PART 14.0 – FIRE SAFETY IN BUDGET ACCOMMODATION BUILDINGS

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PART 14.0 - FIRE SAFETY IN BUDGET ACCOMMODATION BUILDINGS

Purpose

To ensure *budget accommodation buildings* provide for the safe evacuation of occupants.

Application

This code applies to *budget accommodation buildings* as defined under the *Building Act 1975.*

Referral Agency

The Queensland Fire and Rescue Service is an advice agency for special fire services under Schedule 2 of the *Integrated Planning Regulation 1998*.

Associated Requirements

- *Building Act 1975*
- *Standard Building Regulation 1993*
- *Fire and Rescue Service Act 1990*
- *Building Fire Safety Regulation 1991*
- Building Code of Australia (BCA)
- Fire safety standard guidelines
- Fire safety management plan guidelines

Referenced Standards

AS/NZS 1668.1-1998	The use of mechanical ventilation and air conditioning in buildings – Fire and smoke control in multi-compartment buildings
AS/NZS 1668.2-1991	The use of mechanical ventilation and air conditioning in buildings – Mechanical ventilation for acceptable indoor-air quality
AS 1670.1-1995	Fire detection, warning control and intercom systems – System design, installation and commissioning – Part 1: Fire
AS 1851.1-1995	Maintenance of fire protection equipment – Portable fire extinguishers and fire blankets
AS 1851.2-1995	Maintenance of fire protection equipment – Fire hose reels
AS 1851.3-1997	Maintenance of fire protection equipment – Automatic sprinkler systems
AS 1851.4-1992	Maintenance of fire protection equipment – Fire hydrant installations
AS 1851.6-1997	Maintenance of fire protection equipment – Management procedures for maintaining the fire and smoke control features of air-handling systems – Typical maintenance schedule
AS 1851.7-1984	Maintenance of fire protection equipment – fire resistant doorsets
AS 1851.8-1987	Maintenance of fire protection equipment – Automatic fire detection and alarm systems
AS 1851.10-1989	Maintenance of fire protection equipment – Emergency warning and intercommunication systems in buildings
AS 1851.14-1996	Maintenance of fire protection equipment – Pumpset systems
AS 2118.1-1999	Automatic fire sprinkler systems – General requirements
AS 2118.4-1995	Automatic fire sprinkler systems – Residential
AS 2118.5-1995	Automatic fire sprinkler systems – Domestic
AS 2118.6-1995	Automatic fire sprinkler systems – Combined sprinkler and hydrant system

AS/NZS 2293.1-1998	Emergency evacuation lighting for buildings – System design, installation and operation
AS/NZS 2293.2-1995	Emergency evacuation lighting for buildings – Inspection and maintenance
AS/NZS 2293.3-1995	Emergency evacuation lighting for buildings Part 3: Emergency luminaries and exit signs
AS/NZS 2444-2000	Portable fire extinguishers and fire blankets – Selection and location
AS 2676.1-1992	Guide to the installation, maintenance, testing and replacement of secondary batteries in building Part 1: Vented cells
AS 2676.2-1992	Guide to the installation, maintenance, testing and replacement of secondary batteries in building Part 2: Sealed cells
AS 3786-1993	Smoke alarms

Definitions

Note: Italicised words within the body of the text are defined.

Acceptable solutions means solutions which are deemed to satisfy the *performance criteria*.

Automatic means designed to operate when activated by a heat, smoke or fire sensing device.

Bedroom means a space or part of a space used for sleeping purposes excluding corridors, passageways and evacuation routes.

Budget accommodation building means the definition in the application of this code.

Common areas means areas such as entertainment rooms, foyers, lounge rooms and dining rooms but does not include kitchens, laundries or sanitary areas.

Effective height means the height to the floor of the topmost *storey* (excluding the topmost *storey* if it contains only heating, ventilating, lift or other equipment, water tanks or similar service units) from the floor of the lowest *storey* providing direct egress to a road or *open space*.

Evacuation Impairment[1] means an impairment or a combination of impairments which reduces the capacity of a person to evacuate a building in an emergency, and includes any impairment that restricts mobility or the ability to understand or independently respond to an emergency evacuation.

Evacuation route means the continuous *path of travel* (including *exits*, corridors, hallways and the like) from any part of a building to a road or *open space*.

Exit means any, or any combination of the following if they provide egress to a road or *open space*:
(i) An internal or external stairway.
(ii) A ramp.
(iii) A *fire-isolated passageway*.
(iv) A doorway opening to a road or *open space*.

[1] For the purpose of assessing whether a person has an evacuation impairment under the Standard, a checklist is provided in Schedule 5.

External wall means an outer wall of a building which is not a common wall.

Fire door means a complete door assembly having the same fire resistance level as the surrounding wall and has a certification tag fixed to the door and frame on the hinge side at 1500mm.

