

NCC COMPLIANCE CAPABILITY REPORT

PREPARED FOR
The Aboriginal Housing Company Pty Ltd

PREMISES
Col James – Student Accommodation
83-123 Eveleigh Street, Redfern

DATE
30 May 2017

PROJECT NO.
J170145

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This revision register documents the development and issue of this and each subsequent report undertaken by Vic Lilli & Partners Pty Ltd.

REVISION	DATE	COMMENT	PREPARED BY
A	30/05/2017	DA Lodgement	GR

1.0 Executive Summary

This report has been prepared to identify the extent of compliance achieved by the architectural documentation against the relevant provisions of the National Construction Code of Australia (NCC) 2016 and adopted standards.

The proposed development of a Student Accommodation building at 83-123 Eveleigh Street, Redfern

This report will provide a NCC analysis to assist in the process of design development and to assist the consent authority in the determination of the Development Application relating to the works.

It is the opinion of this office that, on satisfaction of the above recommendations, the proposed building is capable of achieving compliance with the requirements of the National Construction Code of Australia (NCC) 2016 and relevant adopted standards without undue modification to the design or appearance of the building.

2.0 Report Summary

2.1 – Location

The subject building is to be located at 83-123 Eveleigh Street, Redfern. The site is bounded by Eveleigh Street to the west, adjoining commercial boundary to the north, Lawson Street to the south and the existing railway corridor to the south-east boundary.

2.2 –Description of Works

The construction of a building containing the following:

- Lower ground floor containing a loading dock and recreation/washing facilities relating to the exclusive building use.
- Upper ground floor containing the entrance lobby and office facilities.
- 522 student accommodation rooms located from the upper ground floor to level 21.

2.3 – Report Purpose

This report has been prepared to identify aspects of the proposed design that require further consideration and to identify aspects of the design that may be altered subsequent to the issue of a Development Consent.

This report has been prepared on the basis of an assessment of compliance only and should not be construed as being design advice.

2.4 – Basis of report

This NCC Capability report has been prepared on the basis of the following-


- (i) Architectural Plans as prepared by Turner Architects.
- (ii) National Construction Code of Australia (NCC) 2016, including NSW Variations and relevant Australian Standards;
- (iii) Environmental Planning and Assessment Act, 1979, and Regulations.

2.5 – Building Description

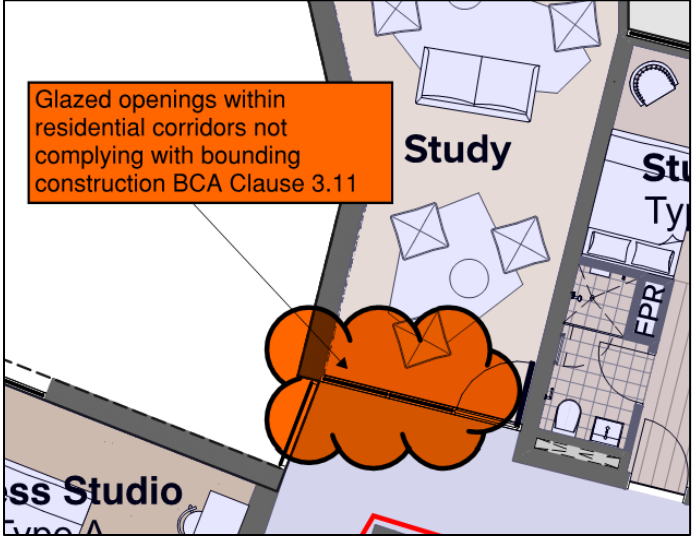
Classification	Class 3 – Student Accommodation All lower and upper ground floor uses have been considered within the same classification as they are used exclusively by occupants of the building. Class 7a – Loading Dock Class 7b – Bike Storage
Rise in Storeys	The building has a rise of twenty-four (24) storeys.
No. of Storeys	The development will contain a twenty-four (24) storeys.
Effective Height	The building will have an effective height greater than 50m.
Type of Construction	The building is to adopt Type A construction throughout
Floor Area and Volume Limitations	Floor area and volume limitations are not applicable to the Class 3 portions. Class 7a & 7b portions comply.
Population	Residential levels are not populated in accordance with NCC Clause D1.13.
Climate Zone	Zone 5

