

A background graphic consisting of a dark blue diagonal band across the page. To the right of this band is a grayscale image of a city skyline with several tall buildings. Overlaid on the entire background is a pattern of white, isometric 3D rectangular blocks of varying heights and orientations.

Accessibility Assessment Report

Assessment Report

Bungendore High School
Birchfield Drive, Bungendore NSW 2621

Client: NSW Department of Education

Report Number: 230468.01

Revision: 07 REF

14 MARCH 2025

REPORT REVISION HISTORY

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01	15/11/2024	Concept Design Stage- Draft Prepared by Chris Michaels <i>Executive director</i>
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07	14/03/2025	Concept Design Stage- Final (Minor Updates) Prepared by Chris Michaels <i>Executive director</i>

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1. INTRODUCTION

This access report has been prepared to support a Review of Environmental Factors (REF) for the NSW Department of Education (DoE) for the construction and operation of the new Bungendore High School.

The purpose of the REF is to assess the potential environmental impacts of the activity prescribed by State Environmental Planning Policy (Transport and Infrastructure) 2021 (T&I SEPP) as “development permitted without consent” on land carried out by or on behalf of a public authority under Part 5 of the Environmental Planning and Assessment Act 1979 (EP&A Act). The activity is to be undertaken pursuant to Chapter 3, Part 3.4, Section 3.37A of the T&I SEPP.

This document has been prepared in accordance with the Guidelines for Division 5.1 assessments (the Guidelines) by the Department of Planning, Housing and Infrastructure (DPHI) as well as the Addendum Division 5.1 guidelines for schools and Addendum October 2024 (Consideration of environmental factors for health services facilities and schools).

The purpose of this report is to identify the compliance status of the architectural design documentation against the accessibility provisions under the Building Code of Australia (BCA) 2022.

1.1. Site Description

The current street address is part of 18 Harp Avenue, Bungendore, NSW, 2621 (the site), and is legally described as part Lot 125 in Deposited Plan 1297613. As shown at Figure 1, the proposed school site forms part of a larger lot which is the subject of a proposed residential subdivision.

The site is located within the North Bungendore Precinct (Elm Grove Estate) in Bungendore. As a result of precinct wide rezonings, the surrounding locality is currently transitioning from a semi-rural residential area to an urbanised area with new low density residential development.

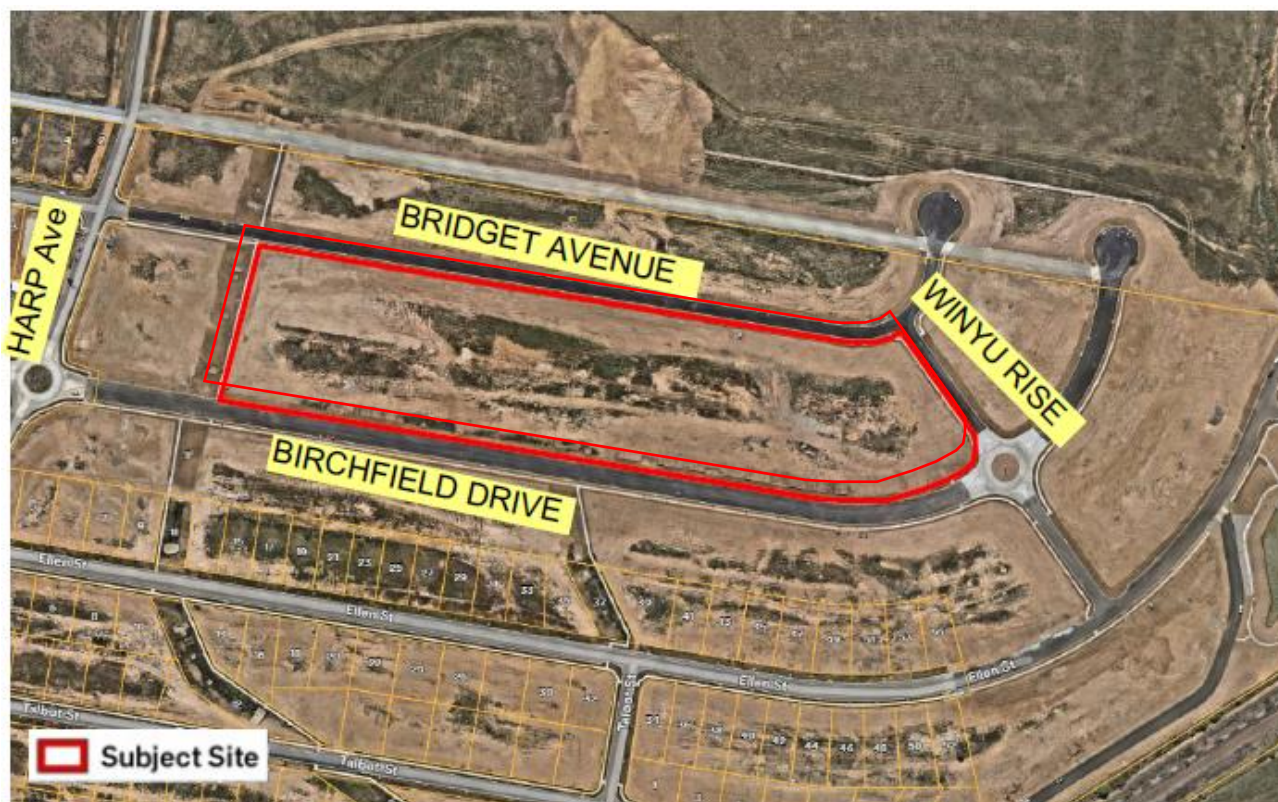
The site is zoned R2 Low Density Residential, with all adjoining land also zoned R2 Low Density Residential.

The site has three frontages:

- Approx 500m southern frontage to Birchfield Drive.
- Approx 500m northern frontage to Bridget Avenue.
- Approx 100m eastern frontage to Winyu Rise.

The site is currently cleared of all vegetation and consists of grassland, having been prepared for the purposes of future low density residential development.

Figure below: Aerial Photograph of the Site



1.2. Proposed Activity Description

The proposed activity is for the construction and operation of a new high school in Bungendore at part 18 Harp Avenue, Bungendore (the site). The new high school will accommodate 600 students and 68 staff. The school will provide 26 general learning spaces, and three support learning spaces across two buildings. The buildings will be predominantly three-storeys in height and will include permanent and support teaching spaces, specialist learning hubs, a library, administrative areas and a staff hub.

Additional core facilities are also proposed including a standalone school hall with covered outdoor learning area (COLA), a car park, a kiss and drop zone along Birchfield Drive, sports courts and a sports field. The new school also features a single storey building with associated paddocks in the far western portion of the site designed for livestock management and hands-on agricultural learning.

Specifically, the proposal involves the following:

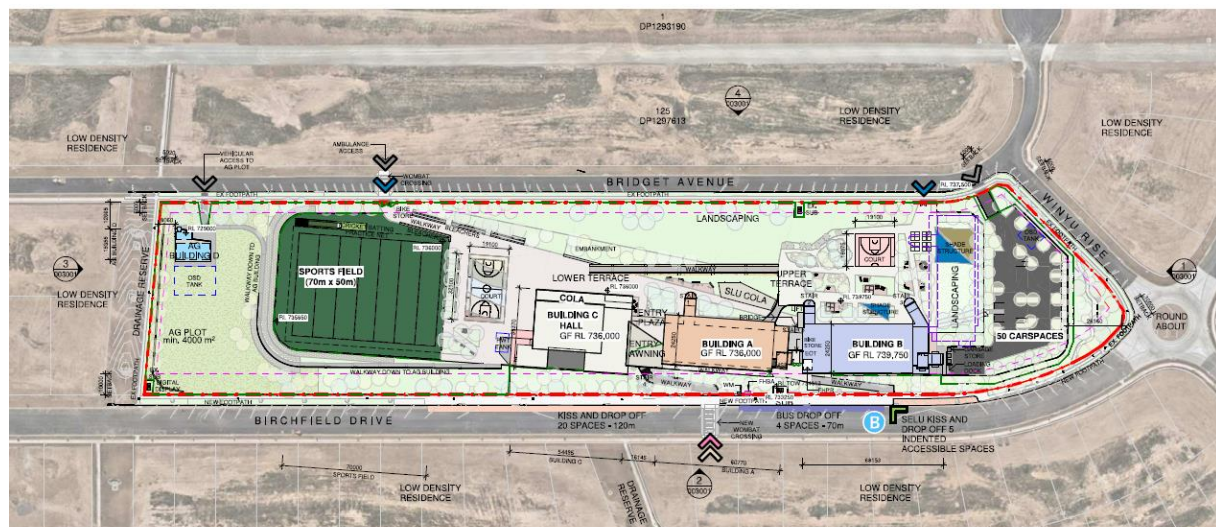
- Building A, a three-storey learning hub accommodating general learning spaces, a special education learning unit (**SELU**), a physical education centre, a performing arts space, and other core facilities including administrative areas, staff hub, library and end of trip facilities.
- Building B, a part three/part four storey learning hub accommodating general learning spaces, specialist workshops for food, textile, wood and metal workshops, as well as visual arts studios, science labs and staff areas.
- Building C, a standalone school hall with COLA.

- Building D, a single-storey agricultural block comprising an animal storage space, a COLA and internal workshop.
- On-site staff car park with 50 spaces with access via Bridget Avenue.
- Kiss and drop zones and bus bays along Birchfield Drive.
- Open play space including a sports courts and sports field.
- Associated utilities and services including a 1000kv padmount substation.
- Main pedestrian entrance to be located off Birchfield Drive.
- Secondary pedestrian access from Bridget Avenue.
- Public domain/off-site works including the removal of street trees.

The design has been masterplanned to allow for an additional future stage. The second stage does not form part of this proposal.

Figure 2 provides an extract of the proposed site plan.

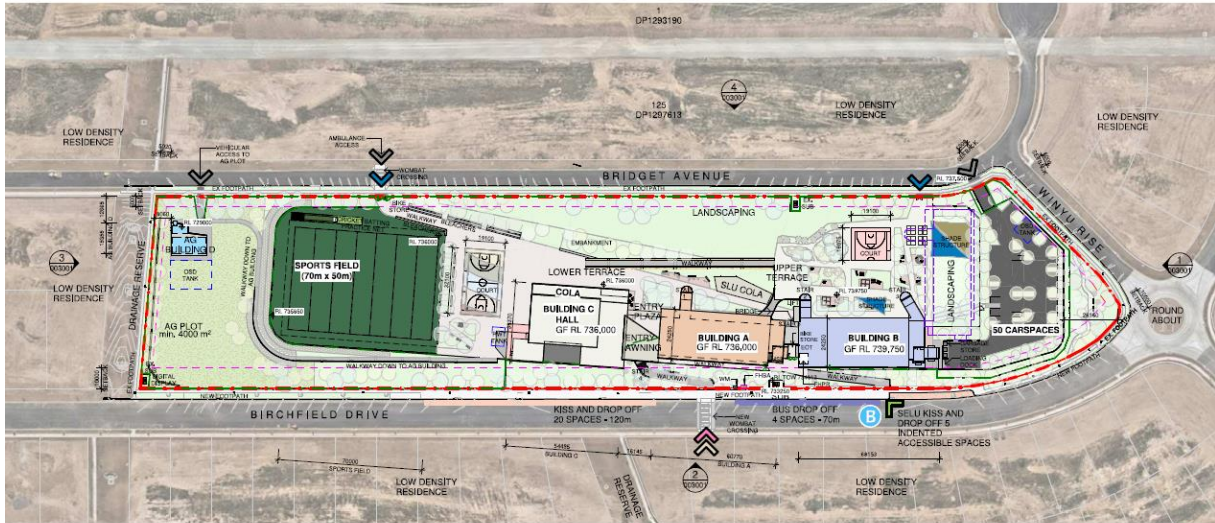
Figure 1 Site Plan



1.3. Purpose

The purpose of this report is to identify the compliance status of the architectural design documentation against the following (as relevant to the project):

1. The accessibility provisions under the Building Code of Australia (BCA) 2022 – Volume 1, as includes:
 - All of Part D4.
 - Clauses F4D5, F4D6, F4D7, F4D12, E3D7 and E3D8.
 - Schedule 5 – NSW variations to the BCA.
2. AS 1428.1-2009, AS 1428.4.1-2009 and AS 2890.6-2009.
3. Disability (Access to Premises — Buildings) Standards 2010 and Amendment Standards 2020



1.4. Documentation Relied Upon

This report has been prepared on the basis of the following:

- Architectural plans prepared by NBRIS & Partners; project no. 24265, plans dated 19/12/25, Issue B, listed as follows:

SHEET NO.	SHEET NAME
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000001	COVER & DRAWING LIST
000010	SCHEDULE OF ACCOMMODATION
000051	SITE ANALYSIS
000100	STACKING PLAN
000110	3D AXONOMETRIC DIAGRAM
000180	SITE BOUNDARY PLAN
000200	SITE PLAN
000201	SITE GROUND FLOOR PLAN
000202	PUBLIC DOMAIN WORKS
001000	OVERALL GROUND PLAN
001001	OVERALL LEVEL 1 PLAN
001002	OVERALL LEVEL 2 PLAN
001003	OVERALL LEVEL 3 PLAN
001004	OVERALL ROOF PLAN
002500	SHADOW DIAGRAMS
003001	SITE ELEVATIONS
004001	SITE SECTIONS
005000	SIGNAGE PACKAGE
005001	GFA PLANS

011001	BLOCK A - GROUND PLAN
011002	BLOCK A - LEVEL 1 PLAN
011003	BLOCK A - LEVEL 2 PLAN
011004	BLOCK A - ROOF PLAN
013000	BLOCK A - ELEVATION 01
013001	BLOCK A - ELEVATION 02
014000	BLOCK A - SECTIONS
018000	BLOCK A - EXTERIOR FINISHES

021000	BLOCK B - GROUND FLOOR PLAN
021001	BLOCK B - LEVEL 1 FLOOR PLAN
021002	BLOCK B - LEVEL 2 FLOOR PLAN
021003	BLOCK B - LEVEL 3 FLOOR PLAN
021005	BLOCK B - ROOF PLAN
023000	BLOCK B - ELEVATIONS 01
023001	BLOCK B - ELEVATIONS 02
024000	BLOCK B - SECTIONS
028000	BLOCK B - EXTERIOR FINISHES

031001	BLOCK C - GROUND FLOOR PLAN
031002	BLOCK C - ROOF PLAN
033000	BLOCK C - ELEVATIONS 01
033001	BLOCK C - ELEVATIONS 02
034000	BLOCK C - SECTIONS 01
034001	BLOCK C - SECTIONS 02
035000	BLOCK C - EXTERNAL FINISHES

041001	BLOCK D - PLANS REF
043001	BLOCK D - ELEVATIONS REF
044001	BLOCK D - SECTIONS REF
044002	BLOCK D - EXTERIOR FINISHES REF

1.5. Exclusions & Limitations

The content of this report relates only to the matters directly nominated in this report and does not assess / include any of the following –

- Any parts of the BCA or standards not directly referenced by this report.
- Any federal, state, and local: policies / guidelines / legislations (except where directly referenced by this report).
- Disability Discrimination Act 1992 (DDA focuses on results. Does not offer prescriptive compliance options).
- Technical assessment for door operating forces, lighting levels, slip resistance ratings and luminance contrast levels.
- Gradients and crossfalls for ramps, landings and walkways unless provided on referenced drawings.
- Review of any fixtures &/or fittings unless detail provided.
- Work Health & Safety considerations.
- Services & equipment operating capacity &/or design.
- Any loose furniture shown on plan is treated as indicative only. The person/s responsible for furnishing the building should ensure their furnishing layout/s do not cause AS 1428.1-2009 circulation deficiencies.

1.6. Relevant Legislation

Disability Discrimination Act 1992

The Disability Discrimination Act 1992 (DDA) prohibits discrimination against people with disabilities in employment, education, access to premises, provisions of goods, services & facilities, accommodation, buying land, sport clubs and incorporated associations.

The 'access to premises' component of the DDA is captured by Section 23 of the DDA which states as follows (paraphrased):

"It is unlawful for a person to discriminate against another person on the ground of the other persons disability in relation to the provision of means of access to such premises."

The DDA per se is philosophical in approach and provides no measurable standards by which an existing built structure can be considered against to determine whether unlawful discrimination is occurring or is likely to occur.

The Act is enforced primarily through a complaint's mechanism, which allows individuals who have directly or indirectly experienced unlawful discrimination to seek a conciliated outcome through the Australian Human Rights Commission.

Compliance with the DDA is a decision for the building owner / occupier to enhance access on matters which are not covered by the applicable prescriptive requirements.

Disability (Access to Premises — Buildings) Standards 2010

On the 1st of May 2011, the DDA adopted the Disability (Access to Premises – Buildings) Amendment Standards 2010 (DAPS) which partially codified the 'access to premises' principles of the DDA by setting mandatory prescriptive requirements for the provision of access to new, and in some cases, existing buildings.

DAPS is limited to those aspects of the built environment which are governed by the BCA.

Access matters not addressed in the Premises Standards / BCA continue to be subject to possible discrimination complaints under the DDA if a person with disability experiences an access barrier.

The key parts under DAPS are as follows:

Affected Part

When new works to an existing building is proposed, the Premises Standards require that, in some situations, upgrading what is called the 'affected part' of a building. Refer to Section 2.0 for further commentary on the application of the 'Affected Part'.

Schedule 1 Access Code for Buildings

Schedule 1 of the Premises Standards contains the prescriptive deemed-to-satisfy provisions / Performance Requirements which new works must comply with.

Building Code of Australia

In NSW, the Environmental Planning and Assessment Act & Regulation contains the legislation applicable to the development of buildings.

The EP&A Act & Reg applies the Building Code of Australia as the technical requirement to be met for all new buildings and new building work to or within an existing building.

An existing part of a building, that is not subject to new works, is not required to comply with the BCA retrospectively unless specifically required by a State Environmental Planning Policy, DAPS or a condition of development consent.

1.7. Building Classification Assessment

Listed below is our assessment of the relevant BCA classification(s) in relation to the subject building.

The proposed buildings consist of the following:

Building A:

Ground	Class 5 Admin/Office & Class 9b School classrooms
Level 1	Class 9b Library and School Classrooms
Level 2	Class 9b School Classrooms

Building B:

Ground	-
Level 1	Class 9b School Classrooms and Canteen / Bistro
Level 2	Class 5 Admin/Office & Class 9b School classrooms
Level 3	Class 9b School Classrooms

Building C:

Ground	Class 9b Hall and COLA
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2. TECHNICAL ASSESSMENT

2.1. General

This section incorporates the access related provisions contained in the BCA (Part D4, Clauses F4D5, F4D6, D4D7, F4D12, E3D7 and E3D8) and as reciprocated in the Premises Standards 'Schedule 1 – Access code for buildings'.

A summary of the compliance status of the architectural design is subsequently provided relevant to each clause.

