

# BUILDING CODE OF AUSTRALIA and AS4299 ACCESS COMPLIANCE ASSESSMENT REPORT

153-157 WALKER STREET NORTH SYDNEY

HOTEL AND BTR ACCOMMODATON

DATE ► 18/06/2025

REPORT NO. ► 14002 Rev 02

PREPARED FOR ► Freecity

PREPARED BY ► AE&D



**AEDGROUP**

Innovation & expertise in building regulations

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REVISION STATUS				
REPORT NO/REV	DATE	STATUS	WRITTEN	CHECKED
14002 Rev 00	17/03/2025	DRAFT FOR COMMENT	SH	JS
14002 Rev 01	20/05/2025	Update to Draft	SH	*
14002 Rev 02	18/06/2025	For TOA	SH	JS

\*DISCLAIMER: REVISION 01 20/05/2025

This set is issued for preliminary information purposes only.

It has not been peer reviewed, and as such **all contained information and advice is subject to alteration**, and AE&D accepts no responsibility for the accuracy of the information contained in this report.

### COMMERCIAL IN CONFIDENCE

This document contains confidential material that is intended solely for the client commissioning AE&D to prepare this report. The client, project team and all regulatory authorities shall exercise precautionary measures to ensure that the information contained herein is not to be accessed by any third party. AE&D will take no responsibility for the use of any information contained within this report by any third party, unless AE&D's permission is requested and provided in writing.

## INTRODUCTION

This report provides an assessment of the proposed mixed use development including a hotel, residential apartments and basement carparking, to be located at 153-157 Walker Street, North Sydney for the purposes of Development Application (DA) submission.

The purpose of this report is to identify the compliance status of the design with the following:

- Relevant accessibility related Deemed-to-Satisfy (DtS) requirements of the Building Code of Australia (BCA) 2022, as are contained within clauses D4D2-D4D13 (Inclusive); E3D7 and E3D8; and F4D6, F4D7, and F4D12.
- AS4299-1995 Adaptable Housing

A detailed “Technical Review and Commentary” is provided at [Part 2.0](#) of this Report, which includes all appropriate technical assessment results and commentary and concludes that, whilst some compliance departures do exist in the current design, such can be remedied in all instances to achieve compliance with the BCA.

### 1.1 Basis of Report

This report is based on a desktop assessment of the proposed plans, with specific reference to the following:

1. Architectural plans prepared by architectus, Project No. 240626, issue P14, dated 13/062025.

Drawing Title	Drawing No.	Revision	Dated
Proposed Site Plan	A.DA0005	P14	13/062025
Basement 11 Plan	A.DA1000	P14	13/062025
Basement 10 Plan	A.DA1001	P14	13/062025
Basement 09 Plan	A.DA1002	P14	13/062025
Basement 08 Plan	A.DA1003	P14	13/062025
Basement 07 Plan	A.DA1004	P14	13/062025
Basement 06 Plan	A.DA1005	P14	13/062025
Basement 05 Plan	A.DA1005	P14	13/062025
Basement 04 Plan	A.DA1007	P14	13/062025
Basement 03 Plan	A.DA1008	P14	13/062025
Basement 02 Plan	A.DA1009	P14	13/062025
Basement 01 Plan	A.DA1010	P14	13/062025
Lower Ground (Lobby)	A.DA1011	P14	13/062025
Ground Floor (Lobby)	A.DA1012	P14	13/062025
Level 01 (Hotel)	A.DA1013	P14	13/062025
Level 02 (Hotel)	A.DA1014	P14	13/062025
Level 03 (Hotel)	A.DA1015	P14	13/062025
Level 04 (Hotel)	A.DA1016	P14	13/062025
Level 05 (Hotel)	A.DA1017	P14	13/062025
Level 06 (Hotel)	A.DA1018	P14	13/062025
Level 07 (Plant Room)	A.DA1019	P14	13/062025





Drawing Title	Drawing No.	Revision	Dated
Level 08 (Typical Residential Floor 1)	A.DA1020	P14	13/062025
Level 09 (Typical Residential Floor 1)	A.DA1021	P14	13/062025
Level 10 (Typical Residential Floor 1)	A.DA1022	P14	13/062025
Level 11-14 (Typical Residential Floor 1)	A.DA1023	P14	13/062025
Level 15-32 (Typical Residential Floor 2)	A.DA1024	P14	13/062025
Level 33 (Mid Level Amenities)	A.DA1025	P14	13/062025
Level 34 (Typical Residential Floor 2 Lift Overrun)	A.DA1026	P14	13/062025
Level 35-39 (Typical Residential Floor 3)	A.DA1027	P14	13/062025
Level 40-45 (Typical Residential Floor 4)	A.DA1028	P14	13/062025
Level 46-47 (Typical Residential Floor 5)	A.DA1029	P14	13/062025
Level 48 (Typical Residential Floor 6 – L1)	A.DA1030	P14	13/062025
Level 49 (Typical Residential Floor 6 – L2)	A.DA1031	P14	13/062025
Level 50 (Lower Plant)	A.DA1032	P14	13/062025
Level 51 (Upper Plant)	A.DA1033	P14	13/062025
Roof	A.DA2034	P14	13/062025
Adaptable Apartment Layouts	A.DA1201	P14	13/062025
DDA Hotel Room Layouts	A.DA1250	P14	13/062025
North Elevation	A.DA2001	P14	13/062025
East Elevation	A.DA2002	P14	13/062025
South Elevation	A.DA2003	P14	13/062025
West Elevation	A.DA2004	P14	13/062025
Sections	A.DA2005	P14	13/062025

2. The Building Code of Australia 2022, prepared by the Australian Building Codes Board.
3. The Guide to the BCA 2019, prepared by the Australian Building Codes Board.
4. Australian Standards AS1428.1-2009 - Design for Access and Mobility – Part 1: General requirements for access - New building work.
5. Australian Standards AS1428.4.1-2009 - Design for Access and Mobility – Part 4.1: Means to assist the orientation of people with vision impairment – Tactile ground surface indicators.
6. Australian Standard AS2890.6-2009 Parking facilities – Part 6: Off-street parking for people with disabilities.
7. AS 1735.12-1999 Lifts, Elevators and Moving Walks - Part 12 facilities for persons with disabilities
8. Australian Standard AS4299-1995 Adaptable Housing

## 1.2 Limitations of the Report

This report does not assess the following:

- Any parts of the BCA or Australian Standards not directly referenced in this report.
- Review of The Disability (Access to Premises – Building) Standards 2010.



- Assessment of the Disability Discrimination Act 1992 (DDA is a complaint-based instrument and does not offer prescriptive compliance options).
- Assessment of the Livable Housing design Guidelines- Forth edition 2017. Livable housing Australia, or provision of an LHA rating for any SOU
- Review of fitouts and/or furniture.
- Standards not directly referenced in this report.
- Assessment of any structural elements, fire services operations , mechanical or electrical systems and installations, plumbing and drainage installations or geotechnical matters relating to the building, including any structural or other assessment of the existing fire-resistant levels of the building
- Work Health & Safety and Work Cover Authority considerations.
- Consideration of energy or water authority requirements
- Heritage significance
- Reporting on hazardous materials, OH&S matters or site contamination
- Local planning policies and/or guidelines, other than those identified.
- This report is not a Part 4A compliance certificate under the Environmental Planning & Assessment Act 1979 or Regulation 2000.
- Does not provide concessions, alternative solutions or exemptions from the requirements of the BCA, unless specifically identified in this report.

This report and assessment have been undertaken on the information made available by the client/design team. No liability is accepted on the accuracy of the information provided.

### 1.3 BCA Assessment Data

Our understanding of the Building Code of Australia 2022 classification(s) in relation to the subject building is as follows:

BCA Building Classification	Class 2	Residential
	Class 3	Hotel
	Class 6	Restaurant
	Class 7a	Carpark
	Class 7b	Storage
	Class 9b	Common recreation areas
	Class 10a	Swimming Pool

#### **BCA Interpretation Notes:**

- Furniture:** Readily moveable furniture has been treated as indicative only. The person/s responsible for furnishing the building (parts) should ensure their furnishing layout/s do not cause AS1428.1 circulation deficiencies.
- Multiple classification:** Where parts have different purposes if not more than 10% of the floor area of a storey, being the minor use, is used for a purpose which is a different classification, the classification applying to the major use may apply to the whole storey.
- Language:** A reference to a building in the BCA is a reference to an entire building or part of a building, as the case requires.

## 2.0 BCA-Technical Review and Commentary

The following table details the compliance status of the architectural design in terms of the prescriptive accessibility provisions of BCA 2022, as are contained within Part D4 and clauses D4D2-D4D13 (inclusive); E3D7 and E3D8; and F4D6-F4D7, and F4D12

The table identifies compliance assessment outcomes into one of four (4) categories, as follows:

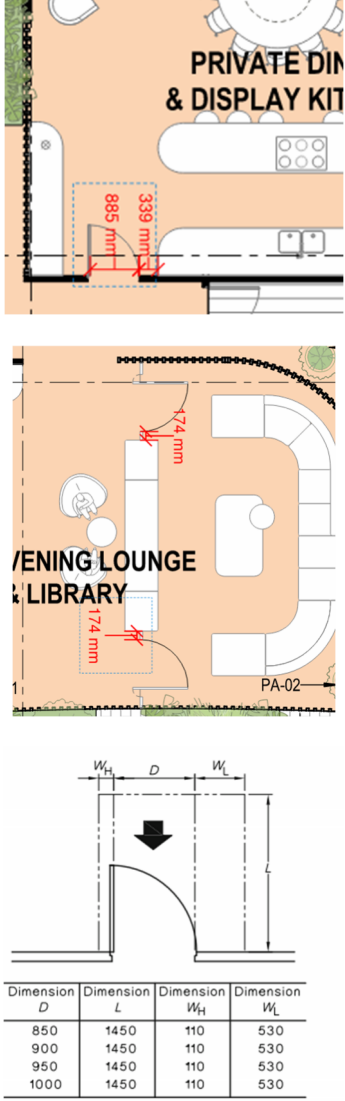
<b>Complies</b>	BCA design compliance is achieved
<b>Does Not Comply</b>	A BCA compliance departure requires rectification. Resolution options are provided.
<b>N/A or Informational</b>	Either not applicable or not directly relevant to the project. Detail provided for information purposes only. No action required.
<b>Design Detail</b>	A detailed commentary is provided within the report. Such instances should not necessarily be considered deficiencies, but matters for consideration by the design team/assessment authority at relevant stages of design.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<b>SECTION D ACCESS &amp; EGRESS</b>					
<b>PART D4 ACCESS FOR PEOPLE WITH A DISABILITY</b>					
D4D1 Deemed-to-Satisfy Provisions [2019: D3.0]			X		Informational clause. (1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements D1P1 to D1P6, D1P8 and D1P9 are satisfied by complying with— (a) D2D2 to D2D23, D3D2 to D3D30 and D4D2 to D4D13; and (b) in a building containing an atrium, Part G3; and (d) for additional requirements for Class 9b buildings, Part I1. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable. (3) Performance Requirement D1P7 must be complied with if lifts are to be used to assist occupants to evacuate a building.
<u>D4D2</u> <u>General building access requirements</u> [2019: D3.1, Table D3.1] Buildings and parts of buildings must be accessible as required by this clause, unless exempted by D4D5.				X	<b>Capable of compliance:</b> -subject to design development to provide additional information, minor design amendments, and or BCA Performance Solution/s as required to achieve compliance with relevant BCA and AS1428.1 requirements, as recommended within this report.  <b>Sole Occupancy Units - calculations</b>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS																		
<p><b>For a Class 2 building,</b> common areas are to be accessible as follows:</p> <p>(a) 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.</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, swimming pool, 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—</p> <p style="padding-left: 20px;">(i) to the entrance doorway of each sole-occupancy unit; and</p> <p style="padding-left: 20px;">(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> <p><b>For a Class 3 building</b></p> <p>(a) Common areas:</p> <p style="padding-left: 20px;">(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.</p> <p style="padding-left: 20px;">(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 service, lunch room, lounge room, or the like.</p>					<p>• A total of 170 hotel Units are provided, and as such a minimum of 8 accessible SOUs are required for the Class 3 Hotel in accordance with BCA Table D4D2b (see below),</p> <p>The development is provided with 10 accessible units to comply with AS1428.1 requirements, which <b>complies</b> with BCA table D4D2(b) calculations.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #333333; color: white;">Total number of sole-occupancy units</th> <th style="background-color: #333333; color: white;">Number required to be accessible</th> </tr> </thead> <tbody> <tr><td>1 to 10</td><td>1</td></tr> <tr><td>11 to 40</td><td>2</td></tr> <tr><td>41 to 60</td><td>3</td></tr> <tr><td>61 to 80</td><td>4</td></tr> <tr><td>81 to 100</td><td>5</td></tr> <tr><td>101 to 200</td><td>5 sole-occupancy units plus 1 additional sole-occupancy unit for each additional 25 units or part thereof in excess of 100.</td></tr> <tr><td>201 to 500</td><td>9 sole-occupancy units plus 1 additional sole-occupancy unit for each additional 30 units or part thereof in excess of 200.</td></tr> <tr><td>More than 500</td><td>19 sole-occupancy units plus 1 additional sole-occupancy unit for each additional 50 units or part thereof in excess of 500.</td></tr> </tbody> </table> <p style="text-align: center; font-weight: bold; color: #003366;">X</p> <p><b>Design requirements – access to and within common areas:</b></p> <p>• Note that BCA D4D2 requires that access for a person with a disability is provided to each type of room or space used in common by the residents. Design development is required to ensure all accessible pathways and doorways are provided with circulation areas to comply with AS1428.1 requirements. The following areas are highlighted, requiring further attention/design development to confirm compliance prior to CC stage:</p> <ul style="list-style-type: none"> <li>Each of the pool-side and landscaped seating pods on Level 33, as highlighted below appear to be a unique type of space, and as such access to and within at least one pool-side and one landscaped seating area is to be provided in accordance with AS1428.1 requirements. Details may be provided at CC stage.</li> </ul>	Total number of sole-occupancy units	Number required to be accessible	1 to 10	1	11 to 40	2	41 to 60	3	61 to 80	4	81 to 100	5	101 to 200	5 sole-occupancy units plus 1 additional sole-occupancy unit for each additional 25 units or part thereof in excess of 100.	201 to 500	9 sole-occupancy units plus 1 additional sole-occupancy unit for each additional 30 units or part thereof in excess of 200.	More than 500	19 sole-occupancy units plus 1 additional sole-occupancy unit for each additional 50 units or part thereof in excess of 500.
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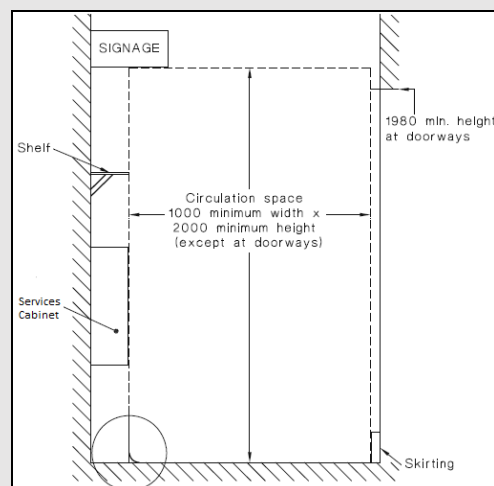
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS																				
<p>(iii) Where a ramp complying with AS 1428.1 or a passenger lift is installed—</p> <p>(A) to the entrance doorway of each sole-occupancy unit; and</p> <p>(B) to and within rooms or 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) Sole-occupancy units — in accordance with Table D4D2b.</p> <p><u>For Class 5, 6, 7b, 8 and 9a buildings</u></p> <p>Access must be provided to and within all areas normally used by the occupants.</p> <p><u>For a Class 7a building.</u></p> <p>Access must be provided to and within any level containing accessible carparking spaces</p> <p><u>For a Class 9b building.</u></p> <p>Access requirements are as follows:</p> <p>(a) Schools and early childhood centres — to and within all areas normally used by the occupants.</p> <p>(b) An assembly building, not being a school or early childhood centre—to and within—</p> <p>(i) wheelchair seating spaces provided in accordance with D4D10; and</p> <p>(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.</p>					<ul style="list-style-type: none"> <li>The fixed joinery at the Private Dining room and Evening Lounge doorways on level 33 is to be amended to provide circulation space at the doorway to comply with AS1428.1 requirements- a minimum 530mm is required, as per Figure 31(h).</li> </ul>  <table border="1" data-bbox="938 1512 1244 1630"> <thead> <tr> <th>Dimension D</th> <th>Dimension L</th> <th>Dimension W<sub>H</sub></th> <th>Dimension W<sub>L</sub></th> </tr> </thead> <tbody> <tr> <td>850</td> <td>1450</td> <td>110</td> <td>530</td> </tr> <tr> <td>900</td> <td>1450</td> <td>110</td> <td>530</td> </tr> <tr> <td>950</td> <td>1450</td> <td>110</td> <td>530</td> </tr> <tr> <td>1000</td> <td>1450</td> <td>110</td> <td>530</td> </tr> </tbody> </table> <p>(h) Front approach, door opens towards user</p> <ul style="list-style-type: none"> <li><u>Doorways:</u> All doors required to be accessible are to be detailed at CC stage to ensure compliance with AS1428.1 Clause 13 requirements including in relation to:                     <ul style="list-style-type: none"> <li>Door sill.</li> <li>Door hardware.</li> <li>Opening force required to operate the door.</li> <li>Luminance contrast.</li> </ul> </li> <li><u>Slip Resistant floor surface/s:</u></li> </ul>	Dimension D	Dimension L	Dimension W <sub>H</sub>	Dimension W <sub>L</sub>	850	1450	110	530	900	1450	110	530	950	1450	110	530	1000	1450	110	530
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BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
					<p>BCA 2022 does not directly specify slip-resistance classification(s) for all accessible paths of travel; however, we highlight the need under AS1428.1-2009 for all accessible paths of travel to have a slip-resistant surface. We recommend you should seek surface finish advice from an independent specialist slip safety consultant.</p> <p><i>The following summary of AS1428.1-2009 requirements for accessways is provided to assist the project team.</i></p>

### Summary of AS1428.1-2009 Requirements for accessways

#### Continuous accessible path of travel –

All paths of travel shall achieve unobstructed heights and widths in accordance with cl. 6 of AS 1428.1 – see diagram below for detail.



