BCA REPORT
Bowman Road,
Moss Vale. NSW

Building Code of Australia 2022
Vol. 1, Class 2-9 Buildings
Deemed-to-Satisfy Assessment Pursuant to Section 19 Environmental Planning and
Assessment (Development Certification and Fire Safety) Regulation, 2021.

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Prepared for: Jackson Environmental and Planning Pty Ltd.
Project No.: BCA 22200
Date: 31st July 2023
Status: DA Submission
Version: V2.0

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Limitations and Exclusions

The limitations and exclusions of this report are as follows: -

1. The buildings structural adequacy has not been considered.
2. The design, maintenance or operation of fire safety measures listed in table 4 of the report.
3. Work Health and Safety Act Regulations.
4. Workcover Authority requirements.
5. Requirements of other agencies including but not limited to, telecommunication providers, Water/Sewerage authority, Energy providers, State Govt. Agencies i.e., RMS or the local authority.
6. The Disability Discrimination Act (DDA) other than the minimum requirements under the Disability (Access to Premises) Standards 2010. An Access Report should be sourced from an accredited Access Consultant
7. The report although referring to Australian Standards adopted by the BCA, it does not detail the specific requirements of those standards.
8. The reference in the title page and elsewhere to ‘capability’ is a reference to a general overview of the proposed development and is not a detailed assessment of a kind that is required for compliance certificate.

BCA Report—Industrial Subdivision and General Industry Development.

Bowman Road,

Moss Vale. NSW.

1.0 INTRODUCTION

Location and Description

This report is prepared for the purpose of providing support documentation for application in respect of a proposed industrial subdivision and general industry development on land at Moss Vale.

The assessment of the development for code compliance is an appraisal under National Construction Code Series, Building Code of Australia 2022, Volume 1, (BCA) in a manner required under Section 19 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation, 2021.

The assessment under Appendix A has in relation to the development identified a number of design and interpretation aspects that are open to either Deemed-to Satisfy or Performance Based Solutions.

2.0. REFERENCES

The following documentation was relied upon when preparing this report:

- National Construction Code; Building Code of Australia 2022, Volume 1-(BCA).
- National Construction Code; Building Code of Australia 2022, Volume 2.
- Environmental Planning and Assessment Act, 1979.
- Environmental Planning and Assessment Regulation, 2021.
- Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation,2021.
- Architectural drawings listed in the schedule at Appendix C prepared by Jackson Planning and Environment dated 6th July,2023-Revision A-01

- Emails from Jackson Planning and Environment from the 19th April, 2023 up until the date of the report—V1.0.

List of Appendices

Appendix N°	Details
A	BCA Assessment
B	Extract—Type B Construction
C	Extract—Type C Construction
D	Drawing/Plan Schedule

Table 1.

3.0 DESCRIPTION OF PROPOSED WORK.

The proposal is to construct on three (3) separate allotments each with separate title, industrial buildings (one per allotment) on land known as 2 Bowman Road, Moss Vale. .

The development site comprises the parcel of lots registered as Lot 2 in DP 1070888 and part lot 51 in DP 130176..

The end use of each building is for a general industry activity.

The construction of the buildings are to consist of structural steel frames clad externally with prefinished interlocking metal siding. The roof planes are pitched in their configuration; each plane is covered with prefinished profiled metal deck sections.

The ground floor of each building is to be constructed from reinforced concrete that is laid in direct contact with the ground surface.

The details of the three allotments of the proposed subdivision of the parcel is as follows-

Building	Site Area	Lot Reference	Storey Contained
Building 1	28826.07m²	1	Three
Building 2	26422.12m²	2	Two
Building 3	21394.42m²	3	Two

Table 2

4.0 BUILDING CHARACTERISTICS

The relevant characteristic of each building in the process of their code assessment is outlined in the bellow tables

Building 1-Lot 1

BCA Determination	BCA Part/Clause	Classification
Proposed Use		
Classification Office part	Part A6G6	Class 5
Classification Carpark part	Part A6G8	Class 7a
Classification Industrial part	Part A6G8	Class 7b
Classification Workshop part	Part A6G9	Class 8
Classification Awning	Part AG11	Class 10a
Rise in Storeys		
Buildings Rise in Storeys (RIS)	Part C2D3	The buildings RIS is calculated at 3 storeys.
Construction Type		
Type of Construction (BCA)	Part C2D3	Type B Construction required-new building work
Effective Height		
Effective Height (EH) as proposed	Schedule 1	The building's EH is <12.0m.
Fire Source Features		
Fire-Source Features (FSF)	Schedule 1	The buildings FSF's are as follows: - • North FSF-side boundary line of the allotment(FSF -01);

		• South FSF-side boundary line of the allotment (FSF-02); • West FSF-rear boundary line (FSF-03); and • East FSF-far boundary line of the Bowman Road(FSF-04). Note 1.
Compartment Size		
Floor area /volume limitations	Part C3D3	The floor area and volume of the building are within limitations for building of Type B Construction and having a Class 7/8 classification.

Table 3A

Note 1. Fire source exposure in respect of FSF-01 and FSF-03 is less than 18m.

Building-2 Lot 2

BCA Determination	BCA Part/Clause	Classification
Proposed Use		
Classification Industrial part	Part A6G8	Class 7b
Classification Office part	Part A6G6	Class 5
Rise in Storeys		
Buildings Rise in Storeys (RIS	Part C2D3	The buildings RIS is calculated at 2 storeys.
Construction Type		
Type of Construction (BCA)	Part C2D3	Type C Construction required-new building work
Effective Height		

Effective Height (EH) as proposed	Schedule 1	The building's EH is <12.0m.
Fire Source Features		
Fire-Source Features (FSF)	Schedule 1	The buildings FSF's are as follows: - • North FSF-side boundary line of the allotment(FSF - 01); • South FSF-side boundary line of the allotment (FSF-02); • West FSF-rear boundary line of the allotment.(FSF-03); and • East FSF-far boundary line of the road reserve of Bowman Road.(FSF-04).
Compartment Size		
Floor area /volume limitations	Part C3D3	The floor area and volume of the building are within limitations for building of Type C Construction and having a Class 7b/8 classification

Table 3B

Building-3 Lot 3

BCA Determination	BCA Part/Clause	Classification
Proposed Use		
Classification Industrial part	Part A6G8	Class 7b
Classification Office part	Part A6G6	Class 5

Rise in Storeys		
Buildings Rise in Storeys (RIS	Part C2D3	The buildings RIS is calculated at 2 storeys.
Construction Type		
Type of Construction (BCA)	Part C2D3	Type C Construction required-new building work
Effective Height		
Effective Height (EH) as proposed	Schedule 1	The building's EH is <12.0mm.
Fire Source Features		
Fire-Source Features (FSF)	Schedule 1	The buildings FSF's are as follows: - • North FSF-side boundary line of the allotment(FSF - 01); • South FSF-far boundary line of the road reserve of Hutchinson Road allotment (FSF-02); • West FSF-far boundary line of the road reserve of Bowman Road (FSF-03); and • East FSF-rear boundary line of the allotment.(FSF-04).
Compartment Size		
Floor area /volume limitations	Part C3D3	The floor area and volume of the building are within limitations for building of Type C Construction and having a Class 7b/8 classification.

