Date: 17 March 2021
Our Ref: P210031

Ms Rebecca Jufas
P.O. Box 337
Lane Cove NSW 1595

Dear Rebecca,

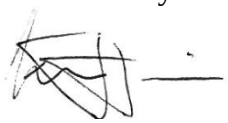
RE: 54 Central Rd, Avalon Beach
DESIGN COMPLIANCE ASSESSMENT

Please find enclosed our BCA Compliance Report prepared in respect of the the unauthorized secondary dwelling situated at the above listed property.

In reviewing the content of this Report, particular attention is drawn to the content of Part 3 as Part 3 summarizes the compliance status of the proposed design in terms of each prescriptive provision of the BCA.
The inclusion of this summary enables an immediate understanding of the compliance status of the proposed design to be obtained.

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

Yours faithfully



Kieran Tobin
Director

DESIGN COMPLIANCE ASSESSMENT

PREPARED FOR

Ms Rebecca Jufas

REGARDING

54 Central Rd, Avalon Beach

Prepared By

BCA vision

REPORT REGISTER

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

Our Reference	Issue No.	Remarks	Issue Date
P210031	1	Design Compliance Assessment	17 March 2021

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1.0 INTRODUCTION

1.1 GENERAL

This "BCA Compliance Assessment" report has been prepared at the request of Ms Rebecca Jufasand relates to 54 Central Rd, Avalon Beach .

The project proposal includes conversion of an existing studio to a secondary dwelling.

This report is based upon, and limited to, the information depicted in the documentation provided for assessment, and does not make assumptions regarding "design intention" or the like.

1.2 REPORT BASIS

The content of this report reflects –

(a) The principles and provisions of BCA 2019 (amendment 1) Volume 2;
(b) A Site Inspection of the premises on Monday 15/03/21;
(c) A Survey Plan prepared by Altitude Surveys and dated 05/02/21;

1.3 EXCLUSIONS

It is conveyed that this report should not construed to infer that an assessment for compliance with the following has been undertaken –

(a) Structural and services design documentation;
(b) General building services (i.e. passenger lifts);
(c) The individual requirements of service providers (i.e. Telstra, Water Supply, Energy Australia);
(d) The individual requirements of the Workcover Authority;
(e) Within the summary assessment; * = Existing building element unaffected by the project proposal and unable to be visually inspected post construction

1.4 REPORT PURPOSE

The purpose of this report is to identify the extent to which the architectural design documentation complies with the relevant prescriptive provisions of the BCA 2019 (amendment 1).
The status of the design is summarised within Part 3 of this report.

2.0 BUILDING DESCRIPTION

2.1 GENERAL

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

2.2 RISE IN STOREYS (CLAUSE C1.2)

The buildings are proposed to have a rise in storeys of two (2)

2.3 BUILDING CLASSIFICATION (CLAUSE A3.2)

The subject buildings incorporates the following classifications: -

Class 1A	A residential Dwelling
Class 1a	Private Garage

2.4 ENERGY EFFICIENCY IN BUILDINGS (PART 3.12)

Council may determine that a BASIX certificate is required for the dwellings.

2.5 BUSHFIRE PRONE LAND (PART 3.7)

An RFS Search indicates that the property is not considered to be Bushfire Prone Land.

2.6 SWIMMING POOLS (PART 3.10.1)

This report does not include a compliance assessment of the existing swimming pool fencing.
It is recognised tht the Pool fencing may include compliance discrepancies due to a change in Legislation and Standards since construction of the swimming pool

3.0 BCA ASSESSMENT – SUMMARY

NOTE

- ✓ * = Existing building element unaffected by the project proposal and unable to be visually inspected post construction

3.1 PART 3.1.1 – EARTHWORKS

Clause	Requirement	Complies	Detail Req'd	Not Applicable
3.1.1.1	Earthworks			✓
3.1.1.2	Un-retained bulk earthworks — site cut			✓ *
3.1.1.3	Un-retained bulk earthworks — site fill			✓
3.1.1.4	Fill			✓

3.2 PART 3.1.3 – DRAINAGE

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.1.3.2	Drainage requirements	✓		
3.1.3.3	Surface water drainage	✓		
3.1.3.4	Subsoil drainage	✓		
3.1.4.5	Stormwater drainage	✓		

3.3 PART 3.1.4 – TERMITE RISK MANAGEMENT

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.1.4.2	Requirements for termite management systems			✓ *
3.1.4.3	Termite management systems			✓ *
3.1.4.4	Durable notice			✓