Alongside each clause heading, compliance shall be indicated by using one (or more) of the following compliance categories –

Complies	Indicates that design compliance has been achieved with the Deemed-to-Satisfy provisions.
Performance Solution	Indicates that compliance is achieved with the Performance Requirements (by way of performance solution).
Capable of compliance	Specific details not provided; however, compliance is readily achievable.
Does not comply	Indicates that design compliance has not been achieved with the Deemed-to-Satisfy provisions.
Design Detail	Compliance commentary is provided. Such should not be considered deficiencies but matters for consideration by the design team / assessment authority at relevant / nominated stages of design.
Not applicable	The Deemed-to-Satisfy provision is neither applicable nor relevant.
For Info	For information purposes only.

2.2. Part D4: Access for People with a Disability

Clause D4D2: General building access requirements.

Buildings and parts of buildings must be accessible as follows (unless exempt by Clause D4D5):

Class 9b (schools and early childhood centres)

To and within all other areas normally used by the occupants.

Class 9b (assembly building other than a school or early childhood centre)

To and within:

- (a) wheelchair seating spaces provided in accordance with D4D10; and
- (b) 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

Compliance Status	
Design Detail	<p>Access required to all areas normally used by the occupants.</p> <p>Refer to the attached mark-up for various comments relating to this clause.</p> <p>Performance justification required to address the disconnect between the accessible entry (SELU entry) and the entry stair at street level. (BCA D4D3(1)(a)). An accessible sign is to be provided at the stair entry at street level identifying location of SELU access as the accessible entry part.</p> <p>Compliance generally indicated and readily achievable subject to design detailing.</p>

Clause D4D3: Access to buildings

An accessway must be provided to a building required to be accessible:

- (a) From the main points of pedestrian entry at the allotment boundary; and
- (b) From another accessible building connected by a pedestrian link; and
- (c) From any required accessible carparking space on the allotment.

An accessway must be provided through the principal pedestrian entrance, and:

- (a) through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and
- (b) in a building with a floor area more than 500m², a pedestrian entrance which is not accessible must not be located more than 50m from an accessible pedestrian entrance.

Doors on an accessway having multiple leaves must have a clear opening width of not less than 850mm for a single leaf.

Compliance Status	
Design Detail	<p>Accessways to be provided from pedestrian entrance at the property boundary, to and between all buildings and between accessible carparking and buildings.</p> <p>Refer to the attached mark-up for various comments relating to this clause.</p> <p>Compliance generally indicated and readily achievable subject to design detailing.</p>

Clause D4D4: Parts of buildings to be accessible

In a building required to be accessible:

- (a) every ramp & walkway (except a fire-isolated ramp) must comply with Clause 10 of AS1428.1-2009.
- (b) every stairway (except a fire-isolated stairway) must comply with Clause 11 of AS1428.1-2009.
- (c) all fire-isolated stairways are required to comply with Clause 11.1(f) and (g) of AS 1428.1-2009.
- (d) passing spaces must be provided as per Clause 6.4 of AS 1428.1-2009 at maximum 20m intervals on those parts of an accessway where a direct line of sight is not available.
- (e) turning spaces must be provided as per Clause 6.5 of AS 1428.1-2009 as follows:
 - Within 2m of the end of accessways; and
 - At maximum 20m intervals along the accessway.
- (f) carpet installed in an accessway must comply with clause D4D4(g) and (h)

Compliance Status	
Design Detail	<p><u>Small building concession</u></p> <p>Not applicable.</p> <p><u>Turning spaces</u></p> <p>A suitable 1540mm x 2070mm turning space will satisfy this provision. Refer to the attached mark-up for commentary relating to turning spaces.</p> <p><u>Passing spaces</u></p> <p>Compliance required to corridors over 20m in length.</p> <p><u>Stairs and ramps</u></p> <p>Refer to the attached mark-up for various matters relating to stairways, walkways & ramps.</p> <p>Detailing to Clause 10, 11 and 12 of AS1428.1-2009 required for assessment.</p>

Clause D4D5: Exemptions

An area where access would be inappropriate because of the particular purpose for which the area is used or would pose a health or safety risk for people with a disability; such area is not required to be accessible nor the path of travel providing access to such area.

Compliance Status	
For Info	Areas may be considered exempt from access due to the nature and tasks undertaken, as may include storerooms, comms room, cleaners' room, subject to SINSW requirements.

Clause D4D6: Accessible carparking

Accessible carparking spaces complying with AS 2890.6-2009 must be provided as follows:

Class 9b buildings

- For a school — Provide 1x accessible space for every 100 carparking spaces or part thereof.
- For other assembly buildings:
 - (A) with up to 1000 carparking spaces - Provide 1x accessible space for every 50 carparking spaces or part thereof.
 - (B) for each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces - Provide 1x accessible space

Compliance Status	
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Design Detail	The accessible carparking spaces are suitably provided in number and size. Layout, falls, markings etc to form part of detailed documentation phase.
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Clause D4D7: Signage

In a building required to be accessible:

- (a) Braille and tactile signage complying with BCA Spec 15 must:
 - incorporate the international symbol of access or deafness, as appropriate, in accordance with AS 1428.1-2009 and identify each:
 - Sanitary facility, except a sanitary facility associated with a bedroom in a Class 1b or a SOU in a Class 3 or 9c building.
 - space with a hearing augmentation system.
 - identify each door required by BCA Clause E4D5 to be provided with an exit sign and state the word "Exit" followed by the "Level".
- (b) signage incorporating the international symbol of deafness, must be provided within a room containing a hearing augmentation system identifying the hearing augmentation type, area covered and location to obtain receivers (if being provided).
- (c) signage in accordance with AS 1428.1-2009 must be provided for accessible unisex sanitary facilities to identify left or right handed use.
- (d) signage to identify an ambulant accessible sanitary facility in accordance with AS 1428.1-2009 must be located on the door of the facility.
- (e) directional signage where a pedestrian entrance is not accessible (incorporating international symbol of access).
- (f) directional signage at bank of toilets not incorporating an accessible unisex sanitary facility.
- (g) In a building subject to Clause F4D12, directional signage complying with Spec 15 shall be provided at each bank of sanitary facilities and accessible unisex sanitary facility, other than one that incorporates an accessible adult change facility, to direct a person to the location of the nearest accessible adult change facility within that building.

Compliance Status	
Design Detail	Signage shall be required to accord with BCA Spec 15 and AS 1428.1-2009. Signage schedule to form part of detailed documentation phase.

Clause D4D8: Hearing augmentation

A hearing augmentation system must be provided where an inbuilt amplification system (other than one used only for emergency warning) is installed:

- (a) In a room in a Class 9b building; or
- (b) Meeting room, conference room, auditorium, or room for judicatory purposes; or
- (c) At any ticket office, teller booth, reception area or the like, where the public is screened from the service provider.

If hearing augmentation system is an induction loop, it must cover no less than 80% of the floor area of the room or space served by the inbuilt amplification system.

If hearing augmentation system is a system requiring the use of receivers, 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 be per Clause D2D18.

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.

Compliance Status	
Design Detail	Hearing augmentation is required to all rooms and spaces with in-built amplification systems (i.e. wall fixed TVs with speakers or wall fixed whiteboards with speakers). Provide plan to show each room and space which contains an in-built amplification system and the proposed hearing augmentation system as per this clause for further review.

Clause D4D9: Tactile indicators

For a building required to be accessible, Tactile Ground Surface Indicators (TGSIs) complying with Sections 1 & 2 of AS/NZS 1428.4.1-2009 shall be required to warn people who are blind or have a vision impairment that they are approaching:

- A stairway (other than fire-isolated),
- An escalator,
- A passenger conveyor or moving walkway,
- A ramp (other than fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp),
- In the absence of a suitable barrier, any overhead obstruction less than 2m above floor level,
- An accessway meeting a vehicular way adjacent to any pedestrian entrance to a building (excluding pedestrian entrance serving an area exempt by Clause D4D5, if there is no kerb or kerb ramp at that point, except for areas exempted by Clause D4D5).

Compliance Status	
Design Detail	Tactile ground surface indicators to be provided to ramp and stairway landings, accessways that meet a vehicular way and to overhead obstructions. TGSIs to form part of the detailed documentation phase.

Clause D4D10: Wheelchair seating spaces in Class 9b assembly buildings

Where fixed seating is provided in a Class 9b assembly building, wheelchair seating spaces complying with Clause 18 of AS 1428.1-2009 must be provided in accordance with the following:

- (a) The number and grouping of wheelchair seating spaces per Table D4D10.
- (b) In a cinema:
 - With not more than 300 seats – Wheelchair seating spaces must not be located in the front row of seats; and
 - 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.

Compliance Status	
Not applicable	No fixed seating indicated in the Class 9b areas.

Clause D4D11: Swimming pools

Compliance Status	
Not applicable	No swimming pools proposed.

Clause D4D12: Ramps

On an accessway:

- (a) a series of connected ramps must not have a combined vertical rise of more than 3.6m; and
- (b) a landing for a step ramp must not overlap a landing for another step ramp or ramp.

Compliance Status	
Design Detail	Compliance indicated

Clause D4D13: Glazing on accessway

On an accessway, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS 1428.1-2009.

Compliance Status	
Design Detail	All full height glazed walls, doors and sidelights shall be marked as per Cl. 6.6 of AS 1428.1-2009.

2.3. Part E3: Lift Installations

Clause E3D7: Passenger lift types and their limitations

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:

- (a) There are no limitations on the use of electric passenger lifts, electrohydraulic passenger lifts or inclined lifts.
- (b) Stairway platform lifts must not:
 - be used to serve a space in a building accommodating more than 100 persons calculated according to BCA Clause D2D18; or
 - be used in a high traffic public use area such as a theatre, cinema, auditorium, transport interchange, shopping centre or the like; or
 - be used where it is possible to install another type of passenger lift; or
 - connect more than 2 storeys; or
 - where more than 1 stairway lift is installed, serve more than 2 consecutive storeys; or
 - when in the folded position, encroach on the minimum width of a stairway required by BCA Clause D2D8 to D2D11.
- (c) A low-rise platform lift must not travel more than 1000mm.
- (d) A low-rise, low-speed constant pressure lift must not—
 - for an enclosed type, travel more than 4 m; or
 - for an unenclosed type, travel more than 2 m; or
 - be used in a high traffic public use areas in buildings such as a theatre, cinema, auditorium, transport interchange, shopping complex or the like.
- (e) A small-sized, low-speed automatic lift must not travel more than 12 m

Note – The above passenger lifts must not rely on a constant pressure device for its operation if the lift car is fully enclosed.

Compliance Status	
Capable of compliance	The lifts are to be either electric passenger lifts or electrohydraulic passenger lifts.

Clause E3D8: Accessible features required for passenger lifts

In an accessible building, every passenger lift must have the following features, where applicable:

- (a) Handrail complying with the mandatory handrail provisions of AS 1735.12 for all lifts except a stairway platform lift and low-rise platform lift,
- (b) Lift floor dimensions of not less than 1100 mm wide x 1400 mm deep for all lifts which travel not more than 12m, except a stairway platform lift.
- (c) Lift floor dimensions of not less than 1400 mm wide x 1600 mm deep for all lifts which travel more than 12m,
- (d) Minimum clear door opening complying with AS 1735.12 for all lifts except a stairway platform lift.
- (e) Passenger protection system complying with AS 1735.12 for all lifts with power-operated doors.
- (f) Lift landing doors at the upper landing for all lifts except a stairway platform lift.

- (g) Lift car and landing control buttons complying with AS 1735.12 for all lifts except a stairway platform lift & low-rise platform lift,
- (h) Lighting in accordance with AS 1735.12, for all enclosed lift cars,
- (i) Where the lift serves more than 2 levels:
 - Automatic audible information within the lift car to identify the level each time the car stops,
 - Audible and visual indication at each lift landing to indicate the arrival of the lift car,

Audible information and audible indication required above is to be provided in a range of between 20-80 dB(A) at a maximum frequency of 1500Hz.

- (j) 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.

In addition to the above, and to comply with AS 1428.1-2009, the following is required for any platform lift:

- (k) The operation of the lift must not be dependent on a key or others for assistance.
- (l) Automatic door opening (as latch-side clearance is unable to be achieved from inside the lift car),
- (m) No changes in level at the door threshold otherwise a threshold ramp as per Cl. 10.5 of AS 1428.1-2009 is to be provided.
- (n) No gaps exceeding 8mm between the lift door threshold & landing.
- (o) Lift call buttons at landings shall be no less than 500mm from an internal corner, 1-2m from the swing of the door arc and located on a flat surface between 900-1200mm AFFL.

Compliance Status

Capable of compliance

A design compliance certificate must be obtained from the lift designer / supplier to confirm compliance with the above requirements and AS 1735.12-1999.

2.4. Part F4: Sanitary & Other Facilities

Clause F4D5: Accessible sanitary facilities

In a building required to be accessible:

- (a) Accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with Clause F4D6.
- (b) Accessible unisex showers must be provided in accordance with Clause F4D7.
- (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.
- (d) An accessible unisex sanitary compartment must contain a closet pan, washbasin, shelf or bench top and adequate disposal of sanitary products.
- (e) The circulation spaces, fixtures and fittings of all accessible sanitary facilities provided in accordance with Clauses F4D6 and F4D7 must comply with the requirements of AS 1428.1.
- (f) An accessible unisex facility must be located so that it can be entered without crossing an area reserved for one sex only.
- (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.
- (h) an accessible unisex sanitary compartment or an accessible 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.

Compliance Status	
Design Detail	Compliance indicated

Clause F4D6: Accessible unisex sanitary compartments

Where required by F4D5(a), the minimum number of accessible unisex sanitary compartments for each class of building is as follows:

Class 9b buildings (where BCA Clause F4D4 requires close pans)

- Provide 1x accessible unisex sanitary compartment on every storey containing sanitary compartments; and
- 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.

Compliance Status	
Capable of compliance	<p><u>Accessible w/c</u> Unisex accessible w/c's indicated, as required. Detailing of fixtures and features to Clause 15 of AS 1428.1-2009 required for assessment.</p> <p><u>Ambulant w/c's</u> Male and female ambulant facilities required to general use sanitary facilities, as indicated. Detailing of fixtures and features to Clause 16 of AS 1428.1-2009 required for assessment.</p>

Clause F4D7: Accessible unisex showers

Where required by F4D5(b), the minimum number of accessible unisex showers for each class of building is as follows:

Class 9b buildings (where BCA Clause F4D4 requires 1 or more showers)

- Provide 1x accessible shower for every 10 showers or part thereof.

Compliance Status	
Capable of compliance	An accessible shower is required to be provided to the Pre-School in consequence of BCA Clause F4D4 requiring a shower to be provided to this area, as indicated. Detailing of fixtures and features to Clause 15 of AS 1428.1-2009 required for assessment.

Clause F4D12: Accessible adult change facilities

One Accessible Adult Change Facility (AACF) is required in an accessible part of a:

- (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 SOUs;
- (b) Class 9b sports venue (or the like) that has a design occupancy of not less than 35,000 spectators
- (c) A swimming pool that has a perimeter of not less than 70m required by BCA Clause D4D2 to be accessible.
- (d) Museum, art gallery, or the like having a design occupancy of not less than 1,500 patrons
- (e) Theatre or the like having a design occupancy of not less than 1,500 patrons
- (f) Passenger use area of an airport terminal building within an airport that accepts domestic &/or international flights that are public transport services as defined in the Disability Standards for Accessible Public Transport 2002.

The AACF must be constructed in accordance with BCA Specification 27 and cannot combine with another sanitary compartment.

Compliance Status	
For info	This clause does not apply to the subject development, however an AACF is proposed. Compliance with this part subject to detailed design and subsequent review.

3. CONCLUSION

This report identifies the compliance status of architectural design with the following –

- (a) The accessibility provisions under the Building Code of Australia (BCA) 2022 – Volume 1, as includes:
 - All of Part D4.
 - Clauses F4D5, F4D6, D4D7, F4D12, E3D7 and E3D8.
 - Schedule 5 – NSW variations to the BCA.
- (b) AS 1428.1-2009, AS 1428.4.1-2009 and AS 2890.6-2009.
- (c) Disability (Access to Premises — Buildings) Standards 2010 and Amendment Standards 2020.

The outcome of this report highlights that the fundamental aspects of the design are capable of compliance in combination with the DTS provisions and Performance Requirements (by way of Performance Solutions) with the above codes.

The finer design details to be reviewed at Construction Documentation stage.

APPENDIX A – SUMMARY OF AS 1428.1-2009

Clause 6 – Continuous accessible paths of travel

- A continuous accessible path of travel shall not include a step, stairway, turnstile, revolving door, escalator, moving walk or other impediment.
- The minimum unobstructed height of a continuous accessible path of travel shall be 2000 mm or 1980 mm at doorways (Note - BCA may have greater requirements).
- Unless otherwise specified (such as at doors, curved ramps and similar), the minimum unobstructed width of a continuous accessible path of travel shall be 1000 mm and shall not be encroached by any fixtures and fittings (lights, awnings, windows, telephones, skirtings and similar objects), fire hose reels, fire extinguishers and switchboard.
- All frameless or fully glazed doors, sidelights, including any glazing capable of being mistaken for a doorway or opening, shall be clearly marked for their full width with a solid and non-transparent contrasting line.
- The contrasting line shall be not less than 75 mm wide and shall extend across the full width of the glazing panel. The lower edge of the contrasting line shall be located between 900 mm and 1000 mm above the plane of the finished floor level.
- Any contrasting line on the glazing shall provide a minimum of 30% luminance contrast when viewed against the floor surface or surfaces within 2 m of the glazing on the opposite side.

Clause 7 – Floor or ground surfaces

Slip resistance

- A continuous accessible path of travel shall have a slip-resistant surface. The texture of the surface shall be traversable by people who use wheelchairs and those with an ambulant or sensory disability.

Abutment of surfaces

- Abutment of surfaces shall have a smooth transition. Construction tolerances of 0 ±3 mm vertical and 0 ±5 mm provided the edges have a bevelled or rounded edge.

Recessed matting

- Recessed matting within a continuous accessible path of travel —
 - where of metal and bristle type construction or similar, its surface shall be no more 3 mm if vertical or 5 mm if rounded or bevelled, above or below the surrounding surface; and
 - 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 3 mm if vertical or 5 mm if rounded or bevelled.

Grates

- Grates shall comply with the following:
 - Circular openings shall be not greater than 13 mm in diameter.
 - Slotted openings shall be not greater than 13 mm wide and be oriented so that the long dimension is transverse to the dominant direction of travel.

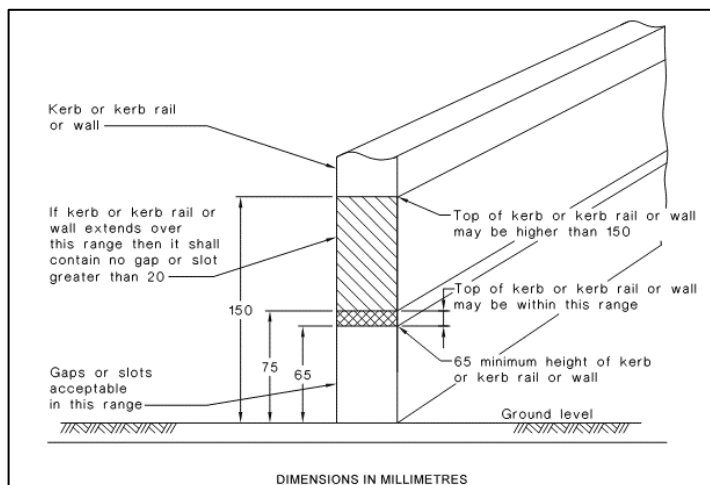
NOTE: Where slotted openings are less than 8 mm, the length of the slots may continue across the width of paths of travel.

