This worksheet is used to calculate the weighted-average values 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 weighing; only U-factors or SHGC values are allowed.

Weighted averaging is done when there is more than one level of insulation or more than one type of window and one or more does not meet prescriptive compliance requirements. Each fenestration type (e.g., vertical windows, skylights, dynamic glazing, and window films) are treated independently. Submit the WS-02 with other energy compliance forms.

If exterior shading devices are used to meet an SHGC requirement, first complete a CF-1R-PRSC-WS-03 (Solar Heat Gain Coefficient (SHGC) Worksheet). If the SHGC exceeds the prescriptive requirement shown on the CF-1R, calculate the weighted-average of like windows to determine compliance with prescriptive requirements.

Area Weighted Average Calculation

1	2		3		4		5		6		7		8		9
Item No.	Type 1 Value[a]		Type 1 Area[b]		Type 2 Value[a]		Type 2 Area[b]		Type 3 Value[a]		Type 3 Area[b]		Total Area		Weighted Average Value[c]
	[(_____)	x	(_____)	+	(_____)	x	(_____)	+	(_____)	x	(_____)]	÷		=	
	[(_____)	x	(_____)	+	(_____)	x	(_____)	+	(_____)	x	(_____)]	÷		=	
	[(_____)	x	(_____)	+	(_____)	x	(_____)	+	(_____)	x	(_____)]	÷		=	
	[(_____)	x	(_____)	+	(_____)	x	(_____)	+	(_____)	x	(_____)]	÷		=	
	[(_____)	x	(_____)	+	(_____)	x	(_____)	+	(_____)	x	(_____)]	÷		=	
	[(_____)	x	(_____)	+	(_____)	x	(_____)	+	(_____)	x	(_____)]	÷		=	

Notes:

a. "Value" can be replaced throughout the formula by "U-factor", "Solar Heat Gain Coefficient," or any other value that varies throughout a residence and is appropriate to weight average.

b. "Area" can be replaced throughout the formula by "Length" or any other unit of measure used for the value being averaged.

c. Enter the above Weighted Average Value on the CF-1R form.