

Date: 9 October 2024
Our Ref: P240070 (2)

Homes NSW
Locked Bag 7028
Liverpool BC NSW 1871
Att: Mr Mano Manoharan

Dear Mano,

**RE: 29-35 Lochinvar Rd, Revesby
BCA COMPLIANCE ASSESSMENT**

Please find enclosed our BCA Compliance Report prepared in respect of the proposed design contained within the architectural documentation provided.

In reviewing the content of this Report, particular attention is drawn to the content of Parts 2, 3 and 4, as: –

- ☐ Part 3 Provides a Key point summary
- ☐ Part 4 summarizes the compliance status of the proposed design in terms of each prescriptive provision of the BCA.

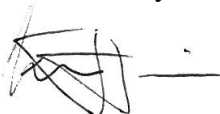
The inclusion of this summary enables an immediate understanding of the compliance status of the proposed design to be obtained.

- ☐ Part 5 contains a detailed analysis of the proposed design, and provides informative commentary & recommendation in respect of each instance of prescriptive non-compliance and area of preliminary only (design) detail, as applicable.

This commentary enables the project team to readily identify and understand the nature and extent of information required within the Crown Certificate application to demonstrate the attainment of BCA compliance.

Should you require any further information, please do not hesitate to contact me on the number provided.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Kieran Tobin', followed by a horizontal line.

Kieran Tobin
Director

BCA COMPLIANCE ASSESSMENT

PREPARED FOR

Homes NSW

REGARDING
29-35 Lochinvar Rd, Revesby

Prepared By



REPORT REGISTER

The following report register documents the development and issue of this report and project as undertaken by this office, in accordance with the *Quality Assurance* policy of BCA Vision Pty Ltd.

Our Reference	Issue No.	Remarks	Issue Date
P240070	1	Design Compliance Report	9 July 2024
P240070	2	Design Compliance Report	9 October 2024
Author	Kieran Tobin Senior NCC Consultant Registered Building Surveyor - Fair Trading no 0409 Grad Dip Building Surveying UWS		

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1.0 INTRODUCTION

1.1 GENERAL

This “BCA Compliance Assessment” report has been prepared at the request of Homes NSW, and relates to the premises located at 29-35 Lochinvar Rd, Revesby.

The project proposal is for construction of a new residential unit building containing 19 Seniors Living Units

1.2 REPORT BASIS

The content of this report reflects –

- (a) The principles and provisions of BCA 2022, Parts B, C, D, E, F and J;
- (b) Architectural documentation provided by DTA Architects

Plan Reference	Plan Description	Dated
01 of 18	Cover Sheet	09/10/24
06 of 18	Site Plan	09/10/24
07 of 18	Ground Floor Plan	09/10/24
08 of 18	First Floor Plan	09/10/24
09 of 18	Roof Plan	09/10/24
10 of 18	Elevations	09/10/24
11 of 18	Elevations	09/10/24
12 of 18	Sections	09/10/24
13 of 18	Sections	09/10/24
17 of 18	Perspectives	09/10/24
18 of 18	Perspectives	09/10/24

1.4 REPORT PURPOSE

The purpose of this report is to identify the extent to which the proposed works comply with the relevant prescriptive provisions of BCA 2022, Parts B, C, D, E, F and J

Assessment of the proposed design considers each prescriptive BCA provision, and identifies such as either: –

- (a) Being complied with; or
- (b) Not being complied with; or
- (c) Requiring the provision further detail with the future Building Permit or other application or
- (d) Not being relevant to the particular building works proposal.

The status of the design, in terms of these four (4) categories, is summarised within Part 3 of this report.

Where prescriptive non-compliance is identified, suitable recommendations to remedy the non-compliance shall be detailed in Part 4.

In instances where preliminary only detail exists, summary of the information required from the project team for inclusion within future applications (i.e. Crown Certificate) shall also be outlined in Part 4.

2.0 MATTERS IDENTIFIED / RECOMMENDATIONS

2.1 COMPLIANCE PATHWAYS WITHIN THE BCA

Compliance with the NCC is achieved by complying with—

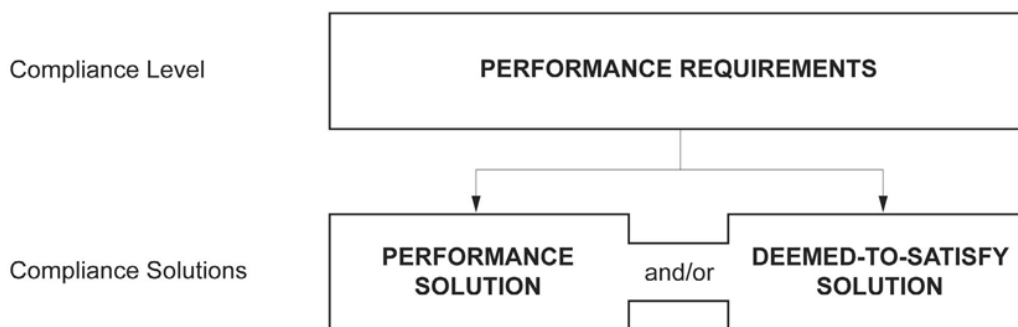
- (1) the Governing Requirements of the NCC; and
- (2) the *Performance Requirements*.

A2.1 Compliance with the Performance Requirements

Performance Requirements are satisfied by one of the following, as shown in Figure 1:


- (1) A *Performance Solution*.
- (2) A *Deemed-to-Satisfy Solution*.
- (3) A combination of (1) and (2).

Figure 1: NCC compliance option structure



2.2 KEY COMPLIANCE ISSUES IDENTIFIED

Key Compliance Requirements requiring Greater detail at Crown Certificate

	BCA Clause	Comment
1	C2D2	<p>All building elements to achieve the fire resistance levels of Type B Construction as outlined in Specification C1.1 (Refer Clause 3.4 of this report).</p> <p>Sectional Details and wall systems must be detailed within the construction plans</p> <div style="display: flex; align-items: flex-start;">  <div style="margin-left: 20px;"> <p>Cladding Section Vertical section of wall will require FRL 90/90/90 (or less (for Integrity and Insulation) depending on distance from boundary)</p> <p>Also Unsure of where Soffit ends and External wall begins at Balconies The same rule as above will apply to the Vertical wall at the balcony</p> <p>Cladding Section Vertical section of wall will require FRL 90/90/90 (or less (for Integrity and Insulation) depending on distance from boundary)</p> <p>External wall Balcony The identified wall is required to either</p> <ul style="list-style-type: none"> - Achieve the FRLs of an external wall Or - Have no integration with the external walls and be non combustible </div> </div>

2	C2D10 C2D15	External wall Construction AS 1530 Fire Test Certificates will be required for Sarking Insulation and Cladding materials
3	C2D14	Attachments to Buildings In regard to Privacy Screens and other attachments to the Building An ancillary element must not be fixed, installed, attached to or supported by the concealed internal parts or external face of an external wall that is required to be non-combustible AS 1530 Fire Test Certificates will be required to qualify these attachments Note the Construction method of the Window Hoods is critical – all attachments and components must be non combustible
4	C4D12	Self-closing, tight fitting, solid core door, not less than 35 mm thick are required to - All (internal) Unit Entry Doors
5	Part D4	Building Access An Access Consultants Report is required to qualify compliance with Part D4 of the BCA, AS 1428.1 - 2009 and SEPP Seniors Housing
6	Part E1	Fire Hydrant Protection Hydraulic Plans and Certification will be required to identify compliance
7	Part E2	Smoke Hazard Management Plans and Certification will be required to identify compliance
8	Part E3	Vertical Transport A Lift Specification and Certification will be required
9	Part E4	Emergency Lighting and Exit Signage Plans and Certification will be required to identify compliance
10	Part F1	Weatherproofing A report identifying compliance of the Roof and Wall system will be required
11	Part F6	A Window Schedule is required to allow for consideration of compliant Light and Ventilation
12	Part F7	Wall floor and riser sections are required to determine the method of Acoustic separation Note services must not be chased into separating walls – provision for services must be detailed
13	Part F8	Identify the methods and materials for condensation management
14	Part J	BASIX, NatHers and a Section J Parts 3, 5 and 6 assessment is required

3.0 BUILDING DESCRIPTION

3.1 GENERAL

In the context of the Building Code of Australia (BCA), the subject development is described within items 2.2 – 2.6 below.

3.1 RISE IN STOREYS (CLAUSE C1.2)

The building is proposed to have a rise in storeys of 2 (two)

2.3 BUILDING CLASSIFICATION (CLAUSE A3.2)

The entire building incorporates the following classifications:-

CLASS	DESCRIPTION
Class 2	A Residential Unit Building

2.4 EFFECTIVE HEIGHT (CLAUSE A1.1)

The building has an effective height Not exceeding 12m.

2.5 TYPE OF CONSTRUCTION (TABLE C1.1)

Specification 5 - Type B Construction

Building element	
EXTERNAL WALL (including any column and other building element incorporated within it) or other external building element, where the distance from any <i>fire-source feature</i> to which it is exposed is—	
	Class 2
less than 1.5 m	90/ 90/ 90
1.5 to less than 3 m	90/ 60/ 30
3 to less than 9 m	90/ 30/ 30
9 to less than 18 m	90/ 30/—
18 m or more	—/—/—
For non-loadbearing parts—	
less than 1.5 m	—/ 90/ 90
1.5 to less than 3 m	—/ 60/ 30
3 m or more	—/—/—
EXTERNAL COLUMN not incorporated in an <i>external wall</i> , where the distance from any <i>fire-source feature</i> to which it is exposed is—	
For loadbearing columns—	
less than 18 m	90/—/—
18 m or more	—/—/—
For non-loadbearing columns—	
For non-loadbearing columns—	—/—/—
COMMON WALLS and FIRE WALLS—	90/ 90 / 90
INTERNAL WALLS—	
<i>Fire-resisting lift and stair shafts—</i>	
<i>Loadbearing</i>	90/ 90/ 90
<i>Fire-resisting stair shafts—</i>	
<i>Non-loadbearing</i>	—/ 90/ 90
Bounding <i>public corridors</i> , public lobbies and the like—	
<i>Loadbearing</i>	60/ 60/ 60
<i>Non-loadbearing</i>	—/ 60/ 60
Between or bounding <i>sole-occupancy units—</i>	
<i>Loadbearing</i>	60/ 60/ 60
<i>Non-loadbearing</i>	—/ 60/ 60

OTHER LOADBEARING INTERNAL WALLS and COLUMNS—	60/—/—
ROOFS	—/—/—

3.5 GENERAL FLOOR AREA LIMITATIONS (TABLE C2.2)

Note – Not applicable to residential portion

3.6 PART B1 - STRUCTURAL PROVISIONS

Structural Engineers Details prepared by an Appropriately qualified Structural Engineer will be required within the Crown Certificate Documentation.

Confirmation will be required that the design achieves compliance with the following standards (where relevant):-

- AS 1170.0 – 2002 – General Principles
- AS 1170.1 – 2002 – Certification of Barriers to Prevent Falls (Dead and Live Loads)
- AS 1170.2 – 2011 – Wind Loads
- AS 1170.4 – 2007 – Earthquake Actions
- AS 3700 – 2018 – Masonry Structures
- AS 3600 – 2018 – Concrete Structures
- AS 4100 – 1998 – Steel Structures
- AS 4600 – 2018 – Cold Formed Steel Structures
- AS 2519- 2009 – Piling Design and Installation
- AS 1720.1 – 2010 – Design of Timber Structures
- AS/NZS 1664.1 and 1664.2 – 1997 – Aluminium Construction
- AS 2047 – 2014 – Windows and External Glazed Doors in Buildings
- AS 1288 – 2006 – Glass In Buildings Selection and Installation

4.0 BCA ASSESSMENT – SUMMARY

4.1 GENERAL

The tables contained within items 3.2 – 3.5 below summarise the compliance status of the proposed architectural design in terms of each prescriptive provision of the Building Code of Australia.

For those instances of either “prescriptive non-compliance” or “preliminary only detail”, a detailed analysis and commentary is provided within Part 4.

4.2 SECTION C – FIRE RESISTANCE

BCA reference	Complies	Does not comply	Detail Required	For REF	Not relevant
C2D1 - Deemed-to-Satisfy Provisions			✓		
C2D2 - Type of construction required				✓	
C2D3 - Calculation of rise in storeys				✓	✓
C2D4 - Buildings of multiple classification					✓
C2D5 - Mixed types of construction					✓
C2D6 - Two storey Class 2, 3 or 9c buildings					✓
C2D7 - Class 4 parts of buildings					✓
C2D8 - Open spectator stands and indoor sports stadiums					✓
C2D9 - Lightweight construction			✓		
C2D10 - Non-combustible building elements			✓		
C2D11 - Fire hazard properties			✓		
C2D12 - Performance of external walls in fire					✓
C2D13 - Fire-protected timber: Concession			✓		
C2D14- Ancillary elements			✓		
C2D15-Fixing of bonded laminated cladding panels			✓		
C3D3 - General floor area and volume limitations					✓
C3D4 - Large isolated buildings					✓
C3D5 - Requirements for open spaces and vehicular access					✓
C3D6 - Class 9 buildings					✓
C3D7 - Vertical separation of openings in external walls					✓
C3D8 - Separation by fire walls					✓
C3D9 - Separation of classifications in the same storey					✓
C3D10 - Separation of classifications in different storeys					✓
C3D11 - Separation of lift shafts					✓
C3D12 - Stairways and lifts in one shaft					✓
C3D13 - Separation of equipment			✓		
C3D14 - Electricity supply system			✓		
C3D15 - Public corridors in Class 2 and 3 buildings			✓		
C4D3 - Protection of openings in external walls	✓				
C4D4- Separation of external walls and associated openings in different fire compartments					✓
C4D5- Acceptable methods of protection					✓
C4D6- Doorways in fire walls					✓
C4D7-Sliding fire doors					✓
C4D8- Protection of doorways in horizontal exits					✓
C4D9- Openings in fire-isolated exits					✓
C4D10- Service penetrations in fire-isolated exits					✓
C4D11- Openings in fire-isolated lift shafts					✓
C4D12- Bounding construction: Class 2 and 3 buildings and Class 4 parts			✓		
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			✓		

4.3 SECTION D – ACCESS AND EGRESS

BCA reference	Complies	Does not comply	Detail Required	Not relevant
D2D3 - Number of exits required	✓			
D2D4 - When fire-isolated stairways and ramps are required				✓
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			✓	
D2D12 - Travel via fire-isolated exits				✓
D2D13 - External stairways or ramps in lieu of fire-isolated exits				✓
D2D14 - Travel by non-fire-isolated stairways or ramps	✓			
D2D15 - Discharge from exits	✓			
D2D16 - Horizontal exits				✓
D2D17 - Non-required stairways, ramps or escalators				✓
D2D18 - Number of persons accommodated				✓
D2D19 - Measurement of distances				✓
D2D20 - Method of measurement				✓
D2D21 - Plant rooms, lift machine rooms and electricity network substations: Concession				✓
D2D22 - Access to lift pits				✓
D2D23 - Egress from primary schools				✓
D3D3 - Fire-isolated stairways and ramps				✓
D3D4 - Non-fire-isolated stairways and ramps				✓
D3D5 - Separation of rising and descending stair flights				✓
D3D6 - Open access ramps and balconies				✓
D3D7 - Smoke lobbies				✓
D3D8 - Installations in exits and paths of travel			✓	
D3D9 - Enclosure of space under stairs and ramps			✓	
D3D10 - Width of required stairways and ramps				✓
D3D11 - Pedestrian ramps				✓
D3D12 - Fire-isolated passageways				✓
D3D13 - Roof as open space				✓
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				✓
D3D22 - Handrails			✓	
D3D23 - Fixed platforms, walkways, stairways and ladders				✓
D3D24 - Doorways and doors				✓
D3D25 - Swinging doors			✓	
D3D26 - Operation of latch			✓	
D3D27 - Re-entry from fire-isolated exits				✓
D3D28 - Signs on doors			✓	
D3D29 - Protection of openable windows			✓	
D3D30 - Timber stairways: Concession				✓
D4D2 -General building access requirements			✓	
D4D3 -Access to buildings			✓	
D4D4 -Parts of buildings to be accessible			✓	
D4D5 -Exemptions				✓
D4D6 -Accessible carparking			✓	
D4D7 -Signage			✓	
D4D8 -Hearing augmentation				✓
D4D9 -Tactile indicators			✓	

D4D10- Wheelchair seating spaces in Class 9b assembly buildings				✓
D4D11-Swimming pools				✓
D4D12-Ramps				✓
D4D13-Glazing on an accessway			✓	

