Why Reinvent Sound Control, Theft Protection, Hurricane Resistance, Safety or Security in Your Windows When You Don't Have To?









Improve your Customer Value with the benefits of Laminated Glass







## Why Reinvent The Window When You Don't Have To?

## Comparision of Monolithic, Laminated and Insulated Glass Performance

Product	Thickness/Make-up	U-Factor Summer (Air)	R-Factor	Shading Coefficient	SHGC	Visible Transmittance	UV Transmittance*
Monolithic	1/4" Clear 1/4" Bronze 1/4" Gray 1/4" Green	0.93 0.93 0.93 0.93	1.08 1.08 1.08 1.08	0.97 0.72 0.69 0.71	0.84 0.62 0.59 0.61	88 54 45 77	66 24 25 30
Laminated Clear	1/8" Clear / .030 Clear PVB / 1/8" Clear	0.91	1.10	0.92	0.79	88	5
Laminated Comfort Ti (Defender Ti™)	1/8" Comfort Ti-PS on Clear / .030 Clear PVB / 1/8" Clear	0.91	1.10	0.63	0.54	77	0
	1/8" Comfort Ti-PS on Clear / .090 Clear PVB / 1/8" Clear	0.87	1.15	0.61	0.52	75	0
	1/8" Comfort Ti-R on Clear / 030 Clear PVB / 1/8" Clear	0.91	1.10	0.55	0.48	71	0
	1/8" Comfort Ti-R on Clear/ 090 Clear PVB / 1/8" Clear	0.87	1.15	0.55	0.48	70	0
	1/8" Comfort Ti-AC on Clear / .030 Clear PVB / 1/8" Clear	0.91	1.10	0.49	0.42	61	0
	1/8" Comfort Ti-AC on Clear / .090 Clear PVB / 1/8" Clear	0.87	1.15	0.49	0.42	60	0
	1/8" Comfort Ti-AC36 on Clear / .030 Clear PVB / 1/8" Clear	0.91	1.10	0.51	0.43	71	0
	1/8" Comfort Ti-AC36 on Clear / .090 Clear PVB / 1/8" Clear	0.87	1.15	0.50	0.43	70	0
	1/8" Comfort Ti-AC40 on Clear / .030 Clear PVB / 1/8" Clear	0.91	1.10	0.50	0.44	71	0
	1/8" Comfort Ti-AC40 on Clear / .090 Clear PVB / 1/8" Clear	0.87	1.15	0.50	0.43	70	0
	1/8" Comfort Ti-AC23 on Clear / .030 Clear PVB / 1/8" Clear	0.91	1.10	0.40	0.34	41	0
	1/8" Comfort Ti-AC23 on Clear / .090 Clear PVB / 1/8" Clear	0.87	1.15	0.39	0.34	40	0
Insulated (IG)	1/8" Clear / 1/2" Air Space / 1/8" Clear	0.51	1.98	0.91	0.79	82	59
	1/8" Bronze / 1/2" Air Space / 1/8" Clear	0.50	2.00	0.72	0.62	62	32
	1/8" Gray / 1/2" Air Space / 1/8" Clear	0.51	1.98	0.70	0.60	56 76	32
	1/8" Green / 1/2" Air Space / 1/8" Clear 1/4" Clear / 1/2" Air Space / 1/4" Clear	0.50 0.50	2.00 2.00	0.70 0.84	0.61 0.73	76 78	37 51
	1/4" Bronze / 1/2" Air Space / 1/4" Clear	0.50	2.00	0.58	0.73	48	19
	1/4" Gray / 1/2" Air Space / 1/4" Clear	0.50	2.00	0.55	0.47	40	20
	1/4" Green / 1/2" Air Space / 1/4" Clear	0.50	2.00	0.58	0.50	68	25

Source: LBNL Windows 5.2 \* Transmittance of UV rays are calculated above as Tuv. Additional methods of calculation including Krochmann (Tdw-K) and also an assessment of Damage-Weighted Transmittance using Tdw-ISO are available. For more information, contact AFG's Technical Services Department. Always glaze low-e lite to the outside.

## Benefits of Laminated Glass include:

- Fits Existing Sash Designs
- Looks like Normal Glazing
- UV Protection

- Lower Shading Coefficient
- Increased Safety
- Added Security
- 1/4" Laminated has a higher Sound Transmission Class (STC) than 1/4" monolithic and 1/8" Insulated

(Source: GANA Glazing Manual - 1/4" Glass = 31 STC, 1/8"-3/8"AS-1/8" IG = 31 STC, 1/8"/.030/1/8" Laminated = 35 STC, 1/8"/.090/1/8" Laminated = 35 STC, 1/8"

