Building Commission NSW



Attn.Proper Officer Mittagong Central Developments Pty Ltd (ACN 607 085 852) Level 29, 66 Goulburn Street SYDNEY NSW2000

Service: By Express post and by Email

DATE: 25 March 2024

Building Work Rectification Order

Section 33 of the Residential Apartment Buildings (Compliance and Enforcement Powers) Act 2020

Mittagong Central Developments Pty Ltd (ACN 607 085 852) is being given this Building Work Rectification Order (Order) in relation to 2-8 Station Street, Mittagong NSW 2575 (SP100313).

Mittagong Central Developments Pty Ltd (ACN 607 085 852) is required to cause building work to be carried out to remediate the serious defects as set out in below in this Order.

Failure to comply with the requirements in this Order is a criminal offence.

Background

- 1. The Department of Customer Service (**the Department**) administers the *Residential Apartment Buildings* (*Compliance and Enforcement Powers*) *Act* 2020 (**the Act**).
- 2. Under section 33 of the Act, if the Secretary of the Department, or their authorised delegate, has a reasonable belief that building work was carried out in a manner that could result in a serious defect in relation a residential apartment building or that a residential apartment building has a serious defect, they may order the developer of that building to carry out or not carry out specified building work or to take other specified action to eliminate, minimise or reduce the serious defect or potential serious defect.
- 3. Section 3 of the Act defines a serious defect. Section 3 of the Act also defines the term "building element" by reference to the *Design and Building Practitioners Act 2020* (**DBP Act**). Section 4 of the Act defines the term "developer". Section 6 of the Act provides the building work to which the Act applies. Relevant excerpts from sections 3, 4 and 6 of the Act and section 6 of the DBP Act are **Attachment A** to this order.
- 4. Elizabeth Stewart, Acting Executive Director, Building Operations, Department of Customer Service, is an authorised delegate of the Secretary of the Department.
- 5. Mittagong Central Developments Pty Ltd (ACN 607 085 852) is the developer of the residential apartment building known as 2-8 Station Street, Mittagong NSW 2575 (SP100313) (the Development) for the purposes of section 4(a) of the Act.
- 6. On 28 March 2023, with the consent of the Owners Corporation, a third party consultant engaged by the Department attended the Building (**Investigator**). The Investigator prepared a report on serious defects in the Building (**Inspection Report**).

Requirements in relation to Serious Defects

I, Elizabeth Stewart, under section 34(1) of the Act, specify the standard of building work to be done in respect of the serious defects referenced in column 1 of Table 1 below and under section 34(1A) of the Act require that you, Mittagong Central Developments Pty Ltd (ACN 607 085 852), do the things specified in column 4 of Table 1 below in respect of those serious defects. Each requirement must be complied with by the time set out in column 5 of Table 1:

Column 1	Column 2	Column 3	Column 4	Column 5
Serious Defect Reference No.	Location of Serious Defect	General Description of Serious Defect	Requirement	Time for compliance with Requirement from the date of issue of this Order
1.	Basement Carpark	Inadequate falls and drainage system enabling water ponding causing surface water damage to the building.	 Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist ii. be prepared with consideration to this Order and the Reasons for this Order; iii. detail the specific building work necessary to meet the codes and relevant standard. iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	Stage 1 – 2 months Stage 2 –6 months

Table 1: Requirements in relation to Serious Defects

2.	Basement Carpark	Water staining and stalactite formation to soffit of ground floor slab through cracks which is consistent with water ingress from the external courtyard areas (located above) into the carpark.	Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: i. be prepared by a suitably qualified and	Stage 1 – 2 months Stage 2 –6 months
			 registered specialist ii. be prepared with consideration to this Order and the Reasons for this Order; iii. detail the specific building work necessary to meet the codes and relevant standard. iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. 	
			Rectify the works in accordance with the specialist report and drawings provided at stage 1.	

3.	Upper Courtyard	Efflorescence to the external faces of upper courtyard slab	Within the time period specified in column 5: Stage 1.	Stage 1 – 2 months
		edges caused by moisture	Submit a written report and drawings prenared for	
		egress due to failure of the	the raised defect via email to	Stage 2 – 5
		waterproofing system to	ocaudits@customerservice.nsw.gov.au	months
		courtyard slabs including lack	The written report required to be submitted must:	
			 be prepared by a suitably qualified and registered specialist 	
			ii. be prepared with consideration to this Order and the Reasons for this Order;	
			iii. detail the specific building work necessary to meet the codes and relevant standard.	
			 be prepared with consideration to relevant design and installation specification and manufacture's recommendation 	
			Stage 2.	
			Rectify the works in accordance with the specialist report and drawings provided at stage 1.	

4.	Upper Courtyard	Inadequate falls towards	Within the time period specified in column 5:	Stage 1 – 2
	and unit balconies	drainage outlets enabling water		months
		ponding.	Stage 1.	
			Submit a written report and drawings prepared for	Stage 2 – 5
				monuns
			The written report required to be submitted must	
			i. be prepared by a suitably qualified and registered specialist	
			ii. be prepared with consideration to this Order and the Reasons for this Order;	
			iii. detail the specific building work necessary to meet the codes and relevant standard.	
			iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation	
			Stage 2.	
			Rectify the works in accordance with the specialist report and drawings provided at stage 1.	

5.	Upper Courtward	Penetrations have been made to the courtyard	Within the time period specified in column 5,	Stage 1 – 2 months
	Balustrado	allowing water ingress	Submit a writton report and drawings propared for	monuis
	Fixings		the raised defect via email to	Stage 2 - 4
	1 1711183		ocaudits@customerservice.nsw.gov.au	months
			The written report required to be submitted must:	montino
			i. be prepared by a suitably qualified and	
			registered specialist	
			II. be prepared with consideration to this Order	
			and the Reasons for this Order;	
			iii. detail the specific building work necessary to	
			meet the codes and relevant standard.	
			iv. be prepared with consideration to relevant	
			design and installation specification and	
			manufacture's recommendation	
			Stage 2.	
			Rectify the works in accordance with the specialist	
			report and drawings provided at stage 1.	
6.	Unit 14 -	Horizontal floor surface does not have	Within the time period specified in column 5:	Stage I – 2
	Laundry and	adequate fails to the drainage outlet/s causing	Stage I.	months
	Linit 35 -		Carry out inspections that will satisfy the	Stage 2 -1
	ensuite		denartment that all locations of this recurring	months
	chisance		defect have been identified.	montins
			Submit a written report and drawings prepared for	
			the raised defect via email to	
			ocaudits@customerservice.nsw.gov.au	
			L	
			The written report required to be submitted must:	

			1		
			i. ii.	be prepared by a suitably qualified and registered specialist be prepared with consideration to this	
			iii.	order and the Reasons for this Order; detail the specific building work necessary	
				to meet the codes and relevant standard.	
			iv.	be prepared with consideration to relevant design and installation specification and manufacture's recommendation	
			Stag	e 2.	
			Rect repo	ify the works in accordance with the specialist rt and drawings provided at stage 1.	
7.	Unit 14 – Balcony Unit 25 – Palcony	1. Inadequate termination height of the waterproofing system at the balcony doors; and	With Stag	in the time period specified in column 5: e 1.	Stage 1 – 2 months
	Unit 35 - Bedroom and Balconies	and water stop angle to rear of doors; allowing water ingress.	Carry depa defe	y out inspections that will satisfy the artment that all locations of this recurring ct have been identified.	Stage 2 – 4 months
			Subr the r ocau	nit a written report and drawings prepared for aised defect via email to <u>dits@customerservice.nsw.gov.au</u> written report required to be submitted must:	
			i.	be prepared by a suitably qualified and registered specialist	

			 ii. be prepared with consideration to this Order and the Reasons for this Order; iii. detail the specific building work necessary to meet the codes and relevant standard. iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation 	
			Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1.	
8.	Unit 14 - Balcony	Inadequate drainage falls to floor wastes and overflows; No drip grooves to the balcony slab soffits; and Overflows have been installed lower than the primary drainage; enabling water ponding.	 Within the time period specified in column 5: Stage 1. Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: be prepared by a suitably qualified and registered specialist be prepared with consideration to this Order and the Reasons for this Order; detail the specific building work necessary to meet the codes and relevant standard. 	Stage 1 – 2 months Stage 2 – 6 months

			 iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	
9.	Unit 14 - Balcony	 The waterproofing membrane upturn extending up the external wall cladding from the balcony slab is inadequate and not detailed correctly; and The fixings for the aluminium posts have punctured the waterproofing and are not sealed adequately; allowing water ingress. 	 Within the time period specified in column 5: Stage 1. Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist ii. be prepared with consideration to this Order and the Reasons for this Order; iii. detail the specific building work necessary to meet the codes and relevant standard. iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation 	Stage 1 – 2 months Stage 2 – 6 months

10.Unit 34 and Unit 35 - Balconies1.The original balcony slabs (at the exposed sections set down adjacent the raised tiled sections) have not been waterproofed or haveWithin the time period specified in column 5: Stage 1.Stage 1 - 2 months				Rectify the works in accordance with the specialist report and drawings provided at stage 1.	
 Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified. Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified. Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified. Stage 2 - 6 months Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified. Submit a written report and drawings prepared for the raised defect via email to ocaudits@customerservice.nsw.gov.au The written report required to be submitted must: be prepared by a suitably qualified and registered specialist be prepared with consideration to this Order and the Reasons for this Order; detail the specific building work necessary to meet the codes and relevant standard. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. 	10.	Unit 34 and Unit 35 - Balconies	1.The original balcony slabs (at the exposed sections set down adjacent the raised tiled sections) have not been waterproofed or have been waterproofed poorly using a liquid membrane; and 2. There also exist gaps between the raised tiling section and original balcony slab (haphazardly sealed previously in some areas); which allows water to enter beneath the tiling (above the balcony slab) and enter internal areas that are adjacent and below.	 Within the time period specified in column 5: Stage 1. Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist ii. be prepared with consideration to this Order and the Reasons for this Order; iii. detail the specific building work necessary to meet the codes and relevant standard. iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	Stage 1 – 2 months Stage 2 – 6 months

11.	Unit 33 and Unit 35 - Balconies	 Sections of the original balcony slabs have not been waterproofed or have been waterproofed poorly using a liquid membrane; and The fixings for the aluminium balustrade posts and air conditioning tracks have punctured the waterproofing and are not sealed adequately; allowing water ingress. 	 Within the time period specified in column 5: Stage 1. Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: be prepared by a suitably qualified and registered specialist be prepared with consideration to this Order and the Reasons for this Order; detail the specific building work necessary to meet the codes and relevant standard. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	Stage 1 – 2 months Stage 2 – 6 months
			report and drawings provided at stage 1.	
12	Unit 5 – Dining Room	 There is persisting excessive mould growth within Unit 5 especially within the area of the painted block wall in the dining room. High moisture readings were obtained from the timber skirting in this area. 	Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must:	Stage 1 – 2 months Stage 2 – 4 months

			i.	be prepared by a suitably qualified and registered specialist	
			ii.	be prepared with consideration to this Order and the Reasons for this Order;	
			iii.	detail the specific building work necessary to meet the codes and relevant standard.	
			iv.	be prepared with consideration to relevant design and installation specification and manufacture's recommendation	
			Stage	2.	
			Rectif report	y the works in accordance with the specialist and drawings provided at stage 1.	
13	Basement – West Wall of Lift Basement	Inadequate fire checking at multiple penetrations on the ceiling of these areas.	Withir Stage	the time period specified in column 5: 1.	Stage 1 – 2 months
	– Southeast Fire Exit Basement –		Submi the rai ocaud	t a written report and drawings prepared for sed defect via email to its@customerservice.nsw.gov.au	Stage 2 – 6 months
	Fire Hydrant		The w	ritten report required to be submitted must:	
			i.	be prepared by a suitably qualified and registered specialist	
			ii.	be prepared with consideration to this Order and the Reasons for this Order;	
			iii.	detail the specific building work necessary to meet the codes and relevant standard.	

			 iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	
14	Basement	The hydrant pipework installed throughout the basement levels is not protected from damage by fire.	 Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist ii. be prepared with consideration to this Order and the Reasons for this Order iii. detail the specific building work necessary to meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation. Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	Stage 1 – 2 months Stage 2 – 6 months

15	Level 3 – Fire Exit	The fire isolation wall of the stairwell at Level 3 does not extend to the underside of the roof.	Within the time period specified in column 5: Stage 1.	Stage 1 – 2 months
			Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u>	Stage 2 – 6 months
			The written report required to be submitted must:	
			i. be prepared by a suitably qualified and registered specialist	
			ii. be prepared with consideration to this Order and the Reasons for this Order	
			iii. detail the specific building work necessary to meet the codes and relevant standard	
			 iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation 	
			Stage 2.	
			Rectify the works in accordance with the specialist report and drawings provided at stage 1.	
16	Level 3 – South Fire Exit	The clearance between the hand wheel serving hydrant and the wall adjacent is approximately 40-50 mm and not the required minimum 100	Within the time period specified in column 5: Stage 1.	Stage 1 – 2 months
		mm.	Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must:	Stage 2 – 4 months
			i. be prepared by a suitably qualified and registered specialist	

		 ii. be prepared with consideration to this Order and the Reasons for this Order iii. detail the specific building work necessary to meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacturer's recommendation Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	
17 Emergency Exit to Regent St	The fire exit door leading from the public corridor to Regent St. swings inwards toward the direction of egress, and not outwards in the direction of egress.	 Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist ii. be prepared with consideration to this Order and the Reasons for this Order iii. detail the specific building work necessary to meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation 	Stage 1 – 2 months Stage 2 – 4 months

