

BUILDING CODE OF AUSTRALIA
NATIONAL CONSTRUCTION CODE COMPLIANCE
ASSESSMENT REPORT
SECONDARY DWELLING
24 OLIVER STREET, FRESHWATER NSW 2096

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EXECUTIVE SUMMARY AND RECOMMENDATIONS

This report provides a Building Code of Australia (BCA/NCC) 2019 assessment of the secondary dwelling located at 24 Oliver Street, Freshwater NSW 2096.

The primary purpose of this report is to identify the non-compliance matters, if any, contained in an already built secondary dwelling against the current Deemed-to-Satisfy (DTS) Provisions of the BCA/NCC 2019 and to provide compliance recommendations to overcome the DTS non-compliances.

RECOMMENDATIONS:

The following is a list of Deemed-to-Satisfy Provisions that should be addressed either by design amendments or additional information.

We note that the items in yellow below in the executive summary needed to be addressed all other items are regarded as complying or for information only.

REVISION STATUS				
017/21 - Rev 01	05.03.2021	INITIAL BCA /NCC REPORT	IA	HA

BCA Clause	Deemed-to-Satisfy Provision to be addressed
<p>Part 3.7 Fire Safety Part 3.7.1 Fire properties for materials and construction</p>	<p>3.7.1.1 General concession — non-combustible materials</p> <p>The following materials, though <i>combustible</i> or containing <i>combustible</i> fibres, may be used wherever a <i>non-combustible</i> material is required in the <i>Housing Provisions</i>:</p> <ul style="list-style-type: none"> (a) Plasterboard. (b) Perforated gypsum lath with a normal paper finish. (c) Fibrous-plaster sheet. (d) Fibre-reinforced cement sheeting. (e) Pre-finished metal sheeting having a <i>combustible</i> surface finish not exceeding 1 mm thick and where the <i>Spread-of-Flame Index</i> of the product is not more than 0. (f) <i>Sarking-type materials</i> that do not exceed 1 mm in thickness and have a <i>flammability index</i> not greater than 5. (g) Bonded laminated materials where— <ul style="list-style-type: none"> (i) each lamina, including any core, is <i>non-combustible</i>; and (ii) each adhesive layer does not exceed 1 mm in thickness and the total thickness of the adhesive layers does not exceed 2 mm; and (iii) the <i>Spread-of-Flame Index</i> and the <i>Smoke-Developed Index</i> of the bonded laminated material as a whole do not exceed 0 and 3 respectively. <p>We note that painted timber cladding externally and plasterboard walls & ceilings internally are fully compliant for North, East and West elevation.</p> <p>South elevation is situated within 900 mm setback and it has to be addressed as non-compliant item</p>

Part 3.7.2 Fire separation of external walls

An *external wall* of a Class 1 building, and any openings in that wall, must comply with 3.7.2.4 if the wall is less than—

- (a) 900 mm from an allotment boundary other than the boundary adjoining a road alignment or other public space; or
- (b) 1.8 m from another building on the same allotment other than a Class 10 building associated with the Class 1 building or a detached part of the same Class 1 building.

Diagram a Full wall protection

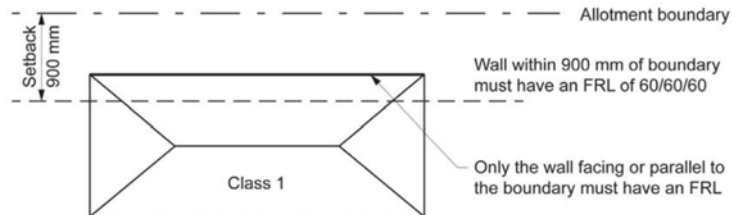
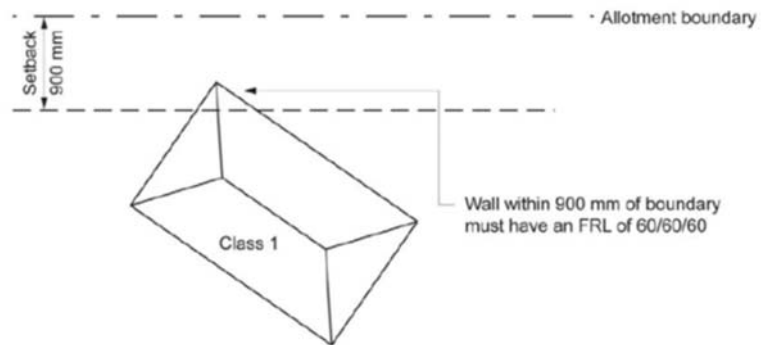


Diagram b Part walls protection



We note that drawing A-1, Site Plan, indicates minimum side setback of 1.073 m West elevation, 1.074 m North elevation, 0.361 m South elevation.

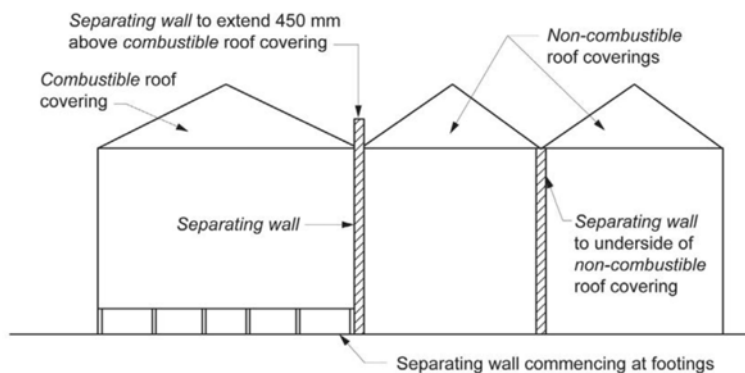
We note that window No.4 and window No.5 do not have minimum required setback of 900 mm.