Fire hazard means the danger in terms of potential harm and degree of exposure arising from the start and spread of fire and the smoke and gases that are thereby generated.

Fire-isolated passageway means a corridor or passageway within a *fire-resisting enclosure* and includes the floor and roof or top enclosing structure, that provides direct egress to a road or *open space*.

Fire-isolated ramp means a ramp within a *fire-resisting enclosure* which provides egress from a *storey*, that provides direct egress to a road or *open space*.

Fire-isolated stairway means a stairway within a *fire-resisting enclosure* and includes the floor and roof or top enclosing structure, that provides direct egress to a road or *open space*.

Fire-resisting enclosure means an enclosed space within which a person will be adequately protected from the effects of a fire external to the enclosure for a period of not less than 60 minutes.

Fire safety system means one or any combination of the methods used in a building to-
(a) warn people of an emergency; or
(b) provide for safe evacuation; or
(c) restrict the spread of fire; or
(d) extinguish a fire,
and includes both active and passive systems.

Fire service means a statutory authority or service constituted under an Act of Parliament and having as one of its functions, the protection of life and property from fire and other emergencies.

Floor area means-
(a) in relation to a building - the total area of all *storey*s excluding areas used to accommodate vehicles; and
(b) in relation to a *storey* - the area of all floors of that *storey* measured over the enclosing walls, and includes
    (i) the area of a *mezzanine* within the *store*y, measured within the finished surfaces of any *external wall*s; and
    (ii) the area occupied by any internal walls or partitions, any cupboard, or other built-in furniture, fixture or fitting; and
    (iii) if there is no enclosing wall, an area which has a use that-
        (A) contributes to the fire load; or
        (B) impacts on the safety, health or amenity of the occupants in relation to the provisions of the BCA; and
(c) in relation to a room - the area of the room measured within the finished surfaces of the walls, and includes the area occupied by any cupboard or other built-in furniture, fixture or fitting.

Mezzanine means an intermediate floor within a room.

Minimum Support Ratio means the lowest ratio of the number of *responsible persons* to the number of persons with an *evacuation impairment* within the building.

Non Combustible means a construction of the following material type:
(i) reinforced or prestressed concrete; or
(ii) steel in no part less than 6mm thick.

Non-itinerant means a person who uses the building as a residence and is not traveling from place to place.

Open space means a space on an allotment, or a roof or similar part of a building adequately protected from fire, open to the sky and connected directly with a public road.

Path of Travel means that part of an *evacuation route* that starts in a *public corridor*, passageway, hallway, stairway, landing, ramp or *required exit*.

Performance criteria means the outcome that must be achieved for an element of a building or part of a building.

Personal care service means any of the following:
(a) Assistance or supervision in-
  (i) bathing, showering or personal hygiene; or
  (ii) toileting or continence management; or
  (iii) dressing or undressing; or
  (iv) consuming food.
(b) The provision of direct physical assistance to a person with mobility problems.
(c) The management of medication.
(d) The provision of substantial rehabilitative or development assistance.

Public Corridor means a space that serves as a means of egress from 2 or more rooms.

Required means required to satisfy a *performance criteria* or an *acceptable solution* of this code.

Responsible person means a person without an *evacuation* impairment who is the manager or agent for the manager of a *supported budget accommodation building*.

Sanitary compartment means a room or space containing a closet pan or urinal.

Smoke alarm means a device containing a smoke detector and an alarm sounding device.

Smoke detection system means a system of fixed apparatus, normally part of an automatic fire alarm system, in which smoke and/or fire detectors, control equipment and indicating equipment are employed for automatically detecting smoke and/or fire and initiating other action as arranged.

Storey means a space within a building which is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but not-

(a) a space that contains only-
  (i) a lift shaft, stairway or meter room; or
  (ii) a bathroom, shower room, laundry, water closet, or other *sanitary compartment*; or
  (iii) accommodation intended for not more than 3 vehicles; or
  (iv) a combination of the above; or
(b) a *mezzanin*e.

Support, for the purposes of *minimum support ratio*, means immediate on-site evacuation assistance, able to be provided by a *responsible person* to a person with an *evacuation impairment*.

Supported budget accommodation building means a *budget accommodation building*:

(a) in which *non-itinerant* persons with an *evacuation impairment* are accommodated; and
(b) in which a *personal care service* is provided to persons in association with accommodation within the building as part of the usual business or practice that is carried on within the building.

Type A construction means a building where all *external walls*, columns, common walls, internal walls, floors, and lift shafts, each have a fire resistance level in accordance with Schedule 2 of this code.

Type B construction means a building where all *external walls*, columns, and common walls each have a fire resistance level in accordance with Schedule 2 of this code.

Type C construction means a building where all building elements have minimal fire resistance levels and is other than *Type A or B construction*.