#### Doorways / Doors –

- (i) All doorways shall have a minimum luminance contrast of 30% between –
  - door leaf and door jamb;
  - door leaf and adjacent wall;
  - architrave and wall;
  - door leaf and architrave;
  - door jamb and adjacent wall.
- (ii) The minimum width of the area of luminance contrast shall be 50mm,
- (iii) Door hardware should be generally located between 900-1100mm from the floor and be of lever type with a clearance between the handle and the door face at the centre of the handle being not less than 35mm and not more than 45mm in accordance with AS1428.1-2009,
- (iv) Doors shall have a clear opening width of 850mm.
- (v) Door handles and related hardware shall be of the type that allows the door to be unlocked and opened with one hand. The handle shall be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch.
- (vi) 'D' type handles shall be provided on sliding doors.
- (vii) Any snibs shall have a lever handle of a minimum length of 45 mm from the centre of the spindle.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	NA or Informational DOES NOT COMPLY	DESIGN DETAIL	COMMENTS
(viii) For doors (other than fire doors and smoke doors) where a door closer is fitted, the force required at the door handle to operate the door shall not exceed the 20N, (ix) Where an outward opening door is not self-closing, a horizontal handrail or pull bar shall be fixed on the closing face of a side-hung door, (x) The location of controls for doors and gates above a level surface shall be provided as per Clause 13.5.3. (xi) Manual controls for power-operated doors shall be located no closer than 500 mm from an internal corner and between 1000 mm to 2000 mm from the hinged door leaf in any position or clear of a surface-mounted sliding door in the open position. (xii) Push-button controls shall have a minimum dimension of 25 mm diameter and be proud of the surface and shall activate the door before the button becomes level with the surrounding surface.				
<u>Floor or ground surfaces on continuous accessible paths of travel and circulation spaces –</u>				
(i) A continuous accessible path of travel and any circulation spaces shall have a slip-resistant surface. The texture of the surface shall be traversable by people who use a wheelchair and those with ambulant or sensory disability. (ii) Abutment of surfaces shall have a smooth transition. Design transition shall be 0mm, however, construction tolerances are as follows –				<ul style="list-style-type: none"> <li>▪ 0 ±3mm vertical change in level – see Figure 1</li> <li>▪ 0 ±5mm change in level provided the edges have a beveled or rounded edge to reduce the likelihood of tripping – see Figure 2</li> <li>▪ Various tolerances for raked joint pavers – see Figure/s 3a - level surfaces, 3b - irregular surfaces &amp; 3c - domed surfaces.</li> </ul>
			<p style="text-align: center;">Figure 1 <span style="margin-left: 200px;">Figure 2</span></p>	
			<p style="text-align: center;">Figure 3a – For continuous paving units – level surfaces</p>	
<p style="text-align: center;">Figure 3b – For continuous paving units – irregular surfaces</p>				
<p style="text-align: center;">Figure 3c – For continuous paving units – domed surfaces</p>				
(iii) Where carpets or any soft flexible materials are used on the ground or floor surface –				

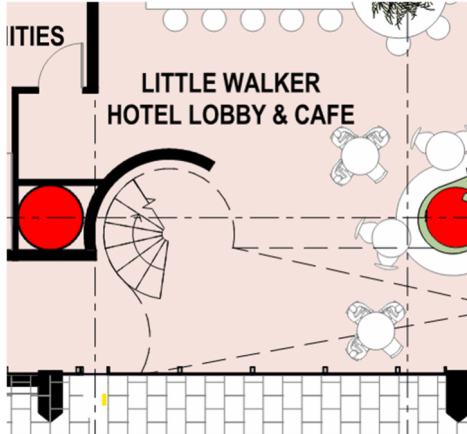


BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<ul style="list-style-type: none"> <li>▪ The pile height or pile thickness, shall not exceed 11mm and the carpet backing thickness shall not exceed 4mm,</li> <li>▪ Exposed edges of floor covering shall be fastened to the floor surface and shall have a trim along the entire length of any exposed edge,</li> <li>▪ At the leading edges, carpet trims and any soft flexible materials shall have a vertical face no higher than 3mm or a rounded beveled edge no higher than 5mm or above that height a gradient of 1:8 up to a total maximum height of 10mm.</li> </ul> <p>(iv) Matting recessed within an accessible path of travel –</p> <ul style="list-style-type: none"> <li>▪ Where of metal and bristle type construction or similar, its surface shall be no more than 3mm if vertical or 5mm if rounded or beveled, above or below the surrounding surface; and</li> <li>▪ Where of a mat or carpet type material, shall have the fully compressed surface level with or above the surrounding surface with a level difference no greater than 3mm if vertical or 5mm if rounded or beveled.</li> </ul> <p><u>Switches and Controls –</u></p> <p>(i) All new switches and controls, other than power points, shall be located not less than 900mm nor more than 1100mm above the finished floor and not less than 500mm from internal corners.</p> <p>Rocker action and toggle switches shall be provided an accordance with Clause 14.2 in accessible residential sole-occupancy units.</p>					
<p><u>D4D3</u></p> <p><u>Access to buildings</u></p> <p>[2019: D3.2]</p> <p>(1) An accessway must be provided to a building required to be accessible—</p> <p>(a) from the main points of a pedestrian entry at the allotment boundary; and</p> <p>(b) from another accessible building connected by a pedestrian link; and</p> <p>(c) from any required accessible carparking space on the allotment.</p> <p>(2) In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and—</p> <p>(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 floor area more than 500 m<sup>2</sup>, a pedestrian entrance which is not accessible must not be located more than 50 m from an accessible pedestrian entrance,</p>				X	<p><u>Capable of compliance:</u></p> <p>-subject to design development to provide additional information, minor design amendments, and or BCA Performance Solution/s as required to achieve compliance with relevant BCA and AS1428.1 requirements, as recommended within this report.</p> <p><b><i>We refer to the AS1428.1-2009 summary at Clause D4D2 to assist the design team with detailed design and/or construction.</i></b></p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<p>except for pedestrian entrances serving only areas exempted by D4D5.</p> <p>(3) Where a pedestrian entrance required to be accessible has multiple doorways—</p> <p>(a) if the pedestrian entrance consists of not more than 3 doorways — not less than 1 of those doorways must be accessible; and</p> <p>(b) if a pedestrian entrance consists of more than 3 doorways — not less than 50% of those doorways must be accessible.</p> <p>(4) For the purposes of (3)—</p> <p>(a) an accessible pedestrian entrance with multiple doorways is considered to be one pedestrian entrance where—</p> <p>(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 accessway 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><b><u>D4D4</u></b></p> <p><b><u>Parts of buildings to be accessible</u></b></p> <p>[2019: D3.3]</p> <p>In a building required to be accessible—</p>				<p>X</p> <p>X</p>	<p><b><u>Capable of compliance:</u></b></p> <p>-subject to design development to provide additional information, minor design amendments, and or BCA Performance Solution/s as required to achieve compliance with relevant BCA and AS1428.1 requirements, as recommended within this report.</p> <p><b><u>Performance Solution Proposed at CC stage:</u></b></p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<p>(a) every ramp and stairway, except for ramps and stairways in areas exempted by D4D5, must comply with—</p> <p>(i) for a ramp, except a fire-isolated ramp, clause 10 of AS 1428.1; and</p> <p>(ii) for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1; and</p> <p>(iii) for a fire-isolated stairway, 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) accessways must have—</p> <p>(i) passing spaces complying with AS 1428.1 at maximum 20 m intervals on those parts of an accessway where a direct line of sight is not available; and</p> <p>(ii) turning spaces complying with AS 1428.1—</p> <p>(A) within 2 m of the end of accessways where it is not possible to continue travelling along the accessway; and</p> <p>(B) at maximum 20 m intervals along the accessway; and</p> <p>(d) an intersection of accessways 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 storey or level other than the entrance storey in a Class 5, 6, 7b or 8 building—</p> <p>(i) containing not more than 3 storeys; and</p> <p>(ii) with a floor area for each storey, excluding the entrance storey, of not more than 200 m<sup>2</sup> 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</p>				X	<p>The spiral stairway located between the Lower Ground and Ground floor Walker Street Lobby is not capable of complying with AS1428.1 requirements.</p> <p>This issue is to be addressed via provision of a suitable BCA <b>Performance Solution</b>, noting that an accessible path of travel is available between the floor levels via the Passenger Lifts.</p>  <p><b>Design requirements</b></p> <ul style="list-style-type: none"> <li>All stairs (other than required fire-isolated stairs) require design development to demonstrate compliance with the relevant requirements of AS1428.1, including provision of handrails on both sides of the stairway, and handrail extensions with complying terminations at all upper and lower landings.</li> </ul> <p>A stairway in the Ground Floor Lobby area is shown below as example, as it is not provided with complying handrails and handrail extensions. It is noted that similar issues occur on common area stairways throughout the development.</p> <p>While handrail details may not be critical at DA stage, it is recommended that all common area stairs are provided with further compliance information, to ensure that provision of handrails and other required details will not create further non-compliances, for example where they may impact on required clearances at doorways, circulation areas, or the clear width of accessways on the transverse path of travel.</p> <p>Typical handrail requirements for non-fire-isolated stairways are provided by AS14281 figure 26(B), as reproduced below.</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
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mm and the carpet backing thickness shall not exceed 4 mm'; and  
 (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.

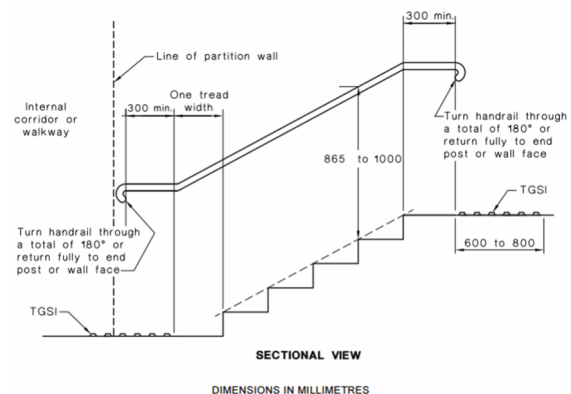
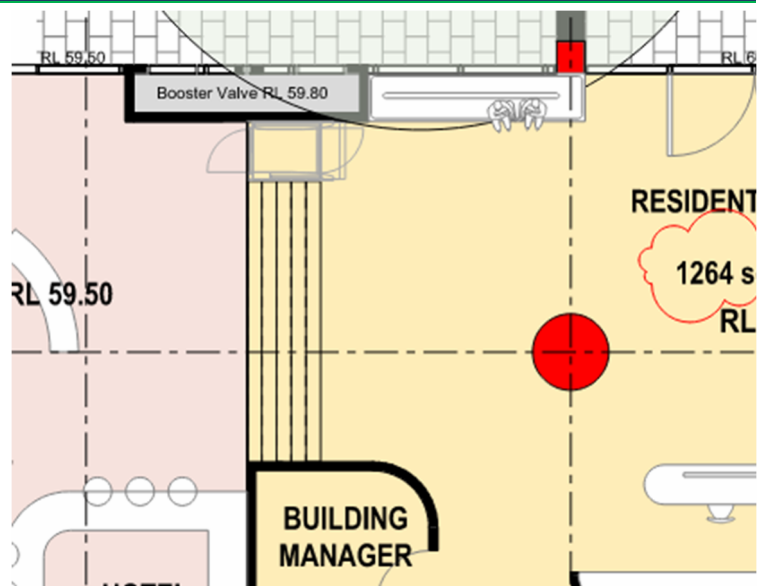


FIGURE 26(B) STAIRWAY LOCATION AND HANDRAIL EXTENSIONS AT END OF STAIRWAY OTHER THAN AT LINE OF BOUNDARY

**Further Information required – CC stage:**

- Further detail of all stairs is required in relation to relevant AS1428.1 requirements, including provision of nosing profiles in accordance with Clause 11.1(e), and provision of luminance contrast strips on each tread in accordance with 11.1(g) requirements. It is noted this information may be detailed or specified at CC stage.
- Further information regarding carpet finishes is required (where provided in common areas), to ensure compliance with this BCA clause. Carpet finish requirements include a maximum pile height of 11mm and backing depth of 4mm. This information may be detailed or specified at CC stage.

X

*The following Clause 10 & Clause 11 summary of AS1428.1-2009 is provided to assist the project team.*

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
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## Summary of AS1428.1-2009; Clause 10 & 11 Requirements (Ramps & Stairs)

### Clause 10.2 – Walkways

Walkways shall comply with the following:

- The floor or ground surface abutting the sides of the walkway shall provide a firm and level surface of a different material to that of the walkway at the same level of the walkway, follow the grade of the walkway and extend horizontally for a minimum of 600 mm unless one of the following is provided:
  - Kerb in accordance with Figure 18.
  - Kerb rail and handrail in accordance with Figure 19.
  - A wall not less than 450 mm in height.
- Landings at top and bottom and at:
  - 25m intervals or less for 1:33,
  - 15m intervals or less for 1:20,
- For walkways shallower than 1 in 33, no landings are required.

### Clause 10.3 – Ramps

Ramps shall comply with the following:

- Max 1:14 gradient for ramps exceeding 1.9m,
- Gradient constant throughout with max. 3% tolerance and max 1:14 gradient,
- Landings at top and bottom and at:
  - 9m intervals or less for 1:14,
  - 15m intervals or less for 1:20,
- Change in direction to have 90° angle of approach as per Figure 13,
- Handrails on each side as per Clause 12,
- Set back min. 900mm from boundary,
- Intersections at internal corridors to be set back min. 0.4m,
- Handrails to extend min. 300mm horizontally past transition point at top and bottom, except where inner handrail is continuous at intermediate landings,
- Kerbs and kerb rails on both sides at min. height of 65mm, not be between 75mm and 150mm high and have no gaps or slots greater than 20mm within the range of 75mm to 150mm,
- Kerbs and kerb rails to be located so that ramp-side face is either flush or no greater than 100mm away from handrail (Figure 19), min. 150mm high if handrails has vertical posts (Figure 19 a, b, c), and be min. 200mm between 65mm-75mm kerb to support posts (Figure 19 d).

