

Parkway Hotel Redevelopment

NCC 2019 Section J1 Fabric Report

ALH Group, c/ Cayas Architects

Job No:	1028175
Doc Ref:	1028175-SY-RPT-001
Revision:	В
Revision Date:	25 March 2021



Project title	Parkway Hotel Redevelopment	Job Number
Report title	NCC 2019 Section J1 Fabric Report	1028175

Document Revision History

Revision Ref	Issue Date	Purpose of issue / description of revision
_	21 September 2020	Issued for information – DTS compliance approach
А	05 February 2021	JV3 compliance approach
В	25 March 2021	Updated Porte Cochere shading

Document Validation (latest issue)

26/03/2021

Checked by

26/03/2021

26/03/2021

Principal author

Signed by: Thompson, Benjamin

Signed by: Hettiarachchi, Isuru

Signed by: Hettiarachchi, Isuru

Verified by

© Cundall Johnston & Partners PTY Ltd ("Cundall") owns the copyright in this report and it has been written for the sole and confidential use of ALH Group, c/ Cayas Architects. It must not be reproduced whole or in part without the express written authorisation of Cundall. Parties other than those specifically named in this disclaimer must not rely upon this report. Any third party relying on this report does so at their own risk. Cundall accepts no duty or responsibility (including in negligence) to any such third party.

Executive Summary

The proposed Parkway Hotel Redevelopment development has been assessed against the NCC 2019 Section J1, utilising the alternative verification approach, JV3. The assessment has shown the current design to be compliant.

Below are the required building fabric and glazing thermal performances for the proposed development to meet the thermal performance requirements of Section J1 of the NCC 2019.

Table 1.1 Thermal performance requirements, building fabric elements

Building Element	R _T (m².K/W)
Roof or ceiling (solar absorptance of not more than 0.45)	R _T 3.7
Wall –	
 External (outer surface solar absorptance value of not more than 0.6) 	R _T 1.0
 Internal walls to unconditioned spaces 	R _T 1.4
Exposed Floor (direction downwards) A floor without an in-slab heating or cooling system	R _T 2.0

Note: RT means total R-value build-up of the building envelope element. Absorptance is the fraction of solar radiation absorbed by the roof and is affected by the colour and reflectance of the outer surface.

Table 1.2 Thermal performance requirements, glazing systems

Glazing Element	U-value (W/m ² . K)	SHGC	
Vision Glazing – All Aspects	≤5.8	≤0.29	

Note: All glazing properties are based on AFRC figures for the total glazing system (glass + frame).

Utilising the alternative verification JV3 approach with the above glazing and building fabric criteria has demonstrated that code compliance requirements are met. However, it is recommended to implement double glazing with better thermal performance than the minimum criteria above, for improved energy efficiency and occupant thermal comfort.



Contents

1.0	Introduc	tion	1
1.1	Scope		1
1.2	Section J background		1
1.3	Referenc	e documents	2
1.4	Limitatior	is and disclaimers	2
2.0	Design d	letails	3
2.1	Location	and weather zones	3
2.2	Building o	classification	3
2.3	Building g	geometry	4
3.0	JV3 mod	elling parameters	5
3.1	Energy modelling software		
3.2	Modelling Parameters		5
4.0	Building fabric properties		7
4.1	Fabric Pr	operties	7
4.2 Total R-Values and total U-Values		7	
5.0 Modelling results		8	
5.1	Greenhou	use gas results	8
5.2	5.2 Thermal comfort results		8
6.0	6.0 Conclusions		9
Арр	endix A Informat	List of Reference Drawings & ion	10
Арр	endix B Report	NCC 2019 Section J1 Façade 11	
Арр	endix C	Fabric Mark-ups	12
Арр	Appendix D Thermal Comfort PMV Results		

1.0 Introduction

Cundall has been engaged by ALH Group, c/ Cayas Architects to provide a National Construction Code (NCC) 2019 Section J1 assessment for the proposed Parkway Hotel Redevelopment development in Frenchs Forest, NSW.

