

### **BCA REPORT**

64 Doncaster Avenue,

Claremont Meadows.

### **Building Code of Australia, 2016 Edition,**

Volume 1, Amend. 1.

Class 2 - Class 9 Buildings.

Prepared for: Shobha Designs.

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#### Introduction.

This report is prepared to assess the relevant provision of the Building Code of Australia (BCA) in relation to a single storey child care centre that is proposed to be erected on land, 64 Doncaster Avenue, Claremont Meadows.

The child care centre is designed to accommodate 31 child places.

#### Purpose of the Report.

The purpose of the report is to assess the design documentation prepared by Shobha Designs against the Deemed to Satisfy (DtS) provisions of the 2016 Edition of the BCA Volume 1, Amendment 1, Part D3 excepted, together with the NSW variations (Part G5.2 excepted) where they are applicable and identify matters of non- compliance (if any) that may require design modification.

The report is the basis for a DtS building solution and if necessary may make reference to a performance based "alternative "building solution where circumstances so warrant.

The report is to accompany the documentation for the lodgement of a development application with the Penrith City Council. However it should be noted that the provisions of clause 145(1)(b) of the Environmental Planning and Assessment Regulation, 2000 will apply in relation to the issue of a construction certificate as to the edition/amendment of the BCA that is in force at the time of application.

#### References and Design Documentation.

The following material has been used in the preparation of this report.

- 1. The Environmental Planning and Assessment Regulations, 2000;
- 2. The National Construction Code Volume 1/Amend 1, known and referred to herein as the Building Code of Australia (BCA);
- 3. Design documentation prepared by Shobha Designs, drawings numbered, DA-01(A), DA-02 (P1),DA-03(P1),DA-04(A),DA-05(P1),DA-06(A),DA-07(A) and DA-08(A) dated 15 June 18-inclusuve;
- 4. Plan of survey prepared by Mark Castelletti, Surveying for Lot 34 in DP 1224294-the allotment, and



5. Pre-Lodgement advice letter from Penrith City Council dated 19<sup>th</sup> March 2018.

#### Limitations.

The report does not include any consideration the following:

- 1. The building' structural design and of its services i.e. electrical, mechanical;
- 2. The National Construction Code-Plumbing Code of Australia;
- 3. The Disability Discrimination Act, 1992;
- 4. The requirements of any State Government Agencies, Utility Service Providers e.g. Telecommunications, Energy suppliers;
- 5. Part D3 Access and compliance statement;
- 6. Section J of the BCA and
- 7. The Council has identified the site as being –Bushfire prone land. The report does not assess the provisions of NSW Provision G 5.2-Protection.

#### **Building Characteristics and Description.**

The design drawings provide for the erection of the following built elements:-

#### **Principal building:**

Single storey building for use as an early childhood centre;

#### Ancillary and appurtenant elements:

- · At-grade area for the parking of motor vehicles,
- Enclosure for the reception of waste material; and
- Shade structure.

For the purposes of the Building Code of Australia the following heads of assessment are relevant:-

(a) Rises in Storeys: Principal building: (Clauses C1.2)

The building has a rise in storeys of one (1)



(b) Classification: Principal building-(Clause A3.2)

The building is classified as follows: Class 9b-Early Childhood Centre.

The ancillary/appurtenant buildings (minor structures) are classified as follows;

- Shade Structure; Class 10a,
- Waste enclosure; Class 10b.

In determination the classification of the minor structures, the provisions of Volume 2 of the 2016 Edition of the BCA were utilised.

(c) **Type of Construction:** (Clauses C1.1 and Table C1.1)

The building is required to be of Type C construction.

(d) Floor Area and Volume of the Buildings Single Compartment: (Clause C2.2 and Table C2.2)

By reason of the buildings classification (9b), its compartment size or in this case the buildings total floor area determine that it is subject to floor area and volume limitations. Both floor area and volume calculations indicate the building is within the single compartment size for a building of Type C construction which is stated as follows:-

Max. floor area------3000sq.m,

Max volume------18000sq.m.

(e) Effective Height: (Clause A1.1)

The building has an Effective Height of less than 12m.