Table 3C

5.0 REQUIRED FIRE SAFETY MEASURES-Class 7, 8 and 5 Buildings

The certifier on issue of a compliance certificate, is obligated under the provisions of Section 78 of the EP&A (Development Certification and Fire Safety) Regulation, 2021, to attach to the certificate, a schedule of fire safety measures that are required to be implemented in the building(s)..

A generic schedule for all buildings is drafted below unless otherwise indicated.

Schedule-------Version 2.0

Fire safety measures	Standard of performance
Automatic fire detection and alarm system	NCC Clause S20C4 and AS 1670.1-2018.
Automatic fire suppression systems	NCC Clauses E1D9, E1D12,Specification 17 and AS 2118.1-2017
Automatic smoke exhaust systems	NCC Clause NSW E2D10 (1)(b) and Specification 21
Building occupant warning system (BOWS)	NCC Clauses S17C8, S20C7 and AS 1670.1-2018(A1)
Emergency lighting	NCC Clause E4D2 and AS2293.1-2018
Exit signs	NCC Clauses E4D5, NSW E4D5 and ASS2293.1-2018
Fire control centre Note 1	NCC Clause E1D15 and Specification 19.
Fire alarm communication link	NCC Clause S17C2(a) and AS 1670.3-2018.
Fire hose reels	NCC Clause E1D3 and ASS 2441-2005
Fire hydrants	NCC Clause E1D2 and AS 2419.1-2021
Fire seals protecting openings in fire-resisting components of the building	NCC Clause C4D15, Specification 13 and AS 4072.1-2005
Mechanical air handling systems-Basement carpark. Note 1	NCC clause E2D7 and clause 5.5 of AS 1668.1-2015
Perimeter vehicle access	NCC Clause C3D5(2)
Portable fire extinguishers	NCC Clause E1D14 and AS 2444-2001

Smoke detectors and heat detectors	NCC Specification 20 and AS 1670.1-2018
Standby power systems	NCC Clause E1D2 and S17C2
Warning and operational signs	NCC Clauses E3D4, S19C12, D4D7(1)(a)(ii)
Performance solution outcomes	TBA

Table 4.

Note 1: Applicable to Building 1

6.0 BUILDING SOLUTION.

The building solution for the development will for the most part be Deemed to Satisfy.

The design of each building has been predicated on the basis that each building is considered a large isolated building for the purpose of not subjecting the buildings to the floor area limitations of Table C3D3.

The building solution therefore adopts the specific requirements of C3D4 by providing-

- Building uses that are applicable to the development in particular Class 5 and Class 7 classifications.
- Sprinkler systems for fire suppression.
- Vehicular access to enable firefighting activities to occur around each building's entire perimeter.

In respect of building 1 the current design requires the building to be of Type B construction.

It is permissible to erect building 1 using different construction types through the application of mixed construction types provision such that the office part remains as Type B construction whereas the industrial part is reduced to Type C construction by effecting fire separation at the interface in accordance with C3D8.

Performance solutions have been earmarked for egress, particularly in respect from building 1.

7.0 CONCLUSION.

The findings of the report from the assessment of the plans and specifications listed under Appendix D is such that the use of each building proposed to be erected on their separate allotments is for general industrial development purpose together with administrative support.

The assessment undertaken has been done in a manner equivalent to that normally associated with the compliance certificate process.

The code assessment undertaken in the report anticipates the building solution for the development will include a combination of Deemed to Satisfy and Performance Based

requirements which as is normal practice reserved for the compliance certificate process given the provisions under BCA Part A2G1.

However, the building solutions to be undertaken to comply with the Building Code of Australia's performance requirements will not impact on the building design.

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APPENDIX A—Class 7, 8 & 5 Assessment.

Building Code of Australia.

Deemed -to-Satisfy Assessment.

Project Address: 2 Bowman Road Moss Vale NSW.
File Reference: BCA 22200
Date: 31st July, 2023
BCA Edition: Volume 1---2022 Edition, and
Volume 2---2022 Edition.

Building occupancy	Determination
Classification---Part A6	Industrial parts---Class 7 or 8 Office parts—Class 5
Number of levels—Rise in storeys.	Varies
Construction Type	Varies
Allotment details	Proposed Lots 1,2 and 3
Allotment area	Varies

BCA Clause by Clause comments of deemed to satisfy provisions.

Note: 1. NA denotes that the clause is not applicable to the development.

2. CC denotes Compliance/Construction Certificate.

3. FRL Fire resistance level.

4. TBD to be determined.

PART/CLAUSE	REFERENCE	COMMENT		
SECTION A – GENERAL PROVISIONS				
		Building N°1	Building N°2	Building N°3
Part A4	Reference documents	NA	NA	NA
Part A5	Documentation of design and construction	NA	NA	NA
Part A6G8	Building classification Industrial part	Class 7b and or 8		
Part A6G6	Building classification Office Parts	Class 5		
Part A6G9	Building classification Workshop	Class 8	NA	NA
Part A6G8	Basement carpark	Class 7a	NA	NA
Part A6G1	Exemptions 1	NA	NA	NA
Part A7	United Buildings	NA	NA	NA
SECTION B				
PART B1 STRUCTURAL PROVISIONS				
B1D1	Deemed to Satisfy provisions	Information.		
B1D2	Structural Provisions-Resistance to actions	Structural Engineers design and specification. Notes: Structural engineer must be a Professional engineer as defined under Schedule 1--Definitions		
B1D3	Determination of individual actions	Structural Engineers design and specification and certification including AS 1170 parts 1, 2 and 4		
B1D4	Determination of structural resistance of materials and forms of construction.	The following Australian Standards in addition to the above standards are relevant to specified elements of the project: - AS 2047-2014: Glazing AS1288-2021; Glass used in buildings AS 1170 Series-2002 AS 1170 Part 1-2002 AS 1170 Part 2-2021 AS 1170 Part 4-2007		

