

Fire Management Guide

Meeting day to day fire management obligations in WA requires reference to Health and Safety legislation, the Building Code of Australia, and multiple Australian Standards. This guide includes frequently asked questions and key references (including excerpts) for fire management in WA workplaces.

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Frequently Asked Questions

1. Are “you are here” indicators mandatory on evacuation plans?

Yes (OSH Regulations 1996 – 3.10c).

2. Are fire extinguishers mandatory in work places?

No – however it is mandatory to complete an assessment of the risk of fire in a work place, and if the risk assessment finds that there is a risk of fire, then it is mandatory to have appropriate fire extinguishers in the work place (OSH Regulations 1996 – 3.9).

3. Are fire blankets classed as fire extinguishers?

Yes – the primary reference regarding fire extinguishers is Australian Standard AS2444-2001, and the Australian Standard includes fire blankets as fire extinguishers (OSH Regulations 1996 – 3.9 (1b)).

4. Is fire extinguisher training mandatory for all employees?

No – however fire extinguisher training is required for any employee or person in the workplace who would be expected to use a fire extinguisher in the event of a fire (OSH Regulations 1996 – 3.10e).

5. When must the current Building Code of Australia (BCA) be applied?

In WA the BCA is given statutory status by the Building Act 2011.

The current BCA **must be** applied to new buildings and whenever a structural change is made to an existing building that:

- effects emergency travel routes or exits;
- requires submission of building plans to regulatory authorities.

The current BCA **should** always be applied in WA workplaces whenever reasonably practicable as it represents the most up to date minimum necessary standards of relevant, health, safety (including structural safety and safety from fire), amenity and sustainability objectives in building.

6. How do the Building Code of Australia (BCA) and the National Construction Code (NCC) relate?

The Building Code (BCA) is Volumes One and Two of the National Construction Code.

7. When are Australian Standards mandatory?

Australian Standards **should** always be applied whenever reasonably practicable.

Australian Standards are **mandatory** when they are included in the OSH Regulations.

8. Where do you need emergency exit signs?

This is not specifically stated in OSH legislation. As such the following from the *NCC* and *Australian Standard* 2293.3-2005 must be applied as outlined for question 5 AND when reasonably practicable.

NCC Volume 1 - Excerpt

E4.5 Exit signs

An *exit* sign must be clearly visible to persons approaching the *exit* (see *definition in Appendix*), and must be installed on, above or adjacent to each—

- (a) door providing direct egress from a *storey* to—
 - (i) an enclosed stairway, passageway or ramp serving as a *required exit*; and
 - (ii) an external stairway, passageway or ramp serving as a *required exit*; and
 - (iii) an external access balcony leading to a *required exit*; and
- (b) door from an enclosed stairway, passageway or ramp at every level of discharge to a road or *open space*; and
- (c) *horizontal exit*; and
- (d) door serving as, or forming part of, a *required exit* in a *storey required* to be provided with emergency lighting in accordance with E4.2.

Refer to Appendix 1 for further details.

9. Do all Emergency Exit signs need to be internally illuminated?

No. They can be internally illuminated or luminated by a light source external to the sign. What is mandatory is that they are visible during all times when a person may be legally in the building.

Refer to Appendix 2 for further details.

10. Should EXIT signs have a Picturegram or writing?

Either are okay under OSH legislation. However a picture should be used whenever reasonably practicable as this is what *Australian Standard AS 2293.3-2005* recommends.

11. Is more than one exit mandatory in a single storey building?

This is not specifically stated in OSH legislation. As such the *NCC* must be applied as outlined for question 5 AND when reasonably practicable. The number of exits required depends upon the class of building. To answer this question, firstly determine the Class of building that you want to know about (see Building Classifications in this Guide), then refer to Appendix 3.

12. Is an annual fire evacuation drill mandatory?

The OSH Regulations do not specify a frequency, but state that the evacuation procedure must be practised at reasonable intervals. For most workplaces once a year is not enough. However, the vital measure is that whatever you do to practise evacuations, all people who are regularly in the workplace know what happens in an evacuation, and what their role is in it.