4.4 SECTION E – SERVICES AND EQUIPMENT

BCA reference	Complies	Does not comply	Detail Required	Not relevant
E1D2 - Fire hydrants			✓	
E1D3 -Fire hose reels				✓
E1D4 - Sprinklers				✓
E1D5 - Where sprinklers are required: all classifications				✓
E1D6 - Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings				✓
E1D7 -Where sprinklers are required: Class 3 building used as a residential care building				✓
E1D8 - Where sprinklers are required: Class 6 building				✓
E1D9 - Where sprinklers are required: Class 7a building, other than an open-deck carpark				✓
E1D10 -Where sprinklers are required: Class 9a health-care building used as a residential care building, Class 9c buildings				✓
E1D11 - Where sprinklers are required: Class 9b buildings				✓
E1D12 - Where sprinklers are required: additional requirements				✓
E1D13 -Where sprinklers are required: occupancies of excessive hazard				✓
E1D14 -Portable fire extinguishers				✓
E1D15 -Fire control centres				✓
E1D16 -Fire precautions during construction				✓
E1D17 -Provision for special hazards				✓
E2D3 -General requirements			✓	
E2D4 -Fire-isolated exits				✓
E2D5 -Buildings more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building				✓
E2D6 -Buildings more than 25 m in effective height: Class 5, 6, 7b, 8 or 9b buildings				✓
E2D7 -Buildings more than 25 m in effective height: Class 9a buildings				✓
E2D8 -Buildings not more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building			✓	
E2D9 -Buildings not more than 25 m in effective height: Class 5, 6, 7b, 8 and 9b buildings				✓
E2D10 -Buildings not more than 25 m in effective height: large isolated buildings subject to C3D4				✓
E2D11 -Buildings not more than 25 m in effective height: Class 9a and 9c buildings				✓
E2D12 -Class 7a buildings				✓
E2D13 -Basements (other than Class 7a buildings)				✓
E2D14 -Class 6 buildings – in fire compartments more than 2000 m2: Class 6 building (not containing 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)				✓
E2D16 -assembly buildings: nightclubs, discotheques and the like				✓
E2D17 - assembly buildings: exhibition halls				✓
E2D18 - assembly buildings: theatres and public halls				✓
E2D19 -Class 9b – assembly buildings: theatres and public halls (not listed in E2D18) including lecture theatres and cinema/auditorium complexes				✓
E2D20 -Class 9b assembly buildings: other assembly buildings (not listed in E2D16 to E2D19)				✓
E2D21 -Provision for special hazards				✓
E3D2 - Lift installations			✓	
E3D3 - Stretcher facility in lifts				✓
E3D4 - Warning against use of lifts in fire			✓	
E3D5 - Emergency lifts				✓
E3D6 -Landings	✓			
E3D7 -Passenger lift types and their limitations			✓	

E3D8 -Accessible features required for passenger lifts			✓	
E3D9 -Fire service controls				
E3D10 -Residential care buildings				
E3D11 -Fire service recall control switch				
E3D12 -Lift car fire service drive control switch				
E4D2 -Emergency lighting requirements			✓	
E4D3 -Measurement of distance			✓	
E4D4 -Design and operation of emergency lighting			✓	
E4D5 -Exit signs			✓	
E4D6 -Direction signs			✓	
E4D7 -Class 2 and 3 buildings and Class 4 parts: exemptions				✓
E4D8 -Design and operation of exit signs			✓	
E4D9 -Emergency warning and intercom systems				✓

3.1. SECTION F – HEALTH AND AMENITY

BCA reference	Complies	Does not comply	Detail required	Not relevant
F1D3 - Stormwater drainage			✓	
F1D4 - Exposed joints			✓	
F1D5 - External waterproofing membranes			✓	
F1D6 - Damp-proofing			✓	
F1D7 - Damp-proofing of floors on the ground			✓	
F1D8 - Subfloor ventilation				✓
F2D2 - Wet area construction			✓	
F2D3 - Rooms containing urinals				✓
F2D4 - Floor wastes			✓	
F3D2 - Roof coverings			✓	
F3D3 - Sarking			✓	
F3D4 - Glazed assemblies			✓	
F3D5 - Wall cladding			✓	
F4D2 - Calculation of number of occupants and facilities				✓
F4D3 - Facilities in Class 3 to 9 buildings				✓
F4D4 - Accessible sanitary facilities			✓	
F4D5 - Accessible unisex sanitary compartments				✓
F4D6 - Accessible unisex showers				✓
F4D7 - Construction of sanitary compartments				✓
F4D8 - Interpretation: urinals and washbasins				✓
F4D9 - Microbial (legionella) control				✓
F4D10 - Waste management				✓
F4D12 - Accessible adult change facilities				✓
F5D2 - Height of rooms and other spaces			✓	
F6D2 Provision of natural light			✓	
F6D3 Methods and extent of natural light			✓	
F6D4 Natural light borrowed from adjoining room				✓
F6D5 Artificial lighting			✓	
F6D6 Ventilation of rooms			✓	
F6D7 Natural ventilation			✓	
F6D8 Ventilation borrowed from adjoining room				✓
F6D9 Restriction on location of sanitary compartments			✓	
F6D10 Airlocks			✓	
F6D11 Carparks				✓
F6D12 Kitchen local exhaust ventilation				✓
F7D3 Determination of airborne sound insulation ratings			✓	
F7D4 Determination of impact sound insulation ratings			✓	
F7D5 Sound insulation rating of floors			✓	
F7D6 Sound insulation rating of walls			✓	
F7D7 Sound insulation rating of internal services			✓	
F7D8 Sound isolation of pumps			✓	

3.1. SECTION J – ENERGY EFFICIENCY

BCA reference	Complies	Does not comply	Detail required	Not relevant
Part J0 Energy Efficiency			✓	
Part J1 Building Fabric			✓	
NSW J3D2 Application of Part				✓
NSW J4D2 Application of Part			✓	
NSW J4D3 Thermal construction—general			✓	
NSW J4D6 Walls and glazing				✓
NSW J5D2 Application of Part			✓	
J5D3 Chimneys and flues				✓
J5D4 Roof lights				✓
NSW J5D5 Windows and doors				✓
J5D6 Exhaust fans			✓	
J5D7 Construction of ceilings, walls and floors			✓	
J5D8				✓
NSW J6D2 Application of Part	✓			
J6D3 Air-conditioning system control			✓	
J6D4 Mechanical ventilation system control				✓
J6D5 Fans and duct systems			✓	
J6D6 Ductwork insulation			✓	
J6D7 Ductwork sealing			✓	
J6D8 Pump systems			✓	
J6D9 Pipework insulation			✓	
J6D10 Space heating			✓	
J6D11 Refrigerant chillers				✓
J6D12 Unitary air-conditioning equipment			✓	
J6D13 Heat rejection equipment			✓	
NSW J7D2 Application of Part	✓			

5.0 BCA ASSESSMENT – DETAILED ANALYSIS

5.1 GENERAL

With reference to the “BCA Assessment Summary” contained within Part 3 above, 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.

In our opinion compliance with the Building Code of Australia 2022, Volume 1, can be achieved subject to the implementation of the following details into the Construction documentation.

5.2 SECTION C – FIRE RESISTANCE

CLAUSE	CLAUSE REQUIREMENT	ACTION/RECOMENDATION
C2D2	Type of construction required (1)The minimum Type of <i>fire-resisting construction</i> of a building must be determined in accordance with Table C2D2, except as allowed for— (a)certain Class 2, 3 or 9c buildings, in C2D6; and (b)a Class 4 part of a building located on the top <i>storey</i> , in C2D4(2); and (c) <i>open spectator stands</i> and indoor sports stadiums, in C2D8. (2)Each building element must comply with Specification 5 as applicable.	Further Detail is required within the Construction Documentation
C2D9	Type of construction required (1)The minimum Type of <i>fire-resisting construction</i> of a building must be determined in accordance with Table C2D2, except as allowed for— (a)certain Class 2, 3 or 9c buildings, in C2D6; and (b)a Class 4 part of a building located on the top <i>storey</i> , in C2D4(2); and	Further Detail is required within the Construction Documentation

	<p>(c) <i>open spectator stands</i> and indoor sports stadiums, in C2D8.</p> <p>(2) Each building element must comply with Specification 5 as applicable.</p>	
C2D10	<p>Non-combustible building elements</p> <p>(1) In a building <i>required</i> to be of Type A or B construction, the following building elements and their components must be <i>non-combustible</i>:</p> <p>(a) <i>External walls</i> and <i>common walls</i>, including all components incorporated in them including the facade covering, framing and insulation.</p> <p>(b) The flooring and floor framing of lift pits.</p> <p>(c) <i>Non-loadbearing internal walls</i> where they are <i>required</i> to be <i>fire-resisting</i>.</p> <p>(2) A <i>shaft</i>, being a lift, ventilating, pipe, garbage, or similar <i>shaft</i> that is not for the discharge of hot products of combustion, that is <i>non-loadbearing</i>, must be of <i>non-combustible</i> construction in—</p> <p>(a) a building <i>required</i> to be of Type A construction; and</p> <p>(b) a building <i>required</i> to be of Type B construction, subject to C3D11, in— (i) a Class 2, 3 or 9 building; and</p> <p>(ii) a Class 5, 6, 7 or 8 building if the <i>shaft</i> connects more than 2 <i>storeys</i>.</p> <p>(3) A <i>loadbearing internal wall</i> and a <i>loadbearing fire wall</i>, including those that are part of a <i>loadbearing shafts</i>, must comply with Specification 5.</p> <p>(4) The requirements of (1) and (2) do not apply to the following: (a) Gaskets.</p> <p>(b) Caulking.</p> <p>(c) Sealants.</p> <p>(d) Termite management systems.</p> <p>(e) Glass, including laminated glass, and associated adhesives, including tapes.</p> <p>(f) Thermal breaks associated with— (i) glazing systems; or</p> <p>(ii) <i>external wall</i> systems, where the thermal breaks— (A) are no larger than necessary to achieve thermal objectives; and</p> <p>(B) do not extend beyond one <i>storey</i>; and</p> <p>(C) do not extend beyond one <i>fire compartment</i>.</p>	<p>Further Detail is required within the Construction Documentation</p>

- (g) *Damp-proof courses.*
- (h) Compressible fillers and backing materials, including those associated with articulation joints, closing gaps not wider than 50 mm.
- (i) Isolated— (i) construction packers and shims; or
- (ii) blocking for fixing fixtures; or
- (iii) fixings, including fixing accessories; or
- (iv) acoustic mounts.
- (j) Waterproofing materials applied to the external face, used below ground level and up to 250 mm above ground level.
- (k) Joint trims and joint reinforcing tape and mesh of a width not greater than 50 mm.
- (l) Weather sealing materials, applied to gaps not wider than 50 mm, used within and between concrete elements.
- (m) Wall ties and other masonry components complying with AS 2699 Part 1 and Part 3 as appropriate, and associated with masonry wall construction.
- (n) Reinforcing bars and associated minor elements that are wholly or predominately encased in concrete or grout.
- (o) A paint, lacquer or a similar finish or coating.
- (p) Adhesives, including tapes, associated with stiffeners for cladding systems.
- (q) Fire-protective materials and components *required* for the protection of penetrations.
- (5) The following materials, when entirely composed of itself, are *non-combustible* and may be used wherever a *non-combustible* material is *required*: (a) Concrete.
- (b) Steel, including metallic coated steel.
- (c) Masonry, including mortar.
- (d) Aluminium, including aluminium alloy.
- (e) Autoclaved aerated concrete, including mortar.
- (f) Iron.
- (g) Terracotta.

	<p>(h) Porcelain.</p> <p>(i) Ceramic.</p> <p>(j) Natural stone.</p> <p>(k) Copper.</p> <p>(l) Zinc.</p> <p>(m) Lead.</p> <p>(n) Bronze.</p> <p>(o) Brass.</p> <p>(6) The following materials may be used wherever a <i>non-combustible</i> material is <i>required</i>:</p> <p>(a) Plasterboard.</p> <p>(b) Perforated gypsum lath with a normal paper finish.</p> <p>(c) Fibrous-plaster sheet.</p> <p>(d) Fibre-reinforced cement sheeting.</p> <p>(e) Pre-finished metal sheeting having a <i>combustible</i> surface finish not exceeding 1 mm thickness and where the <i>Spread-of-Flame Index</i> of the product is not greater than 0.</p> <p>(f) <i>Sarking-type materials</i> that do not exceed 1 mm in thickness and have a <i>Flammability Index</i> not greater than 5.</p> <p>(g) Bonded laminated materials where— (i) each lamina, including any core, is <i>non-combustible</i>; and (ii) each adhesive layer does not exceed 1 mm in thickness and the total thickness of the adhesive layers does not exceed 2 mm; and (iii) the <i>Spread-of-Flame Index</i> and the <i>Smoke-Developed Index</i> 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.</p>	
C2D11	<p>Fire hazard properties</p> <p>(1) The <i>fire hazard properties</i> of the following internal linings, materials and assemblies within a Class 2</p>	Further Detail is required within the Construction Documentation

to 9 building must comply with Specification 7: (a) Floor linings and floor coverings.

(b) Wall linings and ceiling linings.

(c) Air-handling ductwork.

(d) Lift cars.

(e) In Class 9b buildings used as a theatre, public hall or the like— (i) fixed seating in the audience area or auditorium; and

(ii) a proscenium curtain *required* by Specification 32.

(f) Escalators, moving walkways and non-*required* non *fire-isolated stairways* or pedestrian ramps subject to Specification 14.

(g) *Sarking-type materials*.

(h) Attachments to floors, ceilings, *internal walls, common walls, fire walls* and to internal linings of *external walls*.

(i) Other materials including insulation materials other than *sarking-type materials*.

(2) Paint or fire-retardant coatings must not be used to achieve compliance with the *required fire hazard properties*.

(3) The requirements of (1) do not apply to a material or assembly if it is— (a) plaster, cement render, concrete, terrazzo, ceramic tile or the like; or

(b) a *fire-protective covering*; or

(c) a timber-framed *window*; or

(d) a solid timber handrail or skirting; or

(e) a timber-faced door; or

(f) an electrical switch, socket-outlet, cover plate or the like; or

(g) a material used for— (i) a roof insulating material applied in continuous contact with a substrate; or

(ii) an adhesive; or

(iii) a *damp-proof course, flashing*, caulking, sealing, ground moisture barrier, or the like; or

(h) a paint, varnish, lacquer or similar finish, other than nitro-cellulose lacquer; or

(i) a clear or translucent roof light of glass fibre-reinforced polyester if— (i) the roof in which it is

	<p>installed forms part of a single <i>storey</i> building <i>required</i> to be Type C construction; and</p> <p>(ii)the material is used as part of the roof covering; and</p> <p>(iii)it is not closer than 1.5 m from another roof light of the same type; and</p> <p>(iv)each roof light is not more than 14 m² in area; and</p> <p>(v)the area of the roof lights per 70 m² of roof surface is not more than 14 m²; or</p> <p>(j)a face plate or neck adaptor of supply and return air outlets of an air handling system; or</p> <p>(k)a face plate or diffuser plate of light fitting and emergency <i>exit</i> signs and associated electrical wiring and electrical components; or</p> <p>(l)a joinery unit, cupboard, shelving, or the like; or</p> <p>(m)an attached non-building fixture and fitting such as— (i)a curtain, blind, or similar decor, other than a proscenium curtain <i>required</i> by Specification 32; and</p> <p>(ii)a whiteboard, <i>window</i> treatment or the like; or</p> <p>(n)timber treads, risers, landings and associated supporting framework installed in accordance with D3D30 where the <i>Spread-of-Flame Index</i> and the <i>Smoke-Developed Index</i> of the timber does not exceed 9 and 8 respectively; or any other material that does not significantly increase the hazards of fire.</p>	
C2D13	<p>Fire-protected timber: Concession</p> <p><i>Fire-protected timber</i> may be used wherever an element is <i>required</i> to be <i>non-combustible</i>, provided—</p> <p>(a)the building is— (i)a separate building; or</p> <p>(ii)a part of a building— (A)which only occupies part of a <i>storey</i>, and is separated from the remaining part by a <i>fire wall</i>; or</p> <p>(B)which is located above or below a part not containing <i>fire-protected timber</i> and the floor between the adjoining parts is provided with an FRL not less than that prescribed for a <i>fire wall</i> for the lower <i>storey</i>; and</p> <p>(b)the building has an <i>effective height</i> of not more than 25 m; and</p> <p>(c)the building has a sprinkler system (other than a FPAA101D or FPAA101H system) throughout complying with Specification 17; and</p> <p>(d)any insulation installed in the cavity of the timber building element to have an FRL is <i>non-combustible</i>; and cavity barriers are provided in accordance with Specification 9.</p>	Further Detail is required within the Construction Documentation
C2D14	<p>Ancillary elements</p> <p>An <i>ancillary element</i> must not be fixed, installed, attached to or supported by the concealed internal</p>	Further Detail is required within the Construction Documentation

