

21 October 2025
Our Ref: 25200-DA-L01-02

Ceeroose Pty Ltd
Ground Floor, 447 - 451 Parramatta Road
Leichhardt NSW 2040

Attention: Mr Bernardo Malouf

Email: bernardo.malouf@ceeroose.com.au

Dear Bernardo

MIXED-USE DEVELOPMENT – 307-315 PARRAMATTA ROAD, LEICHHARDT PROVISION FOR FIRE ENGINEERING (FOR DA SUBMISSION)

INTRODUCTION

We refer to the proposed construction of a new Mixed-Use Residential Development to be located at 307-315 Parramatta Road, Leichhardt NSW, and provide the following advice with regards to the proposed use of Performance Solutions to address identified variations to the Deemed to Satisfy (DtS) provisions of the National Construction Code Volume 1 Building Code of Australia 2022 (NCC). The purpose of this document is to assist in the design development process, and to assist the Consent Authority in the determination of the Development Application.

Note: It is assumed that NCC 2022, will be the applicable version of the NCC in which the proposed development is subject to compliance.

PROJECT DESCRIPTION

The works comprise the construction of a new Mixed-Use Residential Development, that will include:

- Basement Level 04 to 02 – carparking, residential storage, ancillary
- Basement Level 01 – carparking, loading dock, fire services pump room, vehicle entry, commercial / retail tenancy, ancillary
- Ground Floor – entry lobby, loading dock (void over), retail tenancy, fire-isolated exit discharges
- Levels 01 to 09 – residential units
- Level 10 – residential units, roof terrace
- Levels 11 to 15 – residential units
- Level 16 – roof terrace

Sydney | Suite 1802, Level 18
227 Elizabeth Street
Sydney NSW 2000
PO Box 4788, Forest Lake QLD 4078

Brisbane | Unit 5, Level 1
445 Upper Edward Street
Spring Hill QLD 4000
PO Box 4788, Forest Lake QLD 4078

NCC ASSESSMENT DATA

The relevant NCC Assessment Data for the subject development is summarised in Table 1.

Table 1: Relevant NCC Assessment Data

NCC Reference	NCC Assessment
Classification	Class 2 (residential) Class 6 (retail) Class 7a (car parking) Class 7b (storage)
Rise in Storeys	17
No. of Levels Contained	20
Minimum Type of Construction Required	Type A
Effective Height	>25m

REFERENCED DRAWINGS

Table 2: List of Referenced Architectural Drawings

Drawing No.	Issue	Title	Revision Date
DA-000	G	Title Page, Location Plan	19-09-2025
DA-200	H	Floor Plans – B4	19-09-2025
DA-200	I	Floor Plans – B3	19-09-2025
DA-200	L	Floor Plans – B2	19-09-2025
DA-201	M	Floor Plans – B1	19-09-2025
DA-210	L	Floor Plans – Ground	19-09-2025
DA-211	J	Floor Plans - L1	19-09-2025
DA-212	D	Floor Plans – L2-5	19-09-2025
DA-213	B	Floor Plans – L6	19-09-2025
DA-214	J	Floor Plans – L7-9	19-09-2025
DA-215	D	Floor Plans – L10 (Roof Terrace)	19-09-2025
DA-216	I	Floor Plans – L11-13	19-09-2025
DA-217	H	Floor Plans – L14-15	19-09-2025
DA-218	G	Floor Plans – Roof Terrace	19-09-2025
DA-219	G	Floor Plans – Roof	19-09-2025
DA-300	E	Elevations – South	19-09-2025
DA-301	E	Elevations – East and West	19-09-2025
DA-302	F	Elevations – North	19-09-2025

ACHIEVING COMPLIANCE WITH THE NCC

Compliance with the NCC is achieved by satisfying the Performance Requirements. Clause A2G1 of the NCC states that the Performance Requirements can be satisfied by:

1. *Performance Solution; or*
2. *Deemed-to-Satisfy Solution; or*
3. *a combination of (1) and (2).*

Clause A2G2(1) of the NCC states that a Performance Solution is achieved by demonstrating:

- (a) *compliance with all relevant Performance Requirements; or*
- (b) *the solution is at least equivalent to the Deemed-to-Satisfy Provisions,*

Clause A2G2(2) of the NCC states that a Performance Solution must be shown to comply with the relevant Performance Requirements through one or a combination of the following Assessment Methods:

- (a) *Evidence of suitability in accordance with Part A5 that shows the use of a material, product, plumbing and drainage product, form of construction or design meets the relevant Performance Requirements.*
- (b) *A Verification Method including the following -*
 - (i) *the Verification Methods in the NCC; or*
 - (ii) *Other Verification Methods, accepted by the appropriate authority that show compliance with the relevant Performance Requirements.*
- (c) *Expert judgment.*
- (d) *Comparison with the Deemed-to-Satisfy Provisions.*

Clause A2G2(3) of the NCC states Where a Performance Requirement is satisfied entirely by a Performance Solution, in order to comply with (1) the following method must be used to determine the Performance Requirement or Performance Requirements:

- (a) *Identify the relevant Performance Requirements from the Section or Part to which the Performance Solution applies.*
- (b) *Identify Performance Requirements from other Sections or Parts that are relevant to any aspects of the Performance Solution proposed or that are affected by the application of the Performance Solution.*

Clause A2G2(4) of the NCC states Where a Performance Solution is proposed to be satisfied by a Performance Solution, the following steps must be undertaken:

- (a) *Prepare a performance-based design brief in consultation with relevant stakeholders.*
- (b) *Carry out analysis, using one or more of the Assessment Methods listed in (2), as proposed by the performance-based design brief.*
- (c) *Evaluate results from (b) against the acceptance criteria in the performance-based design brief.*
- (d) *Prepare a final report that includes-*
 - (i) *All Performance Requirements and/or Deemed-to-Satisfy Provisions identified through A2G2(3) or A2G4(3) as applicable; and*
 - (ii) *Identification of all Assessment Methods used; and*
 - (iii) *Details of step (a) to (c); and*
 - (iv) *Confirmation that the Performance Requirement has been met; and*
 - (v) *Details of conditions or limitations, if any exist regarding the Performance Solution.*

SUMMARY OF PROPOSED PERFORMANCE SOLUTIONS

Table 3 summarises the identified Variations to the NCC DtS Provisions, the relevant NCC Performance Requirements, the Assessment Methods, the Methods of Analysis, and the Acceptance Criteria that are proposed to be used in the future Fire Engineering Assessment for the proposed development.

Note: At this stage of the design, the identified variations to the DtS provisions of the NCC are not exhaustive, and other variations resulting in the development of additional Performance Solutions may arise through the detailed design process.

Table 3: Summary of Proposed Performance Solutions

Performance Solution	NCC DTS Provisions	Variations to NCC DTS Provisions	NCC Performance Requirements
1	Specification 5, Clause C3D9, C3D10 Fire-Resisting Construction – Reduced FRL to Storage	To rationalise the FRLs provided to the storage areas to achieve 120/120/120 in lieu of 240/240/240.	C1P1, C1P2
	Summary of Fire Safety Strategy	The fire safety strategy is based on: <ul style="list-style-type: none"> The presence of an automatic fire sprinkler system throughout the building incorporating fast response heads to limit fire growth and spread. The provision of an emergency warning and intercom system (EWIS) throughout the building, to facilitate the evacuation of the building. The characteristics and use of the ancillary storage areas. The fire separation of the storage rooms. Reference to exemption 1 under NCC Clause A6G1 The characteristics of the building occupants 	
	NCC Compliance and Assessment Method	A2G2(1)(a) and A2G2(b)(ii) , Absolute Assessment, Qualitative Analysis.	
	Acceptance Criteria	The Performance Requirements are considered satisfied when it is demonstrated that the storage areas have elements which will maintain structural stability and avoid the spread of fire to enable occupant evacuation and fire brigade intervention.	
2	Clause C2D2, Specification 5 Fire-resisting construction (loading dock)	To permit the non-loadbearing elements within the Basement 1 loading dock to achieve an FRL of 120-minutes in lieu of 240-minutes.	C1P1, C1P2
	Summary of Fire Safety Strategy	The preliminary fire safety strategy is based on: <ul style="list-style-type: none"> The fire-separation of individual storage rooms in 120-minute construction, with self-closing -/120/30 fire doors, which exceeds the DtS requirements for fire separation. The provision of sprinklers throughout the building in accordance with NCC Specification 17 and AS 2118.1-2017. The provision of sprinklers is expected to control the growth and development of fire to mitigate fire spread from the fire-separated storage rooms. Reference to NCC concessions to permit minor classifications to form part of the major classification and adopt the respective FRLs on the basis that the minor classification does not exceed 10% of the floor area of the storey. 	
	NCC Compliance and Assessment Method	A2G2(1)(b) and A2G2(2)(d) , Comparative Assessment, Qualitative Analysis.	
	Acceptance Criteria	The Performance Requirements are considered satisfied when it is demonstrated that the Basement 1 loading dock is provided with FRLs	