3.4 PART 3.2 – FOOTINGS AND SLABS

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.2.1	Application		✓	

3.5 PART 3.2.2 – PREPARATION

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.2.2.1	Excavation for footings		✓	
3.2.2.2	Filling under concrete slabs		✓	
3.2.2.3	Foundations for footings and		✓	
3.2.2.4	Slab edge support on sloping sites			✓
3.2.2.5	Stepped footings			✓
3.2.2.6	Vapour barriers			✓

3.2.2.7	Edge rebates		✓	

3.6 PART 3.2.3 – CONCRETE REINFORCING

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.2.3.1	Concrete		✓	
3.2.3.2	Steel reinforcement		✓	

3.7 PART 3.2.4 – SITE CLASSIFICATION

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.2.4.1	3.2.4.1 Site classification		✓	

3.8 PART 3.2.5 – FOOTING & SLAB CONSTRUCTION

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.2.5.1	Footing and slab construction		✓	
3.2.5.2	Footings and slabs to extensions to existing buildings		✓	
3.2.5.3	Shrinkage control		✓	
3.2.5.4	Minimum edge beam dimensions		✓	
3.2.5.5	Footings for fireplaces on Class A and S sites			✓
3.2.5.6	Stump footing details			✓

3.9 PART 3.3.1 – UNREINFORCED MASONRY

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.3.1.1	Application			✓
3.3.1.2	External walls			✓
3.3.1.3	Internal walls			✓
3.3.1.4	Isolated piers			✓
3.3.1.5	Masonry units			✓
3.3.1.6	Mortar mixes			✓
3.3.1.7	Mortar joints			✓
3.3.1.8	Vertical articulation joints			✓
3.3.1.9	Sub-floor ventilation			✓
3.3.1.10	Shrinkage allowance for timber framing			✓

3.10 PART 3.3.2 –REINFORCED MASONRY

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.3.2.1	Application			✓
3.3.2.2	External wall construction			✓

3.11 PART 3.3.3 – MASONRY ACCESSORIES

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.3.3.1	Application			✓
3.3.3.2	Wall ties			✓
3.3.3.3	Fixing straps and tie-down systems			✓
3.3.3.4	Lintels			✓
3.3.3.5	Corrosion protection			✓

3.12 PART 3.3.4 – WEATHERPROOFING OF MASONRY

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.3.4.1	Application			✓
3.3.4.2	Width of cavity			✓
3.3.4.3	Cavity ventilation and drainage			✓
3.3.4.4	Damp-proof courses — materials			✓
3.3.4.5	Damp-proof courses—installation			✓
3.3.4.6	Flashings			✓
3.3.4.7	Location of flashings			✓
3.3.4.8	Flashings at the base of cavity walls			✓
3.3.4.9	Sill and head flashing			✓
3.3.4.10	Flashings at a roof abutting a wall			✓
3.3.4.11	Chimney flashings			✓
3.3.4.12	Weatherproofing for single skin masonry walls			✓

3.13 PART 3.4.1– SUB-FLOOR VENTILATION

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.4.1.1	Application	✓		
3.4.1.2	Sub-floor ventilation	✓		

3.14 PART 3.4.2 – STEEL FRAMING

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.4.2.1	Application			✓
3.4.2.2	General			✓
3.4.2.3	Steel floor framing			✓
3.4.2.6	Installation of services			✓

3.15 PART 3.4.3 – TIMBER FRAMING

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.4.3.0	Residential timber-framed construction		✓	

3.16 PART 3.4.4 – STRUCTURAL STEEL MEMBERS

Clause	Requirement	Complies	CC Works	DETAIL REQ'D	Not Applicable
3.4.4.1	Application				✓ *
3.4.4.2	Structural steel members				✓ *
3.4.4.3	Columns				✓ *
3.4.4.4	Corrosion protection				✓ *

3.17 PART 3.5.1 – 3.5.1.0 ROOF CLADDING

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.5.1.1	Application of Part			✓ *
3.5.1.2	Corrosion protection and compatibility requirements for roofing			✓ *
3.5.1.3	Minimum pitches for metal sheet roofing profiles			✓ *
3.5.1.4	Maximum spans			✓ *
3.5.1.5	Fixing of metal sheet roofing			✓ *
3.5.1.6	Installation of roofing sheets			✓ *

3.18 PART 3.5.3 – GUTTERS & DOWNPIPES

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.5.3.1	Application	✓		
3.5.3.2	Materials	✓		
3.5.3.3	Selection of guttering	✓		
3.5.3.4	Installation of gutters	✓		
3.5.3.5	Downpipes — size and installation	✓		