	<p>parts or external face of an <i>external wall</i> that is <i>required</i> to be <i>non-combustible</i> unless it is one of the following: (a)An <i>ancillary element</i> that is <i>non-combustible</i>.</p> <p>(b)A gutter, downpipe or other plumbing fixture or fitting.</p> <p>(c)A flashing.</p> <p>(d)A grate, grille or similar cover not more than 2 m² in area associated with a building service.</p> <p>(e)An electrical switch, socket-outlet, cover plate or the like.</p> <p>(f)A light fitting.</p> <p>(g)A <i>required</i> sign.</p> <p>(h)A sign other than one provided under (a) or (g) that— (i)achieves a <i>group number</i> of 1 or 2; and (ii)does not extend beyond one <i>storey</i>; and (iii)does not extend beyond one <i>fire compartment</i>; and (iv)is separated vertically from other signs permitted under (h) by at least 2 <i>storeys</i>.</p> <p>(i)An awning, sunshade, canopy, blind or shading hood other than one provided under (a) that— (i)meets the relevant requirements of Table S7C7 as for an internal element; and (ii)serves a <i>storey</i>— (A)at ground level; or (B)immediately above a <i>storey</i> at ground level; and (iii)does not serve an <i>exit</i>, where it would render the <i>exit</i> unusable in a fire.</p> <p>(j)A part of a security, intercom or announcement system.</p> <p>(k)Wiring.</p> <p>(l)Waterproofing material installed in accordance with AS 4654.2 and applied to an adjacent floor surface, including vertical upturn, or a roof surface.</p> <p>(m)Collars, sleeves and insulation associated with service installations.</p> <p>(n)Screens applied to vents, weepholes and gaps complying with AS 3959.</p> <p>(o)Wiper and brush seals associated with doors, windows or other openings. A gasket, caulking, sealant or adhesive directly associated with (a) to (o).</p>	
C2D15	<p>Fixing of bonded laminated cladding panels</p> <p>(1)In a building <i>required</i> to be of Type A or B construction, externally located bonded laminated cladding panels must have all layers of cladding mechanically supported or restrained to the supporting</p>	Further Detail is required within the Construction Documentation

	<p>frame.</p> <p>(2)An externally located bonded laminated cladding panel need not comply with (1) if it is one of the following: (a)A laminated glass system.</p> <p>(b)Layered plasterboard product.</p> <p>(c)Perforated gypsum lath with a normal paper finish.</p> <p>(d)Fibrous-plaster sheet.</p> <p>(e)Fibre-reinforced cement sheeting. A component of a garage door.</p>	
C3D8	<p>Separation by fire walls</p> <p>(1)Construction — A fire wall must be constructed in accordance with the following: (a)The fire wall has the relevant FRL prescribed by Specification 5 for each of the adjoining parts, and if these are different, the greater FRL, except where S5C18(c), S5C21(3) and S5C25(1) permit a lower FRL on the carpark side.</p> <p>(b)Any openings in a fire wall must not reduce the FRL required by Specification 5 for the fire wall, except where permitted by the Deemed-to-Satisfy Provisions of Part C4.</p> <p>(c)Building elements, other than roof battens with dimensions of 75 mm x 50 mm or less or sarking-type material, must not pass through or cross the fire wall unless the required fire-resisting performance of the fire wall is maintained.</p> <p>(2)Separation of buildings — A part of a building separated from the remainder of the building by a fire wall may be treated as a separate building for the purposes of the Deemed-to-Satisfy Provisions of Sections C, D and E if it is constructed in accordance with (1) and the following:</p> <p>(a)The fire wall extends through all storeys and spaces in the nature of storeys that are common to that part and any adjoining part of the building.</p> <p>(b)The fire wall is carried through to the underside of the roof covering.</p> <p>(c)Where the roof of one of the adjoining parts is lower than the roof of the other part, the fire wall extends to the underside of— (i)the covering of the higher roof, or not less than 6 m above the covering of the lower roof; or</p> <p>(ii)the lower roof if it has an FRL not less than that of the fire wall and no openings closer than 3 m to any wall above the lower roof; or</p>	<p>Further Detail is required within the Construction Documentation</p>

	<p>(iii)the lower roof if its covering is non-combustible and the lower part has a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17.</p> <p>(3)Separation of fire compartments — A part of a building separated from the remainder of the building by a fire wall may be treated as a separate fire compartment if it is constructed in accordance with (a) and the fire wall extends to the underside of— (a)a floor having an FRL required for a fire wall; or the roof covering.</p>	
C3D13	<p>Separation of equipment [2019: C2.12]</p> <p>(1)Equipment other than that described in (2) and (3) must be separated from the remainder of the building with construction complying with (4), if that equipment comprises— (a)lift motors and lift control panels; or (b)emergency generators used to sustain emergency equipment operating in the emergency mode; or (c)central smoke control plant; or (d)<i>boilers</i>; or (e)a <i>battery system</i> installed in the building that has a total voltage of 12 volts or more and a storage capacity of 200 kWh or more.</p> <p>(2)Equipment need not be separated in accordance with (1) if the equipment comprises— (a)smoke control exhaust fans located in the air stream which are constructed for high temperature operation in accordance with Specification 21; or (b)stair pressurising equipment installed in compliance with the relevant provisions of AS 1668.1; or (c)a lift installation without a machine-room; or (d)equipment otherwise adequately separated from the remainder of the building.</p> <p>(3)Separation of on-site fire pumps must comply with the requirements of AS 2419.1.</p> <p>(4)Separating construction must have— (a)except as provided by (b)— (i)an FRL as <i>required</i> by Specification 5, but not less than 120/120/120; and (ii)any doorway protected with a <i>self-closing</i> fire door having an FRL of not less than –/120/30; or when separating a lift <i>shaft</i> and lift motor room, an FRL not less than 120/–/–.</p>	Further Detail is required within the Construction Documentation
C3D14	<p>Electricity supply system</p> <p>(1)An electricity substation located within a building must— (a)be separated from any other part of the</p>	Further Detail is required within the Construction Documentation

	<p>building by construction having an FRL of not less than 120/120/120; and</p> <p>(b) have any doorway in that construction protected with a <i>self-closing</i> fire door having an FRL of not less than –/120/30.</p> <p>(2) A main switchboard located within the building which sustains emergency equipment operating in the emergency mode must— (a) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and</p> <p>(b) have any doorway in that construction protected with a <i>self-closing</i> fire door having an FRL of not less than –/120/30.</p> <p>(3) Subject to (4), electrical conductors must— (a) have a classification in accordance with AS/NZS 3013 of not less than— (i) if located in a position that could be subject to damage by motor vehicles — WS53W; or</p> <p>(ii) otherwise — WS52W; or</p> <p>(b) be enclosed or otherwise protected by construction having an FRL of not less than 120/120/120.</p> <p>(4) The requirements of (3) only apply to electrical conductors located within a building that supply—</p> <p>(a) a substation located within the building which supplies a main switchboard covered by (2); or</p> <p>(b) a main switchboard covered by (2).</p> <p>(5) Where emergency equipment is <i>required</i> in a building, all switchboards in the electrical installation, which sustain the electricity supply to the 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 a fault from the non-emergency equipment switchgear.</p> <p>(6) For the purposes of (5), emergency equipment includes but is not limited to the following: (a) Fire hydrant booster pumps.</p> <p>(b) Pumps for <i>automatic</i> sprinkler systems, water spray, chemical fluid suppression systems or the like.</p> <p>(c) Pumps for fire hose reels where such pumps and fire hose reels form the sole means of fire protection in the building.</p> <p>(d) Air handling systems designed to exhaust and control the spread of fire and smoke.</p> <p>(e) Emergency lifts.</p> <p>(f) Control and indicating equipment. Emergency warning and intercom systems.</p>	
C3D15	Public corridors in Class 2 and 3 buildings [2019: C2.14]	Further Detail is required within the Construction Documentation

	In a Class 2 or 3 building, a public corridor , if more than 40 m in length, must be divided at intervals of not more than 40 m with smoke-proof walls complying with S11C2 .	
C4D12	<p>Bounding construction: Class 2 and 3 buildings and Class 4 parts</p> <p>(1) A doorway in a Class 2 or 3 building must be protected if it provides access from a <i>sole-occupancy unit</i> to— (a) a <i>public corridor</i>, public lobby, or the like; or</p> <p>(b) a room not within a <i>sole-occupancy unit</i>; or</p> <p>(c) the landing of an internal non <i>fire-isolated stairway</i> that serves as a <i>required exit</i>; or</p> <p>(d) another <i>sole-occupancy unit</i>.</p> <p>(2) A doorway in a Class 2 or 3 building must be protected if it provides access from a room not within a <i>sole-occupancy unit</i> to— (a) a <i>public corridor</i>, public lobby, or the like; or</p> <p>(b) the landing of an internal non <i>fire-isolated stairway</i> that serves as a <i>required exit</i>.</p> <p>(3) A doorway in a Class 4 part of a building must be protected if it provides access to any other internal part of the building.</p> <p><i>NSW C4D12(4)</i></p> <p>(4) Except as provided in (5), protection for a doorway must be at least— (a) in a building of Type A construction — a <i>self-closing</i> –/60/30 fire door; and</p> <p>(b) in a building of Type B or C construction — a <i>self-closing</i>, tight fitting, solid core door, not less than 35 mm thick.</p> <p>(5) In a Class 3 building used as a <i>residential care building</i> protected with a sprinkler system complying with Specification 17, protection for a doorway must be at least— (a) a tight fitting, solid core door not less than 35 mm thick if the building is divided into <i>floor areas</i> not exceeding 500 m² with smoke proof walls complying with S11C2; or</p> <p>(b) a tight fitting, solid core door not less than 35 mm thick fitted with a <i>self-closing</i> device, a delayed closing device or an <i>automatic</i> closing device.</p> <p>(6) Other openings in <i>internal walls</i> which are <i>required</i> to have an FRL with respect to <i>integrity</i> and <i>insulation</i> must not reduce the <i>fire-resisting</i> performance of the wall.</p> <p>(7) A door <i>required</i> by (4) or (5) may be <i>automatic-closing</i> in accordance with the following:</p> <p>(a) The <i>automatic-closing</i> operation must be initiated by the activation of a smoke detector, or</p>	Further Detail is required within the Construction Documentation

	<p>any other detector deemed suitable in accordance with AS 1670.1 if smoke detectors are unsuitable in the atmosphere, installed in accordance with the relevant provisions of AS 1670.1 and located not more than 1.5 m horizontal distance from the approach side of the doorway.</p> <p>(b)Where any other <i>required</i> suitable fire alarm system, including a sprinkler system (other than a FPAA101D system) complying with Specification 17, is installed in the building, activation of the system must also initiate the <i>automatic</i>-closing operation.</p> <p>(8)The requirements of (9) apply in a Class 2 or 3 building where a path of travel to an <i>exit</i>—</p> <p>(a)does not provide a person seeking egress with a choice of travel in different directions to alternative <i>exits</i>; and</p> <p>(b)is along an open balcony, landing or the like; and</p> <p>(c)passes an <i>external wall</i> of— (i)another <i>sole-occupancy unit</i>; or</p> <p>(ii)a room not within a <i>sole-occupancy unit</i>.</p> <p>(9)The <i>external wall</i> mentioned in (8)(c) must— (a)be constructed of concrete or masonry, or be lined internally with a <i>fire-protective covering</i>; and</p> <p>(b)have any doorway fitted with a <i>self-closing</i>, tight-fitting solid core door not less than 35 mm thick; and</p> <p>(c)have any <i>windows</i> or other openings— protected internally in accordance with C4D5</p>	
C4D13	<p>Openings in floors and ceilings for services</p> <p>(1)Where a service passes through— (a)a floor that is <i>required</i> to have an FRL with respect to <i>integrity</i> and <i>insulation</i>; or</p> <p>(b)a ceiling <i>required</i> to have a <i>resistance to the incipient spread of fire</i>, the service must be installed in accordance with (2).</p> <p>(2)A service must be protected— (a)in a building of Type A construction, by a <i>shaft</i> complying with Specification 5; or</p> <p>(b)in a building of Type B or C construction, by a <i>shaft</i> that will not reduce the fire performance of the building elements it penetrates; or</p> <p>(c)in accordance with C4D15.</p>	Further Detail is required within the Construction Documentation

	<p>(3)Where a service passes through a floor which is <i>required</i> to be protected by a <i>fire-protective covering</i>, the penetration must not reduce the fire performance of the covering.</p>	
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5.3 SECTION D – ACCESS AND EGRESS

CLAUSE	CLAUSE REQUIREMENT	ACTION/RECOMENDATION
D2D7	<p>Height of exits, paths of travel to exits and doorways [2019: D1.6(a)]</p> <p>In a <i>required exit</i> or path of travel to an <i>exit</i> the unobstructed height throughout must be not less than 2 m, except the unobstructed height of any doorway may be reduced to not less than 1980 mm.</p>	Further Detail is required within the Construction Documentation
D2D8	<p>Width of exits and paths of travel to exits [2019: D1.6(b), (c), (d) and (e)]</p> <p>(1)The unobstructed width of each <i>required exit</i> or path of travel to an <i>exit</i>, except for ladders provided in accordance with D2D21, D3D23 or I3D5, and doorways, must be not less than— (a)1 m; or <i>area</i> or <i>ward area</i>; and 1.8 m in a passageway, corridor or ramp normally used for the transportation of patients in beds within a (b)<i>treatment</i> (c)in a <i>public corridor</i> in a Class 9c <i>aged care building</i>, notwithstanding (2) and (3)— (i)1.5 m; and (ii)1.8 m for the full width of the doorway, providing access into a <i>sole-occupancy unit</i> or communal bathroom.</p> <p>(2)If the <i>storey, mezzanine</i> or <i>open spectator stand</i> accommodates more than 100 persons but not more than 200 persons, the aggregate unobstructed width of each <i>required exit</i> or path of travel to an <i>exit</i>, except for doorways, must be not less than— (a)1 m plus 250 mm for each 25 persons (or part) in excess of 100; or 1.8 m in a passageway, corridor or ramp normally used for the transportation of patients in beds within a (b)<i>treatment area</i> or <i>ward area</i>.</p> <p>(3)If the <i>storey, mezzanine</i> or <i>open spectator stand</i> accommodates more than 200 persons, the aggregate unobstructed width of each <i>required exit</i> or path of travel to an <i>exit</i>, except for doorways, must be not less than— (a)2 m plus 500 mm for every 60 persons (or part) in excess of 200 persons if egress involves a change in floor level by a stairway or ramp with a gradient steeper than 1 in 12; or</p>	Further Detail is required within the Construction Documentation

	<p>(b)in any other case, 2 m plus 500 mm for every 75 persons (or part) in excess of 200.</p> <p>(4)In an <i>open spectator stand</i> which accommodates more than 2000 persons, the aggregate unobstructed width of each <i>required exit</i> or path of travel to an <i>exit</i>, except for doorways, must be not less than 17 m plus a width (in metres) equal to the number in excess of 2000 divided by 600.</p>	
D2D9	<p>Width of doorways in exits or paths of travel to exits</p> <p>In a <i>required exit</i> or path of travel to an <i>exit</i>, the unobstructed width of a doorway must be not less than— (a)in <i>patient care areas</i> through which patients would normally be transported in beds— (i)if the doorway provides access to, or from, a corridor of width— (A)less than 2.2 m — 1200 mm; or</p> <p>(B)2.2 m or greater — 1070 mm; and</p> <p>(ii)where the doorway referred to in (i) is fitted with two leaves and one leaf is secured in the closed position in accordance with D3D26(3)(e), the other leaf must permit an unobstructed opening not less than 800 mm wide; or</p> <p>(b)in <i>patient care areas</i> in a <i>horizontal exit</i> — 1250 mm; or</p> <p>(c)the unobstructed width of each <i>exit</i> provided to comply with D2D8(1), (2), (3) or (4), minus 250 mm; or</p> <p>(d)in a Class 9c building, 800 mm, except— (i)in <i>resident use areas</i> the minimum unobstructed width must be 870 mm; and</p> <p>(ii)for doorways leading from a <i>public corridor</i> to a <i>sole-occupancy unit</i> the minimum unobstructed width must be 1070 mm; and</p> <p>(iii)where the doorway is fitted with two leaves and one leaf is secured in the closed position in accordance with D3D26(3)(e), the other leaf must permit an unobstructed opening not less than 870 mm wide in <i>resident use areas</i> and 800 mm wide in <i>non-resident use area</i>; or</p> <p>in any other case except where it opens to a <i>sanitary compartment</i> or bathroom — 750 mm wide.</p>	Further Detail is required within the Construction Documentation
D2D10	<p>Exit width not to diminish in direction of travel</p> <p>The unobstructed width of a <i>required exit</i> must not diminish in the direction of travel to a</p>	For reference

	road or <i>open space</i> , except where the width is increased in accordance with D2D8(1)(b) or D2D9(a)(i).	
D2D11	<p>Determination and measurement of exits and paths of travel to exits</p> <p>For the purposes of D2D7 to D2D10 the following apply: (a)The <i>required</i> width of a stairway or ramp in a <i>required exit</i> or path of travel to an <i>exit</i> must— (i)be measured clear of all obstructions such as handrails, projecting parts of barriers and the like; and</p> <p>(ii)extend without interruption, except for ceiling cornices, to a height not less than 2 m vertically above a line along the nosings of the treads or the floor surface of the ramp or landing.</p> <p>(b)To determine the aggregate unobstructed width, the number of persons accommodated must be calculated according to D2D18.</p>	For reference
D2D22	<p>Access to lift pits</p> <p>Access to lift pits must— (a)where the pit depth is not more than 3 m, be through the lowest landing doors; or</p> <p>(b)where the pit depth is more than 3 m, be provided through an access doorway complying with the following: (i)In lieu of D2D7 to D2D11, the doorway must be level with the pit floor and not be less than 600 mm wide by 1980 mm high clear opening, which may be reduced to 1500 mm where it is necessary to comply with (ii).</p> <p>(ii)No part of the lift car or platform must encroach on the pit doorway entrance when the car is on a fully compressed buffer.</p> <p>(iii)Access to the doorway must be by a stairway complying with AS 1657.</p> <p>(iv)In lieu of D3D26, doors fitted to the doorway must be— (A)of the horizontal sliding or outwards opening hinged type; and</p> <p>(B)self-closing and self-locking from the outside; and</p> <p>(C)marked on the landing side with the letters not less than 35 mm high:</p>	Further Detail is required within the Construction Documentation