(f) Climate Zone : (Clause A1.1)

The climate zone for Sydney West is, Climate Zone 6.

(g) Location of the Buildings Fire Source Features, FSF (Cluse A1.1)



The Fire-source features for the assessment of relevant BCA provisions are:

North: The far side of the road reserve of Doncaster Ave;

• South: The rear boundary of the allotment;

• East: The Side boundary line of the allotment; and

• West: The side boundary line of the allotment.

The FSF criterion becomes relevant in the assessment of the building under Section C of the BCA.

#### **BCA Compliance Specification.**

The following matters are a summary of the non-compliant BCA provisions identified at annexure C.

The BCA provisions below are those matters deemed to be of significance are not reflective of the total assessment at annexure C.

#### 1. C3.2-Protection of openings in external walls.

The openings in the side external walls of the building and their respective side returns at each corner aris of the building require protection in accordance with C3.4.

#### 2. Clause 5.1 of Specification C1.1-Fire-Resisting Construction.

The external side walls of the building as well as their side returns require by reason of their exposure to the FSF require an FRL as specified at annexure B.

Prior to the issue of Construction Certificate the non-compliances raised at 1 and 2 above may be dealt with as an "alternative" solution.

#### 3. Clause F2.3 Facilities in class 3 to 9 buildings.

- (a) The building has been designed with a unisex facility as per sub clause (b) for the staff/employee usage. The facility also contains a shower recess and this being the case the joint facility must be designed to satisfy the following:-
- F2.3(e);
- F2.4;
- AS 1428.1.



(b) The provisions under F2.3 (h)(i)(B) and F2.3(h)(iii)(C)(dd) require the design of the kitchen and the laundry be done in a manner that enables the staff to undertake a supervisory role and a visibility role from both areas of the children in attendance .

The above are matters are capable of being addressed prior to the issue of a construction certificate, at a time when the plans and specifications of the construction certificate will required a higher level of detail.

#### Conclusion.

The building (when complete) will comply with the relevant provisions of the Building Code of Australia, Volume 1, Amend. 1, 2016 Edition (BCA) other than those provisions listed under "Limitations" of this report provided the matters raised in this report and its annexures are satisfactorily addressed prior to the issue of a construction certificate and the appointed Principal Certifying Authority (PCA) is similarly satisfied as to the buildings compliance with the BCA in force at the specified time and any conditions of Development Consent that are applicable to the Construction Certificate.

Rodger Dowsett. MAIBS



### Annexure A

### Fire Safety Schedule.

The following fire safety measures are to be implemented upon the building premises.

Fire Safety Measure	Existing	Required	Standard of
			Performance
Exits signs	no	yes	NSW E4.6, E4.8 and
			AS 2293.1-2005
Fire doors. Note 1.	no	yes	C3.2, C3.4 and As
			1905.1-2015
Fire shutters/fire	no	yes	C3.2, C3.4 and
windows. Note 1.			Specification C3.4
Lightweight	no	yes	C1.8 and
construction			Specification C1.8
Portable fire	no	yes	E1.6, table E1.6 and
extinguishers		***	AS 2444-2001
Exits and paths of	no	yes	D1.10, D2.21
travel		100	

Note 1: these measures may not be required under an "alternative" solution.



#### **ANNEXURE B**

## Schedule of required Fire Resistance Levels (FRL) for a Building of Type C Construction.

Building Element	Class of building	Structural adequacy/integrity/insulation
External wall	9	******
Less than 1.5m from the FSF		90/90/90
1.5m to less than 3m fromFSF	9	60/60/60
3m or more FSF	9	-/-/-
External column	9	******
Less than 1.5m from	9	90/-/-
FSF		
1.5m to less than 3m to FSF	9	60/-/-
3m or more form FSF	9	-/-/-

Note: FSF is the side boundary lines.



#### ANNEXURE C

Address of premises: 64 Doncaster Avenue, Claremont Meadows.

#### DETAILED BCA 2016 ACCESSMENT.

Outlined below is a detailed assessment of the design under the Deemed-to-Satisfy Provisions of the Building Code of Australia (BCA) including the State variations where applicable.

