

Date: 16 May 2019 Our Ref: P19084

Johnnys Furniture Group Pty Ltd 5 Lake Park Crt Lysterfield Vic 3156 Att: Mr Jonathan McDonald

Dear Jonathan,

RE: 668 - 672 Pittwater Rd, Brookvale BCA COMPLIANCE ASSESSMENT

Please find enclosed our BCA Design Compliance Report prepared in respect of the proposed design contained within the architectural documentation provided and the proposed change of use within the building.

In reviewing the content of this Report, particular attention is drawn to the content of Parts 3 and 4 as: –

- Part 3 summarizes the compliance status of the proposed design in terms of each prescriptive provision of the BCA.
  - The inclusion of this summary enables an immediate understanding of the compliance status of the proposed design to be obtained.
- Part 4 contains a detailed analysis of the proposed design, and provides informative commentary & recommendation in respect of each instance of prescriptive non-compliance and area of insufficient (design) detail, as applicable.

This commentary enables the project team to readily identify and understand the nature and extent of information required within the Building Permit (or other) application to demonstrate the attainment of BCA compliance.

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

Yours faithfully

Kieran Tobin Director

# **BCA COMPLIANCE ASSESSMENT**

# PREPARED FOR

# **Johnnys Furniture Group Pty Ltd**

# REGARDING

668 - 672 Pittwater Rd, Brookvale

**Prepared By** 



## REPORT REGISTER

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

| Our Reference | Issue No. | Remarks                   | Issue Date  |
|---------------|-----------|---------------------------|-------------|
| P19084        | 1         | BCA Compliance Assessment | 16 May 2019 |
|               |           |                           |             |

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## 1.0 Introduction

#### 1.1 GENERAL

This "BCA Compliance Assessment" report has been prepared at the request Johnnys Furniture Group Pty Ltd, and relates to 668 - 672 Pittwater Rd, Brookvale

The subject building is a two storey premises which previously contained a bank. A Building Code of Australia Assessment Report is required in regard to the proposed change of use within the premises to allow for a furniture store. We are not advised of any proposed works within the building.

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

#### 1.2 REPORT BASIS

The content of this report reflects –

- (a) The principles and provisions of BCA 2019 Parts C, D & E
- (b) A Site inspection of the premises on Wednesday the 15<sup>th</sup> of May 2019;
- (c) Plans prepared by Dee Why Drafting: -

| Numbered | Titled            | Date of issue |
|----------|-------------------|---------------|
| 1 of 3   | Site Plan         | 06/09/18      |
| 2 of 3   | Ground Floor Plan | 06/09/18      |
| 3 of 3   | First Floor Plan  | 06/09/18      |

#### 1.3 EXCLUSIONS

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

- (a) Structural and services design documentation;
- (b) General building services;
- (c) The individual requirements of service providers (i.e. Telstra, Water Supply, Energy Australia);
- (d) The individual requirements of the Workcover Authority;
- (e) Disability Discrimination Act (DDA);
- (f) Assessment of any structural elements or geotechnical matters relating to the building, including any;
- (g) Consideration of any fire services <u>operations</u> (including hydraulic, electrical or other systems);
- (h) Assessment of plumbing and drainage installations, including stormwater;
- (i) Assessment of mechanical plant operations, electrical systems or security systems;
- (j) Heritage significance;
- (k) Consideration of energy or water authority requirements;
- (l) Consideration of Council's local planning policies;
- (m) Environmental or planning issues;

(n) Requirements of statutory authorities; Sections B, G, H, J or I of the BCA are not considered.

#### 1.4 REPORT PURPOSE

The purpose of this report is to identify the extent to which the architectural design documentation complies with the relevant prescriptive provisions of the BCA 2019, Parts C, D & E.

Assessment of the proposed design considers each prescriptive BCA provision, and identifies such as either: –

- (a) Being complied with; or
- (b) Not being complied with; or
- (c) Requiring the provision further detail with the future Building Permit or other application or
- (d) Not being relevant to the particular building works proposal.

