



DESIGN CONFIDENCE

EJE Architecture  
BCA Design Assessment Report

DA Report

395 Metford Road,  
Metford NSW 2323

Project: 395 Metford Road, Metford NSW 2323  
Document Type: BCA Design Assessment Report  
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Revision History—

OUR REFERENCE	REMARKS	ISSUE DATE
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## EXECUTIVE SUMMARY

This BCA Design Assessment Report has been prepared by Design Confidence at the request of EJE Architecture and relates to the construction of a new medical centre development located at 395 Metford Road, Metford NSW 2323.

Based upon our assessment to date we are of the opinion that the subject development is capable of achieving compliance with the performance provisions of the BCA, either by complying with the prescriptive requirements or via a performance-based approach.

Any other matters that have been identified as requiring 'Design Detail' in **Section 3** shall also be developed and reviewed as the project progresses. The above has explicitly been stated as they are deemed to have greater implications if left unresolved.

In addition to undertaking a detailed assessment of the design against the prescriptive requirements of the BCA a preliminary performance-based assessment has also been undertaken.

The table below lists scenarios where we believe the adoption of a performance design may add value to development in-lieu of complying with the prescriptive (DtS) provisions—

ITEM	PROPOSED PERFORMANCE SOLUTION	BCA DTS CLAUSE	PERFORMANCE REQUIREMENT
<b>FIRE SAFETY</b>			
1.	Justify hydrant booster assembly not being located at the site boundary.	E1D2	E1P2
<b>NON-FIRE SAFETY</b>			
2.	Justify a portion of the ceiling height in the Tenancy 11 being less than the required height (2.4 m)	F5D2	F5P1

The implementation of a performance-based approach in lieu of compliance with the deemed-to-satisfy (DtS) provisions shall be in consultation with all relevant stakeholders and is subject to the approval of the certifying authority.

The adoption of performance solutions for fire safety matters may be subject to consultation with the NSW Fire Brigade as part of the Construction Certificate process under Section 25 - 29 of the Environmental Planning & Assessment (Development Certification and Fire Safety) Regulation 2021.

## 1.0 INTRODUCTION

### 1.1 General

This report has been prepared at the request of EJE Architecture and relates to the proposed construction of a new medical centre located at 395 Metford Road, Metford NSW 2323.

### 1.2 Purpose of report

The purpose of this report is to identify the extent to which the architectural design documentation complies with the prescriptive provisions of the NCC 2022 Volume One - Building Code of Australia, thereby after referred to as the BCA.

### 1.3 Documentation Provided for Assessment

This assessment is based upon the Architectural documentation prepared by EJE Architecture listed within **Appendix 1**.

### 1.4 Limitations

In interpreting the report, the following limitations shall be noted –

- (a) BCA requirements for existing buildings located on the allotment;
- (b) This report is based upon, and limited to, the information depicted in the documentation provided for assessment, and does not make any assumptions regarding 'design intention' or the like;
- (c) This assessment does not contain comments regarding detailed design issues such as (but not limited to): slip resistance, handrail design, door schedule and door hardware specification and lift specification.
- (d) The list of fire safety measures in Section 2.7 is not a proposed fire safety schedule within the context of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021; and
- (e) This report is not a regulated design, as defined by the Design Building Practitioners Regulations 2021.

### 1.5 Report Exclusions

It is conveyed that this report should not be construed to infer that an assessment for compliance with the following has been undertaken –

- (a) Work Health & Safety Act (2011) and Regulations (2017);
- (b) WorkCover Authority requirements;
- (c) Structural and Services Design Documentation;
- (d) The individual requirements of service authorities (i.e. Telecommunication Carriers, Sydney Water, Endeavour Energy);
- (e) Any conditions imposed by the Consent Authority;
- (f) Any conditions imposed by the Principal Certifying Authority;

- (g) Design and Building Practitioners Act (2020) and Regulations (2021);
- (h) Adaptable Housing (AS4299-1995);
- (i) Liveable Housing Guidelines;
- (j) BASIX certificate;
- (k) The Disability Discrimination Act (DDA) 1992;
- (l) The accessibility requirements of the BCA, as contained within Part D4 and F4D5 of the BCA; and
- (m) The energy efficiency provisions of the BCA, as contained with Section J of the BCA.

