

# FRASERS PROPERTY AUSTRALIA PTY LTD

# **BLOCK 8 CENTRAL PARK PROJECT**

**ACCESS REVIEW** 

Morris Goding Accessibility Consulting

FINAL v3

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# **1. EXECUTIVE SUMMARY**

The Access Review Report is a key element in design development of the Block 8 Central Park project and an appropriate response to the AS1428 series, Building Code of Australia (BCA), DDA Access to Premises Standards (including DDA Access Code) and ultimately the Commonwealth Disability Discrimination Act (DDA).

Morris-Goding Accessibility Consulting has prepared the Access Report to provide advice and strategies to maximise reasonable provisions of access for people with disabilities.

The development has been reviewed to ensure that ingress and egress, paths of travel, circulation areas, car-parking, adaptable units and toilets comply with relevant statutory guidelines.

In general, the development has accessible paths of travel that are continuous throughout. In line with the report recommendations, the proposed development has demonstrated an appropriate degree of accessibility. The Development Application drawings indicate that compliance with statutory requirements, pertaining to site access, common area access, accessible parking, adaptable units and accessible sanitary facilities, can be readily achieved.

The recommendations in this report are to be developed in the ongoing design development and should be confirmed prior to construction certificate stage. As the project proceeds, further review of documentation is strongly recommended to ensure that appropriate access is provided to and throughout the development.

The main recommendations that have arisen from the access review include:

- Ensure the adaptable units comply with the recommendations outlined in the report, to comply with AS4299 and AS1428.1-2009. This to be reviewed at design development stage.
- Ensure a continuous accessible path of travel is provided to the garbage room used by the ground floor residents, compliant with AS1428.1-2009.

# 2. INTRODUCTION

# 2.1. General

Frasers Property Australia Pty Ltd has engaged Morris-Goding Accessibility Consulting, to provide a design review of the proposed mixed-used residential development Block 8 Central Park project.

The proposed development is located on the corner of O'Connor Street and Abercrombie Street in Sydney.

The development consists of 13 levels of residential apartments with two retail areas on the ground floor and 3 basement car parking levels below.

The requirements of the investigation are to:

- Review supplied drawings [DA001\_D1, DA100\_ D1, DA101\_ D1, DA102\_ D1, DA103\_ D1, DA104\_ D1, DA105\_ D1, DA106\_ D1, DA107\_ D1, DA108\_ D1, DA109\_ D1, DA110\_ D1, DA111\_ D1, DA112\_ D1, DA300\_ D1, DA301\_ D1, DA302\_ D1, DA303\_ D1, DA400\_ D1, DA401\_ D1.DA550\_ D1, DA551\_ D1, DA552\_ D1, DA553\_ D1, DA554\_ D1, DA555\_ D1, DA556\_ D1 and DA557\_ D1] of the proposed development,
- Provide a report that will analyse the provisions of disability design of the development, and,
- Recommend solutions that will ensure the design complies with the Federal Disability Discrimination Act (DDA), DDA Access to Premises Standards (including DDA Access Code), Building Code of Australia (BCA) and AS 1428 series.

# 2.2. Objectives

The Access Review Report considers user groups, who include staff and visitors. The Report attempts to deliver equality, independence and functionality to people with disabilities inclusive of:

- People with sensory impairment
- People with mobility impairments
- People with dexterity impairments

The Report seeks to provide compliance with the DDA. In doing so, the Report attempts to eliminate, as far as possible, discrimination against persons on the ground of disability.

# 2.3. Limitations

This report is limited to the accessibility provisions of the building in general. It does not provide comment on detailed design issues, such as: internals of accessible/ambulant toilet, fit-out, lift specification, slip resistant floor finishes, door schedules, hardware and controls, glazing, luminance contrast, stair nosing, TGSI's, handrail design, signage, hearing augmentation etc. that will be included in construction documentation.

# 2.4. Statutory Requirements

The following standards are to be used to implement the Report:

- Disability Discrimination Act 1992
- DDA (Access to Premises) Standards 2010
- Building Code of Australia 2013
- ► AS 1428.1-2009 (General Requirements for Access)
- > AS 4299-1995 (Adaptable Housing Code)
- ► AS 1428.4.1-2009 (Tactile Ground Surface Indicators)
- AS 1735.12-1999 (Lifts, Escalators, & Moving Walks)
- AS2890.6-2009 (Car parking)
- City of Sydney DCP 2012
- City of Sydney Access DCP 2004

# 3. INGRESS & EGRESS

# 3.1. General

The development is bound by Irving Street to the North, Central Park Avenue to the East, O'Connor Street to the South and Abercrombie Street to the West.