N/A Not Applicable. The Deemed-to-Satisfy clause is not applicable to the

proposed design

Complies The relevant provisions of the Deemed-to-Satisfy clause have been satisfied

by the proposed design

CA "COMPLIANCE ACHIEVABLE". It is considered that there was not enough

information included in the documentation to accurately determine strict compliance with the individual clause requirements. However subject to noting the requirements of each clause, compliance can be readily achieved

prior to the issue of the construction certificate.

FI Further information is necessary to determine the compliance potential of

the building design.

PS Performance Solution with respect to the specified Deemed-to-Satisfy

Provision is, having considered the circumstances promoted as an

"alternative" approach to satisfying the relevant Performance Requirements.

DNC Does not Comply.

NOTED BCA Clause simply provides a statement not requiring specific design

comment or confirmation.

• BCA Clause by Clause comments of deemed to satisfy provisions.

ClauseReference	Comment	Status
Section A General Provisions	Information	Noted
Part A3.2 Classification	The principal building has been determined to have the following classification: Class 9b- Early Childhood Centre. For minor structures(shade structure)-refer to body of this report	
Section B Structure	Structural engineers details required	Required at the construction certificate
Part B1.1 Structural Provisions-Resistance to actions	As above	
B1.2 Determination of individual actions	As above	
B1.3 *********		
B1.4 Materials & Forms of Construction- Determination of structural resistance	<ol> <li>Glazing used in glass balustrades to comply with AS 1288-2006,</li> <li>Termite Risk Management to comply with AS 3660.1-2014;</li> <li>Metal roof construction to comply with AS 1562.1-1992;</li> <li>Timber construction to comply with:         <ul> <li>AS 1720.1-2010,</li> <li>AS 1684.2- 2010;</li> </ul> </li> <li>AAC (Hebel) to comply with AS 5146.1-2015.</li> </ol>	CA



#### SECTION C FIRE RESISTANCE

#### PART C1 - FIRE RESISTANCE AND STABLITY

C1.0 Deemed-to-Satisfy Provisions	Informational	
C1.1 Type of Construction Required	The principal building is to be of	Refer to
	Type C construction	annexure B
C1.2 Calculation of Rise in Storeys	The building has been calculated	
	to have a rise in storeys of	
	one(1)	
C1.3 Buildings of Multiple Classification	NA	
C1.4 Mixed Types of Construction	NA	
C1.5 Two Storey Class 2, 3 or 9c Buildings	NA	
C1.6 Class 4 Parts of Buildings	NA	
C1.7 Open Spectator Stands and Indoor	NA	
Sports Stadiums		
	External walls of the building to	CA
C1.8 Lightweight Construction	be constructed from autoclaved	
	aerated concrete blocks (Hebel)	
C 1.9 ***********		
	The early fire hazard indexes for	CA
C1.10 Fire Hazard Properties	floor, wall and ceiling linings	
	together with air-handling	
	ductwork insulating, sarking	
	materials and external building	
	attachments must comply with	
	this clause and its related	
	Specification, Spec-C1.10	
C1.11 Performance of External Walls in	NA	
Fire		
C1.12 Non-combustible Materials	Information	
C1.13 Fire protected timber - Concession	NA	

#### PART C2 – COMPARTMENTATION AND SEPARATION

C2.0 Deemed-to-Satisfy Provisions	information	
C2.1 Application of Part	NA	
C2.2 General Floor Area and Volume	Complies-the building has one	
Limitations	compartment.	
C2.3 Large Isolated Buildings	NA	

C2.4 Requirements for Open Spaces and Vehicular Access	NA
C2.5 Class 9a and 9c Buildings	NA
C2.6 Vertical Separation of Openings in	NA
External Walls	
C2.7 Separation by Fire Walls	NA
C2.8 Separation of Classifications in the	NA
Same Storey	
C2.9 Separation of Classifications in	NA
Different Storeys	
C2.10 Separation of Lift Shafts	NA
C2.11 Stairways and Lifts in One Shaft	NA
C2.12 Separation of Equipment	NA
C2.13 Electricity Supply System	NA
C2.14 Public Corridors in Class 2 and 3	NA
Buildings	

