


ATTUNGA LODGE, THREDBO NSW

BCA COMPLIANCE ASSESSMENT REPORT

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|--|---|
|  | Planning, Industry & Environment |
| <i>Issued under the Environmental Planning and Assessment Act 1979</i> | |
| Approved Application No DA 10659 | |
| Granted on the 18 October 2021 | |
| Signed M Brown | |
| Sheet No | 4 of 21 |

DATE: 19 NOVEMBER 2019
REPORT NO: 1399 – REV A DRAFT
PREPARED FOR: VINCE MYSON
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REVISION STATUS

| REPORT NO. | REVISION | DATE | STATUS | WRITTEN | REVIEWED |
|------------|----------|----------|--------|---------|----------|
| 1399 | REV A | 19/11/19 | FINAL | NW | JA |

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EXECUTIVE SUMMARY




This report is an assessment of the proposed development at Attunga Lodge Thredbo NSW. The report contains a clause-by-clause comparison between the architectural details provided and the current Building Code of Australia (2019). The outcome of this report highlights that the current design contains some compliance departures from the current Deemed-to-Satisfy provisions of the BCA.




Summary of Identified Issues of Non-Compliance to be Addressed




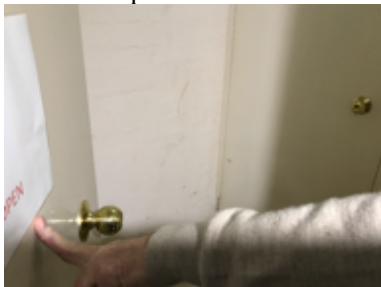
| NO. | DTS CLAUSE | DESCRIPTION OF NON-COMPLIANCE | RECOMMENDATION |
|-----|------------|---|---|
| 1. | C2.12 | Separation of Equipment - Boiler Room access doors required to be self-closing and achieve FRL of --/120/30 | Re - design or obtain a fire engineered solution to address non-compliance.  |
| 2. | C3.8 | Openings in fire – isolated exits – door to stairs required to be self-closing -/60/30 fire doors | Install compliant fire doors or obtain a fire engineered solution to address non-compliance.  |

| NO. | DTS CLAUSE | DESCRIPTION OF NON-COMPLIANCE | RECOMMENDATION |
|-----|------------|--|---|
| 3. | C3.11 | SOU entry doors in Type A construction required to be -/60/30 self-closing fire doors. | Install compliant fire doors obtain a fire engineered solution to address non-compliance. |
| | | Window to games room require protection as in path of travel from an exit. | Window to be redesigned or protected in accordance with C3.4 or raised to 1.5m AFFL or obtain a fire engineered solution to address non-compliances |
| 4. | C3.13 | Access panels to service shafts to achieve FRL -/60/30 | Fire rate or obtain a fire engineered solution to address non-compliance. |
| 5. | C3.15 | Laundry ventilation duct penetrating through walls and spanning corridor | Fire rate or obtain a fire engineered solution to address non-compliance. |



| NO. | DTS CLAUSE | DESCRIPTION OF NON-COMPLIANCE | RECOMMENDATION |
|-----|-------------------------|---|---|
| 6. | Spec C1.1 Clause 3.6 | Roof lights within adjacent SOUS are within 3m of each other. | Obtain a fire engineered solution to address non-compliance.  |
| 7. | Spec C1.1 Table 3 | Walls bounding SOU's required to achieve FRL of 90/90/90 – existing masonry walls do not comply | Fire rate to achieve required FRL or obtain a fire engineered solution to address non-compliance.  |
| 8. | D1.2 | Basement level does not have the required 2 exits | Obtain a fire engineered solution to address non-compliance. |
| 9. | D1.3 | Main internal stairs require to be fire isolated – does not comply | Obtain a fire engineered solution to address non-compliance. |
| 10. | D2.7 | Exhaust duct discharging to exit path of travel from basement | Redirect or obtain a fire engineered solution to address non-compliance  |

| NO. | DTS CLAUSE | DESCRIPTION OF NON-COMPLIANCE | RECOMMENDATION |
|-----|------------|---|---|
| 11. | D2.13 | Goings to front entry stairs exceed BCA requirements. Stair riser at front door not compliant and internal stairs require non slip nosing's | <p>Install non slip nosing's to internal stairs and obtain a fire engineered solution to address other non-compliances.</p>   |
| 12. | D2.16 | Gaps in internal balustrade greater than 125mm | <p>Reduce gaps in balustrades.</p>  <p>External balustrade to have any gaps in excess of 125mm removed. Any climbable areas between 150mm and 760mm AFFL removed where fall height is greater than 4m from deck level. Confirmation of AS1170 Compliance for perspex impact rating where used in upstairs children lounge.</p> |

| NO. | DTS CLAUSE | DESCRIPTION OF NON-COMPLIANCE | RECOMMENDATION |
|-----|------------|---|--|
| 13. | D2.17 | Handrails required to basement egress stair, southern egress stair and western entry stairs | Install handrails in accordance with D2.17    |
| 14. | D2.21 | Lever handles to be installed in accordance with D2.21 to doors serving as required exits or in required exit path | Install compliant lever handle latches  |
| 15. | D3.1 | Access in accordance with AS 1428.1 required from pedestrian entry to at least 1 floor containing SOU and to all common areas | Obtain an Access Solution to address this non-compliance |
| 16. | D3.2 | Access from road to principal pedestrian entry required in accordance with AS1428.1 | Obtain an Access Solution to address this non-compliance |
| 17. | E1.5 | Sprinkler system required throughout whole building as building has rise in stories of four | Install sprinklers or obtain a fire engineered solution to address non-compliance. |



| NO. | DTS CLAUSE | DESCRIPTION OF NON-COMPLIANCE | RECOMMENDATION |
|-----|------------|--|---|
| 18. | G1.2 | Refrigerator chamber requires indicator lamp positioned outside the chamber which is illuminated when the interior light is switched on. | Install indicator lamp |
| 19. | G4.3 | External doors required to open inward and display open inward signage | Re swing doors and add required signage or obtain a fire engineered solution to address non-compliance. |
| 20. | G4.6 | Main entry door and basement egress discharge to areas that could entrap snow | Obtain a fire engineered solution to address non-compliance. |

