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4 Minna Close, Belrose

BCA Assessment Report

Report 2022/0027 R1.3

Prepared for Wu Properties.
November 2023

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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 design of the project at 4 Minna Close, Belrose 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 a Performance Solution to satisfy the Performance Requirements of the BCA.

Summary of BCA Parameters:

Building Use:	Industrial, storage & carparking
Class of Occupancy	Class 5, 7a, 7b
Type of Construction Required	Type B
Rise Storeys:	3
Number of Storeys:	3
Effective Height:	8.900m (Level Office/Research RL189.900 - Basement Level RL 181.000)

The design is capable of complying with the requirements of the relevant sections of the Environmental Planning Assessment Act 1979, Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 - EPAR (DCFS), the Environmental Planning and Assessment Regulations 2021and the Building Code of Australia 2022. 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 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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GLOSSARY

Building Code of Australia - BCA, National Construction Code - NCC

Deemed-to-Satisfy - Dts

Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 - EPAR (DCFS)

Environmental Planning and Assessment Act 1979 No 203 - EPAA

Environmental Planning and Assessment Regulation 2021 - EPAR

1. Introduction

This report presents the findings of an assessment undertaken of the proposed design of the industrial development at 4 Minna Close, Belrose against the Deemed-to-Satisfy (DtS) provisions of Building Code of Australia BCA 2022.

It has been prepared by Steve Watson and Partners for Wu Properties.

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, construction certification to be issued under Part 6 of the NSW Environmental Planning and Assessment Act 1979 No 203, Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 and Environmental Planning and Assessment Regulation 2021.

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 to issue a construction certificate under Part 6 of The 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
- The BCA report and associated compliance advice is not intended or permitted to be relied on by any other party with respect to their obligations to ensure compliance including but not limited to the making of a compliance declaration under the NSW Design and Building Professionals Act.

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 2022- 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 performance 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 (DCFS) S19	All new works must comply

6.1. New Work

Section 19 of the EPAR (DCFS) 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 performance solution has been proposed to address the issue;
    7. Proposed work is to be addressed on a performance basis via a Performance 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 of a three-storey industrial, storage and office building. It is located on 4 Minna Close, Belrose, NSW.

9. Assessment Data Summary

The following basic assessment data has been drawn from the provisions of the BCA 2022.

9.1. Assumptions

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

1. Nil

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.

10. Issues Requiring Resolution

10.1. Issues Required Resolution

The following issues either need to be resolved or require further details and/or documentation to be provided to ensure compliance before issuing the Construction Certificate.

1. Population numbers will be provided (to confirm BCA Clause F4D4 sanitary facility compliance).
2. It appears from review of the architectural drawings that the building does not include any Class 8 laboratories. Proposed building use of the ground floor to be confirmed.
3. Volumes not detailed on the architectural drawings and volumes to be provided by the architect.
4. Bollard required to the fire stair in basement.
5. Demonstrate a 1m travel path delineated from driveway to the south.
6. External pedestrian ramp south side requires D3D22 Handrail to at least 1 side of ramp.
7. Clarify Door swing to fire stair as it not clearly shown at Ground Level.
8. Clarify with Principal Certifier if barrier provisions Clause D3D17 apply to the retaining wall at the rear & loading dock area inside warehouse.
9. Barrier at the top of the Mezzanine stairs applies – any horizontal or near horizontal elements between 150mm and 760mm above the floor must not facilitate climbing. Compliance should be illustrated on the drawings.
10. Fire Hydrant coverage to be verified ie access to the fire stair at Ground Level and coverage to awning at the rear.
11. No booster assembly detailed on the architectural drawings.
    Fire hydrant booster, and any required pump room(s) to be detailed on the architectural drawings.
12. Confirmation to be provided as to whether the facility will contain an occupancy of excessive hazard in relation to the requirements noted in Clause E1D13 where sprinklers are required.
13. Clarify urinals for males in male toilets.

10.2. Fire Engineered Performance solutions required.

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

Item	Non-Compliance	DTS Clause	Description
1.	Deemed-to-satisfy requirements generally require 4hrs fire resistance levels for self-storage units. Reduced fire resistance levels are proposed to be investigated	Spec 5	The structural engineer is to investigate the FRL's of the proposed structural elements to determine if each building element in each storey may achieve the higher FRL of 240/240/240 & if reduced fire resistance levels are to be investigated then this is to be discussed with a fire safety engineer to determine that a fire engineered solution may be sought to overcome DTS departures.
2.	Extended travel distances	D2D5	Basement travel distances are up to 24m to a point of choice in lieu of 20m.
3.	Egress door swing	D3D25	The basement lobby final egress door does not swing in the direction of egress.

The following are the main issue proposed to be addressed by the Architect/Façade Engineer via a Performance Solution:

Item	Non-Compliance	DTS Clause	Description	Performance Requirement
4.	**Weatherproofing**	F3D5	Performance Requirement F3P1, for the prevention of the penetration of water through external walls, must be complied with. Compliance can be demonstrated via the following: 1. FV1 Weatherproofing or 2. Engage a Facade engineer to address the performance requirements of F3P1	F3P1

11. Relevant Authorities

Where an performance 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 Section 26 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 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 (DCFS) 2021, EPAR 2021 and the BCA 2022 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 2022 - Clause by Clause Assessment

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

e.g., Section D - Access and egress

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

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

O - Objective
F - Functional Statement
P - Performance Requirement
V - Verification Method
D - Deemed-to-Satisfy
C - Specification
G - Governing Requirements</td></tr>
<tr><td>Clause</td><td>Clause refers to the number within the Type group.</td></tr>
</table></td><td>Applicable</td></tr>
<tr><td colspan="3">Section A: General Provisions</td><td></td></tr>
<tr><td>A5G3</td><td>Suitability of materials
Every part of a building must be constructed in an appropriate manner to achieve the requirements of the BCA, using materials that are fit for the purpose for which they are intended.</td><td>The builder is responsible to adopt and install appropriate proprietary accredited building products and is to ensure that those products/assemblies are fit for the purpose they are intended and are installed in accordance with the manufacturer’s specifications/ requirements for that system.</td><td>Compliance Readily Achievable</td></tr>
<tr><td>Part A6</td><td>Classification and usage
Usage on each level of the building is as follows:
<table>
<tr><th>LEVEL</th><th>USE</th><th>CLASS</th></tr>
<tr><td>Basement</td><td>Car parking</td><td>7a</td></tr>
</table></td><td>Proposed building uses of the ground floor to be confirmed.
It appears from review of the architectural drawings that the building does not include any Class 8 laboratories.</td><td>Applicable</td></tr>
</table>

Clause	Description			Comment	Status
	Ground	Offices	5		
	(Use TBC)	Storage	7b		
	Level 1	Offices	5		
Part A7	**United buildings** Buildings are deemed united when two or more buildings adjoining each other are connected and used as one building.				N/A
Section B: Structure					
B1D2	**Resistance to actions** The resistance of the building must be greater than the most critical action effect resulting from different combinations of actions			Certification from a qualified structural engineer will need to be provided at Construction Certificate stage.	Compliance Readily Achievable
B1D3	**Determination of individual actions** The magnitude of individual actions must be determined in accordance with Clause B1D3 of the BCA. The building has an importance level 3 in accordance with Table B1D3a.			Certification from a qualified structural engineer will need to be provided at Construction Certificate stage.	Compliance Readily Achievable
B1D4	**Determination of structural resistance of materials and forms of construction** The structural resistance of materials and forms of construction must be determined in accordance with the relevant Australian Standards in accordance with Clause B1D4 of the BCA.			Certification from a qualified structural engineer will need to be provided at Construction Certificate stage	Compliance Readily Achievable
B1D5	**Structural software** Structural software used in computer aided design of a building or structure that uses design criteria based on DTS provisions of the BCA must comply with the ABCB Protocol for Structural Software.			-	Compliance Readily Achievable
B1D6	**Construction of buildings in flood hazard areas** A Class 2, 3, 4, 9a or 9c building located in a flood hazard area must comply with the ABCB Standard for Construction of Buildings in Flood Hazard Areas.			Hydraulic engineer to confirm whether the building is located within a floor hazard area and compliance with this clause.	N/A
Section C: Fire Resistance					
Part C2 - Fire Resistance and Stability					
C2D2	**Type of construction required** **Type B Construction** BCA Type B fire resisting construction is required. Refer to Appendix Specification 5 for the FRLs required of each building element.			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.	Compliance Readily Achievable
Specification 5	**Fire resisting construction** *Support of another part* Where a part of a building required to have an FRL depends upon direct vertical or lateral			The structural engineer is to investigate the FRL's of the proposed structural elements to determine if each building element in each storey may achieve the	Performance Solution

Clause	Description	Comment	Status
	support from another part to maintain its FRL, that supporting part must have an FRL not less than that required for the part if supports and be non-combustible. *Attachments* The method of attaching or installing a finish, lining, ancillary element or service to a building element must not reduce the fire resistance of that element. *Enclosure of shafts* Shafts required to have an FRL must be enclosed at the top and bottom by construction have an FRL not less than that required for the walls of the shaft. Shafts, other than one enclosing a fire isolated stairway or ramp, do not require an FRL at the top if the shaft extends beyond the roof covering.	higher FRL of 240/240/240 & if reduced fire resistance levels are to be investigated then this is to be discussed with a fire safety engineer to determine that a fire engineered solution may be sought to overcome DTS departures 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.	
C2D3	**Calculation of rise in storeys** Effective Height / Calculation of rise in storeys. Rise in storeys is a defined BCA term addressing the number of main building levels excluding basements. Effective height is defined under the BCA as vertical distance between the floor of the lowest storey included in the calculation of rise in storeys and the floor of the topmost storey (excluding the topmost storey if it contains only heating, ventilating, lift or other equipment, water tanks or similar service units). These parameters influence the BCA provisions applicable to the building.	**The following parameters apply:** Rise in storeys: 3 storeys Effective Height: 8.900m	Applicable
C2D4	**Buildings of multiple classification**	The building is required to be constructed of Type B fire resisting construction as the classification of the top storey is a Class 5 office.	Applicable
C2D5	**Mixed types of construction**	If a fire wall divides the building in accordance with Clause C3D8, the building portions are able to be constructed in differing levels of fire-resistance determined in accordance with Clause C2D2 or C2D4.	N/A
C2D6	**Two storey Class 2, 3 or 9c buildings**	A concession is available under this clause and the building may be of Type C construction.	N/A
C2D7	**Class 4 parts of buildings**		N/A
C2D8	**Open spectator stands and indoor sports stadiums**		N/A
C2D9	**Lightweight construction** Lightweight construction used in a wall system must comply with Specification 6 - Structural tests for lightweight construction. Lightweight construction used as a fire-resisting covering of a steel column or the like, and where	Fire rated wall types must match a tested protype. Product codes should be noted on the wall type schedule and corresponding test reports provided for review.	Compliance Readily Achievable

