ENERGY Enhanced

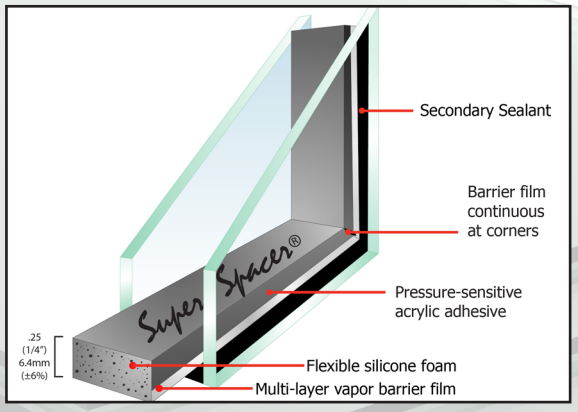
When You Want More From Your Glass

QUAKER

ENERGY STAR PARTNER

Unique Combination of Components Make This the Hardest Working Glass You'll Ever Find!

- Specifically designed to provide an all-in-one glass experience: exceptional glare control, terrific thermal-efficiency and cleaner views
- Cardinal 240 Dual-Silver Low-E exterior pane combined with Cardinal i89 on interior pane
- Neat® anti-static surface coating added to the exterior pane to reduce dust build up. Sunlight activates Neat® to chemically break down dirt, dust and pollutants that have accumulated on the glass meaning less maintenance and cleaning.
- Subtle, yet distinguished gray appearance supplies a polarizing, HD view and stays constant no matter how thick the glass panes
- Available for use with most Quaker window and door series



Super Spacer & Butyl Secondary Seal

- Low thermal conductivity
- Substantially reduced perimeter condensation
- Excellent UV resistance and temperature performance
- Superior argon gas retention
- Enhanced environmental comfort
- Excellent durability for sustainable performance

Commitment to Quality

Every window and door built with Low-E glass also comes filled with the optimal amount of Argon Gas using an automated process in our state-of-the-art Insulating Glass Facility.

Windows and doors that are going into higher elevation areas will automatically have a Capillary Tube.

Our commitment to quality extends to the glass that we source. Quaker's glass is supplied by Cardinal Industries, the preeminent glass manufacturer in North America.

Learn more about Quaker glass offerings at www.quakerwindows.com

Quaker Windows & Doors | Freeburg & Eldon, MO
800.347.0438 | www.quakerwindows.com

QUAKER WINDOWS & DOORS

Technical and Test Data for Cardinal LoE²-240® & LoE-i89 Glass:

Cardinal LoE²-240®

Process: Sputter
Coating: Silver
Layers: 2
Location: I.G. Surface #2
Visual Aesthetics: Virtually Clear*

Cardinal LoE-i89

Process: Sputter
Coating: Indium Tin Oxide
Layers: 1
Location: I.G. Surface #4
Visual Aesthetics: Virtually Clear*

(*please note that viewing angle, sky conditions, colors of objects reflected, colors of materials behind the glass i.e. blinds/drapes, and viewing distance from the glass will impact perceived aesthetics)

Optical Properties of Insulating Glass Units

IG Configuration Outboard Lite / Inboard Lite	Glass Thickness		Visible Light			Fading		SHGC	LSG
	mm	in	Trans.(%)	Refl. Out (%)	Refl. In (%)	UV Trans.	ISO-CIE Trans.		
Cardinal LoE²-240® (#2) / LoE-i89 (#4)	3.0	1/8	39	14	10	15%	34%	0.24	

Winter Day Solar Heat Gain Comparisons

Insulating Glass Unit	U winter BTU/(hr-ft²) (W/m²)	SHGC	Solar Radiation Reflected BTU/(hr-ft²) (W/m²)	Solar Radiation Transmitted BTU/(hr-ft²) (W/m²)	Total Energy Rejected BTU/(hr-ft²) (W/m²)	Total Energy Gained BTU/(hr-ft²)(W/m²)
Cardinal LoE²-240® (#2) / LoE-i89 (#4)	test information not available as of 7-1-2022.					

Summer Day Solar Heat Gain Comparisons

Insulating Glass Unit	U summer BTU/(hr-ft²) (W/m²)	SHGC	Solar Radiation Reflected BTU/(hr-ft²) (W/m²)	Solar Radiation Transmitted BTU/(hr-ft²) (W/m²)	Total Energy Rejected BTU/(hr-ft²) (W/m²)	Total Energy Gained BTU/(hr-ft²) (W/m²)
Cardinal LoE²-240® (#2) / LoE-i89 (#4)	test information not available as of 7-1-2022.					

Winter Night Airspace Heat Transfer

Insulating Glass Unit	U winter BTU/(hr-ft²-F)(W/m²-K)	Radiative Heat Loss BTU/(hr-ft²)(W/m²)	Conductive Heat Loss BTU/(hr-ft²)(W/m²)	Total Heat Loss BTU/(hr-ft²) (W/m²)
CardinalLoE² -240® (#2) / LoE-i89 (#4)	test information not available as of 7-1-2022.			

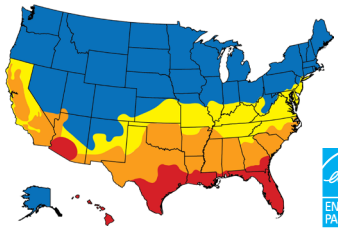
Window U-Factor

Glazing	Class 1		Class 2		Class 3	
	BTU/(hr-ft²-F)	(W/m²-K)	BTU/(hr-ft²-F)	(W/m²-K)	BTU/(hr-ft²-F)	(W/m²-K)
Cardinal LoE²-240® (#2) / LoE-i89 (#4)	test information not available as of 7-1-2022.					

Energy Values For Quaker's Popular Products When Using Energy Enhanced

	U-Value	SHGC	VT	CR	Center Of Glass U-Value
CityLine/CityVu C600 Casement	0.28	0.17	0.26	52	0.22
CityLine/CityVu C600 Pict. Wdw.	0.25	0.21	0.34	52	0.22
EdgeLine/H450 Casement	0.40	0.19	0.20	50	.0.22
EdgeLine/H450 Pict. Wdw.	0.26	0.34	0.20	50	0.22
Manchester/V200/V250 Casement	0.25	0.17	0.25	47	
Manchester Sliding Door	0.25	0.19	0.31	48	0.22
Manchester/V200/V250 Pict. Wdw.	0.23	0.20	0.32	46	
Manchester/V200/V250 Sgl. Hung	0.26	0.19	0.30	47	
TimberLine/TimberVu/W600 Casement	0.25	0.17	0.27	51	0.22
TimberLine/TimberVu/W600 Pic. Wdw.	0.23	0.21	0.34	52	0.22

Values shown were achieved using standard glass pane thickness. Other thicknesses may cause test data to vary slightly.



ENERGY STAR PARTNER

Energy Star Qualifications

Climate Zone	U-Value	SHGC	Wind Infiltration*
Northern	≤0.27	Any	≤0.30
(Alternate #1)	=0.28	≥ 0.32	≤0.30
(Alternate #2)	= 0.29	≥ 0.37	≤0.30
(Alternate #3)	= 0.30	≥ 0.42	≤0.30
North Central	≤0.30	≤0.40	≤0.30
South Central	≤0.30	≤0.25	≤0.30
Southern	≤0.40	≤0.25	≤0.30

*All Quaker Windows meet or exceed wind infiltration requirements necessary for Energy Star qualification