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Early warning system

P1 Building occupants must be provided with appropriate *automatic* warning on the detection of smoke so that they may evacuate in the event of a fire to a place of safety, having regard to-

(a) the height of the building; and

(b) the construction of the building; and

(c) the mobility and other characteristics of the occupants; and

(d) the power supply available to the building.

A1 (a) **In *budget accommodation buildings* of not more than two *storeys* in height and of *Type B or C construction* or not more than three *storeys* in height and of *Type A construction-***

(i) *smoke alarms*-

(A) are installed on or near the ceiling-

(aa) in every *bedroom*; and

(bb) in every *common area* not less than 10.2 m apart; and

(cc) in every enclosed or internal corridor, hallway associated with a *bedroom* or *common area* at a maximum of 5.1 m centres, or

(dd) if there is no enclosed or internal corridor or hallway, in an area between the *bedrooms* and the remainder of the building; and

(ee) on each *storey*; and

(B) located in enclosed or internal corridors, hallways or *common areas* are interconnected; and

(C) comply with AS 3786; and

(D) are powered by-

(aa) a consumer mains power supply, where available; or

(bb) a tamper-proof lithium battery where a consumer power supply is not available; or

(ii) a *smoke detection system* with detectors installed in locations as described for *smoke alarms* in A1(a)(i) with an interconnected audible alarm system and a local fire indicator panel installed; or

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	(iii) a *smoke detection system* complying with AS 1670.1 is installed. (b) **In *budget accommodation buildings* more than two *storeys* in height and of *Type B or C construction* or more than three *storeys* in height and of *Type A construction***, a *smoke detection system* complying with AS 1670.1 is installed.
Emergency Lighting	
P2 A system of lighting for safe evacuation in the event of a fire must be provided, to the degree necessary, appropriate to- (a) the function or use of the building; and (b) the *floor area* of the building; and (c) the distance of travel to an *exit*; and (d) the characteristics of the occupants.	**A2** (a) **In *budget accommodation buildings* with a *floor area* of 300 m^2 or less**, a system of lighting is installed which consists of- (i) a light incorporated within and activated by the *smoke alarm* required by A1 (a) (i) (B); or (ii) the existing lighting located in the enclosed or internal corridor, hallway or other *common areas* activated by the *smoke alarms* required by A1 (a) (i) (B); or (iii) A2 (b) (i) or (ii). (b) **In *budget accommodation buildings* with a *floor area* of more than 300 m^2**, a system of lighting is installed which consists of- (i) internally illuminated exit signs using green lettering on a white opaque background with a sealed rechargeable backup battery and located- (A) above each doorway to a *required exit*; and (B) at every change in direction on the *path of travel*; and (C) with additional emergency lighting in accordance with A2 (a)(ii) installed at 12 m maximum centres between the illuminated exit signs on the *path of travel*; or

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(ii) emergency lighting installed-

(A) in every passageway, enclosed corridor, hallway or the like having a length of more than 5 m from the centre of the *bedroom* doorway to the nearest doorway opening directly to-

(aa) *fire-isolated stairway*, *fire isolated ramp* or *fire-isolated passageway*; or

(bb) an external stairway serving instead of a fire isolated stairway; or

(cc) an external balcony leading to a *fire-isolated stairway, fire-isolated ramp* or *fire-isolated passageway*; or

(dd) a road or *open space*; and

(B) in every *required* non *fire-isolated stairway*; and

(C) within 2 m of the approach side of each *required exit*; and

(D) within 2 m of the intersection of centerlines at each change of direction (other than a staircase); and

(E) within 2 m of any change of floor level, on the low side; and

(F) in stairways at every landing; and

(G) adjacent to escalators and moving walks to ensure safety in disembarking; and

(H) in every *required* fire control center; and

(I) in the event of a power failure is powered by a sealed rechargeable type self-contained or centralised battery facility specifically designed for emergency or standby use for a minimum of 1 hour; and

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS
	(J) the calculated horizontal illuminance of any emergency lighting at floor level is in accordance with clause 5.3.2.4 of AS/NSW 2293.1-1998.
Occupant density	
P3 Adequate space must be provided for occupants in each *bedroom* to permit ease of evacuation in the event of a fire.	**A3 In all *budget accommodation buildings*-** (a) the maximum number of persons to be accommodated in any *bedroom* is obtained by dividing the *floor area* of each part of the room by 2.5 square metres per person; and (b) a minimum clear path of 900 mm is provided within the *bedroom*.
Travel distances	
P4 So that occupants can safely evacuate the building, the length of *paths of travel* to *exits* must be appropriate to- (a) the number, mobility and other characteristics of occupants; and (b) the function or use of the building.	**A4** (a) **In all *supported budget accommodation buildings***, the distance between a doorway of a *bedroom* or any other point on a *storey* not in a *bedroom* and the point of egress to a road, *fire-isolated passageway, fire-isolated ramp, fire-isolated stairway*, external stairway/ramp used in lieu of an internal *fire-isolated stairway* in accordance with A6(b) or *open space* does not exceed the distances set out in Schedule 3. (b) **In *budget accommodation buildings* with a floor area greater than 300m^2 and other than *supported budget accommodation buildings***, the distance between a doorway of a *bedroom* or any other point on a storey not in a *bedroom* and the point of egress to a road, *fire-isolated passageway, fire-isolated ramp, fire-isolated stairway*, external stairway/ramp used in lieu of an internal fire-isolated stairway in accordance with A6(b) or *open space* does not exceed the distances set out in Schedule 4. (c) **In all *budget accommodation buildings* except where sprinklers are installed in accordance with 14.01 of this code**, a *required* non *fire-isolated ramp* or *stairway* greater than 1 m in height–