Part 3.7.3 Fire protection of separating walls and floors

- (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 (see Figure 3.7.3.4); and
 - (iii) extend—
 - (A) if the building has a *non-combustible* roof covering, to the underside of the roof covering (see Figure 3.7.3.1 and Figure 3.7.3.2); or
 - (B) if the building has a *combustible* roof covering, to not less than 450 mm above the roof covering (see Figure 3.7.3.1); 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 (see Figure 3.7.3.2 Diagram b).

Separating wall construction



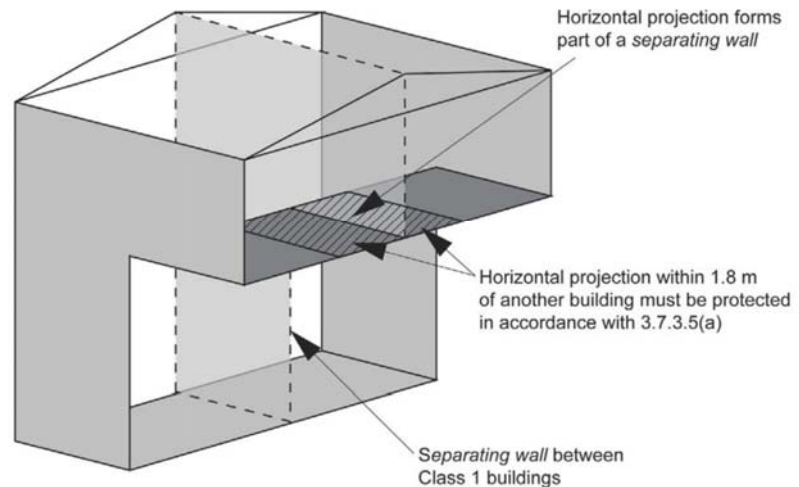
- (a) Where a horizontal projection forms part of a *separating wall* complying with 3.7.3.2, any horizontal projection within 1.8 m on each side of the *separating wall* (see Figure 3.7.3.4) must—
- (i) be a floor/ceiling or floor/soffit system incorporating a ceiling or soffit which has a *resistance to the incipient spread of fire* to the space above itself of not less than 60 minutes; or



- (ii) have an FRL not less than 30/30/30 when tested from the underside; or
(iii) have a fire-protective covering on the underside of the floor, including beams incorporated in it, if the floor is *combustible* or of metal.
- (b) The part of the *separating wall* that projects outwards horizontally must—
(i) extend to the underside of the floor/ceiling or floor/soffit system complying with (a); and
(ii) not be crossed by timber or other *combustible* building elements except for framing members with dimensions of 75 x 50 mm or less, or sarking; and
(iii) have any gap between the bottom of the wall and the underside of the floor/ceiling or floor/soffit system packed with mineral fibre or other suitable *fire-resisting* material.
- (c) Where a floor subject to (a)(ii) 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/-/-.
- (d) Where a service passes through a floor referred to in (a), the penetration must not reduce the fire performance of the floor or covering.

Horizontal projection forming part of a separating wall

Class 1 buildings on same allotment





3.7.4 Fire separation of garage top dwelling

- (a)Where parts of a Class 1a dwelling are located above a Class 10a *private garage* that is not associated with the Class 1a dwelling—
- (i)any wall separating parts of the Class 1a dwelling from the *private garage* not associated with the dwelling must comply with (b); and
- (ii)any *private garage* associated with and located below the Class 1a dwelling must be separated from the *private garage* not associated with the dwelling by a wall complying with (b).
- (b)A wall *required* by (a) must—
- (i)have either—
- (A)an FRL of not less than 60/60/60 when tested from the *private garage* associated with another dwelling side; or
- (B)be of masonry construction not less than 90 mm thick; and
- (ii)commence at the footings or ground slab; and
- (iii)extend to the underside of a separating floor complying with 3.7.4.3; and
- (iv)comply with 3.7.3.2(b) to (e) and 3.7.3.3 as applicable.

We note that drawing A-2 shows only one (1) bedroom, kitchen, study, living room and bathroom.

- (a)Where parts of a Class 1a dwelling are located above or below a Class 10a *private garage* that is not associated with the Class 1a dwelling, any floor separating the Class 1a dwelling from the Class 10a *private garage* not associated with the dwelling must—
- (i)be a floor/ceiling or floor/soffit system incorporating a ceiling or soffit which has a *resistance to the incipient spread of fire* to the space above itself of not less than 60 minutes; or
- (ii)have an FRL not less than 30/30/30 when tested from the underside; or
- (iii)have a *fire-protective covering* on the underside of the floor, including beams incorporated in it, if the floor is *combustible* or of metal.
- (b)Where a floor subject to (a)(ii) 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



Drawing A-2 indicates smoke alarm.

We note that the designed provision of smoke alarms and their location satisfy requirements of Part 3.7.5 of BCA/NCC.



