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BCA 2010 - INDICATIVE COMPLIANCE REPORT FOR DA ASSESSMENT

134 – 144 Pitt Street REDFERN NSW 2016

Prepared for: Kaymet Pty Ltd
Project No.: 10/0399-v1.1.av
Date: 10th January 2011
Status: Final v1.1



Table of Contents

1.0 INTRODUCTION	3
1.1 LOCATION AND DESCRIPTION	3
1.2 REPORT PURPOSE	3
1.3 BASIS OF REPORT	3
1.4 REFERENCED DOCUMENTS	3
1.5 LIMITATIONS AND EXCLUSIONS	4
1.6 LEGISLATIVE FRAMEWORK	5
1.7 TERMINOLOGY	6
2.0 BUILDING DESCRIPTION – PROPOSED DEVELOPMENT	8
2.1 BUILDING CODE OF AUSTRALIA DESCRIPTION	8
2.2 RISE IN STOREYS (CLAUSE C1.2)	8
2.3 BUILDING CLASSIFICATIONS (CLAUSE A3.2)	8
2.4 EFFECTIVE HEIGHT (CLAUSE A1.1)	8
2.5 TYPE OF CONSTRUCTION (TABLE C1.1)	8
2.6 FLOOR AREA AND VOLUME LIMITATIONS (TABLE C2.2)	8
3.0 BCA REQUIREMENTS	9
4.0 FIRE SAFETY SCHEDULE	30
4.1 PROPOSED FIRE SAFETY SCHEDULE	30
4.2 CERTIFICATION OF ESSENTIAL FIRE SAFETY MEASURES	31
5.0 CONCLUSION	32
APPENDIX A – FIRE RESISTANCE LEVELS	33
APPENDIX B – REFERENCED DOCUMENTATION	34

Document History

Date	Issue	Status	Prepared by	Reviewed by
09.07.10	Draft v0.1	Initial document created	Alastair Visch	Peter Antcliffe
13.07.10	Draft v0.2	Peer & client review comments	Alastair Visch	Peter Antcliffe
10.01.11	Final v1.1	Issued to client	Alastair Visch	Peter Antcliffe

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1.0 INTRODUCTION

1.1 Location and Description

This report is prepared for DA lodgement and assessment purposes and comprises a Building Code of Australia 2010 (BCA) assessment of the proposed new residential development at 134-144 Pitt Street, Redfern.

The proposal consists of a new multi-unit residential development comprising of four buildings that contain 159 units above two levels of basement carparking for 170 vehicles and public open space.

1.2 Report Purpose

The purpose of this report is to provide an indicative compliance assessment of the DA design documentation for the proposal, against the current requirements of the BCA.

Demonstrating compliance with the BCA is not a prescribed head of consideration under Section 79C of the Environmental Planning & Assessment Act 1979. It is noted however that Council has an obligation to consider whether the DA proposal, as lodged, is indicatively capable of complying with the BCA - without significant modification to those plans for which approval is sought.

This report will demonstrate that there will be no additional requirements, resulting from prescribed application of the BCA, for any significant design changes that would necessitate the submission of an application under Section 96 of the Environmental Planning and Assessment Act 1979.

As such, and to pre-empt the Certifying Authority's role under clause 145 of the Environmental Planning & Assessment Regulation 2000, we have undertaken a preliminary assessment of the proposed residential development at 134-144 Pitt Street, Redfern, against the provisions of the BCA.

1.3 Basis of Report

This report is based upon and limited to:

- An assessment of design documentation referenced in Appendix B of this report.
- The Deemed-to-Satisfy provisions of the Building Code of Australia 2010 including the NSW variations where applicable.

1.4 Referenced Documents

The following documentation was relied upon when preparing this report:

- Assessment of design documentation referenced in Appendix B of this report.
- The performance and deemed-to-satisfy provisions of the Building Code of Australia 2010 incorporating the NSW Appendices where applicable.



- Guide to the Building Code of Australia.
- Environmental Planning & Assessment Act 1979.
- Environmental Planning & Assessment Regulation 2000.

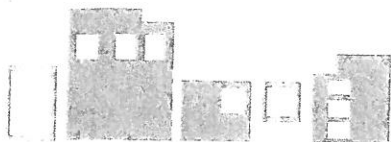
1.5 Limitations and Exclusions

The limitations and exclusions of this report are as follows:

- The plans are assessed indicatively to the extent necessary to proceed to construction certificate stage whereby assessment will be undertaken pursuant to Part 4A of the Environmental Planning and Assessment Act 1979. This means that the design has been assessed to be able to comply with the BCA (i.e. the submitted plans are consistent with the BCA but certain design details may not be specified at this stage due to the plans and specifications being at DA stage).
- Details in regard to access for people with disabilities have been assessed to the extent of the deemed-to-satisfy provisions of the BCA only. An assessment against AS 1428.1 is outside the scope of this report. A detailed report prepared by a suitably qualified access consultant will need to be prepared to verify compliance with AS 1428 prior to the issue of a construction certificate.

Please note that whilst the BCA specifies a minimum standard of compliance with AS1428.1 and Part D3 of the BCA for access and facilities for people with disabilities, compliance with such requirements may not necessarily preclude the possibility of a future complaint made under the Disability Discrimination Act 1992 (DDA). The DDA is a complaint based legislation and is presently not identified by the State Building Codes and Regulations. In this regard the client should be satisfied that their obligations under the DDA have been addressed

- This Report does not address issues in relation to the following:
 - a) The structural adequacy of the building including the Fire Resistance Levels (FRL's) of any building elements (unless specifically referred to).
 - b) The design, maintenance or operation electrical, mechanical, hydraulic or fire protection services.
 - c) Environmental Planning and Assessment Act and Regulations (unless specifically referred to).
 - d) Local Government Act and Regulations.
 - e) Occupational Health and Safety Act and Regulations.
 - f) WorkCover Authority requirements.
 - g) Requirements of other Regulatory Authorities including, but not limited to, Telstra, Sydney Water, Electricity Supply Authority, RTA, Council and the like.
 - h) Disability Discrimination Act.
 - i) Construction Safety Act.
 - j) Conditions of Development Consent issued by the relevant Local Council.
- This assessment does not incorporate the detailed requirements of the Australian Standards.



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1.6 Legislative Framework

Section 79C of the Environmental Planning and Assessment Act provides the matters of consideration that the consent authority must take into account in the determination of a development application.

Once development consent is granted, and pursuant to Clause 145 of the Environmental Planning and Assessment Regulations 2000, a certifying authority must not issue a construction certificate for building work unless:

- (a1) *the plans and specifications for the building include such matters as each relevant BASIX certificate requires, and*
- (a) *the design and construction of the building (as depicted in the plans and specifications and as described in any other information furnished to the certifying authority under clause 140) are not inconsistent with the development consent, and*
- (b) *the proposed building (not being a temporary building) will comply with the relevant requirements of the Building Code of Australia (as in force at the time the application for the construction certificate was made).*

Compliance with the Building Code of Australia

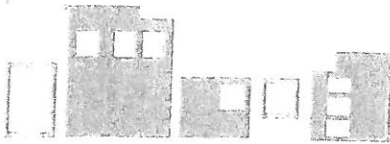
The BCA is a performance based document whereby compliance can be achieved by satisfying the deemed to satisfy requirements or by formulating an alternative solution to address the relevant performance requirements.

As indicated above, the requirements of the Environmental Planning and Assessment Regulations 2000 requires all new building works to comply with the relevant requirements of the BCA (as in force at the time the application for the construction certificate was made).

This means that the plans and documentation submitted with the *construction certificate* application must demonstrate full compliance with the relevant provisions of the Building Code of Australia.