		AS 3700- 2018; Masonry; AS 3600-2018; Concrete; AS 4100-2020; Steel. AS 2159-2009; Piling (if applicable).		
B1D4(i)	Termite management	NA	NA	NA
B1D5	Structural software	Informational		
B1D6	Construction of buildings in flood hazard areas	NA	NA	NA
Specification 4	Design of buildings in cyclonic areas	NA		
SECTION C – FIRE RESISTANCE				
Part C2 - Fire resistance and stability				
	Application of Part DtS	Noted/information .		
C2D2	Type of Construction required	Type B	Type C	Type C
C2D3	Calculation of Rise in Storeys (RiS)	3 storeys	2 storeys	2 storeys
C2D4	Buildings of Multiple Classification	Type B construction applies throughout the building	Type C construction applies throughout the building	Type C construction applies throughout the building
C2D5	Mixed Types of Construction	Noted-relevant at discussion at clause C3D8	NA	NA
C2D6	Two Storey Class 2, 3 or 9c Buildings	NA	NA	NA
C2D7	Class 4 Parts of Buildings	NA	NA	NA
C2D8	Open Spectator Stands & Indoor Sports Stadiums	NA	NA	NA
C2D9	Lightweight Construction	Lightweight fire-resistant construction must comply with Specification 6.		

C2D10	Non-combustible building elements	Refer to cell below.	NA	NA
	Building 1-Type B construction As the building's office part is determined to be of Type B construction, the following non-combustible requirements are applicable 1. External and common walls; 2. Flooring and floor framing of lift pits; 3. Non-loadbearing walls required to have an FRL; 4. Non-loadbearing shaft walls. External attachments to the building i.e., privacy screening, shade devices, pergola type structures, panelling/cladding or 'feature' panelling.			
C2D11 and NSW variations	Fire Hazard Properties	Fire hazard properties of floor linings, floor coverings, wall linings, ceiling linings, air handling ductwork, insulation, sarking type materials, lift cars must comply with NSW Specification 7 and where appropriate NSW Clause S7C7 of Specification 7 **Notes:** The NSW variation relates to- ▪ Sarking materials; ▪ Insulation materials; and ▪ Composite materials.		
		Roof lights (skylights) located in the roof planes of the buildings are to comply as follows- • Glass fibre-reinforced polyester. • Located at least 1.5m apart • Each roof light is to have a max. area of not more than 14m² • Occupy no more than 20% of the roof surface		
C2D12	Performance of External Walls in fire	NA	NA	NA
C2D13	Fire protected timber: Concession	NA	NA	NA
C2D14	Ancillary elements	Ancillary elements of the building's office part are required unless exempted to be non-combustible	**NA**	**NA**
C2D15	Fixing of bonded laminated cladding panels	NA	**NA**	**NA**
PART C3 - FIRE RESISTANCE				

C3D1	Deemed-to-Satisfy Provisions.	Noted/information		
C3D2	Application of Part	NA		
C3D3	General Floor Area and Volume Limitations	The provisions of C3D4 have been utilised for all buildings		
C3D4(a)(ii) and C3D4(b)	Large Isolated Buildings	The buildings are to be- (A) protected by a sprinkler system complying with Specification 17, and (B) provided with perimeter vehicle access complying with C3D5(2)		
C3D5	Requirements for open space and vehicular access- Applicable to buildings 1, 2 and 3	Vehicular access required by this Part:- a) Must be capable of providing continuous access for emergency vehicles to enable travel in a forward direction from a public road around the entire building; and b) Must have a minimum unobstructed width of 6m with no part of its furthest boundary more than 18m from the building and in no part of the 6m width be built upon or used for any purpose other than vehicular or pedestrian movement; and c) Must provide reasonable pedestrian access from the vehicular access to the building; and d) Must have a load bearing capacity and unobstructed height to permit the operation and passage of fire brigade vehicles; and e) Must be wholly within the allotment except that a public road complying with (a), (b), (c) and (d) may serve as vehicular access or part thereof.		
C3D6	Class 9 Buildings	NA		
C3D7	Vertical separation of openings in external Walls	NA-Vertical separation. Spandrels of min.900mm in height are to be of non-combustible construction and achieve an FRL of 60/60/60-----600mmm of the spandrel is to be above the intervening floor level. Horizontal separation. Horizontal or slab separation is also to be of non – combustible construction and project outwards from the building's external walls by a min. distance of 1100mm with 450mm lateral returns.		
C3D8	Separation by fire walls	Not required provided S5C6 is capable of compliance	**NA**	**NA**
C3D9	Separation of classifications in the same storey	The building contains 3 classifiable parts.	Type C construction in accordance with Specification 5 applies throughout the buildings	

		The building as a whole is to comply with Type B construction as specified under S5C21		
C3D10		The classification that applies to the building's Class 5 part applies to all storeys	NA	NA
	Separation of classifications in different storeys	In relation to the building's Class 5 part and Class 7a part, the building as a whole is to comply with Type B construction as specified under S5C21	In relation to the building's Class 5 part the building as a whole is to comply with Type C construction as specified under S5C24	
C3D11	Separation of lift shafts	Building protected by sprinkler system Lift connects 3 storeys	Building protected by sprinkler system Lift connects 2 storeys	Building protected by sprinkler system Lift connects 2 storeys
C3D12	Stairways and lifts in one shaft	NA	NA	NA
C3D13	Separation of equipment	Substations not located within any of the buildings		
C3D14	Electricity supply system	MSB's are to be enclosed in fire resistant construction if the facility sustains emergency equipment operating in the emergency mode. Emergency equipment includes- a)Fire hydrant booster pumps. b) Pumps for the sprinkler systems. c) Pumps for hose reels. d) Control and indication equipment. e) Air handling systems to exhaust smoke and control fire spread.		
C3D15	Public corridors in Class 2 & 3 buildings	NA	NA	NA
PART C4 – PROTECTION OF OPENINGS				
C4D1	Deemed-to-Satisfy Provisions	Noted/information .		
C4D2	Application of Part	informational		

