

# INSULATED GLAZING PANELS



**LAMINATORS**  
Composite Panel Solutions

Effective October 2024

Tech Support: 800.523.2347 [LaminatorsInc.com](http://LaminatorsInc.com)

# INSULATED GLAZING PANELS

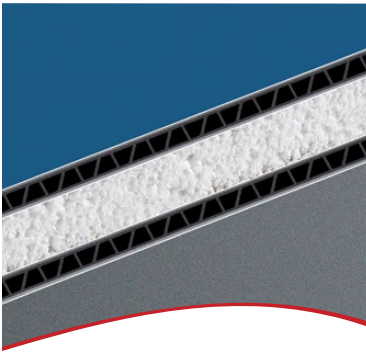
Laminators Incorporated offers a diverse range of insulated glazing panels, including flat, fabricated, and non-combustible options, catering to various construction needs. Alongside our standard flat Thermolite™ panel, we provide a selection of fabricated options that enhance R-Value, introduce fresh aesthetics, and enable seamless hairline joints between panels. Our Thermolite glazing panels are specifically designed to effortlessly integrate into standard or custom glazing systems. As building and energy efficiency codes grow increasingly rigorous, Laminators' insulated glazing panels emerge as an intelligent solution for your upcoming projects.

When superior fire performance is required, InfernoShield® can provide an increased level of defense. InfernoShield is a new innovative non-combustible insulated glazing panel designed to deliver unparalleled fire performance within window, glazing, and curtain wall systems. Engineered to perfection, InfernoShield panels offer a remarkable combination of decorative allure and long-lasting durability while exhibiting exceptional fire-resistant properties.

All of our insulated glazing panels are available in our standard or custom colors and feature a 5-year panel construction warranty. In addition to manufacturing panels, Laminators can also perform take-offs and provide fabrication services to help save on time and labor costs.



# FLAT INSULATED PANELS



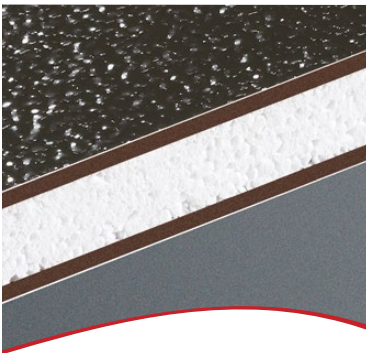
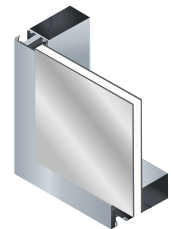
## THERMOLITE™

Thermolite is an insulated glazing insert panel that consists of a foam plastic core bonded on both sides to thermoplastic stabilizers with finished sheets of aluminum on each face. Intended for use in window, glazing, and curtain wall systems, panels are available in thicknesses ranging from 3/4 to 3-1/2 in.

- Available in smooth or stucco-embossed finishes
- Fits into standard 1 in. insulating glass and glazing pockets and storefront extrusions
- Available in stock sheets and cut-to-size

### Applications

- Curtain Walls
- Storefronts
- Spandrels
- Opaque Glazing
- In-Fill Panels
- Partitions
- Sunrooms
- Grow Rooms



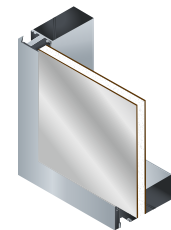
## OMEGA FOAM-PLY®

Omega Foam-Ply is an insulated glazing panel that consists of a foam plastic core bonded on both sides to hardboard stabilizers with finished sheets of aluminum on each face. Intended for use in window, glazing, and curtain wall systems, panels are available in thicknesses ranging from 5/8 to 3-1/2 in.

- Can be cut onsite with standard carpentry tools, lower-cost installation
- Available in a variety of colors and surface finishes
- Available in stock sheets and cut-to-size

### Applications

- Storefronts
- In-Fill Panels
- Opaque Glazing
- Spandrels
- Sunrooms
- Partitions



## References & Testing

AAMA 2605



Voluntary Specification, Performance Requirements, and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels

ASTM B209



Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate

ASTM C518



Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus

ASTM E84



Standard Test Method for Surface Burning Characteristics of Building Materials

ASTM E529

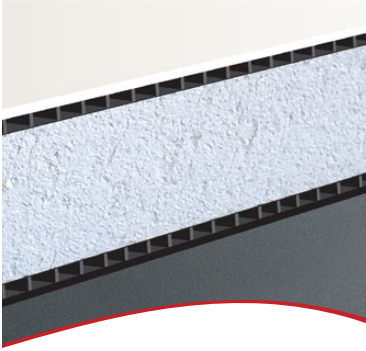


Standard Guide for Conducting Flexural Tests on Beams and Girders for Building Construction

■ Thermolite™

■ Omega Foam-Ply®

# FLAT INSULATED PANELS (continued)



## InfernoShield® Non-combustible Glazing Panels

### Superior fire performance from the inside out.

InfernoShield® is a new non-combustible insulated glazing panel designed to provide superior protection from fire when installed in window, glazing, and curtain wall systems. InfernoShield panels create a highly decorative and durable surface with exceptional fire performance properties.

