

BCA COMPLIANCE REPORT

For DA Submission to Bega Valley Shire Council.

PROJECT: Alterations to Old Bega Hospital.

**ADDRESS. Lot 296 DP728021
3 Corkhill Place Bega**



DATE: October 2018
REPORT NO: 18107 Rev A
PREPARED FOR: Sibling Architecture.
PREPARED BY: MS | Complete Certification Pty Ltd | BCA Consulting

EXECUTIVE SUMMARY

The proposed alterations and additions to the Old Bega Valley Hospital have been assessed for compliance to the 2016 amendment 1 National Construction Code.

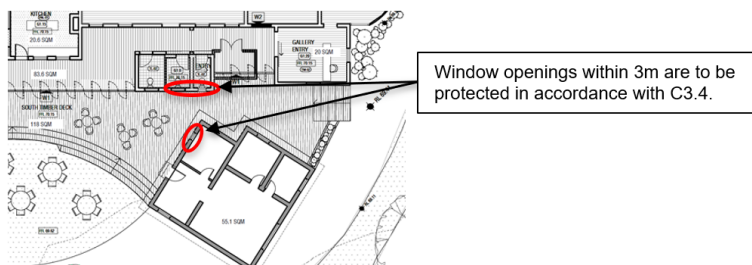
The existing building has been extensively damaged due to fire. The proposed works will revitalise the building to be used as a general purposed community centre.

The following items have been highlighted as requiring further construction details to be provided.

The issues can be addressed via compliance with the DTS provisions prior to the construction certificate approval.

Alterations & Additions to the Existing Old Bega Valley Hospital building.

1. Protection of openings in external walls
 - The external walls separating the main building and the adjoining community building are to achieve FRL60/60/60. (ensure the masonry walls are made good to achieve the required FRL from the outside)
 - Window openings within 3m are to be protected in accordance with C3.4.



2. The required exits are to be shown on the construction certificate plans. (location of illuminated exit and directional exit signage).
3. Exit doors must swing in direction of egress (i.e open out)
4. Exit doors must be readily openable—
 - (i) without a key from the side that faces a person seeking egress; and
 - (ii) by a single hand pushing action on a single device such as a panic bar located between 900 mm and 1.2 m from the floor; and
5. The travel distances to the exits are to be shown on the construction plans.
6. Services or equipment in the path of travel to an exit must be contained by an enclosure with non-combustible construction and suitably sealed from smoke spreading from the enclosure.
7. Fire hydrant coverage is required to service the building. Details to be provided for construction.
8. Location of hose reels to be shown on the construction plans.
9. Portable Fire Extinguishers to be shown on the construction plans.
10. Location of emergency lighting to be shown on the construction plans.
11. If mechanical ventilation proposed to sanitary compartments then must be installed in accordance with AS3666.1.
12. Access compliant to AS1428.1 to be provided throughout the redevelopment area. Door approaches, corridor widths etc are to be demonstrated on the construction plans.



13. Details on the required accessible signage to be provided for the construction certificate
 1. Accessible toilet facilities
 2. Where a bank of sanitary facilities is not provided with an accessible unisex sanitary facility, directional signage incorporating the international symbol of access in accordance with AS 1428.1 must be placed at the location of the sanitary facilities that are not accessible, to direct a person to the location of the nearest accessible unisex sanitary facility.
14. Compliant access is to be provided from the accessible parking to the main points of pedestrian entry. Details to be provided for construction approval.
15. Compliant access is to be provided to and within the northern timber deck.
16. A hearing augmentation system must be provided where an inbuilt amplification system, other than one used only for emergency warning, is installed.
17. The accessible bathroom is to comply to AS1428.1. Details to be indicated on the construction plans.
18. Ambulant toilet facilities compliant to AS1428.1 are to be provided to the male/female toilet. Fitout details to be provided on the construction plans.
19. The location of tactile indicators to be provided on the construction certificate plans.
20. The maximum temperature of the hot water in the accessible bathroom is to be 45 degrees Celsius.
21. Carpets, floor and wall linings to be certified to comply with Spec C1.10a.
 - Floor linings & floor coverings
 - Wall linings and ceiling linings.
22. A building or part of a building used as an assembly building must be provided with automatic shutdown of any air-handling system (**other than non-ducted individual room units with a capacity not more than 1000 L/s** and miscellaneous exhaust air systems installed in accordance with Sections 5 and 6 of AS/NZS 1668.1) which does not form part of the smoke hazard management system.

Additional Toilet facilities

23. Based on the population numbers from table D1.13
 - 2 urinals are required to the male sanitary facility.
 - 2 washbasins required for male.
 - 2 washbasins required for female.
24. Note: one stall in each toilet facility is required to satisfy the ambulant toilet facility requirements of AS1428.1.
25. A commercial kitchen must be provided with a kitchen exhaust hood complying with AS/NZS 1668.1 and AS 1668.2 where—
 - (a) any cooking apparatus has—
 - (i) a total maximum electrical power input exceeding 8kW; or
 - (ii) a total gas power input exceeding 29 MJ/h; or
 - (b) the total maximum power input to more than one apparatus exceeds—
 - (i) 0.5 kW electrical power; or
 - (ii) 1.8 MJ gas, per m² of floor area of the room or enclosure.
26. A refrigerated or cooling chamber, strongroom or vault which is of sufficient size for a person to enter must have—
 - (i) inside without a key; and
 - (ii) internal lighting controlled only by a switch which is located adjacent to the entrance doorway inside the chamber, strongroom or vault; and
 - (iii) an indicator lamp positioned outside the chamber, strongroom or vault which is illuminated when the interior lights required by (a)(ii) are switched on; and



- (iv) an alarm that is—
 (A) located outside but controllable only from within the chamber, strongroom or vault; and
 (B) able to achieve a sound pressure level outside the chamber, strongroom or vault of 90dB(A) when measured 3m from the sounding device.

27. A section J Energy Efficiency compliance report will be required for the construction approval.

REVISION STATUS				
REVISION	DATE	STATUS	WRITTEN	CHECKED
A	18/10/2018	ISSUE TO CLIENT	MS	

COMMERCIAL IN CONFIDENCE

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1.0 INTRODUCTION

The proposed alterations and additions to the existing Old Bega Hospital building have been assessed for compliance to the 2016 amendment 1 National Construction Code.