Part 3.8.1 Wet areas and external waterproofing

- Building elements in *wet areas* within a building must—
- (a) be *waterproof* or *water resistant* in accordance with Table 3.8.1.1; and
 - (b) comply with AS 3740.

Waterproofing and water resistance requirements for building elements in wet areas

Vessels or area where the fixture is installed	Floors and horizontal surfaces	Walls	Wall junctions and joints	Wall / floor junctions	Penetrations
Shower area (enclosed and unenclosed)					
With hob	<i>Waterproof</i> floor in <i>shower area</i> (including any hob or step-down)	(a) <i>Waterproof</i> all walls in <i>shower area</i> to a height the greater of— (i) not less than 150 mm above floor substrate; or (ii) not less than 25 mm above maximum retained water level; and	<i>Waterproof</i> wall junctions within <i>shower area</i> .	<i>Waterproof</i> wall / floor junctions within <i>shower area</i> .	<i>Waterproof</i> penetrations in <i>shower area</i> .
With step-down					
Without hob or step-down		(b) <i>Water resistant</i> walls in <i>shower area</i> to not less than 1800 mm above finished floor level of the			

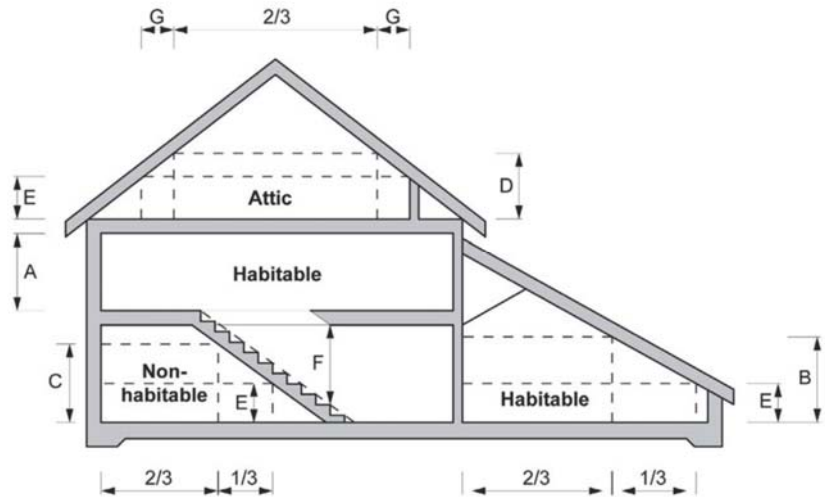


Vessels or area where the fixture is installed	Floors and horizontal surfaces	Walls	Wall junctions and joints	Wall / floor junctions	Penetrations
		shower.			
With preformed shower base	N/A	Water resistant walls in shower area to not less than 1800 mm above finished floor level of the show.	Waterproof wall junctions within shower area.	Waterproof wall / floor junctions within shower area.	Waterproof penetrations in shower area.
Area outside shower area					
For concrete and compressed fibre-cement sheet flooring	Water resistant floor of the room.	N/A	N/A	Waterproof wall / floor junctions	N/A
For timber floors including particleboard, plywood and other timber based flooring materials	Waterproof floor of the room				
Areas adjacent to baths and spas					
For concrete and compressed fibre-cement sheet flooring	Water resistant floor of the room.	(a) Water resistant to a height of not less than 150 mm above the vessel, for the extent of the vessel, where the vessel is within 75 mm of a wall. (b) Water resistant all exposed surfaces below vessel lip.	Water resistant junctions within 150 mm above a vessel for the extent of the vessel.	Water resistant wall / floor junctions for the extent of the vessel.	Waterproof tap and spout penetrations where they occur in horizontal surfaces.
For timber floors including particleboard, plywood and other timber based flooring materials	Waterproof floor of the room.	(a) Water resistant to a height of not less than 150 mm above the vessel, for the extent of the vessel, where the vessel is within 75 mm of a wall. (b) Water resistant all exposed surfaces below vessel lip.	Water resistant junctions within 150 mm above a vessel for the extent of the vessel.	Water resistant wall / floor junctions for the extent of the vessel.	Waterproof tap and spout penetrations where they occur in horizontal surfaces.
Inserted baths and spas	(a) Waterproof shelf area, incorporating waterstop under the bath lip. (b) No	(a) Waterproof to not less than 150 mm above the lip of the bath or spa; and (b) No requirement under bath.	(a) Waterproof junctions within 150 mm above bath or spa; and (b) No	N/A	Waterproof tap and spout penetrations where they occur in horizontal surfaces.
Vessels or area where the fixture is installed	Floors and horizontal surfaces	Walls	Wall junctions and joints	Wall / floor junctions	Penetrations
	requirement under bath.		requirement under bath		
Other areas					
Laundries and WCs	Water resistant floor of the room	N/A	N/A	Water resistant wall / floor junctions.	N/A
Walls adjoining other vessels (e.g. sink, basin or laundry tub	N/A	Water resistant to a height of not less than 150 mm above the vessel, for the extent of the vessel, where the vessel is within 75 mm of a wall.	Waterproof wall junctions where a vessel is fixed to a wall.	N/A	Waterproof tap and spout penetrations where they occur in surfaces required to be waterproof or water resistant.

