STEVE WATSON
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Gosford Library

BCA Assessment Report

Report 2020/0161 R1.4

Prepared for Central Coast Council
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Disclaimer:

This report is based on a desktop audit of preliminary documentation only.
Details contained in the report address issues of significance to broad BCA compliance relevant to this stage of design resolution.

This report is based on a review of the design documentation only. It represents a compliance report for "documentation to this point in time" and will be subject to amendment and expansion as project documentation develops

Executive Summary

An assessment of the design of the proposed Gosford Library project has been undertaken against the Deemed-to-Satisfy (DTS) provisions of the relevant sections of the Building Code of Australia and the applicable Building Regulations.

This report details the non-compliances identified that require either amendments to plans or an Alternative Solution to satisfy the Performance Requirements of the BCA.

Summary of BCA Parameters:

Building Use:	Office, library and auditorium & carparking (private garage)
Class of Occupancy	Class 5 & 9b
Type of Construction Required	Type A
Rise Storeys:	4
Number of Storeys:	4
Effective Height:	12.6m (Level 3 RL20.60 - Level Ground RL 8.00)

The following are the main issues proposed to be addressed by the Fire Safety Engineer via a Performance Solution:

1. The following areas have been identified with distances exceeding 20m to a point of choice:
    (a) Ground floor North west - Children's Reading Play area – approx. 25m
    (b) Level 3 South west – outdoor terrace – approx. 21m
2. Level 3 has a proposed population of 254 occupants and will require a minimum 2.5m aggregate unobstructed exit width. Level 3 is currently provided with approx. 2m aggregate unobstructed exit width via the fire isolated stairways.
3. The southern fire isolated stairway (stair 3) does not have direct access to road or open space.
4. The southern exits on level 1 do not have directly access to road or open space.
5. The location of the hydrant booster will need to be discussed with FRNSW to confirm whether it is acceptable for their operational requirements.
6. There is an atrium which is directly connected to ground floor and level 3. Level 1 and 2 are connected via an open balcony. However, the balconies are located more than 10m behind the building line. Although it is an unconventional atrium it is still determined to connect 4 storeys. A fire safety engineer will need to review the design and requirements under Part G3 and develop an appropriate performance solution to deal with fire separation and smoke hazard management.

The design is capable of complying with the requirements of the relevant sections of the Environmental Planning Assessment Act 1979, the Environmental Planning and Assessment Regulations 2000 and the Building Code of Australia 2019 Amendment 1. Compliance is subject to resolution of the identified areas of non-compliance and compliance with the recommendations provided within the report.

Further detailed regulatory reviews will need to be progressively undertaken as designs advance and become more resolved to ensure compliance is achieved.

Whilst not precluding the issue of a Construction Certificate, it is noted that many detailed design issues are not indicated on the drawings. These issues are designated “Compliance Readily Achievable” in the *“Status*” column of the assessment in Section 14 of the report and should be resolved prior to construction.

Key issues which require additional details have been listed under Section 10.1 of this report and need to be clarified with SWP or the building certifier for the project prior to the issue of a construction certificate.

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1. Introduction

This report presents the findings of a preliminary assessment undertaken of the proposed design of the Gosford Library at 123A Donnison Street, Gosford against the Deemed-to-Satisfy (DtS) provisions of Building Code of Australia BCA 2019 Amendment 1.

It has been prepared by Steve Watson and Partners for Central Coast Council

2. Purpose

The purpose of this report is to provide an assessment of the design documentation against the current requirements of the BCA.

The assessment is undertaken for the purpose of, and to the extent necessary for, with the Development application to Council under Part 4 of the Environmental Planning and Assessment Act.

3. Scope and Limitations

3.1. Scope

The scope of this assessment is limited to the the design documentation referenced in Appendix A of this report.

3.2. Limitations

The following limitations apply to the assessment:

- The report considers matters of a significant nature only and should not be considered exhaustive.
- The plans are assessed to the extent necessary for submission with the Development Application to Council under Part 4 of the Environmental Planning and Assessment Act. This means the design has been assessed to be capable of complying with the BCA without necessarily having all the detailed design completed at this stage.
- Details in regard to access for people with disabilities have been assessed to the extent of the deemed-to-satisfy provisions of the BCA/Premises Standard only. A detailed assessment against AS 1428 series, AS/NZS 2890.6 – 2009 and AS 4299 – 1995 is outside the scope of this report
- Generally, the assessment does not incorporate a detailed assessment of the requirements of the Australian Standards.
- Structural and services documentation have not been reviewed.
- Appraisals are limited to the provisions of the BCA and the Premises Standards. Other legislative requirements have not been considered. It does not address additional or specific requirements stipulated under other areas such as Safety in Design, Construction Safety, Disability Discrimination, Planning and Environment, Occupational Health and Safety, Health, Dangerous Goods, etc, which may impact on the design and use of the building. It is recommended that appropriate advice from suitably qualified consultants should be obtained for further information on these areas

3.3. Certification Works

This report is provided as part of SWP's contracted scope for this project, which is "Certification Work", as defined in the Building and Development Certifiers Regulation 2020. Due to the strict requirements and limits in terms of conflicts of interest imposed under that regulation, SWP cannot undertake any services other than Certification Work services on this project. Hence, the contents of this report, and any associated

correspondence, are provided in the context of a preliminary certification assessment of plans, and may not be construed to constitute involvement in building design, the preparation of plans and specifications, the provision of advice on how to amend a plan or specification to ensure that the aspect will comply with legislative or code requirements, or to breach any other restriction or limitation imposed under the conflict of interest provisions of that or any other legislation.

4. National Construction Code BCA 2019 Amendment 1– Volume 1: Building Code of Australia Class 2 to Class 9 Buildings

The National Construction Code (NCC) is a uniform set of technical provisions for the design and construction of buildings, structures and plumbing/drainage systems which is separated into 3 volumes. Volume 1 of the NCC is the Building Code of Australia (BCA) for Class 2 to 9 buildings which is the document to which the assessment in this report has been undertaken against. The BCA is legislated under The Act and specifies the Performance Requirements for the design and construction of Class 2 to 9 buildings that must be satisfied to achieve compliance. The Performance Requirements can only be satisfied by a Performance Solution, Deemed-to-Satisfy (DTS) solution or a combination of both.

5. Performance Solutions

The BCA is written in a performance format which allows performance based buildings. This has allowed for innovation and variation from the prescriptive deemed-to-satisfy requirements of the BCA, whilst maintaining the principle levels of health, safety and amenity of building occupants.

Performance solutions are generally adopted when a nominated deemed-to-satisfy provision appears inappropriate for the design, or when a proposed design varies from the prescriptive requirements of the BCA. Subsequently, a performance solution supported by Fire Engineering analysis can determine whether a proposed design that varies from prescriptive requirements, will satisfactorily meet the performance provisions of the BCA. Ultimately, it is with the discretion of the relevant building surveyor whether to accept a deviation from the prescriptive code requirements.

Utilising the performance provisions may result in more economical and somewhat safer building, however alternative solutions may require additional on-going maintenance. It is in this instance that all parties, such as the building owner, insurance companies, proposed tenants, etc., are aware of this decision making process and are kept informed of any additional requirements needed to maintain the level of safety.

6. Statutory Framework

The following table summarises the key statutory issues relating to fire safety and the BCA in relation to the certification of new building works.

Issue	Legislative reference	Comment
New Work	EPAR 145	All new works must comply

6.1. New Work

Clause 145 of the EPAR requires that all new work comply with the current requirements of the BCA.

This means that all works proposed in the plans are required to comply but that existing features of an existing building need not comply with the BCA unless required to under other clauses of the legislation.

7. Methodology

7.1. Process adopted

The following method of assessment has been used in the preparation of this report:

1) Determine the basic assessment data for the building.
2) Assess the design of the building against the current Deemed-to-Satisfy requirements of Sections B, C, D, E, F, G, H and J of the BCA. Establish the status of each clause into the following categories:
    1. Clause is administrative information only **(Noted)**;
    2. Clause is or is not relevant to the proposed work **(Applicable or N/A)**
    3. The proposed work complies with the requirements of the clause **(Complies)**;
    4. Compliance with the requirements of the clause is unable to be determined from the documentation provided **(Compliance Readily Achievable)**. A recommendation in the "Comments" column will indicate what is required to achieve compliance. The design and construction teams are responsible to ensure compliance is achieved;
    5. Compliance with the requirements of the clause is unable to be determined from the documentation provided. Additional details or relevant information required to verify compliance (**Additional Details Required**);
    6. Proposed work does not comply with the requirements of the clause **(Does Not Comply)**. An indication will be given in the Comments field as to the nature of the issue and whether an alternative solution has been proposed to address the issue;
    7. Proposed work is to be addressed on a performance basis via an Alternative Solution satisfying the relevant Performance Requirements. (**Performance Solution**);
3) Nominate the status of the design against each BCA requirement;
4) Provide comments against each BCA requirement as appropriate.

8. Description of Proposed Development

The proposed development involves the construction a Regional Library for Central Coast Council to be located at 123A Donnison Street, Gosford. The building will also include a single auditorium/function space and a smart work hub work space.

9. Assessment Data Summary

The following basic assessment data has been drawn from the provisions of the BCA 2019 Amendment 1.

9.1. Assumptions

Assumptions made in the preparation of this report are listed below:

1. Occupants located on level 2 Innovation Hub – Co working space will have access to the public sanitary facilities.

9.2. Interpretations

A number of issues within the BCA are recognised to be interpretive in nature. Where these issues are encountered, interpretations are made that are consistent with Standard Industry Practise and/or Steve Watson & Partners policy formulated in regard of each issue.

1. The BCA does not permit unisex facilities other than Accessible WCs. As such we have allocated the Unisex PDA on level 2 as male urinal.

10. Issues Requiring Resolution

10.1. Items requiring additional details or documentation

Refer to Part 14 of the Report for further details or documentation to be provided to ensure compliance as part of the design process.

10.2. Performance solutions required

It is proposed to satisfy the following non-compliances via performance solutions:

Item	Non-Compliance	DTS Clause	Description	Performance Requirement
1.	Exit travel distances	D1.4	The following areas have been identified with distances exceeding 20m to a point of choice: 1. Ground floor North west - Children's Reading Play area – approx. 25m 2. Level 3 South west – outdoor terrace – approx. 21m	DP4 & EP2.2
2.	Dimensions of exits and paths of travel to exits	D1.6	Level 3 has a proposed population of 254 occupants and will require a minimum 2.5m aggregate unobstructed exit width. Level 3 is currently provided with approx. 2m aggregate unobstructed exit width via the fire isolated stairways.	DP4 & EP2.2
3.	Travel via fire-isolated exits	D1.7	The southern fire isolated stairway (stair 3) does not have direct access to road or open space. Access to the road from the exits discharging to the south is via a the carpark which is on a separate lots. The carpark has a number of easements and right of ways registered on the title.	DP4
4.	Discharge from exits	D1.10	The southern exits on level 1 do not have directly access to road or open space. Access to the road from the exits discharging to the south is via a the carpark which is on a separate lots. The carpark has a number of easements and right of ways registered on the title.	DP4
5.	Fire Hydrant	E1.3	The hydraulic engineer must ensure the fire hydrant booster complies with AS2419.1. Any non-compliance is to be address by way of a Performance Solution from an Accredited Fire Engineered. The location of the hydrant booster will need to be discussed with FRNSW to confirm whether it is acceptable for their operational requirements.	EP1.3

Item	Non-Compliance	DTS Clause	Description	Performance Requirement
6.	Atrium Construction Sprinklers, smoke hazard management	Part G3 E1.5, E2.2	There is an atrium which is directly connected to ground floor and level 3. Level 1 and 2 are connected via an open balcony. However, the balconies are located more than 10m behind the building line. Although it is an unconventional atrium it is still determined to connect 4 storeys. A fire safety engineer will need to review the design and requirements under Part G3 and develop an appropriate performance solution to deal with fire separation and smoke hazard management.	CP1, CP2, CP8, E1.4, EP2.2, EP4.3

11. Relevant Authorities

Where an alternative solution is proposed to meet the performance requirements contained in any one or more of the Category 2 fire safety provisions referral to Fire and Rescue NSW under Clause 144 of the EP&A Regulations is required in either of the following types of buildings:

(a) a class 9a building that is proposed to have a total floor area of 2,000 square metres or more, or

(b) a building (other than a class 9a building) that is proposed to have:

(i) a fire compartment with a total floor area of more than 2,000 square metres, or

(ii) a total floor area of more than 6,000 square metres,

12. Statutory Fire Safety Measures

All fire/essential safety measures installed within the building are required required to be certified upon completion of the project and prior to occupation of the building by the owner of the building, by issuing a Final Fire Safety Certificate under the Act.