C4D3	Protection of openings in external walls	NA-The building when complete are to stand 3m or more from the identified Fire Source Features. Refer to Section 4.0 above		
C4D4	Separation of external walls and associated openings in different fire compartments		**NA**	**NA**
C4D5	Acceptable methods of protection	NA		
C4D6	Doorways in fire walls	**NA**		
C4D7	Sliding fire doors	NA		
C4D8	Protection of doorways in horizontal exits	NA	NA	NA
C4D9	Openings in fire isolated exits	NA- fire isolated stairs are required		
C4D10	Service penetrations in fire Isolated exits	NA	NA	NA
C4D11	Openings in fire isolated lift shafts	Lift shaft not required to be fire isolated- Building protected by a sprinkler system. Refer to C3D11	Lift shaft not required to be fire isolated- Buildings protected by a sprinkler system. Refer to C3D11	
C4D12	Bounding construction: Class 2 and 3 buildings and Class 4 parts	NA		
C4D12(5)		NA		
C4D12(8)				
C4D13	Openings in floors and ceilings for services	NA	NA	NA
C4D14	Openings in shafts	NA	NA	NA
C4D15	Openings for service installations	Service installations (electrical, electronic, plumbing, ventilation	NA	NA

		component and the like) that pass-through construction required to have a FRL must be protected at the point of penetration with a system that has been tested in accordance with AS 4072.1-2005 and AS 1530.4-2014		
C4D16	Construction Joints	NA		
C4D17	Columns protected with lightweight construction to achieve an FRL	Light weight construction protecting columns must comply with this clause.	NA	NA
SPECIFICATION 5	Fire resisting construction	Type B Construction required	Type C Construction required	
S5C3	Fire protection for a support of another part.	TBD		
S5C4	Lintels	NA	NA	NA
S5C5	Method of attachment not to reduce the fire resistance performance of building elements	This provision has application to attachments to the building's external walls, including finishes, linings, ancillary elements and services	NA	NA
S5C6	General concessions	NA	NA	NA
S5C7	Mezzanine floors	NA	NA	NA
S5C8	Enclosure of shafts	NA	NA	NA
S5C9	Carparks -Class 2 buildings	NA	NA	NA
S5C10	Residential care buildings-concession	NA	NA	NA

S5C11	Type A fire resisting construction	NA	NA	NA
S5C12	Concession for floors	NA	NA	NA
S5C15	Roof: Concession	NA	NA	NA
S5C16	Rooflights	NA	NA	NA
S5C17	Internal walls and columns: Concession	NA	NA	NA
S5C20	Type A construction - Class 2 and 3 buildings- Concession	NA	NA	NA
S5C21	Type B-fire resisting construction	The buildings are required to be of Type B construction.	NA	NA
	In respect of building 1, a performance solution is required to reduce the FRL of the external walls that are exposed to Fire Source Features FSF-01 and FSF-03 to -/-/- or in place thereof the office part is fire separated from the industrial part in accordance with C3D8 to permit a building of mixed construction types as follows- • Office part-Type B construction. • Industrial part-Type C construction			
S5C24	Type C-fire resisting construction	NA	The buildings are required to be of Type C construction	
Table S5C24c	FRL for common and fire walls	NA	NA	NA
S5C24(1)(d)	Internal wall construction- Bounding the public corridor	NA	NA	NA
Table S5C24d	FRL for internal walls---Bounding the public corridor	NA	NA	NA
S5C24(1)(d)	Internal wall construction- Between SOUs 1 and 2	NA	NA	NA
Table S5C24d	FRL for internal walls---Between SOUS	NA	NA	NA
SPECIFICATION 6	Structural Test for Light Weight Construction	NA	NA	NA
SPECIFICATION 7	Fire Hazard Properties	Refer to comments under clause C4D15 above		

SPECIFICATION 8	External Walls	NA	NA	NA
SPECIFICATION 9	Cavity Barriers-Timber Const.	NA	NA	NA
SPECIFICATION 10	Fire-protected timber	NA	NA	NA
SPECIFICATION 11	Smoke proof walls in health care and residential care buildings.	NA	NA	NA
SPECIFICATION 12	Fire doors smoke doors and Fire windows and shutters	NA	NA	NA
SPECIFICATION 13	Penetration of walls and floors and ceilings by services	Refer to clause C4D14 above	NA	NA
SECTION D – ACCESS & EGRESS				
PART D2 - PROVISION FOR ESCAPE				
D2D1	Deemed-to-Satisfy Provisions	Noted/informational.		
D2D2	Application of Part	Noted /informational		
D2D3	Number of exits required **Industrial part**	• **Ground Floor Level** One(1) exit required. • Building complies		
	Number of exits required **Office part**	• **All Levels** One(1) exit required. • Building complies		
	Number of exits required **Basement carpark**	Two exits required. Building complies	NA to buildings 2 and 3	
D2D4	When Fire isolated stairways and ramps are required	The stairway that connects the office levels is not required to be fire isolated as the building is protected by a sprinkler system complying with Specification 17	Stairways of the buildings office part only connect 2 levels.	

D2D5	Exit Travel Distances **Industrial part**	Performance solution required at the construction certificate stage	**Building complies**	Performance solution required at the construction certificate stage in respect of unit 3B(N)
	Exit Travel Distances **Office part**	Buildings comply		
	Exit Travel Distances **Basement carpark**	Performance solution required at the construction certificate stage	**TBD**	
D2D6	Distances between alternative exits **Industrial part**	Performance solution required at the construction certificate stage		
	Distances between alternative exits **Office part**	Buildings comply		
	Distances between alternative exits **Basement carpark**	Performance solution required at the construction certificate stage	TBD	
D2D7	Height of exits, path of travel to exits and doorways	Assessment reserved for the CC stage		
D2D8	Width of exits and paths of travel to exits	Assessment reserved for the CC stage		
D2D9	Width of doorways in exits or paths of travel to exits	Assessment reserved for the CC stage		
D2D10	Exit width not to dimmish in direction of travel	NA	NA	NA

D2D11	Determination and measurement of exits and paths of travel to exits	Assessment reserved for the CC stage		
D2D12	Travel via fire isolated exits	NA	NA	NA
D2D13	External stairways or ramps in lieu of fire isolated exits	NA		
D2D14	Travel by non-fire isolated stairways or ramps	Building complies		
D2D15	Discharge from exits	1 a) Walkways from the exits to the road must have a min. unobstructed width of 1.0m. b) The walkway must have a gradient not steeper than 1:14. c) The surface of the walkway must have slip resistance classification not less than listed in Table D3D15 when tested in accordance with AS 4586-2013**.** **2.** Where exit maybe blocked at the point of discharge by vehicles suitable barriers are to be provided.		
D2D16	Horizontal exits	NA		
D2D17	Non-Required stairways ramps or escalators	NA	NA	NA
D2D18	Number of persons accommodated	Assessment reserved for the CC stage in accordance with D2D18(c)		
D2D19	Measurement of distances	Distance measurement undertaken in accordance with sub-clauses (b) and (d)		
D2D20	Method of measurement	Method of measurement has relied upon sub clauses (c), (d), (f) and (h).		
D2D21	Plant rooms, lift machine rooms and electricity network substations: Concession	NA	NA	NA
D2D22	Access to lift pits	NA	NA	NA
D2D23	Egress from primary schools	NA	NA	NA
PART D2 - CONSTRUCTION OF EXITS				
D3D1	Deemed-to-Satisfy Provisions	Noted/informational.		
D3D2	Application of Part	Noted/informational.		