1.1 BASIS OF REPORT

The key objective of the reports is to make an:

- Assessment under the current Building Code of Australia 2016 Amd 1 (BCA) Parts C, D, E, F, H1 and list any departures and information applicable from the BCA.
- Provide BCA non-compliance information where departures are identified.

The architectural drawings, from Sibling Architecture Project No. 171 Old Bega Hospital dated 10/9/2018, relied upon in the preparation of this report are listed as follows:

- DA100 Rev A Proposed Plan
- DA004 Rev A Site Plan
- DA101 Rev A Proposed Landscaping & Roof Plan
- DA200 Rev A Proposed Elevations

1.2 LIMITATIONS & EXCLUSIONS

The following items are outside the scope of this report:

- Reporting on hazardous materials, OH&S matters or construction site contamination
- Assessment of any structural elements or geotechnical matters relating to the building, including any structural or other assessment of the existing fire resistant levels of the building
- Assessment of any fire services operations (including hydraulic, electrical or other systems)
- Assessment of plumbing and drainage installations, including stormwater
- Assessment of mechanical plant operations, electrical systems or security systems
- Heritage significance
- Consideration of energy or water authority requirements
- Access for people with disabilities under Part D3 of the BCA. An outline of the requirements under section D3 and AS1428.1 has been included in the report as reference for the construction documentation.
- Consideration of local planning policies.
- Environmental, planning or heritage issues
- Requirements of statutory authorities
- Pest inspection or assessment of building damage caused by pests.
- Energy efficiency Part J.

1.3 REPORTING TEAM

The information contained herein has been prepared by:

- Matthew Stewart (Building Surveyor, Grade 1 (unrestricted) Accredited Certifier and PCA BPB 1859)



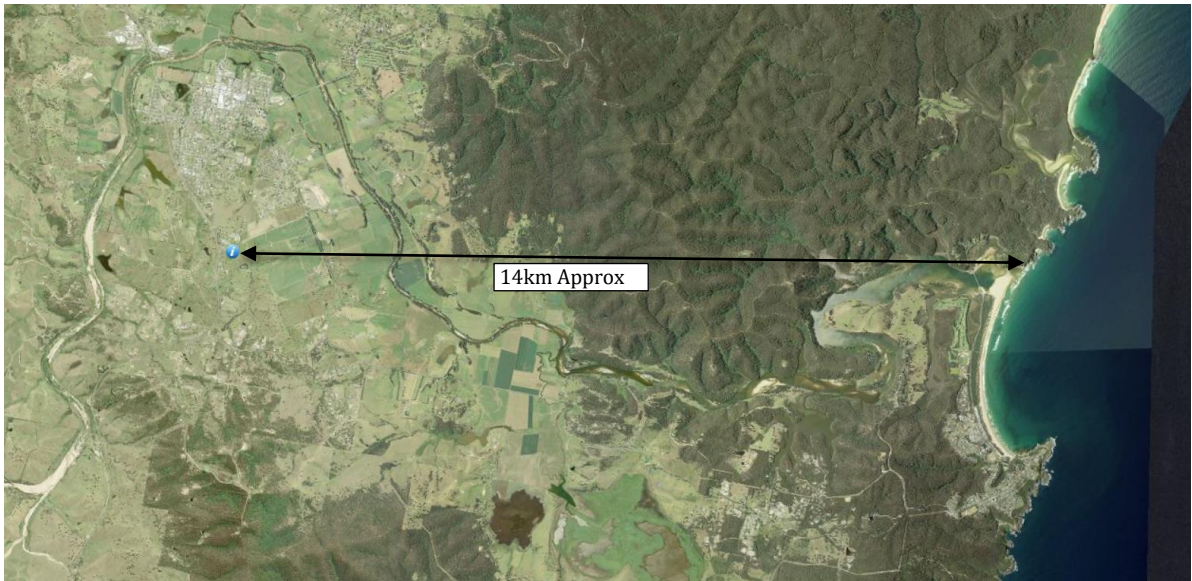


Figure 1 - Locality Plan



Figure 2 – Aerial Photo of the Site





Photo 1



Photo 2



Photo 3



2.0 BUILDING CLASSIFICATION

2.1 BUILDING CHARACTERISTICS

Part A3 - Classification of Buildings and Structures	<p>Clause A3.2 Classification –</p> <p>Class 9: a building of a public nature—</p> <p>Class 9b - an <i>assembly building</i>, including a trade workshop, laboratory or the like in a primary or secondary <i>school</i>, but excluding any other parts of the building that are of another Class;</p> <p>Assembly building.</p> <p>a) civic, theatrical, social, political or religious purposes including a library, theatre, public hall or place of worship.</p> <p>The café tenancy/ gift shop can be incorporated into class 9b part as per clause A3.4.</p>
Rise in Storeys:	1
Storeys contained	1.
Effective Height:	< 12m
Type of Construction:	Type C
Fire compartments:	The building has been considered as one compartment.
Gross Floor areas	Within limits set by table C2.2 for Type C construction.
Volume limitations (C2.2)	<p>Volume of each compartment <18000m³</p> <p>Within limits set by table C2.2 for Type C construction.</p>



3.0 BCA COMPLIANCE SUMMARY

The information contained in this table can be used in the following two ways;

- Grey shaded clauses highlight areas that will need further details to be provided to achieve full compliance in accordance with the deemed-to-satisfy provisions. (DTS)
- Red shaded clauses indicate areas of the design that do not comply with the BCA and will be required to be rectified to satisfy the DTS provisions (or addressed via the preparation of an Alternative Solution report which effectively satisfies the BCA via performance based means.)

SECTION C - FIRE RESISTANCE

Part C1 - FIRE RESITANCE AND STABILITY

CLAUSE	REFERENCE	APPLICABLE	COMPLIES	COMMENT
C1.0	DTS provisions	✓	Note only	Noted
C1.1	Type of Construction Required	✓	Note only	Type C.