The owner is also required under the Act to certify each of the Fire Safety Measures annually by issuing a Fire Safety Statement.

With performance solutions, additional or more frequent maintenance may result.

13. Conclusion

The design is capable of complying with the requirements of the relevant sections of the of the Act and EPAR and the BCA 2019 Amendment 1 subject to resolution of the identified areas of non-compliance and compliance with the recommendations provided within the report.

Further detailed regulatory reviews will need to be progressively undertaken as designs advance and become more resolved to ensure compliance is achieved.

14. BCA 2019 Amendment 1 – Clause by Clause Assessment

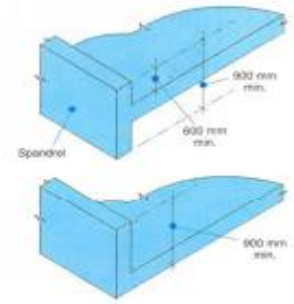
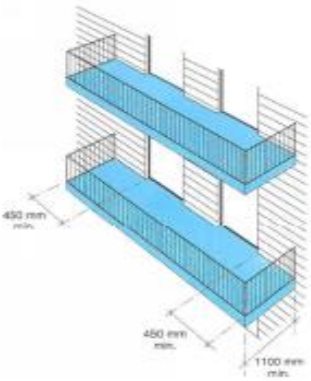
Clause	Description	Comment	Status
BCA Version			
BCA 2019 Amendment 1	**BCA version** The BCA is generally updated every 3 years with amendments influencing health, safety and amenity features required within the building. Legislation typically allows future BCA changes to be ignored provided substantial progress on the design of the development has previously occurred.	This report assumes that the applicable BCA version is BCA 2019 Amendment 1. In addition, requirements of the Premises Standards (PS) are covered as relevant.	Noted
Section A: General Provisions			
A5.2	**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.	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.	Compliance Readily Achievable
Part A6	**Classification and usage** Usage on each level of the building is as follows: **LEVEL** / **USE** / **CLASS** Ground / Library / 9b Level 1 / Auditorium / Flexible function space / 9b Meeting room / function space / 9b Level 2 / Smart work hub work space / 5 Level 3 / Library / Plant room / 9b		Noted
Part A7	**United buildings** Buildings are deemed united when two or more buildings adjoining each other are connected and used as one building.		Not Applicable

Clause	Description	Comment	Status
Section B: Structure			
B1.1	**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	Compliance Readily Achievable
B1.2	**Determination of individual actions** The magnitude of individual actions must be determined in accordance with Clause B1.2 of the BCA.	Certification from a qualified structural engineer will need to be provided at Construction Certificate stage	Compliance Readily Achievable
B1.3	-	No provisions	-
B1.4	**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 B1.4 of the BCA.	Certification from a qualified structural engineer will need to be provided at Construction Certificate stage	Compliance Readily Achievable
B1.5	**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.	-	Noted
B1.6	**Construction of buildings in flood hazard areas** The building if contained in a flood hazard area must comply with the ABCB Standard for Construction of Buildings in Flood Hazard Areas.	Applies to Class 2, 4, 9a and 9c buildings Confirmation from a hydraulic engineer will be required as to whether the building is located within a floor hazard area as defined under the BCA.	N/A
Part B	**Structure and importance level** Assessment of the building structure will be required for dead, live, wind, earthquake, fire and other loads required by current day AS Codes. The design of the structure must be based on the appropriate 'Importance Level' under BCA Table B1.2a.	The building has an importance level 3 in accordance with Table B1.2a. Certification from a qualified structural engineer will need to be provided at Construction Certificate stage	Compliance Readily Achievable
Section C: Fire Resistance			
Part C1 – Fire Resistance and Stability			
C1.1	**Type of construction required** **Type A Construction** BCA Type A fire resisting construction is required.	Details of the proposed construction and how it will achieve the required FRL is to be provided. Certification from a structural engineer will be required for FRL's of all structural elements including existing structure will need to be provided at Construction Certificate stage.	Compliance Readily Achievable

Clause	Description	Comment	Status
		Details of the proposed method of fire separation at the junction of floors and the external wall and the junction of fire rated internal walls and the external wall must be provided for assessment.	Additional Details Required
C1.2	**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: 4 storeys Effective Height: 12.6m (Level 3 RL20.60 - Level Ground RL 8.00)	Noted
C1.3	**Buildings of multiple classification**	The building is required to be constructed of Type A fire resisting construction as the classification of the top storey is a Class 9b	Noted
C1.4	**Mixed types of construction**		N/A
C1.5	**Two storey Class 2, 3 or 9c buildings**		N/A
C1.6	**Class 4 parts of buildings**		N/A
C1.7	**Open spectator stands and indoor sports stadiums**		N/A
C1.8	**Lightweight construction** Lightweight construction used in a wall system must comply with Specification C1.8. 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.	Details of the proposed systems to be installed must be in accordance with a tested prototype.	Compliance Readily Achievable
C1.9	**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	Architect and Structural engineer to make provisions for this requirement in the design. A detailed review of the external cladding must be undertaken to ensure that there are no combustible materials and non-complaint claddings have not been nominated that could increase the risk of fire spread via the external façade. Ensure all façade materials have a current Certificate of Conformity or a current Certificate of Accreditation, or the like to determine their acceptance by the Fire Safety Engineer and Fire Brigade	Additional Details Required

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. • Any product as determined by testing to AS 1530.1 • An appropriately BCA accredited product or system		
C1.10	**Fire hazard properties** *(NSW variation for Entertainment Venues)* Floor materials, floor coverings and wall and ceiling lining materials need to comply with prescribed fire hazard properties. Refer to Appendix C1.10 & 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.	Compliance Readily Achievable
C1.11	**Performance of external walls in fire** Concrete external walls that could collapse as complete panels are to be designed in accordance with Specification C1.11 to minimise the likelihood		N/A

Clause	Description	Comment	Status
	of external walls collapsing outwards in the event of a fire and separating from supporting members.		
C1.12		This Clause has deliberately been left blank	
C1.13	**Fire-protected timber: Concession** *Fire-protected timber* in a Class 2, 3 or 5 building may be used wherever an element is *required* to be *non-combustible*,		N/A
C1.14	**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 as specified under this clause.	Architect to make provisions for this requirement in the design.	Additional Details Required
Part C2 – Compartmentation and Separation			
C2.1	**Application of Part**	Clauses C2.2, C2.3 and C2.4 do not apply to a sprinkler protected carpark, open deck carpark or open spectator stand.	Noted
C2.2	**General floor area and volume limitations (Type A construction)** The floor area and volume limitations are: Class 5, 9b or 9c: 8,000m^2 and 48,000m^3	The floor area and volume of the building are within the maximum limitations outlined by Table C2.2. Refer to appendix C2.2 of this report for floor areas and volumes.	Complies
C2.3	**Large isolated buildings**		N/A
C2.4	**Requirements for open space and vehicular access**		N/A
C2.5	**Class 9a and 9c buildings**		N/A
C2.6	**Vertical separation of openings in external walls** Only applicable to a building of Type A Construction, which is not sprinkler protected.	In a building of Type A construction that is not sprinkler protects, a spandrel must be provided. The spandrel must be not less than 900mm in height, extended 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. Architect and Structural engineer to make provisions for this requirement in the design.	Additional Details Required

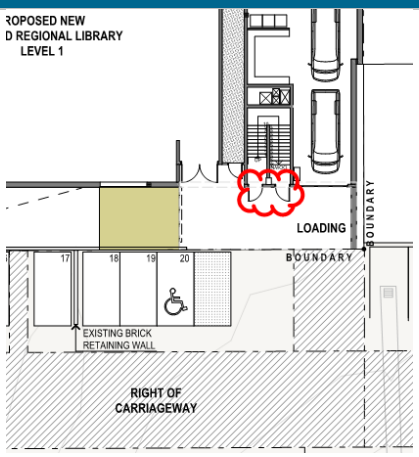
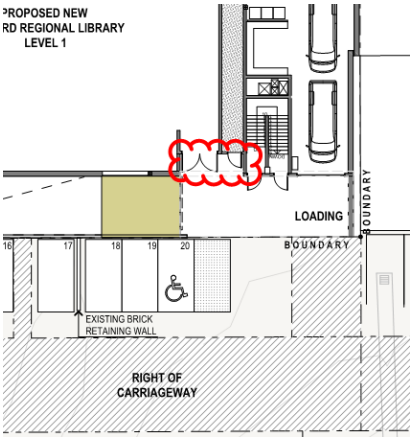
Clause	Description	Comment	Status
	 (i) Spandrels  (ii) Horizontal Projection		
C2.7	**Separation by fire walls** A fire wall must extend to the underside of a floor having an FRL required for a fire wall or the roof covering.	Architect and Structural engineer to make provisions for this requirement in the design.	Compliance Readily Achievable
C2.8	**Separation of classifications in the same storey** As the building has parts of different classifications located alongside one another in the same storey each building element must have the higher FRL prescribed in Specification C1.1 of the BCA or the parts must be separated by a fire wall.		N/A
C2.9	**Separation of classifications in different storeys** As different classifications are situated one above the other in adjoining storeys they must be separated in accordance with the DTS provisions of the BCA.		N/A
C2.10	**Separation of lift shafts** Openings for lift landing doors and services must be protected in accordance with the DTS provisions of Part C3 of the BCA	Architect and Structural engineer to make provisions for this requirement in the design.	Compliance Readily Achievable
C2.11	**Stairways and lifts in one shaft**	The lift is within its own shaft	Complies
C2.12	**Separation of equipment** Two-hour fire enclosure is required for: • lift motor rooms	Architect and services consultant to make provisions for this requirement in the design.	Additional Details Required

