

Window Film Terminology

Emissivity (E)

Emissivity is a measure of a surface's ability to absorb or reflect far-infrared radiation. The lower the Emissivity the higher the far-infrared reflection. Infrared radiation is that which is sensed by the body as heat. The lower the emissivity rating, the better the insulating qualities of the glazing system. Infrared radiation is that which is sensed by the body as heat. The lower the Emissivity rating, the better the insulating qualities of the glazing system.

Glare Reduction (GR)

Glare reduction is the percentage of reduction in visible light transmission through a glazing system without film compared to that with film.

Luminous Efficacy (LE)

LE is the ratio of daylight transmission to solar heat transmission that passes through a glazing system, which is determined by dividing the visible light transmission by the shading coefficient. LE is a measurement of a film's efficiency, the higher the better.

Mil Thickness

Mil is the unit of measurement equal to one thousandth of an inch (.001"). Mil thickness is used in CWF's literature to display the overall thickness of the window film product. 1MIL = 25 micron.

Ply

Ply indicates the number of separate layers of polyester film that are contained within a product's construction. Example: A 1-ply product would consist of one single layer of polyester film where a 2-ply product would be made with two separate layers of polyester film.

Shading Coefficient (SC)

Shading coefficient is the ratio of the solar heat gain through a given glazing system to the solar heat gain under the same conditions for clear, unshaded double strength window glass. The lower the shading coefficient number, the better the sun control capability of the glazing system.

Solar Heat Gain Coefficient (SHGC)

SHGC is the sum of incident solar energy that is transmitted inside through the glazing system. It includes solar energy directly transmitted and the part of absorbed solar energy that is released inwards. SHGC is the fraction of incident solar radiation that actually enters the building through window glass. SHGC is expressed as a number between 0 and 1. The lower a window's solar heat gain coefficient, the less solar heat it transmits.

Total Solar Absorbance (TSA)

Solar energy absorbed is the ratio of the amount of total solar energy directly absorbed by the glazing system to the amount of total solar energy falling on that glazing system.