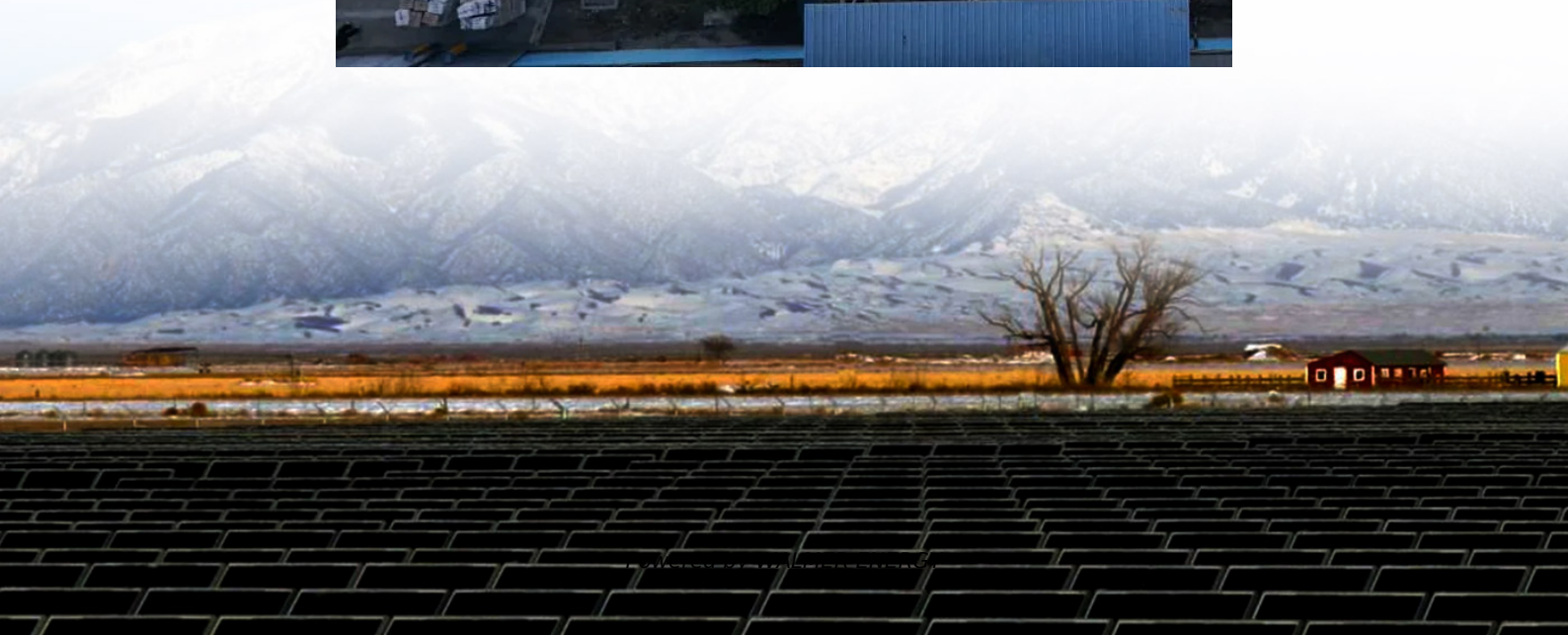


Solar glass transmittance and shade tolerance





Overview

What is the difference between Solar Factor and shading coefficient?

Solar Factor or Total Solar Energy Transmittance or g-value (g%) is the total solar radiation transmitted by the glass. Shading Coefficient (sc) is Solar Factor divided by 0.87. It is a measure of the solar heat gain referenced to 3 mm clear glass which has the designated value of 1.00.

What is visible light transmittance?

Visible Light Transmittance (Tv, %) is the percentage of incident light in the wavelength range of 380 nm to 780 nm that is transmitted by the glass.

Visible Light Outdoors/Indoors (Re out/in, %) is the percentage of incident solar energy directly reflected by the glass.

Which material has the highest spectral transmittance of solar radiation?

This study analyse spectral transmission of solar radiation of glass and plastics. The 8 h transmittances are higher than at 12 h and are higher in winter than summer. Methacrylate and smoked glass have the highest transmittance in UV, VIS and NIR ranges. Polycarbonate has the lowest transmittance in UV, VIS and NIR ranges.

What is solar energy direct transmittance (Te)?

Solar Energy Direct Transmittance (Te, %) is the percentage of incident solar energy in the wavelength range of 300 nm to 2500 nm that is directly transmitted by the glass. Solar Direct Reflectance Outdoors/Indoors (Re out/in, %) is the percentage of incident solar energy directly reflected by the glass.



Solar glass transmittance and shade tolerance

Measuring Solar Transmittance and Solar Reflectance, Part 2

5 days ago · This software supports the calculation of visible light transmittance, UV transmittance, solar transmittance, and solar reflectance for flat glass according to JIS R3106. ...

Designs for photovoltaic glass surface texturing to improve

Dec 27, 2024 · Moreover, as reported by Park et al., 10 the textured glass with high root mean square showed higher optical characteristics (total and diffused transmittance), so the ...

Solar Glass

Solar glass is a specialized low-iron, tempered soda-lime silicate glass, often enhanced with an anti-reflective coating. This combination delivers ultra-high light transmittance, superior ...

SOLAR OPTICAL PROPERTIES g-tot (glass & blind)

Mar 6, 2025 · Microban® antimicrobial protection inhibits the growth of stain-causing bacteria, mold and mildew on the shade. TS = Solar Transmittance RS = Solar Reflectance AS = Solar ...

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Performance value terms

Solar Factor or Total Solar Energy Transmittance or g-value (g%) is the total solar radiation transmitted by the glass. Shading Coefficient (sc) is Solar Factor divided by 0.87.

Spectral transmission of solar radiation by plastic and glass ...

Jul 1, 2020 · In this paper we analyse the spectral transmission of solar radiation of widely used materials using the transmittance parameter. The measurements were performed on clear ...

Transmittance of single-glass photovoltaic panels

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Measurement of Solar Transmittance through Plate Glass

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Aug 23, 2024 · $\tau = 1$ where T represents the overall solar-optical transmittance of the system (at the incident angle θ) and A_k represents the solar-optical absorptance for each of the glazing ...

Radiation Transmission through Glazing

Feb 25, 2020 · Glass is treated to decrease its emittance for use as transparent insulation for glazing applications. If the diffuse radiation from the sky and the radiation reflected from the ...

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