Clause 10.2 – Walkways (any path graded 1:20 to 1:39)

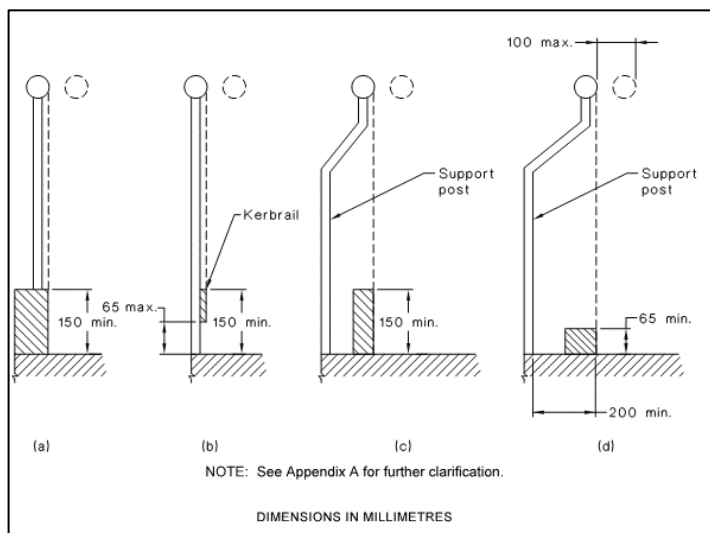
Walkways shall comply with the following:

- The maximum gradient of a walkway shall be 1 in 20 (5%).
- For walkways and landings having gradients in the direction of travel shallower than 1 in 33, a camber or crossfall shall be provided for shedding of water and shall be no steeper than 1 in 40, except that bitumen surfaces shall have a camber or crossfall no steeper than 1 in 33.

- 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 as per the figure below:



- Kerb rail and handrail as per the figure below:



- A wall not less than 450 mm in height.

Clause 10.3 – Ramps (any path graded 1:14 to 1:19)

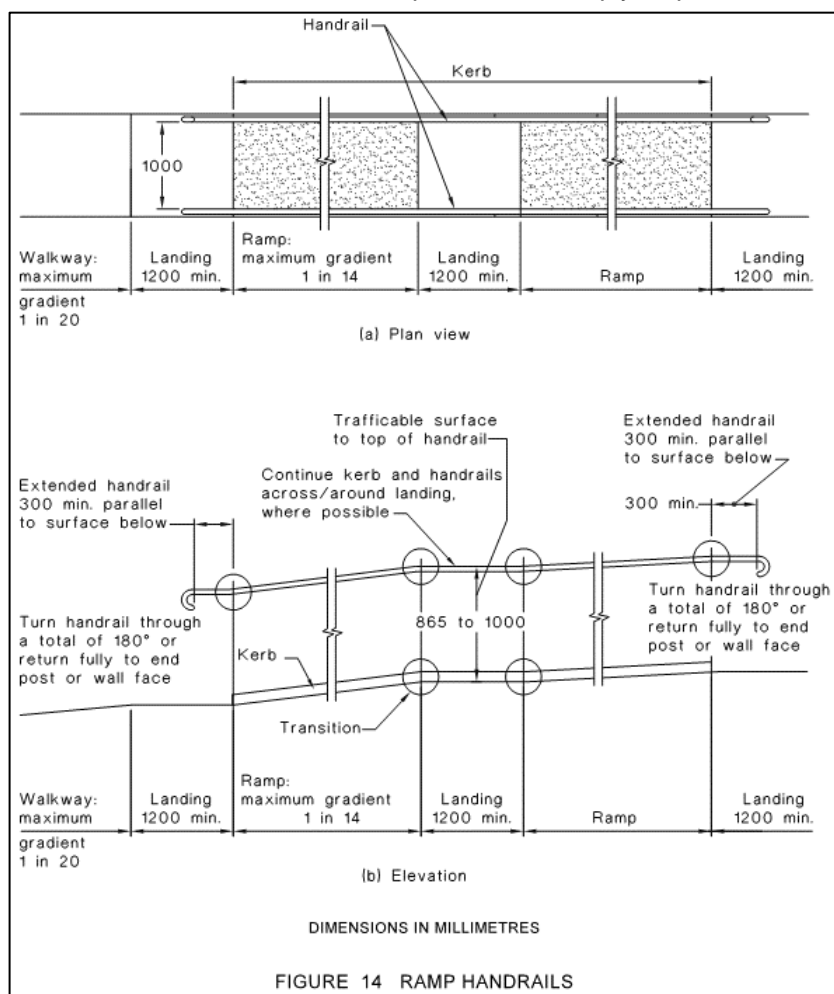
General

- Sharp transition shall be provided between the planes of landings and ramps.
- The maximum gradient shall be 1 in 14 (7.14%).
- The gradient of a ramp shall be constant throughout its length with a maximum allowable tolerance of 3% provided no section of the ramp is steeper than 1 in 14.
- Ramps shall be provided with landings at the bottom and at the top of the ramp, as well as at every 9m (max) intervals.
- Where ramps are constructed with a change in direction, the angle of approach shall create a 90° angle to the line of transition between the ramp surface and the landing surface.

- Landings shall be minimum 1000mm (wide) by 1200mm (deep) if no change in direction occurs otherwise 1500mm by 1500mm if there is a 90-degree change in direction.

Handrails

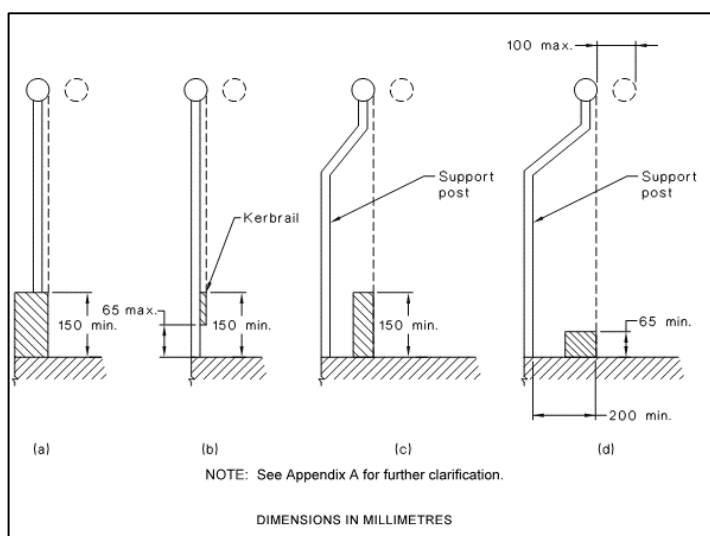
- See also Clause 12 requirements.
- Ramps shall have a handrail on each side of the ramp and shall comply as per the following figure:



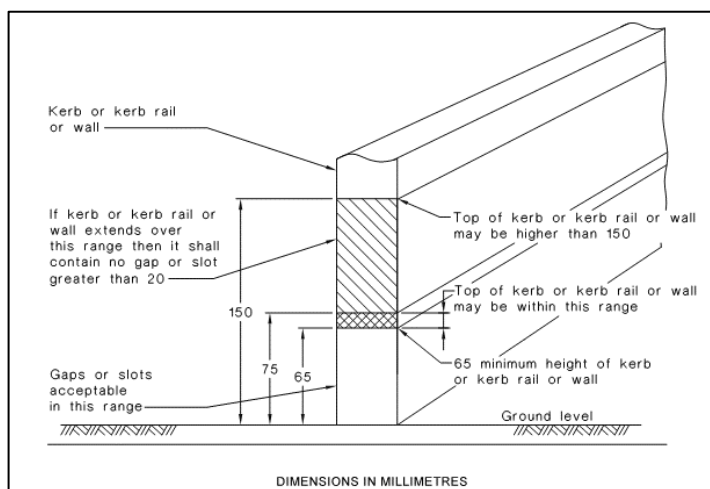
- Where the intersection is at the property boundary, the ramp shall be set back by a minimum of 900 mm so that the handrail and TGSIs do not protrude into the transverse path.
- Where the intersection is at an internal corridor, the ramp shall be set back by a minimum of 400 mm so that the handrail does not protrude into the transverse path of travel.

Kerb or kerb rails

- Ramps and intermediate landings shall have kerbs or kerb rails on both sides that comply with the following four options:



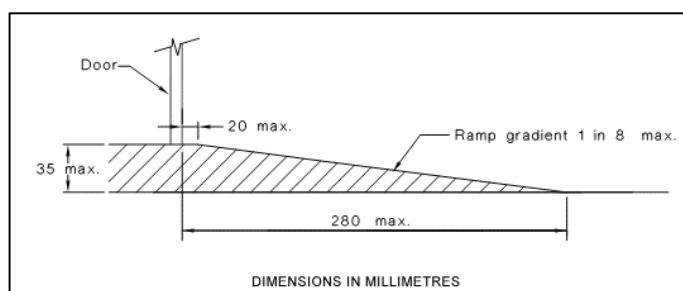
- There shall be no longitudinal gap or slot greater than 20 mm in the kerb or kerb rail within the range 75 mm to 150 mm above the finished floor. See below:



- Where the handrail is supported on a vertical post, the height of the top of the kerb or kerb rail shall be not less than 150 mm above the finished floor, as shown in the figure above.
- where the kerb is at a height of 65 mm to 75 mm, the support posts shall be set back a minimum of 200 mm from the face of the kerb or kerb rail, as shown in (d) on the figure above.

Clause 10.5 – Threshold ramps

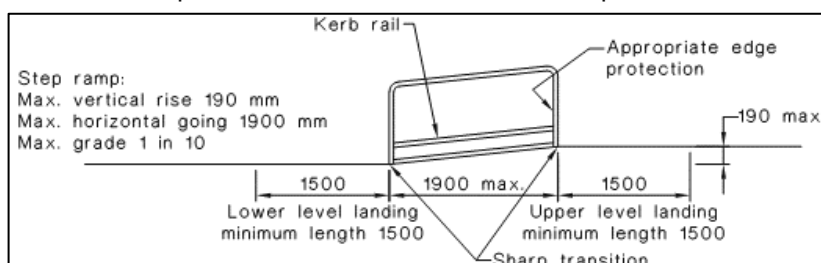
- Threshold ramps at doorways on a continuous path of travel shall have —
 - a maximum rise of 35 mm;
 - a maximum length of 280 mm;
 - a maximum gradient of 1:8; and
 - be located within 20 mm of the door leaf which it serves as shown below.



- The edges of the threshold ramp shall be tapered or splayed at a minimum of 45° where the ramp does not abut a wall.

Clause 10.6 – Step ramps

- Step ramps shall have —
 - a maximum rise of 190 mm;
 - a length not greater than 1900 mm; and
 - a gradient not steeper than 1 in 10.
- The edges of step ramp shall have a 45° splay where there is pedestrian cross-traffic. Otherwise, it shall be protected by a suitable barrier, such as —
 - a wall or suitable barrier with a minimum height of 450 mm; or
 - where an open balustrade is provided a kerb or kerb rail shall be provided.



- Top and bottom landings shall be provided to step ramps. Generally, landing to be 1500mm deep if there is a change in direction otherwise 1200mm deep.
- Step ramp finish shall have a slip-resistant surface.

Clause 10.7 – Kerb ramps

- Kerb ramps shall be aligned in the direction of travel.
- Kerb ramps shall have—
 - a maximum rise of 190 mm;
 - a length not greater than 1520 mm; and
 - a gradient not steeper than 1 in 8, located within or attached to a kerb.
- The profile of ramps shall comply with the following:
 - The design and construction of kerb ramps shall be as shown in Figures 24(A), 24(B) and 24(C) (Refer to AS 1428.1-2009).
 - The sloping sides of a kerb ramp shall be tapered or splayed as indicated in Figures 24(A) and (24(B) (Refer to AS 1428.1-2009).
 - The angle at the base of the kerb ramp shall be a minimum of 166° as shown in Figures 24(A) and 24(B) (Refer to AS 1428.1-2009).
- Kerb ramp finish shall have a slip-resistant surface.

- Where a 'T' junction occurs, the kerb ramp landing shall be a minimum of 1500 × 2000 mm.
- Where a single change in direction is required, the ramp landings shall be a minimum of 1500 mm × 1500 mm.

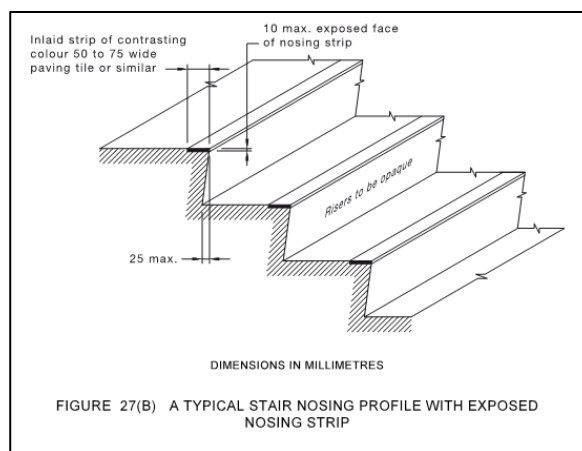
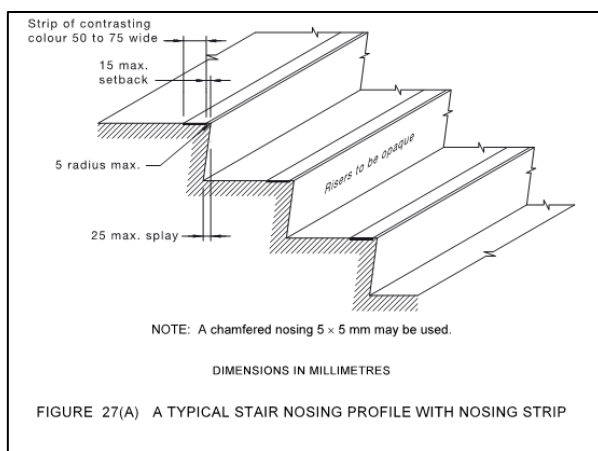
Clause 11 – Stairways

General

- Where the stair intersection is at the property boundary, the stair shall be set back by a minimum of 900 mm from the boundary so that the handrail and TGSIs do not protrude beyond the boundary.
- Where the stair intersection is at an internal corridor, the stair shall be set back sufficiently to accommodate the handrail extensions incorporating a one tread depth + 300mm horizontal extension.
- Stairs shall have opaque risers.

Nosing's

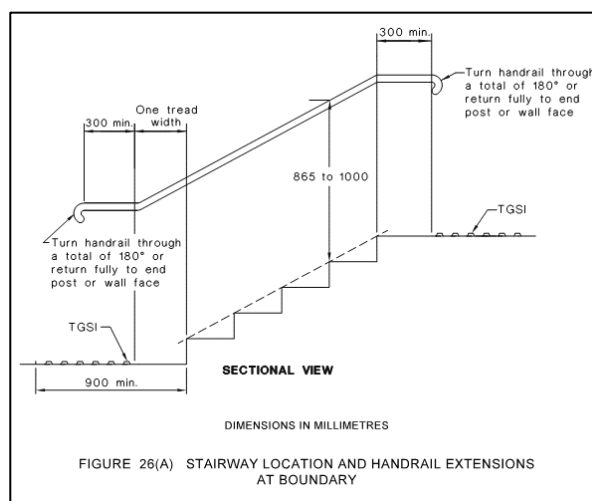
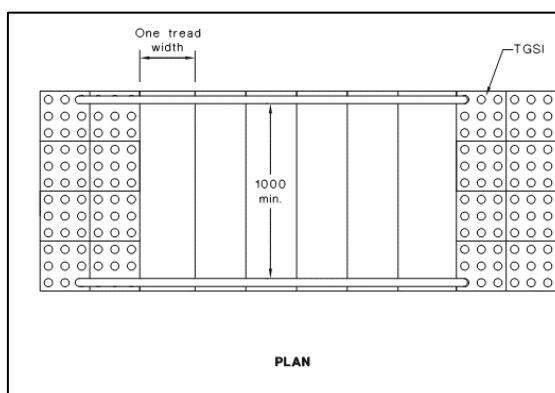
- Stair nosing profiles shall —
 - have a sharp intersection.
 - be rounded up to 5 mm radius; or
 - be chamfered up to 5 mm × 5 mm.
- At the nosing, each tread shall have a strip not less than 50 mm and not more than 75 mm deep across the full width of the path of travel. The strip may be set back a maximum of 15 mm from the front of the nosing. The strip shall have a minimum luminance contrast of 30% to the background. Where the luminous contrasting strip is affixed to the surface of the tread, any change in level shall comply with Clause 7.
- Where the luminance contrasting strip is not set back from the front of the nosing then any area of luminance contrast shall not extend down the riser more than 10 mm.
- Stair nosing's shall not project beyond the face of the riser and the riser may be vertical or have a splay backwards up to a maximum 25 mm, see below:



Handrails

- See also Clause 12 requirements.
- Handrails shall be installed on both sides of the stair.
- Handrails shall be continuous throughout the stair flight and, where practicable, around landings and have no obstruction on or above up to a height of 600 mm.
- Handrails shall have no vertical sections and shall follow the angle of the stairway nosing's.
- Where a handrail terminates at the bottom of a flight of stairs, the handrail shall extend at least one tread depth parallel to the line of nosing's plus minimum of 300 mm horizontally from the last riser.
- The handrail shall extend a minimum of 300 mm horizontally past the nosing on the top riser.