1.0 INTRODUCTION

This report provides a Building Code of Australia (BCA) 2019 compliance assessment of the development at Attunga Lodge located on Brindle Bull Thredbo NSW

The existing development consists of a four-storey holiday ski lodge, containing 13 sole occupancy units (SOUs) with a communal lounge, dining, kitchen and games room. It is of masonry construction with concrete slab and timber windows and doors. All levels are connected by a central stair and additional exits direct to the outside are available on each level.

There is a small carpark consisting of 5 spaces on the western side of the lodge adjacent to Brindle Bull.

1.1 BASIS OF REPORT

The key objective of the report is to make an:

- Assessment under the current Building Code of Australia 2019 (BCA) Parts C, D, E, F and G and list any departures and information applicable from the BCA that will need to be addressed prior to the issue of the construction certificate.
- Provide BCA compliance advice and information where departures are identified.

The following existing architectural drawings prepared by LYCENKO & ASSOCIATES dated January 1986 in conjunction with a site inspection by James Alexander on 12 November 2019 were used for the BCA assessment;

| Drawing title | Number | Date |
|---------------------------|---------|----------|
| Lower Ground and Basement | 8552.02 | Jan 1986 |
| Plans | 8552.02 | Jan 1986 |
| Sections / Elevation | 8552.04 | Jan 1986 |

1.2 LIMITATIONS & EXCLUSIONS

The following items are outside the scope of this report:

- Reporting on hazardous materials, OH&S matters or construction site contamination
- Assessment of any structural elements or geotechnical matters relating to the building, including any structural or other assessment of the existing fire-resistant levels of the building
- Assessment of any new or existing fire services operations (including hydraulic, electrical or other systems)
- Assessment of new or existing 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 local planning policies
- Environmental, planning or heritage issues
- Requirements of statutory authorities
- Pest inspection or assessment of building damage caused by pests.
- Energy efficiency Part J.
- Fire safety upgrading required by the Environmental Planning and Assessment Act and Regulation.

1.3 REPORTING TEAM

The information contained herein has been prepared by James Alexander (Building Surveyor, Grade A1 Accredited Certifier and PCA BPB 0002)

2.0 BUILDING CLASSIFICATION

2.1 BUILDING CHARACTERISTICS

| | |
|-------------------------------------|---|
| Classification of Building or Part: | Class 3 residential units (13 units) Class 7a Carpark (5 spaces) |
| Rise in Storeys: | 4 Storeys |
| Storeys contained: | 4 Storeys |
| Effective Height: | 12.1m |
| Type of Construction: | Type A required |
| Floor areas: Class 3 | Approximately 690m ² (4 levels/13 units + communal areas) |
| Class 7a | 40m ² |
| C2.2 max compartment sizes: | Class 7a – max. 5000m ² |

3.0 BCA COMPLIANCE SUMMARY

| CLAUSE | REFERENCE | APPLICABLE | COMPLIES | COMMENT |
|--------|-----------|------------|----------|---------|
|--------|-----------|------------|----------|---------|


SECTION C - FIRE RESISTANCE AND STABILITY

Part C1 - FIRE RESITANCE AND STABILITY

| | | | | |
|-------|--|---|-------------------|---|
| C1.0 | DTS provisions | ✓ | Note only | Noted |
| C1.1 | Type of Construction Required | ✓ | Note only | Type A |
| C1.2 | Calculation of Rise in Storeys | ✓ | Note only | 4 storeys |
| C1.3 | Buildings of Multiple Classification | ✓ | ✓ | Class 2 and 7a |
| C1.4 | Mixed Types of Construction | ✓ | ✓ | All type A |
| C1.5 | Two Storey Class 2, 3 or 9c Buildings | X | Note only | |
| C1.6 | Class 4 Parts of Buildings | ✓ | Note only | N/A |
| C1.7 | Open Spectator Stands & Indoor Sports Stadiums | X | Note only | |
| C1.8 | Lightweight Construction | ✓ | Note only | Where lightweight construction proposed for fire rating purposes it must comply with this clause. |
| C1.9 | Non-Combustible Building Elements | ✓ | Compliance Advice | External walls and common walls, including all components incorporated in them including the façade covering, framing and insulation must be non-combustible. |
| C1.10 | Fire Hazard Properties | ✓ | Compliance advice | Carpets, floor and wall linings of all areas to be certified to comply with Spec C1.10 and sarking to comply with Spec C1.10a. |
| C1.11 | Performance of External Walls in Fire | ✓ | Note only | No tilt up panels proposed. |
| C1.12 | Non-Combustible Material | ✓ | Note only | |
| C1.13 | Fire Protected Timber: Concession | X | Note only | |