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS
	(i) has its commencement not more than 18 m from a *bedroom* door or any other point on the *storey* not in a *bedroom*; and (ii) discharges at a point not more than- (A) 15 m from the point of egress to a road or *open space* or a *fire-isolated passageway*; or (B) 30 m from one of two such doorways or passageways if travel to each of them is in opposite or approximately opposite directions.
Emergency escape	
P5 *Exits* must be provided from a building to allow occupants to evacuate safely, with their number, location and dimensions being appropriate to- (a) the travel distance; and (b) the number, mobility and other characteristics of occupants; and (c) the function or use of the building; and (d) the height of the building; and (e) whether the *exit* is from above or below ground level.	**A5** (a) **In *budget accommodation buildings* with a *floor area* of 300 m^2 or less**, the building has access to at least one *exit.* (b) **In *budget accommodation buildings* with a floor area greater than 300 m^2 and of not more than two *storeys* and of *Type B or C construction* or not more than 25 m *effective height* and of *Type A construction***, each *storey* has access to at least one *exit*. (c) **In *budget accommodation buildings* with a *floor area* greater than 300 m^2 and of more than two *storeys* but not more than 25 m *effective height* and of *Type B or C construction***, each *storey* has- (i) access to at least two *exits*; or (ii) direct access to a road or *open space*; or (iii) access to at least one *exit* and a sprinkler system is installed in accordance with Specification 14.01 of this code. (d) **In all *budget accommodation buildings* with a *floor area* greater than 300 m^2 and of more than 25 m *effective height***, each *storey* has access to at least two *exits*.

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	(e) **In all *budget accommodation* buildings,** *exits* that are *required* as alternative means of egress are- (i) distributed as uniformly as practicable within or around the *storey* served and in positions where unobstructed access to at least two *exits* is readily available from all points on the *storey* including lift lobby areas; and (ii) not less than 9 m apart; and (iii) not more than 45 m apart; and (iv) located so that alternative *paths of travel* do not converge such that the *paths of travel* are not less than 6 m apart at any point. (f) **In all *budget accommodation buildings***, in a *required exit* or *path of travel* to a *required exit*- (i) the unobstructed height throughout is not less than 2000 mm, except the unobstructed height of any doorway may be reduced to not less than 1980 mm; and (ii) the unobstructed width of each *required exit* or *path or travel* to a *required exit*, except for doorways, is not less than 900 mm nominal; and (iii) landings not less than 750 mm long are provided at doorways along a *path of travel* to a *required exit* or at doorways of *required exits* where the door sill height is more than 190 mm above the finished surface of the floor, ground, balcony or the like, to which the doorway opens. (g) **In all *budget accommodation buildings***, doors in a *required exit* or in the *path of travel* to a *required exit*- (i) are readily openable without a key from the side that faces a person seeking egress, by a single hand downward action or pushing action on a single device which is located between 900 mm and 1200 mm from the floor; and

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS
	(ii) either- (A) swing in the direction of the nearest *required exit* unless it is the only *required exit* from the building and it is fitted with a device for holding it in the open position; or (B) slide open providing that- (aa) the door is in a *required exit* or forms part of a *required exit*; and (bb) the door is able to be opened manually under a force of not more than 110N; and (cc) clearly visible signage is installed on the door and incorporates the word "SLIDE" along with a directional arrow indicating the direction of slide of the door.

Protection of exit paths

P6 To protect evacuating occupants from a fire in the building, *exits* must be fire-isolated, to the degree necessary, appropriate to-

(a) the number of *storeys* connected by the *exits*; and

(b) the *fire safety system* installed in the building; and

(c) the function or use of the building; and

(d) the number of *storeys* passed through by the *exits*.

A6 In *budget accommodation buildings* with a *floor area* greater than 300 m^2-

(a) where *exits* connect, pass through or pass by more than two consecutive *storeys* in a building of *Type B or C construction* or more than three consecutive *storeys* in a building of *Type A construction*-

(i) every *required exit* is fire-isolated; or

(ii) a sprinkler system is installed in accordance with Specification 14.01 of this code.