3.19 PART 3.5.4 - TIMBER AND COMPOSITE WALL CLADDING

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.5.4.1	Application			✓ *
3.5.4.2	Timber wall cladding			✓ *
3.5.4.3	Wall cladding boards			✓ *
3.5.4.4	Sheet wall cladding			✓ *
3.5.4.5	Eaves and soffit linings			✓ *
3.5.4.6	Flashings to wall openings			✓ *
3.5.4.7	Clearance between cladding and ground			✓ *
3.5.4.8	Parapet Capping			✓ *

3.20 PART 3.6– GLAZING

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.6.1	Application			✓ *
3.6.2	Glazing sizes and installation			✓ *
3.6.3	Fully framed glazing installed in perimeter of buildings			✓ *
3.6.4	Human impact safety requirements			✓ *
3.6.4.1	Doors			✓ *
3.6.4.2	Door side panels			✓ *
3.6.4.3	Full height framed glazed panels			✓ *
3.6.4.4	Glazed panels, other than doors or side panels, on the perimeter of rooms			✓ *
3.6.4.5	Bathroom, ensuite and spa room glazing			✓ *
3.6.4.6	Visibility of glazing			✓ *

3.21 PART 3.7.2– FIRE SEPARATION OF EXTERNAL WALLS

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.7.2.1	Application	✓		
3.7.2.2	External walls of Class 1 buildings	✓		
3.7.2.3	Measurement of distances	✓		
3.7.2.4	Construction of external walls			✓
3.7.2.5	Class 10a buildings			✓
3.7.2.6	Open Car ports			✓
3.7.2.7	Allowable encroachments			✓
3.7.2.8	Roof Lights			✓

3.22 PART 3.7.3 – Fire protection of separating walls and floors

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.7.3.1	Application		✓	
3.7.3.2	Separating walls		✓	
3.7.3.3	Services in separating walls		✓	
3.7.3.4	Roof lights			✓
3.7.3.5	Horizontal projections			✓

3.23 NSW 1.1 (REPLACES PART 3.7.3.4) – Fire separation of garage top dwellings

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
NSW 1.1.0	Definitions		✓	
NSW 1.1.1	Fire separation		✓	
NSW 1.1.2	Construction of floors		✓	
NSW 1.1.3	Construction of walls		✓	
NSW 1.1.4	Heat alarms		✓	

3.24 PART 3.7.5 – SMOKE ALARMS

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.7.5.1	Application		✓	
3.7.5.2	Requirements for smoke alarms		✓	
3.7.5.3	Location — Class 1a buildings		✓	
3.7.5.4	Location — Class 1b buildings			✓
3.7.5.5	Lighting to assist evacuation — Class 1b buildings			✓

3.25 PART 3.8.1 – WET AREAS

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.8.1.1	Application			✓ *
3.8.1.2	Wet Areas			✓ *

3.26 PART 3.8.2 – ROOM HEIGHTS

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.8.2.1	Application	✓		
3.8.2.2	Ceiling heights	✓		

3.27 PART 3.8.3 – FACILITIES

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.8.3.1	Application	✓		
3.8.3.2	Req'd facilities		✓	
3.8.3.3	Construction of sanitary compartments		✓	

3.28 PART 3.8.4 – LIGHT

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.8.4.1	Application	✓		
3.8.4.2	Natural lighting	✓		
3.8.4.3	Artificial lighting	✓		

3.29 PART 3.8.5 – VENTILATION

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.8.5.1	Application	✓		
3.8.5.2	Ventilation requirements	✓		
3.8.5.3	Location of sanitary compartments	✓		

3.30 PART 3.8.6 – SOUND INSULATION

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.8.6.1	Application		✓	
3.8.6.2	Sound insulation requirements		✓	
3.8.6.3	General installation requirements for walls		✓	
3.8.6.4	Services		✓	

3.31 PART 3.9.1 – STAIR CONSTRUCTION

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.9.1.1	Application.	✓		
3.9.1.2	General requirements	✓		
3.9.1.3	Stair construction	✓		
3.9.1.4	Slip-resistance		✓	
3.9.1.5	Thresholds	✓		

3.32 PART 3.9.2 – BALUSTRADES

Clause	Requirement	Complies	DETAIL REQ'D	Not Applicable
3.9.2.1	Application	✓		
3.9.2.2	When balustrades or other barriers are Req'd	✓		
3.9.2.3	Balustrades or other barrier construction		✓	
3.9.2.3	Handrails		✓	
3.9.2.5	Protection of Openable Windows			✓

4.0 BCA ASSESSMENT – DETAILED RECOMMENDATIONS

4.1 SUMMARY

We have reviewed the referenced plans and in our opinion the proposal can comply with the Building Code of Australia 2019 subject to the following recommendations: -