The main pedestrian entrance of the ground floor residential lobby is located along the Central Park Avenue public footpath.

There are two ground floor retail areas located along the Abercrombie Street public footpath.

# 3.2. Central Park Avenue Residential Main Entrance

There is a level accessible path of travel from the Central Park Avenue public footpath to the entry doorway of the ground floor residential lobby.

There are sufficient circulation areas internally and externally in front of the entry doorway to allow wheelchair users to pass one another in an equitable and dignified manner, compliant with DDA Premises Standards.

In general, there is continuous accessible path of travel from the entry doorway to the mail room, the residential amenity lounge/gym and ground floor passenger lift lobby, in accordance with DDA Premises Standards and AS1428.1-2009.

Recommendation:

(i) Ensure the entry doorway has suitable latch side circulation areas, compliant with AS1428.1-2009. Alternatively, the doorway needs to be power operated.

# 3.3. Retail Areas

There are 2 retail areas provided on the ground floor of the development.

Entry into the retail areas is directly from the Abercrombie Street and O'Connor Street public footpath.

There appear to be a height difference between the FFL of the public footpath and the FFL of the retail areas. Review is required, to ensure level wheelchair access into the retail areas is provided, compliant with AS1428.1-2009, which is achievable.

Recommendations:

- (i) Ensure the entry doorway of the retail areas has door circulation areas with gradients not exceeding 1:40, compliant with AS1428.1-2009.
- (ii) Ensure the entry doorways of the retail areas have a minimum 850mm clear opening width, compliant with AS1428.1-2009.

#### **3.4.** Emergency Egress

There are emergency fire isolated stairways provided within the development that lead down from the upper residential levels and up from the basement car parking levels to street level.

There are handrails provided on both sides of the fire-isolated stairways, which is preferred to ensure suitable access provisions for people with vision and dexterity impairment.

The fire isolated stairway to the east of the passenger lifts has sufficient clearances to accommodate a waiting space for people with disabilities, outside the door swing and 1000mm width egress route.

It should only be noted that the proposed waiting spaces appear to interfere with the valves in the fire stairs and requires review to avoid conflict.

The proposed 1300mm x 800mm waiting spaces in the fire stair on level 1 is a sufficient footprint from wheelchair users. However, the space is positioned parallel to the egress pathway and may be difficult for some wheelchair user to access without obstructing the egress door swing and the required 1000mm clear wide egress path. Review should be considered to avoid conflict.

Review is also required, to ensure the doors have sufficient latch side circulation areas, compliant with AS1428.1-2009.

Recommendations:

- (i) Ensure the doors to the fire-isolated stairs with waiting spaces have a minimum 850mm clear opening width with 510mm external latch side clearances (e.g. level 10 and 11), compliant with AS1428.1-2009.
- (ii) Ensure the fire isolated stairways handrails have suitable provisions to comply with BCA D2.17 and AS1428.1-2009.
- (iii) Should the provision of any emergency systems be installed within the building, the systems should include audible and visual warnings indicators to assist people with sensory disabilities. (advisory)

# 4. **RESIDENTIAL PATHS OF TRAVEL**

#### 4.1. Path of Travel

In general, the ground floor residential lift lobby has appropriate circulation areas for wheelchair users to access the passenger lifts and to perform a 360° turn, in accordance with DDA Premises Standards and AS1428.1-2009.

The use of passenger lifts will ensure a continuous accessible path of travel is provided to each of the levels with residential units, which is compliant with the City of Sydney Access DCP and the DDA Premises Standards.

The common corridors have a sufficient width, to allow wheelchair users to pass one another at suitable intervals and in a dignified and equitable manner, compliant with City of Sydney Access DCP.

In general, the corridors have sufficient clearances for wheelchair users to perform a  $90^{\circ}$  turn at change of directions and to perform a  $180^{\circ}$  turn at corridor ends, compliant with AS1428.1-2009 and the DDA Premises Standards.

**Recommendations:** 

- (i) Ensure the corridor end to the common use terrace on level 12 has a minimum 1540mm width to achieve the required 510mm internal latch side clearance and to allow a wheelchair user to perform a 180° turn, compliant with AS1428.1-2009, which is achievable.
- (ii) Ensure the corridor leading to the entry door of units L10.01, L10.02, L11.01 and L11.02 has a minimum 1240mm clear width, to allow for sufficient external depth and latch side door circulation areas, compliant with AS1428.1-2009, which is achievable.

#### 4.2. Lifts

The passenger lifts provide an appropriate continuous path of travel to all residential levels of the development, compliant with AS1428.1-2009.

