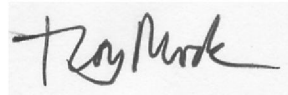


Boarding house
LOT 3 / DP 39084
31 SECOND AVE
KINGSWOOD

SECTION J REPORT

DESIGN STATEMENT AND CERTIFICATE 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.



Roy Mock BSc Arch NSW

Document control

Rev	Date	Description
A	18 Oct.17	Prepared from supplied information

Prepared by



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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

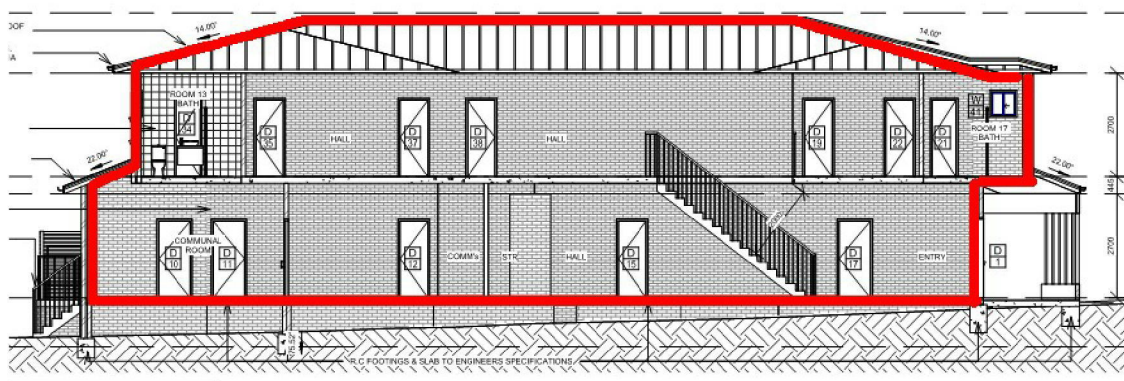
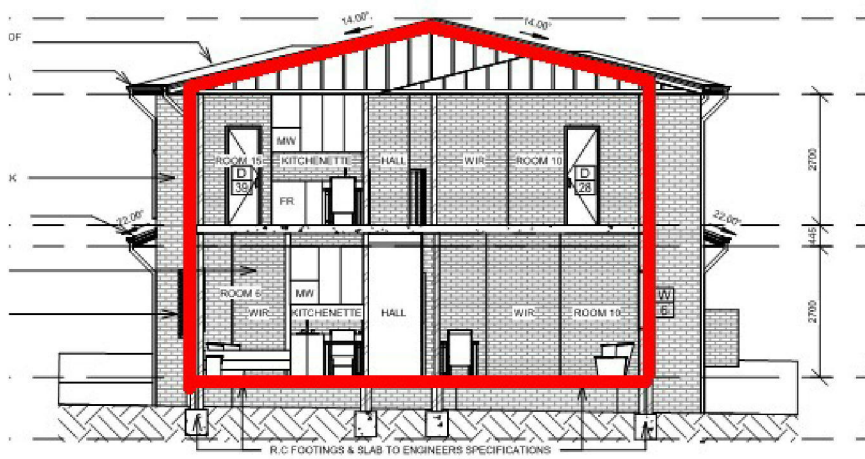
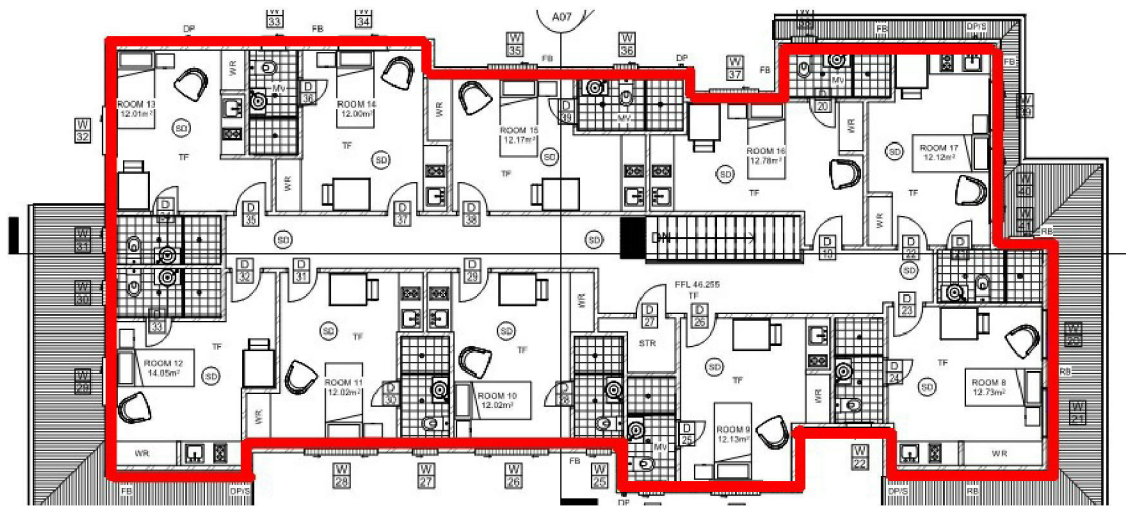