4.2 PART 3.2 – FOOTINGS AND SLABS

Clause	Requirement	Recommendation
3.2.1	**FOOTINGS AND SLABS**	Structural Engineers Advice is required. A Certificate of Structural adequacy for the existing structure is required

4.3 PART 3.2.2 – PREPARATION

Clause	Requirement	Recommendation
3.2.2.1	Excavation for footings	Structural Engineers Advice is required. A Certificate of Structural adequacy for the existing structure is required
3.2.2.3	Foundations for footings and	

4.4 PART 3.2.3 – CONCRETE REINFORCING

Clause	Requirement	Recommendation
3.2.3.1	Concrete	Structural Engineers Advice is required. A Certificate of Structural adequacy for the existing structure is required
3.2.3.2	Steel reinforcement	

4.5 PART 3.2.5 – FOOTING & SLAB CONSTRUCTION

Clause	Requirement	Recommendation
3.2.5.1	Footing and slab construction	Structural Engineers Advice is required. A Certificate of Structural adequacy for the existing structure is required
3.2.5.3	Shrinkage control	
3.2.5.4	Minimum edge beam dimensions	
3.2.5.5	Footings for fireplaces on Class A and S sites	

4.6 PART 3.4.3 – TIMBER FRAMING

Clause	Requirement	Recommendation
3.4.3.0	Residential timber-framed construction	Structural Engineers Advice is required. A Certificate of Structural adequacy for the existing structure is required

4.7 PART 3.7.3 – FIRE PROTECTION OF SEPARATING WALLS AND FLOORS

3.7.3.1	Application Compliance with this acceptable construction practice satisfies Performance Requirement P2.3.1 for protection of separating walls and floors.	For Reference
3.7.3.2	Separating walls (a)A separating wall between Class 1 buildings, or a wall that separates a Class 1 building from a Class 10a building which is not associated with the Class 1 building must— (i) have either— (A) an FRL of not less than 60/60/60; or (B) be of masonry construction not less than 90 mm thick; and (ii) commence at the footings or ground slab (see Figure 3.7.3.1), except for horizontal projections to which 3.7.3.5 applies; and	The wall separating the primary dwelling and the studio and the primary dwelling and garage at ground floor/garage level and between the first floor parts must be fire separated by a wall providing a 60/60/60 Fire Resistance Level (FRL). The wall must extend from the garage footing levels to the underside of the roof covering of the primary dwelling. The wall must not be penetrated by elements such as floor beams or roof structure. The door openings from the primary dwelling to the garage and to the

	(iii) extend— (A) if the building has a non-combustible roof covering, to the underside of the roof covering; or (B) if the building has a combustible roof covering, to not less than 450 mm above the roof covering; and (iv) comply with (b) to (e) and 3.7.3.3 as applicable. (b) A separating wall of lightweight construction must be tested in accordance with Specification C1.8 of the NCC Volume One. (c) A separating wall complying with (a)(iii)(A)— (i) must not be crossed by timber or other combustible building elements except for roof battens with dimensions of 75 x 50 mm or less, or roof sarking; and (ii) must have any gap between the top of the wall and the underside of the roof covering packed with mineral fibre or other suitable fire-resisting material. (d) Where a building has a masonry veneer external wall, any gap between the separating wall and the external masonry veneer must be— (i) not more than 50 mm; and (ii) packed with a mineral fibre or other suitable fire resistant material with the packing arranged to maintain any weatherproofing requirements of Part 3.3.4. (e) Eaves, verandahs and similar spaces that are open to the roof space and are common to more than one Class 1 dwelling must be separated by a non-combustible vertical lining	studio must be removed and replaced with fire rated wall construction.
3.7.3.3	Services in separating walls (a) Any service opening, other than those listed in (b), (c) and (d), in a separating wall must have construction with an FRL of not less than -/60/60.	For Reference

	(b) If an electrical wire or cable penetrates a separating wall— (i) the service and building element at the penetration must— (A) be identical with a prototype assembly that has been tested in accordance with AS 4072.1 and AS 1530.4 and achieve an FRL of not less than -/60/60; or (B) differ from a prototype assembly of the service and building element in accordance with AS 4072.1; or (ii) the service must be installed so that— (A) the opening is neatly formed, cut or drilled and no closer than 50 mm to any other service; and (B) the opening is no larger in cross-section than— (aa) 2000 mm2 if only a single cable is accommodated and the gap between the cable and the wall is no wider than 15 mm; or (bb) 500 mm2 in any other case; and (C) any gap between the service and the wall is packed with mineral fibre or other suitable fire resistant material. (c) If an electrical switch, outlet, socket or the like is accommodated in a separating wall— (i) the service and building element at the penetration must— (A) be identical with a prototype assembly which has been tested in accordance with AS 4072.1 and AS 1530.4 and achieve an FRL of not less than -/60/60; or (B) differ from a prototype assembly of the service and building element in accordance with AS 4072.1; or (ii) the service must be installed so that— (A) the opening or recess— (aa) is not located opposite any point within 300 mm horizontally or 600 mm vertically of any opening or recess on the opposite side of the wall; or	

