Date: 5 August 2020
Our Ref: P20109

Hot House Studio
P.O. Box 26
Newport NSW 2106
Att: Mr Wade Cogle

Dear Wade,

RE: Palm Beach Golf Club, 2 Beach Rd, Palm Beach
BCA COMPLIANCE ASSESSMENT

Please find enclosed our BCA Design Compliance Report prepared in respect of the proposed works within Palm Beach Golf Club, 2 Beach Rd, Palm Beach.

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

BUILDING CODE OF AUSTRALIA ASSESSMENT

PREPARED FOR

HOT HOUSE STUDIO

REGARDING

Palm Beach Golf Club, 2 Beach Rd, Palm Beach

Prepared By

BCA vision

REPORT REGISTER

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

Our Reference	Issue No.	Remarks	Issue Date
P20109	1	BCA Compliance Assessment	5 August 2020

CONTENTS PAGE

1.0 INTRODUCTION

1.1 GENERAL

This "BCA Compliance Assessment" report has been prepared at the request of Hot House Studio and relates to Palm Beach Golf Club, 2 Beach Rd, Palm Beach.

The subject premises is a Golf Club, restaurant and Bar.
The building is a two-storey masonry building with concrete floors and a metal roof.
The building contains change rooms, sanitary and storage facilities within the ground floor and administration, bar and restaurant areas within the first floor.

This report will address compliance requirements only for the area of proposed works or where referenced within this report "the subject area".
The proposed works are upgrade works to improve the level of Accessibility within the premises; they include alteration to the entry points, the addition of a lift and new Accessible sanitary facilities.

However key base building compliance issues are identified within part 2 of this report.
The purpose of identifying these issues is to allow for improvements to the level of fire safety within the building specifically the ability to egress the building in a safe and effective manner.

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

1.2 REPORT BASIS

The content of this report reflects –

(a) The principles and provisions of BCA 2019 AMENDMENT 1 Parts C, D, E and F2;
(b) A Site Inspection of the subject premises on Tuesday the 4th of August 2020;
(c) Architectural plans prepared by Hot House Studio;

Numbered	Titled	Date of issue
DA 100	Site Plan	21/07/20
DA 1.10	Ground Floor Plan	21/07/20
DA 1.11	Level 1 Plan	21/07/20
DA 2.10	Elevations and Sections	21/07/20
DA 4.10	Pro Shop	21/07/20

1.3 EXCLUSIONS

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

(a) Structural and services design documentation;
(b) General building services (i.e. passenger lifts);
(c) The individual requirements of service providers (i.e. Telstra, Water Supply, Energy Australia);
(d) The individual requirements of the Workcover Authority;
(e) Disability Discrimination Act (DDA)

1.4 REPORT PURPOSE

The purpose of this report is to identify the extent to which the architectural design documentation complies with the relevant prescriptive provisions of the BCA 2019 AMENDMENT 1, Parts C, D, E and F2.
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 building is proposed to have a rise in storeys of two (2)

2.3 BUILDING CLASSIFICATION (CLAUSE A3.2)

The entire building incorporates the following classifications:-

CLASS	DESCRIPTION
Class 5	Office
Class 6	Retail premises
Class 9b	An Assembly building

2.4 EFFECTIVE HEIGHT (CLAUSE A1.1)

The building has an effective height Not exceeding 12m.

2.5 TYPE OF CONSTRUCTION (TABLE C1.1)

The Building is required to be Type B Construction.

External walls, common walls flooring and floor framing of lift pits must be non-combustible.
Any internal wall having an FRL must extend to –
(i) the underside of the floor above; or
(ii) the underside of a complying roof; or
(iii) if the roof is not required to comply, the underside of the non-combustible roof covering and must not be crossed by combustible building elements (except 75 x 50 mm roof battens); or
(iv) a ceiling immediately below the roof having a resistance to the incipient spread of fire to the roof space of not less than 60 minutes.

