

CODES, STANDARDS & COMPLIANCE

ENERGY STAR Climate Zone Map and Qualification Criteria for Skylights (Version 5.0)

Originally published by **ENERGY STAR (U.S. EPA / DOE)**, 2009

One-page ENERGY STAR Version 5.0 (April 2009) criteria sheet: U-factor and SHGC limits for windows, doors, and skylights in the Northern, North-Central, South-Central, and Southern climate zones, with the U.S. zone map.

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Read online: <https://logisticslighting.com/daylighting-library/energy-star-map-for-skylights/>

ENERGY STAR® Qualification Criteria for Residential Windows, Doors, and Skylights

This page (page 3 of *ENERGY STAR Program Requirements for Residential Windows, Doors, and Skylights: Version 5.0 (April 7, 2009)*) sets out the U-factor and solar heat gain coefficient (SHGC) criteria a product must meet to qualify in each of the four ENERGY STAR climate zones, and maps the zones across the United States.

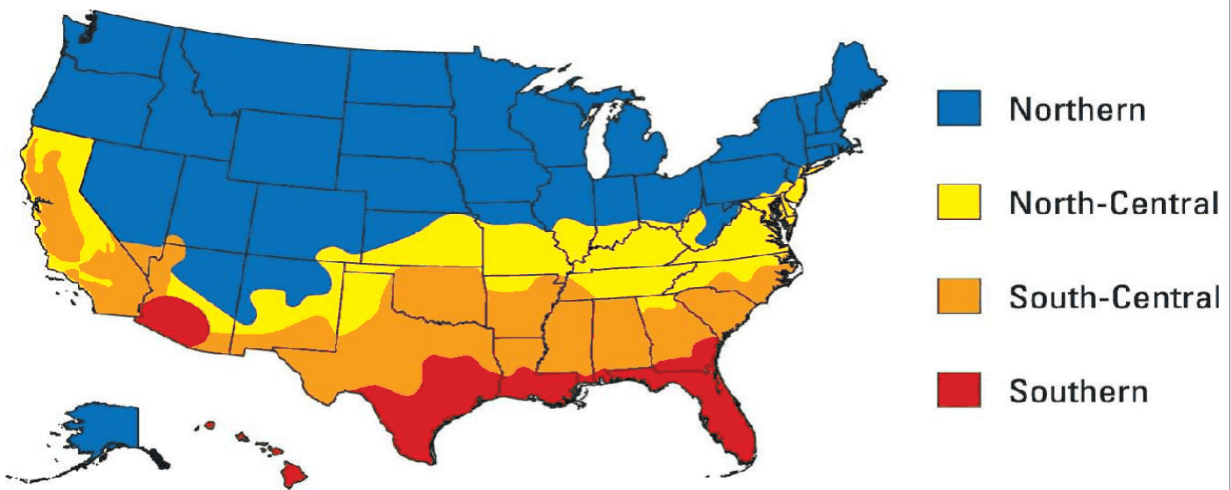
ENERGY STAR® Qualification Criteria for Residential Windows, Doors, and Skylights

Windows				Doors		
Climate Zone	U-Factor ¹	SHGC ²		Glazing Level	U-Factor ¹	SHGC ²
Northern	≤ 0.30	Any	Prescriptive Equivalent Energy Performance	Opaque	≤ 0.21	No Rating
	≤ 0.31	≥ 0.35		≤ ½-Lite	≤ 0.27	≤ 0.30
	≤ 0.32	≥ 0.40		> ½-Lite	≤ 0.32	≤ 0.30
North-Central	≤ 0.32	≤ 0.40				
South-Central	≤ 0.35	≤ 0.30				
Southern	≤ 0.60	≤ 0.27				

Skylights		
Climate Zone	U-Factor ¹	SHGC ²
Northern	≤ 0.55	Any
North-Central	≤ 0.55	≤ 0.40
South-Central	≤ 0.57	≤ 0.30
Southern	≤ 0.70	≤ 0.30

¹ Btu/h-ft²·°F

² Fraction of incident solar radiation



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ENERGY STAR Qualification Criteria for Residential Windows, Doors, and Skylights, with the ENERGY STAR climate zone map (Version 5.0, April 7, 2009)

Windows

Windows: qualification criteria by climate zone

Climate Zone	U-Factor ¹	SHGC ²	Compliance path
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Climate Zone	U-Factor ¹	SHGC ²	Compliance path
Northern	≤ 0.30	Any	Prescriptive
Northern	= 0.31	≥ 0.35	Equivalent Energy Performance
Northern	= 0.32	≥ 0.40	Equivalent Energy Performance
North-Central	≤ 0.32	≤ 0.40	
South-Central	≤ 0.35	≤ 0.30	
Southern	≤ 0.60	≤ 0.27	

Doors

Doors: qualification criteria by glazing level

Glazing Level	U-Factor ¹	SHGC ²
Opaque	≤ 0.21	No Rating
≤ ½-Lite	≤ 0.27	≤ 0.30
> ½-Lite	≤ 0.32	≤ 0.30

Skylights

Skylights: qualification criteria by climate zone

Climate Zone	U-Factor ¹	SHGC ²
Northern	≤ 0.55	Any
North-Central	≤ 0.55	≤ 0.40
South-Central	≤ 0.57	≤ 0.30
Southern	≤ 0.70	≤ 0.30

Map legend

- **Northern** (blue): the northern tier of the contiguous United States, including New England, the upper Midwest, the northern Plains, the Mountain West, the Pacific Northwest, and Alaska.
- **North-Central** (yellow): a band across the central United States from the mid-Atlantic through the Ohio Valley, central Plains, and parts of the interior West and coastal California.
- **South-Central** (orange): the southern Plains, the interior Southeast, and parts of the Southwest and central California.
- **Southern** (red): the Gulf Coast, Florida, southern Texas, the low deserts of Arizona and southern California, and Hawaii.

Footnotes

1. Btu/h·ft²·°F
2. Fraction of incident solar radiation

Source line printed on the page: ENERGY STAR Program Requirements for Residential Windows, Doors, and Skylights: Version 5.0 (April 7, 2009), page 3.

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