



NSW GOVERNMENT  
Planning & Infrastructure

- 4 DEC 2017

DEVELOPMENT ASSESSMENT AND  
SYSTEMS PERFORMANCE  
RECEIVED - JINDABYNE

# MARRITZ HOTEL

# Kosciuszko Rd

# Perisher Valley

## SECTION J REPORT

### DESIGN STATEMENT

Pursuant to BCA A2.2; this report relies on supplied documentation for assessment in regards to adopting measures contributing to deemed-to-satisfy of designed and built deliverables. It is our opinion that the project can be constructed to satisfy the requirements of the Building Code of Australia.

### Document control

Rev	Date	Description
A	8 Nov. 17	Prepared from supplied information.

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Sustainable Housing

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## Energy Efficiency

In response to concerns over global warming, the Australian Government announced in July 2000 that agreement had been reached with industry and State and Territory Governments to adopt a two-pronged approach to reducing greenhouse gas emissions from buildings. The first approach was the introduction of mandatory minimum energy performance requirements through the Building Code of Australia (BCA), and the second approach was the encouragement of best practice voluntary initiatives by industry. Industry was supportive of this two-pronged approach, taking the view that building-related matters should be consolidated in the BCA wherever possible.

Given the importance of the energy performance of buildings to overall national greenhouse gas emissions performance, the Australian Building Codes Board (ABCB) and the Australian Greenhouse Office signed a Memorandum of Understanding to jointly develop the BCA Energy Efficiency Provisions.

The Energy Efficiency Project was endorsed under the National Framework for Energy Efficiency (NFEE), an agreement between all Australian Governments established to improve energy efficiency. The objective of NFEE is to unlock the significant economic potential associated with increased implementation of energy efficiency technologies and processes to deliver a least cost approach to energy efficiency in Australia.

To enable the effective involvement of stakeholders in the development of the BCA Energy Efficiency Provisions, several committees and working groups comprising representatives from a range of government, industry and community organisations were developed.

At specific stages of the project, the ABCB sought the views of the wider community. This process was undertaken when the ABCB released the Directions Report on the Energy Efficiency Project (2001), and on the release of Regulation Documents (RDs) and Regulatory Impact Statements (RISs). Any proposed annual changes to the BCA are also made public prior to finalisation.

Energy efficiency requirements are now incorporated in the Building Code of Australia. In Volume 1, it is Section J, hence the "Section J Report".

This report undertaken under JV1. Deemed to satisfy.

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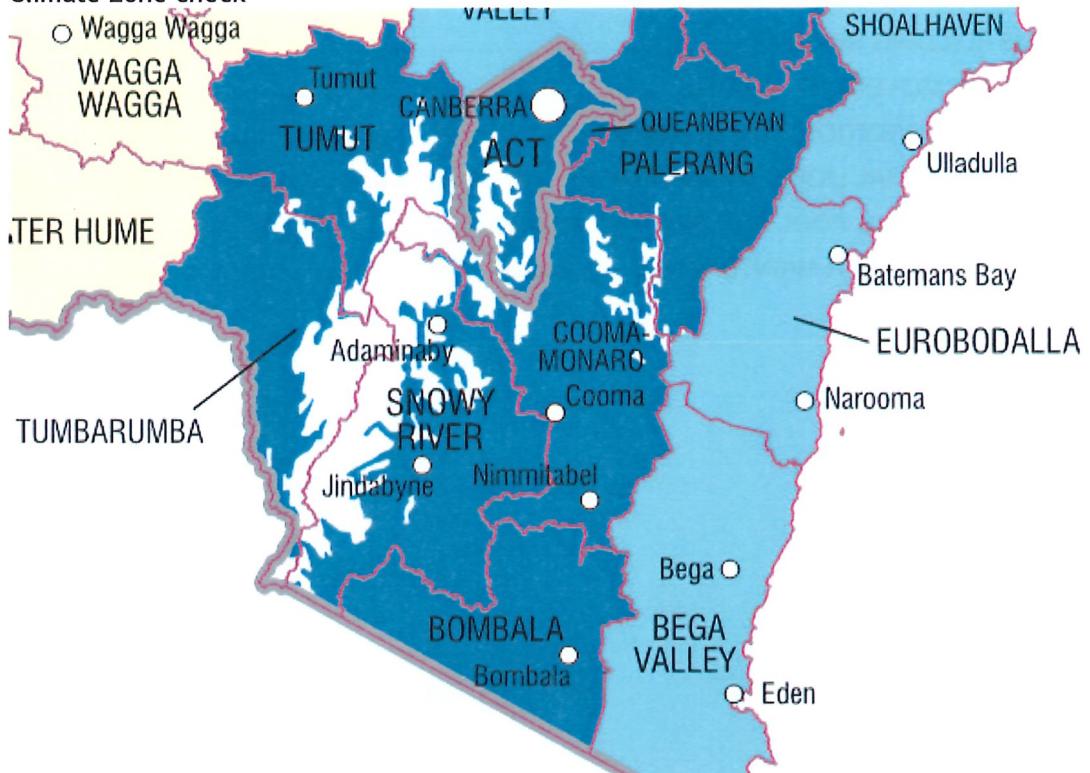
## Section J review