A loadbearing internal wall and fire wall (including part of a loadbearing shaft) must be of concrete or masonry.
Non-loadbearing fire-resisting internal walls, fire and non-fire rated lift, ventilating, pipe, garbage, or similar shaft not for the discharge of hot products of combustion, must be of non-combustible construction.
External column FRL's apply to any internal columns that face and are within 1.5 m of a window and are exposed through that window to a fire-source feature.
Attachments not to impair fire-resistance
(a) A combustible material may be used as a finish or lining to a wall or roof, or in a sign, sunscreen or blind, awning, or other attachment to a building element which has the required FRL if—
(i) the material is exempted under C1.10 or complies with the fire hazard properties prescribed in Specification C1.10; and
(ii) it is not located near or directly above a required exit so as to make the exit unusable in a fire; and
(iii) it does not otherwise constitute an undue risk of fire spread via the facade of the building.
(b) The attachment of a facing or finish, or the installation of ducting or any other service, to a part of a building required to have an FRL must not impair the required FRL of that part.

Building element	Class of building — FRL: (in minutes) *Structural Adequacy/Integrity/Insulation*

	2, 3 or 4 part	5, 7a or 9	6	7b or 8
EXTERNAL WALL (including any column and other building element incorporated within it) or other external building element, where the distance from any *fire-source feature* to which it is exposed is—				
For *loadbearing* parts—				
less than 1.5 m	90/ 90/ 90	120/120/120	180/180/180	240/240/240
1.5 to less than 3 m	90/ 60/ 30	120/ 90/ 60	180/120/ 90	240/180/120
3 to less than 9 m	90/ 30/ 30	120/ 30/ 30	180/ 90/ 60	240/ 90/ 60
9 to less than 18 m	90/ 30/–	120/ 30/–	180/ 60/–	240/ 60/–
18 m or more	–/–/–	–/–/–	–/–/–	–/–/–
For non-*bearing* parts—				
less than 1.5 m	–/ 90/ 90	–/120/120	–/180/180	–/240/240
1.5 to less than 3 m	–/ 60/ 30	–/ 90/ 60	–/120/ 90	–/180/120
3 m or more	–/–/–	–/–/–	–/–/–	–/–/–
EXTERNAL COLUMN not incorporated in an *external wall*, where the distance from any *fire-source feature* to which it is exposed is—				
For *loadbearing* columns—				
less than 18 m	90/–/–	120/–/–	180/–/–	240/–/–
18 m or more	–/–/–	–/–/–	–/–/–	–/–/–
For non-*loadbearing* columns—				
	–/–/–	–/–/–	–/–/–	–/–/–
COMMON WALLS and FIRE WALLS—	90/ 90/ 90	120/120/120	180/180/180	240/240/240
INTERNAL WALLS—				
Fire-resisting lift and stair *shafts*—				
Loadbearing	90/ 90/ 90	120/120/120	180/120/120	240/120/120
Fire-resisting stair *shafts*—				
Non-*loadbearing*	–/ 90/ 90	–/120/120	–/120/120	–/120/120
Bounding *public corridors*, public lobbies and the like—				
Loadbearing	60/ 60/ 60	120/–/–	180/–/–	240/–/–

Non-*loadbearing*	–/ 60/ 60	–/–/–	–/–/–	–/–/–
Between or bounding *sole-occupancy units*—				
Loadbearing	60/ 60/ 60	120/–/–	180/–/–	240/–/–
Non-*loadbearing*	–/ 60/ 60	–/–/–	–/–/–	–/–/–
OTHER LOADBEARING INTERNAL WALLS				
and COLUMNS—	60/–/–	120/–/–	180/–/–	240/–/–
ROOFS	–/–/–	–/–/–	–/–/–	–/–/–

2.6 General Floor Area Limitations (Table C2.2)

The building floor area is approximately 2018m2

Table C2.2 – Maximum size of Fire Compartments				
Building Class		Type A	**Type B**	Type C
6, 7, 8, 9a	Max Floor area Max Volume	5000 m^2 30,000 m^3	**3500 m^2** **21,000 m^3**	2000 m^2 12,000 m^3

2.7 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; or
(b) all of the following apply:
(i) the building work is carried out for or on behalf of the Crown;
(ii) the building work commences on or after 1 May 2011;
(iii) no application for approval for the building work is submitted, before 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.

Subsection 2.1(5) - Affected part

The Premises Standards introduce a new concept referred to as the 'affected part' of an existing building. The introduction of this defined area reflects the desire to improve general accessibility of existing buildings over time where full upgrades of a building are not taking place.