## 1.6 Relevant Legislative Framework

New building works –

Sub-section 19(1)(c) of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulations 2021 requires that all works forming part of the Construction Certification ('new works') comply with the current requirements of the BCA.

All new works proposed in the architectural documentation are required to comply but existing features of an existing building need not comply with the BCA unless specified under different parts of the legislation e.g. change of building use or consent authority may require upgrade of buildings.

## 2.0 DEVELOPMENT DESCRIPTION

### 2.1 General

This report has been prepared at the request of EJE Architecture and relates to the proposed construction of a new medical centre located at 395 Metford Road, Metford NSW 2323.



**Figure 2.1** – Site Plan

### 2.2 Building Description

**Table 2.2** – Building description

	DESCRIPTION	
Building Classification	Medical Centre	Class 6
Rise in Storeys	Two (2)	
Storeys Contained	Two (2)	
Type of Construction	Type C	
Effective Height	Building A: 3 m Building B: 3.3 m	
Largest Fire Compartment (Whole building)	Building A: 1480 m <sup>2</sup> / ~4440 m <sup>3</sup> Building B: 1279 m <sup>2</sup> / ~4253 m <sup>3</sup>	Within Limitation
Climate Zone:	Climate Zone 5	
Importance Level (AS1170.4)	Level 2	

**Table 2.3** – Floor areas and population summary

BUILDING OR PART	FLOOR AREA (m <sup>2</sup> )	POPULATION
Building A - Ground	625 m <sup>2</sup>	63 persons
Building A – Level 1	563 m <sup>2</sup>	57 persons
Building B – Lower Ground	370 m <sup>2</sup>	37 persons
Building B – Ground	710 m <sup>2</sup>	71 persons

Notes:

1. The above populations have been based on the floor areas and calculations in accordance with Table D1.13 of the BCA for Office use;
2. Ancillary areas such as the mall area, sanitary facilities, corridors and storage areas has also been excluded.

### 2.3 BCA Assessment – Interpretation Notes

To provide the reader with additional context, the following information regarding assessment methodology used in this assessment is provided below—

- (a) Metford Road and Turton Street have not been assessed as fire-source features given the boundary is more than 6m to that far side of each road; and
- (b) The medical centre will not provide surgery services were the patients are unconscious.

Several acronyms and abbreviations are used throughout this report, refer to **Appendix 2** for clarification.



## 3.0 BCA ASSESSMENT SUMMARY

### 3.1 Interpretation

The following table summarises the compliance status of the architectural design in terms of each applicable prescriptive provision of the BCA and indicates a capability for compliance with the BCA. The following is an explanation of the terminology used in the summary checklist:

- (a) N/A: Not Applicable. This clause is not applicable to the proposed design.
- (b) Complies: The proposed design complies with the relevant provisions of the BCA.
- (c) Does not comply: The proposed design does not comply with the BCA and requires amendment or investigations into the feasibility of a Performance Solution.
- (d) Capable of compliance: The proposed design does not provide enough information to determine compliance, compliance could be achieved as design progresses.

**Table 3** – BCA Assessment summary checklist

BCA CLAUSE		COMPLIES	DOES NOT COMPLY	CAPABLE OF COMPLIANCE
<b>Section B – Structure</b>				
<b>Part B1 - Structural provisions</b>				
B1D2	Resistance to actions			✓
B1D3	Determination of individual actions			✓
B1D4	Determination of structural resistance of materials and forms of construction			✓
B1D6	Construction of buildings in flood hazard areas			✓
<b>Section C – Fire Resistance</b>				
<b>Part C2 - Fire Resistance and Stability</b>				
C2D2	Type of construction required			✓
C2D3	Calculation of rise in storeys	Note		
C2D9	Lightweight construction			✓
C2D10	Non-combustible building elements			✓
C2D11	Fire hazard properties			✓
C2D12	Performance of external walls in fire	N/A		
C2D13	Fire-protected timber: Concession	Note / N/A		
C2D14	Ancillary elements			✓
C2D15	Fixing of bonded laminated cladding panels			✓
<b>Part C3 - Compartmentation and separation</b>				
C3D3	General floor area and volume limitations	✓		
C3D4	Large isolated buildings	N/A		
C3D5	Requirements for open spaces and vehicular access	N/A		
C3D6	Class 9 buildings	N/A		
C3D7	Vertical separation of openings in external walls	N/A		