Clause	Description	Comment	Status
	• 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.		
C2.13	**Electricity supply system** A substation located within a building or main switchboard, which 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.	Architect and services consultant to make provisions for this requirement in the design.	Compliance Readily Achievable
C2.14	**Public corridors in Class 2 & 3 buildings**		N/A
Part C3 – Protection of Openings			
C3.1	**Application of Part**		Noted
C3.2	**Protection of openings in external walls** Openings in the external walls of the building are to be protected in accordance with C3.4, being fire rated windows, external sprinklers or the like, if: • 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 storey in which they occur.		N/A
C3.3	**Separation of external walls and associated openings in different fire compartments** External walls within the distances specified in Table C3.3 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 C3.4 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
C3.4	**Acceptable method of protection** Window openings that are required to be protected are to be protected by external wall wetting sprinklers with windows that are automatic closing		N/A

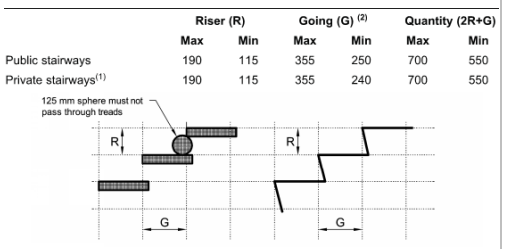
Clause	Description	Comment	Status
	or permanently fixed in the closed position, -/60/- fire windows that are automatic closing or permanently fixed closed or -/60/60 automatic closing fire shutters. Doorways are to be protected by external wall wetting sprinklers used with doors that are self-closing or automatic closing, or -/60/30 self-closing or automatic closing fire doors. Other openings, excluding voids, to be protected with internal or external wall wetting sprinklers or construction having an FRL not less than -/60/-		
C3.5	**Doorways in fire walls**		N/A
C3.6	**Sliding fire doors**		N/A
C3.7	**Protection of doorways in horizontal exits**		N/A
C3.8	**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 C3.4 if it is within 6m of, and exposed to, a window or other opening in the wall of the same building.	Architect to make provisions for this requirement in the design.	Compliance Readily Achievable
C3.9	**Service penetrations in fire-isolated exits** Service penetrations other than electrical wiring for essential service installations, pressurisation ducts with an FRL of -/120/60, or water pipes for fire services are not permissible.	Architect and services consultant to make provisions for this requirement in the design.	Compliance Readily Achievable
C3.10	**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 it exceeds 35,000mm^2 (175 X 200 mm).	Vertical transportation consultant to make provisions for this requirement in the design.	Compliance Readily Achievable
C3.11	**Bounding construction: Class 2, 3, 4 and 9 buildings** *(NSW variation for Class 9c Buildings and Entertainment Venues)* Doorways opening to public corridors are to be protected with self-closing -/60/30 fire doors.		N/A
C3.12	**Openings in floors and ceilings for services** Services passing through floors are to be placed within fire resisting shafts or in accordance with Clause C3.15.	Architect and services consultant to make provisions for this requirement in the design.	Compliance Readily Achievable
C3.13	**Openings in shafts** In a building of Type A construction, an opening in a wall providing access to a ventilating, pipe, garbage, or other service shaft must be protected by: • If it is a sanitary compartment - a door or panel which together with its frame, is non-combustible or has an FRL of not less than -	Architect and services consultant to make provisions for this requirement in the design.	Compliance Readily Achievable

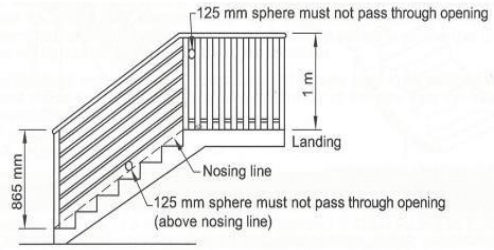
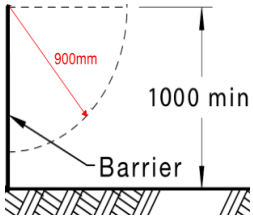
Clause	Description	Comment	Status
	/30/30, or • A self-closing -/60/30 fire door or hopper, or • An access panel with an FRL of not less than -/60/30, or • If the shaft is a garbage shaft - a door or hopper of non-combustible construction.		
C3.14	-	This clause has deliberately been left blank	-
C3.15	**Openings for service installations** Services penetrations through a building elements (other than an external wall or roof) that are 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 with Specification C3.15 Methods and materials used are to be identical to tested prototypes and in accordance with AS4072.1 and AS1530.4, and having achieved the required FRL or resistance to the incipient spread of fire or other specified method, or differ from a prototype assembly of the service, building element and protection method in accordance with Section 4 of AS 4072.1 Ventilation and air-conditioning systems are to be installed in accordance with AS/NZS 1668.1.	Architect and services consultant to make provisions for this requirement in the design.	Compliance Readily Achievable
C3.16	**Construction Joints** Construction joints in elements required to have a fire resistance with respect to integrity and insulation must be protected.	Construction joints are to be installed in accordance with a tested prototype in accordance with AS1530.4.	Compliance Readily Achievable
C3.17	**Columns protected with lightweight construction to achieve an FRL**	Architect and structural engineer to make provisions for this requirement in the design.	Compliance Readily Achievable
Section D: Access and Egress			
Part D1 - Provision for Escape			
D1.1	**Application of Part**		Noted
D1.2	**Number of exits required** *(NSW variation for Entertainment Venues)* At least two exits need to serve all areas of every storey as follows: • Class 9 storeys accommodating more than 50 persons • Any storey or mezzanine within an auditorium in an Entertainment Venue Access to an exit must be provided without passing through another SOU.	At least two exits are provided from each storey	Complies
D1.3	**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		Complies

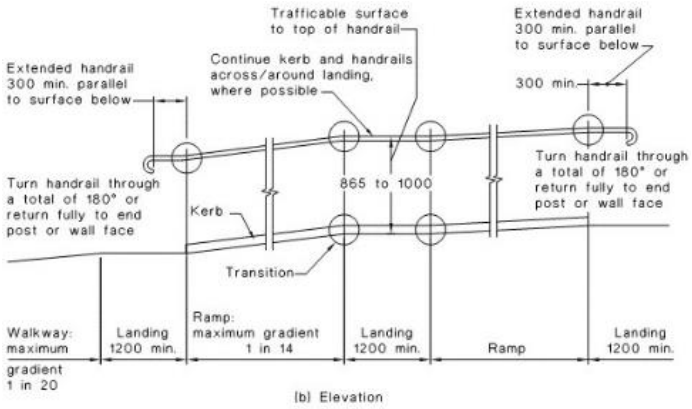
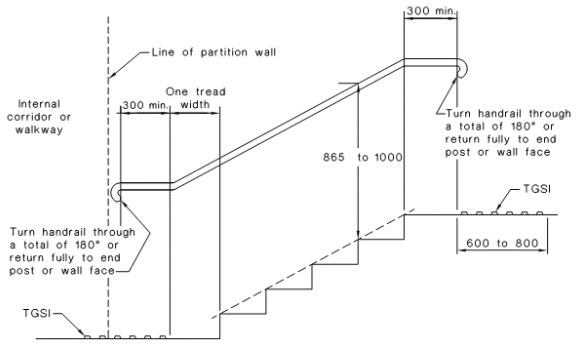
Clause	Description	Comment	Status
	protected building.		
D1.4	**Exit travel distances** No point on the floor must be more than 20m to an exit or a point in which travel in different directions to 2 exits is available, in which case, the maximum distance to 1 exit cannot exceed 40m.	The nominated exits in the building are listed in appendix D1.4 of the report. The following areas have been identified with distances exceeding 20m to a point of choice: 1. Ground floor North west - Children's Reading Play area – approx. 25m	Performance Solution
D1.5	**Distance between alternative exits** The following travel distance limits apply: • ≤ 20m to a single exit or to a point of choice to alternative egress paths, and • ≤ 40m to the closest alternative exit; • ≤ 60m travel distance between alternative exits and not less than 9m between alternative exits; • Exit paths to alternative exits should not converge at any point to be less than 6m apart.	The following areas have been identified with distances exceeding 60m between alternative exits when travelling through the point of choice: 1. Ground Floor - Staff work area – approx. 66m 2. Level 3 – Library area – approx. 67m	Performance Solution
D1.6	**Dimensions of exits and paths of travel to exits** In a required exit or path of travel to an exit the storey accommodates more than 200 persons, the aggregate unobstructed width, except for doorways, must be increased to— (i) 2 m plus 500 mm for every 60 persons (or part) in excess of 200 persons if egress involves a change in floor level by a stairway	Level 3 has a proposed population of 254 occupants and will require a minimum 2.5m aggregate unobstructed exit width. Level 3 is currently provided with approx. 2m aggregate unobstructed exit width via the fire isolated stairways.	Performance Solution
	(NSW variation for Entertainment Venues) In a Class 9b building used as an entertainment venue in parts of the building used by the public, the width of the **required exit or path of travel**, and the unobstructed width of each doorway must not be less than 1 m and not more than 3 m	The required doorways serving the entertainment venue parts of the building used by the public were measures to be less than the required 1m. Doorways serving entertainment venues must have a clear width of 1000mm. This is to be measured between panic bars and any other door hardware.	Compliance Readily Achievable
	(NSW variation for Entertainment Venues) *In a Class 9b building used as an entertainment venue where one or more paths of travel merge, the width of the combined path of travel must be not less than the sum of the required widths of those paths of travel*		Complies
D1.7	**Travel via fire-isolated exits** Each fire-isolated stairway must provide independent egress from each storey served and discharge directly, or by way of its own fire-isolated passageway to a road or open space.	The southern fire isolated stairway (stair 3) does not have direct access to road or open space. Access to the road from the exits discharging to the south is via a the carpark which is on a separate lots. The carpark has a number of easements and right of ways registered on the title.	Performance Solution