D3D3	Fire-Isolated stairways & ramps	NA-Structural engineers' certification re D3D3(b)		
D3D4	Non-Fire-Isolated stairways and ramps	Non-fire isolated stairs to be constructed from reinforced concrete.		
D3D5	Separation of rising and descending stair flights	NA		
D3D6	Open access ramps and balconies	Noted.		
D3D7	Smoke lobbies	NA		
D3D8	Installations in exits and paths of travel	No services except those allowed in this clause can be installed within required exits, paths of travel to exits.		
D3D9	Enclosure of space under stairs and ramps	Space below the stairway of non-fire isolated stairs may be enclosed with fire resistant construction in accordance with this clause		
D3D10	Width of required stairways and ramps	NA		
D3D11	Pedestrian ramps	Ramps serving as accessible ramps to comply with AS 1428.1; gradient more than 1:14. Slip resistance classification as outlined in table D3D15 when tested in accordance with AS 4586-2013		
		Pedestrian exit ramp from the Class 7a part (carpark) to have gradient not steeper than 1:8	NA	NA
D3D12	Fire Isolated passageways	Subject to performance assessments.		
D3D13	Roof as open space	NA		
D3D14	Goings and risers Internal and external stairs	Treads and Risers and nosing strips (geometry/construction/slip resistance) must comply with the provisions of this clause. Slip resistance criteria—AS 4586-2013.		
D3D15	Landings	Landings must not be less than 750 mm long. Slip resistance criteria in accordance with Table D2.14 when tested in accord with AS 4586-2013		
D3D16	Thresholds	Threshold of a doorway must not incorporate a step except when opens to road or open space and the step is less than 190 mm.		

		In addition, thresholds are to be accessible where the doorway opens to a road or open space, the threshold ramp or step ramp is to comply with AS 1428.1-2009		
D3D17	Barriers to prevent falls- External stairways	Balustrades/barriers complying with this clause are required for stairways and their landings including and other areas where the level above the surface beneath is more than 1.0m Height of balustrades are to be not less than 1.0m..		
D3D18	Height of barriers	Not less than 1.0m		
D3D19	Openings in barriers Stairways and landings	Openings in the barrier construction must not permit a 125mm sphere to pass through.		
D3D20	Barrier climbability	Barrier construction to be designed such that there are no climbable elements between 150mm and 760mm above the floor		
D3D21	Wire barriers	NA	NA	NA
D3D22	Handrails	Hand rails must be installed in all stairs, and ramps according to this clause at a height of 865m above the nosing of stair flights. Handrails are also required to comply with clause 12 of AS 1428.1-2009 both in location and construction and be without vertical sections,		
D3D23	Fixed platforms, walkways stairways and ladders	NA	NA	NA
D3D24(2) NSW	Doorways and doors	NA	NA	NA
D3D25	Swinging doors	Doors that form part of the exit system must swing in the direction of egress.		
D3D26	Operation of latch	Doors in required exits or doors in the paths of travel must be readily openable without a key from the side that faces a person seeking egress by single handed downward or push action in accordance with this clause, **Notes: 1.** Door latching requirements for the accessible parts of the building are; - • Such that a person who cannot grip will not slip from the handle during the operation of the latch, and • Have a clearance between the handle and the back plate or door face of not less than 35mm and not more than 45mm, • Comprise a single hand pushing action on a single device located between 900mm and 1.2m from the floor surface, and • The latching requirements relate to latching hardware that is located on the door leafs		

		themselves and not elsewhere, i.e., not located on a surrounding surface.		
D3D27	Re-entry from fire isolated exits	NA	NA	NA
D3D28	Signs on doors	NA	NA	NA
D3D29	Protection of openable windows	**NA**	NA	NA
D3D30	Timber stairways-Concession	NA	NA	NA
PART D4 - ACCESS FOR PEOPLE WITH DISABILITIES				
D4D1	Deemed – to – Satisfy Provisions	Noted/ information		
D4D2	General Building Access Requirements	The buildings are required to be accessible i.e. to and within areas normally used by occupants, Access is required to the basement carparking level of building 1 if the space contains accessible carparking spaces		
D4D3	Access to building	The buildings must be accessible from- a) the main points of pedestrian entry at the allotment boundary, and b) from the accessible at grade car parking spaces on the allotment, and c) doorways on accessway are to have a clear opening of not less than 850mm and comply with AS 1428.1-2009		
D4D4	Parts of building to be accessible	Stairways are to comply with clause 11 of AS 1428.1-2009. Lift or ramp access is required to all storeys of the buildings.		
D4D5	Exemptions	NA	NA	NA
D4D6	Accessible Car Parking	Accessible carparking required at the rate of 1 accessible carparking space for every 100 car parking spaces or part thereof.		
D4D7	Signage	Braille and tactile signage required- a) to identify accessible sanitary facilities in accordance with the international symbol of access and AS 1428.1-2009,and b) where EXIT signs are required under E4D5 braille and tactile signs are required to state “EXIT”; & “Level.”		
D4D8	Hearing augmentation	NA	NA	NA

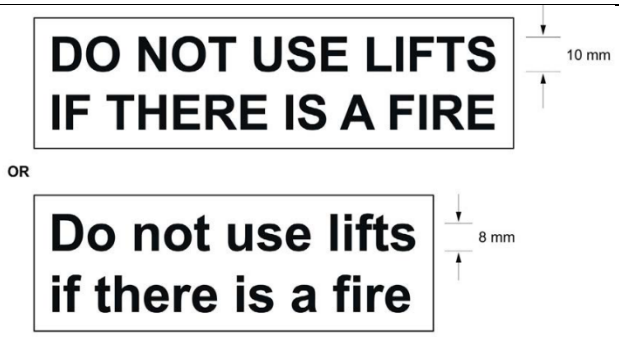
D4D9	Tactile Indicators	Tactile ground surface indicators are required at approaches to all stairways and where accessways cross or meet vehicle ways on the allotment		
D4D10	Wheel chair seating spaces in Class 9 (b) assembly buildings	NA	NA	NA
D4D11	Swimming pools	NA	NA	NA
D4D12	Ramps	NA	NA	NA
D4D13	Glazing on accessways	Glazing assemblies on accessways including frameless or fully glazed doors, sidelights and any other glazing capable of being mistaken for a doorway or opening must be clearly marked in accordance with AS 1428.1-2009		
SPECIFICATION 14	NON-REQUIRED STAIRWAYS RAMPS AND ESCALATORS	NA	NA	NA
SPECIFICATION 15	BRAILLE AND TACTILE SIGNS	Braille and tactile signage is to comply with the requirements of the specification		
SPECIFICATION 16	ACCESSIBLE WATER ENTRY/EXIT FOR SWIMMING POOLS	NA	NA	NA
SECTION E – SERVICES AND EQUIPMENT				
PART E1 - FIRE FIGHTING EQUIPMENT				
E1D1	Deemed-to-Satisfy Provisions	Noted/informational.		
E1D2	Fire Hydrants	Total floor area of each building is calculated to be more than 500m². **Fire hydrants required in accordance with AS 2419.1-2021.**		
E1D3	Fire Hose Reels	Total floor area of each building is calculated to be more than 500m². **Fire hose reels required as and as required by E1D3 and AS 2441-2005**		
E1D4	Sprinklers	Required		
E1D5	Where sprinklers are required: all classifications	Required		
E1D6	Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings	NA		