(b) An external stairway or ramp may serve as a *required exit* in lieu of a fire-isolated *exit* serving a *storey* below an *effective height* of 25 m, if the stairway or ramp is-

(i) *non-combustible* throughout; and

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	(ii) *fire doors* opening onto the stairway are fire resistance rated to 60 minutes; and (iii) windows are- (A) located more than 2 m above the line of the treads or ramp or the *path of travel* at ground level; or (B) located more than 2 m from the stairway or ramp or the *path of travel* at ground level; or (C) are fire rated to 60 minutes and fixed closed; or (D) protected by internal or external wall-wetting sprinklers.
Exit signage	
P7 To facilitate evacuation, suitable signs or other means of identification must, to the degree necessary- (a) be provided to identify the location of *exit*s; and (b) guide occupants to *exit*s; and (c) be clearly visible to occupants; and (d) operate in the event of a power failure of the main lighting system for sufficient time for occupants to safely evacuate.	**A7 For *budget accommodation buildings* with a *floor area* greater than 300 m^2**- (a) *exit* signs- (i) where used as emergency lighting are in accordance with A2 of this code; or (ii) where not used as emergency lighting are in accordance with AS/NZS 2293.1-1998 and AS/NZ 2293.3-1995; and (b) *exit* signs are clearly visible to persons approaching a *required exit*, and installed on, above or adjacent to each- (i) door providing direct egress from a *storey* to- (A) an enclosed stairway, passageway or ramp serving as a *required exit*; and (B) an external stairway, passageway or ramp serving as a *required exit*; and

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	(C) an external access balcony leading to a *required exit*; and (ii) door from an enclosed stairway, passageway or ramp at every level of discharge to a road or *open space*; and (iii) door serving as, or forming part of, a *required exit* in a *storey* required to be provided with emergency lighting in accordance with A2.
Portable fire extinguishers	
P8 Fire extinguishers must be installed to the degree necessary to allow occupants to undertake initial attack on a fire appropriate to- (a) the function or use of the building; and (b) any other *fire safety systems* installed in the building; and (c) the *fire hazard*.	**A8 For *budget accommodation buildings* with a *floor area* greater than 300 m^2-** (a) existing portable fire extinguishers are located in accordance with the Australian Standard applicable at the time of installation; or (b) for buildings with no portable fire extinguishers, extinguishers are selected, located and distributed in accordance with AS 2444-2000.
Fire hose reels	
P9 A fire hose reel system must be installed to the degree necessary to allow occupants to safely undertake initial attack on a fire appropriate to- (a) any other *fire safety systems* installed in the building; and (b) the *fire hazard*.	**A9 For *budget accommodation buildings* with a *floor area* greater than 500 m^2-** (a) a fire hose reel system is installed in accordance with the Australian Standard at the time of installation; and (b) fire hose reels have the nozzle end of a fully extended fire hose fitted to the reel and laid to avoid any partitions or other physical barriers and reach every part of the floor of the *storey*.

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Fire Fighting Water Supply

P10 A fire fighting water supply must be provided to the degree necessary to facilitate the needs of the *fire service* appropriate to-

(a) fire-fighting and rescue operations; and

(b) the *fire hazard*.

A10 **For *budget accommodation buildings* with a floor area greater than 500 m^2 and where a *fire service* with a structural fire fighting capability is available to attend a building fire within 20 minutes of being notified of the fire-**

(a) a fire hydrant system is available for use within 90 metres of the most distant point of the building measured around the perimeter of the building; or

(b) a sprinkler system is installed in accordance with Specification 14.01 of this code.

Smoke hazard management

P11 In the event of a fire in a building the conditions in any *evacuation route* must be maintained for the period of time occupants take to evacuate the part of the building so that-

(a) the temperature will not endanger human life; and

(b) the level of visibility will enable the *evacuation route* to be determined; and

(c) the level of toxicity will not endanger human life.

A11 **For *budget accommodation buildings* with a *floor area* greater than 500 m^2 and where an air-handling system does not form part of an air pressurisation system to *fire-isolated stairways, fire-isolated passageways or fire-isolated ramps* and which recycles air from one room to another room or operates in a manner that may unduly contribute to the spread of smoke from one room to another room**, the system-

(a) is designed and installed to operate as a smoke control system in accordance with AS/NZS 1668.1-1998; or

(b) incorporates smoke dampers where the air-handling ducts penetrate any elements separating the rooms served in a *budget accommodation building*; and is arranged such that the air-handling system is shut down and the smoke dampers are activated to close *automatically* by smoke detectors complying with Clause 4.10 of AS/NZS 1668.1-1998; or

(c) a *smoke detection system* is installed in accordance with Clause 5 of Specification E2.2a of the BCA to operate AS/NZS 1668.1-1998 systems that are provided for zone smoke control and *automatic* air pressurisation for fire isolated *exits*.

