NXLITE™

Window Energy Efficiency for Building Retrofit & New Construction

David Mather

Windows Consume Up to 30% of Building Heating and Cooling Energy.[1]

NxLite Low-E and Solar Control Coatings

Solar Control
Blocks sun's heat

Up to **42%**
less solar heat gain[2]

Insulation
Preserves thermal barrier

Up to **44%**
less energy transfer[3]

Visible Light
Transmits bright light

Up to **87%**
light transmission[4]

Unique Benefits

NxLite Coatings Can Be Applied to **Lightweight Polymeric Materials**.

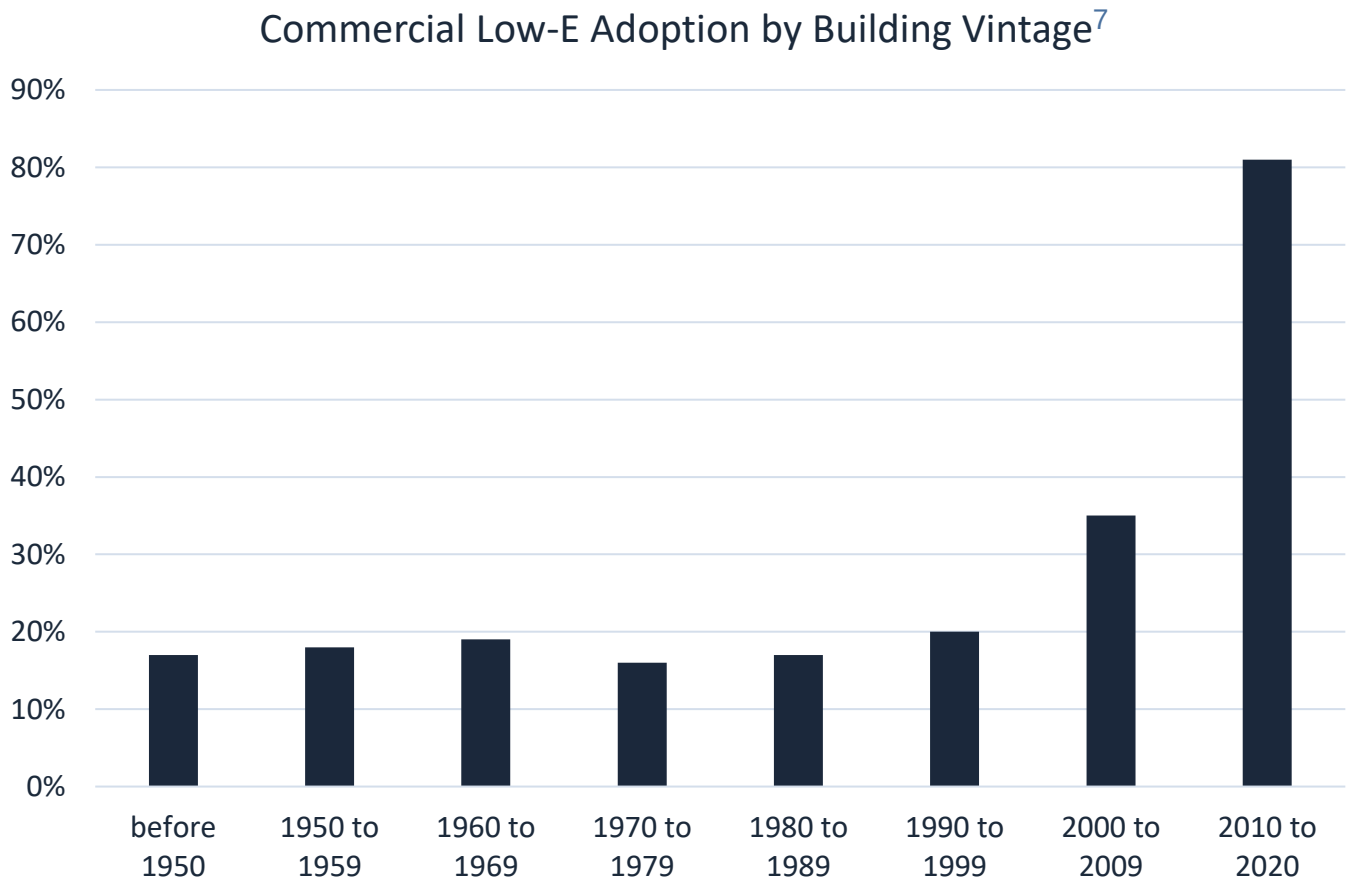
Up to **52%** less weight than comparable glass.[5]

NxLite Coatings Are **Open Air Stable.**

Traditional low-E coatings corrode quickly when they are not sealed in an air-tight cavity.