### Clause 10.5 - Threshold ramps

- Threshold ramps at doorways to have a max. rise of 35mm, max length of 280mm, max gradient of 1:8 and be located within 20mm of the door leaf.
- Edges of the threshold ramp shall be tapered or splayed at max 45° if not abutting a wall.

### Clause 10.6 - Step ramps

- Step ramps shall have max. rise of 190mm, max. length of 1.9m, max. gradient of 1:10.
- Edges of the step ramp to have 45° splay where there is pedestrian traffic or otherwise be protected by suitable barrier such as a min. 450mm wall or kerb / kerb rail with open balustrade.
- Step ramps to have slip-resistant surfaces.

### Clause 10.8 - Landings

Landings for walkways (up to 1:33) and ramps shall comply with one of the following:

- min. 1.2m if no change in direction as per Figure 25(A),

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<ul style="list-style-type: none"> <li>min. 1.5m where change in direction not exceeding 90° internal corner to be truncated for min. 500mm in both directions as per Figure 25(B),</li> <li>180° turn, landing as per Figure 25(C).</li> <li>Landings for step ramps shall be min. 1.2m in length as per Figure 22(A) and (B). Where a change in direction, the length of the step ramp landing to be min. 1.5m as per Figure 22(A). At doorways, landings as per Clause 13.3 for circulation spaces at doorways shown in Figure 25(D).</li> <li>Landings at kerb ramps shall be min. 1.2m in length, or 1.5m X 2.0m at 'T' junctions. Where a single change in direction is required, landings to be min. 1.5m X 1.5m.</li> </ul>					
<p><u>Clause 11.1 - Stair construction</u></p>					
<p>Stairs to be constructed as follows:</p>					
<ul style="list-style-type: none"> <li>Set back min. 0.9m from boundary,</li> <li>Where intersection is at an internal corridor, the stair to be set back as per Figure 26(A),</li> <li>Have opaque risers,</li> <li>Nosings shall not project beyond the face of the riser and the riser may be vertical of 25mm backwards splay,</li> <li>Nosing profiles to have a sharp intersection, be rounded up to 5mm radius or be chamfered up to 5mm x 5mm,</li> <li>50mm – 75mm strip to full length of nosing, set back a max. 15mm from the front of the nosing, with a 30% min. luminance contrast. If not set back, luminance contrast to extend down the riser by max 10mm.</li> <li>TGSIs installed as per AS1428.4.1.</li> </ul>					
<p><u>Clause 11.2 - Stairway handrails</u></p>					
<p>Handrails to be continuous throughout the stair flight and around landings and have no obstructions 0.6m above, and as follows:</p>					
<ul style="list-style-type: none"> <li>Design &amp; construction as per Clause 12,</li> <li>Installed both sides,</li> <li>No vertical sections and shall follow angle of the stairway nosings,</li> <li>Extend at bottom of stairs one stair tread depth and min. 300mm horizontally, (300mm extension not required if handrail is continuous,</li> <li>Dimensions of heights of handrails taken vertically from the nosing or landing to the top of the handrail.</li> </ul>					
<p><u>Clause 12 - Handrails</u></p>					
<p>Design and construction to comply with:</p>					
<ul style="list-style-type: none"> <li>Handrails and balustrades shall not encroach into required circulation,</li> <li>Circular or elliptical cross-section, not less than 30mm or more than 50mm for more than 270°. Elliptical handrails to have greater horizontal dimensions,</li> <li>Exposed edges or corners have min. radius of 5mm,</li> <li>Top of handrail to be between 865mm and 1.0m above nosing or landing,</li> <li>Height to be constant throughout,</li> <li>If balustrade is required at a height greater than the handrail, both shall be provided,</li> <li>Handrails to be securely fixed and rigid with ends turned through a total of 180°, or to the ground, or returned fully to end post or wall face (Figures 26 C and D),</li> <li>Min. 50mm clearance to adjacent wall or other obstruction, for a height of 600mm,</li> <li>Handrails to have no obstructions to the passage of a hand along the rail,</li> </ul>					
<p>Inside handrail at landings to always be continuous as per Figure 28(a).</p>					
<p><u>D4D5</u> <u>Exemptions</u> [2019: D3.4]</p>			X		<p>Exemptions are to be reviewed on a case-by-case basis and when detailed design is achieved. The following parts of the building have been offered access exemption in accordance with D4D5 provisions</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<p>The following areas are not required to be accessible:</p> <p>(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.</p> <p>(c) Any path of travel providing access only to an area exempted by (a) or (b).</p>					<ul style="list-style-type: none"> <li>Electrical rooms.</li> <li>Plant &amp; equipment rooms.</li> <li>Fire control rooms.</li> <li>Service rooms.</li> <li>Commercial Kitchen.</li> <li>Heavy goods loading and handling areas.</li> <li>Other areas restricted for use by staff members who would not include people with a disability, due to the nature of their activities. This includes cleaners, luggage handlers, and maintenance staff.</li> </ul>
<p><b>D4D6</b></p> <p><b><u>Accessible carparking</u></b> [2019: D3.5, Table D3.5]</p> <p>Accessible carparking spaces complying with AS2890.6-2009 must be provided in accordance with DD6 requirements:</p> <p>(1) Accessible carparking spaces—</p> <p>(a) subject to (b), must be provided in accordance with (2) in—</p> <p>(i) a Class 7a building required to be accessible; and</p> <p>(ii) a carparking area on the same allotment as a building required to be accessible; 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 spaces, so as to restrict the use of the carparking space only for people with a disability.</p> <p>(2) For each Class of building to which the carpark or carparking area is associated, the number of</p>				<p>X</p> <p>X</p>	<p><b><u>Capable of compliance:</u></b></p> <p>-subject to design development to provide additional information, as required to demonstrate compliance with relevant BCA and AS2890.6 requirements</p> <p>Note that accessible carparking is to be provided in sufficient quantity to service each Class of Building in the development and as follows:</p> <ul style="list-style-type: none"> <li><b><u>Adaptable Housing</u></b> An accessible space to comply with either AS4288 Private Carparking OR AS2890.6 requirements is to be provided for each SOU required to meet AS4299 Essential Class C requirements. The Accessible space is to be designated per unit (shared parking facilities may not be provided).</li> <li><b><u>Accessible Hotel Accommodation</u></b> An accessible parking space is to be provided for the Hotel accessible SOUs, in accordance with D4D6. 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</li> <li><b><u>Class 6 building— (restaurant)</u></b> 1 accessible space for every 50 carparking spaces or part thereof is to be provided.</li> </ul> <p><b>Further information</b> is required to confirm the quantity of spaces provided, and the designated space relative to each Building Class are to be nominated on plans.</p> <p><b><u>Design Requirements:</u></b></p> <p>Accessible car parking spaces are to comply with the requirements of AS2890.6-2009, including:</p> <p><b><u>Provision of shared area with bollard</u></b></p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<p>accessible carparking spaces required is as follows:</p> <p>(a) Class 1b and 3 buildings:</p> <p>(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 —</p> <p>(A) accessible sole-occupancy units to the total number of sole-occupancy units; or</p> <p>(B) accessible bedrooms to the total number of bedrooms.</p> <p>(ii) For the purposes of (i), the calculated number is taken to the next whole figure.</p> <p>(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.</p> <p>(b) Class 5, 7, 8 or 9c buildings — 1 accessible space for every 100 carparking spaces or part thereof.</p> <p>(c) Class 6 buildings—</p> <p>(i) with up to 1000 carparking spaces — 1 accessible space for every 50 carparking spaces or part thereof; and</p> <p>(ii) for each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces — 1 accessible space.</p> <p>(d) Class 9a buildings:</p> <p>(i) For a hospital (non-outpatient area) — 1</p>					<ul style="list-style-type: none"> <li>A bollard shall be provided at the centre of the shared zone and set back 800mm ±50mm from the front of the space.</li> </ul> <p><u>Parking Space delineation</u></p> <ul style="list-style-type: none"> <li>A symbol of access to the accessible car parking space should be provided in accordance with AS2890.6 requirements. The symbol must be set back 500 mm – 600 mm from the entry point of the space, and include a white symbol of access between 800-1000mm high, in accordance with Clause 3.1 of AS 2890.6-2009.</li> <li>Pavement markings are to be provided to identify the dedicated parking space and the shared areas, as well as any vacant non-trafficked areas in accordance with AS2890.6 Clause 3.2 <i>Space Delineation</i> requirements.</li> </ul> <p><u>Headroom</u></p> <ul style="list-style-type: none"> <li>The path of vehicular travel from the car park entrance to all parking spaces for people with disabilities and from those spaces to the car park exit shall have a minimum headroom of 2200 mm.</li> <li>The headroom above each dedicated space and adjacent shared area, measured from the level of the dedicated space shall be a minimum of 2500 mm, as per AS2890.6 Clause 2.4 requirements.</li> </ul> <p><i>The following summary of the requirements of AS2890.6 are provided to assist the design team during detailed design &amp;/or construction.</i></p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<p>accessible space for every 100 carparking spaces or part thereof.</p> <p>(ii) For a hospital (outpatient area)—</p> <p>(A) with up to 1000 carparking spaces — 1 accessible 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 accessible space.</p> <p>(iii) For a nursing home — 1 accessible space for every 100 carparking spaces or part thereof.</p> <p>(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> <p>(e) Class 9b buildings:</p> <p>(i) For a school — 1 accessible space for every 100 carparking spaces or part thereof.</p> <p>(ii) For other assembly buildings—</p> <p>(A) with up to 1000 carparking spaces — 1 accessible 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 accessible space</p>					

### Summary of AS2890.6-2009

#### Clause 2.3 – Pavement slope & surface

- Accessible parking space and shared zones are to have a firm plane surface with a fall not exceeding 1:40 in any direction (1:33 if the surface is a bituminous seal and the parking space is out of doors).
- These areas shall have a slip-resistant surface.

#### Clause 2.4 – Headroom

- The path of vehicular travel from the car park entrance to all accessible parking spaces and from those spaces to the car park exit shall have a minimum headroom of 2,200 mm.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<ul style="list-style-type: none"> <li>The headroom above each dedicated space and adjacent shared area, measured from the level of the dedicated space shall be a minimum of 2,500 mm. For an angle parking space the headroom of the front of the space and its adjacent shared area may be reduced to lie within the profile shown in Figure 2.7.</li> </ul>					
<p><u>Clause 3.1 – Space identification</u></p>					
<p>Each dedicated space shall be identified by means of a white symbol of access in accordance with AS 1428.1 between 800 mm and 1,000 mm high placed on a blue rectangle with no side more than 1,200 mm, placed as a pavement marking in the centre of the space between 500 mm and 600 mm from its entry point as illustrated in Figure 3.1.</p>					
<p><u>Clause 3.2 – Space delineation</u></p>					
<ul style="list-style-type: none"> <li>Pavement markings specified in Items (a) and (b) of this Clause shall be yellow and shall have a slip resistant surface. Raised pavement markers shall not be used for space delineation.</li> <li>Pavement markings shall be provided as follows:                             <ul style="list-style-type: none"> <li>(a) Dedicated parking spaces shall be outlined with unbroken lines 80 to 100 mm wide on all sides excepting any side delineated by a kerb, barrier or wall.</li> <li>(b) Shared areas shall be marked as follows:                                     <ul style="list-style-type: none"> <li>(i) Walkways within or partly within a shared area shall be marked with unbroken longitudinal lines on both sides of the walkway excepting any side delineated by a kerb, barrier or wall.</li> <li>(ii) Other vacant non-trafficked areas, which may be intentionally or unintentionally obstructed (e.g. by unintended parking), shall be outlined with unbroken lines 80 to 100 mm wide on all sides excepting any side delineated by a kerb, barrier or wall, and marked with diagonal stripes 150 to 200 mm wide with spaces 200 mm to 300 mm between stripes. The stripes shall be at an angle of 45 ±10 degrees to the side of the space.</li> </ul> </li> </ul> </li> </ul>					
<p>No shared area markings shall be placed in trafficked areas.</p>					
<p><u>D4D7</u></p> <p><u>Signage</u></p> <p>[2019: D3.6]</p> <p>(1) In a building required to be accessible—</p> <p>(a) braille and tactile signage complying with Specification 15C2 must—</p> <p>(i) incorporate the international symbol of access or deafness, as appropriate, in accordance with AS 1428.1 and identify each—</p> <p>(A) sanitary facility, except a sanitary facility associated with a bedroom in a Class 1b building or a sole-occupancy unit in a Class 3 or Class 9c building; and</p> <p>(B) space with a hearing augmentation system; and</p> <p>(ii) identify each door required by E4D5 to be provided with an exit sign and state—</p> <p>(A) “Exit”; and</p>			X	<p><u>Design Requirements:</u></p> <p>Accessible signage shall be installed in this project as necessary, but shall include as a minimum:</p> <ul style="list-style-type: none"> <li>Identify each door required by Clause E4.5 to be provided with an exit sign and state “<b>Exit</b>” and “<b>Level</b>” followed by the floor number, as includes braille and tactile signage;</li> <li>Signage in accordance with AS1428.1 must be provided to identify Ambulant sanitary facilities and unisex Accessible sanitary facilities. Signage to unisex Accessible sanitary facilities is required to identify left or right handed use;</li> <li>Directional signage is to be provided where a bank of sanitary facilities are not provided with an accessible sanitary facility.</li> <li>Directional signage is to be provided where a pedestrian entrance is not accessible, indicating the location of accessible Entry/s.</li> <li>Any space in a Class 9b part of the development provided with a Hearing Augmentation system is to be identified with complying signage identifying the area covered, the type of hearing augmentation system provided, and if receivers are being used and where the receivers can be obtained.</li> </ul> <p><i>All signage is to be design detailed to comply with the relevant requirements of Specification 15. In this regard, the following Specification 15 summary is provided to assist the project team.</i></p>	

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<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 accessible 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 accessible sanitary facility in accordance with AS 1428.1 must be located on the door of the facility; and</p> <p>(e) where a pedestrian entrance is not accessible, 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 accessible pedestrian entrance; and</p> <p>(f) where a bank of sanitary facilities is not provided with an accessible unisex sanitary facility, directional signage incorporating the international symbol of access in accordance with AS1428.1 must be placed at the location of the sanitary facilities that are not accessible, to direct a person to the location of the nearest accessible unisex sanitary facility.</p> <p>(2) In a building that is subject F4D12 and is required to be</p>					

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<p>accessible, directional signage complying with Specification 15 to direct a person to the location of the nearest accessible adult change facility within that building must be provided at the location of each—</p> <p>(a) bank of sanitary facilities; and</p> <p>(b) accessible unisex sanitary facility, other than one that incorporates an accessible adult change facility.</p>					

### Summary of Specification 15; Braille and tactile signs

#### S15C2 – Location of braille and tactile signs

Signage must be designed and installed as follows:

- Braille and tactile components located not less than 1.2m or greater than 1.6m;
- Single line signs to have tactile characters not less than 1.25m or greater than 1.35m;
- Signs identifying room features or facilities located on wall on the latch side of the door with edge of sign 50mm to 300mm from the architrave (or on the door itself if not possible to have adjacent).
- Signs identifying a door required by E4.5 to be provided with an exit sign, must be located on the side that faces a person seeking egress, and on the wall on the latch side of the door with the leading edge of the sign located between 50mm and 300mm from the architrave (or on the door itself if not possible adjacent).

#### S15C3 – Braille and tactile sign specification

- Tactile characters to be raised or embossed to a height between 1mm and 1.5mm;
- Sentence case must be used, with 15mm to 50mm high characters for capitals and 50% high for the lower case;
- Tactile characters, symbols and the entire sign / frame to have rounded edges;
- The entire sign including characters, background, negative space or fill of signs to be matt or low gloss finish;
- Min. letter spacing to be 2mm;
- Min. word spacing to be 10mm;
- Thickness of letter strokes between 2mm and 7mm and of Arial typeface;
- Tactile text to be left justified (excluding single words).