	(bb) does not extend beyond half the thickness of the wall; and (B) any gap between the service and the wall is packed with mineral fibre or other suitable fire resistant material. (d) Other than where a tested system is used in accordance with (c)(i), if an electrical switch, socket, outlet or the like is accommodated in a hollow separating wall, the cavity immediately behind the service must be framed and packed with mineral fibre or other suitable fire resistant material	

3.33 NSW 1.1 (REPLACES PART 3.7.3.4) – Fire separation of garage top dwellings

Clause	**Requirement**	
NSW 1.1.0	Definitions Garage top dwelling means a Class 1a dwelling located above a Class 10a private garage which is not associated with that Class 1a dwelling and includes any internal entry stair serving the garage top dwelling.	For Reference
NSW 1.1.1	Fire separation (a) A garage top dwelling must be separated from a non-associated private garage by a floor complying with NSW 1.1.2. (b) Where a garage top dwelling is served by an internal stair, the garage top dwelling must be separated from a non- associated private garage by a wall complying with NSW 1.1.3. (c) Where a garage top dwelling is located above both associated and non-associated private garages— (i) in addition to a floor required by (a), the private garages must be separated with a wall complying with NSW 1.1.3; or (ii) where a garage top dwelling is not served by an internal stair, the garage top dwelling may be separated from the private garages by a floor complying with NSW 1.1.2.	Fore separation is required between the secondary dwelling and the garage in accordance with Clause NSW 1.1.2

NSW 1.1.2	Construction of floors (a) A floor required by NSW 1.1.1(a) or (c)(ii) must— (i) have an FRL of not less than 30/30/30 when tested from the underside; or (ii) have a fire-protective covering on the underside of the floor, including beams incorporated in it; or (iii) be a floor/ceiling system incorporating a ceiling which has a resistance to the incipient spread of fire to the space above itself of not less than 60 minutes. (b) Where a floor subject to (a)(i) depends on direct vertical or lateral support from another part to maintain its FRL, that supporting part must have an FRL of not less than 30/-/-. (c) Where a service passes through a floor referred to in (a), the penetration must not reduce the fire performance of the floor or covering.	The floor between the garage and the secondary dwelling must be a floor/ceiling system incorporating a ceiling which has a resistance to the incipient spread of fire to the space above itself of not less than 60 minutes.
NSW 1.1.3	Construction of walls A wall required by (a) NSW 1.1.1(b) or (c)(i) must— (i) have an FRL of not less than 30/30/30 when tested from the non-associated private garage side; or (ii) be of masonry construction not less than 90 mm thick. (b) A wall subject to (a) must— (i) commence at the footings or ground slab; and (ii) extend to the underside of a floor complying with NSW 1.1.2. (c) A wall referred to in (a)(i), if of lightweight construction must be tested in accordance with Specification C1.8 of BCA Volume One. (d) Where a service passes through a wall referred to in (a), the penetration must not reduce the fire performance of the wall. (e) A wall required by NSW 1.1.1(b) or (c)(i) need not comply with 3.7.3.2.	For Reference
NSW 1.1.4	Heat alarms (a) A heat alarm must be installed in a private garage that is not associated with and located below, a garage top dwelling. (b) A heat alarm required by (a) must— (i) be located on or near the ceiling; and (ii) comply with AS 1603.3; and (iii) be connected to the consumer mains power supplying the garage top	A heat detector is required within the garage and must be interconnected with the smoke alrm system within the secondary dwelling

	dwelling where consumer mains power is supplied to the building; and (iv) be interconnected to and activate the garage top dwelling smoke alarms required by 3.7.5.3. (c) Durable notices must be permanently fixed to the garage top dwelling and non-associated private garage in prominent locations, indicating that— (i) a heat alarm is installed in the non-associated private garage; and (ii) the heat alarm is interconnected to the garage top dwelling smoke alarms.	

4.8 PART 3.7.2 – SMOKE ALARMS

Clause	Requirement	Recommendation
3.7.2.2	Requirements for smoke alarms	Smoke alarm installation must comply with AS 3786. Provide construction method in Project Specification prior to Crown compliance Certificate.
3.7.2.3	Location — Class 1a buildings	Smoke alarms must be provided within hallways leading to a bedroom and on any other level. Where more than 1 smoke alarm is provided to a dwelling the alarms must be interlinked.

