps and escalators	C3.6, Specification D1.12	Annual Inspection to ensure the warning sign is in place and legible
Signs, intercommunication systems, or alarm systems on doors of fire isolated exits stating that re-entry to storey is available	D2.22	Annual Inspection to ensure the warning sign is in place and legible
Signs alerting persons that the operation of doors must not be impaired	D2.23	Annual inspection to ensure the warning sign is in place and legible
Signs required on doors, in alpine areas, alerting people that they open inwards	G4.3	Annual inspection to ensure the warning sign is in place and legible
Fire order notices required in alpine areas	G4.9	Annual inspection to ensure the warning sign is in place and legible

#### PART 4 – LIGHTING

Essential safety	BCA provisions for determining standard of performance	Nature and or Frequency of Test or Inspection
Emergency lighting	E4.2, E4.4	Every 6 months to AS / NZS 2293.2-1995

#### PART 5 – FIRE FIGHTING SERVICES AND EQUIPMENT

Essential safety measure	BCA provisions for determining standard of performance	Nature and or Frequency of Test or Inspection
Fire hydrant system (including on-site pump set and fire service booster connection)	E1.3	As per AS 1851-2012
Fire hose reel system	E1.4	As per AS 1851-2012
Sprinkler system	E1.5, G3.8, H1.2	As per AS 1851-2012
Portable fire extinguishers	E1.6	As per AS 1851-2012
Fire control centres (or rooms)	E1.8	Annual inspection to ensure compliance of construction and contents with BCA
Provisions for special hazards	E1.10	As per AS 1851-2012



#### **PART 6 – AIR HANDLING SYSTEMS**

Essential safety measure	BCA provisions for determining	Nature and or Frequency of Test
	standard of performance	or Inspection
Smoke hazard	E2.2	As per AS 1851-2012
management systems:		
<ul> <li>automatic air pressurisation systems for fire-isolated exits</li> </ul>		
<ul> <li>zone smoke control system automatic</li> </ul>		
<ul> <li>smoke exhaust systems, automatic smoke and heat vents (including automatic vents for atriums)</li> </ul>		
<ul> <li>air handling systems that do not form part of a smoke hazard management system and which may unduly contribute to the spread of smoke</li> </ul>		
<ul> <li>miscellaneous air handling systems covered by Sections 5 and 11 of AS/NZS 1668.1 serving more than one fire compartment</li> </ul>		
Carpark mechanical ventilation system	E2.2 and F4.11	As per AS 1851-2012
Atrium smoke control system (see above for smoke and heat vents)	Specification G3.8	As per AS1851 – 2012

#### PART 7 – AUTOMATIC FIRE DETECTION AND ALARM SYSTEMS

Essential safety measure	BCA provisions for determining standard of performance	Nature and or Frequency of Test or Inspection
Smoke and heat alarm	Clause 3 of	As per AS 1851-2012
system	Specification E2.2a	
Smoke and heat detection	Clause 4 of	As per AS 1851-2012
system	Specification E2.2a	
Atrium fire detection and	Clause 4 of	As per AS 1851-2012
alarm systems	Specification G3.8	



#### **PART 8 – OCCUPANT WARNING SYSTEMS**

Essential safety measure	BCA provisions for determining standard of performance	Nature and or Frequency of Test or Inspection
Emergency warning and intercommunication system	E4.9 Clause 5 of Specification G3.8	As per AS 1851-2012
Building occupant warning system	Clause 8 of Specification E1.5, Clause 6 of Specification E2.2a	As per AS 1851-2012

#### PART 9 – LIFTS

Essential safety measure	BCA provisions for determining standard of performance	Nature and or Frequency of Test or Inspection
Stretcher facilities in lifts	E3.2	Annual inspection to ensure compliance of facilities with BCA
Emergency lifts	E3.4	As Per requirements of AS 1735 Periodic inspection as per manufacturers specification, however no less than annual inspection.
Passenger lift fire service controls	E3.7	Periodic inspection as per manufacturers specification, however no less than annual inspection.

#### **PART 10 – STANDBY POWER SUPPLY SYSTEMS**

Essential safety measure	BCA provisions for determining standard of performance	Nature and or Frequency of Test or Inspection
Standby power supply	E3.4, Clause 6 of	Every six months test to ensure
system	Specification G3.8	auxiliary power is operable. As per manufacturers recommendations or alternatively for diesel engines where the manufacturers recommendations are not available - test as prescribed in AS 1851 – 2012 based on proving electrical load in lieu of flow/pressure for pump sets.