	DANGER LIFTWELL – ENTRY OF UNAUTHORIZED PERSONS PROHIBITED – KEEP CLEAR AT ALL TIMES	
D3D3	Fire-isolated stairways and ramps [2019: D2.2] A stairway or ramp (including any landings) that is <i>required</i> to be within a <i>fire-resisting shaft</i> must be constructed— (a) of <i>non-combustible</i> materials; and (b) so that if there is local failure it will not cause structural damage to, or impair the fire-resistance of, the <i>shaft</i> .	Further Detail is required within the Construction Documentation
D3D4	Non-fire-isolated stairways and ramps [2019: D2.3] In a building having a <i>rise in storeys</i> of more than 2, <i>required</i> stairs and ramps (including landings and any supporting building elements) which are not <i>required</i> to be within a <i>fire-</i>	Further Detail is required within the Construction Documentation

	<p><i>resisting shaft</i>, must be constructed according to D3D3, or only of—</p> <p>(a) reinforced or prestressed concrete; or</p> <p>(b) steel in no part less than 6 mm thick; or</p> <p>(c) timber that— (i) has a finished thickness of not less than 44 mm; and</p> <p>(ii) has an average density of not less than 800 kg/m³ at a moisture content of 12%; and</p> <p>(iii) has not been joined by means of glue unless it has been laminated and glued with resorcinol formaldehyde or resorcinol phenol formaldehyde glue.</p>	
D3D8	<p>Installations in exits and paths of travel</p> <p>(1) Access to service <i>shafts</i> and services other than to fire-fighting or detection equipment as permitted in the <i>Deemed-to-Satisfy Provisions</i> of Section E, must not be provided from a <i>fire-isolated stairway</i>, <i>fire-isolated passageway</i> or <i>fire-isolated ramp</i>.</p> <p>(2) An opening to any chute or duct intended to convey hot products of combustion from a boiler, incinerator, fireplace or the like, must not be located in any part of a <i>required exit</i> or any corridor, hallway, lobby or the like leading to a <i>required exit</i>.</p> <p>(3) Gas or other fuel services must not be installed in a <i>required exit</i>.</p> <p>(4) Except for in a fire-isolated <i>exit</i> specified in (1), services or equipment enclosed in accordance with (5) may be installed in a <i>required exit</i>, or in any corridor, hallway, lobby or the like leading to a <i>required exit</i>, where that service or equipment comprises— (a) electricity meters, distribution boards or ducts; or</p> <p>(b) central telecommunications distribution boards or equipment; or</p> <p>(c) electrical motors or other motors serving equipment in the building.</p> <p>(5) An enclosure for the purposes of (4) must be suitably sealed against smoke spreading from the enclosure and be— (a) <i>non-combustible</i> construction; or</p> <p>(b) a <i>fire-protective covering</i>.</p> <p>(6) Electrical wiring may be installed in a fire-isolated <i>exit</i> if the wiring is associated with— (a) a lighting, detection, or pressurisation system serving the <i>exit</i>; or</p>	Further Detail is required within the Construction Documentation

	<p>(b)a security, surveillance or management system serving the <i>exit</i>; or</p> <p>(c)an intercommunication system or an audible or visual alarm system in accordance with D3D27; or the monitoring of hydrant or sprinkler isolating valves.</p>	
D3D9	<p>Enclosure of space under stairs and ramps</p> <p>(1)Fire-isolated stairways and ramps — If the space below a <i>required fire-isolated stairway</i> or <i>fire-isolated ramp</i> is within the fire-isolated <i>shaft</i>, it must not be enclosed to form a cupboard or similar enclosed space.</p> <p>(2)Non fire-isolated stairways and ramps — The space below a <i>required non fire-isolated stairway</i> (including an external stairway) or non <i>fire-isolated ramp</i> must not be enclosed to form a cupboard or other enclosed space unless— (a)the enclosing walls and ceilings have an FRL of not less than 60/60/60; and any access doorway to the enclosed space is fitted with a <i>self-closing</i> –/60/30 fire door</p>	For reference
D3D14	<p>Goings and risers</p> <p>(1)A stairway must have— (a)not more than 18 and not less than 2 risers in each <i>flight</i>; and</p> <p>(b)going (G), riser (R) and quantity (2R + G) in accordance with Table D3D14, except as permitted by (2) and (3); and</p> <p>(c)constant goings and risers throughout each <i>flight</i>, except as permitted by (2) and (3), and the dimensions of goings (G) and risers (R) in accordance with (1)(b) are considered constant if the variation between— (i)adjacent risers, or between adjacent goings, is no greater than 5 mm; and</p> <p>(ii)the largest and smallest riser within a <i>flight</i>, or the largest and smallest going within a <i>flight</i>, does not exceed 10 mm; and</p> <p>(d)risers which do not have any openings that would allow a 125 mm sphere to pass through between the treads; and</p> <p>(e)treads which have—</p> <p>(i)a surface with a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586; or</p> <p>(ii)a nosing strip with a slip-resistance classification not less than that listed in Table D3D15</p>	Further Detail is required within the Construction Documentation

	<p>when tested in accordance with AS 4586; and</p> <p>(f)treads of solid construction (not mesh or other perforated material) if the stairway is more than 10 m high or connects more than 3 <i>storeys</i>; and</p> <p>(g)in a Class 9b building, not more than 36 risers in consecutive <i>flights</i> without a change in direction of at least 30°; and</p> <p>(h)in the case of a <i>required</i> stairway, no winders in lieu of a landing.</p> <p>(2)In the case of a non-<i>required</i> stairway— (a)the stairway must have— (i)not more than 3 winders in lieu of a quarter <i>landing</i>; and</p> <p>(ii)not more than 6 winders in lieu of a half <i>landing</i>; and</p> <p>(b)the going of all straight treads must be constant throughout the same <i>flight</i> and the dimensions of goings (G) is considered constant if the variation between— (i)adjacent goings, is no greater than 5 mm; and</p> <p>(ii)the largest and smallest going within a <i>flight</i>, does not exceed 10 mm; and</p> <p>(c)the going of all winders in lieu of a quarter or half <i>landing</i> may vary from the going of the straight treads within the same <i>flight</i> provided that the going of all such winders is constant.</p> <p>(3)Where a stairway discharges to a sloping public walkway or public road— (a)the riser (R) may be reduced to account for the slope of the walkway or road; and the quantity (2R+G) may vary at that location.</p>	
D3D15	<p>Landings</p> <p>In a stairway— (a)<i>landings</i> having a maximum gradient of 1:50 may be used in any building to limit the number of risers in each <i>flight</i> and each <i>landing</i> must— (i)be not less than 750 mm long, and where this involves a change in direction, the length is measured 500 mm from the inside edge of the <i>landing</i>; and</p> <p>(ii)have— (A)a surface with a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586; or D3D15 when tested in accordance with AS 4586, where the edge leads to a <i>flight</i> below; and a strip at the edge of the <i>landing</i> with a slip-resistance classification not less than that listed in (B)Table</p> <p>(b)in a Class 9a building— (i)the area of any <i>landing</i> must be sufficient to move a stretcher, 2</p>	Further Detail is required within the Construction Documentation

	<p>m long and 600 mm wide, at a gradient not more than the gradient of the stairs, with at least one end of the stretcher on the <i>landing</i> while changing direction between <i>flights</i>; or</p> <p>(ii) the stair must have a change of direction of 180°, and the <i>landing</i> a clear width of not less than 1.6 m and a clear length of not less than 2.7 m.</p> <p>Table D3D15: Slip-resistance classification</p> <table> <tr> <th>Application</th><th>Dry Surface conditions</th><th>Wet surface conditions</th></tr> <tr> <td>Ramp steeper than 1:14</td><td>P4 or R11</td><td>P5 or R12</td></tr> <tr> <td>Ramp steeper than 1:20 but not steeper than 1:14</td><td>P3 or R10</td><td>P4 or R11</td></tr> <tr> <td>Tread or <i>landing</i> surface</td><td>P3 or R10</td><td>P4 or R11</td></tr> <tr> <td>Nosing or <i>landing</i> edge strip</td><td>P3</td><td>P4</td></tr> </table>	Application	Dry Surface conditions	Wet surface conditions	Ramp steeper than 1:14	P4 or R11	P5 or R12	Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11	Tread or <i>landing</i> surface	P3 or R10	P4 or R11	Nosing or <i>landing</i> edge strip	P3	P4	
Application	Dry Surface conditions	Wet surface conditions															
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Nosing or <i>landing</i> edge strip	P3	P4															
D3D16	<p>Thresholds</p> <p>The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless— (a) in <i>patient care areas</i> in a Class 9a <i>health-care building</i>, the door sill is not more than 25 mm above the finished floor level to which the doorway opens; or</p> <p>(b) in <i>resident use areas</i> in a Class 9c building, a ramp is provided with a maximum gradient of 1:8 for a maximum height of 25 mm over the threshold; or</p> <p>(c) in a building <i>required</i> to be <i>accessible</i> by Part D4, the doorway— (i) opens to a road or <i>open space</i>; and</p> <p>(ii) is provided with a threshold ramp or step ramp in accordance with AS 1428.1; or</p> <p>(d) in other cases— (i) the doorway opens to a road or <i>open space</i>, external stair landing or external balcony; and</p> <p>(ii) the door sill is not more than 190 mm above the finished surface of the ground, balcony, or the like, to which the doorway opens.</p>	Further Detail is required within the Construction Documentation															
D3D17	Barriers to prevent falls	Further Detail is required within the															

	<p>(1)A continuous barrier must be provided along the side of— (a)a roof to which general access is provided; and (b)a stairway or ramp; and (c)a floor, corridor, hallway, balcony, deck, verandah, <i>mezzanine</i>, access bridge or the like; and (d)any delineated path of access to a building, if the trafficable surface is 1 m or more above the surface beneath. (2)The requirements of (1) do not apply to— (a)the perimeter of a <i>stage</i>, rigging loft, loading dock or the like; or (b)areas referred to in D3D23; or (c)a retaining wall unless the retaining wall forms part of, or is directly associated with a delineated path of access to a building from the road, or a delineated path of access between buildings; or (d)a barrier provided to an openable window covered by D3D29. (3)A barrier <i>required</i> by (1) must be constructed in accordance with D3D18, D3D19, D3D20 and, if a wire barrier is used, D3D21.</p>	Construction Documentation
D3D18	<p>Height of barriers (1)The height of a barrier <i>required</i> by D3D17 must be not less than the following: (a)For stairways or ramps with a gradient of 1:20 or steeper — 865 mm. (b)For <i>landings</i> to a stair or ramp where the barrier is provided along the inside edge of the <i>landing</i> and does not exceed 500 mm in length — 865 mm. (c)In front of fixed seating on a <i>mezzanine</i> or balcony within an auditorium in a Class 9b building, where the horizontal projection extends not less than 1 m outwards from the top of the barrier — 700 mm. (d)For all other locations — 1 m. (2)For a barrier provided under (1) — (a)barrier heights are measured vertically from the surface beneath, except that for stairways the height must be measured above the nosing line of the stair treads; and</p>	Further Detail is required within the Construction Documentation

	(b)a transition zone may be incorporated where the barrier height changes from 865 mm on a stair <i>flight</i> or ramp to 1 m at a <i>landing</i> or floor.	
D3D19	<p>Openings in barriers</p> <p>(1)Except where allowed by (2), openings in a <i>required</i> barrier must not allow a 125 mm sphere to pass through.</p> <p>(2)In a <i>fire-isolated stairway</i>, <i>fire-isolated ramp</i> or other area used primarily for emergency purposes, openings in a <i>required</i> barrier— (a)must not allow a 300 mm sphere to pass through; or</p> <p>(b)where rails are used— (i)a 150 mm sphere must not be able to pass through the opening between the nosing line of the stair treads and the rail or between the rail and the floor of the <i>landing</i>, balcony or the like; and</p> <p>(ii)the opening between rails must not be more than 460 mm.</p> <p>(3)In Class 7 (other than <i>carparks</i>) and Class 8 buildings, openings in a <i>required</i> barrier— (a)must not allow a 300 mm sphere to pass through; or</p> <p>(b)where rails are used— (i)a 150 mm sphere must not be able to pass through the opening between the nosing line of the stair treads and the rail or between the rail and the floor of the <i>landing</i>, balcony or the like; and</p> <p>(ii)the opening between the rails must not be more than 460 mm.</p> <p>(4)The requirements of (2) do not apply to external stairways, external ramps, or <i>fire-isolated stairways</i> or <i>fire-isolated ramps</i> serving Class 9b <i>early childhood centres</i>.</p> <p>(5)For a barrier provided under (1), the maximum 125 mm barrier opening for a stairway, such as a non <i>fire-isolated stairway</i>, is measured above the nosing line of the stair treads.</p> <p>(6)Where a <i>required</i> barrier is fixed to the vertical face forming an edge of a <i>landing</i>, balcony, deck, stairway or the like, the opening formed between the barrier and the face must not exceed 40 mm.</p> <p>(7)For the purposes of (6), the opening is measured horizontally from the edge of the trafficable surface to the nearest internal face of the barrier.</p>	Further Detail is required within the Construction Documentation
D3D20	Barrier climbability	Further Detail is required within the

	<p>[2019: Table D2.16a]</p> <p>(1)A barrier <i>required</i> by D3D17, 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.</p> <p>(2)The requirements of (1) do not apply to— (a)<i>fire-isolated stairways, fire-isolated ramps</i> and other areas used primarily for emergency purposes, other than— (i)external stairways; and</p> <p>(ii)external ramps; and</p> <p>Class 7 (other than <i>carparks</i>) and Class 8 buildings.</p>	Construction Documentation
D3D22	<p>Handrails</p> <p>(1)Except for handrails referred to in D3D23, and subject to (2), handrails must— (a)be located along at least one side of the ramp or <i>flight</i>; and</p> <p>(b)be located along each side if the total width of the stairway or ramp is 2 m or more; and</p> <p>(c)in a Class 9b building used as a primary <i>school</i> or a building that contains an <i>early childhood centre</i>— (i)have one handrail fixed at a height of not less than 865 mm; and</p> <p>(ii)in addition to (i), have a handrail— (A)fixed at a height between 665 mm and 750 mm in a primary <i>school</i>; and</p> <p>(B)with a cross-sectional dimension not less than 16 mm and not greater than 45 mm as measured in any direction across its centre, fixed at a height between 450 mm and 700 mm in a Class 9b <i>early childhood centre</i>; and</p> <p>(d)in any other case, be fixed at a height of not less than 865 mm; and</p> <p>(e)be continuous between stair <i>flight</i> landings and have no obstruction on or above them that will tend to break a hand-hold; and</p> <p>(f)in a <i>required exit</i> serving an area <i>required</i> to be <i>accessible</i>, be designed and constructed to comply with clause 12 of AS 1428.1, except that clause 12(d) does not apply to a handrail <i>required</i> by (1)(c)(ii).</p>	Further Detail is required within the Construction Documentation

	<p>(2)The height <i>required</i> by (1)(c) and (d) is measured above the nosings of stair treads and the floor surface of the ramp, landing or the like.</p> <p>(3)Handrails— (a)in a Class 9a <i>health-care building</i> must be provided along at least one side of every passageway or corridor used by patients, and must be— (i)fixed not less than 50 mm clear of the wall; and</p> <p>(ii)where practicable, continuous for their full length; and</p> <p>(b)in a Class 9c <i>aged care building</i> must be provided along both sides of every passageway or corridor used by residents, and must be— (i)fixed not less than 50 mm clear of the wall; and</p> <p>(ii)where practicable, continuous for their full length.</p> <p>(4)Handrails <i>required</i> to assist people with a disability must be provided in accordance with D4D4.</p> <p>(5)Handrails to a stairway or ramp within a <i>sole-occupancy unit</i> in a Class 2 or 3 building or Class 4 part of a building must— (a)be located along at least one side of the <i>flight</i> or ramp; and</p> <p>(b)be located along the full length of the <i>flight</i> or ramp, except in the case where a handrail is associated with a barrier, the handrail may terminate where the barrier terminates; and</p> <p>(c)have the top surface of the handrail not less than 865 mm vertically above the nosings of the stair treads or the floor surface of the ramp; and</p> <p>(d)have no obstruction on or above them that will tend to break a handhold, except for newel posts, ball type stanchions, or the like.</p> <p>(6)The requirements of (5) do not apply to— (a)handrails referred to in D3D23; or</p> <p>(b)a stairway or ramp providing a change in elevation of less than 1 m; or</p> <p>(c)a landing; or a winder where a newel post is installed to provide a handhold.</p>	
D3D26	<p>Operation of latch</p> <p>(1)A door in a <i>required exit</i>, forming part of a <i>required exit</i> or in the path of travel to a <i>required exit</i> must be readily openable without a key from the side that faces a person seeking</p>	Further Detail is required within the Construction Documentation

egress, by— (a) a single hand downward action on a single device which is located between 900 mm and 1.1 m from the floor and if serving an area *required* to be *accessible* by Part D4— (i) be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and

(ii) have a clearance between the handle and the back plate or door face at the centre grip section of the handle of not less than 35 mm and not more than 45 mm; or

(b) a single hand pushing action on a single device which is located between 900 mm and 1.2 m from the floor.