References

AS 2293.1-2005 Emergency escape lighting and exit signs for buildings - System design, installation and operation

AS 2293.3-2005 Emergency escape lighting and exit signs for buildings - Emergency escape luminaires and exit signs

National Construction Code - <http://services.abcb.gov.au/NCCOnline/>

OSH Regulations 1996

WorkSafe Guidance Note - Preparing for Emergency Evacuations at the Workplace. -

<https://www.commerce.wa.gov.au/publications/guidance-note-preparing-emergency-evacuations-workplace>

Building Classifications (Building Code Australia 2015)

- Class 1: one or more buildings which in association constitute—
- (a) Class 1a — a single dwelling being—
 - (i) a detached house; or
 - (ii) one of a group of two or more attached dwellings, each being a building, separated by a fire-resisting wall, including a row house, terrace house, town house or villa unit;or
 - (b) Class 1b —
 - (i) a boarding house, guest house, hostel or the like— (A) with a total area of all floors not exceeding 300 m² measured over the enclosing walls of the Class 1b; and (B) in which not more than 12 persons would ordinarily be resident; or
 - (ii) 4 or more single dwellings located on one allotment and used for short-term holiday accommodation, which are not located above or below another dwelling or another Class of building other than a private garage.
- Class 2: a building containing 2 or more sole-occupancy units each being a separate dwelling.
- Class 3: a residential building, other than a building of Class 1 or 2, which is a common place of long term or transient living for a number of unrelated persons, including—
- (a) a boarding house, guest house, hostel, lodging house or backpackers accommodation; or
 - (b) a residential part of a hotel or motel; or
 - (c) a residential part of a school; or
 - (d) accommodation for the aged, children or people with disabilities; or
 - (e) a residential part of a health-care building which accommodates members of staff; or
 - (f) a residential part of a detention centre.
- Class 4: a dwelling in a building that is Class 5, 6, 7, 8 or 9 if it is the only dwelling in the building.
- Class 5: an office building used for professional or commercial purposes, excluding buildings of Class 6, 7, 8 or 9. NSW Class 6
- Class 6: a shop or other building for the sale of goods by retail or the supply of services direct to the public, including—

- (a) an eating room, café, restaurant, milk or soft-drink bar; or
- (b) a dining room, bar area that is not an assembly building, shop or kiosk part of a hotel or motel; or
- (c) a hairdresser's or barber's shop, public laundry, or undertaker's establishment; or
- (d) market or sale room, showroom, or service station.

Class 7: a building which is—

- (a) Class 7a — a carpark; or
- (b) Class 7b — for storage, or display of goods or produce for sale by wholesale.

Class 8: a laboratory, or a building in which a handicraft or process for the production, assembling, altering, repairing, packing, finishing, or cleaning of goods or produce is carried on for trade, sale, or gain.

Class 9: a building of a public nature—

- (a) Class 9a — a health-care building, including those parts of the building set aside as a laboratory; or
- (b) Class 9b — an assembly building, including a trade workshop, laboratory or the like in a primary or secondary school, but excluding any other parts of the building that are of another Class; or
- (c) Class 9c — an aged care building.

Class 10: a non-habitable building or structure—

- (a) Class 10a — a non-habitable building being a private garage, carport, shed, or the like; or
- (b) Class 10b — a structure being a fence, mast, antenna, retaining or free-standing wall, swimming pool, or the like; or
- (c) Class 10c — a private bushfire shelter.

Appendix 1 – Exit Sign Locations (AS Excerpt)

AS 2293.3-2005 Emergency escape lighting and exit signs for buildings - Emergency escape luminaires and exit signs - Excerpt

3.5 MAXIMUM VIEWING DISTANCES

For exit signs of pictorial element height greater than 200 mm, the maximum viewing distance shall be calculated by the following equation:

$$\text{Maximum viewing distance} = 160 \times \text{element height}$$

For any exit sign of pictorial element height less than or equal to 200 mm the maximum viewing distance shall be as specified in Table 3.2.

TABLE 3.2

MAXIMUM VIEWING DISTANCE CATEGORIES	
Element height (mm)	Maximum viewing distance (m)
≥100 <150	16
≥150 <200	24
200	32

Appendix 2 – Exit Sign Design (AS and BCA Excerpts)

BCA Volume 1 - Excerpt

E4.8 Design and operation of exit signs

Every *required exit* sign must—

- (a) comply with AS 2293.1; or
- (b) for a photoluminescent exit sign, Specification E4.8; and

be clearly visible at all times when the building is occupied by any person having the right of legal entry to the building.

AS 2293.1-2005 Emergency escape lighting and exit signs for buildings - System design, installation and operation - Excerpt

6.7 ILLUMINATION

6.7.1 Internally illuminated signs

Internally illuminated exit signs shall be of a type which complies with the applicable illumination requirements of AS 2293.3.

6.7.2 Externally illuminated signs

Externally illuminated signs shall be provided with an illuminance of not less than 200 lx on the face of the sign. The variation in illuminance shall not exceed 3:1.

The light source used to illuminate the sign shall be located not more than 1.5 m from the face of the sign and shall be positioned relative to the sign in a manner that will ensure that there is no reduction in the contrast of the sign (due to reflection of the light source in the face of the sign) when viewed from within the required range of directions.