#### PART 11 – BUILDING CLEARANCE AND FIRE APPLIANCES

Essential safety measure	BCA provisions for determining standard of performance	Nature and or Frequency of Test or Inspection
Open space around large isolated buildings	C2.3 to C2.4	Annual inspection to ensure that unobstructed access to buildings and fire fighting facilities are maintained
Vehicular access around large isolated buildings	C2.3 to C2.4	Annual inspection to ensure clearance is maintained



Essential safety measure	BCA provisions for determining standard of performance	Nature and or Frequency of Test or Inspection
Mechanical ventilation systems incorporating cooling tower systems (other than a system only serving a single sole occupancy unit in a Class 2 or 3 building or Class 4 part of a building)	E2.2 F4.5 F4.11	AS 3666.2 -2011
Mechanical ventilation systems incorporating hot and warm water systems (other than a system only serving a single sole occupancy unit in a Class 2 or 3 building or Class 4 part of a building)	F2.7	AS 3666.2 – 2011

#### PART 12 - MECHANICAL VENTILATION AND HOT, WARM AND COOLING TOWER WATER SYSTEMS

# 8. CONSOLIDATION OF MAINTENANCE DETERMINATIONS

Over time some buildings will have multiple occupancy permits and maintenance determinations making it difficult for building owners to manage maintenance requirements. Subdivision 1, regulation 1206 permits a Municipal Building Surveyor (MBS) or a Private Building Surveyor (PBS) on the application of the owner, to create a consolidated list of essential safety measures and their maintenance requirements from existing occupancy permits or maintenance determinations. This consolidated document is known as a maintenance schedule.

In creating a maintenance schedule the MBS or PBS must ensure that any safety measure that exists in the building or place of public entertainment at the time of making the schedule is listed in the schedule along with the maintenance requirements that relates to the safety measure.

When creating the schedule the building surveyor must list the essential safety measures in chronological order in the schedule according to the date of issue of the relevant occupancy permit(s) or the date of making the relevant maintenance determination(s).

#### 9. UPDATING MAINTENANCE SCHEDULES

Regulation 1206(3) also provides that an owner may apply to the MBS or a PBS to update maintenance schedules where additional safety measures and related maintenance requirements have been added to a building.

### 10. SUBDIVISION 2 - MAINTENANCE OF ESSENTIAL SAFETY MEASURES IN BUILDINGS AND PLACES OF PUBLIC ENTERTAINMENT CONSTRUCTED BEFORE 1 JULY, 1994

Any essential safety measure in buildings and places of public entertainment constructed before 1 July 1994 must be maintained, by the owner, to a working condition that enables them to fulfil their purpose.

The owner must ensure that an essential safety measure:

• Is maintained in a state which enables the essential safety measure to fulfil its purpose; and



• Is not removed from its approved location except for the purposes of providing maintenance.

Subdivision 2 does not explain or define the terms 'item of equipment', 'form of construction' or 'safety strategies'. Where building owners are unclear about what constitutes an essential safety measure in buildings subject to Subdivision 2, it is expected that building owners will engage suitably qualified persons to establish the essential safety measures, and outline an appropriate level of maintenance. In some instances this may be a difficult task and may involve detailed inspection and researching historical documentation to establish the essential safety measures and frequencies and type of maintenance.

The level of maintenance expected by inspecting authorities should not be greater than that required at the time the equipment, fitting or essential safety measure was installed.

The latest edition of Australian Standard AS 1851-2012 is now more appropriate in this regard as it now includes routine servicing methodologies that can be applied to demonstrate that fire protection essential safety measures are capable of fulfilling their purpose, regardless of the age of these installations. It generally requires less frequency of inspection and testing.

For other essential safety measures, any relevant Australian Standard or other prescribed methodology that can demonstrate essential safety measure performance is adequate can be specified.

The enforcement provisions of Part 8 of the Act provide for an MBS or PBS where appointed, to review any risk to the life, safety, or health of any occupant in a building. As part of the enforcement process consideration could be given to upgrading the essential safety measures to current standards and practices were necessary, informed by a risk management approach following an assessment of the current use, hazards and adequacy of the installed essential safety measures to treat this risk.