The status of the design, in terms of these four (4) categories, is summarised within Part 3 of this report.

Where prescriptive non-compliance is identified, suitable recommendations to remedy the non-compliance shall be detailed in Part 4.

In instances where insufficient detail exists, summary of the information required from the project team for inclusion within future applications (i.e. Building Permit) shall also be outlined in Part 4.

•

## 2.0 BUILDING DESCRIPTION

## 2.1 GENERAL

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

## 2.2 RISE IN STOREYS (CLAUSE C1.2)

The existing building has a rise in storeys of two (2)

## 2.3 BUILDING CLASSIFICATION (CLAUSE A3.2)

The entire building incorporates the following classifications: -

| Class 6 | A Retail Premises |  |
|---------|-------------------|--|
|         |                   |  |

## 2.4 EFFECTIVE HEIGHT (CLAUSE A1.1)

The building has an effective height Not exceeding 12 metres.

# 2.5 TYPE OF CONSTRUCTION (TABLE C1.1) Table 5 TYPE C CONSTRUCTION: FRL OF BUILDING ELEMENTS

| Table 5 THE C CONSTRUCTION. THE OF BOILDING ELEMENTS  |   |               |                    |               |  |
|---|---|---------------|--------------------|---------------|--|
| Building element  | Class of building—FRL: (in minutes)           |               |                    |               |  |
|   | Structural adequacy/ Integrity/<br>Insulation |               |                    | rity/         |  |
|   | 2, 3 or 4<br>part                             | 5, 7a or 9    | 6                  | 7b or 8       |  |
| <b>EXTERNAL WALL</b> (including any column and  | d other buildir                               | ng element    | incorpora          | ted           |  |
| therein) or other external building element, v  | where the dist                                | ance from a   | any <i>fire-so</i> | urce          |  |
| feature to which it is exposed is—  |   |               |                    |               |  |
| Less than 1.5 m   | 90/ 90/ 90                                    | 90/ 90/       | 90/ 90/<br>90      | 90/ 90/<br>90 |  |
| 1.5 to less than 3 m  | -/-/-   | 60/ 60/<br>60 | 60/ 60/<br>60      | 60/ 60/<br>60 |  |
| 3 m or more   | -/-/-   | -/-/-         | -/-/-              | -/-/-         |  |
| <b>EXTERNAL COLUMN</b> not incorporated in an <i>fire-source feature</i> to which it is exposed is— |   | , where the   | distance f         | rom any       |  |
| Less than 1.5 m   | 90/-/-  | 90/-/-        | 90/-/-             | 90/-/-        |  |
| 1.5 to less than 3 m  | -/-/-   | 60/-/-        | 60/-/-             | 60/-/-        |  |
| 3 m or more   | -/-/-   | -/-/-         | -/-/-              | -/-/-         |  |
| COMMON WALLS and FIRE WALLS—  | 90/ 90/ 90                                    | 90/ 90/       | 90/ 90/<br>90      | 90/ 90/<br>90 |  |
| INTERNAL WALLS-   |   |               |                    |               |  |
| Bounding <i>public corridors</i> , public lobbies and the like—                                     | 60/ 60/ 60                                    | -/-/-         | -/-/-              | -/-/-         |  |
| Between or bounding sole-occupancy  | 60/ 60/ 60                                    | -/-/-         | -/-/-              | -/-/-         |  |

| Building element                                 | Class of building—FRL: (in minutes)  Structural adequacy/ Integrity/ Insulation |               |               |               |
|--|---|---------------|---------------|---------------|
|  |   |               |               |               |
|  | 2, 3 or 4<br>part   | 5, 7a or 9    | 6             | 7b or 8       |
| units—   |   |               |               |               |
| Bounding a stair if <i>required</i> to be rated— | 60/ 60/ 60  | 60/ 60/<br>60 | 60/ 60/<br>60 | 60/ 60/<br>60 |
| ROOFS  | -/-/-   | -/-/-         | -/-/-         | -/-/-         |

#### 2.6 ACCESS TO PREMISES STANDARD

#### 1.1 Name of Standards

These Standards are the Disability (Access to Premises — Buildings) Standards 2010.