3.0 – NCC of Australia Assessment

3.1 – Fire Resistance and Stability (Section C, NCC)

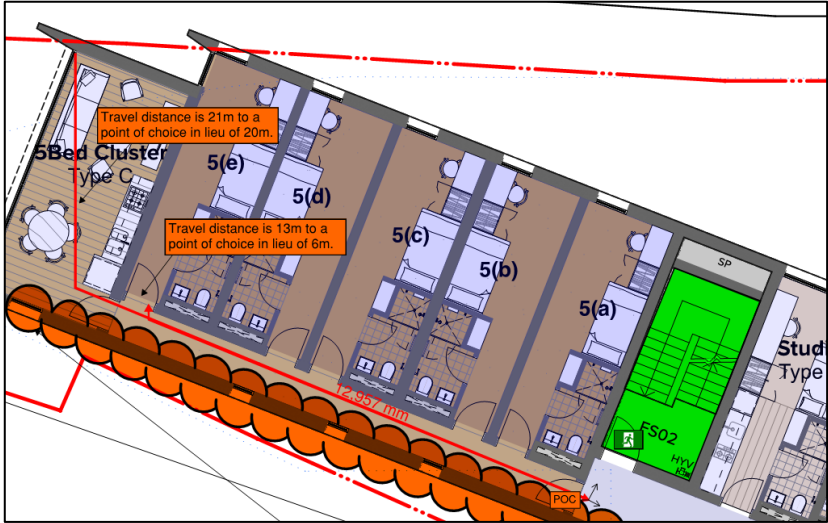
Item	Comment
Fire Resistance	<p>The proposed building structure, being reinforced concrete floors and columns, is capable of achieving the necessary Fire Resistance Levels as detailed in Table 3 of NCC Specification C1.1 for Type A construction</p> <p>Where lightweight fire rated construction is proposed for walls, the system must comply with Specification C1.8 of NCC and the manufactures tested specification.</p>
Compartmentation and fire separation	<p>The key areas for consideration with regards to separation are as follows:</p> <ul style="list-style-type: none"> Each sole occupancy unit within the building, being each individual room or suite of rooms, must be separated by construction achieving an FRL of not less than 90/90/90 for load bearing or -/60/60 for non-load bearing.  <ul style="list-style-type: none"> The loading dock areas must be separated from the residential portion of the building by construction having an FRL not less than 120/120/120. The stair and lift shafts must be constructed with an FRL not less than 120/120/120 to the parking levels, and 90/90/90 to residential levels.

	<ul style="list-style-type: none"> ▪ The bike storage areas must be separated from the remainder of the building by construction having an FRL not less than 240/240/240. <p>Note: The client has advised that they will be undertaking a fire engineered alternative solution for reduction in FRL's within the bike storage area from FRL 240/240/240 to FRL 120/120/120.</p> <p>The proposed development is capable of achieving the required FRL's, and are to be confirmed by the structural engineer at the construction certificate phase.</p> <p>The building is capable of compliance with the maximum compartment sizes specified in NCC Clause C2.2.</p>
<i>Roof lights and skylights</i>	<p>Any part of the building within 3m of a skylight is required to have an FRL of 90/90/90 for 6m vertically above the skylight in accordance with NCC Spec C1.1 (3.6)</p> <p>The building is compliant.</p>