### Application

Building class 3

Section J affected

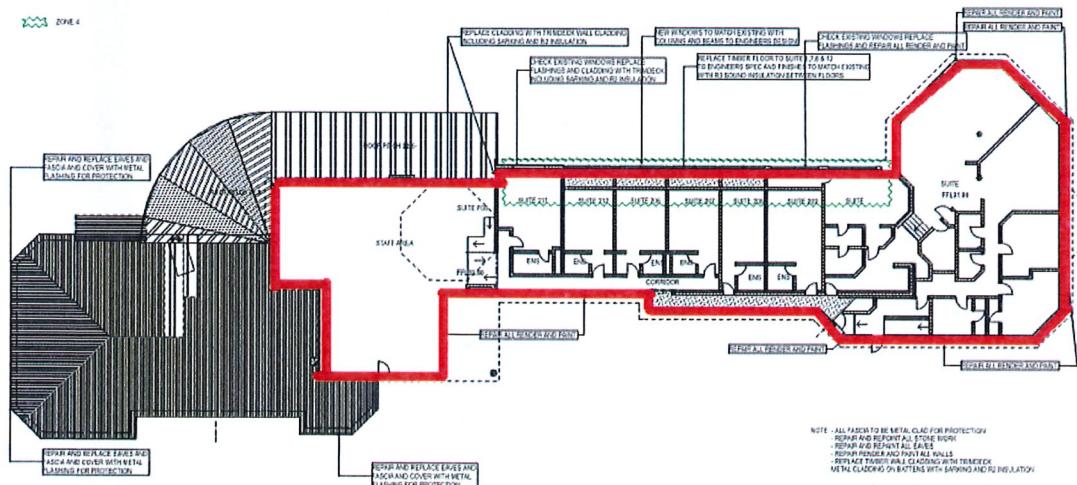
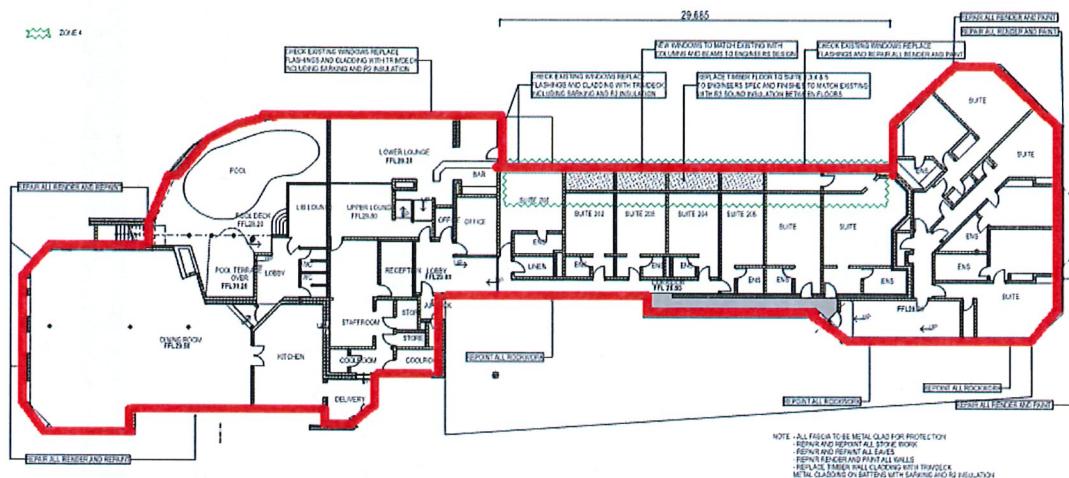
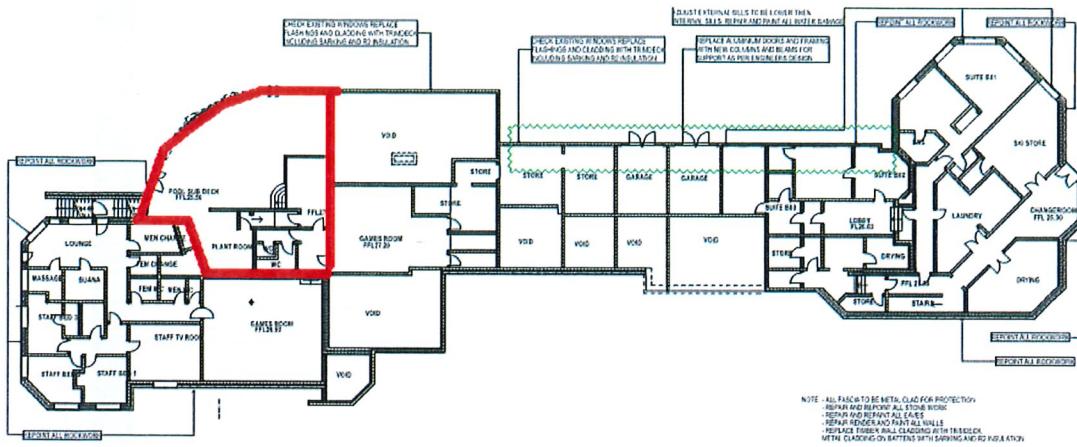
#### Climate Zone check