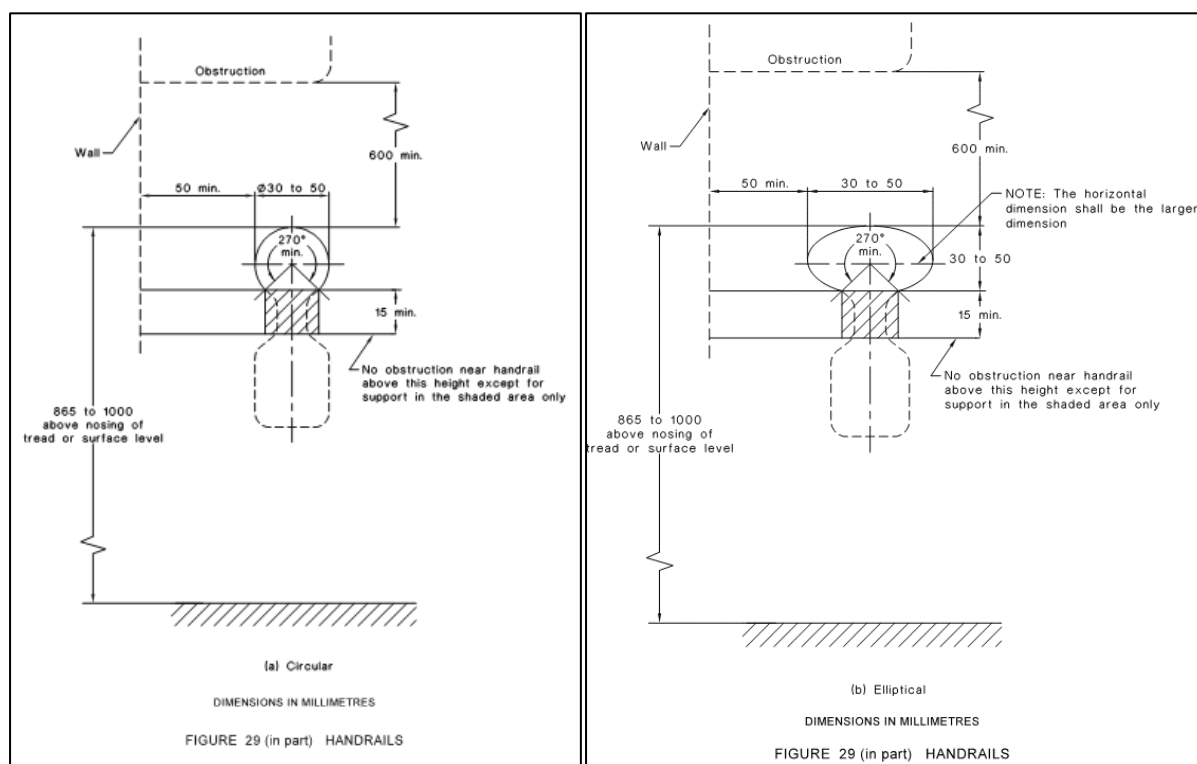
- Where the handrail is continuous, the 300 mm extension is not required in the inner handrail at intermediate landings.
- The dimensions indicating the heights of handrails shall be taken vertically from the nosing of the tread to the top of the handrail or from the landing to the top of the handrail.
- The design and construction of handrails shall comply as follows:



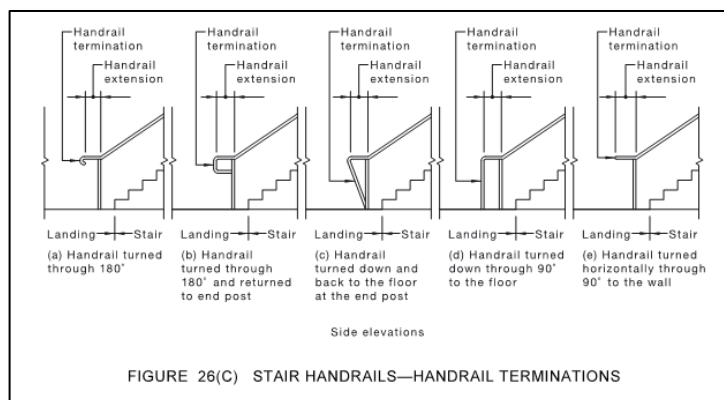
Clause 12 – Handrails (applies to both stairs & ramps)

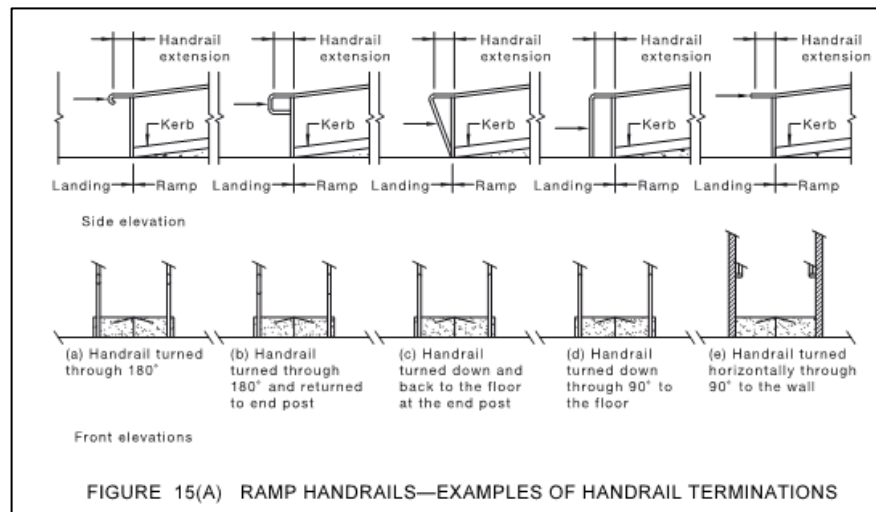
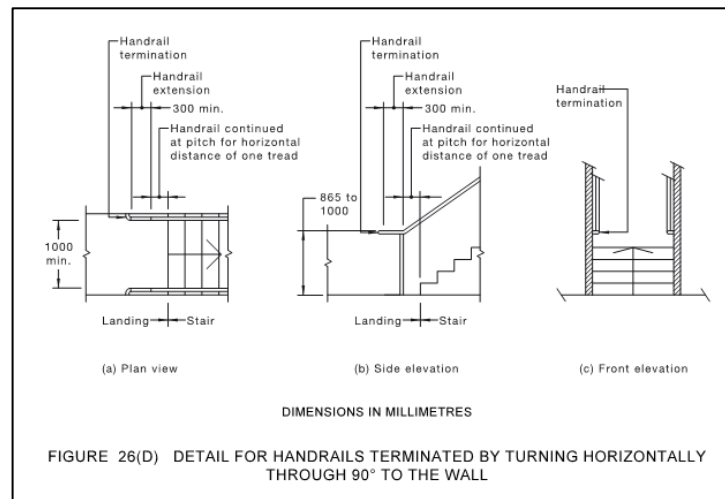
Design and construction of handrails to comply as follows:

- Handrails and balustrades shall not encroach into required circulation spaces.
 - Handrails to have no obstructions to the passage of a hand along the rail. See Figure 29 (a) & (b) below.
 - The cross-section of handrails shall be circular or elliptical, not less than 30 mm or greater than 50 mm in height or width for not less than 270° around the uppermost surface as shown in the Figures 29(a) and 29(b) – See below.
- Elliptical handrails shall have the greater dimension in the horizontal axis as shown in Figure 29(b).

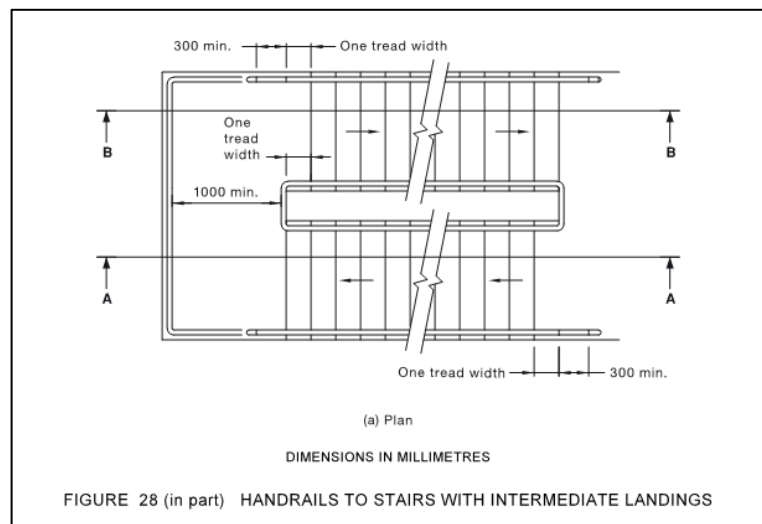


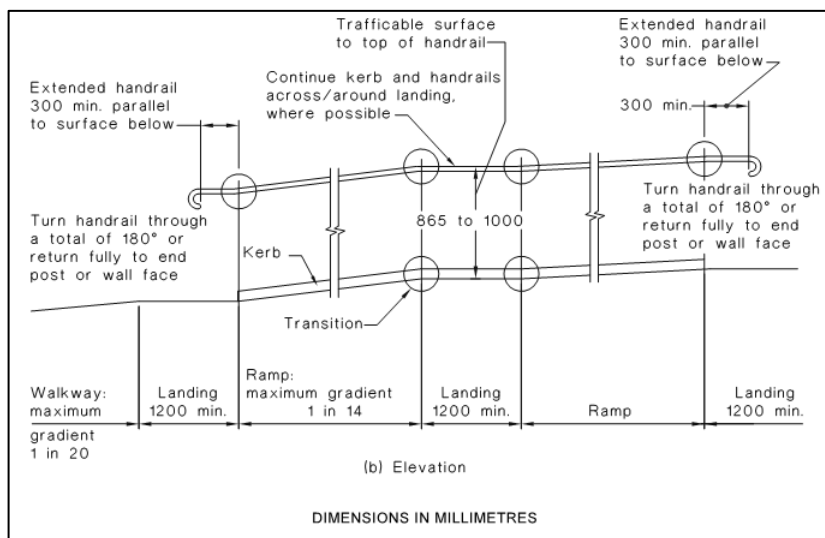
- Exposed edges or corners have min. radius of 5mm.
- Top of handrail to be between 865mm and 1000mm above nosing or landing.
- Handrail heights to be consistent throughout. No tolerance provided.
- If balustrade is required at a height greater than the handrail, both shall be provided.
- Handrails to 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. See various acceptable options on Figure 26 (C) & (D) for stairs and Figure 15(A) for ramps:





- Min. 50mm clearance to adjacent wall or other obstruction, for a height of 600mm.
- The inside inner handrail at landings shall always be continuous as shown on Figure 28 below.





Clause 13 – Doorways, doors & circulation space at doorways

Circulation & openings

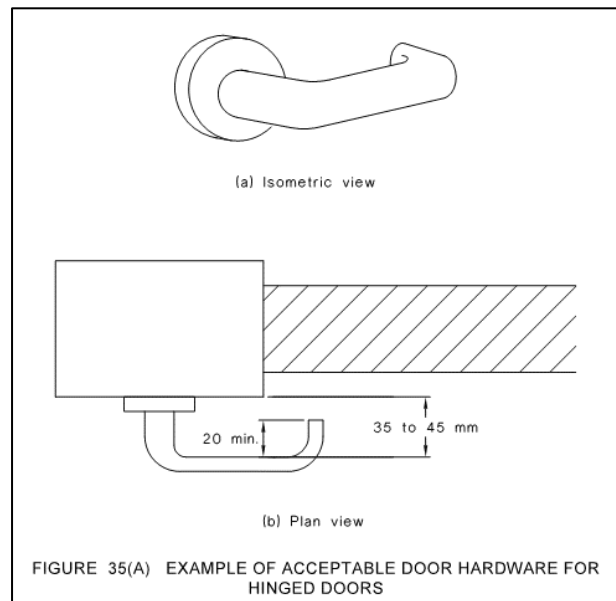
- All door and gates shall achieve circulation space as per AS 1428.1-2009
- All doorways shall have a minimum luminance contrast of 30% provided between:
 - door leaf and door jamb;
 - door leaf and adjacent wall;
 - architrave and wall;
 - door leaf and architrave; or
 - door jamb and adjacent wall.

The minimum width of the area of luminance contrast shall be 50 mm.

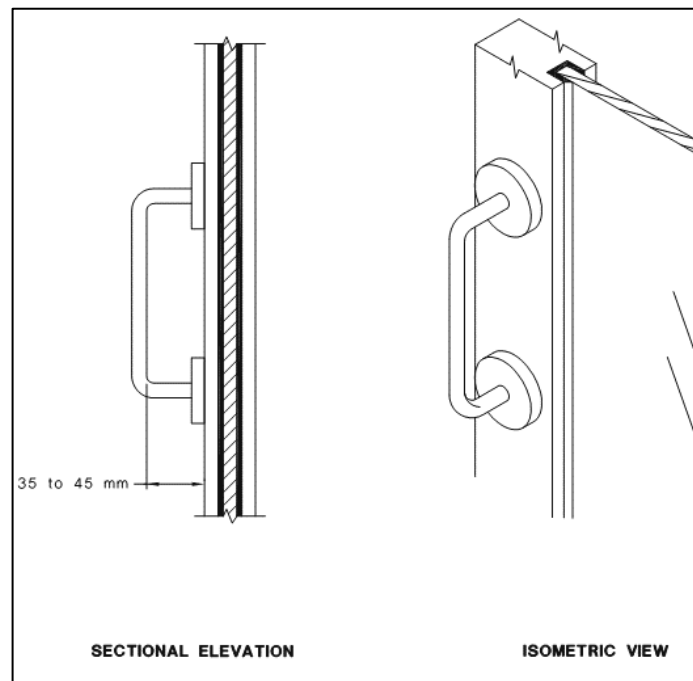
- The minimum clear opening of a doorway on a continuous accessible path of travel shall be 850 mm when measured from the face of the opened door to the doorstep.
- Where double doors are used, the 850 mm minimum clear opening shall apply to the active leaf.
- Circulation spaces at doorways shall have a gradient and crossfall not steeper than 1 in 40.
- The distance between doorways in vestibules, air locks and other similarly enclosed spaces shall be not less than 1450 mm. Where the doors encroach into space, the distance shall be not less than 1450 mm plus the door leaf width.

Door hardware

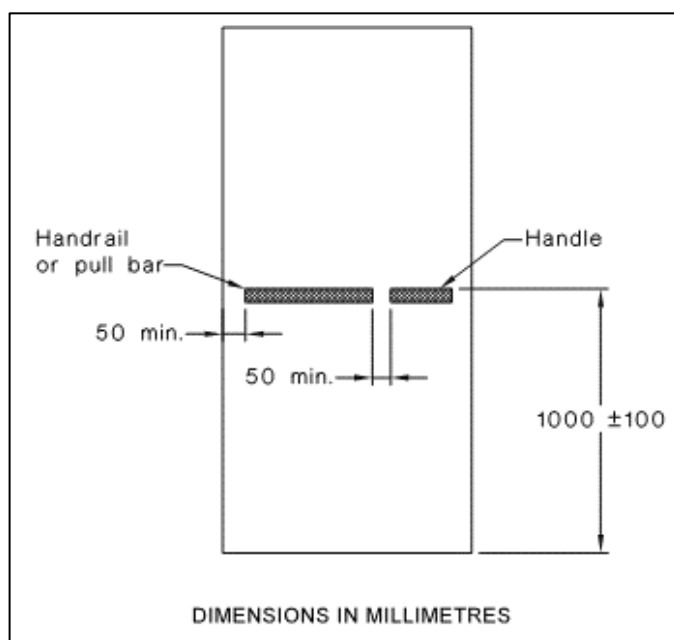
- For doors other than fire doors and smoke doors where a door closer is fitted, the force required at the door handle to operate the door shall not exceed the following:
 - (i) To initially open the door..... 20 N
 - (ii) To swing or slide the door.....20 N.
 - (iii) To hold the door open between 60° and 90°.....20 N.
- The door handle and related hardware shall be of the type that allows the door to be unlocked and opened with one hand and achieve a 35-45mm clearance between the handle and the back plate or door face at the centre grip section of the handle. See below.



- 'D' type handles shall be provided on sliding doors as follows



- Where snibs are installed, they shall have a lever handle of a minimum length of 45 mm from the centre of the spindle.
- Where an outward opening door that is not self-closing, a horizontal handrail or pull bar shall be fixed on the closing face of a side-hung door, as shown below.



Hardware height & clearances

- Controls that need to be grasped or turned shall be not less than 900 mm and not more than 1100 mm above the plane of the finished floor, as shown in Figure 36.
- Controls that only need to be pushed, such as panic bars on egress routes, shall be not less than 900 mm, and not greater than 1200 mm above the plane of the finished floor.
- Controls that only need to be touched shall be not less than 900 mm, and not greater than 1250 mm above the plane of the finished floor, and not less than 500 mm from an internal corner except as specified in AS 1735.12.
- Handles on sliding doors shall be not less than 60 mm from the door jamb or doorstop when in the open or closed position, as shown in Figure 30.
- Manual controls to power-operated doors shall be located on the continuous accessible path of travel 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.
- 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.

Clause 15 – Accessible sanitary facilities

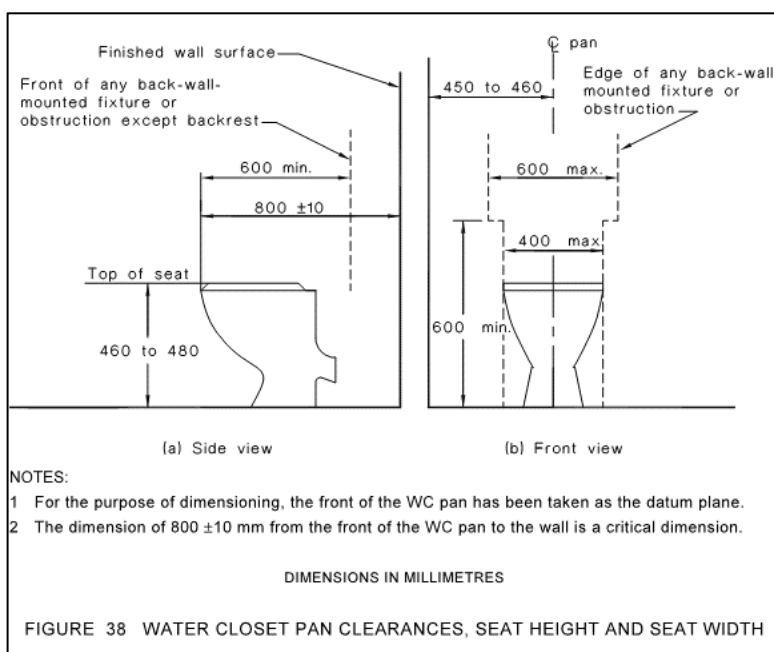
The accessible sanitary facilities shall be designed and constructed to comply as follows:

Water taps (applies to washbasin & shower)

- Taps shall have lever handles, sensor plates, or other similar controls.
- Lever handles shall have not less than 50 mm clearance from an adjacent surface.
- Where separate taps are provided for hot and cold water, the hot water tap shall be placed to the left of the cold water tap for horizontal configurations, or above the cold water tap for vertical configurations.
- Where hot water is provided, the water shall be delivered through a mixing spout.

