

# Deemed-to-Satisfy ENERGY Rating



Introducing **StarRocket**, our energy rating tools for AutoSketch.

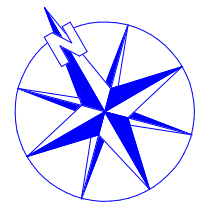
This set of commands which adds on to the PowerTools suite, enables the user to export data from your AutoSketch drawings directly into the EXCEL Glazing Calculator and Air Movement Data Sheet.

**GLAZING CALCULATOR FOR USE WITH PART 3.12.2, BCA VOLUME TWO (HOUSING)** HELP

Climate zone: **5** Building name/description: **COSTELLO RESIDENCE**

Storey: **GROUND** Floor type: **Type A** Type B: **Type B**  
 Area of floor: **160m<sup>2</sup>**  
 Air movement: **1.625** *Note: Air movement level must be separately verified*  
 Glazing area: 50.01m<sup>2</sup> (31% of area of floor Type A)

Number of rows preferred in table below: **40** (as currently displayed)



GLAZING ELEMENTS, ORIENTATION, SIZE and PERFORMANCE CHARACTERISTICS				SHADING CALCULATION DATA				CALCULATED OUTCOMES - OK (if inputs are valid)									
ID	Description (optional)	Floor type	Sector	Height (m)	Width (m)	Area (m <sup>2</sup> )	U-Value (NFRC)	SHGC (NFRC)	P (m)	H (m)	PHI	E factor	Area used (m <sup>2</sup> )	U x area	Element share of % of allowance used	SHGC x E x area	Element share of % of allowance used
1	DINING	NW		2.14	2.41		6.5	0.73	0.83	2.14	0.38	0.64	5.16	33.6	10% of 92%	2.4	10% of 76%
2	MEALS	SW		4.63	1.03		6.5	0.73	0.18	4.63	0.04	0.95	4.75	30.9	10% of 92%	3.3	14% of 76%
3	MEALS	NW		2.14	3.24		6.5	0.73	0.81	2.14	0.38	0.64	6.94	45.1	14% of 92%	3.2	14% of 76%
4	MEALS	NE		2.14	1.03		6.5	0.73	0.18	2.14	0.38	0.64	2.44	15.6	4% of 92%	1.5	6% of 76%
5	FAMILY	NW		2.14	3.61		6.5	0.73	0.84								
6	BED 4						6.5	0.73	0.82								
7	L'DRY						6.5	0.73	0.21								
8	WC						6.5	0.73	0.23								
9	BATH						6.5	0.73	0.82								
10	BED 3						6.5	0.73	0.83								
11	BED 2						6.5	0.73	0.82								
12	ENSUI						6.5	0.73	1.57								
13	MASTI						6.5	0.73	0.82								
14	MASTI						6.5	0.73	0.82								
15	Loung						6.5	0.73	1.92								
16	Loung						6.5	0.73	1.92								



**FIVE STAR RATING**

Symbol = WI-10.0  
SECTOR = NW [North = 120]

ID #

Room: **DINING**

Location: **GROUND**

Floor Type: **Type A**

Calc Height: **2143** Calc Width: **2409**

Area: **5.165**

Eave Ht: **25** Transom: **0**

Head Ht: **25**

Shadow P: **825**

Shadow H: **2143** Vent W%: **0**

Transom H: **0**

U Value: **1** SHGC: **1**

EXPORT

Climate Zone **5**

Site Address: **COSTELLO RESIDENCE**

Nominal frame width (m): **0.02**

VENTILATION OPENING (H x W)

ID	Description	H	W	H = only enter if from Transom (m)	W = open portion (%)	Floor A WOpen (m <sup>2</sup> )	Floor B WOpen (m <sup>2</sup> )
1	DINING	2.14	2.41		50%	1.75	
2	MEALS	4.63	1.03				
3	MEALS	2.14	3.24		33%	2.16	
4	MEALS	2.14	1.03				
5	FAMILY	2.14	3.61		50%	3.71	
6	BED 4	1.54	1.69		50%	1.21	
7	L'DRY	2.14	1.57		50%	1.57	
8	WC	1.20	0.49		20%	0.07	
9	BATH	1.54	1.33	0.6	50%	0.35	
10	BED 3	1.54	1.69		50%	1.21	
11	BED 2	1.54	1.67		50%	1.19	

**HABITABLE ROOM and/or SPACE SCHEDULE**

Room and/or Space description

Room and/or Space description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Room and/or Space floor area (m <sup>2</sup> )															
Type A (m <sup>2</sup> )	30	44	10	11	14										
Type B (m <sup>2</sup> )															
No Fan = n Fan = f Evap = e	n	f	n	n	n	n	n	n	n	n	n	n	n	n	n
Ventilation Opening-to-Floor Area percentage based on above (%)	7.5	5.0	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Place 1 in Space column adjacent to Ventilation Opening(s) serving space															

By selecting your window symbols and adding simple area polygons, StarRocket can collect the data you provide and store it on the drawing to be used over and over again whilst you are designing your buildings.