Fulfilment of BASIX Commitments

Clause 154A of the Environmental Planning and Assessment Regulations 2000 requires a certifying authority to monitor fulfilment of any commitments listed on the BASIX certificate, where the BASIX requires the certifying authority to monitor those commitments.



A certifying authority must not issue an occupation certificate (whether interim or final) for any building resulting from, or any building that becomes a BASIX affected building because of, BASIX affected development or BASIX optional development to which this clause applies, or for any part of such a building, unless each of the commitments whose fulfilment it is required to monitor in relation to the building or part has been fulfilled.

For the purpose of satisfying itself as to the fulfilment of any such commitment, a certifying authority may rely on the advice of any properly qualified person (i.e. Energy Efficiency Consultant).

Special Requirements for Residential Flat Developments

Clause 143A of the Environmental Planning and Assessment Regulations 2000 requires a qualified designer to provide a statement that verifies that the plans and specifications that form part of construction certificate application achieve or improve the design quality of the development having regard to the design quality principles set out in Part 2 of the State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development prior to the issue of a Construction Certificate.

Clause 154A of the Environmental Planning and Assessment Regulations 2000 requires a qualified designer to provide a statement that verifies that the residential flat development achieves the design quality of the development as shown in the plans and specifications having regard to the design quality principles set out in Part 2 of the State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development prior to the issue of an Occupation Certificate.

1.7 Terminology

- *Building Code of Australia* - Document published on behalf of the Australian Building Codes Board. The BCA is a uniform set of technical provisions for the design and construction of buildings and other structures throughout Australia and is adopted in NSW under the provisions of the Environmental Planning & Assessment Act & Regulation.
- *Fire Resistance Level (FRL)* - means the grading periods in minutes for the following criteria -
 - (a) structural adequacy; and
 - (b) integrity; and
 - (c) insulation,and expressed in that order.
- *Fire Source Feature (FSF)* - the far boundary of a road adjoining the allotment; or a side or rear boundary of the allotment; or an external wall of another building on the allotment which is not a Class 10 building.
- *Open space* - means a space on the allotment, or a roof or other part of the building suitably protected from fire, open to the sky and connected directly with a public road.
- *Performance Requirements of the BCA* - A Building Solution will comply with the BCA if it satisfies the Performance Requirements. A Performance requirement states the level of performance that a Building Solution must achieve.

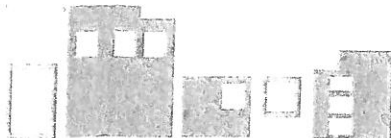


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Compliance with the Performance Requirements can only be achieved by-

- (a) complying with the Deemed-to-Satisfy Provisions; or
- (b) formulating an Alternative Solution which-
 - (i) complies with the Performance Requirements; or
 - (ii) is shown to be at least equivalent to the Deemed-to-Satisfy Provisions; or
- (c) a combination of (a) and (b).

- *Sole occupancy unit* - means a room or other part of a building for occupation by one or joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier.



2.0 BUILDING DESCRIPTION – PROPOSED DEVELOPMENT

2.1 Building Code of Australia Description

For the purposes of the Building Code of Australia 2010 (BCA) the proposed development may be described as follows.

2.2 Rise in Storeys (Clause C1.2)

The overall building has a rise in storeys of seven (7).

2.3 Building Classifications (Clause A3.2)

The proposed building has been classified as follows.

BUILDING LEVELS	CLASSIFICATION	USE
Basement Levels	Class 7a	Carpark
Lower Ground to Level 5	Class 2	Residential Flat Building

2.4 Effective Height (Clause A1.1)

The building has an effective height of less than 25 metres.

2.5 Type of Construction (Table C1.1)

The building is required to be of 'Type A' Construction.

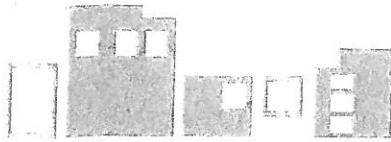
2.6 Floor Area and Volume Limitations (Table C2.2)

The building is subject to maximum floor area and volume limits under Type A Construction of:

▪ Proposed Class 7a	-	Maximum Floor Area	5,000m ²
		Maximum Volume	30,000 m ³

Provision of sprinklers in the carpark allow for compartment sizes greater than above.

The Class 2 portions of the building are not subject to any floor area and volume limitations of C2.2 of the BCA. Table 3 of Specification C1.1 and C3.11 of the BCA regulate compartmentation and separation provisions applicable to Class 2 buildings or building portions.



3.0 BCA REQUIREMENTS

Noting that the level of documentation at this stage is for Development Application assessment purposes, an indicative compliance assessment of the referenced documents identified in Appendix B of this report has been undertaken against the Deemed-to-Satisfy Provisions of the Building Code of Australia 2010 (BCA).

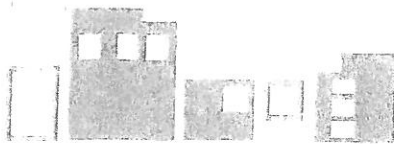
Outlined below is a summary of the Deemed-to-Satisfy Provisions of the BCA. All Deemed-to-Satisfy clauses that are applicable to the subject building have been referred to below, including a comment adjacent to each clause of the proposal's ability to satisfy each respective clause.

It must be noted that compliance with the Deemed to Satisfy Provisions is not mandatory where an alternative solution is formulated in accordance with BCA requirements.

The abbreviations outlined below have been used in the following tables:

N/A	The Deemed-to-Satisfy clause does not apply to the subject Building.
Complies	The relevant provisions of the Deemed-to-Satisfy clause have been demonstrated by the proposed design and existing building features, notwithstanding it is at DA documentation stage.
CRA	'Compliance Readily Achievable'. It is considered that the level of detail included in the DA documentation will not determine strict compliance with the individual BCA clause requirements. However, subject to noting the requirements of each clause, it is considered BCA compliance can be readily demonstrated without significant implication to the approved design. This will occur through progression of documentation at the Construction Certificate stage of the development.
FI	Further information is necessary to determine the compliance potential of the building design.
AS	Alternative Solution with respect to a non-compliance with the Deemed-to-Satisfy Provision can be considered to satisfy the relevant BCA Performance Requirements
DNC	Does Not Comply with Deemed-to-Satisfy Clause.
DTS	Deemed-To-Satisfy provisions as defined by the Building Code of Australia 2010.

SECTION B – STRUCTURE			
Part B1 – Structural Provisions			
Clause	Description	Status	Comments
B1.1	Resistance to actions	CRA	The resistance of a building or structure must be greater than the most critical action effect resulting from different combinations of actions Structural details and a design certificate will be obtained from a qualified structural engineer prior to the issue of a Construction Certificate
B1.2	Determination of	CRA	The magnitude of individual actions must be

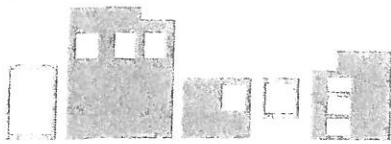


	individual actions		determined in accordance with Clause B1.2 of the BCA Structural details and a design certificate will be obtained from a qualified structural engineer prior to the issue of a Construction Certificate.
B1.3	-	-	No provisions
B1.4	Determination of structural resistance of materials and forms of construction	CRA	The structural resistance of materials and forms of construction must be determined in accordance with the relevant Australian Standards in accordance with Clause B1.4 of the BCA. Structural details and a design certificate will be required by a qualified structural engineer prior to the issue of a Construction Certificate.

