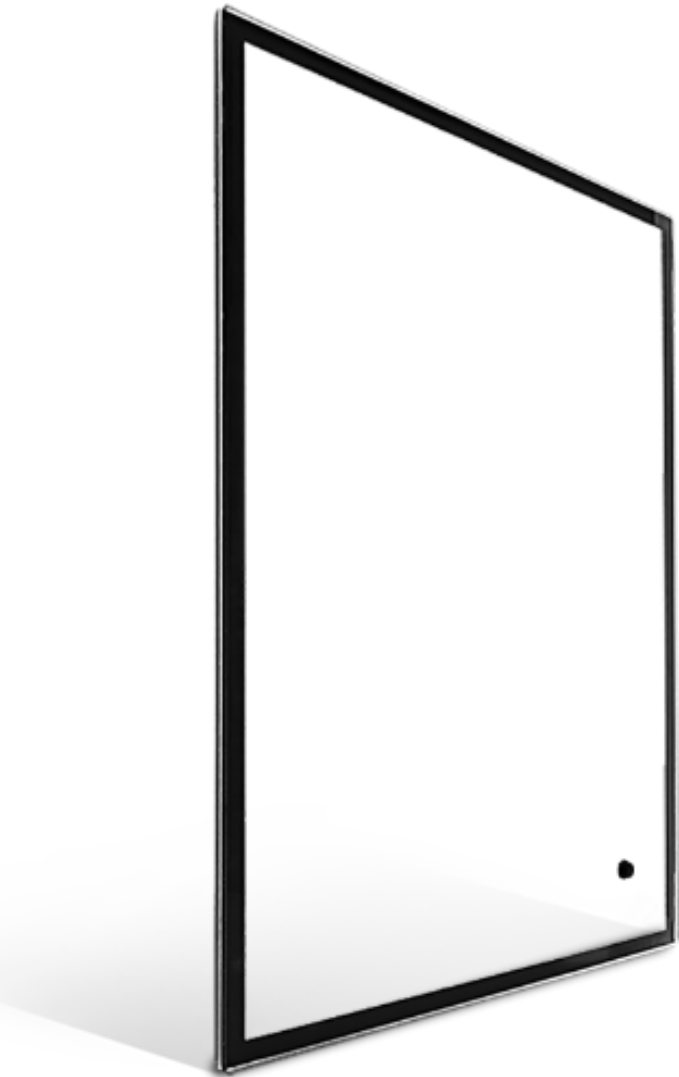




If windows could insulate like a wall...

LuxWall's advanced material science redefined what's possible in window performance by creating **Transparent Insulation**

LuxWall delivers the thermal performance of a wall using vacuum technology to **elevate total window performance**

and you could use the existing frames...

LuxWall Enthermal Transparent Insulation **8-mm to 12-mm slim profile** enables Glass Only Retrofits using the existing frames

Fiberglass Insulation. R18. 140-mm.



LuxWall Entermal. R18. 8-mm.



Transparent Insulation Makes It Possible



LuxWall Retains Heat in the Winter and Cool in the Summer



- ELIMINATES convective heat transfer
- SIGNIFICANTLY REDUCES conductive heat transfer
- BLOCKS up to 60% of solar radiation

**Enthermal vacuum technology
R18 center of glass performance**

LuxWall Enthermal is a Thermos[®] For Buildings

Enthermal "Glass Only Retrofits" reduce glazing capital up to 60% and energy draw up to 45% to deliver a 3 to 10-year property owner payback

Status Quo
Replace
Existing Windows

\$125 - \$175
Installed Cost per ft²
10% - 30%
Energy Savings

15 - 25 Years
Payback Period
15.7 kg / ft²
Embodied Carbon

YES
Tenant Displacement
26 - 28
Sound OITC

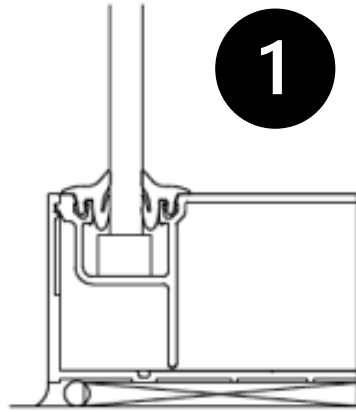
LuxWall
Glass Only
Retrofit

\$55 - \$90
Installed Cost per ft²
30% - 50%
Energy Savings

3 - 10 Years
Payback period
4.9 kg / ft²
Embodied Carbon

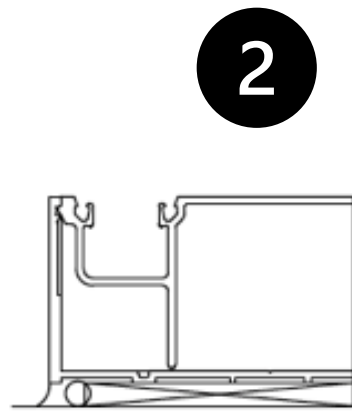
NO
Tenant Displacement
31 - 32
Sound OITC