Item	Comment
<p><i>Protection of Openings</i></p>	<p>In buildings of this type, openings in an external wall (i.e. a wall that is required to have a fire resistance level) if situated less 3.0m from a fire-source feature to which it is exposed must be protected in accordance with Part C3 of the NCC.</p> <ul style="list-style-type: none"> • The railway corridor is located within three meters of the south-east boundary. As the railway corridor is considered for BCA purposes as a 'fire source feature' openings in the external wall located within 3m of this boundary are considered as non-compliant with BCA Clause 3.2. • Openings are also located within 3m of the external wall along the northern boundary. <p>Note: The client has advised that they will be undertaking a fire engineered alternative solution for openings within 3m of any boundary.</p> <p>Bounding construction between residential sole occupant units (SOU) is to comply with the provisions of NCC Specification C1.1, and Clause C3.11.</p>  <p>Note: The client has advised that they will be undertaking a fire engineered alternative solution for non-compliant bounding construction.</p> <p>Lift landing doors must achieve an FRL not less than -/60/-. All doors to sole occupancy units must be protected by self-closing -/60/30 fire doors.</p>
<p><i>Fire hazard properties</i></p>	<p>The fire hazard properties of all materials, assemblies, fixtures and linings are to comply with Specification C1.10 of the NCC, as applicable.</p>

<i>Vertical separation of openings</i>	Spandrel protection is not required as the building will be fully protected by a compliant sprinkler system.
<i>Fire sealing of penetrations</i>	All service penetrations must be sealed to the requirements of NCC Clause C3.12 and C3.15.
Protection of equipment.	<p>The following equipment is to be fire separated with construction complying with NCC Clause C2.12 (d).</p> <ul style="list-style-type: none"> ▪ lift motors and lift control panels; or ▪ boilers; or ▪ a battery or batteries installed in the building that have a voltage exceeding 24 volts and a capacity exceeding 10 ampere hours. <p>Separation of on-site fire pumps must comply with the requirements of AS 2419.1-2005.</p>
<i>Electricity supply</i>	<p>Electrical equipment is to be separated from the building in accordance with NCC Clause C2.13.</p> <p>Any substation and/or main switchboard is to be constructed to achieve a fire resistance level of 120/120/120 with the door being - /120/30 fire rated, unless higher FRL's required by electrical providers.</p>
<i>Class 2 corridor length</i>	<p>A public corridor, if more than 40m in length, must be provided at intervals of not more than 40m with smoke-proof walls complying Clause 2 of Specification C2.5.</p> <ul style="list-style-type: none"> ▪ Corridor lengths in some upper residential areas exceed 40m in length. <p>Note: The client has advised that they will be undertaking a fire engineered alternative solution for corridor lengths which have a length of greater than 40m.</p>

3.2 – Access & Egress (Section D, NCC)

Item	Comment
Number of exits required	<p>For a building, greater than 25m in effective height two exits are required from every storey. Non-compliance has been noted in the following area;</p> <ul style="list-style-type: none"> A single exit has been provided to the plant room located on Level 21. <p>Note: The client has advised that they will be undertaking a fire engineered alternative solution for single exit provided on Level 21.</p>
Exit travel distances	<p>The distance of travel an exit or a point of choice exceeds the maximum distances permitted by NCC Clause D1.4 in the following areas:</p> <ul style="list-style-type: none"> The lower ground floor of 22m to a point of choice in lieu of 20m and 45m total travel distance in lieu of 40m. The lower ground floor of 29m to a point of choice in lieu of 20m. Upper residential levels have bedrooms in multiple areas on multiple levels (sole-occupancy units) in the 5 bed clusters in which have travel distance which are a maximum of 13m to a point of choice in lieu of 6m. Upper residential levels have common rooms in multiple areas on multiple levels in the 5 bed clusters in which have travel distance which are a maximum of 22m to a point of choice in lieu of 20m. <p>Typical Detail</p>  <p>Note: The client has advised that they will be undertaking a fire engineered alternative solution for the extended travel distance non-compliances.</p>