18	The defect has	been removed.	Rectify the works in accordance with the specialist report and drawings provided at stage 1.	
19	Fire Stairwell Fire Hydrant and Sprinkler Booster at corner of Regent St and Church Ln	Block Plans are not current or compliant.	 Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for the raised defect via email to ocaudits@customerservice.nsw.gov.au The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist ii. be prepared with consideration to this Order and the Reasons for this Order iii. detail the specific building work necessary to meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	Stage 1 – 2 months Stage 2 – 3 months

20	Fire Hydrant and Sprinkler Booster at corner of Regent St and Church Ln Fire Hydrant and Sprinkler Pump Room at Basement	System signage provided for combined fire hydrant and sprinkler booster and pump room are not compliant.	 Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist ii. be prepared with consideration to this Order and the Reasons for this Order iii. detail the specific building work necessary to meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	Stage 1 – 2 months Stage 2 – 3 months
21	Courtyard	No warning sign against use of lifts in case of fire.	Within the time period specified in column 5:	Stage 1 – 2 months
			Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist	Stage 2 – 1 months

			 ii. be prepared with consideration to this Orde and the Reasons for this Order iii. detail the specific building work necessary meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	
22	Basement Carpark Fire stair landing slab	Areas of the concrete slab soffit, beam edges and columns have not been properly vibrated or compacted which has created areas of segregation and honeycombing and in some sections, the embedded reinforcement was exposed and observable.	 Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist ii. be prepared with consideration to this Order and the Reasons for this Order iii. detail the specific building work necessary to meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation 	Stage 1 – 2 months Stage 2 – 6 months

			Rectify the works in accordance with the specialist report and drawings provided at stage 1.	
23	Basement Carpark – Adjacent Car Space 28 Under croft Carpark - Soffit	Sections of excessive and poorly formed and cured concrete.	 Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist ii. be prepared with consideration to this Order and the Reasons for this Order iii. detail the specific building work necessary to meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation. Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	Stage 1 – 2 months Stage 2 – 6 months
24	Basement Carpark – Slab on Ground	Systemic uncontrolled cracking of 0.5 - 3mm wide in the basement concrete slab.	Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must:	Stage 1 – 2 months Stage 2 – 6 months

			i. ii. iv. Stage Rectif report	be prepared by a suitably qualified and registered specialist be prepared with consideration to this Order and the Reasons for this Order detail the specific building work necessary to meet the codes and relevant standard be prepared with consideration to relevant design and installation specification and manufacture's recommendation e 2. y the works in accordance with the specialist and drawings provided at stage 1.	
25	Basement Carpark – Slab Soffit	Cracking to the ground floor slab soffit has migrated through the full depth of the suspended slab allowing water to permeate.	Withir Stage Subm the ra <u>ocaud</u> The w i. ii.	a the time period specified in column 5: 1. it a written report and drawings prepared for ised defect via email to its@customerservice.nsw.gov.au ritten report required to be submitted must: be prepared by a suitably qualified and registered specialist be prepared with consideration to this Order and the Reasons for this Order detail the specific building work necessary to meet the codes and relevant standard	Stage 1 – 2 months Stage 2 – 6 months

			 iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	
26	Upper Courtyard – Handrails and Awning Post Fixings	Handrail and awning fixings materials not fit for the building environment.	 Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for the raised defect via email to ocaudits@customerservice.nsw.gov.au The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist ii. be prepared with consideration to this Order and the Reasons for this Order iii. detail the specific building work necessary to meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	Stage 1 – 2 months Stage 2 – 3 months

27	Undercroft Carpark	The steel framing elements and Bondek to the undercroft carpark corroded and stalactites present as a result of water ingress through the slab of the upper courtyard above.	Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for	Stage 1 – 2 months Stage 2 – 6
			the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must:	months
			 be prepared by a suitably qualified and registered specialist 	
			ii. be prepared with consideration to this Order and the Reasons for this Order	
			 iii. detail the specific building work necessary to meet the codes and relevant standard 	
			 iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation 	
			Stage 2.	
			Rectify the works in accordance with the specialist report and drawings provided at stage 1.	
28	Undercroft Carpark	A section of the undercroft carpark steel column baseplate is not supported atop the slab on ground.	Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for	Stage 1 – 2 months Stage 2 – 6
			the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must:	months
			i. be prepared by a suitably qualified and registered specialist	

		 ii. be prepared with consideration to this Order and the Reasons for this Order iii. detail the specific building work necessary to meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1.
29 External Footpath Along Regent Street	There are voids and separation between the base of the masonry columns and adjoining concrete footpath slabs.	Within the time period specified in column 5: Stage 1.Stage 1 - 2 monthsSubmit a written report and drawings prepared for the raised defect via email to ocaudits@customerservice.nsw.gov.auStage 2 - 6 monthsThe written report required to be submitted must:i.be prepared by a suitably qualified and registered specialistStage 1 - 2 monthsii.be prepared by a suitably qualified and registered specialistii.be prepared with consideration to this Order and the Reasons for this Orderiii.detail the specific building work necessary to meet the codes and relevant standardiv.iv.be prepared with consideration to relevant design and installation specification and manufacture's recommendationStage 2.

			Rectify the works in accordance with the specialist report and drawings provided at stage 1.	
30	Fire Stairs	Mortar joints to the structural masonry walls in the fire stair areas are not solid filled or fully bedded	Within the time period specified in column 5: Stage 1.	Stage 1 – 2 months
			Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must:	Stage 2 – 4 months
			i. be prepared by a suitably qualified and registered specialist	
			ii. be prepared with consideration to this Order and the Reasons for this Order	
			iii. detail the specific building work necessary to meet the codes and relevant standard	
			iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation	
			Stage 2.	
			Rectify the works in accordance with the specialist report and drawings provided at stage 1.	
31	Fire stairs	Redundant unused penetrations in the concrete slab which reduce the structural capacity of the concrete slab.	Within the time period specified in column 5: Stage 1.	Stage 1 – 2 months
			Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must:	Stage 2 – 4 months

				the many states and the second states and the second states and the second states and the second states are states and the second states are states and the second states are stat	
			ι.	be prepared by a suitably qualified and registered specialist	
			ii.	be prepared with consideration to this Order and the Reasons for this Order	
			iii.	detail the specific building work necessary to meet the codes and relevant standard	
			iv.	be prepared with consideration to relevant design and installation specification and manufacturer's recommendation	
			Stage	2.	
			Rectif report	y the works in accordance with the specialist and drawings provided at stage 1.	
32	Unit 35 – Balcony	Exposed and unprotected reinforcement is evident to the balcony slab.	Withir Stage	the time period specified in column 5: 1.	Stage 1 – 2 months
			Submi the rai <u>ocaud</u> The w	it a written report and drawings prepared for ised defect via email to <u>its@customerservice.nsw.gov.au</u> ritten report required to be submitted must:	Stage 2 – 4 months
			i.	be prepared by a suitably qualified and registered specialist	
			ii.	be prepared with consideration to this Order and the Reasons for this Order	
			iii.	detail the specific building work necessary to meet the codes and relevant standard	

			 iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation 	
			Rectify the works in accordance with the specialist report and drawings provided at stage 1.	
33	Basement Carpark and Fire Stairs	Leftover formwork to the soffit of concrete slabs within the basement carpark and fire stairs from construction of the building pose a safety hazard should they dislodge.	 Within the time period specified in column 5: Stage 1. Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified. Submit a written report and drawings prepared for the raised defect via email to ocaudits@customerservice.nsw.gov.au The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist ii. be prepared with consideration to this Order and the Reasons for this Order iii. detail the specific building work necessary to meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation 	Stage 1 – 2 months Stage 2 – 4 months
			Stage 2.	

			Rectify the works in accordance with the specialist report and drawings provided at stage 1.	
34	Upper Courtyard Areas and Balconies	Lateral deflection in the balustrades when pushed by hand.	 Within the time period specified in column 5: Stage 1. Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified. Submit a written report and drawings prepared for the raised defect via email to ocaudits@customerservice.nsw.gov.au The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist ii. be prepared with consideration to this Order and the Reasons for this Order iii. detail the specific building work necessary to meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	Stage 1 – 2 months Stage 2 – 6 months

35	Fire Stairs	A steel post has been fixed to the masonry block walls within the fire stairs for strengthening or reinforcement without apparent reason raising concerns of structural reliability.	 Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist ii. be prepared with consideration to this Order and the Reasons for this Order iii. detail the specific building work necessary to meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	Stage 1 – 2 months Stage 2 – 4 months
36	Fire Stairs	A retrofitted plate has been silicone to the top of the handrail to the fire stairs landing to raise the height to the required level.	 Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist 	Stage 1 – 2 months Stage 2 – 4 months

		 ii. be prepared with consideration to this Order and the Reasons for this Order iii. detail the specific building work necessary to meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	
37 Fire Stairs – Level 3 Internal common areas Level 3 – Gas and Water Meter Room	Water ingress staining to the ceiling lining of the fire stairs within the third level (top floor)	 Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist ii. be prepared with consideration to this Order and the Reasons for this Order iii. detail the specific building work necessary to meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation 	Stage 1 – 2 nonths Stage 2 – 6 nonths

			Stage 2.	
			Rectify the works in accordance with the specialist report and drawings provided at stage 1.	
38	Upper Courtyard	Voids between the base of the planter boxes and the adjoining metal cappings provided to the top of the masonry balustrade walls which allow water to enter through the voids and pond atop the masonry walls causing deterioration.	 Within the time period specified in column 5, Stage 1. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist ii. be prepared with consideration to this Order and the Reasons for this Order iii. detail the specific building work necessary to meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	Stage 1 – 2 months Stage 2 – 4 months
39	Unit 14 – Balcony	Salt and mineral deposits and excessive moss growth to the balcony brick balustrades and numerous sections of external walls indicating	Within the time period specified in column 5: Stage 1.	Stage 1 – 2 months
		waterproofing deficiencies.		Stage 2 – 6 months

			Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u>	
			The written report required to be submitted must:	
			registered specialist	
			ii. be prepared with consideration to this Order and the Reasons for this Order	
			iii. detail the specific building work necessary to meet the codes and relevant standard	
			 iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation 	
			Stage 2.	
			Rectify the works in accordance with the specialist report and drawings provided at stage 1.	
40	Unit 5 – Dedreem Unit	Water ingress through ceiling as a result of	Within the time period specified in column 5:	Stage 1 – 2
	34 - bedroom	above.	Stage I.	monuns
	Unit 35 –		Submit a written report and drawings prepared for	Stage 2 – 6
	Bedroom and		the raised defect via email to ocaudits@customerservice.nsw.gov.au	months
	33 - Kitchen		The written report required to be submitted must:	
			 be prepared by a suitably qualified and registered specialist 	
			ii he prepared with consideration to this Order	
			and the Reasons for this Order	

	iii. detail the specific building work necessary to meet the codes and relevant standard
	iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation
	Stage 2.
	Rectify the works in accordance with the specialist report and drawings provided at stage 1.

41	Unit 35 – Balcony	Numerous instances of over-sealed penetrations to the compressed fibre cement external wall cladding panels allowing an avenue for water ingress	 Within the time period specified in column 5: Stage 1. Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: be prepared by a suitably qualified and registered specialist be prepared with consideration to this Order and the Reasons for this Order; detail the specific building work necessary to meet the codes and relevant standard. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	Stage 1 – 2 months Stage 2 – 6 months
42	Unit 33 – Master Bedroom	Water ingress damage in the form of peeling and bubbling paint and elevated moisture readings to the windowsill	Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must:	Stage 1 – 2 months Stage 2 – 6 months

			i. ii. iii. iv. Stage Rectif report	 be prepared by a suitably qualified and registered specialist be prepared with consideration to this Order and the Reasons for this Order detail the specific building work necessary to meet the codes and relevant standard be prepared with consideration to relevant design and installation specification and manufacture's recommendation 2. y the works in accordance with the specialist and drawings provided at stage 1. 	
43	Unit 35 – Balcony	No appropriate flashing/seals to the junctions between the sliding door frames and windows and the adjoining external wall claddings allowing water ingress.	Withir Stage Carry that a identif Subm raised <u>ocaud</u> The w i.	the time period specified in column 5: 1. out inspections that will satisfy the department I locations of this recurring defect have been fied. It a written report and drawings prepared for the defect via email to <u>its@customerservice.nsw.gov.au</u> ritten report required to be submitted must: be prepared by a suitably qualified and registered specialist be prepared with consideration to this Order and the Reasons for this Order	Stage 1 – 2 months Stage 2 – 6 months

			 iii. detail the specific building work necessary to meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation Stage 2. Rectify the works in accordance with the specialist report and drawings provided at stage 1. 	
44	This defect has been	removed.		
45	Fire Hydrant and Sprinkler Pump Room at Basement	No ventilation system at the fire hydrant pump room located in the basement carpark.	 Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist ii. be prepared with consideration to this Order and the Reasons for this Order iii. detail the specific building work necessary to meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation 	Stage 1 – 2 months Stage 2 – 5 months
			Stage 2.	
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			Rectify the works in accordance with the specialist report and drawings provided at stage 1.	
46	South Facade	The mechanical exhaust vent pipe located at ground level on the southern elevation is located below a natural ventilation (window) of Unit 5 and at ground level. It imposes a health and safety risk to the window above and to the public.	 Within the time period specified in column 5: Stage 1. Submit a written report and drawings prepared for the raised defect via email to <u>ocaudits@customerservice.nsw.gov.au</u> The written report required to be submitted must: i. be prepared by a suitably qualified and registered specialist ii. be prepared with consideration to this Order and the Reasons for this Order iii. detail the specific building work necessary to meet the codes and relevant standard iv. be prepared with consideration to relevant design and installation specification and manufacture's recommendation 	Stage 1 – 2 months Stage 2 – 4 months
			Rectify the works in accordance with the specialist report and drawings provided at stage 1.	