Clause	Description	Comment	Status
	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.		
C2D10	**Non-combustible building elements** In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible: I. External walls and common walls, including all components incorporated within them including façade covering, framing and insulation; II. The flooring and floor framing of lift pits; III. Non-loadbearing internal walls where they are required to be fire-resisting; IV. Non-loadbearing shaft being a lift, ventilating, garbage or similar shaft. The following materials may be used where non-combustible materials are required:- • Plasterboard. • Perforated gypsum. • Fibrous-plaster sheeting to AS 2185. • Fibre-reinforced cement sheeting. • Pre-finished metal sheeting having a combustible surface finish not exceeding 1mm thickness and where the spread-of-flame index of the product is not greater than 0. • Sarking-type materials that do not exceed 1mm thickness and have a flammability index not greater than 5. • Bonded laminated materials where each lamina, including any core, is not combustible and each adhesive layer does not exceed 1mm thickness and the total thickness of the adhesive layers does not exceed 2mm and the spread of flame index and smoke development index of the bonded laminated material as a whole do not exceed 0 and 3 respectively and when located externally, are fixed in accordance with C2D15. • Any product as determined by testing to AS 1530.1 • An appropriately BCA accredited product or system	The Architect and Structural Engineer are 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. An architectural specification detailing the components of the external walls and their fire properties are needed for review including corresponding test reports verifying compliance with this clause. Ensure all façade materials have a current Certificate of Conformity or a current Certificate of Accreditation, or the like to determine their acceptance by the Fire Safety Engineer and Fire Brigade	Compliance Readily Achievable
C2D11	**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 C2D11 & compliance with AS5637.1-	Compliance assumed and will require verification test data for all timber and other combustible linings and materials, including: • Carpets • Vinyls (walling and flooring)	Compliance Readily Achievable

Clause	Description	Comment	Status
	2015.	• Timber flooring and wall linings • Veneered wall panelling • Spray-on insulation material • Other combustible finishes • Carpark soffit insulation fire test reports, based on 'room fire testing' will be required to meet fire brigade consent conditions if applicable. A schedule of internal finishes and corresponding fire hazard test data for all combustible internal linings are needed for review prior to the issue of a CC.	
C2D12	**Performance of external walls in fire** Concrete external walls that could collapse as complete panels are to be designed in accordance with Specification 8 to minimise the likelihood of external walls collapsing outwards in the event of a fire and separating from supporting members.	Specification 8 applies to buildings having a rise in storeys of not more than 2 with concrete external walls that could collapse as complete panels, which: a) consist of either single or multiple panels attached by steel connections to lateral supporting members; and b) depend on those connections to resist outward movement of the panels relative to the supporting members, and c) have a height to thickness ratio not greater than 50.	N/A
C2D13	**Fire-protected timber: Concession** *Fire-protected timber* may be permitted under this clause wherever an element is *required* to be *non-combustible*.	N/A	N/A
C2D14	**Ancillary elements** An ancillary element must not be fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible unless it is non-combustible or is otherwise permitted under this clause.	The Architect and Structural Engineer are 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. An architectural specification detailing the components of the external walls and their fire properties are needed for review including corresponding test reports verifying compliance with this clause. Ensure all façade materials have a current Certificate of Conformity or a current Certificate of Accreditation, or the like to determine their acceptance by the Fire Safety Engineer and Fire Brigade	Compliance Readily Achievable
C2D15	**Fixing of bonded laminated cladding panels** In a building required to be of Type A or B construction, externally located bonded laminated cladding panels must have all layers of	The Architect and Structural Engineer are to make provisions for this requirement in the design. A detailed review of the external	Compliance Readily Achievable

Clause	Description	Comment	Status
	cladding mechanically supported or restrained to the supporting frame.	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. An architectural specification detailing the components of the external walls and their fire properties are needed for review including corresponding test reports verifying compliance with this clause. Ensure all façade materials have a current Certificate of Conformity or a current Certificate of Accreditation, or the like to determine their acceptance by the Fire Safety Engineer and Fire Brigade	
Part C3 - Compartmentation and Separation			
C3D2	**Application of Part**	Clauses C3D3, C3D4 and C3D5 do not apply to a sprinkler protected carpark, an open deck carpark or an open spectator stand.	Applicable
C3D3	General floor area and volume limitations **(Type B construction)** The floor area and volume limitations are: Class 5, 9b or 9c: 5,500m^2 and 33,000m^3 Class 6, 7, 8 or 9a: 3,500m^2 and 21,000m^3	The floor area and volume of the largest fire compartment in the building does not exceed the maximum limitations outlined by Table C3D3. As detailed in the architectural drawings. Basement: Approximately 809m^2 Ground: Approximately 1552m^2 Level 1: Approximately 176m2 Total approximate floor area = 2537m^2 To be confirmed by architect prior to issue of the Construction Certificate. Volumes not detailed on the architectural drawings and volumes to be provided by the architect.	Noted
C3D4	**Large isolated buildings** Where the building exceeds the limitations under Clause C3D3 above and neither exceeds 18,000m^2 nor 108,000m^3 and is- Class 7 or 8: • Contains no more than 2 storeys; and • Has an 18m wide open space complying with Clause C3D5(1); or Class 5, 6, 7, 8 or 9: • Sprinkler protected throughout; and • Has 6m wide perimeter vehicular access complying with Clause C3D5(2). Where the building exceeds 18,000m^2 or 108,000m^3: • Sprinkler protection throughout; and	N/A	N/A

Clause	Description	Comment	Status
	• Has 6m wide perimeter vehicular access complying with Clause C3D5(2).		
C3D5	**Requirements for open space and vehicular access** Vehicular access / open space is required from the public road for emergency vehicle access and is not to be used for storage or processing of materials and must not be built upon except for guard houses and service structures that do not unduly impede firefighting. Vehicular access must have a loadbearing capacity and unobstructed height to permit the operation and passage of fire brigade vehicles. Vehicular access must be capable of providing continuous access for emergency vehicles to enable travel in a forward direction from the public road around the entire building.	N/A	N/A
C3D6	**Class 9 buildings**	N/A	N/A
C3D7	**Vertical separation of openings in external walls**	N/A	N/A
C3D8	**Separation by fire walls** A fire wall must extend to the underside of a floor having an FRL required for a fire wall or the roof covering.	N/A	N/A
C3D9	**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 5 of the BCA or the parts must be separated by a fire wall.	The building will require the higher FRL's of the Class 8 part.	Compliance Readily Achievable
C3D10	**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.	Fire separation required between the basement car-park and the ground floor.	Compliance Readily Achievable
C3D11	**Separation of lift shafts** Openings for lift landing doors and services must be protected in accordance with the DTS provisions of Part C4 of the BCA.	The lifts do not connect more than 2 storeys and so the requirements of this clause do not apply.	N/A
C3D12	**Stairways and lifts in one shaft**	The lift is within its own shaft	Compliance Readily Achievable
C3D13	**Separation of equipment** 2hr fire separation is required for: • Lift motor rooms. • Emergency generators sustaining emergency equipment operating in emergency mode. • Central mechanical smoke control plant. • Boilers. • A battery system installed in the building	Drawings to detail compliance prior to the issue of a Construction Certificate.	Compliance Readily Achievable

Clause	Description	Comment	Status
	that has a total voltage of 12 volts or more and a storage capacity of 200 kWh or more.		
C3D14	**Electricity supply system** A substation located within a building or main switchboard that sustains emergency equipment must be separated from the remainder of the building by 2hr fire rated construction. Switchboards sustaining emergency equipment must be constructed so that emergency equipment switchgear is separated from non-emergency equipment switchgear by metal partitions designed to minimise the spread of faults.	Drawings to detail compliance prior to the issue of a Construction Certificate.	Compliance Readily Achievable
C3D15	**Public corridors in Class 2 & 3 buildings**		N/A
Part C4 - Protection of Openings			
C4D2	**Application of Part**		Noted
C4D3	**Protection of openings in external walls** Openings in the external walls of the building are to be protected in accordance with C4D5, being fire rated windows, external sprinklers or the like, if they are: • Less than 3m to side or rear boundary, • Less than 6m from the far boundary of a road or lane, • Less than 6m from another building on the same allotment. • Openings that require protection should not occupy more than $^1/_3$ of the external wall of the storey in which it is located.	Complies	Complies
C4D4	**Separation of external walls and associated openings in different fire compartments** External walls within the distances specified in Table C4D4 of the BCA are to be protected by construction with an FRL not less than 60/60/60 and the associated openings protected in accordance with Clause C4D5 of the BCA. **Angle between walls** — **Min. Distance** 0° (walls opposite) — 6 m more than 0° to 45° — 5 m more than 45° to 90° — 4 m more than 90° to 135° — 3 m more than 135° to less than 180° — 2 m 180° or more — Nil	Complies	Complies
C4D5	**Acceptable method of protection** Window openings are to be protected by internal or external wall wetting sprinklers and must automatically close or be permanently fixed in the closed position, -/60/- fire windows that are automatic closing or permanently fixed closed or -/60/60 automatic closing fire shutters. Doorways are to be protected by internal or external wall wetting sprinklers used with doors that are self-closing or automatic closing, or -/60/30 self-closing or automatic closing fire	Complies	Complies

Clause	Description	Comment	Status
	doors. Other openings, excluding voids, are to be protected with internal or external wall wetting sprinklers or construction having an FRL not less than -/60/-.		
C4D6	**Doorways in fire walls** Doorways in firewalls are to be protected by a fire door or fire shutter that has an FRL of not less than that required for the firewall except that the insulation rating must be at least 30.		Compliance Readily Achievable
C4D7	**Sliding fire doors** Sliding fire doors are to be held open with an electromagnetic device, which when deactivated allows the door to be fully closed in not less than 20 seconds and not more than 30 seconds. An audible warning device and red flashing warning light must be provided. A sign stating "WARNING - SLIDING FIRE DOOR" in capital letters not less than 50 mm high is to be provided on each side of the doorway directly above the opening.	N/A	N/A
C4D8	**Protection of doorways in horizontal exits** Doorways in horizontal exits are to be protected by a fire door, which has an FRL of not less than that required for the firewall except that the insulation rating must be at least 30.	N/A	N/A
C4D9	**Openings in fire-isolated exits** -/60/30 self-closing fire doors are required to doorways providing access to fire isolated stairways. A window or other opening in the external wall of the fire isolated exit is to be protected in accordance with Clause C4D5 if it is within 6m of, and exposed to, a window or other opening in the wall of the same building.		Noted
C4D10	**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.		Noted
C4D11	**Openings in fire-isolated lift shafts** Openings in lift shafts are to be protected by -/60/- fire doors complying with AS1735.11. Lift indicator panels are to be backed by construction having an FRL of not less than -/60/60 if they exceed 35,000mm^2 (175 X 200 mm).	The lifts do not connect more than 2 storeys and so the requirements of this clause do not apply.	N/A
C4D12	**Bounding construction: Class 2 and 3 buildings and Class 4 parts**		N/A
C4D13	**Openings in floors and ceilings for services** Services passing through floors are to be placed within fire resisting shafts or in accordance with Clause C4D15.	Services penetrations of fire rated structure generally need to be fire-stopped and/or located in fire rated riser shafts. Openings in fire rated elements	Compliance Readily Achievable