#### S15C4 – Luminance contrast

- Background, negative space and fill to be min. 30% luminance contrast to the mounted surface,
- Tactile characters icons & symbols to be min 30% luminance contrast to the background or mount surface,
- Luminance contrasts must be met under the lighting conditions of its surrounds.

#### S15C5 – Lighting

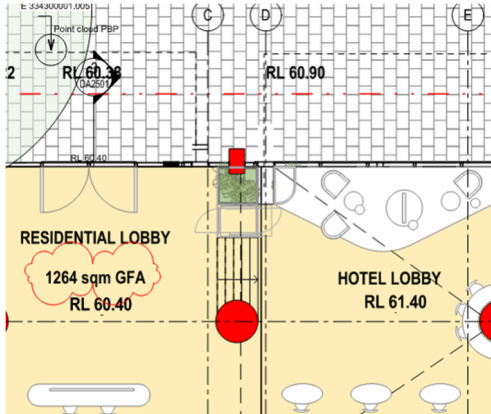
Braille and tactile signs must be illuminated to ensure luminance contrast requirements are met at all times during which the sign is required to be read.

#### S15C6 – Braille

- Grade 1 braille (uncontracted) as per Australian Braille Authority,
- Raised and domed, and left justified,
- Located 8mm below bottom line of text,
- Solid arrow, if arrow provided,

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
On signs with multiple lines, semicircular braille locator at the left margin must be horizontally aligned with the first line of braille text.					
<p><b><u>D4D8</u></b></p> <p><b><u>Hearing augmentation</u></b></p> <p>[2019: D3.7]</p> <p>(1) A hearing augmentation system must be provided where an inbuilt amplification system, other than one used only for emergency warning, is installed—</p> <p>(a) in a room in a Class 9b building; or</p> <p>(b) in an auditorium, conference room, meeting room or room for judicatory purposes; or</p> <p>(c) at any ticket office, teller's booth, reception area or the like, where the public is screened from the service provider.</p> <p>(2) If a hearing augmentation system required by (1) is—</p> <p>(a) an induction loop, it must be provided to not less than 80% of the floor area of the room or space served by the inbuilt amplification system; or</p> <p>(b) a system requiring the use of receivers or the like, it must be available to not less than 95% of the floor area of the room or space served by the inbuilt amplification system, and the number of receivers provided must not be less than—</p> <p>(i) if the room or space accommodates up to 500 persons, 1 receiver for every 25 persons or part thereof, or 2 receivers, whichever is the greater; and</p> <p>(ii) if the room or space accommodates more than 500 persons but not more than 1000 persons, 20 receivers plus 1 receiver for every 33 persons or part thereof in excess of 500 persons; and</p> <p>(iii) if the room or space accommodates more than</p>			X		<p><b><u>Not Applicable:</u></b></p> <ul style="list-style-type: none"> <li>This assessment s based on the understanding that an in-built amplification system or screen capable of displaying public announcements is not to be installed in any room of the building, and that no reception area is to be provided with a screen.</li> </ul>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<p>1000 persons but not more than 2000 persons, 35 receivers plus 1 receiver for every 50 persons or part thereof in excess of 1000 persons; and</p> <p>(iv) if the room or space accommodates more than 2000 persons, 55 receivers plus 1 receiver for every 100 persons or part thereof in excess of 2000 persons.</p> <p>(3) The number of persons accommodated in the room or space served by an inbuilt amplification system must be calculated according to D2D18.</p> <p>(4) Any screen or scoreboard associated with a Class 9b building and capable of displaying public announcements must be capable of supplementing any public address system, other than a public address system used for emergency warning purposes only.</p>					
<p><b>D4D9</b></p> <p><u>Tactile indicators</u></p> <p>[2019: D3.8]</p> <p>(1) For a building required to be accessible, tactile ground surface indicators must be provided to warn people who are blind or have a vision impairment that they are approaching—</p> <p>(a) a stairway, other than a fire-isolated stairway; and</p> <p>(b) an escalator; and</p> <p>(c) a passenger conveyor or moving walk; and</p> <p>(d) a ramp other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp; and</p> <p>(e) in the absence of a suitable barrier—</p>				X	<p><b><u>Capable of compliance:</u></b></p> <p>subject to design development to provide additional information, minor design amendments, and or BCA Performance Solution/s as required to achieve compliance with relevant BCA and AS1428.4.1 requirements, as recommended within this report.</p> <p><b><u>Design requirements:</u></b></p> <ul style="list-style-type: none"> <li>TGSI's are to be provided and detailed as per AS 1428.4.1: 2009, including for the following:             <ul style="list-style-type: none"> <li>At any overhead obstruction less than 2m above floor level.</li> <li>To the top and bottom landing of all stairways, escalators, and ramps, other than fire-isolated stairways in accordance with AS1428.4.1 Clause 2.4 requirements and as shown by Figures 2.2(A), 2.2(B), 2.3(A), 2.3(B) and 2.4 of the Standard.</li> <li>To delineate a pedestrian area from a vehicle carriageway, where they are on the same level.</li> </ul> </li> <li>TGSI specifications are required to ensure appropriate luminance contrast can be achieved. Note that integrated ground surface indicators are required by AS1428.4.1-2009</li> </ul>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<p>(i) an overhead obstruction less than 2 m above floor level, other than a doorway; and</p> <p>(ii) an accessway 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 required 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 residential aged care building, Class 3 accommodation for the aged, Class 9a health-care building or a Class 9c aged care building 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.</p>					<p>clause 2.2(b)(i), to have a luminance contrast to the base surface of not less than 30%, or where discreet indicators are used, the luminance contrast shall be at least 45%, as per clause 2.2(b)(ii).</p> <ul style="list-style-type: none"> <li>All common stairways, other than fire-isolated stairways, are to be provided with TGSIs to comply with AS1428.4.1 at the upper and lower landings.</li> </ul> <p>A stairway at the Ground Floor Residential Lobby is shown below as example, however it is noted a similar issue occurs in related locations throughout the building. Further information is required to document TGSIs to comply with AS1428.4.1 requirements at common area stairways throughout.</p> <p>Refer to AS1428.4.1 Figure 2.3(A) for typical TGSI requirements at stairways.</p> 
<p><b>D4D10</b></p> <p><b>Wheelchair seating spaces in Class 9b assembly buildings</b></p> <p>[2019: D3.9]</p> <p>Where fixed seating is provided in a Class 9b assembly building, wheelchair seating spaces complying with AS 1428.1 must be provided in accordance with the following:</p> <p>(a) The number and grouping of wheelchair seating spaces must be in accordance with Table D4D10.</p> <p>(b) In a cinema—</p> <p>(i) with not more than 300 seats — wheelchair seating</p>			X		<p>Not Applicable – no fixed wheelchair seating to a Class 9b building is proposed.</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<p>spaces must not be located in the front row of seats; and</p> <p>(ii) with more than 300 seats — not less than 75% of required wheelchair seating spaces must be located in rows other than the front row of seats</p>					
<p><b><u>D4D11</u></b></p> <p><b><u>Swimming pools</u></b></p> <p>[2019: D3.10]</p> <p>(1) Not less than 1 means of accessible water entry/exit in accordance with Specification 16 must be provided for each swimming pool required by D4D2 to be accessible.</p> <p>(2) An accessible entry/exit must be by means of—</p> <p>(a) a fixed or movable ramp and an aquatic wheelchair; or</p> <p>(b) a zero depth entry and an aquatic wheelchair; or</p> <p>(c) a platform swimming pool lift and an aquatic wheelchair; or</p> <p>(d) a sling-style swimming pool lift.</p> <p>(3) Where a swimming pool has a perimeter of more than 70 m, at least one accessible water entry/exit must be provided by a means specified in (2)(a), (b) or (c).</p> <p>(4) Latching devices on gates and doors forming part of a swimming pool safety barrier need not comply with AS 1428.1.</p>	X				<p><b><u>Complies</u></b></p> <p>The following summary of BCA Specification 16 is provided to assist the design team during design development and/or construction stages.</p>

**Summary of Specification 16; Accessible water entry/exit for swimming pools**

Numerous compliance options are available for accessible water entry/exit, as follows –

**Fixed or moveable Ramp – Must have:**

- a slip-resistance surface;
- maximum gradient of 1:14;
- handrails and kerbs complying with requirements for ramps in AS1428.1 installed both sides of the ramp;
- extend to a depth of 900-1100mm below the stationary water level;
- have landings in accordance with the requirements for ramps in AS1428.1, with a landing located at the bottom and top of each ramp and located between 900mm and 1100mm below the stationary Water level.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	NA or Informational DOES NOT COMPLY	DESIGN DETAIL	COMMENTS
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Zero Depth Entry – Must have:

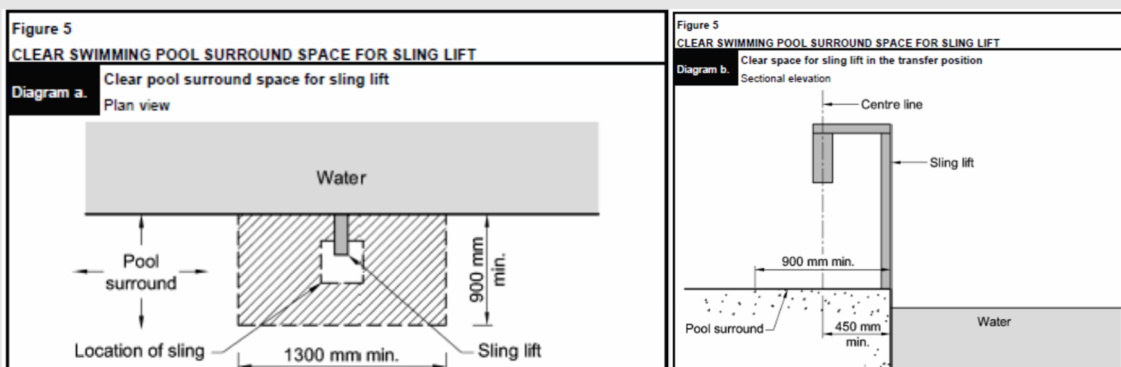
- a slip-resistance surface;
- maximum gradient of 1:14;
- a single handrail complying with requirements for ramps in AS1428.1, from the top of the entry point continuous to the bottom level area;
- a level area 1500mm long for the width of the zero depth entry at the entry point; and at the bottom of the zero depth entry at a level between 900mm – 1100mm below the stationary water level.

Platform Swimming Pool Lift – Must be:

- capable of being operated from the swimming pool surround, within the swimming pool, and on the platform;
- located where the water depth is not more than 1300mm;
- designed to withstand a weight capacity of not less than 160kg and be capable of sustaining a static load of not less than 1.5 times the rated load.

Sling Style swimming pool lift – Must comply with the following:

- must be located where the water depth is not more than 1300 mm;
- When the sling is in the raised position and in the transfer position, the centreline of the sling must be located over the *swimming pool* surround and not less than 450 mm from the *swimming pool* edge.
- The surface of the *swimming pool* surround between the centreline of the sling and the *swimming pool* edge must have a gradient of not more than 1:50 and must be slip-resistant;
- a clear space—
  - (i) not less than 900 mm x 1300 mm; and
  - (ii) with a gradient of not more than 1:50; and
  - (iii) having a slip-resistant surface; and
  - (iv) located so that the centreline of the space is directly below the lifting point for the sling, must be provided on the *swimming pool* surround parallel with the *swimming pool* edge on the side remote from the water (see Figures 5a and 5b below);
- when a sling lift must be capable of being operated from the *swimming pool* surround, within the *swimming pool* and from the sling;
- a sling must be designed so that it will submerge to a water depth of not less than 500 mm below the stationary water level;
- a sling lift must be designed to withstand a weight of not less than 136 kg and be capable of sustaining a static load not less than 1.5 times the rated load.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<p><b>D4D12</b> <b>Ramps</b> [2019: D3.11]</p> <p>On an accessway— (a) a series of connected ramps must not have a combined vertical rise of more than 3.6 m; and (b) a landing for a step ramp must not overlap a landing for another step ramp or ramp.</p>	X				<p><b>Complies.</b></p> <p>The proposal does not include provision of a series of connected ramps with a vertical rise of more than 3.6m.</p> <p>No step ramps with overlapping landings are proposed.</p>
<p><b>D4D13</b> <b>Glazing on an accessway</b> [2019: D3.12]</p> <p>On an accessway, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS 1428.1.</p> <p>The contrasting line shall be not less than 75mm wide and shall extend across the full width the glazing panel. The lower edge of the contrasting line shall be located between 900mm and 1000mm above the plane of the finished floor level.</p> <p>Any contrasting line on the glazing shall provide a minimum of 30% luminance contrast when viewed against the floor surface or surfaces within 2m of the glazing on the opposite side.</p>				<p>X</p> <p>X</p>	<p><b>Capable of compliance.</b></p> <p>subject to provision of suitable details and specifications at CC stage.</p> <p><b>Design requirements:</b></p> <ul style="list-style-type: none"> <li>All glazed doors and sidelights must be clearly marked for their full width with a solid non-transparent line, not less than 75mm wide and located 900-1000mm AFFL, in accordance with AS1428.1 Clause 6.6 requirements. This requirement applies to any door or glazing that is capable of being mistaken for a doorway or opening. Details of compliance should be provided at CC stage.</li> </ul>
<b>SECTION E SERVICES AND EQUIPMENT</b>					
<b>PART E3 LIFT INSTALLATIONS</b>					
<p><b>E3D1</b> <b>Deemed-to-Satisfy Provisions</b> [2019: E3.0]</p>				X	<p>(1) Where a <i>Deemed-to-Satisfy Solution</i> is proposed, <i>Performance Requirements</i> E3P1 to E3P4 are satisfied by complying with—</p> <p>(a) E3D2 to E3D12; and</p> <p>(b) for a building containing an occupiable outdoor area, Part G6; and</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
					(2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
<p><b>E3D7</b>  <u>Passenger lift types and their limitations</u>            [2019: E3.6, Table E3.6a, Table E3.6b]</p> <p>(1) In an accessible building, every passenger lift must be one of the following lift types, subject to the limitations (if any) of each lift type:</p> <p>(a) There are no limitations on the use of electric passenger lifts, electrohydraulic passenger lifts or inclined lifts.</p> <p>(b) Stairway platform lifts must not—</p> <p>(i) be used to serve a space in a building accommodating more than 100 persons calculated according to D2D18; or</p> <p>(ii) be used in a high traffic public use area such as a theatre, cinema, auditorium, transport interchange, shopping centre or the like; or</p> <p>(iii) be used where it is possible to install another type of passenger lift; or</p> <p>(iv) connect more than 2 storeys; or</p> <p>(v) where more than 1 stairway lift is installed, serve more than 2 consecutive storeys; or</p> <p>(vi) when in the folded position, encroach on the minimum width of a stairway required by D2D8 to D2D11.</p> <p>(c) A low-rise platform lift must not travel more than 1000 mm.</p> <p>(d) A low-rise, low-speed constant pressure lift must not—</p> <p>(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>	X				<p><b><u>Complies:</u></b></p> <p>The proposed passenger Lifts are readily capable of complying with BCA E3D7 and AS1735.12 requirements.</p> <p>Refer to commentary below in section E3D8 of this report.</p>