The requirement for upgrading of the 'affected part' of buildings recognises that there is little value in improving access in new parts of existing buildings if people with disability cannot get to those new parts.

Subsection 2.1(5) defines the term 'affected part' of a building.

Affected part means the path of travel between (and including) the principal pedestrian entrance of an existing building to the 'new part' or modified part of the building. This path of travel must provide a continuous accessible path of travel (see 'Accessway' as defined in A1.1 of the Access Code) from the principal pedestrian entrance to the new part or modified part of the building.

Note on extent of 'affected part'

The definition of 'affected part' of a building is limited to the area between (and including) the principal pedestrian entrance and the new work, but does not extend from the entrance to the allotment boundary or any required carparking spaces. It also does not extend to any toilet facilities or other rooms adjacent to the pathway between the principal pedestrian entrance and the area of the new work.

Affect on the subject building

The "New Part" in this instance is the Access upgrade works, including the building entry, new lift and new sanitary facilities.

The affected part is the building entry and the accessible path to the lift and sanitary facilities.

There is a technical issue in relation to the existing stair which under the access to Premises standard require modification to comply with clause 11 of AS 1428.1 – 2009.

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 clause applies to a development application 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 not proposed within the premises.
2	In determining the development application, 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 development application to which this clause 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 CONSENT AUTHORITY MAY REQUIRE BUILDINGS 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	The Architectural plans identify alteration to less than 50% of the building floor area

	(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*.	For Reference

Category 1 fire safety provision *Means the following provisions of the* Building Code of Australia		
Performance Ref	**Performance Requirement**	**Compliance Comments**
EP1.3	A fire hydrant system must be provided to the degree necessary to facilitate the needs of the *fire brigade* appropriate to a) Fire-fighting operations; and b) The floor area of the building; and c) The fire hazard	The building is serviced by street Hydrants
EP1.4	An *automatic* fire suppression system must be installed to the degree necessary to control the development and spread of fire appropriate to a) The size of the Fire Compartment; and b) The function or use of the building; and c) The Fire Hazard; and d) The Height of the Building	A Suppression system is not required within the building
EP1.6	Suitable facilities must be provided to the degree necessary in a building to co-ordinate *fire brigade* intervention during an emergency appropriate to a) The function or use of the building and b) The Floor area of the building; and c) The height of the building.	A Fire Control room is not required within the subject building
EP2.1	In a building providing sleeping accommodation, occupants must be provided with *automatic* warning on the detection of smoke so they may evacuate in the event of a fire to a *safe place*.	The building does not provide sleeping accommodation
EP2.2	In the event of a fire in a building the conditions in any evacuation route must be maintained for the period of time occupants take to evacuate the part of the building so that i) the temperature will not endanger human life; and ii) the level of visibility will enable the	Travel distances within the do not exceed the maximum distances identified within Clause D1.4

	evacuation route to be determined and iii) the level of toxicity will not endanger human life.	
EP3.2	The period of time occupants take to evacuate referred to in (a) must be appropriate to i) the number, mobility and other characteristics of the occupants; and ii) the function or use of the building; and iii) the travel distance and other characteristics of the building; and iv) the *fire load*; and v) the potential *fire intensity*; and vi) the *fire hazard*; and vii) any active *fire safety systems* installed in the building; and viii) *fire brigade* intervention.	Generally egress from the building can be compliant however we will make recommendations within this report in regard to Exit signage, Emergency Lighting.

3.0 BCA ASSESSMENT – SUMMARY

3.1. GENERAL

The tables contained within items 3.2 – 3.5 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 required	Not 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 required	Not 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	✓			
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				✓
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				✓
D2.9 – width of stairways				✓
D2.10 – pedestrian ramps				✓
D2.11 – fire-isolated passageways				✓
D2.12 – roof as open space				✓
D2.13 – goings and risers	✓			
D2.14 – landings	✓			
D2.15 – thresholds	✓			
D2.16 – balustrades	✓			
D2.17 – handrails			✓	
D2.18 – fixed platforms, walkways, stairways and ladders				✓
D2.19 – doorways and doors			✓	
D2.20 – swinging doors			✓	
D2.21 – operation of latch			✓	
D2.22 – re-entry from fire-isolated exits				✓
D2.23 – signs on doors				✓
D2.24 – Openable windows				✓
D3.1 – general building access requirements			✓	
D3.2 – Access to buildings			✓	
D3.3 – parts of buildings to be accessible			✓	
D3.4 – exemptions			✓	
D3.5 – accessible car parking				✓
D3.6 – signage			✓	
D3.12 – glazing on an accessway			✓	