Clause	Description	Comment	Status
		need to be fire resisting to maintain the function of the elements.	
C4D14	**Openings in shafts**	N/A	N/A
C4D15	**Openings for service installations** Services penetrations through a building element (other than an external wall or roof) that is required to have an FRL with respect to integrity or insulation or a resistance to the incipient spread of fire, must comply with a tested system or Specification 13. Methods and materials used are to be identical to tested prototypes and in accordance with AS4072.1 and AS1530.4, and must achieve the required FRL or resistance to the incipient spread of fire or other specified method. Ventilation and air-conditioning systems are to be installed in accordance with AS/NZS 1668.1.	A schedule of penetrations prepared by a properly qualified BCA consultant nominating the types of openings requiring protection and the method of protection including test reports for each fire-stopping product is needed for review.	Compliance Readily Achievable
C4D16	**Construction Joints** Construction joints in elements required to have a fire resistance with respect to integrity and insulation must be protected.	Construction joints are to be fire protected in a manner identical to a prototype tested in accordance with AS4072.1 and AS1530.4 to achieve the required FRL or must otherwise comply with the requirements of this clause.	Compliance Readily Achievable
C4D17	**Columns protected with lightweight construction to achieve an FRL**	Columns must be protected in accordance with the identical tested prototype. Product codes should be noted on architectural plans and corresponding test reports provided for review.	Compliance Readily Achievable
Section D: Access and Egress			
Part D2 - Provision for Escape			
D2D2	**Application of Part**		Applicable

D2D3	**Number of exits required**
	(NSW variation for Entertainment Venues)
	• At least two exits need to serve each storey of :
	• Buildings over 25m in effective height.
	• Class 2 or 3 buildings subject to C2D6.
	• Each basement level.
	• Class 9 buildings:
	  ○ More than 6 storeys or over 25m in effective height.
	  ○ Storeys including Class 9a patient care areas.
	  ○ Storeys containing Class 9c sleeping areas.
	  ○ Early childhood centres.
	  ○ Primary or secondary schools exceeding 2 storeys.
	  ○ Storeys or mezzanines accommodating more than 50
			Complies

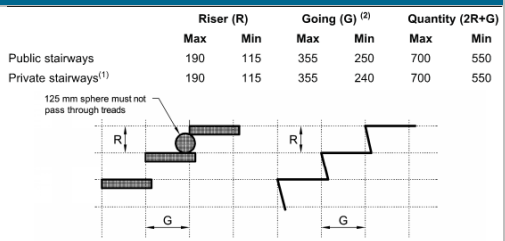
Clause	Description	Comment	Status
	persons. ○ Auditoriums in an entertainment venue. At least one exit must serve each part of storey divided into fire compartments in a Class 9a or 9c building and Class 9b early childhood centre. Access to an exit must be provided without passing through another SOU.		
D2D4	**When fire-isolated stairways and ramps are required** Every stair in a Class 5 to 9 building must be fire isolated unless it does not connect or pass through more than 3 consecutive floors in a sprinkler protected building, or 2 storeys in a non-sprinkler protected building.	Fire isolated stair has been provided on GL 1/D.	Complies
D2D5	**Exit travel distances** The BCA limits maximum travel distances to a point of choice and to an exit. No point on the floor must be more than 20m to an exit or a point in which travel in different directions to 2 exits is available, in which case, the maximum distance to 1 exit cannot exceed 40m.	The following areas have been identified with distances exceeding 20m to a point of choice: 1. Basement travel distances are up to 24m to a point of choice in lieu of 20m.	Performance Solution
D2D6	**Distance between alternative exits** Alternative exits must be at least 9m apart and no more than: • Class 2 or 3 buildings and Class 9a patient care areas - 45m apart. • All other cases - 60m apart. Alternative paths of travel must not converge such that they become less than 6m apart.		Complies
D2D7	**Height of exits, paths of travel to exits and doorways** Except for doorways, paths of travel must have a clear height of at least 2m.		Compliance Readily Achievable
D2D8	**Width of exits and paths of travel to exits**	Min 1000mm path of travel required in all areas.	Complies
D2D9	**Width of doorways in exits or paths of travel to exits** *(NSW variation for Access and egress)*		Compliance Readily Achievable
D2D10	**Exit width not to diminish in direction of travel**		Compliance Readily Achievable
D2D11	**Determination and measurement of exits and paths of travel to exits**		Noted
D2D12	**Travel via fire-isolated exits**		Complies
D2D13	**External stairways or ramps in lieu of fire-isolated exits** External stairs or ramps may be used instead of fire-isolated stairs to a building under 25m in		N/A

<table>
<tr><th>Clause</th><th>Description</th><th>Comment</th><th>Status</th></tr>
<tr><td></td><td>effective height, subject to:
The stair being of non-combustible construction.
Exit doors into the stair to be 1-hour fire rated.
Exit paths via the stair being shielded if within 6m of openings in external wall of building.</td><td></td><td></td></tr>
<tr><td>D2D14</td><td>Travel by non-fire-isolated stairways or ramps</td><td></td><td>Compliance Readily Achievable</td></tr>
<tr><td>D2D15</td><td>Discharge from exits
(NSW variation for Entertainment Venues)
The discharge point of alternative exits must be located as far apart as practical.
The discharge point of fire isolated exits are required to be connected to the road by a path that is not less than the exit width to which the external path serves.
An exit must not be blocked nor be capable of being blocked at its point of discharge.</td><td>An exit must have a direct connection from open space to the street.
The discharge point of the exits (east & west) are to be connected to the road by a minimum path width of the required exits ie 1.0m & travel is via compliant stairs or ramps ie 1:8 grade and 1:14 for accessible paths.
Demonstrate a 1m travel path delineated from driveway to the south.
An exit must not be blocked nor be capable of being blocked at its point of discharge.
It is noted that the fire stair in basement does not comply with this provision. The methods of protecting exit doors should be illustrated on the plans for review.</td><td>Additional Details Required</td></tr>
<tr><td>D2D16</td><td>Horizontal exits</td><td></td><td>N/A</td></tr>
<tr><td>D2D17</td><td>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</td><td></td><td>Complies</td></tr>
<tr><td>D2D18</td><td>Number of persons accommodated<table><tr><th>Level</th><th>Use / Population</th></tr><tr><td>Basement</td><td>Carpark: 809m² / 30m² p/p</td></tr><tr><td>Ground</td><td>Warehouse/Dock Office: 1552m² / 30m² p/p</td></tr><tr><td>Level 1</td><td>Office: 176m² / 10m² p/p</td></tr></table></td><td>See below.
To be confirmed by the architect.

Basement 1 = 27 occupants
Ground = 52 occupants
Office = 18 occupants</td><td>Noted</td></tr>
<tr><td>D2D19</td><td>Measurement of distances</td><td></td><td>Noted</td></tr>
<tr><td>D2D20</td><td>Method of measurement</td><td></td><td>Noted</td></tr>
<tr><td>D2D21</td><td>Plant rooms, lift machine rooms and electricity network substations: Concession
A ladder may be used in lieu of a stairway as an exit from:
a) a plant room with a floor area not more than 100m², or
b) all but one point of egress from a plant room with a floor area not more than</td><td></td><td>N/A</td></tr>
</table>

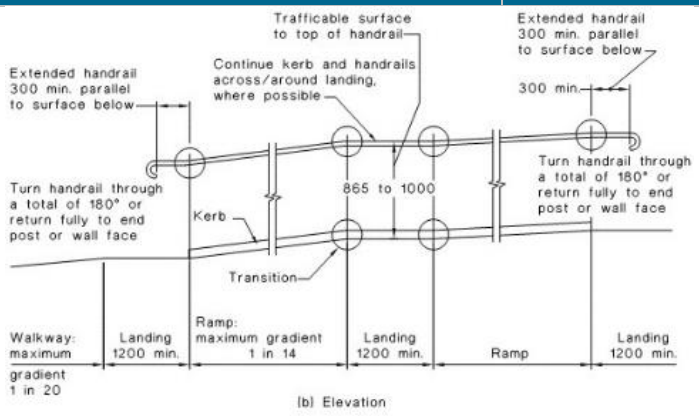
Clause	Description	Comment	Status
	200m^2.		
D2D22	**Access to lift pits** Access requirements apply to lift pits over 3m in depth.	Lift consultant to confirm.	Compliance Readily Achievable
D2D23	**Egress from primary schools**	N/A	N/A
Part D3 - Construction of Exits			
D3D2	**Application of Part** *(NSW variation for Entertainment Venues)*		Noted
D3D3	**Fire-isolated stairways and ramps** Fire resisting shafts must be constructed of non-combustible materials and so that if there is local failure it will not cause structural damage or impair the fire resistance of the shaft.	Fire isolated stair has been provided on GL 1/D.	Compliance Readily Achievable
D3D4	**Non-fire-isolated stairways and ramps** Required stairs in a building having a rise in storeys of not more than 2 must be constructed only of reinforced or prestressed concrete, or steel not less than 6mm thick, or timber that has a finished thickness of not less than 44mm and an average density of not less than 800 kg/m^3 at a moisture content of 12%.	Non fire isolated stairways are provided within the building. Compliance should be illustrated on the drawings.	Compliance Readily Achievable
D3D5	**Separation of rising and descending stair flights**		Compliance Readily Achievable
D3D6	**Open access ramps and balconies**		N/A
D3D7	**Smoke lobbies**		N/A
D3D8	**Installations in exits and paths of travel** Electrical meters and motors, distribution boards and telecommunication boards must not be accessed from fire isolated exits and, if located in corridors leading to exits, should occur in non-combustible or fire protective smoke sealed enclosures. No openings to ducts conveying hot products of combustion permitted in required exits. Gas or fuel services not permitted in required exits. Electric or services equipment in paths of travel to exits must be within a non-combustible and smoke sealed enclosure.	Distribution board enclosures must either be non-combustible or a fire protective covering with doorways or openings suitably sealed against smoke spreading from the enclosure. Compliance should be illustrated on the drawings.	Compliance Readily Achievable
D3D9	**Enclosure of space beneath stairs and ramps** If the space below a fire-isolated stairway is within the fire isolated shaft it must not be enclosed to form a cupboard or similar enclosed space. The space below non fire-isolated stairs must not be enclosed to form a cupboard or similar enclosed space unless the enclosing walls have an FRL of not less than 60/60/60 and any doorway to the enclosed space is fitted with a self-closing -/60/30 fire door.	The storage cupboard below the required egress stair must be fire separated with 60min construction and a -/60/30 self-closing fire door. Compliance should be illustrated on the architectural drawings.	Compliance Readily Achievable

Clause	Description	Comment	Status
D3D10	**Width of required stairways and ramps** A stairway or ramp more than 2m in width is only counted as having a width of 2m unless it is divided by a continuous handrail or balustrade between landings and each division is less than 2m wide.		N/A
D3D11	**Pedestrian ramps** Ramps serving as required exit must have a gradient not less steep than 1:8. If the ramp is required for disabled access under Part D4 it must comply with AS1428.1. The surface of the ramp must have a non-slip finish.	An external pedestrian ramp to the south is provided within the building. Compliance should be illustrated on the drawings. Refer also D3D22 in relation to handrails.	Compliance Readily Achievable
D3D12	**Fire-isolated passageways** Fire isolated passageways are to have an FRL equivalent to the fire resisting stair shaft as specified in Specification 5 when tested from the outside		Compliance Readily Achievable
D3D13	**Roof as open space** The roof is required to have an FRL of not less than 120/120/120 and not incorporate any roof lights or other openings within 3m of the path of travel.		N/A
D3D14	**Going and risers** *(NSW variation for Entertainment Venues)* To provide safe passage, stairways must comply with the following: • minimum 2 risers / maximum 18 in each flight • risers 115mm min 190 mm max - going 250mm min 355mm max - 2R+G 550mm min 700mm max. • Adjacent risers, or between adjacent goings a variation no greater than 5mm is permitted and the largest and smallest riser within the flight or the largest and smallest going within a flight is not to exceed a variation of 10mm. • Under the requirements of AS1428.1-2009 open riser are not permitted. • All treads to be fitted with non-slip finish or non-skid strips. • Treads are required to have a surface or nosing strip with a slip-resistance classification not less than listed in Table D3D15 when tested in accordance with AS 4586	Large scale stair details are needed for review and should demonstrate compliance with the requirements of this clause.	Compliance Readily Achievable