InfernoShield panels are constructed of a Calcium Silicate core, sandwiched between extruded profile stabilizers with a finished aluminum sheet on each face. The finished product has a 1 in. overall thickness, provides an R-Value of 2.1 per in., and weighs 2.77 lbs./sq. ft.

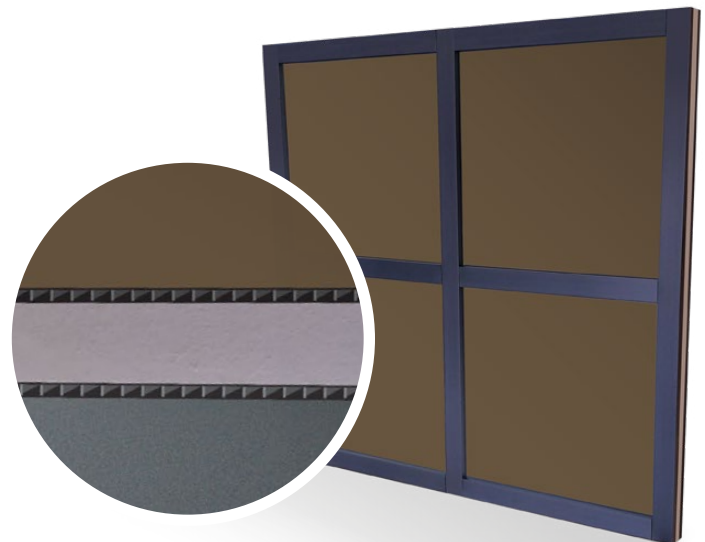
- Multiple finish options including PVDF/Kynar 500®, Polyester, or Anodized
- Available in smooth or stucco-embossed finishes
- Fits into standard 1 in. glazing pockets and curtain wall systems
- Available in stock sheets and cut-to-size

### Applications

- Curtain walls
- Window systems
- Window replacement
- Opaque glazing
- Storefronts
- In-fill panels
- High-rise and commercial construction

### Benefits

- Meets non-combustible requirements of IBC Section 703.5
- Flame spread and smoke index meet Class-A per ASTM E84
- Lightweight—up to 40% lighter than other non-combustible in-fill panels
- Provides R-Value comparable to a typical 1 in. insulated glass unit
- Panels can be fabricated on-site using standard carpentry tools or factory-cut to meet your exact specifications
- Up to 30-year finish warranty
- 5-year panel construction warranty

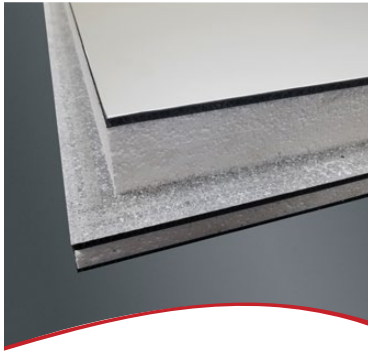


	<b>Thermolite™</b>	<b>Omega Foam-Ply®</b>	<b>InfernoShield®</b>
<b>Sizes*</b>	4 ft. x 8 ft.   4 ft. x 10 ft.   4 ft. x 12 ft. 5 ft. widths available in select colors		4 ft. x 8 ft.
<b>Stabilizers</b>	Extruded Corrugated Polypropylene	Exterior Grade Hardboard	Extruded Profile Polypropylene
<b>Insulating Core</b>	Expanded Polystyrene (EPS): 2.0 pcf density (Type IX) Polyisocyanurate (ISO): 2.0 pcf density (Type I)		Calcium Silicate Composition (based on xonotlite mineral) 18.0 pcf density
<b>Aluminum Backer</b>	Mill finish 0.013 in. or same surface as face depending on application		
<b>Aluminum Face (Nominal)</b>	0.028 or 0.032 in. 0.024 in. 0.013 in.		
<b>Face Color Finish</b>	PVDF/Kynar 500® Polyester Anodized		
<b>Face Texture Finish</b>	Smooth and/or stucco-embossed		
<b>Panel Thickness</b>	3/4 in. to 3-1/2 in.	5/8 in. to 3-1/2 in.	1 in (nom), standard
<b>R-Value (hr °F ft²/BTU)</b>	R-2.0 to R-17.4 depending on insulating core and panel thickness	R-1.6 to R-17.5 depending on insulating core and panel thickness	R-2.1
<b>Weight</b>	1.40 psf (+/-) based on 1 in. (nom), standard	1.81 psf (+/-) based on 1 in. (nom), standard	2.77 psf (+/-), based on 1 in. (nom), standard
<b>Tolerance</b>	Length & Width: +/- 1/16 in. Squareness: Diagonals equal within 1/8 in. Thickness: +/- 5/64 in.		
<b>Thermal Expansion</b>	13x10 <sup>-6</sup> in./in./°F		

For specifics on R-Value, performance information, and allowable load carrying capacities, refer to our Technical Data Sheets.