<i>Distance between alternative exits</i>	<p>The travel distance between alternative exits is greater than the distance permitted by NCC Clause D1.5 in the following areas:</p> <ul style="list-style-type: none"> • The lower ground floor has travel distances between alternative exits of 64m in lieu of 45m. • The lower ground floor has travel distances between alternative exits of 48m in lieu of 45m. <p>Note: The client has advised that they will be undertaking a fire engineered alternative solution for extended travel distance between exits non-compliances.</p>
<i>Dimensions of exits</i>	<p>The proposed aggregate egress width is adequate to serve the anticipated building population.</p> <p>A minimum clear width of 1m must be maintained to all exit stairways. The overall width of the stairways must be such that the clear width can be achieved between handrails.</p>
<i>Travel via fire-isolated exits</i>	<p>Fire isolated stairs discharge within the building and not directly to open space in accordance with NCC Clause D1.7.</p> <p>Discharge from fire isolated stairs necessitates passing back under the building to egress and within 6m of opening in the external wall of the building which require protection in accordance with BCA Clause C3.4.</p> <p>Note: The client has advised that they will be undertaking a fire engineered alternative solution for fire isolated exit discharges.</p>
<i>Construction of exits.</i>	<p>The exits descending from the residential levels must be constructed as a fire isolated exits to the requirements of NCC Part D2. All other exits are not required to be fire isolated.</p> <p>The exit stairways must comply with requirements for treads, risers, landings and thresholds in accordance with clauses D2.13, D2.14 & D2.15 of the NCC respectively.</p>

<i>Electrical distribution boards</i>	Electrical distribution boards located in the path of travel to an exit must be enclosed in a non-combustible enclosure and sealed to prevent the escape of smoke.
<i>Egress Doors</i>	All doors acting as exits are required to swing in the direction of egress and are required to be provided with the appropriate hardware in accordance with NCC Clauses D2.20 & D2.21.
<i>Balustrades</i>	<p>Balustrades must be provided for all areas where it is possible to fall more than 1m. Balustrades are to be designed in accordance with NCC Clause D2.16.</p> <p>Balustrades protecting a difference in levels of over 4m must not have horizontal elements between 150mm and 760mm of the floor that facilitate climbing. Balustrades within fire isolated stairways may be constructed with three horizontal rails with gaps up to 460mm.</p> <p>Under the current provisions of the glazing code it is not permissible to have frameless glass balustrades. Any new glass balustrade must be provided with a structural barrier as required by AS 1288.</p>
<i>Signage</i>	Signage must be provided to all fire safety doors (except those doorways providing access to sole occupancy units) and to doors leading from enclosed stairways as required NCC Clause D2.23 and D3.6.
<i>Handrails</i>	<p>Handrail design and construction shall comply with the requirements specified in NCC Clause D2.17.</p> <p>Generally, handrails must be provided to all stairways at a height not less than 865mm measured above the nosing of the stair treads.</p> <p>Non-fire isolated stairs are to have handrails both sides complying with clause 11 of AS 1428.1-2009</p>
<i>Protection of openable windows</i>	<p>Window openings where the floor is more than 2m above the surface beneath must be protected in accordance with NCC Clause D2.24 in the bedrooms for the Class 3 part of the building.</p> <p>Where the window opening is restricted calculations are to be provided at Construction Certificate stage that sufficient natural ventilation is provided by Part F4.5.</p>

<p><i>Access for people with disabilities.</i></p>	<p>The building is to comply with:</p> <ul style="list-style-type: none"> ▪ The Disability Discrimination Act 1992; ▪ The Disability (Access to Premises — Buildings), Standards 2010; ▪ Part D3 of the NCC; ▪ Australian Standard AS 1428.1-2009. <p>Buildings and parts of buildings must be accessible as required by NCC Table D3.1, unless exempted by NCC Clause D3.4, which requires access as follows:</p> <p><u>Class 2 – Common areas</u></p> <p>From a pedestrian entrance required to be accessible to at least 1 floor containing sole-occupancy units and to the entrance doorway of each sole-occupancy unit located on that level. To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, swimming pool, common laundry, games room, TV room, individual shop, dining room, public viewing area, ticket purchasing service, lunch room, lounge room, or the like.</p> <p>Where a ramp complying with AS 1428.1 or a passenger lift is installed—</p> <ol style="list-style-type: none"> 1. to the entrance doorway of each sole-occupancy unit; and 2. to and within rooms or spaces for use in common by the residents, located on the levels served by the lift or ramp. <p><u>Class 7a & 7b –</u></p> <p>To and within any level containing accessible car parking spaces.</p> <p>The building is capable of compliance subject to detailed design. Full documentation is to be provided for assessment at the Construction Certificate stage.</p>
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3.3 – Services and Equipment (Section E, NCC)