Clause	Description	Comment	Status
			
D3D15	**Landings** Ramps Surfaces, stair tread surfaces or nosing strips, and stair landing surfaces, or landing nosing strips to a flight below, must achieve slip-resistance classifications to AS4586-2013 as follows: **Application** / **Dry Surface Conditions** / **Wet Surface Condition** 1:14 or steeper ramps — P4 or R11 — P5 or R12 Ramps of 1:14 to 1:20 — P3 or R10 — P4 or R11 Tread or Landing Surface — P3 or R10 — P4 or R10 Nosing Strip or Landing Strip — P3 — P4	A finishes schedule specifying ramp and stairway finishes and corresponding slip resistance certification/test reports are needed for review.	Compliance Readily Achievable
D3D16	**Thresholds** *(NSW variation for Entertainment Venues)* Steps should not occur at doorways without a threshold landing except as follows: • In patient care areas in a Class 9a, the door sill is not more than 25mm above the finished floor level to which the door way opens, • In a Class 9c building, a ramp is provide with a maximum gradient of 1:8 for a maximum height of 25mm over the threshold • In a building required to be accessible and the doorway opens to a road or open space and is provided with a threshold ramp or step ramp in 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.	Compliance Readily Achievable
D3D17	**Barriers to prevent falls**	Clarify with Principal Certifier if barrier provisions Clause D3D17 apply to the retaining wall at the rear & Loading dock area inside warehouse.	Additional Details Required
D3D18	**Height of barriers** *(NSW variation for Entertainment Venues)* Barriers must generally not be less than 865mm for stairways and ramps and 1m in all other cases. A 700mm balustrade is permitted in front of		Compliance Readily Achievable

Clause	Description	Comment	Status
	fixed seating in an auditorium.		
D3D19	**Openings in barriers** Openings in a required barrier must not allow a 125mm sphere to pass through, except for concessions applying to fire-isolated stairs or other emergency use areas excluding Class 9b early childhood centres. Where a barrier is fixes to the face of a landing, balcony or the like, the opening between the barrier and the face must not permit a 40mm sphere to pass through.	Openings in barrier to the Mezzanine stairs applies ie a 125mm sphere must not be able to pass through any opening. Compliance should be illustrated on the drawings.	Compliance Readily Achievable
D3D20	**Barrier climbability** Where the level of the surface below is 4m or more, a balustrade or other barrier must not facilitate climbing of horizontal elements between 150mm and 760mm above the floor.	Barrier at the top of the Mezzanine stairs applies - any horizontal or near horizontal elements between 150mm and 760mm above the floor must not facilitate climbing. Compliance should be illustrated on the drawings.	Does Not Comply
D3D21	**Wire barriers**		N/A
D3D22	**Handrails** Handrails to exits including parts of fire isolated exit serving an area required to be accessible to people with disabilities must comply with Clause 12 of AS1428.1, viz: • Handrails not to obstruct circulation space • 30-50mm diameter • 865-1000mm above nosing line of stairs • 865-1000mm above ramps and landings • Consistent height throughout • 50mm grip clearance and no obstructions to handhold • Continuous at internal (return) landings • Provided with handrail extensions and 180 degree curled ends	Handrail compliance should be confirmed by the access consultant. Handrails are to be provided in compliance with Clause D4D4, which includes the following- **Non-Fire Isolated Stairways and Ramps** All stairs and ramps not used as an emergency exit are to have handrails installed on both sides that comply with Clause 10 & 11 of AS1428.1-2009 **Fire Isolated Stairways and Ramps** In Fire Isolated Stairways & Ramps a handrail is required to be installed to at least 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.	Compliance Readily Achievable
	Ramps		Compliance Readily Achievable

Clause	Description	Comment	Status

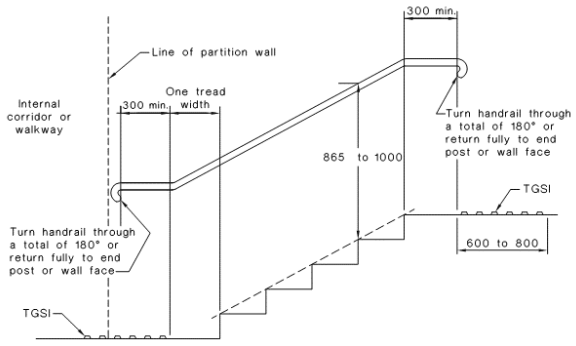


(b) Elevation

DIMENSIONS IN MILLIMETRES

FIGURE 14 RAMP HANDRAILS

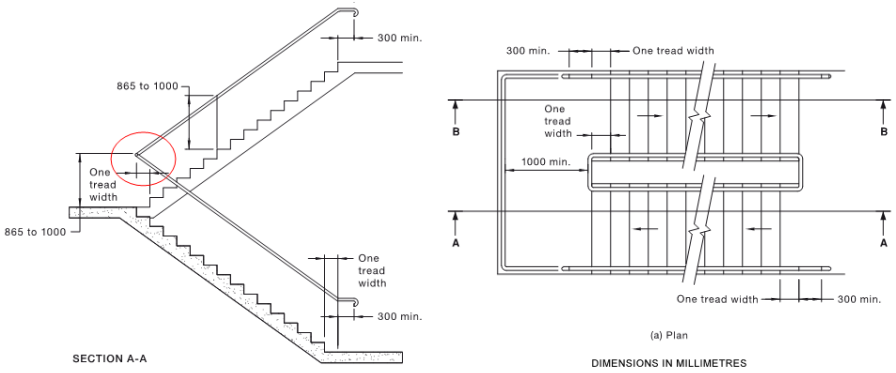
Stairways



SECTIONAL VIEW

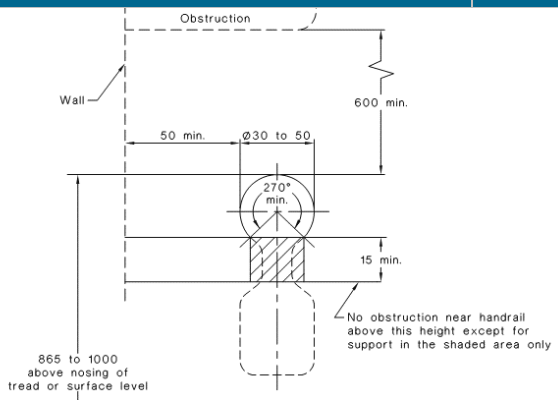
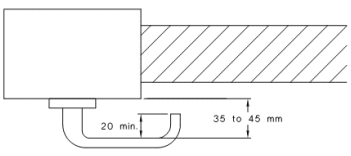
DIMENSIONS IN MILLIMETRES

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



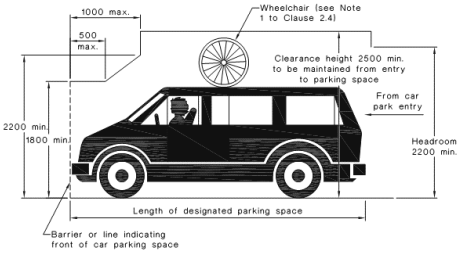
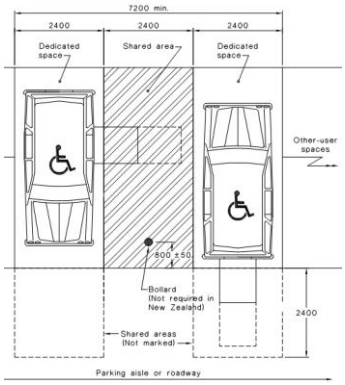
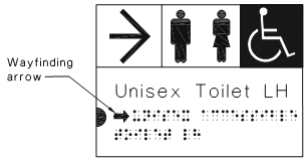
DIMENSIONS IN MILLIMETRES

Handrail Profile

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

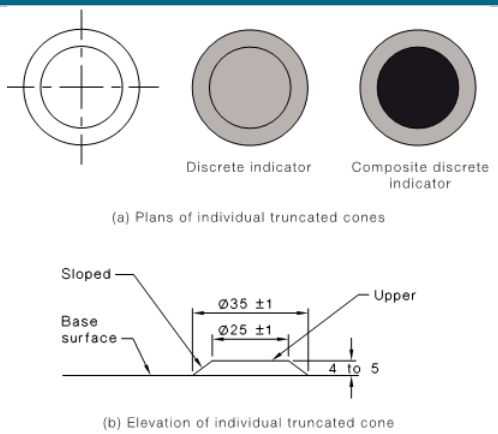
Clause	Description	Comment	Status
	located on the door leaf itself- • manual controls to power-operated doors must be at least 25 mm wide, proud of the surrounding surface and located not less than 500 mm from an internal corner; and • for a hinged door, between 1 m and 2 m from the door leaf in any position; • and for a sliding door, within 2 m of the doorway and clear of a surface mounted door in the open position. • braille and tactile signage complying with Clause 3 and 6 of Specification D3.6 must identify the latch operation device. Doors in a Class 9b building (other than schools or early childhood centres) serving a storey or room accommodating more than 100 people must be provided with a panic bar.		
D3D27	**Re-Entry from Fire-Isolated Exits**		N/A
D3D28	**Signs on doors** Signage in capital letters not less than 20mm high to be provided on doors as follows i. An automatic door held open by an automatic hold-open device: **FIRE SAFETY DOOR - DO NOT OBSTRUCT** ii. for a self-closing door **FIRE SAFETY DOOR** **DO NOT OBSTRUCT** **DO NOT KEEP OPEN** iii. for a door discharging from a fire-isolated exit **FIRE SAFETY DOOR - DO NOT OBSTRUCT**	Under Section 108 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 a notice is to be displayed in a conspicuous location adjacent to a doorway providing access to but not within a fire isolated stairway, passageway or ramp. The words "**OFFENCES RELATING TO FIRE EXITS**" are to be provided in letters at least 8mm high and the remaining words are to be at least 2.5mm high. The notice is to state the following: **OFFENCES RELATING TO FIRE EXITS** It is an offence under the Environmental Planning and Assessment Act 1979 (a) to place anything in or near this fire exit that may obstruct persons moving to or from this exit, or (b) to interfere with or obstruct the operation of any fire doors, or (c) to remove, damage or otherwise interfere with this notice.	Compliance Readily Achievable
D3D29	**Protection of openable windows**		N/A
D3D30	**Timber stairways: Concession**		N/A
NSW D3D31	**Doors in the path of travel in an Entertainment Venue**		N/A
Part D4 - Access for People with Disabilities			
D4D2	**General building access requirements** Access is generally required for persons with a disability throughout all areas unless specifically exempted.	Access is required throughout. Consultation with the access consultant is required.	Applicable