The development is serviced by 3 lifts, which provide a continuous accessible path of travel from the upper residential levels to street level, as well as to the three basement car parking levels below compliant with AS1428.1-2009 and the DDA Premises Standards.

In general, there are sufficient circulation areas provided in front of the passenger lifts to allow wheelchair users to enter and exit the lift car in and equitable and dignified manner, compliant with City of Sydney Access DCP and DDA Premises Standards.

The passenger lifts have minimum internal dimensions of 1400mm x 1700mm, compliant with City of Sydney Access DCP 2004 and DDA Premises Standards.

Recommendation:

(i) Ensure the lift car components (grabrail, control buttons, lighting) comply with AS1735.12.

# 4.3. Stairs

There are common use stairs between the car parking levels in the basement. Review is required, to ensure the stairs are appropriately set back from the lift lobby, to allow for handrails with suitable handrails extensions on both sides of the stair, compliant with AS1428.1-2009.

# Recommendations:

- (i) Ensure the common use stairs in the building have handrails on both sides of the stair, with a minimum 1000mm clear path of travel in between, compliant with AS1428.1-2009.
- (ii) Ensure the basement car parking stairs are set back from the lift lobbies and bike rack area, to allow for handrails with suitable extensions, compliant with AS1428.1-2009.

The handrail extensions shall not protrude into transverse path of travel (lift lobby).

# 5. ACCOMMODATION

# 5.1. Residential Units

In general, the passenger lifts provide a continuous path of travel from the basement car parking levels and the ground floor residential entry lobby to the upper levels 1 to 12 containing residential units, which is compliant with DDA Premises Standards and BCA.

There are in total 178 residential units provided, which can be found on the ground floor to level 12 of the development. The development contains of a variety of studio, 1 bedroom, 2 bedroom and 3 bedroom apartments.

In total 27 units are proposed to be design as adaptable unit, in accordance with AS1428.1-2009 and AS4299, which satisfies satisfy the minimum 15% requirement of the City of Sydney 2012.

The adaptable units are spread amongst all unit sizes. The adaptable apartment types are distributed through the building as follows:

Apartment Type	Number op Units	Adaptable Unit no.
Studio/1 Bed Type 1	2x	L2.11, L2.12
Studio/1 Bed Type 2 (1)	5x	L03-07.12
Studio/1 Bed Type 2 (2)	5x	L03-07.13
2 Bed Type 1	7x	L01-07.07
2 Bed Type 2	1x	L00.01
2 Bed Type 3	4x	L10-11.01, L10-11.02
2 Bed Type 4	1x	L01.05
3 Bed Type 1	2x	L08.13, L09.08

# 5.2. Adaptable Unit Design – Studio/1 Bed Type 1

The entry door of adaptable units has suitable door circulation compliant with AS4299 and AS1428.1-2009. Review is required, to ensure the doorway of the units has sufficient 850mm clear opening width.

There is a minimum 1000mm unobstructed path of travel to the living/dining room. The living/dining room can achieve appropriate 2250mm diameter turning area, compliant with AS4299.

The adaptable bedroom has appropriate overall dimensions to achieve suitable circulation areas around bed and in front of wardrobe, compliant with AS4299.

The bathroom has suitable pre-adaption dimensions to achieve the required circulation spaces at post-adaption stage. Review is required, to ensure 2300mm x 1900mm unobstructed circulation areas are provided around the toilet pan at post adaptation, which is achievable in rotating the toilet pan.

The provision of extra plumbing provisions (capped off wastes and supply pipes) in place at pre-adaption stage will allow the basin to be re-located at post adaption.

There is suitable 1550mm unobstructed circulation areas in front of the laundry area and kitchen area, to allow wheelchair users to perform a 180° turn, compliant with AS4299. The kitchen has a 300mm workspace adjacent refrigerator. Review is required to ensure suitable 800mm width workspace adjacent to the cooktop as required under AS4299.