Part 3.8.2 Room Height

- (a) in a habitable room excluding a kitchen — 2.4 m; and
- (b) in a kitchen — 2.1 m; and
- (c) in a corridor, passageway or the like — 2.1 m; and
- (d) in a bathroom, shower room, laundry, sanitary compartment, airlock, pantry, storeroom, garage, car parking area or the like — 2.1 m; and
- (e) in a room or space with a sloping ceiling or projections below the ceiling line within—
 - (i) a habitable room—
 - (A) in an attic — a height of not less than 2.2 m for at least two-thirds of the floor area of the room or space; and
 - (B) in other rooms — a height of not less than 2.4 m over two-thirds of the floor area of the room or space; and
 - (ii) a non-habitable room — a height of not less than 2.1 m for at least two-thirds of the floor area of the room or space, and when calculating the floor area of a room or space, any part that has a ceiling height of less than 1.5 m is not included; and
- (f) in a stairway, ramp, landing, or the like — 2.0 m measured vertically above the nosing line of stairway treads or the floor surface of a ramp, landing or the like.

Measurement of heights of rooms and other spaces



We note that architectural drawing A-4, marked as Sections and perspective views, shows 2700 mm floor to ceiling height and therefore the granny flat complies with all requirements of Part 3.8.2 of BCA/NSS 2019.



Part 3.8.3 Facilities

Clause 3.8.3.1 Required facilities

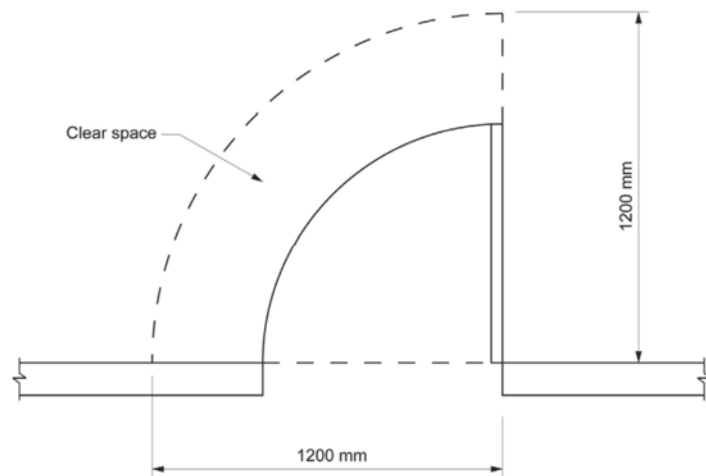
- (a) A Class 1 building must be provided with—
- (i) a kitchen sink and facilities for the preparation and cooking of food; and
 - (ii) a bath or shower; and
 - (iii) clothes washing facilities, comprising at least one washtub and space in the same room for a washing machine; and
 - (iv) a closet pan; and
 - (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.

We note architectural plan A-2 having all necessary facilities required for compliance with Part 3.8.3 of BCA/NCC 2019.

Clause 3.8.3.3 Construction 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.

Construction of sanitary compartments



We note architectural plan A-2 indicate bathroom not having required clearance of 1.2 m as stipulated by item (c) of this clause.

The door (D1) must reconfigured to open outward or lift off hinges must be installed.



<p>Part 3.8.4 Light</p>	<p>Natural light must be provided to all habitable rooms, in accordance with the following:</p> <ul style="list-style-type: none">(a) Natural light must be provided by—<ul style="list-style-type: none">(i) windows, excluding roof lights that—<ul style="list-style-type: none">(A) have an aggregate light transmitting area measured exclusive of framing members, glazing bars or other obstructions of not less than 10% of the floor area of the room; and(B) are open to the sky or face a court or other space open to the sky or an open verandah, carport or the like; or(ii) roof lights that—<ul style="list-style-type: none">(A) have an aggregate light transmitting area measured exclusive of framing members, glazing bars or other obstructions of not less than 3% of the floor area of the room; and(B) are open to the sky; or(iii) a proportional combination of windows and roof lights required by (i) and (ii).(b) A window required to provide natural light that faces a boundary of an adjoining allotment must not be less than a horizontal distance of 900 mm from that boundary.(c) Natural light to a room may come through one or more glazed panels or openings from an adjoining room (including an enclosed verandah) if—<ul style="list-style-type: none">(i) the glazed panels or openings have an aggregate light transmitting area of not less than 10% of the floor area of the room to which it provides light; and(ii) the adjoining room has—<ul style="list-style-type: none">(A) windows, excluding roof lights that—<ul style="list-style-type: none">(aa) have an aggregate light transmitting area of not less than 10% of the combined floor area of both rooms; and(bb) are open to the sky or face a court or other space open to the sky or an open verandah, carport or the like; or(B) roof lights that—<ul style="list-style-type: none">(aa) have an aggregate light transmitting area of not less than 3% of the combined floor area of both rooms; and(bb) are open to the sky; or(C) a proportional combination of windows and roof lights required by (A) and (B).(iii) the areas specified in (i) and (ii) may be reduced as appropriate if direct natural light is provided from another source. <p>We note architectural plan A-2 indicate that the subject dwelling have allocated windows to all rooms except bathroom which must be provided with artificial lighting.</p> <p>“Sanitary compartments, bathrooms, shower rooms, airlocks and laundries must be provided with artificial lighting if natural light in accordance with the relevant provisions of 3.8.4.2 is not available—</p> <ul style="list-style-type: none">(a) at a rate of not less than one light fitting per 16 m2 of floor area; or(b) in accordance with AS/NZS 1680.0.”
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Part 3.8.5 Ventilation

