

**PRODUCT OVERVIEW**

# ENTHERMAL

**R18. 8-mm.**

**AT THE CORE OF LUXWALL IS ENTHERMAL**

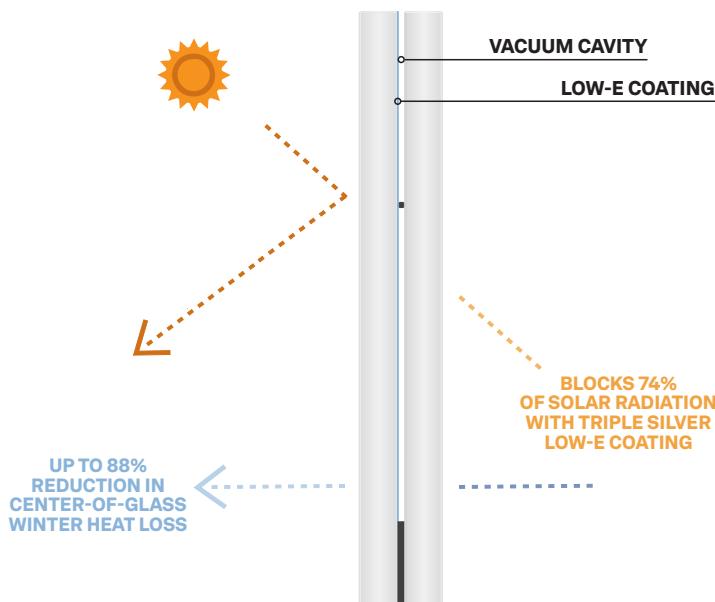
With a U-Factor of 0.056, a 20-year warranty, and fully tempered strength, **Enthermal™** delivers superior thermal performance, energy savings, enhanced comfort, and acoustic control. Its ultra-slim 8-mm, 10-mm, and 12-mm profiles offer endless design options from glass-only retrofits to one-inch insulating glass units with a U-Factor of 0.043. Enthermal delivers exceptional condensation resistance, lower embodied carbon, and sleek modern aesthetics—without compromise.

**0.056**  
U-Factor  
(BTU/hr·ft<sup>2</sup>·F)

**64%**  
Visible  
Transmittance (VLT)

**0.26**  
Solar Heat  
Gain Coefficient (SHGC)

**77+**  
Condensation  
Resistance Factor



1. Comparing to Double Pane Clear for Glass-Only Retrofit • 2. Center of Glass U-Factor comparison of Enthermal Triple Silver on surface 2 (U-Factor 0.056) vs. Double Pane IG, Air Fill (U-Factor 0.473).

**COATING POSITION**

Low-E coatings applied to **Surface 2** of the Enthermal enables targeted thermal efficiency. Low-E coatings can be selected to optimize for visible light transmission, passive solar design, insulating performance, and elevation specific design.



**ENTHERMAL PERFORMANCE | 10-MM**

	VISIBLE LIGHT		FADING		SOLAR/INSULATION		
	Light Transmission (VLT)	Exterior Reflectance	T-UV	T-UV DW ISO	SHGC	U-Factor IP / SI	LSG
② Cardinal LoĒ-180™	78%	15%	26%	61	0.62	0.084 / 0.48	1.25
② Cardinal LoĒ <sup>2</sup> -270®	69%	12%	13%	50	0.35	0.062 / 0.36	1.96
② Cardinal LoĒ <sup>2</sup> -272®	71%	11%	15%	54	0.40	0.067 / 0.39	1.79
② Cardinal LoĒ <sup>3</sup> -340®	38%	13%	2%	27	0.16	0.055 / 0.32	2.42
② Cardinal LoĒ <sup>3</sup> -366®	64%	11%	5%	42	0.26	0.055 / 0.32	2.48
② Solarban 60®	72%	11%	19%	54	0.38	0.063 / 0.36	1.89
② Solarban 70®	66%	13%	6%	44	0.26	0.056 / 0.32	2.57

**SPECIFICATIONS**

**ENTHERMAL DIMENSIONS**

Maximum | 60" x 96"  
Minimum | 12" x 18"

**GLASS STRENGTH**

Tempered Enthermal  
Tempered Enthermal with Heat Soak

**ENTHERMAL THICKNESS PROFILE**

8-mm, 9-mm, 10-mm, 11-mm, 12-mm

**COATED GLASS OPTIONS**

Cardinal LoĒ-180™  
Cardinal LoĒ<sup>2</sup>-270®  
Cardinal LoĒ<sup>2</sup>-272®  
Cardinal LoĒ<sup>3</sup>-340®  
Cardinal LoĒ<sup>3</sup>-366®  
Solarban 60®  
Solarban 70®

**BIRD FRIENDLY SOLUTIONS**

2" x 2", 2" x 4", and 4" x 4" array with 5 mm or 6 mm dot or square patterns

**TINTED OUTBOARD OPTIONS**

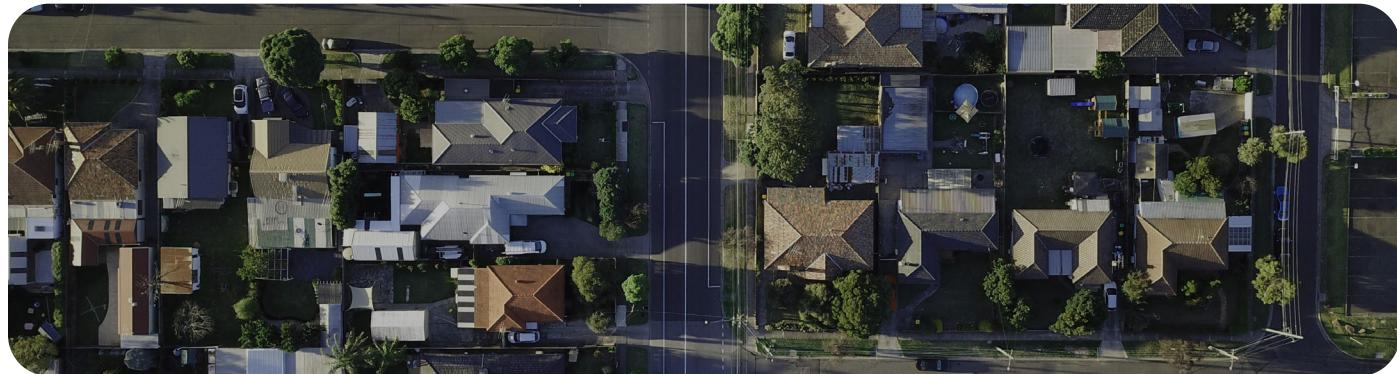
Solarban 60® is available on Optibleue®, Optigray®, Solexia®, Solarbronze®, Solargray®, and Solarblue® substrates.

**INBOARD GLASS**

Clear Glass Only

**WARRANTY**

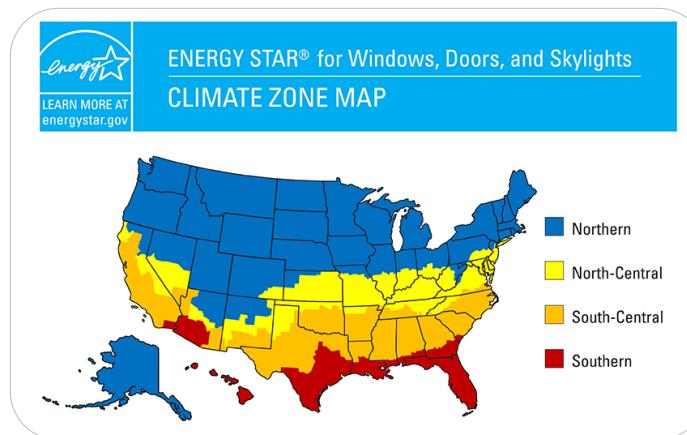
LuxWall Enthermal comes with a 20-year warranty. LuxWall has subjected Enthermal to accelerated durability testing beyond the industry standard requirements of ASTM 2188/2189/2190 and ISO 19916-1 to ensure product longevity. LuxWall has successfully passed the following accelerated performance levels: -600 C to +1300 C thermal cycling, +850 C with 85% relative humidity, +/- 900 C asymmetric thermal shock, DP Rating of 80 per ASTM E330, 25K door slam cycles, accelerated UV (up to 32X standard ultraviolet exposure), combinatorial humidity freeze, and salt spray.



#### ENERGY STAR® CERTIFICATION FOR RESIDENTIAL WINDOWS

ENERGY STAR® is a program run by the U.S. Environmental Protection Agency (EPA) that promotes energy efficiency in consumer products, including windows. ENERGY STAR 7.0 is the latest version of the ENERGY STAR program's requirements for windows.

LuxWall's Enthermal Transparent Insulation combined with defying insulating glass technology delivers best in class performance to meet the ENERGY STAR® criteria for all four climate zones.



ENERGY STAR® REQUIREMENTS	C180	C270	C272	C366	C340	SB60	SB70
U-Factor ≤ 0.22, SHGC ≥ 0.17	✓	✓	✓	✓		✓	✓
U-Factor ≤ 0.23, SHGC ≥ 0.35	✓		✓			✓	
U-Factor ≤ 0.24, SHGC ≥ 0.35	✓		✓			✓	
U-Factor ≤ 0.25, SHGC ≥ 0.40	✓						
U-Factor ≤ 0.26, SHGC ≥ 0.40	✓						
U-Factor ≤ 0.25, SHGC ≤ 0.40		✓	✓	✓	✓	✓	✓
U-Factor ≤ 0.28, SHGC ≤ 0.23					✓		
U-Factor ≤ 0.32, SHGC ≤ 0.23					✓		

\*Assumptions: Coating surfaces are located on surfaces 2. All lites are 5-mm thickness. Window LBNL calculation method.

#### ADDITIONAL PERFORMANCE AND AESTHETIC OPTIONS ARE AVAILABLE UPON REQUEST

LuxWall performance data is calculated in accordance with LBNL Windows 7 program. • Information within this document is subject to change without notice or obligation. • The information contained herein is offered in good faith and believed to be accurate. The stated information should not be used in substitution for customer's tests to ensure our products are safe, effective, and fully satisfactory for the intended end use.

