

Andersen® Window and Patio Door Center of Glass Performance Data

Dual-Pane Glass (Air filled)

Andersen® Product	Visible Light ¹	SC ²	SHGC ³	RHG ⁴	Fading		U-Factor ⁷	%RH @ center ⁸	IGST ⁹
					TUV ⁵	TDW ⁶			
Casement/Awning, Narroline® Double-Hung, Narroline® Transom, 200 Series Tilt-Wash and Gliding Window	83%	0.91	0.79	189	63%	65%	0.49	38%	43°F
Casement/Awning Picture/Transom, 200 Series Fixed Units (Tempered)	82%	0.89	0.78	186	58%	61%	0.48	39%	44°F
Perma-Shield® Patio Door	82%	0.89	0.78	186	58%	61%	0.48	39%	44°F
Narroline® Gliding Patio Door	82%	0.87	0.75	180	55%	59%	0.48	39%	44°F

High-Performance™ Low-E4® and Low-E Glass (Dual-pane, Low-E, argon blend glass)

Andersen® Product	Visible Light ¹	SC ²	SHGC ³	RHG ⁴	Fading		U-Factor ⁷	%RH @ center ⁸	IGST ⁹
					TUV ⁵	TDW ⁶			
Casement/Awning, 400 Series Tilt-Wash, Narroline® Double-Hung, Narroline® Transom, 200 Series Tilt-Wash and Gliding Window	73%	0.48	0.42	99	17%	34%	0.25	61%	56°F
Woodwright® Full-Frame Double-Hung, Woodwright® Insert Double-Hung Window	73%	0.48	0.42	99	17%	34%	0.25	61%	56°F
Casement/Awning Picture/Transom, Double-Hung Picture, Woodwright® Full-Frame Picture/Transom, Woodwright® Insert (Tempered) Window	72%	0.47	0.41	98	16%	33%	0.26	59%	55°F
Picture/Transom, Circle Top®, Oval, Circle, 200 Series Fixed Units	72%	0.47	0.41	98	16%	33%	0.26	59%	55°F
400 Series Gliding Window	72%	0.48	0.41	99	16%	33%	0.25	61%	56°F
Flexiframe®, Arch, Springline®, Full Chord, Gothic, Elliptical, Octagon, Full Round, Quarter Round	70%	0.46	0.40	95	14%	31%	0.25	61%	56°F
Frenchwood® Hinged, Outswing and Gliding Door, Frenchwood® Patio Door Sidelight/Transom, Narroline Gliding Door	71%	0.47	0.41	97	16%	33%	0.25	61%	56°F

High-Performance™ Low-E4® Sun and Low-E Sun Glass (Dual-pane, tinted Low-E, argon blend glass)

Andersen® Product	Visible Light ¹	SC ²	SHGC ³	RHG ⁴	Fading		U-Factor ⁷	%RH @ center ⁸	IGST ⁹
					TUV ⁵	TDW ⁶			
Casement/Awning, 400 Series Tilt-Wash, Narroline® Double-Hung, Narroline® Transom, 200 Series Tilt-Wash and Gliding Window	40%	0.29	0.26	62	17%	25%	0.25	61%	56°F
Woodwright® Full-Frame Double-Hung, Woodwright® Insert Double-Hung Window	40%	0.29	0.26	62	17%	25%	0.25	61%	56°F
Casement/Awning Picture/Transom, Double-Hung Picture, Woodwright Full-Frame Picture/Transom, Woodwright Insert (Tempered) Window	40%	0.29	0.25	60	16%	24%	0.26	59%	55°F
Picture/Transom, Circle Top®, Oval, Circle	40%	0.29	0.25	60	16%	24%	0.26	59%	55°F
200 Series Fixed Window	40%	0.29	0.25	60	16%	24%	0.26	59%	55°F
400 Series Gliding Window	40%	0.29	0.26	62	17%	25%	0.25	61%	56°F
Flexiframe®, Arch, Springline®, Full Chord, Gothic, Elliptical, Octagon, Full Round, Quarter Round	37%	0.28	0.24	59	13%	22%	0.25	61%	56°F
Frenchwood® Hinged, Outswing and Gliding Door, Frenchwood® Patio Door Sidelight/Transom, Narroline® Gliding Door	39%	0.29	0.25	60	15%	23%	0.25	61%	56°F