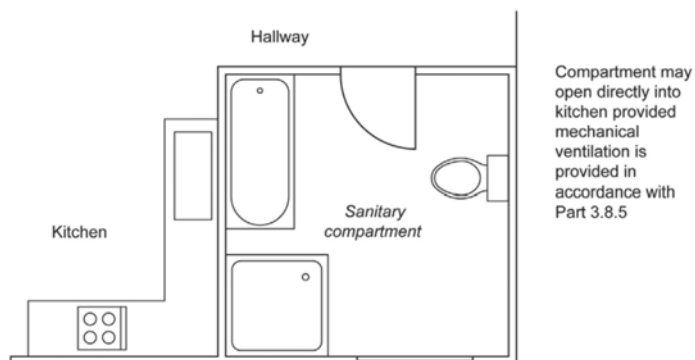
Ventilation must be provided to a habitable room, sanitary compartment, bathroom, shower room, laundry and any other room occupied by a person for any purpose by any of the following means:

- (a) Openings, windows, doors or other devices which can be opened—
 - (i) with a ventilating area not less than 5% of the floor area of the room required to be ventilated; and
 - (ii) open to—
 - (A) a suitably sized court, or space open to the sky; or
 - (B) an open verandah, carport, or the like; or
 - (C) an adjoining room in accordance with (b).
- (b) Natural ventilation to a room may come through a window, opening, door or other device from an adjoining room (including an enclosed verandah) if—
 - (i) the room to be ventilated or the adjoining room is not a sanitary compartment; and
 - (ii) the window, opening, door or other device has a ventilating area of not less than 5% of the floor area of the room to be ventilated; and
 - (iii) the adjoining room has a window, opening, door or other device with a ventilating area of not less than 5% of the combined floor areas of both rooms; and
 - (iv) the ventilating areas specified may be reduced as appropriate if direct natural ventilation is provided from another source.

Sanitary compartments must not open directly into a kitchen or pantry unless—

- (a) access is by an airlock, hallway or other room, (see Figure 3.8.5.2); or
- (b) the sanitary compartment is provided with an exhaust fan or other means of mechanical exhaust ventilation.

Acceptable location of non mechanically ventilated sanitary compartment





We note architectural plan A-2, for secondary dwelling, indicates that bathroom does not have any window and therefore mechanical ventilation is required in this bathroom.



Part 3.8.6
Sound insulation

Clause 3.8.6.2

(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 an $R_w + C_{tr}$ (airborne) not less than 50; and
- (ii) be of discontinuous construction if it separates a bathroom, sanitary compartment, laundry or kitchen in one Class 1 building from a habitable room (other than a kitchen) in an adjoining Class 1 building (see Figure 3.8.6.1).

(b) For the purposes of (a)(ii), discontinuous construction means a wall system that has two separate leaves and that is not a staggered stud wall, that complies with the following:

- (i) The wall has a minimum 20 mm cavity between leaves.
- (ii) For masonry walls, where wall ties are required to connect leaves, the ties are of the resilient type.
- (iii) For walls other than masonry, there is no mechanical linkage between leaves except at the periphery.

(c) A wall required to have sound insulation must continue to—

- (i) the underside of the roof above; or
- (ii) a ceiling that provides the sound insulation required for the wall.

We note that wall and ceiling systems provided in architectural plan A-2, indicate equal or higher values of $R_w + C_{tr}$.

The granny flat complies with the Part 3.8.6 of BCA/NCC 2019

Part 3.9.1 Stairway and ramp construction

A stairway must be designed to take loading forces in accordance with AS/NZS 1170.1 and must have—

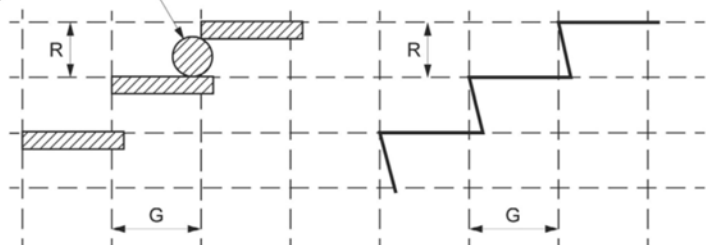
- (i) not more than 18 and not less than 2 risers in each flight; and
 - (ii) Goings (G), risers (R) and a slope relationship quantity ($2R + G$) in accordance with Table 3.9.1.1, except as permitted by (b) and (c); and
 - (iii) constant goings and risers throughout each flight, except as permitted by (c) and (d), and the dimensions of goings (G) and risers (R) in accordance with (a), (b) and (c) are considered constant if the variation between—
 - (A) adjacent risers, or between adjacent goings, is no greater than 5 mm; and
 - (B) the largest and smallest riser within a flight, or the largest and smallest going within a flight, does not exceed 10 mm; and
 - (iv) risers which do not have any openings that would allow a 125 mm sphere to pass through between the treads; and
 - (v) treads of solid construction (not mesh or other perforated material) if the stairway is more than 10 m high or connects more than 3 storeys.
- (b) In the case of a stairway serving only non-habitable rooms, such as attics, storerooms and the like that are not used on a regular or daily basis—
- (i) the going (G), riser (R) and slope relationship quantity ($2R + G$) in accordance with Table 3.9.1.1 may be substituted with those in Table 3.9.1.2; and
 - (ii) need not comply with 3.9.1.2(a)(iv).

