



v4 - LEED v4 Windows

Possible 3 points

Glossary

Intent

To maximize the energy performance of windows.

Requirements

Design and install windows, skylights, and glass doors whose ratings from the National Fenestration Rating Council exceed the requirements in the ENERGY STAR for Homes, version 3, prescriptive pathway, as shown in Tables 1-3. Use the average window ratings, average skylight ratings, and average exterior door ratings.

Determine the window-to-floor-area (WFA) ratio by calculating the total window area in the above-grade conditioned floor area. All skylight window areas count toward the WFA ratio. For decorative glass, the project team may exclude up to 0.75% of the WFA ratio from the calculations. If the WFA ratio is 15% or more, the following additional requirements apply:

- In climate zones 4-8, homes with a WFA ratio of 15% or more must meet a more stringent U-factor requirement:
U-factor = (0.15 / WFA) * (U-factor from Table 1)
- In climate zones 1-3, homes with a WFA ratio of 15% or more must meet a more stringent solar heat gain coefficient (SHGC) requirement:
SHGC = (0.15 / WFA) * (SHGC from Table 1)

Project teams that achieve EA Credit Building Orientation for Solar Design are exempt from the requirements for window SHGC.

Table 1. Points for exceeding baseline window ratings

	Climate zone				Points
	1, 2	3	4	5-8	
U-factor	≤ 0.45	≤ 0.30	≤ 0.26	≤ 0.26	1.5
SHGC	≤ 0.25	≤ 0.25	≤ 0.40	Any	
U-factor	≤ 0.30	≤ 0.26	≤ 0.22	≤ 0.22	3
SHGC	≤ 0.25	≤ 0.25	≤ 0.40	Any	

SHGC = solar heat gain coefficient

Table 2. Points for exceeding baseline skylight ratings

	Climate zone				Points
	1, 2	3	4	5-8	
U-factor	≤ 0.70	≤ 0.57	≤ 0.47	≤ 0.47	1.5
SHGC	≤ 0.25	≤ 0.25	≤ 0.40	Any	
U-factor	≤ 0.47	≤ 0.47	≤ 0.40	≤ 0.40	3
SHGC	≤ 0.25	≤ 0.25	≤ 0.40	Any	

SHGC = solar heat gain coefficient

Table 3. Points for exceeding baseline door ratings

	Opaque	≤ 1/2 lite	> 1/2 lite
U-factor	0.21	0.27	0.32
SHGC	N/A	0.30	0.30

SHGC = solar heat gain coefficient

Credit only available for projects using the EA prescriptive path'