BCA CLAUSE		COMPLIES	DOES NOT COMPLY	CAPABLE OF COMPLIANCE
C3D8	Separation by fire walls	N/A		
C3D9	Separation of classifications in the same storey	N/A		
C3D10	Separation of classifications in different storeys	N/A		
C3D11	Separation of lift shafts	N/A		
C3D12	Stairways and lifts in one shaft	N/A		
C3D13	Separation of equipment			✓
C3D14	Electricity supply system			✓
C3D15	Public corridors in Class 2 and 3 buildings	N/A		
<b>Part C4 - Protection of openings</b>				
C4D3	Protection of openings in external walls	✓		
C4D4	Separation of external walls and associated openings in different fire compartments	N/A		
C4D5	Acceptable methods of protection			✓
C4D6	Doorways in fire walls	N/A		
C4D7	Sliding fire doors	N/A		
C4D8	Protection of doorways in horizontal exits	N/A		
C4D9	Openings in fire-isolated exits	N/A		
C4D10	Service penetrations in fire-isolated exits	N/A		
C4D11	Openings in fire-isolated lift shafts	N/A		
C4D12	Bounding construction: Class 2 and 3 buildings and Class 4 parts	N/A		
C4D13	Openings in floors and ceilings for services			✓
C4D14	Openings in shafts			✓
C4D15	Openings for service installations			✓
C4D16	Construction joints			✓
C4D17	Columns protected with lightweight construction to achieve an FRL			✓
<b>Section D – Access and Egress</b>				
<b>Part D2 - Provisions for escape</b>				
D2D3	Number of exits required	✓		
D2D4	When fire-isolated stairways and ramps are required	N/A		
D2D5	Exit travel distances	✓		
D2D6	Distance between alternative exits	✓		
D2D7	Height of exits, paths of travel to exits and doorways	✓		
D2D8	Width of exits and paths of travel to exits	✓		
D2D9	Width of doorways in exits or paths of travel to exits	✓		
D2D10	Exit width not to diminish in direction of travel	✓		
D2D11	Determination and measurement of exits and paths of travel to exits	✓		

BCA CLAUSE		COMPLIES	DOES NOT COMPLY	CAPABLE OF COMPLIANCE
D2D12	Travel via fire-isolated exits	N/A		
D2D13	External stairways or ramps in lieu of fire-isolated exits	N/A		
D2D14	Travel by non-fire-isolated stairways or ramps	✓		
D2D15	Discharge from exits	N/A		
D2D16	Horizontal exits	N/A		
D2D17	Non-required stairways, ramps or escalators			✓
D2D21	Plant rooms, lift machine rooms and electricity network substations: Concession	Note		
D2D22	Access to lift pits			✓
D2D23	Egress from primary schools	N/A		
<b>Part D3 - Construction of exits</b>				
D3D3	Fire-isolated stairways and ramps	N/A		
D3D4	Non-fire-isolated stairways and ramps			✓
D3D5	Separation of rising and descending stair flights	N/A		
D3D6	Open access ramps and balconies	N/A		
D3D7	Smoke lobbies	N/A		
D3D8	Installations in exits and paths of travel			✓
D3D9	Enclosure of space under stairs and ramps	N/A		
D3D10	Width of required stairways and ramps	N/A		
D3D11	Pedestrian ramps	N/A		
D3D12	Fire-isolated passageways	N/A		
D3D13	Roof as open space	N/A		
D3D14	Goings and risers			✓
D3D15	Landings			✓
D3D16	Thresholds			✓
D3D17	Barriers to prevent falls	✓		
D3D18	Height of barriers	✓		
D3D19	Openings in barriers			✓
D3D20	Barrier climbability			✓
D3D21	Wire barriers	N/A		
D3D22	Handrails			✓
D3D23	Fixed platforms, walkways, stairways and ladders	N/A		
D3D24	Doorways and doors			✓
D3D25	Swinging doors	N/A		
D3D26	Operation of latch			✓
D3D27	Re-entry from fire-isolated exits	N/A		
D3D28	Signs on doors	N/A		
D3D29	Protection of openable windows	✓		
D3D30	Timber stairways: Concession	N/A		

