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CONSULTANT ADVICE

Project Name	Novus on Victoria, Chatswood	Project #	240482
Subject	Vertical Transportation Analysis	Revision	JHA-VT-CAN-001 [B] (16/07/2025)

The following Consultant's Advice is provided to outline the lift quantity requirements for the proposed Novus on Victoria, Chatswood Development.

Summary

Our review is based on one group of lifts serving a total estimated population of 530 residents based on 260 apartment units. We confirm the proposed four-lift design meets the requirements of ISO 8100-32:2020 and will provide an appropriate level of service for the proposed development. Occasional slight delays may occur if a lift is out of service for maintenance or repairs; therefore, regular maintenance per manufacturer recommendations is advised. The lift traffic simulations were conducted based on ISO 8100.32-2020; the results have been tabled below.

Traffic Profile	Handling Capacity	Average Waiting Times (AWT, s)		
		Recommended	Four Lifts	Three Lifts
Two-way traffic (50 % incoming, 50 % outgoing)	7%	≤ 60	44 ✓	94 ✗

Table 1: Lift simulation results

Requirements

The recommended lift performance requirements have been drawn from ISO 8100-32:2020 (E) and are summarised in the tabled below.

Parameter	Value
Average Waiting Time (AWT)	≤ 60 s
Handling capacity	≥ 7 % of population per 5-min
Traffic profile	Incoming 50 %, outgoing 50 %, Inter-floor 0 %

Table 2: Summary of lift performance requirements

Table 3 — Typical design criteria for simulation method, depending on building type

Building type and traffic mix	Required handling capacity $\%C_{h,req}$ % of population per 5 min	Required average waiting time $t_{aw,req}$ s
Office:		
— uppeak traffic (100 % incoming); or	$\geq 12 \%$	≤ 30
— mixed uppeak traffic (85 % incoming, 10 % outgoing, 5 % interfloor); and	$\geq 12 \%$	≤ 35
— lunch traffic (40 % incoming, 40 % outgoing, 20 % interfloor); or	$\geq 11 \%$	≤ 40
— lunch traffic (45 % incoming, 45 % outgoing, 10 % interfloor)	$\geq 11 \%$	≤ 40
Hotel:		
— two-way traffic (50 % incoming, 50 % outgoing)	$\geq 12 \%$	≤ 40
NOTE Hotel chains can have their own design criteria.		
Residential:		
— two-way traffic (50 % incoming, 50 % outgoing)	$\geq 7 \%$	≤ 60

Figure-1: Extract from ISO 8100:32 showing recommended performance requirements

Building population and configuration

Summary of floors served and population in the stacking plan below.

DWG Ref	Rev	Floor	Marking	ET	F1	F2	FFL	FTF	MR				MR				MRL				Use	Occupancy Factors					car park use factor				94%																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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Lift Locations

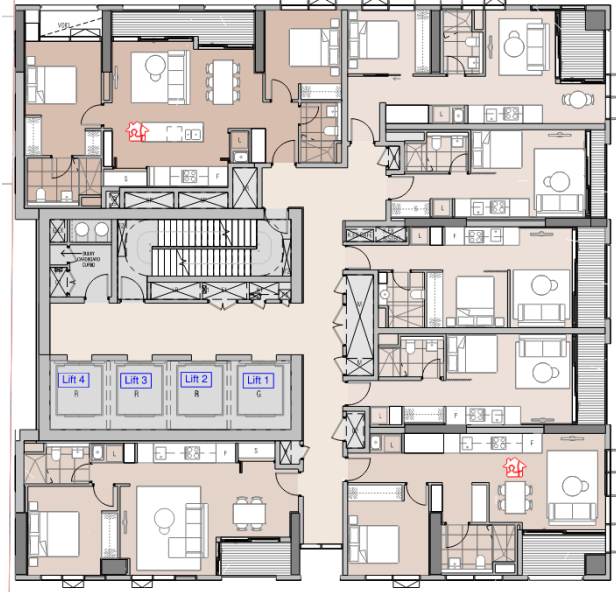


Image 1: Lift locations and numbering, ref: DA-107-Level 07-22 - Floor Plan Rev. A

Referenced documents

- ISO 8100.32-2020 Planning and selection of passenger lifts to be installed in office, hotel and residential buildings & CIBSE Guide D 2020 (Chartered Institution of Building Services Engineers)
- Australian Bureau of Statistics 2016 for Chatswood
- Architectural drawings issued by Fender Katsalidis

Preliminary lifts technical schedule

Lift technical schedule listed below are nominal for preliminary planning purposes.

Residential Lifts (Lifts 1, 2, 3 & 4)		
Quantity	Four (4)	
Capacity Rating	Lift 1: 1,600 kg 21 passengers Lifts 2, 3 & 4: 1,275 kg 17 passengers	
Floors served	Lift 1: 48 Lifts 2, 3 & 4: 46	B2, B1, G, 1-45 B2, B1, G, 2-44
Service classification	Lift 1: Passenger / Goods Lifts 2, 3 & 4: Passenger	
Lift Speed	Lift 1: 3.0 m/s Lifts 2, 3 & 4: 4 m/s	
Entrance size	Lift 1: 1,200 mm W x 2,200 mm H Lifts 2, 3 & 4: 1,100 mm W x 2,200 mm H	Two panel centre opening (2PC)
Well size	Lift 1: 2,450 mm W x 2,800 mm D Lifts 2, 3 & 4: 2,300 mm W x 2,800 mm D	Excludes dividing wall / trimmer beam between lifts
Headroom	Lift 1: 5,800 mm, Machine-room-less (MRL) Lifts 2, 3 & 4: 5,600 mm + 3,000 mm Motor room	
Pit	3,500 mm, pit access door required for installation and maintenance access	

Table 5: Lifts Technical Schedule

Limitations

The report is informative in nature and will be used to develop the vertical transportation design through discussions and workshops with the wider design team and stakeholder group.

To discuss further or if you have any queries, please call me.

Yours sincerely,



Govind Pandaran vilasan
Vertical Transportation Engineer
JHA Consulting Engineers