		Remarks
Climate zone:	6	blue

Conditioned envelopes (likely to be heated or cooled)

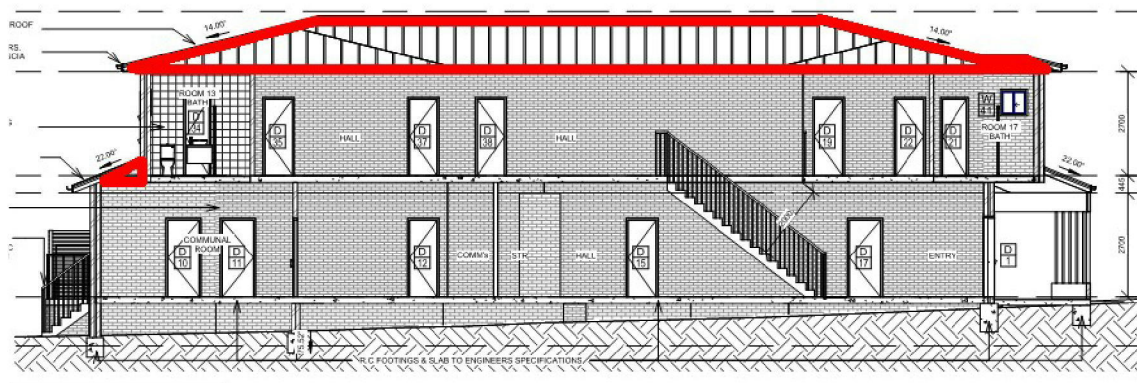
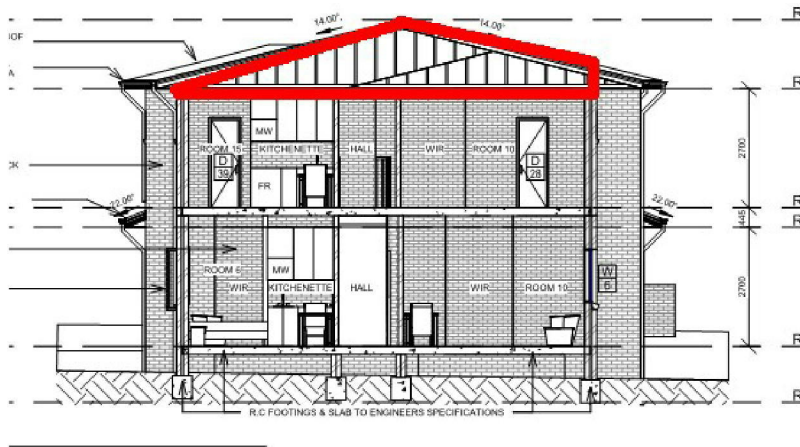
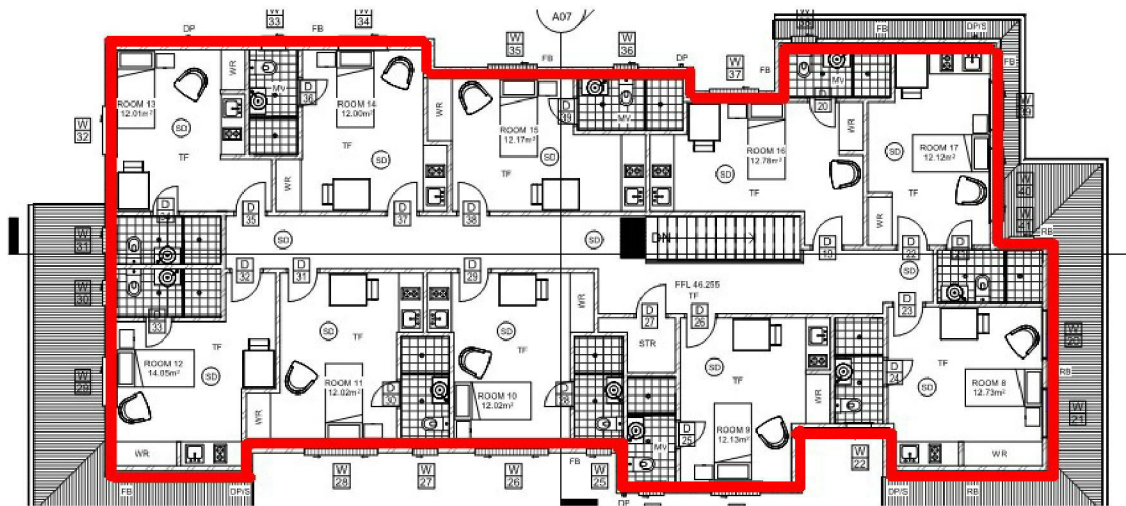
Space	Conditioned	Non-conditioned
As shown	X	-



