Suite 4C 250 Pacific Hwy Charlestown NSW 2290
PO Box 132 Charlestown NSW 2290
P 02 4940 0355

23.07.2024

Jean-Michel Huet
PO Box 29, Gordon
NSW 2072

BCA/NCC Compliance assessment of the Proposed Medical Centre at 99-101 Newcastle Street, East Maitland.

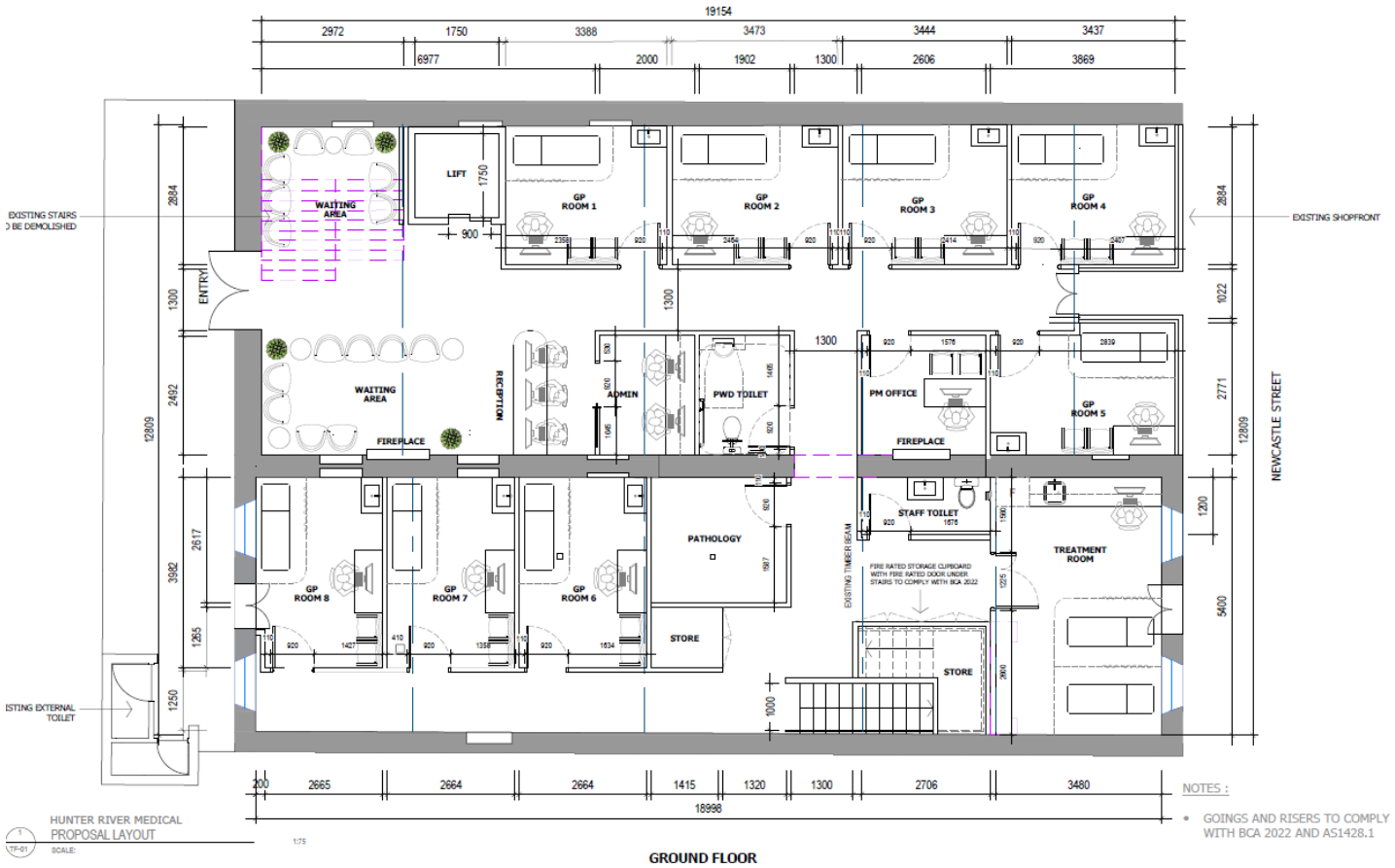
1. Introduction

This report is an assessment of the existing building and plans for the proposed Medical Centre at the above address to determine if construction shown generally complies with the (NCC/BCA) Building Code of Australia 2022.

The requirement for assessment of the existing Building and Proposed works against the BCA with respect to BCA Parts C, D and E are to fulfil the requirements of the PCA in determining their CC and at the request of the owner.

The plans assessed against the Deemed-to-Satisfy (DTS) Provisions of the BCA. As per below plans.

Architectural Plans prepared by Design Doctors Australia, Project No: DDA 201202S, Dated: 15.05.2024



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The assessment relates to the BCA/NCC 2022, and NSW Environmental Planning and Assessment legislation current at the time and therefore does not necessarily infer building compliance with the same legislation at some other point in time. The assessment relates specifically to the building, the subject of this report and therefore should not be construed to apply to any other building.

Generally, the report only comments on non-compliances, or where insufficient detail is shown to confirm compliance. Other comment may be made where necessary to explain requirements for interrelated elements and systems of the building. The use of notes and diagrams from BCA and relevant Australian Standards on CC issue plans may address some of the requirements listed below.

2. Description of Building/s

Location:	99-101 Newcastle Street, East Maitland	
Proposed Use:	Medical Centre and Associated Car Park	
Classification:	5, 7a	(A6G10)
Type of construction:	B	(C2D2)
Effective Height:	Less than 12m	
Rise in Storeys:	3	(C2D3)

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3. Limitations

This report generally only comments on new BCA/NCC requirements (2022)

This report does not comment on the as built (Building Element) compliance at the time it was approved/ built (see below limitations), but rather comments on non-compliances with respect proposed Use if changing and proposed construction.

- **The report generally only comments on BCA/NCC requirements (2022) that are critical in terms of Life/ Building Safety compliance which is consistent with Council approach for upgrade of existing buildings and undertaking such reports.**

- **The Councils Development Consent may require upgrade of Existing Building where it is deemed a change of use in part, where it is not deemed a change of use the Certifier issuing CC may deem it appropriate to upgrade altered parts of the building in accordance with** Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021

The report does not specifically comment/ cover the following:

- Concealed building elements. The inspection of the building was a visual inspection only limited to accessible parts of the building at the time of inspection. Therefore, no inspection has been made of the concealed structural elements, waterproofing, concealed fire penetrations, ceiling cavities and the like.
- Structural Adequacy - The structural adequacy and materials of the existing building elements were not checked during inspection; this would need to be verified by a practicing structural engineer.
- Accessibility under the BCA, Premises Standards is not covered in this report and will require input from an accredited access consultant (Disability Access)
- Existing construction generally and FRL's of existing building elements, e.g., FRL of existing Building for ALL building elements would need to be verified by a Structural Engineer in that the Structural Adequacy and Fire Safety are adequate.

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- Existing Glazing - Should an assessment of the glazing be required for glass within the office/amenities building, a glazier should be engaged to ensure that the installed windows meet AS1288 – 2006 and AS2047.
- Existing Performance of Slip Resistance installations
- Toilet Facilities – To be determined by designer and approved by PCA in terms of existing facilities and total number of expected Occupants if not determined in accordance with Floor area.
- Floor Coverings Existing and Proposed (Fire Hazard Properties)

NOTE: (1) Access for people with a disability was not considered as part of this Assessment (ONLY Life Safety Egress Provisions and Fire Safety Measures) this would require specialist input from a Registered Access Consultant, however, by way of assisting in this regard in terms of the major issues would be to advise that there is no Passenger Lift as required, Disabled Toilets, Ambulant Toilets, or compliant carparking/ Access.

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BCA 2022 - Clause by Clause Assessment

<table>
<tr><th>Clause</th><th>Description</th><th>Comment</th><th>Status</th></tr>
<tr><td colspan="4">BCA Version</td></tr>
<tr><td>BCA 2022</td><td>BCA version
The BCA is generally updated every 3 years with amendments influencing health, safety and amenity features required within the building. Legislation typically allows future BCA changes to be ignored provided substantial progress on the design of the development has previously occurred.</td><td>This report assumes that the applicable BCA version is BCA 2022. In addition, requirements of the Premises Standards (PS) are covered as relevant.
NCC 2022 uses a new structure and clause referencing system. This system is called Section-Part-Type-Clause (SPTC).
An example of the (SPTC) referencing system is expanded upon below:
<table>
<tr><th>Ref</th><th>Description</th></tr>
<tr><td>Section</td><td>Refers to the applicable section of the NCC.

e.g., Section D - Access and egress

Section lettering will mostly stay as per previous editions of the National Construction Code.</td></tr>
<tr><td>Part</td><td>Part identifies the part of the applicable section.

e.g., Part D2 - Provisions for escape.</td></tr>
<tr><td>Type</td><td>Type refers to the type of Clause:

O - Objective
F - Functional Statement
P - Performance Requirement
V - Verification Method
D - Deemed-to-Satisfy
C - Specification
G - Governing Requirements</td></tr>
<tr><td>Clause</td><td>Clause refers to the number within the Type group.</td></tr>
</table></td><td>Noted</td></tr>
<tr><td colspan="4">Section A: General Provisions</td></tr>
<tr><td>A5G3</td><td>Suitability of materials
Every part of a building must be constructed in an appropriate manner to achieve the requirements of the BCA, using materials that are fit for the purpose for which they are intended.</td><td>The builder is responsible to adopt and install appropriate proprietary accredited building products and is to ensure that those products/assemblies are fit for the purpose they are intended and are installed in accordance with the manufacturer’s specifications/ requirements for that system.</td><td>Compliance Readily Achievable . TBC at CC stage</td></tr>
<tr><td>Part A6</td><td>Classification and usage</td><td>-</td><td>Noted</td></tr>
<tr><td>Part A7</td><td>United buildings
Buildings are deemed united when two or more buildings adjoining each other are connected and used as one building.</td><td></td><td>N/A</td></tr>
</table>