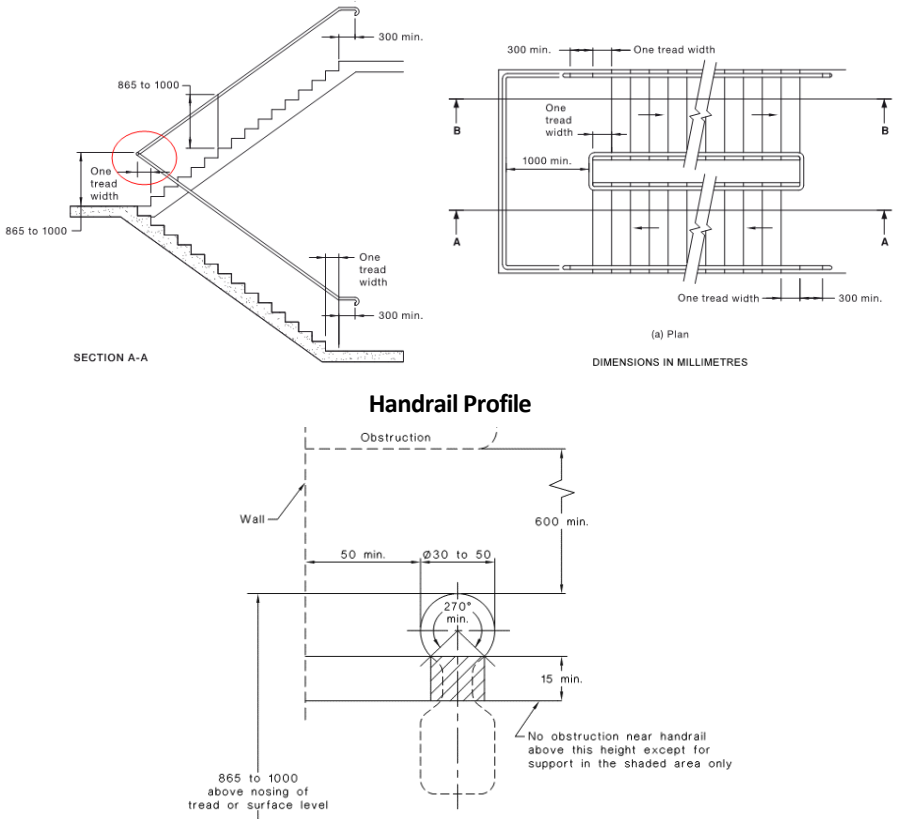
Clause	Description	Comment	Status
			
D1.8	**External stairways or ramps in lieu of fire-isolated exits**		N/A
D1.9	**Travel by non-fire-isolated stairways or ramps**		N/A
D1.10	**Discharge from exits** *(NSW variation for Entertainment Venues)* An exit must not be blocked nor be capable of being blocked at its point of discharge.	The southern exits on level 1 do not have directly access to road or open space. Access to the road from the exits discharging to the south is via the carpark which is on a separate lots. The carpark has a number of easements and right of ways registered on the title. 	Performance Solution
		Details of the methods of protection of the doors are required to be provided on the plans to demonstrate compliance against the requirements of BCA Clause D1.10	Compliance Readily Achievable
D1.11	**Horizontal exits**		N/A
D1.12	**Non-required stairways, ramps or escalators** Non-required stairs are permitted to connect up to 3 consecutive levels in a sprinklered building if one of the levels has direct access to open space		Compliance Readily Achievable
D1.13	**Number of persons accommodated**	Refer to Appendix D1.13.	Noted
D1.14	**Measurement of distances**		Noted
D1.15	**Method of measurement**		Noted
D1.16	**Plant rooms, lift machine rooms and electricity**		N/A

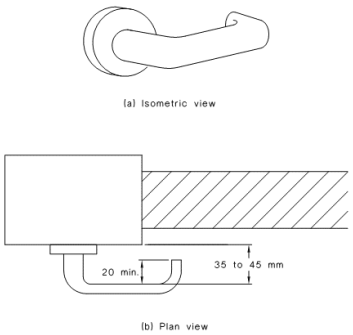
Clause	Description	Comment	Status
	network substations: Concession A ladder may be used in lieu of a stairway as an exit from: a) a plant room with a floor area not more than 100m^2, or b) all but one point of egress from a plant room with a floor area not more than 200m^2.		
D1.17	**Access to lift pits** Access requirements apply to lift pits over 3m in depth.	Lift consultant to confirm.	Compliance Readily Achievable
D1.18	**Egress from early childhood centres**		N/A
Part D2 – Construction of Exits			
D2.1	**Application of Part** *(NSW variation for Entertainment Venues)*		Noted
D2.2	**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	Architect and structural engineer to make provisions for this requirement in the design.	Compliance Readily Achievable
D2.3	**Non-fire-isolated stairways and ramps**		N/A
D2.4	**Separation of rising and descending stair flights**	Architect to make provisions for this requirement in the design. The current design does not correctly detail the separation between the rising and descending flights	Additional Details Required
D2.5	**Open access ramps and balconies**		N/A
D2.6	**Smoke lobbies**		N/A
D2.7	**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.	Architect and services consultants to make provisions for this requirement in the design. Install non-combustible linings to the internal walls, ceiling and doors of relevant cupboards and install smoke seals to the doors.	Compliance Readily Achievable
D2.8	**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.		N/A
D2.9	**Width of required stairways and ramps**		Noted

Clause	Description	Comment	Status
	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.		
D2.10	**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 D3 it must comply with AS1428.1. The surface of the ramp must have a non-slip finish.		N/A
D2.11	**Fire-isolated passageways** Fire isolated passageways are to have an FRL equivalent to the fire resisting stair shaft as specified in Specification C1.1 when tested from the outside		N/A
D2.12	**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
D2.13	**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 D2.14 when tested in accordance with AS 4586  	Further detail of the stairs will need to be provided to confirm compliance. Architect to make provisions for this requirement in the design.	Additional Details Required
D2.14	**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** **Wet Surface**	Certification / test reports on the slip resistance of the surfaces will need to be provided on constructed elements. Further detail of the stairs will need to be provided to confirm compliance. Architect to make provisions for this	Additional Details Required

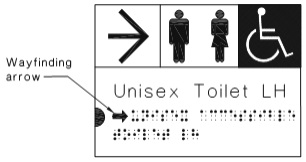
Clause	Description	Comment	Status
	<u>Conditions</u> / <u>Condition</u> 1:14 or steeper ramps: P4 or R11 / P5 or R12 Ramps of 1:14 to 1:20: P3 or R10 / P4 or R11 Tread or Landing Surface: P3 or R10 / P4 or R10 Nosing Strip or Landing Strip: P3 / P4	requirement in the design.	
D2.15	**Thresholds** *(NSW variation for Entertainment Venues)* Steps should not occur at doorways without a threshold landing except as follows: • 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 accordance with AS1428.1, • Or in any other case a single 190mm step is permitted at doors leading to the exterior.	Note that where access for people with disabilities is required it is not permitted to have a step at the threshold of a doorway Architect to make provisions for this requirement in the design.	Compliance Readily Achievable
D2.16	**Barriers to prevent falls** *(NSW variation for Entertainment Venues)* Requirements apply to the provision and design of barriers at locations where a person could fall 1m or more. Generally, 125mm maximum gap size limits apply between balusters or rails and a 1m minimum height applies, with alternate dimensions permitted in fire isolated stairs and industrial areas.  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. Climbable elements cannot be located within 900mm of the top rail of each balustrade where the fall is greater than 4m. This measurement is taken in an arc as seen in the extract below  	Further detail of the balustrade will need to be provided to confirm compliance. Architect to make provisions for this requirement in the design.	Additional Details Required
D2.17	**Handrails** Handrails to exits including parts of fire isolated exit serving an area required to be accessible to people	Handrail details to be confirmed by the access consultant Handrails are to be provided in compliance	Compliance Readily Achievable

Clause	Description	Comment	Status
	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 • Continuous at internal (return) landings • Provided with handrail extensions and 180 degree curled ends	with Clause D3.3 and include 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 one side of stair flights and located not less 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	
	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		

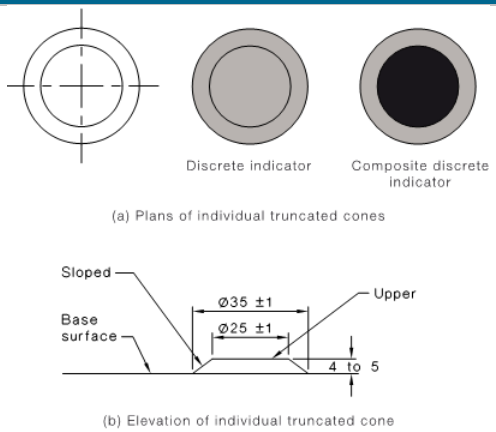
Clause	Description	Comment	Status
			
D2.18	**Fixed platforms, walkways, stairways and ladders** Platforms, walkways, stairs, ladders and the like that give access to and around plant and equipment, machine rooms, attic spaces and other low use areas of the building are permitted provided that construction details are to AS1657.		N/A
D2.19	**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.	Auto sliding doors at the entries into the building must comply with these requirements	Compliance Readily Achievable
D2.20	**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. Must not encroach more than 500mm into the required width of the stair or 100mm when fully open and swing in the direction of travel.		Complies
D2.21	**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.	All exit doors and doors in the path of travel must comply.	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 serving a storey or room accommodating more than 100 people or an Entertainment Venue must be provided with a **panic bar.**	Architect to make provisions for this requirement in the design.	Compliance Readily Achievable
D2.22	**Re-Entry from Fire-Isolated Exits**		N/A
D2.23	**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 Clause 183 of the Environmental Planning and Assessment Regulation 2000 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.	Compliance Readily Achievable
D2.24	**Protection of openable windows**		N/A

Clause	Description	Comment	Status
D2.25	**Timber stairways: Concession**		N/A
NSW D2.101	**Doors in the path of travel in an Entertainment Venue** In a Class 9b building used as an entertainment venue, a doorway in a path of travel: (A) must not be fitted with a collapsible gate, accordion door, turnstile or rigid barrier; and (B) if fitted with a door, must be— (aa) a swing door which opens in the direction of egress; and (bb) doors hung in two folds where the unobstructed width of the doorway is more than 1 m; and (C) a doorway or opening within sight of the audience but not intended for egress must have a notice displayed clearly indicating its purpose and such a notice must not be internally illuminated	Architect to make provisions for this requirement in the design.	Compliance Readily Achievable
Part D3 – Access for People with Disabilities			
D3.1	**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	Compliance Readily Achievable
D3.2	**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
D3.3	**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 E3.6. 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	Refer to access consultant's report.	Compliance Readily Achievable

Clause	Description	Comment	Status
	more than 3 storeys and with a floor area of each storey, excluding the entrance floor, of not more than 200m^2. Pile height or pile thickness of carpets shall comply with the requirements of this Clause and AS 1428.1.		
D3.4	**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.		N/A
D3.5	**Accessible carparking**		N/A
D3.6	**Signage** Braille and tactile signage complying with Specification D3.6 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 E4.5 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	Signage details must be in accordance with AS1428.1 - 2009 and Specification D3.6 of the BCA.	Compliance Readily Achievable

Clause	Description	Comment	Status
	unisex sanitary facility.		
D3.7	**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 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.	Refer to access consultant's report.	Compliance Readily Achievable
D3.8	**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 D3.4, 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	Refer to access consultant's report.	Compliance Readily Achievable

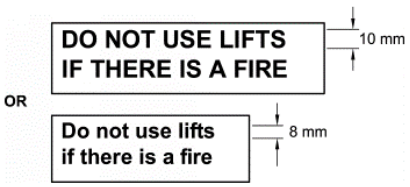
Clause	Description	Comment	Status
			
D3.9	**Wheelchair seating spaces in Class 9b assembly buildings** Where fixed seating is provided in a Class 9b assembly building, wheelchair seating spaces comply with AS 1428.1 must be provided in accordance with Table D3.9.	Refer to access consultant's report.	Compliance Readily Achievable
D3.10	**Swimming pools**		Compliance Readily Achievable
D3.11	**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.	Refer to access consultant's report.	Compliance Readily Achievable
D3.12	**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.	Glazed shopfronts will need to have solid and non-transparent decals installed in accordance with AS 1428.1	Compliance Readily Achievable
Section E: Services and Equipment			
Part E1 – Fire Fighting Equipment			
E1.1	-	This Clause has deliberately been left blank	
E1.2	-	This Clause has deliberately been left blank	
E1.3	**Fire hydrants** The building requires a fire hydrant system in accordance with AS 2419.1 – 2005.	Full compliance with AS2419.1 will be required unless varied via fire brigade approval. The hydraulic engineer must ensure that compliant coverage is provided to all areas of the building from the internal hydrants and must provide design certification to accompany the drawings certifying the design complies with Clause E1.3 of the BCA and AS2419.1 – 2005 (noting any non-compliances, which are to be addressed as	Compliance Readily Achievable