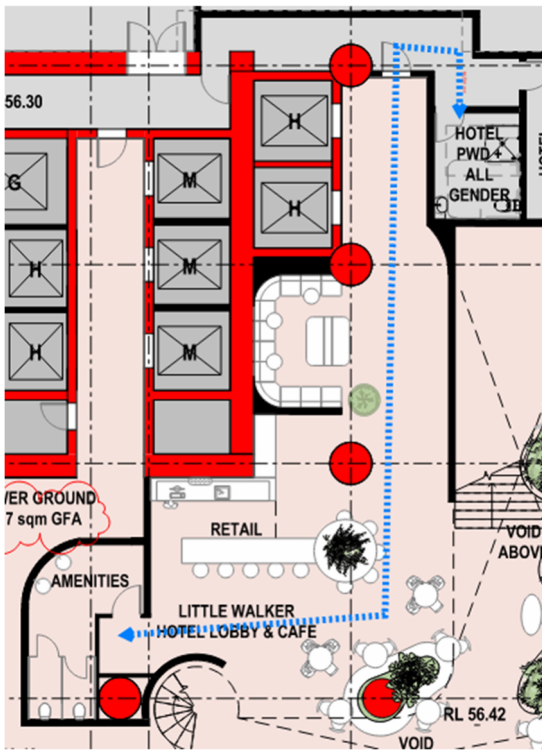
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<p>(iii) be used in a high traffic public use areas in buildings such as a theatre, cinema, auditorium, transport interchange, shopping complex or the like.</p> <p>(e) A small-sized, low-speed automatic lift 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>					
<p><b>E3D8</b></p> <p><b><u>Accessible features required by passenger lifts</u></b></p> <p>[2019: Table E3.6a, Table E3.6b]</p> <p>In an accessible building, every passenger lift must have the following features where applicable:</p> <p>(a) A handrail complying with the provisions for a mandatory handrail in AS 1735.12 for all lifts except—</p> <ul style="list-style-type: none"> <li>(i) a stairway platform lift; and</li> <li>(ii) a low-rise platform lift.</li> </ul> <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 stairway platform lift.</p> <p>(d) Lift floor dimensions of not less than 810 mm wide x 1200 mm deep for a stairway platform lift.</p> <p>(e) Minimum clear door opening complying with AS 1735.12 for all lifts except a stairway platform lift</p> <p>(f) Passenger protection system complying with AS 1735.12 for all lifts with power-operated doors.</p>				<p>X</p>	<p><b><u>Capable of compliance</u></b></p> <p>The proposed Passenger Lifts are readily capable of complying with E3D8 and AS1735.12 requirements, subject to provision of specifications and installations at construction stage.</p> <p><b>A design compliance certificate is to be obtained from the lift designer to confirm the installed lifts comply with all relevant provisions BCA E3D8 and Australian Standard AS1735.12.</b></p> <p><b><u>Design requirements</u></b></p> <p>As per BCA E3D7 and AS1735.12 requirements, the proposed passenger lifts shall have the following features –</p> <ul style="list-style-type: none"> <li>(i) Handrail complying with the mandatory handrail provisions of AS1735.12,</li> <li>(ii) Lift floor dimensions not less than 1,400mm x 1,600mm as the lifts vertical travel are greater than 12m, or Lift floor dimensions not less than 1,100mm x 1,400mm as the vertical travel is not more than 12m,</li> <li>(iii) Minimum clear door opening complying with AS1735.12,</li> <li>(iv) Passenger protection system complying with AS1735.12,</li> <li>(v) Lift landing doors at the upper landing,</li> <li>(vi) Lift car and landing control buttons complying with AS1735.12,</li> <li>(vii) Lighting in accordance with AS1735.12,</li> <li>(viii) Lifts serving more than 2 Levels –             <ul style="list-style-type: none"> <li>▪ Automatic audible information within the lift car to indicate the level each time the lift car stops;</li> <li>▪ audible and visual indication at each lift landing to indicate the arrival of the lift car;</li> <li>▪ audible information and audible indication is to be provided in a range of between 20-80dB(A) at a maximum frequency of 1500Hz;</li> </ul> </li> <li>(ix) 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.</li> </ul>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<p>(g) Lift landing doors at the upper landing for all lifts except a stairway platform lift.</p> <p>(h) Lift car and landing control buttons complying with AS 1735.12 for all lifts except—</p> <ul style="list-style-type: none"> <li>(i) a stairway platform lift; and</li> <li>(ii) a low-rise platform lift.</li> </ul> <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—</p> <ul style="list-style-type: none"> <li>(i) automatic audible information within the lift car to identify the level each time the car stops; and</li> <li>(ii) audible and visual indication at each lift landing to indicate the arrival of the lift car; and</li> <li>(iii) audible information and audible indication required by (i) and (ii) is to be provided in a range of between 20 - 80 dB(A) at a maximum frequency of 1500 Hz.</li> </ul> <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 stairway platform lift.</p>					<p>Stretcher facility requirements through BCA Clause E3.2 can cause lift car size requirements greater than that listed above. See BCA Report for detail.</p> <p>A design compliance certificate should be obtained from the lift designer to confirm compliance with the relevant provisions of the BCA and Australian Standards.</p>

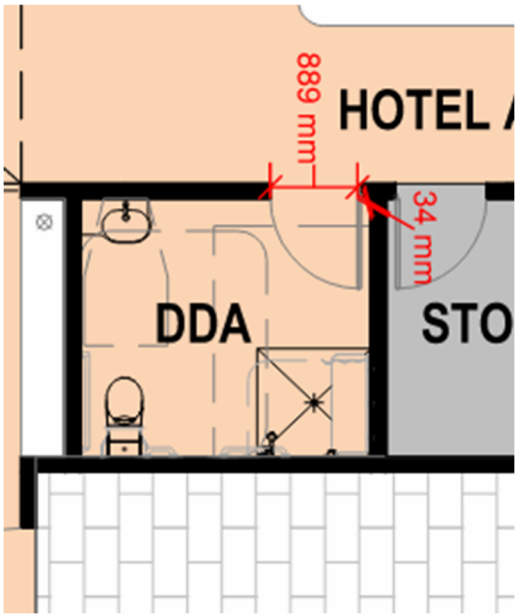
## SECTION F HEALTH AND AMENITY

### Part F4 Sanitary and other facilities

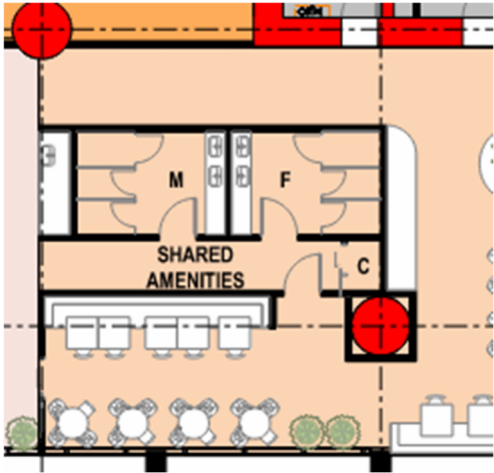
<p><b>F4D1</b> <u>Deemed-to-Satisfy Provisions</u> [2019: F2.0]</p>				X	<p>(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F4P1 to F4P6 are satisfied by complying with—</p> <ul style="list-style-type: none"> <li>(a) F4D2 to F4D12; and</li> </ul> <p>(2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.</p>
<p><b>F4D5</b> <u>Accessible sanitary facilities</u> [2019: F2.4]</p> <p>In a building required to be accessible—</p>				X	<p><b>Capable of compliance:</b></p> <p>subject to design development to provide additional information, minor design amendments, and/or development of BCA Performance Solution/s as required to achieve compliance with relevant BCA and AS1428.1 requirements, as recommended within this report.</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<p>(a) accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with F4D6; and</p> <p>(b) accessible unisex showers must be provided in accordance with F4D7; and</p> <p>(c) at each bank of toilets where there is one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, not less than one sanitary compartment suitable for a person with an ambulant disability for use by males and one sanitary compartment suitable for a person with an ambulant disability for use by females, must be provided; and</p> <p>(d) an accessible unisex sanitary compartment must contain a closet pan, washbasin, shelf or bench top and adequate means of disposal of sanitary products; and</p> <p>(e) the circulation spaces, fixtures and fittings of all accessible sanitary facilities provided in accordance with F4D6 and F4D7 must comply with the requirements of AS 1428.1; and</p> <p>(f) an accessible unisex sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only; and</p> <p>(g) where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right handed mirror image facilities must be provided as evenly as possible; and</p> <p>(h) where male sanitary facilities are provided at a separate location to female sanitary facilities, accessible unisex sanitary facilities are only required at one of those locations; and</p> <p>(i) an accessible unisex sanitary compartment or an accessible</p>				X	<p>Note that any floor level provided with a bank of toilets in common areas is typically required to provide one unisex accessible sanitary facility to comply with AS1428.1 requirements. Additionally, where at least on toilet is provided in addition to a unisex accessible WC , one sanitary facility suitable for use by Males with an Ambulant disability, and one sanitary facility suitable for use by Females with an Ambulant disability is to be provided.</p> <p>ie: Typically, a bank toilets in a common area is to include;</p> <ul style="list-style-type: none"> <li>• One unisex accessible WC to comply with AS1428.1 Clause 15 requirements</li> <li>• One Male and one Female Ambulant WC to comply with A1428.1 Clause 16 requirements.</li> </ul> <p><b>Performance Solution proposed:</b></p> <ul style="list-style-type: none"> <li>• At lower ground floor level, the unisex accessible sanitary facility is not provided at the common bank of toilets on this floor level. This issue is to be addressed via development of a <b>BCA Performance Solution</b>, noting that suitable accessible sanitary facilities can be provided on this floor level, relative to the function of the building and the expected needs of the occupants. It is also noted that one Ambulant facility for use by Males, and one ambulant facility for use by Females is not provided at this floor level, however is considered that complying Ambulant facilities can be provided, subject to design development and provision of additional details.</li> </ul> 



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
unisex shower need not be provided on a storey or level that is not required by D4D4(f) to be provided with a passenger lift or ramp complying with AS 1428.1.				X	<p><b><u>Design development requirements</u></b></p> <ul style="list-style-type: none"> <li>As per F4D5(g) where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right-handed mirror image facilities must be provided as evenly as possible. Unisex Accessible WCs are consistently provided with a left-hand transfer pan configuration, as shown below at the Level 05 Hotel common area facilities. Design Development is required to provide a range of toilet configurations to accommodate both left-handed and right-handed transfer configurators throughout the development.</li> </ul>  <ul style="list-style-type: none"> <li>At Hotel 06 Level floor level, the sanitary facilities nominated as 'U' require design development to demonstrate provision of sanitary facilities for use by people with an ambulant disability, including provision of a 900x900 clear circulation area in front of the toilet pan. Note also that provision of Unisex Ambulant facilities does not comply with BCA requirements; each Ambulant WC should be designated for use exclusively by Males or by Females. Refer to Figure 53(A) as partially reproduced below for an example of a complying Ambulant WC layout.</li> </ul>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
					<div data-bbox="906 353 1310 846" data-label="Image"> </div> <div data-bbox="756 981 1469 1234" data-label="Diagram"> </div> <p data-bbox="679 1272 997 1310">X <u>Design Requirements</u></p> <ul data-bbox="772 1373 1501 1995" style="list-style-type: none"> <li>Detail should be provided to demonstrate provision of a Unisex Accessible Sanitary compartment compliant with AS1428.1 Clause 15 requirements, including provision of required grabrails, toilet pan and seat, backrests, circulation spaces, doors and door hardware, signage, fixtures and fittings including tapware soap dispensers, toilet paper dispenser, basins, and mirrors and disposal units (where installed).</li> <li>Further detail should be provided at CC stage to demonstrate compliance with AS1428.1 Clause 16 requirements for Ambulant sanitary facilities, including provision of required grabrails, toilet paper dispenser, doors and door hardware, coat hook, and signage.</li> <li>Light switches in unisex accessible sanitary facilities are required to comply with Clause 14.2, and located in accordance with Figure 37 (located 900- 1100mm above floor level). Rocker action and toggle switches shall be provided and have a minimum dimension of 30 mm × 30</li> </ul>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
					<p>mm. Push-pad switches shall have a minimum dimension of 25 mm in diameter.</p> <ul style="list-style-type: none"> <li>Note that all dimensional requirements refer to finished dimensions. Allowances should be made for wall and floor finishes, and any other items such as architraves and skirtings, to ensure that required clearances are maintained.</li> </ul> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p> <p><i>The summary of requirements for accessible sanitary facilities is provided below following Part F4D12 to assist the project team during detailed design &amp;/or construction.</i></p>
<p><b>F4D6</b></p> <p><u>Accessible unisex sanitary compartments</u></p> <p>[2019: Table F2.4a]</p> <p>(1) Where required by F4D5(a), the minimum number of accessible unisex sanitary compartments for each class of building is as follows:</p> <p>(a) For a Class 1b building—</p> <p>(i) not less than 1; and</p> <p>(ii) where private accessible unisex sanitary compartments are provided for every accessible bedroom, common accessible unisex sanitary compartments need not be provided.</p> <p>(b) For a Class 2 building, where sanitary compartments are provided in common areas, not less than 1.</p> <p>(c) For Class 3 and Class 9c buildings—</p> <p>(i) in every accessible sole-occupancy unit provided with sanitary compartments within the accessible sole occupancy unit, not less than 1; and</p>			X		<p><b>Further Information required:</b></p> <ul style="list-style-type: none"> <li>At Ground floor level, the bank of sanitary facilities does not include a unisex Accessible sanitary facility to comply with AS1428.1 requirements. Design development is required to demonstrate the proposal is capable of providing complying sanitary facilities on this floor level.</li> </ul> 

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<p>(ii) at each bank of sanitary compartments containing male and female sanitary compartments provided in common areas, not less than 1.</p> <p>(d) For Class 5, 6, 7, 8 or 9 buildings, where F4D4 requires closet pans—</p> <p>(i) 1 on every storey containing sanitary compartments; and</p> <p>(ii) where a storey has more than 1 bank of sanitary compartments containing male and female sanitary compartments, at not less than 50% of those banks.</p> <p>(e) For a Class 10a building, at each bank of sanitary compartments containing male and female sanitary compartments, not less than 1.</p>					
<p><b><u>F4D7</u></b></p> <p><b><u>Accessible unisex showers</u></b></p> <p>[2019: Table F2.4b]</p> <p>(1) Where required by F4D5(b), the minimum number of accessible unisex showers for each class of building is as follows:</p> <p>(b) For a Class 2 building, where showers are provided in common areas, not less than 1.</p> <p>(c) For Class 3 and 9c buildings—</p> <p>(i) in every accessible sole-occupancy unit provided with showers within the accessible sole-occupancy unit, not less than 1; and</p> <p>(ii) 1 for every 10 showers or part thereof provided in common areas.</p> <p>(d) For Class 5, 6, 7, 8 or 9 buildings, where F4D4 requires 1 or more showers, not less than 1 for every 10 showers or part thereof.</p>			X		<p><b><u>Complies</u></b></p> <p>Suitable accessible shower facilities are provided in common areas, and in each accessible SOU as required to comply with BCA and AS1428.1 requirements, subject to provision of appropriate details and specifications at CC stage.</p> <ul style="list-style-type: none"> <li>• Accessible unisex shower facilities are to comply with AS1428.1 Clause 15.5 requirements, including provision of suitable circulation spaces, plumbing fixtures, floor finishes and waste details, grabrails, folding seat, and coat hook.</li> </ul> <p><i>The summary of requirements for accessible sanitary facilities is provided below following Part F4D12 to assist the project team during detailed design &amp;/or construction</i></p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<p>(e) For a Class 10a building, where showers are provided, 1 for every 10 showers or part thereof.</p> <p>(2) The requirements of (1)(d) do not apply within a ward area of a Class 9a health-care building.</p> <p>(3) The requirements of (1)(e) do not apply to—</p> <p>(a) a Class 10a appurtenant to another class of building; and</p> <p>(b) a sanitary compartment dedicated to a single caravan/camping site.</p>					
<p><b>F4D12</b></p> <p><b><u>Accessible adult change facilities</u></b></p> <p>[2019: F2.9]</p> <p>(1) One unisex accessible adult change facility must be provided in an accessible part of a—</p> <p>(a) Class 6 building that is a shopping centre having a design occupancy of not less than 3,500 people, calculated on the basis of the floor area and containing a minimum of 2 sole-occupancy units; and</p> <p>(b) Class 9b sports venue or the like that—</p> <p>(i) has a design occupancy of not less than 35,000 spectators; or</p> <p>(ii) contains a swimming pool that has a perimeter of not less than 70 m and that is required by D4D2 to be accessible; and</p> <p>(c) museum, art gallery or the like having a design occupancy of not less than 1,500 patrons; and</p> <p>(d) theatre or the like having a design occupancy of not less than 1,500 patrons; and</p> <p>(e) passenger use area of an airport terminal building within an airport that accepts domestic and/or international flights that</p>			X		<p><b>Not applicable.</b></p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
are public transport services as defined in the Disability Standards for Accessible Public Transport 2002.					