Clause	Description	Comment	Status
Section B: Structure			
B1D2	**Resistance to actions** The resistance of the building must be greater than the most critical action effect resulting from different combinations of actions	Certification from a qualified structural engineer will need to be provided at Construction Certificate stage if structural works are completed. At this stage in the design, it has been advised that no structural works will be undertaken.	Compliance Readily Achievable
B1D3	**Determination of individual actions** The magnitude of individual actions must be determined in accordance with Clause B1D3 of the BCA. The building has an importance level 2 in accordance with Table B1D3a.	Certification from a qualified structural engineer will need to be provided at Construction Certificate stage if structural works are completed. At this stage in the design, it has been advised that no structural works will be undertaken.	Compliance Readily Achievable
B1D4	**Determination of structural resistance of materials and forms of construction** The structural resistance of materials and forms of construction must be determined in accordance with the relevant Australian Standards in accordance with Clause B1D4 of the BCA.	Certification from a qualified structural engineer will need to be provided at Construction Certificate stage if structural works are completed. At this stage in the design, it has been advised that no structural works will be undertaken.	Compliance Readily Achievable
B1D5	**Structural software** Structural software used in computer aided design of a building or structure that uses design criteria based on DTS provisions of the BCA must comply with the ABCB Protocol for Structural Software.	-	Compliance Readily Achievable - Note
B1D6	**Construction of buildings in flood hazard areas** A Class 2, 3, 4, 9a or 9c building located in a flood hazard area must comply with the ABCB Standard for Construction of Buildings in Flood Hazard Areas.	-	N/A
Section C: Fire Resistance			
Part C2 - Fire Resistance and Stability			
C2D2	**DTS Type of construction required Type B Construction** BCA Type B fire resisting construction is required. Refer to Appendix Specification 5 for the required FRLs for each building element. Performance Solution - Type B Construction proposed – Based on Performance Solution and Subject to Certifier issuing CC and NSWFB's Approval	-	Compliance Readily Achievable
Spec. 5	**Fire resisting construction** *Support of another part* Where a part of a building required to have an FRL depends upon direct vertical or lateral support from another part to maintain its FRL, that supporting part must have an FRL not less than that required for the part if supports and be non-combustible. *Attachments* The method of attaching or installing a finish, lining, ancillary element or service to a building element must not reduce the fire resistance of that element.	A structural engineer will need to verify that all load-bearing elements achieve the FRLs required under Table S5C21a-g as part of the Construction Certificate application.	Compliance Readily Achievable asper structural engineering report
		A structural engineer will need to verify that the FRLs required for load-bearing elements in the external walls of the existing adjacent buildings that are now in proximity to the proposed building comply with Specification 5. Existing lightweight fire rated walls will need to	Compliance Readily Achievable as per structural engineers report.

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Clause	Description	Comment	Status
	Enclosure of shafts Shafts required to have an FRL must be enclosed at the top and bottom by construction have an FRL not less than that required for the walls of the shaft. Shafts, other than one enclosing a fire isolated stairway or ramp, do not require an FRL at the top if the shaft extends beyond the roof covering.		
C2D3	**Calculation of rise in storeys** **Effective Height / Calculation of rise in storeys**. Rise in storeys is a defined BCA term addressing the number of main building levels excluding basements. Effective height is defined under the BCA as vertical distance between the floor of the lowest storey included in the calculation of rise in storeys and the floor of the topmost storey (excluding the topmost storey if it contains only heating, ventilating, lift or other equipment, water tanks or similar service units). These parameters influence the BCA provisions applicable to the building.	The following parameters apply: Rise in storeys: 3 storeys Effective Height: <12m	Noted
C2D4	**Buildings of multiple classification**	-	N/A
C2D5	**Mixed types of construction**	-	N/A
C2D6	**Two storey Class 2, 3 or 9c buildings**	-	N/A
C2D7	**Class 4 parts of buildings**	-	N/A
C2D8	**Open spectator stands and indoor sports stadiums**	-	N/A
C2D9	**Lightweight construction** Lightweight construction used in a wall system must comply with Specification 6 - Structural tests for lightweight construction. Lightweight construction used as a fire-resisting covering of a steel column or the like, and where the covering is not in continuous contact with the column must have the voids filled to a height of not less than 1.2m above the floor and where the column is liable to be damaged must be protected by steel or other suitable material.	Fire rated wall types must match a tested protype. Product codes should be noted on the wall type schedule and corresponding test reports provided as part of the Construction Certificate application.	Compliance Readily Achievable. To be noted on the CC plans if no works are being undertaken.

C2D10	**Non-combustible building elements** In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible: i. External walls and common walls, including all components incorporated within them	The Architect and Structural Engineer are to make provisions for this requirement in the design. An architectural specification detailing the components of the external walls and their fire properties are needed for review including corresponding test reports verifying compliance with this clause. Ensure all façade materials have a current Certificate of Conformity or a current Certificate of Accreditation, or	Compliance Readily Achievable. To be noted on the CC plans if no works are being undertaken.

Clause	Description	Comment	Status
	including façade covering, framing and insulation; ii. The flooring and floor framing of lift pits; iii. Non-loadbearing internal walls where they are required to be fire-resisting; iv. Non-loadbearing shaft being a lift, ventilating, garbage or similar shaft. The following materials may be used where non-combustible materials are required:- • Plasterboard. • Perforated gypsum. • Fibrous-plaster sheeting to AS 2185. • Fibre-reinforced cement sheeting. • Pre-finished metal sheeting having a combustible surface finish not exceeding 1mm thickness and where the spread-of-flame index of the product is not greater than 0. • Sarking-type materials that do not exceed 1mm thickness and have a flammability index not greater than 5. • Bonded laminated materials where each lamina, including any core, is not combustible and each adhesive layer does not exceed 1mm thickness and the total thickness of the adhesive layers does not exceed 2mm and the spread of flame index and smoke development index of the bonded laminated material as a whole do not exceed 0 and 3 respectively and when located externally, are fixed in accordance with C2D15. • Any product as determined by testing to AS 1530.1 • An appropriately BCA accredited product or system	the like to determine their acceptance by the Fire Safety Engineer and Fire Brigade	
C2D11	**Fire hazard properties** Floor materials, floor coverings and wall and ceiling lining materials need to comply with prescribed fire hazard properties. Refer to Appendix C2D11 & compliance with AS5637.1-2015.	Compliance assumed and will require verification test data for all timber and other combustible linings and materials, including: • Carpets • Vinyls (walling and flooring) • Timber flooring and wall linings • Veneered wall panelling • Spray-on insulation material • Other combustible finishes • Carpark soffit insulation fire test reports, based on 'room fire testing' will be required to meet fire brigade consent conditions if applicable. A schedule of internal finishes and corresponding fire hazard test data for all	Compliance Readily Achievable . To be noted at CC stage

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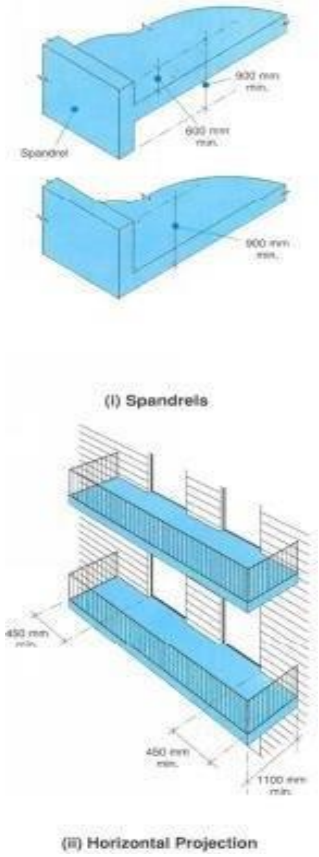
Clause	Description	Comment	Status
		combustible internal linings are needed for review.	
C2D12	**Performance of external walls in fire** Concrete external walls that could collapse as complete panels are to be designed in accordance with Specification 8 to minimise the likelihood of external walls collapsing outwards in the event of a fire and separating from supporting members.	-	N/A
C2D13	**Fire-protected timber: Concession** *Fire-protected timber* may be permitted under this clause wherever an element is *required* to be *non-combustible*.	-	N/A
C2D14	**Ancillary elements** An ancillary element must not be fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible unless it is non-combustible or is otherwise permitted under this clause.	Façade attachments and building signs are required to comply. Materials should be specified, and fire test reports provided for review.	Compliance Readily Achievable – To be noted at CC stage
C2D15	**Fixing of bonded laminated cladding panels** In a building required to be of Type A or B construction, externally located bonded laminated cladding panels must have all layers of cladding mechanically supported or restrained to the supporting frame.	-	N/A
Part C3 - Compartmentation and Separation			
C3D2	**Application of Part**	-	Applicable
C3D3	**General floor area and volume limitations (Type B construction)**	-	Compliance Readily Achievable
C3D4	**Large isolated buildings**	-	N/A
C3D5	**Requirements for open space and vehicular access**	-	N/A
C3D6	**Class 9 buildings**	-	N/A
C3D7	**Vertical separation of openings in external walls** Spandrel separation is required in a building of Type A construction that is not sprinkler protected, which must be not less than 900mm in height, extend not less than 600mm above the upper surface of the intervening floor and be of non-combustible material having an FRL of not less than 60/60/60.		N/A