#### PART C3 - PROTECTION OF OPENINGS

C3.0 Deemed-to-Satisfy Provisions	Information	
C3.1 Application of Part	information	
C3.2 Protection of Openings in External Walls	The external walls of the building that are setback 1000mm from the side boundary lines together with their respective 90 degree returns for a distance of 2000mm as measured from the corner aris are required to have a fire – resistance level (FRL) as determined by clause 5.1 of Specification C1.1. Openings (windows/doorways) that occur in an external wall required to have an FRL must be protected in accordance with C3.4	PS
C3.3 Separation of External Walls and Associated Openings in Different Fire Compartments	NA	
C3.4 Acceptable Methods of Protection	Fire doors/ fire shutters to comply with the Spec C3.4	PS
C3.5 Doorways in Fire Walls	NA	

C3.6 Sliding Fire Doors	NA
C3.7 Protection of Doorways in	NA
Horizontal Exits	
C3.8 Openings in Fire-Isolated Exits	NA
C3.9 Service Penetrations in Fire-Isolated	NA
Exits	
C3.10 Openings in Fire-Isolated Lift Shafts	NA
C3.11 Bounding Construction Class 2, 3	NA
and 4 Buildings	
C3.12 Openings in Floors and Ceilings for	NA
Services	
C3.13 Openings in Shafts	NA
C3.15 Openings for Service Installations	NA
C3.16 Construction Joints	NA
C3.17 Columns Protected with	NA
Lightweight Construction to Achieve an	
FRL	

#### SPECIFICATION C1.1 - FIRE RESISTING CONSTRUCTION

2.0 General Requirements	Information	
2.1 Exposure to Fire-Source Features	This provision has relevance to the side external walls of the building, there returns as to their exposure to the fire source features. Refer to comments at C3.2	Noted
2.2 Fire Protection for a Support of Another Part	NA	
2.3 Lintels	NA	
2.4 Attachments not to Impair Fire-Resistance	The eastern and western elevations of the building do not indicate a attachments that will impair the fire resistance performance of the external walls	CA
2.5 General Concessions	NA	
2.6 Mezzanine Floors: Concession	NA	

2.7 Enclosure of Shafts	NA	
2.8 Carparks in Class 2 and 3 Buildings	NA	
2.9 Residential Aged Care Building:	NA	
5.0 Type C Fire-Resisting Construction	Buildings required construction	
	typeType C	
5.0 Fire-Resistance of Building Elements		
5.1	a) Application of Table 5 of	Refer to
	Specification C 1.1 in the	annexure B
	determination of FRL for the	
	buildings classification, in this	
	case Class 9b	
	b)determination of and external	As above
	walls; FRL	

#### SPECIFIC ATION C1.8 - STRUCTURAL TESTS FOR LIGHTWEIGHT CONSTRUCTION

1 Scope	Noted	
2 Application	Application of the specification satisfied if the external wall system (Autoclaved aerated blocks) is designed and constructed in accordance with Section B	Structural engineers certification required at the construction certificate.
3 Tests	Noted	
4 Test Specimens	Noted	
5 Test Methods	Noted	
6 Criteria for Compliance	Noted	



#### SPECIFICATION C1.10 - FIRE HAZARD PROPERTIES

1 Scope	information	Noted
2 Application	Information	Noted
3 Floor linings and floor coverings	Floor lining/covering must have critical flux as specified in Table 2 and a group No. complying with clause 6(b)	CA
4 Wall and ceiling linings	Wall and ceiling linings must have a group No. specified in Table 3 as well as:  • A smoke growth rate index of not more than 100,  • An average specific extinction area less than 250sq.m/kg.	CA
5 Air-handling Ductwork	Centralised air-handling plant not shown	CA
6 Lift Cars	NA	
7 Other materials (NSW variation)	Applies to sarking type materials and insulation materials	CA