E1D7	Where sprinklers are required: Class 3 building used as a residential care building	NA		
E1D8	Where sprinklers are required: Class 6 building	NA		
E1D9	Where sprinklers are required: Class 7a building, other than an open-deck carpark	NA		
E1D10	Where sprinklers are required: Class 9a health-care building used as a residential care building and Class 9c buildings	NA		
E1D11	Where sprinklers are required: Class 9b buildings	NA		
E1D12	Where sprinklers are required: additional requirements	Sprinklers are required pursuant to C3D4		
E1D13	Where sprinklers are required: occupancies of excessive hazard	Reserved for determination on application for the specific use of each building.		
E1D14	Portable Extinguishers	Portable fire extinguishers are required to be installed in accordance with AS 2444-2001 and on determination of the fire risks		
E1D15	Fire Control Centres	Building 1 exceeds 18000m²- a fire control centre is required	NA	NA
E1D16	Fire precautions during construction	Noted.		
E1D17	Provision for special hazards	Reserved for determination on application for the specific use of each building		
SPECIFICATION 17	Fire sprinkler system	Design and installation of the sprinkler systems are to comply with AS 2118.1-2017		
SPECIFICATION 18	Class 2 and 3 buildings not	NA	NA	NA

	more than 25.0m in effective height			
SPECIFICATION 19	Fire control centres	Fire control room to comply with this specification	NA	NA
SPECIFICATION 23	Residential fire safety systems	NA	NA	NA
PART E2 – SMOKE HAZARD SYSTEM				
E2D1	Deemed-to-Satisfy Provisions	Information		
E2D2	Application of Part	Noted.		
E2D3	General requirements	NA	NA	NA
E2D4	Fire-isolated exits	NA		
E2D5	Buildings more than 25m in effective height: Class 2 and 3 buildings and Class 4 part of a building	NA		
E2D6	Buildings more than 25m in effective height: Class 5, 6, 7b, 8 and 9b buildings	NA		
E2D7	Buildings more than 25m in effective height: Class 9a buildings	NA		
E2D8	Buildings not more than 25m in effective height: Class 2 and 3 buildings and Class 4 part of a building	.NA		
E2D9	Buildings not more than 25m in effective height: Class 5, 6, 7b, 8 and 9 buildings	NA		
E2D10 (NSW)	Buildings not more than 25m in effective height: large isolated buildings subject to C3D4	**Ceiling height<12m** The industrial part of the building with a ceiling height less than 12m requires- a) Automatic smoke exhaust system in accordance with Specification 21,or		

		b) Automatic smoke and heat vents in accordance with Specification 22. **Ceiling height>12m** Ceiling heights more than 12m require automatic smoke exhaust system in accordance with Specification 21.		
E2D11	Buildings not more than 25m in effective height: Class 9a and 9c buildings	NA	NA	NA
E2D12	Class 7a buildings	The basement carpark if required to be ventilated in accordance with AS 1668.2 must also comply with clause 5.5 of AS 1668.1-2015	NA	NA
E2D13	Basements (other than Class 7a buildings)	NA	NA	NA
E2D14	Class 6 buildings – in fire compartments more than 2000m2. Class 6 building (not containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit)	NA	NA	Na
E2D15	Class 6 buildings – in fire compartments more than 2000m2. Class 6 building (containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit)	NA	NA	NA
E2D16-NSW	Class 9b – assembly buildings: nightclubs, discotheques and the like	NA	NA	NA
E2D17	Class 9b – assembly	NA	NA	NA

	buildings: exhibition halls			
E2D18	Class 9b – assembly buildings: theatres and public halls	NA	NA	NA
E2D19	Class 9b – assembly buildings: theatres and public halls (not listed in E2D18) including lecture theatres and cinema, auditorium complexes	NA	NA	NA
E2D20	Class 9b assembly buildings: other assembly buildings (not listed in E2D16 to E2D19.	NA	NA	NA
E2D21	Provision for special hazard	Reserved for determination at the CC stage		
SPECIFICATION 20 S20C4	Smoke detection and alarm systems	The smoke detection system must comply with- ▪ The provisions of AS 1670.1-2018; ▪ Activate a BOWS in accordance with S20C7,		
SPECIFICATION 21	Smoke exhaust systems	Refer to NSW E2D10 above	NA	NA
SPECIFICATION 22	Smoke and heat vents	Refer to NSW E2D10 above	NA	NA
SPECIFICATION 23	Residential fire safety systems	NA.		
PART E3 – LIFT INSTALLATIONS				
E3D1	Deemed-to-Satisfy Provisions	Noted.		
E3D2	Lift installations	NA-Criteria for electric and electrohydraulic lift installation.		
E3D3	Stretcher facility in lifts	NA-EH<12m		
E3D4	Warning against use of lifts in fire	Warning signs for the lift is as follows.		