LuxWall Value Proposition



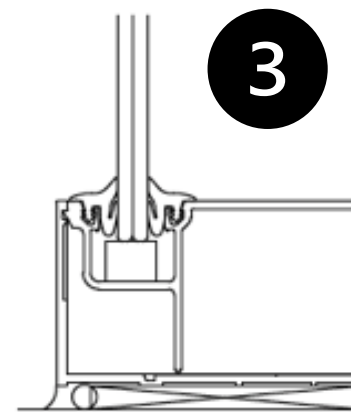
Remove Existing Glass

Remove Sealants
Remove Gaskets
Remove Tape
Remove Glass



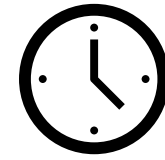
Clean and Repair Frame

Clean Frame
Repair Leakage Sources
Weatherize Frame



Install Enthermal

New Enthermal units
New Tape : Gaskets
New Reducers : Blocks
New Weather Sealing



**Retrofit a Window
In Less Than
60 Minutes**

**No Tenant
Displacement.**

**Up to 60% Glazing
CAPEX Reduction.**

LuxWall “Proven” Glass Only Retrofit Changes the Game

LuxWall Glass-Only Retrofit Solutions



Enthermal

R-18 COG

4.2 kg/ft² eCO₂

33 STC (in frame)

8-mm to 12-mm



Enthermal+

R-21 COG

7.2 kg/ft² eCO₂

35 STC (in frame)

18-mm to 25-mm



Enthermal Insert

R-22 COG

9.4 kg/ft² eCO₂

37 STC (with insert)

25-mm to 40-mm

Single Pane Retrofit

New gaskets, tape, and sealants.

Double Pane Retrofit

Pocket reducer + retrofit kit.

Double Pane Retrofit

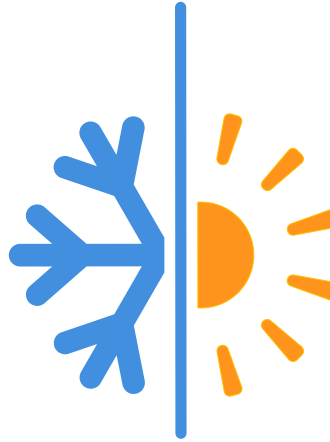
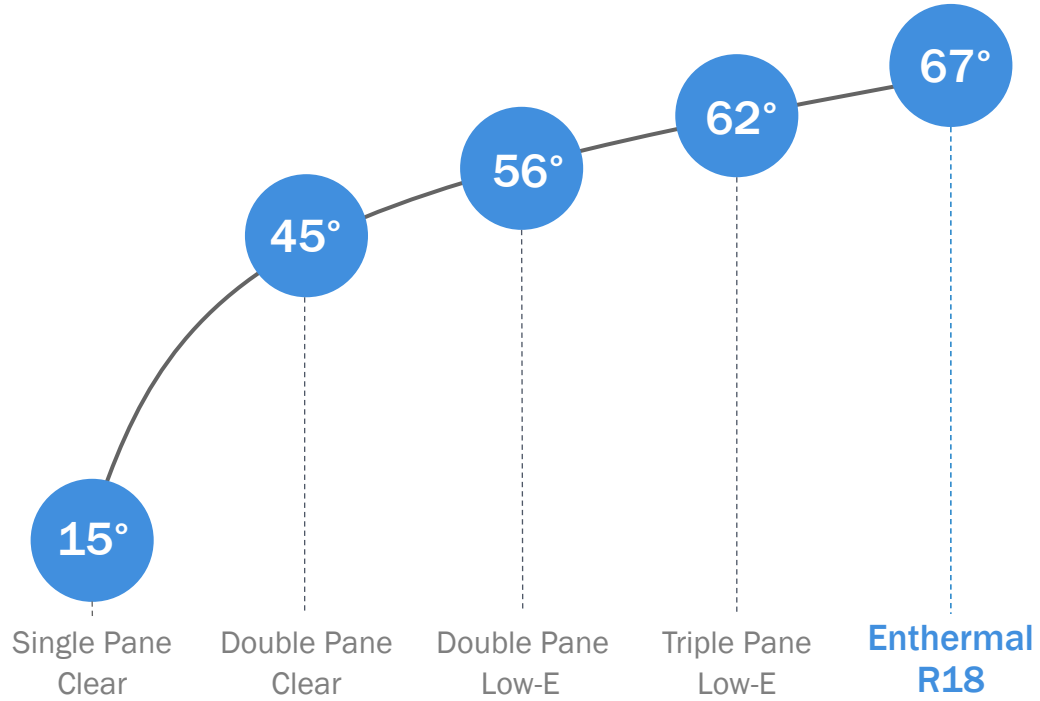
New gaskets, tape, and sealants.