Riser and going dimensions (mm)

Stair type	Riser (R) (see Figure 3.9.1.4 below)		Going (G) (see Figure 3.9.1.4 below)		Slope relationship ($2R + G$)	
	Max	Min	Max	Min	Max	Min
Stairs (other than spiral)	190	115	355	240	700	550
Spiral	220	140	370	210	680	590

Riser and going dimensions—Measurement

125 mm sphere must not pass through treads



This part is not applicable to subject granny flat



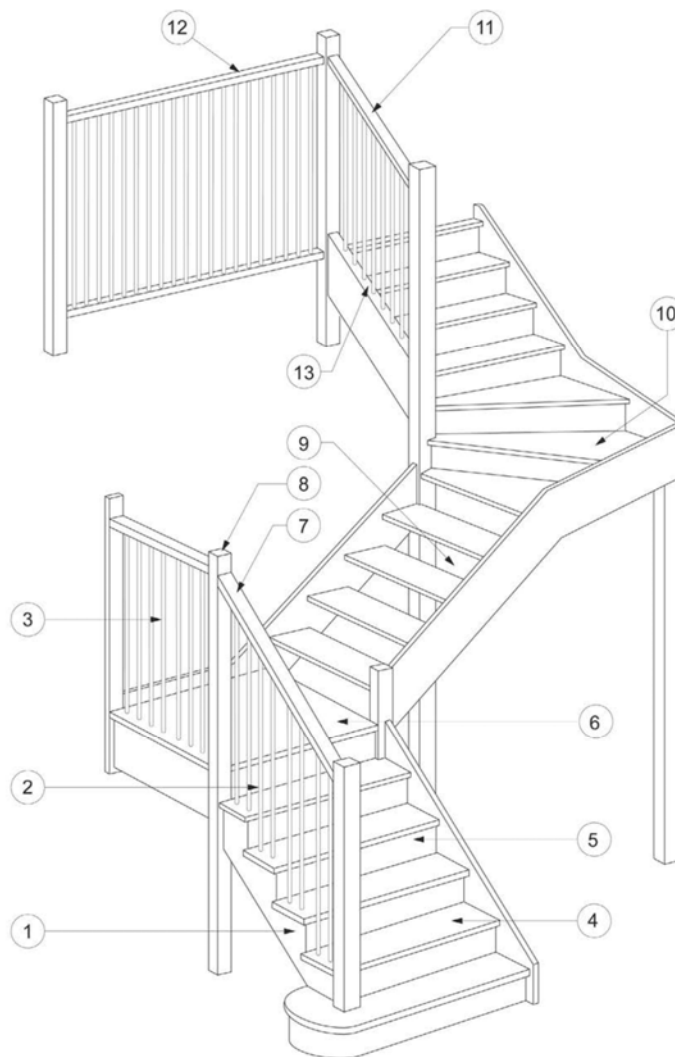
Part 3.9.2 Barriers and handrails

(a) A continuous barrier must be provided along the side of a trafficable surface, such as—

- (i) a stairway, ramp or the like; and
- (ii) a floor, corridor, hallway, balcony, deck, verandah, mezzanine, access bridge or the like; and
- (iii) a roof top space or the like to which general access is provided; and
- (iv) any delineated path of access to a building, where it is possible to fall 1 m or more measured from the level of the trafficable surface to the surface beneath (see Figure 3.9.2.1).

(b) The requirements of (a) do not apply to—

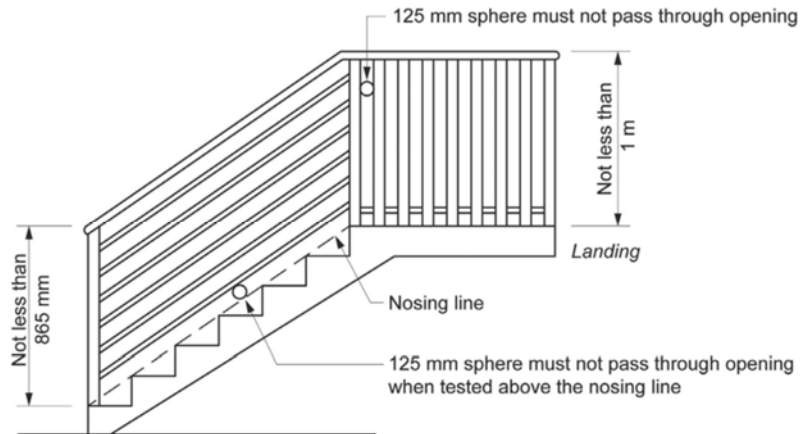
- (i) a retaining wall unless the retaining wall forms part of, or is directly associated with a delineated path of access to a building from the road, or a delineated path of access between buildings (see Figure 3.9.2.2); or
- (ii) a barrier provided to an openable window covered by 3.9.2.6 and 3.9.2.7.