Table C1.1 TYPE OF CONSTRUCTION REQUIRED

Rise in storeys	Class of building	
	2, 3, 9	5, 6, 7, 8
4 OR MORE	A	A
3	A	B
2	B	C
1	C	C

C1.2	Calculation of Rise in Storeys	✓	Note only	Building has a rise of 1 storeys
C1.3	Buildings of Multiple Classification	✓	✓	Type C construction applies The café tenancy/ gift shop can be incorporated into class 9b part as per clause A3.4.
C1.4	Mixed Types of Construction	X		Type C
C1.5	Two Storey Class 2, 3 or 9c Buildings	X	N/A	
C1.6	Class 4 Parts of Buildings	X	N/A	No residential components proposed.
C1.7	Open Spectator Stands & Indoor Sports Stadiums	X	N/A	
C1.8	Lightweight Construction	✓	Note only	Where lightweight construction proposed for fire rating purposes it must comply with this clause.



C1.9	Non-combustible Building Elements	X	N/A	Does not apply to Type C construction.
C1.10	Fire Hazard Properties	✓	Construction details required for CC	Carpets, floor and wall linings to be certified to comply with Spec C1.10a. <ul style="list-style-type: none"> - Floor linings & floor coverings - Wall linings and ceiling linings Test reports to be provided demonstrating compliance for construction.
C1.11	Performance of External Walls in Fire.	X		No tilt up walls.
C1.12	*****			Blank -This clause is not utilised in the NCC
C1.13	Fire Protected Timber: Concession	X	N/A	Not applicable to class 9b part
C1.14	Ancillary Elements	X	N/A	This clause does not apply as the building is not Type A construction.

Part C2 - FIRE RESISTANCE

C2.0	Deemed-to-Satisfy Provisions	✓	Note only	Noted
C2.1	Application of Part	✓	Note only	Noted
C2.2	General Floor Area & Volume Limitations	✓	✓	Within limitation of table C2.2 <3000m ² Volume of each compartment <18000m ³

Table C2.2 MAXIMUM SIZE OF FIRE COMPARTMENTS OR ATRIA

Classification	Type of construction of building			
		Type A	Type B	Type C
5, 9b or 9c aged care building	max floor area—	8 000 m ²	5 500 m ²	3 000 m ²
	max volume—	48 000 m ³	33 000 m ³	18 000 m ³
6, 7, 8 or 9a (except for patient care areas)	max floor area—	5 000 m ²	3 500 m ²	2 000 m ²
	max volume—	30 000 m ³	21 000 m ³	12 000 m ³

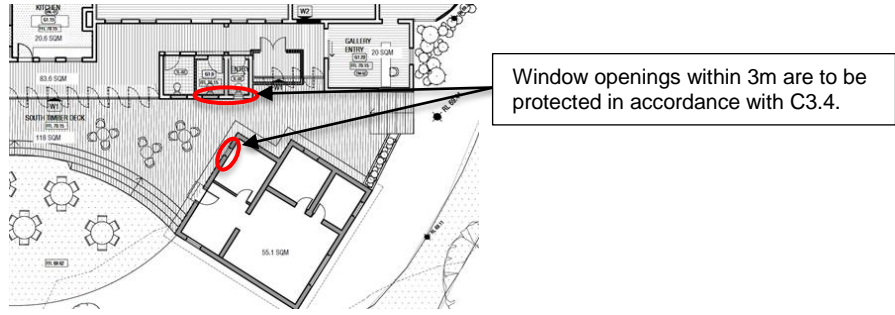
Note: See C2.5 for maximum size of compartments in patient care areas in Class 9a health care buildings.

C2.3	Large Isolated Buildings	X		Not large isolated building.
C2.4	Requirements for open space & Vehicular Access	X		Not a "large isolated building".
C2.5	Class 9a & 9c Buildings	X		Not a class 9a or 9c building.
C2.6	Vertical separation of openings in external walls	X	X	Not Type A Construction
C2.7	Separation by fire walls	X		All one compartment.
C2.8	Separation of classifications in the same storey	✓		The ancillary uses café/ gift shop can be included in the 9b classification (10% of the floor area). As per Clause A3.4.



C2.9	Separation of classifications in different storeys	X		Single storey
C2.10	Separation of lift shafts	X		No Lift Proposed in the new works
C2.11	Stairways and lifts in one shaft	X	N/A	
C2.12	Separation of equipment	X		No emergency equipment identified
C2.13	Electricity supply system	X		
C2.14	Public corridors in Class 2 & 3 buildings	X	N/A	Not class 2

Part C3 - PROTECTION OF OPENINGS

C3.0	Deemed-to-Satisfy Provisions	Applicable	Note only	Noted
C3.1	Application of Part	✓	Note only	Noted
C3.2	Protection of openings in external walls	✓	Construction details required	-The external walls separating the main building and the adjoining community building are to achieve FRL60/60/60. (ensure the masonry walls are made good to achieve the required FRL) -Window openings within 3m are to be protected in accordance with C3.4.
				
C3.3	Separation of openings in different fire compartments	X		The main building is considered to be one compartment.
C3.4	Acceptable methods of protection.	✓	Construction details required for C3.2.	(a) Doorways, <i>windows</i> and other openings must be protected as follows: <ul style="list-style-type: none"> (i) Doorways— <ul style="list-style-type: none"> (A) internal or external wall-wetting sprinklers as appropriate used with doors that are <i>self-closing</i> or <i>automatic</i> closing; or (B) -/60/30 fire doors that are <i>self-closing</i> or <i>automatic</i> closing. (ii) <i>Windows</i>— <ul style="list-style-type: none"> (A) internal or external wall-wetting sprinklers as appropriate used with windows that are automatic closing or permanently fixed in the closed position; or (B) -/60/- fire windows that are automatic closing or permanently fixed in the closed position; or (C) -/60/- automatic closing fire shutters. (iii) Other openings—



				(A) excluding voids — internal or external wall-wetting sprinklers, as appropriate; or (B) construction having an FRL not less than -/60/- (b) Fire doors, fire windows and fire shutters must comply with Specification C3.4.
C3.5	Doorways in fire walls	X		Architectural plans do not indicate any doorways in firewall.
C3.6	Sliding fire doors	X		No sliding fire doors identified on the plans
C3.7	Protection of doorways in horizontal exits	X		No horizontal exits proposed
C3.8	Openings in fire isolated exits	X		A fire isolated stair is not required.
C3.9	Service penetrations in fire isolated exits	X		A fire isolated stair is not required.
C3.10	Openings in fire isolated lift shafts	X		
C3.11	Bounding construction Class 2, 3 and 4 buildings	N/A		Not class 2,3,or 4.
C3.12	Openings in floors for services	X		All one compartment.
C3.13	Openings in shafts	X		
C3.14	*****			Blank
C3.15	Openings for service installations	✓		
C3.16	Construction Joints	✓		To be protected where required.
C3.17	Columns protected with lightweight construction to achieve an FRL	✓	✓	Columns protected with lightweight construction to comply with tested materials and systems.