Part C2 - COMPARTMENTATION AND SEPARATION




| | | | | |
|------|---|---|-----------|--|
| C2.0 | Deemed-to-Satisfy Provisions | ✓ | Note only | Noted |
| C2.1 | Application of Part | ✓ | Note only | Noted |
| C2.2 | General Floor Area & Volume Limitations | ✓ | ✓ | Does not apply to the class 3 part. Complies for the class 7a part |


| CLAUSE | REFERENCE | APPLICABLE | COMPLIES | COMMENT |
|--------|--|------------|-------------------|---|
| C2.3 | Large Isolated Buildings | ✓ | ✓ | Noted |
| C2.4 | Requirements for open space & Vehicular Access | ✓ | ✓ | Noted |
| C2.5 | Class 9a & 9c Buildings | X | N/A | Not a class 9a or 9c. |
| C2.6 | Vertical separation of openings in external walls | ✓ | ✓ | Noted |
| C2.7 | Separation by fire walls | ✓ | Note | |
| C2.8 | Separation of classifications in the same storey | ✓ | ✓ | |
| C2.9 | Separation of classifications in different storeys | ✓ | ✓ | |
| C2.10 | Separation of lift shafts | X | N/A | |
| C2.11 | Stairways and lifts in one shaft | X | N/A | |
| C2.12 | Separation of equipment | ✓ | X | <p>Lift motor room, emergency generators, central smoke control plant, boilers and onsite fire pumps if applicable, to be separated by construction achieving FRL 120/120/120. Access doorways to have self-closing doors with FRL --/120/30.</p>  <p>Access doors to be self-closing --/120/30 fire doors.</p> |
| C2.13 | Electricity supply system | ✓ | Compliance advice | An electricity substation located in the building, main switchboard sustaining emergency equipment, electrical conductors etc. If applicable, is required to be separated from remainder of building by construction achieving FRL 120/120/120. |
| C2.14 | Public corridors in Class 2 & 3 buildings | ✓ | ✓ | Corridors do not exceed 40 metres. |

Part C3 - PROTECTION OF OPENINGS

| | | | | |
|------|------------------------------|---|-----------|-------|
| C3.0 | Deemed-to-Satisfy Provisions | ✓ | Note only | Noted |
| C3.1 | Application of Part | ✓ | Note only | Noted |

| CLAUSE | REFERENCE | APPLICABLE | COMPLIES | COMMENT |
|--------|---|------------|-------------------|--|
| C3.2 | Protection of openings in external walls | ✓ | ✓ | |
| C3.3 | Separation of openings in different fire compartments | ✓ | ✓ | No openings in separate fire compartments adjacent. |
| C3.4 | Acceptable methods of protection | X | N/A | |
| C3.5 | Doorways in fire walls | ✓ | ✓ | Noted |
| C3.6 | Sliding fire doors | X | N/A | No sliding fire doors indicated on plans. |
| C3.7 | Protection of doorways in horizontal exits | X | N/A | No horizontal exits required. |
| C3.8 | Openings in fire-isolated exits | ✓ | X | <p>Doors to fire stairs must be self or auto closing - --/60/30 fire doors.</p> <p>Doors to existing stair are not self-closing fire doors or jambs</p>  |
| C3.9 | Service penetrations in fire isolated exits | ✓ | Compliance advice | Services are not permitted in fire stairs except hydrant pipe work, ducting for pressurisation and electrical services. |
| C3.10 | Openings in fire isolated lift shafts | X | N/A | |


| CLAUSE | REFERENCE | APPLICABLE | COMPLIES | COMMENT |
|--------|--|------------|-------------------|--|
| C3.11 | Bounding construction Class 2, 3 and 4 buildings | ✓ | X | <p>Unit entry doors are required to be -/60/30 self-closing fire doors. Type A. Currently not fire door or jambs.</p>  <p>Windows to games room in path of exit requires protection in accordance with C3.4 or located at least 1.5m AFFL of exit path.</p>  |
| C3.12 | Openings in floors for services | ✓ | Compliance Advice | Service penetrations to be in fire rated shaft as per Table 3 Spec C1.1. Refer extract. |
| C3.13 | Openings in shafts | ✓ | X | <p>Access panels to service shafts to be fire rated to achieve -/60/30. If in sanitary compartment this may be reduced to -/30/30.</p>  |

| CLAUSE | REFERENCE | APPLICABLE | COMPLIES | COMMENT |
|--------|---|------------|-------------------|---|
| C3.14 | ***** | | | Blank |
| C3.15 | Openings for service installations | ✓ | X | Ductwork from laundry penetrates corridor walls |
| | | | |  |
| C3.16 | Construction Joints | ✓ | Compliance advice | Construction joints required to be fire rated in fire rated suspended slabs, if used. (AS 1530.4) |
| C3.17 | Columns protected with lightweight construction to achieve an FRL | ✓ | ✓ | Assumed no columns to be protected with lightweight construction. |

| CLAUSE | REFERENCE | APPLICABLE | COMMENT |
|--------|-----------|------------|---------|
|--------|-----------|------------|---------|