3.4. SECTION E – SERVICES AND EQUIPMENT

BCA reference	Complies	Does not comply	Detail required	Not relevant
E1.3 – fire hydrants	✓*			
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				✓
E3.9 – Fire Service Recall switch				✓
E3.10 – Lift Car Drive Control Switch				✓
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: exemptions				✓
E4.8 – design and operation of exit signs			✓	
E4.9 – emergency warning and intercommunication systems				✓
✓* = Building protected by street Hydrant – Flow and pressure not tested by BCA Vision				

3.1. SECTION F – HEALTH AND AMENITY

BCA reference	Complies	Does not comply	Detail required	Not relevant
F2.1 – facilities in residential buildings				✓
F2.3 – facilities in Class 3 to 9 buildings	✓			✓
F2.4 – facilities for people with disabilities			✓	
F2.5 – construction of sanitary compartments	✓			
F2.7 – microbial (legionella) control				✓
F2.8 – waste management				✓

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, Amendment 1, Parts C, D, E and F2 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. C1.9	Non-combustible building elements (a) In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible: (i) External walls and common walls, including all components incorporated in them including the facade covering, framing and insulation. (ii) The flooring and floor framing of lift pits. (iii) Non-loadbearing internal walls where they are required to be fire-resisting. (b) A shaft, being a lift, ventilating, pipe, garbage, or similar shaft that is not for the discharge of hot products of combustion, that is non-loadbearing, must be of non-combustible construction in— (i) a building required to be of Type A construction; and (ii) a building required to be of Type B construction, subject to C2.10, in—	The existing combustible timber parapet is proposed to be removed and replaced with Colourbond. All elements of the new classing must be non combustible including framework and batons where required

	(A) a Class 2, 3 or 9 building; and (B) a Class 5, 6, 7 or 8 building if the shaft connects more than 2 storeys. (c) A loadbearing internal wall and a loadbearing fire wall, including those that are part of a loadbearing shaft, must comply with Specification C1.1. (d) The requirements of (a) and (b) do not apply to the following: (i) Gaskets. (ii) Caulking. (iii) Sealants. (iv) Termite management systems. (v) Glass, including laminated glass. (vi) Thermal breaks associated with glazing systems. (vii) Damp-proof courses. (e) The following materials may be used wherever a non-combustible material is required: (i) Plasterboard. (ii) Perforated gypsum lath with a normal paper finish. (iii) Fibrous-plaster sheet. (iv) Fibre-reinforced cement sheeting. (v) Pre-finished metal sheeting having a combustible surface finish not exceeding 1 mm thickness and where the Spread-of-Flame Index of the product is not greater than 0. (vi) Sarking-type materials that do not exceed 1 mm in thickness and have a Flammability Index not greater than 5. (vii) Bonded laminated materials where— (A) each lamina, including any core, is non-combustible; and (B) each adhesive layer does not exceed 1 mm in thickness and the total thickness of the adhesive layers does not exceed 2 mm; and (C) the Spread-of-Flame Index and the Smoke-Developed Index of the bonded laminated material as a whole do not exceed 0 and 3 respectively.	
Cl. C1.10	Fire Hazard Properties (a) The *fire hazard properties* of the following linings, materials and assemblies in a Class 2 to 9 building must comply with Specification C1.10	We recommend that new floor finishes to the proposed training area are selected to comply with the following (it will be necessary to obtain an AS 1530 test

		certificate from the supplier):- 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 *smoke development rate* 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. When sourcing floor coverings we recommend requesting a Fire Test Certificate for the product to determine the level of compliance achieved
Cl. C3.2	Protection of openings in external walls Openings in an *external wall* that is *required* to have an FRL must— (a)if the distance between the opening and the *fire-source feature* to which it is exposed is less than— (i)3 m from a side or rear boundary of the allotment; or (ii)6 m from the far boundary of a road, river, lake or the like adjoining the allotment, if not located in a *storey* at or near ground level; or (iii)6 m from another building on the allotment that is not Class 10, be protected in accordance with C3.4 and if wall-wetting sprinklers are used, they are located externally	The building contains existing openings to the rear of the kitchen and to the front balcony which are within 3m of the property boundary. However there are no triggers under clauses 93 and 94 of the Ep and A Regs requiring an upgrade of these building elements. In our opinion the provision of the openings provide a low risk of spread of flame