Climate zone:	8	Remarks
		White

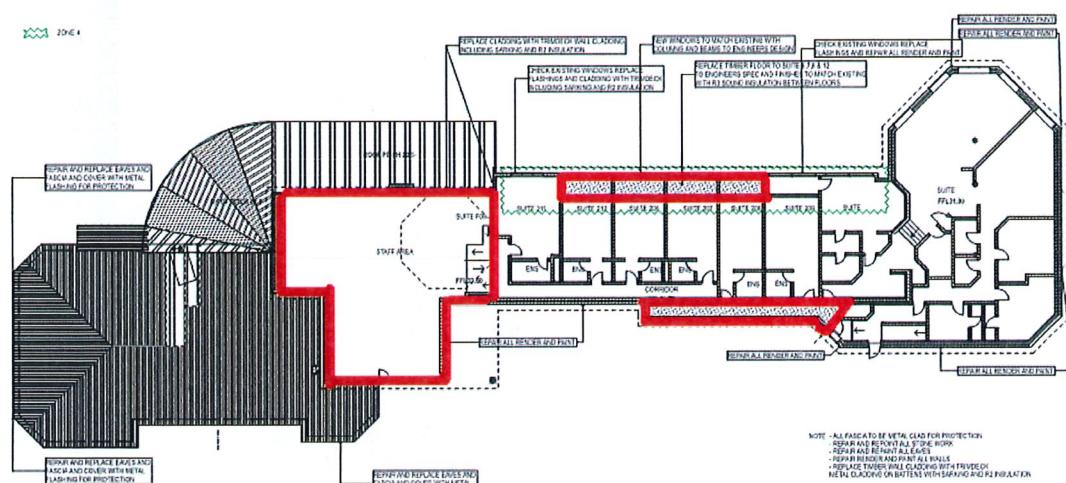
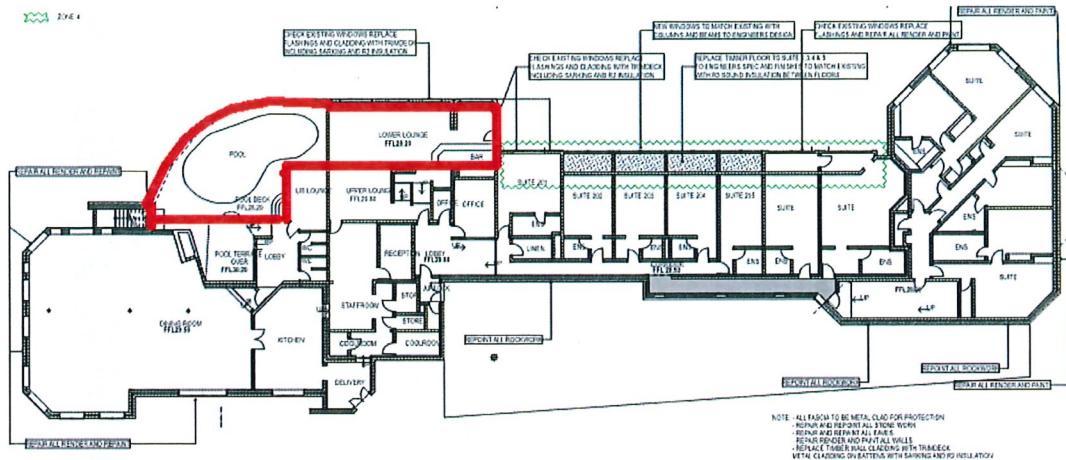
#### Conditioned envelopes (likely to be heated or cooled)