Clause	Description	Comment	Status
			
C3D8	**Separation by fire walls** A fire wall must extend to the underside of a floor having an FRL required for a fire wall or the roof covering.	The Existing integrity of the existing walls located on the boundary are to be verified by a Structural Engineer as meeting the Performance requirements of Spec 5 and this provisions.	Compliance Readily Achievable
C3D9	**Separation of classifications in the same storey**	-	N/A
C3D10	**Separation of classifications in different storeys**	-	N/A
C3D11	**Separation of lift shafts** Openings for lift landing doors and services must be protected in accordance with the DTS provisions of Part C4 of the BCA.	-	Compliance Readily Achievable . Designs requiredas part of CC package.
C3D12	**Stairways and lifts in one shaft**		N/A
C3D13	**Separation of equipment** 2hr fire separation is required for: • Lift motor rooms. • Emergency generators sustaining emergency equipment operating in emergency mode. • Central mechanical smoke control plant. • Boilers. • A battery system installed in the building that has a total voltage of 12 volts or more and a storage capacity of 200 kWh or more.	-	N/A

Clause	Description	Comment	Status
C3D14	**Electricity supply system** A substation located within a building or main switchboard that sustains emergency equipment must be separated from the remainder of the building by 2hr fire rated construction. Switchboards sustaining emergency equipment must be constructed so that emergency equipment switchgear is separated from non-emergency equipment switchgear by metal partitions designed to minimise the spread of faults.		Advised N/A
C3D15	**Public corridors in Class 2 & 3 buildings**	-	N/A
Part C4 - Protection of Openings			
C4D2	**Application of Part**	-	Applicable
C4D3	**Protection of openings in external walls** Openings in the external walls of the building are to be protected in accordance with C4D5, being fire rated windows, external sprinklers or the like, if they are: • Less than 3m to side or rear boundary, • Less than 6m from the far boundary of a road or lane, • Less than 6m from another building on the same allotment. Openings that require protection should not occupy more than $^1/_3$ of the external wall of the storey in which it is located.	There are windows located within 3m of the side boundary. These windows will require protection in accordance with this provision. This may be addressed through a Fire Engineered Performance Solution.	Non-Compliance/Compliance Readily Achievable.
C4D4	**Separation of external walls and associated openings in different fire compartments** External walls within the distances specified in Table C4D4 of the BCA are to be protected by construction with an FRL not less than 60/60/60 and the associated openings protected in accordance with Clause C4D5 of the BCA. **Angle between walls** / **Min. Distance** 0° (walls opposite) — 6 m more than 0° to 45° — 5 m more than 45° to 90° — 4 m more than 90° to 135° — 3 m more than 135° to less than 180° — 2 m 180° or more — Nil	-	N/A
C4D5	**Acceptable method of protection** Window openings are to be protected by internal or external wall wetting sprinklers and must automatically close or be permanently fixed in the closed position, -/60/- fire windows that are automatic closing or permanently fixed closed or -/60/60 automatic closing fire shutters. Doorways are to be protected by internal or external wall wetting sprinklers used with doors that are self-closing or automatic closing, or -/60/30 self-closing or automatic closing fire doors. Other openings, excluding voids, are to be protected with internal or external wall wetting sprinklers or construction having an FRL not less than -/60/-.	The openings within 3m of the boundaries are required to be protected in accordance with this clause. The windows located within these openings ae to be protected in accordance with the clause or addressed through an alternative methods (Fire Engineered Solution) as per the Fire Engineering Concept Design Statement by LOTE Consulting.	Compliance Readily Achievable -

Clause	Description	Comment	Status
C4D6	**Doorways in fire walls** Doorways in firewalls are to be protected by a fire door or fire shutter that has an FRL of not less than that required for the firewall except that the insulation rating must be at least 30.	-	N/A
C4D7	**Sliding fire doors**	-	N/A
C4D8	**Protection of doorways in horizontal exits**	-	N/A
C4D9	**Openings in fire-isolated exits** -/60/30 self-closing fire doors are required to doorways providing access to fire isolated stairways. A window or other opening in the external wall of the fire isolated exit is to be protected in accordance with Clause C4D5 if it is within 6m of, and exposed to, a window or other opening in the wall of the same building.	-	N/A
C4D10	**Service penetrations in fire-isolated exits** Service penetrations other than electrical wiring for essential service installations, pressurization ducts with an FRL of -/120/60, or water pipes for fire services are not permissible.	-	Compliance Readily Achievable
C4D11	**Openings in fire-isolated lift shafts** Openings in lift shafts are to be protected by -/60/- fire doors complying with AS1735.11. Lift indicator panels are to be backed by construction having an FRL of not less than -/60/60 if they exceed 35,000mm^2 (175 X 200 mm).	- Details of compliance are required prior to the issue of a Construction Certificate.	Compliance Readily Achievable
C4D12	**Bounding construction: Class 2 and 3 buildings and Class 4 parts**	-	Compliance Readily Achievable
C4D13	**Openings in floors and ceilings for services** Services passing through floors are to be placed within fire resisting shafts or in accordance with Clause C4D15.	Services penetrations of fire rated structure generally need to be fire-stopped and/or located in fire rated riser shafts. Openings in fire rated elements need to be fire resisting to maintain the function of the elements. The method of protecting services penetrations through floor slabs should be confirmed as either horizontal protection at slab level or shaft separation. Fire separating wall and door details for shafts should be provided where applicable.	Compliance Readily Achievable
C4D14	**Openings in shafts**	-	N/A

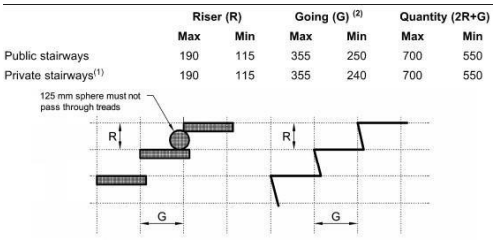
Clause	Description	Comment	Status
C4D15	**Openings for service installations** Services penetrations through a building element (other than an external wall or roof) that is required to have an FRL with respect to integrity or insulation or a resistance to the incipient spread of fire, must comply with a tested system or Specification 13. Methods and materials used are to be identical to tested prototypes and in accordance with AS4072.1 and AS1530.4, and must achieve the required FRL or resistance to the incipient spread of fire or other specified method. Ventilation and air-conditioning systems are to be installed in accordance with AS/NZS 1668.1.	- Methods of construction are required prior to the installation of a Construction Certificate.	Compliance Readily Achievable
C4D16	**Construction Joints** Construction joints in elements required to have a fire resistance with respect to integrity and insulation must be protected.	- It is noted that the structure is not proposed to be modified. The structural engineer is to conform compliance with the required Fire Resistance Levels.	Compliance Readily Achievable
C4D17	**Columns protected with lightweight construction to achieve an FRL**	-	N/A
Section D: Access and Egress			
Part D2 - Provision for Escape			
D2D2	**Application of Part** This part does not apply to the internal parts of a sole-occupancy in a Class 2 or 3 building or Class 4 part of a building.	-	Applicable

D2D3	**Number of exits required**
	(NSW variation for Entertainment Venues)
	At least two exits need to serve each storey of :
	• Buildings over 25m in effective height.
	• Class 2 or 3 buildings subject to C2D6.
	• Each basement level.
	• Class 9 buildings:
	  ○ More than 6 storeys or over 25m in effective height.
	  ○ Storeys including Class 9a patient care areas.
	  ○ Storeys containing Class 9c sleeping areas.
	  ○ Early childhood centres.
	  ○ Primary or secondary schools exceeding 2 storeys.
		-	Complies

Clause	Description	Comment	Status
	○ Storeys or mezzanines accommodating more than 50 persons. ○ Auditoriums in an entertainment venue. At least one exit must serve each part of storey divided into fire compartments in a Class 9a or 9c building and Class 9b early childhood centre. Access to an exit must be provided without passing through another SOU.		
D2D4	**When fire-isolated stairways and ramps are required** Every stair in a Class 5 to 9 building must be fire isolated unless it does not connect or pass through more than 3 consecutive floors in a sprinkler protected building, or 2 storeys in a non-sprinkler protected building. Required stairs in a Class 9b early childhood center and Class 9c building must be fire-isolated.		N/A
D2D5	**Exit travel distances.** The BCA limits maximum travel distances to a point of choice and to an exit. No point on the floor must be more than 20m to an exit or a point in which travel in different directions to 2 exits is available, in which case, the maximum distance to 1 exit cannot exceed 40m. (Note Specification 18 concession for sprinkler protected Class 2 and 3 buildings not more than 25m in effective height)	-	Complies
D2D6	**Distance between alternative exits** Alternative exits must be at least 9m apart and no more than: • Class 2 or 3 buildings and Class 9a patient care areas - 45m apart. • All other cases - 60m apart. Alternative paths of travel must not converge such that they become less than 6m apart.	-	Complies
D2D7	**Height of exits, paths of travel to exits and doorways** Except for doorways, paths of travel must have a clear height of at least 2m.	- Plans for construction to dimension paths of travel to an exit and be provided to the certifier prior to issuing a CC.	Compliance Readily Achievable
D2D8	**Width of exits and paths of travel to exits**	- Plans for construction to dimension paths of travel to an exit and be provided to the certifier prior to issuing a CC.	Compliance Readily Achievable
D2D9	**Width of doorways in exits or paths of travel to exits**	- Plans for construction to dimension paths of travel to an exit and be provided to the certifier prior to issuing a CC.	Compliance Readily Achievable
D2D10	**Exit width not to diminish in direction of travel**	- Plans for construction to dimension paths of travel to an exit and be provided to the certifier prior to issuing a CC.	Compliance Readily Achievable