Cl. C3.4	Acceptable methods of protection (a) Where protection is required, doorways, windows and other openings must be protected as follows: (i) Doorways— (A) internal or external wall-wetting sprinklers as appropriate used with doors that are self-closing or automatic closing; or (B) –/60/30 fire doors that are self-closing or automatic closing. (ii) Windows— (A) internal or external wall-wetting sprinklers as appropriate used with windows that are automatic closing or permanently fixed in the closed position; or (B) –/60/– fire windows that are automatic closing or permanently fixed in the closed position; or (C) –/60/– automatic closing fire shutters. (iii) Other openings— (A) excluding voids — internal or external wall-wetting sprinklers, as appropriate; or (B) construction having an FRL not less than –/60/–. (b) Fire doors, fire windows and fire shutters must comply with Specification C3.4.	For Reference

4.4 SECTION D – ACCESS AND EGRESS

CLAUSE	CLAUSE REQUIREMENT	ACTION/RECOMENDATION
Cl. D2.17	Handrails must be provided to at least one side of all stairways and ramps less than 2-metres in width, and to both sides where more than 2-metres in width, and must: – ❑ Be continuous between stair flight landings ❑ Have no obstruction that would cause a break in the hand hold ❑ Have one rail fixed at a height not less than 865-mm Hand rails within the building must comply with Part D3 of the BCA and AS 1428.1 - 2009	Compliant hand rail to each side of the stair
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 (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	The electronic doors must 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 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

	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. (c)A power-operated door in a path of travel to a *required exit*, except for a door in a *patient care area* of a Class 9a *health-care building* as provided in (b), 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.	
Cl. D2.20	Swinging doors A swinging door in a required exit or forming part of a required exit— (a) must not encroach— (i) at any part of its swing by more than 500 mm on the required width (including any landings) of a required— (A) stairway; or (B) ramp; or (C) passageway, if it is likely to impede the path of travel of the people already using the exit; and (ii) when fully open, by more than 100 mm on the required width of the required exit, and the measurement of encroachment in each case is to include door handles or other furniture or attachments to the door; and (b) must swing in the direction of egress unless— (i) it serves a building or part with a floor area not more than 200 m2, it is the only required exit from the building or part and it is fitted with a device for holding it in the open position; or (ii) it serves a sanitary compartment or airlock (in which case it may swing in either direction); and (c) must not otherwise impede the path or direction of egress.	The rear Exit door at the rear of the kitchen area must open outward in the direction of egress
Cl. D2.21	Operation of latch	The door handle to the rear Exit door at the rear of the kitchen Exit door must be replaced

	(a) A door in a *required exit*, forming part of a *required exit* or in the path of travel to a *required exit* must be readily openable without a key from the side that faces a person seeking egress, by— (i) a single hand downward action on a single device which is located between 900 mm and 1.1 m from the floor and if serving an area *required* to be *accessible* by Part D3— (A) be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and (B) have a clearance between the handle and the back plate or door face at the centre grip section of the handle of not less than 35 mm and not more than 45 mm; or (ii) a single hand pushing action on a single device which is located between 900 mm and 1.2 m from the floor.	with door hardware that provides a single hand downward action on a single device which is located between 900 mm and 1.1 m from the floor No locking device should obstruct egress such that the door handle must be readily openable without a key from the side that faces a person seeking egress
Cl. D3.1	General building access requirements Buildings and parts of buildings must be *accessible* as *required* by Table D3.1, unless exempted by D3.4. Access within the Building is required as follows:- To an within all areas not exempted by Clause D3.4	The "New Part" in this instance is the Access upgrade works, including the building entry, new lift and new sanitary facilities. The affected part is the building entry and the accessible path to the lift and sanitary facilities. Key Compliance issues 1) The access to premises standard requires the existing entry stairs to be upgraded to comply with Clause 11 of AS 1428.1 -2009 This will require a compliant hand rail to each side of the stair and Tactile Ground surface Indicators at