Space	Conditioned	Non-conditioned
As shown	X	-

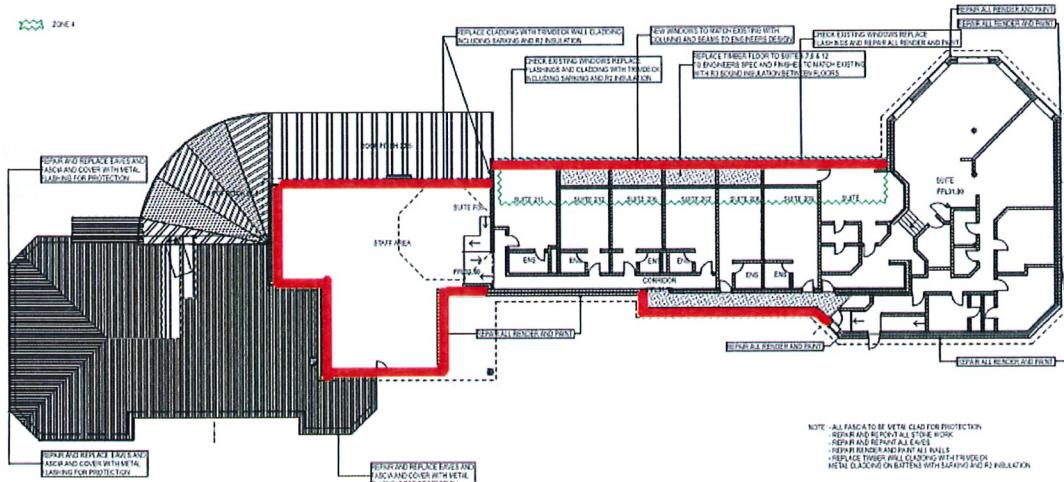
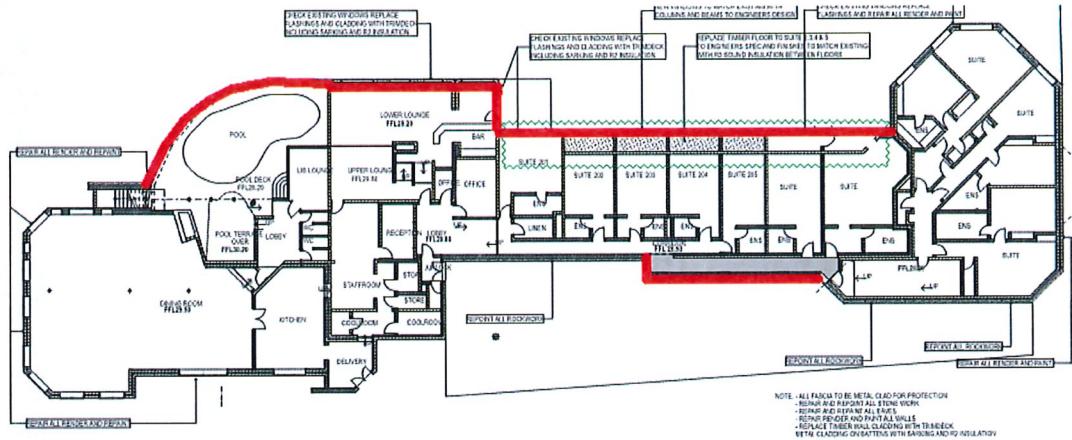
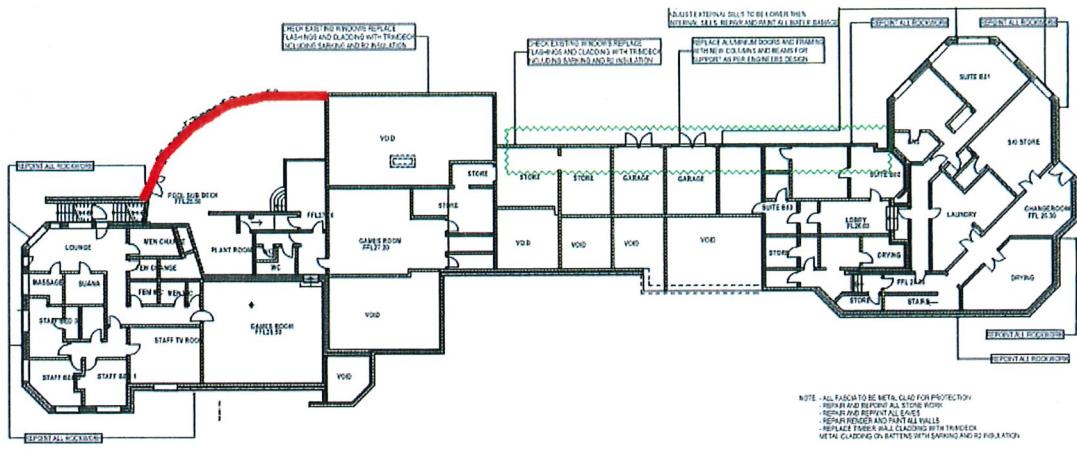