Conditions of this Order

- 8. You must make good any consequential damage caused in carrying out the works specified in this Order.
- 9. A design that is prepared for a building element for building work or a design that is prepared for a performance solution for building work (including a building element) in this Order must comply with the *Design and Building Practitioners Act 2020* (DBP Act).
- 10. A suitably qualified person or specialist referred to in column 4 of Table 1 is a person who is a registered design practitioner under the DBP Act.
- 11. Where this Order requires you to submit a written report, then written report must:
 - a. be prepared by a suitably qualified person or specialist; and
 - b. be prepared with consideration to this Order and the Reasons for this Order; and
 - c. detail the specific building work necessary to meet the codes and relevant standards specified in column 5 of Table 2; and
 - d. be prepared with consideration to other building work already constructed at the time of this Order and not the subject of a serious defect including designs for that building work, and other building work required by this Order including designs for that building work, and other building work required by this Order including designs for that building work, and manufacturer's specifications and;
 - e. be submitted to Building Commission NSW via email to <u>ocaudits@customerservice.nsw.gov.au.</u>

Duration of this Order

- 12. This Order remains in force until it is revoked by the Secretary.
- 13. This Order is given on the date that is listed above in accordance with section 67 of the Act.



Reasons for Building Work Rectification Order

- 1. These Reasons for Order are with respect to the Order dated 25 March 2024 issued to **Mittagong Central Developments Pty Ltd** (ACN 607 085 852) under the *Residential Apartment Buildings* (*Compliance and Enforcement Powers*) Act 2020 (the Act). These Reasons for Order adopt the Background to the Order and any definitions within the Order, unless otherwise specified in the Reasons for Order.
- 2. On 28 March 2023, with the consent of the Owners Corporation, a third party consultant engaged by the Department attended the Building (**Investigator**). The Investigator prepared a report on serious defects in the Building (**Inspection Report**).
- 3. I Elizabeth Stewart, have formed a reasonable belief that the development has serious defects based on my consideration of the Inspection Report.
- 4. My reasonable belief is also based upon the following matters, set out in Table 2 below in respect of each serious defect identified in column 1 of Table 2 (where that reference corresponds to the reference set out in Table 1 above).

Serious Defect Reference No.	Building element in which serious defect has been identified	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
1.	Waterproofing	Uncontrolled flow of water and water ponding causing surface water damage to the building such as corroded bollard fixings.	Inadequate falls and drainage system in Basement carpark enable water ponding. Inadequate measures to prevent water ponding leads to unhealthy and dangerous conditions, loss of	Australian Standard AS/NZS3500.3 Plumbing and Drainage–Stormwater Drainage, Section 5 Surface water drainage system – Design, 5.3 Layout – General criteria which states in part –

Table2–Basis of reasonable belief as to serious defects

	amenity for the occupants and undue dampness and deterioration of the building elements, causing water and moisture damage.	"5.3.2 Other than roof areas Stormwater from other than roof areas shall be collected and conveyed via stormwater channels and inlets to site stormwater drains." "5.3.3 Ponding Except for on-site stormwater detention (OSD) systems, ponding of stormwater shall only occur temporarily at sag pits conforming to Clause 5.4.10.1.
		Australian Standard AS/NZS3500.3 appears as a standard referenced in the BCA Volume One, Part F Damp and Weatherproofing, Performance Requirements FP1.3 which states in part –
		"A drainage system for the disposal of surface water must – (a) convey surface water to an appropriate outfall; and (b) avoid surface water damaging the building;"
		Australian Standard AS/NZS3500.3 appears as a standard referenced in the BCA Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Deemed-to- Satisfy provision F1.1 Stormwater drainage, which states:
		"Stormwater drainage must comply with AS/NZS 3500.3."
		Deemed-to-Satisfy provision F1.1 is a pathway that can satisfy the BCA Volume One, Section F Health and Amenity. Part F1 Damp and

	V R d	Veatherproofing, Performance Requirements: FP1.3 Rainwater Irainage systems, which states:
	", o s ir (a (i a s a e b	A drainage system for the disposal of surface water resulting from a storm having an average recurrence nterval of — a) 20 years must — i) convey surface water to an oppropriate outfall; and (ii) avoid surface water damaging the building; and (b) 100 years must avoid the entry of surface water into a building."

Serious Defect Reference No.	Building element in which serious defect has been identified	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
2.	Waterproofing	Water staining and stalactite formation to soffit of ground floor slab above Basement carpark through cracks which is consistent with water ingress from the external courtyard areas (located above).	Inadequate waterproofing of the ground floor slab above Basement carpark to prevent water penetration and leakage. Inadequate measures to prevent water ingress and leakage lead to unhealthy conditions, loss of amenity for the occupants and undue dampness or deterioration of the building elements, causing water and moisture damage	Australian Standard AS4654.2 appears as a standard referenced in the BCA Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Deemed-to- Satisfy provision F1.4 which states in part: "Waterproof membranes for external above ground use must comply with AS4654 Parts 1 and 2."
3.	Waterproofing	Efflorescence to the external faces of upper courtyard slab edges.	Moisture egress due to failure of the waterproofing system to courtyard slabs including lack of overflows. Inadequate measures to prevent water ingress lead to dangerous conditions, loss of amenity for the occupants and undue dampness or deterioration of the building elements, causing water and moisture damage.	Australian Standard AS/NZS3500.3 Plumbing and Drainage. Part 3: Stormwater drainage, Section 3.8 Balcony and Terrace Areas, which states in part – "Systems for draining balconies and terraces shall be designed for – In Australia – (i) 5 % AEP (20 years ARI) intensity; and (ii) 1 % AEP (100 years ARI) rainfall intensity for overflow". Australian Standard AS/NZS3500.3 Plumbing and Drainage–Stormwater Drainage, Section 5 Surface Drainage Systems – Design, Clause 5.3.1.1 Roof areas, which states in part –

		"Stormwater from roof areas shall be collected and conveyed in gutters and downpipes () and, during periods of high rainfall intensity or blockage of the roof drainage system, be discharged through overflow devices to –(a) site stormwater drains or channels;"AS 3500.3 appears as a standard referenced in the BCA Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Deemed to Satisfy Provision F1.0, which states: "Stormwater drainage must comply with AS/NZS 3500.3."
		Australian Standard AS/NZS3500.3 appears as a standard referenced in the BCA Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4 which states in part –
		"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause- (a) Unhealthy or dangerous conditions, or loss of amenity for occupants; and (b) Undue dampness or deterioration of building elements."

4.	Waterproofing	Water ponding on Upper Courtyard and unit balconies.	Inadequate falls towards drainage outlets to prevent water ponding and avoid surface water damaging the building. Inadequate measures to prevent water ponding lead to dangerous conditions, loss of amenity for the occupants and undue dampness of the building elements, causing water and moisture damage.	Australian Standard AS/NZS 3500.3 Plumbing and Drainage– Stormwater Drainage, Section 5 Surface water drainage system – Design, 5.3 Layout – General criteria which states in part – "5.3.2 Other than roof areas Stormwater from other than roof areas shall be collected and conveyed via stormwater channels and inlets to site stormwater drains." And "5.3.3 Ponding Except for on-site stormwater detention (OSD) systems, ponding of stormwater shall only
				occur temporarily at sag pits conforming to Clause 5.4.10.1" Australian Standard 4654.2 - Waterproofing Membranes for External Above Ground Use, Section 2 Design and installation, 2.5 Substrate, 2.5.2 Falls, which states in part - "Falls in finishes shall ensure water drains to the drainage outlet. Water shall not be retained on the finished surface with the exception of residual water remaining due to surface tension. The fall in the structural substrate, or formed by a screed over the structural substrate. NOTE: Falls for surface drainage should be no flatter than 1 in 100."

		Australian Standard AS4654.2 appears as a standard referenced in the BCA Volume One, Part F Damp and Weatherproofing, Performance Requirements FP1.3 which states in part:
		"A drainage system for the disposal of surface water must – (a) convey surface water to an appropriate outfall; and (b) avoid surface water damaging the building;"

5.	Waterproofing	Penetrations have been made to the upper courtyard slab membrane by balustrade fixings that have not been sealed allowing water ingress and corrosion.	The fixings that penetrate the membrane have not been sealed to prevent the penetration of water that could cause - (a) unhealthy or dangerous conditions, or loss of amenity for occupants; and (b) undue dampness or deterioration of building elements. Inadequate measures to prevent water ingress lead to dangerous conditions, loss of amenity for the occupants and undue dampness or deterioration of the building	Australian Standard AS4654.2 Waterproofing membranes for external above-ground use – Design and installation, Section 2 - Design and installation, 2.8 Termination of membranes, 2.8.4 penetrations, which states in part - "Any fixings that penetrate the membrane shall be sealed. The sealant shall be compatible with the surface material. Where backing rods are used to support the sealant, they shall be a minimum 12mm NOTES: 1 Typical
			elements, causing water and moisture damage	Minimum 12mm. NOTES: 1. Typical details of penetrations are shown in Figures 2.10 and 2.11. 2. Typical details of metal post supports are shown in Figure 2.12."
				Australian Standard AS4654.2 appears as a standard referenced in the BCA Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4 Weatherproofing, which states in part:
				"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause - (a) unhealthy or dangerous conditions, or loss of amenity for occupants; and (b) undue dampness or deterioration of building

		elements."

6	Waterproofing	Horizontal floor surface in Unit 14 -laundry and ensuite and Unit 35 -	The falls in the floors are insufficient to allow for water drainage to the drainage outlets	Australian Standard 3740- Waterproofing of domestic wet areas, Section 3 Installation, 3.3
		ensuite does not have	without water ponding and allowing	Falls in floor finishes, which states in
		drainage outlet/s causing	building.	part -
		accumulation of excess water.	Inadequate measures to prevent water ponding lead to dangerous conditions, loss of amenity for the occupants and undue dampness of the building elements, causing water and moisture damage.	"Where required, falls in floor finishes shall allow all surface water to drain without ponding except for residual water remaining due to surface tension. For general bathroom floor area, the minimum fall to the waste shall be 1:100." And Appendix B Falls in floor finishes
				Clause B4 Diagonal Cutting Tiles , which states in part -
				"Tiles may require diagonal cutting in the area around the waste to achieve the requirement falls, sufficient drainage and to ensure lipping is kept within the guidelines of AS 3958.1"
				Australian Standard 4654.2 - Waterproofing Membranes for External Above Ground Use, Section 2 Design and installation, 2.5 Substrate, 2.5.2 Falls, which states in part -
				"Falls in finishes shall ensure water drains to the drainage outlet. Water shall not be retained on the finished surface with the exception of residual water remaining due to surface

		tension. The fall in the structural substrate, or formed by a screed over the structural substrate. NOTE: Falls for surface drainage should be no flatter than 1 in 100."