1.1 Scope

This report includes a review of the proposed building envelope design in accordance with Section J1 – Building Fabric. All other NCC 2019 Section J compliance requirements are the responsibility of others.

The aim is to verify that the fabric and glazing thermal performance meets the NCC 2019 Section J1 requirements.

1.2 Section J background

The general objective of Section J of the 2019 NCC is to reduce greenhouse gas emissions of the built environment. A building, and its services, is required to use energy efficiently so that the greenhouse gas emissions associated with its operation are minimised. This is subject to the intended use of the building and the necessary level of occupant comfort. For buildings that are air-conditioned, the amount of energy has also been quantified.

This is important, as energy consumption in a building is highly dependent on how the building is used. Energy efficiency cannot be assured simply by 'building-in' appropriate measures, as the building also needs to be operated, managed and maintained in an appropriate way. This also addresses the need for a low greenhouse gas intensity source or a renewable source of energy for the building's services.

There are multiple pathways to ensure compliance with Section J of the NCC. Compliance can be achieved by using the Deemed to Satisfy (DTS) requirements (prescriptive approach), which set out the thermal performance of envelope elements of a development, or a performance solution which assesses the thermal performance of a proposed development against pre-defined measures.

1.2.1 Verification Methods

There are three verification methods that can be utilised in lieu of meeting the DTS provisions of Section J1. These are;

- JV1 NABERS Energy for Offices;
- JV2 Green Star; and
- JV3 Verification using a reference building.

This report demonstrates compliance with the Section J1 Building Fabric provisions using the JV3 method.

To comply under a JV3 methodology, the predicted annual greenhouse gas emissions of a building must be less than it would be if the building was constructed to meet the minimum DTS requirements as per 2019 NCC Section J Energy Efficiency.

Typically, a JV3 assessment requires three scenarios to be compared; the reference building with services and fabric based on DTS provisions; the proposed building with proposed services and fabric and the proposed building with DTS services and proposed fabric. However, since the proposed building services are being designed to meet minimum DTS requirements as per the 2019 NCC, only the building fabric is required to be compared.

This JV3 assessment is focussed on envelope only and will only include the impact upon heating and cooling in the building. The energy usage of all other services is the same in the proposed building and the reference building. Accordingly, they have been omitted from the calculation of both the proposed building and the reference building.

1.3 Reference documents

The following resources were used throughout this verification exercise:

- Drawings: a list of which is contained in Appendix A;
- NCC 2019, volume one, class 2 to 9 buildings; and
- NCC 2019 facade calculator; results of which are contained in Appendix B.

1.4 Limitations and disclaimers

This report considers the building for compliance against Section J1 of the NCC 2019, and only considers the design from an energy efficiency perspective. This assessment does not consider proposed building services, peak load, thermal comfort, daylight, glare, condensation, or any other issues.

The thermal performance requirements indicated in this report are to be determined and achieved in accordance with AS/NZS 4859.2. The standard comprises a calculation method that takes into account the impact of thermal bridging on the thermal performance of a façade. Depending on the extent of the thermal bridging within a façade, extra insulation or thermal breaks may be required for a façade to be compliant. As such, achieving the as-built thermal performance of elements shall be the responsibility of the contractor(s).

Cundall does not bear responsibility for verifying the compliance or suitability of any individual product, system, or construction.

2.0 Design details

2.1 Location and weather zones

The proposed Parkway Hotel Redevelopment development is located in Frenchs Forest, New South Wales. The climate zone as defined by the NCC is climate zone 5.



Figure 2.1 Climate zones of proposed development location

2.2 Building classification

The proposed development has been assumed as a Class 3.



2.3 Building geometry

The following images show the general form of the building as modelled.





Figure 2.2 JV3 model images

3.0 JV3 modelling parameters

3.1 Energy modelling software

IESVE version 2019 was used to construct the building thermal model including materials, glazing, internal loads, profiles and a representation of the mechanical systems. IESVE is validated in accordance with ANSI/ASHRAE Standard 140 for the purposes of energy modelling.