Clause	Description	Comment	Status
		an Alternative Solution). *Note 1: The hydrant hose must extend at least 1m into rooms to be counted for coverage.* *Note 2: If full coverage is not provided from hydrants located within the stairs alone. Intermittent hydrant outlets can be installed to achieve a compliant coverage. The hydrants are to be located not more than 25m from another hydrant to allow for progressive attack.*	
	Where a sprinkler system is installed in the building in accordance with AS 2118.1, AS 2118.4, AS 2118.6, FPAA101H or FPAA101D the fire hydrant booster protection requirements of clauses 7.3(c)(ii) and 7.3(d)(iii) of AS 2419.1 do not apply The fire brigade booster assembly is required to be installed in accordance with AS2419.1 – 2005 except that it may be located between 3.5m and 10m of the building where the assembly is protected by an adjacent fire-rated freestanding wall that— • achieves an FRL of not less than 90/90/90; and • extends not less than 1 m each side of the outermost fire hydrant booster risers within the assembly and is not less than 3 m wide; and extends to a height of not less than 2 m above finished ground level.	The hydraulic engineer must ensure the fire hydrant booster complies with AS2419.1. Any non-compliance is to be address by way of a Performance Solution from an Accredited Fire Engineered. ***The location of the hydrant booster will need to be discussed with FRNSW to confirm whether it is acceptable for their operational requirements.***	Performance Solution
E1.4	**Fire hose reels** Fire hose reel coverage to AS2441-2005 is required throughout with hose reels located adjacent to stairs and exits. Where coverage is not achieved with hose reels located Additional hose reels are permitted to be located along the paths of travel to achieve coverage where Hoses are not permitted to pass through fire or smoke doors to achieve hose reel cover. Note: Fire hose reels not required to: - • Class 2, 3, 4, 5 and 9c buildings; • Class 8 electricity network substations; • Classrooms and associated corridors in primary and secondary schools	The hydraulic engineer must ensure that compliant coverage is provided to all areas of the building and must provide design certification to accompany the drawings certifying the design complies with Clause E1.4 of the BCA and AS2441 – 2005.	Compliance Readily Achievable
E1.5	**Sprinklers** Fire sprinkler protection to AS2118.1-1999, AS2118.4-1995 or 2012 and AS2118.6-2012 as relevant is a mandatory requirement for the project if:- Sprinkler pumps and valves must be accessible from the street. Sprinkler system activation must be linked to an audible occupant warning system. Sprinkler hazard Class under AS2118 needs to be	Refer to Part G3 – Atrium Construction	Performance Solution

Clause	Description	Comment	Status
	agreed where uncertainty of usage under Appendix 1 of the Code occurs.		
E1.6	**Portable fire extinguishers** Portable Fire Extinguishers are required be installed to Table E1.6 and AS 2444 requirements, at: • Throughout Class 5 buildings • emergency services switchboards • kitchens • flammable liquid stores • special risk areas • where fire hose reels are not installed		Compliance Readily Achievable
E1.7	-	This Clause has deliberately been left blank	
E1.8	**Fire control centre**		N/A
E1.9	**Fire precautions during construction** Fire services are required during construction, including fire hydrants and hose reels which must be active and operational after the building reaches a construction stage effective height of 12m. When the building reaches 12m effective height: • All required hydrants and hose reels must be operational on every storey covered by a roof or floor slab over, except for the two uppermost storeys. • Any required booster connections must be installed.	Further discussion required with builder to determine that this is included in their program. BCA compliance with respect to fire services during construction can be problematic as hydrants with required pressures and flows and booster connections often cannot be achieved at the required time. A temporary fire protection system, possibly with temporary boosters and no fire pumps, may need to be agreed with the fire brigade. This needs to be put in place early in the construction programme and may require liaison with the builder and his fire services contractor.	Compliance Readily Achievable
E1.10	**Provisions for special hazards**		N/A
Part E2 – Smoke Hazard Management			
E2.1	**Applicable of Part**	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	Noted
E2.2	**Smoke hazard management - General requirements** *(NSW variation for Entertainment Venues)* **Public assembly buildings** The following smoke hazard management systems are required:- • Air-handling systems serving multiple fire compartments and not forming part of a smoke hazard management system should be designed to AS1668.1 or should be fitted with smoke dampers and set to automatically shut down in fire mode. Smoke detectors to BCA E2.2a are	It may be possible to fire compartment the building so that there is no compartment over 2,000m^2. *However, also refer to the requirements under Specification G3.6 for Atriums. Atrium provisions require sprinklers, smoke detection, smoke exhaust, stair pressurisation, EWIS and emergency generators.*	Performance Solution

Clause	Description	Comment	Status

	required in addition to sprinklers for this purpose.
	• Having a rise in storeys of more than 2 it is required to be provided with either of the following:
	  ○ Each fire isolated stairway provided with stair pressurisation in accordance with AS1668.1; or
	  ○ A zone pressurisation system in accordance with AS1668.1 if the building has more than 1 fire compartment; or
	  ○ An automatic smoke detection and alarm system in accordance with Specification E2.2a and AS1670.1; or
	  ○ A sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification E1.5.
	• Where a fire compartment is more than 2,000m^2 it is required to be provided with either:
	  ○ Automatic smoke exhaust system complying with Specification E2.2b.
	Stages and backstages
	A building or part of a building used as an assembly building which has a stage with a floor area of more than 50m^2 and not more than 150m^2 must, over the stage, be provided with an automatic smoke exhaust system complying with Specification E2.2b		

E2.3	**Provisions of special hazards**		N/A
Part E3 – Lift Installations			
E3.1	**Lift installations** Electric and electrohydraulic lifts must comply with the design requirements of BCA Specification E3.1.	Vertical transportation consultant to make provisions for this requirement in the design.	Compliance Readily Achievable
E3.2	**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 level to which lift access is provided.	Vertical transportation consultant to make provisions for this requirement in the design	Compliance Readily Achievable
E3.3	**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.  Vertical transportation consultant to make provisions for this requirement in the design	Compliance Readily Achievable
E3.4	**Emergency lifts**		N/A
E3.5	**Landings** Access and egress to and from liftwell landings must comply with the Deemed-to-Satisfy Provisions of	Architect and Vertical transportation consultant to make provisions for this requirement in the design	Compliance Readily Achievable

Clause	Description	Comment	Status
	Section D.		
E3.6	**Passenger lifts** Every passenger lift must be one of the types identified n Table E3.6a, have accessible features in accordance with Table E3.6b and not reply on a constant pressure device for its operation if the lift car is fully enclosed.	Vertical transportation consultant to make provisions for this requirement in the design	Compliance Readily Achievable
E3.7	**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.	Vertical transportation consultant to make provisions for this requirement in the design	Compliance Readily Achievable
E3.8	**Residential care buildings**		N/A
E3.9	**Fire service recall control switch** The fire service control switch must be located at the landing nominated by the appropriate authority and, when activated, must return all lifts to the nominated floor. If a lift car drive control has been activated, it shall override the landing fire service control switch.	Vertical transportation consultant to make provisions for this requirement in the design	Compliance Readily Achievable
E3.10	**Lift car fire service drive control switch** The lift car service drive control must be activated from within the lift car. The switch is to be located between 600mm and 1500mm above the lift car floor and be labelled '**FIRE SERVICE**" in indelible white lettering on red background. The "**OFF**" and "**ON**" positions are to be identified.	Vertical transportation consultant to make provisions for this requirement in the design	Compliance Readily Achievable
Part E4 – Emergency Lighting, Exit and Warning Systems			
E4.1	-	This clause has been intentional left blank	-
E4.2	**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	Electrical consultant to make provisions for this requirement in the design.	Compliance Readily Achievable

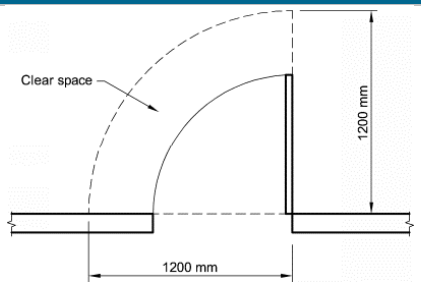
Clause	Description	Comment	Status

	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 opening directly to the road or open space; or
	  • if the egress involves a vertical rise within the building of more than 1.5m.		

E4.3	**Measurement of distances**		Noted
E4.4	**Design and operation of emergency lighting** Emergency lighting must comply with to AS2293.1	Electrical consultant to make provisions for this requirement in the design.	Compliance Readily Achievable
E4.5	**Exit signs** Exit signs are to be provided in accordance with Clause E4.5 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 door serving as or forming part of a required exit in a storey required to be provided with emergency lighting.	Electrical consultant to make provisions for this requirement in the design.	Compliance Readily Achievable
E4.6	**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	Electrical consultant to make provisions for this requirement in the design.	Compliance Readily Achievable
E4.7	**Class 2 and 3 buildings and Class 4 parts: Exemptions**		N/A
E4.8	**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 E4.8	Electrical consultant to make provisions for this requirement in the design.	Compliance Readily Achievable
E4.9	**Emergency warning and intercom systems** An emergency warning and intercom system complying where applicable with AS 1670.4 must be installed in a Class 9b building used as a theatre, public hall, or the like, having a floor area more than	Details demonstrating compliance and design certification will be required from services consultants at Construction Certificate stage. Electrical consultant to make provisions	Compliance Readily Achievable

Clause	Description	Comment	Status
	1000 m² or a rise in storeys of more than 2.	for this requirement in the design.	
Section F: Health and Amenity			
Part F1 – Damp and Weatherproofing			
F1.0	**Water proofing of external walls** Weatherproofing of external wall systems must be in accordance with BCA Verification Method FV1.	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 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.	Compliance Readily Achievable
F1.1	**Stormwater drainage** Stormwater drainage must comply with AS/NZS 3500.3.	Hydraulic consultant to make provisions for this requirement in the design.	Compliance Readily Achievable
F1.2	-	This clause has deliberately been left blank	-
F1.3	-	This clause has deliberately been left blank	-
F1.4	**External above ground membranes** External waterproofing membrane systems for roofs, decks, balconies and the like must comply with AS4654 Parts 1 and 2.	The standard membrane detailing for waterproofing including minimum upturn termination lengths, requirements for stepped balcony details at doorways and windows and provision of continuous grates where stepping does not occur.	Compliance Readily Achievable
F1.5	**Roof coverings** Metal sheet roofing complying with AS 1562.1	Architect to make provisions for this requirement in the design.	Compliance Readily Achievable
F1.6	**Sarking** Sarking type materials used for weatherproofing of roofs and walls must comply with AS/NZS 4200 Parts 1 and 2.	Architect to make provisions for this requirement in the design.	Compliance Readily Achievable
F1.7	**Water proofing of wet areas in buildings** Water proofing of wet areas within a building to comply with AS 3740.	Architect to make provisions for this requirement in the design.	Compliance Readily Achievable
F1.8	-	This clause has deliberately been left blank	-
F1.9	**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	Architect to make provisions for this requirement in the design.	Compliance Readily Achievable