SPECIFICATION C1.1 – FIRE RESISTING CONSTRUCTION

2.1	Exposure to fire source feature	Noted	As per table 5. External wall to adjoining community centre.
2.2	Fire protection for a support of another part	noted	
2.3	Lintels	✓	To comply
2.4	Attachments not to impair fire resistance	noted	
2.5	General concessions	Noted	Noted
2.5(a)	Steel columns	Noted	Concession noted but NA
2.5(b)	Timber structures	Noted	Concession noted but NA
2.5(c)	Structures on roofs	Noted	Concession noted but NA
2.5(d)	Curtain walls and panel walls	Noted	Concession noted but NA
2.5(e)	*****		Blank



2.5(f)	Balconies and verandas	✓	This concession may be applied to the external balconies. Details on exit locations to be provided for CC.
2.6	Mezzanine Floors: Concession	X	No Mezzanine proposed
2.7	Enclosure of shafts	X	
2.8	Car parks in Class 2 and 3 buildings	NA	
2.9	Residential aged care buildings	NA	

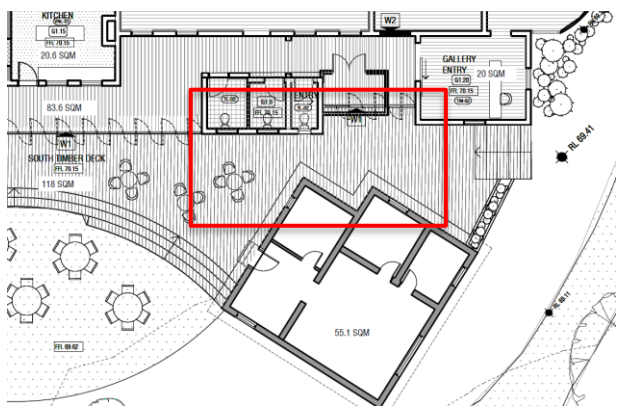
5.0	Type C Construction		
5.1(a)	Fire resistance of building elements	Noted	Refer table 5 extract below.
	<ul style="list-style-type: none"> - The external walls separating the main building and the adjoining community building are to achieve FRL60/60/60. (ensure the masonry walls are made good to achieve the required FRL) - Window openings within 3m are to be protected in accordance with C3.4. 		
5.1(b)	External wall required to have an FRL need only be tested from the outside.	Noted	The external wall separating the main building and the adjoining community centre building is only required to achieve the FRL from the outside.
5.1(c)	Fire walls, common walls, internal walls bounding SOU's required to have an FRL and comply with Spec C1.8	Noted	
5.1(d)	Class 2 or 3 building internal walls required to have an FRL	N/A	Not Class 2 or 3
5.1(e)	Floor Separating Storeys in Class 2, 3 & 9c Buildings.	N/A	Single storey and not 2,3 or 9c.
5.1(f)	Floor in a Class 9c Building	NA	Not class 9c building.



Table 5 TYPE C CONSTRUCTION: FRL OF BUILDING ELEMENTS				
Building element	Class of building—FRL: (in minutes)			
	<u>Structural adequacy/Integrity/Insulation</u>			
	2, 3 or 4 part	5, 7a or 9	6	7b or 8
EXTERNAL WALL (including any column and other building element incorporated therein) or other external building element, where the distance from any fire-source feature to which it is exposed is—				
Less than 1.5 m	90/90/90	90/ 90/ 90	90/ 90/ 90	90/ 90/ 90
1.5 to less than 3 m	++	60/ 60/ 60	60/ 60/ 60	60/ 60/ 60
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 1.5 m	90/+-	90/-/-	90/+-	90/+-
1.5 to less than 3 m	++	60/-/-	60/+-	60/+-
3 m or more	++	-/-/-	++	++
COMMON WALLS and FIRE WALLS—				
	90/90/90	90/ 90/ 90	90/ 90/ 90	90/ 90/ 90
INTERNAL WALLS-				
Bounding public corridors, public lobbies and the like—	60/60/60	-/-/-	++	++
Between or bounding sole-occupancy units—	60/60/60	-/-/-	++	++
Bounding a stair if required to be rated—	60/60/60	60/ 60/ 60	60/ 60/ 60	60/ 60/ 60
ROOFS				
	++	-/-/-	++	++

SECTION D - ACCESS AND EGRESS

Part D1 - PROVISION FOR ESCAPE

D1.0	Deemed-to-Satisfy Provisions	✓		Noted
D1.1	Application of Part	✓		Applies and noted
D1.2	Number of exits required	✓	Construction details required	A minimum of 2 exits are to be provided. Required exits to be shown on the Construction plans.
D1.3	When Fire isolated exits are required	X		Fire isolated exits are not required.
D1.4	Exit Travel Distances	✓	Construction details required	Travel distances to be shown on the construction plans.
D1.5	Distances between alternative exits	✓	Construction details required	Travel distances to be shown on the construction plans.
D1.6	Dimensions of exits and paths of travel to exits	✓	Construction details required	1m plus 250 mm for each 25 persons (or part) in excess of 100 Door width required based on population of 170 persons in the effected part. The minimum door width required = 1.75m. Door widths comply with population numbers. Door widths and exits to be shown on the construction plans.
D1.7	Travel via fire isolated exits	X		NA



D1.8	External stairways	X		No external stair in lieu of a fire isolated stair proposed.
D1.9	Travel by non fire isolated stairways or ramps.	X		No external fire isolated stairways or ramps proposed.
D1.10	Discharge from exits	✓		Exits must not be blocked at point of discharge. Details to be provided for CC.
D1.11	Horizontal exits	X		Architectural plans don't indicate any door openings through fire wall.
D1.12	Non-Required stairways ramps and escalators	X		No ramps applicable.
D1.13	Number of persons accommodated	✓	Noted	Public area - 614 m ² / 4 persons per m ² = 154 people Meeting room -28.5m ² / 2 persons per m ² = 15 people Population number of affected part = 170 persons. (85 male & 85 Female) (to be confirmed for Construction certificate)
D1.14	Measurement of distances	✓	Note only	Noted
D1.15	Method of measurement	✓	Note only	Noted
D1.16	Plant rooms & lift motor rooms: Concession	X		No plant rooms as part of this redevelopment
D1.17	Access to lift pits	X		