1.2 Commencement

These Standards commenced on 1 May 2011.

1.3 Objects

The objects of these Standards are:

- (a) to ensure that dignified, equitable, cost-effective and reasonably achievable access to buildings, and facilities and services within buildings, is provided for people with a disability; and
- (b) to give certainty to building certifiers, building developers and building managers that, if access to buildings is provided in accordance with these Standards, the provision of that access, to the extent covered by these Standards, will not be unlawful under the Act.

## Excerpt from Disability (Access to Premises Buildings) Standards 2010

Clause (4) A part of a building is a *new part* of the building if it is an extension to the building or a modified part of the building about which:

- (a) an application for approval for the building work is submitted, on or after 1 May 2011, to the competent authority in the State or Territory where the building is located;
- (5) An affected part is:
- (a) the principal pedestrian entrance of an existing building that contains a new part; and
- (b) any part of an existing building, that contains a new part, that is necessary to provide a continuous accessible path of travel from the entrance to the new part.

## **Project Specific Compliance Comment**

No New works are proposed – there is no legislative trigger to require an upgrade to the accessible components of the building.

# 2.7 FIRE SAFETY UPGRADES TO EXISTING BUILDINGS (EP & A REGS)

Subject to the following maximum fire compartment floor area and volume limits for Construction: –

# 93 FIRE SAFETY AND OTHER CONSIDERATIONS

| Sub clause | Requirement   | Comment/Advice  |
|------------|---|---|
| 1          | This <u>clause</u> applies to a <u>development</u> <u>application</u> for a change of building use for an existing building where the applicant does not seek the rebuilding, alteration, enlargement or extension of a building.   | A Change of use is proposed within the building from class 5 to class 6 |
| 2          | In determining the <u>development</u> <u>application</u> , the consent authority is to take into consideration whether the fire protection and structural capacity of the building will be appropriate to the building's proposed use.  | For reference   |
| 3          | Consent to the change of building use sought by a <u>development application</u> to which this <u>clause</u> applies must not be granted unless the consent authority is satisfied that the building complies (or will, when completed, comply) with such of the Category 1 fire safety provisions as are applicable to the building's proposed use.  Note: The obligation to comply with the Category 1 fire safety provisions may require building work to be carried out even though none is proposed or required in relation to the relevant development consent. | For reference   |
| 94 CONSEN  | T AUTHORITY MAY REQUIRE BUILDI  | NGS TO BE UPGRADED  |

| Sub clause | Requirement   | Comment/Advice |
|------------|---|----------------|
| 1          | This clause applies to a development application for development involving the rebuilding, alteration, enlargement or extension of an existing building where: (a) the proposed building work, together with any other building work completed or authorised within the previous 3 years, represents more than half the total volume of the building, as it was before any such work was commenced, measured over its roof and external walls, or does not apply (b) the measures contained in the building are inadequate: (i) to protect persons using the building, and to facilitate their egress from the building, in the event of fire, or | Not Applicable |
|            | (ii) to restrict the spread of fire from the building to other buildings nearby.  |                |

2

In determining a development application to which this clause applies, a consent authority is to take into consideration whether it would be appropriate to require the existing building to be brought into total or partial conformity with the *Building Code of Australia*.

does not apply

# 3.0 BCA ASSESSMENT – SUMMARY

## 3.1. GENERAL

The tables contained within items 3.2 - 3.6 below summarise the compliance status of the proposed architectural design in terms of each prescriptive provision of the Building Code of Australia.

For those instances of either "prescriptive non-compliance" or "insufficient detail", a detailed analysis and commentary is provided within Part 4.