		 Listed in the buildings fire safety schedule.		
E3D5	Emergency lifts	NA		
E3D6	Landings	Landings are to comply with Parts D2, D3 and D4		
E3D7	Passenger lift types and their limitations	**Lift design TBD**		
E3D8	Accessible features required for passenger lifts	Lift car dimensions are to be less than 1100mm wide by 1400mm deep and comply with AS 1735.12 in respect of- • Power operated doors. • Lift landing doors. • Landing control buttons		
		Refer to cell below	NA	NA
	The lift must have- i. Automatic audible information within the lift car to identify the level each time the car stops; and ii Audible and visual indication at each lift landing to indicate the arrival of the lift car; and iii Audible information and audible indication required by (i) and (ii) is to be provided in a range of between 20 – 80 dB(A) at a maximum frequency of 1500 Hz, and iv Emergency hands-free communication, including a button that alerts a call centre of a problem and a light to signal that the call has been received, for all lifts except a stairway platform lift.			
E3D9	Fire Service Controls	NA		
E3D10	Residential care buildings	NA		
E3D11	Fire service recall control switch	NA		
E3D12	Lift car service drive control switch	NA		
SPECIFICATION 24	Lift installations	NA		
PART E4 - EMERGENCY LIGHTING, EXIT SIGNS AND WARNING SYSTEMS				

E4D1	Deemed-to-Satisfy Provisions	Noted.		
E4D2	Emergency Lighting requirements	Emergency lighting required		
E4D3	Measurement of distance	Noted/information		
E4D4	Design and operation of emergency lighting	Design and installation standard is AS2293.1-2018		
E4D5	Exit signs	Required above the doorways that leads to open space		
E4D6 NSW	Direction signs	Required to ensure EXITs are readily apparent		
E4D7	Class 2 and 3 Buildings and Class 4 parts: exemptions	NA		
E4D8	Design and operation of exit signs	Design and installation standard is AS2293.1-2018		
E4D9	Emergency warning and intercom systems	NA		
SPECIFICATION 25	Photoluminescent exit signs	NA		
SECTION F – HEALTH AND AMENITY				
PART F1 - DAMP & WEATHER PROOFING				
F1D1	Deemed to Satisfy provisions	Noted/informational		
F1D2	Application of Part			
F1D3	Stormwater drainage	Revisit after DA determination		
F1D4	Exposed joints	NA		
F1D5	External waterproofing membranes	Compliance standard AS 4654 parts 1 and 2-2012.		
F1D6	Damp proofing	NA	NA	NA
F1D7	Damp proofing of floors on the ground	The raft slab construction in direct contact with the ground surface is to have inserted a vapour barrier in accordance with AS 2870-2010		
F1D8	Subfloor ventilation	NA		
PART F2 – WET AREA AND OVERFLOW PROTECTION				
F2D1	Deemed-to-Satisfy Provisions	Noted/informational.		

F2D2	Wet area construction	Wet areas must be waterproofed in accordance with Specification 26 and comply with AS 3740-2021		
F2D3	Rooms containing urinals	NA		
F2D4	Floor wastes	Floor waste must be provided according to this clause----. Within bathrooms, sanitary compartments and must have floor waste The floor surface of wet areas must be graded and drained to the floor waste i.e. Min continuous fall is 1:80, Max continuous fall 1:50		
SPECIFICATION 26	Waterproofing and water resistance requirements for building elements in wet areas	Specification sets out requirements for water resistance or waterproofing in wet areas		
		. The accessible sanitary compartment must contain the following: - • Closet pan; • Washbasin; • Shelf or bench top; and Adequate means to dispose of sanitary products		
PART F3 ROOF AND WALL CLADDING				
F3D1	Deemed to Satisfy Provisions	Informational		
F3D2	Roof coverings	Roof covering to comply with AS 1562.1-2018		
F3D3	Sarking	Sarking membranes are to comply with AS4200.1-2017 and AS 4200.2-2017		
F3D4	Glazed assemblies	Windows, glazed doors, adjustable louvres etc located in the buildings external walls are to comply with AS 2047 for resistance to water penetration		
F3D5	Wall cladding	Wall cladding to comply with AS1562.1-2018		
PART F4 SANITARY AND OTHER FACILITIES				
F4D1	Deemed to Satisfy Provisions	Noted/informational		
F4D2	Facilities in residential buildings	NA		
F4D3	Number of persons accommodated as determined in accordance with D2D18(c) stated as follows- • *20 office/admin staff across all three buildings.* • *Building 1 - 30 positions , 10 visitors/day* • *Building 2 - 30 positions , 10 visitors/day*			

	• *Building 3 - 20 positions across units 3A and 3B, 5 visitors/day* A further 20 staff across the three buildings			
	Calculation of number of occupants and facilities	Refer to above occupant numbers		
F4D4	Facilities in Class 3 -9 building	Based on the building's Class 5 parts being occupied by equal number of males and females and the industrial part predominantly by one sex (M) calculations in accordance with Tables F4D4a and F4D4b indicate the sanitary facilities as designed with the exception of units 3B(N) and 3A(S), comply. Units 3B(N) and 3A(S) require facilities for personal hygiene.		
F4D5	Accessible sanitary facility	a) One accessible unisex facility contained in each building with the exception of units 3B(N) and 3A(S). b) Male and female toilet banks are to contain at least one sanitary compartment for use by a person with an ambulant disability in accordance with ASS 1428.1-2009		
F4D6	Accessible unisex sanitary compartments	Accessible facilities provided. The facilities are to contain- • Closet pan. • Washbasin. • Shelf or bench • Means to dispose of sanitary products . • Comply with AS 1428.1-2009		
F4D7	Accessible unisex showers	NA		
F4D8	Construction of sanitary compartments	Doors to sanitary compartments require "lift of hinge" fittings if there is not a clear space of at least 1.2m between the closet pan and the arc of the doorway swing		
F4D9	Interpretation: urinal and washbasins	NA		
F4D10 NSW	Microbial(legionella) control	NA		
F4D11	Waste Management	NA		
F4D12	Accessible adult change facilities	NA		
SPECIFICATION 27	Accessible adult change facilities	NA		

PART F5 - ROOM HEIGHTS				
F5D1	Deemed-to-Satisfy Provisions	Noted/informational		
F5D2	Height of rooms and other spaces	Ceiling heights comply		
PART F6 - LIGHT AND VENTILATION				
F6D1	Deemed-to-Satisfy Provisions			
F6D2	Provision of Natural light	Natural light to be provided as follows- a) Windows that have a light transmitting area of 10% of the floor area of the part served, b) Skylights that have a light transmitting area of 3% of the floor area of the part served. c) Artificial lighting to comply with AS 1680.0-2009		
F6D3	Methods and extent of natural light	Informational		
F6D4	Natural light borrowed from adjoining room	Noted/informational.		
F6D5	Artificial lighting	Compliance standard AS1680.0-2009		
NSW F6D6	Ventilation of rooms Office, workplaces, workrooms, sanitary compartments	Natural ventilation complying with F6D7,or Mechanical ventilation complying with AS 1668.2-2012		
F6D7	Natural ventilation	Natural ventilation is achieved by openable windows, doors that have a ventilating area of not less than 5% of floor area of the room.		
F6D8	Ventilation borrowed from adjoining room	NA.		
F6D9	Restriction on location of sanitary compartments	Buildings comply		
F6D10	Airlocks	NA		
F6D11	Car parks	Basement carpark is to be ventilated in accordance with AS 1668.2-2012	NA	NA