### SPECIFICATION C3.4 – FIRE DOORS, SMOKE DOORS, FIRE WINDOWS AND SHUTTERS

1 Scope	Information	
2 Fire Doors	Refer to comments at C3.3	PS
3 Smoke Doors	NA	
4 Fire Shutters	Refer to comments at C3.2	PS
5 Fire Windows	Refer to comments at C3.2	PS

### SPECIFICATION C3.15 – PENETRATION OF WALLS, FLOORS AND CEILINGS BY SERVICES

1 Scope	information	
2 Application	information	



3 Metal Pipe Systems	NA	
4 Pipes Penetrating Sanitary	NA	
Compartments		
5 Wires and Cables	NA	
6 Electrical Switches and Outlets	NA	
7 Fire-Stopping	NA	

**SECTION D: ACCESS AND EGRESS** 

#### PART D1 - PROVISION FOR ESCAPE

D1.0 Deemed-to-Satisfy Provisions	Information	
D1.1 Application of Part	NA	
D1.2 Number of Exits Required	Two(2) exits required for a class 9b building used as an early childhood centre	Complies
D1.3 When Fire-Isolated Stairways and Ramps are Required	NA	
D1.4 Exit Travel Distances	No point on the floor to be more than 20m from an exit or to a point where travel in different directions to 2 exits is available.	Complies
		CA
D1.5 Distance between alternative exits	<ul> <li>Exits to be uniformly distributed around the building.</li> <li>Min. distance apart-9m,</li> <li>Max. distance apart-60m.</li> <li>Alternative paths of travel not to converge min distance 6m apart</li> </ul>	Complies
D1.6 Dimensions of Exits and Paths of Travel to Exits	Path of travel to exits. Min height-2m, Min. width-1m. Doorways less 250mm apart from doorways required to be accessible by a person with a disability. Refer to AS 1428.1-	CA

	2009	
D1.7 Travel via Fire-Isolated Exits	NA	
D1.8 External Stairways or ramps in lieu	NA	
of Fire Isolated Exits		
D1.9 Travel by Non Fire-Isolated	NA	
Stairways or Ramps		
D1.10 Discharge from Exits	Exits not to be capable of being obstructed.	Complies
D1.11 Horizontal Exits	NA	
D1.12 Non-Required Stairways, Ramps or	NA	
Escalators		
D1.13 Number of Persons Accommodated	Capacity to be assessed under table D1.13 but note design of building is for 31 child places aged between 0-5 years, together with 4 employees during the span of hours after and before parent attendance.	CA
D1.14 Measurement of Distances	Information	
D1.15 Method of Measurement	Information	
D1.16 Plant Rooms, Lift Motor Rooms and electricity network substations: Concession	NA	
D1.17 Access to Lift Pits	NA	

#### PART D2 - CONSTRUCTION OF EXITS

D2.0 Deemed-to-Satisfy Provisions	information	
D2.1 Application of Part	Information	
D2.2 Fire-Isolated Stairways and Ramps	NA	
D2.3 Non-Fire Isolated Stairways and	NA	
Ramps		
D2.4 Separation of Rising and Descending	NA	
Stair Flights		
D2.5 Open Access Ramps and Balconies	NA	
D2.6 Smoke Lobbies	NA	

		ı
D2.7 Installations in Exits and Paths of Travel	Position of services and equipment e.g. electricity meters etc. not shown but most likely to be installed external to the building	CA
D2.8 Enclosure of Space Under Stairs and Ramps	NA	
D2.9 Width of required Stairways and Ramps	Ramp less than 2m in width	Complies
D2.10 Pedestrian Ramps	External walkway/ramps that lead to main entry as well as the rear ramp to comply with AS 1428.1-2009.	CA
D2.11 Fire Isolated Passageways	NA	
D2.12 Roof as Open Space	NA	
D2.13 Goings and Risers	NA	
D2.14 Landings	NA	
D2.15 Thresholds	Internal floor level RL and thresholds RL at doorways is one and the same.	Complies
D2.16 Barriers to prevent falls	External ground level surfaces and trafficable surface of building than 1m. South elevation plots 1.2 m height glass balustrade	Complies
D2.17 Handrails	NA	
D2.18 Fixed Platforms, Walkways, Stairways and Ladders	NA	
D2.19 Doorways and Doors	Power operated exit doors not shown	Not proposed
D2.20 Swinging Doors	Exit doors are required to swing in the direction of egress	Complies
D2.21 Operation of Latch	Exits doors from the building and doors in the paths of travel to exits FROM the SECURE PARTS must all be capable of being immediately unlocked by:  1. A fail safe control switch or  2. By a person or persons specifically nominated by the owner, properly instructed as to duties	CA