Sourced via LuxWall Certified
Enthermal+ Fabricator Network

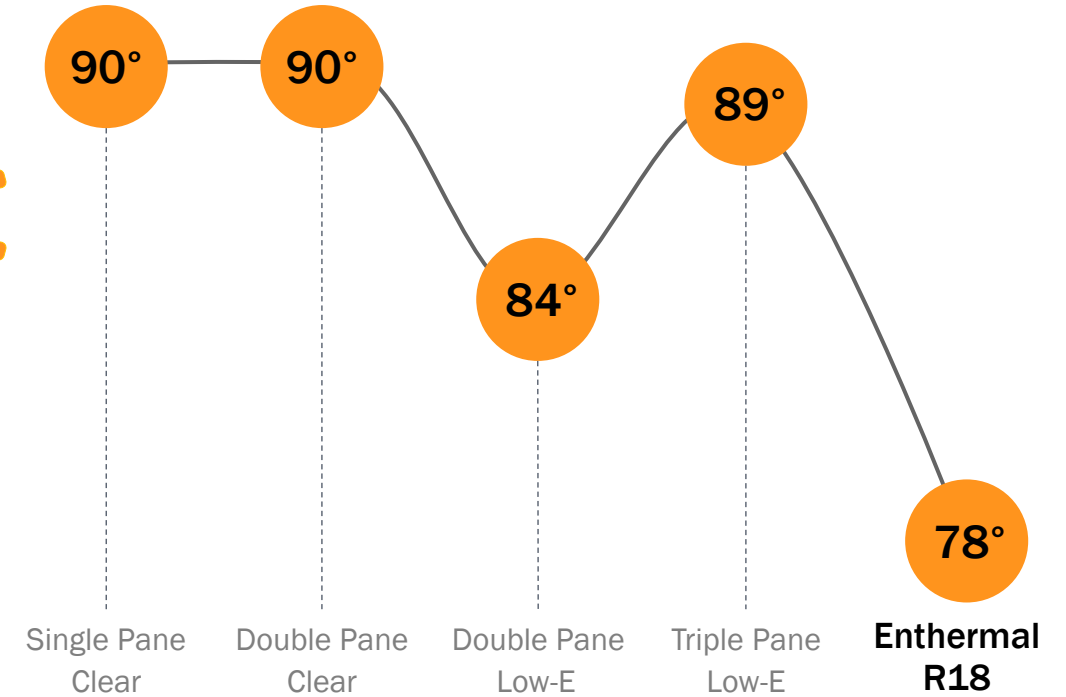
Retrofits where existing glazing
cannot be removed.

Sourced via LuxWall Partners :
Indow, QuantaPanel, and Inovues

Winter Interior Glass Surface Temperature (°F)



Summer Interior Glass Surface Temperature (°F)



WARMEST interior **WINTER** temperatures

COOLEST interior **SUMMER** temperatures

Highest Comfort with the Lowest Energy Cost



NY Presbyterian

Location: NYC, New York
Glazier: Adler Glass
Frame: Aluminum No Thermal Break
Validation: BET, Inc.
Glass Retrofit: 4Q24 – 4Q25



Weather 52° - 73° F



Thermostat 73° F

Enthermal Retrofits	Window M&V R-value	AI (50 mph) cfm/ft²
Double Pane Clear	1.30	0.70
Enthermal (10-mm)	9.88	0.28
Enthermal+ (24-mm)	17.06	0.28
Enthermal Insert (10-mm)	21.67	0.23