7	Waterproofing	Unit 14 – Balcony Unit 35	Inadequate waterproofing system	Australian Standard AS4654.2,
		– Balcony	termination details at doors fails to	Waterproofing Membranes for
		Unit 35 - Bedroom and	prevent the penetration of water	External Above Ground Use, Section
		Balconies have	that could cause -	2 - Design and installation, 2.8
			(a) unhealthy or dangerous	Termination of membranes, 2.8.3
		1. Inadequate termination	conditions, or loss of amenity for	Doors and windows onto external
		height of the	occupants; and	waterproofed areas which states in
		waterproofing system at	(b) undue dampness or deterioration	part: -
		the balcony doors; and	of building elements.	
		2. Absence of waterproof		"For doors and windows onto external
		membrane, subsill and	Inadequate measures to prevent	waterproofed areas, the following
		water stop angle to rear	water ingress lead to dangerous	apply: Sub-sill flashing shall be
		of doors;	conditions, loss of amenity for the	included as part of the membrane
			occupants and undue dampness or	system (see Note 1).
		allowing water ingress.	deterioration of the building	Where the internal and external
			elements, causing water and	finished floor levels do not allow an
			moisture damage.	upturn, the membranes shall be fixed
				under the sill and terminate in the
				stormwater system (see Note 2).
				Notes:
				1. For typical detail of sub-sill flashing,
				see Figure 2.8.
				3. Ideally, the deck surface should fall
				away from the grate, and additionally
				the grate should be to the width of or
				greater than the opening.
				4. Typical details of external
				terminations at external opening doors
				and at wall openings are snown in
				Figure 2.8 and Figure 2.9.
				5. Upenings should be provided with a
				set-down or nob to provide a vertical
				surface of sufficient dimension. See
				also Table AT, Appendix A.
				o. where circumstances do not permit
				the inclusion of a set-down or nob (e.g.,
	1			for wheelchair access), a gutter should

		be formed into the substrate
		Immediately in front of the opening.
		and frames are given in AS 2047 "
		and 2.8.1 Upward terminations,
		2.8.1.1. Height, which states:
		"Where the membrane termination is to
		prevent water entry, the finished
		height of the membrane above the
		finished surface level shall be
		sufficient to prevent water, including
		membrane "
		membrane.
		Australian Standard AS1170.2
		Structural design actions, Part 2
		Wind Actions, Section 2 Calculation
		of Wind Actions, 2.1 General, which
		"(a) Determine site wind speeds:
		(b) Determine design wind speed from
		the site wind speeds;
		(c) Determine design wind pressures
		and distributed forces;
		(d) Calculate wind actions
		Australian Standard AS4654.2
		appears as a standard referenced in
		the BCA Volume One, Section F
		Health and Amenity, Part F1 Damp
		Requirement FP1.4 Weatherproofing
		which states in part –
		·
		"A roof and external wall (including

		openings around windows and doors) must prevent the penetration of water that could cause - (a) unhealthy or dangerous conditions, or loss of amenity for occupants; and (b) undue dampness or deterioration of building elements."
		F1.4 External above ground membranes, which states in part -
		"Waterproofing membranes for external above ground use must comply with AS 4654.1 and AS 4654.2"

8	Waterproofing	Unit 14 - Balcony has	Inadequate falls in floors ranging	Australian Standard AS/NZS 3500.3
		1. Inadequate drainage	between 1.7/1000mm and	–2015 Plumbing and Drainage–
		falls to floor wastes and	5.2/1000mm from the drainage	Stormwater Drainage, Section 5
		overflows;	(where the required minimal fall is	Surface water drainage system –
		2. No drip grooves to the	10/1000mm towards the drainage)	Design, 5.3 Layout – General criteria
		balcony slab soffits; and	are insufficient to allow for water	which states in part –
		3. Overflows have been	drainage to drainage outlet without	
		installed lower than the	water ponding and avoid surface	"5.3.2 Other than roof areas
		primary drainage.	water damaging the building.	Stormwater from other than roof areas shall be collected and conveyed via
			Inadequate measures to prevent	stormwater channels and inlets to site
			water ponding lead to dangerous	stormwater drains." And "5.3.3
			conditions, loss of amenity for the	Ponding Except for on-site stormwater
			occupants and undue dampness of	detention (OSD) systems, ponding of
			the building elements, causing water	stormwater shall only occur
			and moisture damage.	temporarily at sag pits conforming to
				Clause 5.4.10.1.
				Australian Standard 4654.2 -
				Waterproofing Membranes for
				External Above Ground Use, Section
				2 Design and installation, 2.5
				Substrate, 2.5.2 Falls, which states
				in part -
				"Falls in finishes shall ansure water
				drains to the drainage outlet Water
				chall not be retained on the finished
				surface with the exception of residual
				water remaining due to surface
				tension The fall in the structural
				substrate, or formed by a screed over
				the structural substrate_NOTF: Falls
				for surface drainage should be no
				flatter than 1 in 100."
				Australian Standard AS4654.2

		appears as a standard referenced in the BCA Volume One, Part F Damp and Weatherproofing, Performance Requirements FP1.3 which states in part:
		"A drainage system for the disposal of surface water must – (a) convey surface water to an appropriate outfall; and (b) avoid surface water damaging the building;"

9	Waterproofing	On the Unit 14 – Balconv:	1. The finished height of the	Australian Standard AS4654.2
-		,	membrane above the finished	Waterproofing Membranes for
		1. The waterproofing	surface level must be sufficient to	External Above Ground Use. Section
		membrane upturn	prevent water, including wind driven.	2 Design and Installation. 2.8
		extending up the external	flowing over the top of the	Termination of membranes, 2.8.1.1
		wall cladding from the	membrane; and	Height, which states in part:
		balcony slab is	2. Any fixings that penetrate the	
		inadequate and not	membrane shall be sealed;	"Where the membrane termination is to
		detailed correctly; and	to prevent the penetration of water	prevent water entry, the finished
		2. The fixings for the	that could cause - (a) unhealthy or	height of the membrane above the
		aluminium posts have	dangerous conditions, or loss of	finished surface level shall be
		punctured the	amenity for occupants; and (b) undue	sufficient to prevent water, including
		waterproofing and are	dampness or deterioration of	wind driven, flowing over the top of the
		not sealed adequately;	building elements.	membrane."
		Both allowing water	Inadequate measures to prevent	Australian Standard AS4654.2
		ingress.	water ingress lead to dangerous	Waterproofing membranes for
			conditions, loss of amenity for the	external above-ground use – Design
			occupants and undue dampness or	and installation, Section 2 - Design
			deterioration of the building	and installation, 2.8 Termination of
			elements, causing water and	membranes, 2.8.4 penetrations,
			moisture damage	which states in part -
				"Any fixings that penetrate the
				membrane shall be sealed. The sealant
				shall be compatible with the surface
				material. Where backing rods are used
				to support the sealant, they shall be a
				minimum 12mm. NOTES: 1. Typical
				details of penetrations are shown in
				Figures 2.10 and 2.11. 2. Typical details
				of metal post supports are shown in
				rigure 2.12.
				Australian Standard AS4654.2
				appears as a standard referenced in
				the BCA Volume One, Section F

		Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4 Weatherproofing, which states in part:
		"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause - (a) unhealthy or dangerous conditions, or loss of amenity for occupants; and (b) undue dampness or deterioration of building elements."

10	Waterproofing	On the Unit 34 and Unit	Roofs and external walls must	Deemed-to-Satisfy provision F1.4 is
		35 – Balconies	prevent the penetration of water	a pathway that can satisfy the BCA
			that could cause-	Volume One, Section F Health and
		1.The original balcony	(a) Unhealthy or dangerous	Amenity, Part F1 Damp and
		slabs (at the exposed	conditions, or loss of amenity for	Weatherproofing, Performance
		sections set down	occupants; and	Requirement FP1.4, which states in
		adjacent the raised tiled	(b) Undue dampness or deterioration	part:
		sections) have not been	of building elements	
		waterproofed or have		"A roof and external wall (including
		been waterproofed	Inadequate measures to prevent	openings around windows and doors)
		poorly using a liquid	water ingress lead to dangerous	must prevent the penetration of water
		membrane; and	conditions, loss of amenity for the	that could cause-
		2. There also exist gaps	occupants and undue dampness or	(a) Unhealthy or dangerous conditions,
		between the raised tiling	deterioration of the building	or loss of amenity for occupants; and
		section and original	elements, causing water and	(b) Undue dampness or deterioration of
		balcony slab	moisture damage.	building elements."
		(inadequately sealed		
		previously in some areas)	;	Australian Standard 4654.2, the BCA
		which allows water to		Volume One Performance
		enter beneath the tiling		Requirement
		(above the balcony slab)		
		and enter internal areas		
		that are adjacent and		
		pelow.		

1 11 Waterproofing On the Unit 33 and Unit 11, Roofs and external walls must Deemed-to -	-Satisfy provision F1.4 is
35 – Balconies prevent the penetration of water; a pathway the	hat can satisfy the BCA
I. Sections of the original and volume One	e, Section F Health and
bacony stabs have not 2. Any fixings that penetrate the Amenity, Pa	art FI Damp and
been waterproofed of internorate must be sealed; weatherproofed by been waterproofed to provent	offing, Performance
nave been waterproofed to prevent Requiremen	IT FP1.4 , which states in
poorty using a tiquid (a) officially of dangerous part:	
2. The fivings for the sequents and "A reaf and s	avternal well (including
2. The fixings for the occupants, and A 1001 and e	external wall (including
addition backstrade (b) ondue dampness of deterioration openings are	t the penetration of water
tracks have punctured	
the waterproofing and Inadequate measures to prevent (a) Unhoalth	v or dangerous conditions
are not sealed water ingress lead to dangerous or loss of am	y of daligerous conditions,
adequately:	mppage or deterioration of
allowing water ingress occupants and undue dampness or building eler	mente"
deterioration of the building	nents.
elements causing water and Australian S	Standard AS4654 2
moisture damage.	ing membranes for
external abr	ove-ground use – Design
and installat	tion. Section 2 - Design
and installat	tion. 2.8 Termination of
membranes	5. 2.8.4 penetrations.
which states	s in part -
	·
"Any fixings	that penetrate the
membrane sl	hall be sealed. The sealant
shall be com	patible with the surface
material. Wh	nere backing rods are used
to support th	he sealant, they shall be a
minimum 12n	nm. NOTES: 1. Typical
details of per	netrations are shown in
Figures 2.10 a	and 2.11. 2. Typical details
of metal post	t supports are shown in
Figure 2.12."	
Australian S	Standard AS4654 2

		appears as a standard referenced in the BCA Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4 Weatherproofing , which states in part:
		"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause – (a) unhealthy or dangerous conditions, or loss of amenity for occupants; and (b) undue dampness or deterioration of building elements."

10				
12	Waterproofing	In the Unit 5 – Dining	External walls must prevent the	Deemed-to-Satisfy provision F1.4 is
		Room;	penetration of water that could	a pathway that can satisfy the BCA
			cause-	Volume One, Section F Health and
		1. There is persisting		Amenity, Part F1 Damp and
		dampness and excessive	(a) Unhealthy or dangerous	Weatherproofing, Performance
		mould growth within Unit	conditions, or loss of amenity for	Requirement FP1.4, which states in
		5 especially within the	occupants; and	part:
		area of the painted block		
		wall in the dining room;	(b) Undue dampness or deterioration	"A roof and external wall (including
		and	of building elements.	openings around windows and doors)
		2. High moisture readings		must prevent the penetration of water
		were obtained from the	Inadequate measures to prevent	that could cause-
		timber skirting in this	water ingress lead to dangerous	(a) Unhealthy or dangerous conditions,
		area;	conditions, loss of amenity for the	or loss of amenity for occupants; and
			occupants and undue dampness or	(b) Undue dampness or deterioration of
		related to the area on the	deterioration of the building	building elements."
		other side of the block	elements, causing water and	
		wall which is the ramp	moisture damage	Australian Standard 4654.2, the
		leading to the basement	_	BCA Volume One Performance
		carpark where a section		Requirement
		of the exposed block wall		
		further along the ramp is		
		damp.		

13	Fire Safety Systems	Inadequate fire checking	Inadequate fire-resisting sealing,	BCA Volume One, Section C Fire
		at multiple penetrations	including protection of openings and	Resistance, Performance
		on the ceiling of	penetrations, does not, to the degree	Requirements CP2 Spread of fire,
		Basement – West Wall of	necessary, avoid the spread of fire	which states in part –
		Lift Basement –	and achieve the required FRL.	
		Southeast Fire Exit		"(a) A building must have elements
		Basement – Fire Hydrant	In case of fire, restricting the spread	which will, to the degree necessary,
		Pump Room.	of fire is vital for the safety of	avoid the spread of fire —
			occupants and emergency services	(i) to exits; and
			building.	(II) to sole-occupancy units and public corridors: and
				(iii) between buildings: and (iv) in a
				building."
				CP8 Fire protection of openings and
				penetrations, which states in part –
				"Any building element provided to
				resist the spread of fire must be
				protected, to the degree necessary, so
				that an adequate level of performance
				is maintained — (a) where openings,
				construction joints and the like occur;
				and
				(b) where penetrations occur for building services."
				Part C3 Protection of openings,
				Deemed-to-Satisfy provisions: C3.15
				Openings for service installations,
				which states in part:
				"Where an electrical, electronic,
				plumbing, mechanical ventilation, air-
				conditioning, or other service
				penetrates a building element (other
				than an external wall or roof) that is

		required to have an FRL with respect to
		integrity or insulation or a resistance to
		the incinient spread of fire that
		installation must comply with any one
		of the following:
		(a) Taatad ayatama
		(d) Testeu Systems
		(i) The service, building element and
		any protection method at the
		penetration are identical with a
		prototype assembly of the service,
		building element and protection
		method which has been tested in
		accordance with AS 4072.1 and AS
		1530.4 and has achieved the required
		FRL or resistance to the incipient
		spread of fire"
		Part C1 Fire Resistance and Stability.
		Specification C1.1 Fire-Resisting
		Construction, Part 3 Type A Fire-
		Resisting Construction, Clause 3.1
		Fire-Resistance of Building
		Flements which states:
		"In a building required to be of Type Δ
		construction —
		(a) each building element listed in
		Table 3 and any beam or column
		incorporated in it must have an FRI
		neor porated in it, must have all I KL
		for the perticular Class of building
		for the particular class of building
		concerned; and"