If essential safety measures are upgraded building permit approval will be required for these works unless this is specifically waived in an Emergency Order or Building Order. Accordingly a new occupancy permit or maintenance determination will need to be issued at the completion of works confirming the new installation performance and maintenance requirements.

## 11. SUBDIVISION 3 - MAINTENANCE OF EXITS AND PATHS OF TRAVEL RELATING TO BUILDINGS AND PLACES OF PUBLIC ENTERTAINMENT

In addition to the requirements for building owners in Part 12 of the Regulations, Subdivision 3 establishes specific additional requirements for the building occupier relating to egress. Subdivision 3 sets out the requirement for maintenance of exits and paths of travel. Regulation 1218 requires that the occupier of a Class 1b, 2, 3, 5, 6, 7, 8, 9 building or place of public entertainment must ensure exits and paths of travel are maintained in an efficient condition and kept readily accessible, functional and clear of obstruction so that egress from the building is maintained. This regulation does not remove the responsibility of the owner under subdivision 1 or 2.

## **12. INSPECTIONS AND ENFORCEMENT**

The Victorian Building Authority (VBA), MBS or Chief Officer of the fire brigade may issue a building infringement notice (on-the-spot-fine). This applies under Division 5 of Part 13 of the



Act and Part 17 of the Regulations for an offence against:

- Subdivision 1 regulations 1205, 1207, 1208, 1211,; and
- Sub Division 2 regulations 1214, 1216 and 1217; and
- Subdivision 3 regulation 1218.

To determine whether essential safety measures are performing and being maintained, and records of maintenance are being kept in accordance with the Act or the Regulations, an inspection may be carried out under section 227E of the Act by the chief officer and municipal building surveyor either jointly or separately. The chief officer must report to the MBS within 5 business days and the MBS must report to the building owner within 10 business days regarding the inspection.

A building infringement notice may be issued as a consequence of this inspection. A building infringement notice must be issued in accordance with the *Infringements Act 2006*.

Following inspection, the municipal building surveyor may also determine it is appropriate take further enforcement action under Part 8 of the Act to enforce building standards. Such action may include the serving of an Emergency Order if appropriate or serving a Building Notice and Building Order as necessary.

Enforcement action can be taken by the MBS if they determine there is a danger to life or property, or the use contravenes the Act or Regulations. Enforcement action may be taken against the owner or occupier and could include, evacuation and prohibiting the use of the building, or may require certain improvement work to be undertaken on essential safety measures or other building elements to satisfy safety expectations.

Note that the MBS can order work to be undertaken and if the owner fails to carry out work, the municipal building surveyor can cause work to be carried out and recover costs from the owner in court.

Also the MBS can waive or enforce the requirement to obtain a building permit for works subject to an order. However, whether a building permit is obtained or not a maintenance determination is required under regulation 1204 to capture essential safety measures and maintenance requirements.

## **13. OFFENCES UNDER SUBDIVISION 1**

Failure to maintain an essential safety measure to the required standard is an offence under Section 40 of the Building Act 1993 and or regulation 1205 as applicable and Part 12 of the Regulations.

Failing to complete the required documentation constitutes an offence under regulations 1205, 1207, 1208, 1211. This may include:

- Failure to comply with a maintenance determination.
- Failure to make maintenance schedule or determination available for inspection.
- Failure to complete an annual essential safety measures report (in accordance with regulation 1208) before each anniversary of the occupancy permit or RBS's determination.
- Failure to keep all essential safety measure reports and records on the premises for inspection purposes.

These offences relate to the building owner.

## **14. OFFENCES UNDER SUBDIVISION 2**

Failure to maintain any safety equipment, safety fitting or essential safety measure in a state that allows it to fulfil its purpose and prepare and make available an annual essential safety measures report constitutes an offence under regulations 1214, 1216 and 1217.



Removal of any safety equipment, safety fitting or essential safety measures from its approved location (unless for maintenance purposes in accordance with the regulations) constitutes an offence under regulation 1217.

These offences relate to the building owner.