By utilizing both spreadsheets, an accurate Ventilation calculation can be verified and used to provide the most accurate results.

**VENTILATION**

VENT AREA POLYGON

Vent ID: **1**

Location: **GROUND**

Existing Location - none

Type: **Type A**

NoFan  Fan  EvapAir

EXPORT

The whole process should take about 15 minutes for an average single storey house.

Special Introductory price **\$242** incl GST  
 Call paul on (08) 9368 0704 for a demo

# GLAZING CALCULATOR FOR USE WITH PART 3.12.2, BCA VOLUME TWO (HOUSING)

Climate zone **5** Building name/description **COSTELLO RESIDENCE**

**CONSTANTS**  
 Type A Type B  
 C<sub>U</sub> / C<sub>SHGC</sub> 2.2 / 0.20

Storey **GROUND**  
 Floor type Type A Type B  
 Area of floor **160m<sup>2</sup>**  
 Air movement **H**  
 Glazing area 50.0m<sup>2</sup> ..... (31% of area of floor Type A)

*Note: Air movement level must be separately verified*

**ALLOWANCES**  
 C<sub>U</sub> x Area **352.0**  
 C<sub>SHGC</sub> x Area **32.0**

Number of rows preferred in table below **40** (as currently displayed)

GLAZING ELEMENTS, ORIENTATION, SIZE and PERFORMANCE CHARACTERISTICS								SHADING		CALCULATION DATA			CALCULATED OUTCOMES - OK (if inputs are valid)					
Glazing element		Sector faced		Size			Performance		P&H or device		Exposure		Size		Conductance - PASSED		Solar heat gain - PASSED	
ID	Description (optional)	Floor type A	Floor type B	Height (m)	Width (m)	Area (m <sup>2</sup> )	Total U-Value (NFRC)	SHGC (NFRC)	P (m)	H (m)	P/H	E factor	Area used (m <sup>2</sup> )	U x area	Element share of % of allowance used	SHGC x E x area	Element share of % of allowance used	
1	DINING	NW		2.14	2.41		6.5	0.73	0.83	2.14	0.38	0.64	5.16	33.6	10% of 92%	2.4	10% of 72%	
2	MEALS	SW		4.63	1.03		6.5	0.73	0.18	4.63	0.04	0.95	4.75	30.9	10% of 92%	3.3	14% of 72%	
3	MEALS	NW		2.14	3.24		6.5	0.73	0.81	2.14	0.38	0.64	6.94	45.1	14% of 92%	3.2	14% of 72%	
4	MEALS	NE		2.14	1.03		6.5	0.73	0.18	2.14	0.08	0.91	2.20	14.3	4% of 92%	1.5	6% of 72%	
5	FAMILY	NW		2.14	3.61		6.5	0.73	0.84	2.14	0.39	0.63	7.74	50.3	15% of 92%	3.6	15% of 72%	
6	BED 4	NE		1.54	1.69		6.5	0.73	0.82	1.54	0.53	0.50	2.61	16.9	5% of 92%	1.0	4% of 72%	
7	L'DRY	SW		2.14	1.57		6.5	0.73	0.21	2.14	0.10	0.86	3.36	21.9	7% of 92%	2.1	9% of 72%	
8	WC	NE		1.20	0.49		6.5	0.73	0.23	1.20	0.19	0.78	0.59	3.8	1% of 92%	0.3	1% of 72%	
9	BATH	NE		1.54	1.33		6.5	0.73	0.82	1.54	0.53	0.50	2.05	13.3	4% of 92%	0.7	3% of 72%	
10	BED 3	SE		1.54	1.69		6.5	0.73	0.83	1.54	0.53	0.50	2.61	16.9	5% of 92%	1.0	4% of 72%	
11	BED 2	SE		1.54	1.67		6.5	0.73	0.82	1.54	0.53	0.50	2.58	16.7	5% of 92%	0.9	4% of 72%	
12	ENSUITE	NE		1.37	0.97		6.5	0.73	1.57	1.37	1.14	0.27	1.33	8.6	3% of 92%	0.3	1% of 72%	
13	MASTERSUITE	SE		1.54	1.15		6.5	0.73	0.82	1.54	0.53	0.50	1.77	11.5	4% of 92%	0.6	3% of 72%	
14	MASTERSUITE	SW		1.54	1.39		6.5	0.73	0.82	1.54	0.53	0.54	2.14	13.9	4% of 92%	0.8	4% of 72%	
15	Lounge	SW		2.14	0.97		6.5	0.73	1.92	2.14	0.90	0.40	2.08	13.5	4% of 92%	0.6	3% of 72%	
16	Lounge	SW		2.14	0.97		6.5	0.73	1.92	2.14	0.90	0.40	2.08	13.5	4% of 92%	0.6	3% of 72%	
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**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 (including air movement levels) are valid*