## 1. J1 BUILDING FABRIC – conditioned spaces

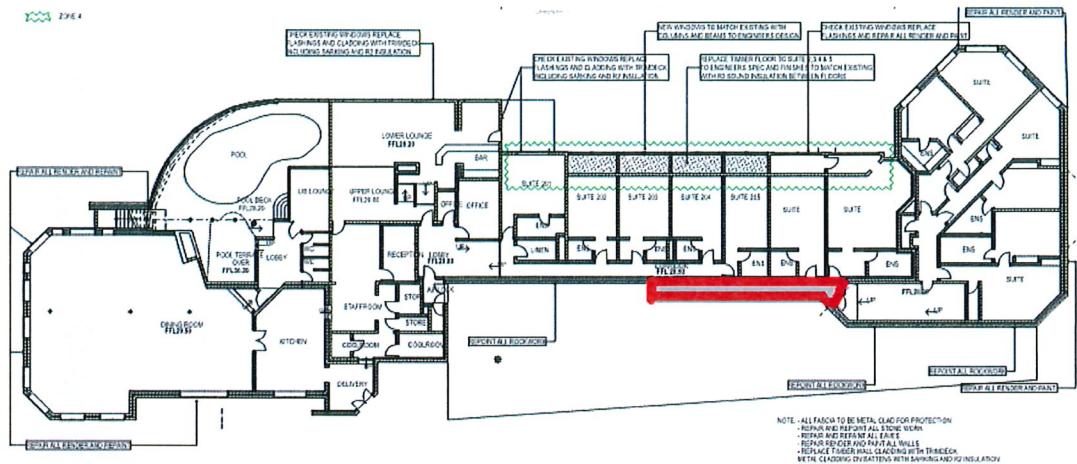
Action by applicant	Certifier check
J1.1 Applicant  Insulation to wall or roof <u>if metal framed</u> (to simulate insulation equivalence to timber frame)	Note  Provide thermal break between metal cladding or roofing DTS are <ul style="list-style-type: none"> <li>• 15mm styrene</li> <li>• 25 timber OR</li> <li>• mass insulation at fixing</li> </ul>
J1.3 Roof/ceiling insulation [dark roofing]  Required total R-value R 4.2  Metal roofed .....R 0.39	Note  Certify that the installation is deemed to satisfy.
Provide R .2.8 insulation between roofing and ceiling.  Markups below show ceilings affected.	Certify that the installation is deemed to satisfy.



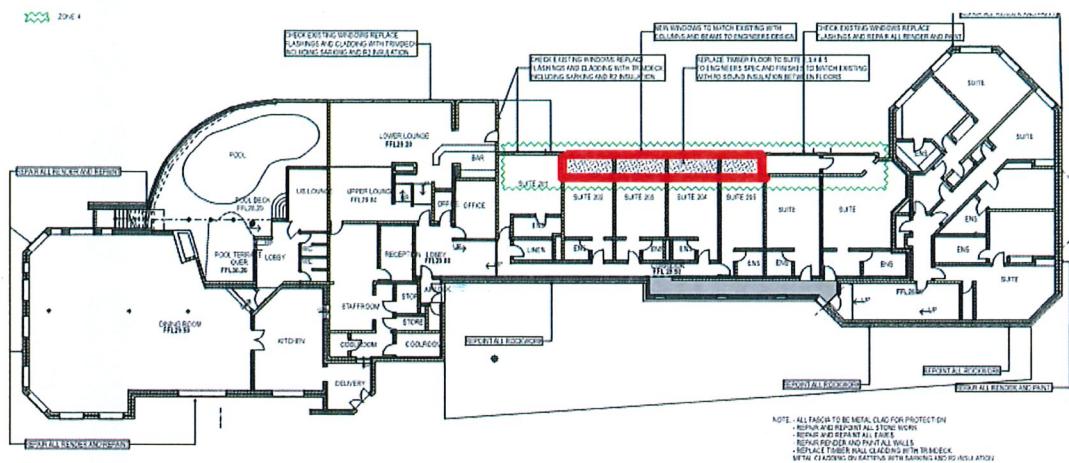
	Action by applicant	Certifier check															
	Roof lights	Note															
J1.4	NA																