Location: Boulder, CO

Owner: P.N. Eklund

VAR Glazier: JRB Service

Installation: 1Q25

Glazing CAPEX Reduction: 55%

Payback Period: 8-years

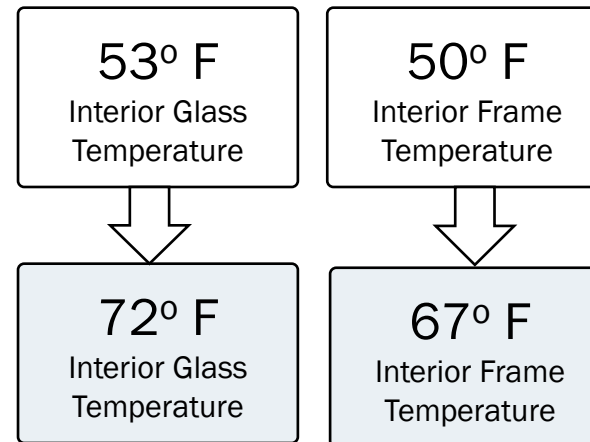
Re-Glaze Incentives: None



Weather 28° F



Thermostat 72° F



Existing Glazing

Double Pane 6-mm Bronze Glass
R-value 2.0 (COG) and aluminum
frame with no thermal break

Glass Only Retrofit

Enthermal 5-mm : 5-mm
R-value 18.0 (COG)

Randolf Center - Office



Location: Chicago, IL

Glazier: Christopher Glass

Frame: Aluminum No Thermal Break

Glass Only Retrofit Pilot: 4Q24



Weather 34° F

49° F

Interior Glass
Temperature

50° F

Interior Frame
Temperature

73° F

Interior Glass
Temperature

57° F

Interior Frame
Temperature



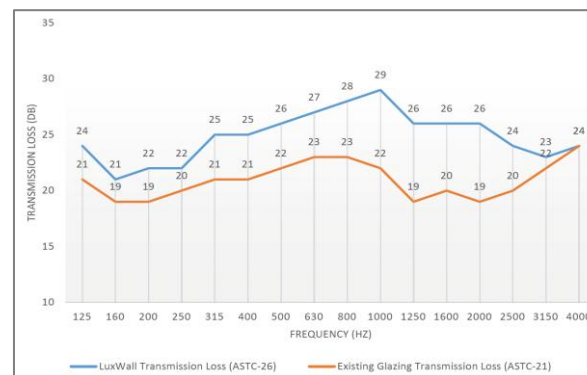
Thermostat 73° F

Existing Glazing

Single Pane 6-mm Clear Glass
R-value 1 (COG)

Glass Only Retrofit

Enthermal 5-mm : 5-mm
R-value 18 (COG)



Sound Attenuation

Significant reduction in street
noise levels (500 to 1500 Hz)

Prairie Shores – Multi-Family



1250 Broadway

Location: NYC, New York
Owner: Global Holdings
VAR Glazier: Kilroy Architectural
Validation: BET, Inc.
Glass Retrofit: 4Q2025
Glazing: 57,000 ft²



Weather 54° - 83° F



Thermostat 71° F

Total Window Results	Existing Glazing	LuxWall Glass Retrofit
u-Factor (BTU/hrft2F)	0.58	0.14
Heat Loss (BTU/ft2h)	11.1	2.6
Heat Loss (BTUs per year)	6.04M	1.41M

ConEd utility calculations.





20-Year Warranty

LuxWall offers a 20-year warranty on Enthermal product including Rvalue performance, LuxWall design issues, and manufacturing defects.



LuxWall Accelerated Durability Testing

Enthermal has undergone accelerated durability validation and stress testing to ensure the product satisfies the warranty and useful life.



3rd Party Validation

LuxWall has performed required and incremental 3rd party tests including ASTM, IGCC, SGCC, AAMA, ISO, NFRC, TSCA, RoHs, and OSHA.

Backed by LuxWall



Energy Efficiency

4X increase in Rvalue reduces **energy draw** up to **50%** and improves **HVAC useful life** and **maintenance costs**.



Increased Comfort

Enthermal has the **highest winter glass** temperature and the **lowest summer glass** temperature.



Sound Reduction

LuxWall **vacuum** technology improves **sound attenuation** by **20%-30%** at target low frequencies.



Environmental Impact

Enthermal retrofits have the **highest operating CO₂** impact, **lowest embodied CO₂** and are **100% recyclable**.