14	Fire Safety Systems	The hydrant pipework	Fire hydrant pipework, being internal	Australian Standard AS2419.1 Fire
		installed throughout the	above-ground pipework, must be	hydrant installations Part 1: System
		basement levels is not	protected from damage by fire so as	design, installation and
		protected from damage	to provide a fire hydrant system	commissioning, Section 8 Pipework
		by fire.	necessary to facilitate the needs of	design and installation, 8.5 Pipework
			the fire brigade.	Design, 8.5.3 Internal pipework,
				which states in part -
			In case of fire, a functioning	
			firefighting system is vital for the	"Where internal above-ground
			safety of occupants and emergency	pipework is installed, it shall be
			services personnel and to limit	protected from the effects of fire by
			damage to the building.	one of the following methods:
				(a) An automatic fire sprinkler system
				(h) Fire rating the pipe supports in
				(b) File facing the pipe supports in
				(c) Installing in a fire-isolated stair or
				fire resisting shaft
				(d) Protecting with barriers capable of
				resisting the effects of fire for a period
				not less than 60 mm.
				Australian Standard AS2419.1
				appears as a standard referenced in
				the BCA Volume One, Section E
				Services and equipment, Part E1.3
				Fire hydrants, that states in part –
				W(L) The Cash backgroup can be a first the second sec
				(b) The fire hydrant system — (i) must
				pe installed in accordance with AS
				2413.1,
				Deemed-to-Satisfy provision E1.3 is a
				pathway that can satisfy the BCA
				Volume One, Section E Services and
				equipment, Part E1 Fire fighting
				equipment, Performance

		Requirement EP1.3, that states in part
		- "A fire hydrant system must be provided to the degree necessary to facilitate the needs of the fire brigade appropriate to — (a) fire-fighting operations; and (b) the floor area of the building; and (c) the fire hazard"

15	Fire Safety Systems	The fire isolation wall of	Any internal wall required to have an	BCA Volume One, Section C Fire
		the stairwell at Level 3	FRL with respect to integrity and	resistance Specification C1.1 Fire-
		does not extend to the	insulation must extend to $-$ (i) the	resisting construction that states in
		underside of the roof.	underside of the floor next above; or	part –
			(ii) the underside of a roof so as to	
			avoid the spread of fire.	"3.1 Fire-resistance of building
				elements In a building required to be
			In case of fire, restricting the spread	of Type A construction —
			of fire is vital for the safety of	(a) each building element listed in
			occupants and emergency services	Table 3 and any beam or column
			personnel and to limit damage to the	incorporated in it, must have an FRL
			building.	not less than that listed in the Table
				for the particular Class of building
				concerned; and (b) * * * * *
				(c) any internal wall required to have
				an FRL with respect to integrity and
				insulation must extend to –
				(i) the underside of the floor next
				above; or
				(II) the underside of a root complying
				with Table 3; or

10				
16	Fire Safety Systems	The clearance between	For a fully open fire hydrant valve,	Australian Standard AS2419.1 Fire
		the hand wheel serving	there must be not less than 100 mm	hydrant installations Part 1: system
		the hydrant at the Level 3	clearance around the valve	design, installation and
		– South Fire Exit and the	handwheel to allow operation to the	commissioning Section 3.5 Fire
		wall adjacent is	degree necessary to facilitate the	Hydrant Accessibility and Clearance
		approximately 40-50 mm	needs of the fire brigade to operate	which states in part -
		and not the required	the valve.	
		minimum 100 mm.		3.5.2 Clearance For a fully open fire
			In case of fire, a functioning	hydrant valve, there shall be not less
			firefighting system is vital for the	than 100 mm clearance around the
			safety of occupants and emergency	valve handwheel. Fire hydrant valves
			services personnel and to limit	shall be installed with a clearance
			damage to the building.	around the outlet of not less than 300
				mm through an arc of 225° to facilitate
				hose coupling (see Figure 3.5.1 (a)).
				Australian Standard AS2419.1
				appears as a standard referenced in
				the BCA Volume One, Section E
				Services and equipment, Part E1.3
				Fire hydrants, which states in part
				"(b) The fire hydrant system — (i) must
				be installed in accordance with AS
				2419.1,"
				Deemed-to-Satisfy provision E1.3 is
				a pathway that can satisfy the BCA
				Volume One, Section E Services and
				equipment, Part E1 Fire fighting
				equipment, Performance
				Requirement EP1.3. which states in
				part –
				"A fire hydrant system must be
				provided to the degree necessary to
				facilitate the needs of the fire brigade

		appropriate to — (a) fire-fighting operations; and (b) the floor area of the building; and (c) the fire hazard".

17	Fire Safety Systems	The fire exit door leading	A swinging door in a required exit or	BCA Volume One, Section D Access
		from the public corridor	forming part of a required exit must	and egress, Part D2 Construction of
		to Regent St. swings	swing in the direction of egress to	exits, Deemed-to-Satisfy provision
		inwards toward the	avoid the risk of occupants having	D2.20 Swinging doors, which states
		direction of egress, and	their egress impeded in the event of	in part -
		not outwards in the	a fire.	
		direction of egress.		"A swinging door in a required exit or
			In case of fire, the ability to safely	forming part of a required exit —
			evacuate the building quickly and	(b) must swing in the direction of
			without obstruction is vital for the	egress unless —
			safety of occupants and emergency	(i) it serves a building or part with a
			services personnel	floor area not more than 200 m2 it is
				the only required exit from the building
				or part and it is fitted with a device for
				bolding it in the open position: or
				(ii) it corves a capitary compartment or
				(ii) it serves a samilary compartment of
				airtock (iii which case it may swing in
				Desmand to Catiofe musciple p0.00
				Deemed-to-Satisfy provision D2.20
				is a pathway that can satisfy the BCA
				Volume One, Section D Access and
				egress, Performance Requirement
				DP4 , which states in part –
				"So that people can move safely to and
				within a building, it must have —
				(b) any doors installed to avoid the risk
				of occupants —
				(i) having their egress impeded;"

18	This defect has been removed.

19	Fire Safety Systems	The Block Plans at the	A plan of the risk (block plan) with	Australian Standard AS2118.1
		Fire Stairwell Fire	the position of the main stop valves	Automatic fire sprinkler systems,
		Hydrant and Sprinkler	clearly indicated thereon must be	Part 1: General requirements,
		Booster at the corner of	placed adjacent to each set of	Section 8 Valves and Ancillary
		Regent St and Church Ln	installation control assemblies or	Equipment, 8.3 BLOCK PLAN which
		are not current or	group of valves where it can be	states in part –
		compliant.	readily seen by firefighters and	
			others responding to the alarm and	"8.3 BLOCK PLAN A plan of the risk
			include the information listed in	(block plan) with the position of the
			Australian Standard AS2118.1	main stop valves clearly indicated
			Automatic fire sprinkler systems,	thereon shall be placed adjacent to
			Part 1: General requirements,	each set of installation control
			Section 8 Valves and Ancillary	assemblies or group of valves where it
			Equipment, 8.3 BLOCK PLAN	can be readily seen by firefighters
			information.	and others responding to the alarm.
				The plan of the risk shall be in the
			In case of fire, a functioning	form of a permanent diagram, which
			firefighting system is vital for the	water-resistant and fade-resistant,
			safety of occupants and emergency	and shall include –
			demose to the building	(a) the layout of the protected
			damage to the building.	buildings or areas an adjacent streets;
				(b) a diagram of water supplies,
				Including sizes and locations of
				supply authority mains and valves
				(almensioned), connections for non-
				(consistive and locations) and nump
				(capacity and tocations), and pump
				duties,
				(c) the location of control valves
				subsidiary stop valves, remote test
				valves, tail-end air valves, anti-freeze
				devices, drains, air release valves
				orifice plates, external sprinklers and
				any unusual features of the
				installation;
				(d) the location and telephone number

		of the responding fire station.
		(e) the location of the main
		switchboard, distribution boards and
		starters, and ratings of electrical
		services associated with all pumps,
		and details of auxiliary power supply,
		if applicable;
		(f) the location of the stock of
		replacement sprinklers (see Clause
		6.7);
		(g) the year of installation of the
		system and of any major extension
		thereto;
		(h) the height in metres above the
		installation gauge of the highest
		sprinkler used for the purpose of
		sizing the distribution piping for each
		installation and hazard class and the
		pressure and flow requirements when
		carrying out proving tests (see
		Clauses 9.3, 10.2.1 and 11.2.1); and (i)
		the outline of the area of each
		individual hazard and the design
		density for that area."

20	Fire Safety Systems	System signage provided for combined fire hydrant and sprinkler booster and pump rooms at the Fire Hydrant and Sprinkler Booster at corner of Regent St and Church Ln Fire Hydrant and the Sprinkler Pump Room in the Basement are not compliant.	Combined system signage must be displayed at the site of combined fire hydrant and sprinkler systems. In case of fire, a functioning firefighting system is vital for the safety of occupants and emergency services personnel and to limit damage to the building.	Australian Standard AS2118.6 Automatic fire sprinkler systems, Part 6 Combined sprinkler and hydrant systems in multistorey buildings, Section 2 System design criteria, 2.2 Location, Access and Signage, 2.2.3 System signage which states in part – "The separate signage requirements of AS 2118.1, AS 2419.1 and AS 2941 shall be replaced by a combined system signage (including the wording specified below) at the following locations: (a) 'COMBINED FIRE HYDRANT AND SPRINKLER BOOSTER' at the fire brigade booster. (b) 'COMBINED FIRE HYDRANT AND SPRINKLER PUMP ROOM' at the pump room. (c) 'SPRINKLER CONTROL ASSEMBLY' at each sprinkler valve set.
21	Fire Safety Systems No us at	o warning sign against se of lifts in case of fire t the Courtyard lift.	A warning sign to alert occupants about the use of a lift during an emergency must be displayed where it can be readily seen near every call button for a passenger lift throughout a building.	BCA Volume One, Section E Services and equipment, Part E3 Lift Installations, Deemed-to- Satisfy provision E3.3 Warning against use of lifts in fire, which states in part:
----	------------------------------------	--	--	--
			In case of fire, the ability to safely evacuate the building quickly and without obstruction is vital for the safety of occupants and emergency services personnel.	 "A warning sign must - (a) be displayed where it can be readily seen - (i) near every call button for a passenger lift or group of lifts throughout a building; except (ii) a small lift such as a dumb-waiter or the like that is for the transport of goods only; (b) comply with the details and dimensions of Figure E3.3 and consist of - (i) incised, inlaid or embossed letters on a metal, wood, plastic or similar plate securely and permanently attached to the wall; or (ii) letters incised or inlaid directly into the surface of the material

	A .			
22	Structural Systems	Areas of the concrete	Embedded items such as steel	Australian Standard AS3600
		slab soffit, beam edges	reinforcement must be protected	Concrete Structures as follows:
		and columns to the	from corrosion or deterioration by	 Section 4 – Design for durability,
		Basement Carpark and	adequate cover and hardened	4.10 Requirements for cover to
		Fire stair landing slab	concrete must not be porous,	reinforcing steel and tendons, 4.10.3
		have not been properly	segregated, or honeycombed so as	Cover for corrosion protection,
		vibrated or compacted	to preserve structural integrity.	4.10.3.7 Embedded items cover,
		which has created areas		which states in part -
		of segregation and	If the structural integrity of the	
		honeycombing and in	concrete structures is compromised,	"Embedded items", as defined in
		some sections, the	It could cause premature	Clause 19.2, "shall be protected from
		embedded reinforcement	deterioration of building elements,	corrosion or deterioration. The cover to
		was exposed and	allow water ingress and ultimately	embedded items that are not corrosion
		observable.	collapse causing damage to the	resistant shall be as given in Table
			building and injury or death to	4.10.3.2 and 4.10.3.3, as applicable.
			occupants.	
				2. Section 17 - Materials and
				construction requirements, 17.1.7-
				Rejection of concrete, 17.1.7.2
				Hardened concrete, which states:
				"Hardened concrete shall be liable to
				rejection if
				(I) It does not satisfy the requirements
				of Clause 17.1.6; (II) it is porous,
				segregated, or noneycombed, or
				contains surface defects outside the
				specified limits. (iii) it fails to complement that the other
				(III) It fails to comply with the other
				requirements of this Standard.
				3 Section 17 - Materials and
				construction requirements 1712
				Handling placing and compacting of
				concrete that states in part -
				Concrete that states in part –
				Concrete shall be handled, placed and

		compacted as to – (a) Limit
		cogragation or loss of materials
		(b) limit promotion of the stiffening (c)
		(b) limit premature surrening (c)
		produce a monolithic mass between
		planned joints or the extremities of
		members, or both.
		(d) completely fill the formwork to the
		specified level, expel entrapped air,
		and closely surround all reinforcement.
		tendons ducts anchorages and
		fivings and
		(a) Provide the specified finish to the
		(e) Flowide the specified finish to the
		formed surfaces of the member.