## 3.2. SECTION C – FIRE RESISTANCE

| BCA reference  | Complies | Does not comply | Detail<br>required | Not<br>relevant |
|--|----------|-----------------|--------------------|-----------------|
| Spec. C1.1 – fire resisting construction                     | ✓        |                 |                    |                 |
| C1.3 – buildings of multiple classification                  |          |                 |                    | ✓               |
| C1.4 – mixed types of construction                           |          |                 |                    | ✓               |
| C1.5 – two storey Class 2 or 3 buildings                     |          |                 |                    | ✓               |
| C1.6 – Class 4 parts of a building                           |          |                 |                    | ✓               |
| C1.7 – open spectator stands & indoor sports stadiums        |          |                 |                    | ✓               |
| C1.8 – lightweight construction                              |          |                 |                    | ✓               |
| C1.9 – non-combustible materials                             |          |                 |                    | ✓               |
| C1.10 – fire hazard properties                               |          |                 | ✓                  |                 |
| C1.11 – performance of external walls                        |          |                 |                    | ✓               |
| C2.2 – general floor area & volume limits                    |          |                 |                    | ✓               |
| C2.3 – large isolated buildings                              |          |                 |                    | ✓               |
| C2.4 – requirements for open spaces & vehicular access       |          |                 |                    | ✓               |
| C2.5 – Class 9a and 9c buildings                             |          |                 |                    | ✓               |
| C2.6 – vertical separation of openings in external walls     |          |                 |                    | ✓               |
| C2.7 – separation of firewalls                               |          |                 |                    | ✓               |
| C2.8 – separation of classifications in same storey          |          |                 |                    | ✓               |
| C2.9 – separation of classifications in different storeys    |          |                 |                    | ✓               |
| C2.10 – separation of lift shafts                            |          |                 |                    | ✓               |
| C2.11 – stairways and lifts in one shaft                     |          |                 |                    | ✓               |
| C2.12 – separation of equipment                              |          |                 |                    | ✓               |
| C2.13 – electricity supply system                            |          | ✓               |                    |                 |
| C2.14 – public corridors in Class 2 and 3 buildings          |          |                 |                    | ✓               |
| C3.2 – openings in external walls                            |          |                 | ✓                  |                 |
| C3.3 – separation of external walls & associated openings    |          |                 |                    | ✓               |
| C3.4 – acceptable methods of protection                      |          |                 | ✓                  |                 |
| C3.5 – doorways in firewalls                                 |          |                 |                    | ✓               |
| C3.6 – sliding fire doors                                    |          |                 |                    | ✓               |
| C3.7 – doorways in horizontal exits                          |          |                 |                    | ✓               |
| C3.8 – openings in fire-isolated exits                       |          |                 |                    | ✓               |
| C3.9 – service penetrations in fire-isolated exits           |          |                 |                    | ✓               |
| C3.10 – openings in fire-isolated lift shafts                |          |                 |                    | ✓               |
| C3.11 – bounding construction: Class 2, 3, 4 and 9 buildings |          |                 |                    | ✓               |
| C3.12 – openings in floors & ceilings for services           |          |                 |                    | ✓               |
| C3.13 – openings in shafts                                   |          |                 |                    | ✓               |
| C3.15 – openings for service installations                   |          |                 |                    | ✓               |
| C3.16 – construction joints                                  |          |                 |                    | ✓               |
| C3.17 – columns protected with f/r lightweight construction  |          |                 |                    | ✓               |

