Livable Housing Assessment Report

20-26 Avon Road, Dee Why

Project:	20-26 Avon Road, Dee Why
Reference No:	113958-ADG-r3
Date:	1 February 2022
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Document Control

Revision	Date	Description	
113958-ADG-r1	18 November 2021	Livable Housing Assessment Report	
113958-ADG-r1.1	19 November 2021	Livable Housing Assessment Report	
113958-ADG-r2	22 November 2021	Livable Housing Assessment Report	
113958-ADG-r3	1 February 2022	Livable Housing Assessment Report	
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1 BASIS OF ASSESSMENT

1.1. Location

The building development, the subject of this report, is located at 20-26 Avon Road, Dee Why.

1.2. Purpose

The purpose of this report is to assess the proposed building against the documents and their relevant Deemed to Satisfy requirements. The report is intended to clearly outline those areas where compliance is not achieved and provide recommendations to achieve compliance:

- Design Quality of Residential Apartment Development 2015 (SEPP65)

1.3. Limitations

This report is limited to an assessment of the silver level livable housing requirement under the Apartment Design Guide as outlined in 1.2 above. It is not an assessment of the proposal against provisions of the BCA2019 and if this is required, a separate report is provided.

This report does not include nor imply any detailed assessment for design, compliance or upgrading for:

- The structural adequacy or design of the building;
- The inherent derived fire-resistance ratings of any existing or proposed structural elements of the building (unless specifically referred to); and
- The design basis and/or operating capabilities of any existing or proposed electrical, mechanical or hydraulic fire protection services.

This report does not include, or imply compliance with:

- The Disability Discrimination Act (it cannot be guaranteed that that a complaint under the DDA will not be made, however should the building comply with BCA2019 and the Premises Standard then those responsible for the building cannot be subject to a successful complaint);
- Deemed-to-Satisfy Provisions of the BCA2019;
- Demolition Standards not referred to by the BCA2019;
- Work Health and Safety Act;
- Construction Safety Act;
- Requirements of other Regulatory Authorities including, but not limited to, Telecommunications Supply Authority, Water Supply Authority, Electricity Supply Authority, Work Cover, Roads and Maritime Services (RMS), Local Council, ARTC, Department of Planning and the like;
- Conditions of Development Consent issued by the Local Consent Authority; and
- This report does not assess the safety of the particular aspects of the building but merely the minimum standards called up by the documents outlined in Part 1.2 of this report.

1.4. Federal Disability Discrimination Act (DDA)

Disability is broadly defined and includes disabilities which are physical, intellectual, psychiatric, neurological, cognitive or sensory (a hearing or vision impairment), learning difficulties, physical disfigurement and the presence in the body of disease causing organisms.

All organisations have a responsibility, under the DDA, to provide equitable, dignified access to goods and services and to premises used by the public. Premises are broadly defined and would include all areas included within the subject development.

The DDA applies nationally and is complaint based. While the Disability (Access to Premises – Buildings) Standards 2010 and the BC2019 are recognised as a design standard to satisfy certain aspects of the DDA, compliance with the BCA2019 and the referenced standards does not guarantee that a complaint will not be lodged.

1.5. Disability Access to Premises Standards (Premises Standards)

The aim of the Premises Standards is to provide the building and design industry with detailed information regarding the required access provisions associated with the design and construction of new buildings and upgrade to existing buildings.

The Premises Standards intend to provide certainty for the building industry in relation to meeting the requirements for access in new and upgraded buildings. They only apply to elements addressed within the Standards. All other elements related to premises will still be subject to the existing provisions of the DDA.

The Premises Standards generally align with the BCA2019 and reference a range of Australian Standards relating to access and other associated matters.

They do not apply to existing buildings that are not undergoing upgrade, however they introduce the concept of the “Affected Part”. This means that new works need to be connected to the building’s Principal Pedestrian Entrance by an accessible path of travel. This can mean that upgrade to the building may be necessary even where none is proposed.

1.6. Design Documentation

This report has been based on the Design plans and Specifications listed in Annexure A of this Report.

1.7. Definitions

Accessible

Having features to enable use by people with a disability.

Accessway

A continuous accessible path of travel (as defined in AS 1428.1) to, into or within a building.

Affected Part

The affected part is;

(a) The principal pedestrian of an existing building that contains a new part; and

(b) Any part of an existing, that contains a new part, that is necessary to provide a continuous accessible path of travel from the entrance to the new part.

