

ACT Fire & Rescue

Fire Safety Guideline – Childcare Facilities located above ground floor



FSG-012

CONTENTS

1. PURPOSE.....	1
2. SCOPE	2
3. REGULATORY REQUIREMENTS.....	2
4. LOCATION OF EDUCATION AND CARE SERVICES.....	3
5. FIRE SAFETY & PROTECTION PROVISIONS.....	3
6. EMERGENCY EVACUATION PROCEDURES.....	4
7. REFERENCES	5
8. GLOSSARY OF TERMS.....	6

FSG-012: Childcare facilities located above ground floor

1. PURPOSE

1.1. To provide guidance specifying the requirements of ACTF&R, being a referral entity under the ACT Building Regulation 2008, in regards to Education and Care (childcare) facilities in multi-storey buildings and the risks associated with the evacuation of children up to 13 years of age.

The recommendations made within this guideline are in addition to other relevant legislative requirements, including the;

- National Construction Code (NCC) also referred to as the Building Code of Australia (BCA)
- Education and Care Services National Law Act 2010
- Education and Care Services National Regulations
- National Quality Standard
- ACT Children and Young People Act 2008
- Children and Young People (ACT Childcare Services) Standards 2009

2. SCOPE

- 2.1. This guideline applies to education and care services located in multi-storey buildings. This includes Kindergartens, Preschools, Centre Based Long Day Care, Occasional Care, Family Day Care and Out of Hours Care.

3. REGULATORY REQUIREMENTS

- 3.1. An education and care service facility is considered a class 9b – assembly building under BCA clause A3.2. Any education and care service and the building in which it is located must comply with the relevant parts of the BCA.

ACTF&R is of the opinion that the Deemed-to-Satisfy (DTS) provisions of the BCA do not adequately address the risks to occupants where education and care service facilities are located above ground level in mixed class buildings. Consequently, ACTF&R classifies those services as 'special hazards' under BCA Clause E2.3 and fire safety measures in excess of DTS may be required to ensure compliance with the relevant performance requirements.

BCA Clause E2.3 Provision for special hazards states that additional smoke hazard management measures may be necessary for some buildings due to, among other things, the function or use of the building.

The following is an excerpt from the Guide to the BCA and indicates that education and care services are not adequately addressed in the BCA when they are located above ground level:

“Examples

E2.3 may be applicable in situations where:

- *A childcare centre is located above ground floor level or within a commercial building. Safety of children is paramount. They will need assistance to evacuate. As egress arrangements depart from providing exits direct to a road or open space, (usually provided at ground floor level) so does the potential for things to go wrong. The BCA does not specifically address child care centres at other than the ground floor.”*

The recommendations made in this guideline are intended to address and satisfy the Performance Requirements of the BCA for life safety.

4. LOCATION OF EDUCATION AND CARE SERVICES

4.1. ACTF&R recommends that;

- Where education and care services are to be provided in multi-storey buildings, they are located on the ground level,
- Design consideration should be given to AS1428.1-2009 Design for Access and Mobility, General Requirements for Access – new building work 6,
- Continuous accessible paths of travel are ensured that allow equitable access and egress for all members of the education and care services community,
- Consideration should also be given to the Education and Care Services National Regulations which has provisions regarding access to outdoor spaces, emergency and evacuation drills.

4.1.1. Where no other viable ground level location for an education and care service can be found, and the facility must be located on another level, the facility should be located on the first level above ground. In addition, if the education and care service occupy both the ground and first level of a building, consideration should be made to allow the youngest children to be located on the lowest level of the site.

4.1.2. As the inherent risk is increased, a risk assessment must be undertaken to address the complications associated with the evacuation of the facility. Children will have difficulty coping with steps, handrails etc. as they have generally been designed for adult use, making emergency evacuation more difficult.

4.1.3. Section D of the NCC Volume 1 – Access and Egress, DP4 states

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
- (c) the function and use of the building; and
- (d) the height of the building; and
- (e) whether the exit is from above or below ground floor

Where education and care services are located higher than the first level above ground, the requirements of Section 5.2 of this document apply.

5. FIRE SAFETY & PROTECTION PROVISIONS

5.1. Facilities on Ground Level or One Level above Ground

Education and Care services provided on ground level or the first level above ground shall comply with the requirements of the BCA.