# 3.3. SECTION D – ACCESS AND EGRESS

| BCA reference   | Complies | Does not comply | Detail<br>required | Not<br>relevant |
|---|----------|-----------------|--------------------|-----------------|
| D1.2 – number of exits required                                   | ✓        |                 |                    |                 |
| D1.3 – when fire-isolated exits are required                      |          |                 |                    | ✓               |
| D1.4 – exit travel distances                                      | ✓        |                 |                    |                 |
| D1.5 – distance between alternative exits                         | ✓        |                 |                    |                 |
| D1.6 – dimensions of exits and paths of travel to exits           |          |                 | ✓                  |                 |
| D1.7 – travel via fire-isolated exits                             |          |                 |                    | ✓               |
| D1.8 – external stairways or ramps in lieu of fire-isolated exits |          |                 |                    | ✓               |
| D1.9 – travel via non-fire isolated stairways or ramps            |          |                 |                    | ✓               |
| D1.10 – discharge from exits                                      |          | <b>\</b>        |                    |                 |
| D1.11 – horizontal exits  |          |                 |                    | ✓               |
| D1.12 – non-required stairways or ramps                           |          |                 |                    | ✓               |
| D1.13 – number of persons accommodated                            |          |                 |                    | ✓               |
| D1.16 – plant rooms and lift motor rooms: concession              |          |                 |                    | ✓               |
| D1.17 – access to lift pits                                       |          |                 |                    | ✓               |
| D2.2 – fire-isolated stairways and ramps                          |          |                 |                    | ✓               |
| D2.3 – non-fire isolated stairways and ramps                      |          |                 |                    | ✓               |
| D2.4 – separation of rising and descending stair flights          |          |                 |                    | <b>√</b>        |
| D2.5 – open access ramps and balconies                            |          |                 |                    | ✓               |
| D2.6 – smoke lobbies  |          |                 |                    | ✓               |
| D2.7 – installations in exits and paths of travel                 |          |                 |                    | ✓               |
| D2.8 – enclosure of space under stairs and ramps                  |          |                 |                    | <b>√</b>        |
| D2.9 – width of stairways   |          |                 |                    | <b>√</b>        |
| D2.10 – pedestrian ramps  |          |                 |                    | <b>√</b>        |
| D2.11 – fire-isolated passageways                                 |          |                 |                    | <b>√</b>        |
| D2.12 – roof as open space  |          |                 |                    | <b>√</b>        |
| D2.13 – goings and risers   | <b>√</b> |                 |                    |                 |
| D2.14 – landings  |          |                 |                    |                 |
| D2.15 – thresholds  | <b>√</b> |                 |                    |                 |
| D2.16 – balustrades   |          | ✓               |                    | ✓               |
| D2.17 – handrails   | ✓        |                 |                    |                 |
| D2.18 – fixed platforms, walkways, stairways and ladders          |          |                 |                    | ✓               |
| D2.19 – doorways and doors  |          |                 | ✓                  |                 |
| D2.20 – swinging doors  | <b>√</b> |                 |                    |                 |
| D2.21 – operation of latch  | ✓        |                 |                    |                 |
| D2.22 – re-entry from fire-isolated exits                         |          |                 |                    | ✓               |
| D2.23 – signs on doors  |          |                 |                    | <b>√</b>        |
| D2.24 – Protection of Openable Windows                            |          |                 |                    |                 |
| D3.1 – General Building Access requirements                       |          |                 |                    | ✓               |
| D3.2 – Access to Buildings  |          |                 |                    | ✓               |
| D3.3 – parts of buildings to be accessible                        |          |                 |                    | ✓               |
| D3.4 – concessions  |          |                 |                    | <b>✓</b>        |
| D3.5 – car parking  |          |                 |                    | <b>√</b>        |
| D3.6 – signage  |          |                 |                    | · ✓             |
| D3.7 – hearing augmentation services and features                 |          |                 |                    | <b>√</b>        |
| D3.8 – tactile indicators   |          |                 |                    | ✓               |
| D3.9 – Wheelchair Seating   |          |                 |                    | ·               |
| D3.10 – Swimming Pools  |          |                 |                    | ·<br>✓          |
| D3.11 - Ramps   |          |                 |                    | · ✓             |
| D3.12 – Glazing on Access ways                                    |          |                 |                    | · /             |
| D3.12 Glazing on riccess ways                                     |          |                 |                    | *               |

