

Nano Thermic Low-E Membrane for Windows

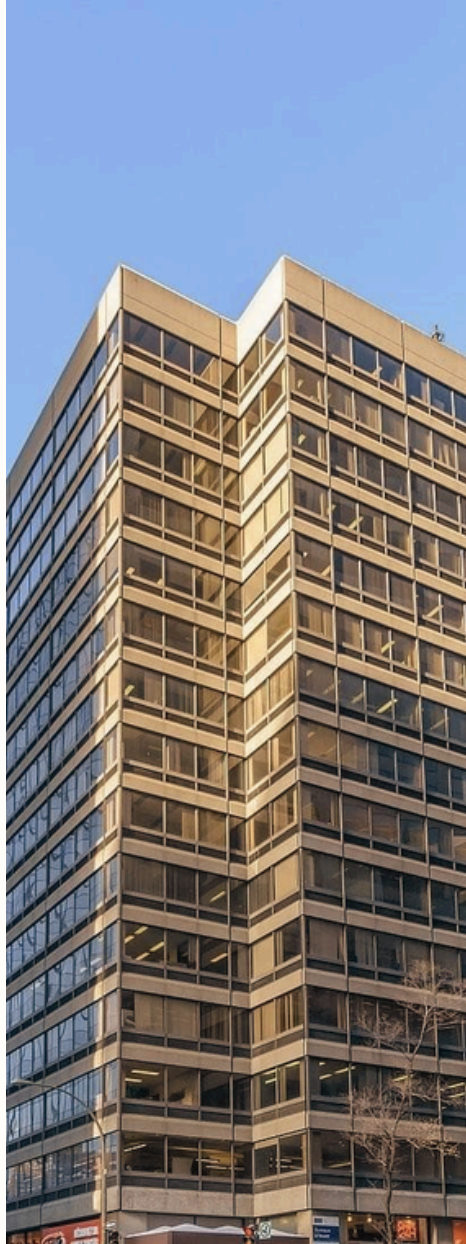
Increasing comfort and **reducing cost** by transitioning buildings towards greater **energy efficiency** and **decarbonization**

Many commercial and institutional buildings lose significant energy through underperforming windows, resulting in higher heating and cooling costs, uneven indoor temperatures and increased carbon emissions. We can solve this challenge with a nanothermal Low-E membrane that **upgrades existing windows** into high-performance thermal barriers—**improving comfort and energy efficiency** without the cost, disruption or waste associated with window replacement.

Applied directly onto existing windows, this **clear membrane** dramatically improves temperature control in both extreme high and low temperatures, without the cost or disruption of construction. The solution has already proven itself across multiple pilot projects and successful installations:

- **Tim Hortons (Canada):** A case study found a return on investment of 1 year 7 months to 2 years 7 months, with window related energy losses reduced by 20 to 40%.
- **Iberostar Hotels (Mexico & Dominican Republic):** Avoided a costly HVAC system replacement for a fraction of the planned investment by easing the load on air conditioning systems and reducing solar glare.
- **2075 Robert Bourassa Boulevard:** Achieved nearly 30% savings in the first year alone and avoided a window replacement that would have cost roughly 10 times as much.





Why Nano thermal Low-E Membranes?

- **In winter**, the consumption of heating systems will be reduced.
- Our protection reduces perceived **light penetration** by only 12% and customers noted increased vibrancy of colours.
- **In summer**, temperature control will be facilitated by reducing heat penetration.
- Between **20% and 40% savings** on heating and air conditioning costs.
- Increases **material life cycle** by preventing fading.
- Reduces reliance on HVAC, lowering **greenhouse gas emissions**.
- One of the few solutions approved by **Health Canada**.

INFRARED RAYS REDUCTION
Heat management (Incoming/Outgoing)

95%

ULTRAVIOLET RAYS REDUCTION
Lifetime increase of furnitures, fabrics and materials, etc.

99%

WARRANTY
On installation and performance

10 years

RETURN ON INVESTMENT ESTIMATED
Varies with building and energy costs

2-3 years

How it Works

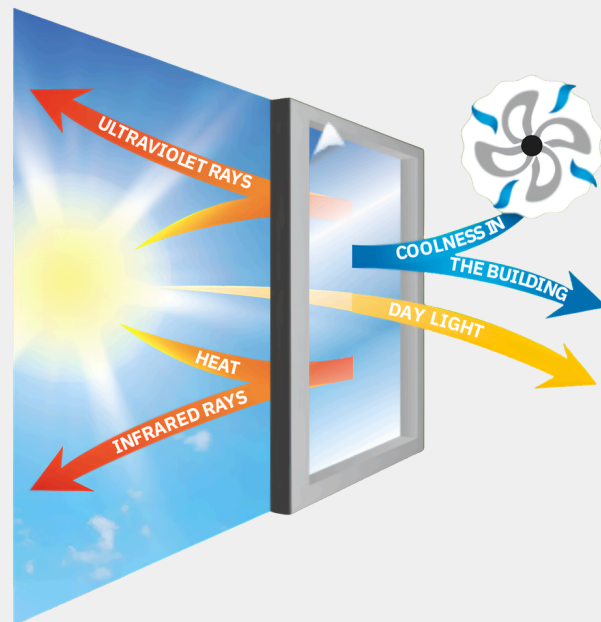
WINTER/Low Temperature

- ✓ Reduces heat loss through windows
- ✓ Reduces heating costs
- ✓ Reduces condensation formation by up to 50%
- ✓ Keeps heat in the building



SUMMER/High Temperature

- ✓ Significantly reduces solar energy penetration
- ✓ Significantly reduces air conditioning costs
- ✓ Reduces the indoor greenhouse effect when combined with air conditioning
- ✓ Keeps the building cool



Case Photos



Tested and Certified in Conformity With:

- Health Canada ecological requirements
- EPA ecological performances Standards
- RoHS / REACH requirement
- Low Volatile organic compound EPA
- Accelerated aging test
- Without PFAS / PFOS
- Fire Tested



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