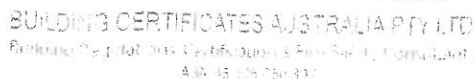
SECTION C – FIRE RESISTANCE

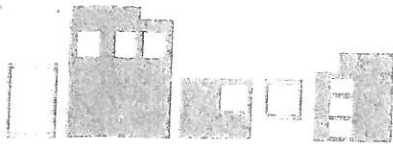
Part C1 – Fire Resistance and Stability

Clause	Description	Status	Comments
C1.1	Type of construction required	CRA	The building is to be erected in Type A fire resisting construction in accordance with Specification C1.1 of the BCA Refer to Appendix A for the relevant fire resisting requirements. Plans to reflect required FRLs prior to the issue of a Construction Certificate.
C1.2	Calculation of rise in storeys	Noted	The building has an overall rise in storeys of seven (7).
C1.3	Buildings of multiple classification	Noted	The building is required to be constructed of Type A fire resisting construction as the classification of the top storey is Class 2.
C1.4	Mixed types of Construction	N / A	If a fire wall divides the building in accordance with Clause C2.7, the building portions are able to be constructed in differing levels of fire-resistance determined in accordance with Clause C1.1 and C1.3.
C1.5	Two storey Class 2,3 or 9c buildings	N / A	
C1.6	Class 4 parts of buildings	N / A	
C1.7	Open spectator stands and indoor sports stadiums	N / A	
C1.8	Lightweight construction	CRA	Lightweight construction used in a wall system must comply with Specification C1.8 Lightweight construction used as a fire-resisting covering of a steel column or the like, and where the covering is not in continuous contact with the column must have the voids filled to a height of not less than 1.2m above the floor and where the column is liable to be damaged must be protected by steel or other suitable material If lightweight construction is used in the



			proposed development, then details demonstrating required FRL and compliance with this clause must be provided prior to the issue of a Construction Certificate.
C1.9	-	-	No provisions
C1.10	Fire hazard properties	CRA	The fire hazard properties of all floor materials, floor coverings, wall and ceiling lining materials must comply with Specification C1.10a. The fire hazard properties of all other materials must comply with Specification C1.10. Design certification will be required verifying compliance prior to the issue of a Construction Certificate.
C1.11	Performance of external walls in fire	N / A	Concrete external walls that could collapse as complete panels (e.g. tilt-up and pre-cast concrete), in a building having a rise in storeys of not more than 2, must comply with Specification C1.11.
C1.12	Non-combustible materials	Noted	Gypsum, metal and laminated non-combustible materials containing combustible components are deemed to be non-combustible.
Part C2 – Compartmentation and Separation			
C2.1	Application of Part	Noted	Clauses C2.2, C2.3 and C2.4 do not apply to a sprinkler protected carpark, open deck carpark or open spectator stand.
C2.2	General floor area limitations	N / A	Not applicable to Class 2 portion of building or Class 7a (carpark) portion provided with a sprinkler system.
C2.3	Large isolated buildings	N / A	
C2.4	Requirements for open spaces and vehicular access	N / A	
C2.5	Class 9a and 9c buildings	N / A	
C2.6	Vertical separation of Openings in external walls	CRA	In a building of Type A construction that is not sprinkler protected, a spandrel must be provided. The spandrel must be not less than 900mm in height, extended not less than 600mm above the upper surface of the intervening floor and be of non-combustible material having an FRL of not less than 60/60/60. Alternatively, a slab or other horizontal construction that projects outwards not less than 1100mm and extends 450mm beyond the opening and be of non-combustible material having an FRL of not less than 60/60/60. Details demonstrating compliance must be provided on plans, elevations and sections prior to the issue of a Construction Certificate.
C2.7	Separation by fire walls	N / A	
C2.8	Separation of classifications in the same storey	N / A	

Page 12 of 34



			than 120/120/120 and any doorways in that construction protected with a self-closing --/120/30 fire door. Details verifying compliance can be provided on plans prior to the issue of a Construction Certificate.
C2.14	Public corridors in Class 2 and 3 buildings	N / A	Public corridors must be divided at intervals of not more than 40m by smoke-proof walls complying with Clause 2 of Specification C2.5. There does not appear to be any corridors within the Class 2 portions that exceed 40m.
Part C3 – Protection of Openings			
C3.1	Application of Part	Noted	Concessions and definition of certain openings.
C3.2	Protection of openings in external walls	N / A	Openings less than 3m from a side or rear boundary or 6m from the far boundary of a road or 6m from another building must be protected, and such openings must not exceed 1/3 of wall area. There does not appear to be any openings that require protection.
C3.3	Separation of external walls and associated openings in different fire compartments	N / A	
C3.4	Acceptable method of protection	Noted	Window openings that are required to be protected are to be protected by wall wetting sprinklers with windows that are automatic closing or permanently fixed in the closed position, --/60/-- fire windows or --/60/60 automatic fire shutters. Other openings that required to be protected are to be protected by internal or external wall-wetting sprinklers or have construction with an FRL not less than --/60/--.
C3.5	Doorways in fire walls	N / A	
C3.6	Sliding fire doors	N / A	
C3.7	Protection of doorways in horizontal exits	N / A	
C3.8	Openings in fire isolated exits	CRA	--/60/30 self-closing fire doors are required to doorways providing access to fire isolated passageways and exits Details verifying compliance must be provided on plans prior to the issue of a Construction Certificate.
C3.9	Service penetrations in fire isolated exits	CRA	Fire-isolated exits must not be penetrated by any services other than electrical wiring for essential fire service installations, pressurisation ducts with an FRL of --/120/60, or water pipes for fire services are not permissible Due care to be taken by services consultants to ensure compliance.



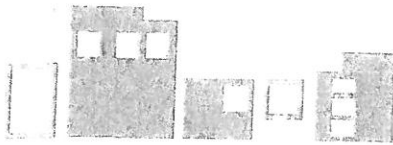
C3 10	Openings in fire isolated lift shafts	CRA	Openings in lift shafts are to be protected by -- /60/-- fire doors complying with AS1735 11. Lift indicator panels are to be backed by construction having an FRL of not less than -- /60/60 if it exceeds 35,000mm² (175mm X 200 mm) Details verifying compliance must be provided on plans prior to the issue of a Construction Certificate.
C3 11	Bounding construction, Class 2, 3, 4 and 9 buildings	CRA	Doorways which open into a public corridor, public lobby or the like are to have self-closing -- /60/30 fire doors fitted in accordance with AS 1905.1-1997. In this regard, all entrance doorways to residential SOUs and any other room which open onto the common corridor must comply with this clause. Details verifying compliance must be provided on plans prior to the issue of a Construction Certificate.
C3 12	Openings in floors for services	CRA	Services passing through floors are to be placed within fire resisting shafts or in accordance with Clause C3.15. Loadbearing shafts passing through the carparking portions are required to have an FRL not less than 120/90/90, and for non-loadbearing shafts an FRL not less than -- /90/90 Loadbearing shafts passing through the residential portion are required to have an FRL of not less than 90/90/90, and for non-loadbearing shafts an FRL of not less than -- /90/90 Details verifying compliance must be provided on plans prior to the issue of a Construction Certificate.
C3 13	Openings in shafts	CRA	In a building of Type A construction, an opening in a wall providing access to a ventilating pipe, garbage, or other service shaft must be protected by: • If it is a sanitary compartment - a door or panel which together with its frame is non combustible or has an FRL of not less than --/30/30, or • A self closing --/60/30 fire door or hopper, or • An access panel with an FRL of not less than --/60/30, or • If the shaft is a garbage shaft - a door or hopper of non-combustible construction.



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			Details verifying compliance must be provided on plans prior to the issue of a Construction Certificate.
C3.14	-	-	No provisions
C3.15	Openings for service installation	CRA	Where services (e.g. hydraulic, mechanical, plumbing, electrical) penetrate a building element that is required to achieve an FRL with respect to integrity or insulation or a resistance to the incipient spread of fire then that installation must be protected / sealed (e.g. fire collars, fire dampers etc) by material that is identical to tested prototypes and in accordance with AS4072.1 and AS1530.4, and having achieved the required FRL or resistance to the incipient spread of fire or other specified method. Details verifying compliance must be provided on plans prior to the issue of a Construction Certificate.
C3.16	Construction Joints	CRA	Construction joints are to be installed in accordance with a tested prototype in accordance with AS1530.4 Details verifying compliance must be provided on plans prior to the issue of a Construction Certificate.
C3.17	Columns protected with lightweight construction	CRA	Columns must be protected in accordance with the identical tested prototype Details verifying compliance must be provided on plans prior to the issue of a Construction Certificate.

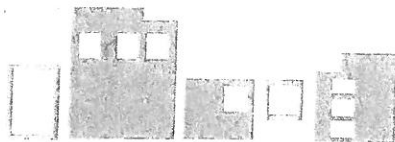
SECTION D – ACCESS AND EGRESS			
Part D1 – Provision for Escape			
Clause	Description	Status	Comments
D1.1	Application of Part	Noted	Does not apply to the internal parts of a sole occupancy unit in a Class 2, 3 or 4 building.
D1.2	Number of exits required	Complies	No less than 2 exits are provided from the upper and lower basement levels
		Complies	1 exit is provided from each residential storey.
D1.3	When fire isolated exits are required	CRA	All required stairways servicing the residential blocks that connect, pass through or pass by more than three consecutive storeys must be fire-isolated and for the carparking levels stairways that connect, pass through or pass by more than two consecutive storeys must be fire-isolated Details verifying compliance must be provided on plans prior to the issue of a Construction Certificate.



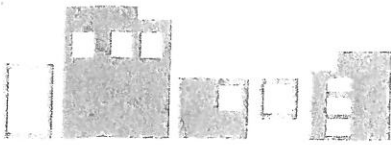
D1.4	Exit travel distances	AS	In some locations within the proposed residential portions of the building travel distances exceed the DTS travel distance provisions In this respect an alternative solution may be obtained to justify extended travel distances and be provided for assessment by the Certifying Authority at Construction Certificate stage
D1.5	Distances between alternative exits	Complies	The alternative exits within the basement carpark are not more than 60m apart, and not more than 45m within the residential portion of the building.
D1.6	Dimensions of exits	CRA	In a required exit or path of travel, the unobstructed height throughout must be not less than 2m, except the unobstructed height of any doorway must be reduced to not less than 1980mm. The unobstructed width of each exit or path of travel to an exit except a doorway must not be less than 1m. The unobstructed width must be measured clear of all obstructions such as handrails, projecting parts of balustrades or other barriers and the like. Details verifying compliance must be provided on plans prior to the issue of a Construction Certificate.
D1.7	Travel via fire-isolated exits	AS	Fire-isolated stairways discharge into covered areas that are not open for at least 1/3 of their perimeter and necessitate passing within 6m of an opening in an external wall of a building on the allotment. In this respect an alternative solution may be obtained to justify extended travel distances and be provided for assessment by the Certifying Authority at Construction Certificate stage
D1.8	External stairways in lieu of fire-isolated exits	N / A	
D1.9	Travel by Non-fire-isolated Stairways or ramps	Complies	Where non-fire-isolated stairways are provided, the distance between the doorway of a sole-occupancy unit to the point of egress to the road or open space, by way of a non fire-isolated exit, must not exceed 60m. Where non-fire-isolated stairways are provided to the carparking levels, the distance from any point on the floor to the point of egress to the road or open space, by way of a non fire-isolated exit, must not exceed 80m.
D1.10	Discharge from exits	CRA	Suitable barriers such as bollards are to be provided to prevent the blockage of exits by vehicles, etc



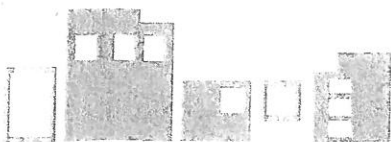
			All external ramps that are used as a path from an exit to a road must have a gradient not steeper than 1:8 at any part. Details verifying compliance must be provided on plans prior to the issue of a Construction Certificate.
D1.11	Horizontal exits	N / A	
D1.12	Non-required stairs, ramps or escalators	N / A	
D1.13	Number of persons accommodated	Noted	
D1.14	Measurement of distance	Noted	
D1.15	Method of measurement	Noted	
D1.16	Plant rooms and lift machine rooms: Concession	N / A	
D1.17	Access to lift pits	CRA	Access to lift pits where the pit depth is not more than 3m must be through the lowest landing doors. Lift pits with a depth of more than 3m must have an access doorway that is level with the pit floor and not be less than 600mm wide by 1980mm high. Access to the doorway must be by a stairway complying with AS 1657. Doors must be horizontal sliding or outward opening and be self-closing and self-locking from the outside and be provided with signage on the landing side in letters not less than 35mm high stating: "DANGER LIFTWELL- ENTRY OF UNAUTHORISED PERSON PROHIBITED - KEEP CLEAR AT ALL TIMES" Details demonstrating compliance with this clause must be incorporated into the architectural drawings prior to the issue of a Construction Certificate.
Part D2 – Construction of Exits			
D2.1	Application of Part	Noted	
D2.2	Fire isolated stairs or ramps	CRA	A stairway or ramp (including any landings) that is required to be within a fire-resisting shaft must be constructed— a) of non-combustible materials, and b) so that if there is local failure it will not cause structural damage to or impair the fire-resistance of, the shaft Details verifying compliance must be provided on plans and specifications prior to the issue of a Construction Certificate.
D2.3	Non-fire-isolated stairways and ramps	CRA	Required stairs that are not required to be within a fire-resisting shaft are to be constructed of concrete, steel, or timber of specified minimum dimensions.



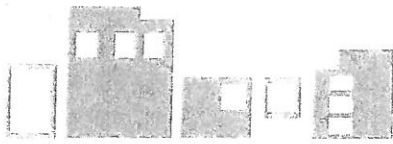
			Details verifying compliance must be provided on plans and specifications prior to the issue of a Construction Certificate.
D2.4	Separation of rising and descending stair flights	Complies	It appears that the ascending and descending fire isolated stairways are separated as required.
D2.5	Open access ramps and balconies	N / A	
D2.6	Smoke lobbies	N / A	
D2.7	Installations in exits and paths of travel	CRA	Electrical boards and the like are to be located within and enclosed by non-combustible construction or have a fire-protective covering with the doorway suitably sealed against smoke spreading from the enclosure. Details verifying compliance must be provided on plans and specifications prior to the issue of a Construction Certificate.
D2.8	Enclosure of space under stairs and ramps	CRA	The space below non fire-isolated stairs must not be enclosed to form a cupboard or similar enclosed space unless the enclosing walls have an FRL of not less than 60/60/60 and any doorway to the enclosed space is fitted with a self closing --/60/30 fire door. There is to be no form of cupboard or similar enclosed space within any of the fire-isolated stairways. Details verifying compliance must be provided on plans and specifications prior to the issue of a Construction Certificate.
D2.9	Width of stairways	Noted	Stairway width is to be measured clear of obstructions such as handrails, projecting parts of balustrades or other barriers and the like and extend to a height of not less than 2m.
D2.10	Pedestrian ramps	Noted	Ramps serving as a required exit must not have a gradient steeper than 1:8. If the ramp is required for disabled access under Part D3 it must comply with AS1428.1. The surface of the ramp must have a non-slip finish.
D2.11	Fire-isolated passageways	N / A	
D2.12	Roof as open space	CRA	Where exits discharges over the upper level basement roof slab, the slab must— a) have an FRL of not less than 120/120/120; and b) not have any rooflights or other openings within 3 m of the path of travel of persons using the exit to reach a road or open space Details demonstrating compliance with this clause must be incorporated into the architectural drawings prior to the issue of a Construction Certificate