Clause	Description	Comment	Status
D4D3	**Access to buildings** External access to the building for people with a disability must be provided: • From main pedestrian entry points at the allotment boundary. • Through the principle pedestrian entrance. • Through at least 50% of all pedestrian entries. • From accessible car parking spaces. • For buildings over 500m², so that an accessible entry occurs within 50m of any non-accessible entry. • From any another accessible building on the site.	Refer to access consultant's report.	Compliance Readily Achievable
D4D4	**Parts of the building to be accessible** All parts of the building must be accessible to people with a disability except for areas where access would be inappropriate due to the particular use or areas that would pose a health or safety risk to people with a disability. Every ramp, except a fire isolated ramp, must comply with Clause 10 if AS 1428.1. Every stairway, except a fire isolated stairway, must comply with Clause 11 of AS 1428.1. A fire isolated stairway must comply with Clause 11(f) and (g) of AS 1428.1. Every passenger lift must comply with Clause E3D7. Access ways must have passing spaces and turning spaces complying with AS 1428.1. A ramp or passenger lift need not be provided to serve a storey or level other than the entrance storey of a class 5, 6, 7b or 8 building containing not more than 3 storeys and with a floor area of each storey, excluding the entrance floor, of not more than 200m². Pile height or pile thickness of carpets shall comply with the requirements of this Clause and AS 1428.1.	Refer to access consultant's report.	Additional Details Required
D4D5	**Exemptions** Certain areas may not need to be accessible if the area is deemed inappropriate because of the particular use or the area would pose a health or safety risk for people with disabilities.		Compliance Readily Achievable
D4D6	**Accessible carparking** The accessible parking spaces must comply with AS/NZS 2890.6 - 2009. General requirements are: • 2.4m x 5.4m. • 2.2m head clearance for access and egress routes to and from accessible car spaces. • 2.5m head clearances over accessible car spaces.		Additional Details Required

Clause	Description	Comment	Status
	• Flat even surfaces. • Designated and sign posted for disabled users.   		
D4D7	**Signage** Braille and tactile signage complying with Specification 15 and incorporating the international symbol of access or deafness in accordance with AS1428.1 must identify every accessible sanitary facility and space with a hearing augmentation system. Every doorway required to be provided with an exit sign under Clause E4D5 is to be provided with braille and tactile signage that states “EXIT” and identify the floor level “LEVEL #”.  Signage must be provided within a room containing hearing augmentation identifying the type of hearing augmentation, the area covered in the room and if receivers are being used and where the receivers can be obtained. Signage identifying ambulant accessible sanitary facilities in accordance with AS 1428.1 must be located on the door of the facility.  	Signage details must be in accordance with AS1428.1 - 2009 and Specification 15 of the BCA.	Compliance Readily Achievable

Clause	Description	Comment	Status
	  Where the pedestrian entrance is not accessible, directional signage in accordance with AS 1428.1 must be provided to direct a person to the location of the nearest accessible pedestrian entrance. Where a bank of sanitary facilities is not provided with an accessible unisex sanitary facility, directional signage must be placed at the location of the sanitary facilities that are not accessible, to direct a person to the location of the nearest accessible unisex sanitary facility.		
D4D8	**Hearing augmentation**	Refer to access consultant's report.	N/A

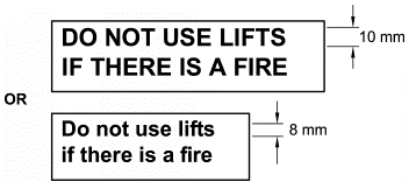
D4D9	**Tactile indicators (TGSIs)**
	Tactile indicators are to be provided to all stairways, ramps and escalators must be provided to warn people who are blind or have a vision impairment that they are approaching:
	• a stairway, other than a fire-isolated stairway,
	• an escalator, passenger conveyor or moving walk,
	• a ramp other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp, or
	• in the absence of a suitable barrier an overhead:
	  ○ obstruction less than 2 m above floor level, other than a doorway
	  ○ an access way meeting a vehicular way adjacent to any pedestrian entrance to a building, excluding a pedestrian entrance serving an area referred to in D4D5, if there is no kerb or kerb ramp at that point
	Tactile ground surface indicators must comply with sections 1 and 2 of AS/NZS 1428.4.1
		Refer to access consultant's report.	Additional Details Required

Clause	Description	Comment	Status
			
D4D10	**Wheelchair seating spaces in Class 9b assembly buildings**	N/A.	N/A
D4D11	**Swimming pools**	N/A	N/A
D4D12	**Ramps** On an access way a series of connected ramps must not have a combined vertical rise of more than 3.6m. A landing for a step ramp must not overlap a landing of another step ramp or ramp.	Refer to access consultant's report.	Compliance Readily Achievable
D4D13	**Glazing on an accessway** On an accessway, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS 1428.1.	Required non-transparent glazing decals complying with AS 1428.1 should be illustrated for review.	Compliance Readily Achievable
Section E: Services and Equipment			
Part E1 - Fire Fighting Equipment			
E1D2	**Fire hydrants** The building requires a fire hydrant system in accordance with AS2419.1-2021. 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 AS2419.1 do not apply. The fire brigade booster assembly is required to be installed in accordance with AS2419.1-2021.	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 E1D2 of the BCA and AS2419.1-2021 (noting any non-compliances, which are to be addressed as a Performance Solution). Fire hydrant coverage to be verified ie access to the fire stair at Ground Level and coverage to awning at rear. No booster assembly detailed on the architectural drawings. Fire hydrant booster, and any required pump room(s) to be detailed on the architectural	Additional Details Required

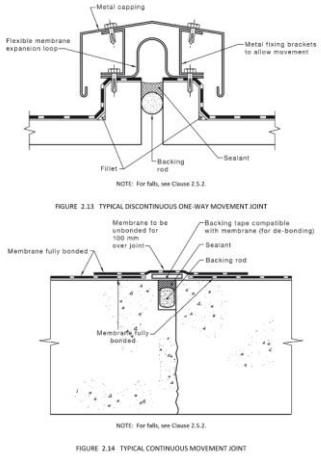
Clause	Description	Comment	Status
		drawings.	
E1D3	**Fire hose reels** Fire hose reel coverage to AS2441-2005 is required throughout with hose reels located adjacent to stairs and exits. Where coverage is not achieved with hose reels located Additional hose reels are permitted to be located along the 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 E1D3 of the BCA and AS2441 - 2005.	Compliance Readily Achievable
E1D4	**Sprinklers** *(NSW variation for Residential Aged Care)* Fire sprinkler protection to AS2118.1-1999, AS2118.6-2012 as relevant is a mandatory requirement for the project if:- • Occupancies of "excessive hazard" that occur in fire compartments over 2,000m^2 or 12,000m^3. 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 agreed where uncertainty of usage under Appendix 1 of the Code occurs.	The car-park now has less than 40 motor vehicles. These areas need to be confirmed but could include: • External under croft areas • Radiation therapy bunkers • PC3 laboratories • Chemical stores • Dangerous goods stores • Flammable liquids stores Further compliance information to be provided for review.	Compliance Readily Achievable
E1D5	**Where sprinklers are required: all classifications**		Compliance Readily Achievable
E1D6	**Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings**		N/A
E1D7	**Where sprinklers are required: Class 3 building used as a residential care building**		N/A
E1D8	**Where sprinklers are required: Class 6 building**		N/A
E1D9	**Where sprinklers are required: Class 7a building, other than an open-deck carpark**	The car-park now has less than 40 motor vehicles.	N/A
E1D10	**Where sprinklers are required: Class 9a health-care building used as a residential care building, Class 9c buildings**		N/A
E1D11	**Where sprinklers are required: Class 9b buildings**		N/A
E1D12	**Where sprinklers are required: additional requirements**		N/A
E1D13	**Where sprinklers are required: occupancies of excessive hazard**	Confirmation to be provided as to whether the facility will contain an occupancy of excessive hazard in relation	Additional Details Required

Clause	Description	Comment	Status
	"Excessive hazard" means: a) Hazardous process risks including the following: (i) Aircraft hangars (ii) Electrical/electronic manufacturing and assembly (predominantly plastic components. (iii) Fire-lighter manufacturing. (iv) Fireworks manufacturing. (v) Flammable liquid spraying. (vi) Foam plastic goods manufacturing and/or processing. (vii) Foam rubber goods manufacturing and/or processing. (viii) Hydrocarbon based sheet product manufacturing. (ix) Nitrocellulose and nitrocellulose goods manufacturing. (x) Paint and varnish works, solvent based. (xi) Plastic goods manufacturing and/or processing works. (xii) Resin and turpentine manufacturing. (xiii) Vehicle repair shops. b) Combustible goods with an aggregate volume exceeding 2,000m3 and stored to a height greater than 4m such as the following: (i) Aerosol packs with flammable contents. (ii) Cartons and associated packing material excluding cartons with densely packed non-combustible content.	to the requirements noted in Clause E1D13 where sprinklers are required.	
E1D14	**Portable fire extinguishers** Portable Fire Extinguishers are required be installed to sections (3) and (4) in Clause E1D14 and AS 2444 requirements, at: • Throughout Class 5 buildings • emergency services switchboards • kitchens • flammable liquid stores • at nurses' stations • special risk areas • where fire hose reels are not installed • Class 2, 3 or 4 residential areas are to be protected by 2.5kg ABE type fire extinguishers located in common areas on the storey served and located not more than 10m from each sole occupancy unit entry door.		Compliance Readily Achievable
E1D15	**Fire control centre**	N/A	N/A
E1D16	**Fire precautions during construction**	N/A	N/A

Clause	Description	Comment	Status
	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.		
E1D17	**Provisions for special hazards**	EV charging is a special hazard and requires a separate assessment from a fire engineer.	Compliance Readily Achievable
Part E2 - Smoke Hazard Management			
E2D2	**Applicable of requirements**	N/A	Noted
E2D3	**General requirements**	N/A	Noted
E2D4	**Fire-isolated exits**		Compliance Readily Achievable
E2D5	**Buildings more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building**	N/A	N/A
E2D6	**Buildings more than 25 m in effective height: Class 5, 6, 7b, 8 or 9b buildings**	N/A	N/A
E2D7	**Buildings more than 25 m in effective height: Class 9a buildings**	N/A	N/A
E2D8	**Buildings not more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building**	N/A	N/A
E2D9	**Buildings not more than 25 m in effective height: Class 5, 6, 7b, 8 and 9b buildings**	Smoke hazard management is required with one of the following being installed: • Fire detection system to AS1670 • Stair pressurisation • Sprinkler system or • Zone pressurisation system	Compliance Readily Achievable
E2D10	**Buildings not more than 25 m in effective height: large isolated buildings subject to C3D4**	N/A	N/A
E2D11	**Buildings not more than 25 m in effective height: Class 9a and 9c buildings**	N/A	N/A
E2D12	**Class 7a buildings**	A Class 7a building, including a basement, provided with a mechanical ventilation system in accordance with AS 1668.2, must comply with clause 5.5 of AS 1668.1.	Compliance Readily Achievable
E2D13	**Basements (other than Class 7a buildings)**	Basement is counted in the rise in storeys.	Compliance Readily Achievable
E2D14	**Class 6 buildings - in fire compartments more than 2000 m^2: Class 6 building (not containing**	N/A	N/A