		the top and bottom landing 2) The latch side door clearance on leaving the ground floor access WC void does not achieve compliance with clause 13 of AS 1428.1 **General Compliance Requirements are**: 1) Circulation space in regard to clauses 6 and 7 of AS 1428.1 – 2009 2) Slip resistance of floors in regard to clause 7 of AS 1428.1 – 2009. 3) Paths and ramps must comply with Clause 10 of AS 1428.1 – 2009 4) Doors and Door circulation are required to comply with Clause 13 of AS 1428.1 – 2009 5) The stairs are required to comply with clauses 11 and 12 of AS 1428.1 2009 6) The sanitary facilities are required to comply with clauses 15 and 16 of AS 1428.1 - 2009
Cl. D3.2	Access to Buildings ▪ Must be provided by an AS 1428.1 complying path of travel from – (i) a entry point from the road at the allotment boundary to the entrance	For Reference

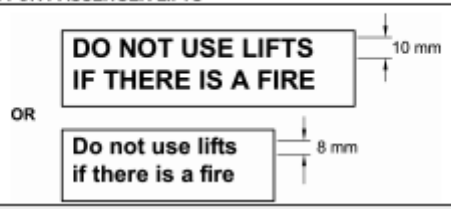
	doorway. (ii) any disabled car parking space on the allotment. (iii) any other accessible building on the allotment. (iv) through the principal public entrance. ▪ Parts of buildings required to be accessible must comply with AS 1428.1	
Cl. D3.3	Parts of buildings to be accessible In a building *required* to be *accessible*: (a) every ramp and stairway, except for ramps and stairways in areas exempted by clause D3.4, must comply with: (i) for a ramp, except a fire-isolated ramp, clause 10 of AS 1428.1; and (ii) for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1; (iii) for a fire-isolated stairway, clause 11.1(f) and (g) of AS 1428.1; (b) every passenger lift must comply with clause E3.6; (c) *access ways* must have: (i) passing spaces complying with AS 1428.1 at maximum 20 m intervals on those parts of an *access way* where a direct line of sight is not available; and (ii) turning spaces complying with AS 1428.1: (A) within 2 m of the end of *access ways* where it is not possible to continue travelling along the *access way*; and (B) at maximum 20 m intervals along the *access way*; (d) an intersection of *access ways* satisfies the spatial requirements for a passing and turning space; (e) a passing space may serve as a turning space;	For Reference

	(f) a ramp complying with AS 1428.1 or a passenger lift need not be provided to serve a *storey* or level other than the entrance *storey* in a Class 5, 6, 7b or 8 building- (i) containing not more than 3 *storeys*; and (ii) with a *floor area* for each *storey*, excluding the entrance *storey*, of not more than 200 m^2.	
Cl. D3.4	Exemptions The following areas are not required to be accessible: (a) An area where access would be inappropriate because of the particular purpose for which the area is used. (b) An area that would pose a health or safety risk for people with a disability. (c) Any path of travel providing access only to an area exempted by (a) or (b).	For reference
Cl. D3.6	Signage In a building required to be accessible— (a) braille and tactile signage complying with Specification D3.6 must— (i) incorporate the international symbol of access or deafness, as appropriate, in accordance with AS 1428.1 and identify each— (A) sanitary facility, except a sanitary facility within a sole-occupancy unit in a Class 1b or Class 3 building; and (B) space with a hearing augmentation system; and (ii) identify each door required by E4.5 to be provided with an exit sign and state— (A) "Exit"; and (B) "Level" ; and either (aa) the floor level number; or (bb) a floor level descriptor; or (cc) a combination of (aa) and (bb); and (b) signage including the international symbol for deafness in accordance with AS 1428.1 must be provided within a room containing a hearing augmentation system identifying— (i) the type of hearing augmentation; and (ii) the area covered within the room; and	Signage will be require to at each building entry in addition to Exit signage within the building