Clause	Description	Comment	Status
	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.		
F1.10	**Damp-proofing of floors on the ground** A vapour barrier in accordance with AS2870 is to be provided beneath the basement floor slab.	Architect to make provisions for this requirement in the design.	Compliance Readily Achievable
F1.11	**Provision of 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 the floor graded to the floor waste to permit drainage of water.		N/A
F1.12	**Subfloor ventilation** The lower ground sub floor space is to be cleared of all building debris and vegetation and be cross ventilated in accordance with Table F1.12 by evenly distributed openings provided in the external walls Additionally the sub floor space is to contain no dead air spaces and be graded to prevent water ponding under the building.		N/A
F1.13	**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.	Architect to make provisions for this requirement in the design.	Compliance Readily Achievable
Part F2 – Sanitary and Other Facilities			
F2.1	**Facilities in residential buildings**		N/A
F2.2	**Calculation of number of occupants and fixtures**		Noted
F2.3	**Facilities in Class 3 to 9 buildings** Toilet facilities are required in appropriate numbers based on the number of persons accommodated.	Refer to appendix F2.3 of this report. The BCA does not permit unisex facilities other than Accessible WCs. As such we have allocated the Unisex PDA on level 2 as male urinal.	Complies
F2.4	**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.	Refer to access consultant's report	Compliance Readily Achievable
F2.5	**Construction of sanitary compartments** Where clear space between closet pan and doorway is less than 1.2m, doors must open outwards, slide or be readily removable from outside.	All hinged doors that swing inward to sanitary facilities and do not comply with achieving a 1200mm clearance to pan are required to be installed with lift-off hinges	Compliance Readily Achievable

Clause	Description	Comment	Status
			
F2.6	**Interpretation: Urinals and washbasins**	Each 600mm length of a continuous urinal trough is counted as 1 urinal.	Noted
F2.7	*(NSW variation – Deleted)*	-	-
F2.8	**Waste management**		N/A
F2.9	**Accessible adult change facilities**		N/A
Part F3 – Room Heights			
F3.1	**Height of rooms and other spaces** Generally, a minimum ceiling height of 2.4m is required throughout. In a Class 9b building in a 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;	Architect to make provisions for this requirement in the design.	Compliance Readily Achievable
Part F4 – Light and Ventilation			
F4.1	**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 aged care buildings. • To school classrooms and early childhood centres.		N/A
F4.2	**Methods and extent of natural lighting**		N/A
F4.3	**Natural light borrowed from adjoining room**		N/A
F4.4	**Artificial lighting** The artificial lighting system must comply with AS/NZS 1680.0.	Electrical Consultant to make provisions for this requirement in the design.	Compliance Readily Achievable
F4.5	**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 F4.6 or mechanical ventilation complying with the requirements of AS1668.2 as required by Clause F4.5 of the BCA.	Mechanical Consultant to make provisions for this requirement in the design.	Compliance Readily Achievable

Clause	Description	Comment	Status
F4.6	**Natural ventilation**		N/A
F4.7	**Ventilation borrowed from adjoining room**		N/A
F4.8	**Restriction on location of sanitary compartments**		Complies
F4.9	**Airlocks**		N/A
F4.10	-	This clause has intentionally been left blank	-
F4.11	**Carparks**		N/A
F4.12	**Kitchen local exhaust ventilation**		N/A
Part F5 – Sound Transmission and Insulation			
Part F5	**Application of Part** Applicable to Class 3, 3 and 9c buildings		N/A
Part F6 – Condensation management			
Part F6	**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
Section G: Ancillary Provisions			
Part G1- Minor Structures and components			
G1.1	**Swimming pools** *(NSW variation for swimming pools)*		N/A
G1.2	**Refrigerated chambers, strong rooms and vaults**		N/A
G1.3	**Outdoor play spaces** Any outdoor play space in a Class 9b early childhood centre must be enclosed on all sides with a barrier which complies with AS 1926.1.		N/A
NSW G1.101	**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			
G2.1	-	This clause has intentionally been left blank	-
G2.2	**Installation of appliances**		N/A
G2.3	**Open fireplaces**		N/A
G2.4	**Incinerator rooms**		N/A
Part G3 - Atrium Construction			
G3.1	**Application of Part**	There is an atrium which is directly connected to ground floor and level 3. Level 1 and 2 are connected via an open balcony. However, the balconies are located more than 10m behind the building line. Although it is an unconventional atrium it is still	Performance Solution

Clause	Description	Comment	Status
		determined to connect 4 storeys. A fire safety engineer will need to review the design and requirements under Part G3 and develop an appropriate performance solution to deal with fire separation and smoke hazard management.	
G3.2	**Dimensions of atrium well** Minimum 6m diameter atrium well is required.	The atrium well does not have a well with a minimum diameter of 6m.	Performance Solution
G3.3	**Separation of atrium by bounding walls** An atrium well is required to be separated from the remainder of the building by bounding walls not more than 3.5m from the perimeter of the atrium well, except in the case of 3 consecutive storeys.	The atrium is capable being separated from level 3 by bounding walls that are not more than 3.5m from the atrium well.	Compliance Readily Achievable
G3.4	**Construction of bounding walls** Bounding walls must have an FRL not less than 60/60/60 or constructed of fixed toughened safety glass or wired safety glass in non-combustible frames protected with wall wetting sprinklers in accordance with Specification G3.8.	The walls bounding the atrium well on level 3 are to achieve he required construction specified under this Clause.	Compliance Readily Achievable
G3.5	**Construction of balconies** If a bounding wall separating an atrium from the remainder of the building is set back from the atrium well, an imperforate and non-combustible barrier not less than 1 m high must be provided.		Performance Solution
G3.6	**Separation at roof** The atrium roof must have an FRL not less than that prescribed in Table 3 of Specification C1.1 or the roof structure and membrane are to be protected by a sprinkler system complying with Specification E1.5 and G3.8	Sprinkler protection is not proposed in the building,	Performance Solution
G3.7	**Means of egress** All areas within the atrium must have at least 2 means of egress.	Each storey in the building is provided with 2 exits.	Complies
G3.8	**Fire and smoke control systems** Sprinklers are to be provided throughout in accordance with Specification E1.5 and G3.8. A smoke control system complying with AS/NZS1668.1 and Specification G3.8 is required throughout. An automatic fire detection and alarm system must comply with AS1670.1 and Specification G3.8. A sound system and intercom system for emergency purposes must be provided in accordance with AS1670.4 and must incorporate visual warning devices that operate on alarm and display the words “EVACUATE” in red letters. A suitable alternative power supply (emergency generator) must be provided to operate “required” safety systems in the building in accordance with Specification G3.8. Fire isolated stairways are required to be provided automatic air pressurisation in accordance with AS/NZS1668.1.	The fire safety engineer will need to undertake an assessment to determine required fire services that will need to be provided in the building or whether it is possible remove fire service under a Performance Solution.	Performance Solution

Clause	Description	Comment	Status
Part G4 - Construction in Alpine Areas			
Part G4	**Application of Part**		N/A
Part G5 - Construction in Bushfire Prone Areas			
Part G5	**Application of Part**	The building is not situated within bushfire prone land.	N/A
Part G6 – Occupiable outdoor areas			
Part G6	**Application of Part** Applies to occupiable outdoor areas in addition to 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 G6.2, Part G6 does not apply to occupiable outdoor areas of individual resident rooms or outdoor occupiable areas less than 10m^2.		N/A
Section H: Special Use Buildings – Auditoriums, Public Halls, Public Transport Buildings			
Part H1 - Class 9b Buildings			
H1.1	**Application of Part** *(NSW variation for Entertainment Venues)* For a Class 9b building that is an entertainment venue refer to NSW Part H101.	Applies every enclosed Class 9b building, which is not an entertainment venue which— I. is a school assembly, church or community hall with a stage and any backstage area with a total floor area of more than 300m^2; or II. otherwise, has a stage and any backstage area with a total floor area of more than 200m^2; or III. has a stage with an associated rigging loft. Notwithstanding the above- I. H1.4 applies to every open or enclosed Class 9b building; and II. H1.7 applies to every enclosed Class 9b building.	N/A
H1.2	**Separation** A theatre, public hall or the like must— (a) have a sprinkler system complying with Specification E1.5; or (b) have the *stage*, *backstage* area and accessible under-*stage* area separated from the audience by a proscenium wall in accordance with H1.3.		N/A
H1.3	**Proscenium wall construction** A proscenium wall must comply with Specification H1.3		N/A
H1.4	**Seating area** 1) The gradient of the floor surface must not be steeper than 1 in 8, or the floor must be stepped so that—	Details of the seating within the lecture theatres are to be provided for assessment.	Additional Details Required

Clause	Description	Comment	Status
	a) a line joining the nosings of consecutive steps does not exceed an angle of 30° to the horizontal; and b) the height of each step in the stepped floor is not more than 600 mm; and c) the height of any opening in such a step is not more than 125 mm 2) Where an aisle divides the stepped floor and the difference in level between any 2 consecutive steps exceeds 230 mm but not 400 mm an intermediate step must be provided in the aisle. If the difference in level exceeds 400 mm then 2 equally spaced intermediate steps must be provided. The going of intermediate steps must be not less than 270 mm 3) The clearance between rows of fixed seats used for viewing performing arts, sport or recreational activities must be not less than— a) 300 mm if the distance to an aisle is not more than 3.5 m; or b) 500 mm if the distance to an aisle is more than 3.5 m.		
H1.5	**Exit from stages**		N/A
H1.6	**Access to platforms and lofts** A stairway that provides access to a service platform, rigging loft, or the like, must comply with AS 1657		N/A
H1.7	**Aisle lights** In every enclosed Class 9b building, where in any part of the auditorium, the general lighting is dimmed or extinguished during public occupation and the floor is stepped or is inclined at a slope steeper than 1 in 12, aisle lights must be provided to illuminate the full length of the aisle and tread of each step.	Details of the proposed aisle lighting are to be provided	Additional Details Required
NSW Part - H101 Entertainment Venues other than Temporary Structures and Drive-In Theatres			
H101.1	**Application of Part** This Part applies to every entertainment venue as described in the Environmental Planning and Assessment Regulation 2000.	Entertainment Venue is defined as a building used as a cinema, theatre or concert hall or an indoor sports stadium.	Applicable
H101.2	**Fire separation** If an entertainment venue forms part only of a building, then the whole of the entertainment venue; or the part containing the stage, backstage area and auditorium must be separated from the other parts of the building by construction having an FRL of not less than 60/60/60.	The auditorium should be fire separated from the remainder of the building by construction with an FRL not less than 60/60/60.	Compliance Readily Achievable
H101.3	**Foyer space** An entertainment venue used principally for the purpose of exhibiting films or conducting live stage productions must be provided with foyer		N/A

Clause	Description	Comment	Status
	space (excluding stairways and concession areas) on the basis of at least 0.25m^2 for each person that the auditorium accommodates.		
H101.4	**Sprinkler systems for common foyers** Where 2 auditoriums have a common foyer then that foyer must be separated from any adjoining foyer by construction with an FRL of 60/60/60. If a foyer serves more than 2 auditoriums a sprinkler system complying with Specification E1.5 must be provided throughout the storey containing the foyer and throughout each storey in the building below the foyer.		N/A
H101.5	**Conventional stages** A room or area not separated from the conventional stage by construction with an FRL not less than 60/60/60 is then taken to form part of the stage. A small stage has an area of more than 50m^2 but not more than 150m^2. A large stage has an area more than 150m^2 and must have sprinklers installed directly above the stage, a proscenium opening protected by a safety curtain, a line of open drenchers or open sprinklers above the proscenium opening and have 2 or means of egress.		N/A
H101.6	**Non-conventional stages** A small stage has a floor area of more than 50m^2 and not more than 150m^2 and must be provided with 2 means of egress. A large stage has an area more than 150m^2 and misty have 2 means of egress from the backstage area.		Compliance Readily Achievable
H101.7	**Flying scenery** Where there is a grid or other means of flying scenery over a conventional stage or non-conventional stage: (i) the stage must be provided with a sprinkler system complying with Specification E1.5; and (ii) a fly gallery, bridge grid, rigging loft, tie gallery or electric light perch must— (A) comply with AS 1657; and (B) be of non-combustible construction; (iii) a fly gallery must be provided with at least 2 means of egress, one on each side of the stage; (iv) a grid or rigging loft must be provided with at least 2 means of egress; (v) if exposed steel is used in the construction of a roof, fly or tie gallery, the roof, fly or tie gallery must be so designed that, in the event of its structural failure due to fire, the wall structure of the building will not be affected. (vi) structural steel supporting the stage tower must be enclosed by masonry or concrete and have an FRL of not less than 120/120/120		N/A