SPEC C1.1 – FIRE RESISTING CONSTRUCTION

| | | | |
|-----------|---|--------------|---|
| 2.1 | Exposure to fire source feature | Noted | None proposed |
| 2.2 | Fire protection for a support of another part | Noted | FRL in accordance with Table 3 Spec C1.1 |
| 2.3 | Lintels | Noted | Window lintels to have FRL to match external wall FRL. |
| 2.4 | Attachments not to impair fire resistance | Noted | None proposed |
| 2.5 | General concessions | Noted | None proposed |
| 2.5(a) | Steel columns | N/A | None proposed |
| 2.5(b) | Timber structures | N/A | None proposed |
| 2.5(c) | Structures on roofs | N/A | None proposed |
| 2.5(d) | Curtain walls and panel walls | Noted | None proposed |
| 2.5(e) | ***** | | Blank |
| 2.5(f) | Balconies and verandas | N/A | Concession noted but NA |
| 2.6 | Mezzanine Floors: Concession | N/A | None proposed |
| 2.7 | Enclosure of shafts | N/A | |
| 2.8 | Car parks in Class 2 and 3 buildings | N/A | Carpark external to building |
| 2.9 | Residential aged care buildings | N/A | NA |
| 3. | Type A Construction | | |
| 3.1(a) | Fire resistance of building elements | Noted | Refer table 3 extract below. |
| 3.1(b) | External walls, lift pits | Noted | Required to be non-combustible construction. |
| 3.1(c) | Internal walls required to have an FRL | Noted | Must extend to underside of ceiling with RISF or roof with FRL. |
| 3.1(d) | Loadbearing internal walls | Noted | Required to be of concrete or masonry. |
| 3.1(e) | Non-loadbearing internal required to have FRL | Noted | Must be of non-combustible construction. |
| 3.1(f) | Floor in a Class 9c Building | Noted | N/A |
| 3.2 | Concessions on floors | Noted | Concession noted but N/A |
| 3.3 | Floor loading of Class 5 & 9b buildings: concession | Noted | Concession noted but N/A |
| 3.4 | Roof superimposed on concrete slab: concession | Noted | Must be of non-combustible construction and comply with Table 3 – N/A |
| 3.5 | Roof: concession | Noted | Class 3 - Concession applies. |

| CLAUSE | REFERENCE | APPLICABLE | COMMENT |
|--------|--|--------------|---|
| 3.6 | Rooflights | Noted | Roof lights in adjacent SOUs within 3m – do not comply.  |
| 3.7 | Internal columns and walls: concession | Noted | Concession noted but N/A |
| 3.8 | Open spectator stands and indoor sports stadiums: concession | Noted | Concession noted but N/A |
| 3.9 | Carparks | Noted | Concession noted but N/A |
| 3.10 | Class 2 and 3 buildings: concession | Noted | Concession noted but N/A |

| TABLE 3 SPEC C1.1 EXTRACT | | | |
|---|----------|-------------|---|
| BUILDING ELEMENT | CLASS 3 | CLASS 7a | COMMENT |
| EXTERNAL WALL (distance to fire source feature) | | | |
| <i>Loadbearing</i> | | | |
| Less than 1.5m | 90/90/90 | 120/120/120 | |
| 1.5 to less than 3m | 90/60/60 | 120/90/90 | |
| 3m or more | 90/30/30 | 120/60/30 | |
| <i>Non-Loadbearing</i> | | | |
| Less than 1.5m | -/90/90 | -/120/120 | |
| 1.5 to less than 3m | -/60/60 | -/90/90 | |
| 3m or more | -/-/- | -/-/- | |
| EXTERNAL COLUMN (not incorporated in an external wall) | | | |
| For <i>loadbearing</i> columns | 90/-/- | 120/-/- | |
| For <i>non-loadbearing</i> columns | -/-/- | -/-/- | |
| COMMON WALLS & FIRE WALLS | 90/90/90 | 120/120/120 | |
| INTERNAL WALLS | | | |
| Fire-resisting lift and stair shafts: | | | |
| • Loadbearing | 90/90/90 | 120/120/120 | Fire resisting stair shafts |
| • Non-loadbearing | -/90/90 | -120/120 | |
| Bounding public corridors, public lobbies etc.: | | | |
| • Loadbearing | 90/90/90 | 120/-/- | |
| • Non-loadbearing | -/60/60 | -/-/- | |
| Between or bounding sole occupancy units (bedrooms): | | | Walls between units to have an FRL of 90/90/90. It is difficult to definitely confirm each walls FRL loadbearing details etc unknown. Walls appear to be single skin masonry and could be considered |
| • Loadbearing | 90/90/90 | 120/-/- | |
| • Non-loadbearing | -/60/60 | -/-/- | |

| TABLE 3 SPEC C1.1 EXTRACT | | | |
|--|---------------------|----------------------|--|
| BUILDING ELEMENT | CLASS 3 | CLASS 7a | COMMENT |
| | | | to achieve minimum of 60/60/60 FRL. |
| Ventilating, pipe, garbage and shafts not used for the discharge of hot products of combustion: <ul style="list-style-type: none"> Loadbearing Non-loadbearing | 90/90/90 -/90/90 | 120/90/90 -/90/90 | |
| OTHER LOADBEARING INTERNAL WALLS, INTERNAL BEAMS, TRUSSES & COLUMNS | 90/-/- | 120/-/- | |
| FLOORS | 90/90/90 | 120/120/120 | Floors to be 90/90/90 Concrete slab construction should achieve this |
| ROOF | 90/60/30 | 120/60/30 | FRL not required to roof if roof covering remains non-combustible . |

| CLAUSE | REFERENCE | APPLICABLE | COMPLIES | COMMENT |
|--------|-----------|------------|----------|---------|
|--------|-----------|------------|----------|---------|

SECTION D - ACCESS AND EGRESS




Part D1 - PROVISION FOR ESCAPE




| | | | | |
|--------------|--|---|-------------------|---|
| D1.0 | Deemed-to-Satisfy Provisions | ✓ | | Noted |
| D1.1 | Application of Part | ✓ | | Applies and noted |
| D1.2 | Number of exits required | ✓ | X | Basement level required to have 2 exits. Managers Flat SOU complies. But additional exit required for remainder of basement level |
| D1.3 | When Fire isolated exits are required | ✓ | X | Required as main internal stair connects 4 storeys |
| D1.4 | Exit Travel Distances | ✓ | ✓ | Complies |
| D1.5 | Distances between alternative exits | ✓ | ✓ | The distance between alternative exits are more than 9m apart. Complies |
| D1.6 | Dimensions of exits and paths of travel to exits | ✓ | Compliance Advice | Exit widths must be 1m wide inclusive of stairs where width must be 1m clear from inside edge of handrails |
| D1.7 | Travel via fire isolated exits | ✓ | N/A | |
| D1.8 | External stairways | X | N/A | |
| D1.9 | Travel by non-fire-isolated stairways or ramps | ✓ | ✓ | Complies |
| D1.10 | Discharge from exits | ✓ | Compliance advice | Stair from basement must comply with DTS requirements of BCA |
| D1.10(f) NSW | Class 9b - place of public entertainment | X | N/A | Not a place of public entertainment. |
| D1.11 | Horizontal exits | X | N/A | No horizontal exits shown. |