#### Recommendations:

- (i) Ensure the entry door has a minimum 850mm clear opening width, compliant with AS1428.1-2009.
- (ii) Ensure the toilet pan is centred 450-460mm from the side wall at preadaptation, to minimise amount of modification required at post adaptation.
- (iii) Ensure the post adaptation toilet pan is provided at the same location as proposed at pre-adaptation, to ensure the toilet can achieve a minimum 2300mm x 1900mm unobstructed circulation area around the toilet pan.
- (iv) Pre-adaption drawings for bathroom to include extra capped off plumbing services for toilet and basin to allow for re- location in compliance with AS1428.1 at post adaption stage. In addition continuous water-proofing/tiling is to be provided behind joinery for ease of removal and adaption.
- (v) Ensure there is no hob into the shower, to achieve a minimum 900mm x 1250mm unobstructed clearance in front of the toilet pan at pre-adaptation, as required for the provision of a visitable toilet.
- (vi) Provide a minimum 800mm workspace beside cooktop, sink and small set-down area near fridge compliant with AS4299 at preadaption stage or ensure this is easily achievable (at post-adaption) without replacing bench-top.
- (vii) Provide slip-resistant floor surface with minimum wet pendulum test rating of 'X' (under HB197/AS4856) in kitchen, laundry and adaptable bathroom at pre-adaption as required by AS4299 clause 4.5.4.

# 5.3. Adaptable Unit Design – Studio/1 Bed Type 2 (1)

Review is required, to ensure the door has a minimum 850mm clear opening width and sufficient 340mm external latch side clearance, to allow for suitable side approach for wheelchair users to access the unit. The internal door circulation space can be achieved by removal of joinery unit in front of the door, compliant with AS4299.

There is a minimum 1000mm unobstructed path of travel to the living/dining room. The living/dining room can achieve appropriate 2250mm diameter turning area, compliant with AS4299.

The adaptable bedroom has appropriate overall dimensions to achieve suitable circulation areas around bed and in front of the wardrobes, compliant with AS4299.

The bathroom has suitable pre-adaption dimensions to achieve the required circulation spaces at post-adaption. The provision of extra plumbing

provisions (capped off wastes and supply pipes) in place at pre-adaption stage will allow the basin and toilet to be re-located at post adaption.

There is suitable 1550mm unobstructed circulation areas in front of the laundry area and kitchen area, to allow wheelchair users to perform a 180° turn, compliant with AS4299. The kitchen has a 300mm workspace adjacent refrigerator. Review is required to ensure suitable 800mm width workspace adjacent to the cooktop as required under AS4299.

Recommendations:

- (i) Ensure the entry door has a minimum 850mm clear opening width and minimum 340mm external latch side clearance, compliant with AS1429.1-2009.
- (ii) All joinery/walls proposed to be removed at post-adaption to have continuous flooring under and be free of all services from the outset, compliant with AS4299 and AS1428.1-2009.
- (iii) Pre-adaption drawings for bathroom to include extra capped off plumbing services for toilet and basin to allow for re-location in compliance with AS1428.1 at post adaption stage. In addition continuous water-proofing/tiling is to be provided behind joinery for ease of removal and adaption.
- (iv) Ensure there is no nib wall in front of the toilet and a hob into the shower, to achieve a minimum 900mm x 1250mm unobstructed clearance in front of the toilet pan at pre-adaptation, as required for the provision of a visitable toilet.
- (v) Provide a minimum 800mm workspace beside cooktop, sink and small set-down area near fridge compliant with AS4299 at preadaption stage or ensure this is easily achievable (at post-adaption) without replacing bench-top.
- (vi) Provide slip-resistant floor surface with minimum wet pendulum test rating of 'X' (under HB197/AS4856) in kitchen, laundry and adaptable bathroom at pre-adaption as required by AS4299 clause 4.5.4.

# 5.4. Adaptable Unit Design – Studio/1 Bed Type 2 (2)

Review is required, to ensure the door has a minimum 850mm clear opening width and sufficient 510mm external latch side clearance, to allow for suitable side approach for wheelchair users to access the unit. The internal door circulation space can be achieved by removal of joinery unit in front of the door, compliant with AS4299.

There is a minimum 1000mm unobstructed path of travel to the living/dining room. The living/dining room can achieve appropriate 2250mm diameter turning area, compliant with AS4299.

The adaptable bedroom has appropriate overall dimensions to achieve suitable circulation areas around bed and in front of wardrobe, compliant with AS4299. The bedroom external door circulation areas can be easily achieved by repositioning the door and removing a part of the robe area besides the door, compliant with AS4299 and AS1428.1-2009.

The bathroom has suitable pre-adaption dimensions to achieve the required circulation spaces at post-adaption stage. The provision of extra plumbing provisions (capped off wastes and supply pipes) in place at pre-adaption stage will allow the toilet and basin to be re-located at post adaption.

There is suitable 1550mm unobstructed circulation areas in front of the laundry area and kitchen area, to allow wheelchair users to perform a 180° turn, compliant with AS4299. The kitchen has a 300mm workspace adjacent refrigerator. Review is required to ensure suitable 800mm width workspace adjacent to the cooktop as required under AS4299.