	(iii) if receivers are being used and where the receivers can be obtained; and (c) signage in accordance with AS 1428.1 must be provided for accessible unisex sanitary facilities to identify if the facility is suitable for left or right handed use; and (d) signage to identify an ambulant accessible sanitary facility in accordance with AS 1428.1 must be located on the door of the facility; and (e) where a pedestrian entrance is not accessible, directional signage incorporating the international symbol of access, in accordance with AS 1428.1 must be provided to direct a person to the location of the nearest accessible pedestrian entrance; and (f) where a bank of sanitary facilities is not provided with an accessible unisex sanitary facility, directional signage incorporating the international symbol of access in accordance with AS 1428.1 must be placed at the location of the sanitary facilities that are not accessible, to direct a person to the location of the nearest accessible unisex sanitary facility.	
Cl. D3.8	Tactile indicators (a) For a building *required* to be *accessible*, tactile ground surface indicators must be provided to warn people who are blind or have a vision impairment that they are approaching— (i) a stairway, other than a *fire-isolated stairway*; and (ii) an escalator; and (iii) a passenger conveyor or moving walk; and (iv) a ramp other than a *fire-isolated ramp*, step ramp, kerb ramp or *swimming pool* ramp; and (v) in the absence of a suitable barrier— (A) an overhead obstruction less than 2 m above floor level, other than a doorway; and (B) an *accessway* meeting a vehicular way adjacent to any pedestrian entrance to a building, excluding a pedestrian entrance serving an area referred to inD3.4, if there is no kerb or kerb ramp at that point, except for areas exempted by D3.4. (b) Tactile ground surface indicators *required* by (a) must comply with sections 1 and 2 of AS/NZS 1428.4.1. (c) A hostel for the aged, nursing home for the aged, a *residential aged care building* Class 3	Details will be required within the Construction Certificate plans and Specifications

	accommodation for the aged, Class 9a *health-care building* or a Class 9c building need not comply with (a)(i) and (iv) if handrails incorporating a raised dome button in accordance with the requirements for stairway handrails in AS 1428.1 are provided to warn people who are blind or have a vision impairment that they are approaching a stairway or ramp.	
Cl. D3.12	Glazing on an accessway On an *accessway*, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS 1428.1.	Details will be required within the Construction Certificate plans and Specifications

4.5 SECTION E – SERVICES AND EQUIPMENT

CLAUSE	CLAUSE REQUIREMENT	ACTION/RECOMENDATION
Cl. E3.3	Warning against use of lifts in fire A warning sign must— (a) be displayed where it can be readily seen— (i) near every call button for a passenger lift or group of lifts throughout a building; except (ii) a small lift such as a dumb-waiter or the like that is for the transport of goods only; and (b) comply with the details and dimensions of Figure E3.3 and consist of— (i) incised, inlaid or embossed letters on a metal, wood, plastic or similar plate securely and permanently attached to the wall; or (ii) letters incised or inlaid directly into the surface of the material forming the wall. Figure E3.3 WARNING SIGN FOR PASSENGER LIFTS  	Warning signage is required to the existing lift
Cl. E3.5	Landings Access and egress to and from lift well landings must comply with the Deemed-to-Satisfy Provisions of Section D.	For Reference
Cl. E3.6	Passenger lifts In an *accessible* building, every passenger lift must— (a) be one of the types identified in Table E3.6a, subject to the limitations on use specified in the Table; and (b) have *accessible* features in accordance with Table E3.6b; and	Verification will be required with the Construction Documentation

(c) not rely on a constant pressure device for its operation if the lift car is fully enclosed.

Table E3.6a LIMITATIONS ON USE OF TYPES OF PASSENGER LIFTS

Lift type	Limitations on use	
Electric passenger lift	No limitation.	
Electrohydraulic passenger lift	No limitation.	
Stairway platform lift	Must not—	
	(a)	be used to serve a space in a building accommodating more than 100 persons calculated according to D1.13; or
	(b)	be used in a high traffic public use area such as a theatre, cinema, auditorium, transport interchange, shopping centre or the like; or
	(c)	be used where it is possible to install another type of passenger lift; or
	(d)	connect more than 2 *storeys*; or
	(e)	where more than 1 stairway lift is installed, serve more than 2 consecutive *storeys*; or
	(f)	when in the folded position, encroach on the minimum width of a stairway *required* by D1.6.
Inclined lift	No limitation.	
Low-rise platform lift	Must not travel more than 1000 mm.	
Low-rise, low-speed constant pressure lift	Must not—	
	(a)	for an enclosed type, travel more than 4 m; or
	(b)	for an unenclosed type, travel more than 2 m; or
	(c)	be used in high traffic public use areas in buildings such as a theatre, cinema, auditorium, transport interchange, shopping complex or the like.
Small sized, low-speed automatic lift	Must not travel more than 12 m.	

