Double-IGU Features/Benefits Comparison

Solarban® 90 glass is a low-e glass featuring proprietary multi-silver solar control coating technology. Developed with input from architects to mimic the look of traditional clear glass, Solarban® 90 glass blocks nearly 80 percent of the sun's radiant energy to reduce cooling costs while transmitting more than 50 percent of the available sunlight to promote daylighting and outdoor views.

When supplemented with quality framing, insulating spacers and insulating gases such as argon, windows made with *Solarban*® 90 glass achieve or exceed ENERGY STAR 6.0 certification standards in all U.S. climate regions. *Solarban*® 90 glass is especially appealing to homeowners in air-conditioned-dominated locations who want the energy savings provided by an advanced low-e coating coupled with the appearance of traditional, uncoated clear-glass windows.

Warmer in Winter

The winter nighttime U-Value (insulating value) of a **Solarban® 90 (2)** glass unit is **50%** better than standard clear insulating glass.

- Lower U-values mean higher performance
- Reduces furnace heat loss
- Helps reduce heating energy costs

Cooler During Summer

The total solar energy transmitted through **Solarban® 90 (2)** glass is **70%** less than that transmitted through standard clear insulating glass.

- Lower SHGC numbers mean less solar heat gain
- Helps keep interiors cooler
- Helps reduce air-conditioning-related energy costs

Transmits Visible Light/Appearance

Insulating units with **Solarban® 90 (2)** glass transmit about **64%** as much visible light as standard clear insulating glass.

- Interior light from the sun is not reduced dramatically compared to clear glass
- Provides exterior appearance similar to clear glass

Fading Factors

While $Solarban^{\circ}$ 90 (2) glass blocks 92% of damaging UV energy, it also blocks other contributors to fading – in all, 50% better than standard clear insulating glass.

 Helps protect interior furnishings, fabrics and carpets from fading





Solarban® 90 (2) Insulating Glass



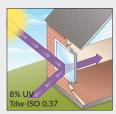












Note: 'Tdw-ISO represents potential fading damage caused by both UV and visible light. It is considered by the U.S. Department of Energy and the International Standards Organization (ISO) to be a more accurate barometer of fade resistance than UV transmittance alone. All comparisons are center of glass based on an insulating unit containing 3/4" insulating units; two 1/8" (3mm) glass lites and a 1/2" (12mm) air-filled space for the standard clear insulating glass and 90% argon gas-filled space for the Solarban* To insulating glass. Actual glass performance may differ due to glass thickness, gas fill and glass to frame ratio.

Solar Heat Gain Coefficient (SHGC) measures how well a window blocks (or shades) the heat from sunlight. SHGC is the fraction of solar radiation transmitted through a window, as well as the amount that is absorbed by the glass and reradiated to the interior.

Figures may vary due to manufacturing tolerances. All tabulated data are based on the National Fenestration Rating Council (NFRC) methodology, using the Lawrence Berkeley National Laboratory's



Vitro customers use our products to manufacture Energy Star compliant windows, doors and skylights.