Item	Comment
<i>Hydrant System</i>	<p>The building is required to be provided with a hydrant system in accordance with the provisions of Clause E1. 3 of the NCC and AS 2419.1. The external booster valve assembly and any pump rooms are required to be located and installed in compliance with AS 2419.1-2005.</p> <p>The fire hydrant system is to be designed and certified by a hydraulic engineer or other competent hydraulic designer at the construction certificate stage.</p> <p>Note: The client has advised that they will be undertaking a fire engineered alternative solution for non-compliances relating to the location and fire protection requirements of the hydrant booster assembly.</p>
<i>Hose Reel System</i>	<p>The building will be provided with a fire hose reel system in accordance with the provisions of NCC Clause E1.4 and AS 2441 - 2005.</p> <p>The fire hose reel system is to be designed and certified by a hydraulic engineer or other competent hydraulic designer at the construction certificate stage.</p>
<i>Sprinklers</i>	<p>The development will require a sprinkler system throughout the whole development complying with NCC Specification E1.5.</p> <p>The sprinkler system is to be designed and certified by a hydraulic engineer or other competent hydraulic designer at the construction certificate stage.</p>
<i>Portable Fire Extinguishers</i>	<p>Fire extinguishers will be provided in accordance with the provisions of NCC Clause E1.6 and AS2444 - 2001.</p>
<i>Fire Control Room</i>	<p>A fire control room has been provided and has two forms of entry. The fire control room will be fully separated by a compliant FRL 120/120/120.</p> <p>Although accessible from a fire-isolated passageway a technical non-compliance occurs as access is not provided from the front entrance of the building.</p> <p>Note: The client has advised that they will be undertaking a fire engineered alternative solution for non-compliances relating to the location of the fire control room.</p>

<i>Smoke Hazard Management</i>	<p>The building is required to be provided with the following:</p> <ul style="list-style-type: none"> ▪ Fire isolated stairways are required to be pressurised. ▪ An automatic smoke detection and alarm system complying with NCC Specification E2.2a. ▪ Building Occupant Warning System is required in accordance with NCC Specification E2.2a. <p>The smoke hazard management system is to be designed and certified by a fire services contractor or other competent fire services designer at the construction certificate stage.</p>
<i>Lifts</i>	<p>Emergency lifts in accordance with BCA Clause E3.4 are to be provided as the building has an effective height of greater than 25m.</p> <p>The proposed lifts shall comply with all requirements nominated by AS1735.12 and NCC Clause E3.6, with regards to facilities for people with disabilities, lift floor dimension of not less than 1400 mm wide x 2000 mm deep.</p> <p>All lifts are to have stretcher facilities in accordance with E3.2. The dimensions of these lifts are to be no less than 1400mm wide and 2000 mm deep</p> <p>A sign must be provided in accordance with NCC Clause E3.3 warning against the use of lifts in a fire.</p>
<i>Emergency Lighting</i>	<p>Emergency lighting will be provided throughout the building in accordance with NCC Clauses E4.2 & E4.4 and AS2293.1 - 2005.</p>
<i>Exit Signs</i>	<p>Exit signs will be provided throughout the building in accordance with NCC Clauses E4.5, E4.6 & E4.8 and AS2293.1- 2005.</p>
<i>Sound systems and intercommunication systems for emergency purposes</i>	<p>A Sound System and Intercom System for Emergency Purposes (SSISEP) must be provided.</p>

3.4 – Health and Amenity (Section F, NCC)