Part D2 - CONSTRUCTION OF EXITS

D2.0	Deemed-to-Satisfy Provisions	✓	Note only	Noted
D2.1	Application of Part	✓	Note only	Applies in part (a) Clauses D2.13, D2.14(a) & D 2.16 do not apply to internal parts of Class 3 SOU's (b) Clauses D2.13, D2.14(a), D 2.16 & D2.18 do not apply to internal parts of Class 2 SOU's
D2.2	Fire-Isolated stairways & ramps	X		NA
D2.3	Non-Fire-Isolated stairways and ramps	X		
D2.4	Separation of rising and descending stair flights	X		No rising and descending flights proposed.
D2.5	Open access ramps and balconies	X		No open access ramp proposed or required to meet smoke hazard management.
D2.6	Smoke lobbies	X		
D2.7	Installations in exits and paths of travel	✓	To comply for OC	Services or equipment in the path of travel to an exit must be contained by an enclosure with non-combustible construction and suitably sealed from smoke spreading from the enclosure. Details to be provided for CC.



D2.8	Enclosure of space under stairs and ramps	N/A		
D2.9	Width of stairways	X		No stairs indicated wider than 2m.
D2.10	Pedestrian ramps	✓		Ensure ramp at least 1m wide measured from inside of handrails and gradient not greater than 1:14.
D2.11	Fire Isolated passageways	X		No fire isolated passageway proposed.
D2.12	Roof as open space	X		Roof not used as open space.
D2.13	Treads and risers	✓	✓	To comply for OC
D2.14	Landings	✓	✓	To comply for OC
D2.15	Thresholds	✓	✓	To comply for OC
D2.16	Balustrades	✓	✓	To comply for OC
D2.17	Handrails	✓	✓	To comply
D2.18	Fixed platforms, walkways stairways and ladders	X		NA.
D2.19	Doorways and doors	✓	To comply for CC	Exit doors must swing in direction of egress (i.e open out) To be shown on the construction plans.
D2.20(b)	Swinging doors	✓	To comply for CC	Construction details required for CC.
D2.21	Operation of latch	✓	✓	To comply for OC
D2.22	Re-entry from fire isolated exits	X		No fire isolated stair proposed.
D2.23	Signs on doors	X		
D2.24	Protection of openable windows.	X		Not 2,3,4 or 9b
D2.25	Timber Stairways Concession	X		

PART D3 – ACCESS FOR PEOPLE WITH DISABILITIES

D3.0	DTS Provisions	✓		Noted
D3.1	Application of part	✓	Construction details required	Access compliant to AS1428.1 to be provided to and within all areas normally used by the occupants. Accessible entry to the building and the external decks to demonstrate compliance for the construction approval.
D3.2	General access requirements	✓	Construction details required	Access to be provided in accordance with AS1428.1. (a) An <i>accessway</i> must be provided to a building <i>required</i> to be <i>accessible</i> — (i) from the main points of a pedestrian entry at the allotment boundary; and (ii) from another <i>accessible</i> building connected by a pedestrian link; and



				<p>(iii) from any <i>required accessible</i> carparking space on the allotment.</p> <p>(b) In a building <i>required</i> to be <i>accessible</i>, an <i>accessway</i> must be provided through the principal pedestrian entrance, and—</p> <p>(i) through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and</p> <p>(ii) in a building with a total <i>floor area</i> more than 500 m², a pedestrian entrance which is not <i>accessible</i> must not be located more than 50 m from an <i>accessible</i> pedestrian entrance.</p>
D3.5	Car parking	✓		5 accessible parking spaces have been proposed.
D3.6	Signage	✓		<p>Details on the required accessible signage to be provided for the construction certificate</p> <ol style="list-style-type: none"> 1) Accessible toilet facilities 2) where a bank of sanitary facilities is not provided with an accessible unisex sanitary facility, directional signage incorporating the international symbol of access in accordance with AS 1428.1 must be placed at the location of the sanitary facilities that are not accessible, to direct a person to the location of the nearest accessible unisex sanitary facility.
D3.7	Hearing augmentation	✓	Construction details required	<p>A hearing augmentation system must be provided where an inbuilt amplification system, other than one used only for emergency warning, is installed.</p> <p>Details to be provided.</p>
D3.8	Tactile Indicators	✓	CC	To comply for CC
D3.9	Wheelchair seating in class 9b buildings	X		No fixed seating
D3.10	Swimming pools	X		
D3.11	Ramps	X		A series of ramps have not been proposed
D3.12	Glazing on an accessway	X		

SECTION E - SERVICES AND EQUIPMENT

Part E1 - FIRE FIGHTING EQUIPMENT

E1.0	Deemed-to-Satisfy Provisions	✓		Noted
E1.1	*****			Repealed
E1.2	*****			Repealed
E1.3	Fire Hydrants	✓	Construction details required	Fire hydrant coverage is required to service the building. Details to be provided for construction.



E1.4	Hose Reels	✓		Location of hose reels to be shown on the construction plans
E1.5	Sprinklers	X		Not required
E1.6	Portable Extinguishers	✓	Construction details required	An ABE type Portable Fire Extinguishers minimum size 2.5kg to be installed throughout in accordance with AS 2444..
E1.7	*****			Repealed
E1.8	Fire Control Centres	X		NA building less than 50m in effective height
E1.9	Fire precautions during construction	✓		Builder to ensure extinguishers on site during construction.
E1.10	Provision for special hazards	X		The building is assumed not to incorporate any special hazards.