Recommendations:

- (i) Ensure the entry door has a minimum 850mm clear opening width and minimum 510mm external latch side clearance, compliant with AS1429.1-2009.
- (ii) All joinery/walls proposed to be removed at post-adaption to have continuous flooring under and be free of all services from the outset, compliant with AS4299 and AS1428.1-2009.
- (iii) Pre-adaption drawings for bathroom to include extra capped off plumbing services for toilet and basin to allow for re- location in compliance with AS1428.1 at post adaption stage. In addition continuous water-proofing/tiling is to be provided behind joinery for ease of removal and adaption.
- (iv) Provide a minimum 800mm workspace beside cooktop, sink and small set-down area near fridge compliant with AS4299 at preadaption stage or ensure this is easily achievable (at post-adaption) without replacing bench-top.
- (v) Provide slip-resistant floor surface with minimum wet pendulum test rating of 'X' (under HB197/AS4856) in kitchen, laundry and adaptable bathroom at pre-adaption as required by AS4299 clause 4.5.4.

# 5.5. Adaptable Unit Design – 2 Bed Type 1

The entry door of adaptable unit has a suitable door circulation compliant with AS4299 and AS1428.1-2009. Review is required, to ensure the doorway has sufficient 850mm clear opening width.

There is a minimum 1000mm unobstructed path of travel to the living/dining room. The living/dining room can achieve appropriate 2250mm diameter turning area, compliant with AS4299.

The adaptable bedroom has appropriate overall dimensions to achieve suitable circulation areas around bed and in front of wardrobe, compliant with AS4299.

Review is required, to ensure the bathroom door has sufficient external latch side clearance circulation areas, in accordance with AS1428.1-2009, which is achievable.

The bathroom has suitable pre-adaption dimensions to achieve the required circulation spaces at post-adaption, once the bath is removed. Review is

required to ensure the toilet pan is located at the correct location at preadaptation, to minimise the amount of modification at post-adaptation stage.

The provision of extra plumbing provisions (capped off wastes and supply pipes) in place at pre-adaption stage will allow basin and shower to be re-located at post adaption.

There is suitable 1550mm diameter unobstructed circulation areas in front of the kitchen area, to allow wheelchair users to perform a 180° turn, compliant with AS4299. The kitchen has an 800mm workspace adjacent the stove and sink, as well as 300mm clearance work bench adjacent refrigerator.

Review is required to ensure a 1550mm diameter unobstructed circulation areas in front of the laundry area, which is achievable.

**Recommendations:** 

- (i) Ensure the entry door has a minimum 850mm clear opening width, compliant with AS1428.1-2009.
- (ii) Post adaptation plan to show the bathroom doorway to have minimum 510mm external latch side clearance, compliant with AS1428.1-2009.
- (iii) Provide the toilet pan in the correct location at 450-460mm from the side wall at pre-adaptation stage, to minimise the amount of modification required to ensure compliance with AS4299 and AS1428.1-2009.
- (iv) Pre-adaption drawings for bathroom to include extra capped off plumbing services for shower to allow for re- location in compliance with AS1428.1 at post adaption stage. In addition continuous waterproofing/tiling is to be provided underneath bath and behind joinery for ease of removal and adaption.
- (v) Ensure a minimum 1550mm diameter unobstructed circulation area is provided in front of the laundry area at post adaptation as required by AS4299.
- (vi) Provide slip-resistant floor surface with minimum wet pendulum test rating of 'X' (under HB197/AS4856) in kitchen, laundry and adaptable bathroom at pre-adaption as required by AS4299 clause 4.5.4.

#### 5.6. Adaptable Unit Design – 2 Bed Type 2

The entry door of the adaptable unit appears to have suitable external door circulation space and internal door circulation space can be easily achieved by removal of joinery unit beside door, compliant with AS4299. Review is required, to ensure the door has a minimum 850mm clear opening width, compliant with AS1428.1-2009.

There is a minimum 1000mm unobstructed path of travel to the living/dining room. The living/dining room can achieve appropriate 2250mm diameter turning area, compliant with AS4299.

The adaptable bedroom has appropriate overall dimensions to achieve circulation areas around bed and in front of wardrobe behind door, compliant

with AS4299. The adaptable bedroom can achieve suitable doorway latch side clearances after the robe area is reduced in length at post-adaption.

The en-suite has suitable pre-adaption dimensions to achieve the required circulation spaces at post-adaption. The provision of extra plumbing provisions (capped off wastes and supply pipes) in place at pre-adaption stage will allow basin and toilet to be re-located at post adaption.

