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BUILDING CODE OF AUSTRALIA COMPLIANCE ASSESSMENT REPORT



CHARGRILL CHARLIE'S DEE WHY

10-12 HOWARD AVENUE, DEE WHY

DATE ► 21/06/2019

REPORT NO. ► PROJECT 9361 - REV 00

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CONTENTS

1.0	EXECUTIVE SUMMARY AND RECOMMENDATIONS	3
1.1	RECOMMENDATIONS	3
2.0	INTRODUCTION	5
2.1	BASIS OF REPORT	5
2.2	PURPOSE OF THE REPORT.....	6
2.3	LIMITATIONS OF THE REPORT	6
3.0	BCA ASSESSMENT DATA	6
3.1	LOCATION OF FIRE SOURCE FEATURES	6
3.2	SUMMARY OF FIRE SERVICES REQUIRED.....	7
4.0	BCA ASSESSMENT SUMMARY	8
5.0	CONCLUSION	24
6.0	ATTACHMENT A - INSPECTION & MAINTENANCE	25
6.1	FIRE SAFETY MEASURES.....	25
6.2	GOOD HOUSEKEEPING	25
7.0	ATTACHMENT B – REQUIREMENTS TYPE C CONSTRUCTION	26

REVISION STATUS				
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9361 - Rev 00	21/06/19	FINAL	EDM	JS

COMMERCIAL IN CONFIDENCE

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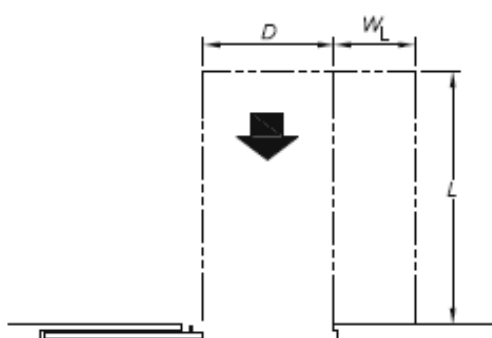
1.0 EXECUTIVE SUMMARY AND RECOMMENDATIONS

This report provides a Building Code of Australia (BCA) 2019 assessment of the extension of the tenancy by demolition of an existing service corridor and subsequent fit out works, alterations to the front façade including new shop signage, and minor alterations within the loading dock, to be located at 10-12 Howard Avenue, Dee Why.

The primary purpose of this report is to identify the non-compliance matters contained in the proposed design against the current Deemed-to-Satisfy (DTS) Provisions of the BCA and to provide compliance recommendations to overcome the DTS non-compliances.

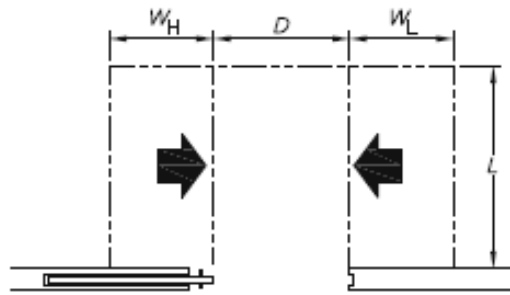
1.1 Recommendations

The following is a list of Deemed-to-Satisfy Provisions that should be addressed either by design amendments, additional information **OR** by way of an Alternative Solution:

BCA Clause	Deemed-to-Satisfy Provision to be addressed																				
D3.1 General building access requirements	<p>Compliance commentary</p> <p>The proposed sliding doors to the front entry must be provided with compliant circulation space in accordance with AS 1428.1-2009.</p> <ul style="list-style-type: none">The inside of the proposed sliding door contains an existing ramp that exceeds the maximum gradient permissible within the circulation space of a doorway, being 1:40. A circulation space complying with Figure 32(d) of AS 1428.1-2009 (see below) must be provided to the inside of the doorway. Note the 'L' dimension is obstructed by the existing ramp, and the 'WL' dimension is obstructed from the proposed handrail. <div><table><tr><th>Dimension D</th><th>Dimension L</th><th>Dimension WH</th><th>Dimension WL</th></tr><tr><td>850</td><td>1450</td><td>0</td><td>530</td></tr><tr><td>900</td><td>1450</td><td>0</td><td>530</td></tr><tr><td>950</td><td>1450</td><td>0</td><td>530</td></tr><tr><td>1000</td><td>1450</td><td>0</td><td>530</td></tr></table><p>(d) Front approach</p></div> <ul style="list-style-type: none">Architect to ensure circulation space is provided on the outside of the proposed sliding doors, in accordance with Figure 32(c) of AS 1428.1-2009.There is a change in level at the door externally and a level accessway is required.	Dimension D	Dimension L	Dimension WH	Dimension WL	850	1450	0	530	900	1450	0	530	950	1450	0	530	1000	1450	0	530
Dimension D	Dimension L	Dimension WH	Dimension WL																		
850	1450	0	530																		
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BCA Clause

Deemed-to-Satisfy Provision to be addressed



Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1280	660	660
900	1280	610	660
950	1280	560	660
1000	1280	510	660

(c) Either side approach

Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification. Or, these non-compliances are to be addressed via a performance solution from a suitably qualified access consultant.

2.0 INTRODUCTION

This report provides a Building Code of Australia (BCA) 2019 assessment of the extension of the tenancy by demolition of an existing service corridor and subsequent fit out works, alterations to the front façade including new shop signage, and minor alterations within the loading dock, to be located at 10-12 Howard Avenue, Dee Why.