Part E2 - SMOKE HAZARD MANAGEMENT

E2.0	Deemed-to-Satisfy Provisions	✓		Noted
E2.1	Application of Part	✓		Applies
E2.2	General requirements (including Tables E2.2a & b)	✓	✓	<p>Class 9b building <2000m². All one compartment. The building does not have a rise in storey of more than 2. Table E2.2a does not specify a smoke detection system.</p> <p>The area used as a performance/rehearsal area is less 150m²</p> <p><u>NSW 9b Variation table E2.2b</u> A building or part of a building used as an <i>assembly building</i> must be provided with <i>automatic</i> shutdown of any air-handling system (other than non-ducted individual room units with a capacity not more than 1000 L/s and miscellaneous exhaust air systems installed in accordance with Sections 5 and 6 of AS/NZS 1668.1) which does not form part of the smoke hazard management system, on the activation of—</p> <ul style="list-style-type: none"> (i) smoke detectors installed complying with Clause 5 of Specification E2.2a; and (ii) any other installed fire detection and alarm system, including a sprinkler system complying with Specification E1.5.
E2.3	Provision for special hazard	X		The building is assumed not to incorporate any special hazards.

Part E4 - EMERGENCY LIGHTING, EXIT SIGNS AND WARNING SYSTEMS

E4.0	Deemed-to-Satisfy Provisions	✓		Noted
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E4.1	*****			Repealed
E4.2	Emergency Lighting	✓	Construction details required	Location of emergency lighting to be shown on the construction plans.
E4.3	Measurement of distances	✓		Noted
E4.4	Design and operation of emergency lighting	X		Not required
E4.5	Exit signs	X	Construction details required	Illuminated exit signs to be shown on the construction plans.
E4.6	Direction signs	X	Construction details required	Location of directional exist signs to be shown on the construction plans.
E4.7	Class 2 and 3 Buildings and Class 4 parts exemptions	✓		Noted
E4.8	Design and operation of exit signs	✓		Noted
E4.9	Sound system	X		Building does not have a rise in storeys of more than 2.

Part F2 - SANITARY & OTHER FACILITIES

F2.0	Deemed-to-Satisfy Provisions	✓		Noted
F2.1	Facilities in residential buildings	✓		
F2.2	Calculation of number of occupants and fixtures	✓	Noted	170 persons (85 male & 85 Female.) In calculating the number of sanitary facilities to be provided under F2.1 and F2.3, a unisex facility required for people with a disability may be counted once for each sex.
F2.3	Facilities in Class 3 to 9 Buildings, Table F2.3	✓	Construction details required	Based on the population numbers from table D1.13 a) 2 urinals are required to the male sanitary facility. b) 2 washbasins required for male. c) 2 washbasins required for female. Note: one stall in each toilet facility is required to satisfy the ambulant toilet facility requirements of AS1428.1.

Male Patron facilities required – 1 pan, 2 urinals and 2 washbasins

Female Patron Facilities required – 3 pans, 2 washbasins.

User Group	Closet Pans		Urinals		Washbasins	
	Design Occupancy	Number	Design Occupancy	Number	Design Occupancy	Number



Class 9b — public halls, function rooms or the like					
Male patrons	1 — 100 >100	① Add 1 per 200	1 — 50 51 — 100 101 — 150 151 — 200 201 — 250 >250	1 ② 3 4 5 Add 1 per 100	1 — 50 51 — 200 >200 Add 1 per 200
Female patrons	1 — 25 26 — 50 51 — 100 101 — 150 151 — 200 201 — 250 >250	1 2 ③ 4 5 6 Add 1 per 100			1 — 50 51 — 150 >150 Add 1 per 200

F2.4	Facilities for people with disabilities	✓	Construction details required	The assessable toilet facility within the affected part is to comply to AS1428.1-2009. Compliance details to be demonstrated on the CC plans.
F2.5	Construction of sanitary compartments	✓	✓	Noted. To comply for CC/OC
F2.6	Interpretation: urinals and wash basins	X		Noted
F2.7 NSW	Warm water installations	✓		Hot water, warm water and cooling water systems to be installed in accordance with AS 3666.1. Max 45 degrees to Accessible.
F2.8	Waste Management	X		Not a class 9a or 9c building.

Part F3 - ROOM SIZES

F3.0	Deemed-to-Satisfy Provisions	✓		Noted
F3.1	Height of rooms	✓	✓	Rooms have sufficient height

Part F4 - LIGHT AND VENTILATION

CLAUSE	REFERENCE	APPLICABLE	COMPLIES	COMMENT
F4.0	Deemed-to-Satisfy Provisions	✓		Noted
F4.1	Provision of Natural light	✓	✓	Provision of natural light is to be provided to not less than 10% of the floor area to all <i>habitable</i> rooms.
F4.2	Methods and extent of natural lighting	✓	✓	Provision of natural light is to be provided to not less than 10% of the floor area to all <i>habitable</i> rooms.
F4.3	Natural light borrowed from adjoining room	✓	✓	Natural light can be borrowed through glazed panels or openings in accordance with clause F4.3 BCA vol 1.
F4.4	Artificial lighting	✓	✓	Artificial lighting to be designed and installed in accordance with AS 1680.0. to common areas.
F4.5	Ventilation of rooms	✓	✓	Natural ventilation provided.



F4.5 (b) NSW	Mechanical Ventilation	✓	Construction details required	Natural or mechanical ventilation is to be provided to the sanitary compartments and laundries. If mechanical ventilation proposed to sanitary compartments then must be installed in accordance with AS3666.1. The construction certificate documentation is to demonstrate the proposed ventilation system design.
F4.6	Natural ventilation	✓	✓	Provision of natural ventilation is to be provided to not less than 5% of the floor area to all <i>habitable</i> rooms.
F4.7	Ventilation borrowed from adjoining rooms	✓	✓	Natural ventilation can be borrowed through a window, opening, ventilating door or other device from an adjoining room
F4.8	Restriction on position of water closets and urinals	✓	✓	Sanitary compartments are provided with airlock to tea room.
F4.9	Airlocks	✓	✓	Not required if mechanical ventilation provided.
F4.10	*****			Repealed
F4.11	Car parks	NA		No changes to existing carpark
F4.12	Kitchen local exhaust ventilation	✓	✓	A commercial kitchen must be provided with a kitchen exhaust hood complying with AS/NZS 1668.1 and AS 1668.2 where— (a) any cooking apparatus has— (i) a total maximum electrical power input exceeding 8kW; or (ii) a total gas power input exceeding 29 MJ/h; or (b) the total maximum power input to more than one apparatus exceeds— (i) 0.5 kW electrical power; or (ii) 1.8 MJ gas, per m ² of <i>floor area</i> of the room or enclosure.