| CLAUSE | REFERENCE | APPLICABLE | COMPLIES | COMMENT |
|--------|---|------------|-----------|----------------------------------|
| D1.12 | Non-Required stairways ramps and escalators | X | N/A | No non-required ramps or stairs. |
| D1.13 | Number of persons accommodated | ✓ | Note only | Noted |
| D1.14 | Measurement of distances | ✓ | Note only | Noted |
| D1.15 | Method of measurement | ✓ | Note only | Noted |
| D1.16 | Plant rooms & lift motor rooms: Concession | ✓ | N/A | |
| D1.17 | Access to lift pits | X | N/A | |

Part D2 - CONSTRUCTION OF EXITS

| | | | | |
|-------|---|---|-------------------|---|
| D2.0 | Deemed-to-Satisfy Provisions | ✓ | Note only | Noted |
| D2.1 | Application of Part | ✓ | Note only | Applies in part (a) Clauses D2.13, D2.14(a) & D2.16 do not apply to internal parts of Class 3 SOU's (b) Clauses D2.13, D2.14(a), D 2.16 & D2.18 do not apply to internal parts of Class 2/4 SOU's |
| D2.2 | Fire-Isolated stairways & ramps | ✓ | ✓ | Concrete stairs. |
| D2.3 | Non-Fire-Isolated stairways and ramps | ✓ | ✓ | |
| D2.4 | Separation of rising and descending stair flights | ✓ | ✓ | Complies |
| D2.5 | Open access ramps and balconies | X | N/A | No open access ramp proposed or required to meet smoke hazard management. |
| D2.6 | Smoke lobbies | X | N/A | Smoke lobby not shown. |
| D2.7 | Installations in exits and paths of travel | ✓ | Compliance advice | Services located in public corridors. Must be enclosed non-combustible construction or a fire protective covering within doorways or openings suitably sealed against smoke spreading from the enclosure. |
| D2.8 | Enclosure of space under stairs and ramps | ✓ | Compliance advice | Enclosure under stairs in kitchen must achieve FRL of 60/60/60 and access door -/60/30. |
| D2.9 | Width of stairways | ✓ | Compliance advice | Stair width to be 1m min measured from inside of handrails. Appears to comply. |
| D2.10 | Pedestrian ramps | ✓ | ✓ | Noted |
| D2.11 | Fire Isolated passageways | ✓ | ✓ | Noted |
| D2.12 | Roof as open space | X | N/A | Roof not used as open space. |
| D2.13 | Goings and risers | ✓ | X | The riser and going dimensions must not vary by more than 10mm over the flight. Non-compliant step at front door. |

| CLAUSE | REFERENCE | APPLICABLE | COMPLIES | COMMENT |
|--------|---------------------------|------------|----------|--|
| | | | |  <p>Non slip contrasting nosing's required to internal stairs.</p>  <p>Goings exceed DTS requirements at 470mm wide.</p>  |
| D2.14 | Landings | ✓ | ✓ | Ensure compliance with this clause. |
| D2.15 | Thresholds | ✓ | ✓ | Ensure compliance with this clause. |
| D2.16 | Barriers to Prevent Falls | ✓ | X | Appears to comply. These must be at least 1m and 865mm on stair flights. Gaps in corners between |

| CLAUSE | REFERENCE | APPLICABLE | COMPLIES | COMMENT |
|--------|-----------|------------|----------|---|
| | | | | <p>perspex exceed 125mm minimum</p>  <p>Handrail to external balcony has opeinings in excess of 125mm and is climbable with fall in excess of 4m.</p> <p>Perspex to top floor childrens lounge to be confirmed compliance with AS1170 for live loads impacts.</p> |
| D2.17 | Handrails | ✓ | X | <p>Handrails required to one side of stairs</p>   |

| CLAUSE | REFERENCE | APPLICABLE | COMPLIES | COMMENT |
|----------|---|------------|-------------------|---|
| D2.18 | Fixed platforms, walkways stairways and ladders | ✓ | Compliance advice | Compliance with AS 1657 required for access to and within plant rooms. |
| D2.19 | Doorways and doors | X | N/A | No revolving, sliding or roller shutter exit shown. |
| D2.20(a) | Swinging doors | ✓ | ✓ | Swing of doors not to impede path of travel. |
| D2.20(b) | Swinging doors | ✓ | ✓ | Doors from fire exits swing in the direction of egress. |
| D2.21 | Operation of latch | ✓ | X | Lever handles required to exit doors and doors in a path of travel to an exit.  |
| D2.22 | Re-entry from fire isolated exits | ✓ | ✓ | |
| D2.23 | Signs on doors | ✓ | Compliance advice | Signage required to fire doors to fire-isolated stairs. |
| D2.24 | Protection of openable windows | ✓ | Compliance advice | A window opening must be provided with protection, if the floor below the window is 2m or more above the surface beneath in a bedroom of a class 2 or 3 unit. Provide detail with CC application. |
| D2.25 | Timber Stairways: Concession | X | N/A | Not proposed |