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

2.1 Basis of Report

The key basis of this report is to address compliance with the Building Code of Australia (BCA) 2019. The scope of services is limited to Sections C – “Fire Resistance”, Section D – “Access & Egress”, Section E – “Services & Equipment”, Section F “Health and Amenity” and Section J “Energy Efficiency”

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

- Architectural plans prepared by Sophie Booth – Drawing Numbers:

Drawing Number	Revision	Dated	Drawing Title
S.001	A	10/06/19	GENERAL NOTES
D.010	B	10/06/19	EXISTING PLAN
D.020	A	10/06/19	DEMOLITION AND BUILDERS WORKS
D.030	A	10/06/19	OVERALL REFERENCE PLAN
D.100	B	10/06/19	GENERAL ARRANGEMENT PLAN
D.110	A	10/06/19	SETOUT AND PARTITION WALL
D.120	A	10/06/19	RCP
D.130	A	10/06/19	CO-ORD RCP
D.140	A	10/06/19	FINISHES PLAN – OPT A
D.141	A	10/06/19	FINISHES PLAN – OPT B
D.150	A	10/06/19	SERVICES PLAN
D.300	A	10/06/19	EXTERNAL ELEVATIONS
D.301	A	10/06/19	EXTERNAL ELEVATIONS
D.350	A	10/06/19	INTERNAL ELEVATIONS
D.351	A	10/06/19	INTERNAL ELEVATIONS
D.352	A	09/06/19	INTERNAL ELEVATIONS

- The Building Code of Australia 2019 prepared by the Australian Building Codes Board.
- The Guide to the BCA 2019, prepared by the Australian Building Codes Board.

2.2 Purpose of the Report

The purpose of this report is to assess the following:

- Assessment under the current Building Code of Australia 2019 and list any departures from the BCA 2019.
- Provide recommendations to address identified non-compliances, and/or identify potential alternative solutions

2.3 Limitations of the Report

This report does not assess the following:

- Access and facilities for people with disabilities is addressed however compliance with Disability Discrimination Act 1992 (DDA) is outside the scope of this report. It should be noted that BCA compliance does not necessarily meet the requirements of the Disability Discrimination Act (DDA).
- Reporting on hazardous materials, OH&S matters or site contamination
- Assessment of any structural elements or geotechnical matters relating to the building, including any structural or other assessment of the existing fire resistant levels of the building
- Consideration of any fire services operations (including hydraulic, electrical or other systems)
- Assessment of plumbing and drainage installations, including stormwater
- Assessment of mechanical plant operations, electrical systems or security systems
- Heritage significance
- Consideration of energy or water authority requirements
- Consideration of Council's local planning policies
- Environmental or planning issues
- Requirements of statutory authorities
- Pest inspection or assessment building damage caused by pests (general/visual pest invasion or damage will be reported, however invasive or intrusive inspections have not been carried out)
- Sections G, H or I of the BCA are not considered.
- Provision of any construction approvals or certification under Part 4A or Part 5 of the Environmental Planning & Assessment Act 1979.
- Glazing, shading, lighting calculations and the like required by Section J of the BCA not been carried out
- BCA 2019 does not directly specify slip-resistance classification(s) for all accessible paths of travel; however, we highlight the need under AS 1428.1-2009 for all accessible paths of travel to have a slip-resistant surface. We recommend you should seek surface finish advice from an independent specialist slip safety consultant.
- Fit out works being approved under the separate Complying Development Certificate.

3.0 BCA ASSESSMENT DATA

The following data is provided in respect to review of the building under the Building Code of Australia 2019 in respect to the compliance assessment of the extension of the tenancy by demolition of an existing service corridor and subsequent fit out works, alterations to the front façade including new shop signage, and minor alterations within the loading dock, to be located at 10-12 Howard Avenue, Dee Why.

BCA Building Classifications:	Class 6 – Restaurant
Building rise in storeys:	2 (determined in accordance with C1.2 of the BCA).
Type of Construction:	C (determined in accordance with C1.1 of the BCA)

3.1 Location of Fire Source features

The fire source features for the subject development are:

- The far boundary of Howard Avenue adjoining the allotment.

3.2 Summary of Fire Services Required

Summarised below are also the likely fire services required for the building:

- Fire hydrants are required to serve the building and be provided in accordance with BCA E1.3 and AS 2419.1-2005.
- An emergency lighting system must be installed throughout the tenancy in accordance with BCA E4.2 of the BCA and AS 2293.1-2005.
- Exit signs must be installed throughout the tenancy in accordance with BCA E4.5 and AS 2293.1-2005.