J1.5	<p><b>External walls</b></p> <p><b>Required R 2.8</b></p> <p>Typical options</p> <table> <tbody> <tr> <td>BV walls .....</td> <td>R 0.48</td> <td>Provide R 2.3 insulation</td> </tr> <tr> <td>Cavity brick .....</td> <td>R 0.51 + 0.5</td> <td>Provide R 1.5 insulation (&gt; 220 surface density)</td> </tr> <tr> <td>Conc block .....</td> <td>R 0.54</td> <td>Provide R 2.3 insulation</td> </tr> <tr> <td>Framed walls .....</td> <td>R 0.42</td> <td>Provide R 2.4 insulation</td> </tr> <tr> <td>200 Hebel .....</td> <td>R 2.39</td> <td>Provide R 0.4 insulation</td> </tr> </tbody> </table> <p>Markups below show walls affected.</p>	BV walls .....	R 0.48	Provide R 2.3 insulation	Cavity brick .....	R 0.51 + 0.5	Provide R 1.5 insulation (> 220 surface density)	Conc block .....	R 0.54	Provide R 2.3 insulation	Framed walls .....	R 0.42	Provide R 2.4 insulation	200 Hebel .....	R 2.39	Provide R 0.4 insulation	<p>Certify that the installation is deemed to satisfy.</p>
BV walls .....	R 0.48	Provide R 2.3 insulation															
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200 Hebel .....	R 2.39	Provide R 0.4 insulation															