# 3.4. SECTION E – SERVICES AND EQUIPMENT

| BCA reference  | Complies       | Does not comply | Detail<br>required | Not<br>relevant |
|--|----------------|-----------------|--------------------|-----------------|
| E1.3 – fire hydrants                                 | <b>√</b> *     |                 |                    |                 |
| E1.4 – fire hose reels                               | ✓              |                 |                    |                 |
| E1.5 – sprinklers                                    |                |                 |                    | ✓               |
| E1.6 – portable fire extinguishers                   | ✓              |                 |                    |                 |
| E1.8 – fire control centres                          |                |                 |                    | ✓               |
| E1.9 – fire precautions during construction          |                |                 |                    | ✓               |
| E1.10 – provision for special hazards                |                |                 |                    | ✓               |
| E2.2a – general provisions                           |                |                 |                    | ✓               |
| E2.2b – specific provisions                          |                |                 |                    | ✓               |
| E2.3 – provision for special hazards                 |                |                 |                    | ✓               |
| E3.2 – stretcher facility in lifts                   |                |                 |                    | ✓               |
| E3.3 – warning against use of lifts in fire          |                |                 |                    | ✓               |
| E3.4 – emergency lifts                               |                |                 |                    | ✓               |
| E3.5 – landings                                      |                |                 |                    | ✓               |
| E3.6 – facilities for people with disabilities       |                |                 |                    | ✓               |
| E3.7 – fire service controls                         |                |                 |                    | ✓               |
| E3.8 – aged care buildings                           |                |                 |                    | ✓               |
| E4.2 – emergency lighting                            | ✓              |                 |                    |                 |
| E4.4 – design and operation of emergency lighting    | ✓              |                 |                    |                 |
| E4.5 – exit signs                                    | ✓              |                 | _                  |                 |
| E4.6 – direction signs                               | ✓              |                 |                    |                 |
| E4.7 – Class 2 and 3 buildings and Class 4 parts     |                |                 | _                  | ✓               |
| E4.8 – design and operation of exit signs            | ✓              |                 |                    |                 |
| E4.9 – emergency warning and intercommunication      |                |                 |                    | ✓               |
| ✓* = The building is protected by a street Hydrant - | - flow and pre | ssure have n    | ot been teste      | ed              |

# 4.0 BCA ASSESSMENT – DETAILED ANALYSIS

### 4.1 GENERAL

With reference to the "BCA Assessment Summary" contained within Part 3 above, the following detailed analysis and commentary is provided.

This commentary is formulated to enable the design documentation to be further progressed, for the purpose of evidencing the attainment of compliance with the relevant provisions of the BCA.

In our opinion compliance with the Building Code of Australia 2019 Volume 1 Parts C, D & E can be achieved subject to the implementation of the following details into the Construction documentation.

## 4.2 SECTION C – FIRE RESISTANCE

| CLAUSE    | CLAUSE REQUIREMENT   | ACTION/RECOMENDATION   |
|-----------|--|--|
| Cl. C1.10 | Fire Hazard Properties   | Qualification is required regarding the                        |
|           | (a) The <i>fire hazard properties</i> of the following linings, materials and assemblies in a Class 2 to 9 building must comply with Specification C1.10:    | Fire Hazard properties of the carpet tiles within the building |
|           | A floor lining or floor covering must have—  |  |
|           | (a) a critical radiant flux not less than a grouping of 2.2; and   |  |
|           | (b) in a building not protected by a sprinkler system complying with Specification E1.5, a maximum <i>smoke development rate</i> of 750 percent-minutes; and |  |
|           | (c) a group number complying with Clause 6(a)(ii), for any portion of the floor covering that is continued more than 150 mm up a wall.                       |  |
|           | Wall and ceiling linings – requires groupings as follows   |  |

Fire Isolated Exit = Grouping of 1 Public Corridors = a grouping of 1,2 Other areas = a grouping of 1,2,3