4.0 BCA ASSESSMENT SUMMARY

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

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
SECTION B STRUCTURE					
Part B1: Structural Provisions				X	<ul style="list-style-type: none"> Glazing must comply with AS1288-2006 and AS2047-2014. <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification (and structural details)</p>
SECTION C FIRE RESISTANCE					
Part C1 Fire Resistance & Stability					
C1.1 Type of Construction Required				X	<p>Refer to Spec C1.1 and Attachment B for Schedule of FRLs for Type C Construction. These are to be certified by the architect and structural engineer as having been met, based on the proposed design.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
C1.10 Fire Hazard Properties				X	<p>(a) The fire hazard properties of the following internal linings, materials and assemblies must comply with Specification C1.10 by way of test reports / certificates provided from a <i>registered testing authority</i> (within the meaning of the BCA):</p> <ul style="list-style-type: none"> (i) Floor linings and floor coverings. (ii) Wall linings and ceiling linings. (iii) Air-handling ductwork. (vii) Sarking type materials. (viii) Attachments to floors, ceilings, internal walls and the internal linings of external walls. (ix) Other materials including insulation materials other than sarking type materials. <p>(b) NSW: Paint or fire -retardant coatings must not be used in order to make a material comply with the required fire hazard property, except in respect to a material referred to in NSW Specifications C1.10, NSW Table 4 and to which Notes 4 and 5 are applicable.</p> <p>(c) The requirement s of (a) do not apply to a material or assembly if it is –</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(i) plaster, cement render, concrete, terrazzo, ceramic tile or the like; or</p> <p>(ii) a fire protective covering; or</p> <p>(i) a timber framed window; or</p> <p>(ii) a solid timber handrail or skirting; or</p> <p>(iii) a timber-faced door; or</p> <p>(iv) an electrical switch, socket-outlet, cover plate or the like; or</p> <p>(v) a material used –</p> <p>(A) a roof insulating material applied in continuous contact with a substrate; or</p> <p>(B) an adhesive; or</p> <p>(C) a damp-proof course, flashing, caulking, sealing, ground moisture barrier or the like; or</p> <p>(vi) a paint, varnish, lacquer or similar finish, other than nitro-cellulose lacquer; or</p> <p>(vii) a clear or translucent roof light of glass fibre-reinforced polyester if –</p> <p>(A) the roof in which is installed forms part of a single storey building required to be Type C construction; and</p> <p>(B) the material is used as part of the roof covering; and</p> <p>(C) it is no closer than 1.5m from another roof light of the same type; and</p> <p>(D) each roof light is not more than 14m² in area; and</p> <p>(E) the area of the roof lights per 70m² of roof surface is not more than 14m² in area; or</p> <p>(viii) a face plate or neck adaptor of supply and return air outlets of an air handling system; or</p> <p>(ix) a face plate or diffuser plate of light fitting and emergency exit signs and associated electrical wiring and electrical components; or</p> <p>(x) a joinery unit, cupboard, shelving or the like; or</p> <p>(xi) NSW: an attached non-building fixture and fitting such as –</p> <p>(A) A curtain, blind, or similar décor, other than-</p> <p>(aa) a proscenium curtain required by Specification H1.3; or</p> <p>(B) A whiteboard, window treatment or the like; or</p> <p>(xii) Any other material that does not significantly increase the hazards of the fire.</p>

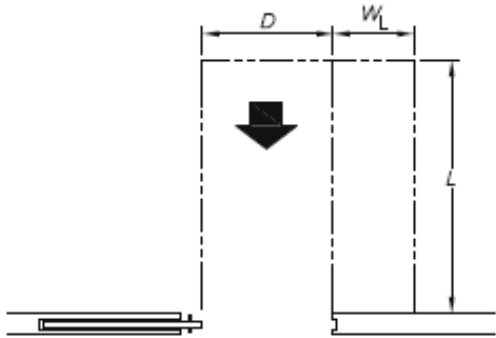
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
Part C3					
Protection of Openings					
C3.2 Protection of openings in external walls	X				<p>Openings in an external wall that is required to have an FRL must be protected in accordance with C3.4:</p> <ul style="list-style-type: none"> (i) if the distance between the opening and the fire-source feature is less than 3 m from a side or rear boundary; or (ii) less than 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) less than 6 m from another building on the allotment that is not Class 10; and <p>Compliance commentary AED notes that the far boundary of the road is more than 3 m from the front façade of the subject tenancy and protection of openings is not required in accordance with this part.</p>
C3.12 Openings in floors and ceilings for services				X	<p>Where services pass through a floor which is required to achieve a FRL or a ceiling required to have a RISF, the service must be enclosed within a fire resisting shaft or fire protected in accordance with Clause C3.15.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
C3.15 Openings for Service Installations				X	<p>Where services pass through an element which is required to achieve a FRL (other than an external wall or roof), the service must be fire stopped by a tested system or Specification C3.15.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
SECTION D					
ACCESS & EGRESS					
Part D1					
Provision for Escape					
D1.2 Number of Exits required	X				(a) All buildings — Every building must have at least one exit from each storey.

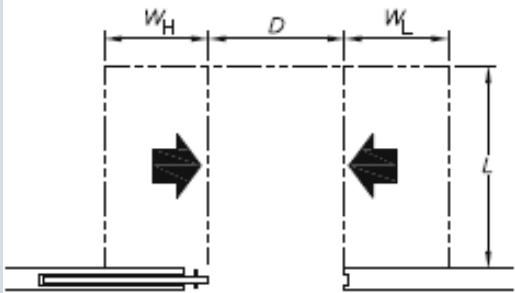
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(g) Access to exits — Without passing through another sole-occupancy unit every occupant of a storey or part of a storey must have access to—</p> <ul style="list-style-type: none"> (i) an exit; or (ii) at least 2 exits, if 2 or more exits are required. <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
<p>D1.4</p> <p>Exit Travel Distances</p>	X				<p>(c) Class 6 buildings —</p> <ul style="list-style-type: none"> (i) no point on a floor must be more than 20 m from an exit, or a point from which travel in different directions to 2 exits is available, in which case the maximum distance to one of those exits must not exceed 40 m; and (ii) in a Class 5 or 6 building, the distance to a single exit serving a storey at the level of access to a road or open space may be increased to 30 m. <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
<p>D1.6</p> <p>Dimensions of Exits and paths of Travel to Exits</p>	X				<p>In a required exit or path of travel to an exit—</p> <ul style="list-style-type: none"> (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 exit or path of travel to an exit, except for doorways, must be not less than— (i) 1 m <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
<p>Part D2</p> <p>Construction of Exits</p>					
<p>D2.3</p> <p>Non-fire Isolated stairways and ramps</p>				X	<p>In a building having a rise in storeys of more than 2, required stairs and ramps (including any landings and any supporting building elements) which are not required to be within a fire resisting shaft, must be constructed according to D2.2, or only of -</p> <ul style="list-style-type: none"> (a) reinforced or prestressed concrete; or (b) steel in no part less than 6 mm thick; or (c) timber that— (i) has a finished thickness of not less than 44 mm; and (ii) has an average density of not less than 800 kg/m³ at a moisture content of 12%; and