Performance Solution	NCC DTS Provisions	Variations to NCC DTS Provisions	NCC Performance Requirements
		commensurate with the risk of fire spread appropriate to the nature of the spaces and installed fire safety systems.	
3	Specification 5, Clause C3D9, C3D10 Clause C2D2, Specification 5 (S5C8) Fire-resisting Construction (Enclosure of Shafts)	To not enclose base of the garbage chute shafts that extend throughout the upper levels of the building by fire-resistant construction.	C1P1, C1P2
	Summary of Fire Safety Strategy	The fire safety strategy is based on: <ul style="list-style-type: none"> The garbage room chutes will each be separately constructed in 2-hour fire rated shafts that extend through all levels of the building served. The hopper doors into each shaft will comprise of self-closing doors or access panels that achieve an FRL of -/120/30. The waste collection / chute discharge rooms at Basement Level 1 will each be fire separated from the remainder of the building in construction that achieves a 2-hour fire rating. The doorways into each room will be protected with self-closing -/120/30 fire doors fitted with medium temperature smoke seals. The base of the waste collection / chute discharge room chute shafts are not required to be enclosed in fire-resisting construction, whereby the waste collection / chute discharge room will form part of the same fire compartment as the shafts. The provision of a fire sprinkler system throughout the building, which is expected to control the development and spread of fire. 	
	NCC Compliance and Assessment Method	A2G2(1)(a) and A2G2(b)(ii) , Absolute Assessment, Qualitative Analysis.	
	Acceptance Criteria	The Performance Requirements are considered satisfied when it is demonstrated that the garbage chute shaft, which will not be fire rated at the base where they penetrate into the waste collection / chute discharge rooms will not increase the risk of fire spread within the building, such that occupant evacuation and fire brigade intervention are not impeded.	
4	Clause C4D3 Protection of openings in external walls Clause C4D5 Methods of protection	To permit openings in the external wall of the building to be protected in a manner that is not consistent with the requirements of the NCC, either by varied protection or omitted protection.	C1P2, C1P8
	Summary of Fire Safety Strategy	The preliminary fire safety strategy is based on: <ul style="list-style-type: none"> The provision of fire sprinklers throughout the building in accordance with AS 2118.1-2017, which is expected to mitigate the development and spread of fire. Fire sprinklers are expected to maintain tenable conditions in the event of fire within the building to facilitate occupant evacuation and fire brigade intervention. Provision of fire-rated blade wall to balcony openings. Provision of radiant heat attenuation screens to operable windows. Quantitative radiant heat modelling to assess exposure. 	
	NCC Compliance and Assessment Method	A2G2(1)(a) and A2G2(b)(ii) , Absolute Assessment, Qualitative and Quantitative Analysis.	

Performance Solution	NCC DTS Provisions	Variations to NCC DTS Provisions	NCC Performance Requirements
	Acceptance Criteria	The Performance Requirements will be considered satisfied when it is demonstrated that fire spread between buildings on adjoining allotments is mitigated to the degree necessary appropriate to the installed fire safety systems and protection measures.	
5	Clause D2D5 Exit Travel Distance (Residential)	To permit extended travel distance to an exit within the residential parts of the building to a point of choice up to 7m in lieu of 6m.	D1P4, E2P2
	Summary of Fire Safety Strategy	<p>The preliminary fire safety strategy is based on:</p> <ul style="list-style-type: none"> The provision of fire sprinklers throughout the building in accordance with AS 2118.1-2017, which is expected to mitigate the development and spread of fire. Fire sprinklers are expected to maintain tenable conditions in the event of fire within the building to facilitate occupant evacuation and fire brigade intervention. The provision of smoke seals to all SOU doors throughout the development, which is expected to limit smoke leakage into the residential corridors, prolonging tenable conditions to offset the additional movement time associated with the extended travel distances. 	
	NCC Compliance and Assessment Method	A2G2(1)(b) and A2G2(d) , Comparative Assessment, Qualitative Analysis.	
	Acceptance Criteria	The Performance Requirements are considered satisfied when it is demonstrated that occupants can evacuate from the residential levels safely and in conditions at least equivalent to a design that complies with the DtS provisions of the BCA.	
6	Clause D2D5 Exit Travel Distance	To permit extended travel distance to an exit within the residential parts of the building to a point of choice up to 7m in lieu of 6m.	D1P4, E2P2
	Summary of Fire Safety Strategy	<p>The preliminary fire safety strategy is based on:</p> <ul style="list-style-type: none"> The provision of fire sprinklers throughout the building in accordance with AS 2118.1-2017, which is expected to mitigate the development and spread of fire. Fire sprinklers are expected to maintain tenable conditions in the event of fire within the building to facilitate occupant evacuation and fire brigade intervention. The provision of fast response sprinkler heads in lieu of standard response to offset the additional evacuation time associated with the extended travel distance by reducing the cue time to activation of occupant warning. 	
	NCC Compliance and Assessment Method	A2G2(1)(b) and A2G2(d) , Comparative Assessment, Qualitative and Quantitative Analysis.	
	Acceptance Criteria	The Performance Requirements are considered satisfied when it is demonstrated that occupants can evacuate from the residential levels safely and in conditions at least equivalent to a design that complies with the DtS provisions of the BCA.	
7	Clause D2D12 Travel via fire-isolated exits (exposure to path of travel)	To permit the fire-isolated stairways discharging at Ground Floor to have paths of travel to road or open space that necessitate passing within 6m of	D1P5, E2P2

