Double-IGU Features/Benefits Comparison

Warmer in Winter

The winter nighttime U-Value (insulating value) of **Sungate® 400 (3)** glass is as much as **42%** better than standard clear insulating glass.

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

Standard Clear Insulating Glass



Sungate® 400 (3) Insulating Glass



Warmer During Winter Daylight

The total solar energy transmitted through **Sungate® 400 (3)** glass is only **11%** less than that transmitted by standard clear insulating glass.

- Higher Solar Heat Gain Coefficient (SHGC) numbers mean more solar heat gain
- Helps keep interiors warmer
- Helps reduce heating energy costs



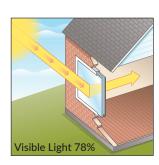


Transmits Visible Light/Appearance

Insulating units with **Sungate® 400 (3)** glass transmit about **96%** of the visible light as standard clear insulating glass.

• Provides exterior appearance similar to clear glass

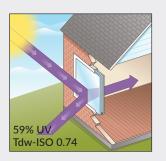




Fading Factors

While **Sungate® 400 (3)** glass blocks **68%** of damaging UV energy, it also blocks other contributors to fading — in all, **14%** better than standard clear insulating glass.

 Helps protect interior furnishings, fabrics and carpets from fading





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® 70 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 Window 7.4 software.



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