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(iii) has not been joined by means of glue unless it has been laminated and glued with resorcinol formaldehyde or resorcinol phenol formaldehyde glue".</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
<p>D2.7</p> <p>Installations in Exits and Paths of Travel</p>				X	<p>Services or equipment comprising of electricity meters, distribution boards, telecommunications distribution boards or equipment, electrical motors or other motors located within the path of travel to an exit must be enclosed with non-combustible construction or a fire protective covering with doorways suitably sealed against smoke spread from the enclosure.</p> <p><u>Compliance commentary</u></p> <p>The new doorway to the existing 'electrical switches cupboard' in the 'loading dock' area, must comply with this part.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
<p>D2.13</p> <p>Goings & Risers</p>				X	<p>Stairways to achieve compliance with this clause relevant to going and riser dimensions.</p> <p>Stairways to achieve constant risers & goings except where minor variations are permitted over flight as detailed in the clause.</p> <p>Treads must have a surface with a slip-resistant classification not less than that listed in Table D2.14 when tested in accordance with AS 4586-2013 <i>Slip resistance classification of new pedestrian surface materials</i>.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
<p>D2.14</p> <p>Landings</p>				X	<p>The landing or strip edge must have a slip-resistant classification not less than that listed in Table D2.14 when tested in accordance with AS 4586-2013 <i>Slip resistance classification of new pedestrian surface materials</i>.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
<p>D2.15</p> <p>Thresholds</p>		X			<p>The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaves unless the doorway is in a building required to be accessible by Part D3, and in which case the doorway opens to a road or open space and is provided with a threshold ramp or step ramp in accordance with AS 1428.1.</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p><u>Compliance commentary</u></p> <p>There is an existing step and ramp on either side, within the threshold of the proposed sliding doors at the front entry. Design to be compliant at CC stage or seek a performance solution be obtained from a suitably qualified BCA consultant to address this non-compliance.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
D2.17 Handrails				X	<p>All stairways and ramps must be provided with a handrail to at least one side of a ramp or flight per this clause.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</i></p>
D2.19 Doorways & Doors				X	<p>(a) A doorway serving as a required exit or forming part of a required exit—</p> <p>(i) Must not be fitted with a sliding door unless—</p> <p>(A) The door is able to opened manually under a force of not more than 110 N.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</i></p>
D2.20 Swinging Doors				X	<p>A swinging door in a required exit or forming part of a required exit—</p> <p>(a) Must swing in the direction of egress unless—</p> <p>(i) It serves a building part with a floor area not more than 200m², it is the only required exit from the building part and it is fitted with a device for holding it in the open position; or</p> <p>(ii) It serves a sanitary compartment or airlock (in which case it may swing in either direction; and</p> <p>(iii) Must not otherwise impede the path or direction of egress.</p> <p><u>Compliance commentary</u></p> <p>The proposed exit swinging door in the 'loading dock' area, must swing in the direction of egress. The plans should be redesigned to allow for this whilst noting that the doorway must not swing over the public footpath. The client has advised that a performance solution will be obtained from a suitably qualified fire engineer at CC stage to justify the doorway swinging towards the direction of egress.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</i></p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
<p>D2.21</p> <p>Operation of Latch</p>				X	<p>(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—</p> <p>(i) A single hand downward action or pushing action on a single device which is located between 900mm and 1.1 m from the floor and if serving an area required to be accessible by Part D3—</p> <p>(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</p> <p>(B) have a clearance between the handle and the back plate or door face at the center grip section of the handle of not less than 35mm and not more than 45mm; or</p> <p>(ii) a single hand pushing action on a single device which is located between 900mm and 1.2m from the door; and</p> <p>(iii) where the latch operation device referred to in (ii) is not located on the door leaf itself –</p> <p>(b) The requirements of (a) do not apply to a door that—</p> <p>(i) Serves a sanitary compartment, or the like; or</p> <p>(ii) Serves only, or is within—</p> <p>(A) A space which is otherwise inaccessible to persons at all times when the door is locked</p> <p><u>Compliance commentary</u></p> <p><u>Option A</u> – the sliding exit doorway serving the restaurant and the swinging exit doorway serving the 'loading dock' area must be fitted with door hardware complying with D2.21(a).</p> <p><u>Option B</u> – If the area will be inaccessible to persons at all times when the door is locked, compliance with D2.21(a) is not required, in accordance with D2.21(b)(ii)(D).</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
<p>Part D3</p> <p>Access for People with Disabilities</p>					
<p>D3.1</p> <p>General building access requirements</p>		X			<p>Information clause relevant to the extent of disabled access required depending upon the building classification, and the features required by AS 1428.1-2009 to ensure such buildings or parts are accessible.</p> <p>All doors that are required for disabled access are to be a minimum of 850mm clear width.</p> <p><u>Compliance commentary</u></p>