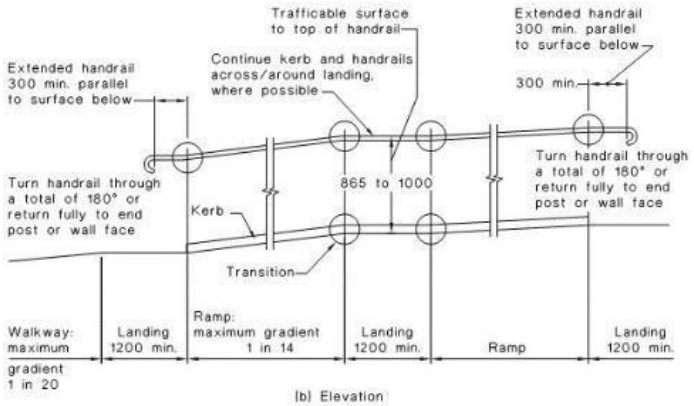
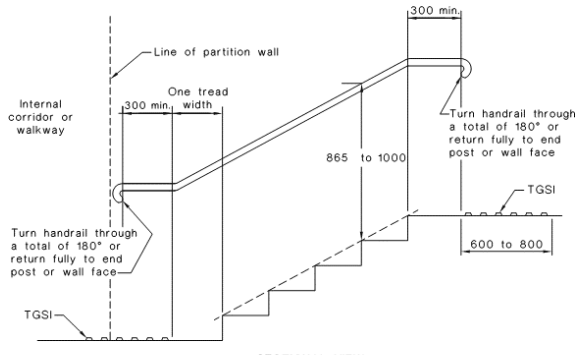
Clause	Description	Comment	Status
D2D11	**Determination and measurement of exits and paths of travel to exits**	- Plans for construction to dimension paths of travel to an exit and be provided to the certifier prior to issuing a CC.	Compliance Readily Achievable
D2D12	**Travel via fire-isolated exits**	-	N/A
D2D13	**External stairways or ramps in lieu of fire-isolated exits** External stairs or ramps may be used instead of fire-isolated stairs to a building under 25m in effective height, subject to: • The stair being of non-combustible construction. • Exit doors into the stair to be 1-hour fire rated. • Exit paths via the stair being shielded if within 6m of openings in external wall of building.	-	N/A
D2D14	**Travel by non-fire-isolated stairways or ramps**	-	Compliance Readily Achievable
D2D15	**Discharge from exits** *(NSW variation for Entertainment Venues)* An exit must not be blocked nor be capable of being blocked at its point of discharge.	-	N/A
D2D16	**Horizontal exits**	-	N/A
D2D17	**Non-required stairways, ramps or escalators**	- To be dimensioned at CC stage	Compliance Readily Achievable
D2D18	**Number of persons accommodated**	-	Noted
D2D19	**Measurement of distances**	-	Noted
D2D20	**Method of measurement**	-	Noted
D2D21	**Plant rooms, lift machine rooms and electricity network substations: Concession** A ladder may be used in lieu of a stairway as an exit from: a) a plant room with a floor area not more than 100m^2, or a) all but one point of egress from a plant room with a floor area not more than 200m^2.	-	N/A
D2D22	**Access to lift pits** Access requirements apply to lift pits over 3m in depth.	Lift consultant to confirm.	Compliance Readily Achievable
D2D23	**Egress from primary schools** Every part of a class 9b primary school must be wholly within a storey that provides direct egress to a road or open space. These requirements do not apply in a building with a rise in storeys of not more than 4 used only as a school.	-	N/A
Part D3 - Construction of Exits			
D3D2	**Application of Part**	-	Applicable

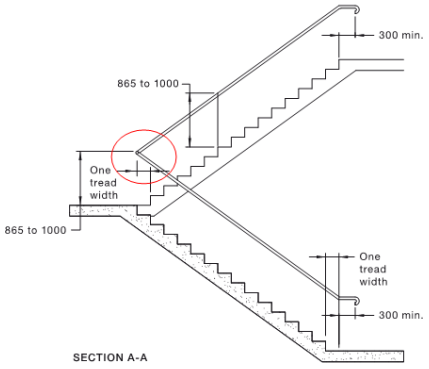
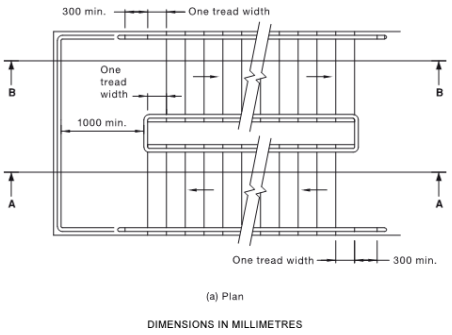
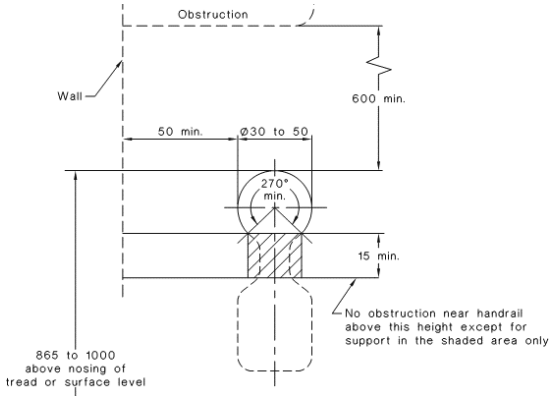
Clause	Description	Comment	Status
D3D3	**Fire-isolated stairways and ramps** Fire resisting shafts must be constructed of non-combustible materials and so that if there is local failure it will not cause structural damage or impair the fire resistance of the shaft.	-	N/A
D3D4	**Non-fire-isolated stairways and ramps** Required stairs in a building having a rise in storeys of not more than 2 must be constructed only of reinforced or prestressed concrete, or steel not less than 6mm thick, or timber that has a finished thickness of not less than 44mm and an average density of not less than 800 kg/m^3 at a moisture content of 12%.	- To be detailed at CC stage.	Compliance Readily Achievable
D3D5	**Separation of rising and descending stair flights**	-	N/A
D3D6	**Open access ramps and balconies**	-	N/A
D3D7	**Smoke lobbies**	-	N/A
D3D8	**Installations in exits and paths of travel** Electrical meters and motors, distribution boards and telecommunication boards must not be accessed from fire isolated exits and, if located in corridors leading to exits, should occur in non-combustible or fire protective smoke sealed enclosures. No openings to ducts conveying hot products of combustion permitted in required exits. Gas or fuel services not permitted in required exits. Electric or services equipment in paths of travel to exits must be within a non-combustible and smoke sealed enclosure.	- To be detailed at CC stage	Compliance Readily Achievable
D3D9	**Enclosure of space beneath stairs and ramps** If the space below a fire-isolated stairway is within the fire isolated shaft it must not be enclosed to form a cupboard or similar enclosed space. The space below non fire-isolated stairs must not be enclosed to form a cupboard or similar enclosed space unless the enclosing walls have an FRL of not less than 60/60/60 and any doorway to the enclosed space is fitted with a self-closing -/60/30 fire door.	- To be detailed at CC stage.	Compliance Readily Achievable
D3D10	**Width of required stairways and ramps** A stairway or ramp more than 2m in width is only counted as having a width of 2m unless it is divided by a continuous handrail or balustrade between landings and each division is less than 2m wide.	-	Noted
D3D11	**Pedestrian ramps** Ramps serving as required exit must have a gradient not less steep than 1:8. If the ramp is required for disabled access under Part D4 it must comply with AS1428.1. The surface of the ramp must have a non-slip finish.	- To be detailed at CC stage.	Compliance Readily Achievable
D3D12	**Fire-isolated passageways** Fire isolated passageways are to have an FRL equivalent to the fire resisting stair shaft as specified	-	N/A

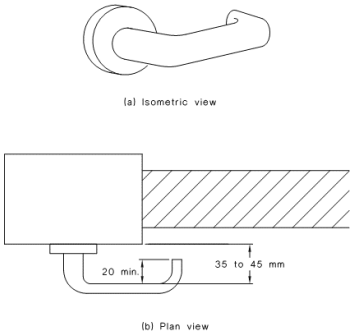
Clause	Description	Comment	Status
	in Specification 5 when tested from the outside		
D3D13	**Roof as open space** The roof is required to have an FRL of not less than 120/120/120 and not incorporate any roof lights or other openings within 3m of the path of travel.	-	N/A
D3D14	**Going and risers** *(NSW variation for Entertainment Venues)* To provide safe passage, stairways must comply with the following: • minimum 2 risers / maximum 18 in each flight • risers 115mm min 190 mm max - going 250mm min 355mm max - 2R+G 550mm min 700mm max. • Adjacent risers, or between adjacent goings a variation no greater than 5mm is permitted and the largest and smallest riser within the flight or the largest and smallest going within a flight is not to exceed a variation of 10mm. • Under the requirements of AS1428.1-2009 open riser are not permitted. • All treads to be fitted with non-slip finish or non-skid strips. • Treads are required to have a surface or nosing strip with a slip-resistance classification not less than listed in Table D3D15 when tested in accordance with AS 4586  Riser (R) / Going (G) [2] / Quantity (2R+G) Max / Min / Max / Min / Max / Min Public stairways: 190 / 115 / 355 / 250 / 700 / 550 Private stairways[1]: 190 / 115 / 355 / 240 / 700 / 550 	**From a visual inspection the current staircase was non-compliant with the requirements of this clause.** **The proposed new staircases will be required to be design in accordance with this clause. This is to be detailed at CC stage.**	Non-Compliance /Compliance Readily Achievable.
D3D15	**Landings** Ramps Surfaces, stair tread surfaces or nosing strips, and stair landing surfaces, or landing nosing strips to a flight below, must achieve slip-resistance classifications to AS4586-2013 as follows: **Application** / **Dry Surface Conditions** / **Wet Surface Condition** 1:14 or steeper ramps: P4 or R11 / P5 or R12 Ramps of 1:14 to 1:20: P3 or R10 / P4 or R11 Tread or Landing Surface: P3 or R10 / P4 or R10 Nosing Strip or Landing Strip: P3 / P4	A finishes schedule specifying ramp and stairway finishes and corresponding slip resistance certification/test reports should be provided with the Construction Certificate application.	Compliance Readily Achievable
D3D16	**Thresholds**	Note that where access for people with disabilities is required it is not permitted to have a step at the threshold of a doorway. Compliance to be detailed at the CC stage.	Compliance Readily Achievable