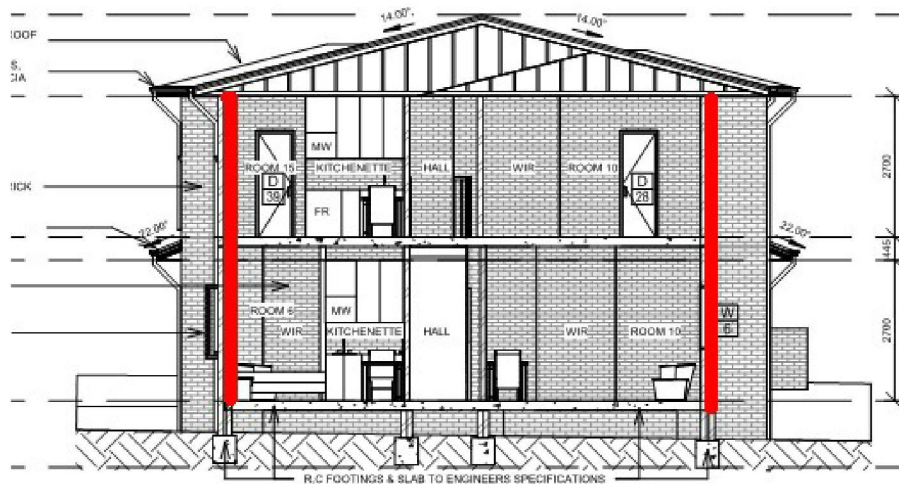
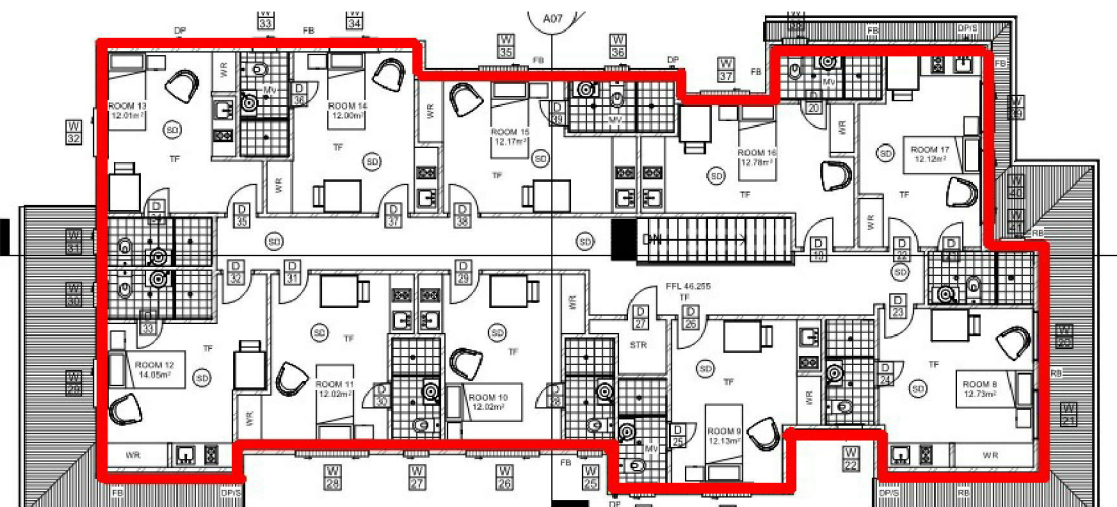
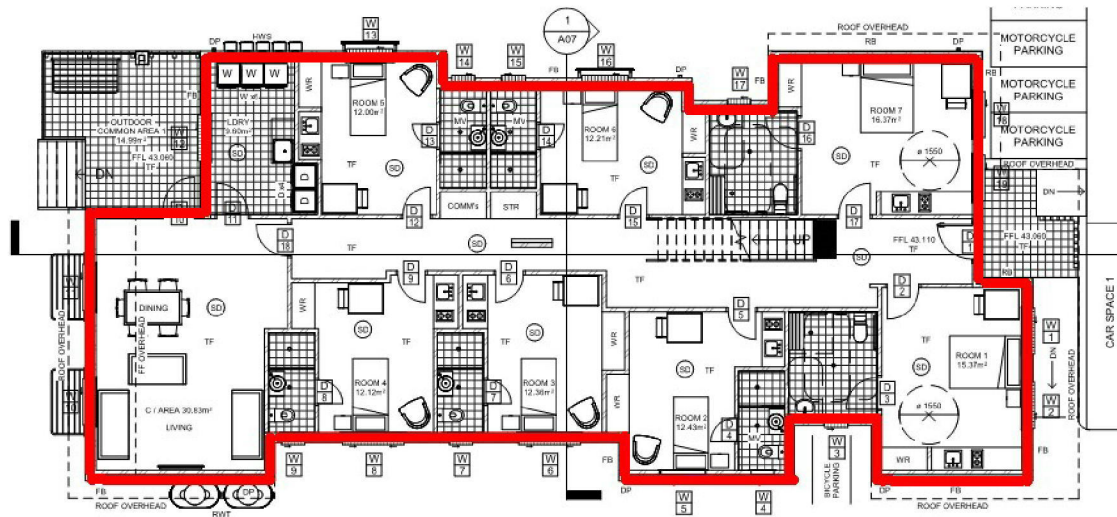