Clause	Description	Comment	Status
	In the case of a conventional stage, the following additional requirements apply: • The proscenium wall must: (A) have an FRL of not less than 120/120/120; and (B) have the proscenium opening protected by a rigid safety curtain in accordance with NSW H101.10.1; • The walls forming the stage area, and the area beneath the stage, must be constructed of masonry or concrete and have an FRL of not less than 120/120/120		
H101.8	**Load notice** A notice indicating the actual distributed and concentrated load for which the stage floor has been designed must be conspicuously and permanently displayed in a position adjacent to the stage floor. This notice must be in legible letters and figures— (a) at least 50 mm high; and (b) on a contrasting background		Compliance Readily Achievable
H101.9	-	This clause has deliberately been left blank.	-
H101.10	**Safety curtains** A safety curtain required by NSW H101.5.3 must: (a) be made of non-combustible material; and (b) be so fitted that, when it is closed, it forms an efficient smoke seal between the stage and the auditorium; and (c) be capable of withstanding a pressure differential of 0.5 k Pa over its entire surface area; and (d) be run on steel guides located on each side of the proscenium opening; and (e) remain engaged in its guides if the guides, together with their fittings and attachments and that part of the curtain engaged in the guides, are subjected to a pressure differential of 1 k Pa; and (f) be of sufficiently robust construction to withstand damage by scenery, stage properties and falling debris; and (g) be capable of closing the proscenium opening within 30 seconds, either by gravity slide or by motor assisted mechanisms; and (h) have manual controls, located on each side of the stage, for the closing of the curtains; and (i) have a notice displayed adjacent to the operating controls, in clear and legible letters and symbols of adequate size, indicating its use and operation; and (j) when operated, actuate a distinctive warning alarm audible to persons on the stage and must		N/A

Clause	Description	Comment	Status
	not be reliant for its operation solely on the primary electricity supply; and (k) have the words "Safety Curtain" exhibited on the curtain in clear and legible letters of adequate size to enable them to be read from all parts of the auditorium.		
H101.11	**Seating in rows** Number of seats Where seating is arranged in rows, the maximum of seats in each row must not exceed— • 8 where there is an aisle at one end only of the row, or • 16 where there are aisles on both ends of the row Chairs in auditoriums Chairs used for seating must: • where they have arms, be at least 500 mm from centre to centre, and • where they do not have arms, be at least 450 mm from centre to centre; and • have a minimum lateral clearance of at least 300 mm between- ○ the front of each chair and the back of the chair in front; or ○ if a guardrail is provided in front of the chairs, between the front of each chair and the guardrail; and • have a distance of at least 950 mm between the back of each chair and the back of the chair in front • The chairs must be securely fastened. • Where seating is securely fastened to the floor and arranged in rows of concentric circles, semi-circles or segments of circles, with radiating aisles: • the number of seats in each row between 2 aisles must not exceed 24, and • each seat must have a minimum lateral clearance of at least 325 mm between the front of the seat and the back of the seat in front and have a distance of at least 975 mm between the back of the seat and the back of the seat in front. Platforms and steps Each aisle must have a width of at least 1000 mm and each cross-over must have a width of at least 1500 mm	Details of the proposed seating rows are to be provided	Additional Details Required
H101.12	**Continental seating**		

Clause	Description	Comment	Status
H101.13	**Provision of guardrails** Guardrails must be provided: • along the fascia of each balcony or box; • if there is a stepped floor, along the front edge of each cross-over; and • where NSW H101.13.2 and NSW H101.13.3 apply		Additional Details Required
H101.14	**Guardrails** A guardrail provided along the front edge of a cross-over on a stepped floor must be at least 750 mm high and must extend for the full distance between aisles, or between a wall and an aisle, or for such other distance as considered necessary.		Additional Details Required

H101.15	**Dressing rooms**
	A dressing room or 2 or more adjoining dressing rooms, having a total floor area of more than 50 m^2, must
	• be separated from other parts of the building by construction having an FRL of not less than 60/60/60;
	• have at least 2 means of egress as remote from each other as possible, one of which must discharge
	  ○ directly to a road or open space; or
	  ○ through a fire-isolated exit to a road or open space
			N/A

H101.16	**Storerooms** A storeroom must be separated from other parts of the building by construction having an FRL of not less than 60/60/60.		Compliance Readily Achievable
H101.17	**Projection suites**		N/A
H101.18	**Basement storeys**		N/A
H101.19	**Electric mains installation** The switchboard containing the main isolation switch must: • be located in a position that is readily accessible to authorised persons, and to the Fire Brigade in the case of an emergency; and • be enclosed by construction having an FRL not less than 60/60/60 Protection of a final sub-circuit originating at a switchboard or distribution board must be by means of circuit breakers. Where an entertainment venue has its mains supply in common with that of another building or where it is a part of a building: • the entertainment venue must be served by a separate and independent sub-main from the main switchboard; and • each such sub-main, the consumer's main and the supply authority's conductors within the		Additional Details Required

Clause	Description	Comment	Status
	building must be protected against fire by means of: ○ mineral-insulated metal-sheathed cables or other cables that provide at least 2 hours' fire protection; or ○ heavy-duty PVC conduit or metallic pipe, concrete encased in walls or slabs with a minimum of 50 mm cover; or heavy-duty PVC conduit or metallic pipe, buried at least 500 mm below ground level, for underground cabling		
H101.20	**Lighting** Any switch controlling the lighting system must not be accessible. Where, during normal use, general lighting may be dimmed or switched off, an override switch to switch on all the general lighting instantaneously must be installed in the auditorium in a position accessible to management. Where general lighting is to be either dimmed or extinguished when the public is in attendance and where the floor is stepped or at an inclination greater than 1 in 12, aisle lights must be provided to illuminate the length of each aisle and the tread of each step therein. Where an aisle light is installed in a seat frame, it must be supplied at a voltage of not more than 32 volts AC or 115 volts DC. Aisle lighting must be provided with an alternative electricity supply that— • is capable of being automatically energised in the event of failure of the primary lighting electricity supply; and • complies with the provisions applying to emergency lighting.		Additional Details Required
H101.21	-	This clause has deliberately been left blank.	-
H101.22	**Automatic smoke and heat vents for Stages** An automatic smoke-and-heat vent system required by NSW Table E2.2b" Stages and backstage" must a) be capable of automatic operation by the inclusion of a heat sensing device designed to activate the system at a temperature of not more than 71°C; and b) be capable of being released manually from positions at each side of the stage and of being fully activated from either position; and c) have a notice, prominently displayed at each position referred to in (b), clearly indicating the method of activation; and d) have an openable area of not less than 1/10 of the total area of the stage.		N/A
H101.23	**Solid fuel burning stoves and open fire places** Solid fuel burning stoves and open fire places must not be installed in premises designed for the		N/A

Clause	Description	Comment	Status
	purpose of exhibiting films or conducting live theatre productions.		
H101.24	**Fuel gas cylinders** Fuel gas cylinders must be housed in an enclosure that is located outside the building and comply with the ventilation requirements of AS/NZS 1596. The enclosure must comply with Clause NSW H101.24.2		Additional Details Required
NSW Part - H102 Temporary Structures			**N/A**
NSW Part - H103 Drive-In Theatres			**N/A**
Part H2 - Public Transport Buildings			**N/A**
Part H3 - Farm Building and Farm Sheds			**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 JV3 assessment may be adopted for the project if compliance with BCA deemed to satisfy provisions are problematic.	Compliance Readily Achievable
NSW Subsection J(B) Energy Efficiency - Class 3 and Class 5 to 9 Buildings			
NSW J(B)1 - Compliance with BCA Provisions. Class 3 and Class 5 to 9 buildings must comply with all of the provisions of the national **Section J** that are applicable to the relevant classifications, except as varied by **NSW J3.1** Application of Part. **The building is to be assessed by an Energy Efficiency Consultant and non-compliances addressed via a Verification Method from the Energy Efficiency Consultant.**			Additional Details Required

15. Appendix A – Referenced Documentation

The following documentation was used in the preparation of this report:

Drawing No.	Title	Issue	Date	Drawn By
A-DA-1100	Site Plan	A	23/07/2021	Lahznimmo Architects
A-DA-1200	Demolition Plan	A	23/07/2021	Lahznimmo Architects
A-DA-1400	Ground Floor	A	23/07/2021	Lahznimmo Architects
A-DA-1401	Level 1	A	23/07/2021	Lahznimmo Architects
A-DA-1402	Level 2	A	23/07/2021	Lahznimmo Architects
A-DA-1403	Level 3	A	23/07/2021	Lahznimmo Architects
A-DA-1404	Roof Level	A	23/07/2021	Lahznimmo Architects
A-DA-2000	Elevation – North	A	23/07/2021	Lahznimmo Architects
A-DA-2001	Elevation – South	A	23/07/2021	Lahznimmo Architects
A-DA-2002	Elevation – East	A	23/07/2021	Lahznimmo Architects
A-DA-2003	Elevation – West	A	23/07/2021	Lahznimmo Architects
A-DA-3000	Section – Neighbourhood Room	A	23/07/2021	Lahznimmo Architects
A-DA-3001	Section – Program Room	A	23/07/2021	Lahznimmo Architects
A-DA-3002	Section – Flexible Function Space	A	23/07/2021	Lahznimmo Architects

16. Appendix B – Statutory Fire Safety Measures

Schedule of Statutory Fire Safety Measures

The fire safety schedule will be developed during the design process in association with the fire engineered performance solution.