Low-E4® SmartSun™ and Low-E SmartSun Glass (Dual-pane, tinted Low-E, argon blend glass)

Andersen® Product	Visible Light ¹	SC ²	SHGC ³	RHG ⁴	Fading		U-Factor ⁷	%RH @ center ⁸	IGST ⁹
					TUV ⁵	TDW ⁶			
Casement/Awning, 400 Series Tilt-Wash Window	65%	0.32	0.27	66	5%	21%	0.24	61%	56°F
Woodwright® Full-Frame Double-Hung, Woodwright® Insert Double-Hung, 200 Series Tilt-Wash and Gliding Window	65%	0.32	0.27	66	5%	21%	0.24	61%	56°F
Casement/Awning Picture/Transom, Double-Hung Picture, Woodwright® Full-Frame Picture/Transom, Woodwright® Insert (Tempered) Window	65%	0.31	0.27	65	5%	21%	0.25	61%	56°F
Flexiframe®, Arch, Springline®, Full Chord, Gothic, Elliptical, Octagon, Full Round, Quarter Round, 200 Series Fixed Window	63%	0.31	0.27	65	4%	20%	0.24	61%	56°F
Frenchwood® Hinged, Outswing and Gliding Door, Frenchwood® Patio Door Sidelight/Transom	64%	0.31	0.27	66	5%	21%	0.24	61%	56°F

- "High-Performance Low-E4" (HP Low-E4), "SmartSun" and "High-Performance Low-E4 Sun" (HP Sun) are Andersen trademarks for "Low-E" glass.
- Based on NFRC testing/simulation conditions using Windows 5.2 and NFRC validated spectral data. 0°F outside temperature, 70°F inside temperature and a 15 mph wind.
- ¹ Visible Transmittance (VT) measures how much light comes through the glass. The higher the value, from 0 to 1, the more daylight the glass lets in. Visible Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.
- ² Shading Coefficient (SC) defines the amount of heat gain through the glass compared to a single lite of clear 1/8" (3 MM) glass.
- ³ Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass both directly transmitted and absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the glass.
- ⁴ Relative Heat Gain (RHG) is the amount of heat gain through a glazing incorporating U-Factor and Solar Heat Gain Coefficient.
- ⁵ Transmission Ultra-Violet Energy (TUV). The transmission of short wave energy in the 300-380 nanometer portion of the solar spectrum. The energy can cause fabric fading.
- ⁶ Transmission Damage Function (TDW). The transmission of UV and visible light energy in the 300-600 nanometer portion of the solar spectrum. The value includes both the UV and visible light energy that can cause fabric fading. This rating has also been referred to as the Krochmann Damage Function. This rating better predicts fading potential than UV transmission alone. The lower the Damage Function rating, the less transmission of short wave energy through the glass that can potentially cause fabric fading. Fabric type is also a key component of fading potential.
- ⁷ U-Factor in this table is a measure of the heat loss through the center of glass in BTU/hr deg. F sq. ft. This U-Factor should not be confused with U-Factor as measured by the National Fenestration Rating Council (NFRC) which represents heat loss through the total unit. Only NFRC total unit U-Factor Ratings should be used when assessing building or energy code compliance.
- ⁸ Percent relative humidity before condensation occurs at the center of glass, taken using center of glass temperature.
- ⁹ Inside glass surface temperatures are taken at the center of glass.
- This data is accurate as of December 2010. Due to ongoing product changes, updated test results or new industry standards, this data may change over time. Contact your Andersen supplier for current performance information or upgrade options.
- Contact your Andersen supplier or visit andersenwindows.com for center of glass performance data on windows with laminated glass, patterned glass, tempered glass and products ordered with capillary breather tubes.
- PassiveSun™ glass values are available online at andersenwindows.com.