D2 13	Goings and risers	CRA	Stairs are to have risers measuring between 115-190mm and goings between 250-355. Goings and Risers are to satisfy the equation of $2R+G=700(\text{max})$ and $550(\text{min})$ Goings and risers are to be consistent throughout in one flight. Any gap between risers must not permit a 125mm sphere to pass through it All treads to be fitted with non-slip finish or non-skid strips.
D2 14	Landings	CRA	Landings must comply with the requirements of Clause D2 14 of the BCA. Landings must be not less than 750mm long and have a non-slip finish throughout or an adequate non-skid strip near the edge of the landing where it leads to a flight below.
D2 15	Thresholds	CRA	A threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless The door opens to a road or open space, external stair landing or external balcony and the doorsill is not more than 190mm above the finished surface of the ground balcony or the like to which the door opens.
D2 16	Balustrades	CRA	Balustrades complying with Deemed-to-Satisfy provisions of the BCA are to be provided to where the level of the surface below is 1m or more. Balustrades must also be provided where the level of the surface beneath is more than 4m where it is possible for a person to fall through an openable window Where the level of the surface below is 4m or more, a balustrade or other barrier must not facilitate climbing of horizontal elements between 150mm and 760mm above the floor Any opening in the balustrade must not permit a 125mm sphere to pass through the balusters Wire balustrades must be constructed to comply with Clause D2 16(h) and Tables D2 16a and D2 16b. Details demonstrating compliance with this clause must be incorporated into the architectural drawings prior to the issue of a Construction Certificate.
D2 17	Handrails	CRA	Handrails are to be provided to at least one side of stair flights and located not less than 865mm above the nosings of stair treads and the floor surfaces of landings Details demonstrating compliance with this clause must be incorporated into the



			architectural drawings prior to the issue of a Construction Certificate.
D2.18	Fixed platforms walkways, stairways and ladders	CRA	Fixed platforms, walkways, stairways, ladders, landings, handrails, balustrades and any tread or riser in a plant room, lift motor room or the like is to comply with AS1657 Details demonstrating compliance with this clause must be incorporated into the architectural drawings prior to the issue of a Construction Certificate.
D2.19	Doorways and doors	Complies	Swinging doors are proposed throughout the building.
D2.20	Swinging doors	CRA	All exit doors are to swing in the direction of egress as required and are not to encroach more than 500mm of the required width in the fire-isolated and non fire-isolated stairways Details verifying compliance must be provided on plans and specifications prior to the issue of a Construction Certificate.
D2.21	Operation of latch	CRA	The latch of a door in a required exit, forming part of a required exit or in the path of travel is to be readily openable without a key from the side of that faces a person seeking egress. It is to have a single downward action or pushing action and to be located between 900mm and 1100mm from the floor Details verifying compliance must be provided on plans and specifications prior to the issue of a Construction Certificate.
D2.22	Re-entry fire-isolated exits	N / A	
D2.23	Signs on doors	CRA	Fire Door and Smoke Door signage is required to be provided to all doors giving access to and egress from the fire isolated stairways. Also, Offences signage is to be installed adjacent to the fire isolated stair doors in accordance with Clause 183 of the <i>Environmental Planning and Assessment Regulation 2000</i> .
NSW D2.101	Doors of travel in a P.O.P.E.	N / A	
Part D3 – Access for People with Disabilities			
D3.1	Application of Part	Noted	Part D3 of the BCA is not applicable to Class 2 buildings and Class 7a buildings associated with a Class 2 building. Therefore the provisions of this part of the BCA are generally not applicable to these areas of the proposed development. Note however, Council requirements may trigger the need for a certain number of adaptable units within the building, in which case AS4299-1995 (Adaptable housing) will be applied to those units.

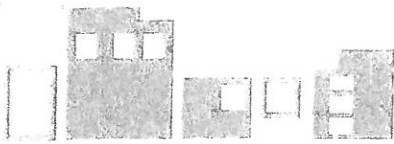


D3.2	Access to building	N / A	
D3.3	Parts of building to be accessible	N / A	
D3.4	Concessions	N / A	
D3.5	Carparking	N / A	
D3.6	Identification of access facilities, services and features	N / A	
D3.7	Hearing argumentation	N / A	
D3.8	Tactile indicators	N / A	

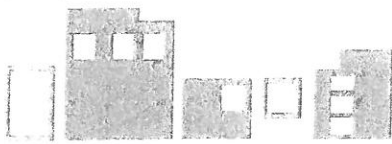
SECTION E – SERVICES AND EQUIPMENT

Part E1 – Fire Fighting Equipment

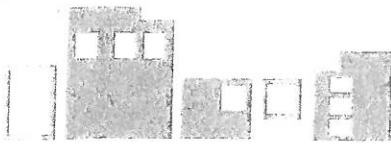
Clause	Description	Status	Comments
E1.1	-	-	No Provisions
E1.2	-	-	No Provisions
E1.3	Fire Hydrants	CRA	Fire hydrants must conform to the pressure and flow requirements and distance limitations specified in AS 2419.1. NB Allowances may need to be made for the inclusion of a pump room at Ground level to serve the fire hydrant system, and a booster cabinet (shielded from building) at the street frontage. Hydraulic details and a design certificate will be required by a qualified hydraulic engineer prior to the issue of a Construction Certificate.
E1.4	Hose Reels	CRA	Fire hose reels are to be installed within 4m of an exit so that the fire hose reel will not need to pass through fire and smoke doors Fire hose reels are to be installed accordance with AS2441 Hydraulic details and a design certificate will be required by a qualified hydraulic engineer prior to the issue of a Construction Certificate.
E1.5	Sprinklers	CRA	A sprinkler system is required throughout the entire Class 7a (carpark) portion of the building and must comply with specification E1.5 Hydraulic details and a design certificate will be required by a qualified hydraulic engineer prior to the issue of a Construction Certificate.
E1.6	Portable fire extinguishers	CRA	Portable fire extinguishers are required to be provided in accordance with Table E1.6 of the BCA and AS 2444 Detailed service plans and specifications are to be submitted with the documentation to enable assessment of the Construction Certificate
E1.7	-	-	No Provisions
E1.8	Fire control centres	N / A	
E1.9	Fire precautions during	CRA	During construction, not less than one fire