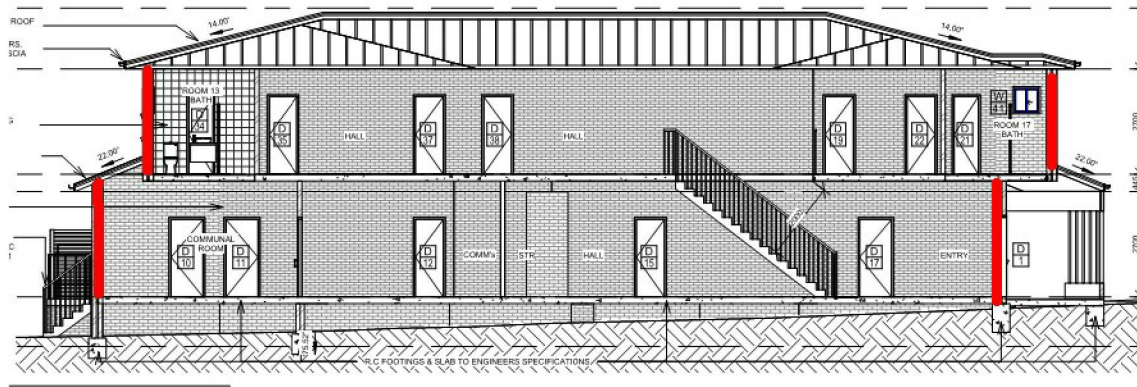
1. J1 BUILDING FABRIC – conditioned spaces

		Action by applicant	Certifier check
J1.1	Applicant		Note
J1.2	Insulation to wall or roof <i>if metal framed</i> (to simulate insulation equivalence to timber frame)	Provide thermal break between metal cladding or roofing DTS are • 15mm styrene • 25 timber OR • mass insulation at fixing	Certify that the installation is deemed to satisfy.
J1.3	Roof/ceiling insulation [dark roofing] Required total R-value R 4.2 Metal roofedR 0.39	Provide R .2.8 insulation between roofing and ceiling. Markups below show ceilings affected.	Certify that the installation is deemed to satisfy.