Item	Comment
<i>Damp & Weatherproofing</i>	Adequate measures must be employed to ensure compliance with NCC Part F1 is achieved in terms of weatherproofing.
<i>Sanitary & Other Facilities</i>	Facilities will be provided in accordance with the provisions of NCC Clause F2.1. Sanitary facilities are satisfactory for the media and gym rooms.
<i>Room Heights</i>	The following minimum building ceiling heights must be maintained. <ul style="list-style-type: none"> ▪ Common kitchen, laundry or the like – 2.1m ▪ Corridor, passageway or the like – 2.1m ▪ Bathroom, shower, sanitary compartment or the like – 2.1m ▪ Habitable rooms including common areas – 2.4m ▪ Stairways – 2.0m ▪ Car parking areas – 2.2m ▪ Disabled car parks – 2.5m including a 2.3m path of travel.
<i>Ventilation</i>	The building is required to be provided with ventilation in accordance with the provisions of Clause F4.5 of the NCC. Ventilation may be provided by natural means or a mechanical system complying with AS 1668.2. The residential areas of the building must be provided with natural or mechanical ventilation as required by Part F4 of the NCC.
<i>Lighting</i>	Artificial lighting must be provided throughout the building in accordance with the provisions of Clause F4.4 of the NCC and AS/NZS1680.0-2009. Natural lighting must be provided to the habitable areas of the residential apartments to the requirements of NCC Part F4, being by way of openings of not less than 10% of the floor area of the space they serve. The current design provides for adequate natural light to habitable rooms.

Item	Comment
<i>Sound insulation</i>	<p>The floor separating the residential units and separating the sole occupancy units from public areas must achieve a sound insulation rating of R_w+C_{tr} (airborne) of not less than 50 and an $L_n,w+C_i$ (impact) not more than 62.</p> <p>Walls separating units must achieve a sound insulation rating of R_w+C_{tr} (airborne) of not less than 50.</p> <p>Walls separating units from plant rooms, lift shafts, stairways corridors or other public areas must have an insulation rating of R_w (airborne) not less than 50.</p> <p>Walls separating a bathroom, sanitary compartment, laundry or kitchen in one sole occupancy unit from a habitable room in another or separating a unit from a lift shaft must be of discontinuous construction.</p> <p>The doorway separating to sole occupancy unit from the public area must have an R_w not less than 30</p> <p>Soil, waste & stormwater services must be separated by construction having an R_w+C_{tr} (airborne) not less than</p> <ul style="list-style-type: none"> ▪ 40 if the room is a habitable room ▪ 25 if the room is a non-habitable room

3.5 – Ancillary Provisions (Section G, NCC)

Item	Comment
<i>Cleaning of windows</i>	<p>As per NSW Clause G1.101 a building must provide for a safe manner of cleaning any windows located 3 or more storeys above ground level.</p> <p>This is satisfied where—</p> <ul style="list-style-type: none"> ▪ the windows can be cleaned wholly from within the building; or ▪ provision is made for the cleaning of the windows by a method complying with the Work Health and Safety Act 2011 and regulations made under that Act.
<i>Atrium construction</i>	Not applicable.

3.6 – Energy Efficiency (Section J, NCC)

Note: The residential Class 3 part of the building is to be designed to comply with two mandatory requirements for energy efficiency. They are:

A BASIX assessment and a BASIX certificate will be required to be lodged with the development application.

In addition to the BASIX certificate compliance with NSW J (A) is required for the Class 3 part. The applicable sections of NSW Section J (A) are to be complied with, these clauses are:

- NSW J(A) 1.0 – Building Fabric,
- NSW J(A) 2.0 – Building Sealing
- NSW J(A) 3.0 – Air Conditioning and ventilating systems
- NSW J(A) 4.0 – Hot Water Supply
- NSW J(A) 5.0 – Access For Maintenance

NB: The following NCC Section J National provisions will be applicable to the non-Class 3 residential areas as applicable under NSW J(A).