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Maintenance of fire safety systems

P12	Fire safety equipment, installations and components essential to the safety of the occupants must be adequately maintained in such condition that will enable their proper performance.	**A12**	**For *budget accommodation buildings* with *fire safety systems* installed in accordance with A1 to A11 of this code**, inspections and maintenance are in accordance with the relevant sections of Schedule 1 of this code.

Specification 14.01 –Sprinkler systems

For buildings less than 4 storeys in height, buildings comply with Australian Standard AS 2118.5-1995 Automatic fire sprinkler systems - Domestic

For buildings of 4 or more storeys in height, buildings comply with Australian Standard AS 2118.4-1999 Automatic fire sprinkler systems - Residential

Schedule 1 – Schedule of maintenance options for fire safety systems

Schedule 1 – Schedule of maintenance options for *fire safety systems* lists the options that should be used for each building by adding or deleting items to a **Schedule of Essential Fire Safety Measures** for a particular *budget accommodation building*.

Therefore, only those measures required by this fire safety standard and forming part of the development permit should be included in the **Schedule of Essential Fire Safety Measures** for a *budget accommodation building*.

Measures to be maintained	Deemed-to-satisfy installation standards	Nature and frequency of maintenance	Inspection / Testing Authority
12.1 Early warning systems			
Self contained smoke alarms – 240 volt powered	Solution A1 (a) of this Code	Monthly inspection to test operation. Replace backup battery when test indicates low battery. Replace complete units at ten year intervals.	Building owner/ occupier
Self contained smoke alarms – lithium battery powered	Solution A1(a) of this Code	Six -monthly inspection to test operation. Replace complete units at five year intervals.	Building owner/ occupier
Detection and alarm systems	Solution A1(b) of this Code and Specification E2.2a of Vol One of the BCA.	Test Monthly as prescribed in AS 1851.8. Test Weekly if connected to the Fire Control Station as prescribed in AS 1851.8.	Licensed Fire detection systems contractor
Fire alarm signal	Solution A1(b) of this Code and Specification E2.2a of Vol One of the BCA.	Monthly test as prescribed in AS 1851.8. Weekly if connected to the Fire Control Station as prescribed in AS 1851.8.	Licensed fire detection systems contractor
Secondary batteries in buildings	Solution A1(b) of this Code and AS1670.1.	Quarterly testing as prescribed in AS2676.1-1992 and AS2676.2-1992	Licensed fire detection systems contractor
Interconnection of fire safety systems	Refer to specific requirements for each interconnected system	Annual test of interconnection of all fire and safety systems for correct operation under automatic alarm (not simulation)	Licensed fire detection systems contractor
12.2 Emergency lighting			
Emergency lighting – existing lighting	Solution A2 (a) of this Code	Monthly testing of light bulbs. Replace defective bulbs as necessary.	Building owner/occupier

Measures to be maintained	Deemed-to-satisfy installation standards	Nature and frequency of maintenance	Inspection / Testing Authority
Emergency lighting – self-contained systems	Solution A2 (b) of this Code	Six monthly testing as prescribed in AS/NZS 2293.2-1995 and AS/NZS 2293.2.	Licensed electrician
Emergency lighting – central systems	Solution A2(b) of this Code	Six monthly testing as prescribed in AS/NZS 2293.2-1995.	Licensed electrician
12.3 Occupant density			
Paths of travel to and discharge from exits	Solution A4 of this Code.	Three monthly inspection to ensure that there are no obstructions and no alterations have been made.	Building owner/ occupier
12.5 Emergency Escape			
Latches and automatic closing or unlocking devices to doors to required exits	Solution A5 of this Code	Three monthly inspections to ensure that the latches are operable and will open without the use of a key in an emergency. Inspections as prescribed in AS1851.7.	Licensed Passive Fire Equipment Contractor- Restricted Licence Type 2 - installation, maintenance and general repair of fire doors and fire shutters for a building.
Doors and doorsets in *required exits*	Solution A5 of this Code.	Three monthly inspection to ensure that doors are operable and are clear of obstructions as prescribed in AS1851.7.	Licensed Passive Fire Equipment Contractor -
12.6 Protection of exit paths			
Fire isolated stairways and ramps and passageways, including handrails, balustrades and stair treads.	Solution A6 of this Code.	Three monthly inspection to ensure that there are no obstructions and no alterations have been made.	Building owner/ occupier
Non- fire isolated stairways and ramps	Solution A6 of this Code.	Three monthly inspection to ensure that there are no obstructions and no alterations have been made.	Building owner/ occupier