4.9 PART 3.8.3 – SANITARY FACILITIES

Clause	Requirement	Recommendation
3.8.3.2	Required facilities (a) A Class 1 building must be provided with— (i) a kitchen sink and facilities for the preparation and cooking of food; and (ii) a bath or shower; and (iii) clothes washing facilities, comprising at least one washtub and space in the same room for a washing machine; and (iv) a closet pan; and	A Laundry tub is required within the secondary dwelling laundry (contained within the garage

	(v) a washbasin. (b) If any of the facilities in (a) are detached from the main building, they must be set aside for the exclusive use of the occupants of the building.	
3.8.3.3	**Construction of sanitary compartments** The door to a fully enclosed *sanitary compartment* must— (a) open outwards; or (b) slide; or (c) be readily removable from the outside of the compartment, unless there is a clear space of at least 1.2 m, measured in accordance with Figure 3.8.3.3, between the closet pan within the *sanitary compartment* and the doorway.	Lift off hinges are required to the door of the secondary dwelling WC

4.10 PART 3.8.6 – SOUND INSULATION

3.8.6.2	Sound insulation requirements (a) To provide insulation from airborne and impact sound, a separating wall between two or more Class 1 buildings must— (i) achieve the weighted sound reduction index with spectrum adaptation term (R C) and discontinuous construction requirements, as required by Table 3.8.6.1; and R w tr (ii) be installed in accordance with the appropriate requirements of 3.8.6.3 and 3.8.6.4. (b) For the purpose of this Part, the R + C AS/NZS 1276.1 or ISO 717.1, using results from laboratory measurements. must be determined in accordance with	Provide construction method in Project plans
3.8.6.3	General installation requirements for walls (a) To achieve the appropriate level of sound insulation, walls must— (i) be constructed in accordance with the appropriate	Provide construction method in Project plans

	requirements contained in (b) to (f); and (ii) at the junction of sound insulated walls with any perimeter walls and roof cladding, be sealed in accordance with Figure 3.8.6.2. (d) Masonry units must be laid with all joints filled solid, except for adequately sound insulated articulation joints, including those between the masonry and any adjoining construction. (c) Concrete panels must have joints between panels and any adjoining construction filled solid. (d) Plasterboard must be installed as follows: (i) If one layer is required on both sides of a wall the joints must be staggered on opposite sides (See Figure 3.8.6.3). (ii) If two layers are required, the first layer must be fastened in accordance with (i) and the second layer joints must not coincide with those of the first layer (See Figure 3.8.6.3). (iii) The following joints must be taped and filled solid: (A) Outer layer joints between sheets. (B) Joints between sheets and any adjoining construction. (f) Timber studs and perimeter members must be installed as follows: (i) Studs must be fixed to top and bottom plates of sufficient depth to permit secure fixing of the plasterboard. (ii) Noggings and like members must not bridge between studs supporting different wall leaves. (iii) All timber members at the perimeter of the wall must be securely fixed to the adjoining structure and bedded in resilient compound or the joints must be caulked so there are no voids between the timber members and the wall.	
3.8.6.4	Services (a) Services must not be chased into concrete or masonry separating walls. (b) If a duct, soil, waste, water supply or storm water pipe serves or passes through a separating wall or is located in a	Provide construction method in Project plans

	separating wall— (i) a door or panel providing access to a duct or pipe required to be separated must— (A) not open into any habitable room, other than a kitchen; and (B) in any other part must be firmly fixed so as to overlap the frame or rebate of the frame by not less than 10 mm and be constructed of— (aa) wood, plasterboard or blockboard not less than 33 mm thick; or (bb) compressed fibre reinforced cement sheeting not less than 9 mm thick; or (cc) other suitable material with a mass per unit area not less than 24.4 kg/m2 ; and (ii) in the case of a water supply pipe, it must— (A) only be installed in discontinuous construction; and (B) in the case of a water supply pipe that serves one dwelling, not be fixed to the wall leaf on the side of any other dwelling and have a clearance not less than 10 mm to the other wall leaf. (c) Electrical outlets must be offset from each other— (i) in masonry walling, not less than 100 mm; and (ii) in timber or steel framed walling, not less than 300 mm.	
3.8.6.5	General installation requirements for walls (a) To achieve the appropriate Rw and impact sound resistance, walls must— (i) be installed in accordance with the appropriate requirements contained in (b) to (f); and (ii) at the junction of sound insulated walls with perimeter walls and roof cladding, be sealed in accordance with any relevant detail in Figure 3.8.6.3. (b) Masonry units must— (i) be laid with all joints filled solid, including those between the masonry and any adjoining construction; and	Provide construction method in Project plans