17. Appendix C1.1 – Fire Rating Requirements

Type A Construction: FRL of Building Elements				
Building element	**Class of building - FRL:** (in minutes) *Structural adequacy/Integrity/Insulation*			
	2, 3 or 4 part	5, 9 or 7a	6	7b or 8
EXTERNAL WALL (including any column and other building element incorporated within it) or other external building element, where the distance from any fire-source feature to which it is exposed is-				
For loadbearing parts-				
less than 1.5m	90/90/90	120/120/120	180/180/180	240/240/240
1.5 to less than 3 m	90/60/60	120/ 90/ 90	180/180/120	240/240/180
3 or more	90/60/30	120/ 60/ 30	180/120/90	240/180/ 90
For non-loadbearing parts-				
less than 1.5 m	-/90/90	- /120/120	- /180/180	- /240/240
1.5 to less than 3 m	-/60/60	- / 90/ 90	- /180/120	- /240/180
3 m or more	- / - / -	- / - / -	- / - / -	- / - / -
EXTERNAL COLUMN not incorporated in an external wall-				
For loadbearing columns	90/ - / -	120/ - / -	180/ - / -	240/ - / -
For non-loadbearing columns	- / - / -	- / - / -	- / - / -	- / - / -
COMMON WALLS and FIRE WALLS	90/90/90	120/120/120	180/180/180	240/240/240
INTERNAL WALLS-				
Fire-resisting lift and stair shafts-				
Loadbearing	90/90/90	120/120/120	180/120/120	240/120/120
Non-loadbearing	- /90/90	- /120/120	- /120/120	- /120/120
Bounding public corridors, public lobbies and the like-				
Loadbearing	90/90/90	120/ - / -	180/ - / -	240/ - / -
Non-loadbearing	- /60/60	- / - / -	- / - / -	- / - / -
Between or bounding sole-occupancy units-				
Loadbearing	90/90/90	120/ - / -	180/ - / -	240/ - / -
Non-loadbearing	- /60/60	- / - / -	- / - / -	- / - / -
Ventilating, pipe, garbage, and like shafts not used for the discharge of hot products of Combustion-				
Loadbearing	90/90/90	120/ 90/ 90	180/120/120	240/120/120
Non-loadbearing	- /90/90	- / 90/ 90	- /120/120	- /120/120
OTHER LOADBEARING INTERNAL WALLS, INTERNAL BEAMS, TRUSSES and COLUMNS	90/ - / -	120/ - / -	180/ - / -	240/ - / -
FLOORS	90/90/90	120/120/120	180/180/180	240/240/240
ROOFS	90/60/30	120/ 60/ 30	180/60/30	240/ 90/ 60

18. Appendix C1.10 – Early Fire Hazard Properties for Materials

Floor materials, floor coverings and wall and ceiling lining materials are required to comply with BCA prescribed fire hazard properties and AS5637.1-2015

Floor Linings and Floor Coverings	
General Non Sprinklered Areas	Minimum 2.2 (or 4.5 for Class 3 areas and 9a patient care areas) kw/m^2 critical radiant heat flux and, a maximum smoke development rate of 750 percent minutes.
General Sprinklered Areas	Minimum 1.2(or 2.2 for Class 3, 9a patient care, and 9c residential use areas) kw/m^2 critical radiant heat flux
Fire Isolated Exits and Fire Control Rooms	Minimum 2.2/(or 4.5 for Class 3, 9a and 9c areas) kw/m^2 critical radiant heat flux
Lift Cars	Minimum 2.2 kw/m^2 critical radiant heat flux

Wall Linings and Ceiling Linings	
Generally	Variously Group 1,2, or 3 materials (more restrictive Group number for non-sprinklered areas, public corridors, health care corridors and other prescribed locations) when tested to AS/ISO 9705 or clause 3 of BCA Spec A2.4 and AS/NZ 3837
Fire Isolated Exits	Group 1 material when tested as above
Lift Cars	Group 1 or 2 materials when tested as above

In addition, in non-sprinklered areas, wall and ceiling linings must have a smoke growth rate index not more than 100 or an average specific extinction area less than 250m^2/g.

Other than above, construction materials generally need to achieve as1530.3 early fire hazard indices requirements as follows:	
Generally	Spread of flame Index not > 9 Smoke developed index not > 8
Sarking	Flammability Index not > 5
Fire Isolated Exits and Fire Control Rooms	Spread of Flame Index 0 Smoke Developed Index not > 2 Sarking Flammability 0
Non Fire Isolated Stairs & Escalators and Auditorium Fixed Seating	Spread of Flame Index 0 Smoke Developed Index not > 5
Lifts	To AS 1735.2
Air Ducts	To AS4254

19. Appendix C2.2 – Floor Areas and Volumes

Floor areas and volumes of each storey

Floor	Approx. Area (m^2)	Approx. Volume (m^3)	Comment
Ground	1328		As the atrium connects ground to level 3, the building is considered a single fire compartment.
Level 1	1030		
Level 2	450		
Level 3	1257		

Nominated Fire Compartments

These are indicated in the table above.

20. Appendix D1.4 – Exits

The exits from the building are set out below:

Exit No	Location	Type	Grid Ref	No of storeys connected / passed by	Comments
1.	Ground Floor	Single swing door	A:07	1	Door discharges to Donnison Street
2.	Ground Floor	Fire isolated exit (stair 3)	F:06	1	Door discharges to southern boundary to the street via the easement roadway which links to the public road.
3.	Level 1	Fire isolated exit (stair 2)	B:02	3	Door discharges to Donnison Street
4.	Level 1	Single swing door	G:06	1	Door discharges to southern boundary to the street via the easement roadway which links to the public road.
5.	Level 1	Double swing doors	G:05	1	Doors discharges to southern boundary to the street via the easement roadway which links to the public road.
6.	Level 2	Fire isolated exit (stair 2)	B:02	3	Door discharges to Donnison Street
7.	Level 2	Fire isolated exit (stair 3)	F:06	2	Door discharges to southern boundary to the street via the easement roadway which links to the public road.
8.	Level 3	Fire isolated exit (stair 2)	B:02	3	Door discharges to Donnison Street
9.	Level 3	Fire isolated exit (stair 3)	F:06	2	Door discharges to southern boundary to the street via the easement roadway which links to the public road.

21. Appendix D1.13 & D1.6 – Populations/Exit Width Assessment

(population numbers provided by Lahznimmo – 30/07/2021)

Location	Use	Class	Population	Comments
Ground Floor	Library	9b	134	
	Council Staff Service Office	5	20	
Sub Total			**154**	
Level 1	Library	9b	10	
	Public Hall / Meeting Room	9b	140	
	Auditorium	9b	320	
Sub Total			**470**	
Level 2	Innovation Hub – Co-work Space	5	25	
	Library	9b	30	
Sub Total			**55**	
Level 3	Library	9b	249	
Sub Total			**249**	
Total Population			**925**	

Location	Use	Population	Required aggregate egress width (m) or maximum permissible population*	Proposed aggregate egress width (m)	Status
Ground Floor	Library / Council Staff Service Office	154	2m	2m	Complies
Level 1	Library	10	1.5m	5m	Complies
	Public Hall / Meeting Room	140			
	Auditorium	320	3.5m		
Level 2	Innovation Hub – Co-work Space / Library	55	2m	2m	Complies
Level 3	Library	249	2.5m	2m	Does Not Comply

* The maximum permissible population is based on proposed aggregate egress width.

22. Appendix D3 – Significant Accessibility Requirements

Access for wheelchair users and people with disabilities generally must be to AS1428.1-2009.
Principle requirements are:

- Continuous accessible paths of travel throughout
- Minimum 1m wide travel paths with maximum 3-5mm joints, lips, level changes etc.
- No deep pile carpets or grates with large slots.
- Walls or 75-150mm kerbs at travel path sides or if level change occurs to cause a wheelchair hazard.
- 1.8m wide x 2m long wheelchair passing spaces at 20m intervals in passageways where a direct line of sight is not available.
- Turning spaces at 20m intervals and within 2m of dead end access ways. 1.5m x 1.5m 90 deg turning spaces (with splayed internal corner) and 1.54m x 2.07m long 180 deg turning spaces are required including at dead ends in passageways.
- Step ramps, kerb ramps and threshold ramps as prescribed.
- 1:14 maximum ramps with 9m between landings.
- 1.9m x 1 in 10 (maximum 190mm rise) step ramps
- 1.52m x 1 in 8 (maximum 190mm rise) kerb ramps.
- 30-50mm handrails with 300mm extensions and curls and 50mm clearances on both sides of steps, ramps, etc.
- 850mm clear width doors with 340 - 900mm latch side clearances and 1220-1670mm approach clearances depending on arrangements.
- Stairs and ramps set back from building lines and corridors to allow space for handrail extensions and TGSIs.
- Decals to glazing.
- 900-1100mm door hardware height.
- Lever handle hardware with low opening forces.
- Landings at doorways, direction changes and at intervals on ramps and inclined walkways.
- Walkways with colour contrast borders.
- Flat even surfaces.
- Colour contrasted hand rails and door frames.
- “D” pull handles to doors.
- Continuous protected paths from disabled persons’ car spaces to lifts, access points, etc.
- Ambulant disabled persons’ toilets with grab rails and outward swinging doors or longer cubicles.
- Prescribed types of water entry arrangements for swimming pools depending on pool size.
- Non fire enclosed stairs with opaque risers.
- Fire stairs and non-fire enclosed stairs with colour contrasting nosing strips.
- All switches and controls 900-1100mm above floor level.

The following general requirements apply to accessible toilets:

- Unisex facility.
- ~1.9 x 2.7m or 2.3 x 2.4m minimum room dimensions depending on arrangements. (~2.2m x 1.6m if AS1428.1-2001 concession applies).
- 30-40mm grab rails with 50-60mm clearances.
- Doors with appropriate clearances and circulation spaces and able to be operated externally in emergencies
- Washbasins with clearances as required.
- Shielded hot water pipes.
- Mirror, shelf, dispensers and coat hooks.
- Mirrored layout for alternative facilities

23. Appendix F2.3 – Requirements for Sanitary Facilities

The status of sanitary facilities required by Part F2 of the BCA are set out below:

Class	Use	Occupant Numbers			WC Required / Provided		Urinal Required / Provided		Basin Required / Provided	
		Total								
9b	Auditorium – Level 1	320	Male	160	1		2		2	
			Female	160	4		N/A		2	
			Unisex Disabled				N/A			
9b	Public Hall / Meeting Room – Level 1 Library – Ground to Level 2	140 174 Total = 314	Male	157	2		4		2	
			Female	157	5		N/A		3	
			Unisex Disabled				N/A			
5	Library Staff + Council Service Office - Ground Floor	20	Male	10	1		0		1	
			Female	10	1		N/A		1	
			Unisex Disabled				N/A			
	TOTAL		**Male**		**4**	**3 + 1 AWC**	**6**	**5+ 1 AWC**	**4**	**3 + 1 AWC**
			Female		**10**	**8 + 2 AWC**	**N/A**		**6**	**4 + 2 AWC**
			Unisex Disabled		**2**	**2**	**N/A**		**2**	**2**

*Table F2.3 - Public halls, function rooms or the like was applied to library.

* Accessible WCs are provided on Ground and Level 1

* Proposed sanitary facilities from ground to level 1 used for the above.

Class	Use	Occupant Numbers			WC Required / Provided		Urinal Required / Provided		Basin Required / Provided	
		Total								
9b	Library – Level 3	249	Male	125	2	2 (1 + 1 AWC)	3	3	2	2
			Female	125	4	4 (3 + 1 AWC)	N/A		2	2
			Unisex Disabled		1	1	N/A		1	1

*Table F2.3 - Public halls, function rooms or the like was applied to library.

Class	Use	Occupant Numbers			WC **Required** / Provided		Urinal **Required** / Provided		Basin **Required** / Provided	
5	Innovation hub – Co work space – Level 2	25	Male	13	1	1 AWC	1	1* Unisex PDA n level 2 allocated to male urinal	1	1 AWC
			Female	13	1	1 AWC	N/A		1	1 AWC
			Unisex Disabled		1	1	N/A		1	1

Notes:

1. *A common unisex accessible facility may be counted once for both male and female facilities in accordance with Clause F2.2(c) of the BCA;
2. Staff and patrons are permitted to share the same facilities in accordance with Clause F2.3(d) of the BCA;
3. At least one ambulant sanitary compartment must be provided within each the male and female facilities complying with Section 16 of AS1428.1 – 2009.
4. *A WC is able to be used in place of a urinal.

STEVE WATSON
& PARTNERS