Best Payback

LuxWall retrofits deliver a **3 to 10-year payback** by reducing glazing **CAPEX** up to **50%** and **no tenant displacement**.

LuxWall Delivers the highest ROI for property owners

Made in America



R&D Center

- Ypsilanti, MI
- Pilot Production Line
- 18" x 26" Max Size
- Operational
- R&D Product Validation



Factory 1

- Litchfield, MI
- 60" x 96" Max Size
- 12" x 18" Min Size
- Operational
- Commercial & Residential



Factory 2

- Detroit, MI
- 60" x 120" Max Size
- 16" x 20" Min Size
- Shipments August 2026
- Commercial & Residential



Automated Production

- Make-to-Order Production
- +/- 1/16" Size Increments
- Tempered Glass
- < 4-week lead times
- < 1-week remake lead times

Siemens Moonshot



Dallas, TX / 1.3K ft2
Owner: Siemens
Status: Completed March 2025

Randolf Center



Boulder, CO / 9.8K ft2
Owner: PN Eklund Realty
Status: Completed March 2025

GSA Cohen Building



Washington, DC / 1.2K ft2
Owner: GSA
Status: Completed April 2025

Golden Hill



Lakewood, CO / 21K ft2
Owner: Propp Realty
Status: Completed June 2025

Litchfield Schools



Litchfield, MI / 1K ft2
Owner: Litchfield Public Schools
Status: Completed July 2025

P&G Geneva



Geneva, SUI / 3.1K ft2
Owner: Procter and Gamble
Status: Completed August 2025

OWH



Omaha, NB / 1K ft2
Owner: City + Ventures
Status: Completed August 2025

Chase Bank



Loveland, CO / 1K ft2
Owner: JP Morgan Chase
Status: Completed October 2025

Hartford Library



Hartford, CT / 6.7K ft²
Owner: City of Hartford
Status: Glazing Phase

Scott Park



Toledo, OH / 13.4K ft²
Owner: City of Toledo
Status: Glazing Phase

U of C Duane



Boulder, CO / 3K ft²
Owner: University of Colorado
Status: Glazing Phase

Millet Mountain



Annecy, France / 4.7K ft²
Owner: Millet Mountain Group
Status: Glazing Phase

West 96th Street



New York, NY / 6.5K ft²
Owner: Equity Residential
Status: Glazing Phase

Bedrock Detroit



Detroit, MI / 10.8K ft²
Owner: Bedrock Detroit
Status: Glazing Phase

Clark Logic



Litchfield, MI / 4.2K ft²
Owner: Clark Logic
Status: Glazing Phase

TN State Capitol



Nashville, TN / 6.7K ft²
Owner: State of Tennessee
Status: Glazing Phase

Toledo Museum



Toledo, OH / 4.7K ft2
Owner: Museum of Art
Status: In Production

Craig Hospital



Englewood, CO / 10.2K ft2
Owner: Craig Healthcare
Status: In Production

1250 Broadway



New York, NY / 57K ft2
Owner: Global Holdings
Status: In Production

SE Fountain School



Veedersburg, IN / 6.4K ft2
Owner: Fountain Charter School
Status: In Production

Hotel Nobu



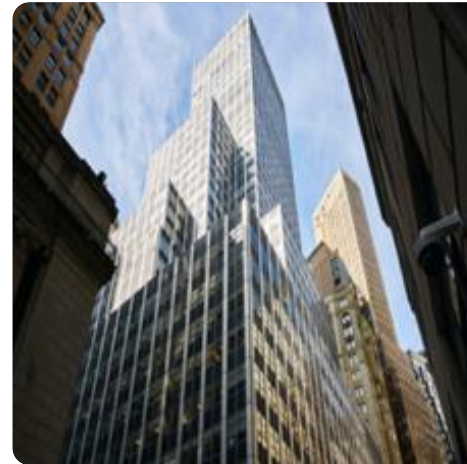
New York, NY / 4.4K ft2
Owner: Nobu Hotel Group
Status: SOP December 2025

591 Finch



Pickering, ON / 7.5K ft2
Owner: Sionto Group
Status: SOP December 2025

99 Park Avenue



New York, NY / 43.6K ft2
Owner: Global Holdings
Status: SOP February 2026

1 Woodward



Detroit, MI / 96.5K ft2
Owner: Bedrock Detroit
Status: SOP March 2026