(2) Where the latch operation device referred to in (1)(b) is not located on the door leaf itself— (a) manual controls to power-operated doors must be at least 25 mm wide, proud of the surrounding surface and located— (i) not less than 500 mm from an internal corner; and

(ii) for a hinged door, between 1 m and 2 m from the door leaf in any position; and

(iii) for a sliding door, within 2 m of the doorway and clear of a surface mounted door in the open position; and

(b) braille and tactile signage complying with S15C3 and S15C6 must identify the latch operation device.

(3) The requirements of (1) and (2) do not apply to a door that— (a) serves a vault, strong-room, *sanitary compartment*, or the like; or

(b) serves only, or is within— (i) a *sole-occupancy unit* in a Class 2 building or a Class 4 part of a building; or

(ii) a *sole-occupancy unit* in a Class 3 building (other than an entry door to a *sole-occupancy unit* of a boarding house, guest house, hostel, lodging house or backpacker accommodation); or

(iii) a *sole-occupancy unit* with a *floor area* not more than 200 m² in a Class 5, 6, 7 or 8 building; or

(iv) a space which is otherwise inaccessible to persons at all times when the door is locked; or

(c) complies with (4) and serves— (i) Australian Government Security Zones 4 or 5; or

	<p>(ii)the secure parts of a bank, <i>detention centre</i>, mental health facility, <i>early childhood centre</i> or the like; or</p> <p>(d)is fitted with a fail-safe device which <i>automatically</i> unlocks the door upon the activation of any sprinkler system (other than a FPAA101D system) complying with Specification 17 or smoke, or any other detector system deemed suitable in accordance with AS 1670.1 installed throughout the building, and is readily openable when unlocked; or</p> <p>(e)is in a Class 9a or 9c building and— (i)is one leaf of a two-leaf door complying with D2D9(1)(a) or D2D9(1)(d) provided that it is not held closed by a locking mechanism and is readily openable; and</p> <p>(ii)the door is not <i>required</i> to be a fire door or smoke door.</p> <p>(4)A door referred to in (3)(c) must be able to be immediately unlocked— (a)by operating a fail-safe control switch, not contained within a protective enclosure, to actuate a device to unlock the door; or</p> <p>(b)by hand by a person or persons, specifically nominated by the owner, properly instructed as to the duties and responsibilities involved and available at all times when the building is lawfully occupied so that persons in the building or part may immediately escape if there is a fire.</p> <p>(5)The requirements of (1) and (2) do not apply in a Class 9b building (other than a <i>school</i>, an <i>early childhood centre</i> or a building used for religious purposes) to a door in a <i>required exit</i>, forming part of a <i>required exit</i> or in the path of travel to a <i>required exit</i> serving a <i>storey</i> or room accommodating more than 100 persons, determined in accordance with D2D18, in which case it must be readily openable— (a)without a key from the side that faces a person seeking egress; and</p> <p>(b)by a single hand pushing action on a single device such as a panic bar located between 900 mm and 1.2 m from the floor; and</p> <p>(c)where a two-leaf door is fitted, the provisions of (a) and (b) need only apply to one door leaf if the appropriate requirements of D2D9 are satisfied by the opening of that one leaf.</p>	
D3D29	Protection of openable windows	Further Detail is required within the

(1)A window opening must be provided with protection, if the floor below the window is 2 m or more above the surface beneath in— (a)a bedroom in a Class 2 or 3 building or Class 4 part of a building; or
(b)a Class 9b *early childhood centre*.

(2)Where the lowest level of the window opening is less than 1.7 m above the floor, a window opening covered by (1) must comply with the following: (a)The openable portion of the window must be protected with— (i)a device capable of restricting the window opening; or
(ii)a screen with secure fittings.
(b)A device or screen *required* by (a) must— (i)not permit a 125 mm sphere to pass through the window opening or screen; and
(ii)resist an outward horizontal action of 250 N against the— (A>window restrained by a device; or
(B)screen protecting the opening; and
(iii)have a child resistant release mechanism if the screen or device is able to be removed, unlocked or overridden.

(3)A barrier with a height not less than 865 mm above the floor is *required* to an openable window— (a)in addition to window protection, when a child resistant release mechanism is *required* by (2)(b)(iii); and
(b)where the floor below the window is 4 m or more above the surface beneath if the window is not covered by (1).

(4)A barrier covered by (3) except for (5) must not— (a)permit a 125 mm sphere to pass through it; and
(b)have any horizontal or near horizontal elements between 150 mm and 760 mm above the floor that facilitate climbing.

(5)A barrier *required* by (3) to an openable window in— (a)*fire-isolated stairways, fire-isolated ramps* and other areas used primarily for emergency purposes, excluding external stairways and external ramps; and

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	(b)Class 7 (other than <i>carparks</i>) and Class 8 buildings and parts of buildings containing those classes,	
D4D2	<p>General building access requirements</p> <p>(1)Buildings and parts of buildings must be <i>accessible</i> as <i>required</i> by this clause, unless exempted by D4D5.</p> <p>(2)Access requirements for a Class 1b building are as follows: Dwellings located on one allotment and used for short-term holiday accommodation — in accordance with (a)Table</p> <p>(b)A boarding house, bed and breakfast, guest house, hostel or the like, other than those described in (a) — to and within— (i)1 bedroom and associated sanitary facilities; and</p> <p>(ii)not less than 1 of each type of room or space for use in common by the residents or guests, including a cooking facility, sauna, gymnasium, <i>swimming pool</i>, laundry, games room, eating area, or the like; and</p> <p>(iii)rooms or spaces for use in common by all residents on a floor to which access by way of a ramp complying with AS 1428.1 or a passenger lift is provided.</p> <p>(3)For the purposes of (2)(a), a community or strata-type subdivision or development is considered to be on a single allotment.</p> <p>(4)For a Class 2 building, common areas are to be <i>accessible</i> as follows: From a pedestrian entrance <i>required</i> to be <i>accessible</i> to at least 1 floor containing <i>sole-occupancy units</i> and to the entrance doorway of each <i>sole-occupancy unit</i> located on that level.</p> <p>(b)To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, <i>swimming pool</i>, common laundry, games room, individual shop, eating area, or the like.</p> <p>(c)Where a ramp complying with AS 1428.1 or a passenger lift is installed— (i)to the entrance doorway of each <i>sole-occupancy unit</i>; and</p> <p>(ii)to and within rooms or spaces for use in common by the residents.</p> <p>(d)The requirements of (c) only apply where the space referred to in (c)(i) or (ii) is located on the levels served by the lift or ramp.</p>	Further Detail is required within the Construction Documentation

(5) For a Class 3 building, access requirements are as follows: (a) Common areas: (i) From a pedestrian entrance required to be accessible to at least 1 floor containing *sole-occupancy units* and to the entrance doorway of each *sole-occupancy unit* located on that level.
(ii) a cooking facility, sauna, gymnasium, *swimming pool*, common laundry, games room, TV room, individual shop, dining room, public viewing area, ticket purchasing service, lunch room, lounge room, or the like.
(iii) Where a ramp complying with AS 1428.1 or a passenger lift is installed— (A) to the entrance doorway of each *sole-occupancy unit*; and
(B) to and within rooms or spaces for use in common by the residents.
(iv) The requirements of (iii) only apply where the space referred to in (A) and (B) are located on the levels served by the lift or ramp.
(b) *Sole-occupancy units* — in accordance with Table D4D2b.

(6) For Class 5, 6, 7b, 8 and 9a buildings, access must be provided to and within all areas normally used by the occupants.

(7) For a Class 7a building, access must be provided to and within any level containing *accessible* carparking spaces.

(8) For a Class 9b building, access requirements are as follows: (a) *Schools* and *early childhood centres* — to and within all areas normally used by the occupants.
(b) An *assembly building*, not being a *school* or *early childhood centre*—to and within—
(i) wheelchair seating spaces provided in accordance with D4D10; and
(ii) all other areas normally used by the occupants, except that access need not be provided to tiers or platforms of seating areas that do not contain wheelchair seating spaces.

(9) For a Class 9c building, access requirements are as follows: (a) Common areas: (i) From a pedestrian entrance required to be *accessible* to at least 1 floor containing *sole-occupancy units* and to the entrance doorway of each *sole-occupancy unit* located on that level.
(ii) To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, *swimming pool*, common laundry, games room, TV room, individual shop, dining room, public viewing area, ticket purchasing

	<p>service, lunch room, lounge room, or the like.</p> <p>(iii)Where a ramp complying with AS 1428.1 or a passenger lift is installed— (A)to the entrance doorway of each <i>sole-occupancy unit</i>; and</p> <p>(B)to and within rooms or spaces for use in common by the residents.</p> <p>(iv)The requirements of (iii) only apply where the space referred to in (A) and (B) are located on the levels served by the lift or ramp.</p> <p>(b)<i>Sole-occupancy units</i> — in accordance with Table D4D2b.</p> <p>(10)For a Class 10 building, access requirements are as follows: (a)For a Class 10a non-habitable building located in an <i>accessible</i> area intended for use by the public and containing a sanitary facility, change room facility or shelter, to and within— an <i>accessible</i> sanitary facility; and</p> <p>(ii)a change room facility; and</p> <p>(iii)a public shelter or the like.</p> <p>(b)For Class 10b <i>swimming pools</i>, to and into <i>swimming pools</i> with a total perimeter greater than 40 m, associated with a Class 1b, 2, 3, 5, 6, 7, 8 or 9 building that is <i>required</i> to be <i>accessible</i>, but not <i>swimming pools</i> for the exclusive use of occupants of a Class 1b building or a <i>sole-occupancy unit</i> in a Class 2 or Class 3 building.</p>	
D4D3	<p>Access to buildings</p> <p>(1)An <i>accessway</i> must be provided to a building <i>required</i> to be <i>accessible</i>— (a)from the main points of a pedestrian entry at the allotment boundary; and</p> <p>(b)from another <i>accessible</i> building connected by a pedestrian link; and from any <i>required accessible</i> carparking space on the allotment.</p> <p>(2)In a building <i>required</i> to be <i>accessible</i>, an <i>accessway</i> must be provided through the principal pedestrian entrance, and— (a)through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and</p> <p>(b)in a building with a total <i>floor area</i> more than 500 m², a pedestrian entrance which is not <i>accessible</i> must not be located more than 50 m from an <i>accessible</i> pedestrian entrance, except for pedestrian entrances serving only areas exempted by D4D5.</p>	Further Detail is required within the Construction Documentation

	<p>(3)Where a pedestrian entrance <i>required</i> to be <i>accessible</i> has multiple doorways— (a)if the pedestrian entrance consists of not more than 3 doorways — not less than 1 of those doorways must be <i>accessible</i>; and</p> <p>(b)if a pedestrian entrance consists of more than 3 doorways — not less than 50% of those doorways must be <i>accessible</i>.</p> <p>(4)For the purposes of (3)— (a)an <i>accessible</i> pedestrian entrance with multiple doorways is considered to be one pedestrian entrance where— (i)all doorways serve the same part or parts of the building; and</p> <p>(ii)the distance between each doorway is not more than the width of the widest doorway at that pedestrian entrance (see Figure D4D3); and</p> <p>(b)a doorway is considered to be the clear, unobstructed opening created by the opening of one or more door leaves (see Figure D4D3).</p> <p>(5)Where a doorway on an <i>accessway</i> has multiple leaves, (except an automatic opening door) one of those leaves must have a clear opening width of not less than 850 mm in accordance with AS 1428.1.</p>	
<p>D4D4</p>	<p>Parts of buildings to be accessible</p> <p>In a building <i>required</i> to be <i>accessible</i>— (a)every ramp and stairway, except for ramps and stairways in areas exempted by D4D5, must comply with— (i)for a ramp, except a <i>fire-isolated ramp</i>, clause 10 of AS 1428.1; and</p> <p>(ii)for a stairway, except a <i>fire-isolated stairway</i>, clause 11 of AS 1428.1; and</p> <p>(iii)for a <i>fire-isolated stairway</i>, clause 11.1(f) and (g) of AS 1428.1; and</p> <p>(b)every passenger lift must comply with E3D7; and</p> <p>(c)<i>accessways</i> must have— (i)passing spaces complying with AS 1428.1 at maximum 20 m intervals on those parts of an <i>accessway</i> where a direct line of sight is not available; and</p> <p>(ii)turning spaces complying with AS 1428.1— within 2 m of the end of <i>accessways</i> where it is not possible to continue travelling along the <i>accessway</i>;</p> <p>and</p> <p>(B)at maximum 20 m intervals along the <i>accessway</i>; and</p>	<p>For reference</p>

	<p>(d)an intersection of <i>accessways</i> satisfies the spatial requirements for a passing and turning space; and</p> <p>(e)a passing space may serve as a turning space; and</p> <p>(f)a ramp complying with AS 1428.1 or a passenger lift need not be provided to serve a <i>storey</i> or level other than the entrance <i>storey</i> in a Class 5, 6, 7b or 8 building— (i)containing not more than 3 <i>storeys</i>; and</p> <p>(ii)with a <i>floor area</i> for each <i>storey</i>, excluding the entrance <i>storey</i>, of not more than 200 m²; and</p> <p>(g)clause 7.4.1(a) of AS 1428.1 does not apply and is replaced with ‘the pile height or pile thickness shall not exceed 11 mm and the carpet backing thickness shall not exceed 4 mm’; and</p> <p>(h)the carpet pile height or pile thickness dimension, carpet backing thickness dimension and their combined dimension shown in Figure 8 of AS 1428.1 do not apply and are replaced with 11 mm, 4 mm and 15 mm respectively.</p>	
D4D5	<p>Exemptions</p> <p>The following areas are not <i>required</i> to be <i>accessible</i>: (a)An area where access would be inappropriate because of the particular purpose for which the area is used.</p> <p>(b)An area that would pose a health or safety risk for people with a disability. Any path of travel providing access only to an area exempted by (a) or (b).</p>	For reference
D4D6	<p>Accessible carparking</p> <p>(1)<i>Accessible</i> carparking spaces— (a)subject to (b), must be provided in accordance with (2) in— (i)a Class 7a building <i>required</i> to be <i>accessible</i>; and</p> <p>(ii)a carparking area on the same allotment as a building <i>required</i> to be <i>accessible</i>; and</p> <p>(b)need not be provided in a Class 7a building or a carparking area where a parking service is provided and direct access to any of the carparking spaces is not available to the public; and</p> <p>(c)subject to (d), must comply with AS/NZS 2890.6; and</p> <p>(d)need not be identified with signage where there is a total of not more than 5 carparking</p>	Further Detail is required within the Construction Documentation

spaces, so as to restrict the use of the carparking space only for people with a disability.