CHALLENGE

Most Buildings Before 2009 Have Very Inefficient Windows.



Upgrading the Performance of Older Windows to Today's Standard Can Drive Significant Energy Savings.

SOLUTION

High-Performance Inserts with NxLite Coatings

Lightweight, Energy-Efficient Alternative to Window Replacement

- Thermal Performance
- Solar Control
- Cost Effective
- Easier Installation than Replacement
- Improved Air Leakage
- Noise Reduction
- Improved Comfort
- Reduced Condensation
- Improved Durability
- Better Aesthetics
- Green Incentives

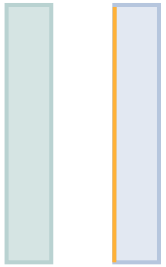
ACTIVE PROJECT

Climate Zone 4 Office Building

	U-factor	SHGC
	Insulation Lower is better BTU/hr*ft2*F	Solar Heat Gain % of heat through
Single Pane Glass *6mm clear*	1.03	82

ACTIVE PROJECT

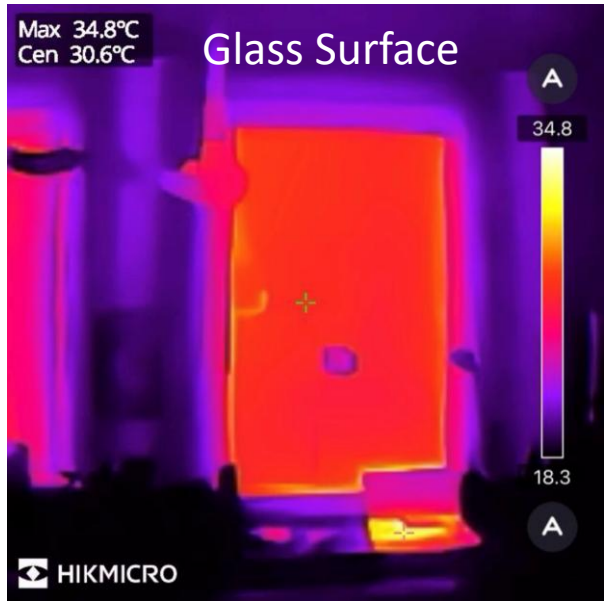
Climate Zone 4 Office Building

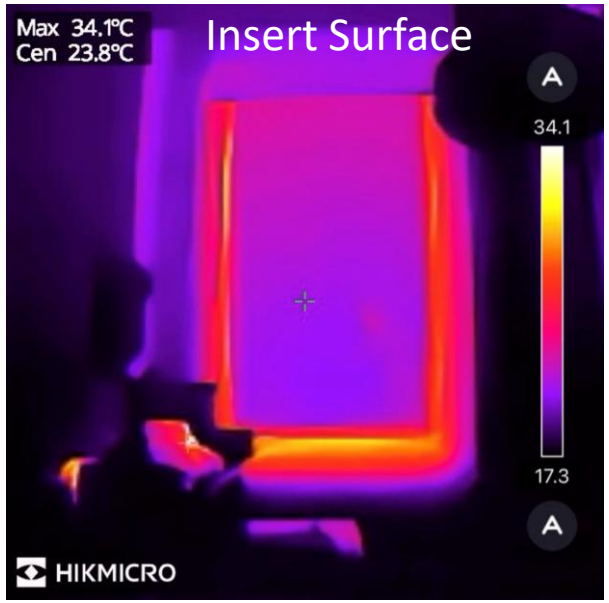


	U-factor Insulation Lower is better BTU/hr*ft2*F	SHGC Solar Heat Gain % of heat through
Single Pane Glass *6mm clear* **+**	1.03	82
NxLite Coated Insert *5.6mm PMMA with NxLite L80*	0.29	57
Impact	**Over 70% improvement**	**Over 30% reduction**