WC pan clearances

- WC pan clearances, including set-out, seat height and seat width shall be as shown in Figure 38 below:



WC pan seat

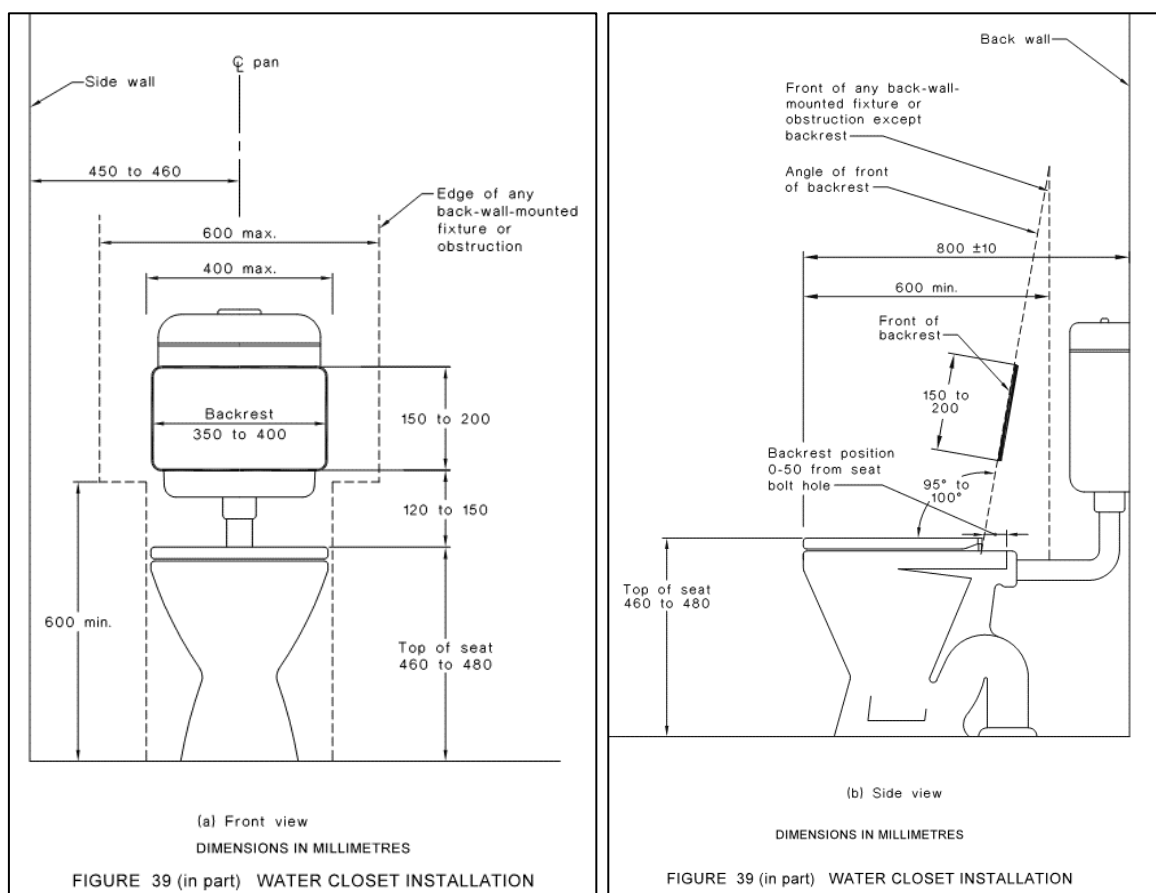
The toilet seat shall—

- be of the full-round type, (i.e. not open fronted) and with minimal contours to the top surface.
- be securely fixed in position when in use.
- have seat fixings that create lateral stability for the seat when in use.
- be load-rated to 150 kg.
- have a minimum luminance contrast of 30% with the background (e.g., pan, wall or floor against which it is viewed).

WC pan backrest

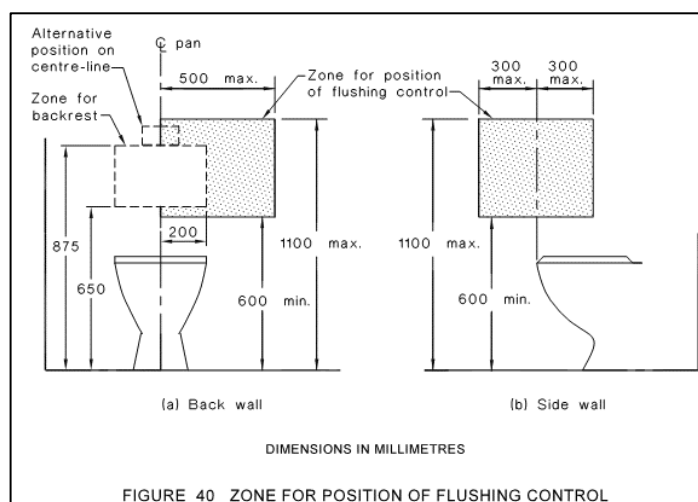
The backrest shall—

- be capable of withstanding a force in any direction of 1100 N.
- have a height, at the lower edge of backrest to the top of the WC seat, of 120 mm to 150 mm, as shown in Figure 39(a), see below.
- have a vertical height of 150–200 mm and a width of 350–400 mm, as shown in Figure 39(a), see below.
- the front edge of the centre of the backrest be positioned to achieve an angle of between 95° to 100° back from the seat hinge (Figure 39(b), see below).



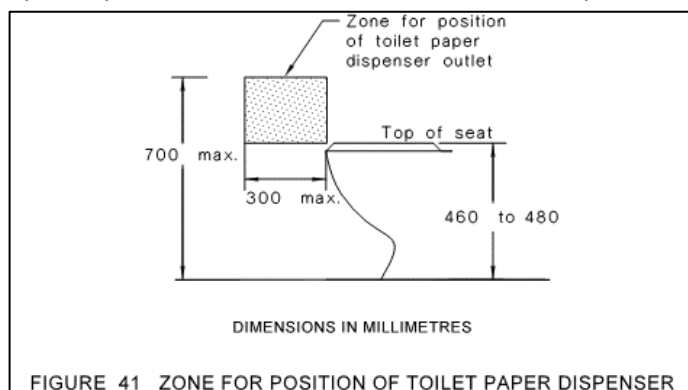
WC pan flush

- Flushing controls shall be user activated, either hand operated or automatic.
- The flushing control shall be proud of the surface and shall activate the flush before the button becomes level with the surrounding surface.
- Where hand-operated flushing controls are used, they shall be located within the zone shown in Figure 40 or centred on the centre-line of the toilet, wholly within the vertical limits of that zone. The position of the flushing control within this zone shall not be within the area required for any grabrails or backrest.



WC toilet paper dispenser

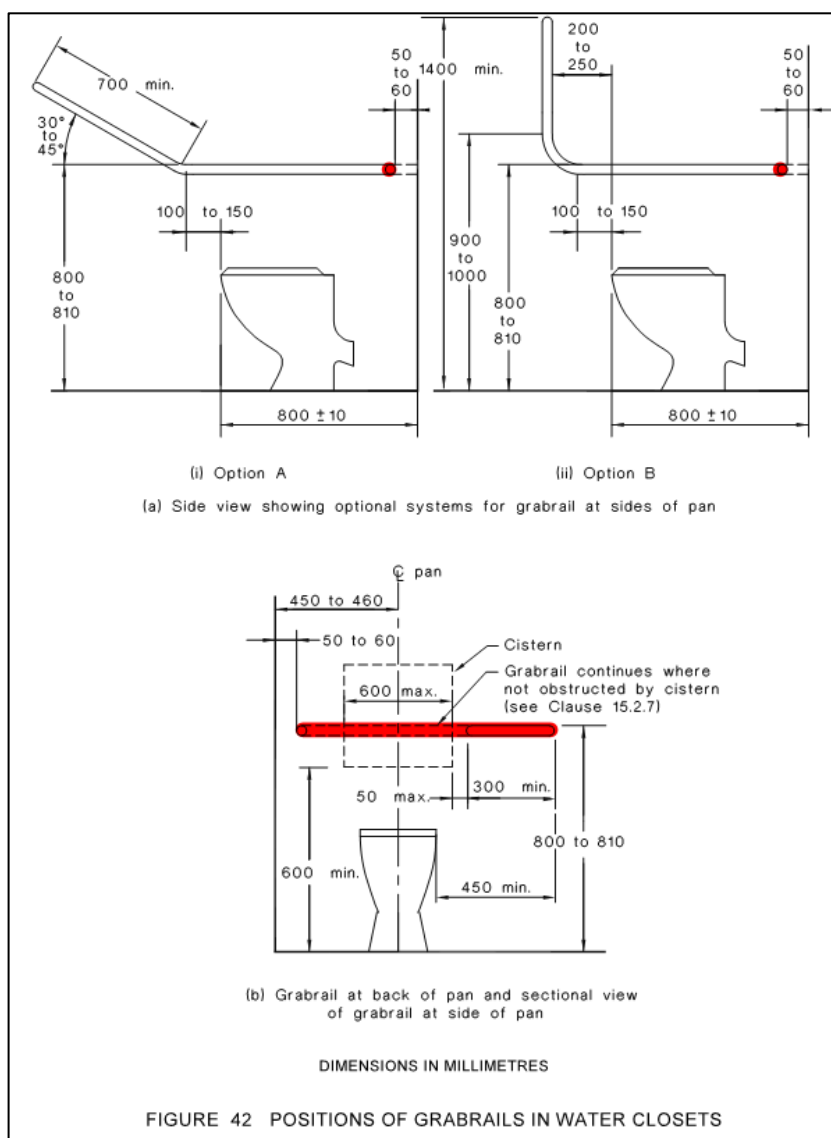
- The outlet for the toilet paper dispenser shall be located within the zone specified in Figure 41, see below.



- The toilet paper dispenser shall not encroach upon the clearance space required around the WC pan grabrails.

Grabrails

- Where a concealed or high-level cistern or flush valve is used, a continuous grabrail shall be provided across the rear wall and side wall nearest the WC pan, as shown in Figure 42, see below.



- Where a low-level non-concealed cistern or flush valve is used, the grabrail shall be terminated at each side of the cistern, as shown in Figure 42, see above but not need to provide a continuation of the grabrail.

WC door

WC doors may be either hinged or sliding. WC doors shall comply with the following:

- Outward-opening doors shall have a mechanism that holds the door in a closed position without the use of a latch.
- 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.
- The force required to operate the door if it is fitted with a door closer shall not exceed the following:
 - (i) To initially open the door..... 20 N
 - (ii) To swing or slide the door.....20 N.
 - (iii) To hold the door open between 60° and 90°.....20 N.

- Door handles and hardware shall be in accordance with Clause 13.5.

Baby change table

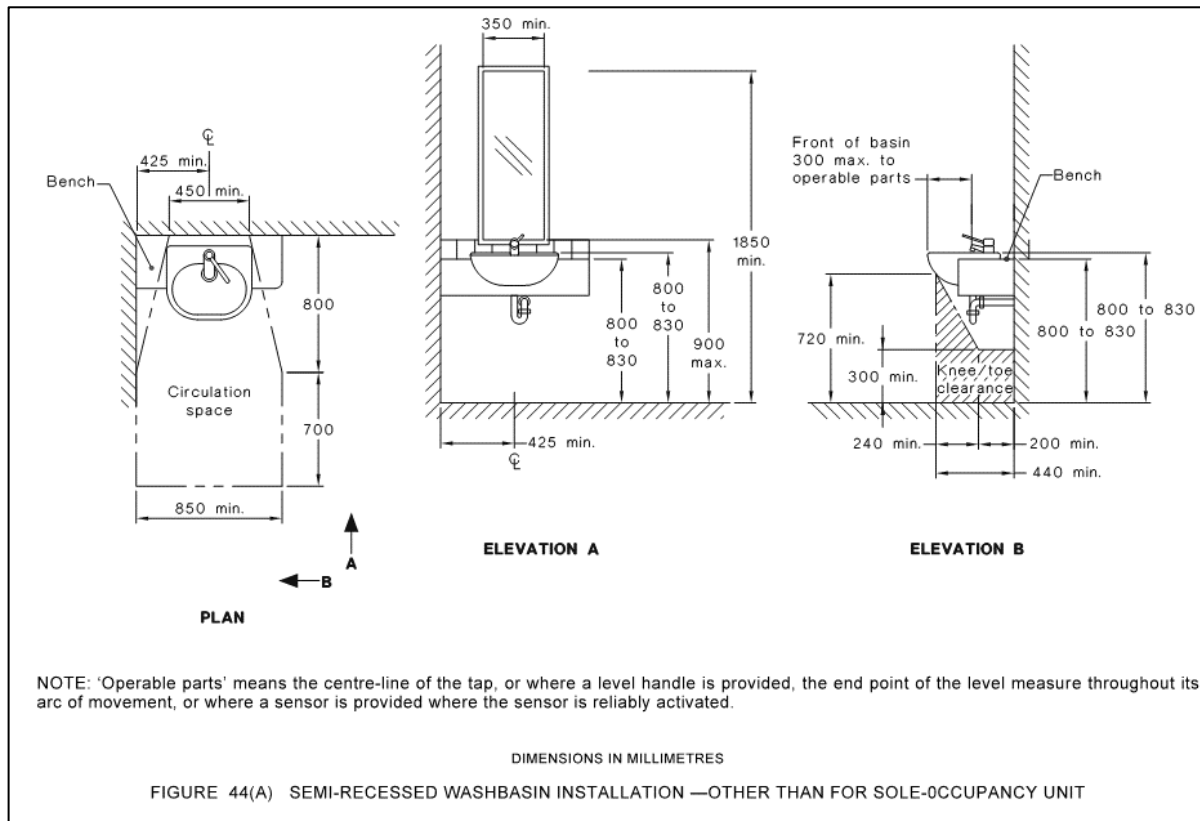
Where installed, baby change tables shall—

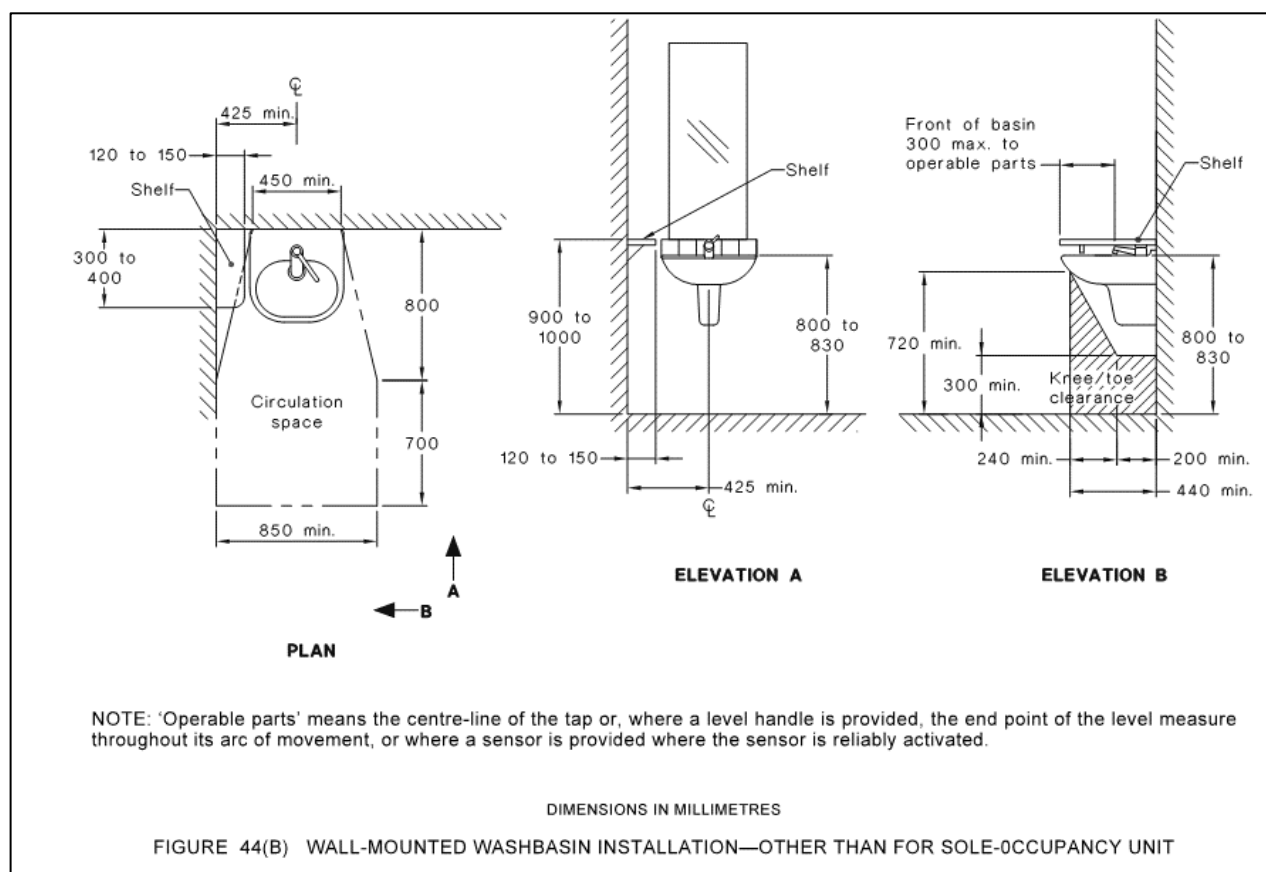
- not encroach into the circulation space of any other toilet facility when in the folded up position; and
- have a maximum height of 820 mm and a minimum clearance underneath of 720 mm when in the open position.

Washbasin

The installation of washbasins shall comply with the following:

- The washbasin shall be outside the pan circulation space.
- Exposed hot water supply pipes shall be insulated or located so as not to present a hazard.
- Water supply pipes and waste outlet pipes shall not encroach on the required clear space under the washbasin.
- The required clearances, dimensions, and setbacks for washbasin shall comply as follows:





Mirror

- Provide mirror to WB, located either above or adjacent to the washbasin.
- A vertical mirror with a reflective surface not less than 350 mm wide shall extend from a height of not more than 900 mm to a height of not less than 1850 mm above the plane of the finished floor.
- Where a second vertical mirror is provided it shall extend from a height of not less than 600 mm to a height of not less than 1850 mm above the plane of the finished floor.
- Angled or tilted mirrors should not be used.
- In an accessible sole occupancy unit, the mirror shall be centred over the washbasin.

Shelves

Shelf space shall be provided adjacent to the washbasin in one of the following ways:

- As a vanity top at a height of 800 mm to 830 mm and a minimum width of 120 mm and depth of 300 mm to 400 mm without encroaching into any circulation space.
- As a separate fixture—
 - within any circulation space at a height of 900 mm to 1000 mm with a width of 120 mm to 150 mm and length of 300 mm to 400 mm; and
 - external to all circulation spaces at a height of 790 mm to 1000 mm with a minimum width of 120 mm and minimum length of 400 mm.

Soap dispensers, towel dispensers and similar fittings

- Where provided, soap dispensers, towel dispensers, hand dryers and similar fittings shall be operable by one hand, and shall be installed with the height of their operative component or outlet not less than 900 mm and not more than 1100 mm above the plane of the finished floor, and no closer than 500 mm from an internal corner.

Clothes-hanging devices

- A clothes-hanging device shall be installed 1200 mm to 1350 mm above the plane of the finished floor and not less than 500 mm out from any internal corner.

