



Solar Energy

Technical Definitions

Solar Transmittance: The percent of incident solar radiation that is transmitted through the window film/glass system. The lower the number, the less solar radiation transmitted.

Solar Absorptance: The percent of incident solar radiation that is absorbed by the window film/glass system. The lower number, the less radiation absorbed.

Solar Reflectance: The percent of incident solar radiation that is reflected by the window film/glass system. The lower the number, the less solar radiation reflected.

Visible Light Transmittance: The percent of total visible light that is transmitted through the window film/glass system. The lower the number, the less visible light transmitted.

Visible Light Reflectance: The percent of total visible light that is reflected by the window film/glass system. The lower the number, the less visible light reflected.

Emissivity: The measure of a surface's ability to absorb or reflect far-infrared radiation. The lower the emissivity rating, the better the insulating qualities of the window film/glass system.

Winter U-Factor (W/m²°C): The amount of heat energy which transfers through an area of 1m² with temperature difference of 1°C. The Lower the U-factor, the better insulating qualities of the window film/glass system.

Shading Coefficient: The ratio of the solar heat passing through window film to the solar heat gain that occurs under the same conditions if the window were made of clear, unshaded double strength window glass. The lower the number, the better solar shading qualities of the window film/glass system.

Solar Heat Gain Coefficient: The ratio of the total solar heat passing through a given window product relative to the solar heat incident on the projected window surface at normal solar incidence (i.e. perpendicular to the glazing surface). The lower the coefficient number for a particular window film/glass system, the better it is able to reduce heat.

Ultraviolet Light Blocked: The percent of ultraviolet (UV) that is blocked by the window film/glass system. The higher the number, the less ultraviolet transmitted.

Total Solar Energy Rejected: The percent of total solar energy (heat) rejected by the window film/glass system. The higher the number, the more total solar energy (heat) is rejected.