Part F5 - SOUND TRANSMISSION AND INSULATION

F5.0	Deemed-to-Satisfy Provisions	✓		Noted
F5.1	Application of Part	X		Applies to class 2, 3 & 9c.

Part G1 – MINOR STRUCTURES AND COMPONENTS

G1.2	Refrigerated chambers, strong rooms and vaults	✓	Construction details required	a) A refrigerated or cooling chamber, strongroom or vault which is of sufficient size for a person to enter must have— (i) inside without a key; and (ii) internal lighting controlled only by a switch which is located adjacent to the
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				<p>entrance doorway inside the chamber, strongroom or vault; and</p> <p>(iii) an indicator lamp positioned outside the chamber, strongroom or vault which is illuminated when the interior lights required by (a)(ii) are switched on; and</p> <p>(iv) an alarm that is—</p> <p>(A) located outside but controllable only from within the chamber, strongroom or vault; and</p> <p>(B) able to achieve a sound pressure level outside the chamber, strongroom or vault of 90dB(A) when measured 3m from the sounding device.</p>
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Part H1 – Class 9b Buildings.

H101.1	Application of Part			Not an entertainment venue, no stage proposed. H1.4 & H1.7 apply.
H1.2	Separation	X		Not theatre or public hall building.
H1.3	Proscenium wall construction	X		No stage proposed. Proscenium wall construction not required.
H1.4	Seating area	X		No Fixed seating area proposed.
H1.5	Exits from stages	X		No stage proposed.
H1.6	Access to platforms and lofts	X		No stage proposed.
H1.7	Aisle lights	X		Not required.

4.0 CONCLUSION

The primary purpose of this report is to identify non-compliance matters in comparison to the current Deemed-to-Satisfy provisions of the BCA under Parts C, D, E, F & H1



Report by: Matthew Stewart

Accredited Certifier / Principal Certifying Authority (Building) - Grade 1 (unrestricted)
18 October 2018.



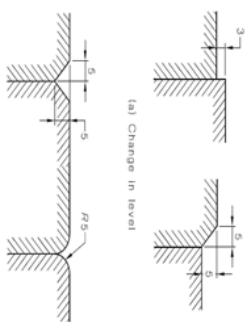


FIGURE 6 ACCEPTABLE CONSTRUCTION TOLERANCES FOR ABUTMENT OF SURFACES

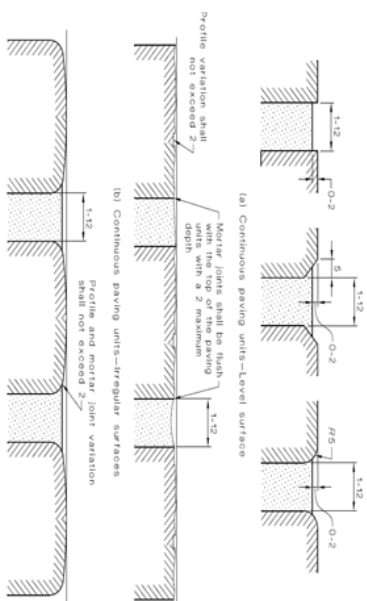


FIGURE 7 RAKED JOINT PAVERS

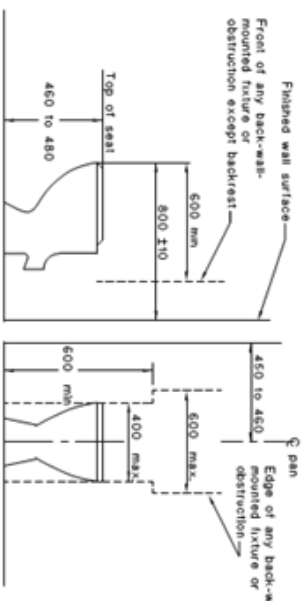


FIGURE 38 WATER CLOSET PAN CLEARANCES, SEAT HEIGHT AND SEAT WIDTH

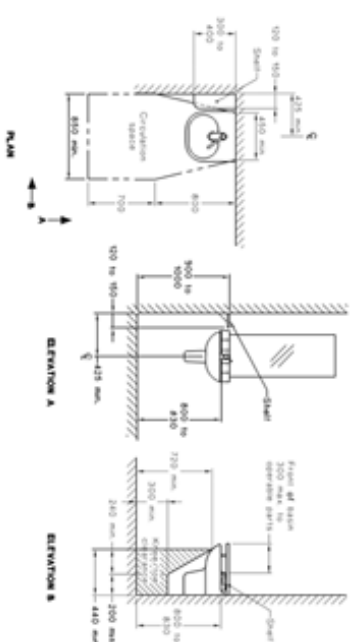


FIGURE 42 POSITIONS OF GRABRAILS IN WATER CLOSETS

NOTE: 'Change in level' means the difference of the top or bottom of the level surface, the end point of the level surface throughout its run or wherever, or where a level is provided where the level is readily achieved.