- (a) For the purposes of this Clause, the group number of a material is determined by either—
  - (i) physical testing in accordance with AS ISO 9705; or
  - (ii) prediction in accordance with Clause 3 of Specification A2.4 using data obtained by testing the material at 50 kW/m<sup>2</sup> irradiance in the horizontal orientation with edge frame in accordance with AS/NZS 3837.
- (b) The *group number* of a material is as follows when tested or predicted in accordance with sub-clause (a):
  - (i) A Group 1 material is one that does not reach *flashover* when exposed to 100 kW for 600 seconds followed by exposure to 300 kW for 600 seconds.
  - (ii) A Group 2 material is one that reaches *flashover* following exposure to 300 kW within 600 seconds after not reaching *flashover* when exposed to 100 kW for 600 seconds.
  - (iii) A Group 3 material is one that reaches *flashover* in more than 120 seconds but within 600 seconds when exposed to 100 kW.
  - (iv) A Group 4 material is one that reaches *flashover* within 120 seconds when exposed to 100 kW.
- (c) A material used as a finish, surface, lining or attachment to a wall or ceiling must be a Group 1, Group 2 or Group 3 material used in accordance with Table 3 and for buildings not fitted with a sprinkler system complying with Specification E1.5, have—
  - (i) a smoke growth rate index not more than 100; or
  - (ii) an average specific extinction area less than 250 m<sup>2</sup>/kg.

#### Lift cars

- (a) Materials used as—
  - (i) floor linings and floor coverings must have a critical radiant flux not less than 2.2; and

| Cl. C2.13 | <ul> <li>(ii) wall and ceiling linings must be a Group 1 material or a Group 2 material in accordance with Clause 4(b).</li> <li>(a) Materials, other than those referenced in (a), used in the construction of a lift car in a Class 2 to 9 building must comply with the <i>fire hazard properties required</i> by AS 1735.2.</li> <li>Electricity supply system</li> </ul>  | The plant room on level 1 contains a  |
|-----------|--|---|
|           | (a) An electricity substation located within a building must—  (i) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and  (ii) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than –/120/30.  (b) A main switchboard located within the building which sustains emergency equipment operating in the emergency mode must—  (i) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and  (ii) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than –/120/30. | main switch board Generally partial fire separation is achieved however the masonry wall separating the plant room from the remainder of the building only extends to ceiling level Our recommendation is to either:  a) Continue the separating wall to the underside of the roof covering in material which will achieve an FRL of 120/120/120; or b) Provide a ceiling system that provides and FRL of 120/120/120 to the plant room  Note service penetrations occurring as a result of the fire upgrade works must be protected with a system to achieve a |
|           |  | 120m FRL in accordance with AS 1530   |
| Cl. C3.2  | Protection of Openings in External Walls  Openings in external walls required to have an FRL must be protected under C3.4  | The louvred vent to the plant room is within 3m of the property boundary an is  |

|          | <ul> <li>if – <ol> <li>3 m from a side or rear boundary of the allotment; or</li> <li>6 m from the far boundary of a road adjoining the allotment, if not located in a storey at or near ground level; or</li> <li>6 m from another building on the allotment that is not Class 10,</li> <li>If wall-wetting sprinklers are used they are to be located externally.</li> </ol> </li> <li>Protected areas must not occupy more than 1/3 of the external wall area of the storey in which they are located.</li> </ul>   | not protected in accordance with Clause C3.4 Where the issue raised in relation to clause C2.13 is resolved the risk of spread between buildings will be negligible |
|----------|--|---|
| Cl. C3.4 | Acceptable Methods of Protection  Doorways –internal or external wall-wetting sprinklers as appropriate or –/60/30 fire doors (self-closing or automatic closing).  Windows – internal or external wall-wetting sprinklers used with automatic or permanently fixed closed windows, –/60/– fire windows (automatic or permanently fixed in the closed position) or –/60/– automatic fire shutters.  Other openings – internal or external wall-wetting sprinklers or –/60/– construction.  Fire doors, fire windows and fire shutters must comply with Specification C3.4. | Verification will be required with the Construction Documentation   |