3.2 Modelling Parameters

Table 3.1 JV3 modelling parameters

Parameter	Value				
Climate File	AUS_NSW.Sydney.947680_RMY.epw				
Space Temperatures	18°CDB to 25°CDB in conditioned spaces with transitory occupancy				
	21°CDB to 24°CDB in all	other conditioned spaces			
Cooling System Type, Fuel, COP	Multi-split / VRF	Multi-split / VRF Electricity 2.9			
Heating System Type, Fuel, COP	Multi-split / VRF	Electricity	2.9		
Operational Loads	Internal heat gains for appliances and equipment	Class 3 (sole occupancy unit)	160W per room		
	Occupants Loads	Bar/Dining	80 W Sensible		
			80 W Latent		
		Misc	75 W Sensible		
			55 W Latent		
	Area per person	Bar/Dining Lounge	1 m ² /person		
		Gym	3 m²/person		
		Hotel	15 m ² /person		
		Kitchen / Office	10 m ² /person		
		Function Space	1 m ² /person		
	Lighting heat gains	Gym / Office / Reception Lounge	4.5 W/m ²		
		Bar/Dining Lounge / Function Space	14 W/m ²		
		Kitchen / Function Prep	4 W/m ²		
		Hotel Room / Suite / Corridor	5 W/m ²		
Operational Profiles	As per Specification JVc, Table 2b, Class 3 hotel				
Gas Emission Factors	NSW [51.5 kg CO ₂ -e/GJ]				
Electricity Emission Factors	NSW [256.0 kg CO ₂ -e/GJ]				

The following parameters were selected to reflect the levels of human activity, clothing and wind speed within the development. These parameters are used to determine the predicted mean vote (PMV) for the zones. These are assigned on a seasonal basis to account for the different levels of clothing of occupants throughout the year.

Table 3.2 Summary of comfort parameters modelled

Parameter	October - March (hotter months)	April - September (colder months)	
Clothing Level (Iclu (clo))	0.60	0.95	
Metabolic Rate (W/m ²)	60		
Nominal air speed (m/s)	0.3	0.15	

4.0 Building fabric properties

4.1 Fabric Properties

The following table summarises the DTS and proposed thermal performance properties.

Table 4.1 Thermal performance requirements, building fabric elements

Building Envelopment Element	DTS (m².K/W)	Proposed (m².K/W)	
Roof or ceiling (solar absorptance of not more than 0.45)	R _T 3.7	R _T 3.7	
Wall –			
 External (outer surface solar absorptance value of not more than 0.6) 	R⊤1.0	R⊤1.0	
 Internal (to unconditioned spaces) 	R⊤1.4	R⊤1.4	
Exposed Floor (direction downwards)	R _T 2.0	R _T 2.0	

Note: RT means total R-value build-up of the building envelope element. Absorptance is the fraction of solar radiation absorbed by the roof and is affected by the colour and reflectance of the outer surface.

Table 4.2 Thermal performance requirements, glazing systems

Glazing Element	DTS U-value (W/m². K) / SHGC	Proposed U-value (W/m². K) / SHGC
Vision Glazing – All Aspects	5.8 / 0.18	5.8 / 0.29

Note: All glazing properties are based on AFRC figures for the total glazing system (glass + frame).

Utilising the alternative verification JV3 approach with the above glazing and building fabric criteria has demonstrated that code compliance requirements are met. However, it is recommended to implement double glazing with better thermal performance than the minimum criteria above, for improved energy efficiency and occupant thermal comfort.

Refer Appendix B for the NCC 2019 J1 Fabric Report.

4.2 Total R-Values and total U-Values

Must be calculated including allowance for thermal bridging.

- calculated in accordance with AS/NZS 4859.2 for a roof or floor; or
- determined in accordance with Specification J1.5a for wall-glazing construction; or
- determined in accordance with Specification J1.6 or Section 3.5 of CIBSE Guide A for soil or sub-floor spaces.
 Refer for building fabric thermal performance.