Table E3.6b APPLICATION OF FEATURES TO PASSENGER LIFTS

Feature	Application	
Handrail complying with the provisions for a mandatory handrail in AS 1735.12	All lifts except—	
	(a)	a *stairway platform lift*; and
	(b)	a *low-rise platform lift*.

	<table><tr><td>Lift floor dimension of not less than 1400 mm wide x 1600 mm deep</td><td>All lifts which travel more than 12 m.</td></tr><tr><td>Lift floor dimensions of not less than 1100 mm wide x 1400 mm deep</td><td>All lifts which travel not more than 12 m except a *stairway platform lift*.</td></tr><tr><td>Lift floor dimensions of not less than 810 mm wide x 1200 mm deep</td><td>A *stairway platform lift*</td></tr><tr><td>Minimum clear door opening complying with AS 1735.12</td><td>All lifts except a *stairway platform lift*.</td></tr><tr><td>Passenger protection system complying with AS 1735.12</td><td>All lifts with a power operated door.</td></tr><tr><td>Lift landing doors at the upper landing</td><td>All lifts except a *stairway platform lift*.</td></tr><tr><td rowspan="3">Lift car and landing control buttons complying with AS 1735.12</td><td>All lifts except—</td></tr><tr><td>(a) a *stairway platform lift*; and</td></tr><tr><td>(b) a *low-rise platform lift*.</td></tr><tr><td>Lighting in accordance with AS 1735.12</td><td>All enclosed lift cars.</td></tr><tr><td>(a) Automatic audible information within the lift car to identify the level each time the car stops; and</td><td>All lifts serving more than 2 levels.</td></tr><tr><td>(b) audible and visual indication at each lift landing to indicate the arrival of the lift car; and</td><td></td></tr><tr><td>(c) audible information and audible indication *required* by (a) and (b) is to be provided in a range of between 20–80 dB(A) at a maximum frequency of 1 500 Hz</td><td></td></tr><tr><td>Emergency hands-free communication, including a button that alerts a call centre of a problem and a light to signal that the call has been received</td><td>All lifts except a *stairway platform lift*.</td></tr></table>	
Cl. E4.2	AS 2293.1 compliant emergency lighting must be provided throughout the building.	We recommend providing additional Emergency Lighting throughout the building specifically in hallways and at stair landings
Cl. E4.4 **Cl. E4.5**	Refer Clause E4.2 above for emergency lighting requirements	Verification will be required with the Construction Documentation
Cl. E4.5 **Cl. E4.8**	AS 2293.1 compliant Exit signage is required at each stair landing, Exit Doors and egress stairs	Directional signage can be improved by providing additional units where the Exit

		signs (above stairs or external doors) is not directly visible to give certainty to the path of egress. Consideration should be given to brail signage in addition to the illuminated signage)
Cl. E4.6 **Cl. E4.8**	AS 2293.1 compliant Directional signage must be provided where Exit signage is not directly visible	Verification will be required with the Construction Documentation

4.6 SECTION F – HEALTH AND AMENITY

CLAUSE	CLAUSE REQUIREMENT	ACTION/RECOMENDATION
Cl. F2.4	Accessible sanitary facilities In a building *required* to be *accessible*— (a) *accessible* unisex *sanitary compartments* must be provided in *accessible* parts of the building in accordance with Table F2.4(a); and (b) *accessible* unisex showers must be provided in accordance with Table F2.4(b); and (c) at each bank of toilets where there is one or more toilets in addition to an *accessible* unisex *sanitary compartment* at that bank of toilets, a *sanitary compartment* suitable for a person with an ambulant disability in accordance with AS 1428.1 must be provided for use by males and females; and (d) an *accessible* unisex *sanitary compartment* must contain a closet pan, washbasin, shelf or bench top and adequate means of disposal of sanitary towels; and (e) the circulation spaces, fixtures and fittings of all *accessible* sanitary facilities provided in accordance with Table F2.4(a) and Table F2.4(b) must comply with the requirements of AS 1428.1	Verification will be required with the Construction Documentation

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