	construction		extinguisher to suit Class A, B and C fires is required for each storey, and is required to be located adjacent to each exit.
E1.10	Provisions for special hazards	N / A	
Part E2 – Smoke Hazard Management			
E2.1	Application of Part	Noted	Part is not applicable to • open deck car parks • open spectator stands
E2.2	General requirements	CRA	The building must be provided with an automatic smoke detection and alarm system, and smoke detectors complying with Specification E2.2a. The carpark is to be provided with fans with metal blades suitable for operation at normal temperature and electrical power and control cabling need not be fire rated. Detailed mechanical and electrical services plans and specifications are to be submitted with the documentation to enable assessment of the Construction Certificate.
E2.3	Provisions for special hazards	N / A	
Part E3 – Lift Installations			
E3.1	-	-	No provisions.
E3.2	Stretcher facility in lifts	CRA	Stretcher facilities are to be provided in passenger lifts that serve a storey above an effective height of more than 12 metres. Detailed plans and specifications are to be provided for assessment at Construction Certificate stage.
E3.3	Warning against use of lifts in fire	CRA	A warning sign is to be displayed where it can be readily seen near every call button of the passenger lift. The warning sign is to comply with the details and dimensions set out in Figure E3.3 of the BCA.
E3.4	Emergency lifts	N / A	
E3.5	Landings	CRA	Access and egress to and from the lift well landings is to comply with the Deemed-to-Satisfy provisions of Section D of the BCA.
E3.6	Facilities for people with disabilities	N / A	Not required under BCA however where adaptable units are required then the lifts may be subject to requirements under this clause.
E3.7	Fire Services Control	CRA	Passenger lift cars are to be provided with fire service controls in accordance with AS1735.2 Applicable in this instance as lift cars are serving storey's above an effective height of 12m. To be confirmed with details provided at Construction Certificate stage.
E3.8	Aged care buildings	N / A	
Part E4 – Emergency Lighting, Exit Signs and Warning Systems			
E4.1	-	-	No provisions

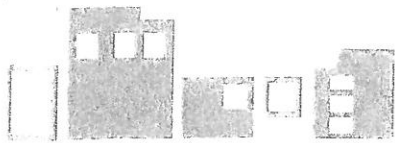


E4.2	Emergency lighting requirements	CRA	Emergency lighting is to be provided throughout the building in accordance with Clause E4.2 of the BCA. Detailed electrical services plans and specifications with a design certificate are to be submitted with the documentation to enable assessment of the Construction Certificate.
E4.3	Measurement of distance	Noted	
E4.4	Design and operation of emergency lighting	CRA	Emergency lighting shall be provided throughout the building in accordance with the requirements of Clause E4.4 of the BCA and AS 2293.1. Detailed electrical services plans and specifications with a design certificate are to be submitted with the documentation to enable assessment of the Construction Certificate.
E4.5	Exit signs	CRA	Exit signs are to be provided in accordance with Clause E4.5 of the BCA. Exit signs must be clearly visible to person approaching the exit and must be installed on, above or adjacent to, 1 A door providing direct egress from a storey to a stairway, passageway or ramp serving as a required exit 2 A door from an enclosed stairway, passageway or ramp at every level of discharge to a road or open space 3 A door serving as or forming part of a required exit in a storey required to be provided with emergency lighting Detailed electrical services plans and specifications with a design certificate are to be submitted with the documentation to enable assessment of the Construction Certificate.
E4.6	Direction signs	CRA	Where an exit is not readily apparent then exit signs with directional arrows must be installed in appropriate positions in corridors, hallways, lobbies and the like indicating the direction to a required exit in accordance with Clause E4.6 of the BCA. Detailed electrical services plans and specifications with a design certificate are to be submitted with the documentation to enable assessment of the Construction Certificate.
E4.7	Class 2, 3 and 4 buildings: Exemptions	Applicable	
E4.8	Design and operation of exit signs	CRA	Exit signs are to operate in accordance with AS 2293.1 and be clearly visible at all times while the building is occupied. Detailed electrical services plans and specifications with a design certificate are to be submitted with the documentation to enable



			assessment of the Construction Certificate
E4.9	Sound and intercom system for emergency purposes (aka EWIS)	N / A	

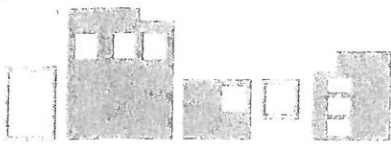
SECTION F – HEALTH AND AMENITY			
Part F1 – Damp and Weatherproofing			
Clause	Description	Status	Comments
F1.1	Stormwater drainage	CRA	Stormwater drainage design shall be in accordance with AS/NZS 3500.3. Design plans and specifications and a design certificate will be required from a suitably qualified hydraulic engineer prior to the issue of a Construction Certificate.
F1.2	-	-	No provisions
F1.3	-	-	No provisions
F1.4	-	-	No provisions
F1.5	Roof coverings	CRA	Roof coverings are to comply with the relevant Australian Standards as per Clause F1.5. Details and design certification to be provided prior to the issue of a Construction Certificate.
F1.6	Sarking	CRA	Sarking type materials used for weatherproofing of roofs and walls must comply with AS/NZS 4200 Parts 1 and 2. Details and design certification to be provided prior to the issue of a Construction Certificate.
F1.7	Waterproofing of wet areas	CRA	Shower enclosure surfaces, floor surfaces in bathrooms, shower rooms, slop hoppers, sink compartments, laundry and sanitary compartments is required to be waterproofed in accordance with AS 3740. Details and design certification to be provided prior to the issue of a Construction Certificate.
F1.8	-	-	No provisions
F1.9	Damp-proofing	N / A	
F1.10	Damp-proofing of floors on the ground	CRA	A vapour barrier in accordance with AS2870 is to be provided beneath the basement floor slab. Details and design certification to be provided prior to the issue of a Construction Certificate.
F1.11	Provisions of floor wastes	CRA	The floor of each bathroom and laundry in each sole occupancy of a Class 2 or 3 building or class 4 part is to be graded to permit drainage to a floor waste. The plans forming part of the Construction Certificate Application must detail compliance with the above.
F1.12	Sub-floor ventilation	N / A	
F1.13	Glazed assemblies	CRA	Windows, sliding doors with a frame, adjustable louvers, shopfronts and window walls with one piece framing in an external wall must comply



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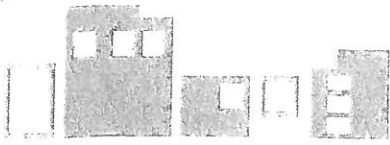
			with AS 2047 requirements for resistance to water penetration. Details and design certification to be provided prior to the issue of a Construction Certificate
Part F2 – Sanitary and Other Facilities			
F2.1	Facilities in residential buildings	Complies	Kitchen, bath/shower, closet pan, washbasin and laundry facilities are proposed in each unit. A closet pan and washbasin has been provided in a room at the lower ground floor level of Building 1 for employees, trades, etc.
F2.2	Calculation of number of occupants and fixtures	Noted	
F2.3	Facilities in Class 3 to 9 buildings	N / A	
F2.4	Facilities for people with disabilities	N / A	
F2.5	Construction of sanitary compartments	CRA	Doors to the fully enclosed toilets are to open outwards, slide or be readily removable from the outside of the sanitary compartment unless there is a clear space of at least 1.2m between the closet pan within the sanitary compartment and the nearest part of the doorway. Plans submitted with the Construction Certificate Application must detail compliance with the above.
F2.6	Interpretation: Urinals and washbasins	N / A	
F2.7	Warm water installations	N / A	Not Applicable in NSW
F2.8	Waste	N / A	
Part F3 – Room Sizes			
F3.1	Height of rooms and other spaces	CRA	Plans submitted with the Construction Certificate Application must detail compliance.
Part F4 – Light and Ventilation			
F4.1	Provisions of natural light	Noted	Natural light must be provided to all habitable rooms located within the Class 2 portion of the development.
F4.2	Methods and extent of natural light	Complies	
F4.3	Natural light borrowed from adjoining room	CRA	Natural lighting to a room in a Class 2 building may come through a glazed panel or opening from an adjoining room (including an enclosed verandah) Details verifying compliance with the natural lighting provisions for the class 2 units are to be submitted for assessment with the Construction Certificate application.
F4.4	Artificial lighting	CRA	Artificial lighting must be provided in required stairways, passageways, ramps, sanitary compartments, bathrooms, laundries and other spaces used in common by occupants of the building complying with AS1680.0 in accordance with the requirements of Clause



