

Residential Windows, Doors, and Skylights Key Product Criteria

The ENERGY STAR criteria for residential windows, doors, and skylights are tailored to four Climate Zones. A product's energy efficiency for a given climate is based on its impact on heat gain and loss in cold weather and heat gain in warm weather. Windows that are energy efficient in Florida will not necessarily be energy efficient in Michigan and vice-versa.

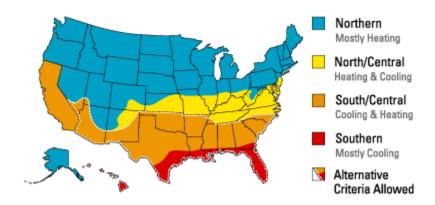
Climate Zones for ENERGY STAR Qualification Criteria

The four Climate Zones for ENERGY STAR qualified windows, doors, and skylights are:

Northern: mostly heating

North/Central: heating and coolingSouth/Central: cooling and heating

Southern: mostly cooling



To find the Climate Zone for a specific zip code, consult the ENERGY STAR Climate Zone Finder (9MB)

ENERGY STAR Qualified Windows, Doors and Skylights Eligibility

To be eligible for the ENERGY STAR, products must be rated, certified, and labeled for both U-Factor and Solar Heat Gain Coefficient (SHGC) in accordance with the procedures of the National Fenestration Rating Council (NFRC) at levels which meet the following ENERGY STAR qualification criteria in one or more Climate Zone. Storm windows, window films and interior doors are not eligible for ENERGY STAR at this time.

Windows & Doors

Climate Zone	U-Factor ¹	SHGC ²		
Northern	≤ 0.35	Any		
North/Central	≤ 0.40	≤ 0.55		
South/Central	≤ 0.40	≤ 0.40	Prescriptive	
	≤ 0.41	≤ 0.36	Equivalent Performance	
	≤ 0.42	≤ 0.31	(Excluding CA)	
	≤ 0.43	≤ 0.24	Products meeting these criteria also qualify in the Southern zone.	
Southern	≤ 0.65	≤ 0.40	Prescriptive	
	≤ 0.66	≤ 0.39	Equivalent Performance	
	≤ 0.67			
	≤ 0.68	≤ 0.38		
	≤ 0.69	< 0.07		
	≤ 0.70	≤ 0.57		
	≤ 0.71	≤ 0.36		
	≤ 0.72	< 0.35		
	≤ 0.73	≤ 0.30		
	≤ 0.74	≤ 0.34		
	≤ 0.75	≤ 0.33		

Skylights

	U-Factor ¹		
Climate Zone	2001 NFRC rated at 20°3	RES97 rated at 90°4	SHGC ²
Northern	≤ 0.60	≤ 0.45	Any
North/Central	≤ 0.60	≤ 0.45	≤ 0.40
South/Central	≤ 0.60	≤ 0.45	≤ 0.40
Southern	≤ 0.75	≤ 0.75	≤ 0.40

¹ Btu/h.ft².°F

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² Fraction of incident solar radiation.

³ U-Factor qualification criteria based on 2001 NFRC simulation and certification procedures that rate skylights at a 20-degree angle. Although reported U-Factor is higher than RES97 rated products, energy performance at the ENERGY STAR minimum qualifying level is equivalent.

⁴ NFRC certification using the 1997 NFRC procedures for residential windows (RES 97) that rated skylights at a 90-degree angle. Skylights rated under this procedure may be present in the marketplace until March 31, 2008. NFRC labels for products using this procedure state: "RES97 rated at 90 degrees."