Clause	Description	Comment	Status
	an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit)		
E2D15	**Class 6 buildings - in fire compartments more than 2000 m²: Class 6 building (containing an enclosed common walkway or mall)**	N/A	N/A
NSW E2D16	**Class 9b – assembly buildings: all**	N/A	N/A
NSW E2D17	**Class 9b – assembly buildings: night clubs, discotheques and the like**	N/A	N/A
NSW E2D18	**Class 9b – assembly buildings: exhibition halls, museums and art galleries**	N/A	N/A
NSW E2D19	**Class 9b – assembly buildings: other assembly buildings (not listed in NSW E2D16 to E2D18)**	N/A	N/A
NSW E2D20	**Class 9b assembly buildings: other assembly buildings (not listed in E2D16 to E2D19)**	N/A	N/A
E2D21	**Provisions of special hazards**	EV charging is a special hazard and requires a separate assessment from a fire engineer.	Compliance Readily Achievable
Part E3 - Lift Installations			
E3D2	**Lift installations** Electric and electrohydraulic lifts must comply with the design requirements of BCA Specification 24.	Certification of lift design to be provided	Compliance Readily Achievable
E3D3	**Stretcher facility in lifts** Buildings greater than 12m in effective height require a lift sized to accommodate a stretcher of 2m x 0.6m x 1.4m high. The lift must serve every level to which lift access is provided.	Ensure a suitably sized lift serves each level.	N/A
E3D4	**Warning against use of lift in fire** Warning signage is required at lift doors advising that lifts should not be used in the event of a fire.	Signage to be installed stating. 	Complies
E3D5	**Emergency lifts**		N/A
E3D6	**Landings**		Compliance Readily Achievable
E3D7	**Passenger lift types and their limitations** Every passenger lift must be one of the types identified in Sections (1) of Clause E3D7 of the BCA and not reply on a constant pressure device for its operation if the lift car is fully enclosed.		Compliance Readily Achievable
E3D8	**Accessible features required for passenger lifts** Every passenger lift must have accessible features where applicable as identified in Clause E3D8 of the BCA.		Compliance Readily Achievable
E3D9	**Fire service control**	N/A	N/A

Clause	Description	Comment	Status
	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.		
E3D10	**Residential care buildings**	N/A	N/A
E3D11	**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.	N/A	N/A
E3D12	**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.	N/A	N/A
Part E4 - Emergency Lighting, Exit and Warning Systems			
E4D2	**Emergency lighting requirements** Emergency lighting is to be provided throughout the building.	Emergency lighting is to be provided.	Compliance Readily Achievable
E4D3	**Measurement of distances**		Noted
E4D4	**Design and operation of emergency lighting** Emergency lighting must comply with to AS2293.1		Compliance Readily Achievable
E4D5	**Exit signs** Exit signs are to be provided in accordance with Clause E4D5 of the BCA.	Exit signs must be clearly visible to person approaching the exit.	Compliance Readily Achievable
E4D6	**Direction signs** *(NSW variation for Entertainment Venues)* Where an exit is not readily apparent then exit signs with directional arrows must be installed in appropriate positions in corridors, hallways, lobbies and the like indicating the direction to a required exit		Compliance Readily Achievable
E4D7	**Class 2 and 3 buildings and Class 4 parts: Exemptions**	N/A	N/A
E4D8	**Design and operation of exit signs** 1. Exit signs are to operate in accordance with AS 2293.1. 2. Photo luminescent exit sign are to comply with Specification 25.	N/A	Compliance Readily Achievable
E4D9	**Emergency warning and intercom systems** An emergency warning and intercom system	N/A	N/A

Clause	Description	Comment	Status
	complying with AS 1670.4 must be installed throughout the building.		
Section F: Health and Amenity			
Part F1 - External waterproofing, rainwater management and rising damp			
F1D1	**Deemed-to-Satisfy Provisions** Performance requirements F1P1 to F1P4 are satisfied by complying with Clause F1D2 to F1D10.	Noted	Noted
F1D2	**Application of Part**	Noted	Noted
F1D3	**Stormwater drainage** Stormwater drainage must comply with AS/NZS 3500.3.	Hydraulic drawings and design certification to be provided at Construction Certificate stage.	Compliance Readily Achievable
F1D4	**Exposed joints** Exposed joints in the drainage surface on a roof, balcony, podium or similar horizontal surface part of a building must be protected in accordance with Section 2.9 of AS 4654.2; and not be located beneath or run through a planter box, water feature or similar part of the building.  FIGURE 2.13 TYPICAL DISCONTINUOUS ONE-WAY MOVEMENT JOINT FIGURE 2.14 TYPICAL CONTINUOUS MOVEMENT JOINT	Structural engineer/architect to confirm compliance.	Compliance Readily Achievable
F1D5	**External waterproofing membranes** Trafficable roofs, balconies, podiums or similar parts of a building require a waterproofing membrane complying with AS4654.1 and AS4654.2, which must be installed directly on the structural substrate.	A waterproofing detail illustrating compliance with this clause is needed for review.	Compliance Readily Achievable
F1D6	**Damp-proofing** Moisture from the ground must be prevented from reaching the lowest floor timber and the walls above the lowest floor joists, the walls above the dam proof course and the underside of a suspended floor constructed of a material other than timber, and the supporting beams or girders. Damp proof course must consist of a material that complies with AS/NZS 2904 or an impervious termite shield in accordance with AS		Compliance Readily Achievable

Clause	Description	Comment	Status
	3660.1.		
F1D7	**Damp-proofing of floors on the ground** A vapour barrier in accordance with AS2870 is to be provided beneath the basement floor slab.		Compliance Readily Achievable
F1D8	**Subfloor ventilation**	No subfloor spaces.	N/A
Part F2 - Wet areas and overflow protection			
F2D1	**Deemed-to-Satisfy Provisions** Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F2P1 and F2P2 are satisfied by complying with F2D2 to F2D4. Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.		Noted
F2D2	**Wet area construction** Water proofing of wet areas within a building to comply with AS 3740. Showers in Class 2 and 3 buildings or a Class 4 part must have a concrete or FC sheet structural substrate for floors and concrete, masonry, or FC sheeted walls. Concrete structural substrates for shower floors must be graded to a 1:80 fall, and the membrane directly applied to the structural substrate. The waterproofing requirements for multi-residential buildings also apply to commercial buildings.		Compliance Readily Achievable
F2D3	**Rooms containing urinals** Additional requirements apply including falls to floor wastes and impervious materials surrounding urinals.		Compliance Readily Achievable
F2D4	**Floor wastes** The floor of each bathroom and laundry in each sole occupancy of the Class 2 and 3 building portions must have a floor waste and floors graded to the floor waste at 1:50.		Compliance Readily Achievable
Part F3 - Roof and wall cladding			
F3D1	**Deemed-to-Satisfy Provisions** Where a Deemed-to-Satisfy Solution is proposed, Performance Requirement F3P1 is satisfied by complying with F3D2 to F3D5. Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.		Noted
F3D2	**Roof coverings** A roof must be covered with— (a) roof tiles complying with AS 2049, fixed in accordance with AS 2050; or (b) metal sheet roofing complying with AS 1562.1; or		Compliance Readily Achievable

Clause	Description	Comment	Status
	(c) plastic sheet roofing designed and installed in accordance with AS 1562.3; or (d) terracotta, fibre-cement and timber slates and shingles designed and installed in accordance with AS 4597, except in cyclonic areas; or an external waterproofing membrane complying with F1D5.		
F3D3	**Sarking** Sarking type materials used for weatherproofing of roofs and walls must comply with AS/NZS 4200 Parts 1 and 2.		Compliance Readily Achievable
F3D4	**Glazed assemblies** Windows, sliding doors with a frame, adjustable louvres, shopfronts and window walls with one piece framing in an external wall must comply with AS 2047 requirements for resistance to water penetration.		Compliance Readily Achievable
F3D5	**Wall cladding** External wall cladding must comply with one or a combination of the following: • Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700 • Autoclaved aerated concrete: AS 5146.3. • Metal wall cladding: AS 1562.1.	External wall claddings which are not captured under Clause F3D5 will require a performance solution to be documented by an appropriately qualified practitioner in accordance with *Clause A2G2 - Performance Solution.* Performance Requirement F3P1, for the prevention of the penetration of water through external walls, must be complied with. Compliance can be demonstrated via the following: 1. FV1 Weatherproofing or 2. Engage a Facade engineer to address the performance requirements of F3P1 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.	Performance Solution

Part F4 - Sanitary and other facilities

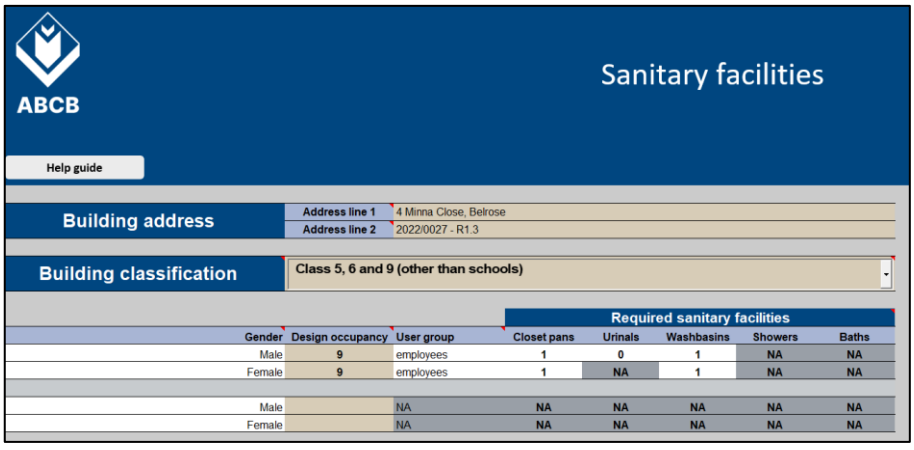
F4D2	**Facilities in residential buildings**		N/A
F4D3	**Calculation of number of occupants and fixtures** 1) The number of persons accommodated must be calculated according to D2D18 if it cannot be more accurately determined by other means. 2) Unless the premises are used predominantly by one sex, sanitary facilities must be provided on the basis of equal numbers of males and females. 3) In calculating the number of sanitary facilities to be provided under F4D2 and F4D4, a unisex facility required for people with a disability (other than a facility provided under F4D12) may be counted once for each sex. 4) For the purposes of this Part, a unisex facility comprises one closet pan, one washbasin and means for the disposal of sanitary products.	The Architect has advised that the office is to be considered as 1 occupant per 10m² and the warehouse should be considered with 1 occupant per 30m².	Additional Details Required
F4D4	**Facilities in Class 3 to 9 buildings** Toilet facilities are required in appropriate numbers based on the number of persons accommodated. No urinals have been detailed in the male toilets.		Additional Details Required

Table F4D4a: Sanitary facilities in Class 3, 5, 6 and 9 buildings other than schools

User group	Closet pans		Urinals		Washbasins	
	Design occupancy	Number	Design occupancy	Number	Design occupancy	Number
Male employees	1 - 20	1	1 - 10	0	1 - 30	1
	>20	Add 1 per 20	11 - 25	1	>30	Add 1 per 30
	-	-	26 - 50	2	-	-
	-	-	>50	Add 1 per 50	-	-
Female employees	1 - 15	1	N/A	N/A	1-30	1
	>15	Add 1 per 15	N/A	N/A	>30	Add 1 per 30

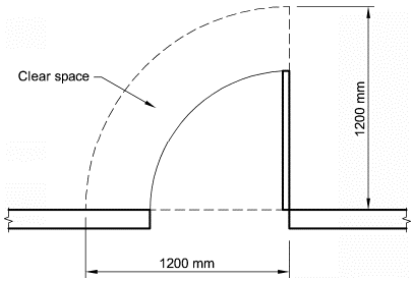
Table F4D4b: Sanitary facilities in Class 7 and 8 buildings