5.0 Modelling results

5.1 Greenhouse gas results

The JV3 assessment results, show that, based on the current building envelope design, the hypothetical building model emits less greenhouse gas than that of the DTS reference building model, and therefore complies with Section J1 of the NCC 2019.

<u> </u>				
Table 5.1 JV3 Assessment	areenhouse	aas	emission	results
	9	3		

Model	Annual GHG Emissions (kgCO2-e)			
	Heating	Cooling	Total	
Reference (DTS)	85,708.0	52,888.1	138,596.1	
Proposed	82,461.9	55,066.7	137,528.6	

5.2 Thermal comfort results

The JV3 comfort assessment results demonstrate a Predicted Mean Vote (PMV) of -1 to +1 is achieved across more than 95% of occupied floor area for more than 98% of the annual hours of operation. Compliance with the comfort criteria of Section J1 has been satisfied and results are shown in Appendix D.

6.0 Conclusions

A Section J1 fabric assessment has been carried out to demonstrate that the proposed development is able to meet the thermal performance requirements specified within Section J1 of the NCC 2019 by following the JV3 verification methodology.

Based on the documentation listed in Appendix A, the building meets the requirements of NCC Section J, Part 1.

Appendix A List of Reference Drawings & Information

Drawing Number	Drawing Title	Revision	Date Issued
DA00.12	Detail Site Plan	D	11.03.21
DA10.00	Basement Plan	F	14.12.20
DA10.01	Ground Floor Plan	G	14.12.20
DA10.02	Level 1 Floor Plan	G	14.12.20
DA10.03	Level 2 Floor Plan	G	14.12.20
DA10.04	Level 3 and 4 Floor Plan	F	14.12.20
DA10.05	Level 5 Floor Plan	G	14.12.20
DA10.06	Level 6 Floor Plan	G	14.12.20
DA10.07	Roof Plan	E	14.12.20
DA20.10	East External Elevation	F	11.03.21
DA20.11	North and South External Elevations	F	11.03.21
DA20.12	West External Elevation	F	11.03.21
DA30.10	Sections	D	14.12.20



Appendix B NCC 2019 Section J1 Façade Report

Please see overleaf.



TANT NOTICE AND DISCLAIMER IN RESPECT OF THIS CALCULATOR

nersure that you are using a complete and up-to-date version by checking the Australian Building Codes Board website (www abcb gour.au). The Australian Building Codes Board, the Commonwealth of Australia and States on as a result of accessing, using or relying upon this calculator, to the maximum extent permitted by law. No representation or warranty is made or gravit and a state state and an and a state state and an and a state state and a state and a state state and a state state and a state and a state and a state and a state and a state state and a state state and a state calculator, you agree to the following: While care has be do not accept any liability, including liability for negliger of this calculator or any information which may appear ation in relation to their particular circumstances. en taken in the preparation of this calcula ce, for any loss (howsoever caused), dar ng or using this ries of Australia o-date. Yo red by any urpose or completeness of this nd accuracy of the information nmonwealth of Australia and the States and Te

⁶ Commonwealth of Australia and the States and The material in this calculator is licensed under a and without warranties of any kind. You may not n regarding this calculator, see www.abcb.gov.au. tories of Australia 2019, published by the Australian Building Co ive Commons Attribution-No Derivatives—4.0 International licer des Board. co, with the exception of third party materials and any trade marks. It is provided for general information only More information on this CC BY ND licence is set out at the Creative Commons Website. For information



Appendix C Fabric Mark-ups

Please see overleaf.

	Project.	Sketch No.	R
	Parkway Hotel Redevelopment	ХХХ	
CUNJALL	Title. NCC Section J Fabric Mark-up - Basement		
 CUNDALL Notes: Version of NCC: 2019 Climate Zone: 5 Building Class: 3 This mark-up is indicative only and requires approval by the client. This information is to be incorporated into the appropriate documentation. This advice relates to Section J1 only. Other sections by others. The R-values represent complete roof, wall and floor constructions, including air films/gaps and including allowance for thermal bridging. Complete constructions are to be shown for compliance. All glazing properties are based on AFRC figures for the total glazing system (glass and frame). Architect and/or contractor are to ensure compliance with the construction requirements of section J1. Including the calculation and application of R-value adjustments. Legend: External Wall - R 1.0 Internal Wall - R 1.4 Suspended Exposed Floor - R 2.0 Note: Arrows indicate direction of heat flow. (a) (b) Facade Glazing: (c) Facade Glazing: (c) Stan SHGC; 0.29 	THE NCC Section J Fabric Mark-up - Basement		
	1 Basement Floor Plan 1:200		

evision.	Job No.	Made by.
Α	1028175	BT
ate.	Scale.	Page No.
18/01/21	NTS	1 of 10

. *.*



		Olivatala Nia	
	Project. Parkway Hotel Redevelopment	Sketch No. XXX	Re
	Title.	<u> </u>	Da
	NCC Section J Fabric Mark-up - Ground Floor		
Notes: 1. Version of NCC: 2019 2. Climate Zone: 5 3. Building Class: 3 4. This mark-up is indicative only and requires approval by the client. 5. This information is to be incorporated into the appropriate documentation. 6. This advice relates to Section J1 only. Other sections by others. 7. The R-values represent complete roof, wall and floor constructions, including air films/gaps and including allowance for thermal bridging. Complete constructions are to be shown for compliance. 8. All glazing properties are based on AFRC figures for the total glazing system (glass and frame). 9. Architect and/or contractor are to ensure compliance with the construction requirements of section J1. Including the calculation and application of R-value adjustments. Legend: External Wall - R 1.0 Mote: Arrows indicate direction of heat flow. are flow. are flow. are flow. are flow. by SHGC; 0.29			



	Project. Parkway Hotel Redevelopment	Sketch No. XXX	Rev
CUNJALL	Title. NCC Section J Fabric Mark-up - L1	1	Date
Notes: 1. Version of NCC: 2019 2. Climate Zone: 5 3. Building Class: 3 4. This mark-up is indicative only and requires approval by the client. 5. This information is to be incorporated into the appropriate documentation. 6. This advice relates to Section J1 only. Other sections by others. 7. The R-values represent complete roof, wall and floor constructions, including air films/gaps and including allowance for thermal bridging. Complete constructions are to be shown for compliance. 8. All glazing properties are based on AFRC figures for the total glazing system (glass and frame). 9. Architect and/or contractor are to ensure compliance with the construction requirements of section J1. Including the calculation and application of R-value adjustments. Legend: External Wall - R 1.4 Exposed Roof - R 3.7 (absorptance < 0.45) 5. Suspended Exposed Floor - R 2.0 Note: Arrows indicate direction of heat flow. (a) Facade Glazing: (b) 5.8 SHGC; 0.29			



	Project. Parkway Hotel Redevelopment	Sketch No. XXX	Rev
CUNJALL	Title. NCC Section J Fabric Mark-up - L2	1	Date
Notes: 1. Version of NCC: 2019 2. Climate Zone: 5 3. Building Class: 3 4. This mark-up is indicative only and requires approval by the client. 5. This information is to be incorporated into the appropriate documentation. 6. This advice relates to Section J1 only. Other sections by others. 7. The R-values represent complete roof, wall and floor constructions, including air films/gaps and including allowance for thermal bridging. Complete constructions are to be shown for compliance. 8. All glazing properties are based on AFRC figures for the total glazing system (glass and frame). 9. Architect and/or contractor are to ensure compliance with the construction requirements of section J1. Including the calculation and application of R-value adjustments. Legend: External Wall - R 1.0 Internal Wall - R 1.4 Exposed Roof - R 3.7 (absorptance < 0.45) Suspended Exposed Floor - R 2.0 Note: Arrows indicate direction of heat flow. (a) Facade Glazing: (b) 5.8 SHGC; 0.29			200