Any light source provided specifically for the purpose of illuminating the sign shall be screened from the view of persons moving through the designated area.

Appendix 3 – Number of Exits (BCA Excerpts)

BCA Exit Definition

Exit means—

(a) 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.

(b) A horizontal exit or a fire-isolated passageway leading to a horizontal exit.

D1.2 Number of exits required

(a) All buildings — Every building must have at least one exit from each storey.

(b) Class 2 to 8 buildings — In addition to any horizontal exit, not less than 2 exits must be provided from the following:

- (i) Each storey if the building has an effective height of more than 25 m.
- (ii) A Class 2 or 3 building subject to C1.5.

(c) Basements — In addition to any horizontal exit, not less than 2 exits must be provided from any storey if egress from that storey involves a vertical rise within the building of more than 1.5 m, unless—

- (i) the floor area of the storey is not more than 50 m²; and
- (ii) the distance of travel from any point on the floor to a single exit is not more than 20 m.

(d) Class 9 buildings — In addition to any horizontal exit, not less than 2 exits must be provided from the following:

- (i) Each storey if the building has a rise in storeys of more than 6 or an effective height of more than 25 m.
- (ii) Any storey which includes a patient care area in a Class 9a health-care building.
- (iii) Any storey that contains sleeping areas in a Class 9c building.
- (iv) Each storey in a Class 9b building used as an early childhood centre.
- (v) Each storey in a primary or secondary school with a rise in storeys of 2 or more.
- (vi) Any storey or mezzanine that accommodates more than 50 persons, calculated under D1.13.

NSW D1.2(d)(vii)

- (e) Exits from Class 9c buildings and patient care areas in Class 9a health-care buildings — In a Class 9a health-care building and a Class 9c building, at least one exit must be provided from every part of a storey which has been divided into fire compartments in accordance with C2.2 or C2.5.
- (f) Exits in open spectator stands — In an open spectator stand containing more than one tier of seating, every tier must have not less than 2 stairways or ramps, each forming part of the path of travel to not less than 2 exits.
- (g) Access to exits — Without passing through another sole-occupancy unit every occupant of a storey or part of a storey must have access to—
 - (i) an exit; or
 - (ii) at least 2 exits, if 2 or more exits are required.

Appendix 4 - OSH Regulations 1996 Part 3 Division 1 Excerpts

3.8. Emergency egress from workplaces

A person who, at a workplace, is an employer, the main contractor, a self-employed person or a person having control of access to the workplace must ensure that the means of emergency egress from the workplace enable safe egress from the workplace in the event of an emergency.

Penalty: the regulation 1.16 penalty.

3.9. Fire precautions, duties of employer etc. as to

1. If there is a risk of fire at a workplace then a person who, at the workplace, is an employer, the main contractor, a self-employed person or a person having control of the workplace must, as far as practicable —
 - a. provide regularly maintained and efficient portable fire extinguishers to control any fire likely to arise from the work being done at the workplace; and
 - b. ensure that portable fire extinguishers are located and distributed at the workplace in accordance with AS 2444.

Penalty: the regulation 1.16 penalty.

2. If, in any part of a workplace —

- a. there are goods or materials which in the event of a fire are likely to burn with extreme rapidity, emit poisonous fumes or cause explosions; and
- b. there is a risk of harm or injury to a person at the workplace resulting from the goods or materials being ignited,

then a person who, in the case of a construction site, is the main contractor or who, in the case of any other workplace, is an employer or a self-employed person, must ensure, where practicable, that no person smokes or introduces a naked flame into that part of the workplace.

Penalty: the regulation 1.16 penalty.

- 3. A person must comply with a direction given for the purposes of subregulation (2).

Penalty for a person who commits the offence as an employee: the regulation 1.15 penalty.

Penalty in any other case: the regulation 1.16 penalty.

3.10 Evacuation procedures

A person who, at a workplace, is an employer, the main contractor, a self-employed person or a person having control of the workplace must ensure that —

- a. there is an evacuation procedure to be followed in the event of fire or other emergency at the workplace; and
- b. where practicable, the evacuation procedure is clearly and prominently displayed at the workplace; and
- c. where practicable, a diagram showing the location of exits and the position of the diagram in relation to the exits is clearly and prominently displayed at the workplace; and
- d. where practicable, the evacuation procedure is practised at the workplace at reasonable intervals; and
- e. persons at the workplace who would be required to help control or extinguish a fire at the workplace are appropriately trained and provided with appropriate protective clothing and equipment.

Penalty: the regulation 1.16 penalty.