User group	Closet pans		Urinals		Washbasins	
	Design occupancy	Number	Design occupancy	Number	Design occupancy	Number
Male employees	1 - 20	1	1 - 10	0	1 - 20	1
	>20	Add 1 per 20	11 - 25	1	>20	Add 1 per 20
	-	-	26 - 50	2	-	-
	-	-	>50	Add 1 per 50	-	-
Female employees	1 - 15	1	N/A	N/A	1 - 20	1
	>15	Add 1 per 15	N/A	N/A	>20	Add 1 per 20



	ABCB Sanitary facilities Help guide Building address: Address line 1: 4 Minna Close, Belrose; Address line 2: 2022/0027 - R1.3 Building classification: Class 7 and 8 Required sanitary facilities		

Gender	Design occupancy	User group	Closet pans	Urinals	Washbasins	Showers	Baths
Male	26	employees	2	2	2	NA	NA
Female	26	employees	2	NA	2	NA	NA
Male		NA	NA	NA	NA	NA	NA
Female		NA	NA	NA	NA	NA	NA

F4D5	**Accessible sanitary facilities** Facilities should be constructed to AS1428.1 - 2009 although an existing WC facility that fully complies with AS1428.1 - 2001 may substitute as a concession. Separate male and female ambulant facilities are required at each bank of toilets that contains one or more toilets in addition to an accessible unisex facility.	Refer to access consultant's report.	Compliance Readily Achievable
F4D6	**Accessible unisex sanitary compartments** Accessible unisex toilets for people with a disability are required on each storey and at 50% of toilet banks on any storey.	Refer to access consultant's report.	Compliance Readily Achievable
F4D7	**Accessible unisex showers**	Refer to access consultant's report.	N/A
F4D8	**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
F4D9	**Interpretation: Urinals and washbasins**	Each 600mm length of a continuous urinal trough is counted as 1 urinal.	Compliance Readily Achievable
F4D10	*(NSW variation - This clause has deliberately been left blank.)*		-
F4D11	**Waste management**	N/A	N/A
F4D12	**Accessible adult change facilities**	N/A	N/A
Part F5 - Room heights			
F5D2	**Height of rooms and other spaces** Generally, a minimum ceiling height of 2.4m is required throughout.	Compliance to be fully confirmed prior to the issue of a Construction Certificate once RC drawings detailing full compliance has been provided.	Compliance Readily Achievable

	In a Class 9b building in a school classroom or other assembly building with more than 100 persons — 2.4 m; A theatre, public hall or other assembly building with more than 100 persons — 2.7 m In a corridor that serves an assembly building with not more than 100 persons — 2.4 m In a corridor that serves an assembly building with more than 100 persons — 2.7 m; in a Class 9a health-care building— (i) a patient care area — 2.4 m; and (ii) an operating theatre or delivery room — 3 m; and (iii) a treatment room, clinic, waiting room, passageway, corridor, or the like — 2.4 m		
Part F6 - Light and ventilation			
F6D2	**Provision of natural light**		N/A
F6D3	**Methods and extent of natural lighting**		N/A
F6D4	**Natural light borrowed from adjoining room**		N/A
F6D5	**Artificial lighting** The artificial lighting system must comply with AS/NZS 1680.0.	Design details and certification from an electrical engineer is required	Compliance Readily Achievable
F6D6	**Ventilation of rooms** *(NSW variation for Public Health Regulation)* Ventilation shall be provided throughout the building in by means of natural ventilation complying with Clause F6D7 or mechanical ventilation complying with the requirements of AS1668.2 as required by Clause F6D6 of the BCA.	Design details and certification from a mechanical engineer is required	Compliance Readily Achievable
F6D7	**Natural ventilation**	N/A	N/A
F6D8	**Ventilation borrowed from adjoining room**	N/A	N/A
F6D9	**Restriction on location of sanitary compartments**		Compliance Readily Achievable
F6D10	**Airlocks**		Complies
F6D11	**Carparks** Basement carparks must be provided with a system of mechanical ventilation complying with AS 1668.2		Compliance Readily Achievable
F6D12	**Kitchen local exhaust ventilation** A commercial kitchen must be provided with a kitchen exhaust hood complying with AS/NZS 1668.1 and AS 1668.2, where: any cooking apparatus has a total maximum electrical power input exceeding 8kW, or a total gas power input exceeding 29 MJ/h, or the total maximum power input to more than one apparatus exceeds 0.5kW electrical power or 1.8 MJ gas per metre square of the room or enclosure.		Compliance Readily Achievable

Part F7 - Sound transmission and insulation			
F7D2	**Application of Part** Applicable to Class 2, 3 and 9c buildings		Noted
F7D3	**Determination of airborne sound insulation ratings**	N/A	N/A
F7D4	**Determination of impact sound insulation ratings**	N/A	N/A
F7D5	**Sound insulation rating of floors**	N/A	N/A
F7D6	**Sound insulation rating of walls**	N/A	N/A
F7D7	**Sound insulation rating of internal services**	N/A	N/A
F7D8	**Sound isolation pumps**	N/A	N/A
Part F8 - Condensation management			
F8D2	**Application of part** This part applies to a sole-occupancy unit of a Class 2 building or Class 4 part of a building.		Noted
F8D3	**External wall construction**	N/A	N/A
F8D4	**Exhaust systems**	N/A	N/A
F8D5	**Ventilation of roof spaces**	N/A	N/A
Section G: Ancillary Provisions			
Part G1- Minor Structures and components			
G1D2	**Swimming pools**	N/A	N/A
G1D3	**Refrigerated chambers, strong rooms and vaults**	N/A	N/A
G1D4	**Outdoor play spaces**	N/A	N/A
NSW G1D5	**Provision for cleaning windows** A safe manner of cleaning windows is to be provided as windows are located 3 or more storeys above ground level.	The windows must either be able to be cleaned wholly from within the building, or a method complying with the Construction Safety Act 1912 and Regulations is required.	Compliance Readily Achievable
Part G2 - Boilers, pressure vessels, heating appliances, fire places, chimneys and flues			
G2D2	**Installation of appliances**	N/A	N/A
G2D3	**Open fireplaces**	N/A	N/A
G2D4	**Incinerator rooms**	N/A	N/A
Part G3 - Atrium Construction			
G3D1	**Application of Part**		Noted
G3D2	**Dimensions of atrium well** Minimum 6m diameter atrium well is required.		N/A
G3D3	**Separation of atrium by bounding walls**	N/A	N/A
G3D4	**Construction of bounding walls**	N/A	N/A
G3D5	**Construction of balconies**	N/A	N/A
G3D6	**Separation at roof**	N/A	N/A

G3D7	**Means of egress**	N/A	N/A
G3D8	**Fire and smoke control systems**	N/A	N/A
Part G4 - Construction in Alpine Areas			
G4D2	**Application of Part**	N/A	N/A
G4D3	**External doorways**	N/A	N/A
G4D4	**Emergency lighting**	N/A	N/A
G4D5	**External trafficable structures**	N/A	N/A
G4D6	**Clear space around buildings**	N/A	N/A
G4D7	**Fire-fighting services and equipment**	N/A	N/A
G4D8	**Fire orders**	N/A	N/A
Part G5 - Construction in Bushfire Prone Areas			
G5D2	**Application of Part**	N/A	N/A
G5D3	**Protection - residential buildings** *(NSW variation for bushfire prone area)*	N/A	N/A
G5D4	**Protection - certain Class 9 buildings**	N/A	N/A
Part G6 - Occupiable outdoor areas			
G6D1	**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 G6D2, Part G6 does not apply to occupiable outdoor areas of individual resident rooms or outdoor occupiable areas less than $10m^2$.		Noted
G6D2	**Fire hazard properties**	N/A	N/A
G6D3	**Fire separation**	N/A	N/A
G6D4	**Provision for escape**	N/A	N/A
G6D5	**Construction of exits**	N/A	N/A
G6D6	**Fire fighting equipment**	N/A	N/A
G6D7	**Lift installations**	N/A	N/A
G6D8	**Visibility in an emergency, exit signs and warning systems**	N/A	N/A
G6D9	**Light and ventilation**	N/A	N/A
G6D10	**Fire orders**	N/A	N/A
Part G7 - Livable housing design			
G7D2	**Livable housing design** Each Class 2 sole-occupancy unit in a Class 2 building must comply with the ABCB Standard for Livable Housing Design, except for Part 1.	N/A	N/A
Section I: Special use buildings			

Part I1 - Class 9b buildings			
I1D1	**Application of Part** *(NSW variation for Entertainment Venues)* For a Class 9b building that is an entertainment venue refer to NSW Part I4.		Noted
I1D2	**Separation**	N/A	N/A
I1D3	**Proscenium wall construction**	N/A	N/A
I1D4	**Seating area**	N/A	N/A
I1D5	**Exit from stages**	N/A	N/A
I1D6	**Access to platforms and lofts**	N/A	N/A
I1D7	**Aisle lights**	N/A	N/A
Part I2 - Public Transport Buildings			**N/A**
Part I3 - Farm buildings and farm sheds			**N/A**
NSW Part I4 - Entertainment venues other than temporary structures and drive-in theatres			
I4D1	**Application of Part** This Part applies to every entertainment venue as described in the Environmental Planning and Assessment Regulation 2021.	Entertainment Venue is defined as a building used as a cinema, theatre or concert hall or an indoor sports stadium.	Noted
I4D2	**Fire separation**	N/A	N/A
I4D3	**Foyer space**	N/A	N/A
I4D4	**Sprinkler systems for common foyers**	N/A	N/A
I4D5	**Conventional stages: application**	N/A	N/A
I4D6	**Conventional stages: extent of stage area**	N/A	N/A
I4D7	**Conventional stages: small stages**	N/A	N/A
I4D8	**Conventional stages: large stages**	N/A	N/A
I4D9	**Conventional stages: fire separation of stages**	N/A	N/A
I4D10	**Non-conventional stages: application**	N/A	N/A
I4D11	**Non-conventional stages: small stages**	N/A	N/A
I4D12	**Non-conventional stages: large stages**	N/A	N/A
I4D13	**Flying scenery**	N/A	N/A
I4D14	**Load notice**	N/A	N/A
I4D15	**Safety curtains**	N/A	N/A
I4D16	**Safety curtains - additional requirements**	N/A	N/A
I4D17	**Seating in rows**	N/A	N/A
I4D18	**Seating in rows: number of seats**	N/A	N/A
I4D19	**Seating in rows: chairs used for seating**	N/A	N/A
I4D20	**Seating in rows: chairs in auditoriums — level floors**	N/A	N/A
I4D21	**Seating in rows: chairs in auditoriums — sloping floors**	N/A	N/A
I4D22	**Seating in rows: radiating aisles in seating areas**	N/A	N/A