Sanitary disposal unit

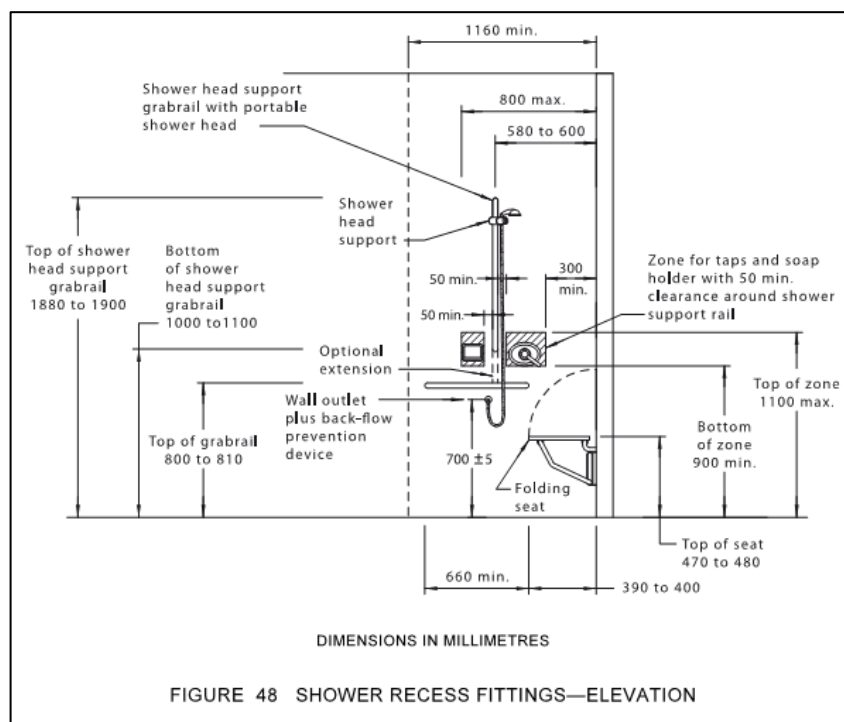
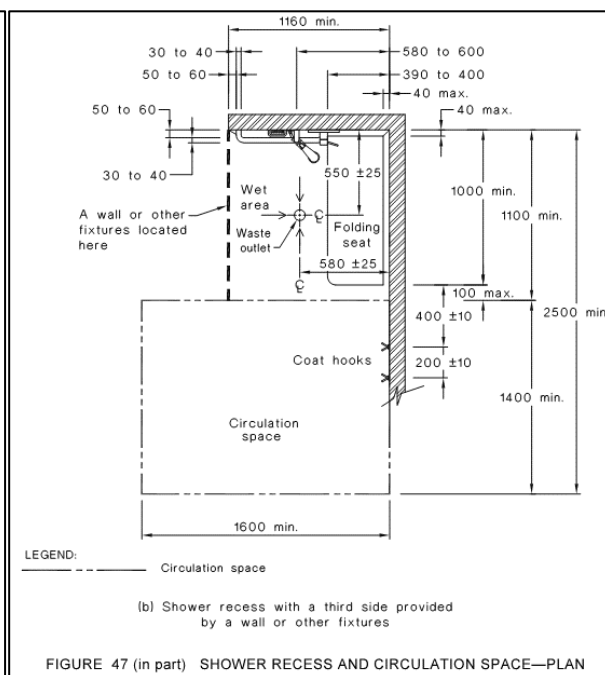
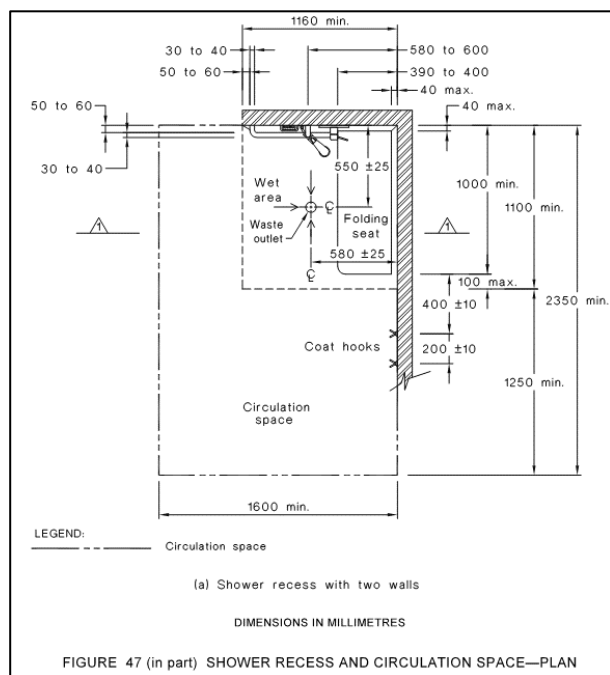
- Where provided, the sanitary disposal unit shall be located as follows:
 - Portable unit.
 - Recessed unit within 500 mm from the pan.

Switches and general purpose outlets

- Switches and GPOs to be located as close as possible to the shelf.
- All switches and controls, other than general purpose outlets, shall be located not less than 900 mm nor more than 1100 mm above the plane of the finished floor and not less than 500 mm from internal corners.
- Rocker action and toggle switches shall be provided and have a minimum dimension of 30 mm x 30 mm. Push-pad switches shall have a minimum dimension of 25 mm in diameter.
- General purpose outlets shall be located not less than 600 mm nor more than 1100 mm above the plane of the finished floor and not less than 500 mm from internal corners.

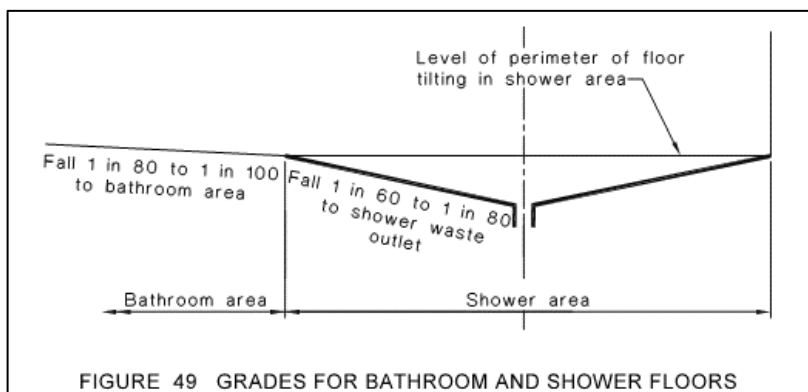
Showers

- Provide back flow prevention device at the shower head wall outlet.
- Shower recess fixtures and fittings shall be provided as shown in Figures 47 and Figure 48, see below.
- Not less than two clothes-hanging devices shall be fitted outside the shower recess. One such device shall be located within 400 ±10 mm and the other within 600 ±10 mm of the folding seat.
- The waste outlet for the shower shall be provided in accordance with Figure 47, see below.



- The floor of the shower recess and associated circulation space shall be self-draining and without a step-down, raised step kerb or hob at the entry to the recess.
- The slope of the floor of the shower recess shall have a gradient between 1 in 60 and 1 in 80, as shown in Figure 49, see below.

- The slope of floor of the remainder of the sanitary facility shall have a gradient between 1 in 80 and 1 in 100, as shown in Figure 49, see below.



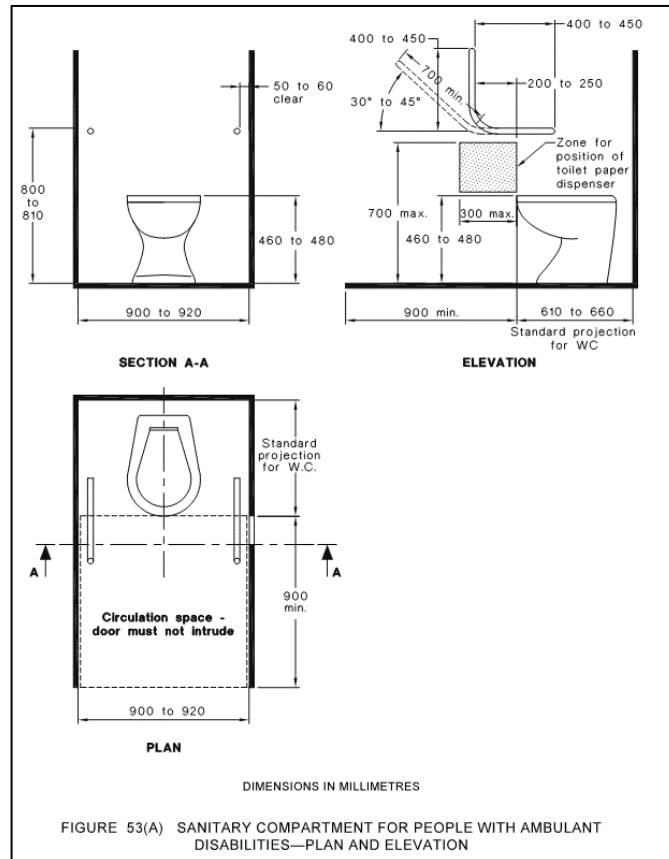
- A hand-held shower head shall be provided, which shall have a flexible hose of a minimum length of 1500 mm.
- An adjustable shower head holder shall be provided to support the shower head and shall—
 - be installed on the shower head holder support grabrail as shown in Figure 48, see above;
 - allow the graspable portion of the shower head to be positioned at various angles and heights;
 - allow the graspable portion of the shower head to be located at heights between 1000 mm and 1800 mm above the plane of the finished floor; and
 - allow access and adjustment from a seated position.
- Provide soap holder in the zone shown in Figure 48, above.
- Provide a folding seat inside shower area as shown in Figure 47 above but also shall be self-draining, slip resistant, front corners rounded to a radius of 10-15mm, have top edges that are rounded within a minimum radius of 2 to 3mm and shall fold in an upwards direction and when folded the grabrail shall be accessible. The fastenings, materials and construction of the set shall withstand a force of 1100N at any position and in any direction without failing or loosening of fastenings.

Clause 16 – Sanitary compartments for people with ambulant disabilities

Sanitary compartments for people with ambulant disabilities shall be designed and constructed to comply as follows:

- Compartment door shall have a clear opening width of not less than 700 mm.
- Door 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.
- The latch mechanism shall be openable from the outside.
- Sanitary compartment for people with ambulant disabilities shall be identified by signage as per BCA Spec 15 and Clause 8 of AS 1428.1-2009.
- Provide a coat hook within the compartment at a height 1350-1500mm from the floor.
- Provide single roll toilet paper holder.
- Provide grabrails on either side of the pan to comply as follows:
 - Grabrail diameter shall be 30-40mm.
 - Exposed edges and corners of grabrails shall have a radius of not less than 5 mm.
 - Re-enforce walls and use high-strength fastenings for the grabrails such that they can withstand a force of 1100N when applied at any position and in any direction without deformation or loosening or rotation of the fastenings or fittings.
 - The clearance between a grabrail and the adjacent wall surface or other obstruction shall be not less than 50 mm and not more than 60 mm.

- The clearance above a horizontal grabrail shall extend above the top of the grabrail by not less than 600 mm. The clearance below a horizontal or angled rail shall be a minimum of 50 mm except at fixing points.
- Grabrails shall be fixed so that there is no obstruction to the passage of the hand along the top 270° arc of horizontal and angled grabrails. There shall be no obstruction to the passage of the hand for the full length of vertical grabrails.
- Refer to Figure 52(A) below to assist with required dimensions, setbacks and clearances:



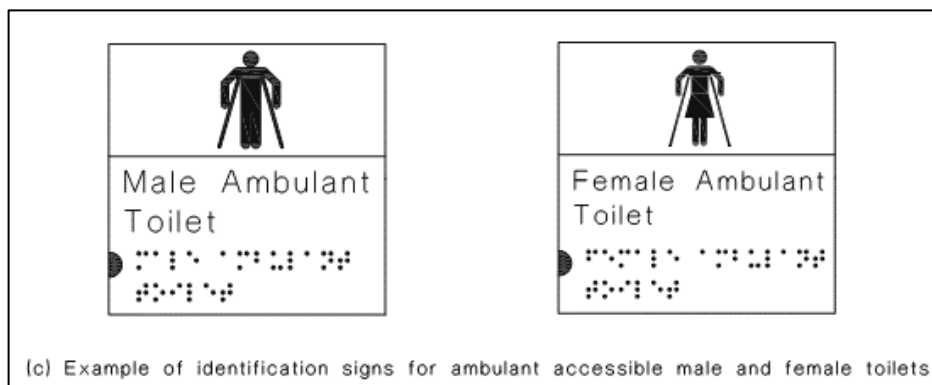
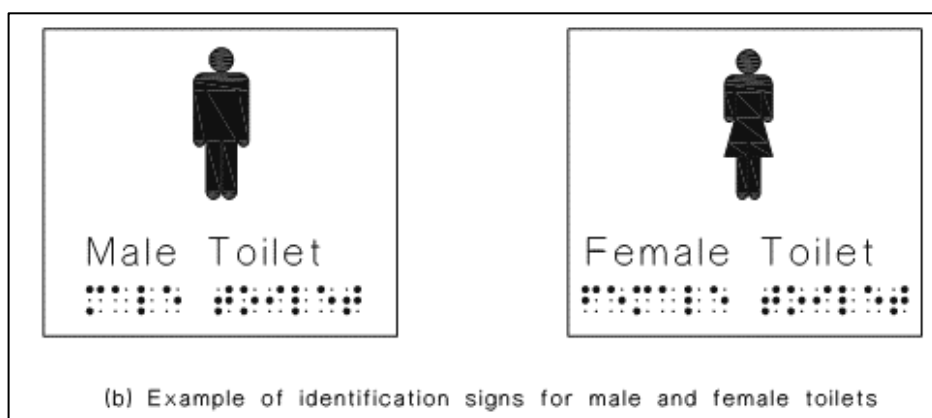
APPENDIX B – SUMMARY OF BCA SPEC 15

BCA Spec 15 & AS 1428.1 – Signage

Any sign required by Clause D4D7 must comply as follows:

- Braille and tactile components of a sign must be located not less than 1200mm and not higher than 1600mm above the floor.
- Signs with single lines of characters must have the line of tactile characters not less than 1250 mm and not higher than 1350 mm above the floor or ground surface.
- Signs identifying rooms containing features or facilities listed in BCA Clause D4D7 must be located:
 - on the wall on the latch side of the door with the leading edge of the sign located between 50 mm and 300mm from the architrave; and
 - where above is not possible, the sign may be placed on the door itself.
- Signage for sanitary facilities:
 - Have raised and visual versions of the international symbol of access.
 - Have raised and visual versions of the male and female symbols.
 - Raised text that shall be in title case.
 - Braille that fully describes the visual information displayed by symbols and raised text.
 - Signs for unisex accessible facilities shall be provided with the letters LH or RH to indicate a left-hand or right-hand side transfer onto the WC pan. The minimum font size shall be 20 mm sans serif.
 - Entry doors to airlocks serving areas containing sanitary facilities shall be identified by the use of raised text and Braille, together with raised and visual symbols identifying each sanitary facility within.
- See signage examples below:





- Signs identifying a door required by BCA Clause F4D12 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 50 mm and 300mm from the architrave; and
 - where the above is not possible, the sign may be placed on the door itself.
- A sign identifying a door required by BCA Clause F4D12 to be provided with an exit sign must state:
 - "Exit"; and
 - "Level"; and either

- (aa) the floor level number; or
- (bb) a floor level descriptor.

See example of a Ground level sign (level descriptor to change to suit each level)



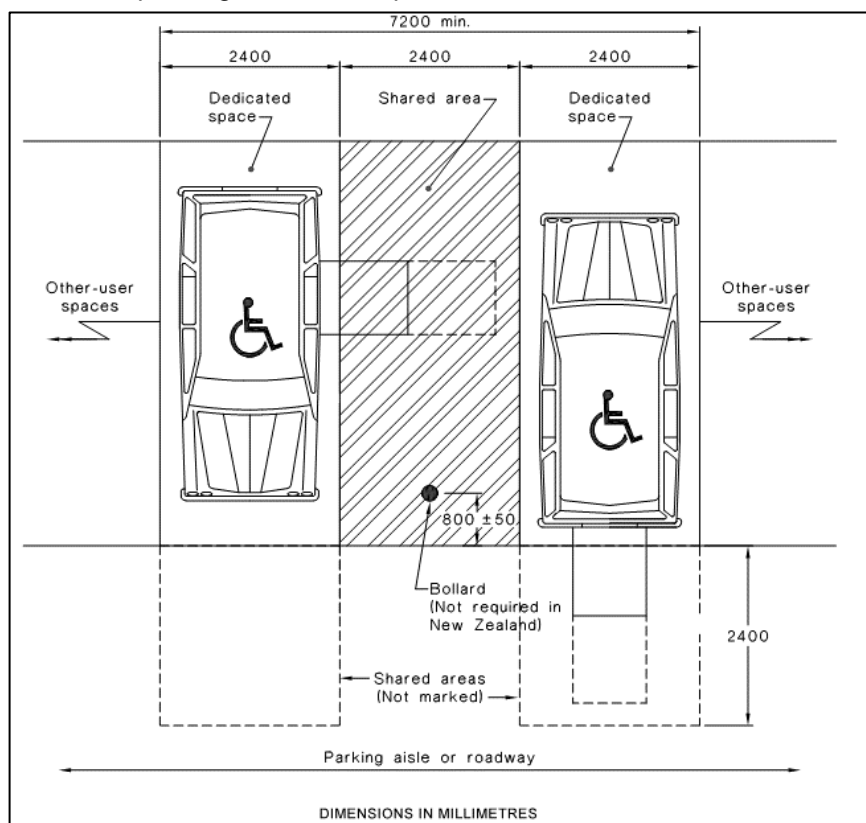
- Refer to Clause 3 & 6 of BCA Spec 15 for specific sign specification.
- The background, negative space, fill of a sign or border with a minimum width of 5 mm must have a luminance contrast with the surface on which it is mounted of not less than 30%.
- Tactile characters, icons and symbols must have a minimum luminance contrast of 30% to the surface on which the characters are mounted.
- Luminance contrasts must be met under the lighting conditions in which the sign is to be located.