Part D3 - ACCESS FOR PEOPLE WITH DISABILITIES

| | | | | |
|------|------------------------------------|---|-------------------|--|
| D3.0 | Deemed-to-Satisfy Provisions | ✓ | | Noted. |
| D3.1 | General access requirements | ✓ | X | Class 3 – from pedestrian entry to at least 1 floor containing SOU. Access to each type of room or space used as common areas. |
| D3.2 | Access to buildings | ✓ | X | Access to principle pedestrian entrance needs to have a level surface from the street to enable an accessible path of travel. 1:20 ramp provided |
| D3.3 | Parts of building to be accessible | ✓ | Compliance advice | Class 3 Common areas only, access to unit doors, and 7a parts. Access from entrance to SOU entrances on ground floor provided. Access to common areas provided. |

| CLAUSE | REFERENCE | APPLICABLE | COMPLIES | COMMENT |
|--------|--|------------|-------------------|---|
| | | | | Stairs and accessways required to comply with AS1428.1 |
| D3.4 | Exemptions | ✓ | | Plant room only. |
| D3.5 | Car parking | X | N/A | |
| D3.6 | Signage | ✓ | Compliance advice | Exit signs must have braille and tactile signage identifying the word "exit" and "level" followed by the floor level number. Provide detail with CC application. |
| D3.7 | Hearing Augmentation | X | N/A | |
| D3.8 | Tactile Indicators | ✓ | Compliance advice | Required to stairs to comply. The internal stair although required to be fire isolated (and therefore exempt) is the only stair to access all levels and therefore required. |
| D3.9 | Wheelchair seating spaces in Class 9b assembly buildings | X | N/A | Not required. |
| D3.10 | Swimming Pools | X | N/A | No pool |
| D3.11 | Ramps | X | N/A | No accessible ramp shown on plans or required. |
| D3.12 | Glazing on Accessway | ✓ | Compliance advice | This provision requires there to be a contrasting strip, chair rail, handrail or transom across all frameless or fully glazed doorways and surrounding glazing capable of being mistaken for an opening. Attention to front doors at the principal pedestrian entrance. |

SECTION E - SERVICES AND EQUIPMENT

Part E1 - FIRE FIGHTING EQUIPMENT

| | | | | |
|------|------------------------------|---|-------------------|---|
| E1.0 | Deemed-to-Satisfy Provisions | ✓ | | Noted |
| E1.1 | ***** | | | Blank |
| E1.2 | ***** | | | Blank |
| E1.3 | Fire Hydrants | ✓ | Compliance Advice | A hydrant system complying with AS 2419.1-2005 must be provided to serve the whole building. |
| E1.4 | Hose Reels | X | N/A | Not Required |
| E1.5 | Sprinklers | ✓ | X | Sprinklers required throughout whole building as building has a rise in stories of 4 |
| E1.6 | Portable Extinguishers | ✓ | Compliance advice | Portable Fire Extinguishers to be installed throughout carpark in accordance with AS 2444. |

| | | | | |
|-------|--------------------------------------|---|-------------------|--|
| | | | | <p>Portable fire extinguishers provided in the class 2 parts of the building must be:</p> <ul style="list-style-type: none"> • An ABE type fire extinguisher; and • A minimum size of 2.5kg; and • Distributed outside the SOU to serve only the storey at which they are located and so that travel distance from the entrance doorway of any SOU to the nearest PFE is not more than 10m. |
| E1.7 | ***** | | | Blank |
| E1.8 | Fire Control Centres | ✓ | | Not required |
| E1.9 | Fire precautions during construction | ✓ | Compliance advice | Builder to ensure extinguishers on site during construction. |
| E1.10 | Provision for special hazards | X | N/A | The building is assumed not to incorporate any special hazards. |

Part E2 - SMOKE HAZARD MANAGEMENT

| | | | | |
|------|---|---|-------------------|--|
| E2.0 | Deemed-to-Satisfy Provisions | ✓ | N/A | Noted |
| E2.1 | Application of Part | ✓ | | Applies to building. |
| E2.2 | General requirements (including Tables E2.2a & b) | ✓ | Compliance Advice | <p>Must be provided with:</p> <p>AS1670.1 smoke detection system complying with Clause 3 or Clause 4 or combination complying with clause 5.</p> <p>Additional works required in regards to thermal 's smoke detectors and sounders to be confirmed for compliance</p> |
| E2.3 | Provision for special hazard | X | N/A | The building is assumed not to incorporate any special hazards. |

Part E3 - LIFT INSTALLATIONS

| | | | | |
|------|--------------------------------------|---|-----|-------|
| E3.0 | Deemed-to-Satisfy Provisions | | | Noted |
| E3.1 | Lift installations | ✓ | N/A | |
| E3.2 | Stretcher facility in lifts | ✓ | N/A | |
| E3.3 | Warning against use of lifts in fire | ✓ | N/A | |
| E3.4 | Emergency lifts | ✓ | N/A | |
| E3.5 | Landings | ✓ | N/A | |
| E3.6 | Passenger lifts | ✓ | N/A | |
| E3.7 | Fire Service Controls | ✓ | N/A | |
| E3.8 | Aged Care buildings | X | N/A | |
| E3.9 | Fire Service Recall Control Switch | ✓ | N/A | |

| | | | | |
|-------|--|---|-----|--|
| E3.10 | Lift Car Fire Service Drive Control Switch | ✓ | N/A | |
|-------|--|---|-----|--|