Performance Solution	NCC DTS Provisions	Variations to NCC DTS Provisions	NCC Performance Requirements
		unprotected openings in the external wall of the building.	
	Summary of Fire Safety Strategy	<p>The preliminary fire safety strategy is based on:</p> <ul style="list-style-type: none"> The provision of fire sprinklers throughout the building in accordance with AS 2118.1-2017, which is expected to mitigate the development and spread of fire. Fire sprinklers are expected to maintain tenable conditions in the event of fire within the building to facilitate occupant evacuation and fire brigade intervention. Reference to Clause 109 of the Environmental Planning and Assessment Regulation of NSW which prohibit the storage of combustibles in or near the fire exit that may obstruct persons evacuating via the fire-isolated exits. The nature of exposure, being to the driveway entry. The availability of alternative paths of travel to open space. 	
	NCC Compliance and Assessment Method	A2G2(1)(a) and A2G2(b)(ii) , Absolute Assessment, Qualitative Analysis.	
	Acceptance Criteria	The Performance Requirements are considered satisfied when it is demonstrated that occupants are permitted to evacuate from the building via the subject fire-isolated stairways safely and in conditions that are tenable.	
8	Clause D2D12 Travel via fire-isolated exits (shared passageways)	To permit the fire-isolated stairways discharging at Ground Floor to have shared fire-isolated passageways, serving rising and descending stairs, in lieu of each fire-isolated exit being provided with independent egress.	D1P5, E2P2
	Summary of Fire Safety Strategy	<p>The preliminary fire safety strategy is based on:</p> <ul style="list-style-type: none"> The subject stairs sharing passageways shall not be alternative exits, and therefore exit convergence does not occur. The rising and descending stairs shall be fire and smoke separated from one-another. Reference to NCC Clause D3D5 and the associated NCC Guide entry permitting the subject arrangement. 	
	NCC Compliance and Assessment Method	A2G2(1)(a) and A2G2(b)(ii) , Absolute Assessment, Qualitative Analysis.	
	Acceptance Criteria	The Performance Requirements are considered satisfied when it is demonstrated that occupants are permitted to evacuate from the building via the subject fire-isolated stairways safely and in conditions that are tenable.	
9	Clause D2D15 Discharge from Exits (separation)	To permit alternative exits to not discharge as far apart as practical.	D1P5, E2P2
	Summary of Fire Safety Strategy	<p>The preliminary fire safety strategy is based on:</p> <ul style="list-style-type: none"> Reference to Clause 109 of the Environmental Planning and Assessment Regulation of NSW which prohibit the storage of combustibles in or near the fire exit that may obstruct persons evacuating via the fire-isolated exits. The characteristics and use of the discharge area. The characteristics of the expected building's occupants discharging from the residential levels. 	