Legend:

- | | |
|-------------|------------------------------|
| 1. Stringer | 8. Newel post |
| 2. Baluster | 9. Open riser |
| 3. Barrier | 10. Winders (tapered treads) |
| 4. Tread | 11. Handrail |
| 5. Riser | 12. Landing barrier |
| 6. Landing | 13. Barrier |
| 7. Handrail | |

Barrier construction



(a) Handrails to a stairway or ramp must—

- (i) be located along at least one side of the stairway flight or ramp; and
- (ii) be located along the full length of the stairway 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 (see Figure 3.9.2.4); and
- (iv) be continuous and 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—

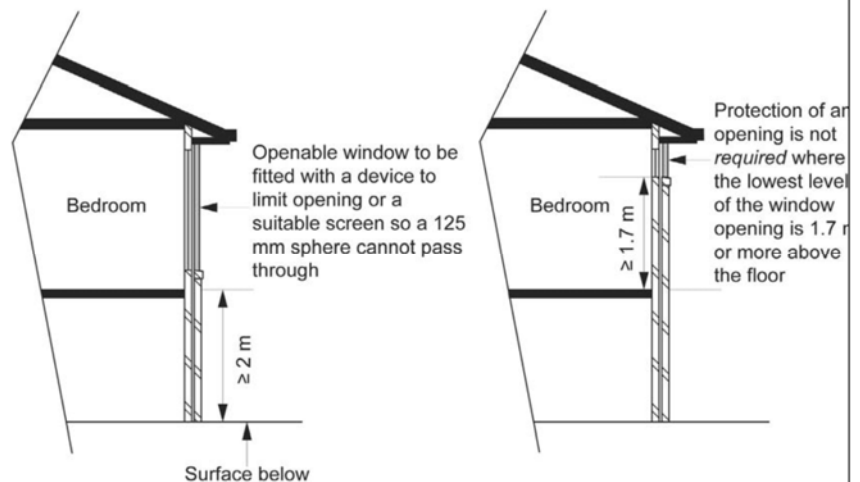
- (i) a stairway or ramp providing a change in elevation of less than 1 m; or
- (ii) a landing; or
- (iii) a winder where a newel post is installed to provide a handhold.

This part is not applicable to subject granny flat



3.9.2.6 Protection of openable windows — bedrooms

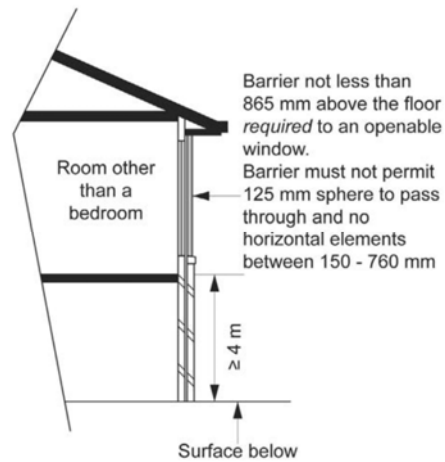
- (a) A window opening in a bedroom must be provided with protection, where the floor below the window is 2 m or more above the surface beneath.
- (b) Where the lowest level of the window opening covered by (a) is less than 1.7 m above the floor, the window opening must comply with the following:
- (i) The openable portion of the window must be protected with—
- (A) a device capable of restricting the window opening; or
- (B) a screen with secure fittings.
- (ii) A device or screen required by (i) must—
- (A) not permit a 125 mm sphere to pass through the window opening or screen; and
- (B) resist an outward horizontal action of 250 N against the—
- (aa) window restrained by a device; or
- (bb) screen protecting the opening; and
- (C) have a child resistant release mechanism if the screen or device is able to be removed, unlocked or overridden.
- (c) Where a device or screen provided in accordance with (b)(i) is able to be removed, unlocked or overridden, a barrier with a height not less than 865 mm above the floor is required to the openable window in addition to window protection.
- (d) A barrier covered by (c) must not—
- (i) permit a 125 mm sphere to pass through it; and
- (ii) have any horizontal or near horizontal elements between 150 mm and 760 mm above the floor that facilitate climbing (see Figure 3.9.2.5)





3.9.2.7 Protection of openable windows — rooms other than bedrooms

- (a) A window opening in a room other than a bedroom must be provided with protection where the floor below the window is 4 m or more above the surface beneath.
- (b) The openable part of the window covered by (a) must be protected with a barrier with a height of not less than 865 mm above the floor.
- (c) A barrier required by (b) must not—
 - (i) permit a 125 mm sphere to pass through it; and
 - (ii) have any horizontal or near horizontal elements between 150 mm and 760 mm above the floor that facilitate climbing.



This part is not applicable to subject granny flat



Part 3.10.1 Swimming pool

Appropriate Performance Requirements

(a)Where an alternative swimming pool safety barrier is proposed as a Performance Solution to that described in Part 3.10.1, that proposal must comply with—

(i)Performance Requirement P2.7.1; and

(ii)the relevant Performance Requirements determined in accordance with A2.2(3) and A2.4(3) as applicable.

(b)Where an alternative swimming pool water recirculation system is proposed as a Performance Solution to that described in Part 3.10.1, that proposal must comply with—

(i)Performance Requirement P2.7.2; and

(ii)the relevant Performance Requirements determined in accordance with A2.2(3) and A2.4(3) as applicable.

This part is not applicable to subject granny flat

1.0 INTRODUCTION

This report provides a Building Code of Australia (BCA/NCC) 2019 assessment for the granny flat located at 24 Oliver Street, Freshwater NSW 2096

The granny flat consist of one bedroom, living room, study, kitchen and bathroom.

This report provides a BCA assessment table in Section 3.0 that summarizes the identified non compliance matters and offers specific compliance recommendations.