\*5 ft. widths available in select colors. Refer to our Architectural Color Chart for specific size, finish, and color availability.  
Thermolite™ and Omega Foam-Ply® can be custom cut to size.

# FABRICATED INSULATED PANELS

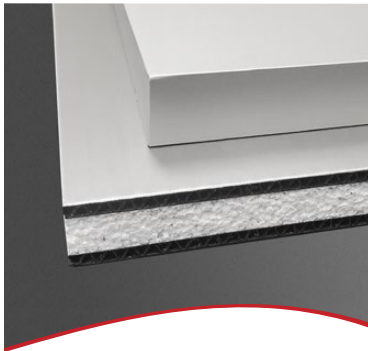
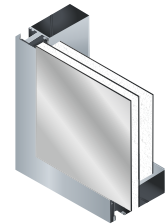


## THERMOLITE™ U-MAX

**A 7-ply, rabbet edge panel designed to provide increased insulation on the interior face of the panel.**

Thermolite U-MAX is a multi-layered, insulated glazing panel that consists of two foam plastic cores bonded to three thermoplastic stabilizers with finished sheets of aluminum on each face. Intended for use in standard glazing pockets of window, glazing, and curtain wall systems, panels include stepped edges on the interior side. Panels offer higher R-Values than standard 1 in. Thermolite and Thermolite WE panels and are available in thicknesses ranging from 1-1/2 to 3-1/2 in.

- Increases R-Value by 100-200% (over standard 1 in. in-fill panels)
- Up to 3-1/2 in. overall panel thickness

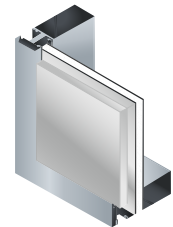


## THERMOLITE™ SE

**Designed to provide new aesthetics with the ability to adjust the reveal created between the face of the mullion and the face of the panel.**

Thermolite SE is an insulated glazing insert panel that consists of a fabricated Laminators Omega-Lite® ACM panel bonded on the exterior face of a standard Thermolite panel to create stepped edges. Intended for use in window, glazing, and curtain wall systems, panels are available in thicknesses ranging from 1-3/4 to 3-1/2 in.

- Can provide flush aesthetic
- Up to 3-1/2 in. overall panel thickness\*

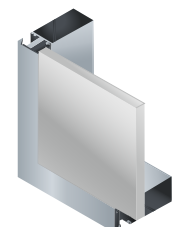


## THERMOLITE™ WE

**Edge treatment allowing for metal-to-metal butt-glazed joints.**

Thermolite WE is an insulated glazing insert panel that consists of a foam plastic core bonded on both sides to thermoplastic stabilizers with finished sheets of aluminum on each face that encapsulate the edges for metal-to-metal hairline joints in butt-glazed applications. Intended for use in window, glazing, and curtain wall systems, panels are available in thicknesses ranging from 3/4 to 2 in.

- 1-4 wrapped/panned edges
- Up to 2 in. panel thickness\*\*



\*Call for thicknesses in excess of 3-1/2 in. (Thermolite SE only).

\*\*Call for thicknesses in excess of 2 in. (Thermolite WE only).

	Thermolite™ U-MAX	Thermolite™ SE	Thermolite™ WE
Sizes*	Custom fabricated up to maximum panel blank size of 4 ft. x 12 ft.		
Stabilizers	Extruded Corrugated Polypropylene		
Insulating Core	Expanded Polystyrene (EPS): 2.0 pcf density (Type IX) Polyisocyanurate (ISO): 2.0 pcf density (Type I)		
Aluminum Backer	Mill finish 0.013 in. or same surface as face depending on application		
Aluminum Face (Nominal)	0.028 or 0.032 in. 0.024 in. 0.013 in.	0.028 or 0.032 in. 0.024 in.	
Face Color Finish	PVDF/Kynar 500® Polyester Anodized	PVDF/Kynar 500® Anodized	
Face Texture Finish	Smooth and/or stucco-embossed	Exterior: Smooth finish only Interior: Smooth and/or stucco-embossed	
Panel Thickness	1-1/2 in. to 3-1/2 in.	1-3/4 in. to 3-1/2 in.	3/4 in. to 2 in.
R-Value (hr °F ft²/BTU)	R-4.9 to R-16.9 depending on insulating core and panel thickness	R-5.7 to R-15.7 depending on insulating core and panel thickness	R-2.0 to R-9.3 depending on insulating core and panel thickness
Weight	1.82 psf (+/-) based on 2-1/2 in. (nom), standard	2.52 psf (+/-) based on 2 in. (nom), standard	1.40 psf (+/-) based on 1 in. (nom), standard
Tolerance	Length & Width: +/- 1/16 in. Squareness: Diagonals equal within 1/8 in. Thickness: +/- 5/64 in.		
Thermal Expansion	13x10 <sup>-6</sup> in./in./°F		

For specifics on R-Value, performance information, and allowable load carrying capacities, refer to our Technical Data Sheets.

\*5 ft. widths available in select colors. Refer to our Architectural Color Chart for specific size, finish, and color availability.  
Thermolite™ and Omega Foam-Ply® can be custom cut to size.



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