Performance Solution	NCC DTS Provisions	Variations to NCC DTS Provisions	NCC Performance Requirements
		<ul style="list-style-type: none"> The provision of 'KEEP CLEAR – NO STORAGE PERMITTED' signage within the discharge area. 	
	NCC Compliance and Assessment Method	A2G2(1)(a) and A2G2(b)(ii) , Absolute Assessment, Qualitative Analysis.	
	Acceptance Criteria	The Performance Requirements are considered satisfied when it is demonstrated that occupants are permitted to evacuate from the building via the subject fire-isolated stairways safely and in conditions that are tenable.	
10	Clause E1D2, E1D4 Fire hydrants and sprinklers (booster assembly location)	To permit the fire hydrant booster to not be located within sight of the main building entry, noting that the building has multiple entries.	E1P3, E1P4
	Summary of Fire Safety Strategy	<p>The preliminary fire safety strategy is based on:</p> <ul style="list-style-type: none"> The provision of a block plan at the booster assembly, fire control room and pump room identifying the location of all relevant firefighting infrastructure. The provision of a visual alarm device (VAD) at the booster assembly that will identify the location of the assembly to approaching fire crews in the event of fire. The location of the booster assembly, being within close proximity to the fire control room, which is deemed to be the designated building entry point under AS 1670.1-2018 	
	NCC Compliance and Assessment Method	A2G2(1)(a) and A2G2(2)(b)(ii) , Absolute Assessment, Qualitative Analysis.	
	Acceptance Criteria	The Performance Requirements are considered satisfied when it is demonstrated that the location of the booster assembly is easily and readily identifiable and facilitates fire brigade intervention.	
11	Clause E1D4 Sprinklers (concessions)	To permit the use of concessions associated with sprinkler protection noting that the sprinkler system is not technically provided throughout the building, due to a performance solution regarding sprinkler protection in the main switch room and other concessions offered within AS 2118.1-2017	E1P4
	Summary of Fire Safety Strategy	<p>The preliminary fire safety strategy is based on:</p> <ul style="list-style-type: none"> Sprinkler protection shall be provided throughout the building except where justified by Performance Solutions documented herein. AS 2118.1-2017 is the most recent and up to date edition of the sprinkler standard and is thus considered the most appropriate installation. It is considered that the where the BCA states “a building which has a sprinkler system complying with Specification E1.5 installed throughout”, that the BCA acknowledges that concessions within the relevant sprinkler standard can be adopted while still considering the system “installed throughout”, noting that these standards only permit omissions where the risk is considered minor or reasonable. 	
	NCC Compliance and Assessment Method	A2G2(1)(a) and A2G2(2)(b)(ii) , Absolute Assessment, Qualitative Analysis.	

Performance Solution	NCC DTS Provisions	Variations to NCC DTS Provisions	NCC Performance Requirements
	Acceptance Criteria	The Performance Requirements shall be considered satisfied when it is demonstrated that the provided sprinkler system is adequate, and will satisfy the intent of the BCA.	
12	Clause E1D15, Specification 19 Fire Control Rooms (location)	To permit the Fire Control Room to not be accessible from front entrance of the building, noting that the building is provided with multiple pedestrian entries. To permit access to the Fire Control Room to be via a change in level exceeding 300mm.	E1P6, E2P2
	Summary of Fire Safety Strategy	The preliminary fire safety strategy is based on: <ul style="list-style-type: none"> The location of the fire control room, being directly accessible from the road in close proximity to the fire brigade booster assembly. 	
	NCC Compliance and Assessment Method	A2G2(1)(a) and A2G2(2)(b)(ii) , Absolute Assessment, Qualitative Analysis.	
	Acceptance Criteria	The Performance Requirements shall be considered satisfied when it is demonstrated that the fire control room is located in a suitable location to facilitate fire brigade intervention.	

REQUIRED FIRE SAFETY SYSTEMS

The following fire safety systems will be required to be installed throughout the subject development:

- Fire hydrants
- Fire hose reels (non-residential use areas)
- Fire sprinklers
- Portable fire extinguishers
- Automatic smoke detection and alarm system
- Emergency warning and intercom system
- Emergency lighting and exit signs
- Automatic stair pressurisation
- Emergency lifts

Note: The above list may change or vary during the detailed design process, and / or as a result of the future Fire Engineering Assessment.

CONCLUSION

In consideration of the above, it is concluded that Performance Solutions can be developed to the DtS provisions of the NCC to ensure the proposed development can achieve compliance with the relevant Performance Requirements of the NCC.

Should you require any additional information with regards to the above please do not hesitate to contact the undersigned.

Yours Faithfully

Innova Services Australia Pty Ltd

A handwritten signature in black ink, appearing to read "Ben Hamilton".

Ben Hamilton

Director

Certifier – Fire Safety (BDC3375)
BEng (Civil), MFireSafetyEng