Part E4 - EMERGENCY LIGHTING, EXIT SIGNS AND WARNING SYSTEMS

| | | | | |
|------|--|---|-------------------|---|
| E4.0 | Deemed-to-Satisfy Provisions | ✓ | | Noted |
| E4.1 | ***** | | | Blank |
| E4.2 | Emergency Lighting Requirements | ✓ | Compliance advice | Emergency lighting is to be provided throughout in accordance with this clause and AS 2293.1-2005. |
| E4.3 | Measurement of distances | ✓ | | Noted |
| E4.4 | Design and operation of emergency lighting | ✓ | Compliance advice | The emergency lighting provided must comply with AS 2293.1-2005 to enclosed corridors and fire isolated stair. Additional emergency lighting required in accordance with the above standard. |
| E4.5 | Exit signs | ✓ | Compliance advice | The emergency lighting provided must comply with AS 2293.1-2005 to carpark and enclosed corridors. |
| E4.6 | Direction signs | ✓ | Compliance advice | Required where applicable. |
| E4.7 | Class 2 and 3 Buildings and Class 4 parts exemptions | X | N/A | |
| E4.8 | Design and operation of exit signs | ✓ | | Noted |
| E4.9 | Sound system | X | | Noted |

SECTION F - HEALTH AND AMENITY

Part F1 - DAMP & WEATHER PROOFING

| | | | | |
|-------|---|---|-------------------|---|
| F1.1 | Stormwater drainage | ✓ | Compliance advice | Stormwater drainage must comply with AS/NZS 3500.3. |
| F1.4 | External above ground membranes | ✓ | Compliance advice | Compliance assumed. Must comply AS 4654 Parts 1 & 2 – 2012. |
| F1.5 | Roof coverings | ✓ | Compliance advice | Compliance assumed. Roof covering must comply with AS 1562.1. |
| F1.6 | Sarking | ✓ | Compliance advice | Compliance assumed. Sarking materials to comply with AS NZS 4200 Parts 1 and 2 and Spec C1.10. |
| F1.7 | Waterproofing of wet areas in buildings | ✓ | Compliance advice | Compliance assumed. Wet areas must be waterproofed to AS 3740 – 2010. |
| F1.8 | ***** | | | Blank |
| F1.9 | Damp-proofing | ✓ | Compliance advice | Compliance assumed. Damp proofing must be provided in accordance with F1.9. |
| F1.10 | Damp-proofing of floors on the ground | ✓ | Compliance advice | Compliance assumed. A vapour barrier is to be provided to floors laid directly on ground in accordance with AS 2870 – 2011. |
| F1.11 | Provision of floor wastes | ✓ | Compliance advice | Floor wastes to be provided to sanitary compartments, laundries and bathrooms. |

| | | | | |
|-------|-----------------------|---|-------------------|---|
| F1.12 | Sub-floor ventilation | ✓ | | No suspended floors. |
| F1.13 | Glazed assemblies | ✓ | Compliance advice | Compliance assumed. Glazed assemblies must comply with AS 2047 and AS 1288. |

Part F2 - SANITARY & OTHER FACILITIES

| | | | | |
|----------|--|---|-------------------|---|
| F2.0 | Deemed-to-Satisfy Provisions | ✓ | ✓ | Noted |
| F2.1 | Facilities in residential buildings | ✓ | ✓ | Complies |
| F2.2 | Calculation of number of occupants and fixtures | ✓ | ✓ | Complies |
| F2.3 | Facilities in Class 3 to 9 Buildings, Table F2.3 | ✓ | N/A | Noted. |
| F2.4 | Accessible Sanitary Facilities | ✓ | ✓ | Refer Part D3 |
| F2.5 | Construction of sanitary compartments | ✓ | Compliance advice | Doors to sanitary compartments that swing inwards must be readily removable from the outside of the sanitary compartment. |
| F2.6 | Interpretation: urinals and wash basins | ✓ | N/A | NA |
| F2.7 NSW | Microbial (legionella) control | X | | N/A Clause Deleted in NSW. |
| F2.8 | Waste Management | X | N/A | Not a class 9a or 9c building. |

Part F3 - ROOM SIZES

| | | | | |
|------|------------------------------|---|---|--|
| F3.0 | Deemed-to-Satisfy Provisions | ✓ | ✓ | Noted |
| F3.1 | Height of rooms | ✓ | X | Games room ceiling does not achieve required |

Part F4 - LIGHT AND VENTILATION

| | | | | |
|--------------|--|---|-------------------|--|
| F4.0 | Deemed-to-Satisfy Provisions | ✓ | ✓ | Noted |
| F4.1 | Provision of Natural light | ✓ | Compliance advice | Roof lights to have an aggregate light transmitting area of no less than 3% of the floor area of the room and open to the sky. |
| F4.2 | Methods and extent of natural lighting | ✓ | ✓ | Natural light provided. |
| F4.3 | Natural light borrowed from adjoining room | ✓ | ✓ | Natural light to be compliant |
| F4.4 | Artificial lighting | ✓ | ✓ | Artificial lighting to be designed and installed in accordance with AS 1680.0. |
| F4.5 | Ventilation of rooms | ✓ | Compliance advice | |
| F4.5 (b) NSW | Mechanical Ventilation | ✓ | Compliance advice | If mechanical ventilation is proposed to sanitary compartments then must be installed in accordance with AS3666.1. |

| | | | | |
|-------|--|---|-------------------|--|
| F4.6 | Natural ventilation | ✓ | Compliance advice | Natural ventilation provided to SOU habitable rooms. Ventilating area not less than 5% of the floor area of the room. SOU's A08, A02 and A05 confirmation of rooflight operable opening. Further clarification required for lounge on attic level. |
| F4.7 | Ventilation borrowed from adjoining rooms | ✓ | note | Ventilation for bedrooms can be relied upon as borrowed ventilation if required to achieve compliance |
| F4.8 | Restriction on location of sanitary compartments | ✓ | ✓ | Does not open directly to eating or food prep area. |
| F4.9 | Airlocks | X | NA | Not required |
| F4.10 | ***** | | | Repealed |
| F4.11 | Car parks | ✓ | NA | Mechanical ventilation may be required to AS1668.1. Building is capable of complying. |
| F4.12 | Kitchen local exhaust ventilation | X | NA | No commercial kitchen. |