	and responsibilities and available at all times when the building is lawful occupied to facilitate immediate escape of all occupants if there is a fire, AND In other cases exit doors and doors in the path of travel, door hardware comply with D2.21 (a)	
D2.22 Re-entry from Fire Isolated Exits	NA	
D2.23 Signs on Doors	NA	
D2.24 Protection of Openable Windows	Internal floor level of the building and surfaces beneath window openings is within 2m	Complies
D2.25 Timber stairways: Concession	NA	

PART D3: ACCESS FOR PEOPLE WITH DISABILITIES.

Note: Refer to separate report

D3.0 Deemed-to-Satisfy Provisions	Information	
D3.1 General Building Access Requirements	To and within all areas normally used by the occupants	Complies
D3.2 Access to Building	Accessways to be provided;  1. From the main point of a pedestrian entry at the allotment boundary &  2. From an accessible	CA CA
	carparking space on the allotment.  3. Accessways/ramps to comply with AS 1428.1-2009.	
D3.3 Parts of building to be accessible	Carpet floor covering- if to be installed	CA
D3.4 Concessions/Exemptions	NA	
D3.5 Car Parking	One accessible carparking space to comply with AS 2890.6 required	CA

D3.6 Signage	Required- unisex sanitary facility, exit doors. Refer to D3.6 and AS 1428.1-2009.	CA
D3.7 Hearing augmentation listening system	NA	
D3.8 Tactile Indicators	Required at ramps/allotment boundary. Refer to AS 1428.4.1	CA
D3.9 Wheelchair seating-Class 9b buildings.	NA	
D3.10 Swimming pools	NA	
D3.11 Ramps	NA	
D3.12 Glazing on accessways	Fully glazed doors/frameless doors to be clearly marked in accord with AS 1428.1-2009 to avoid them being mistaken by those persons with vision impairment.	CA
SPEC D1.12 Non Required Stairways Ramps and Escalators	NA	
SPEC D3.6 Braille and Tactile Signs	Tactile signage required	CA
SPEC D3.10 Accessible Water Entry Exit for Swimming Pools	NA	

### **SECTION E: SERVICES AND EQUIPMENT**

### PART E1 - FIRE FIGHTING EQUIPMENT

E1.0 Deemed-to-Satisfy Provisions	Information	
E1.3 Fire Hydrants	Not required, buildings FA	Noted
	>500sq.m	
E1.4 Fire Hose Reels	Not required, buildings FA	Noted
	>500sq.m	
E1.5 Sprinklers	Not required	Noted
E1.6 Portable Fire Extinguishers	To be provided as owe Table	CA
	E1.6	
E1.8 Fire Control Centres	Not required	
E1.9 Fire Precautions during Construction	Not required at this stage	
E1.10 Provisions for Special Hazards	NA	



#### PART E2- SMOKE HAZARD MANAGEMENT

E2.0 Deemed-to- Satisfy Provisions	Information	
E2.1 Application of Part	Applies to class 9b buildings in	Noted
	certain situations	
E2.2 General Requirements (including	Smoke hazard management- not	
Tables E2.2a and E2.2b)	required	
E2.3 Provisions for Special Hazards	NA	

#### SPECIFICATION E2.2a – SMOKE DETECTION AND ALARM SYSTEMS

1 Scope	Information	
2 Type of System	NA	
3 Smoke Alarm System	NA	
4 Smoke Detection System	NA	
5 Smoke Detection for Smoke Control	NA	
Systems		
6 Building Occupant Warning System	NA	
7 System Monitoring	NA	