(2) For each Class of building to which the *carpark* or carparking area is associated, the number of *accessible* carparking spaces *required* is as follows:

(a) Class 1b and 3 buildings:

(i) For a boarding house, guest house, hostel, lodging house, backpackers' accommodation, or the residential part of a hotel or motel, the number of *accessible* carparking spaces *required* is to be calculated by multiplying the total number of carparking spaces by the percentage of —

(A) *accessible sole-occupancy units* to the total number of *sole-occupancy units*; or

(B) *accessible* bedrooms to the total number of bedrooms.

(ii) For the purposes of (i), the calculated number is taken to the next whole figure.

(iii) For a residential part of a *school*, accommodation for the aged, disabled or children, residential part of a *health-care building* which accommodates members of staff or the residential part of a *detention centre* —

1 *accessible* space for every 100 carparking spaces or part thereof.

(b) Class 5, 7, 8 or 9c buildings — 1 *accessible* space for every 100 carparking spaces or part thereof.

(c) Class 6 buildings — (i) with up to 1000 carparking spaces — 1 *accessible* space for every 50 carparking spaces or part thereof; and

(ii) for each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces — 1 *accessible* space.

(d) Class 9a buildings:

(i) For a hospital (non-outpatient area) — 1 *accessible* space for every 100 carparking spaces or part thereof.

(ii) For a hospital (outpatient area) — (A) with up to 1000 carparking spaces — 1 *accessible* space for every 50 carparking spaces or part thereof; and

(B) for each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces — 1 *accessible* space.

(iii) For a nursing home — 1 *accessible* space for every 100 carparking spaces or part thereof.

(iv) For a clinic or day surgery not forming part of a hospital — 1 *accessible* space for every 50 carparking spaces or part thereof.

	<p>(e)Class 9b buildings: (i)For a <i>school</i> — 1 <i>accessible</i> space for every 100 carparking spaces or part thereof.</p> <p>(ii)For other <i>assembly buildings</i>— (A)with up to 1000 carparking spaces — 1 <i>accessible</i> space for every 50 carparking spaces or part thereof; and</p> <p>(B)for each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces — 1 <i>accessible</i> space.</p>	
D4D7	<p>Signage</p> <p>(1)In a building <i>required</i> to be <i>accessible</i>— (a)braille and tactile signage complying with Specification 15 must— (i)incorporate the international symbol of access or deafness, as appropriate, in accordance with AS 1428.1 and identify each— <i>occupancy unit</i> in a Class 3 or Class 9c building; and sanitary facility, except a sanitary facility associated with a bedroom in a Class 1b building or a (A)<i>sole-</i></p> <p>(B)space with a hearing augmentation system; and</p> <p>(ii)identify each door <i>required</i> by E4D5 to be provided with an <i>exit</i> sign and state—</p> <p>(A)“Exit”; and</p> <p>(B)“Level”; and</p> <p>(C)the floor level number or floor level descriptor, or a combination of the two.</p> <p>(b)signage including the international symbol for deafness in accordance with AS 1428.1 must be provided within a room containing a hearing augmentation system identifying—</p> <p>(i)the type of hearing augmentation; and</p> <p>(ii)the area covered within the room; and</p> <p>(iii)if receivers are being used and where the receivers can be obtained; and</p> <p>(c)signage in accordance with AS 1428.1 must be provided for <i>accessible</i> unisex sanitary facilities to identify if the facility is suitable for left or right handed use; and</p> <p>(d) signage to identify an ambulant <i>accessible</i> sanitary facility in accordance with AS 1428.1 must be located on</p>	<p>Further Detail is required within the Construction Documentation</p>

	<p>the door of the facility; and</p> <p>(e)where a pedestrian entrance is not <i>accessible</i>, directional signage incorporating the international symbol of access, in accordance with AS 1428.1, must be provided to direct a person to the location of the nearest <i>accessible</i> pedestrian entrance; and</p> <p>(f)where a bank of sanitary facilities is not provided with an <i>accessible</i> unisex sanitary facility, directional signage incorporating the international symbol of access in accordance with AS 1428.1 must be placed at the location of the sanitary facilities that are not <i>accessible</i>, to direct a person to the location of the nearest <i>accessible</i> unisex sanitary facility.</p> <p>(2)In a building that is subject F4D12 and is <i>required</i> to be <i>accessible</i>, directional signage complying with Specification 15 to direct a person to the location of the nearest <i>accessible</i> adult change facility within that building must be provided at the location of each— (a)bank of sanitary facilities; and <i>accessible</i> unisex sanitary facility, other than one that incorporates an <i>accessible</i> adult change facility.</p>	
D4D9	<p>Tactile indicators</p> <p>(1)For a building <i>required</i> to be <i>accessible</i>, tactile ground surface indicators must be provided to warn people who are blind or have a vision impairment that they are approaching— (a)a stairway, other than a <i>fire-isolated stairway</i>; and</p> <p>(b)an escalator; and a passenger conveyor or moving walk; and</p> <p>(d)a ramp other than a <i>fire-isolated ramp</i>, step ramp, kerb ramp or <i>swimming pool</i> ramp; and</p> <p>(e)in the absence of a suitable barrier— (i)an overhead obstruction less than 2 m above floor level, other than a doorway; and</p> <p>(ii)an <i>accessway</i> 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, except for areas exempted by D4D5.</p> <p>(2)Tactile ground surface indicators <i>required</i> by (1) must comply with sections 1 and 2 of AS/NZS 1428.4.1.</p> <p>(3)A hostel for the aged, nursing home for the aged, a <i>residential aged care building</i>, Class 3</p>	Further Detail is required within the Construction Documentation

	accommodation for the aged, Class 9a <i>health-care building</i> or a Class 9c <i>aged care building</i> need not comply with (1)(a) and (d) if handrails incorporating a raised dome button in accordance with AS/NZS 1428.4.1 are provided to warn people who are blind or have a vision impairment that they are approaching a stairway or ramp.	
D4D13	Glazing on an accessway On an <i>accessway</i> , 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.	Further Detail is required within the Construction Documentation

5.4 SECTION E – SERVICES AND EQUIPMENT

CLAUSE	CLAUSE REQUIREMENT	ACTION/RECOMENDATION
E1D2	<p>Fire hydrants</p> <p>(1)A fire hydrant system must be provided to serve a building—</p> <p>(a)having a total <i>floor area</i> greater than 500 m²; and</p> <p>(b)where a <i>fire brigade station</i> is— (i)no more than 50 km from the building as measured along roads; and</p> <p>(ii)equipped with equipment capable of utilising a fire hydrant.</p> <p>(2)The fire hydrant system must be installed in accordance with AS 2419.1.</p> <p>(3)Notwithstanding (2), a Class 8 <i>electricity network substation</i> need not comply with clause 4.2 of AS 2419.1 if— (a)it cannot be connected to a town main supply; and</p> <p>(b)one hour water storage is provided for fire-fighting.</p> <p>(4)Where internal fire hydrants are provided, they must serve only the <i>storey</i> on which they are located except that a <i>sole-occupancy unit</i>—</p> <p>(a)in a Class 2 or 3 building or Class 4 part of a building may be served by a single fire hydrant located at the level of egress from that <i>sole-occupancy unit</i>; or</p> <p>(b)of not more than 2 <i>storeys</i> in a Class 5, 6, 7, 8 or 9 building may be served by a single fire hydrant located at the level of egress from that <i>sole-occupancy unit</i> provided the fire hydrant can provide coverage to the whole of the <i>sole-occupancy unit</i>.</p>	Further Detail is required within the Construction Documentation
E1D16	<p>Fire precautions during construction</p> <p>In a building under construction— (a)not less than one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each <i>storey</i> adjacent to each <i>required exit</i> or temporary stairway or <i>exit</i>; and</p> <p>(b)after the building has reached an <i>effective height</i> of 12 m— (i)the <i>required</i> fire hydrants and fire hose reels must be operational in at least every <i>storey</i> that is covered by the roof or the floor structure above, except the 2 uppermost <i>storeys</i>; and</p> <p>any <i>required</i> booster connections must be installed.</p>	Further Detail is required within the Construction Documentation
E2D3	General requirements	Further Detail is required within the

	<p>(1)An air-handling system which does not form part of a smoke hazard management system in accordance with E2D4 to E2D20 and which recycles air from one <i>fire compartment</i> to another <i>fire compartment</i> or operates in a manner that may unduly contribute to the spread of smoke from one <i>fire compartment</i> to another <i>fire compartment</i> must, subject to (2), be designed and installed— (a)to operate as a smoke control system in accordance with AS 1668.1; or</p> <p>(b)such that it— <i>compartments</i> served; and incorporates smoke dampers where the air-handling ducts penetrate any elements separating the (i)<i>fire</i></p> <p>(ii)is arranged such that the air-handling system is shut down and the smoke dampers are activated to close <i>automatically</i> by smoke detectors complying with clause 7.5 of AS 1670.1.</p> <p>(2)For the purposes of (1), each <i>sole-occupancy unit</i> in a Class 2 or 3 building is treated as a separate <i>fire compartment</i>.</p> <p>(3)Miscellaneous air-handling systems covered by Sections 5 and 6 of AS 1668.1 serving more than one <i>fire compartment</i> (other than a <i>carpark</i> ventilation system) and not forming part of a smoke hazard management system must comply with these Sections of the Standard.</p> <p>(4)A smoke detection system must be installed in accordance with S20C6 to operate AS 1668.1 systems that are provided for zone pressurisation and <i>automatic</i> air pressurisation for fire-isolated <i>exits</i>.</p>	Construction Documentation
E2D8	<p>Buildings not more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building</p> <p>In a Class 2 and 3 building or part of a building, or Class 4 part of a building, if the building is not more than 25 m in <i>effective height</i>— (a)it must be provided with an <i>automatic</i> smoke detection and alarm system complying with Specification 20; and</p> <p>(b)where a <i>required fire-isolated stairway</i> serving the Class 2 or 3 parts also serves one or more <i>storeys</i> of Class 5, 6, 7 (other than an <i>open-deck carpark</i>), 8 or 9b parts— (i)the <i>fire-isolated stairway</i>, including any associated <i>fire-isolated passageway</i> or <i>fire-isolated ramp</i>, must be provided with an <i>automatic</i> air pressurisation system for fire-isolated <i>exits</i> in accordance with AS 1668.1; or</p> <p>(ii)the Class 5, 6, 7 (other than an <i>open-deck carpark</i>), 8 and 9b parts must be provided</p>	Further Detail is required within the Construction Documentation

	<p>with— (A)an <i>automatic</i> smoke detection and alarm system complying with Specification 20; or</p> <p>(B)a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17; and</p> <p>(c)where a <i>required fire-isolated stairway</i> serving the Class 4 part also serves one or more <i>storeys</i> of Class 5, 6, 7 (other than an <i>open-deck carpark</i>), 8 or 9b parts—</p> <p>(i)a system complying with (b)(i) or (b)(ii) must be installed; or</p> <p>(ii)a smoke alarm or detector system complying with Specification 20 must be provided except that alarms or detectors need only be installed adjacent to each doorway into each <i>fire-isolated stairway</i> (set back horizontally from the doorway by a distance of not more than 1.5 m) to initiate a building occupant warning system for the Class 4 part.</p>	
E2D9	<p>Buildings not more than 25 m in effective height: Class 5, 6, 7b, 8 and 9b buildings</p> <p>(1)A building not more than 25 m in effective height that— (a)is a Class 5 or 9b school building or part of a building having a rise in storeys of more than 3; or</p> <p>(b)is Class 6, 7b, 8 or 9b building (other than a school) or part of a building having a rise in storeys of more than 2; or</p> <p>(c)has a rise in storeys of more than 2, and contains— (i)a Class 5 or 9b school part; and</p> <p>(ii)a Class 6, 7b, 8 or 9b (other than a school) part, must meet the requirements of (2).</p> <p>(2)A building referred to in (1) must be provided with— (a)in each required fire-isolated stairway, including any associated fire-isolated passageway or fire-isolated ramp, an automatic air pressurisation system for fire-isolated exits in accordance with AS 1668.1; or</p> <p>(b)a zone pressurisation system between vertically separated fire compartments in accordance with AS 1668.1, if the building has more than one fire compartment; or</p> <p>(c)an automatic smoke detection and alarm system complying with Specification 20; or</p> <p>(d)a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17.</p> <p>(3)For the purposes of (2), vertically separated fire compartments are fire compartments above and below each other, and not fire compartments within the same storey.</p>	<p>Further Detail is required within the Construction Documentation</p>

E3D2	Lift installations <i>An electric passenger lift</i> installation and an <i>electrohydraulic passenger lift</i> installation must comply with Specification 24.	Further Detail is required within the Construction Documentation
E3D4	Warning against use of lifts in fire (1) A warning sign must be displayed where it can be readily seen near every call button for a passenger lift or group of lifts throughout a building. (2) The requirements of (1) do not apply to a small lift such as a dumb-waiter or the like that is for the transport of goods only. (3) Each warning sign <i>required</i> by (1) must comply with the details and dimensions of Figure E3D4 and consist of— (a) incised, inlaid or embossed letters on a metal, wood, plastic or similar plate securely and permanently attached to the wall; or letters incised or inlaid directly into the surface of the material forming the wall.	Further Detail is required within the Construction Documentation
E3D6	Landings Access and egress to and from lift well landings must comply with the <i>Deemed-to-Satisfy Provisions</i> of Parts D2, D3 and D4.	Further Detail is required within the Construction Documentation
E3D7	Passenger lift types and their limitations (1) In an <i>accessible</i> building, every passenger lift must be one of the following lift types, subject to the limitations (if any) of each lift type: (a) There are no limitations on the use of <i>electric passenger lifts</i> , <i>electrohydraulic passenger lifts</i> or <i>inclined lifts</i> . (b) <i>Stairway platform lifts</i> must not— (i) be used to serve a space in a building accommodating more than 100 persons calculated according to D2D18; or (ii) be used in a high traffic public use area such as a theatre, cinema, auditorium, transport interchange, shopping centre or the like; or (iii) be used where it is possible to install another type of passenger lift; or (iv) connect more than 2 <i>storeys</i> ; or	Further Detail is required within the Construction Documentation

	<p>(v)where more than 1 stairway lift is installed, serve more than 2 consecutive <i>storeys</i>; or</p> <p>(vi)when in the folded position, encroach on the minimum width of a stairway <i>required</i> by D2D8 to D2D11.</p> <p>(c)A <i>low-rise platform lift</i> must not travel more than 1000 mm.</p> <p>(d)A <i>low-rise, low-speed constant pressure lift</i> must not— (i)for an enclosed type, travel more than 4 m; or</p> <p>(ii)for an unenclosed type, travel more than 2 m; or</p> <p>(iii)be used in a high traffic public use areas in buildings such as a theatre, cinema, auditorium, transport interchange, shopping complex or the like.</p> <p>(e)A <i>small-sized, low-speed automatic lift</i> must not travel more than 12 m.</p> <p>(2)A passenger lift referred to in (1) must not rely on a constant pressure device for its operation if the lift car is fully enclosed.</p>	
E3D8	<p>Accessible features required for passenger lifts</p> <p>In an <i>accessible</i> building, every passenger lift must have the following features where applicable: (a)A handrail complying with the provisions for a mandatory handrail in AS 1735.12 for all lifts except— (i)a <i>stairway platform lift</i>; and</p> <p>(ii)a <i>low-rise platform lift</i>.</p> <p>(b)Lift floor dimensions of not less than 1400 mm wide x 1600 mm deep for all lifts which travel more than 12 m.</p> <p>(c)Lift floor dimensions of not less than 1100 mm wide x 1400 mm deep for all lifts which travel not more than 12 m, except a <i>stairway platform lift</i>.</p> <p>(d)Lift floor dimensions of not less than 810 mm wide x 1200 mm deep for a <i>stairway platform lift</i>. Minimum clear door opening complying with AS 1735.12 for all lifts except a <i>stairway platform lift</i>.</p> <p>(f)Passenger protection system complying with AS 1735.12 for all lifts with power-operated doors.</p>	Further Detail is required within the Construction Documentation