BCA CLAUSE		COMPLIES	DOES NOT COMPLY	CAPABLE OF COMPLIANCE
<b>Section E – Services and Equipment</b>				
<b>Part E1 – Fire fighting equipment</b>				
E1D2	Fire hydrants			<b>PS</b>
E1D3	Fire hose reels			✓
E1D4 - E1D12	Sprinklers	<b>N/A</b>		
E1D13	Where sprinklers are required: occupancies of excessive hazard	<b>N/A</b>		
E1D14	Portable fire extinguishers			✓
E1D15	Fire control centres	<b>N/A</b>		
E1D16	Fire precautions during construction	<b>N/A</b>		
E1D17	Provisions for special hazards	<b>N/A</b>		
<b>Part E2 - Smoke hazard management</b>				
E2D3	General requirements	<b>N/A</b>		
E2D4	Fire-isolated exits	<b>N/A</b>		
E2D5 - E2D20	Smoke hazard management system	<b>N/A</b>		
E2D21	Provision for special hazards	<b>N/A</b>		
<b>Part E3 - Lift installations</b>				
E3D2	Lift installations			✓
E3D3	Stretcher facility in lifts	<b>N/A</b>		
E3D4	Warning against use of lifts in fire			✓
E3D5	Emergency lifts	<b>N/A</b>		
E3D6	Landings			✓
E3D7	Passenger lift types and their limitations			✓
E3D9	Fire service controls	<b>N/A</b>		
E3D10	Residential care buildings	<b>N/A</b>		
E3D11	Fire service recall control switch	<b>N/A</b>		
E3D12	Lift car fire service drive control switch	<b>N/A</b>		
<b>Part E4 - Visibility in an emergency, exit signs and warning systems</b>				
E4D4	Design and operation of emergency lighting			✓
E4D8	Design and operation of exit signs			✓
E4D9	Emergency warning and intercom systems	<b>N/A</b>		
<b>Section F - Health and amenity</b>				
<b>Part F1 - Surface water management, rising damp and external waterproofing</b>				
F1D3	Stormwater drainage			✓
F1D4	Exposed joints			✓
F1D5	External waterproofing membranes			✓
F1D6	Damp-proofing			✓
F1D7	Damp-proofing of floors on the ground			✓

BCA CLAUSE		COMPLIES	DOES NOT COMPLY	CAPABLE OF COMPLIANCE
F1D8	Subfloor ventilation	N/A		
<b>Part F2 - Wet areas and overflow protection</b>				
F2D2	Wet area construction			✓
F2D3	Rooms containing urinals	N/A		
F2D4	Floor wastes			✓
<b>Part F3 - Roof and wall cladding</b>				
F3D2	Roof coverings			✓
F3D3	Sarking			✓
F3D4	Glazed assemblies			✓
F3D5	Wall cladding			✓
<b>Part F4 - Sanitary and other facilities</b>				
F4D2	Facilities in residential buildings	N/A		
F4D4	Facilities in Class 3 to 9 buildings	✓		
F4D8	Construction of sanitary compartments	✓		
F4D11	Waste management	N/A		
<b>Part F5 - Room heights</b>				
F5D2	Height of rooms and other spaces			PS
<b>Part F6 - Light and ventilation</b>				
F6D2	Provision of natural light	N/A		
F6D3	Methods and extent of natural light	Note		
F6D4	Natural light borrowed from adjoining room	Note		
F6D5	Artificial lighting			✓
F6D6	Ventilation of rooms			✓
F6D7	Natural ventilation	Note		
F6D8	Ventilation borrowed from adjoining room	Note		
F6D9	Restriction on location of sanitary compartments	N/A		
F6D10	Airlocks	N/A		
F6D11	Carparks	N/A		
F6D12	Kitchen local exhaust ventilation	N/A		
<b>Part F7 - Sound transmission and insulation</b>				
F7D3	Determination of airborne sound insulation ratings	N/A		
F7D4	Determination of impact sound insulation ratings	N/A		
F7D5	Sound insulation rating of floors	N/A		
F7D6	Sound insulation rating of walls	N/A		
F7D7	Sound insulation rating of internal services	N/A		
F7D8	Sound insulation rating of internal pumps	N/A		
<b>Part F8 - Condensation management</b>				
F8D3	External wall construction	N/A		
F8D4	Exhaust systems	N/A		