Clause	Description	Comment	Status
	(NSW variation for Entertainment Venues) Steps should not occur at doorways without a threshold landing except as follows: • In patient care areas in a Class 9a, the door sill is not more than 25mm above the finished floor level to which the door way opens, • In a Class 9c building, a ramp is provide with a maximum gradient of 1:8 for a maximum height of 25mm over the threshold • In a building required to be accessible and the doorway opens to a road or open space and is provided with a threshold ramp or step ramp in accordancewith AS1428.1, • Or in any other case a single 190mm step is permitted at doors leading to the exterior.		
D3D17	**Barriers to prevent falls**	-	Complies
D3D18	**Height of barriers** Barriers must generally not be less than 865mm for stairways and ramps and 1m in all other cases. A 700mm balustrade is permitted in front of fixed seating in an auditorium.	- To be detailed at the CC stage.	Compliance Readily Achievable
D3D19	**Openings in barriers** Openings in a required barrier must not allow a 125mm sphere to pass through, except for concessions applying to fire-isolated stairs or other emergency use areas excluding Class 9b early childhood centres. Where a barrier is fixes to the face of a landing, balcony or the like, the opening between the barrier and the face must not permit a 40mm sphere to pass through.	- To be detailed at the CC stage.	Compliance Readily Achievable
D3D20	**Barrier climbability**	Where the level of the surface below is 4m or more, a balustrade or other barrier must not facilitate climbing of horizontal elements between 150mm and 760mm above the floor.	Compliance Readily Achievable
D3D21	**Wire barriers**	-	N/A
D3D22	**Handrails** Handrails to exits including parts of fire isolated exit serving an area required to be accessible to people with disabilities must comply with Clause 12 of AS1428.1, viz: • Handrails not to obstruct circulation space • 30-50mm diameter • 865-1000mm above nosing line of stairs • 865-1000mm above ramps and landings • Consistent height throughout • 50mm grip clearance and no obstructions to handhold	Handrail compliance should be confirmed by the access consultant. The current arrangement of the handrails is non-compliant with the provisions of this clause. Handrails are to be provided in compliance with Clause D4D4, which includes the following- **Non-Fire Isolated Stairways and Ramps** All stairs and ramps not used as an emergency exit are to have handrails installed on both sides that comply with Clause 10 & 11 of AS1428.1-2009 **Fire Isolated Stairways and Ramps** In Fire Isolated Stairways & Ramps a handrail is required to be installed to at least	Non-Compliance /Compliance Readily Achievable

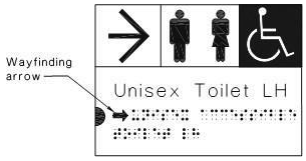
		one side of stair flights and located not less	

Clause	Description	Comment	Status
	• Continuous at internal (return) landings • Provided with handrail extensions and 180 degree curled ends	than 865mm above the nosing's of stair treads and the floor surfaces of landings **Consistent Handrail Heights for all stairways** The height of the top of the handrail, measured at a height of between 865mm - 1000mm vertically from the stair nosing shall be consistent throughout the ramp (or stairs) and any landings. All stairs including fire stairs are required to be designed to comply with Clause 12 of AS1428.1 - 2009 **Primary Schools and Early Childhood Centres** One handrail must be fixed at a height of not less than 865mm and a second handrail is required to be fixed at a height of between 665mm and 750mm.	
	Ramps  (b) Elevation DIMENSIONS IN MILLIMETRES FIGURE 14 RAMP HANDRAILS **Stairways**  SECTIONAL VIEW DIMENSIONS IN MILLIMETRES FIGURE 26(B) STAIRWAY LOCATION AND HANDRAIL EXTENSIONS AT END OF STAIRWAY OTHER THAN AT LINE OF BOUNDARY		

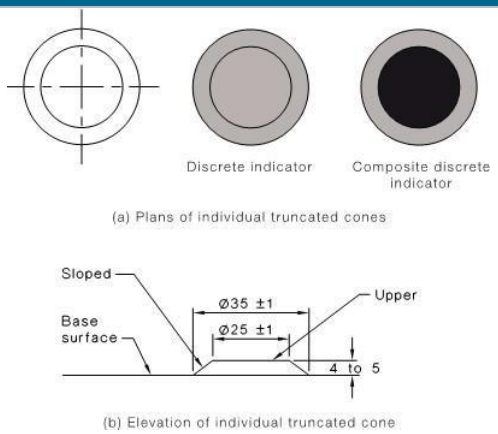
Clause	Description	Comment	Status
	  **Handrail Profile** 		
D3D23	**Fixed platforms, walkways, stairways and ladders** Platforms, walkways, stairs, ladders and the like that give access to and around plant and equipment, machine rooms, attic spaces and other low use areas of the building are permitted provided that construction details are to AS1657.	Certification to AS1657 is to be provided	Compliance Readily Achievable
D3D24	**Doorways and doors** *(NSW variation for Entertainment Venues)* Must not be revolving door, roller shutter or tilt door. Can be fitted with a sliding door if it leads directly to open space and can be opened manually under a force of not more than 110N and be fitted with a fail-safe device if the door is power operated.		Compliance Readily Achievable
D3D25	**Swinging doors** Defined exit doors that serve a part of a building with a floor area over 200m^2 must swing outward in the direction of exit travel. Exit doors must not encroach more than 500mm into the required width of the stair or 100mm when fully open and must swing in the direction of travel.		Compliance Readily Achievable
D3D26	**Operation of latch** *(NSW variation for Entertainment Venues)* Exit doors should be provided with “free handle” egress via a downward or pushing action and, if serving an area accessible to people with disabilities, must have non-slip “D” pull handles with 35-45mm hand clearances.	The current arrangement of latches throughout the building don’t comply with the requirements of this clause. All exit doors and doors in the path of travel must comply with the provisions of this clause.	Non-Compliance /Compliance Readily Achievable

Clause	Description	Comment	Status
	 Where the latch operation device is not located on the door leaf itself- • manual controls to power-operated doors must be at least 25 mm wide, proud of the surrounding surface and located not less than 500 mm from an internal corner; and • for a hinged door, between 1 m and 2 m from the door leaf in any position; • and for a sliding door, within 2 m of the doorway and clear of a surface mounted door in the open position. • braille and tactile signage complying with Clause 3 and 6 of Specification D3.6 must identify the latch operation device. Doors in a Class 9b building (other than schools or early childhood centres) serving a storey or room accommodating more than 100 people must be provided with a panic bar.		
D3D27	**Re-Entry from Fire-Isolated Exits**	-	N/A
D3D28	**Signs on doors** Signage in capital letters not less than 20mm high to be provided on doors as follows i. An automatic door held open by an automatic hold-open device: **FIRE SAFETY DOOR - DO NOT OBSTRUCT** **ii.** for a self-closing door **FIRE SAFETY DOOR** **DO NOT OBSTRUCT** **DO NOT KEEP OPEN** iii. for a door discharging from a fire-isolated exit **FIRE SAFETY DOOR - DO NOT OBSTRUCT**	Under Section 108 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 a notice is to be displayed in a conspicuous location adjacent to a doorway providing access to but not within a fire isolated stairway, passageway or ramp. The words "**OFFENCES RELATING TO FIRE EXITS**" are to be provided in letters at least 8mm high and the remaining words are to be at least 2.5mm high. The notice is to state the following: **OFFENCES RELATING TO FIRE EXITS** It is an offence under the Environmental Planning and Assessment Act 1979 (a) to place anything in or near this fire exit that may obstruct persons moving to or from this exit, or (b) to interfere with or obstruct the operation of any fire doors, or (c) to remove, damage or otherwise interfere with this notice.	N/A
D3D29	**Protection of openable windows**	-	N/A

Clause	Description	Comment	Status
D3D30	**Timber stairways: Concession**	-	N/A
NSW D3D31	**Doors in the path of travel in an Entertainment Venue**	-	N/A
Part D4 - Access for People with Disabilities			
D4D2	**General building access requirements** Access is generally required for persons with a disability throughout all areas unless specifically exempted.	Access is required throughout. Consultation with the access consultant is required. The Disabled Access Consultant's report should be referenced for disabled access requirements throughout the building.	Compliance Readily Achievable
D4D3	**Access to buildings** External access to the building for people with a disability must be provided: • From main pedestrian entry points at the allotment boundary. • Through the principle pedestrian entrance. • Through at least 50% of all pedestrian entries. • From accessible car parking spaces. • For buildings over 500m², so that an accessible entry occurs within 50m of any non-accessible entry. • From any another accessible building on the site.	Refer to access consultant's report.	Compliance Readily Achievable
D4D4	**Parts of the building to be accessible** All parts of the building must be accessible to people with a disability except for areas where access would be inappropriate due to the particular use or areas that would pose a health or safety risk to people with a disability. Every ramp, except a fire isolated ramp, must comply with Clause 10 if AS 1428.1. Every stairway, except a fire isolated stairway, must comply with Clause 11 of AS 1428.1. A fire isolated stairway must comply with Clause 11(f) and (g) of AS 1428.1. Every passenger lift must comply with Clause E3D7. Access ways must have passing spaces and turning spaces complying with AS 1428.1. A ramp or passenger lift need not be provided to serve a storey or level other than the entrance storey of a class 5, 6, 7b or 8 building containing not more than 3 storeys and with a floor area of each storey, excluding the entrance floor, of not more than 200m². Pile height or pile thickness of carpets shall comply with the requirements of this Clause and AS 1428.1.	Refer to access consultant's report.	Compliance Readily Achievable
D4D5	**Exemptions** Certain areas may not need to be accessible if the area is deemed inappropriate because of the particular use or the area would pose a health or safety risk for people with disabilities.	-	Noted
D4D6	**Accessible carparking**		N/A