	Project. Parkway Hotel Redevelopment	Sketch No. XXX	Rev
CUNJALL	Title. NCC Section J Fabric Mark-up - L3&4	I	Date
Notes: 1. Version of NCC: 2019 2. Climate Zone: 5 3. Building Class: 3 4. This mark-up is indicative only and requires approval by the client. 5. This information is to be incorporated into the appropriate documentation. 6. This advice relates to Section J1 only. Other sections by others. 7. The R-values represent complete roof, wall and floor constructions, including air films/gaps and including allowance for thermal bridging. Complete constructions are to be shown for compliance. 8. All glazing properties are based on AFRC figures for the total glazing system (glass and frame). 9. Architect and/or contractor are to ensure compliance with the construction requirements of section J1. Including the calculation and application of R-value adjustments. Legend: External Wall - R 1.0 Minternal Wall - R 1.4 Exposed Roof - R 3.7 (absorptance < 0.45) Suspended Exposed Floor - R 2.0 Note: Arrows indicate direction of heat flow. G 1. Facade Glazing: U; 5.8 SHGC; 0.29	() Leg 2004 Hor Mar.		



	Project. Parkway Hotel Redevelopment	Sketch No.	Revi
	Title.	***	Date
	NCC Section J Fabric Mark-up - L5		
Notes: 1. Version of NCC: 2019 2. Climate Zone: 5 3. Building Class: 3 4. This mark-up is indicative only and requires approval by the client. 5. This information is to be incorporated into the appropriate documentation. 6. This advice relates to Section J1 only. Other sections by others. 7. The R-values represent complete roof, wall and floor constructions, including air films/gaps and including allowance for thermal bridging. Complete constructions are to be shown for compliance. 8. All glazing properties are based on AFRC figures for the total glazing system (glass and frame). 9. Architect and/or contractor are to ensure compliance with the construction requirements of section J1. Including the calculation and application of R-value adjustments. Legend: External Wall - R 1.0 Internal Wall - R 1.4 Exposed Roof - R 3.7 (absorptance < 0.45) Suspended Exposed Floor - R 2.0 Note: Arrows indicate direction of heat flow. © Facade Glazing: 1. (a) Facade Glazing: 1. (b) Facade Glazing: 1. (c) Facade Glazing:			



	Project. Parkway Hotel Redevelopment	Sketch No. Re XXX
CUNJALL	Title. NCC Section J Fabric Mark-up - L6	Da
Notes: 1. Version of NCC: 2019 2. Climate Zone: 5 3. Building Class: 3 4. This mark-up is indicative only and requires approval by the client. 5. This information is to be incorporated into the appropriate documentation. 6. This advice relates to Section J1 only. Other sections by others. 7. The R-values represent complete roof, wall and floor constructions, including air films/gaps and including allowance for thermal bridging. Complete constructions are to be shown for compliance. 8. All glazing properties are based on AFRC figures for the total glazing system (glass and frame). 9. Architect and/or contractor are to ensure compliance with the construction requirements of section J1. Including the calculation and application of R-value adjustments. Legend: External Wall - R 1.0 Internal Wall - R 1.4 Exposed Roof - R 3.7 (absorptance < 0.45) Suspended Exposed Floor - R 2.0 Note: Arrows indicate direction of heat flow. ① Facade Glazing: U; 5.8 SHGC; 0.29	The NCC Section J Fabric Mark-up - L6	





evision.	Job No.	Made by.
Α	1028175	ВТ
ate.	Scale.	Page No.
18/01/21	NTS	8 of 10
(16) (17)	18 (19)	
	E	Consultant Issue SB 14.12.20