There is suitable 1550mm unobstructed circulation areas in front of the laundry area and kitchen area, to allow wheelchair users to perform a 180° turn, compliant with AS4299. Review is required, to ensure the kitchen has 800mm workspace adjacent the cooktop, as well as 300mm clearance work bench adjacent refrigerator.

Recommendations:

- (i) Ensure the entry door has a minimum 850mm clear opening width and a minimum 340mm external latch side clearance, compliant with AS1428.1-2009.
- (ii) Pre-adaption drawings for bathroom to include extra capped off plumbing services for toilet to allow for re- location in compliance with AS1428.1 at post adaption stage. In addition continuous waterproofing/tiling is to be provided behind joinery for ease of removal and adaption.
- (iii) Provide a minimum 800mm workspace beside cooktop and a 300mm bench-top adjacent refrigerator, compliant with AS4299 at preadaption or ensure this is easily achievable (at post-adaption) without replacing bench-top.
- (iv) Provide slip-resistant floor surface with minimum wet pendulum test rating of 'X' (under HB197/AS4856) in kitchen, laundry and adaptable bathroom at pre-adaption as required by AS4299 clause 4.5.4.

# 5.7. Adaptable Unit Design – 2 Bed Type 3

The unit entry door appears to have suitable external length and latch side circulation areas. The internal door circulation space can be easily achieved by removal of joinery unit beside the door, compliant with AS4299. Review is required, to ensure the door has a minimum 850mm clear opening width, compliant with AS1428.1-2009.

There is a minimum 1000mm unobstructed path of travel to the living/dining room. The living/dining room can achieve appropriate 2250mm diameter turning area, compliant with AS4299.

The adaptable bedroom has appropriate overall dimensions to achieve suitable circulation areas around bed and in front of wardrobe, compliant with AS4299. The bedroom door circulation areas can be easily achieved by repositioning the door and removing a part of the robe area besides the door, compliant with AS4299 and AS1428.1-2009.

The bathroom has suitable pre-adaption dimensions to achieve the required circulation spaces at post-adaption stage. The provision of extra plumbing

provisions (capped off wastes and supply pipes) in place at pre-adaption stage will allow the basin and toilet to be re-located at post adaption.

There is suitable 1550mm unobstructed circulation areas in front of the laundry area and kitchen area, to allow wheelchair users to perform a 180° turn, compliant with AS4299. Review is required, to ensure the kitchen has 800mm workspace adjacent the cooktop, as well as 300mm clearance work bench adjacent refrigerator.

Recommendations:

- (i) Ensure the entry door has a minimum 850mm clear opening width, compliant with AS1428.1-2009.
- (ii) Ensure the corridor leading to the unit entry door has a minimum 1240mm clear width, to allow for sufficient external depth and latch side door circulation areas, compliant with AS1428.1-2009.
- (iii) All joinery/walls proposed to be removed at post-adaption to have continuous flooring under and be free of all services from the outset, compliant with AS4299 and AS1428.1-2009.
- (iv) Pre-adaption drawings for bathroom to include extra capped off plumbing services for toilet and basin to allow for re- location in compliance with AS1428.1 at post adaption stage.
- (v) Provide a minimum 800mm workspace beside cooktop and a 300mm bench-top adjacent refrigerator, compliant with AS4299 at preadaption or ensure this is easily achievable (at post-adaption) without replacing bench-top.
- (vi) Provide slip-resistant floor surface with minimum wet pendulum test rating of 'X' (under HB197/AS4856) in kitchen, laundry and adaptable bathroom at pre-adaption as required by AS4299 clause 4.5.4.

# 5.8. Adaptable Unit Design – 2 Bed Type 4

The entry door of adaptable unit has a suitable door circulation compliant with AS4299 and AS1428.1-2009. Review is required, to ensure the doorway has sufficient 850mm clear opening width.

There is a minimum 1000mm unobstructed path of travel to the living/dining room. The living/dining room can achieve appropriate 2250mm diameter turning area, compliant with AS4299.

The adaptable bedroom has appropriate overall dimensions to achieve circulation areas around bed and in front of wardrobe behind door, compliant with AS4299.

The adaptable bedroom en-suite can achieve suitable doorway latch side clearances after the robe area is reduced in length at post-adaption.

The en-suite has suitable pre-adaption dimensions to achieve the required circulation spaces at post-adaption, once the bath is removed. Review is required to ensure the toilet pan is located at the correct location at pre-adaptation, to minimise the amount of modification at post-adaptation stage.

The provision of extra plumbing provisions (capped off wastes and supply pipes) in place at pre-adaption stage will allow basin and shower to be relocated at post adaption.