Continuous Accessible Path of Travel

An uninterrupted path of travel to, into or within a building providing access to all access facilities.

Luminance Contrast

The light reflected from one surface or component, compared to the light reflected from another surface or component.

Ramp

An inclined surface on a continuous accessible path of travel between two landings with a gradient steeper than 1 in 20 but not steeper than 1 in 14.

Tactile Indicators

Tactile Ground Surface Indicators (TGSIs)

Truncated cones and/or bars installed on the ground or floor surface, designed to provide pedestrians who are blind or vision-impaired with warning or directional orientation information

2 KEY COMPLIANCE CONSIDERATION

2.1. General

The following is a summary of all the individual elements that relate directly to the ability of a person with a disability to access all the portions of the building required to be accessible.

Accessibility has been assessed against the documents outlined in Part 1.2 of this Report. The Annexures to this report provides a detailed assessments of the proposal against ALL relevant Deemed-to-Satisfy Provisions and prescriptive requirements

Note: It is important that the Annexures are read in conjunction with the items below, as some matters may not have had sufficient information provided to allow a detailed assessment to be undertaken.

The abbreviations outlined below have been used in the following tables.

N/A	Not Applicable. The Deemed-to-Satisfy clause is not applicable to the proposed design.
Complies	The relevant provisions of the Deemed-to-Satisfy clause have been satisfied by the proposed design.
CRA – Refer Annexure C	'COMPLIANCE READILY ACHIEVABLE'. It is considered that there is not enough information included in the documentation to accurately determine strict compliance with the individual clause requirements. However, with further design development, compliance can readily be achievable. This item is to be read in conjunction with the BCA Specification included within Annexure C of this report.
FI	Further Information is necessary to determine the compliance potential of the building design.
PS	Performance Solution with respect to this Deemed-to-Satisfy Provision is necessary to satisfy the relevant Performance Requirements.
DNC	Does Not Comply.
Noted	BCA Clause simply provides a statement not requiring specific design comment or confirmation.

2.2. Dimensions and Tolerances

The Premises Standards and BCA contains the minimum standards for building construction and safety, and therefore generally stipulates minimum dimensions which must be met. BCA Logic's assessment of the plans and specifications has been undertaken to ensure the minimal dimensions have been met.

The designer and builder should ensure that the minimum dimensions are met onsite and consideration needs to be given to construction tolerances for wall set outs, applied finishes and skirtings to corridors and bathrooms for example, tiling bed thicknesses and the like which can adversely impact on critical maters such as access for people with disabilities, stair and corridor widths and balustrade heights.

2.3. Residential Sole Occupancy Units

The following table summarises the required accessible features for the proposed Residential SOUs. This is based upon the SEPP65 Apartment Design Guide;

Table 1. Residential Sole Occupancy Units

Unit Type	SOU's
Livable SOU's	SOU's G05, G07, 107, 207, 302 are identified and designed as Livable Housing SOU's

2.4. Liveable Housing Design Guidelines Requirements (LHDG)

The SEPP 65 Apartment Design Code requires that residential developments achieve a benchmark that at least 20% of the total apartments incorporate the Livable Housing Guideline's silver level universal design features. The B of this Report includes an assessment against the relevant requirements of the LHDG.

Based on the total number of units being provided (25) and the proposed number of silver livable units (5), it is noted that the benchmark of 20% will be complied with.

Note: These Guidelines do not take precedence over the requirements of the Disability (Access to Premises – Buildings) Standards 2010 or the Building Code of Australia.

3 STATEMENT OF COMPLIANCE

The design documentation as referred to in this report has been assessed against the applicable provisions for Accessibility as outlined in Part 1.2 of this report. It is considered that such documentation complies or is capable of complying (as outlined in Part 2 of this Report) with those documents

Annexure A – Design Documentation

This report has been based on the following design documentation.

Table 2. Architectural Plans

Architectural Plans Prepared by Walsh Architects			
Drawing Number	**Revision**	**Date Title**	**Title**
DA101	E	27.01.2022	GROUND FLOOR PLAN
DA102	D	27.01.2022	LEVEL 1 PLAN
DA103	D	27.01.2022	LEVEL 2 PLAN
DA104	C	27.01.2022	ATTIC PLAN

Annexure B - LHDG Assessment

Table 3. LHDG Assessment

Item	Design Element	Comment	Compliance
1.	**Dwelling (SOU) Access**		
	Silver Level (a) Provide a safe, continuous step-free pathway from the front boundary of the property to an entry door to the dwelling. (b) This provision does not apply where the average slope of the ground where the path would feature is steeper than 1:14. (c) The path of travel referred to in (a) should have a minimum clear width of 1000mm and have; (i) No steps; (ii) An even, firm, slip resistant surface; (iii) A crossfall of not more than 1:40; (iv) A maximum pathway slope of 1:14 Where ramps are required they should have landings provided at no greater than 9m for a 1:14 ramp and no greater than 15m for ramps steeper than 1:20. Landings should be no less than 1200mm in length. (d) The path of travel referred to in (a) may be provided via an associated car parking space for the dwelling. Where a car parking space is relied upon as the safe and continuous pathway to the dwelling entrance, the space should incorporate: (i) Minimum dimensions of at least 3200 mm (width) x 5400mm (length); (ii) An even, firm and slip resistant surface; and (iii) A level surface (1:40 maximum gradient, 1:33 maximum gradient for bitumen).	Entry into the buildings from the pedestrian entrance is noted to be provided via a level walkway and a stairway lift to gain entry into the building. From within the building, it is noted that access throughout the building is provided via the central lift to reach each of the applicable storeys containing the livable units. The pathways throughout the building are considered to maintain a suitable gradient and crossfall as required by this Clause due to access being required under the BCA and AS1428.1-2009 to these paths. It is considered that the path of travel would not be provided from the carparking space as this is located within the basement with the remainder of the carpark and not a private garage used for dwelling entry. However, it is noted that the suitable level of access is provided from parking spaces due to the level gradients being maintained and the provisions of a lift.	CRA – Refer to Annexure C

Item	Design Element	Comment	Compliance
	(e) A step ramp may be incorporated at an entrance doorway where there is a change in height of 190mm or less. The step ramp should provide: (i) A maximum gradient of 1:10 (ii) A minimum clear width of 1000mm (please note: width should reflect the pathway width) (iii) A maximum length of 1900 mm (f) Where a ramp is part of the pathway, level landings no less than 1200mm in length, exclusive of the swing of the door or gate than opens onto them, must be provided at the head and foot of the ramp. **Note:** The width of the landing will be determined by the adjoining pathway. If the landing directly adjoins the doorway please refer to Element 2 for dimensional requirements.		
2.	**Dwelling (SOU) Entrance**		
	Silver Level (a) The dwelling should provide an entrance door with – (i) A minimum clear opening width of 820mm (see Figure 2(a)); (ii) A level (step-free) transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or bevelled); and (iii) Reasonable shelter from the weather. (b) A level landing area of at least 1200mm x 1200mm should be provided at the level (step free) entrance door. A level landing area at the entrance door should be provided on the arrival side of the door (i.e. the external side of the door) to allow a person to safely stand and then open the door. (c) Where the threshold at the entrance exceeds 5mm and is less than 56mm, a ramped threshold may be provided (see Figure 1(b)).	The unit entry doorways are provided with a sufficient clear openings to allow for compliance with this Clause. The doors are located internally and therefore considered to be suitable protected from the weather and provided with a level threshold. A level landing has been provided outside of the unit entry door to allow for a level of circulation.	CRA – Refer to Annexure C

Item	Design Element	Comment	Compliance
	(d) The level (step-free) entrance should be connected to the safe and continuous pathway as specified in Element 1. **Note:** The entrance must incorporate waterproofing and termite management requirements as specified in the NCC.		
3.	**Internal Doors and Corridors**		
	Silver Level (a) Doorways to rooms on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartment purposes should provide: (i) A minimum clear opening width of 820mm (see Figure 2(a)); and (ii) A level transition and threshold (maximum vertical tolerance of 5mm between abutting surfacers if allowable provided the lip is rounded or bevelled). (b) Internal corridors/passageways to the doorways referred to in (a) should provide a minimum clear width of 1000mm * Corridor widths should be measured as described in Clause 6.3 of AS 1428.1 – 2009	It is considered that each of the accessible doorways as required throughout the unit will achieve the require 820mm and a level threshold due to them being internal. The corridors leading to doorways throughout the units are considered to maintain the required 1000mm clear width.	CRA – Refer to Annexure C
4.	**Toilet**		
	Silver Level (a) Dwellings should have a toilet on the ground (or entry) level that provides: (i) A minimum clear width of 900mm between the walls of the bathroom if located in a separate room; and (ii) A minimum 1200mm clear circulation space forward of the toilet pan exclusive of the swing of the door in accordance with Figure 3(a). (iii) The toilet pan should be located in the corner of the room (if the toilet is located in a combined toilet / bathroom) to enable installation of grabrails at a future	The proposed WC for the units are located within a corner and capable of being provided with the reinforcement as required. In front of the pan is noted that 1200mm clearance is provided due to the sliding door and the required 900mm width is provided due to the setback of the shower screen.	CRA – Refer to Annexure C