A	Client Issue	SB	16 06 20
_A	Client Issue	SB	16.06.20







Appendix D Thermal Comfort PMV Results

Location	Occupied Hours	Occupied Hours	Occupied Hours	%Time
	<-1.00	>-1.00 to <=1.00	>1.0	>-1.00 to <=1.00
Basement Staff Room Main	38	6532	0	99%
Ground Function Prep	11	6559	0	100%
Ground Hotel Function Space	0	6570	0	100%
Ground Function Room	10	6547	13	100%
Ground Office	1	6569	0	100%
Ground Bar/ Dining Lounge	0	6570	0	100%
Level 1 Gym	6	6564	0	100%
Level 1 Suite 5	1	6569	0	100%
Level 1 Suite 12	0	6570	0	100%
Level 1 Suite 11	0	6570	0	100%
Level 1 Suite 10	0	6570	0	100%
Level 1 Suite 9	0	6570	0	100%
Level 1 Suite 8	0	6570	0	100%
Level 1 Suite 7	3	6567	0	100%
Level 1 Suite 6	6	6564	0	100%
Level 1 Suite 1	95	6475	0	99%
Level 1 Suite 2	34	6536	0	99%
Level 1 Suite 3	34	6536	0	99%
Level 1 Suite 4	116	6454	0	98%
Level 1 Suite 13	86	6484	0	99%
Level 1 Suite 14	42	6528	0	99%
Level 1 Suite 15	55	6515	0	99%
Level 1 Suite 16	63	6507	0	99%
Level 1 Suite 17	55	6515	0	99%
Level 1 Suite 18	71	6499	0	99%
Level 1 Suite 19	64	6506	0	99%
Level 1 Suite 20	55	6515	0	99%



Level 1 Suite 21	29	6541	0	100%
Level 1 Suite 22	30	6540	0	100%
Level 1 Suite 23	29	6541	0	100%
Level 1 Suite 24	55	6515	0	99%
Level 1 Suite 25	62	6508	0	99%
Level 1 Suite 26	123	6447	0	98%
Level 2 Suite 5	2	6568	0	100%
Level 2 Suite 13	4	6566	0	100%
Level 2 Suite 12	1	6569	0	100%
Level 2 Suite 11	1	6569	0	100%
Level 2 Suite 10	1	6569	0	100%
Level 2 Suite 9	1	6569	0	100%
Level 2 Suite 8	2	6568	0	100%
Level 2 Suite 7	6	6564	0	100%
Level 2 Suite 1	89	6481	0	99%
Level 2 Suite 2	44	6526	0	99%
Level 2 Suite 3	42	6528	0	99%
Level 2 Suite 4	107	6463	0	98%
Level 2 Suite 14	102	6468	0	98%
Level 2 Suite 15	45	6525	0	99%
Level 2 Suite 16	41	6529	0	99%
Level 2 Suite 17	45	6525	0	99%
Level 2 Suite 18	40	6530	0	99%
Level 2 Suite 19	46	6524	0	99%
Level 2 Suite 20	44	6526	0	99%
Level 2 Suite 21	41	6529	0	99%
Level 2 Suite 22	41	6529	0	99%
Level 2 Suite 23	41	6529	0	99%
Level 2 Suite 24	41	6529	0	99%
Level 2 Suite 25	40	6530	0	99%
Level 2 Suite 26	44	6526	0	99%
Level 2 Suite 27	101	6469	0	98%



Level 2 Suite 6	6	6564	0	100%
Level 3 Suite 5	2	6568	0	100%
Level 3 Suite 13	4	6566	0	100%
Level 3 Suite 12	2	6568	0	100%
Level 3 Suite 11	1	6569	0	100%
Level 3 Suite 10	2	6568	0	100%
Level 3 Suite 9	2	6568	0	100%
Level 3 Suite 8	2	6568	0	100%
Level 3 Suite 7	6	6564	0	100%
Level 3 Suite 1	89	6481	0	99%
Level 3 Suite 2	46	6524	0	99%
Level 3 Suite 3	42	6528	0	99%
Level 3 Suite 4	106	6464	0	98%
Level 3 Suite 14	109	6461	0	98%
Level 3 Suite 15	44	6526	0	99%
Level 3 Suite 16	44	6526	0	99%
Level 3 Suite 17	44	6526	0	99%
Level 3 Suite 18	41	6529	0	99%
Level 3 Suite 19	44	6526	0	99%
Level 3 Suite 20	44	6526	0	99%
Level 3 Suite 21	41	6529	0	99%
Level 3 Suite 22	44	6526	0	99%
Level 3 Suite 23	41	6529	0	99%
Level 3 Suite 24	44	6526	0	99%
Level 3 Suite 25	41	6529	0	99%
Level 3 Suite 26	44	6526	0	99%
Level 3 Suite 27	97	6473	0	99%
Level 3 Suite 6	6	6564	0	100%
Level 4 Suite 5	2	6568	0	100%
Level 4 Suite 13	4	6566	0	100%
Level 4 Suite 12	1	6569	0	100%
Level 4 Suite 11	1	6569	0	100%