I4D23	**Seating in rows: aisles and cross-overs**	N/A	N/A
I4D24	**Seating in rows: platforms and steps**	N/A	N/A
I4D25	**Seating in rows: stepped platforms**	N/A	N/A
I4D26	**Continental seating**	N/A	N/A
I4D27	**Continental seating: seating to be fastened**	N/A	N/A
I4D28	**Continental seating: maximum seats per row**	N/A	N/A
I4D29	**Continental seating: depth of seating**	N/A	N/A
I4D30	**Continental seating: clearance between rows**	N/A	N/A
I4D31	**Continental seating: chairs used for seating**	N/A	N/A
I4D32	**Continental seating: egress doorways**	N/A	N/A
I4D33	**Continental seating: clear areas**	N/A	N/A
I4D34	**Continental seating: minimum clear space**	N/A	N/A
I4D35	**Continental seating: doors**	N/A	N/A
I4D36	**Provision of guardrails: location**	N/A	N/A
I4D37	**Provision of guardrails: fixed back seats**	N/A	N/A
I4D38	**Provision of guardrails: steps between platforms**	N/A	N/A
I4D39	**Guardrails for seating areas: application**	N/A	N/A
I4D40	**Guardrails for seating areas: continental seating**	N/A	N/A
I4D41	**Guardrails for seating areas: balconies and boxes**	N/A	N/A
I4D42	**Guardrails for seating areas: cross-overs**	N/A	N/A
I4D43	**Dressing rooms**	N/A	N/A
I4D44	**Storerooms**	N/A	N/A
I4D45	**Projection suites**	N/A	N/A
I4D46	**Projection suites: rooms to be provided**	N/A	N/A
I4D47	**Projection suites: fire separation**	N/A	N/A
I4D48	**Projection suites: concession for protection of some openings**	N/A	N/A
I4D49	**Basement storeys**	N/A	N/A
I4D50	**Basement storeys: more than two**	N/A	N/A
I4D51	**Electric mains installation: main switchboard**	N/A	N/A
I4D52	**Electric mains installation: circuit**	N/A	N/A
I4D53	**Electric mains installation: separate sub-mains**	N/A	N/A
I4D54	**Lighting: lighting switches**	N/A	N/A
I4D55	**Lighting: lighting levels**	N/A	N/A
I4D56	**Lighting: provision of aisle lighting**	N/A	N/A
I4D57	**Lighting: aisle lighting power supply**	N/A	N/A
I4D58	**Lighting: aisle lighting alternative lighting supply**	N/A	N/A
I4D59	**Automatic smoke and heat vents for Stage**	N/A	N/A

I4D60	**Solid fuel burning stoves and open fire places**	N/A	N/A
I4D61	**Fuel gas cylinders: general**	N/A	N/A
I4D62	**Fuel gas cylinders: enclosures**	N/A	N/A
NSW Part I5 Temporary structures			**N/A**
NSW Part I6 Drive-in theatres			**N/A**
NSW Section J: Energy Efficiency Energy Efficiency for buildings requires buildings to reduce greenhouse gas emissions by efficiently using energy. A building's services must have features that facilitate the efficient use of energy. The discipline of Energy Efficiency with the BCA has become a specialised field where compliance with BCA Section J is to be certified with the issue of a Certificate of Compliance - Design from the relevant Services Engineer/Consultant. The purpose of this section is to provide a brief explanation of which areas are to achieve compliance with BCA Section J - Energy Efficiency during design and construction. The BCA should be referenced for exact requirements, clarification and further explanation.			
Section J	**Energy efficiency measures** Energy efficiency measures are prescribed for the following building elements to limit energy consumption:- • Building fabric • External glazing • Building sealing • Air movement. • Air-conditioning and ventilation systems. • Artificial lighting and power • Hot water supply • Access for maintenance	Compliance assumed, although further information is required to confirm compliance. A performance based BCA J1V3 assessment may be adopted for the project if compliance with BCA deemed to satisfy provisions are problematic.	Compliance Readily Achievable
Part J2 - Energy efficiency			
Part J3 - Elemental provisions for a sole-occupancy unit of a Class 2 building or a Class 4 part of a building			
Part J4 - Building Fabric			
Part J5 - Building sealing			
Part J6 - Air-conditioning and ventilation			
Part J7 - Artificial Lighting and Power			
Part J8 - Heated Water Supply and Swimming Pool and Spa Pool Plant			
Part J9 - Energy monitoring and on-site distributed energy resources			

15. Appendix A - Referenced Documentation

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

Drawing No.	Title	Rev	Date	Drawn By
DA000	Cover Page	A	9/11/2023	SRH Architecture
DA002	Site Plan & Site Analysis	A	9/11/2023	SRH Architecture
DA100	Basement Plan	A	9/11/2023	SRH Architecture
DA101	Ground Floor Plan	A	9/11/2023	SRH Architecture
DA102	First Floor Plan	A	9/11/2023	SRH Architecture
DA103	Roof Plan	A	9/11/2023	SRH Architecture
DA200	Elevations Sheet 01	A	9/11/2023	SRH Architecture
DA201	Elevations Sheet 02	A	9/11/2023	SRH Architecture
DA300	Section Sheet 01	A	9/11/2023	SRH Architecture
DA301	Section Sheet 02	A	9/11/2023	SRH Architecture

16. Appendix B - Statutory Fire Safety Measures – TBC prior to issue of a CC

Schedule of Statutory Fire Safety Measures

Measure	Standard of Performance
Access Panels, Doors And Hoppers To Fire Resisting Shafts	BCA 2022 Clause C4D14 and tested prototypes (AS 1530.4 - 2014)
Automatic Fail Safe Devices (If installed)	Scheduled devices release upon trip in accordance with BCA 2022 Clause D3D26.
Automatic Fire Detection And Alarm System *(Smoke Detection System)*	BCA 2022 S20C4 and AS 1670.1 - 2018
Automatic Fire Suppression Systems *(Sprinklers)* *(If installed)*	BCA 2022 Specification 17 and AS 2118.1 - 2017
Building Occupant Warning System	BCA 2022 S20C7 and AS 1670.1 - 2018
Emergency Lighting	BCA 2022 Clause E4D2, E4D4 and AS/NZS 2293.1 - 2018
Exit Signs	BCA 2022 Clause E4D5, NSW E4D6, E4D8 and AS/NZS 2293.1 - 2018
Fire Alarm Monitoring System	BCA 2022 S20C8 and AS 1670.3 - 2018
Fire Dampers	BCA 2022 Clause C4D15 and AS 1668.1 - 2015 (AS 1682.1 - 2015 and AS 1682.2 - 2015)
Fire Doors	BCA 2022 Specification 12 and AS/NZS 1905.1 - 2015
Fire Engineering Report	Fire Engineering Report prepared by: 1.
Fire Hydrants Systems	BCA 2022 Clause E1D2 and AS2419.1-2021
Fire Seals Protecting Opening In Fire Resisting Components Of The Building	BCA 2022 Clause C4D15, Specification 13, AS 1530.4 - 2014, AS 4072.1 - 2005 and installed in accordance with the tested prototype.
Hose Reel System	BCA 2022 Clause E1D3 and AS 2441 - 2005
Lightweight Construction	BCA 2022 Specification 6, Clause A2G3 and AS 1530.4 - 2014
Mechanical Air Handling System *(Carpark Mechanical Ventilation System)*	BCA 2022 Clause E2D12, Clause 5.5 of AS/NZ 1668.1 - 2015 and fans with metal blades suitable for operation at normal temperature may be used and the electrical power and control cabling need not be fire rated
Portable Fire Extinguishers	BCA 2022 Clause E1D14 and AS 2444 - 2001
Warning And Operational Signs	BCA 2022 Clauses D2D22, NSW D3D24, D3D28, D4D7 E3D4, E3D11, E3D12,

Note the fire safety schedule will need to be amended subject to the inclusion of a fire engineered performance solution.

17. Appendix C2D2 - Fire Rating Requirements

17.1. Type B Construction

Table 1 S5C21a: Type B construction: FRL of loadbearing parts of external walls

Distance from a *fire-source feature*	FRL:(in minutes) *Structural adequacy / Integrity / Insulation*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Less than 1.5 m	90/90/90	120/120/120	180/180/180	240/240/240
1.5 to less than 3 m	90/60/30	120/90/60	180/120/90	240/180/120
3 m to less than 9 m	90/30/30	120/30/30	180/90/60	240/90/60
9 m to less than 18 m	90/30/–	120/30/–	180/60/–	240/60/–
18 m or more	–/–/–	–/–/–	–/–/–	–/–/–

Table 2 S5C21b: Type B construction: FRL of non-loadbearing parts of external walls

Distance from a *fire- source feature*	FRL (in minutes): *Structural adequacy / Integrity / Insulation*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Less than 1.5 m	–/90/90	–/120/120	–/180/180	–/240/240
1.5 m to less than 3 m	–/60/30	–/90/60	–/120/90	–/180/120
3 m or more	–/–/–	–/–/–	–/–/–	–/–/–

Table 3 S5C21c: Type B construction: FRL of external columns not incorporated in an external wall

Distance from a *fire-source feature*	FRL (in minutes): *Structural adequacy / Integrity / Insulation*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Loadbearing column — less than 18 m	90/–/–	120/–/–	180/–/–	240/–/–
Loadbearing column — 18 m or more	–/–/–	–/–/–	–/–/–	–/–/–
Non-loadbearing column	–/–/–	–/–/–	–/–/–	–/–/–

Table 4 S5C21d: Type B construction: FRL of common walls and fire walls

Wall type	FRL (in minutes): *Structural adequacy / Integrity / Insulation*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Loadbearing or non-loadbearing	90/90/90	120/120/120	180/180/180	240/240/240

Table 5 S5C21e: Type B construction: FRL of loadbearing internal walls

Location	FRL (in minutes): *Structural adequacy / Integrity / Insulation*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Fire-resisting lift and stair shafts	90/90/90	120/120/120	180/120/120	240/120/120
Bounding public corridors, public lobbies and the like	60/60/60	120/–/–	180/–/–	240/–/–
Between or bounding sole-occupancy units	60/60/60	120/–/–	180/–/–	240/–/–

Table 6 S5C21f: Type B construction: FRL of non-loadbearing internal walls

Location	FRL (in minutes): *Structural adequacy / Integrity / Insulation*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Fire-resisting lift and stair shafts	–/90/90	–/120/120	–/120/120	–/120/120
Bounding public corridor, public lobbies and the like	–/60/60	–/–/–	–/–/–	–/–/–
Between or bounding sole-occupancy units	–/60/60	–/–/–	–/–/–	–/–/–

Table 7 S5C21g: Type B construction: FRL of other building elements not covered by Tables S5C21a to S5C21f

Building element	FRL (in minutes): *Structural adequacy / Integrity / Insulation*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Other loadbearing internal walls and columns	60/–/–	120/–/–	180/–/–	240/–/–
Roofs	–/–/–	–/–/–	–/–/–	–/–/–

18. Appendix C2D11 - 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 C3D3 - Floor Areas and Volumes - TBC

Floor areas and volumes of each storey

Floor	Approx. Area (m^2)	Approx. Volume (m^3)	Comment
Basement Carpark	809	TBC Prior to issue of CC	
Ground	1552	TBC Prior to issue of CC	
First Floor	176	TBC Prior to issue of CC	

Nominated Fire Compartments

These are indicated in the table above.

Compartment	Approx. Area (m^2)	Approx. Volume (m^3)	Comment
Basement Carpark	809	TBC Prior to issue of CC	
Ground floor warehouse including dock office, amenities, mezzanine office on level 1	1728	TBC Prior to issue of CC	

20. Appendix D2D5 - Exits

The exits from the building are set out below:

Exit No	Location	Type	Grid Ref	No of storeys connected / passed by	Comments
1.	Basement	Non-Fire isolated	GL 3/D	1	Final discharge door does not swing in direction of egress.
2.	Basement	Fire isolated	GL 1/D	2	Final discharge door on ground floor not detailed.
3.	Ground floor	Non-Fire isolated	GL 4/A	1	
4.	Ground floor	Non-Fire isolated	GL 1/A	1	
5.	Ground floor	Non-Fire isolated	GL 1/C	1	
6.	First floor	Non-Fire isolated stairway	GL 2/B	2	

21. Appendix D4 - 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

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