### Summary of AS1428.1-2009 requirements for Accessible & Ambulant Sanitary Facilities

#### Water Taps – Must have:

- Taps shall have lever handles, sensor plates or other similar control,
- Lever handles to be min. 50mm clear from adjacent surface,
- Where hot water is provided, the water to be delivered through the mixing spout.

#### WC pan clearances

- WC pan clearance including set-out, seat height and seat width as per Figure 38 of AS1428.1.

#### Seat – As follows:

- full round type with minimal contours,
- be securely fixed when in use,
- seat fixings that create lateral stability,
- load rated to 150kgs,
- min. luminance contrast of 30%.

#### Backrest – As follows:

- be capable of withstanding 1100 N,
- height to the lower edge of backrest to the top of the WC pan of 120mm to 150mm,
- vertical height of 150mm-200mm and a width of 350mm and 400mm,
- front edge of the centre of the backrest to be at an angle of 95° to 100°.

#### Flushing control

- Flushing controls shall be user activated, either hand operated or automatic. Hand-operated controls to comply with Figure 40, or on the centre-line of the toilet within the vertical limit zone. Controls within this zone shall not be within the area required for grabrails.
- Controls shall be proud of the surface and activate the flush before being level with the surrounding surface.

#### Toilet paper dispenser

- Toilet paper dispenser to be located within zone specified in Figure 41. Dispenser shall not encroach on required grabrail clearances.

#### Grabrails

- Concealed, high level cisterns or flush valves require a continuous grabrail across the rear wall and the side wall closest to the pan as per Figure 42.
- Low-level non-concealed cistern or flush valves require the grabrail to terminate each side of the cistern as per Figure 42.

#### Circulation space – Shall be as per Figure 43 of AS1428.1-2009, except for the following intrusions:

- Toilet paper dispenser,
- Grabrails,
- Washbasins with 100mm intrusion,
- Hand dryers and towel dispensers,
- Soap dispensers,
- Shelves,
- Wall cabinets with 150mm intrusion, mounted between 0.9m and 1.25m,
- Clothes hanging devices,

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<ul style="list-style-type: none"> <li>Portable sanitary disposal units (Figure 43),</li> <li>Other wall mounted fixtures with 150mm intrusion, mounted between 0.9m and 1.25m.</li> <li>The overlapping of circulation space shall be in accordance with Clause 15.6.</li> </ul>					
<u>Baby change tables</u>					
<ul style="list-style-type: none"> <li>Where installed, baby change tables shall not encroach into the required circulation space when in the folded position and have a max height of 820mm with clearance underneath of min. 720mm when open.</li> </ul>					
<u>WC doors</u>					
<ul style="list-style-type: none"> <li>To be either hinged or sliding,</li> <li>Outward-opening doors shall have a mechanism to hold in the closed position without the use of a latch,</li> <li>Doors provided with an in-use indicator and a bolt or catch. If fitted with a snib, the snib handle is to be min. length of 45mm from the centre of the spindle.</li> <li>Latch mechanism are to be openable from the outside in the case of an emergency.</li> <li>Force required as per Clause 13.5.2(e),</li> <li>Door handles and hardware as per Clause 13.5.</li> </ul>					
<u>Washbasins for unisex accessible sanitary facilities</u>					
<ul style="list-style-type: none"> <li>A hand-washing facility shall be provided inside the toilet cubicle.</li> </ul>					
<u>Washbasins – As follows:</u>					
<ul style="list-style-type: none"> <li>Shall be located inside the cubicle,</li> <li>Washbasin outside pan circulation,</li> <li>Water taps as per Clause 15.2.1,</li> <li>Exposed hot water supply pipes to be insulated or located so as not a hazard,</li> <li>Projection of washbasins from wall and taps, bowl and drain outlet as per Figures 44 (A) and (B),</li> <li>Water supply pipes and waste outlets not to encroach on required clear space under basin.</li> <li>Each washbasin fixture to have unobstructed circulation space as per Figure 46, or Figure 45 for SOU's.</li> </ul>					
<u>Mirrors</u>					
<ul style="list-style-type: none"> <li>Mirror to be located above or adjacent to washbasin.</li> <li>Where provided, a vertical mirror with a reflective surface not less than 350mm wide to extend from a height not less than 0.6m to not more than 1.85m.</li> <li>In an accessible residential unit, the mirror to be centred over the washbasin.</li> </ul>					
<u>Shelves – To be provided adjacent to washbasin, as follows:</u>					
<ul style="list-style-type: none"> <li>A vanity top at a height of 800mm-830mm and min. width of 1200mm and depth of 300mm-400mm without encroaching circulation space,</li> <li>A separate fixture, within any circulation spaces at a height of 0.9m-1.0m, and external to all circulation space 0.79m-1.0m.</li> </ul>					
<u>Soap dispensers, towel dispenser and similar fittings</u>					
<ul style="list-style-type: none"> <li>Soap and towel dispensers and hand dryers shall be operable by one hand and installed so the operative component or outlet between 0.9m and 1.1m and no closer than 0.5m from an internal corner.</li> </ul>					
<u>Clothes-hanging devices</u>					
<ul style="list-style-type: none"> <li>A clothes-hanging device shall be installed 1.2m to 1.35m high and not less than 0.5m from an internal corner.</li> </ul>					
<u>Sanitary disposal unit</u>					
<ul style="list-style-type: none"> <li>Where provided, sanitary disposal units to be as per Figure 43 for portable units or 0.5m from the pan for recessed units.</li> </ul>					
<u>Switches and general purpose outlets</u>					

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	DESIGN DETAIL	COMMENTS
<ul style="list-style-type: none"> <li>Where provided near the washbasin, switches and GPOs to be located as per Clause 14 and as close to the shelf as possible.</li> </ul>					
<u>Showers</u>					
<ul style="list-style-type: none"> <li>Shower recesses and circulation space to a height not less than 0.9m as per Figure 47. Grabrails, shower hose fittings, taps, soap holder, shelf and seat are the only fixtures permitted in these spaces.</li> </ul>					
<u>Circulation spaces in accessible sanitary facilities</u>					
<ul style="list-style-type: none"> <li>Circulation spaces in accessible sanitary facilities shall be in accordance with Clause 15.2.8 and Figures 43-47 and 50.</li> <li>Circulation spaces, including door circulation space, may be overlapped.</li> <li>Fixtures shall not encroach circulation space except:               <ol style="list-style-type: none"> <li>Washbasin in WC circulation as per Figure 43,</li> <li>Washbasin in shower circulation as per Figure 50,</li> <li>Washbasin in door circulation as per Figure 51(A) and 51(B).</li> </ol> </li> <li>Clearances beneath washbasin as per Clause 15.3.</li> </ul>					
<u>Summary of AS1428.1-2009 requirements for Ambulant Sanitary Facilities</u>					
<u>General</u>					
<ul style="list-style-type: none"> <li>Ambulant sanitary facilities shall be in accordance with Figures 53(A) and 53(B).</li> </ul>					
<u>Grabrails</u>					
<ul style="list-style-type: none"> <li>Grabrails shall be installed in accordance with Clause 17 and Figure 53(A).</li> </ul>					
<u>Doors</u>					
<ul style="list-style-type: none"> <li>Doors to sanitary compartments for people with ambulant disabilities shall have openings with a minimum clear width of 700 mm, and shall comply with Figure 53(B).</li> <li>Doors shall be provided with an in-use indicator and a bolt or catch. Where a snib catch is used, the snib handle shall have a minimum length of 45 mm from the centre of the spindle. In an emergency, the latch mechanism shall be openable from the outside.</li> </ul>					
<u>Coat hook</u>					
<p>A coat hook shall be provided within the sanitary compartment and at a height between 1350 mm to 1500 mm from the floor.</p>					

### 3.0 AS4299 - 1995 - Adaptable Housing - Technical Review Assessment and Commentary

The purpose of this report part is to identify any areas of non-compliance with the architectural design in terms of the AS4299-1995 (Adaptable Housing) **Essential Class C** Requirements. The following table details the compliance status of the architectural design against the aforementioned criteria.

The table identifies compliance assessment outcomes into one of four (4) categories, as follows:

<b>Complies</b>	Design compliance is achieved.
<b>Does Not Comply</b>	A compliance departure requires rectification. Resolution options are provided.
<b>Satisfied</b>	Compliance is achieved through compliance with requirements detailed in a BCA assessment of the project (where applicable)
<b>Design Detail</b>	Further information and/or additional design detail is required to demonstrate compliance. A detailed commentary is provided within the report. Such instances should not necessarily be considered deficiencies, but matters for consideration by the design team/assessment authority at relevant stages of design.

#### Comment 1: Requirements for the provision of Adaptable Housing SOUs

As the BCA does not provide DtS requirements for provision of Accessible or Adaptable SOUs for this development, the Local Authority's planning guidelines are to be referred to as a benchmark for minimum requirements for provision of Adaptable Units.

Reference is made to North Sydney Development Control Plan (DCP2013) Section 3.12 *Accessible Design*.

Part B12.5 Universal Design and *Adaptable Housing* Provision P2 requires that 20% of all dwellings provided by this development are to be Adaptable dwellings (in accordance with AS4299-2009 requirements).

#### Note/s:

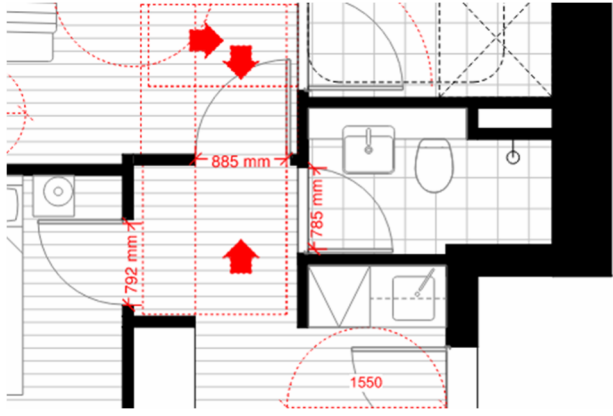
- Adaptable (AS4299) sole-occupancy units are to be indicated on plan.
- A car parking space complying with AS4299 or AS2890.6 should be designated per Adaptable unit.
- The following table references only essential Class C requirements. 'Checklist' numbers refer to AS4299 Appendix A schedule numbering. Items numbers which do not relate to Class C requirements are not included.
- Readily moveable furniture has been treated as indicative only. The person/s responsible for furnishing the building (parts) should ensure their furnishing layout/s do not cause AS1428.1 circulation deficiencies.
- Rather than repeating Access criteria in the below summary; where cross-over occurs between the Access requires of BCA and AS4299, then a simple comment is made ... *Satisfied by AED Access Report*.

CHECKLIST #	AS4299 – ADAPTABLE HOUSING ESSENTIAL CLASS C REQUIREMENTS	COMPLIES	DOES NOT COMPLY	SATISFIED BY AED	COMPLIES: SUBJECT TO	COMMENTS
	<b>DRAWINGS</b>					
1.	<u>Clause 2.3</u> Provision of drawings showing the housing unit in its pre-adaption and post-adaption stages along with a description of how the adaptation is to be achieved shall also be provided.				X	<b>Complies</b> -subject to provision of further information and resolution of recommendations as contained within this report. <ul style="list-style-type: none"> <li>Each SOU required to meet AS4299 is to be identified on floor plans, and provided with pre- and post-adaptation layouts at sufficient detail to confirm compliance.</li> <li>Additional specifications and selections should also be provided to ensure compliance prior to construction (however, note that these documents are not assessed by this report).</li> </ul>



CHECKLIST #	AS4299 – ADAPTABLE HOUSING ESSENTIAL CLASS C REQUIREMENTS	COMPLIES	DOES NOT COMPLY	SATISFIED BY AED	COMPLIES: SUBJECT TO	COMMENTS
						<ul style="list-style-type: none"> <li>An accessible car parking space complying with AS4299 or AS2890.6 is also to be designated per Adaptable unit and identified on plans.</li> </ul>
	<b>SITING</b>					
3.	<u>Clause 3.2.2</u> A continuous accessible path of travel from street frontage and vehicle parking to entry complying with AS1428.1			X		<b>Capable of compliance.</b> Satisfied subject to compliance with Part 2.0 of this report.
	<b>LETTERBOXES</b>					
11.	<u>Clause 3.8</u> Letterboxes to be on hard standing area connected to an accessible pathway.	X				<b>Complies.</b> Note that letterboxes are also to be detailed to comply with Australia Post requirements as per document Auspost APPENDIX 2 – STREET MAIL SERVICE – CONDITIONS OF DELIVERY
	<b>PRIVATE CAR ACCOMMODATION</b>					
14.	<u>Clause 3.7.2</u> Carparking space or garage min. area 6.0m x 3.8m.			X		<b>Complies.</b> -satisfied subject to compliance with Part 2.0 of this report. <u>Compliance Comment:</u> Provision of accessible carparking to comply with BCA Part D4D6 as discussed in Part 2.0 of this report will satisfy AS4299 Private Car Accommodation requirements: AS2890.6 has superseded AS4299 and is considered suitable in this instance. ie: a carpark space complying with <i>either</i> standard is considered to be acceptable for the intended use.
	<b>ACCESSIBLE ENTRY</b>					
20.	<u>Clause 4.3.1</u> Accessible entry complying with AS1428.1 to be provided.	X				<b>Complies</b> Subject to provision of additional details at CC stage to document provision of accessible doorways including door thresholds, landings and circulation areas to comply with A1428.1 requirements
22.	<u>Clause 4.3.2</u> Landing: Accessible entry to be provided with a landing outside the door with a maximum fall of 1:40 if not protected from weather by a minimum of 1,600mm overhang. Refer to <b>Figure 4.1.</b>	X				<b>Complies</b>
23.	<u>Clause 4.3.2</u> Threshold:	X				<b>Complies</b>

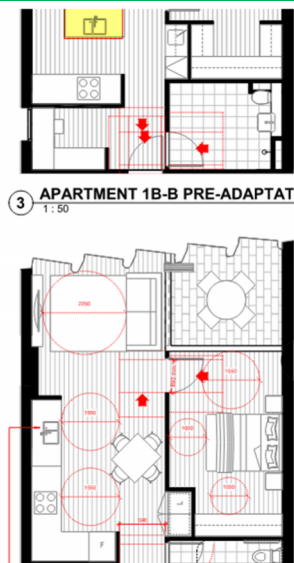


CHECKLIST #	AS4299 – ADAPTABLE HOUSING ESSENTIAL CLASS C REQUIREMENTS	COMPLIES	DOES NOT COMPLY	SATISFIED BY AED	COMPLIES: SUBJECT TO	COMMENTS
	A low threshold allowing for a smooth transition shall be provided.  Examples of threshold details are provided by Appendix C.					
24.	<u>Clause 4.3.2</u> Landing to enable manoeuvrability. An area of 1550mm diameter will generally satisfy this requirement.	X				<b>Complies</b>
25.	<u>Clause 4.3.2</u> Accessible entry door to have min, 850mm clearance.	X				<b>Complies</b>
27.	<u>Clause 4.3.4</u> Entry Door hardware  Door lever handles and hardware to comply with AS1428.1, including <ul style="list-style-type: none"> <li>door can be unlocked and opened with one hand.</li> <li>Handles located 900-1100AFFL</li> </ul> All external lockable doors keyed alike				X	<b>Capable of compliance.</b>  Subject to provision of additional details or specifications prior to Construction stage.
<b>INTERIOR : GENERAL</b>						
32.	<u>Clause 4.3.3</u>  Internal doors of each of the adaptable housing units shall have a minimum clear door opening width of 820mm.				X	<b>Capable of compliance - design development required.</b>  Note that the 820mm clear opening width requirement applies to all doors within the Adaptable Units, other than doors which are required to achieve a minimum 850mm clearance. <ul style="list-style-type: none"> <li>Unite 2B an 2C post-adaptation plans are to be developed to demonstrate compliance with this requirement. In particular, the doorway to Bed 2 and Bath 2 in this layout requires minor design amendments to demonstrate provision of suitable clear opening width of 820mm.</li> </ul>
						