Action by applicant	Certifier check
J1.6	Note
Floor insulation. Slab on ground Required R 2.0 insulation	Provide R 2.0 insulation under slab Markup below shows floor affected.



Action by applicant	Certifier check
J1.6 Floor insulation. Elevated timber floor	Note
Required R 3.5insulation	Provide R 3.5 insulation under floor Markup below shows floor affected.



## 2. J2 EXTERNAL GLAZING – *conditioned spaces*

Action by applicant	Certifier check
Select from <a href="http://www.wers.net/Certified-Products-Residential">http://www.wers.net/Certified-Products-Residential</a> or use their search engine <a href="http://www.wers.net/">http://www.wers.net/</a>	Check and certify manufacturer's certificates if complies. Manufacturer's window data <b>MUST</b> <b>MATCH</b> U and SHGC values in the following calculator.
Deemed to satisfy with double glazed ComfortPlus Neutral and external shading devices.	Provide data of selected windows to Assessor for validation (see bottom of cover page).

# NCC VOLUME ONE GLAZING CALCULATOR (first issued with NCC 2014)

Building name/Description

CAPRAL CAP-059-014 double glazed ComfortPlus Neutral shading device DEEMED TO SATISFY

Application

Class 3

Climate zone

1

HELP

Storey		Facade areas								
	street	N	NE	E	SE	S	SW	W	NW	internal
	Option A				60m <sup>2</sup>	15m <sup>2</sup>	30m <sup>2</sup>	75m <sup>2</sup>	193m <sup>2</sup>	
	Option B									70.3m <sup>2</sup>
	Glassing area (m <sup>2</sup> )				16.3m <sup>2</sup>	2.56m <sup>2</sup>	8.96m <sup>2</sup>	33.9m <sup>2</sup>	70.3m <sup>2</sup>	

Number of rows preferred in table below

35 /as currently displayed?