BCA CLAUSE		COMPLIES	DOES NOT COMPLY	CAPABLE OF COMPLIANCE
F8D5	Ventilation of roof spaces	N/A		
<b>Section G - Ancillary provisions</b>				
<b>Table 2.2</b>				
<b>Part G1 - Minor structures and components</b>				
G1D2	Swimming pools	N/A		
G1D3	Refrigerated chambers, strong-rooms and vaults	N/A		
G1D4	Outdoor play spaces	N/A		
<b>Part G2 - Boilers, pressure vessels, heating appliances, fireplaces, chimneys and flues</b>				
G2D2 – G2D4	Boilers, pressure vessels, heating appliances, fireplaces, chimneys and flues	N/A		
<b>Part G3 - Atrium construction</b>				
G3D2 – G3D8	Atrium construction	N/A		
<b>Part G4 - Construction in alpine areas</b>				
G4D3 – G4D8	Construction in alpine areas	N/A		
<b>Part G5 - Construction in bushfire prone areas</b>				
NSW G5D3 – G5D4	Construction in bushfire prone areas	N/A		
<b>Part G6 - Occupiable outdoor areas</b>				
G6D2 – G6D10	Occupiable outdoor areas	N/A		
<b>Section I – Special use buildings</b>				
<b>Part I1 Class 9b buildings</b>				
I1D2- I1D7	Class 9b buildings	N/A		
<b>Part I2 – Public transport buildings</b>				
I2D2 – I2D15	Public transport buildings	N/A		
<b>Part I3 - Farm buildings and farm sheds</b>				
I3D2 – I3D18	Farm buildings and farm sheds	N/A		
<b>NSW Part I4 - Entertainment venues other than temporary structures and drive-in theatres</b>				
NSW I4D2 – I4D62	Entertainment venues other than temporary structures and drive-in theatres	N/A		
<b>NSW Part I5 - Temporary structures</b>				
I5D2 – I5D19	Temporary structures	N/A		
<b>NSW Part I6 - Drive-in theatres</b>				
NSW I6D2 – I6D6	Drive-in theatres	N/A		

## 4.0 BCA DETAILED ASSESSMENT

### 4.1 General

With reference to the 'BCA Assessment Summary' contained within **Section 3** of this report, the following detailed analysis and commentary is provided. This commentary is formulated to enable the design documentation to be further progressed, for the purpose of evidencing the attainment of compliance with the relevant provisions of the BCA

### 4.2 Section B – Structure

#### Part B1 **Structural provisions**

Structural works shall comply with this section. Compliance with Section B of the BCA shall be addressed by the project's Structural Engineer as part of the structural design documentation

### 4.3 Section C – Fire Resistance

#### Part C2 **Fire Resistance and stability**

The building is to be erected in Type C fire resisting construction in accordance with **Spec. 5** of the BCA. Refer to **Appendix A2** for the relevant fire resisting requirements.

#### Part C4 **Protection of openings**

If the distance between the opening and the fire source feature to which it is exposed is less than 3 m from a side or rear boundary of an allotment, it must be protected in accordance with C4D5 and if wall wetting sprinklers are used, they are located externally.

Door from egress stair in Building A is within 3m from the Northern boundary and therefore should be self-closing fire door having an FRL of --/60/30.

There are windows within 3 m of the Northern boundary from the Level 1 corridor of Building A that will be protected in accordance with C4D5.