Part F5 - SOUND TRANSMISSION AND INSULATION

| | | | | |
|-----------|---|---|-------------------|--|
| F5.0 | Deemed-to-Satisfy Provisions | ✓ | ✓ | Noted |
| F5.1 | Application of Part | ✓ | | Applies to class 3 parts. |
| F5.2 | Determination of airborne sound insulation ratings | ✓ | | Noted |
| F5.3 | Determination of impact sound insulation ratings | ✓ | | Noted |
| F5.4 | Sound insulation rating of floors | ✓ | Compliance advice | Slabs to be 200mm thick minimum. |
| F5.5 | Sound Insulation of walls between units | ✓ | Compliance advice | For walls separating a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification, the wall must have an R_w not less than 50. For walls separating habitable areas in one sole-occupancy unit from a bathroom compartment in an adjoining unit, the wall must be discontinuous construction. |
| F5.6 | Sound insulation rating for services | ✓ | | Ratings to be achieved for service ducts. |
| F5.7 | Isolation of Pumps | x | | No pumps indicated on plans. |
| F5.8 | Walls between a bedroom and kitchen or laundry in Class 9c building | x | | Not a class 9c. |
| Spec F5.2 | Sound isolation for building elements | x | N/A | Noted |
| Spec F5.5 | Impact Sound Test Equivalence | x | N/A | Noted |

SECTION G - ANCILLARY PROVISIONS

Part G1 - MINOR STRUCTURES & COMPONENTS

| | | | | |
|------------|--|---|-------------------|--|
| G1.0 | Deemed-to-Satisfy provisions | ✓ | N/A | Noted |
| G1.1 | Swimming pools | X | N/A | |
| G1.2 | Refrigerated chambers, strong rooms & vaults | ✓ | X | Refrigerator chamber requires indicator lamp positioned outside the chamber which is illuminated when the interior light is switched on. |
| G1.3 | Outdoor Play spaces | X | N/A | Only applies to Early Childhood Centres |
| NSW G1.101 | Provision for cleaning windows | ✓ | Compliance advice | A building must provide a safe manner of cleaning any windows located 3 or more storeys above ground level. |

Part G2 - HEATING APPLIANCES, FIRE PLACES, CHIMNEYS & FLUES

| | | | | |
|-------|------------------------------|---|-------------------|--|
| G2.0 | Deemed to satisfy provisions | ✓ | N/A | Noted |
| G2.1 | ***** | | N/A | Blank |
| G2.2 | Installation of appliances | ✓ | Compliance advice | Boiler must comply with specification G2.2 |
| G 2.3 | Open fireplaces | ✓ | Compliance advice | Required to have non-combustible heart extending no less than 300mm beyond the front of the fireplace and 150 either side. Walls in 2 separated leaves of solid masonry not less than 180mm thick. Chimney constructed of masonry. |
| G2.4 | Incinerator rooms | X | N/A | No incinerators proposed. |

Part G3 - ATRIUM CONSTRUCTION

| | | | | |
|------|-------------------------------|---|-----|---------------------------------------|
| G3.1 | Atriums affected by this part | X | N/A | The building does not have an atrium. |
|------|-------------------------------|---|-----|---------------------------------------|

Part G4 - CONSTRUCTION IN ALPINE AREAS

| | | | | |
|------|---------------------------------|---|-------------------|---|
| G4.0 | Deemed to satisfy provisions | ✓ | noted | |
| G4.1 | Application of Part | ✓ | | |
| G4.2 | ***** | | | |
| G4.3 | External Doors | ✓ | X | Basement door exit required to open inward and have Open Inward signage Open Inward signage required to main entry doors to lower ground floor Exit doors to upper ground floor and attic required to open inwards and have Inward Opening signage. |
| G4.4 | Emergency Lighting | ✓ | Compliance advice | Emergency lighting required in every stairway, public corridor, externally above every doorway to open space. |
| G4.5 | External trafficable structures | ✓ | N/A | No external trafficable structures |

| | | | | |
|------|--------------------------------------|---|-------------------|---|
| G4.6 | Clear Space around buildings | ✓ | X | Main Entry door and basement exit discharge to areas that could entrap snow. |
| G4.7 | ***** | | | |
| G4.8 | Fire Fighting Services and equipment | ✓ | Compliance advice | Must have manually operated fire alarm system with call points complying with AS 1670.1 Fire hydrants in accordance with E1.3(b) |
| G4.9 | Fire Orders | ✓ | Compliance advice | FIRE ORDERS explaining <ul style="list-style-type: none"> • method of operation of the fire alarm system and location of call points. • Location and operation of fire fighting equipment • Locations of exits and evacuation procedures |

Part G5 - CONSTRUCTION IN BUSHFIRE PRONE AREAS

| | | | | |
|------|------------------------------|---|-------------------|---------------------------------|
| G5.0 | Deemed-to-Satisfy provisions | ✓ | Noted | |
| G5.1 | Application of this Part | ✓ | Note | Located in bushfire prone zone. |
| G5.2 | Protection | ✓ | Compliance Advice | Must comply with AS 3959 |

4.0 CONCLUSION

The primary purpose of this report is to identify non-compliance matters in comparison to the current Deemed-to-Satisfy provisions of the BCA under Parts C, D, E, F and G. This report has identified some non-compliances, which need to be addressed via a change in building design or via a performance solution report.

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