	(ii) not be chased for services. (c) Joints between concrete slabs, wall units and any adjoining construction must be filled solid. (d) Plasterboard must be installed as follows: (i) If one layer is required under this Part, joints must be staggered with the joints in sheets on the opposite face of the wall. (ii) If 2 layers are required, the first layer must be fixed according to (i) and the second layer must be fixed to the first layer with nails, screws or adhesive so that the joints do not coincide with those of the first layer. (iii) Joints between sheets or between sheets and any adjoining construction must be taped and filled solid. (iv) Fire-protective grade plasterboard (when nominated) must be the grade manufactured for use in fire-resisting construction. (f) Timber studs and perimeter members must be installed as follows: (i) Studs must be fixed to top and bottom plates of sufficient depth to permit secure fixing of the plasterboard. (ii) Noggings and like members must not bridge between studs supporting different wall leaves. (iii) All timber members at the perimeter of the wall must be securely fixed to the adjoining structure and bedded in resilient compound or the joints must be caulked so there are no voids between the timber members and the wall. 3.8.6.4 Soil and waste pipes If a soil or waste pipe passes through a separating wall— (a) a door or panel providing access to the pipe must not open into any habitable room, other than a kitchen; and (b) an access door or panel in any other part must be firmly fixed so as to overlap the frame or rebate of the frame by not less than 10 mm, be fitted with a sealing gasket along all edges and constructed of—	

	(i) wood, plasterboard or blockboard not less than 38 mm thick; or (ii) compressed fibre reinforced cement sheeting not less than 9 mm thick; or (iii) other suitable material with a mass per unit area not less than 24.4 kg/m 2.	

4.11 PART 3.9.1 – STAIR CONSTRUCTION

3.9.1.4	**Slip-resistance** The requirements for slip-resistance treatment to stair treads, ramps and landings are as follows: (a) Treads must have— (i) a surface with a slip-resistance classification not less than that listed in Table 3.9.1.3 when tested in accordance with AS 4586; or (ii) a nosing strip with a slip-resistance classification not less than that listed in Table 3.9.1.3 when tested in accordance with AS 4586. (b) The floor surface of a ramp must have a slip-resistance classification not less than that listed in Table 3.9.1.3 when tested in accordance with AS 4586. (c) Landings, where the edge leads to the flight below, must have— (i) a surface with a slip-resistance classification not less than that listed in Table 3.9.1.3 when tested in accordance with AS 4586, for not less than 190 mm from the stair nosing; or (ii) a nosing strip with a slip-resistance classification not less than that listed in Table 3.9.1.3 when tested in accordance with AS 4586.	Non slip nosing's are require to the eternal timber stairs to the secondary dwelling

	Table 3.9.1.3 SLIP-RESISTANCE CLASSIFICATION <table><tr><th rowspan="2">Application</th><th colspan="2">Surface conditions</th></tr><tr><th>Dry</th><th>Wet</th></tr><tr><td>Ramp not steeper than 1:8</td><td>P4 or R10</td><td>P5 or R12</td></tr><tr><td>Tread surface</td><td>P3 or R10</td><td>P4 or R11</td></tr><tr><td>Nosing or landing edge strip</td><td>P3</td><td>P4</td></tr></table>	

4.12 PART 3.9.2 – BALUSTRADES

3.9.2.3	Construction of barriers to prevent falls (a) The height of a barrier required by 3.9.2.2 must be in accordance with the following: (i) The height must not be less than 865 mm above the nosings of the stair treads or the floor of a ramp. (ii) The height must not be less than— (A) 1 m above the floor of any access path, balcony, landing or the like; or (B) 865 mm above the floor of a landing to a stair or ramp where the barrier is provided along the inside edge of the landing and does not exceed a length of 500 mm. (b) A transition zone may be incorporated where the barrier height changes from 865 mm on the stair flight or ramp to 1 m at the landing (c) Openings in barriers (including decorative balustrades) must be constructed so that they do not permit a 125 mm sphere to pass through it and for stairs, the opening is measured above the nosing line of the stair treads. (d) A barrier to a stairway serving a non-habitable room, such as an attic, storeroom or the like that is not used on a regular or daily basis, need not comply with (c) if— (i) openings are constructed so that they do not permit a 300 mm	The spacing and tension level to the wire balustrade on the timber balcony and access stair to the secondary dwlling are non compliant. We recommend a) Provide additional wires t reduce the gaps b) Tension the wire to prevent spreading