#### PART E3 - LIFT INSTALLATIONS

E3.0 Deemed-to-Satisfy Provisions	Information
E3.1 Lift Installations	NA
E3.2 Stretcher Facility in Lifts	NA
E3.3 Warning against use of lifts in Fire	NA
E3.4 Emergency Lifts	NA
E3.5 Landings	NA
E3.6 Passenger Lifts	NA
E3.7 Fire Service Controls	NA
E3.8 Aged Care Buildings	NA
E3.9 Fire Service Control Switch	NA
E3.10 Lift Car Service Drive Control Switch	NA

#### SPECIFICATION E3.1 – LIFT INSTALLATIONS

1 Scope	Information	
2 Lift Cars Exposed	NA	
3 Lift Car Emergency Lighting	NA	



4 Cooling of Lift Shaft	NA	
5 Lift Foyer Access	NA	
6 Emergency Access Doors in a Single	NA	
Enclosed Lift Shaft		

### PART E4 – VISIBILITY IN AN EMERGENCY, EXIT SIGNS AND WARNING SYSTEMS

E4.0 Deemed-to-Satisfy Provisions	Information	
E4.2 Emergency Lighting Requirements	Not required	
E4.3 Measurement of Distance	Information	
E4.4 Design and Operation of Emergency	NA	
Lighting		
E4.5 Exit Signs	Required	CA
E4.6 Direction Signs	Required	CA
E4.7 Class 2 and 3 Buildings and Class 4	NA	
Parts: Exemptions		
E4.8 Design and Operation of Exit Signs	Relevant standard is AS 2293.1	CA
E4.9 Sound Systems and Intercom	NA	
Systems for Emergency purposes		

#### SPECIFICATION E4.8 – PHOTOLUMINESCENT EXIT SIGNS

1 Scope	NA
2 Application	NA
3 Illumination	NA
4 Pictorial Elements	NA
5 Viewing Distance	NA
6 Smoke Control Systems	NA



#### SECTION F - HEALTH AND AMENITY

#### PART F1 - DAMP & WEATHER PROOFING

F1.1 Stormwater drainage	Stormwater drainage to comply with:-  1. The requirements of the local authority, &  2. AS 3500.3-2015.	CA
F1.5 Roof coverings	Roof coverings to comply AS1562.1	CA
F1.6 Sarking	Sarking type materials used for weatherproofing of roofs and walls to comply with AS 4200 Part 1 & 2-1994.	CA
F1.7 Waterproofing of wet areas in buildings	Wet areas constructed to comply with AS 3740-2010 and BCA Table F1.7	CA
F1.8	******	
F1.9 Damp-proofing	Slab on ground construction	CA
F1.10 Damp-proofing of floors on the ground	Refer to structural Engineers details and provision of vapour barrier to AS 2870-2011 in the structural engineer's drawings.	CA
F1.11 Provision of floor wastes	Floors of wet areas to be graded and drained. Note: the provisions of AS 1428.1-2009 re: floors surfaces /drainage in the shower of the unisex facility.	CA
F1.12 Sub-floor ventilation	Not applicable	
F1.13 Glazed assemblies	Glazed assemblies e.g. Windows, swinging glazed doors to comply with AS 2047-2014.	CA

#### PART F2 - SANITARY & OTHER FACILITIES

F2.0 Deemed-to-Satisfy Provisions	Informational	
F2.1 Facilities in residential	NA	
buildings		
F2.2 Calculation of number of	Information	
occupants and fixtures		
F2.3 Facilities in Class 3 to 9	1. If less than 10 persons	