**BCA2006 Part 3.12 - Energy Efficiency  
Deemed-To-Satisfy (DTS) COMPLIANCE REPORT (Class 1&10a Blds)**

**Climate Zone 5**

Client  Job No  Site Address **COSTELLO RESIDENCE**

3.12.1.2 - ROOF SPECIFICATION			Applies to this application	Added Insulation
Type	Ceiling	Cover	Y or N	
Pitched, skillion or flat (timber or steel frame)	Plasterboard on flat or rake	Tiles or Metal	<input type="checkbox"/>	R3.0
Thermal Break to steel batten/purlins (only if metal cover + ceiling lining fixed to same member)				R0.2

3.12.1.3 - ROOF LIGHT SPECIFICATION					Aggregate Roof Light(s) to storey floor area %
Habitable Room or Interconnecting Space	Roof Light(s) to floor area %	Shaft Index	Total U-value	SHGC	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	=3%
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	

3.12.1.4 - WALL SPECIFICATION			Added Insulation
Type	Cover	Floor type	
Cavity Bwk (min 90+90mm)		Slab on-grd	nil
Cavity Bwk (min 90+90mm) and masonry internal walls		Susp floor	nil
Cavity Bwk (min 90mm)		Susp floor	R0.5
Brick Veneer (min 90mm)			R1.5
Reverse Brick Veneer (min 90mm)	W/board, fibro or metal		R1.5
Framed	W/board, fibro or metal		R1.5
Thermal Breaks to steel framing			R0.2

3.12.1.5 - (SUSPENDED) FLOOR SPECIFICATION		Added Insulation
Type	Perimeter	
Exempt (unless in-slab heating)	<input type="checkbox"/>	
<input type="text"/>	<input type="checkbox"/>	
<input type="text"/>	<input type="checkbox"/>	
In-slab Heating System (insulate perimeter of slab on-grd, perimeter plus underside of susp conc floor)		R1.0

3.12.1.6 - ATTACHED CLASS 10A BUILDING SPECIFICATION			Added Insulation
Separating Wall to Class 1 Building	Perimeter	Roof Total R-value	
Single masonry	Fully enclosed masonry	As for Class 1 Bld	R3.0

3.12.2 - EXTERNAL GLAZING (ABC B Glazing Calculator Version 1.02 outcomes)				
Storey Assessed	Floor Type A or B	Air Movement Level Used	Conductance (% of 100%)	SHGC (% of 100%)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

3.12.3 - BUILDING SEALING SPECIFICATION			Sealing Required
Location	Item	Type	
Conditioned space	External windows and doors	Aluminium Timber	<input type="checkbox"/>
	Evaporative cooler		<input type="checkbox"/>
	Chimney or S/C flue		<input type="checkbox"/>
	Roof Light		<input type="checkbox"/>
	Exhaust fan		<input type="checkbox"/>
Evaporative air-conditioner installed and the ONLY means of conditioning (no heating)			<input type="checkbox"/>

3.12.4 - AIR MOVEMENT SPECIFICATION (DataSheet Version 28 Aug(A) outcomes)			Opening to Floor %
Habitable Rooms and Spaces			
Min Ventilation Opening area provided per room or space	No ceiling fan		7.5%
	Ceiling fan		5.0%
	Evaporative a/c		7.5%
Each Ventilation Opening connected to Breeze Path	Max length 20m and no more than two min 1.5m <sup>2</sup> internal openings		Complies
	Min 2 Ventilation Openings to room/space each =25% of req'd area		Complies

3.12.5 - SERVICES				Added Insulation
Item	Type	Location		
Evaporative cooling system		All locations	<input type="checkbox"/>	R0.6
Heating or refrigerative cooling system		External and roof space with ceiling insulation	<input type="checkbox"/>	R1.0
Hot water supply system	Storage/instant (as per 6A of AS/NZS3500.4.2 or 3.38 of AS/NZS3500.5)		<input type="checkbox"/>	R0.3
	Solar		<input type="checkbox"/>	R0.3

The outcomes shown on this Compliance Report have been calculated and/or determined as required by BCA2006 Part 3.12 to reflect what is required to achieve compliance for the plans and specification submitted for Building Licence approval.

Authorised Representative of Applicant  
 Name  Title  Date  Signature

DTS Compliance Report version current at: 28 Aug 06(A)