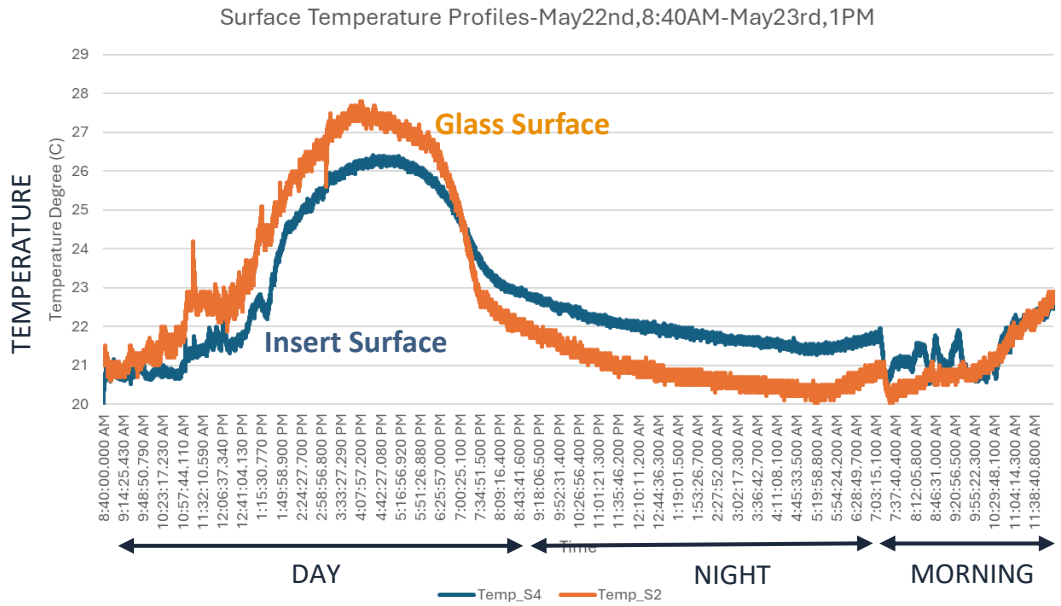
ACTIVE PROJECT

Enhanced Comfort Realized





Temperature Time	Glass Surface	Insert Surface
Daytime High	81.5 ºF	78.8 ºF
Nighttime Low	68.0 ºF	71.7 ºF