GLAZING ELEMENTS, ORIENTATION SECTOR, SIZE and PERFORMANCE CHARACTERISTIC										SHADING			
ID	Glazing element (optional)	Facing sector	Size	Performance	PtH or device	Shading	Multippliers	Size	Outcomes	Element share of % of allowance used	Area used (m <sup>2</sup> )		
		Option A facade facades	Option B facades	Height (m)	Width (m)	Area (m <sup>2</sup> )	Total System U-Value (kFRC)	Total System SHGC (kFRC)	P	H	PH	G	
1	205	NW		2.40	1.50	2.9	0.40	device	2.00	0.00	1.00	0.15	3.60 5% of 68%
2	205	NW		2.40	1.50	2.9	0.40	device	2.00	0.00	1.00	0.15	3.60 5% of 68%
3	204	NW		2.40	1.50	2.9	0.40	device	2.00	0.00	1.00	0.15	3.60 5% of 68%
4	204	NW		2.40	1.50	2.9	0.40	device	2.00	0.00	1.00	0.15	3.60 5% of 68%
5	203	NW		2.40	1.50	2.9	0.40	device	2.00	0.00	1.00	0.15	3.60 5% of 68%
6	203	NW		2.40	1.50	2.9	0.40	device	2.00	0.00	1.00	0.15	3.60 5% of 68%
7	202	NW		2.40	1.50	2.9	0.40	device	2.00	0.00	1.00	0.15	3.60 5% of 68%
8	202	NW		2.40	1.50	2.9	0.40	device	2.00	0.00	1.00	0.15	3.60 5% of 68%
9	208	NW		2.40	1.50	2.9	0.40	device	2.00	0.00	1.00	0.15	3.60 5% of 68%
10	208	NW		2.40	1.50	2.9	0.40	device	2.00	0.00	1.00	0.15	3.60 5% of 68%
11	207	NW		2.40	1.50	2.9	0.40	device	2.00	0.00	1.00	0.15	3.60 5% of 68%
12	207	NW		2.40	1.50	2.9	0.40	device	2.00	0.00	1.00	0.15	3.60 5% of 68%
13	206	NW		2.40	1.50	2.9	0.40	device	2.00	0.00	1.00	0.15	3.60 5% of 68%
14	206	NW		2.40	1.50	2.9	0.40	device	2.00	0.00	1.00	0.15	3.60 5% of 68%
15	212	NW		2.40	1.50	2.9	0.40	device	2.00	0.00	1.00	0.15	3.60 5% of 68%
16	212	NW		2.40	1.50	2.9	0.40	device	2.00	0.00	1.00	0.15	3.60 5% of 68%
17	Pool	NW		2.60	3.00	2.9	0.40	device	2.00	0.00	1.00	0.15	7.80 11% of 68%
18	dining	NW		1.20	0.70	2.9	0.40	device	2.00	0.00	1.00	0.15	0.84 1% of 68%
19	dining	NW		1.80	1.80	2.9	0.40	device	2.00	0.00	1.00	0.15	3.24 5% of 68%
**	dining	NW		1.20	0.70	2.9	0.40	device	2.00	0.00	1.00	0.15	0.84 1% of 68%

THE DRAFTS OF THE GLAZING CALCULATOR

The Glazing Calculator has been developed by the ABUC to assist in developing a better understanding of glazing energy efficiency parameters. While the ABUC believes that the Glazing Calculator, if used correctly, will produce accurate results, it is provided as "is" and without any representation.

Your use of the Glazing Calculator is entirely at your own risk, and the ABCB accepts no liability of any kind.

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*if inputs are valid*



### **3. J3 BUILDING SEALING**

	Action by applicant	Certifier check	
J3.1	Where air conditioning is by evaporative cooler or parts of building not fully enclosed	Sealing not required if evaporative cooler. Note.	
J3.2	Otherwise seal building	To J3.2 Chimneys and flues J3.3 Roof lights J3.4 External doors and windows with weatherstripping some of which is covered by window standard. J3.5 Exhaust fans J3.6 Evaporative coolers	Certify that office has been fully sealed.

### **4. J4 AIR MOVEMENT – not used**

	Action by applicant	Certifier check
J4	Not applicable	Note

## **5. J5 AIR CONDITIONING – by others**

	Action by applicant	Certifier check
J5.1	Refers mechanical consultant submission.	Note
J5.2	Applies if air conditioned Package a/c likely to be deemed to satisfy Provide automatic door closures.	See separate submission by a/c designer

## **6. J6 ARTIFICIAL LIGHTING AND POWER – by others**

	Action by applicant	Certifier check
	Electrical consultant to complete and submit the following spreadsheet showing green tick to PCA. <a href="http://www.abcb.gov.au/Resources/Tools-Calculators/Lighting-Calculator">http://www.abcb.gov.au/Resources/Tools-Calculators/Lighting-Calculator</a>	Refer also lighting designer certifications. Refer also lighting designer certifications for compliance with Illumination code Part F4.

## **7. J7 SWIMMING POOL AND SPA – *not applicable***

Action by applicant	Certifier check
Refer NCC Plumbing Code	Note NA

## **8. J8 ACCESS FOR MAINTENANCE – *by builder***

Action by applicant	Certifier check
Provide access to any operable controls.  Inclusions Times switches Thermostats Air dampers Light fittings Heat transfer equipment	Certify that respective controls are in place.

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