33.	<u>Clause 4.3.7</u>					



CHECKLIST #	AS4299 – ADAPTABLE HOUSING ESSENTIAL CLASS C REQUIREMENTS	COMPLIES	DOES NOT COMPLY	SATISFIED BY AED	COMPLIES; SUBJECT TO	COMMENTS
	Internal corridors shall have a minimum width of 1000mm.					
34.	<p><u>Clause 4.3.7</u> After adaptation, circulation spaces at doorways shall comply with AS1428.1</p> <p>Note: Complying doorways are to be provided on the path of travel to the kitchen, one visitable toilet, and one bedroom in each unit, which is considered to satisfy the Performance requirements of AS4299-1995.</p>	X				<b>Complies</b>
	<b>LIVING ROOM &amp; DINING ROOM</b>					
36.	<p><u>Clause 4.7.1</u> Provision for circulation space to allow at wheelchair to make a 360° turn, after furniture has been placed.</p> <p>Note: A clear space of. 2250mm diameter will satisfy this requirement.</p>	X				<b>Complies</b>
38.	<p><u>Clause 4.7.4</u> A telephone outlet shall be provided in the Living Room adjacent to a GPO.</p>				X	<p><b>Capable of compliance.</b> Subject to provision of additional details or specifications prior to Construction stage.</p>
	<b>KITCHEN</b>					
42.	<p><u>Clause 4.5.2</u></p> <ul style="list-style-type: none"> <li>Minimum clear width of 1,550mm between all opposing base cabinets</li> <li>Minimum clear 1500 x820mm that allows forward or front approach by a wheelchair in front of the sink and all kitchen appliances.</li> </ul> <p>A width between walls of 2.7m will generally provide complying circulation.</p>				X	<p><b>Capable of compliance.</b> Note that the requirement for 1550mm clear between opposing base cabinets in the Kitchen is a pre-adaptation requirement. This requirement is in accordance with AS4299 'Ease of Adaptation' Performance Requirements. Unit 1B-B currently includes an island bench including plumbing fixtures which are to be re-located in the post-adaptation layout.</p>



CHECKLIST #	AS4299 – ADAPTABLE HOUSING ESSENTIAL CLASS C REQUIREMENTS	COMPLIES	DOES NOT COMPLY	SATISFIED BY AED	COMPLIES: SUBJECT TO	COMMENTS
						 <p data-bbox="957 436 1332 470">3 APARTMENT 1B-B PRE-ADAPTATION PLAN 1:50</p> <p data-bbox="837 828 965 862"><u>Comment</u></p> <p data-bbox="837 873 1540 1120">This non-compliance may be addressed by provision of a <b>Performance Solution</b> and provision of details or specifications documenting that complying services are to be provided during the initial construction stage, to allow the island bench to be relocated economically and with minimal disruption, in accordance with AS4299 'Ease of Adaptation' Performance Requirements.</p>
43.	<u>Clause 4.5.1</u> Circulation spaces at doors after adaptation is to comply with AS1428.1	X				<b>Complies.</b>
44.	<u>Clause 4.5.5</u> Provide on adjustable height bench (worksurface) at least 800mm in length, adjustable between 750-850mm or replaceable as a single unit. Refer to <b>Figure 4.8</b> .				X	<b>Capable of compliance.</b> Note that provision of a 800mm worksurface that is capable of being replaced as a single unit is considered to comply with this requirement.
45.	<u>Clause 4.5.5</u> A refrigerator shall be located adjacent to the adjustable work surface (Item 44).				X	<b>Capable of compliance.</b> Subject to provision of additional details or specifications prior to Construction stage.
46.	<u>Clause 4.5.6</u> The sink shall be adjustable from 750 to 850mm height, or replaceable as a unit. Refer to <b>Figure 4.9</b> .				X	<b>Capable of compliance.</b>
47.	<u>Clause 4.5.6</u> The maximum depth of the sink, or the main bowl of a double sink, shall be 150mm				X	<b>Capable of compliance.</b> As per item 47 above.

CHECKLIST #	AS4299 – ADAPTABLE HOUSING ESSENTIAL CLASS C REQUIREMENTS	COMPLIES	DOES NOT COMPLY	SATISFIED BY AED	COMPLIES; SUBJECT TO	COMMENTS
48.	<u>Clause 4.5.6(e)</u> Sink provided with capstan or lever handles or lever mixer, and to comply with AS1428.1 Refer also to <b>Figure 4.4.</b>				X	<b>Capable of compliance.</b> As per item 47 above.
49.	<u>Clause 4.5.6(e)</u> Taps or their operating handles to be located within 300mm of the front of the sink.				X	<b>Capable of compliance.</b> As per item 47 above.
51.	<u>Clause 4.5.7</u> Cooktops to include front or side controls with raised crossbars.				X	<b>Capable of compliance.</b> As per item 47 above.
52.	<u>Clause 4.5.7</u> Cooktop to be provided with isolating switch or gas stop valve.				X	<b>Capable of compliance.</b> As per item 47 above.
53.	<u>Clause 4.5.7</u> Cooktop to be located adjacent a min.800mm bench at the same height.	X				<b>Complies.</b>
54.	<u>Clause 4.5.8</u> Ovens shall be located adjacent to a min. 800mm height adjustable worksurface, as per Item 44 requirements. Refer to <b>Figure 4.10.</b>				X	<b>Capable of compliance.</b> As per item 47 above.
59.	<u>Clause 4.5.11</u> GPOs located to comply with AS1428.1. At least one double GPO located within 300mm of front of the worksurface.				X	<b>Capable of compliance.</b> Subject to provision of additional details or specifications prior to Construction stage.
60.	<u>Clause 4.5.11</u> The GPO for the refrigerator shall be easily reachable when the refrigerator is in its operating position				X	<b>Capable of compliance.</b> Subject to provision of additional details or specifications prior to Construction stage.
61.	<u>Clause 4.5.4</u> The floor surface shall be slip-resistant to comply with AS/NZS 3661.1				X	<b>Capable of compliance.</b> Subject to provision of additional details or specifications prior to Construction stage.
	<b>MAIN BEDROOM</b>					
62.	<u>Clause 4.6.1</u> At least one bedroom of area sufficient to accommodate queen size bed and wardrobe and	X				<b>Complies.</b> <u>Compliance Comment:</u> NOTE: Livable Housing Guidelines 2017 are considered to supersede AS4299-1995 in this case and may be used as

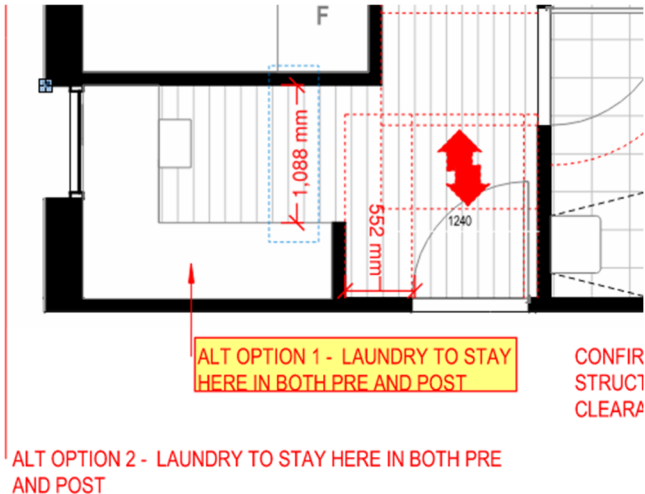


CHECKLIST #	AS4299 – ADAPTABLE HOUSING ESSENTIAL CLASS C REQUIREMENTS	COMPLIES	DOES NOT COMPLY	SATISFIED BY AED	COMPLIES; SUBJECT TO	COMMENTS
	<p>circulation space requirements of AS1428.2.</p> <p>Note; Compliance to be indicated on plan, including 1,540mm clearance provided at the base of the bed, and appropriate door circulation into bedroom.</p>					<p>a precedent for provision of 1000mm clear at the base of the bed Although AS4299 requires that a 1540 circulation space is provided at the foot of the bed, it is considered that the intent of the standard can be met, provided that</p> <ul style="list-style-type: none"> <li>a 1550mm circulation space is provided at one side of the bed; and</li> <li>the bedroom doorway is provided with circulation areas to comply with AS1428.1; and</li> <li>a circulation area with minimum width of 1000mm is provided at the foot of the bed.</li> </ul>
	<b>BATHROOM</b>					
75.	<p><u>Clause 4.4.1</u></p> <p>Provision for bathroom area to be adaptable at minimum cost to comply with AS1428.1; circulation spaces at doors and around WC pans, washbasins, and showers.</p>	X				<b>Complies</b>
76.	<p><u>Clause 4.4.2</u></p> <p>The floor surface shall be slip-resistant to comply with AS/NZS 3661.1</p>				X	<p><b>Capable of compliance.</b></p> <p>Subject to provision of additional details or specifications prior to Construction stage.</p>
77.	<p><u>Clause 4.4.4(f)</u></p> <p>The shower recess shall be hobless and have minimum dimension of 1600 x 1000. Shower head and taps to achieve clearances as per AS1428.1</p> <p>Refer to <b>Figure 4.6 and 4.7.</b></p>				X	<p><b>Capable of compliance.</b></p> <p>As per item 76 above.</p>
78.	<p><u>Clause 4.4.4(f)</u></p> <p>Shower area with falls to floor waste and waterproofed to AS3740.</p>				X	<p><b>Capable of compliance.</b></p> <p>As per item 76 above.</p>
79.	<p><u>Clause 4.4.4(f)</u></p> <p>A recessed soap holder is to be provided.</p>				X	<p><b>Capable of compliance.</b></p> <p>As per item 76 above.</p>
80.	<p><u>Clause 4.4.4(f)</u></p> <p>Shower taps positioned for easy reach to access side of shower sliding track.</p>				X	<p><b>Capable of compliance.</b></p> <p>As per item 76 above.</p>
82.	<p><u>Clause 4.4.4(h)</u></p> <p>Provision for adjustable, detachable hand-held shower rose mounted on a slider grabrail or fixed hook.</p>				X	<p><b>Capable of compliance.</b></p> <p>As per item 76 above.</p>



CHECKLIST #	AS4299 – ADAPTABLE HOUSING ESSENTIAL CLASS C REQUIREMENTS	COMPLIES	DOES NOT COMPLY	SATISFIED BY AED	COMPLIES; SUBJECT TO	COMMENTS
	(See plumbing and wall - strengthening provision notes below)					
83.	<u>Clause 4.4.4(h)</u> Provision for grabrails in shower to comply with AS 1428.1 Refer to <b>Figure 4.7</b> (See strengthening provision notes below)				X	<b>Capable of compliance.</b> Note that Construction documents are to specify strengthening provisions suitable for installation of grabrails to comply with AS1428.1 requirements.
86.	<u>Clause 4.4.4(c)</u> Tap sets to be capstan or lever handles with single outlet.				X	<b>Capable of compliance.</b> As per item 76 above.
88.	<u>Clause 4.4.4(g)</u> Provision for washbasin with clearances to comply with AS 1428.1. For knee clearances, refer to <b>Figure 4.4</b>				X	<b>Capable of compliance.</b> As per item 76 above.
90.	<u>Clause 4.4.4(d)</u> Double GPO beside mirror				X	<b>Capable of compliance.</b> Subject to provision of additional details or specifications prior to Construction stage.
<b>TOILET</b>						
92.	<u>Clause 4.4.3</u> Provision of either 'visitable toilet' or accessible toilet. A visitable toilet requires a 1250 x 900 wide space in front of the pan exclusive of door swings and fixtures. Refer to <b>Figure 1.1</b> .	X				<b>Complies.</b>
93.	<u>Clause 4.4.1</u> Provision to be adaptable to comply with AS 1428.1	X				<b>Complies.</b>
94.	<u>Clause 4.4.3</u> Location of WC pan at correct distance from fixed walls (pre-adaptation) Refer <b>Figure 4.3</b> .	X				<b>Complies.</b>
95.	<u>Clause 4.4.4(h)</u> Provision reinforced areas for subsequent installation of grab rails ,if not initially provided. (See strengthening provision notes below) Refer <b>Figure 4.5</b> .				X	<b>Capable of compliance.</b> Note that Construction documents are to specify strengthening provisions suitable for installation of grabrails to comply with AS1428.1 requirements.



CHECKLIST #	AS4299 – ADAPTABLE HOUSING ESSENTIAL CLASS C REQUIREMENTS	COMPLIES	DOES NOT COMPLY	SATISFIED BY AED	COMPLIES SUBJECT TO	COMMENTS
96.	<u>Clause 4.4.2</u> Slip resistant floor surface to comply with AS/NZS 3661.1. (Vitreous tiles or similar)				X	<b>Capable of compliance.</b> Subject to provision of additional details or specifications prior to Construction stage.
<b>LAUNDRY</b>						
98.	<u>Clause 4.4.2</u> Circulation space at doors to comply with AS 1428.1	X				<b>Complies</b> This assessment is based on the understanding that the Adaptable SOU is to be provided with an electrical clothes dryer, in lieu of a clothes line.
98.	<u>Clause 4.8</u> Provision for adequate circulation space in front of or beside appliances and under or adjacent the tub.  Note: a clear area of 1550 mm will satisfy this requirement.	X				<b>Complies</b> Note that the alternative Layout for Unit 1B-B is <b>not recommended</b> , as the alternative Laundry location is not capable of providing a circulation area in front of the appliances as required to comply with this AS4299 clause.   <p style="text-align: center;"><b>2</b> <b>APARTMENT 1B-B PO</b> 1 : 50</p>
100	<u>Clause 4.8(e)</u> Provision for automatic washing machine.				X	<b>Capable of compliance.</b> Subject to provision of additional details or specifications prior to Construction stage.
102	<u>Clause 4.8(e)</u> Where clothes line is provided, an accessible path of travel from the laundry to the clothes line is required to comply with AS1428.1.	X				<b>Complies</b> This assessment is based on the understanding that the Adaptable SOU is to be provided with an electrical clothes dryer, in lieu of a clothes line.
105	<u>Clause 4.8(g)</u> Double GPO to be provided. Refer to <b>Figure 4.11</b>				X	<b>Capable of compliance.</b> Subject to provision of additional details or specifications prior to Construction stage.

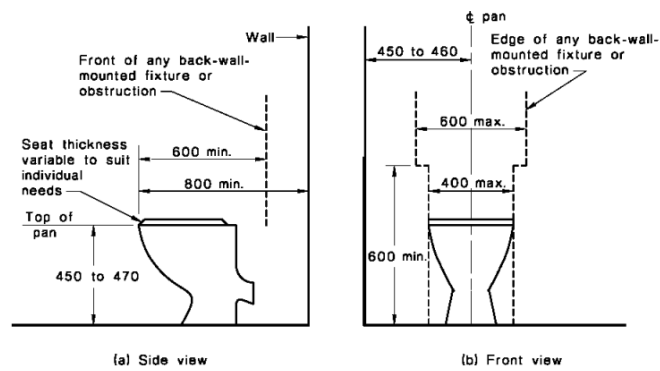


CHECKLIST #	AS4299 – ADAPTABLE HOUSING ESSENTIAL CLASS C REQUIREMENTS	COMPLIES	DOES NOT COMPLY	SATISFIED BY AED	COMPLIES; SUBJECT TO	COMMENTS
108	<u>Clause 4.9.1</u> Slip resistant floor surface to comply with AS/NZS 3661.1.				X	<b>Capable of compliance.</b> Subject to provision of additional details or specifications prior to Construction stage.
	<b>DOOR LOCKS</b>					
110	<u>Clause 4.3.4</u> Door hardware operable with one hand, located 900–1100 mm above floor, and in accordance with AS1428.1.  Lever handles are preferred.				X	<b>Capable of compliance.</b> Subject to provision of additional details or specifications prior to Construction stage.