Clause	Description	Comment	Status
D4D7	**Signage** Braille and tactile signage complying with Specification 15 and incorporating the international symbol of access or deafness in accordance with AS1428.1 must identify every accessible sanitary facility and space with a hearing augmentation system. Every doorway required to be provided with an exit sign under Clause E4D5 is to be provided with braille and tactile signage that states "**EXIT**" and identify the floor level "**LEVEL #**".  Signage must be provided within a room containing hearing augmentation identifying the type of hearing augmentation, the area covered in the room and if receivers are being used and where the receivers can be obtained. Signage identifying ambulant accessible sanitary facilities in accordance with AS 1428.1 must be located on the door of the facility.    Where the pedestrian entrance is not accessible, directional signage in accordance with AS 1428.1 must be provided to direct a person to the location of the nearest accessible pedestrian entrance. Where a bank of sanitary facilities is not provided with an accessible unisex sanitary facility, directional signage 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.	Signage details must be in accordance with AS1428.1 - 2009 and Specification 15 of the BCA.	Compliance Readily Achievable
D4D8	**Hearing augmentation** A hearing augmentation system must be provided where an inbuilt amplification system, other than one used only for emergency warning, is installed— i) in a room in a Class 9b building; or ii) in an auditorium, conference room, meeting room or room for judicatory purposes; or iii) at any ticket office, teller's booth, reception area or the like, where the public is screened from the service provider	Refer to access consultant's report.	Compliance Readily Achievable

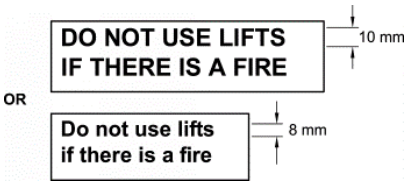
Clause	Description	Comment	Status
	An induction loop must be provided to not less than 80% of the floor area of the room or space served by the inbuilt amplification system; or A system requiring the use of receivers or the like, it must be available to not less than 95% of the floor area of the room or space served by the inbuilt amplification system, and the number of receivers provided must not be less than— A) if the room or space accommodates up to 500 persons, 1 receiver for every 25 persons or part thereof, or 2 receivers, whichever is the greater; and B) if the room or space accommodates more than 500 persons but not more than 1000 persons, 20 receivers plus 1 receiver for every 33 persons or part thereof in excess of 500 persons; and C) if the room or space accommodates more than 1000 persons but not more than 2000 persons, 35 receivers plus 1 receiver for every 50 persons or part thereof in excess of 1000 persons; and D) if the room or space accommodates more than 2000 persons, 55 receivers plus 1 receiver for every 100 persons or part thereof in excess of 2000 persons.		
D4D9	**Tactile indicators (TGSIs)** Tactile indicators are to be provided to all stairways, ramps and escalators must be provided to warn people who are blind or have a vision impairment that they are approaching: • a stairway, other than a fire-isolated stairway, • an escalator, passenger conveyor or moving walk, • a ramp other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp, or • in the absence of a suitable barrier an overhead: ○ obstruction less than 2 m above floor level, other than a doorway ○ an access way meeting a vehicular way adjacent to any pedestrian entrance to a building, excluding a pedestrian entrance serving an area referred to in D4D5, if there is no kerb or kerb ramp at that point Tactile ground surface indicators must comply with sections 1 and 2 of AS/NZS 1428.4.1		Compliance Readily Achievable

Clause	Description	Comment	Status
			
D4D10	**Wheelchair seating spaces in Class 9b assembly buildings**		N/A
D4D11	**Swimming pools**		N/A
D4D12	**Ramps** On an access way a series of connected ramps must not have a combined vertical rise of more than 3.6m. A landing for a step ramp must not overlap a landing of another step ramp or ramp.		Compliance Readily Achievable
D4D13	**Glazing on an accessway** On an accessway, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS 1428.1.	Required non-transparent glazing decals complying with AS 1428.1 should be illustrated for review.	Compliance Readily Achievable
Section E: Services and Equipment			
Part E1 - Fire Fighting Equipment			
E1D2	**Fire hydrants**	Required	To be verified by Hydraulic Engineer

Suite 4C 250 Pacific Hwy Charlestown NSW 2290
PO Box 132 Charlestown NSW 2290
P 02 4940 0355

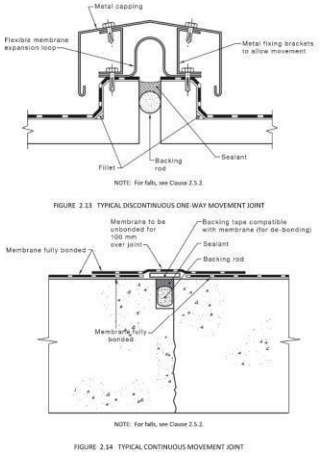
Clause	Description	Comment	Status
E1D3	**Fire hose reels**	Required	To be verified by Hydraulic Engineer
E1D4	**Sprinklers**	-	N/A
E1D5	**Where sprinklers are required: all classifications**	-	N/A
E1D6	**Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings**	-	N/A
E1D7	**Where sprinklers are required: Class 3 building used as a residential care building**	-	N/A
E1D8	**Where sprinklers are required: Class 6 building**	-	N/A
E1D9	**Where sprinklers are required: Class 7a building, other than an open-deck carpark**	-	N/A
E1D10	**Where sprinklers are required: Class 9a health-care building used as a residential care building, Class 9c buildings**	-	N/A
E1D11	**Where sprinklers are required: Class 9b buildings**	-	N/A
E1D12	**Where sprinklers are required: additional requirements**	-	N/A
E1D13	**Where sprinklers are required: occupancies of excessive hazard**	-	N/A
E1D14	**Portable fire extinguishers** Portable Fire Extinguishers are required be installed to sections (3) and (4) in Clause E1D14 and AS 2444 requirements, at: • Throughout Class 5 buildings • emergency services switchboards • kitchens • flammable liquid stores • at nurses' stations • special risk areas • where fire hose reels are not installed • Class 2, 3 or 4 residential areas are to be protected by 2.5kg ABE type fire extinguishers located in common areas on the storey served and located not more than 10m from each sole occupancy unit entry door.	-	Compliance Readily Achievable
E1D15	**Fire control centre**	-	N/A
E1D16	**Fire precautions during construction**	-	N/A
E1D17	**Provisions for special hazards**	-	N/A
Part E2 - Smoke Hazard Management			
E2D2	**Applicable of requirements**	Part is not applicable to • open deck car parks • open spectator stands • a Class 8 electricity network substation with a floor area not more than 200m^2 • storerooms, etc. less than 30m^2 • sanitary compartments • plant rooms or the like	Applicable

Clause	Description	Comment	Status
E2D3	General requirements	-	Noted
E2D4	Fire-isolated exits	-	N/A
E2D5	Buildings more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building	-	N/A
E2D6	Buildings more than 25 m in effective height: Class 5, 6, 7b, 8 or 9b buildings	-	N/A
E2D7	Buildings more than 25 m in effective height: Class 9a buildings	-	N/A
E2D8	Buildings not more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building	-	N/A
E2D9	Buildings not more than 25 m in effective height: Class 5, 6, 7b, 8 and 9b buildings	-	N/A
E2D10	Buildings not more than 25 m in effective height: large, isolatedbuildings subject to C3D4	-	N/A
E2D11	Buildings not more than 25 m in effective height: Class 9a and 9c buildings	-	N/A
E2D12	Class 7a buildings	-	N/A
E2D13	Basements (other than Class 7a buildings)	-	N/A
E2D14	Class 6 buildings - in fire compartments more than 2000 m^2: Class 6 building (not containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit)	-	N/A
E2D15	Class 6 buildings - in fire compartments more than 2000 m^2: Class 6 building (containing an enclosed common walkway or mall)	-	N/A
E2D16 (NSW)	Class 9b - assembly buildings	-	N/A
E2D17	Class 9b - assembly buildings: exhibition halls	-	N/A
E2D18	Class 9b - assembly buildings: theatres and public halls	-	N/A
E2D19	Class 9b - assembly buildings: theatres and public halls (not listed in E2D18) including lecture theatres and cinema/auditorium complexes	-	N/A
E2D20	Class 9b assembly buildings: other assembly buildings (not listed in E2D16 to E2D19)	-	N/A
E2D21	Provisions of special hazards	-	N/A
Part E3 - Lift Installations			
E3D2	**Lift installations** Electric and electrohydraulic lifts must comply with the design requirements of BCA Specification 24.	Certification of lift design to be provided at CC stage.	Compliance Readily Achievable
E3D3	**Stretcher facility in lifts** Buildings greater than 12m in effective height require a lift sized to accommodate a stretcher of 2m x 0.6m x 1.4m high. The lift must serve every	Ensure a suitably sized lift serves each level at CC stage	N/A

Clause	Description	Comment	Status
	level to which lift access is provided.		
E3D4	**Warning against use of lift in fire** Warning signage is required at lift doors advising that lifts should not be used in the event of a fire.	Signage to be installed stating. 	Compliance Readily Achievable
E3D5	**Emergency lifts**	-	N/A
E3D6	**Landings**	-	Compliance Readily Achievable
E3D7	**Passenger lift types and their limitations** Every passenger lift must be one of the types identified in Sections (1) of Clause E3D7 of the BCA and not reply on a constant pressure device for its operation if the lift car is fully enclosed.	-	Compliance Readily Achievable
E3D8	**Accessible features required for passenger lifts** Every passenger lift must have accessible features where applicable as identified in Clause E3D8 of the BCA.	-	Compliance Readily Achievable
E3D9	**Fire service control** Where lifts serve a storey above 12m in effective height: • A fire service control switch is required for each lift or lift group. • A lift car fire service drive control is required for each lift.	-	N/A
E3D10	**Residential care buildings**	-	N/A
E3D11	**Fire service recall control switch**	-	N/A
E3D12	**Lift car fire service drive control switch**	-	N/A
Part E4 - Emergency Lighting, Exit and Warning Systems			