## **15. OFFENCES UNDER SUBDIVISION 3**

Failure to ensure that exits and paths of travel are maintained in an efficient condition and kept readily accessible, functional and clear of obstruction so that egress from the building is maintained constitutes an offence under Regulation 1218. An infringement notice issued under this subdivision is issued to occupier, however does not prevent infringement notices being issued on the owner for similar issues under subdivision 1 or 2.

### **16. OWNER'S RESPONSIBILITY**

Part 12 of the regulations places the responsibility on the owner to ensure that the maintenance of the essential safety measures required for their building is carried out, and that appropriate records of maintenance, service and repair work are kept. These records provide the necessary information to allow the annual essential safety measure report to be completed, as required by regulation 1208 and 1214 subject to subdivision 1 and 2 respectively. Regulations 1209 and 1215 stipulate the content requirements of the annual essential safety measures report including:

- The prescribed form of the report
- The address of the building or place of public entertainment it relates to
- Details of any inspection report made under section 227E of the Act in respect of each essential safety measure
- Be signed by the owner or agent of the owner

The annual essential safety measures report must also include a statement that the owner or

an agent of the owner has taken all reasonable steps to ensure that-

- Each essential safety measure is operating at the required level of performance and has been maintained in accordance with the relevant occupancy permit or maintenance determination or otherwise to enable it to fulfil its purpose; and
- Since the last annual essential safety measures report, there have been no penetrations to required fire-resisting construction, smoke curtains and the like in the building or place, other than those for which a building permit has been issued; and
- Since the last annual essential safety measures report, there have been no changes to materials or assemblies that must comply with particular fire hazard properties, other than those for which a building permit has been issued; and
- The information contained in the report is correct.

Some owners engage an agent to organise the carrying out inspections and testing by competent persons or to complete the annual essential safety measures report on the owner's behalf. Owner agents are typically building or facility managers. However the owner can appoint anyone as an agent. In this case the law dealing with 'agency' applies, and it is prudent that the correct written authority is provided by the owner, including any limitations of that authority, when providing documentation.

Regulation 1207 and 1216 require that owners must make the annual report available within 24 hours' notice from the MBS or the Chief Officer. This requirement is to prevent the "wallpapering" effect that may occur in some buildings and allows the annual essential safety measures report to be stored in more appropriate and secure locations. Note that this does not affect the requirement to display an



occupancy permit in accordance with regulation 1007.

Subdivision 3 sets out the requirement for maintenance of exits and paths of travel. Regulation 1218 requires that the occupier must ensure exits and paths of travel are maintained in an efficient condition and kept readily accessible functional and clear of obstruction so that egress from the building is maintained. This regulation does not remove the responsibility of the owner under subdivision 1 or 2, but also makes occupier responsible.

## **17. ENGAGING COMPETENT PERSONS**

It is important that the building owner or their appointed agent can demonstrate that the individuals engaged to undertake maintenance activities are competent to perform the functions they have been contracted to complete.

A competent person can be defined as:

"A person who has acquired through training, qualification, experience, or a combination of these, the knowledge and skill enabling them to correctly perform the required task."

A relevant Building Practitioner Board registration is valid demonstration of competence for some wet fire protection system maintenance activities.

Additionally, evidence of competency can be demonstrated by participation in recognised industry accreditation schemes that have been established to independently assess competence in activities associated with essential safety measures relating to fire protection.

## 18. USING THE LATEST STANDARDS FOR METHODOLOGY AND FREQUENCY OF MAINTENANCE

## SUBDIVISION 1 BUILDINGS

Owners of buildings to which subdivision 1 applies, must, as a minimum, comply with the

standard regarding the methodology and frequency of maintenance nominated as a condition of an occupancy permit or maintenance determination.

Standards produced through the consensus approach of Standards Australia are universally recognised as representing best practice and are most likely to satisfy regulatory requirements for maintenance as well as workplace health and safety and common law duty of care expectations.

Owners of buildings to which subdivision 1 applies that wish to take advantage of the latest standards for maintenance to improve methodology and reduce frequency must be able to demonstrate that application of the latest standards continue to demonstrate an essential safety measure is able to fulfil its purpose and maintain safety objectives as was expected by the application of standards nominated as a condition of an occupancy permit or maintenance determination.

AS 1851-2012 has been developed to demonstrate fire protection systems and equipment remain able to fulfil their purpose regardless of the date of installation.