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					<p>The proposed sliding doors to the front entry must be provided with compliant circulation space in accordance with AS 1428.1-2009.</p> <ul style="list-style-type: none">The inside of the proposed sliding door contains an existing ramp that exceeds the maximum gradient permissible within the circulation space of a doorway, being 1:40. A circulation space complying with Figure 32(d) of AS 1428.1-2009 (see below) must be provided to the inside of the doorway. Note the 'L' dimension is obstructed by the existing ramp, and the 'WL' dimension is obstructed from the proposed handrail. <div><table><thead><tr><th>Dimension D</th><th>Dimension L</th><th>Dimension WH</th><th>Dimension WL</th></tr></thead><tbody><tr><td>850</td><td>1450</td><td>0</td><td>530</td></tr><tr><td>900</td><td>1450</td><td>0</td><td>530</td></tr><tr><td>950</td><td>1450</td><td>0</td><td>530</td></tr><tr><td>1000</td><td>1450</td><td>0</td><td>530</td></tr></tbody></table><p>(d) Front approach</p></div> <ul style="list-style-type: none">Architect to ensure circulation space is provided on the outside of the proposed sliding doors, in accordance with Figure 32(c) of AS 1428.1-2009.There is a change in level at the door externally and a level accessway is required.	Dimension D	Dimension L	Dimension WH	Dimension WL	850	1450	0	530	900	1450	0	530	950	1450	0	530	1000	1450	0	530
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1000	1450	0	530																						

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS																				
					<div><table data-bbox="845 649 1361 851"><thead><tr><th>Dimension D</th><th>Dimension L</th><th>Dimension WH</th><th>Dimension WL</th></tr></thead><tbody><tr><td>850</td><td>1280</td><td>660</td><td>660</td></tr><tr><td>900</td><td>1280</td><td>610</td><td>660</td></tr><tr><td>950</td><td>1280</td><td>560</td><td>660</td></tr><tr><td>1000</td><td>1280</td><td>510</td><td>660</td></tr></tbody></table><p>(c) Either side approach</p></div> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification. Or, these non-compliances are to be addressed via a performance solution from a suitably qualified access consultant.</p>	Dimension D	Dimension L	Dimension WH	Dimension WL	850	1280	660	660	900	1280	610	660	950	1280	560	660	1000	1280	510	660
Dimension D	Dimension L	Dimension WH	Dimension WL																						
850	1280	660	660																						
900	1280	610	660																						
950	1280	560	660																						
1000	1280	510	660																						
D3.3 Parts of the building required to be accessible				X	<p>In a building required to be accessible—</p> <p>(c) accessways must have—</p> <ul style="list-style-type: none">(i) passing spaces complying with AS 1428.1 at maximum 20 m intervals on those parts of an accessway where a direct line of sight is not available; and(ii) turning spaces complying with AS 1428.1—<ul style="list-style-type: none">(A) within 2 m of the end of accessways where it is not possible to continue travelling along the accessway; and(B) at maximum 20 m intervals along the accessway; and <p>BCA 2019 does not directly specify slip-resistance classification(s) for all <i>accessible paths of travel</i>; however, we highlight the need under AS 1428.1-2009 for all <i>accessible paths of travel</i> to have a slip-resistant surface. We recommend you should seek surface finish advice from an independent specialist slip safety consultant.</p> <p><u>Compliance commentary</u></p> <p>The new ‘loading dock’ stair will need to be provided with handrails complying with Section 11.2 of AS 1428.1-2009.</p>																				