Insert surface stayed 2-4 ºF closer to interior set points throughout testing

COMPLETED PROJECT

University of Colorado (CU) Boulder Environmental Design Building

1,683

Square feet of glazing

15%

Forecasted reduction in building energy usage

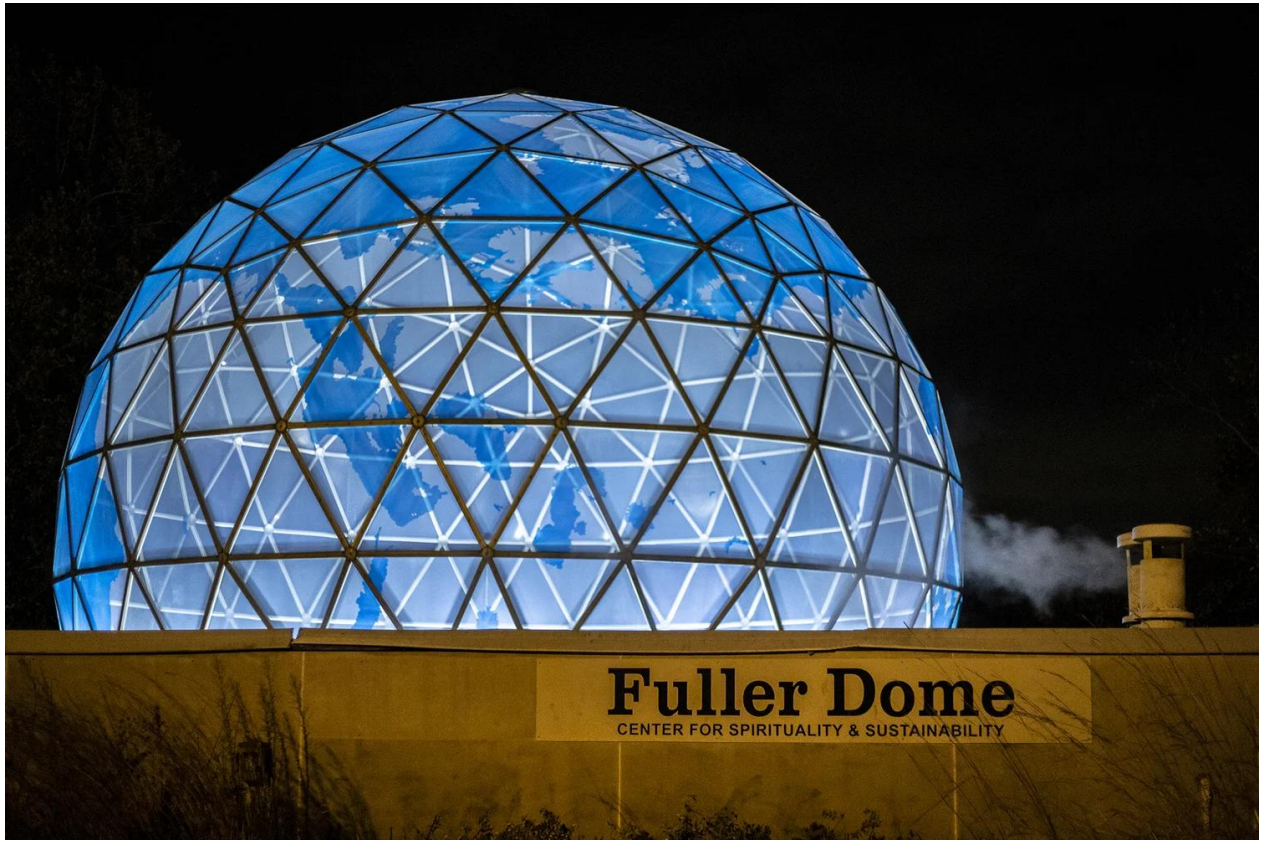
$46,900

Forecasted annual energy saving

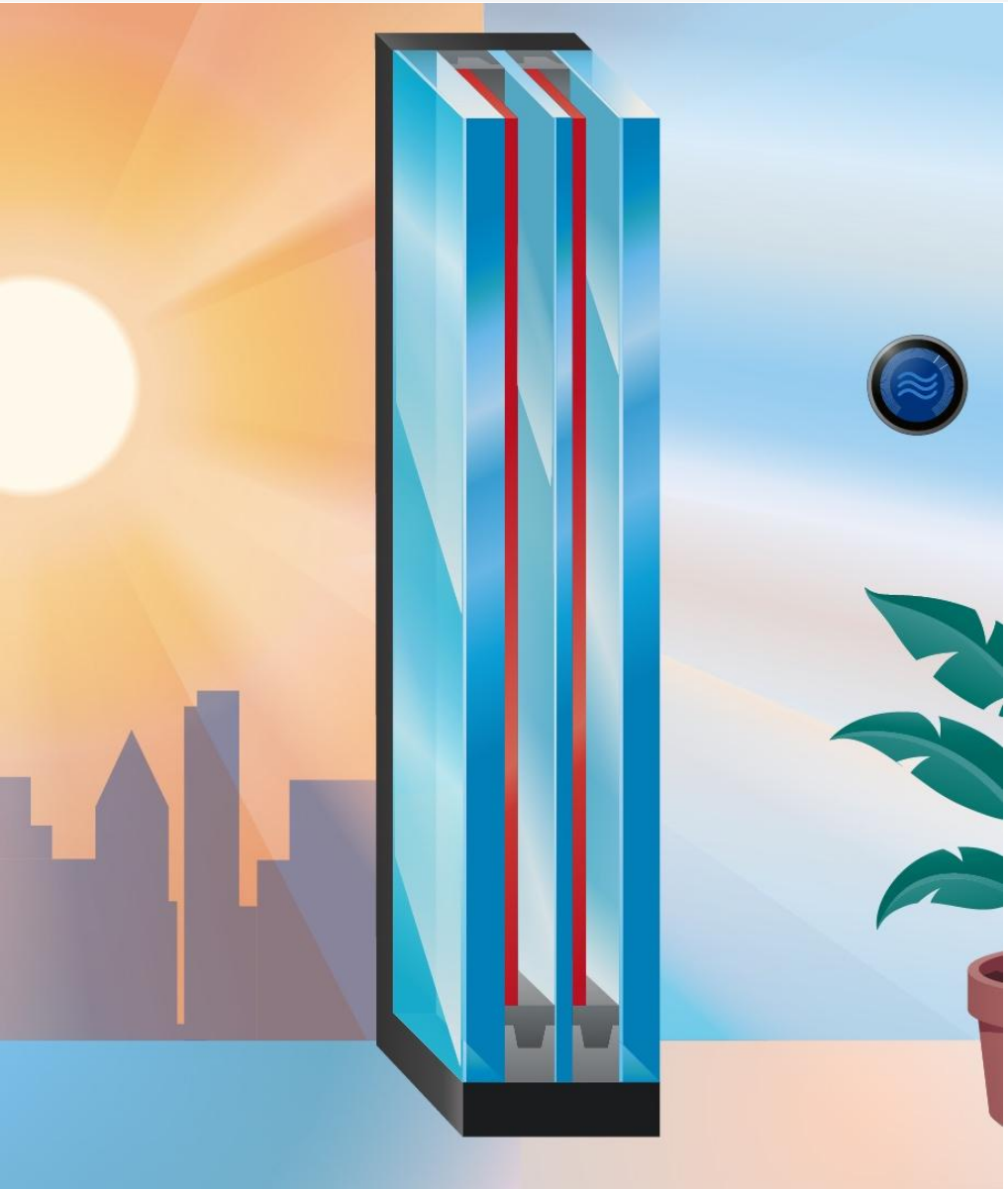
Windows maintain functionality.