F6D12	Kitchen local exhaust ventilation	NA		
PART F7 - SOUND TRANSMISSION AND INSULATION				
F7D1	Deemed-to-Satisfy Provisions	Noted.		
F7D2	Application of Part	NA		
F7D3	Determination of airborne sound insulation ratings	NA		
F7D4	Determination of impact sound insulation ratings	NA		
F7D5	Sound Insulation rating of floors	NA		
F7D6	Sound Insulation rating of walls	**NA**		
F7D7	Sound insulation rating of internal services	NA		
F7D8	Sound isolation of pumps	NA		
SPECIFICATION 29	Sound insulation for building elements	NA		
PERT F8 CONDENSATION MANAGEMENT				
F8D1	Deemed to Satisfy Provisions	Informational		
F8D2	Application of part	NA		
F8D3	External wall construction	NA		
F8D4	Exhaust systems	NA		
F8D5	Ventilation of roof spaces	NA		
SECTION G1 – ANCILLARY PROVISIONS				
G1D1	Deemed to Satisfy Provisions	Noted/informational		
G1D2NSW	Swimming pools	NA		
G1D3	Refrigerated chambers, strong rooms and vaults	NA		
G1D4	Outdoor play spaces	NA		
(NSW) G1D5	Provision for window cleaning	Refer to cell below	NA	NA

	As the building contains windows located 3 or more storeys above ground level the windows must be either: • Capable of being cleaned from within the building; or Provision is made for the cleaning of windows by a method that complies with the Work, Health and Safety Act 2011 and its regulations.			
PART G2 Boilers, pressure vessels, heating appliance ,fireplaces ,chimneys and flues				
G2D1	Deemed to Satisfy Provisions	NA		
G2D2	Installation of appliances	NA		
G2D3	Open fireplaces	NA		
G2D4	Incinerator rooms	NA		
PART G3-ATRIUM CONSTRUCTION				
	Atrium construction	NA		
PART G4 CONSTRUCTION IN APLINE AREAS				
	Construction in alpine areas	NA		
PART G5 CONSTRCTION IN BUSHFIRE PRONE AREAS				
	Construction in bushfire prone areas	TBD		
PART G6 OCCUPIABLE OUTDOOR AREAS				
G6D1	Application of part	Informational----- NA		
G6D2	Fire hazard properties	NA-		
G6D3	Fire separation	NA		
G6D4	Provision for escape	NA		
G6D5	Construction of exits	NA		
G6D6	Firefighting equipment	NA		
G6D7	Lift installations	NA		
G6D8	Visibility in an emergency, exit signs and warning systems	NA		
G6D9	Light and ventilation	NA		
G6D10	Fire orders	NA		
PART G7 LIVABLE HOUSING DESIGN				

SECTION I SPECIAL USE BUILDINGS				
I1D1NSW	Application of part	NA		
SECTION J ENERGY EFFICIENCY				
	Energy Efficiency.	Not part of this report		
Other Matters—Volume 2				
Class 10a—Awnings **Building 1**	**The provisions of Part 9.2.4(2) BCA Volume 2 Housing provisions apply**	***Building 1***	***Building 2***	***Building 3***
		"A Class 10a building must not significantly increase the risk of spread of fire between class 2-9 building". The construction of the Deemed -to Satisfy provision is identical to the relevant Performance Requirement H3P1	***NA***	***NA***
		Commentary **Performance assessment and solution at the compliance certificate stage required.**	NA	NA
Class 10b On-site pumps rooms and tanks. **Buildings 1, 2 and 3**	Structural design standards to be specified at the CC stage			

APPENDIX B-TYPE B CONSTRUCTION

Table 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 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 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/–/–

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 — 18 m or more	–/–/–	–/–/–	–/–/–	–/–/–
Non-*loadbearing* column	–/–/–	–/–/–	–/–/–	–/–/–

Table 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 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 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	–/–/–	–/–/–	–/–/–

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 — 18 m or more	–/–/–	–/–/–	–/–/–	–/–/–
Non-*loadbearing* column	–/–/–	–/–/–	–/–/–	–/–/–

Table 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 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 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	–/–/–	–/–/–	–/–/–

APPENDIX C-TYPE C CONSTRUCTION

Table S5C24a: Type C construction: FRL of 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	90/90/90	90/90/90	90/90/90
1.5 to less than 3 m	–/–/–	60/60/60	60/60/60	60/60/60
3 m or more	–/–/–	–/–/–	–/–/–	–/–/–

Table S5C24b: Type C construction: FRL of external columns not incorporated into 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
Less than 1.5 m	90/–/–	90/–/–	90/–/–	90/–/–
1.5 to less than 3 m	–/–/–	60/–/–	60/–/–	60/–/–
3 m or more	–/–/–	–/–/–	–/–/–	–/–/–

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	90/90/90	90/90/90	90/90/90

Table S5C24d: Type C construction: FRL of 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
Bounding *public corridors*, public lobbies and the like	60/60/60	–/–/–	–/–/–	–/–/–
Between or bounding *sole-occupancy units*	60/60/60	–/–/–	–/–/–	–/–/–
Bounding a stair if *required* to be rated	60/60/60	60/60/60	60/60/60	60/60/60

Table S5C24e: Type C construction: FRL of roof

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
Roofs	–/–/–	–/–/–	–/–/–	–/–/–

APPENDIX D

Drawing Schedule

Plan Number	Date	Details
Building 1		
1	6th July, 2023	Site Plan
1.1		Site Layout
1.2		Floor Plan
1.3		Truck Paths
1.4		Basement Parking
1.5		Roof Plan
1.6		Elevations
1.7		Elevations & Section
1.8		Office Floor Plans
1.9		Office-Elevations
1.10		On-site Pump Room and Tank
Building 2		
2.1	6th July, 2023	Site Plan
2.2		Floor Plan
2.3		Truck Paths
2.4		Roof Plan
2.5		Elevations
2.6		Sections
2.7		Office Floor Plans
2.8		Office Elevations
2.9		On-Site Pump Room and Tank
Building 3A and 3B		
3.1		Site Layout Buildings 3A and 3B
3.2		Site Plan & Truck Paths

3.3	6th July, 2023	Floor Plans Building 3A and 3B
3.4		Roof Plan
3.5		Elevations
3.6		Sections
3.7		Office Floor plans and Elevations
3.8		Office Floor plans and Elevations
3.9		On-Site Pump Room and Tank