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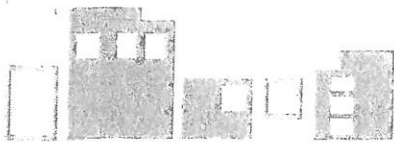
			F4.4 of the BCA Details and design certification to be provided by electrical engineer prior to the issue of a Construction Certificate.
F4.5	Ventilation of rooms	CRA	Ventilation shall be provided throughout the building by means of natural ventilation complying with Clause F4.6 or mechanical ventilation complying with the requirements of AS1668.2 and AS3666.1 as required by Clause F4.5 of the BCA. Details and design certification to be provided by mechanical engineer prior to the issue of a Construction Certificate.
F4.6	Natural ventilation	CRA	See Clause F4.5
F4.7	Ventilation borrowed from adjoining room	CRA	See Clause F4.5
F4.8	Restriction on position of water closets and urinals	Complies	
F4.9	Airlocks	Noted	
F4.10	-	-	No provisions
F4.11	Carparks	CRA	The carpark is to be provided with ventilation complying with AS1668.2 Details and design certification to be provided by a mechanical engineer prior to the issue of a Construction Certificate.
F4.12	Kitchen local exhaust	N / A	
Part F5 – Sound Transmission and Insulation			
F5.1	Application of part	Applicable	Applicable to Class 2 buildings.
F5.2	Determination of airborne sound insulation ratings	Noted	Construction required to have an airborne sound insulation rating must have the value for weighted sound reduction index (R_w) or weighted sound reduction index with spectrum adaptation term ($R_w + C_w$) determined in accordance with AS/NZS1276.1, or ISO717.1 using result from laboratory measurements, or comply with Specification F5.2 of the BCA.
F5.3	Determination of impact sound installation ratings	Noted	A floor required to have an impact sound insulation rating must have the required value for weighted normalised impact sound pressure level with spectrum adaptation term ($L_{n,w} + C_i$) determined in accordance with AS/ISO 717.2 using results from laboratory measurements or comply with Specification F5.2 of the BCA. A wall that is required to have an impact sound insulation rating must be of discontinuous construction.
F5.4	Sound insulation rating for floors	CRA	Floors separating sole occupancy units or separating sole occupancy units from a plant room, lift shaft, public lobby or the like or parts of different classifications must have an $R_w + C_w$ of not less than 50 and an $L_{n,w} + C_i$ of not more than 62



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APN 15 004 001 197

			A design certificate and details of form of construction required to achieve such will be required from a qualified acoustic engineer prior to the issue of a Construction Certificate.
F5.5	Sound insulation rating of walls	CRA	A wall separating sole occupancy units must have an $R_w + C_{tr}$ not less than 50. A wall separating a sole occupancy from a lift shaft, public lobby or the like, or parts of different classifications must have an $R_w + C_{tr}$ not less than 50. Compliance with F5.3(b) is required if the wall separates a bathroom, sanitary compartment, laundry or kitchen in one sole occupancy unit from a habitable room (excluding a kitchen) in another adjoining unit or a sole occupancy unit from a plant room or lift shaft. A door may be incorporated in a wall that separates a sole occupancy unit from a stairway, public corridor, public lobby or the like, provided the door assembly has an R_w not less than 30. Where a wall required to have sound insulation has a floor above, the wall must continue to the underside of the floor above or a ceiling that provides the sound insulation required for the wall. Where a wall required to have sound insulation has a roof above, the wall must continue to the underside of the roof above or a ceiling that provides the sound insulation required for the wall. A design certificate and details of form of construction required to achieve such will be required from a qualified acoustic engineer prior to the issue of a Construction Certificate.
F5.6	Sound insulation rating of services	CRA	If a duct, soil, waste or water supply pipe, including a duct or pipe that is located in a wall or floor cavity, serves or passes through more than one sole-occupancy unit, the duct or pipe must be separated from the rooms of any sole-occupancy unit by construction with an $R_w + C_{tr}$ (airborne) not less than— (i) 40 if the adjacent room is a habitable room (other than a kitchen); or (ii) 25 if the adjacent room is a kitchen or non-habitable room If a storm water pipe passes through a sole-occupancy unit it must be separated in accordance with (i) and (ii) above A design certificate and details will be required



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			by a qualified acoustic engineer prior to the issue of a Construction Certificate.
F5.7	Isolation of pumps	CRA	A flexible coupling must be used at the point of connection between the service pipes in a building and any circulating or other pump.

SECTION G – ANCILLARY PROVISIONS

Part G1 – Minor Structures and Components

Clause	Description	Status	Comments
G1.1	Swimming pools	N / A	
G1.2	Refrigerated chambers, strong-rooms and vaults	N / A	
G1.101	Provision for cleaning windows	CRA	A safe manner of cleaning windows is to be provided as windows are located 3 or more storeys above ground level. The windows must either be able to be cleaned wholly from within the building, or a method complying with the Construction Safety Act 1912 and Regulations is required. Details verifying compliance must be provided prior to the issue of a Construction Certificate.
Part G2	Heating appliances, fireplaces, chimneys and flues	N / A	
Part G3	Atrium construction	N / A	
Part G4	Construction in alpine areas	N / A	
Part G5	Construction in bushfire prone areas	N / A	

SECTION H – SPECIAL USE BUILDINGS

N / A

SECTION J – ENERGY EFFICIENCY

Clause	Description	Status	Comments
NSW J(A)	Energy Efficiency – Class 2 Buildings and Class 4 Parts	CRA	The new building will be subject to compliance with the Energy Efficiency provisions of NSW Subsection J(A) as applicable to Class 5-9 buildings, including: - NSW Part J(A)1: Building Fabric - NSW Part J(A)2: Building Sealing - NSW Part J(A)3: Air-conditioning & ventilating systems - NSW Part J(A)4: Hot water supply - NSW Part J(A)5: Access for maintenance The provisions of NSW Subsection J(A) are designed to complement requirements that arise under BASIX (the Building Sustainability Index). In this instance, a BASIX certificate must accompany a Development Application for all residential alterations throughout NSW as of the 1 July 2006.



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			The design consultants should incorporate sufficient details demonstrating that the proposed building works comply with the above provisions as applicable to their discipline. Further advice on the implementation of Section J will be obtained from an energy efficiency consultant where deemed necessary.
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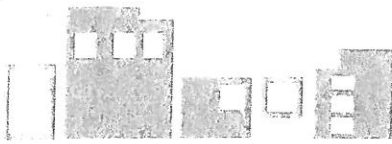
4.0 FIRE SAFETY SCHEDULE

Details on the draft proposed fire safety schedule is included in the following schedule.