There is suitable 1550mm unobstructed circulation areas in front of the laundry area and kitchen area, to allow wheelchair users to perform a 180° turn, compliant with AS4299. Review is required, to ensure the kitchen has 800mm workspace adjacent the cooktop, as well as 300mm clearance work bench adjacent refrigerator.

Recommendations:

- (i) Ensure the entry door has a minimum 850mm clear opening width, compliant with AS1428.1-2009.
- (ii) All joinery/walls proposed to be removed at post-adaption to have continuous flooring under and be free of all services from the outset, compliant with AS4299 and AS1428.1:2009.
- (iii) Provide toilet pan in the correct location at 450-460mm from the side wall at pre-adaptation stage, to minimise the amount of modification required to ensure compliance with AS4299 and AS1428.1-2009.
- (iv) Pre-adaption drawings for bathroom to include extra capped off plumbing services for shower to allow for re- location in compliance with AS1428.1 at post adaption stage. In addition continuous waterproofing/tiling is to be provided underneath bath and behind joinery for ease of removal and adaption.
- (v) Provide a minimum 800mm workspace beside cooktop and a 300mm bench-top adjacent refrigerator, compliant with AS4299 at preadaption or ensure this is easily achievable (at post-adaption) without replacing bench-top.
- (vi) Provide slip-resistant floor surface with minimum wet pendulum test rating of 'X' (under HB197/AS4856) in kitchen, laundry and adaptable bathroom at pre-adaption as required by AS4299 clause 4.5.4.

# 5.9. Adaptable Unit Design – 3 Bed Type 1

The entry door of adaptable unit can achieve suitable door circulation areas compliant with AS4299 and AS1428.1-2009. Review is required, to ensure the doorway has sufficient 850mm clear opening width.

There is a minimum 1000mm unobstructed path of travel to the living/dining room. The living/dining room can achieve appropriate 2250mm diameter turning area, compliant with AS4299.

The adaptable bedroom appears to have appropriate overall dimensions to achieve circulation areas around bed and in front of wardrobe area, compliant with AS4299. Review is required, to ensure column is not obstructing the required circulation area around the bed. Review is also required to ensure the bedroom door has suitable latch side clearances at post adaptation, which is achievable.

Review is required to ensure the doorway of the adaptable en-suite can achieve suitable doorway latch side clearances at post-adaption.

The adaptable bedroom en-suite has suitable pre-adaption dimensions to achieve the required circulation spaces at post-adaption. The provision of extra plumbing provisions (capped off wastes and supply pipes) in place at pre-adaption stage will allow basin and shower to be re-located at post adaption.

There is suitable 1550mm unobstructed circulation areas in front of the kitchen area, to allow wheelchair users to perform a 180° turn, compliant with AS4299. Review is required, to ensure a continuous accessible path of travel to the laundry area and sufficient clearances in front of the laundry area are provided, compliant with AS4299, which is achievable.

Recommendations:

- (i) Ensure the entry door has a minimum 850mm clear opening width, compliant with AS1428.1-2009.
- (ii) All joinery/walls proposed to be removed at post-adaption to have continuous flooring under and be free of all services from the outset, compliant with AS4299 and AS1428.1:2009.
- (iii) Review is required, to ensure the minimum 1000mm clearance both sides of the bed with minimum 1540mm x 2070mm clearance at the base of the bed. Note minimum 1200mm x 600mm robe is required outside this circulation area.
- (iv) Ensure the bedroom door has suitable latch side clearances, compliant with AS1428.1-2009.
- (v) Ensure the doorway of the adaptable en-suite can achieve suitable latch side clearances at post-adaptation, compliant with AS1428.1-2009.
- (vi) Pre-adaption drawings for bathroom to include extra capped off plumbing services for toilet and basin to allow for re- location in compliance with AS1428.1 at post adaption stage.
- (vii) Provide the laundry area in an accessible location that has a minimum 1550mm diameter turning area in front, compliant with AS4299.
- (viii) Provide slip-resistant floor surface with minimum wet pendulum test rating of 'X' (under HB197/AS4856) in kitchen, laundry and adaptable bathroom at pre-adaption as required by AS4299 clause 4.5.4.

# 6. RESIDENTIAL COMMUNAL AREAS

# 6.1. Residential Amenity Lounge/Gym

There is a residential amenity lounge/gym provided on the ground floor of the development. There is a continuous accessible path of travel from the entry/lift lobby to the room.

The hinged doorways have a minimum 850mm clear opening width and sufficient latch side circulation areas for wheelchair users to access the room, compliant with AS1428.1-2009.