APPENDIX C – SUMMARY OF AS 2890.6-2009

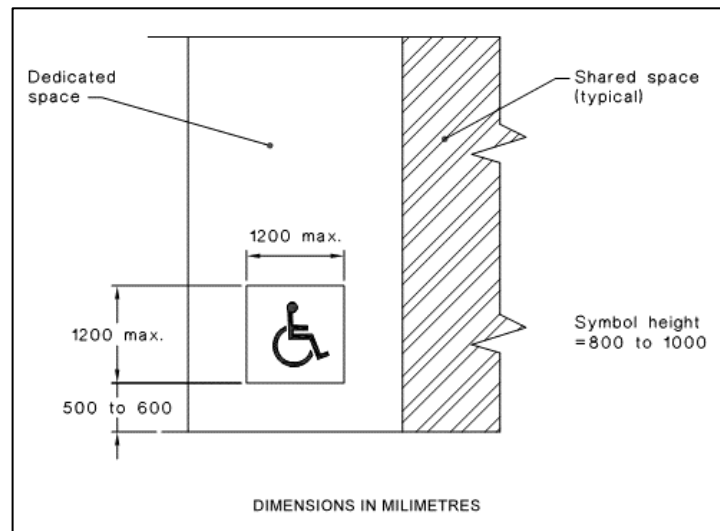
AS 2890.6 – Accessible Carspace

The accessible car spaces shall be designed and constructed to comply as follows:

- Each accessible carspace shall be 2.4m wide and 5.4m long.
- Provide a 'marked' shared area on one side of the accessible carspace that is 2.4m wide and 5.4m long.
- Make allowance for an 'unmarked' shared area on one end of the accessible carspace that is 2.4m wide by 2.4m long.
- All shared areas (marked & unmarked) shall be the same level as the accessible carspace and achieve falls not exceeding 1:40.
- The accessible carspace and shared areas must all be slip-resistant surface.
- Install a bollard to the marked shared.
- Refer to figure below corresponding to the above points:

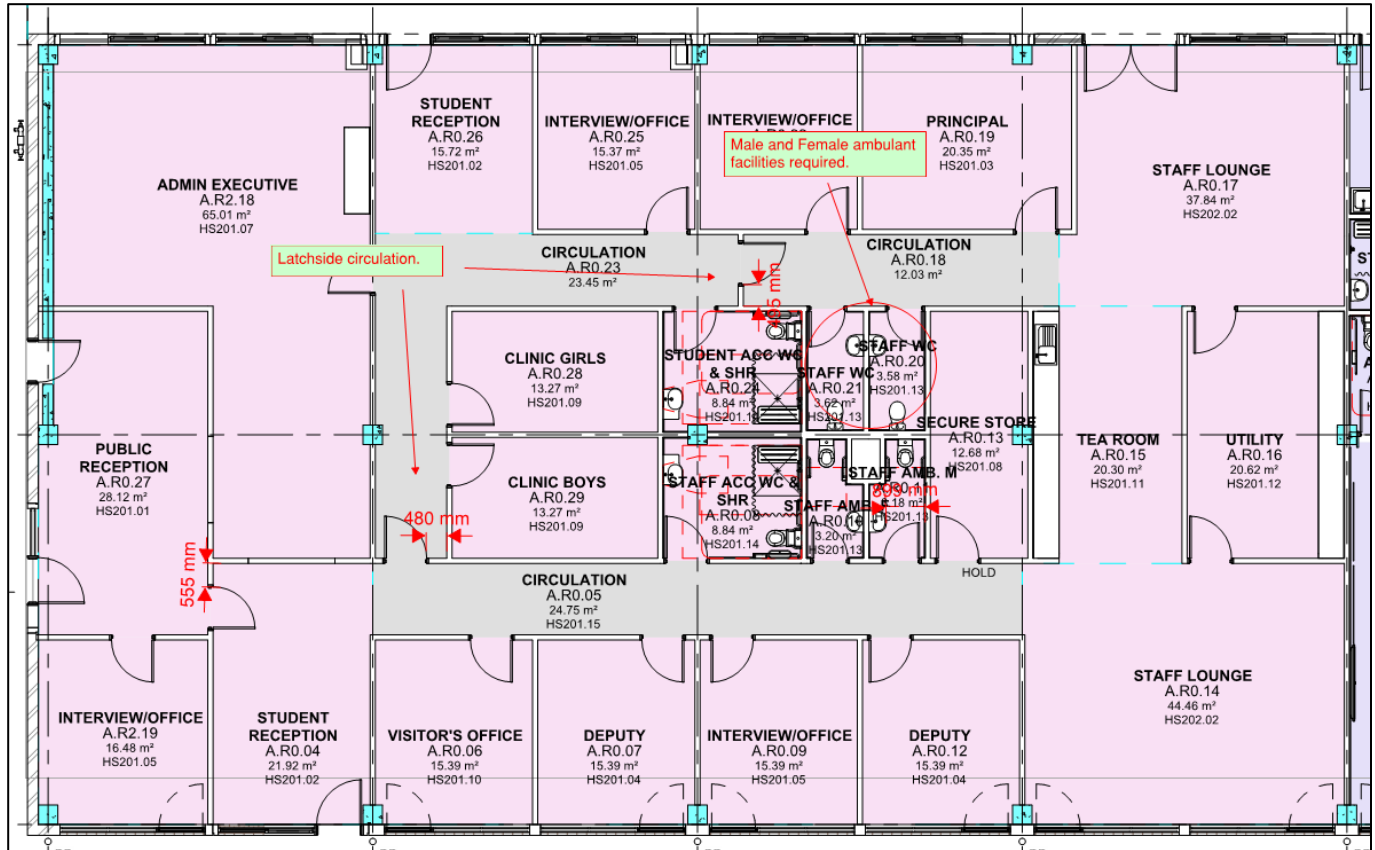


- The path of vehicular travel from the car park entrance to all accessible carparking spaces shall have a minimum headroom of 2.2m.
- The headroom above each accessible car space and adjacent shared area, measured from the level of the accessible car space shall be a minimum of 2500 mm.
- The accessible carspace shall be identified with the wheelchair symbol for access as follows:

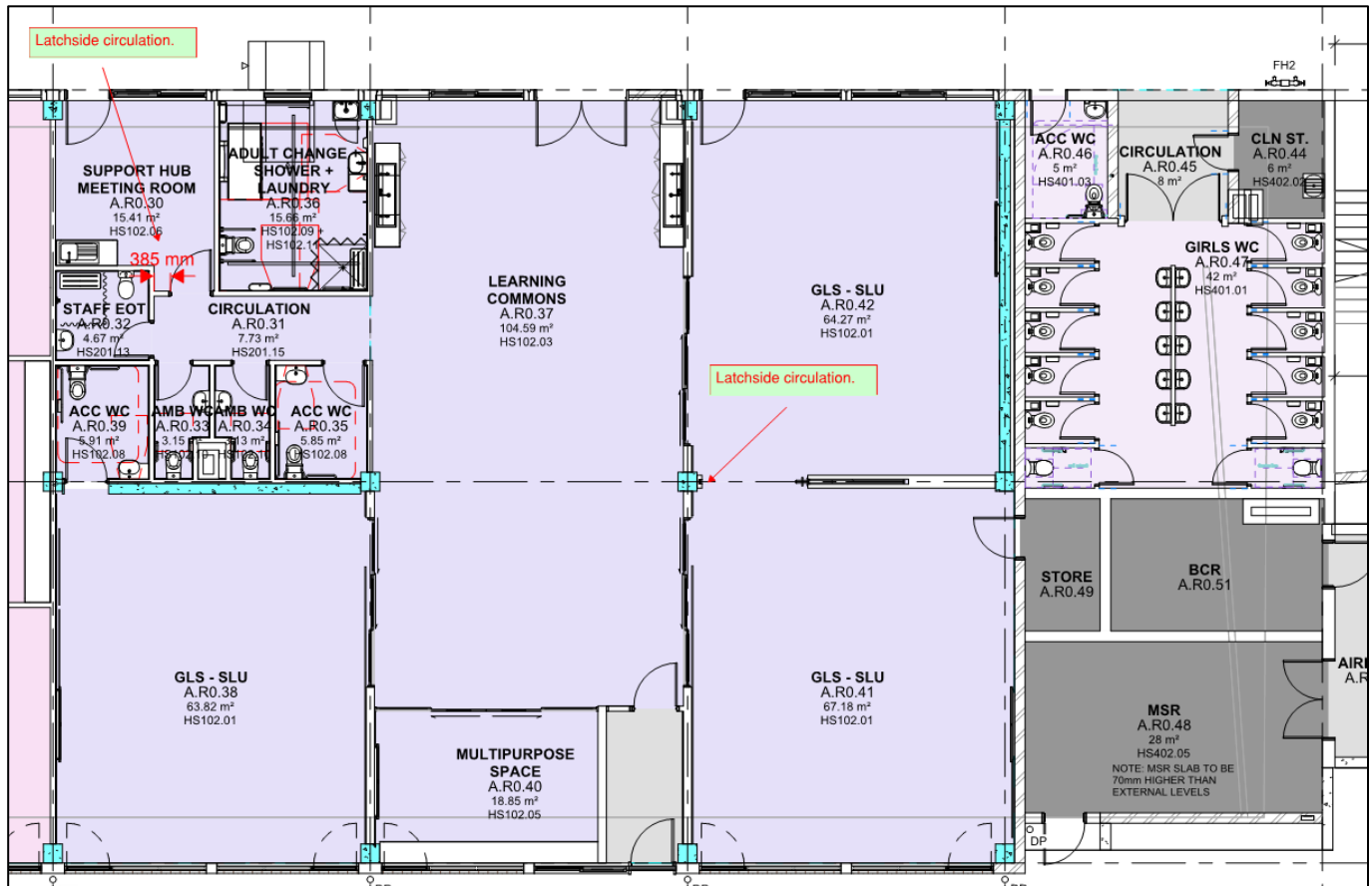


- All line marking shall be yellow and have slip resistance surface.
- The accessible carspace shall be outlined with unbroken lines 80-100mm wide on all sides except any side delineated by a kerb, barrier or wall.
- The marked shared area shall be outlined with unbroken lines 80-100mm wide on all sides except any side delineated by a kerb, barrier or wall and marked with diagonal stripes 150-200mm wide with spaces 200mm to 300mm between stripes. The stripes shall be at an angle of 45 degrees to the side of the space.