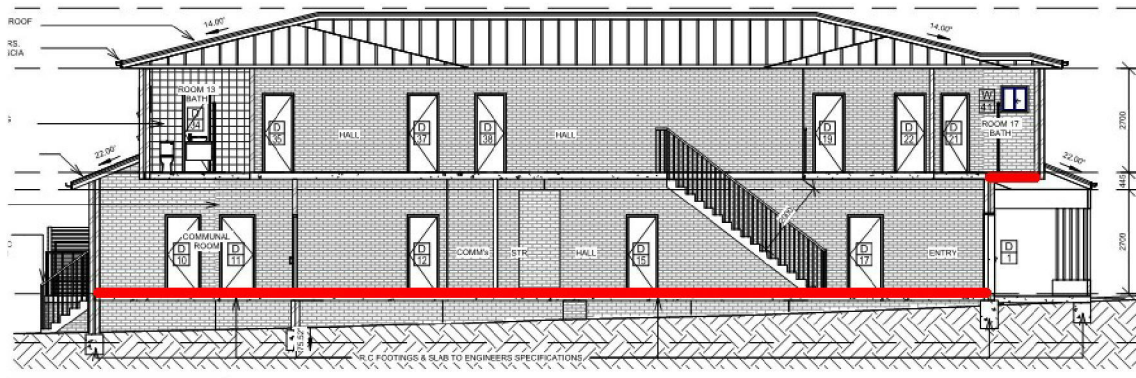
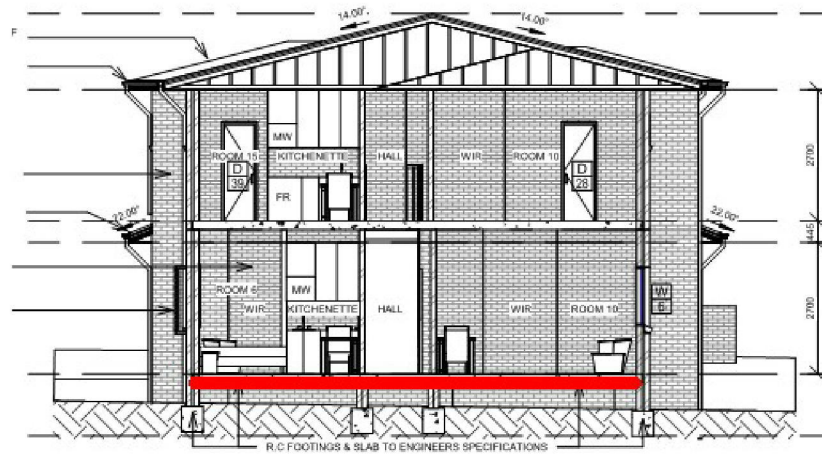
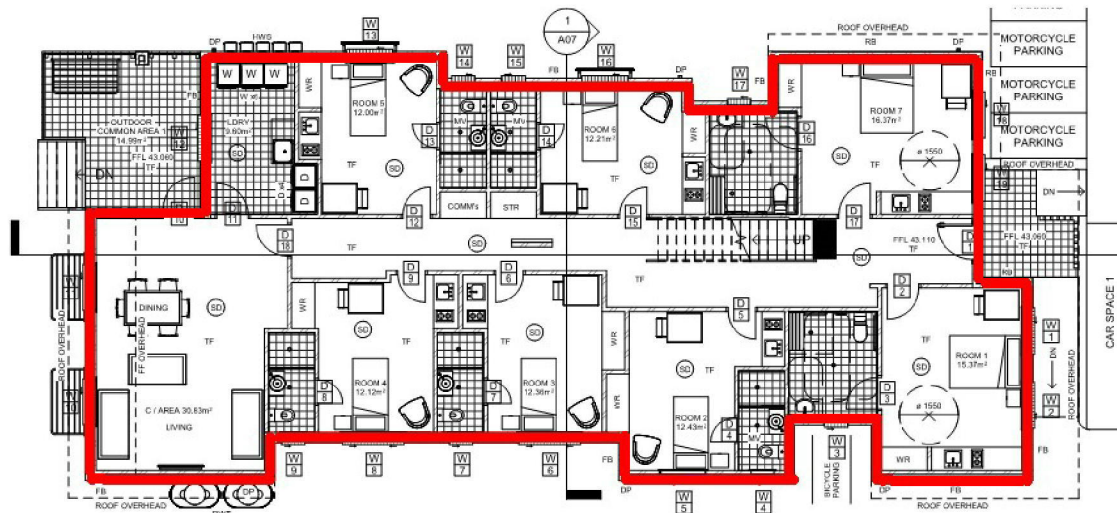


