INSULATED GLAZING PANELS

LAMINATORS
Composite Panel Solutions

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In addition to our standard flat Thermolite™ panel, Laminators now offers fabricated options to provide additional R-Value, new aesthetics, and the ability to create hairline joints between panels. Thermolite™ Glazing Panels are designed to easily fit into any standard or custom glazing system. With building and energy efficiency codes becoming even more stringent, these panels can be a smart solution for your next project.

When you need a high-tech look with energy-saving, insulating properties for glazing inserts, Thermolite panels are the answer. Thermolite panels are constructed with an insulating foam core sandwiched between finished aluminum sheets and two corrugated stabilizers. Available in smooth or stucco-embossed finishes in a variety of colors, Thermolite panels create a highly decorative and durable surface with excellent insulating properties.
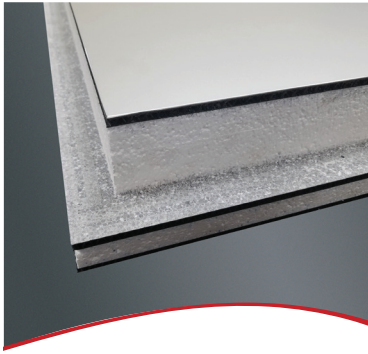
Features

- Custom Colors
- Smooth or Stucco-Embossed Finish*
- Project Specific Customization
- 5-Year Panel Construction Warranty
*See chart for details.

Applications

- Curtain Walls
- Window Systems
- Window Replacement
- Commercial Door Systems
- Opaque Glazing
- Storefronts
- In-Fill Panels
- Spandrels
- Butt Glazing

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
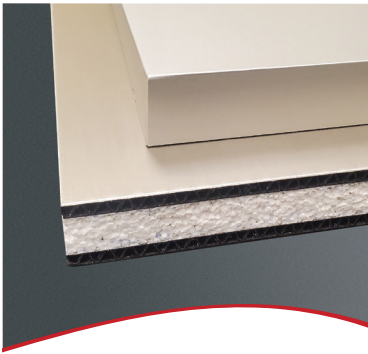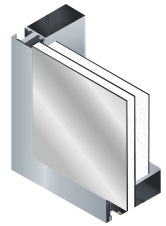
THERMOLITE™ SE

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*
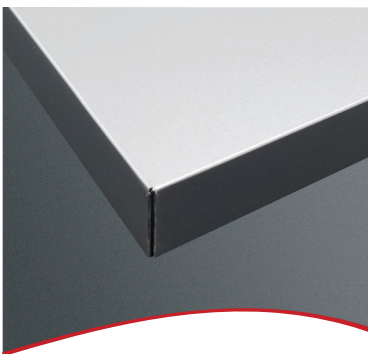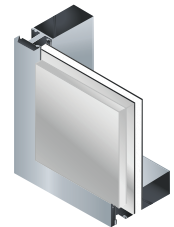
THERMOLITE™ WE

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 2-1/2 in.
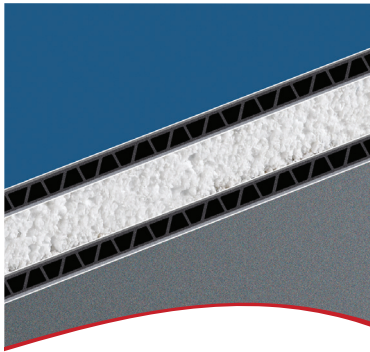
- 1-4 wrapped/panned edges
- Up to 2-1/2 in. panel thickness**
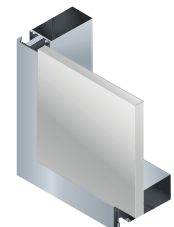
*Call for thicknesses in excess of 3-1/2 in. (Thermolite SE only).   **Call for thicknesses in excess of 2-1/2 in. (Thermolite WE only).
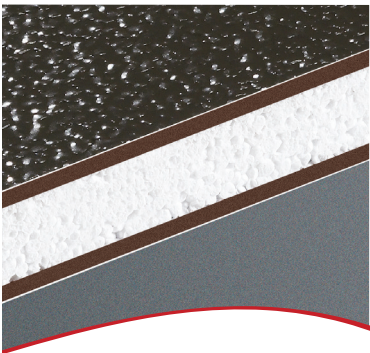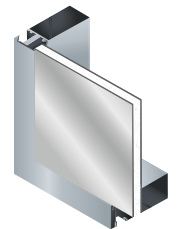
FLAT INSULATED PANELS

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
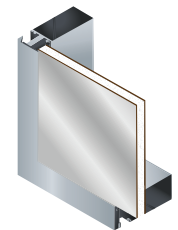- In-Fill Panels
- Partitions
- Sunrooms
- Grow Rooms

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, very low-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®

GLAZING PANELS COMPARISON CHART

	Fabricated Panels			Flat Insulated Panels	
	Thermolite™ U-MAX	Thermolite™ SE	Thermolite™ WE	Thermolite™	Omega Foam-Ply®
Sizes*	Custom fabricated up to maximum panel blank size of 4 ft. x 12 ft.			4 ft. x 8 ft. | 4 ft. x 10 ft. | 4 ft. x 12 ft. 5 ft. widths available in select colors	
Stabilizers	Extruded Corrugated Polypropylene			Extruded Corrugated Polypropylene	Exterior Grade Hardboard
Insulating Core	Expanded Polystyrene (EPS): 2.0 pcf density (Type IX) Polyisocyanurate (ISO): 2.0 pcf density (Type I)			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			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.		0.028 or 0.032 in. 0.024 in. 0.013 in.	
Face Color Finish	PVDF/Kynar 500® Polyester Anodized	PVDF/Kynar 500® Anodized		PVDF/Kynar 500® Polyester Anodized	
Face Texture Finish	Smooth and/or stucco-embossed	Exterior: Smooth finish only Interior: Smooth and/or stucco-embossed		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 2-1/2 in.	3/4 in. to 3-1/2 in.	5/8 in. to 3-1/2 in.
R-Value (hr °F ft²/ BTU)	R-5.2 to R-16.9 depending on insulating core and panel thickness	R-6.0 to R-15.7 depending on insulating core and panel thickness	R-2.2 to R-12.0 depending on insulating core and panel thickness	R-2.2 to R-17.4 depending on insulating core and panel thickness	R-1.7 to R-17.5 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	1.40 psf (+/-) based on 1 in. (nom), standard	1.81 psf (+/-) based on 1 in. (nom), standard
Tolerance	Length & Width: +/- 1/16 in. Squareness: Diagonals equal within 1/8 in. Thickness: +/- 5/64 in.			Length & Width: +/- 1/16 in. Squareness: Diagonals equal within 1/8 in. Thickness: +/- 5/64 in.	
Thermal Expansion	13.1×10^{-6} in./in./°F			13.1×10^{-6} 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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