### 4.4 Section D - Access and egress

#### Part D2 General Egress

Number of exits, travel distances, distance between alternative exits and width of exits are all in accordance with the deemed to satisfy provisions of the BCA.

Please see **Appendix 4** of this report showing travel distance markup.

#### Part D3 **Construction of exits**

Stairway Construction

Part D3  
Cont'd

All stairways to be constructed with compliant balustrades, going and risers, handrails, landings slip resistance tread or nosing strips.

A required stairway not within a fire-resisting shaft must be constructed—

- (a) of non-combustible materials; and
- (b) reinforced or prestressed concrete; or
- (c) steel in no part less than 6 mm thick; or
- (d) timber that—
  - (i) has a finished thickness of not less than 44 mm; and
  - (ii) has an average density of not less than 800 kg/m<sup>3</sup> at a moisture content of 12%; and
  - (iii) has not been joined by means of glue unless it has been laminated and glued with resorcinol formaldehyde or resorcinol phenol formaldehyde glue.

Barriers

All barriers on balconies should -

- (a) Be at least 1 m in height.
- (b) Not allow a 125 mm sphere to pass through;
- (c) If located on a floor more than 4 m above the surface beneath, must not incorporate horizontal or near horizontal elements that could facilitate climbing between 150 mm and 760 mm above the floor.

Doorways and doors

The swinging door must not otherwise impede the path or direction of egress.

If fitted with a power operated door serving as a required exit or forming part of a required exit -

- (a) It must be opened manually under a force of not more than 110N
- (b) If it leads directly to road or open space, must open automatically on power failure, or activation of a fire or smoke alarm.

## 4.5 Section E - Services and equipment

Part E1 **Fire fighting equipment**

Fire Hydrants

A fire hydrant system complying with AS2419.1-2021 is required to serve the building.



Part E1 <i>Cont'd</i>	<p>If the fire brigade booster assembly is remote from the building, it is required to be at the boundary of the site, be within sight of the main entrance of the building and adjacent to the principal vehicular access to the site.</p> <p><b>Performance Solution:</b> <i>Justify hydrant booster assembly not being located at the site boundary.</i></p> <p><u>Hose Reels</u></p> <p>A hose reel system complying with AS2441-2005 is required to serve the carpark and storage parts, where one or more internal fire hydrants are installed.</p> <p><u>Portable fire extinguishers</u></p> <p>Portable fire extinguishers must be provided, selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444.</p>
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Part E3	<p><b>Lift installations</b></p> <p>An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with Specification 24.</p>
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Part E4	<p><b>Visibility in an emergency, exit signs and warning systems</b></p> <p>Emergency lighting complying with AS2293.1-2018 is required to be installed throughout common areas.</p> <p>Exit signage complying with AS2293.1-2018 is required installed above or adjacent to any doorways serving as required exits from the building and above the non-fire isolated stair.</p>
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#### 4.6 Section F - Health and amenity

Part F1-F3	<p><b>Surface water management waterproofing and weatherproofing</b></p> <p>All drainage, waterproofing and weatherproofing is to be constructed to comply with part F1-F3 of the BCA.</p>
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Part F4	<p><b>Sanitary and other facilities</b></p> <p>Sanitary facilities numbers are generally capable of compliance, on the basis facilities located elsewhere within the golf club site are permitted to be used.</p>
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Part F5	<p><b>Height of rooms and other spaces</b></p> <p>Ceiling heights in a Class 6 building are required as per the following -</p> <ul style="list-style-type: none"> <li>(a) All areas — 2.4m, unless specified below</li> <li>(b) Corridor, passageway, or the like — 2.1 m</li> </ul> <p><b>Performance Solution:</b> <i>Justify a portion of the ceiling height in the Tenancy 11</i></p>
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Part F5  
Cont'd

*being less than the required height (2.4 m)*

Part F6 **Light and ventilation**

Lighting (natural or artificial) and ventilation (natural or mechanical) shall be provided to any occupiable room.

## 5.0 CONCLUSION

Our strategy for ensuring compliance will be refined and documented during the design process in conjunction with the continual development of the architectural documentation, as required.