Therefore where an essential safety measure is maintained using AS 1851-2012 in lieu of previous nominated versions of AS 1851, it is considered that the essential safety measure will fulfil its purpose and maintain safety objectives.

Where an essential safety measure is not covered by AS 1851-2012 or it is unclear if maintenance to a new standard can be demonstrated to ensure the essential safety measure will continue to fulfil its purpose and maintain safety objectives, the building owner may apply to the MBS or the RBS who issued the occupancy permit to amend their occupancy permit, maintenance determination(s) or maintenance schedule respectively.

## SUBDIVISION 2 BUILDINGS

Owners of buildings to which subdivision 2 applies, may adopt any standard regarding the methodology and frequency of maintenance,



provided that they can demonstrate that application of such a standard demonstrates essential safety measures are being maintained in a state which enables the essential safety measure to fulfil its purpose.

### **19. ADDITIONAL INFORMATION**

To assist practitioners dealing with buildings and building work carried out between July 1994 and 2004 Appendix B contains the previous source table.

The table includes versions of standards applicable from the time period July 1994 and 2004. Some items have multiple standards listed as both versions have been used in this time period. Where multiple versions or editions of standards are listed in the source table the relevant building surveyor must ensure that the relevant standard is listed applicable to the building. Standards or documentation must be relevant to the building and those not relevant must not be listed.

If you have a technical enquiry please email: <u>technicalenquiry@vba.vic.gov.au</u> or phone 1300 815 127

Victorian Building Authority 733 Bourke Street Docklands VIC 3008



# Appendix B

The following source table has been reproduced to provide some level of guidance to practitioners having to deal with buildings constructed in period of July 1994 to July 2004.

Essential safety measure to	Installation standards/	Nature of inspection or test and
be inspected or tested	level of performance	Frequency of inspection or test
Air conditioning systems	AS/NZS 1668.1-1998, AS 1668.2-	Monthly to AS 1851.6-1993 or
	1991	Monthly to AS 1851.6 1997, AS
		3666-1995
Air Pressurisation systems	BCA E 2.2, E1.8,	Monthly to AS 1851.6-1993 or
	AS/NZS 1668.1-1998	Monthly to AS 1851.6 1997, AS
		3666-1995
Commercial Kitchen Exhaust	BCA F4.12, AS1668.2-1991,	2012Monthly to AS 1851.6-1993
	AS/NZS 1668.1-1998	
Emergency lifts	BCA E3.4, AS 1735.2-1997	BCA 90 Weekly to Occupational
		Health and Safety (Plant)
		Regulations 1995 BCA 96
		Annual Inspections or in
		accordance with Manufacturers
		Specifications, the lesser of
		the two
Emergency lighting	BCA Part E4,	Every 6 months to AS 2293.2-
	AS 2293.1-1998	1995
Emergency power supply	Electrical power supply	Every 6 months
	BCA Spec G3.8	
Emergency warning and	BCA E4.9, AS 2220.1-1989	Every 3 months to AS 1851.10-
intercommunication systems	& AS 2220.2-1989	1989
Exit doors	BCA Section D	Every 3 months. Inspection to
		confirm exit doors are intact,
		operational and fitted with
		conforming hardware
Fire brigade connections	BCA 90Spec E1.7, Vic	Weekly to AS 1851.8-1987 or
	H101.9, Vic H103, AS 1670-	Weekly to AS 1851.8-1990
	1995 BCA 96 Spec E2.2a,	
	Vic H103, AS1670-1995,	
	AS2118.4-1995, AS2118.1-	
	1999	
Fire control centres	BCA Spec E1.8	Annual Inspection
Fire control panels	(BCA 90 provisions) BCA	Weekly to AS 1851.8-1987
	Vic H101.9, AS1603.4-1987	
Fire indicator panels	BCA Vic H103.1, Practice	Weekly to AS 1851.8-1987
	Note No. 07	
Fire curtains	BCA Spec H1.3	Annual inspection for damage or
		deterioration