	<p>(g)Lift landing doors at the upper landing for all lifts except a <i>stairway platform lift</i>.</p> <p>(h)Lift car and landing control buttons complying with AS 1735.12 for all lifts except— (i)a <i>stairway platform lift</i>; and</p> <p>(ii)a <i>low-rise platform lift</i>.</p> <p>(i)Lighting in accordance with AS 1735.12 for all enclosed lift cars.</p> <p>(j)For all lifts serving more than 2 levels— (i)automatic audible information within the lift car to identify the level each time the car stops; and</p> <p>(ii)audible and visual indication at each lift landing to indicate the arrival of the lift car; and</p> <p>(iii)audible information and audible indication <i>required</i> by (i) and (ii) is to be provided in a range of between 20 - 80 dB(A) at a maximum frequency of 1500 Hz.</p> <p>(k)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 <i>stairway platform lift</i>.</p>	
E4D2	<p>Emergency lighting requirements</p> <p>An emergency lighting system must be installed— (a)in every <i>fire-isolated stairway, fire-isolated passageway</i> or <i>fire-isolated ramp</i>; and</p> <p>(b)in every <i>storey</i> of a Class 5, 6, 7, 8 or 9 building where the <i>storey</i> has an area more than 300 m²— (i)in every passageway, corridor, hallway, or the like, that is part of the path of travel to an <i>exit</i>; and</p> <p>(ii)in any room having a <i>floor area</i> more than 100 m² that does not open to a corridor or space that has emergency lighting or to a road or <i>open space</i>; and</p> <p>(iii)in any room having a <i>floor area</i> more than 300 m²; and</p> <p>(c)in every passageway, corridor, hallway, or the like, having a length of more than 6 m from the entrance doorway of any <i>sole-occupancy unit</i> in a Class 2 or 3 building or Class 4 part of a building to the nearest doorway opening directly to— (i)a <i>fire-isolated stairway, fire-isolated passageway</i> or <i>fire-isolated ramp</i>; or</p>	Further Detail is required within the Construction Documentation

	<p>(ii)an external stairway serving instead of a <i>fire-isolated stairway</i> under D2D13; or</p> <p>(iii)an external balcony leading to a <i>fire-isolated stairway</i>, <i>fire-isolated passageway</i> or <i>fire-isolated ramp</i>; or</p> <p>(iv)a road or <i>open space</i>; and</p> <p>(d)in every <i>required non-fire-isolated stairway</i>; and</p> <p>(e)in a <i>sole-occupancy unit</i> in a Class 5, 6 or 9 building if— (i)the <i>floor area</i> of the unit is more than 300 m²; and</p> <p>(ii)an <i>exit</i> from the unit does not open to a road or <i>open space</i> or to an external stairway, passageway, balcony or ramp, leading directly to a road or <i>open space</i>; and</p> <p>(f)in every room or space to which there is public access in every <i>storey</i> in a Class 6 or 9b building if— (i)the <i>floor area</i> in that <i>storey</i> is more than 300 m²; or</p> <p>(ii)any point on the floor of that <i>storey</i> is more than 20 m from the nearest doorway leading directly to a stairway, ramp, passageway, road or <i>open space</i>; or</p> <p>(iii)egress from that <i>storey</i> involves a vertical rise within the building of more than 1.5 m, or any vertical rise if the <i>storey</i> concerned does not admit sufficient light; or</p> <p>(iv)the <i>storey</i> provides a path of travel from any other <i>storey required</i> by (i), (ii) or (iii) to have emergency lighting; and</p> <p>(g)in a Class 9a <i>health-care building</i>— (i)in every passageway, corridor, hallway, or the like, serving a <i>treatment area</i> or a <i>ward area</i>; and</p> <p>(ii)in every room having a <i>floor area</i> of more than 120 m² in a <i>patient care area</i>; and</p> <p>(h)in every Class 9c building excluding within <i>sole-occupancy units</i>; and in every <i>required</i> fire control centre.</p>	
E4D3	<p>Measurement of distance</p> <p>Distances, other than vertical rise, must be measured along the shortest path of travel whether by straight lines, curves or a combination of both.</p>	Further Detail is required within the Construction Documentation
E4D4	<p>Design and operation of emergency lighting</p>	Further Detail is required within the

	Every <i>required</i> emergency lighting system must comply with AS/NZS 2293.1.	Construction Documentation
E4D5	<p>Exit signs</p> <p>An <i>exit</i> sign must be clearly visible to persons approaching the <i>exit</i>, and must be installed on, above or adjacent to each— (a)door providing direct egress from a <i>storey</i> to— (i)an enclosed stairway, passageway or ramp serving as a <i>required exit</i>; and</p> <p>(ii)an external stairway, passageway or ramp serving as a <i>required exit</i>; and</p> <p>(iii)an external access balcony leading to a <i>required exit</i>; and</p> <p>(b)door from an enclosed stairway, passageway or ramp at every level of discharge to a road or <i>open space</i>; and</p> <p>(c)<i>horizontal exit</i>; and</p> <p>(d)door serving as, or forming part of, a <i>required exit</i> in a <i>storey required</i> to be provided with emergency lighting in accordance with E4D2.</p>	Further Detail is required within the Construction Documentation
E4D6	<p>Direction signs</p> <p>If an <i>exit</i> is not readily apparent to persons occupying or visiting the building then <i>exit</i> signs must be installed in appropriate positions in corridors, hallways, lobbies, and the like, indicating the direction to a <i>required exit</i>.</p>	Further Detail is required within the Construction Documentation
E4D8	<p>Design and operation of exit signs</p> <p>Every <i>required exit</i> sign must— (a)comply with— (i)AS/NZS 2293.1; or</p> <p>(ii)for a photoluminescent <i>exit</i> sign, Specification 25; and</p> <p>(b)be clearly visible at all times when the building is occupied by any person having the right of legal entry to the building.</p>	Further Detail is required within the Construction Documentation

5.5 SECTION F – HEALTH AND AMENITY

CLAUSE	CLAUSE REQUIREMENT	ACTION/RECOMENDATION
F1D3	Stormwater drainage Stormwater drainage must be designed and constructed in accordance with AS/NZS 3500.3.	Further Detail is required within the Construction Documentation
F1D4	Exposed joints [New for 2022] Exposed joints in the drainage surface on a roof, balcony, podium or similar horizontal surface part of a building must— (a) be protected in accordance with Section 2.9 of AS 4654.2; and (b) not be located beneath or run through a planter box, water feature or similar part of the building.	Further Detail is required within the Construction Documentation
F1D5	External waterproofing membranes A roof, balcony, podium or similar horizontal surface part of a building must be provided with a <i>waterproofing membrane</i> — (a) consisting of materials complying with AS 4654.1; and designed and installed in accordance with AS 4654.2.	Further Detail is required within the Construction Documentation
F1D6	Damp-proofing (1) Except for a building covered by (3), moisture from the ground must be prevented from reaching— (a) the lowest floor timbers and the walls above the lowest floor joists; and (b) the walls above the <i>damp-proof course</i> ; and (c) the underside of a suspended floor constructed of a material other than timber, and the supporting beams or girders. (2) Where a <i>damp-proof course</i> is provided, it must consist of— (a) a material that complies with AS/NZS 2904; or	Further Detail is required within the Construction Documentation

	<p>(b)impervious sheet material in accordance with AS 3660.1.</p> <p>(3)The following buildings need not comply with (1):</p> <p>(a)A Class 7 or 8 building where in the particular case there is no necessity for compliance.</p> <p>(b)A garage, tool shed, <i>sanitary compartment</i>, or the like, forming part of a building used for other purposes. <i>An open spectator stand or open-deck carpark.</i></p>	
F1D7	<p>Damp-proofing of floors on the ground</p> <p>(1)If a floor of a room is laid on the ground or on fill, moisture from the ground must be prevented from reaching the upper surface of the floor and adjacent walls by the insertion of a vapour barrier in accordance with AS 2870.</p> <p>(2)The requirements of (1) do not apply where—</p> <p>(a)weatherproofing is not <i>required</i>; or the floor is the base of a stair, lift or similar <i>shaft</i> which is adequately drained by gravitation or mechanical means.</p>	Further Detail is required within the Construction Documentation
F2D2	<p>Wet area construction</p> <p>(1)In a Class 2 and 3 building and a Class 4 part of a building, building elements in <i>wet areas</i> must—</p> <p>(a)be <i>water resistant</i> or <i>waterproof</i> in accordance with Specification 26; and</p> <p>(b)comply with AS 3740.</p> <p>(2)In a Class 5, 6, 7, 8 or 9 building, building elements in a bathroom or shower room, a slop hopper or sink compartment, a laundry or <i>sanitary compartment</i> must—</p> <p>(a)be <i>water resistant</i> or <i>waterproof</i> in accordance with Specification 26; and</p> <p>(b)comply with AS 3740, as if they were in a Class 2 or 3 building or a Class 4 part of a building.</p>	Further Detail is required within the Construction Documentation
F2D4	<p>Floor wastes</p> <p>(1)In a Class 2 or 3 building or Class 4 part of a building, a bathroom or laundry located at any level above a <i>sole-occupancy unit</i> or public space must have a <i>floor waste</i>.</p> <p>(2)Where a <i>floor waste</i> is installed—</p> <p>(a)the minimum continuous fall of a floor plane to the waste must be 1:80; and the maximum continuous fall of a floor plane to the waste must be 1:50.</p>	Further Detail is required within the Construction Documentation

F3D1	<p>Deemed-to-Satisfy Provisions</p> <p>(1)Where a <i>Deemed-to-Satisfy Solution</i> is proposed, <i>Performance Requirement F3P1</i> is satisfied by complying with F3D2 to F3D5.</p> <p>(2)Where a <i>Performance Solution</i> is proposed, the relevant <i>Performance Requirements</i> must be determined in accordance with A2G2(3) and A2G4(3) as applicable.</p> <p>A roof must be covered with— (a)roof tiles complying with AS 2049, fixed in accordance with AS 2050; or</p> <p>(b)metal sheet roofing complying with AS 1562.1; or</p> <p>(c)plastic sheet roofing designed and installed in accordance with AS 1562.3; or</p> <p>(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 <i>membrane</i> complying with F1D5.</p>	Further Detail is required within the Construction Documentation
F3D3	<p>Sarking</p> <p><i>Sarking-type material</i> used for weatherproofing of roofs and walls must comply with AS 4200.1 and AS 4200.2.</p>	Further Detail is required within the Construction Documentation
F3D4	<p>Glazed assemblies</p> <p>(1)Subject to (2) and (3), the following glazed assemblies in an <i>external wall</i>, must comply with AS 2047 requirements for resistance to water penetration: (a)Windows.</p> <p>(b)Sliding and swinging glazed doors with a frame, including French and bi-fold doors with a frame.</p> <p>(c)Adjustable louvres.</p> <p>(d)Shopfronts.</p> <p>(e)Window walls with one piece framing.</p> <p>(2)The following buildings need not comply with (1): (a)A Class 7 or 8 building where in the particular case there is no necessity for compliance.</p> <p>(b)A garage, tool shed, <i>sanitary compartment</i>, or the like, forming part of a building used for</p>	Further Detail is required within the Construction Documentation

	<p>other purposes, except where the construction of the garage, tool shed, <i>sanitary compartment</i> or the like contributes to the weatherproofing of the other part of the building.</p> <p>(c)An <i>open spectator stand</i> or <i>open-deck carpark</i>.</p> <p>(3)The following glazed assemblies need not comply with (1): (a)All glazed assemblies not in an <i>external wall</i>.</p> <p>(b)Revolving doors.</p> <p>(c)Fixed louvres.</p> <p>(d)Skylights, roof lights and windows in other than the vertical plane.</p> <p>(e)Sliding and swinging glazed doors without a frame.</p> <p>(f)Windows constructed on site and architectural one-off windows, which are not design tested in accordance with AS 2047.</p> <p>(g)Second-hand windows, re-used windows and recycled windows. Heritage windows.</p>	
F3D5	<p>Wall cladding</p> <p>(1)External wall cladding must comply with one or a combination of the following:</p> <p>(a)Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700.</p> <p>(b)Autoclaved aerated concrete: AS 5146.3.</p> <p>(c)Metal wall cladding: AS 1562.1.</p> <p>(2)The following buildings need not comply with (1): (a)A Class 7 or 8 building where in the particular case there is no necessity for compliance.</p> <p>(b)A garage, tool shed, <i>sanitary compartment</i>, or the like, forming part of a building used for other purposes, except where the construction of the garage, tool shed, <i>sanitary compartment</i> or the like contributed to the weatherproofing of another part of the building that is <i>required</i> to be weatherproofed. An <i>open spectator stand</i> or <i>open deck carpark</i>.</p>	Further Detail is required within the Construction Documentation
F4D2	<p>Facilities in residential buildings</p> <p>(1)For facilities in Class 2 buildings, the following applies:</p>	Further Detail is required within the Construction Documentation

- (a) Within each *sole-occupancy unit*, provide— (i) a kitchen sink and facilities for the preparation and cooking of food; and
- (ii) a bath or shower; and
- (iii) a closet pan; and
- (iv) a washbasin.
- (b) For laundry facilities, provide either— (i) in each *sole-occupancy unit*— (A) clothes washing facilities, comprising at least one washtub and a space for a washing machine; and (B) clothes drying facilities comprising clothes line or a hoist with not less than 7.5 m of line, or space for one heat operated drying cabinet or appliance in the same room as the clothes washing facilities; or
- (ii) a separate laundry for each 4 *sole-occupancy units*, or part thereof, that must comprise— (A) clothes washing facilities, comprising at least one washtub and a space for a washing machine; and *occupancy unit*, or space for one heat operated drying cabinet or appliance. clothes drying facilities comprising clothes line or a hoist with not less than 7.5 m of line per (B) *sole-*
- (c) For the purposes of (a) and (b), a kitchen sink or washbasin must not be counted as a laundry washtub.
- (2) For facilities in Class 3 buildings other than *residential care buildings*, the following applies:
- (a) For residents in each building or group of buildings, for each 10 residents for whom private facilities are not provided, provide— (i) a bath or shower; and
- (ii) a closet pan; and
- (iii) a washbasin.
- (b) Notwithstanding (a), if one urinal is provided for each 25 males up to 50 and one additional urinal for each additional 50 males or part thereof, one closet pan for each 12 males may be provided.
- (c) Facilities for employees must be provided in accordance with F4D4.

- (d) Facilities *required* by (a), (b) or (c) need not be situated in the same building.
- (3) For facilities in Class 3 *residential care buildings*, the following applies:
- (a) For residents in each building or group of buildings, provide— (i) a shower, closet pan and wash basin for each 8 residents or part thereof where private facilities are not provided; and
- (ii) a suitable bath for each 30 residents or part thereof.
- (b) For the purposes of (a), urinals must not be taken into consideration in calculating the number of facilities.
- (4) For facilities in a Class 4 part of a building, the following applies:
- (a) For the *sole-occupancy unit*, provide— (i) a kitchen sink and facilities for the preparation and cooking of food; and
- (ii) a bath or shower; and
- (iii) a closet pan; and
- (iv) a washbasin; and
- (v) clothes washing facilities, comprising a washtub and space in the same room for a washing machine; and
- (vi) a clothes line or hoist, or space for a heat-operated drying cabinet or similar appliance for the exclusive use of the occupants.
- (b) For the purposes of (a), a kitchen sink or washbasin must not be counted as a laundry washtub.
- (5) For facilities in Class 9c buildings, the following applies:
- (a) For residents in each building or group of buildings, provide— (i) a closet pan and wash basin for each 6 residents or part thereof where private facilities are not provided; and
- (ii) a shower for each 7 residents or part thereof for where private facilities are not provided; and
- (iii) a suitable bath, fixed or mobile.
- (b) In addition to the facilities *required* by (a), provide— (i) one kitchen or other adequate

	<p>facility for the preparation and cooking or reheating of food including a kitchen sink and washbasin; and</p> <p>(ii)laundry facilities for the cleansing and drying of linen and clothing or adequate facilities for holding and dispatch or treatment of soiled linen and clothing and the like and the receipt and storage of clean linen; and</p> <p>(iii)one clinical hand washing basin for each 16 residents or part thereof.</p> <p>For the purposes of (a), urinals must not be taken into consideration in calculating the number of facilities.</p>	
F4D8	<p>Construction of sanitary compartments [2019: F2.5]</p> <p>(1)Other than in an <i>early childhood centre</i>, <i>sanitary compartments</i> must have doors and partitions that separate adjacent compartments and extend— (a)from floor level to the ceiling in the case of a unisex facility; or</p> <p>(b)to a height of not less than 1.5 m above the floor if primary <i>school</i> children are the principal users; or</p> <p>(c)1.8 m above the floor in all other cases.</p> <p>(2)The door to a fully enclosed <i>sanitary compartment</i> must— (a)open outwards; or</p> <p>(b)slide; or</p> <p>(c)be readily removable from the outside of the <i>sanitary compartment</i>, unless there is a clear space of at least 1.2 m, measured in accordance with Figure F4D8, between the closet pan within the <i>sanitary compartment</i> and the doorway.</p> <p>(3)In an <i>early childhood centre</i>, facilities for use by children must have each <i>sanitary compartment</i> screened by a partition which, except for the doorway, is opaque for a height of at least 900 mm but not more than 1200 mm above the floor level.</p>	Further Detail is required within the Construction Documentation
F5D2	<p>Height of rooms and other spaces</p> <p>(1)The height of rooms and other spaces in a Class 2 or 3 building or Class 4 part of a building must be not less than—</p>	Further Detail is required within the Construction Documentation