- III		
Buildings, Table F2.3	employed—unisex facility to be	CA
	provided in place of separate	
	facilities for each sex. The design	
	requirement for a unisex	
	facility/shower is set out in	
	clause 15.5- AS 1428.1-2009.	
	<ol><li>Unisex facility to contain a</li></ol>	
	disposal facility for sanitary	CA
	towels.	
	<ol><li>Early child hood facility to be</li></ol>	
	provided with:-	
	(a) Kitchen for food preparation	
	with sink, separate hand basin,	CA
	refrigerator, and cooking	
	appliance,	
	(b) Kitchen access door to have	
	child proof latches,	
	(c) If the centre is to	CA
	accommodate children less	
	than 2 years of age Then	
	facilities through design must	CA/PS
	be provided to allow continual	,
	supervision of the children	
	(d) One bath, shower or shower-	CA
	bath	
	(e) (i)Laundry facilities,	
	(ii)bench type baby bath,	
	(iii) nappy change bench with;	CA
	Wash hand basin and	
	bench type baby bath	
	Bench area to 0.9sq.m	
	at a height of between	
	850mm and max. of	
	900mm.	
	Space the storage	
	steps,	
	• Positioned to allow a	
	staff member to have a	
	visibility of play areas.	
	Refer to F2.3 (h) for detailed	
	specification of required facilities.	Complies
	4. Sanitary facilities for the	Compiles
	children, based on 31 places are;	

	<ul><li> 3 closet pans,</li><li> 3 washhand basins.</li></ul>	
F2.4 Accessible sanitary facilities	<ol> <li>To be provided in accessible parts of the building.</li> <li>Accessible unisex facility to contain:         <ul> <li>Closet pan,</li> <li>Washhand basin,</li> <li>Shelf/bench top,</li> <li>Sanitary towel disposal facility</li> </ul> </li> </ol>	Complies
F2.5 Construction of sanitary compartments	Construction to comply with F2.5	CA
F2.6 Interpretation: urinals and wash basins	NA	
F2.7 Warm water installations- Microbial control	NA	
F2.8 Slop-hoppers/Waste management	NA	

#### PART F3 - ROOM HEIGHTS

F3.0 Deemed-to-Satisfy Provisions	Information	
F3.1 Height of rooms	Ceiling height 2.7m	Complies

#### PART F4 - LIGHT AND VENTILATION

F4.0 Deemed-to-Satisfy Provisions	Information	
F4.1 Provision of Natural light	To be provided to all playrooms	Complies
F4.2 Methods and extent of natural lighting	Windows, glazed component 10% of FA	Complies
F4.3 Natural light borrowed from adjoining room	NA	
F4.4 Artificial lighting	To comply with AS 1680.0	CA
F4.5 Ventilation of rooms	Playrooms, admin. office, staff room, sanitary compartments laundry and kitchen to have natural ventilation.  Cot room requires mechanical	CA
	ventilation or air conditioning	



	complying with AS 1668.2-2012.	
F4.6 Natural ventilation	Ventilating area to equal 5% of	Complies
	rooms FA, except cot room.	1967
F4.7 Ventilation borrowed from adjoining	NA	
rooms		
F4.8 Restriction on position of water	NA	
closets and urinals		
F4.9 Airlocks	NA	
F4.10 *******		
F4.11 Car parks	NA	
F4.12 Kitchen local exhaust ventilation	See the requirement of the	CA
	Penrith City Council	

#### PART F5 – SOUND TRANSMISSION AND INSULATION

F5.0 Deemed-to-Satisfy Provisions	Information	
F5.1 Application of Part	NA	
F5.2 Determination of airborne sound	NA	
insulation ratings		
F5.3 Determination of impact sound	NA	
insulation ratings		
F5.4 Sound insulation ratings of floors	NA	
F5.5 Sound insulation ratings of walls	NA	
F5.6 Sound insulation rating of services	NA	
F5.7 Sound isolation of pumps	NA	

#### SECTION G - ANCILLARY PROVISIONS

Part G1 Minor structures and components	NA	
	100 (000) 10	
G1.101 (NSW) Provision for cleaning	NA	
windows		
Part G2 Heating Appliances	NA	
Part G3 Atrium construction	NA	
Part G4 Construction in alpine areas	NA	
Part G5 Construction in bushfire prone	Site identified as being bushfire	Subject of
areas—NSW G5.2	prone	separate
		report



SECTION H SPECIAL USE BUILDINGS	NA	
SECTION I MAINTENANCE	NA	
SECTION J ENERGY EFFICIENCY	Separate assessment/report	
	required	