Source Table – BCA 96 and BCA 90, Schedule of Essential safety measures



Fire dampers	BCA 90 AS 1682.2-1990 BCA 96 Part C3, AS 1668.2-1991	Weekly to AS 1851.8-1987
Fire detectors and alarm systems	BCA 90 Provision BCA E1.7, AS 1670-1995 BCA 96 Provisions BCA E2, AS 1670-1995	Weekly to AS 1851.8-1987
Smoke Dampers	BCA C2.5	Weekly to AS 1851.8-1987
Smoke and Heat Detectors	BCA Spec E2.2a, AS 1670-1995	Weekly to AS 1851.8-1987
Fire doors (including signs)	BCA Spec C3.4, AS 1905.1-1997	Monthly to AS 1851.7-1994
Fire extinguishers (portable)	BCA E1.6, AS 2444-1995	Every 6 months to AS 1851.1- 1995
Fire hose reels	BCA E1.4, AS2441-1988	
		Every 6 months to AS 1851.2- 1995
Fire hydrants	BCA E1.3, AS 2419.1-1994	Weekly to AS 1851.4-1992 where pumps are installed or Monthly to AS 1851.4-1992
Fire indices for materials	BCA C1.10, AS 1530.3-1999	Annual inspection to confirm no materials with potentially non- conforming fire indices occur
Fire isolated lift shafts	BCA Section C	Annual inspection
Fire isolated passageways	BCA Sections C and D	Annual inspection
Fire isolated ramps	BCA Sections C and D	Annual inspection
Fire isolated stairs	BCA Sections C and D	Annual inspection
Fire mains	BCA 90 provision only BCA Part E1, AS 2118.61995, AS 2419.1-1994	Weekly to AS 1851-4 1992
Fire protective coverings	BCA Section C	Annual inspection
Fire rated access panels	BCA Part C3	Annual Inspection to AS 1851.7- 1984 equivalent
Fire rated control joints	BCA Section C	Annual inspection
Fire rated materials applied to building elements	BCA Section C	Annual inspection
Fire resisting shafts	BCA Section C	Annual inspection
Fire resisting structures	BCA Section C	Annual inspection
Fire shutters	BCA Spec C3.4, AS 1905.2-1989	Annual inspection
Fire windows	BCA Spec C3.4	Annual inspection
Lightweight construction	BCA C1.8	Annual inspection
Mechanical ventilation systems	BCA E2.2, G3.8, Spec H1.3, AS 1668.2-1991, AS/NZS 1998.1- 1998	Monthly to AS 1851.6-1993, AS 3666.2-1995
Occupant warning systems	BCA 96 Spec E2.2a, BCA 90 Spec E1.7	Monthly to AS1851.8-1990
Paths of travel to exits	BCA Section D	Every 3 months inspection to confirm travel paths are intact



Path of travel to road	BCA Section D	Every 3 months inspections to confirm path of travel is clear
Penetrations in fire-rated structures	BCA Part C3	Annual inspection
Smoke alarms	BCA 90 E1.7, G3.8, Vic H101.9, Vic H103 BCA 96 E1.7, G3.8 Vic H 103	Monthly to AS 1851.8-1987 (as applicable)
Smoke control measures	BCA Part E2, G3.8, Part H1	Monthly to AS 1851.5-1981AS 1668.1 - 1998
Smoke doors	BCA 90 C2.5, BCA Spec C3.4	Monthly to AS 1851.7-1987 or equivalent
Smoke/Heat vents	BCA 90E2.4, G3.8, AS 2665-1983 BCA 96 Spec E2.2c, Spec G3.8, AS2665- 1983	Every 6 months to AS 1851.5- 1981
Sprinkler systems	BCA 90, E1.5, AS 2118.1- 1999, AS 2118.6-1995, Code of practice for installation of residential life safety sprinkler systems BCA 96, E1.5, C2.3, Vic H103, Reg. 5.15, AS2118.1- 1999, AS 2118.4-1995, AS 2118.6-1995	Weekly to AS 1851.3-1985 or Weekly to AS 1851.3- 1997
Stairwell pressurisation systems Static water storage	BCA E2.2, AS/NZS 1668.1-1998 BCA Part E1, AS 2118.1- 1999, AS 2118.6-1995, AS 2419.1-1994	Monthly to AS 1851.6-1983 Annual inspection
Vehicular access for large isolated buildings	BCA C2.4	Annual inspection to confirm access is maintained
Warning systems associated with lifts (including signs)	BCA Part E3	Annual inspection

Note: BCA in this Table 2 refers to BCA 96 unless stated otherwise.

Note 2: In some cases there are 2 publication dates for referenced Standards from 1994 to 2004. eg: AS 1668.1