23	Structural Systems	Sections of excessive and poorly formed and cured concrete in Basement Carpark adjacent to Car Space 28 and Undercroft Carpark Soffit	Concrete must be handled, placed and compacted as to limit segregation or loss of materials and provide the specified finish to the formed surfaces of the member so as to avoid the risk of delamination and dislodgement.	Australian Standard AS3600 Concrete Structures as follows: 1. Section 17 - Materials and construction requirements, 17.1.7- Rejection of concrete, 17.1.7.2 Hardened concrete, which states:
			Delamination and dislodgement of concrete and other material comprise a safety hazard and could cause injury or death to occupants.	"Hardened concrete shall be liable to rejection if (i) it does not satisfy the requirements of Clause 17.1.6; (ii) it is porous, segregated, or honeycombed, or contains surface defects outside the specified limits. (iii) it fails to comply with the other requirements of this Standard."
				2. Section 17 - Materials and construction requirements, 17.1.3 Handling, placing and compacting of concrete that states in part –
				Concrete shall be handled, placed and compacted as to – (a) Limit segregation or loss of materials (b) limit premature stiffening (c) produce a monolithic mass between planned joints or the extremities of members, or both. (d) completely fill the formwork to the specified level, expel entrapped air, and closely surround all reinforcement, tendons, ducts, anchorages and fixings, and (e) Provide the specified finish to the formed surfaces of the member.

24	Structural Systems	Systemic uncontrolled	Cracking in concrete structures	Australian Standard 3600 Concrete
		cracking of 0.5 - 3mm	must be controlled so that structural	structures, Section 2 Design
		wide in the basement	performance, durability and	procedures, actions and loads, 2.3,
		carpark concrete slab.	appearance of the structure are not	Design for serviceability, 2.3.3,
			compromised.	Cracking which states in part
			If the structural performance,	"2.3.3.1 General Cracking in concrete
			durability and appearance of the	structures shall be controlled so that
			concrete structures is compromised,	structural performance, durability and
			it could cause premature	appearance of the structure are not
			deterioration of building elements,	compromised."
			allow water ingress, loss of amenity	
			and ultimately fail.	

25	Structural Systems	Cracking to the basemen	tCracking in concrete structures	Australian Standard 3600 Concrete
		carpark slab soffit has	must be controlled so that structural	structures, Section 2 Design
		migrated through the ful	performance, durability and	procedures, actions and loads, 2.3,
		depth of the suspended	appearance of the structure are not	Design for serviceability, 2.3.3,
		slab allowing water to	compromised.	Cracking which states in part
		permeate.		. .
		-	If the structural performance,	"2.3.3.1 General Cracking in concrete
			durability and appearance of the	structures shall be controlled so that
			concrete structures is compromised,	structural performance, durability and
			it could cause premature	appearance of the structure are not
			deterioration of building elements,	compromised."
			allow water ingress, loss of amenity,	
			undue dampness and water and	BCA Volume One, Section B
			moisture damage.	Structure, Deemed-to-
			_	Satisfy provision B1.4 -
				Determination of structural
				resistance of materials and forms of
				construction which states in part -
				"The structural resistance of
				materials and forms of construction
				must be determined in accordance
				with the following, as appropriate:
				(b) Concrete:
				(i) Concrete construction (including
				reinforced and prestressed concrete):
				AS 3600"

26	Structural Systems	Handrail and awning	Each building component must be	BCA Volume One. Part A2
	, , , , , , , , , , , , , , , , , , ,	fixings materials in the	constructed using materials that are	Acceptance of Design and
		Upper Courtyard are	fit for the purpose for which they are	Construction A2.1 – Suitability of
		corroding and not fit for	intended.	Materials, which states –
		the building environment.		,
			Corroding fixings to structural	"Every part of a building must be
			systems result in lack of amenity	constructed in an appropriate manner
			and could ultimately fail thereby	to achieve the requirements of the
			constituting a safety hazard that	BCA, using materials that are fit for
			may result in injury or death of	the purpose for which they are
			occupants.	intended."

			T	
27	Structural Systems	The steel framing elements and Bondek to the undercroft carpark corroded and stalactites present as a result of water ingress through the slab of the upper courtyard above.	A building or structure must perform adequately throughout its service life under all reasonably expected design actions and display appropriate structural resistance and stability. If the structural performance, reliability and appearance of the building structures is compromised, it could cause premature deterioration of building elements, allow water ingress, loss of amenity, undue dampness and water and moisture damage.	BCA Volume One, Section B Structure, Part B1 Structural Provisions, Performance Requirements BP1.1 which states in part – "Structural reliability (a) A building or structure, during construction and use, with appropriate degrees of reliability, must- (i) Perform adequately under all reasonably expected design actions; and (ii) Withstand extreme or frequently repeated design actions; and (iii) Be designed to sustain local damage, with the structural system as a whole remaining stable and not
				being damaged to an extent disproportionate to the original local damage;" BCA Volume One, Section B, Structure and the Australian Standard 3600. The Deem to satisfy provisions of the BCA Volume One Section B1.4, Determination of structural resistance of materials and forms of construction states: "The structural resistance of materials and forms of construction must be determined in accordance with the following, as appropriate:"

28	Structural Systems	A section of the	Structural steel columns must be	BCA Volume One, Section B. Part B1
		undercroft carpark steel	adequately supported so that the	Structural Provisions, Performance
		column baseplate is not	structure performs adequately	requirements BP1.1, which states in
		supported atop the slab	throughout its service life under all	part:
		on ground.	reasonably expected design actions	
			and display appropriate structural	"(a) A building or structure, during
			resistance and stability, including	construction and use, with
			sustaining local damage.	appropriate degrees of reliability, must –
			If the structural performance,	(i) perform adequately under all
			reliability and appearance of the building structures is compromised	reasonably expected design actions;
			it could cause premature	(ii) withstand extreme or frequently
			deterioration of building elements.	repeated design actions: and
			lack of amenity and could ultimately	(iii) be designed to sustain local
			fail thereby constituting a safety	damage. with the structural system as
			hazard that may result in injury or	a whole remaining stable and not
			death of occupants.	being damaged to an extent
				disproportionate to the original local
				damage; and (iv) avoid causing
				damage to other properties, by
				resisting the actions to which it may
				reasonably expect to be subjected.
				(b) The actions to be considered to
				satisfy (a) include but are not limited
				to (i) permanent actions (dead loads);
				and
				(II) Imposed actions (live loads arising
				from occupancy and use); and
				(11)"

29	Structural Systems	There are voids and	Structural masonry columns must be	BCA Volume One – Section B
		separation between the	adequately supported and have	Structure, Clause BP1.1 Structural
		base of the masonry	adequate footings/foundations so	Reliability that states in part -
		columns and adjoining	that the structures perform	"(a) A building or structure, during
		concrete footpath slabs	adequately throughout their service	construction and use, with
		in the external footpath	life under all reasonably expected	appropriate degrees of reliability,
		along Regent Street.	design actions and display	must –
			appropriate structural resistance	(i) perform adequately under all
			and stability, including sustaining	reasonably expected design actions;
			local damage.	and
				(ii) withstand extreme or frequently
			If the structural performance,	repeated design actions; and
			reliability and appearance of the	(iii) be designed to sustain local
			building structures is compromised,	damage, with the structural system as
			It could cause premature	a whole remaining stable and not
			deterioration of building elements,	being damaged to an extent
			lack of amenity and could ultimately	disproportionate to the original local
			fail thereby constituting a safety	damage; and (iv) avoid causing
			nazard that may result in injury or	damage to other properties,
			death of occupants and others	by resisting the actions to which it
				may reasonably expect to be
				subjected.
				(b) The actions to be considered to
				satisfy (a) include but are not limited
				to (I) permanent actions (dead loads);
				and (ii) immersed estimate (line leads wising
				(II) Imposed actions (live loads arising
				from occupancy and use); and
				(111)

30	Structural Systems	Mortar joints to the	To preserve structural integrity solid	Australian Standard AS3700
		structural masonry walls	and cored masonry units must be	Masonry structures, Section 12
		in the fire stair areas are	laid on a full bed of mortar, hollow	Construction, 12.4.2 Mortar joints.
		not solid filled or fully	units must be face-shell bedded and	which states in part –
		bedded.	vertical joints in fully bedded	
			masonry must be filled with mortar.	"Solid and cored units shall be laid on a full bed of mortar. Hollow units shall
			If the structural performance,	be face-shell bedded. Vertical joints
			durability and appearance of the	in fully bedded masonry shall be filled
			concrete structures is compromised,	with mortar unless otherwise
			it could cause premature	specified."
			deterioration of building elements,	
			loss of amenity, and could ultimately	
			fail thereby constituting a safety	
			hazard.	
			it could cause premature deterioration of building elements, loss of amenity, and could ultimately fail thereby constituting a safety hazard.	specified."

31	Structural Systems	Redundant unused	Concrete slab structures must retain	BCA Volume 1: (i) Section B
		penetrations in the	their integrity so that the structures	Structure, Part B1 Structural
		concrete slab in the fire	perform adequately throughout their	Provisions, Performance
		stair which reduce the	service life under all reasonably	Requirements BP1.1 which states in
		structural capacity of the	expected design actions and display	part -
		concrete slab.	appropriate structural resistance	"Structural reliability
			and stability, including sustaining	(a) A building or structure, during
			local damage.	construction and use, with
				appropriate degrees of reliability,
			If the structural performance,	must-
			durability and appearance of the	(i) Perform adequately under all
			concrete structures is compromised,	reasonably expected design actions;
			It could cause premature	and
			deterioration of building elements,	(ii) Withstand extreme or frequently
			loss of amenity, and could ultimately	repeated design actions; and
			hered constituting a safety	(III) Be designed to sustain local
			nazaro.	damage, with the structural system as
				a whole remaining stable and not
				being damaged to an extent
				disproportionate to the original local
				damage; and (IV)
				being damaged to an extent disproportionate to the original local damage; and (iv)"

32	Structural Systems	Exposed and unprotected	Embedded items must be protected	Australian Standard AS3600
	-	reinforcement is evident	from corrosion or deterioration by	Concrete structures, Section 4,
		to the Unit 35 balcony	adequate cover and concrete must	Design for durability 4.10
		slab.	be handled, placed and compacted	Requirements for cover to
			so as to closely surround all	reinforcing steel and tendons,
			reinforcement.	4.10,3 Cover for corrosion
				protection 10.4.3.1 General which
			If the structural integrity of the	states in part -
			concrete structures is compromised,	
			it could cause premature	"For corrosion protection, the cover
			deterioration of building elements,	shall be not less than the value given
			allow water ingress and ultimately	in accordance with Clauses 4.10.3.2 to
			collapse causing damage to the	4.10.3.7."
			building and injury or death to	
			occupants.	Required cover varies between
				20mm to 70 mm.
				Section 4 Design for Durability, 4.10
				Requirements for cover to
				reinforcing steel and tendons,
				4.10.3 Cover for corrosion
				protection, 4.10.3.7 Embedded
				items cover, which states in part –
				<i>"</i> – , , , , , , , , , , , , , , , , , , ,
				"Embedded items, as defined in
				Clause 14.2, shall be protected from
				corrosion or deterioration. The cover
				to embedded items that are not
				corrosion resistant shall be as given in
				Table 4.10.3.2 and Table 4.10.3.3, as
				applicable. Metals such as aluminium
				snall not be embedded in structural
				concrete unless effectively coated,
				coverea, or treated to prevent
				chemical action between the metal
				and the concrete and electrolytic
				action between the metal and steel."