NOTES AND REFERENCES TO AS 4299 FIGURED INFORMATION	
<p><b>Strengthening provisions</b> for grabrails in Toilets and Bathrooms</p>	<p>Where framed walls are used, strengthened areas for secure fixing shall be provided as shown in Figures 4.5 to 4.7.</p> <p>Where required, the walls around the shower, bath and toilet should be reinforced to provide a fixing surface for the safe installation of grabrails.</p> <p>The strengthened areas shall be adequate to support the loads imposed through the grabrails.</p> <p>Notes:</p> <ol style="list-style-type: none"> <li>12 mm structural plywood or similar may be deemed to provide adequate strengthening.</li> <li>The loading requirements for grabrails are contained in AS 1428.1; The fastenings, wall reinforcement and grabrails combined must be able to withstand 1,100N of force applied in any position and in any direction.</li> </ol>
<p>Figure 1.1: Visitable Toilet</p>	<p style="text-align: center;">DIMENSIONS IN MILLIMETRES</p> <p style="text-align: center;">FIGURE 1.1 VISITABLE TOILET</p>
<p>Figure 4.1: Entry Landing, Threshold, Overhang.</p>	<p style="text-align: center;">FIGURE 4.1 ENTRY LANDING</p>

Figure 4.3:  
Location of WC pan

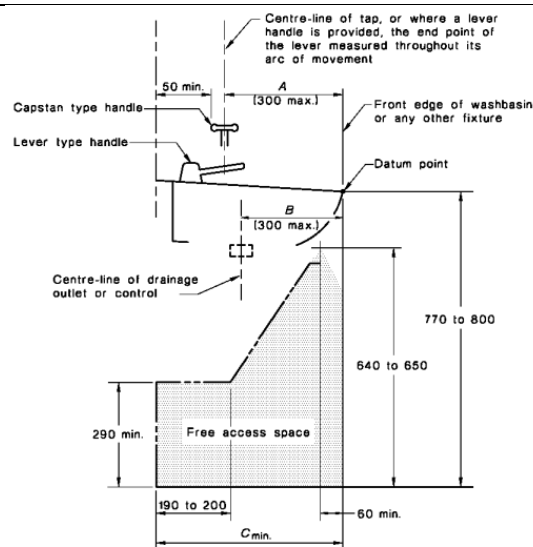


NOTES:

- 1 For the purpose of dimensioning, the front of the WC pan has been taken as the datum plane.
- 2 The dimension of 800 mm from the front of the WC pan to the wall is a critical dimension.
- 3 A back support at 600 mm from the front of the pan is important. This supports people who are paralysed from the chest down. The back support may be a cistern or a continuous grab rail and toilet lid.

DIMENSIONS IN MILLIMETRES  
FIGURE 4.3 LOCATION OF WC PAN

Figure 4.4:  
Washbasin clearances



LEGEND:

- $C_{min.} = (\text{the greater of } A \text{ or } B) + 190$   
 - - - - - Outer limits of obstructions beneath the washbasin

NOTE: The dimensions of the unobstructed space beneath the washbasin are critical dimensions.

DIMENSIONS IN MILLIMETRES  
FIGURE 4.4 WASHBASIN CLEARANCES

Figure 4.5:

Reinforcement areas for subsequent installation of grabrails in toilets

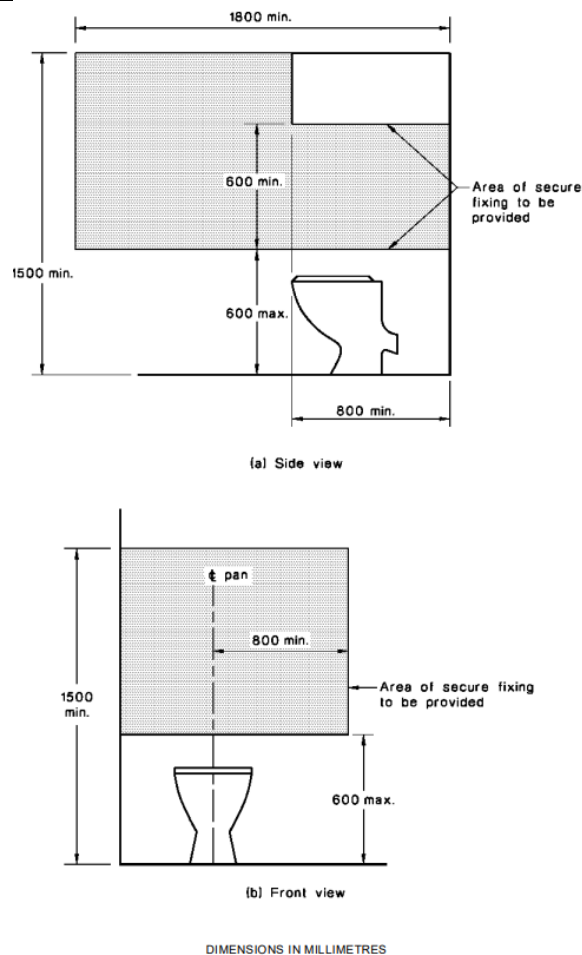


FIGURE 4.5 REINFORCED AREAS FOR SUBSEQUENT INSTALLATION OF GRABRAILS IN TOILETS

Figure 4.6:

Reinforced areas for subsequent installation of grabrails in shower compartments

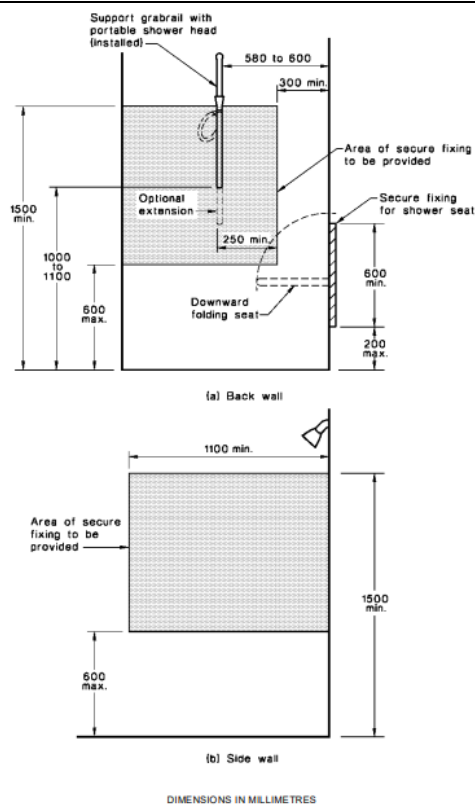
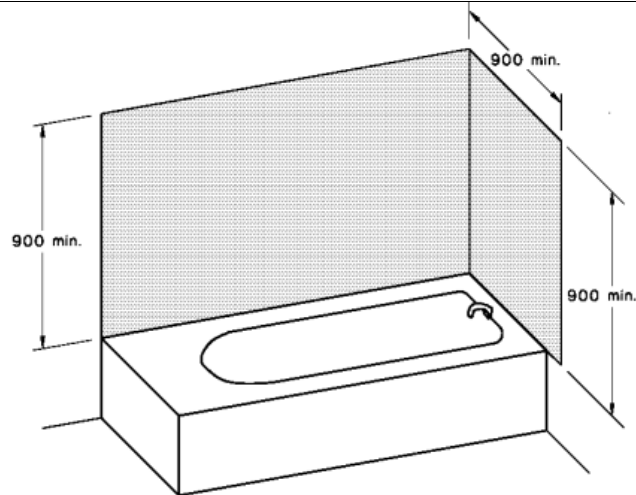


FIGURE 4.6 REINFORCED AREAS FOR SUBSEQUENT INSTALLATION OF GRABRAILS IN SHOWER COMPARTMENTS

Figure 4.7:

Reinforced areas for subsequent installation of grabrails at baths



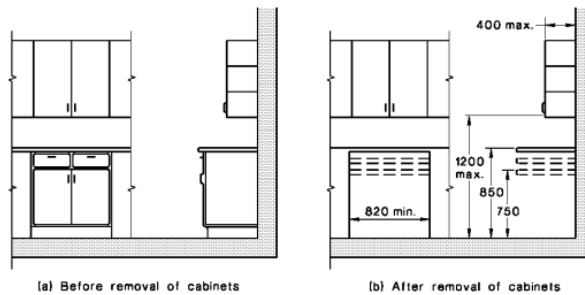
Where bath is to be retained after modification

DIMENSIONS IN MILLIMETRES

FIGURE 4.7 REINFORCED AREAS FOR SUBSEQUENT INSTALLATION OF GRABRAILS AT BATHS

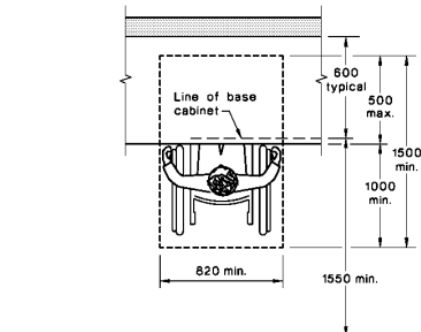
Figure 4.8

Kitchen work surfaces



(a) Before removal of cabinets

(b) After removal of cabinets



(c) Clear floor space under work surface

DIMENSIONS IN MILLIMETRES

FIGURE 4.8 WORK SURFACES

Figure 4.9  
Kitchen sinks

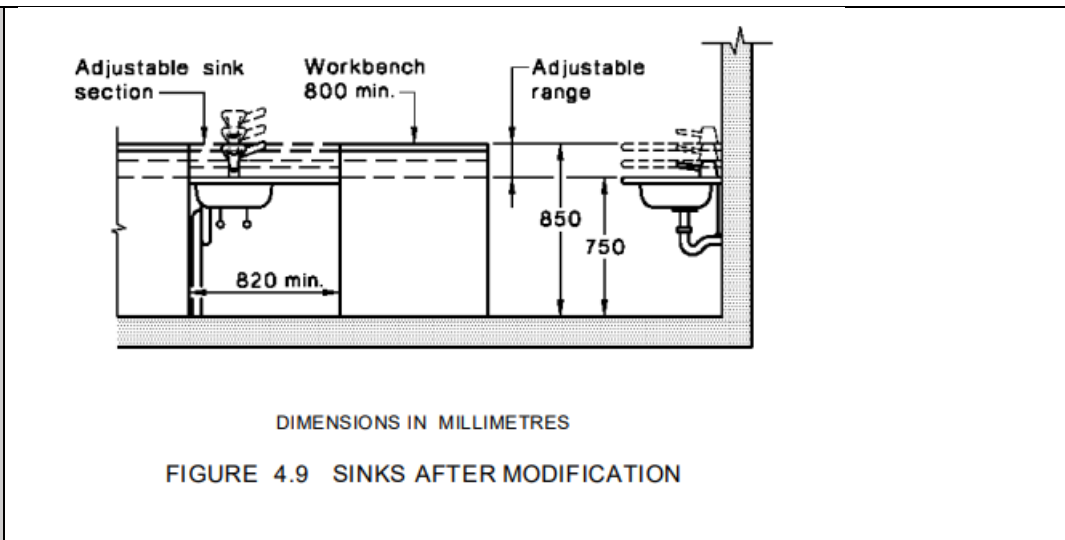


Figure 4.10  
Ovens and adjacent work surfaces

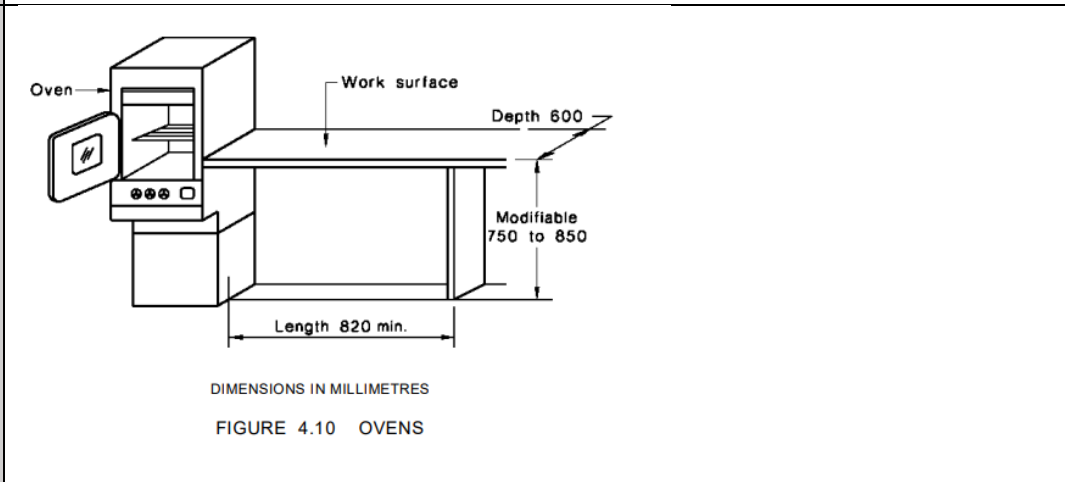
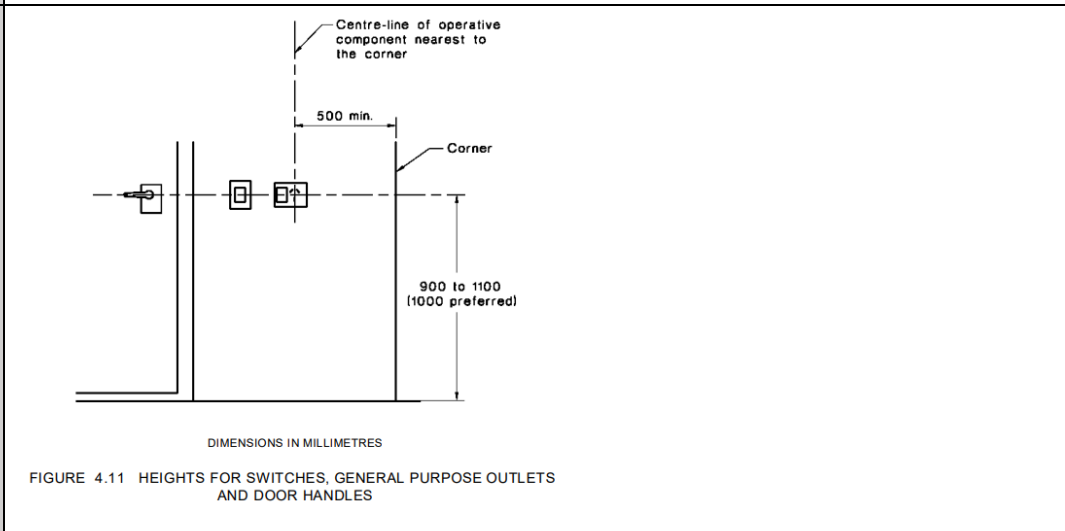


Figure 4.11  
Heights for switches,  
general purpose outlets  
and door handles;  
As per AS1428.1



## 4.0 CONCLUSION

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This report provides a Building Code of Australia 2022 Amendment 1 (BCA) and AS4299 assessment of the proposed mixed use development including Hotel, Build-to-Rent private accommodation and Basement carparking, to be located at 153-157 Walker Street, North Sydney for

The primary purpose of this report is to identify the non-compliance matters contained in the proposed of the Development Application (DA) stage submission design and in relation to the Deemed-to-Satisfy (DTS) Provisions of the BCA as they relate to Access for People with a Disability, and to provide recommendations to overcome non-compliances.

The outcome of the report highlights that the current design contains some non-compliances with the DtS provisions of the BCA, however, such can be readily resolved by minor design changes, provision of additional information, or development of BCA Performance Solution(s), as nominated at Part 2.0 and Part 3.0 of this report.

Subject to the resolutions contained within this report, the current design is capable of complying with the accessibility provisions of the BCA and AS4299.

<p>Report prepared by:</p>   <b>Simon Hearn</b> <u>BCA and Access Consultant For AED</u> Certificate IV in Access Consulting Association of Consultants in Access Australia Affiliate member 774 Association of Australian Certifiers; Associate Corporate Member Registered Architect / NSWARB #7369	<p>Report reviewed by:</p>   <b>Jason Storer</b> <u>Associate Director, AED</u> Building Surveyor and Access Consultant Accredited Building Surveyor AIBS – Level 1 No. 8176 Grad.Dip.Bld. Surv. (WSU) Association of Consultants in Access Australia Affiliate Member – No. 554
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