## 4.4 SECTION D – ACCESS AND EGRESS

| CLAUSE    | CLAUSE REQUIREMENT   | ACTION/RECOMENDATION   |
|-----------|--|--|
| Cl. D1.6  | Dimensions of exits and paths of travel to exits In a <u>required exit</u> or path of travel to an <u>exit</u> —  (a) the unobstructed height throughout must be not less than 2 m, except the unobstructed height of any doorway may be reduced to not less than 1980 mm; and  (b) the unobstructed width of each <u>exit</u> or path of travel to an <u>exit</u> , except for doorways, must be not less than—  (i) 1m   | The height above a riser at the mid landing of the front stair is less than 2m above the stair nosing (approx. 1900) Where possible we recommend adjusting the head clearance at this point Where this cannot be achieved without significant structural alteration to the stair we recommend providing a caution strip in this location |
| Cl. D1.10 | Discharge from exits  (a) An <i>exit</i> must not be blocked at the point of discharge and where necessary, suitable barriers must be provided to prevent vehicles from blocking the <i>exit</i> , or access to it.  (b) If a <i>required exit</i> leads to an <i>open space</i> , the path of travel to the road must have an unobstructed width throughout of not less than—  (i) the minimum width of the <i>required exit</i> ; or  (ii) 1 m,  whichever is the greater.  (c) If an <i>exit</i> discharges to <i>open space</i> that is at a different level than the public road to which it is connected, the path of travel to the road must be by—  (i) a ramp or other incline having a gradient not steeper than 1:8 at any part, or not steeper | Egress from the rear exit door may be obstructed by motor vehicles parked directly in front.  We recommend providing bollards in this location to maintain a 1m path of travel from the exit door  |
|           | than 1:14 if <i>required</i> by the <i>Deemed-to-Satisfy Provisions</i> of Part D3; or (ii) except if the <i>exit</i> is from a Class 9a building, a stairway complying with the <i>Deemed-</i>  |  |

|           | to-Satisfy Provisions of the BCA.   |  |
|-----------|---|--|
|           | (d) The discha8rge point of alternative <i>exits</i> must be located as far apart as practical.   |  |
| Cl. D2.16 | Barriers to prevent falls  (a) A continuous barrier must be provided along the side of—  (i) a roof to which general access is provided; and  (ii) a stairway or ramp; and  (iii) a floor, corridor, hallway, balcony, deck, verandah, mezzanine, access bridge or the like; and  (iv) any delineated path of access to a building, if the trafficable surface is 1 m or more above the surface beneath.  The Height of a balustrade above floor level is required to be a minimum of 1m Gaps within balustrades must not exceed 125mm  | The balustrade above the front stair void is lower than the required 1000mm (approximately 900mm in height) We recommend raising the balustrade height to comply.  |
| Cl. D2.19 | Doorways and doors  (a) A doorway in a resident use area of a Class 9c building must not be fitted with—  (i) a sliding fire door; or  (ii) a sliding smoke door; or  (iii) a revolving door; or  (iv) a roller shutter door; or  (v) a tilt-up door.  (b) A doorway serving as a required exit or forming part of a required exit, or a doorway in a patient care area of a Class 9a health-care building—  (i) must not be fitted with a revolving door; and  (ii) must not be fitted with a roller shutter or tilt-up door unless—  (A) it serves a Class 6, 7 or 8 building or part with a floor area not more than 200 m2; and  (B) the doorway is the only required exit from the building or part; and  (C) it is held in the open position while the building or part is lawfully occupied; and | Confirmation is required that the glass sliding door to the entry area and door which provides egress to Pittwater Rd  a) Can be opened manually under a force of not more than 110 N; and b) Can be opened manually under a force of not more than 110 N if there is a malfunction or failure of the power source |

(iii) must not be fitted with a sliding door unless—

(A) it leads directly to a road or open space; and

(B) the door is able to be opened manually under a force of not more than 110 N; and

(iv) if fitted with a door which is power-operated—

(A) it must be able to be opened manually under a force of not more than 110 N if there is a malfunction or failure of the power source; and

(B) if it leads directly to a road or open space it must open automatically if there is a power failure to the door or on the activation of a fire or smoke alarm anywhere in the fire compartment served by the door.

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