		Australian Standard AS3600 - 17.1.3 Handling, placing and compacting of concrete that states in part –
		Concrete shall be handled, placed and compacted as to – (a) Limit segregation or loss of materials (b) limit premature stiffening (c) produce a monolithic mass between planned joints or the extremities of members, or both. (d) completely fill the formwork to the specified level, expel entrapped air, and closely surround all reinforcement, tendons, ducts, anchorages and fixings, and (e) Provide the specified finish to the formed surfaces of the member.
		Australian Standard AS3600 appears as a standard referenced in the BCA Volume One, Part B1 Structural provisions, BP1.1 Structural reliability, which states:
		"Structural reliability (a) A building or structure, during construction and use, with appropriate degrees of reliability, must- (i) Perform adequately under all reasonably expected design actions; and (ii) Withstand extreme or frequently repeated design actions; and

		(iii) Be designed to sustain local damage, with the structural system as a whole remaining stable and not being damaged to an extent disproportionate to the original local damage;"

33 Structural Systems Leftover formwork to the Concrete must be handled, placed	Australian Standard AS3600
soffit of concrete slabs and compacted as to limit	Concrete Structures as follows:
within the basement segregation or loss of materials a	d 1. Section 17 - Materials and
carpark and fire stairs provide the specified finish to the	construction requirements, 17.1.7-
from construction of the formed surfaces of the member so	Rejection of concrete, 17.1.7.2
building pose a safety as to avoid the risk of delamination	Hardened concrete. which states:
hazard should they and dislodgement.	
dislodge.	"Hardened concrete shall be liable to
Delamination and dislodgement of	rejection if
concrete and other material	(i) it does not satisfy the requirements
comprise a safety hazard and coul	d of Clause 17.1.6:
cause injury or death to occupants	(ii) it is porous, segregated, or
	honevcombed, or contains surface
	defects outside the specified limits.
	(iii) it fails to comply with the other
	requirements of this Standard."
	2. Section 17 - Materials and
	construction requirements. 17.1.3
	Handling, placing and compacting
	of concrete that states in part –
	Concrete shall be handled. placed
	and compacted as to $-$ (a) Limit
	segregation or loss of materials
	(b) limit premature stiffening
	(c) produce a monolithic mass
	between planned joints or the
	extremities of members or both
	(d) completely fill the formwork to the
	specified level expel entrapped air
	and closely surround all
	reinforcement tendons ducts
	anchorages and fivings and
	(a) Provide the specified finish to the
	formed surfaces of the member

34	Structural Systems	There is excessive lateral	Barriers, including parapets,	Australian Standard 1170.1
		deflection in the	balustrades and railings, together	Structural design actions. AS1170,
		balustrades in the upper	with members and connections that	Section 3 Imposed actions, 3.6,
		courtyard areas and	provide structural support, must	Barriers, states:
		balconies when pushed	sustain and resist the most critical	
		by hand.	action effect resulting from different	"Barriers, including parapets,
			combinations of actions.	balustrades and railings, together with members and connections that
			If the structural performance and	provide structural support, shall be
			durability of balustrades is	designed to sustain the imposed
			compromised it could result in	actions given in Table 3.3."
			catastrophic failure causing injury or	
			death to occupants.	Australian Standard AS1170
				the BCA Volume One. Part B
				Structural Provisions, Deemed-to-
				Satisfy provision B1.1 – Resistance
				to actions which states in part -
				"The resistance of a building or
				structure must be greater than the
				most critical action effect resulting
				from different combinations of
				actions. where —
				(a) the most critical action effect on a
				building or structure is determined in
				accordance with B1.2 and the general
				design procedures contained in
				AS/NZS 1170.0;".
				B1.2 Determination of individual
				actions, which states:
				"The magnitude of individual actions
				must be determined in accordance
				with the following: (a) Permanent
				actions:
				(i) the design or known dimensions of

		the building or structure; and (ii) the unit weight of the construction; and (iii) AS/NZS 1170 1
		(b) Imposed actions: (i) the known loads that will be imposed during the occupation or use of the building or structure; and
		(iii) construction activity actions; and (iii) AS/NZS 1170.1."

fixed to the masonry block walls within the fire stairs for strengthening or reinforcement without apparent reason.
block walls within the fire appropriate degrees of reliability, stairs for strengthening or reinforcement without apparent reason.
stairs for strengthening or reinforcement without apparent reason.
or reinforcement without apparent reason.
apparent reason. action, ground water action, differential movement and time dependent effects - including creep construction and use, with appropriate degrees of reliability, must —
differential movement and time appropriate degrees of reliability, dependent effects - including creep must –
dependent effects - including creep must –
and shrinkage), with the structural (i) perform adequately under all
system as a whole remaining stable reasonably expected design actions:
and not being damaged to an extent and
disproportionate to the original local (ii) withstand extreme or frequently
damage repeated design actions; and
(iii) be designed to sustain local
If the structural performance, damage, with the structural system a
durability and appearance of the a whole remaining stable and not
building structure is compromised, it being damaged to an extent
could cause premature deterioration disproportionate to the original local
of building elements, loss of damage;
amenity, and could ultimately fail (b) The actions to be considered to
thereby constituting a safety hazard. satisfy
(a) include but are not limited to —
(i) permanent actions (dead loads);
and
(ii) imposed actions (live loads arising
from occupancy and use); and
(iii) wind action; and
(iv) earthquake action; and (v) snow
action; and
(VI) liquid pressure action; and
(VII) ground water action; and (VIII)
rainwater action (including ponding
action); and
(IX) earlin pressure action; and
x) unrerential movement; and (xi) time dependent offecte (includin
(xi) time dependent effects (including

	 (xii) thermal effects; and (xiii) ground movement caused by — (A) swelling, shrinkage or freezing of the subsoil; and (B) landslip or subsidence; and (C) siteworks associated with the building or structure; and"

36	Structural Systems	A retrofitted plate has	A building or structure, during use,	BCA Volume One, Section B
		been affixed with silicone	must perform adequately under all	Structure, Part B1 Structural
		to the top of the handrail	reasonably expected design actions	Provisions, Performance
		to the fire stairs landing	and withstand extreme or frequently	Requirements BP1.1 which states in
		to raise the height to the	repeated design actions such that	part –
		required level.	uncertified retrofitted plates are	"Structural reliability
			unnecessary.	(a) A building or structure, during
				construction and use, with
			If the structural performance,	appropriate degrees of reliability,
			durability and appearance of the	must-
			building structure is compromised, it	(i) Perform adequately under all
			could cause premature deterioration	reasonably expected design actions;
			of building elements, loss of	and
			amenity, and could ultimately fail	(ii) Withstand extreme or frequently
			thereby constituting a safety hazard.	repeated design actions; and
				(iii) Be designed to sustain local
				damage, with the structural system as
				a whole remaining stable and not
				being damaged to an extent
				disproportionate to the original local
				damage;"

37 Building Er	nclosure Water ingress staining and damage to the internal ceiling lining of	A roof must prevent the penetration of water that could cause - (a) unhealthy or dangerous conditions,	BCA Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance
	the fire stairs within the third level (top floor), Level 3 Internal commor	or loss of amenity for occupants; and (b) undue dampness or deterioration of building elements.	Requirement FP1.4 Weatherproofing , which states in part -
	areas and Gas and Water Meter Room	Inadequate measures to prevent water ingress lead to unhealthy or dangerous conditions, loss of amenity for the occupants and undue dampness or deterioration of the building elements, causing water and moisture damage.	"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause - (a) unhealthy or dangerous conditions, or loss of amenity for occupants; and (b) undue dampness or deterioration of building elements."

38	Building Enclosure	Voids between the base	A roof must prevent the penetration	BCA Volume One. Section F Health
		of the planter boxes and	of water that could cause - (a)	and Amenity. Part F1 Damp and
		the adjoining metal	unhealthy or dangerous conditions.	Weatherproofing. Performance
		cappings provided to the	or loss of amenity for occupants: and	Requirement FP1.4
		top of the masonry	(b) undue dampness or deterioration	Weatherproofing, which states in
		balustrade walls in the	of building elements.	part –
		Upper Courtyard which		
		allow water to enter	Inadequate measures to prevent	"A roof and external wall (including
		through the voids and	water ingress lead to unhealthy or	openings around windows and doors)
		pond atop the masonry	dangerous conditions. loss of	must prevent the penetration of water
		walls causing	amenity for the occupants and	that could cause-
		deterioration.	undue dampness or deterioration of	(a) Unhealthy or dangerous
			the building elements, causing water	conditions. or loss of amenity for
			and moisture damage.	occupants: and
				(b) Undue dampness or deterioration
				of building elements."

39	Building Enclosure	Mineral deposits and	A roof must prevent the penetration	BCA Volume One, Section F Health
		excessive moss growth	of water that could cause - (a)	and Amenity, Part F1 Damp and
		indicating waterproofing	unhealthy or dangerous conditions,	Weatherproofing, Performance
		issues to the Unit 14	or loss of amenity for occupants; and	Requirement FP1.4
		balcony brick balustrades	(b) undue dampness or deterioration	Weatherproofing, which states in
		and numerous sections of	of building elements.	part –
		external walls.	_	
			Inadequate measures to prevent water ingress lead to unhealthy or dangerous conditions, loss of amenity for the occupants and undue dampness or deterioration of the building elements, causing water and moisture damage.	"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause- (a) Unhealthy or dangerous conditions, or loss of amenity for occupants; and (b) Undue dampness or deterioration of building elements."

40	Building Enclosure	Water ingress through ceilings to Unit 5 – Bedroom Unit 34 - bedroom Unit 35 – Bedroom and Ensuite Unit 33 - Kitchen as a result of failed waterproofing	A roof must prevent the penetration of water that could cause - (a) unhealthy or dangerous conditions, or loss of amenity for occupants; and (b) undue dampness or deterioration of building elements.	BCA Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4 Weatherproofing, which states in part –
		system to balcony and roof above.	Inadequate measures to prevent water ingress lead to unhealthy or dangerous conditions, loss of amenity for the occupants and undue dampness or deterioration of the building elements, causing water and moisture damage.	"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause- (a) Unhealthy or dangerous conditions, or loss of amenity for occupants; and (b) Undue dampness or deterioration of building elements."

41	Building Enclosure	Numerous instances of	An external wall must prevent the	BCA Volume One, Section F Health
	_	over-sealed penetrations	penetration of water that could	and Amenity, Part F1 Damp and
		to the compressed fibre	cause - (a) unhealthy or dangerous	Weatherproofing, Performance
		cement external wall	conditions, or loss of amenity for	Requirement FP1.4
		cladding panels to Unit	occupants; and (b) undue dampness	Weatherproofing, which states in
		35 allowing an avenue for	or deterioration of building	part –
		water ingress.	elements.	
			Inadequate measures to prevent water ingress lead to unhealthy or dangerous conditions, loss of amenity for the occupants and undue dampness or deterioration of the building elements, causing water and moisture damage.	"A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause- (a) Unhealthy or dangerous conditions, or loss of amenity for occupants; and (b) Undue dampness or deterioration of building elements."

10				
42	Building Enclosure	Water ingress damage in	An external wall (including openings	BCA Volume One, Section F Health
		the form of peeling and	around windows) must prevent the	and Amenity, Part F1 Damp and
		bubbling paint and	penetration of water that could	Weatherproofing, Performance
		elevated moisture	cause - (a) unhealthy or dangerous	Requirement FP1.4
		readings to the	conditions, or loss of amenity for	Weatherproofing, which states in
		windowsill to Unit 33	occupants; and (b) undue dampness	part –
		Master Bedroom.	or deterioration of building	•
			elements, and installed window	"A roof and external wall (including
			assemblies must prevent water	openings around windows and doors)
			penetration.	must prevent the penetration of water
				that could cause-
			Inadequate measures to prevent	(a) Unhealthy or dangerous
			water ingress lead to unhealthy or	conditions, or loss of amenity for
			dangerous conditions, loss of	occupants: and
			amenity for the occupants and	(b) Undue dampness or deterioration
			undue dampness or deterioration of	of building elements "
			the building elements, causing water	
			and moisture damage	

43	Building Enclosure	No appropriate	An external wall (including openings	BCA Volume One, Section F Health
		flashing/seals to the	around windows and doors) must	and Amenity, Part F1 Damp and
		junctions between the	prevent the penetration of water	Weatherproofing, Performance
		sliding door frames and	that could cause - (a) unhealthy or	Requirement FP1.4
		windows and the	dangerous conditions, or loss of	Weatherproofing, which states in
		adjoining external wall	amenity for occupants; and (b) undue	part –
		claddings to Unit 35	dampness or deterioration of	
		Balcony allowing water	building elements, and installed	"A roof and external wall (including
		ingress.	window assemblies must prevent	openings around windows and doors)
			water penetration.	must prevent the penetration of water
				that could cause-
			Inadequate measures to prevent	(a) Unhealthy or dangerous
			water ingress lead to unhealthy or	conditions, or loss of amenity for
			dangerous conditions, loss of	occupants; and
			amenity for the occupants and	(b) Undue dampness or deterioration
			undue dampness or deterioration of	of building elements."
			the building elements, causing water	
			and moisture damage.	AS 2047-2014 Windows and
				external glazed doors in buildings,
				Section 7, 7.2 Installation, 7.2.1
				General , which states in part:
				" Installed windows assemblies
				shall prevent water penetration and
				air infiltration."

44	This defect has been removed.

45	Building Essential Services	No ventilation system at the fire hydrant pump room located in the	Pump rooms must be adequately ventilated for the aspiration and cooling of pumps.	Australian Standard AS 2419 Fire hydrant installations Part 1: System design, installation and
		basement carpark.		commissioning, Section 6
			Inadequate ventilation can lead to	Pumpsets, Clause 6.4.1 General,
			pump failure which will compromise	which states -
			the fire hydrant pump system.	4
				"Fixed on-site pumpsets and
				associated equipment shall be
				be –
				(a) Secure to prevent the entry of
				unauthorized person;
				(b) Adequately ventilated for the
				aspiration and cooling of pump drivers;
				(c) Heated, where necessary, to prevent
				compression ignition drivers:
				(d) Identified by appropriate signs and
				other visual and audible aids, so that
				the room and its entrance can be
				readibly located by the attending fire
				prigade; and (a) Constructed with a minimum 2.1 m
				high internal clearance with adequate
				space for pump maintenance and
				replacement."
				BCA Volume One, Section E
				Services and Equipment, Part El
				Fire Fighting Equipment, E1.3 (D)
				The hydrants , which states in part –
				"The fire hydrant system –
				(i) must be installed in accordance
				with AS 2419.1"

46	Building Essential Services	The mechanical exhaust vent pipe located at ground level on the southern elevation is located below a natural ventilation (window) of Unit 5 and at ground level. It imposes a health and safety risk to the window above and to the public.	For health and amenity air discharges must be in accordance with AS1668 and in a location so that there is no danger to health and will prevent a nuisance from occurring. Inadequate measures to discharge air from enclosed areas lead to unhealthy or dangerous conditions for the occupants and public, loss of amenity and comprise a safety hazard.	Australian Standard AS1668 The Use of Ventilation and Airconditioning in Buildings Part 2 Mechanical Ventilation in Buildings, Section 3 Mechanical Ventilation – Exhaust Systems, Clause 3.10 Air Discharges, 3.10.1 General, which states in part - "All exhaust air shall be discharged to atmosphere in such a manner as not to cause danger or nuisance to occupants in the building, occupants of neighbouring buildings or members of the public."
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Consideration of written representations

- 5. On 2 August 2023 a notice of intention to issue the Order and a draft copy of the Order (**"Order"**) was served on the Developer, Local Council, the Owners Corporation and Principal Certifier. The parties were invited to provide submissions relating to the draft copy of the Order by 23 August 2023.
- 6. The solicitors acting on behalf of the Developer provided written representations by way of email on 23 August 2023 which included, among other things, the following:
 - a) The Department's lead consultants that prepared the Inspection Report may not be sufficiently qualified with one point being that there is insufficient publicly available information on their credentials.

- b) That the Inspection Report was expressed to be a preliminary report and therefore further work would be necessary before the report becomes one that can be acted upon.
- c) That by issue of Occupation Certificate and other relevant certifications (such as those concerning fire safety, waterproofing, structure, building elements and essential services), the principal certifying authority would have been satisfied that the works comprising the building met all relevant requirements as at the completion of the building
- d) That the Developer did not receive a response to their response to the inspection report.
- e) That many of the alleged defects contained in the Draft Order are maintenance items or lack of care by the owners to repair and maintain common property and that this is likely caused due to the result of bias.
- f) Sort to clarify whether it is intended that an order be given under section 33(1)(a), 33(1)(b) or 33(2).
- 7. The Owners Corporation provided written representations by way of email which included, among other things, the following:
 - a) On 25 September 2023 and via email, the OC's submitted a written response to the draft copy of the Order that primarily consisted of an expert report detailing identification of additional serious defects that were not present in the draft copy of the Order.
- 8. I have reviewed and considered the Developers Representations and the Owners Corporation representations,
- 9. I make the following observations in relation to the Developer Representations:
 - a) The persons who carry out inspections for the Secretary and who produce inspection reports have the necessary expertise to carry out inspections of the five building elements and defects in them, in class 2 buildings.
 - b) Further, it is not required that such persons be registered as design practitioners under the *Design and Building Practitioners Act*. Those that the Developer must use to carry out the remediation work are required to be registered design practitioners under the *Design and Building Practitioners Act* and be responsible for the designs being compliant.
 - c) The inspection of the building in this instance was carried out by investigators engaged for this purpose. They were selected because they had the necessary expertise to carry out inspections for serious defects in the five key building elements in class 2 buildings. They were instructed to inspect the building and prepare a report, and the Department's compliance officers reviewed the information gathered by the investigators, including photos and field notes, resulting in the inspection report.
 - d) The report is described as preliminary because it is not intended to be a comprehensive compliance report. It is the approach of Project Intervene to have such a report prepared for the basis of considering if there should be an enforcement action under the *Residential Apartment Buildings (Compliance and Enforcement Powers) Act.* It then offers the Developer an opportunity to provide

respond with written submissions. These submissions and those of others who receive a draft building work rectification order are considered by the decision maker's on whether a Final Building Work Rectification Order ("**Final BWRO**") should be issued as well as which and how the identified defects shall contribute to the Final BWRO.

- e) The issuing of an Occupation Certificate from a Principal Certifying Authority does not mean there are no serious defects; these submissions demonstrate a misunderstanding of the role of the certifier. Whether various professionals have designed/built or signed off on those particular building elements associated with serious defects, it is evident to the Department that serious defects have been observed and are present.
- f) I have considered the submissions made on the preliminary report and on the draft order, as part of the process of deciding whether the a Final Building Work Rectification Order is to be made or not.
- g) The Department has put reasonable effort in identifying and confirming the serious defects. I am persuaded by the observations in the Inspection Report that the defects identified in this Order are serious defects as defined in the *Residential Apartment Buildings (Compliance and Enforcement Powers) Act.* I conclude they are not defects resulting from a lack of maintenance nor do they exist because of any failure of the Owners to carry out their responsibility in maintaining and repairing common property.
- h) Lastly, I note that the developer raised the issue of whether the draft order referred to section 33(1)(a) or (b) or section 33(2). The serious defects are identified under section 33 and for each serious defect the nature is identified in the table above. Generally, the serious defects are in the occupied building and so, principally the order is made under section 33(1)(b).
- 10. I make the following observations in relation to the Owners Corporation Representations:
 - a) I am of the view that the serious defects as set out in this Order as based on the Inspection Report are reasonable and appropriate and reflect the actions required to rectify the serious defects.
 - b) I do not consider the making of this Order would unnecessarily cause prejudice to the Owners Corporation.

Why is it appropriate to give the Building Work Rectification Order?

11. I have considered all of the circumstances. I accept that the order requires considerable further work that is likely to be costly, and I give this consideration moderate weight. However, the cost to the developer must be balanced against the benefit to the occupiers in having the development constructed to the Building Code of Australia and Australian Standards with respect to building elements.

- 12. I am aware that the Development is occupied which may delay the Developer doing the things ordered to be done by this Order. I have taken this into account when specifying the time periods in column 5 of Table 1. I am of the view the periods above for serious defects reference numbers 1 to 46 (inclusive) are reasonable periods for compliance in all circumstances for the specified actions required by the Order to be carried out. I have formed this belief balancing the risks that the serious defects pose against the period of time it will take to carry out the specified actions.
- 13. Considering these potential consequences as outlined in this order, I give greater weight to the seriousness of the defects and failure to adhere to the Australian Standards and Building Code of Australia, and the benefits arising from remediating them and I find that it is appropriate, in the exercise of my discretion, to require Mittagong Central Developments Pty Ltd (ACN 607 085 852) to carry out the building work to remediate the serious defects described, within the period specified in the above Order.
- 14. I have considered and accept that the Order requires considerable further construction work that is likely to be costly, and I give this consideration moderate weight. However, the cost to the developer must be balanced against the benefit to the occupiers at the development in having the building constructed to the Building Code of Australia and Australian Standards. Considering the potential consequences as outlined in my reasons and the order, I give greater weight to the seriousness of the defect and failure to adhere to the Building Code of Australia, Australian Standards and the benefits arising from remediating the defects and I find that it is appropriate, in the exercise of my discretion, to make the building work rectification order to carry out the building work described above within the specified period.

Notes about this Order

- A person is not required to obtain consent or approval under the *Environmental Planning and Assessment Act 1979* to carry out work in compliance with a requirement of a Building Work Rectification Order.
- It is an offence to fail to comply with this Order. The maximum penalty for a company is 3,000 penalty units and in addition, for every day the offence continues, 300 penalty units. For and individual the maximum penalty is 1,000 penalty units and in addition, for every day the offence continues, 100 penalty units.
- You may appeal to the Land and Environment Court against this Order within 1 months after this Order is given, unless the Land and Environment Court grants leave for it to be made after that time. Lodging an appeal does not operate to stop the effect of this Order unless ordered by the Court.
- You are entitled to be given reasons for this Order, unless it has been given in an emergency. The reasons have been included within this Order and are not provided separately.
- The Secretary has given the following persons notice of the making of this building work rectification order:
 - the relevant local council,
 - o if the local council is not the certifier in relation to the building work—the principal certifier,
 - o if you are not the owner of the land concerned—the owner of the land concerned,
 - the Registrar-General,
 - o if the order relates to a strata building—the relevant owners corporation,
 - \circ $\,$ any other person prescribed by the regulations.
- This Order specifies a time by which, or period within which, the order must be complied with. This Order continues to have effect until it is complied with even though the time has passed, or the period has expired, unless any requirement under this Order is revoked.

Attachment A

Residential Apartment Buildings (Compliance and Enforcement Powers) Act2020.

3 Definitions

(1) In this Act –

approved plans, in relation to building work, means the following -

- (a) approved plans and specifications issued with respect to a construction certificate or complying development certificate for the building work under the *Environmental Planning and Assessment Act 1979*, together with any variations to those plans and specifications for the purposes of those certificates effected or approved in accordance with that Act,
- (b) regulated designs under the Design and Building Practitioners Act 2020,
- (c) any other plans prescribed by the regulations for the purposes of this definition.

Building Code of Australia has the same meaning as in the Environmental Planning and Assessment Act 1979.

Building Commissioner means the Building Commissioner referred to in section 61.

building element has the same meaning as in the *Design and Building Practitioners Act 2020* and includes any element of a building that is prescribed by the regulations for the purposes of this definition.

building product means any product, material or other thing that is, or could be, used in a building.

building work - see section 5.

buildingworkrectificationorder - seesection 33.

class of building means a building of that class as recognised by the Building Code of Australia.

completion, in relation to building work, means the date that the occupation certificate for the building or part of a building to which the building work relates was issued.

Department means the Department of Customer Service.

developer - see section 4.

expected completion amendment notice — see section 8.
expected completion notice - see section 7.

expected date — see section 7(2).

function includes a power, authority or duty, and exercise a function includes perform a duty.

 $occupation certificate {\tt means an occupation certificate } is sued under the {\tt Environmental Planning and Assessment Act 1979}.$

owners corporation for a strata scheme means the owners corporation for the strata scheme constituted under the *Strata Schemes Management Act2015.*

prohibition order - see section 9.

rectification bond — see section 28.

residential apartment building means a class 2 building within the meaning of the *Building Code of Australia* and includes any building containing a part that is classified as a class 2 component, but does not include any building or part of a building excluded from this definition by the regulations.

Secretary means the Secretary of the Department.

serious defect, in relation to a building, means -

- (a) a defect in a building element that is attributable to a failure to comply with the performance requirements of the *Building Code of Australia*, the relevant Australian Standards or the relevant approved plans, or
- (b) a defect in a building product or building element that --
 - (i) is attributable to defective design, defective or faulty workmanship or defective materials, and
 - (ii) causes or is likely to cause -
 - (A) the inability to inhabit or use the building (or part of the building) for its intended purpose, or
 - (B) the destruction of the building or any part of the building, or
 - (C) a threat of collapse of the building or any part of the building, or
- (c) a defect of a kind that is prescribed by the regulations as a serious defect, or
- (d) the use of a building product (within the meaning of the Building Products (Safety) Act 2017) in contravention of that Act.

stop work order – see section 29.

strata building means a building containing a lot or part of a lot that is the subject of a strata scheme.

strata plan has the same meaning as in the Strata Schemes Development Act 2015.

strata scheme has the same meaning as in the Strata Schemes Development Act 2015.

Note. The Interpretation Act 1987 contains definitions and other provisions that affect the interpretation and application of this Act.

(2) Notes included in this Act do not form part of this Act.

4 Meaning of "developer"

For the purposes of this Act, a *developer*, in relation to building work, means any of the following persons, but does not include any person excluded from this definition by the regulations —

- (a) the person who contracted or arranged for, or facilitated or otherwise caused, (whether directly or indirectly) the building work to be carried out,
- (b) if the building work is the erection or construction of a building or part of a building the owner of the land on which the building work is carried out at the time the building work is carried out,
- (c) the principal contractor for the building work within the meaning of the Environmental Planning and Assessment Act 1979,
- (d) in relation to building work for a strata scheme the developer of the strata scheme within the meaning of the *Strata Schemes Management Act* 2015,
- (e) any other person prescribed by the regulations for the purposes of this definition.

$6 \, \text{Act} \, \text{applies} \, \text{only} \, \text{to} \, \text{residential} \, \text{apartment} \, \text{building} \, \text{work}$

(1) The exercise of any function under this Act applies only to building work in respect of a residential apartment building that -

- (a) is or was authorised to commence in accordance with a construction certificate or complying development certificate issued under the *Environmental Planning and Assessment Act* 1979, or is required to be authorised by a construction certificate or complying development certificate, and
- (b) has not been completed or has been completed within the period of 10 years before the exercise of that function.
- (2) The regulations may provide that a specified provision, or specified provisions, of this Act extend to other classes of buildings (within the meaning of the *Building Code of Australia*).

Design and Building Practitioners Act 2020.

6 Building elements

- (1) For the purposes of this Act, building element means any of the following
 - (a) the fire safety systems for a building within the meaning of the Building Code of Australia,
 - (b) waterproofing,
 - (c) an internal or external load-bearing component of a building that is essential to the stability of the building, or a part of it (including but not limited to in-ground and other foundations and footings, floors, walls, roofs, columns and beams),
 - (d) a component of a building that is part of the building enclosure,
 - (e) those aspects of the mechanical, plumbing and electrical services for a building that are required to achieve compliance with the Building Code of Australia,
 - (f) other things prescribed by the regulations for the purposes of this section.
- (2) The regulations may exclude things from being building elements for the purposes of this Act.
- (3) In this section —

above grade wall means a wall above the level of the ground surrounding a building. *below grade wall* means a wall below the level of the ground surrounding a building. *building enclosure* means the part of the building that physically separates the interior environment of the building from the exterior environment, including roof systems, above grade and below grade walls (including windows and doors).