# 6.2. Mail Room

The mailroom is provided adjacent the residential amenity lounge/gym on the ground floor of the development.

There are minimum 1550mm diameter turning areas provided in front of the mailboxes, which is suitable for a wheelchair user to perform 180° turn, in accordance with AS4299.

# 6.3. Garbage Rooms

There are garbage rooms provided on each of the levels (levels 1- 12) containing residential units.

The garbage room have sufficient internal dimensions to allow wheelchair users to perform a 180° turn and to access to the garbage chute from within the room, compliant with AS1428.1-2009 and AS4299.

Review is required to ensure the doorway to the garbage room have minimum 850mm clear opening with, compliant with AS1428.1-2009. Currently there appears to be no garbage room for the ground floor units and is further information required.

Recommendations:

- (i) Ensure a continuous accessible path of travel is provided to the garbage room used by the ground floor residents, compliant with AS1428.1.
- (ii) Ensure the garbage room doors have a minimum 850mm clear opening width and latch side clearances, compliant with AS1428.1-2009.

# 6.4. Common Terrace

There is a common terrace for the residents on level 12 of the development.

In general, there is a continuous accessible path of travel from the level 12 lift lobby to the common terrace. Review is required to ensure the door has sufficient latch side circulation areas, compliant with AS1428.1-2009.

The common terrace has sufficient circulation areas, to allow wheelchair users to access the barbeque areas and to perform a 360° in an equitable and dignified manner, compliant with AS1428.1-2009.

# Recommendation:

(i) Ensure the door to the common terrace has a minimum 510mm internal latch side clearance, compliant with AS1428.1-2009.

# 7. CAR PARKING

# 7.1. General

There are in total 88 car parking bays provided on the basement levels (B1, B2 and B3) of the development. In total 6 of the 88 car parking bays are reserved for shared car parking.

From the information provided, there are no visitor car parking bays provided and car parking bays reserved for the ground floor retail areas.

# 7.2. Residential Car Parking

In total 28 of the 88 car parking bays are reserved for the proposed adaptable units within the development. The 32 accessible car parking bays are distributed over the three basement levels.

The provision of 28 accessible residential car parking bays, will ensure at least 1 accessible car parking bays is reserved for each adaptable unit within the development, which satisfies the minimum requirement of the AS4299.

In general, the accessible car parking bays are provided within proximity of the passenger lifts, which provide a continuous accessible path of travel to street level and the upper residential levels 1 to 12.

The accessible residential car parking bays are each 2.4m wide x 5.4m in depth and have an equivalent shared zone adjacent, compliant with AS2890.6-2009.

Provided the shared zone remains common building property with a bollard installed from the outset (to ensure its use as circulation zone and not an additional car bay) these alternate dimensions will satisfy intent of AS4299 for the layout of an accessible car bay for the adaptable unit.

# 8. SANITARY FACILITIES

# 8.1. General

There is an accessible unisex toilet with shower facility provided within the retail tenancy on the corner of Abercrombie Street and O'Connor Street, on the ground floor of the building.

There is also an accessible unisex toilet facility provided in the end of journey area on basement level 1. This toilet facility is reserved for the staff members of the retail areas on the ground floor of the development.

# 8.2. Ground Floor Retail Toilet

The accessible toilet with shower in the retail area has internal dimensions that are generally sufficient to accommodate an accessible toilet facility, compliant with AS1428.1-2009. However, the facility will need to be enlarged if an accessible shower is also proposed to be provided in the facility.

# Recommendations:

- (i) Ensure the accessible facility has minimum 2300mm x 2700mm internal dimensions, to allow for sufficient toilet and shower circulation areas, compliant with AS1428.1-2009.
- (ii) Ensure the accessible toilet with shower facility has fixtures in accordance with DDA Premises Standards and AS1428.1-2009.

# 8.3. Basement Level 1 End of Journey Toilet

There is an accessible unisex toilet with shower facility located in the end of journey area on basement level 1 of the development.

Review is required, to ensure the path of travel through the end of journey area has sufficient wheelchair circulation areas, which is achievable.

The accessible unisex toilet with shower facility has sufficient internal dimensions, to accommodate adequate toilet and shower wheelchair circulation areas.

#### Recommendations:

- Ensure the door to the accessible toilet facility is provided a minimum 1450mm away from the entry door to the end of journey, to allow sufficient wheelchair circulation areas between door swings, compliant with AS1428.1-2009.
- (ii) Ensure the accessible toilet with shower facility has fixtures set out in accordance with DDA Premises Standards and AS1428.1-2009.