1.1 Basis of Report

The key basis of this report is to address compliance with the Building Code of Australia (BCA/NCC) 2019, Volume Two. The scope of services is limited to Part 3.7 Fire safety

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

- Architectural plans prepared by Complete Construction Engineering Pty Ltd

No.	Drawing Number	Revision	Dated	Drawing Title
1	A-1	B	05/03/2021	Site Plan
2	A-2	B	05/03/2021	Granny flat floor plan and window & door schedule
3	A-3	B	05/03/2021	Elevations and perspective views
4	A-4	B	05/03/2021	Sections and perspective views
5	A-5	B	05/03/2021	Stormwater plan
6	A-6	B	05/03/2021	Landscape plan
7	A-7	B	05/03/2021	Notification plan

- The Building Code of Australia/National Construction Code (BCA/NCC) 2019 prepared by the Australian Building Codes Board.
- The Guide to the Building Code of Australia/National Construction Code (BCA/NCC) 2019 prepared by the Australian Building Codes Board

1.2 Purpose of the Report

The purpose of this report is to assess the following:

- Assessment under the current Building Code of Australia/National Construction Code (BCA/NCC) 2019 and list any departures from the BCA/NCC 2019 and particularly fire rating issues between principle and secondary dwelling.
- Provide recommendations to address identified non-compliances, and/or identify potential alternative solutions.

1.3 Limitations of the Report

- Compliance with Disability Discrimination Act 1992 (DDA) is outside the scope of this report.
- Compliance with AS 4299-1995 Adaptable Housing, is outside the scope of this report.
- Reporting on hazardous materials, OH&S matters or site contamination
- Assessment of any structural elements or geotechnical matters relating to the building, including any structural or other assessment of the existing fire resistance levels of the building
- Consideration of any fire services operations (including hydraulic, electrical or other systems)
- Assessment of plumbing and drainage installations, including stormwater
- Assessment of mechanical plant operations, electrical systems or security systems
- Heritage significance
- Consideration of energy or water authority requirements
- Consideration of Council's local planning policies
- Environmental or planning issues
- Requirements of statutory authorities

2.0 BCA ASSESSMENT DATA

This report provides a Building Code of Australia/National Construction Code (BCA/NCC) 2019 assessment of the granny flat located at 24 Oliver Street, Freshwater NSW 2096

BCA Building Classifications: Class 1/1a - dwelling

3.0 BCA ASSESSMENT SUMMARY

The following table details the BCA compliance of the assessed design.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
SECTION B STRUCTURE					
Part B1 Structural Provisions	X			X	<ul style="list-style-type: none"> Structural engineer to provide structural drawings/details and accompanying structural design certificate to demonstrate that all building elements will comply with Section B of the BCA. Glazing must comply with AS 1288-2006 and AS 2047-2014. Termite control must comply with AS 3660.1-2014 where any primary building elements are timber. If the building is in a flood hazard area it is required to comply with BCA clause B1.6. Confirmation is required from the hydraulic engineer regarding this provision of the BCA being applicable or not. <p><i>Details demonstrating compliance with this clause must be incorporated into the building certificate plans / specification (and structural details)</i></p>
SECTION C FIRE RESISTANCE PART 3.7 FIRE SAFETY					



<p>Part 3.7 Fire Safety</p>		<p>X</p>	<p>X</p>	<p>Where a combustible material is used as a finish or lining to a wall or roof, or sunscreen, or awning, to a building element required to have an FRL the material must be exempted or comply with the fire hazard properties prescribed under C1.10 and must not otherwise constitute an undue risk of fire spread via the façade of the building or compromise egress from the building. This includes any aluminum panels where containing plastic strengthening elements would not be non-combustible.</p> <p>External walls, common walls and the flooring must be non-combustible construction. Architects to ensure that the design of the building does not include any aluminum composite claddings unless they are fully compliant for use within an external wall, i.e. non-combustible and certified by an AS 1530.1 non-combustibility test, or a certificate that allows their use on a building such as this. All external sarking as well as external insulation is also required to be non-combustible.</p> <p>We note that the façade currently details timber framed walls with pre finished timber cladding deemed to not complying with Part 3.7 Fire safety for South elevation.</p> <p>Drawing A-1, Site Plan, indicates minimum side setback of 1.073 m West elevation, 1.074 m North elevation, 0.361 m South elevation. South wall must be constructed of materials which provides FRL 60/60/60.</p> <p>Minimum construction shall comprise of</p> <ul style="list-style-type: none"> • 1x16 mm Gyprock Fyrchek plasterboard- internally • 1x16 mm Gyprock Fyrchek plasterboard – externally • 19 mm top hat • 6 mm Fibro cement sheet <p>We note that window No.4 and window No.5 do not have minimum required setback of 900 mm. It is recommended that these windows be blocked off/made redundant.</p>
		<p>X</p>		



Part 3.7.5 Smoke alarms and evacuation lighting	X				We note that the designed provision of smoke alarms and their location satisfy requirements of Part 3.7.5 of BCA/NCC.
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4.0 CONCLUSION

This report provides a Building Code of Australia/National Construction Code (BCA/NCC) 2019 assessment of an as built granny flat at 24 Oliver Street, Freshwater NSW 2096

The primary purpose of this report was to identify the non-compliance matters against the current Deemed-to-Satisfy (DTS) Provisions of the BCA/NCC 2019 and to provide compliance recommendations to overcome the DTS non-compliances.

This report provided a BCA assessment table in Section 3.0 that summarizes the identified non-compliance matters and offers specific recommendations that are also outlined in the Executive Summary.

BCA Report Prepared by:



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