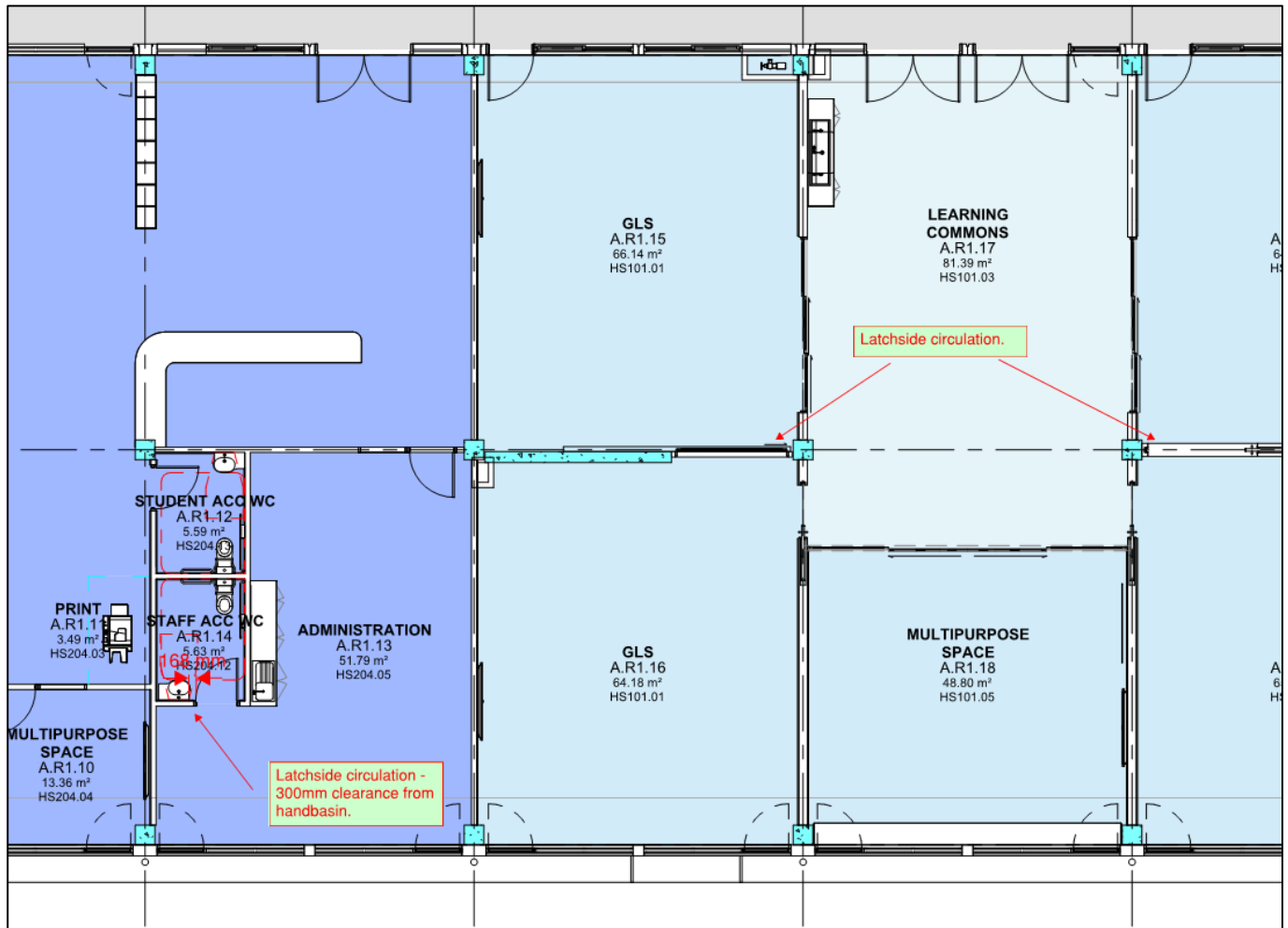
APPENDIX D – MARK-UPS



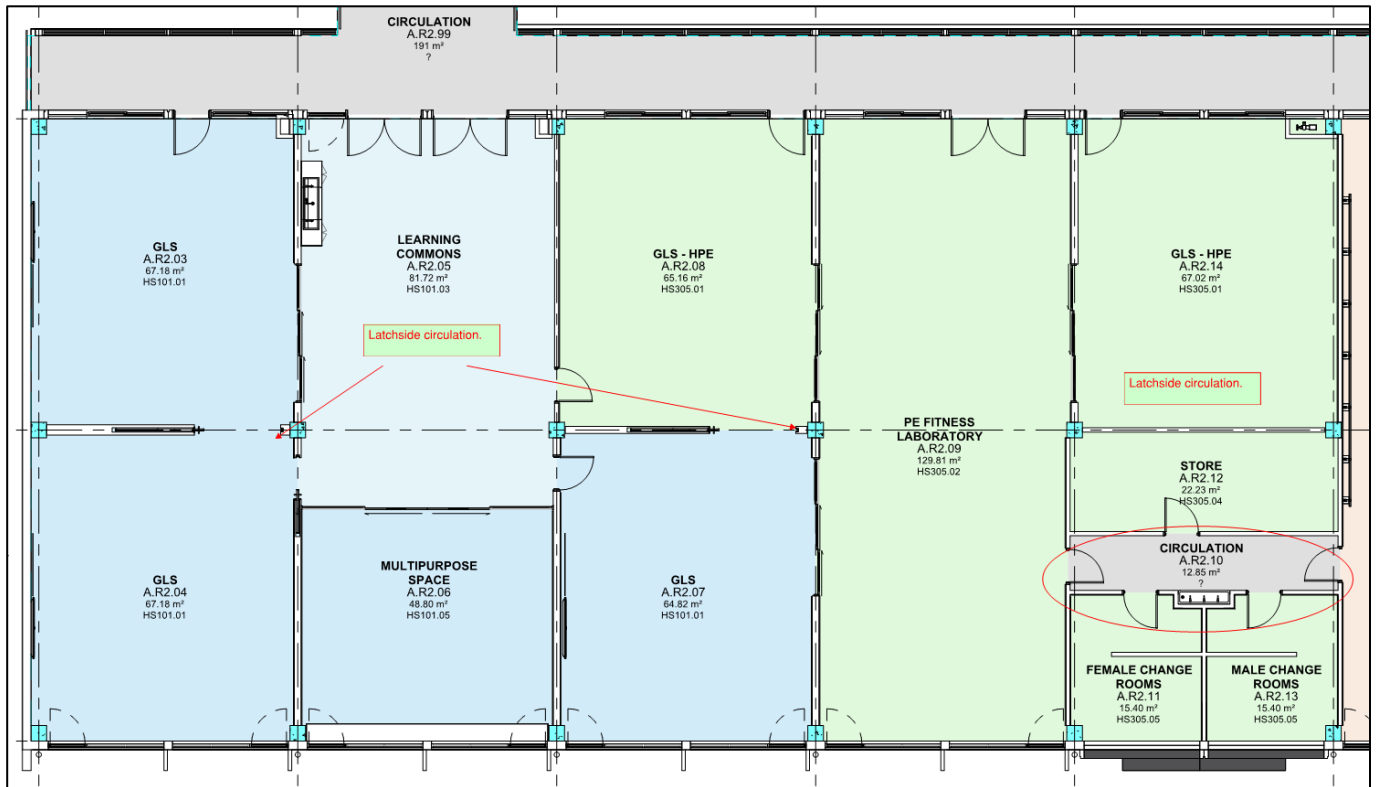
Block A – Ground Plan



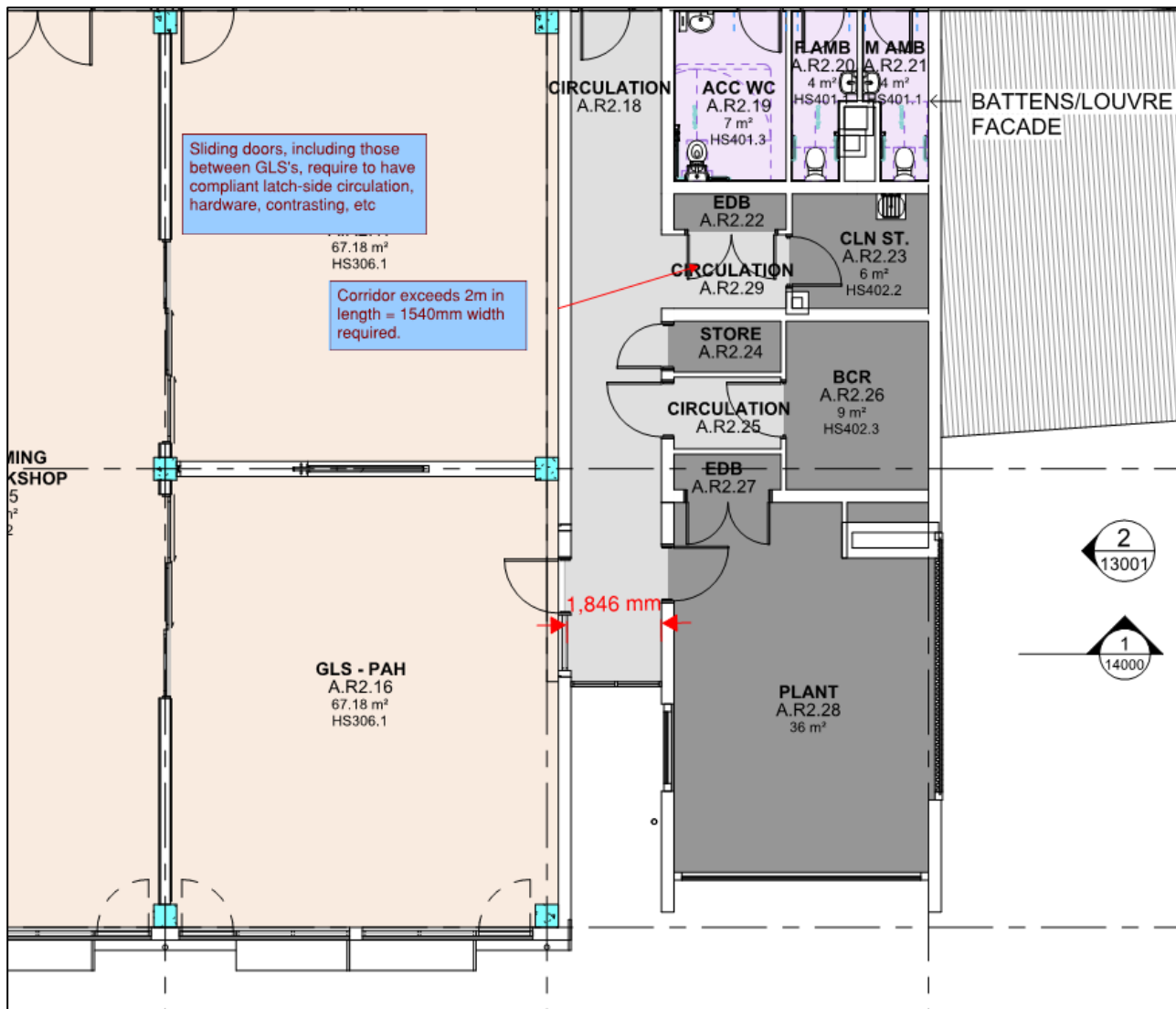
Block A – Ground Plan



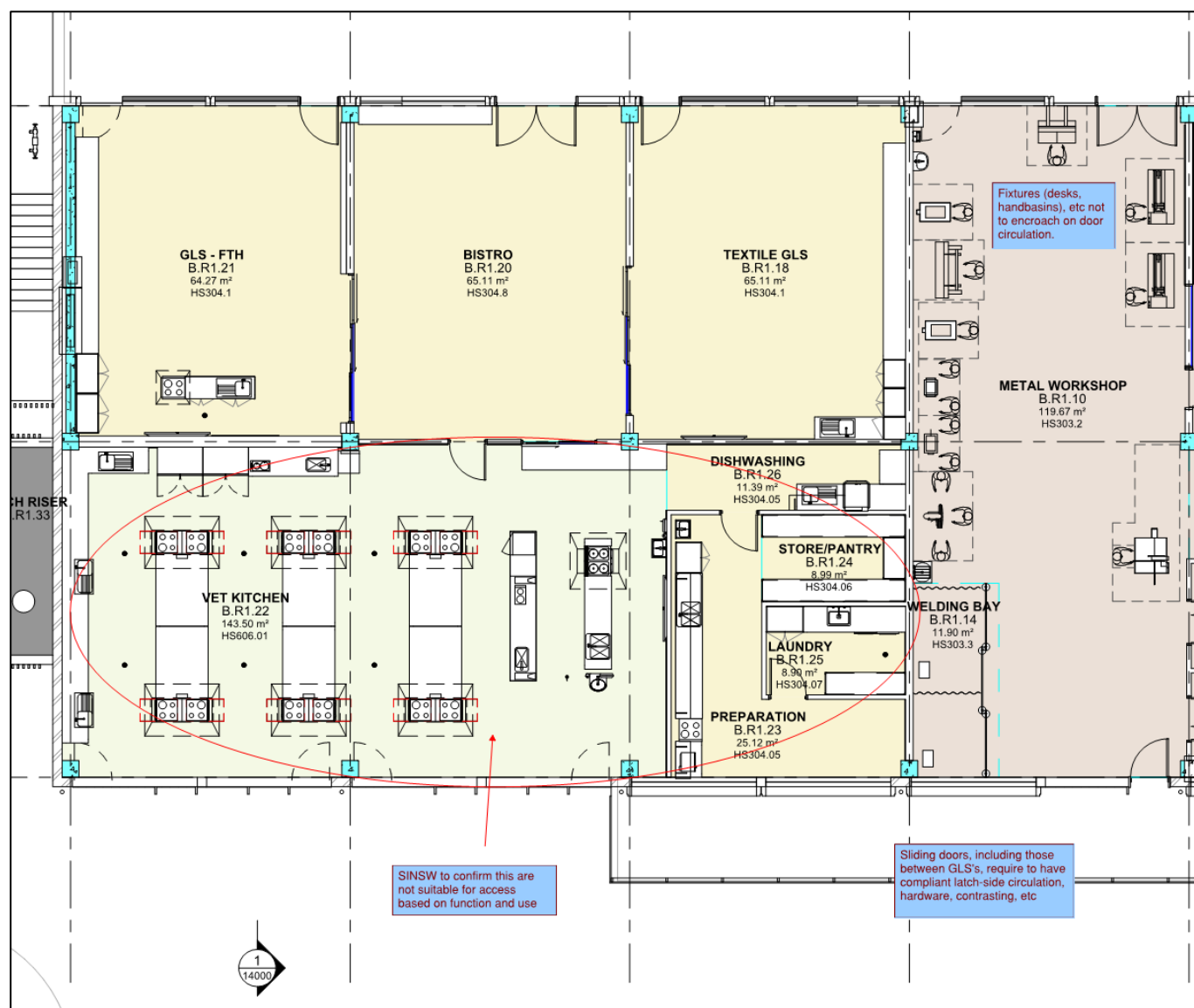
Block A – Level 1



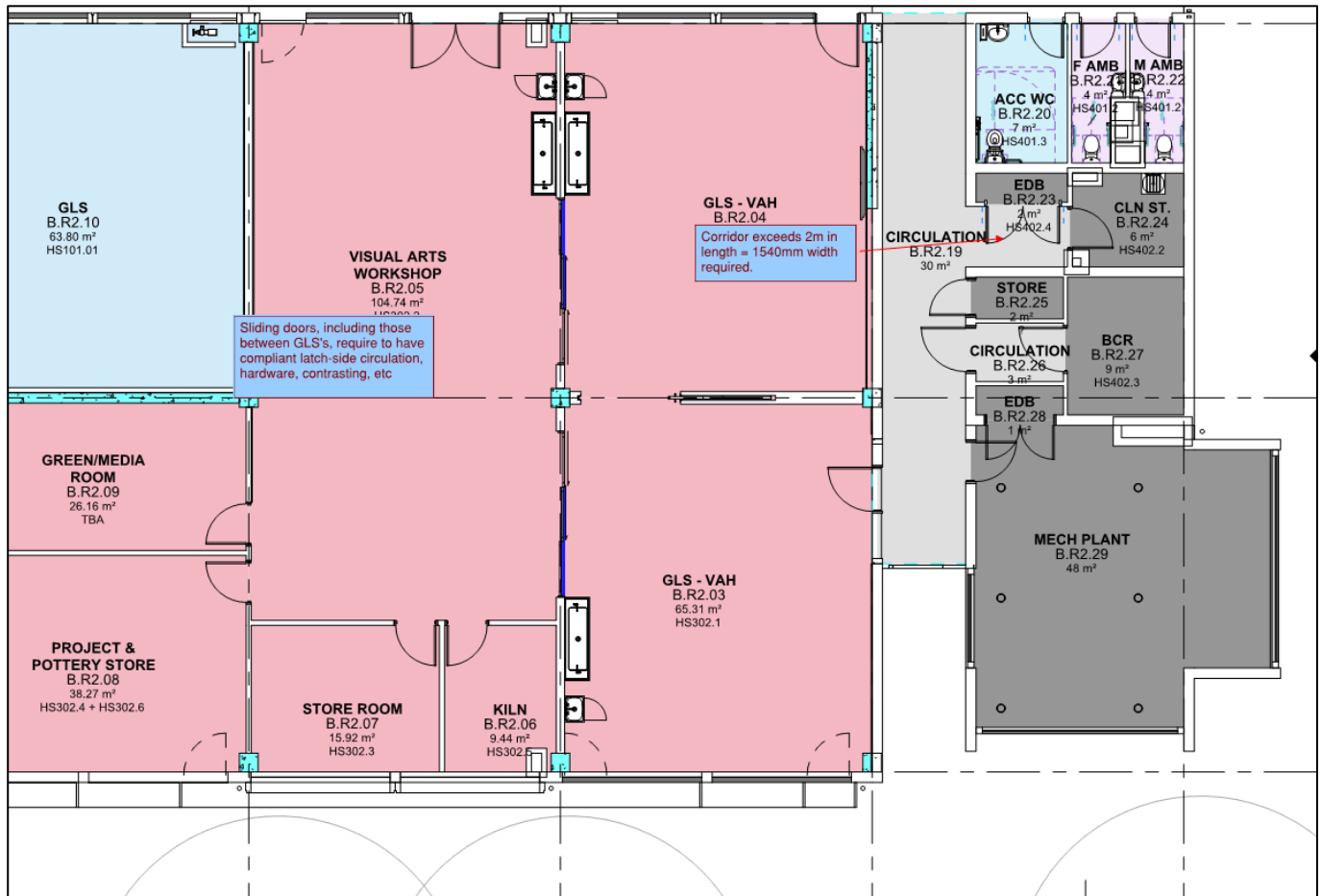
Block A – Level 2



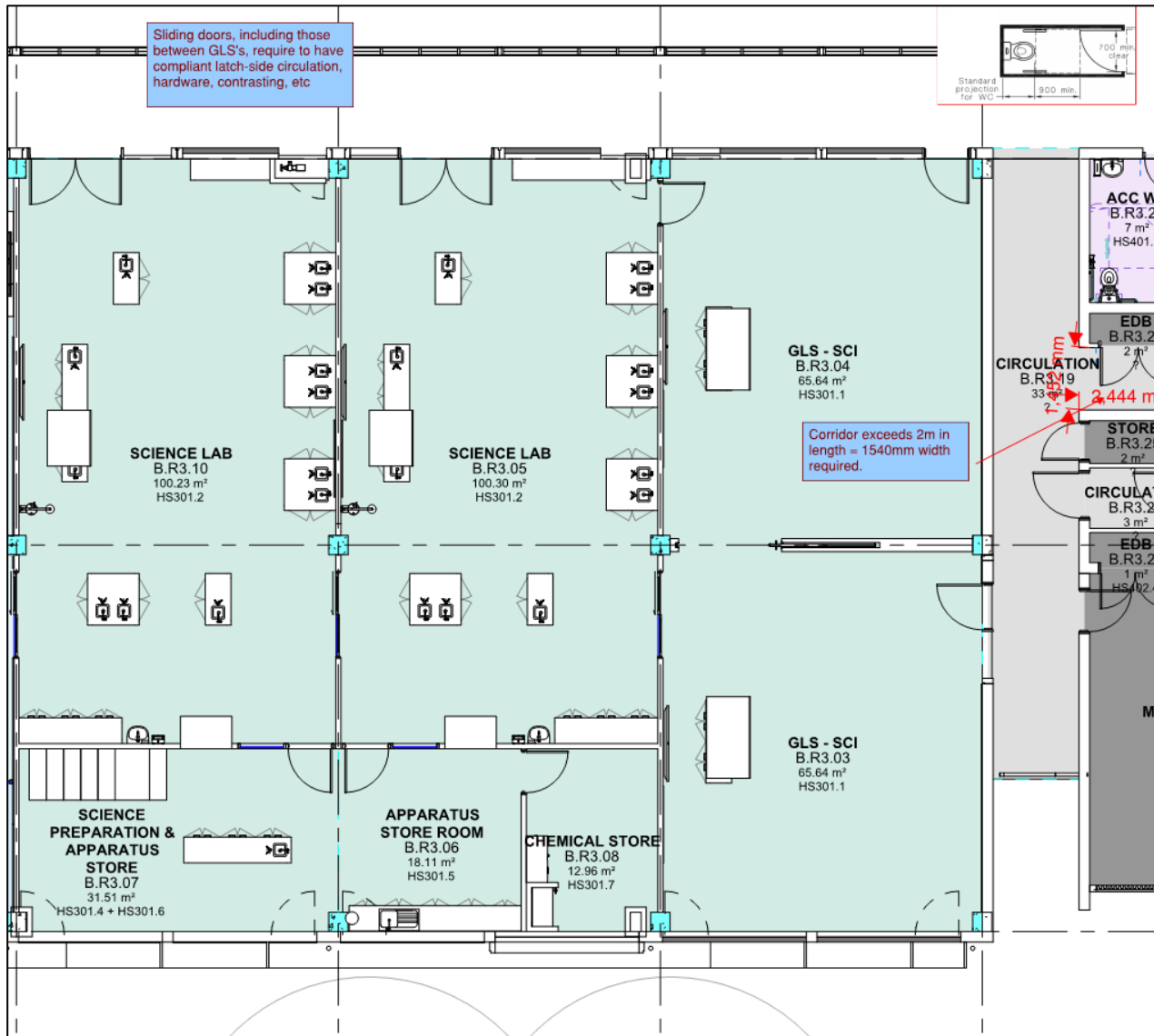
Block A – Level 2



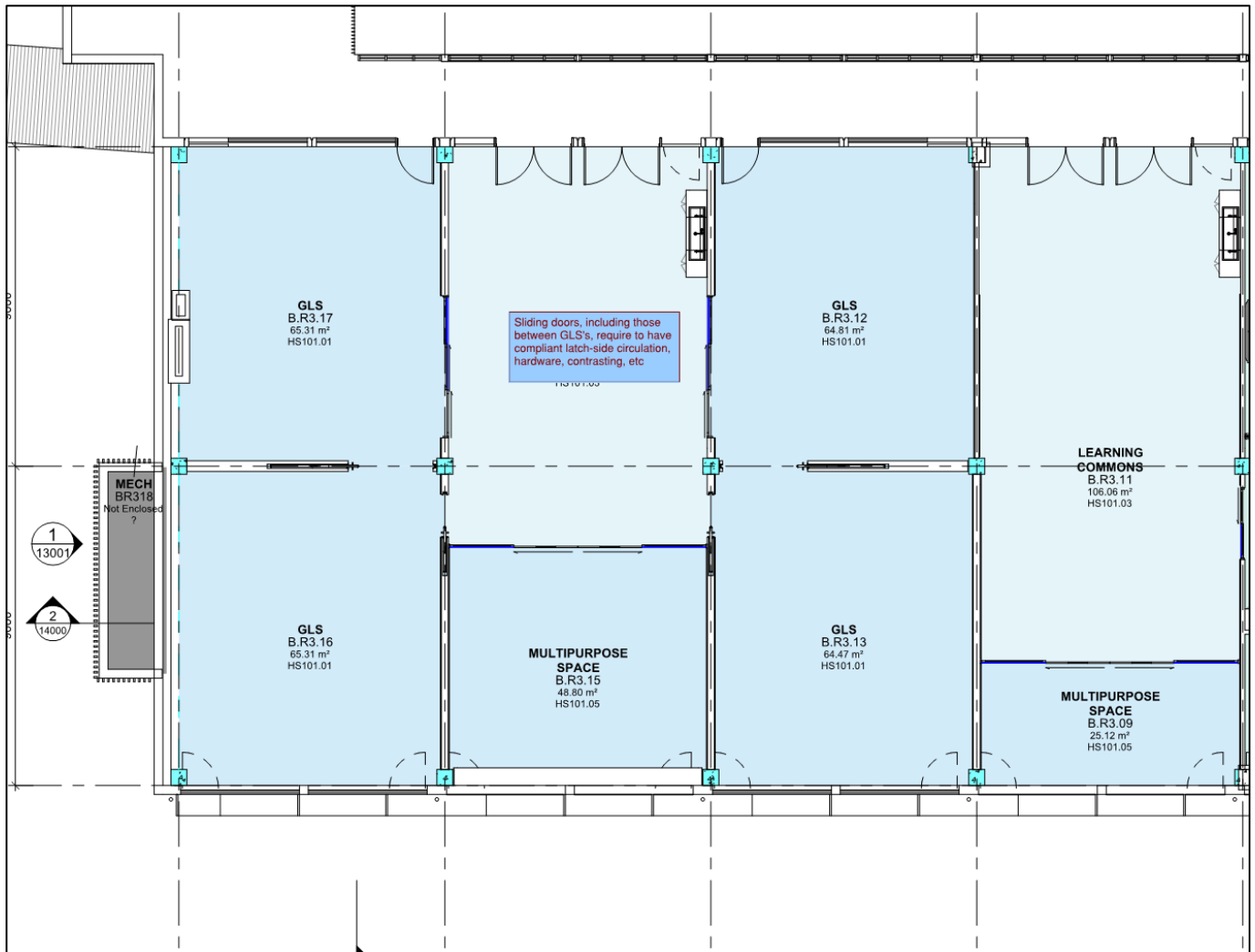
Block B – Level 1



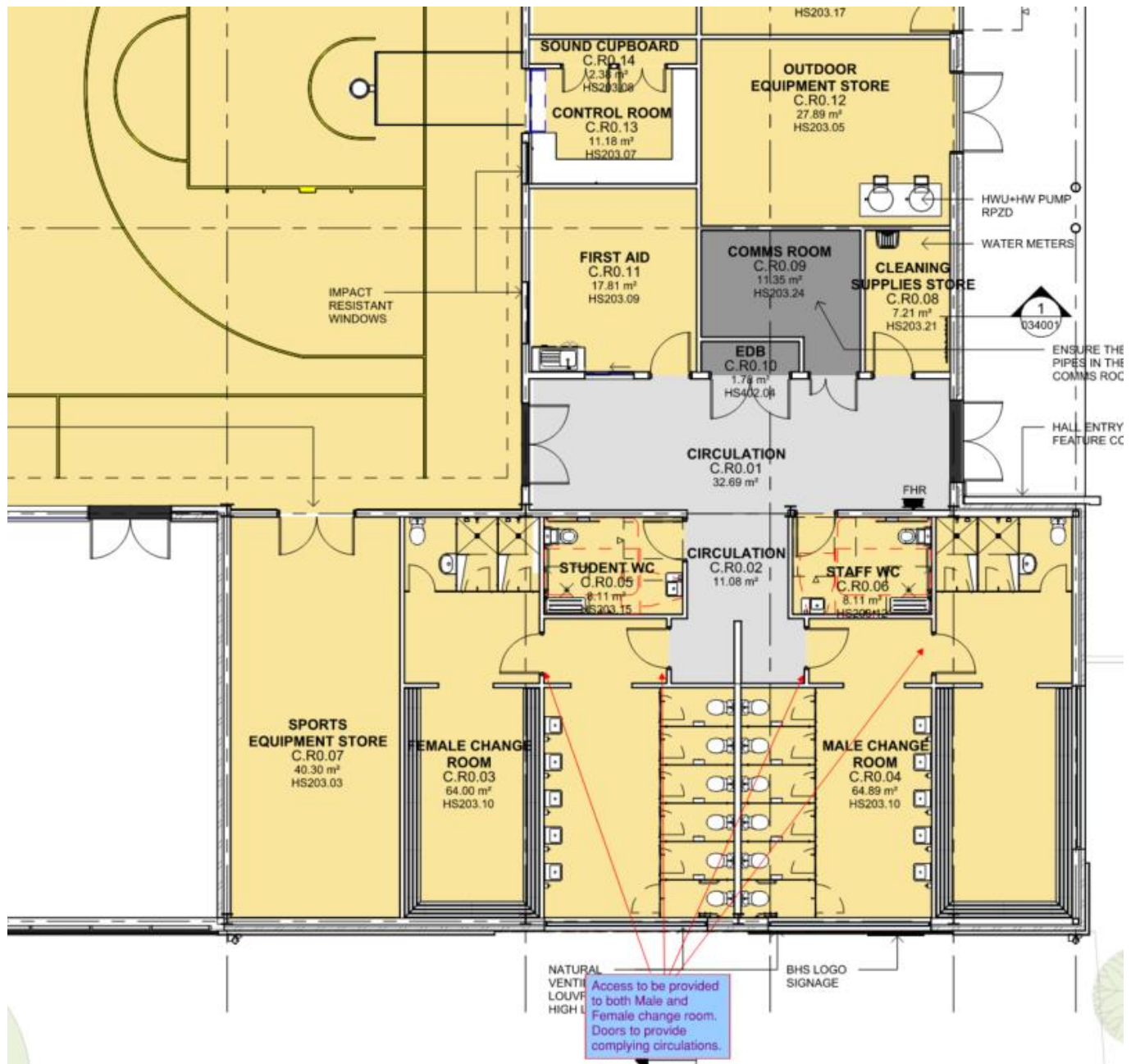
Block B – Level 2



Block B – Level 3



Block B – Level 3



Block C – Ground Floor