Based upon our assessment to date we are of the opinion that the subject development is capable of achieving compliance with the performance provisions of the BCA. Compliance would be achieved via a mixture of adopting a performance based approach as well as complying with the relevant deemed-to-satisfy requirements as outlined within the BCA, compliance via the performance based approach could occur without significant changes to the proposed design.

The Performance Solutions for the building will be developed as part of the ongoing design and consultation with the design team.

The details of the proposed Performance Solutions with respect to fire safety are subject to the outcome of the fire engineering brief and analysis which will be carried out in accordance with the International Fire Engineering Guidelines.

Report By



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For Design Confidence (Sydney) Pty Ltd

## APPENDIX 1 – DOCUMENTATION PROVIDED FOR ASSESSMENT

This BCA assessment was based upon the architectural documentation prepared by EJE Architecture namely—

DRAWING	REV	TITLE	DATE
A00		COVER SHEET	24/07/2023
A01	E	EXISTING SITE PLAN	24/07/2023
A02	F	PROPOSED SITE PLAN & ANALYSIS	24/07/2023
A04	F	OVERALL ELEVATIONS	24/07/2023
A05	F	BUILDING A - GROUND LEVEL	24/07/2023
A06	D	BUILDING A - LEVEL 1	24/07/2023
A07	F	BUILDING A - ROOF PLAN	24/07/2023
A08	F	BUILDING A - NORTH, SOUTH, EAST & WEST ELEVATION	24/07/2023
A09	E	BUILDING A - SECTION A-A, B-B, C-C, D-D	24/07/2023
A10	E	BUILDING B - LOWER GROUND LEVEL	24/07/2023
A11	C	BUILDING B - GROUND LEVEL	24/07/2023
A12	E	BUILDING B - ROOF PLAN	24/07/2023
A13	E	BUILDING B - NORTH, SOUTH, EAST & WEST ELEVATION	24/07/2023
A14	E	BUILDING B - SECTION A-A, B-B, C-C, D-D	24/07/2023

## APPENDIX 2 – ABBREVIATIONS & DEFINITIONS

The following acronyms and abbreviations are used throughout the report.

ACRONYM / ABBREVIATION	DEFINITION
AS	Australian Standard
CHF	Critical Heat Flux
BCA	Building Code of Australia 2022
DTS	Deemed to Satisfy
FRL	Fire-resistance level
FH	Fire hydrant
FHR	Fire hose reel
NCC	National Construction Code
PFE	Portable fire extinguisher
PBDB	Performance Based Design Brief
RC	Reinforced concrete
SOU	Sole occupancy unit
SPEC.	Specification
U-Value	Thermal transmittance

### DEFINITIONS

The following definitions are provided for words used throughout the report.

#### **Accessible**

Accessible means having features to enable use by people with a disability.

#### **Combustible**

A material — means combustible as determined by AS 1530.1; and construction or part of a building — means constructed wholly or in part of combustible materials.

#### **Deemed-to-Satisfy Provisions**

Provisions which are deemed to satisfy the Performance Requirements.

#### **Deemed-to-Satisfy Solution**

*A method of satisfying the Deemed-to-Satisfy Provisions.*

#### **Effective height**

Effective height means the vertical distance between the floor of the lowest storey included in a determination 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).

#### **Exit**

Exit means –

Any, or any combination of the following if they provide egress to a road or open space—

- (a) An internal or external stairway.
- (b) A ramp.
- (c) A fire-isolated passageway.
- (d) A doorway opening to a road or open space.
- (e) A horizontal exit or a fire-isolated passageway leading to a horizontal exit.

### **Fire compartment**

Fire compartment means –

- (a) the total space of a building; or
- (b) when referred to in—
  - (i) the Performance Requirements — any part of a building separated from the remainder by barriers to fire such as walls and/or floors having an appropriate resistance to the spread of fire with any openings adequately protected; or
  - (ii) the Deemed-to-Satisfy Provisions — any part of a building separated from the remainder by walls and/or floors each having an FRL not less than that required for a fire wall for that type of construction and where all openings in the separating construction are protected in accordance with the Deemed-to Satisfy Provisions of the relevant Part.