Measures to be maintained	Deemed-to-satisfy installation standards	Nature and frequency of maintenance	Inspection / Testing Authority
12.7 Exit Signage			
Illuminated exit signs – self contained	Solution A7 of this Code; Clause E4.4 of BCA Volume One and AS/NZS 2293.1 & 3.	Six monthly as prescribed in AS/NZS 2293.2	Licensed electrician
12.8 Portable fire extinguishers			
Portable fire extinguishers	Solution A8 of this Code.	Six monthly as prescribed in AS 1851.1	Licensed fire fighting appliances contractor
12.9 Fire hose reels			
Fire hose reel systems	Solution A9 of this Code.	Six monthly as prescribed in AS 1851.2.	Licensed fire fighting appliances contractor
Fire hose reel pump	Solution A9 of this Code.	Monthly as prescribed in AS1851.2.	Licensed fire fighting appliances contractor
12.10 Fire Fighting Water Supply			
Fire hydrants	Solution A10 of this Code.	Six monthly as prescribed in AS 1851.4	Licensed fire fighting appliances contractor
12.11 Smoke hazard management			
Supply and return air fans	Solution A11 of this Code; AS/NZS 1668.1 and AS 1668.2	Quarterly as prescribed in AS 1851.6 Appendix B2 for a level 1 routine.	Mechanical services contractor
Smoke spill and air pressurisation fans	Solution A11 of this Code; AS/NZS 1668.1 and AS 1668.2	Yearly as prescribed in AS1851.6 Appendix B2 for a level 1 routine	Mechanical services contractor
Induction motors, fan drives with frequent use	Solution A11 of this Code; AS/NZS 1668.1 and AS 1668.2	Quarterly as prescribed in AS1851.6 Appendix B3 for a level 1 routine	Mechanical services contractor
Induction motors, fan drives, test and emergency use only	Solution A11 of this Code; AS/NZS 1668.1 and AS 1668.2	Half yearly as prescribed in AS1851.6 Appendix B3 for a level 1 routine	Mechanical services contractor
Batteries for fire/smoke control services – vented cell	Solution A11 of this Code; AS2676.2/NZS 4512	As prescribed in AS1676.1/NZS 4512 for a level 1 routine	Mechanical services contractor

Measures to be maintained	Deemed-to-satisfy installation standards	Nature and frequency of maintenance	Inspection / Testing Authority
Batteries for fire/smoke control services – sealed cells	Solution A11 of this Code; AS2676.2/NZS 4512	As prescribed in AS1676.1/NZS 4512 for a level 1 routine	Mechanical services contractor
Fire dampers (thermal)	Solution A11 of this Code; AS 1682.1, AS 1682.2 and AS/NZS 1668.1	Five-yearly as prescribed in AS1851.6 Appendix B4 for a level 1 routine	Mechanical services contractor
Fire mode air dampers for smokespill, fresh air and recycle air, complete with their automatic gear	Solution A11 of this Code; AS 1682.1, AS 1682.2 and AS/NZS 1668.1	Yearly as prescribed in AS1851.6 Appendix B5 for a level 1 routine	Mechanical services contractor
Automatic smoke detectors for fire/smoke control services (AS1670 system)	Solution A11 of this Code; AS/NZS 1668.1 and AS 1668.2 and AS1670	Monthly as prescribed in AS1851.8/NZS4512 for a level 1 routine	Mechanical services contractor
Air filters	Solution A11 of this Code; AS/NZS 1668.1 and AS 1668.2	Yearly as prescribed in AS1851.6/NZS4512 Appendix B6 for a level 1 routine	Mechanical services contractor
Electric duct heaters	Solution A11 of this Code and AS/NZS 1668.1	Two-yearly as prescribed in AS1851.6 Appendix B7 for a level 1 routine	Mechanical services contractor
Kitchen exhaust systems including grease filters	Solution A11 of this Code; AS/NZS 1668.1 and AS 1668.2	Yearly as prescribed in AS1851.6 Appendix B8 for a level 1 routine	Mechanical services contractor
Air-handling changeover under fire/smoke conditions	Solution A11 of this Code; AS/NZS 1668.1 and AS 1668.2	Yearly as prescribed in AS1851.6 Appendix B9 for a level 1 routine	Mechanical services contractor
Fire-isolated escape routes protected by air-pressurisation systems	Solution A11 of this Code; Specification E2.2 of Volume 1 of Building Code of Australia	Yearly as prescribed in AS1851.6 Appendix B10 for a level 1 routine	Mechanical services contractor
Automatic smoke/heat venting systems	Solution A11 of this Code; Part E2 of Volume 1 of Building Code of Australia and AS/NZS 1668.1.	As prescribed in AS1851.5 for a level 1 routine	Mechanical services contractor

