

# Solatube Daylighting System Thermal Performance Characteristics



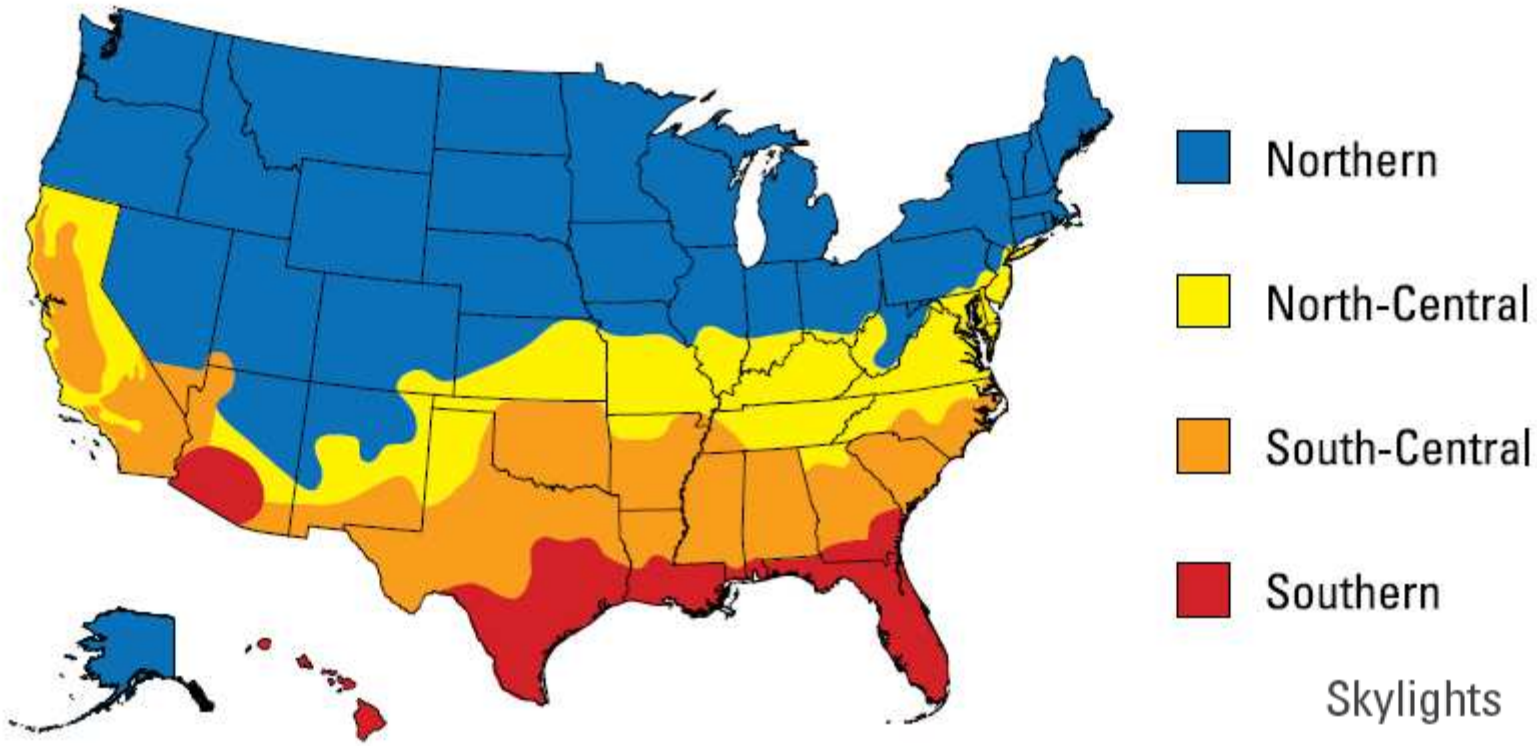
Updated: April 2010

Product	Diffuser Type	U-Factor <sup>1</sup> (BTU/hr-sf-F)	R-Value (hr-sf-F/BTU)	SHGC <sup>2</sup>	NFRC Certification #	Notes
Solatube 160 DS (10 in/250 mm) and 290 DS (14 in/350 mm)	Vusion™	0.43	2.33	0.34	Cert. # 3762	10" insulation @ ceiling, 30" tube length & dual glazed diffuser.
Solatube 160 DS (10 in/250 mm) and 290 DS (14 in/350 mm)	Vusion™	0.43	2.33	0.24	Cert. # 3762	10" insulation @ ceiling, 30" tube length & dual glazed diffuser with Softening Effect Lens.
Solatube 160 DS (10 in/250 mm) and 290 DS (14 in/350 mm)	OptiView®	0.43	2.33	0.30	Cert. # 3762	10" insulation @ ceiling, 30" tube length & dual glazed diffuser.
Solatube 330 DS-C (21 in/530 mm) Suspended Ceiling	Prismatic or OptiView®	0.55	1.82	0.34	Cert.# 5006	10" insulation @ ceiling, 30" tube length and single glazed diffuser
Solatube 330 DS-O (21 in/530 mm) Open Ceiling	Prismatic or OptiView®	1.27	0.79	0.40	N/A	Estimated from test results of Solatube 330 DS (10" insulation @ roof, 30" tube length and single glazed diffuser)
Solatube 750 DS-C (21 in/530 mm) Suspended Ceiling (with Inner Dome)	Prismatic or OptiView®	0.47	2.13	0.20	Cert.# 5006	10" insulation @ ceiling, 30" tube length, dual glazed dome, and dual glazed transition box
Solatube 750 DS-C (21 in/530 mm) Suspended Ceiling	Prismatic or OptiView®	0.52	1.92	0.23	Cert.# 5006	10" insulation @ ceiling, 30" tube length, single glazed dome, and dual glazed transition box
Solatube 750 DS-O (21 in/530 mm) Open Ceiling (with Inner Dome)	Prismatic or OptiView®	0.89	1.12	0.23	N/A	Estimated from test results of Solatube 750 DS (10" insulation @ roof, 30" tube length and single glazed diffuser)

**Notes:**

1. U-Factor measures how well a product prevents heat from escaping a home or building. It measures the rate of heat transfer through a building element over a given area, under standardised conditions. The lower the U-Factor, the better a product is at keeping heat in.
2. Solar Heat Gain Coefficient (SHGC) measures how well a product blocks heat from the sun. SHGC is expressed as a number between 0 and 1. The lower the SHGC, the better a product is at blocking unwanted heat gain.

# ENERGY STAR<sup>®</sup> Qualification Criteria for Skylights



## Skylights

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

<sup>1</sup> Btu/h·ft<sup>2</sup>·°F

<sup>2</sup> Fraction of incident solar radiation