Level 4 Suite 10	1	6569	0	100%
Level 4 Suite 9	1	6569	0	100%
Level 4 Suite 8	1	6569	0	100%
Level 4 Suite 7	6	6564	0	100%
Level 4 Suite 1	89	6481	0	99%
Level 4 Suite 2	48	6522	0	99%
Level 4 Suite 3	42	6528	0	99%
Level 4 Suite 4	107	6463	0	98%
Level 4 Suite 14	103	6467	0	98%
Level 4 Suite 15	44	6526	0	99%
Level 4 Suite 16	40	6530	0	99%
Level 4 Suite 17	42	6528	0	99%
Level 4 Suite 18	40	6530	0	99%
Level 4 Suite 19	44	6526	0	99%
Level 4 Suite 20	44	6526	0	99%
Level 4 Suite 21	40	6530	0	99%
Level 4 Suite 22	41	6529	0	99%
Level 4 Suite 23	41	6529	0	99%
Level 4 Suite 24	44	6526	0	99%
Level 4 Suite 25	39	6531	0	99%
Level 4 Suite 26	44	6526	0	99%
Level 4 Suite 27	95	6475	0	99%
Level 4 Suite 6	6	6564	0	100%
Level 5 Suite 5	3	6567	0	100%
Level 5 Suite 13	4	6566	0	100%
Level 5 Suite 12	2	6568	0	100%
Level 5 Suite 11	1	6569	0	100%
Level 5 Suite 10	1	6569	0	100%
Level 5 Suite 9	1	6569	0	100%
Level 5 Suite 8	2	6568	0	100%
Level 5 Suite 7	6	6564	0	100%
Level 5 Suite 1	90	6480	0	99%



Level 5 Suite 2	47	6523	0	99%
Level 5 Suite 3	44	6526	0	99%
Level 5 Suite 4	110	6460	0	98%
Level 5 Suite 17	44	6526	0	99%
Level 5 Suite 18	45	6525	0	99%
Level 5 Suite 6	6	6564	0	100%
Level 5 Suite 21	72	6498	0	99%
Level 5 Suite 25	44	6526	0	99%
Level 6 Suite 5	6	6564	0	100%
Level 6 Suite 13	7	6563	0	100%
Level 6 Suite 12	6	6564	0	100%
Level 6 Suite 11	6	6564	0	100%
Level 6 Suite 10	6	6564	0	100%
Level 6 Suite 9	6	6564	0	100%
Level 6 Suite 8	6	6564	0	100%
Level 6 Suite 7	9	6561	0	100%
Level 6 Suite 1	120	6450	0	98%
Level 6 Suite 2	64	6506	0	99%
Level 6 Suite 3	59	6511	0	99%
Level 6 Suite 4	136	6434	0	98%
Level 6 Suite 20	69	6501	0	99%
Level 6 Suite 21	70	6500	0	99%
Level 6 Suite 6	8	6562	0	100%
Level 6 Suite 19	43	6527	0	99%
Level 6 Suite 16	44	6526	0	99%
Level 6 Suite 15	44	6526	0	99%
Level 6 Suite 14	75	6495	0	99%
Level 6 Suite 15	107	6463	0	98%
Level 6 Suite 16	70	6500	0	99%
Level 6 Suite 18	69	6501	0	99%
Level 6 Suite 22	70	6500	0	99%
Level 6 Suite 25	70	6500	0	99%



	99%			
Ground Reception Lounge	3143	5617	0	64%
Level 6 Suite 26	105	6465	0	98%



Cundall Johnston & Partners PTY Click down arrow to select CUNDALL Office address