Measures to be maintained	Deemed-to-satisfy installation standards	Nature and frequency of maintenance	Inspection / Testing Authority
Outdoor air intakes	Solution A11 of this Code; AS/NZS 1668.1 and AS 1668.2	Monthly as prescribed in AS1851.6 Appendix B11 for a level 1 routine	Building owner/ occupier
Smoke Detectors (not forming part of an AS 1670 system)	Solution A11 of this Code; Clause E2.2 and Specification E2.2a of Vol One of the BCA and AS/NZS 1668.1 or AS 1670 as appropriate	Six monthly as prescribed in AS 1851.8 for smoke detectors	Licensed Fire detection systems contractor
Make up air provisions including louvres and automatic doors	Solution A11 of this Code; Specifications E2.2b and C2.3 of Vol One of the BCA as applicable, or as approved by the relevant authority	Annual testing for actuation, obstruction and operation in conjunction with the relevant smoke hazard management system	Mechanical services contractor
12.12 Fire Sprinkler Installations			
Fire sprinkler installations	Clause E1.5 and Spec E1.5 of Vol 1 of BCA and AS2118.4.	As prescribed in AS1851.3.	Licensed residential fire sprinkler contractor

Schedule 2 – Fire Resisting Construction

Building Element	FRL (in minutes) Structural adequacy/Integrity/Insulation *Type A construction*	FRL (in minutes) Structural adequacy/Integrity/Insulation *Type B construction*
External wall (including any column or other building element incorporated within the wall) where the distance from any fire-source feature to which it is exposed is- For loadbearing parts-		
Less than 1.5m	90/ 90/ 90	90/ 90/ 90
1.5m to less than 3.0m	90/ 60/ 60	90/ 60/ 30
3 m or more	90/ 60/ 30	90/ 30/ 30
For non-loadbearing parts-		
Less than 1.5m	-/ 90/ 90	-/ 90/ 90
1.5m to less than 3.0m	-/ 60/ 60	-/ 60/ 30
3 m or more	-/ -/ -	-/ -/ -
External column (not incorporated in an external wall), where the distance from any fire-source feature to which it is exposed is-		
Less than 3m	90/ -/ -	90/ -/ -
3 m or more	-/ -/ -	-/ -/ -
Common walls and fire walls	90/ 90/ 90	90/ 90/ 90
Internal walls-		
Loadbearing lift shafts	90/ 90/ 90	-/ -/ -
loadbearing	90/ 90/ 90	60/ 60/ 60
Non-loadbearing	-/ 60/ 60	-/ 60/ 60
Floors	90/ 90/ 90	-/ -/ -

Note: The fire resistance levels (FRL) are extracted from the Building Code of Australia.

Schedule 3 – Maximum *exit* distances (m) for all *supported budget accommodation buildings*

		Bedroom doors without self closing door mechanisms		**Bedroom doors have self closing door mechanisms fitted**		
		All Types of Building Construction		**Type of Building Construction**		
				Type B or C construction	*Type A construction*	*Type A, B or C construction* with sprinklers
Minimum Support Ratio	1:1	30		60	60	60
	1:2	0		25	25	60
	1:3	0		15	15	54
	1:4	0		10	10	38
	1:5	0		6	6	29
	1:6	0		4	4	23
	1:7	0		2	2	19
	1:8	0		1	1	15
	1:9	0		0	0	13
	1:10	0		0	0	11

Schedule 4 – Maximum *exit* distances (m) for *budget accommodation buildings* with a *floor area* greater than 300m^2

Type of Building Construction		
Type B or C construction	*Type A construction*	*Type A, B or C construction* with sprinklers
30	60	60

Schedule 5 – Evacuation Impairment Assessment Checklist

Supported Accommodation
EVACUATION IMPAIRMENT ASSESSMENT FORM

This form assesses whether the occupant has an *evacuation impairment*.
Use this form for the purposes of compliance with A4(a) of the Fire Safety Standard only.

Note 1: **The occupant does not have an *evacuation impairment* when ALL answers on the form are ticked with Yes.**

A "Yes" answer means that the occupant is able to meet the criteria at all times of the day or night.

Note 2: **Fire safety evacuation drills should be practiced monthly to determine the ability of a person to safely evacuate the building in the event of fire.**

		Date of Drill:	
Name of Occupant:		Room Number:	
Name of Building:			
Name of Organisation:			
Assessed by:	(name)		(signature)

Does the occupant	Yes	No	Comments
1) Demonstrate the ability to recognise fire evacuation alarms?			
2) Demonstrate the ability to evacuate unaided?			
3) Demonstrate the ability to evacuate to a safe place identified in the fire safety management plan?			
4) Demonstrate the mobility to follow the fire safety management plan without delay?			
5) Demonstrate the ability to respond upon hearing the alarm (follow the fire safety management plan and evacuate to a safety place)?			
6) Demonstrate observance of the fire safety management plan in a calm and timely manner in a drill situation?			
7) Demonstrate an understanding he/she must comply with the directions of emergency personnel?			
Result			
Does the occupant have an *evacuation impairment*?			

NOTE 3: **If the occupant has an *evacuation impairment*, you MUST include him/her in your minimum support ratio calculations.**
If the occupant does not have an *evacuation impairment*, you do not need to include him/her in your minimum support ratio calculations.