ACTF&R recommends that all education and care services be provided with an automatic smoke detection and alarm system in accordance with BCA Specification E2.2a Clause, and monitored by the fire service in accordance with Clause 7.

5.2. Facilities Located Greater than One Level above Ground Level

In addition to the requirements of the BCA, the requirements of ACTF&R for education and care services located higher than the first level above ground are as follows:

5.2.1. Construction

- Must comply with Section C of the BCA (unless acceptable Performance Solutions are applicable); and
- The education and care service must be separated into a minimum of two fire compartments to allow for horizontal evacuation from one compartment to another.
- Exits will be in accordance with BCA Clause D1.2 (d).
- When located above another occupancy, the floor must have a FRL of Type 'A' Construction, or demonstrate compliance with the Performance Requirements.

5.2.2. Egress Provisions

- Where lifts are provided, the lifts must be provided with a smoke lobby or lobbies as appropriate; and
- A safe assembly area should also be provided at ground level to contain and protect children from other hazards upon evacuation, this may include segregation from other building occupants; and
- Egress routes to fire-isolated stairs should be marked to clearly identify both the route and the area that must be kept clear of play equipment, furnishing etc.

5.2.3. Fire Protection

The building will comply with the provisions of BCA Clause E2.2 for Class 9b;

- The building shall contain an automatic smoke detection and alarm system in accordance with AS 1670.1 and either:
- Zone pressurisation in accordance with AS 1668.1 (with detectors spaced and located in accordance with AS 1670.1): or
- Sprinkler protection in accordance with AS 2118.1; or
- In each required fire-isolated stairway, including any associated fire-isolated passageway or fire-isolated ramp, an automatic air pressurisation system for fire-isolated exits in accordance with AS 1668.1.

6. EMERGENCY EVACUATION PROCEDURES

6.1. Detailed emergency and evacuation procedures must be produced for all childcare facilities. Australian Standard AS 3745-2010 'Planning for Emergencies in Facilities' should form the basis for evacuation planning.

Staff / child ratios must comply with the Education and Care Services National Regulations, regulation 123 and 123A, and Clause 1.42 of the Children and Young People (ACT Childcare Services) Standards 2009 (No1) – made under the Children and Young People Act 2008.

7. REFERENCES

Related forms and documents	
Reference	title
ACT Building Act 2004	
ACT Building Regulation 2008	
National Construction Code	Building Code of Australia, Volume one
National Construction Code	The Guide to Volume one
Building Code of Australia	Specification A1.3, Reference Standards
National Law and Regulations	Education and Care Services National Law Act 2010
	Education and Care Services National Regulations
ACT Children and Young Peoples Act 2008	ACT Legislative Assembly
Children and Young People Act	(ACT Childcare Services) Standards 2009 (No1)
Disallowable Instrument DI2009-11	
Australian Standard AS 3745:2010	Planning for emergencies in facilities

8. GLOSSARY OF TERMS

Acronym / term	meaning
ABC	Alarm Bell Circuit
ACF	Ancillary Control Facility
ACTF&R	ACT Fire & Rescue
AFANP	Automatic Fire Alarm Network Provider
AS	Australian Standard
AZF	Alarm Zone Facility
BCA	Building Code of Australia (see NCC)
BGA	Break Glass Alarm
CBR	Chemical, Biological, Radiation
Combatting Agency	Designated as the lead agency authorised to handle a specific incident in accordance with the Emergencies Act 2004
ComCen	Communications Centre
Dts	Deemed to Satisfy
ECO	Emergency Control Organisation
EWIS	Emergency Warning & Intercommunication System
EWS	Emergency Warning System
FFCPs	Fire Fan Control Panels
FIPs	Fire indicator Panels
FRL	Fire-resistance level - the grading periods in minutes determined in accordance with BCA Specification A2.3, for the following criteria— (a) structural adequacy; and (b) integrity; and (c) insulation,
FSG	Fire Safety Guideline
Hazmat	Hazardous material
HVAC	Heating, Ventilation And Air Conditioning
MAF	Master Alarm Facility
MOA	Memorandum of Agreement
NCC	National Construction Code, formerly referred to as BCA
PA	Public Announcement
SOP	Standard Operating Procedure