### **Fire-resistance level (FRL)**

Fire-resistance level (FRL) means the grading periods in minutes determined in accordance with Specification A2.3, for the following criteria—

- (a) structural adequacy; and
- (b) integrity; and
- (c) insulation,

— expressed in that order.

Note: A dash means that there is no requirement for that criterion. For example, 90/-- means there is no requirement for an FRL for integrity and insulation, and --/-- means there is no requirement for an FRL.

### **Fire-source feature**

- (a) the far boundary of a road, river, lake or the like adjoining the allotment; or
- (b) a side or rear boundary of the allotment; or
- (c) an external wall of another building on the allotment which is not a Class 10 building

### **Fire wall**

Fire wall means a wall with an appropriate resistance to the spread of fire that divides a storey or building into fire compartments.

### **Loadbearing**

Intended to resist vertical forces additional to those due to its own weight.

### **Non-combustible**

Non-combustible means—

- (a) applied to a material — not deemed combustible as determined by AS 1530.1:1994 — Combustibility Tests for Materials; and
- (b) applied to construction or part of a building — constructed wholly of materials that are not deemed combustible

### **Occupiable outdoor area**

Occupiable outdoor area means a space on a roof, balcony or similar part of a building—

- (a) that is open to the sky; and
- (b) to which access is provided, other than access only for maintenance; and
- (c) that is not open space or directly connected with open space.

### **Open space**

Open space means a space on the allotment, or a roof or similar part of a building adequately protected from fire, open to the sky and connected directly with a public road.

### **Performance Requirement**

Performance Requirement means a requirement which states the level of performance which a Performance Solution or Deemed-to-Satisfy Solution must meet.

### **Performance Solution**

Performance Solution means a method of complying with the Performance Requirements other than by a Deemed-to-Satisfy Solution.

### **Sole-occupancy unit**

Sole-occupancy unit means a room or other part of a building for occupation by one or joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier and includes—

- (a) a dwelling; or
- (b) a room or suite of rooms in a Class 3 building which includes sleeping facilities; or
- (c) a room or suite of associated rooms in a Class 5, 6, 7, 8 or 9 building; or
- (d) a room or suite of associated rooms in a Class 9c building, which includes sleeping facilities and any area for the exclusive use of a resident.

## APPENDIX 3 – FRLS

**Table A3 TYPE C CONSTRUCTION: FRL OF BUILDING ELEMENTS**

Building element	Class of building—FRL: (in minutes)			
	<i>Structural adequacy/Integrity/Insulation</i>			
	2, 3 or 4 part	5, 7a or 9	6	7b or 8
<b>EXTERNAL WALL</b> (including any column and other building element incorporated therein) or other external building element, where the distance from any <i>fire-source feature</i> to which it is exposed is—				
Less than 1.5 m	90/ 90/ 90	90/ 90/ 90	90/ 90/ 90	90/ 90/ 90
1.5 to less than 3 m	-/-/-	60/ 60/ 60	60/ 60/ 60	60/ 60/ 60
3 m or more	-/-/-	-/-/-	-/-/-	-/-/-
<b>EXTERNAL COLUMN</b> not incorporated in an <i>external wall</i> , where the distance from any <i>fire-source feature</i> to which it is exposed is—				
Less than 1.5 m	90/-/-	90/-/-	90/-/-	90/-/-
1.5 to less than 3 m	-/-/-	60/-/-	60/-/-	60/-/-
3 m or more	-/-/-	-/-/-	-/-/-	-/-/-
<b>COMMON WALLS and FIRE WALLS—</b>	90/ 90/ 90	90/ 90/ 90	90/ 90/ 90	90/ 90/ 90
<b>INTERNAL WALLS-</b>				
Bounding <i>public corridors</i> , public lobbies and the like—	60 / 60/ 60	-/-/-	-/-/-	-/-/-
Between or bounding <i>sole-occupancy units</i> —	60/ 60/ 60	-/-/-	-/-/-	-/-/-
Bounding a stair if <i>required</i> to be rated—	60/ 60/ 60	60/ 60/ 60	60/ 60/ 60	60/ 60/ 60
<b>ROOFS</b>	-/-/-	-/-/-	-/-/-	-/-/-



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