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</i>
D3.4 Exemptions			X		<p>Clause relevant to parts of buildings that are not required to be accessible.</p> <p><u>Compliance commentary</u></p> <p>The 'loading dock' area and behind the counter in the restaurant are considered exempt from being accessible in accordance with D3.4, on the basis that these are areas where access would be inappropriate because of the particular purpose for which the area is used.</p>
D3.6 Signage				X	<p>Clause relevant to the provision of braille and tactile signage complying with Specification D3.6 to identify:</p> <ul style="list-style-type: none"> (i) sanitary facilities; and (ii) each door required by Clause E4.5 to be provided with an exit sign, inclusive of the requirement to state "EXIT" and "Level" followed by the floor level number on such doors. <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
D3.8 Tactile indicators				X	<p>Clause relevant to the provision of tactile ground surfaced indicators complying with AS/NZS 1428.4.1-2009 to:</p> <ul style="list-style-type: none"> (iii) a stairway, other than a fire-isolated stairway; and (iv) a ramp, other than a fire-isolated ramp, step ramp, kerb ramp, or swimming pool ramp; and (v) warn of overhead obstructions; and (vi) warn of an accessway that intersects with a vehicular way adjacent to any pedestrian entrance to a building. <p><u>Compliance commentary</u></p> <p>The TGSI's to the proposed stairway in the 'loading dock' must be installed at the top and bottom of the stairway in accordance with AS 1428.4.1-2009.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
D3.12 Glazing on an accessway				X	<p>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.</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
SECTION E SERVICES & EQUIPMENT					
Part E1 Fire Fighting Equipment					
E1.3 Fire Hydrants				X	A hydraulic engineer must be engaged to assess the existing coverage. <i>Hydraulic Services Design Certification and associated plans must be incorporated into the construction certificate specification</i>
E1.4 Fire Hose Reels	X				<u>Compliance commentary</u> The existing fire hose reel provides compliant coverage to the new layout of the tenancy.
E1.6 Portable Fire Extinguishers				X	(a) Portable fire extinguishers must be – (i) Provided as listed in Table E1.6; <u>Compliance commentary</u> Portable Fire Extinguishers must be provided to the kitchen area in accordance with AS 2444-2001. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
Part E4 Visibility in an Emergency, Exit signs and Warning Systems					
E4.2 Emergency Lighting Requirements				X	Emergency lighting must be provided throughout the building relevant to the requirements of this clause. <i>Electrical Design Certification must be incorporated into the construction certificate specification</i>
E4.4 Design and Operation of Emergency Lighting				X	The emergency lighting system must comply with AS/NZS 2293.1-2005. <i>Electrical Design Certification must be incorporated into the construction certificate specification</i>
E4.5 Exit Signs				X	Exit signs must be provided to doors serving as or forming part of a required throughout the buildings in accordance with AS/NZS 2293.1-2005. <i>Electrical design plans and certification must be incorporated into the construction certificate specification</i>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
E4.6 Direction Signs (inclusive of NSW E4.6)				X	If an exit is not readily apparent to persons occupying or visiting the building, then directional exit signs must be installed in appropriate positions. <i>Electrical Design Certification must be incorporated into the construction certificate specification and directional exit sign locations must be illustrated on the architectural floor plans</i>
E4.8 Design & Operation of Exit Signs				X	Exit signs must comply with: (i) AS/NZS 2293.1-2005; or (ii) For a photoluminescent exit sign, Specification E4.8. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
SECTION F					
HEALTH & AMENITY					
Part F1 Damp & Weatherproofing					
F1.6 Sarking				X	Sarking-type materials used for weatherproofing must comply with AS/NZS 4200.1 and AS 4200.2. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
F1.7 Waterproofing of wet area				X	Wet areas must be waterproofed in accordance with AS 3740-2010 and F1.7 & Table F1.7 of the BCA. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
F1.13 Glazed Assemblies				X	Information clause relevant to the provision of glazed assemblies within external walls in accordance with AS 2047-2014. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
Part F2 Sanitary & Other Facilities					
F2.3 Facilities for Class 3 to 9 Buildings	X				(d) Employees and the public may share the same facilities in a Class 6 provided the number of facilities provided is not less than the total number of facilities required for employees plus those required for the public. (e) Adequate means of disposal of sanitary towels must be provided in sanitary facilities for use by females.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p><u>Compliance commentary</u></p> <p>There is an existing staff unisex sanitary facility in the back of house 'BOH' area shown on plan, and an accessible unisex facility in the restaurant for shared use by the patrons and staff in accordance with F2.3(d).</p>
Part F3 Room Sizes					
F3.1 Height of Rooms and other spaces				X	<p>The ceiling height must be not less than—</p> <p>(b) in a Class 5, 6, 7 or 8 building—</p> <p>(i) except as allowed in (ii) and (f) — 2.4 m; and</p> <p>(ii) a corridor, passageway, or the like — 2.1 m; and</p> <p>(f) In any building—</p> <p>(iii) above a stairway, ramp, landing or the like — 2 m measured vertically above the nosing line of stairway treads or the floor surface of the ramp, landing or the like.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
Part F4 Light & Ventilation					
F4.4 Artificial lighting				X	<p>Clause relevant to the provision of artificial lighting in accordance with AS/NZS 1680.0-2009 to specific building areas.</p> <p><i>Electrical Design Certification must be incorporated into the construction certificate specification</i></p>
F4.5 Ventilation of Rooms				X	<p>All rooms to be provided with Clause F4.6 compliant natural ventilation OR a mechanical ventilation or air-conditioning system complying with AS 1668.2-2012.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
F4.6 Natural Ventilation			X		<p>(a) Natural ventilation provided in accordance with F4.5(a) must consist of permanent openings, windows, doors or other devices which can be opened—</p> <p>(i) with ventilating area not less than 5% of the floor area of the room required to be ventilated; and</p> <p>(ii) open to—</p> <p>(A) a suitably sized court, or space open to the sky; or</p> <p>(B) an open verandah, carport, or the like; or</p> <p>(C) an adjoining room in accordance with F4.7.</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
SECTION J					
ENERGY EFFICIENCY					
NSW SECTION J					
ENERGY EFFICIENCY					
NSW SUBSECTION J(B) ENERGY EFFICIENCY - CLASS 3 AND CLASS 5-9 BUILDINGS					
NSW J(B) 1 Compliance with BCA Provisions				X	Class 3 and Class 5 to 9 buildings must comply with all of the provisions of the National Section J, except as varied by NSW J3.1 (as referenced below).
NSW J3.1 Application of Part			X		Add the following sub-clause to the National Section J provisions of Clause J3.1: (iii) J3.1(d) – “parts of buildings that cannot be fully enclosed”
SECTION J - NATIONAL ENERGY EFFICIENCY PROVISIONS					
Part J1: Building Fabric					
J1.1 Application of Part				X	The DTS Provisions of this Part apply to building elements forming the envelope of Class 2 to 9 buildings.
J1.2 Thermal construction –general				X	Where required, insulation must be provided as per AS/NZS 4859.1-2002 and installed as per this clause. Details demonstrating compliance with this clause must be incorporated into the construction certificate specification
J1.5 Walls				X	Each part of a wall that is part of the envelope must satisfy one of the thermal performance options in Table J1.5, noting the specific exceptions of this clause relevant to doors, vents, penetrations, shutters, glazing, and an earth retaining wall or earth berm, in other than climate zone 8. Details demonstrating compliance with this clause must be incorporated into the construction certificate specification
Part J2: Glazing					
J2.1 Application of Part				X	The DTS Provisions of this Part apply to building elements forming the envelope of Class 2 to 9 buildings, other than a sole occupancy unit of a class 2 building or Class 4 part of a building.
J2.4 Glazing				X	The glazing in each storey, including any mezzanine, must be assessed separately in accordance with the requirements of this clause, for:

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(iv) Glazing in the external fabric facing each orientation; and (v) Glazing in the internal fabric, to ensure that the aggregate air-conditioning energy value attributable to the glazing does not exceed the allowance obtained by multiplying the façade area that is exposed to the conditioned space for the orientation by the energy index in Table J2.4a. Glazing calculations demonstrating compliance with this clause must be incorporated into the specification
J2.5 Shading				X	Where required to comply with J2.4, shading must be provided in accordance with this clause. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Part J3: Building Sealing					
J3.1 Application of Part				X	The requirements of this Part apply to elements forming the envelope of Class 2 to 9 buildings, other than: <ul style="list-style-type: none"> ➤ A building in a climate zones 1, 2, 3 and 5 where the only means of air-conditioning is by using an evaporative cooler; ➤ A permanent building opening necessary for the safe operation of a gas appliance; ➤ A building or part where mechanical ventilation required by Part F4 provides sufficient pressurization to prevent infiltration; ➤ Parts of buildings that cannot be fully enclosed.
J3.4 Window and doors				X	Seals to restrict air infiltration to windows and doors must be provided as required (note exceptions listed in J3.4 (b), and requirements for sealing of main entrance in J3.4 (d)). Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
J3.6 Construction of roofs, walls and floors				X	Roofs, ceilings, walls, floors and any openings such as a window frame, door frame, light frame or the like must be sealed in accordance with the requirements of this clause to minimise air leakage. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Part J5: Air-conditioning and ventilation systems					
J5.2				X	An air-conditioning unit or system must comply with J5.2(a) to J5.2(g).

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Air-conditioning systems					<i>Mechanical Design certification must be submitted in support of the construction certificate application</i>
J5.3 Mechanical ventilation systems				X	Mechanical ventilation systems must comply with J5.3(a) to J5.3(c). <i>Mechanical Design certification must be submitted in support of the construction certificate application</i>
Part J6: Artificial lighting and power					
J6.2 Artificial lighting				X	Artificial lighting must comply with J6.2(a), J6.2(b) and J6.2(c), relevant to maximum permitted illumination power loads. <i>Electrical Design certification must be submitted in support of the construction certificate application</i>
J6.3 Interior artificial lighting and power control				X	Internal artificial lighting systems must be switched and zoned in accordance with the specific requirements of this clause. <i>Electrical Design certification must be submitted in support of the construction certificate application</i>
J6.4 Interior decorative and display lighting				X	Interior decorative and display lighting, such as for a foyer mural or art display, must be controlled separately from other artificial lighting, and be switched in accordance with the specific requirements of this clause. <i>Electrical Design certification must be submitted in support of the construction certificate application</i>
J6.5 Artificial lighting around the perimeter of a building				X	Artificial lighting around the perimeter of a building must be controlled by sensors or time switches in accordance with the specific requirements of this clause. Refer exclusions relevant to emergency lighting and lighting around detention centres. <i>Electrical Design certification must be submitted in support of the construction certificate application</i>

5.0 CONCLUSION

This report provides a Building Code of Australia (BCA) 2019 assessment of the extension of the tenancy by demolition of an existing service corridor and subsequent fit out works, alterations to the front façade including new shop signage, and minor alterations within the loading dock, to be located at 10-12 Howard Avenue, Dee Why.

The primary purpose of this report was to identify the non-compliance matters contained in the proposed design philosophy against the current Deemed-to-Satisfy (DTS) Provisions of the BCA and to provide compliance recommendations to overcome the DTS non-compliances.

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

Further, if compliance with the deemed-to-satisfy provisions is not achievable or desirable, Alternative Solutions could be further developed and verified by an appropriately qualified BCA Consultant or Fire Safety Engineer.

 <p>Edward Di Michiel <u>A3 Accredited Certifier</u> for AE&D</p>	 <p>Jason Storer <u>Director</u> for AE&D</p>
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6.0 ATTACHMENT A - INSPECTION & MAINTENANCE

6.1 Fire Safety Measures

The fire safety measures within the building must be maintained to ensure correct operation at all times the building is occupied. All firefighting equipment should be tagged when tested/inspected and log books kept up-to-date for all smoke detection, warning systems and sprinkler systems (where installed).

An annual fire safety certificate must be submitted to the local consent authority and the NSW Fire Brigade each year indicating satisfactory performance of the fire safety measures contained within the building. The annual fire safety statement should be displayed in a prominent place within the building (i.e. the main entry foyer)

The correct operation and maintenance of the buildings fire safety measures is critical in affording an adequate level of fire safety.