- (a)for a kitchen, laundry, or the like — 2.1 m; and
- (b)for a corridor, passageway or the like — 2.1 m; and
- (c)for a *habitable room* excluding a kitchen — 2.4 m; and
- (d)in a *habitable room*, or space within a *habitable room*, with a sloping ceiling or projections below the ceiling line— (i)in an attic — a height of not less than 2.2 m for not less than two-thirds of the *floor area* of the room or space; and
- (ii)in other rooms — a height of not less than 2.4 m for not less than two-thirds of the *floor area* of the room or space; and
- (e)in a *habitable room*, or space within a *habitable room*, with a sloping ceiling or projections below the ceiling line — a height of not less than 2.1 m for not less than two-thirds of the *floor area* of the room or space.
- (2)For the purposes of (1), when calculating the *floor area* of a room or space, any part that has a ceiling height of less than 1.5 m is not included.
- (3)The height of rooms and other spaces in a Class 5, 6, 7 or 8 building must be not less than—
 - (a)except as allowed in (b) and (8) — 2.4 m; and
 - (b)a corridor, passageway, or the like — 2.1 m.
- (4)The height of rooms and other spaces in a Class 9a *health-care building* must be not less than—
 - (a)for a *patient care area* — 2.4 m; and
 - (b)for an operating theatre or delivery room — 3 m; and
 - (c)for a treatment room, clinic, waiting room, passageway, corridor, or the like — 2.4 m.
- (5)The height of rooms and other spaces in a Class 9b building must be not be less than—
 - (a)for a *school* classroom or other *assembly building* or part that accommodates not more than 100 persons — 2.4 m; and
 - (b)for a theatre, public hall or other *assembly building* or part that accommodates more than

	<p>100 persons — 2.7 m; and</p> <p>(c)for a corridor— (i)that serves an <i>assembly building</i> or part that accommodates not more than 100 persons — 2.4 m; or</p> <p>(ii)that serves an <i>assembly building</i> or part that accommodates more than 100 persons — 2.7 m.</p> <p>(6)For the purposes of (5) the number of persons accommodated must be calculated according to D2D18.</p> <p>(7)The height of rooms and other spaces in a Class 9c building must be not be less than—</p> <p>(a)for a kitchen, laundry, or the like — 2.1 m; and</p> <p>(b)for a corridor, passageway or the like — 2.4 m; and</p> <p>(c)for a <i>habitable room</i> excluding a kitchen — 2.4 m.</p> <p>(8)The height of rooms and other spaces in any building must be not be less than— (a)for a bathroom, shower room, <i>sanitary compartment</i>, other than an <i>accessible</i> adult change facility, airlock, tea preparation room, pantry, store room, garage, car parking area, or the like — 2.1 m; and</p> <p>(b)for a commercial kitchen — 2.4 m; and</p> <p>(c)above a stairway, ramp, landing or the like — 2 m measured vertically above the nosing line of stairway treads or the floor surface of the ramp, landing or the like; and for a <i>required accessible</i> adult change facility — 2.4 m.</p>	
F6D2	<p>Provision of natural light</p> <p>Natural light must be provided in:</p> <p>(a)A Class 2 building and a Class 4 parts of a building — to all <i>habitable rooms</i>.</p> <p>(b)A Class 3 building — to all bedrooms and dormitories.</p> <p>(c)Class 9a and 9c buildings — to all rooms used for sleeping purposes.</p> <p>(d)A Class 9b building — to all general purpose classrooms in primary or secondary <i>schools</i></p>	Further Detail is required within the Construction Documentation

	and all playrooms or the like for the use of children in an <i>early childhood centre</i> .	
F6D3	<p>Methods and extent of natural light</p> <p>(1)<i>Required</i> natural light must be provided by—</p> <p>(a)<i>windows</i>, excluding <i>roof lights</i>, that— (i)have an aggregate light transmitting area measured exclusive of framing members, glazing bars or other obstructions of not less than 10% of the <i>floor area</i> of the room; and</p> <p>(ii)are open to the sky or face a court or other space open to the sky or an open verandah, carport or the like; or</p> <p>(b)<i>roof lights</i>, that— (i)have an aggregate light transmitting area measured exclusive of framing members, glazing bars or other obstructions of not less than 3% of the <i>floor area</i> of the room; and</p> <p>(ii)are open to the sky; or</p> <p>a proportional combination of <i>windows</i> and <i>roof lights required</i> by (a) and (b).</p> <p>(2)Except in a Class 9c <i>aged care building</i>, in a Class 2, 3 or 9 building or Class 4 part of a building, a <i>required window</i> that faces a boundary of an adjoining allotment or a wall of the same building or another building on the allotment must not be less than a horizontal distance from that boundary or wall that is the greater of—</p> <p>(a)generally — 1 m; and</p> <p>(b)in a <i>patient care area</i> or other room used for sleeping purposes in a Class 9a building — 3 m; and</p> <p>(c)50% of the square root of the exterior height of the wall in which the <i>window</i> is located, measured in metres from its sill.</p> <p>(3)In a Class 9c <i>aged care building</i>, a <i>required window</i> must be transparent and located—</p> <p>(a)in an <i>external wall</i> with the <i>window</i> sill not more than 1 m above the floor level; and</p> <p>(b)where the <i>window</i> faces an adjoining allotment, another building or another wall of the same building, it must not be less than a horizontal distance of 3 m from the adjoining allotment, other building or wall.</p>	Further Detail is required within the Construction Documentation

	(4)In a Class 9b <i>early childhood centre</i> , the sills of 50% of <i>windows</i> in children's rooms must be located not more than 500 mm above the floor level.	
F6D4	<p>Natural light borrowed from adjoining room</p> <p>(1)Natural light to a room in a Class 2 building or Class 4 part of a building or in a <i>sole-occupancy unit</i> of a Class 3 building, may come through one or more glazed panels or openings from an adjoining room (including an enclosed verandah) if—</p> <p>(a)both rooms are within the same <i>sole-occupancy unit</i> or the enclosed verandah is on common property; and</p> <p>(b)the glazed panels or openings have an aggregate light transmitting area of not less than 10% of the <i>floor area</i> of the room to which it provides light; and</p> <p>(c)the adjoining room has— (i)<i>windows</i>, excluding <i>roof lights</i>, that— (A)have an aggregate light transmitting area of not less than 10% of the combined <i>floor areas</i> of both rooms; and (B)are open to the sky or face a court or other space open to the sky or an open verandah, carport or the like; or</p> <p>(ii)<i>roof lights</i>, that— (A)have an aggregate light transmitting area of not less than 3% of the combined <i>floor areas</i> of both rooms; and</p> <p>(B)are open to the sky; or</p> <p>(iii)a proportional combination of <i>windows</i> and <i>roof lights</i> required by (i) and (ii).</p> <p>(2)The areas specified in (1)(b) and (c) may be reduced as appropriate if direct natural light is provided from another source.</p>	For Reference
F6D5	<p>Artificial lighting</p> <p>(1)Artificial lighting must be provided— (a)in <i>required</i> stairways, passageways, and ramps; and</p> <p>(b)if natural light of a standard equivalent to that <i>required</i> by F6D3 is not available, and the periods of occupation or use of the room or space will create undue hazard to occupants seeking egress in an emergency, in— (i)a Class 4 part of a building — to <i>sanitary compartments</i>, bathrooms, shower rooms, airlocks and laundries;</p>	Further Detail is required within the Construction Documentation

	<p>and</p> <p>(ii)a Class 2 building — to <i>sanitary compartments</i>, bathrooms, shower rooms, airlocks, laundries, common stairways and other spaces used in common by the occupants of the building; and</p> <p>(iii)Class 3, 5, 6, 7, 8 and 9 buildings — to all rooms that are frequently occupied, all spaces <i>required</i> to be <i>accessible</i>, all corridors, lobbies, internal stairways, other circulation spaces and paths of egress.</p> <p>(2)The artificial lighting system must comply with AS/NZS 1680.0.</p> <p>(3)The system may provide a lesser level of illumination to the following spaces during times when the level of lighting would be inappropriate for the use: (a)A theatre, cinema or the like, when performances are in progress, with the exception of aisle lighting <i>required</i> by Part II.</p> <p>(b)A museum, gallery or the like, where sensitive displays require low lighting levels.</p> <p>(c)A discotheque, nightclub or the like, where to create an ambience and character for the space, low lighting levels are used.</p>	
NSW F6D6	<p>Ventilation of rooms</p> <p>A <i>habitable room</i>, office, shop, factory, workroom, <i>sanitary compartment</i>, bathroom, shower room, laundry and any other room occupied by a person for any purpose must have—</p> <p>(a)natural ventilation complying with F6D7; or a mechanical ventilation or air-conditioning system complying with AS 1668.2.</p>	Further Detail is required within the Construction Documentation
F6D7	<p>Natural ventilation</p> <p>(1)Natural ventilation provided in accordance with F6D6(a) must consist of openings, <i>windows</i>, doors or other devices which can be opened— (a)with a ventilating area not less than 5% of the <i>floor area</i> of the room <i>required</i> to be ventilated; and</p> <p>(b)open to— (i)a suitably sized court, or space open to the sky; or</p> <p>(ii)an open verandah, carport, or the like; or</p>	Further Detail is required within the Construction Documentation

	<p>(iii)an adjoining room in accordance with F6D8.</p> <p>(2)The requirements of (1)(a) do not apply to a Class 8 <i>electricity network substation</i>.</p>	
F6D8	<p>Ventilation borrowed from adjoining room</p> <p>Natural ventilation to a room may come through a <i>window</i>, opening, door or other device from an adjoining room (including an enclosed verandah) if both rooms are within the same <i>sole-occupancy unit</i> or the enclosed verandah is common property, and— (a)in a Class 2 building, a <i>sole-occupancy unit</i> of a Class 3 building or Class 4 part of a building— (i)the room to be ventilated is not a <i>sanitary compartment</i>; and</p> <p>(ii)the <i>window</i>, opening, door or other device has a ventilating area of not less than 5% of the <i>floor area</i> of the room to be ventilated; and</p> <p>(iii)the adjoining room has a <i>window</i>, opening, door or other device with a ventilating area of not less than 5% of the combined <i>floor areas</i> of both rooms; and</p> <p>(b)in a Class 5, 6, 7, 8 (except a Class 8 <i>electricity network substation</i>) or 9 building— (i)the <i>window</i>, opening, door or other device has a ventilating area of not less than 10% of the <i>floor area</i> of the room to be ventilated, measured not more than 3.6 m above the floor; and</p> <p>(ii)the adjoining room has a <i>window</i>, opening, door or other device with a ventilating area of not less than 10% of the combined <i>floor areas</i> of both rooms; and</p> <p>(c)the ventilating areas specified in (a) and (b) may be reduced as appropriate if direct natural ventilation is provided from another source.</p>	For Reference
F6D9	<p>Restriction on location of sanitary compartments</p> <p>A <i>sanitary compartment</i> must not open directly into— (a)a kitchen or pantry; or</p> <p>(b)a public dining room or restaurant; or</p> <p>(c)a dormitory in a Class 3 building; or</p> <p>(d)a room used for public assembly (which is not an <i>early childhood centre</i>, primary <i>school</i> or <i>open spectator stand</i>); or</p> <p>(e)a workplace normally occupied by more than one person.</p>	Further Detail is required within the Construction Documentation

F6D10	Airlocks If a <i>sanitary compartment</i> is prohibited under F6D9 from opening directly to another room— (a) in a <i>sole-occupancy unit</i> in a Class 2 or 3 building or Class 4 part of a building— (i) access must be by an airlock, hallway or other room; or (ii) the <i>sanitary compartment</i> must be provided with mechanical exhaust ventilation;	Further Detail is required within the Construction Documentation
F7D3	Determination of airborne sound insulation ratings A form of construction <i>required</i> to have an airborne sound insulation rating must— (a) have the <i>required</i> value for weighted sound reduction index (Rw) or weighted sound reduction index with spectrum adaptation term (Rw + Ctr) determined in accordance with AS/NZS ISO 717.1 using results from laboratory measurements; or comply with Specification 28.	Further Detail is required within the Construction Documentation
F7D4	Determination of impact sound insulation ratings (1) A floor in a building <i>required</i> to have an impact sound insulation rating must— (a) have the <i>required</i> value for weighted normalised impact sound pressure level (Ln,w) determined in accordance with AS ISO 717.2 using results from laboratory measurements; or (b) comply with Specification 28. (2) A wall in a building <i>required</i> to have an impact sound insulation rating must— (a) for a Class 2 or 3 building be of discontinuous construction and (b) for a Class 9c building, must— (i) for other than masonry, be two or more separate leaves without rigid mechanical connection except at the periphery; or (ii) be identical with a prototype that is no less resistant to the transmission of impact sound when tested in accordance with Specification 29 than a wall listed in S28C4 to S28C7. (3) For the purposes of this Part, discontinuous construction means a wall having a minimum 20 mm cavity between 2 separate leaves, and— (a) for masonry, where wall ties are required to connect leaves, the ties are of the resilient type; and for other than masonry, there is no mechanical linkage between leaves except at the periphery.	Further Detail is required within the Construction Documentation
F7D5	Sound insulation rating of floors (1) A floor in a Class 2 or 3 building must have an Rw + Ctr (airborne) not less than 50 and an	Further Detail is required within the Construction Documentation

	<p>Ln,w (impact) not more than 62 if it separates— (a)<i>sole-occupancy units</i>; or</p> <p>(b)a <i>sole-occupancy unit</i> from a plant room, lift <i>shaft</i>, stairway, <i>public corridor</i>, public lobby or the like, or parts of a different classification.</p> <p>(2)A floor in a Class 9c building separating <i>sole-occupancy units</i> must have an Rw not less than 45.</p>	
F7D6	<p>Sound insulation rating of walls</p> <p>(1)A wall in a Class 2 or 3 building must— (a)have an Rw + Ctr (airborne) not less than 50, if it separates <i>sole-occupancy units</i>; and</p> <p>(b)have an Rw (airborne) not less than 50, if it separates a <i>sole-occupancy unit</i> from a plant room, lift <i>shaft</i>, stairway, <i>public corridor</i>, public lobby or the like, or parts of a different classification; and</p> <p>(c)comply with F7D4(2) if it separates— (i)a bathroom, <i>sanitary compartment</i>, laundry or kitchen in one <i>sole-occupancy unit</i> from a <i>habitable room</i> (other than a kitchen) in an adjoining unit; or</p> <p>(ii)a <i>sole-occupancy unit</i> from a plant room or lift <i>shaft</i>.</p> <p>(2)A door may be incorporated in a wall in a Class 2 or 3 building that separates a <i>sole-occupancy unit</i> from a stairway, <i>public corridor</i>, public lobby or the like, provided the door assembly has an Rw not less than 30.</p> <p>(3)A wall in a Class 9c building must have an Rw not less than 45 if it separates— (a)<i>sole-occupancy units</i>; or</p> <p>(b)a <i>sole-occupancy unit</i> from a kitchen, bathroom, <i>sanitary compartment</i> (not being an associated ensuite), laundry, plant room or utilities room.</p> <p>(4)In addition to (3), a wall separating a <i>sole-occupancy unit</i> in a Class 9c building from a kitchen or laundry must comply with F7D4(2).</p> <p>(5)Where a wall <i>required</i> to have sound insulation has a floor above, the wall must continue to— (a)the underside of the floor above; or</p> <p>(b)a ceiling that provides the sound insulation <i>required</i> for the wall.</p> <p>(6)Where a wall <i>required</i> to have sound insulation has a roof above, the wall must continue to— (a)the underside of the roof above; or a ceiling that provides the sound insulation</p>	<p>Further Detail is required within the Construction Documentation</p>

	<i>required</i> for the wall.	
F7D7	Sound insulation rating of internal services (1)If a duct, soil, waste or water supply pipe, including a duct or pipe that is located in a wall or floor cavity, serves or passes through more than one <i>sole-occupancy unit</i> , the duct or pipe must be separated from the rooms of any <i>sole-occupancy unit</i> by construction with an $R_w + C_{tr}$ (airborne) not less than— (a)40 if the adjacent room is a <i>habitable room</i> (other than a kitchen); or (b)25 if the adjacent room is a kitchen or non- <i>habitable room</i> . (2)If a stormwater pipe passes through a <i>sole-occupancy unit</i> , it must be separated in accordance with (1)(a) and (b).	Further Detail is required within the Construction Documentation
F7D8	Sound isolation of pumps A flexible coupling must be used at the point of connection between the service pipes in a building and any circulating or other pump.	Further Detail is required within the Construction Documentation

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