		Action by applicant	Certifier check
J1.4	Roof lights	NA	Note
J1.5	External walls Required R 2.8		
Typical options	BV wallsR 0.48 Cavity brickR 0.51 + 0.5 Conc blockR 0.54 Framed wallsR 0.42 200 HebelR 2.39	Provide R 2.3 insulation Provide R 1.5 insulation (> 220 surface density) Provide R 2.3 insulation Provide R 2.4 insulation Provide R 0.4 insulation Markups below show walls affected.	Certify that the installation is deemed to satisfy.





		Action by applicant	Certifier check
J1.6	Floor insulation. Slab on ground Required Total R 2.0	Provide R 1.3 insulation under slab Markup below shows floor affected.	Note



2. J2 EXTERNAL GLAZING – conditioned spaces

		Action by applicant	Certifier check
		Select from http://www.wers.net/Certified-Products-Residential or use their search engine http://www.wers.net/ CAPRAL 400 series assumed [Darley, Alspec] Select external shading devices from https://www.wers.net/werscontent/screened-products/wers-screened-products---residential or https://www.wers.net/werscontent/screened-products/wers-screened-products---commercial	Check and certify manufacturer's certificates if complies. Manufacturer's window data <i>MUST MATCH</i> U and SHGC values in the following calculator. Provide data of selected windows to Assessor for validation (see bottom of cover page).

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

[HELP](#)

Building name/description

single clear - deemed to satisfy

Application

Class 3

Climate zone

5

Storey

all

Facade areas

N	NE	E	SE	S	SW	W	NW	internal
64m ²		135m ²		64m ²		135m ²		
Option A								
Option B								n/a

 Glazing area (A) 6.48m² 11.5m² 12.2m² 10.8m²

Number of rows preferred in table below

40 (as currently displayed)

GLAZING ELEMENTS, ORIENTATION SECTOR, SIZE and PERFORMANCE CHARACTERISTICS									SHADING		CALCULATED OUTCOMES OK (if inputs are valid)					
Glazing element		Facing sector		Size			Performance		P&H or device		Shading		Multipliers		Size	Outcomes
		Option A facade s	Option B facades	Height (m)	Width (m)	Area (m ²)	System U-Value (AFRC)	Total System SHGC (AFRC)	P (m)	H (m)	P/H	G (m)	Heating (S _w)	Cooling (S _c)	Area used (m ²)	Element share of % of allowance used
ID	Description (optional)															
1	W2	S		1.20	1.20		6.1	0.75				0.00	1.00	1.00	1.44	12% of 80%
2	W1	S		1.20	1.20		6.1	0.75				0.00	1.00	1.00	1.44	12% of 80%
3	W19	S		1.20	1.20		6.1	0.75				0.00	1.00	1.00	1.44	12% of 80%
4	W18	S		1.20	1.20		6.1	0.75				0.00	1.00	1.00	1.44	12% of 80%
5	W21	S		1.20	1.20		6.1	0.75				0.00	1.00	1.00	1.44	12% of 80%
6	W20	S		1.20	1.20		6.1	0.75				0.00	1.00	1.00	1.44	12% of 80%
7	W40	S		1.20	1.80		6.1	0.75				0.00	1.00	1.00	2.16	18% of 80%
8	W39	S		1.20	1.20		6.1	0.75				0.00	1.00	1.00	1.44	12% of 80%
9	W12	N		1.20	1.20		6.1	0.75	3.000	1.500	2.00	0.30	0.00	0.21	1.44	3% of 83%
10	W11	N		1.20	1.20		6.1	0.75				0.00	1.00	1.00	1.44	28% of 83%
11	W10	N		1.20	1.20		6.1	0.75				0.00	1.00	1.00	1.44	28% of 83%
12	W32	N		1.20	1.20		6.1	0.75				0.00	1.00	1.00	1.44	28% of 83%
13	W31	N		0.60	0.60		6.1	0.75				0.00	1.00	1.00	0.36	7% of 83%
14	W30	N		0.60	0.60		6.1	0.75				0.00	1.00	1.00	0.36	7% of 83%