4.1 Proposed Fire Safety Schedule

Subject to the final construction design documentation and BCA compliance options chosen, the draft fire safety schedule for the development, when completed, will be:

Essential Fire and Other Safety Measures	Standard of Performance
Access panels, doors and hoppers to fire resisting shaft	BCA Clause C3.13
Automatic fire detection and alarm system	BCA Spec. E2.2a and AS 1670-2004
Automatic fire suppression system (sprinklers)	BCA Spec. E1.5 and AS 2118.1-1999
Emergency Lighting	BCA Clauses E4.2/E4.4 & AS/NZS 2293.1-2005
Exit Signs	BCA Clauses E4.5/NSW E4.6/E4.7/E4.8 and AS/NZS 2293.1-2005
Fire doors	BCA Spec. C3.4 and BCA C2.12 (Separation of Equipment) BCA C2.13 (Electricity Supply Systems) BCA C3.8 (Openings in Fire Isolated Exits) C3.11 (Bounding Construction) AS1905.1-2005
Fire hydrant systems	BCA Clause E1.3 & AS 2419.1-2005
Fire seals (protecting openings in fire resisting components of the building)	BCA Clause C3.15
Hose reel system	BCA Clause E1.4 & AS 2441-2005
Lightweight construction	BCA Clause C1.8 and BCA Spec. C1.8
Mechanical air handling systems	BCA Clauses E2.2 and AS/NZS 1668.1-1998
Openings in fire-isolated lift shafts	BCA Clause C3.10 and AS 1735.11-1986
Path of travel for stairways, passageway and ramps	EP&A Reg. 2000 Clauses 184-186
Portable fire extinguishers	BCA Clause E1.6 and AS 2444-2001
Stretcher Lifts	BCA Clause E3.2 and AS 1735.2-



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104 15 198 95 297

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Warning and Operational Signs	D2.23 (Signs on Fire Doors) E3.3 (Lift Sign), EPA Regs 2000, Clause 183
Alternative Solutions - Extended travel distances - Discharge from fire-isolated stairways	Fire Engineered Report

Note: The above schedule is draft only for indicative purposes at this stage of design documentation. Any alternative solutions accepted to satisfy BCA performance provisions will be incorporated into the final proposed fire safety schedule at CC stage.

4.2 Certification of Essential Fire Safety Measures

Pursuant to Section 169 of the Environmental Planning and Assessment Regulations 2000, it will be necessary for the owner of the building, on completion of work to furnish a Final Fire Safety Certificate with regard to each essential fire safety measure identified in the proposed Fire Safety Schedule listed above.

The final fire safety certificate must state that each essential fire safety measure specified in the fire safety schedule for the building to which the certificate relates:

- (a) has been assessed by a properly qualified person, and
- (b) was found, when it was assessed, to be capable of performing to at least the standard required by the current fire safety schedule for the building for which the certificate is issued.

Every year, the owner(s) will need to sign and submit an Annual Fire Safety Statement to the Local Council and the NSW Fire Brigades, which confirms that all essential fire safety measures have been tested and maintained and perform to the original design and installation standard. A copy of the Annual Fire Safety Statement must also be displayed in a prominent areas of the buildings (i.e. the main entrance foyers).

5.0 CONCLUSION

The development application seeks consent for a new residential development at 134-144 Pitt Street, Redfern.

Although demonstrating compliance with the BCA at DA assessment stage is not a prescribed head of consideration under Section 79C of the Environmental Planning & Assessment Act 1979, Council has an obligation to consider whether the proposal, as lodged, is indicatively capable of complying with the BCA - without significant modification to those plans for which approval is sought.

In this instance we are confident that any modifications and advancement in level of details required to the proposal in order to satisfy the requirements of the BCA (in force at the time the Construction Certificate application is lodged) will not necessitate the need for any significant design changes that in turn would necessitate the submission of an application under Section 96 of the Environmental Planning and Assessment Act 1979.

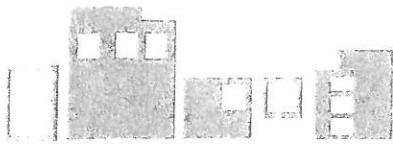
In the same regard, we draw Council's attention to the requirements of clause 145 of the Environmental Planning & Assessment Regulation 2000, and suggest that detailed & specific BCA compliance matters shall be addressed to the satisfaction of the appointed Certifying Authority prior to the issue of the Construction Certificate.

Further, it is considered that this BCA review and the progression of the design documentation through to the prescribed Construction Certificate stage will be sufficient to ensure that the proposed design will achieve the necessary compliance with the BCA.

APPENDIX A – FIRE RESISTANCE LEVELS

Table 3 TYPE A 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—				
For <i>loadbearing</i> 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/ 60	120/ 90/ 90	180/180/120	240/240/180
3 m or more	90/ 60/ 30	120/ 60/ 30	180/120/ 90	240/180/ 90
For non- <i>loadbearing</i> parts—				
less than 1.5 m	- / 90/ 90	- /120/120	- /180/180	- /240/240
1.5 to less than 3 m	- / 60/ 60	- / 90/ 90	- /180/120	- /240/180
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 3 m	90/ - / -	120/ - / -	180/ - / -	240/ - / -
3 m or more	- / - / -	- / - / -	- / - / -	- / - / -
COMMON WALLS and FIRE WALLS—	90/ 90/ 90	120/120/120	180/180/180	240/240/240
INTERNAL WALLS—				
<i>Fire-resisting</i> lift and stair <i>shafts</i> —				
<i>Loadbearing</i>	90/ 90/ 90	120/120/120	180/120/120	240/120/120
Non- <i>loadbearing</i>	- / 90/ 90	- /120/120	- /120/120	- /120/120
Bounding <i>public corridors</i> , public lobbies and the like—				
<i>Loadbearing</i>	90/ 90/ 90	120/ - / -	180/ - / -	240/ - / -
Non- <i>loadbearing</i>	- / 60/ 60	- / - / -	- / - / -	- / - / -
Between or bounding <i>sole-occupancy units</i> —				
<i>Loadbearing</i>	90/ 90/ 90	120/ - / -	180/ - / -	240/ - / -
Non- <i>loadbearing</i>	- / 60/ 60	- / - / -	- / - / -	- / - / -
Ventilating, pipe, garbage, and like <i>shafts</i> not used for the discharge of hot products of combustion—				
<i>Loadbearing</i>	90/ 90/ 90	120/ 90/ 90	180/120/120	240/120/120
Non- <i>loadbearing</i>	- / 90/ 90	- / 90/ 90	- /120/120	- /120/120
OTHER LOADBEARING INTERNAL WALLS, INTERNAL BEAMS, TRUSSES and COLUMNS—				
	90/ - / -	120/ - / -	180/ - / -	240/ - / -
FLOORS	90/ 90/ 90	120/120/120	180/180/180	240/240/240
ROOFS	90/ 60/ 30	120/ 60/ 30	180/ 60/ 30	240/ 90/ 60



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APPENDIX B – REFERENCED DOCUMENTATION

The following documentation was used in the preparation of this report:

Drawing No.	Title	Issue	Date	Drawn By
A-010	Lower Basement Plan	B2	18.09.09	Architecture & Buildings Works
A-011	Upper Basement Plan	B2	18.09.09	Architecture & Buildings Works
A-012	Lower Ground Plan	B2	18.09.09	Architecture & Buildings Works
A-013	Ground Floor Plan	B2	18.09.09	Architecture & Buildings Works
A-014	First Floor Plan	B2	18.09.09	Architecture & Buildings Works
A-015	Second Floor Plan	B2	18.09.09	Architecture & Buildings Works
A-016	Third Floor Plan	B2	18.09.09	Architecture & Buildings Works
A-017	Fourth Floor Plan	B2	18.09.09	Architecture & Buildings Works
A-018	Fifth Floor Plan	B2	18.09.09	Architecture & Buildings Works
A-019	Roof Plan	B2	18.09.09	Architecture & Buildings Works
A-020	Elevations 01	B2	18.09.09	Architecture & Buildings Works
A-021	Elevations 02	B2	18.09.09	Architecture & Buildings Works
A-022	Elevations 03	B2	18.09.09	Architecture & Buildings Works
A-023	Elevations 04	B2	18.09.09	Architecture & Buildings Works
A-024	Elevations 05	B2	18.09.09	Architecture & Buildings Works
A-030	Sections 01	B2	18.09.09	Architecture & Buildings Works