Items 1 through 4 must be completed for glazing/shading combinations by using the Default Table for Fenestration Products (Table S-1) ; NFRC certified data, or Solar Heat Gain Coefficients Used for Exterior Shading Attachments (Table S-2) for the specific conditions indicated (#1a or #1b or #3). For instructions on filling out the worksheet, see *Shading* in the *RM Glossary, Appendix G*.

General Information

1a. For Fenestration Products w/NFRC testing and labels: $SHGC_{fen}$ = _____

OR

1b. For Fenestration Products without NFRC testing and labels (Table S-1):$SHGC_{fen}$ = _____

1c. Frame Type	1d. Product Type	1e. Glazing Type	1f. Single/Double Pane
_____	_____	_____	_____
metal, non-metal, metal w/thermal break	operable/fixed	(visibly) tinted clear (not visibly tinted)	single pane/double pane

2. Skylight (Y/N) _____

("Skylights" are glazing having a slope of less than 60 degrees from the horizontal with conditioned space below.)

Combined Exterior Shade with Fenestration

Exterior Shade Type: _____

3. $SHGC_{Exterior\ Shade}$: _____

(If no exterior shade, assume standard bug screens, $SHGC_{Exterior\ Shade}$ = 0.76 for ordinary windows. This requirement does not apply to skylights where $SHGC_{Exterior\ Shade}$ is assumed to be 1.00. If another exterior shade is substituted for bug screens, use one of the values from Table S-2

4. $[(\underline{\quad}_{SHGC_{max}} \times 0.2875) + 0.75] \times \underline{\quad}_{SHGC_{min}} =$ [ ] Total SHGC

Where:
$SHGC_{max}$ = Larger of (#1a or #1b) or #3
$SHGC_{min}$ = Smaller of (#1a or #1b) or #3

Note: Calculated Solar Heat Gain Coefficient values for Total SHGC may be used directly for prescriptive packages.
Target Value for Total SHGC is 0.39 for Package Requirement of $SHGC_{fen}$ = 0.40.

TABLES

Table S-1: DEFAULT FENESTRATION SOLAR HEAT GAIN COEFFICIENT

Frame Type	Product	Glazing	Total Window SHGC Single Pane	Total Window SHGC Double Pane
Metal	Operable	Clear	0.80	0.70
Metal	Fixed	Clear	0.83	0.73
Metal	Operable	Tinted	0.67	0.59
Metal	Fixed	Tinted	0.68	0.60
Metal, Thermal Break	Operable	Clear	0.72	0.63
Metal, Thermal Break	Fixed	Clear	0.78	0.69
Metal, Thermal Break	Operable	Tinted	0.60	0.53
Metal, Thermal Break	Fixed	Tinted	0.65	0.57
Non-Metal	Operable	Clear	0.74	0.65
Non-Metal	Fixed	Clear	0.76	0.67
Non-Metal	Operable	Tinted	0.60	0.53
Non-Metal	Fixed	Tinted	0.63	0.55

SHGC = Solar Heat Gain Coefficient

TABLES (Continued)

Table S-2: Solar Heat Gain Coefficients Used for Exterior Shading Attachments for Form S and Computer Performance Methods [1,2]

Exterior Shading Device[3]	w/Single Pane Clear Glass & Metal Framing[4]
1) Standard Bug Screens	0.76
2) Exterior Sunscreens with weave 53*16/inch	0.30
3) Louvered Sunscreens w/louvers as wide as openings	0.27
4) Low Sun Angle (LSA) Louvered Sunscreens	0.13
5) Roll-down Awning	0.13
6) Roll Down Blinds or Slats	0.13
7) None (for skylights only)	1.00

1. These values may be used on line 3 of the Solar Heat Gain Coefficient (SHGC) Worksheet (Form S) to calculate exterior shading with other glazing types and combined interior and exterior shading with glazing.

2. Exterior operable awnings (canvas, plastic or metal), except those that roll vertically down and cover the entire window, should be treated as overhangs for purposes of compliance with the Standards.

3. Standard bug screens must be assumed for all fenestration unless replaced by other exterior shading attachments. The solar heat gain coefficient listed for bug screens is an area-weighted value that assumes that the screens are only on operable windows. The solar heat gain coefficient of any other exterior shade screens applied only to some window areas must be area-weighted with the solar heat gain coefficient of standard bug screens for all other glazing (see Weighted Averaging in the Glossary). Different shading conditions may also be modeled explicitly in the computer performance method.

4. Reference glass for determining solar heat gain coefficients is 1/8 inch double strength (DSS) glass.