Item	Comment
Building Fabric	The external fabric to the retail portion of the development with a conditioned space will be insulated in accordance with Part J1 of the NCC.
Glazing	The external glazing of the development with a conditioned space will have the appropriate U value and solar heat gain co efficiency in accordance with Part J2 of the NCC.
Building Sealing	The external fabric of the development with a conditioned space will be appropriately sealed in accordance with Part J3 of the NCC.
Air-Conditioning and Ventilation System	The air-conditioning and ventilation system of the development with a conditioned space will be designed to comply with Part J5 of the NCC.

Item	Comment
Artificial Lighting and Power	<p>The building is to maintain maximum lighting power levels and control systems as applicable. The design of lighting systems must comply with NCC Part J6.</p> <p>The following maximum lighting power loads (W/m²) are applicable to the building:</p> <ul style="list-style-type: none"> ▪ Car park - 6 ▪ Car park entry zone (20m) - 25 ▪ Common rooms, corridors - 8 ▪ Entry lobby from outside - 15 ▪ Control room, switch room - 9 ▪ Plant room - 5 ▪ Service areas & store rooms – 5 ▪ Retail – 22 <p>These rates are able to be adjusted as detailed in NCC Clause Table J6.2 where daylight or motion sensors or dimming systems are provided or in particularly small rooms. BASIX will also impose efficiency measures to the building</p>
Hot Water Supply	Hot water supply systems will be installed in accordance with Part J7 of the NCC and AS/NZS 3500.4.
Access for Maintenance and Energy Monitoring	The building is to have facilities for maintenance and energy monitoring in compliance with NCC Part J8 and the NSW variations.

4.0 Fire safety Measures

4.1 – Proposed Fire Safety Measures

In terms of the proposed building the following fire safety measures may be required:

Fire Safety Measure	Standard of Performance
Access panels, doors and hoppers to fire-resisting shafts	BCA 2016 Clause C3.13
Automatic fail safe devices	BCA 2016 Clause C3.4, D2.19, D2.21, D2.22, Spec C3.4, AS 1670.1- 2015
Automatic fire detection and alarm system	BCA 2016 Clause C3.5, C3.8, C3.11, E2.2, Spec. C3.4, Spec. E2.2a, Spec. AS 1670.1-2015,
Automatic fire suppression system	BCA 2016 Clause E1.5, E2.2, Spec. E1.5, Spec. E2.2, AS 2118.1-1999,
Emergency lighting	BCA 2016 Clause E4.2 & E4.4, AS 2293.1-2005
Emergency lift	BCA 2016 Clause E3.4
Exit and directional signage	BCA 2016 Clause E4.4, E4.5, (NSW E4.6) & E4.8, AS 2293.1-2005
Fire alarm monitoring system	BCA 2016 Spec E2.2a, AS 1670.3-2004
Fire control room	BCA 2016 Clause E1.8, Spec E1.8
Fire dampers	BCA 2016 Clause E2.2, AS/NZS 1668.1-2015, AS 1682.2-2015
Fire door sets	BCA 2016 Clause C2.12, C2.13, C3.4, C3.8, C3.11, Spec C3.4, AS 1905.1-2005
Fire Engineering Report	Report prepared by: Affinity Fire Engineering
Fire hydrant systems	BCA 2016 Clause C2.12, E1.3, AS 2419.1-2005
Fire hose reel systems	BCA 2016 Clause E1.4, AS 2441-2005
Fire seals (protecting openings /service penetrations in fire resisting components of the building)	BCA 2016 Clause C3.15, Spec C3.15, Manufacturer's specifications
Fire windows (including frame)	BCA 2016 Clause C3.4, BCA Spec C3.4 Spec C1.8
Lightweight construction	BCA 2016 Clause C1.8, Spec A2.3, Spec C1.8, Manufacturer's specifications
Mechanical air handling systems	BCA 2016 Clause E2.2, Spec. E1.8 (fire control rooms), Table E2.2a, AS/NZS 1668.1-2015, AS 1668.2-2012
Openings in fire-isolated lift shafts	BCA 2016 Clause C3.10, AS 1735.11-1986
Occupant warning system	BCA 2016 Clause E2.2, Spec E2.2a, AS 1670.1-2015
Portable fire extinguishers	BCA 2016 Clause E1.6, AS 2444-2001
Power operated exit doors	BCA 2016 Clause D2.19, D2.21
Pressurising systems	BCA 2016 Clause E2.2, Table E2.2a, Spec E2.2a, AS/NZS 1668.1-2015
Smoke dampers	BCA 2016 Clause E2.2, C2.5, Spec C2.5, AS/NZS 1668.1-2015
Smoke doors	BCA 2016 Clause C2.5, C2.14, Spec C3.4
Smoke-proof walls	BCA 2016 Clause C2.5(b), Specification C2.5
Sound systems and intercom systems for emergency purposes	BCA 2016 Clause E4.9, AS 1670.4-2015
Wall wetting sprinkler and drencher systems	BCA 2016 Clause C3.4, AS2118.1-1999
Warning and operational signs	BCA 2016 Clause C3.6, D2.23, D3.6, E3.3, Spec E1.8, Clause 183 of the Environmental Planning and Assessment Regulation 2000

6.0 Conclusion

6.1 – Conclusion

It is the opinion of this office that, the proposed building is capable of achieving compliance with the requirements of the Building Code of Australia (BCA) 2016 Volume 1, and relevant adopted standards without undue modification to the design or appearance of the building.

Whilst the above recommendations have been made as a means of achieving compliance with the various provisions of the Performance Requirements of the BCA, their acceptability has not been verified at this time. It will be necessary for the design to be reviewed by an appropriately qualified person prior to the issue of a Construction Certificate for the works.

This report does not imply, nor make reference to structural design or operating capability or design of any electrical, fire, hydraulic or mechanical services.

Except as mentioned in the report, the following matters were not addressed-

- (1) Structural adequacy;
- (2) Fire resistance of primary structural elements;
- (3) Design basis or operating capability of the installed electrical, fire, hydraulic or mechanical services;
- (4) Compliance with the *Disability Discrimination Act 1992*;

Author,



Gary Rafferty
For **Vic Lilli & Partners**

7.0 References

7.1 – Basis of Report

This NCC Capability report has been prepared on the basis of the following-

- (i) Architectural Plans as prepared by Turner Architects

Drawing No.	Title	Revision	Date
DA-110-007	GA Plans Lower Ground	N	29.05.17
DA-110-008	GA Plans Upper Ground	N	29.05.17
DA-110-010	GA Plans Level 01	N	29.05.17
DA-110-020	GA Plans Level 02	N	29.05.17
DA-110-030	GA Plans Level 03	N	29.05.17
DA-110-040	GA plans Level 04, 05	N	29.05.17
DA-110-050	GA Plans Level 06	N	29.05.17
DA-110-060	GA Plans Level 07	N	29.05.17
DA-110-070	GA Plans Level 08, 09	N	29.05.17
DA-110-080	GA Plans Level 10	N	29.05.17
DA-110-090	GA Plans Level 11 – 14, 16	N	29.05.17
DA-110-100	GA Plans Level 15	N	29.05.17
DA-110-110	GA Plans Level 17	N	29.05.17
DA-110-120	GA Plans Level 18-20	N	29.05.17
DA-110-130	GA Plans Level 21	N	29.05.17
DA-110-001	GA Plans Roof	N	29.05.17
DA-110-140	GA Plans Plant	N	29.05.17
DA-250-010	GA Elevations Eveleigh Street-North Elevation	N	29.05.17
DA-250-020	GA Elevations Lawson Street-West Elevation	N	29.05.17
DA-250-030	GA Elevations Railway Line – South Elevation	N	29.05.17
DA-250-040	GA Elevations Terrace – East Elevation	N	29.05.17
DA-350-010	GA Sections Section A-A	N	29.05.17

- (ii) National Construction Code of Australia (NCC) 2016;
- (iii) Environmental Planning and Assessment Act, 1979, and Regulations