6.2 Good Housekeeping

The ongoing management of the building should ensure good housekeeping procedures. The following matters should be considered by building management:

- Ensure exits and paths of travel to exits remain unobstructed (in particular stairways)
- Avoid storage of materials in unoccupied areas
- Limit storage of flammable/combustible materials to designated and approved areas
- Prevent chocking open fire/smoke doors
- Prevent storage of materials that could hinder access to firefighting equipment

7.0 ATTACHMENT B – REQUIREMENTS TYPE C CONSTRUCTION

5.1 Fire-resistance of building elements

In a building *required* to be of Type C construction—

- (a) a building element listed in **Table 5** and any beam or column incorporated in it, must have an FRL not less than that listed in the Table for the particular Class of building concerned; and
- (b) an *external wall* that is *required* by **Table 5** to have an FRL need only be tested from the outside to satisfy the requirement; and
- (c) a *fire wall* or an *internal wall* bounding a *sole-occupancy unit* or separating adjoining units must comply with **Specification C1.8** if it is of *lightweight construction* and is *required* to have an FRL; and
- (d) in a Class 2 or 3 building, an *internal wall* which is *required* by **Table 5** to have an FRL must extend—
 - (i) to the underside of the floor next above if that floor has an FRL of at least 30/30/30 or a *fire-protective covering* on the underside of the floor; or
 - (ii) to the underside of a ceiling having a resistance to the incipient spread of fire to the space above itself of not less than 60 minutes; or
 - (iii) to the underside of the roof covering if it is non-combustible, and except for roof battens with dimensions of 75 mm x 50 mm or less or sarking-type material, must not be crossed by timber or other combustible building elements; or
 - (iv) 450 mm above the roof covering if it is combustible; and
- (e) in a Class 2 or 3 building, except where within the one sole-occupancy unit, or a Class 9a health-care building, or a Class 9b building, a floor separating storeys, or above a space for the accommodation of motor vehicles or used for storage or any other ancillary purpose, and any column supporting the floor, must—
 - (i) have an FRL of at least 30/30/30; or
 - (ii) have a fire-protective covering on the underside of the floor including beams incorporated in it and around the column, if the floor or column is combustible or of metal; and
- (f) in a Class 9c aged care building a floor above a space for the accommodation of motor vehicles or used for storage or any other ancillary purpose, and any column supporting the floor, must—
 - (i) have an FRL of at least 30/30/30; or
 - (ii) have a fire-protective covering on the underside of the floor including beams incorporated in it and around the column, if the floor or column is combustible or of metal.

Table 5 TYPE C CONSTRUCTION: FRL OF BUILDING ELEMENTS

Building element	Class of building—FRL: (in minutes)			
	<i>Structural adequacy/Integrity/Insulation</i>			
	2, 3 or 4 part	5, 7a or 9	6	7b or 8
EXTERNAL WALL (including any column and other building element incorporated therein) or other external building element, where the distance from any <i>fire-source feature</i> to which it is exposed is—				
Less than 1.5 m	90/ 90/ 90	90/ 90/ 90	90/ 90/ 90	90/ 90/ 90
1.5 to less than 3 m	—/—/—	60/ 60/ 60	60/ 60/ 60	60/ 60/ 60
3 m or more	—/—/—	—/—/—	—/—/—	—/—/—

EXTERNAL COLUMN not incorporated in an <i>external wall</i> , where the distance from any <i>fire-source feature</i> to which it is exposed is—				
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/ 90/ 90	90/ 90/ 90
INTERNAL WALLS-				
Bounding <i>public corridors</i> , public lobbies and the like—	60/ 60/ 60	-/-/-	-/-/-	-/-/-
Between or bounding <i>sole-occupancy units</i> —	60/ 60/ 60	-/-/-	-/-/-	-/-/-
Bounding a stair if <i>required</i> to be rated—	60/ 60/ 60	60/ 60/ 60	60/ 60/ 60	60/ 60/ 60
ROOFS	-/-/-	-/-/-	-/-/-	-/-/-

5.2 Carparks

(a) Notwithstanding Clause 5.1, a carpark may comply with Table 5.2 if it is an open-deck carpark or is protected with a sprinkler system complying with Specification E1.5 and is—

- (i) a separate building; or
- (ii) a part of a building, and if occupying only part of a storey, is separated from the remaining part by a fire wall.

(a) For the purposes of this clause, a carpark—

- (i) Includes-

(A) an administration area associated with the functioning of the carpark; and

(B) where the carpark is sprinklered, is associated with a Class 2 or 3 building and provides carparking for separate sole-occupancy units, each carparking area with an area not greater than 10% of its floor area for purposes ancillary to the sole-occupancy units; but

- (ii) excludes-

(A) except for (b)(i), any area of another classification, or other part of a Class 7 building not used for carparking; and

(B) a building or part of a building specifically intended for the parking of trucks, buses, vans and the like.

Table 5.2 REQUIREMENTS FOR CARPARKS

Building element	FRL (not less than) <i>Structural adequacy/Integrity/Insulation</i> ESA/M (not greater than)
Wall	
(a) <i>external wall</i>	
(i) less than 1.5 m from a <i>fire-source feature</i> to which it is exposed:	
<i>Loadbearing</i>	60/60/60
Non-loadbearing	—/60/60
(ii) 1.5 m or more from a <i>fire-source feature</i> to which it is exposed	—/—/—
(b) <i>internal wall</i>	—/—/—
(c) <i>fire wall</i>	
(i) from the direction used as a <i>carpark</i>	60/60/60
(ii) from the direction not used as a <i>carpark</i>	90/90/90
Column	
(a) steel column less than 1.5 m from a <i>fire-source feature</i>	60/—/— or 26 m ² /tonne
(b) any other column less than 1.5 m from a <i>fire-source feature</i>	60/—/—
(c) any other column not covered by (a) or (b)	—/—/—
Beam	
(a) less than 1.5 m from a <i>fire-source feature</i>	
(i) steel floor beam in continuous contact with a concrete floor slab	60/—/— or 30 m ² /tonne
(ii) any other beam	60/—/—
(b) 1.5 m or more from a <i>fire-source feature</i>	—/—/—
Roof, floor slab and vehicle ramp	—/—/—

Note: ESA/M means the ratio of exposed surface area to mass per unit length.