

AREA WEIGHTED AVERAGE CALCULATION WORKSHEET

CERTIFICATE OF COMPLIANCE		CF1R-ENV-02-E
Area Weighted Average Calculation Worksheet		(Page 1 of 1)
Project Name:	Date Prepared:	

A. Area-Weighted Average Calculation		
01	Project Name:	
02	Dwelling Name or Number:	
03	Feature Being Area Weighted Averaged:	
04	Property Being Averaged:	

B. U-factor Area-Weighted Average Calculation		
01	02	03
Tag /Identification	Surface Feature Area (ft ²)	U-Factor Value
04	U-Factor Area-weighted Average:	

C. SHGC Area-Weighted Average Calculation		
01	02	03
Tag /Identification	Surface Feature Area (ft ²)	SHGC Value
04	SHGC Area-weighted Average:	

For information and data collection only. Not valid until registered with a HERS provider

CF1R-ENV-02-E User Instructions

This worksheet is used to calculate the area-weighted average U-factors for building envelope features such as walls, roofs, floors, mass, and fenestration/glazing U-factors or Solar Heat Gain Coefficient (SHGC) values for prescriptive compliance. R-values are not used for area-weighting; only U-factors or SHGC values are allowed.

The area weighted averaging calculation is done when there is more than one level of insulation, window U-factor or SHGC used in a building to meet prescriptive compliance requirements. Each fenestration type (e.g., vertical windows, skylights, dynamic glazing, and window films) is treated independently and cannot be combined. Submit the ENV-02 with the energy compliance forms.

If exterior shading devices are used to meet an SHGC requirement, first complete a CF1R-ENV-03 form (Solar Heat Gain Coefficient (SHGC) Worksheet). If the SHGC exceeds 0.25, then use the weighted-average of other like windows to determine overall compliance with prescriptive SHGC requirements.

A. Area Weighted Average – General Information

1. Project Name: From the CF1R
2. Dwelling Name or Number: From the CF1R
3. Feature Being Area-Weighted Averaged: Indicate what is being area weighted is Fenestration, Wall, Roof, Ceiling or Floors.
4. Property Being Averaged: Indicate if the area-weighted average is for a U-factor, SHGC or Both.

B. U-factor Area Weighted Average Calculation

1. Tag/ID: Same data given on CF1R's; provides an identification Tag or Identification name that uniquely identifies the features being area-weighted.
2. Surface Feature Area: Total area of each occurrence of the feature being area-weighted.
- ~~2-3.~~ U-Factor Value: U-factor of the area described in this row. Values can come from the 2013 Reference Appendices, manufacturer's data or specification sheets.
- ~~3-4.~~ Calculated value; not a user input.

C. SHGC Area Weighted Average Calculation

1. Tag/ID: same data given on CF1R's; provides an identification Tag or Identification name that uniquely identifies the features being area-weighted.
2. Surface Feature Area: Total area of each fenestration being area-weighted.
3. Property being averaged: Value: SHGC of the area being described in this row. Values can come from the 2013 ~~63~~ Reference Appendices, manufacturer's data or specification sheet.
4. Calculated value; not a user input.