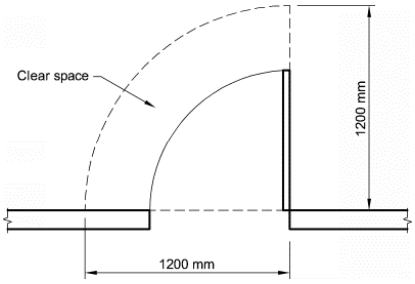
E4D2	**Emergency lighting requirements**
	Emergency lighting is to be provided throughout the building.
		Emergency lighting is to be provided in:
		• every fire-isolated stairway, fire-isolated ramp or fire-isolated passageway.
		• Every passageway, hallway, corridor or the like, that is part of the path of travel to an exit.
		• In every room having a floor area more than 100m^2 that does not open to a corridor or space that has emergency lighting or to a road or open space.
		• In any room having a floor area more than 300m^2.
		• In every required non-fire isolated stairway
		• To every room or space that has public access in a Class 6 or 9b building if:
		  • the floor area is more than 300m^2;
		  • or if any point on the floor is more than 20m from the nearest doorway
			Compliance Readily Achievable

Clause	Description	Comment	Status
		opening directly to the road or open space; or • if the egress involves a vertical rise within the building of more than 1.5m. • In every Class 9c excluding within sole-occupancy units	
E4D3	**Measurement of distances**	-	Compliance Readily Achievable
E4D4	**Design and operation of emergency lighting** Emergency lighting must comply with to AS2293.1	-	Compliance Readily Achievable
E4D5	**Exit signs** Exit signs are to be provided in accordance with Clause E4D5 of the BCA.	Exit signs must be clearly visible to person approaching the exit and must be installed on, above or adjacent to; 1. A door providing direct egress from a storey to a stairway, passageway or ramp serving as a required exit. 2. A door from an enclosed stairway, passageway or ramp at every level of discharge to a road or open space. 3. A horizontal exit 4. A door serving as or forming part of a required exit in a storey required to be provided with emergency lighting.	Compliance Readily Achievable
E4D6	**Direction signs** *(NSW variation for Entertainment Venues)* Where an exit is not readily apparent then exit signs with directional arrows must be installed in appropriate positions in corridors, hallways, lobbies and the like indicating the direction to a required exit	-	Compliance Readily Achievable
E4D7	**Class 2 and 3 buildings and Class 4 parts: Exemptions**	-	N/A
E4D8	**Design and operation of exit signs** 1. Exit signs are to operate in accordance with AS 2293.1. 2. Photo luminescent exit sign are to comply with Specification 25.	-	Compliance Readily Achievable
E4D9	**Emergency warning and intercom systems**	-	N/A
Section F: Health and Amenity			
Part F1 - External waterproofing, rainwater management and rising damp			
F1D1	**Deemed-to-Satisfy Provisions** Performance requirements F1P1 to F1P4 are satisfied by complying with Clause F1D2 to F1D10.	A test report on the proposed wall system is to be provided. The test report must include the following information: (i) Name and address of the person supervising the test. (ii) Test report number. (iii) Date of the test. (iv) Cladding manufacturer's name and	Noted

Clause	Description	Comment	Status
		address. (v) Construction details of the test specimen, including a description, and drawings and details of the components, showing modifications, if any. (vi) Test sequence with the pressures used in all tests. (vii) For each of the static and cyclic pressure tests, full details of all leakages, including position, extent and timing.	
F1D2	**Stormwater drainage** Stormwater drainage must comply with AS/NZS 3500.3.	Hydraulic drawings and design certification to be provided at Construction Certificate stage.	Compliance Readily Achievable
F1D3	**Provision of drainage and grading to external areas** A roof, balcony, podium or similar requires stormwater drainage and concrete structural substrates graded to a 1:80 fall, excluding planter boxes.	Structural drawings illustrating a 1:80 fall to floor wastes for concrete structural substrates of external balconies are needed for review.	Compliance Readily Achievable
F1D4	**Substrate materials** Trafficable roofs, balconies, podiums, or similar partsof a Class 2, 3 building or Class 4 part must have a structural substrate consisting or concrete, FC sheet,or aerated concrete.	Architect/waterproofing consultant to confirm that the finished surface of any structural substrate will not affect the performance of the membrane.	Compliance Readily Achievable
F1D5	**Self-draining finishes** Trafficable roofs, balconies, podiums, or similar parts of a Class 2, 3 building or Class 4 part must be self-draining.	Hydraulic engineer to confirm compliance.	Compliance Readily Achievable
F1D6	**Exposed joints** Exposed joints in the drainage surface on a roof, balcony, podium, or similar horizontal surface part of a building must be protected in accordance with Section 2.9 of AS 4654.2; and not be located beneath or run through a planter box, water feature or similar part of the building.  FIGURE 2.13 TYPICAL DISCONTINUOUS ONE-WAY MOVEMENT JOINT FIGURE 2.14 TYPICAL CONTINUOUS MOVEMENT JOINT	Structural engineer/architect to confirm compliance.	Compliance Readily Achievable
F1D7	**External waterproofing membranes** Trafficable roofs, balconies, podiums or similar parts of a building require a waterproofing membrane complying with AS4654.1 and AS4654.2, which must	-	Compliance Readily Achievable

Clause	Description	Comment	Status
	be installed directly on the structural substrate.		
F1D8	**Damp-proofing** Moisture from the ground must be prevented from reaching the lowest floor timber and the walls above the lowest floor joists, the walls above the dam proof course and the underside of a suspended floor constructed of a material other than timber, and the supporting beams or girders. Damp proof course must consist of a material that complies with AS/NZS 2904 or an impervious termite shield in accordance with AS 3660.1.	-	Compliance Readily Achievable
F1D9	**Damp-proofing of floors on the ground** A vapour barrier in accordance with AS2870 is to be provided beneath the basement floor slab.	-	Compliance Readily Achievable
F1D10	**Subfloor ventilation**	-	N/A
Part F2 - Wet areas and overflow protection			
F2D1	**Deemed-to-Satisfy Provisions** Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F2P1 and F2P2 are satisfied by complying with F2D2 to F2D4. Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	-	Compliance Readily Achievable
F2D2	**Wet area construction** Water proofing of wet areas within a building to comply with AS 3740. Showers in Class 2 and 3 buildings or a Class 4 part must have a concrete or FC sheet structural substrate for floors and concrete, masonry, or FC sheeted walls. Concrete structural substrates for shower floors must be graded to a 1:80 fall, and the membrane directly applied to the structural substrate. The waterproofing requirements for multi-residential buildings also apply to commercial buildings.	-	Compliance Readily Achievable
F2D3	**Rooms containing urinals** Additional requirements apply including falls to floor wastes and impervious materials surrounding urinals.	-	Compliance Readily Achievable
F2D4	**Floor wastes** The floor of each bathroom and laundry in each sole occupancy of the Class 2 and 3 building portions must have a floor waste and floors graded to the floor waste at 1:50.	-	Compliance Readily Achievable
Part F3 - Roof and wall cladding			
F3D1	**Deemed-to-Satisfy Provisions** Where a Deemed-to-Satisfy Solution is proposed, Performance Requirement F3P1 is satisfied by complying with F3D2 to F3D5.	-	Compliance Readily Achievable

Clause	Description	Comment	Status
	Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.		
F3D2	**Roof coverings**	-	Compliance Readily Achievable
F3D3	**Sarking** Sarking type materials used for weatherproofing of roofs and walls must comply with AS/NZS 4200 Parts 1 and 2.	-	Compliance Readily Achievable
F3D4	**Glazed assemblies** Windows, sliding doors with a frame, adjustable louvres, shopfronts and window walls with one piece framing in an external wall must comply with AS 2047 requirements for resistance to water penetration.	-	Compliance Readily Achievable
F3D5	**Wall cladding** External wall cladding must comply with one or a combination of the following: • Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700 • Autoclaved aerated concrete: AS 5146.3. • Metal wall cladding: AS 1562.1.	External wall claddings which are not captured under Clause F3D5 will require a performance solution to be documented by an appropriately qualified practitioner in accordance with *Clause A2G2 - Performance Solution.*	Compliance Readily Achievable
Part F4 - Sanitary and other facilities			
F4D2	**Facilities in residential buildings**	-	N/A
F4D3	**Calculation of number of occupants and fixtures**	-	Compliance Readily Achievable
F4D4	**Facilities in Class 3 to 9 buildings** Toilet facilities are required in appropriate numbers based on the number of persons accommodated.	-	N/A
F4D5	**Accessible sanitary facilities** Accessible unisex toilets for people with a disability are required on each storey and at 50% of toilet banks on any storey. Facilities should be constructed to AS1428.1 - 2009 although an existing WC facility that fully complies with AS1428.1 - 2001 may substitute as a concession. Separate male and female ambulant facilities are required at each bank of toilets that contains one or more toilets in addition to an accessible unisex facility.	Refer to access consultant's report.	Compliance Readily Achievable
F4D6	**Accessible unisex sanitary compartments**	-	Compliance Readily Achievable
F4D7	**Accessible unisex showers**	-	N/A
F4D8	**Construction of sanitary compartments** Where clear space between closet pan and doorway	All hinged doors that swing inward to sanitary facilities and do not comply with	N/A

Clause	Description	Comment	Status
	is less than 1.2m, doors must open outwards, slide or be readily removable from outside.	achieving a 1200mm clearance to pan are required to be installed with lift-off hinges.  	
F4D9	**Interpretation: Urinals and washbasins**	Each 600mm length of a continuous urinal trough is counted as 1 urinal.	N/A
F4D10	*(NSW variation - This clause has deliberately been left blank.)*		-
F4D11	**Waste management**	-	N/A
F4D12	**Accessible adult change facilities** Note: applies to- • Shopping centre >3,500 people • Sports venue >35,000 people • Swimming pool >70m perimeter • Museum, art gallery, theatre >1,500 patrons • Airport terminal	-	N/A
Part F5 - Room heights			
F5D2	**Height of rooms and other spaces** Generally, a minimum ceiling height of 2.4m is required throughout. In a Class 9b building in a school classroom or other assembly building with more than 100 persons — 2.4 m; A theatre, public hall or other assembly building with more than 100 persons — 2.7 m In a corridor that serves an assembly building with not more than 100 persons — 2.4 m In a corridor that serves an assembly building with more than 100 persons — 2.7 m; in a Class 9a health-care building— (i) a patient care area — 2.4 m; and (ii) an operating theatre or delivery room — 3 m; and (iii) a treatment room, clinic, waiting room, passageway, corridor, or the like — 2.4 m	-	Compliance Readily Achievable
Part F6 - Light and ventilation			
F6D2	**Provision of natural light** Natural lighting aggregating 10% of room floor area is required as follows: • To all habitable rooms in residential buildings. • In bedrooms and dormitories of hotels, motels and the like. • To rooms used for sleeping in health care and	-	Applicable

Clause	Description	Comment	Status
	aged care buildings. • To school classrooms and early childhood centres.		
F6D3	**Methods and extent of natural lighting**	-	Compliance Readily Achievable
F6D4	**Natural light borrowed from adjoining room**	-	Noted
F6D5	**Artificial lighting** The artificial lighting system must comply with AS/NZS 1680.0.	Design details and certification from an electrical engineer is required.	Compliance Readily Achievable
F6D6	**Ventilation of rooms** *(NSW variation for Public Health Regulation)* Ventilation shall be provided throughout the building in by means of natural ventilation complying with Clause F6D7 or mechanical ventilation complying with the requirements of AS1668.2 as required by Clause F6D6 of the BCA.	Design details and certification from a mechanical engineer is required.	Compliance Readily Achievable
F6D7	**Natural ventilation**	-	Compliance Readily Achievable
F6D8	**Ventilation borrowed from adjoining room**	-	Compliance Readily Achievable
F6D9	**Restriction on location of sanitary compartments**	-	Compliance readily Achievable.
F6D10	**Airlocks**	-	N/A
F6D11	**Carparks**	-	N/A
F6D12	**Kitchen local exhaust ventilation**	-	N/A
Part F7 - Sound transmission and insulation			
F7D2	**Application of Part** Applicable to Class 2, 3 and 9c buildings	-	N/A
F7D3	**Determination of airborne sound insulation ratings**	-	N/A
F7D4	**Determination of impact sound insulation ratings**	-	N/A
F7D5	**Sound insulation rating of floors**	-	N/A
F7D6	**Sound insulation rating of walls**	-	N/A
F7D7	**Sound insulation rating of internal services**	-	N/A
F7D8	**Sound isolation pumps**	-	N/A
Part F8 - Condensation management			
F8D2	**Application of part** This part applies to a sole-occupancy unit of a Class 2 building or Class 4 part of a building.	-	N/A
F8D3	**Pliable building membrane**	-	N/A
F8D4	**Flow rate and discharge of exhaust systems**	-	N/A
F8D5	**Ventilation of roof spaces**	-	N/A

Clause	Description	Comment	Status
Section G: Ancillary Provisions			
Part G1- Minor Structures and components			
G1D2	**Swimming pools**	-	N/A
G1D3	**Refrigerated chambers, strong rooms and vaults**	-	N/A
G1D4	**Outdoor play spaces**	-	N/A
NSW G1D5	**Provision for cleaning windows** A safe manner of cleaning windows is to be provided as windows are located 3 or more storeys above ground level.	The windows must either be able to be cleaned wholly from within the building, or a method complying with the Construction Safety Act 1912 and Regulations is required.	Compliance Readily Achievable
Part G2 - Boilers, pressure vessels, heating appliances, fire places, chimneys and flues			
G2D2	**Installation of appliances**	-	N/A
G2D3	**Open fireplaces**	-	N/A
G2D4	**Incinerator rooms**	-	N/A
Part G3 - Atrium Construction			
G3D1	**Application of Part**	-	N/A
G3D2	**Dimensions of atrium well**	-	N/A
G3D3	**Separation of atrium by bounding walls**	-	N/A
G3D4	**Construction of bounding walls**	-	N/A
G3D5	**Construction of balconies**	-	N/A
G3D6	**Separation at roof**	-	N/A
G3D7	**Means of egress**	-	N/A
G3D8	**Fire and smoke control systems**	-	N/A
Part G4 - Construction in Alpine Areas			
G4D2	**Application of Part**	-	N/A
G4D3	**External doorways**	-	N/A
G4D4	**Emergency lighting**	-	N/A
G4D5	**External trafficable structures**	-	N/A
G4D6	**Clear space around buildings**	-	N/A
G4D7	**Fire-fighting services and equipment**	-	N/A
G4D8	**Fire orders**	-	N/A
Part G5 - Construction in Bushfire Prone Areas			
G5D2	**Application of Part**	-	N/A
G5D3	**Protection - residential buildings**	-	N/A
G5D4	**Protection - certain Class 9 buildings**	-	N/A
Part G6 - Occupiable outdoor areas			
G6D1	**Application of Part** Applies to occupiable outdoor areas in addition to	-	Applicable

Clause	Description	Comment	Status
	other deemed-to-satisfy provisions of the BCA. Part G6 takes precedent where there is a difference to the deemed-to-satisfy provisions of Sections C, D, E, F & G. Except for clause G6D2, Part G6 does not apply to occupiable outdoor areas of individual resident rooms or outdoor occupiable areas less than $10m^2$.		
G6D2	**Fire hazard properties** A lining, material or assembly in an occupiable outdoor area must comply with C2D11 as for an internal element. The following fire hazard properties of a lining, material or assembly in an occupiable outdoor area are not required to comply with C2D11: (i) Average specific extinction area. (ii) Smoke-Developed Index. (iii) Smoke development rate. (iv) Smoke growth rate index ($SMOGRA_{RC}$)	Proposed materials used in outdoor occupiable areas are subject to C2D11 requirements as this clause.	Compliance Readily Achievable
G6D3	**Fire separation**	-	Noted
G6D4	**Provision for escape** For the purposes of the Deemed-to-Satisfy Provisions of Part D2, a reference to a storey or room includes an occupiable outdoor area.	Egress requirements under Part D2 apply to occupiable outdoor areas.	Complies
G6D5	**Construction of exits** For the purposes of the Deemed-to-Satisfy Provisions of Part D3, a reference to a storey or room includes an occupiable outdoor area.	Construction of exits requirements under Part D3 apply to occupiable outdoor areas.	Complies
G6D6	**Fire fighting equipment** Except for Clause S17C7(2)(a), for the purposes of the Deemed-to-Satisfy Provisions of Part E1, a reference to a storey includes an occupiable outdoor area.	Fire fighting equipment required under Part E1 to be designed to include occupiable outdoor areas.	Compliance Readily Achievable
G6D7	**Lift installations** For the purposes of the Deemed-to-Satisfy Provisions of Part E3, a reference to a storey includes an occupiable outdoor area.	Lift designs required under Part E3 to be designed to include occupiable outdoor areas.	Compliance Readily Achievable
G6D8	**Visibility in an emergency, exit signs and warning systems** For the purposes of the Deemed-to-Satisfy Provisions of Part E4, a reference to a storey includes an occupiable outdoor area.	Emergency lighting, exits signs and emergency warning and intercom systems to be designed to include occupiable outdoor areas.	Compliance Readily Achievable
G6D9	**Light and ventilation** For the purposes of the Deemed-to-Satisfy Provisions of F6D5, F6D9 and F6D10, a reference to a room includes an occupiable outdoor area.	-	Compliance Readily Achievable
G6D10	**Fire orders** For the purposes of the Deemed-to-Satisfy Provisions of G4D8, a reference to a storey includes an occupiable outdoor area.	-	N/A
Part G7 - Livable housing design			

surescope BUILDING CERTIFIERS

Suite 4C 250 Pacific Hwy Charlestown NSW 2290
PO Box 132 Charlestown NSW 2290
P 02 4940 0355

Clause	Description	Comment	Status
G7D2	**Livable housing design** Each Class 2 sole-occupancy unit in a Class 2 building must comply with the ABCB Standard for Livable Housing Design, except for Part 1.	-	N/A
Section I: Special use buildings			
Part I1 - Class 9b buildings			**N/A**
Part I2 - Public Transport Buildings			**N/A**
Part I3 - Farm buildings and farm sheds			**N/A**
NSW Part I5 Temporary structures			**N/A**
NSW Part I6 Drive-in theatres			**N/A**
NSW Section J: Energy Efficiency Energy Efficiency for buildings requires buildings to reduce greenhouse gas emissions by efficiently using energy. A building's services must have features that facilitate the efficient use of energy. The discipline of Energy Efficiency with the BCA has become a specialised field where compliance with BCA Section J is to be certified with the issue of a Certificate of Compliance - Design from the relevant Services Engineer/Consultant. The purpose of this section is to provide a brief explanation of which areas are to achieve compliance with BCA Section J - Energy Efficiency during design and construction. The BCA should be referenced for exact requirements, clarification and further explanation.			
Section J	**Energy efficiency measures** Energy efficiency measures are prescribed for the following building elements to limit energy consumption:- • Building fabric • External glazing • Building sealing • Air movement. • Air-conditioning and ventilation systems. • Artificial lighting and power • Hot water supply • Access for maintenance	Compliance assumed, although further information is required to confirm compliance. A performance based BCA J1V3 assessment may be adopted for the project if compliance with BCA deemed to satisfy provisions are problematic.	Compliance Readily Achievable

Conclusion

There a few BCA DTS non-compliances, and other items requiring further verification (Fire Designs and the like) at CC stage that can be verified by certifier issuing the CC, these have in part been addressed via an Alternative Fire Engineered Solution (Subject to NSFFB approval at CC application stage), however, in our opinion the design can readily incorporate the requirements listed in this report in delivery of updated information to the certifier issuing the CC.

Scott O'Donohue BDC1713

Building Surveyor-Unrestricted
(02) 4940 0355

surescope
BUILDING CERTIFIERS

Suite 4C 250 Pacific Hwy Charlestown NSW 2290
PO Box 132 Charlestown NSW 2290
P 02 4940 0355