Item	Design Element	Comment	Compliance
	date. Reinforcement guidelines for walls in bathrooms and toilets are found in element 6.		
5.	**Shower**		
	Silver Level (a) One bathroom should feature a slip resistant, hobless shower recess. Shower screens are permitted provided they can be easily removed at a later date. (b) The shower recess should be located in the corner of the room to enable the installation of grabrails at a future date. For hobless specification please see Australian Standard AS3740-3.6. Reinforcement guidelines for walls in bathrooms and toilets are found in element 6.	The proposed shower is located within the corner of the room and provisioning of a shower screen has been provided and may be removed at a later date. The shower is required to be hobless and details will need to be confirmed at the CC stage	CRA – Refer to Annexure C
6.	**Reinforcement of bathroom & toilet walls**		
	Silver Level (a) Except for walls constructed of solid masonry or concrete, the walls around the shower, bath (if provided) and toilet should be reinforced to provide a fixing surface for the safe installation of grabrails. (b) The walls around the toilet are to be reinforced by installing: (i) Noggings with a thickness of at least 25mm in accordance with Figure 6(a); or (ii) Sheeting with a thickness of at least 12mm in accordance with Figure 6(b). (c) The walls around the bath are to be reinforced by installing: (i) Noggins with a thickness of at least 25mm in accordance with Figure 7(a); or (ii) Sheeting with a thickness of at least 12mm in accordance with Figure 7(b).	It will be required that reinforcement is provided to the showers and toilet in the surrounding walls in accordance with this Clause. Due to the provisioning of wall adjacent to the WC, it is noted that 600mm is provided and therefore it would be required that noggings are provided for the method of reinforcement. Compliance is considered readily available and detailing at the CC stage for the wall build up may confirm compliance. It will be required to ensure the wall in front of the WC will be at least 600mm.	CRA – Refer to Annexure C

Item	Design Element	Comment	Compliance
	(d) The walls around the hobless shower recess are to be reinforced by installing: (i) Noggins with a thickness of at least 25mm in accordance with Figure 8(a); or (ii) Sheeting with a thickness of at least 12mm in accordance with Figure 8(b).		
7.	**Internal stairways**		
	Silver Level (a) Stairways in dwellings must feature: (i) A continuous handrail on one die of the stairway where there is a rise of more than 1m. **Note:** This is a requirement for all new homes under the NCC. Homes built prior to 2014 may benefit from this element.	It is noted that each of the proposed dwellings are not provided with internal stairways.	N/A

Annexure C - Compliance Specification

Design Certification

Further due to the level of detail provided at this stage the following items are to form part of a design statement or specification:

SEPP 65 – Livable Housing Design Guidelines (LHDG)

1. Entrance door to have 820mm min. clear door width opening, level transition (5mm max. vertical tolerance) and reasonable shelter from the weather.
2. Entrance door to have 1200x1200mm level landings.
3. “Ramped threshold” (Fig 1b) allowed between 5-56mm height change.
4. Level & “step-free” entrance connected to the “safe and continuous pathway”.
5. Waterproofing and termite management at entry door (as per NCC).
6. All internal doors to have 820mm min. clear door opening at entry level rooms, 5mm max. vertical tolerance surface, and 1000mm min. internal corridors at entry level rooms.
7. Toilet to be on entry level (ground floor).
8. If WC is located within a bathroom. WC pan circulation space to be in the corner of the room to enable installation of grabrails (door not to encroach) (Fig 3b).
9. Bathroom to have slip resistant and hobless shower recess (portable shower screens allowed)
10. Shower recess located in a room corner to enable the installation of grabrails.
11. Walls to be constructed of solid masonry or concrete, otherwise to be reinforced (1100N min. withstand in all directions).
12. For WC, the reinforcement to be 25mm thick noggings (Fig 6a), or 12mm thick sheeting (Fig 6b)
13. For baths, reinforcement to be 25mm thick noggings (Fig 7a), or 12mm thick sheeting (Fig 7b)
14. For showers, reinforcement to be 25mm thick noggings (Fig 8a), or 12mm thick sheeting (Fig 8b)