	sphere to pass through; or (ii) where rails are used, the barrier consists of a top rail and an intermediate rail, with the openings between rails not more than 460 mm. (e) A barrier, except a window serving as a barrier, must be designed to take loading forces in accordance with AS/NZS 1170.1.	
3.9.2.4	Handrails (a) Handrails to a stairway or ramp must— (i) be located along at least one side of the flight or ramp; and (ii) be located along the full length of the flight or ramp, except in the case where a handrail is associated with a barrier the handrail may terminate where the barrier terminates; and (iii) have the top surface of the handrail not less than 865 mm vertically above the nosings of the stair treads or the floor surface of the ramp; and (iv) have no obstruction on or above them that will tend to break a handhold, except for newel posts, ball type stanchions, or the like. (b) The requirements of (a) do not apply to— (i) a stairway or ramp providing a change in elevation of less than 1 m; or (ii) a landing; or (iii) a winder where a newel post is installed to provide a handhold; or (iv) a stairway or ramp in a Class 10 building.	For Reference
3.9.2.5	Construction of wire barriers A wire barrier is deemed to meet the requirements of 3.9.2.3(c) if it is constructed in accordance with the following: (a) For a horizontal or near horizontal wire system— (i) when measured with a strain indicator, it must be in accordance with the tension values in Table 3.9.2.1; or (ii) when measured for a maximum permissible deflection, it must not	

	exceed the maximum deflections in Table 3.9.2.3. (b) For a non-continuous vertical wire system— (i) when measured with a strain indicator, it must be in accordance with the tension values in Table 3.9.2.1 (see Note 4); or (ii) when measured for maximum permissible deflection, it must not exceed the maximum deflections in Table 3.9.2.3. (c) For a continuous vertical or continuous near vertical sloped wire system— (i) it must have wires of no more than 2.5 mm diameter with a lay of 7 x 7 or 7 x 19 construction; and (ii) changes in direction at support rails must pass around a pulley block without causing permanent deformation to the wire; and (iii) supporting rails must be spaced of not more than 900 mm apart and be of a material that does not allow deflection that would decrease the tension of the wire under load; and (iv) when the wire tension is measured with a strain indicator, it must be in accordance with the tension values in Table 3.9.2.2 when measured in the furthermost span from the tensioning device.	

Table 3.9.2.1 Wire barrier construction—Required tension for stainless steel horizontal wires

			Clear distance between posts (mm)								
			600	800	900	1000	1200	1500	1800	2000	2500
Wire dia. (mm)	Lay	Wire spacing (mm)	Minimum required tension in Newtons (N)								
2.5	7x7	60	55	190	263	415	478	823	1080	1139	x
		80	382	630	730	824	1025	1288	x	x	x
		100	869	1218	1368	x	x	x	x	x	x
2.5	1x19	60	35	218	310	402	585	810	1125	1325	x

		Clear distance between posts (mm)								
		600	800	900	1000	1200	1500	1800	2000	2500
Wire dia. (mm)	Lay	Wire spacing (mm)	Minimum required tension in Newtons (N)							
		80	420	630	735	840	1050	1400	1750	x	x
		100	1140	1565	x	x	x	x	x	x	x
3.0	7x7	60	15	178	270	314	506	660	965	1168	1491
		80	250	413	500	741	818	1083	1370	1565	x
		100	865	1278	1390	1639	x	x	x	x	x
3.0	1x19	60	25	183	261	340	520	790	1025	1180	x
		80	325	555	670	785	1025	1330	1725	1980	x
		100	1090	1500	1705	1910	x	x	x	x	x
4.0	7x7	60	5	73	97	122	235	440	664	813	1178
		80	196	422	480	524	760	1100	1358	1530	2130
		100	835	1182	1360	1528	1837	2381	2811	3098	x
4.0	1x19	60	5	5	10	15	20	147	593	890	1280
		80	30	192	300	415	593	1105	1303	1435	1844
		100	853	1308	1487	1610	2048	2608	3094	3418	3849
4.0	7x19	60	155	290	358	425	599	860	1080	1285	1540
		80	394	654	785	915	1143	1485	1860	2105	2615
		100	1038	1412	1598	1785	2165	2735	x	x	x

Notes to Table 3.9.2.1:

1. Lay = number of strands by the individual wires in each strand. For example a lay of 7 x 19 consists of 7 strands with 19 individual wires in each strand.
2. Where a change of direction is made in a run of wire, the tensioning device is to be placed at the end of the longest span.
3. If a 3.2 mm diameter wire is used, the tension figures for 3.0 mm wire are applied.
4. This table may also be used for a set of non-continuous (single) vertical wires forming a barrier using the appropriate clear distance between posts as the vertical clear distance between the rails. X = not allowed because the required tension would exceed the safe load of the wire.
5. Tension measured with a strain indicator.

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