Framed by INOVUES

Unique and Specialty Designs Also Benefit from Window Inserts



The Most Advanced Buildings Use Triple and Multi-Pane Units

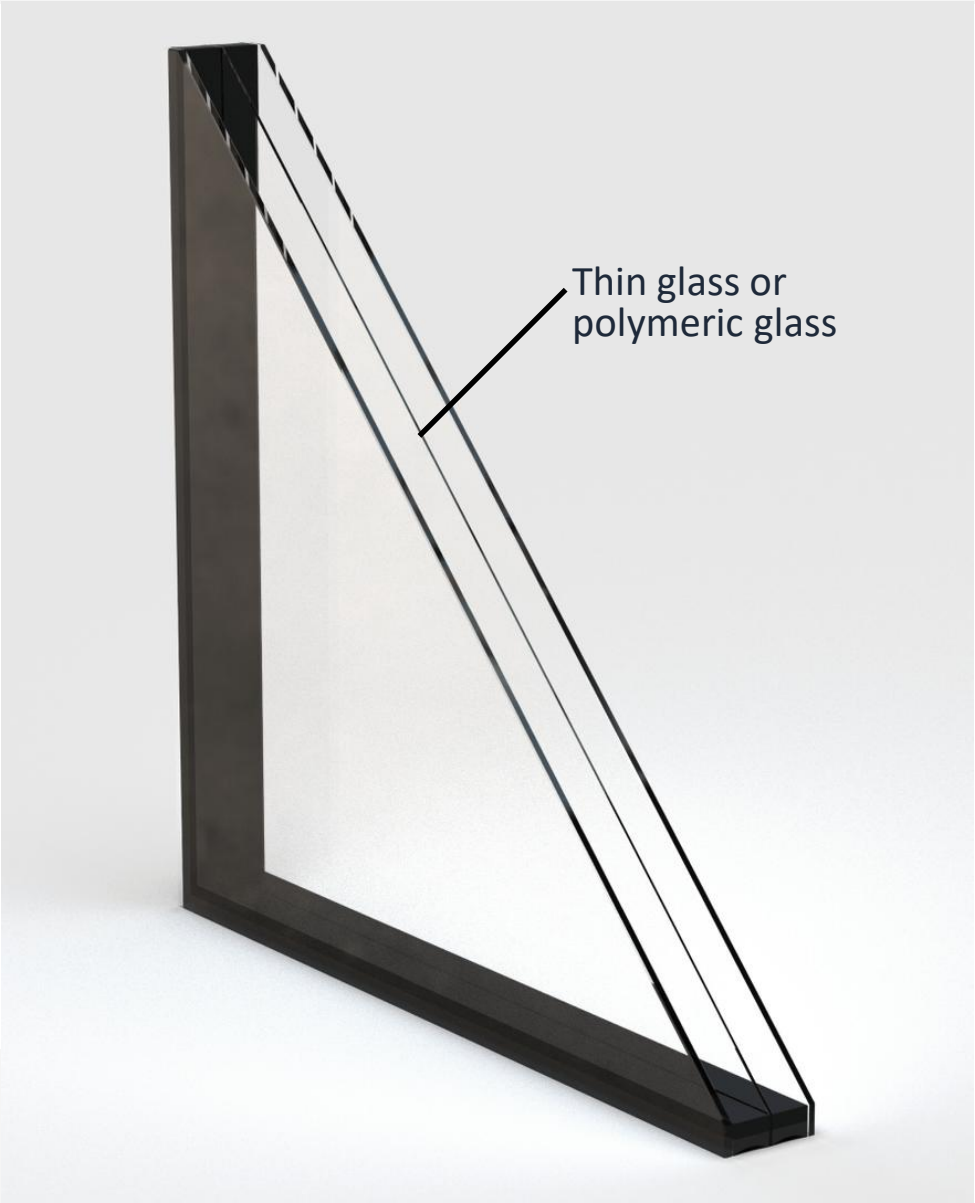


Current triple and multi-pane designs use heavy glass multiplying issues across the value chain.

Current triple products often mean…

- More expensive.
- More glass.
- More complex framing.
- New product development.
- New equipment to manufacture.
- More shipping and handling difficulties.
- More difficult to install.
- Additional envelope support for added weight.

Building Thin Triples with Polymeric and Thin Glass



Slim Profile

Fits in a 0.85-1.25” frame profile with seamless integration into existing designs

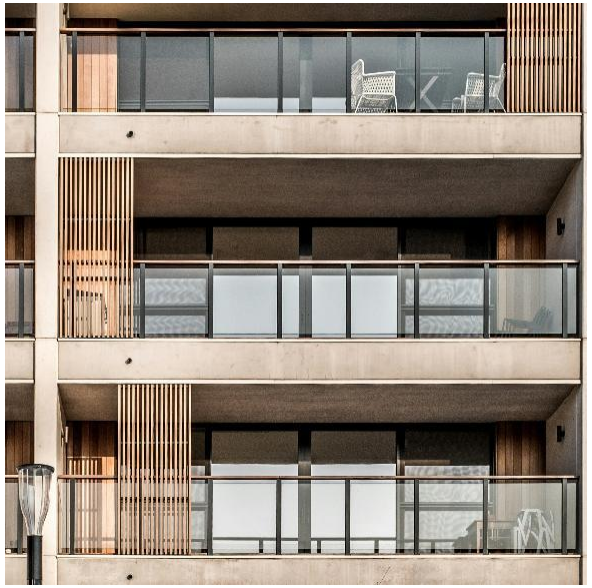
Superior Insulation

Delivers thermal performance of up to R8, doubling standard double-pane efficiency

Similar Weight to Double-Panes

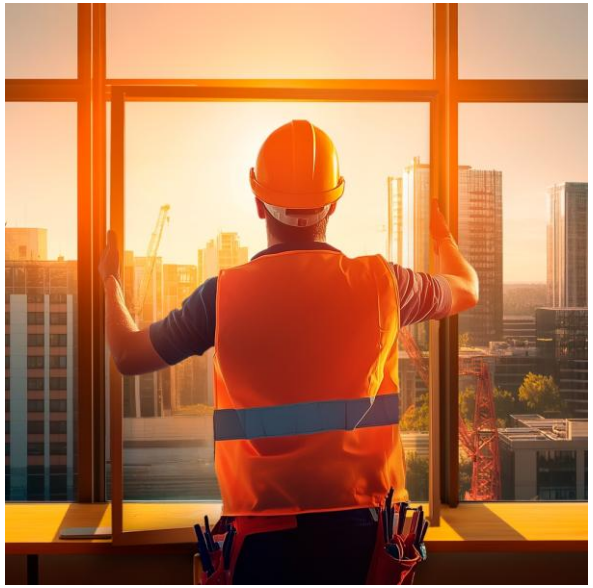
Maintains comparable weight to double-pane units for easy handling and installation

Endless Possibilities for NxLite Solutions



New/Replacement Windows & Doors

Glass, polymer, and hybrid solutions to help meet ENERGY STAR® and other requirements



Storm Windows & Commercial Retrofit

Lightweight, energy-efficient alternatives to window replacements

Commercial Refrigeration

More efficient cooling and operations with NxLite-coated substrates

Transportation, Construction & Agriculture

Automotive, aviation, mass transit, manufactured homes, recreational vehicles, agricultural and construction equipment

NxLite is the Next Generation of Sustainable Glazing for New and Existing Building Envelopes

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Contact Us

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