DIMENSIONS IN MILLIMETRES

FIGURE 44(B). WALL-MOUNTED WASHBASIN INSTALLATION—OTHER THAN FOR SOLE OCCUPANCY UNIT

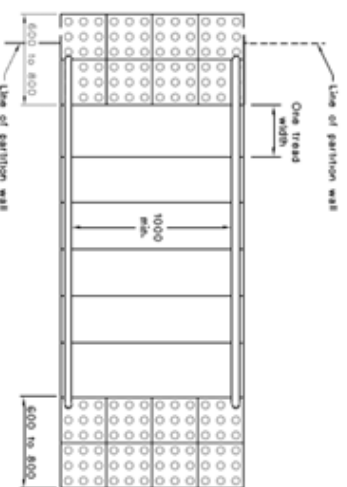


FIGURE 26(B). STAIRWAY LOCATION AND HANDRAIL EXTENSIONS AT END OF STAIRWAY OTHER THAN AT LINE OF BOUNDARY

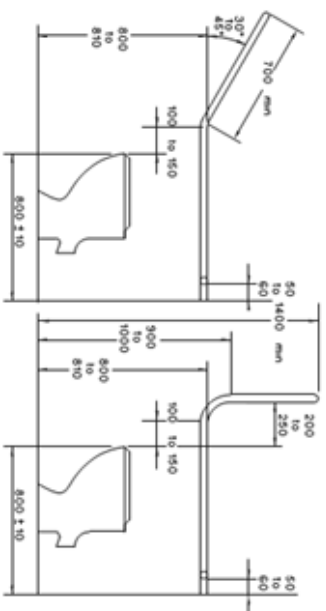


FIGURE 26(B). STAIRWAY LOCATION AND HANDRAIL EXTENSIONS AT END OF STAIRWAY OTHER THAN AT LINE OF BOUNDARY

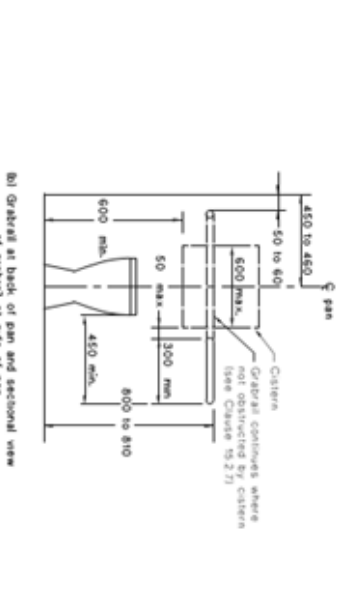


FIGURE 43 CIRCULATION SPACE FOR WC PAN—RIGHT-HAND TRANSFER (LEFT-HAND TRANSFER IS MIRROR REVERSED)

NOTE: 'Change in level' means the difference of the top or bottom of the level surface, the end point of the level surface throughout its run or wherever, or where a level is provided where the level is readily achieved.

DIMENSIONS IN MILLIMETRES

FIGURE 44(B). WALL-MOUNTED WASHBASIN INSTALLATION—OTHER THAN FOR SOLE OCCUPANCY UNIT

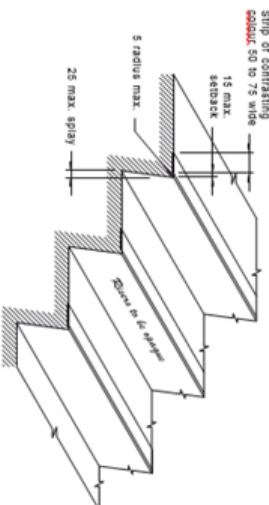


FIGURE 27(A). TYPICAL STAIR NOSING PROFILE WITH NOSING STRIP

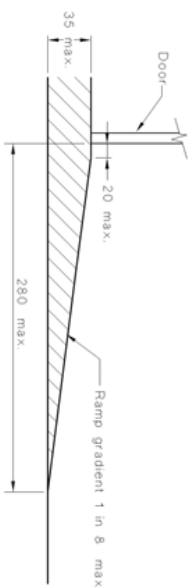


FIGURE 21 THRESHOLD RAMP

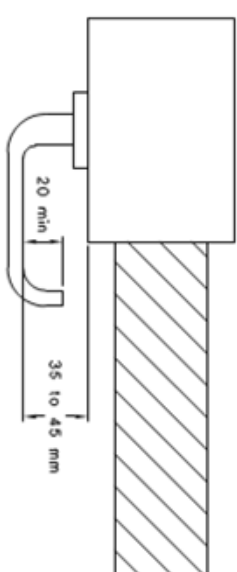


FIGURE 35(A). EXAMPLE OF ACCEPTABLE DOOR HARDWARE FOR HINGED DOORS

FIGURE 43 CIRCULATION SPACE FOR WC PAN—RIGHT-HAND TRANSFER (LEFT-HAND TRANSFER IS MIRROR REVERSED)

NOTE: This circulation space may overlap any other circulation spaces specified in this Standard.

DIMENSIONS IN MILLIMETRES

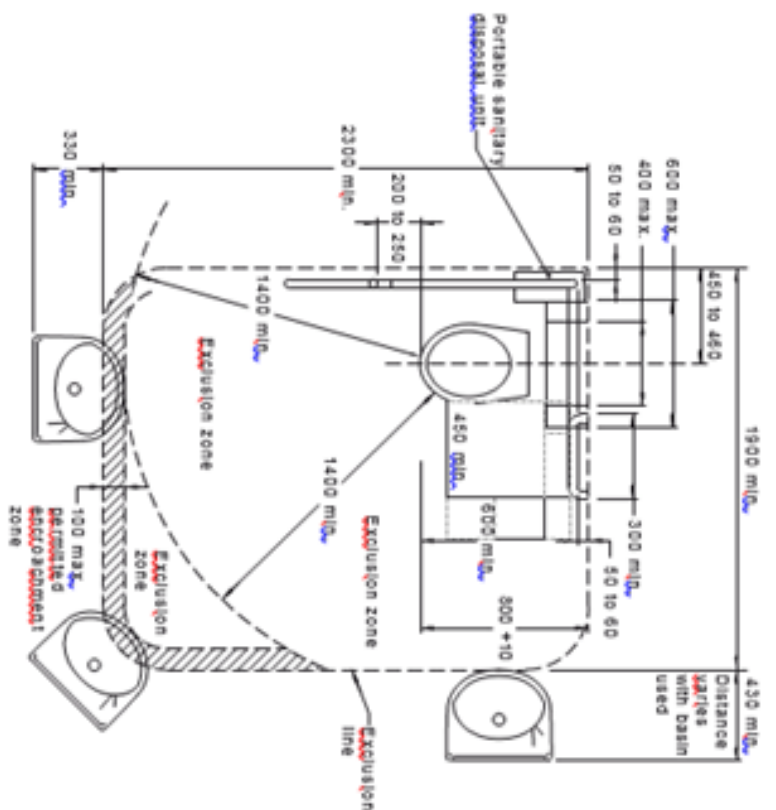


FIGURE 43 CIRCULATION SPACE FOR WC PAN—RIGHT-HAND TRANSFER (LEFT-HAND TRANSFER IS MIRROR REVERSED)

NOTE: This circulation space may overlap any other circulation spaces specified in this Standard.

DIMENSIONS IN MILLIMETRES

FIGURE 44(B). WALL-MOUNTED WASHBASIN INSTALLATION—OTHER THAN FOR SOLE OCCUPANCY UNIT

Circulation Requirements at Doorways

