## ENVELOPE COMPONENT APPROACH

NRCC-ENV-02-E

Project Name:

Date:

Climate Zone:

## WINDOWS DETAILS Worksheet §140.3(a)5B and C

NOTE: For all newly installed fenestration; must have either a certified NFRC Label Certificate or use the CEC default tables found in Table 116-A and Table 116B. For site-built fenestration less than 1,000  $ft^2$  or more than or equal to 1,000  $ft^2$  see options Reference Nonresidential Appendix NA6

1	2	3	4	5	7	8	9	10	11	12	13	14	15
			<b>Fenestration</b> <sup>4</sup>									Overhang	
			U-Fa	ctor	SH	GC	V	Т	Di	mens	ions	Calc	ulated
Tag /ID <sup>1</sup>	Window Type <sup>2</sup> (e.g., Window-1)	Area	Proposed <sup>3</sup>	Allowed <sup>4</sup>	Proposed <sup>3</sup>	Allowed <sup>4</sup>	Proposed <sup>4</sup>	Allowed <sup>4</sup>	H⁵	$V^5$	<b>H/V</b> 6	(R)SHGC Proposed <sup>7,</sup> 8	Max (R)SHGC Allowed <sup>3,8</sup>

1. Indicate the identifying name of the frame type (i.e. Window #1, Skylight #1) and should be listed identical on the ENV-2C-PRSC-NCB-01.

2. Indicate type of construction Type such, Fixed Window, Operable Window, Curtainwall or Storefront, Glazed Doors. For Skylights use either Glass Curb Mounted, Glass Deck Mounted or Plastic curb Mounted.

3. The Proposed column is the sum of all the weighted average values for that specific Window Type in Column 2 and is the combination results from NFRC, CEC Default Values or Appendix NA6.

4. Proposed VT is dependent on the WWR,  $VT \ge 0.11/WWR$  or use NA6 when COG values are available by the window manufacturer. The Allowed Column values are listed on Table 140.3-B or C or D for that specific Window Type in Column 2.

5. *H* is the Horizontal Projection of the overhang, Vis the Vertical distance from the top of sill to the bottom of overhang in feet.

WEST WINDOW AREA CALCULATION See §140.3(a)5A in the Energy Standards						
A. Gross West Exterior Wall Area	$ft^2 \times 0.40 =$	ft <sup>2</sup>	40% Of Gross West Facing Exterior Wall Area; or			
B. West Display Linear Perimeter	$FT \times 6 ft =$	ft <sup>2</sup>	West Display Perimeter Area			
C. Enter Larger Of A Or B	<u>.</u>	ft <sup>2</sup>	Maximum Standard West Area			
D. Enter Proposed West Window Area		ft <sup>2</sup>	Proposed West Window Area			
Note: If the PROPOSED <b>WEST</b> WINDOW AREA is greater than the MAXIMUM STANDARD <b>WEST</b> AREA then the						
WINDOW AREA CALCULATION for all other orientations other than West - See §140.3(a)5A in the Energy Standards						

E. Gross Exterior Wall Area		$\mathrm{ft}^2 \times 0.40 =$	ft <sup>2</sup>	40% Of Gross Exterior Wall Area or			
F. Linear Display Perimeter		$FT \times 6 ft =$	ft <sup>2</sup>	Display Perimeter Area			
G. Enter The Larger Of E or F			ft <sup>2</sup>	Maximum Standard Area			
H. Enter Proposed Window Area			ft <sup>2</sup>	Proposed Window Area			
Note: If the PROPOSED WINDOW AREA is greater than the MAXIMUM STANDARD AREA then the envelope							

ENVELOPE COMPONENT APPROACHNRCC-ENV-02-E							
Project Name:	Date:	Climate Zone:					
SKYLIGHT AREA CALCULATION See §143(a)6A in the Energy Standards							
	ACTUAL		STANDARD				
A IF Atrium/Skylight Height is $\leq 55$ ft;		$ft^2 \times 0.05 =$		$ft^2$			
or							
B. IF Atrium/Skylight Height is > 55 ft		$ft^2 \times 0.10 =$		ft <sup>2</sup>			
C. Proposed Skylight Area		$ft^2$					
D. Skylight % = Proposed Skylight Area <u>Divided</u> by Actual Gross Roof Area = %							
If the PROPOSD SKYLIGHT AREA is greater than the STANDARD ALLOWED SKYLIGHT AREA then the Envelope Component							
Approach may not be used. The skylight percentage determines the appropriate row for the maximum U-factor allowed TO BE USED IN THE							
Skylight Details. See Table 140.3- B, C and D.							

RELOCATABLE PUBLIC SCHOOL BUILDINGS - See §140.3(a)8 in the Energy Standards					
Option 1					
☐ For Specific Climate Zone, use Table 143-A - Prescriptive Envelope Criteria.	<ul> <li>Specific Climate Zone Metal Identification Label – Place two labels on each relocatable school building and indicate on the building plans.</li> <li>Indicate location on the building plans:</li> </ul>				
Option 2					
For Any (All) Climate Zone, use Table 143-C - Prescriptive Envelope Criteria.	Any (All) Climate Zone Metal Identification Label - Place two labels on each relocatable school building and indicate on the building plans.				

Indicate location on the building plans: