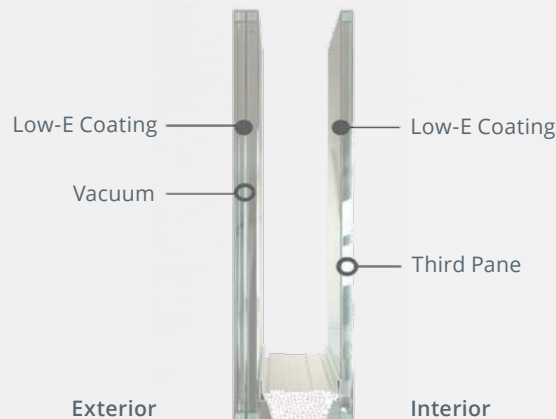
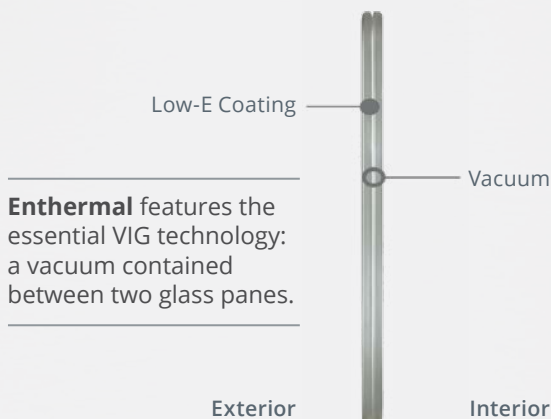




Kolbe Windows & Doors has partnered with LuxWall, Inc. to offer vacuum insulating glass (VIG) options in select products, redefining what is possible when pursuing improved efficiency and optimal comfort through your choice of windows and doors.

VIG reimagines insulating glass construction by repurposing the space between glass panes. Instead of using air, argon, or krypton for insulation, the air is removed from this space, creating a vacuum. When incorporated into a window or door system, the vacuum significantly limits the thermal energy that can pass through the unit, much like how an insulated coffee mug keeps hot beverages warm and chilled beverages cool longer.

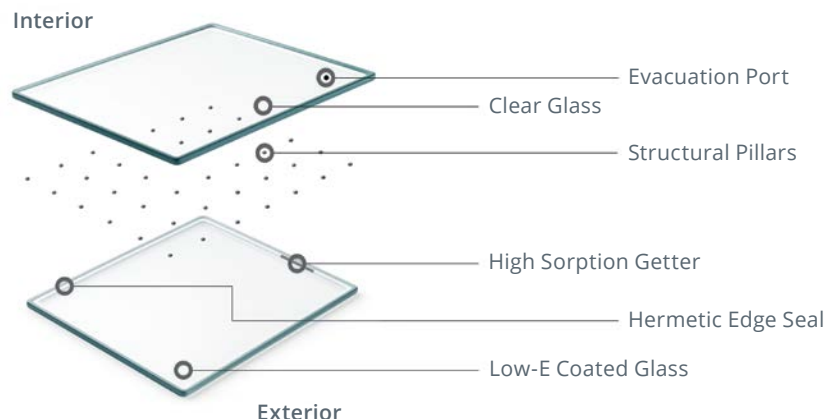
Two VIG options: Enthermal™ and Enthermal Plus™



Enthermal Plus features the VIG with a space for a third glass pane, offering an opportunity to include specialty glass, such as tinted or privacy glass.

Enthermal™ is defined by five key components:

- 1. Low-E Coated Glass** – A choice of Low-E coating is applied to the VIG.
- 2. Hermetic Edge Seal** – This patented airtight design helps maintain the vacuum.
- 3. Structural Pillars** – Extremely small, nearly imperceptible metal alloy structures hold the glass panes apart to accommodate the vacuum.
- 4. Evacuation Port** – A protective cap covers the hole through which the vacuum is initially created.
- 5. Getter** – A rectangular tool near the evacuation port captures any substances that may remain as the vacuum is created.



Reframing Possibility & Efficiency

- *Convenient & Approachable Design* – No specialized installation required.
- *Broad Application* – Crafted to be thinner than most triple-pane glass units.
- *Thoughtful Production* – American-made, with lower embodied carbon.
- *For Any Project* – Creates comfortable environments in new construction and renovation settings.

Both Enthermal™ and Enthermal Plus™:

- Are available in Ultra Series & VistaLuxe® WD LINE windows & doors, including swinging, folding & sliding styles.
- Are available in rectangular glass shapes. No geometric or radius at this time.
- Are scalable in sizes ranging from 12 by 18 inches up to 60 by 96 inches.
- Can be specified with performance divided lites. Some pattern limitations do exist.
- Feature a 20-year warranty.

Explore a Sampling of Certified U-Values in Kolbe® Offerings

	Dual Pane U-Value	Triple Pane U-Value	Enthermal U-Value	Enthermal Plus U-Value
Ultra Series Crank-out Casement	0.28	0.27	0.24	0.20
Ultra Series Crank-out Picture Casement	0.25	0.24	0.17	0.15
Ultra Series Push-out Casement	0.29	—	0.25	0.22
Ultra Series Push-out Picture Casement	0.25	—	0.18	0.16
Ultra Series Sterling Double Hung	0.27	0.26	0.21	0.18
VistaLuxe® WD LINE Direct Set	0.23	0.16	0.14	0.11
VistaLuxe® WD LINE Picture Casement	0.18	0.17	0.16	0.12

To view a full list of Kolbe products and certified performance values, visit the Energy Performance Resource page at: kolbewindows.com/resources/professional-tools/energy-performance



We're continually expanding our database with new product types featuring VIG glass options; updates are added weekly.

If you're unable to find the specific values you need, please don't hesitate to reach out for assistance.

Additionally, keep an eye out for upcoming availability of Enthermal and Enthermal Plus options across all our product lines.