15	W29	E		1.20	1.20		6.1	0.75				0.00	1.00	1.00	1.44	15% of 66%
16	W17	E		0.60	0.60		6.1	0.75				0.00	1.00	1.00	0.36	4% of 66%
17	W16	E		1.20	1.50		6.1	0.75				0.00	1.00	1.00	1.80	19% of 66%
18	W15	E		0.60	0.60		6.1	0.75				0.00	1.00	1.00	0.36	4% of 66%
19	W14	E		0.60	0.60		6.1	0.75				0.00	1.00	1.00	0.36	4% of 66%
**	W8	E		0.60	0.60		6.1	0.75				0.00	1.00	1.00	0.36	4% of 66%
21	D10	E		2.10	0.90		6.1	0.75				0.00	1.00	1.00	1.89	20% of 66%
**	W41	E		0.60	0.60		6.1	0.75				0.00	1.00	1.00	0.36	4% of 66%
**	W38	E		0.60	0.60		6.1	0.75				0.00	1.00	1.00	0.36	4% of 66%
**	W37	E		1.60	1.20		2.9	0.40				0.00	1.00	1.00	1.92	11% of 66%
**	W36	E		0.60	0.60		2.9	0.40				0.00	1.00	1.00	0.36	2% of 66%
**	W35	E		1.60	1.20		2.9	0.40				0.00	1.00	1.00	1.92	11% of 66%
**	W9	W		0.60	0.60		2.9	0.40				0.00	1.00	1.00	0.36	3% of 35%
**	W8	W		1.20	1.50		2.9	0.40				0.00	1.00	1.00	1.80	17% of 35%
**	W7	W		0.60	0.60		2.9	0.40				0.00	1.00	1.00	0.36	3% of 35%
**	W6	W		1.20	1.50		2.9	0.40				0.00	1.00	1.00	1.80	17% of 35%
31	W5	W		1.20	1.20		2.9	0.40				0.00	1.00	1.00	1.44	13% of 35%
**	W4	W		0.60	0.60		2.9	0.40				0.00	1.00	1.00	0.36	3% of 35%
**	W3	W		0.60	0.60		2.9	0.40				0.00	1.00	1.00	0.36	3% of 35%
**	W28	W		0.60	1.80		2.9	0.40				0.00	1.00	1.00	1.08	10% of 35%
**	W27	W		0.60	0.60		2.9	0.40				0.00	1.00	1.00	0.36	3% of 35%
**	W26	W		0.60	1.80		2.9	0.40				0.00	1.00	1.00	1.08	10% of 35%
**	W25	W		0.60	0.60		2.9	0.40				0.00	1.00	1.00	0.36	3% of 35%
**	W24	W		0.60	0.60		2.9	0.40				0.00	1.00	1.00	0.36	3% of 35%
**	W23	W		0.60	1.20		2.9	0.40				0.00	1.00	1.00	0.72	7% of 35%
**	W22	W		0.60	0.60		2.9	0.40				0.00	1.00	1.00	0.36	3% of 35%

IMPORTANT NOTICE AND DISCLAIMER IN RESPECT OF THE GLAZING CALCULATOR

The Glazing Calculator has been developed by the ABCB to assist in developing a better understanding of glazing energy efficiency parameters. While the ABCB believes that the Glazing Calculator, if used correctly, will produce accurate results, it is provided "as is" and without any representation or warranty of any kind, including that it is fit for any purpose or of merchantable quality, or functions as intended or at all. Your use of the Glazing Calculator is entirely at your own risk and the ABCB accepts no liability of any kind.

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		Refer 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. http://www.abcb.gov.au/Resources/Tools-Calculators/Lighting-Calculator	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
	NA	Refer NCC Plumbing Code	Note

8. J8 ACCESS FOR MAINTENANCE – by builder

7		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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