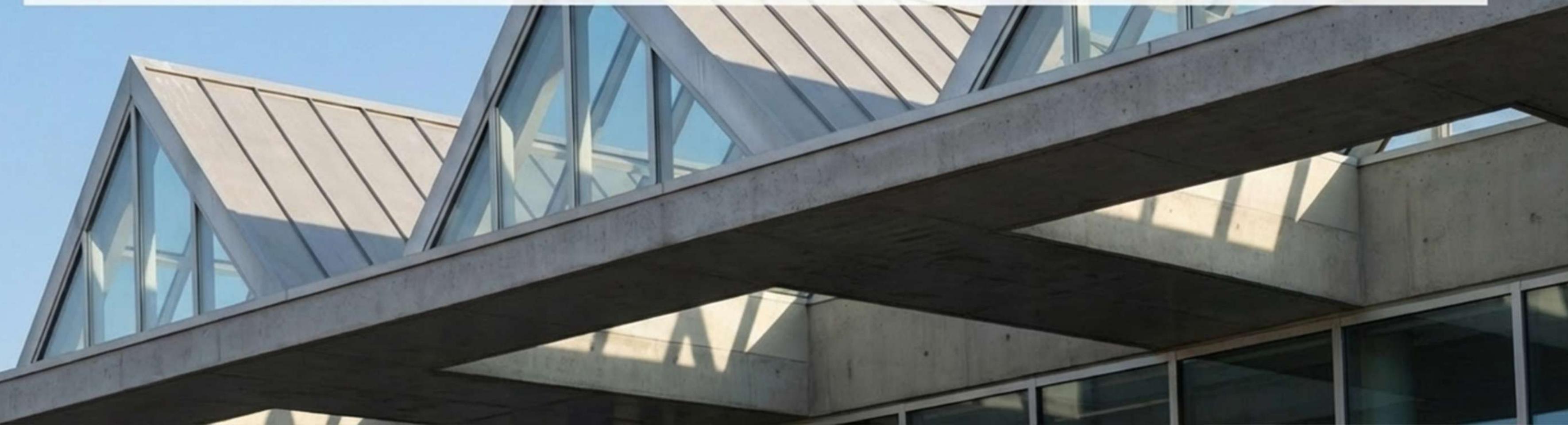


Rethinking the Roofline: Transforming Skylights from a Liability into a High-Performance Asset

An Introduction to Thermo-Skylight Shield



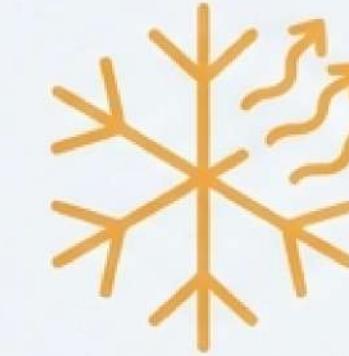
The Skylight Performance Dilemma

Skylights introduce valuable natural light, but they are often the **weakest point** in a building's envelope, creating a paradox for architects, owners, and facility managers. They represent a critical source of inefficiency and asset risk.



Excessive Heat Gain

Unchecked solar radiation drives up HVAC costs and creates uncomfortable interior environments.



Uncontrolled Heat Loss

Inefficient skylights act as thermal windows in colder climates, increasing heating expenses.



Chronic Water Infiltration

Failing seals and material degradation lead to leaks, causing costly damage to interiors and structures.



Accelerated Asset Damage

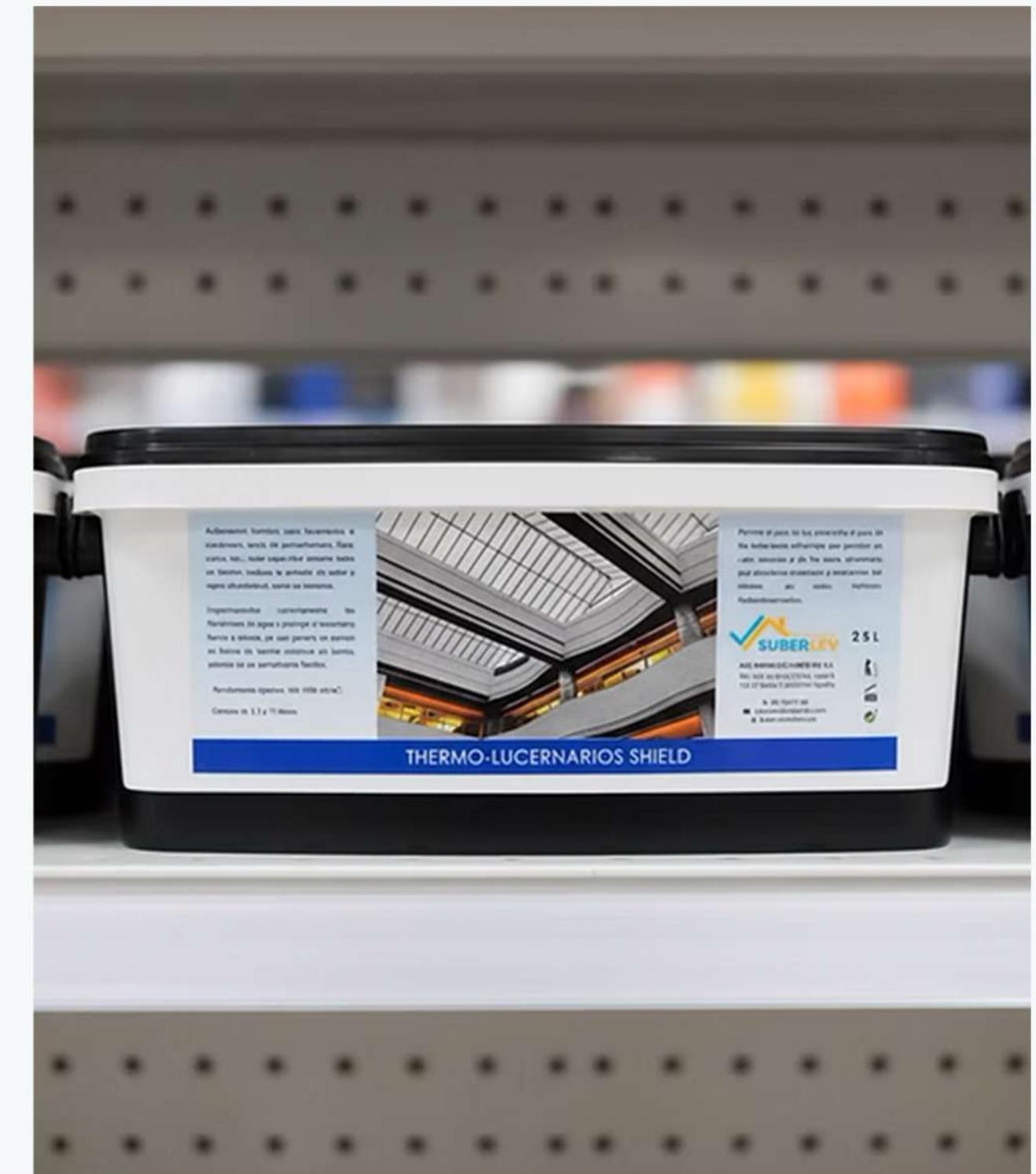
Constant UV exposure fades and deteriorates valuable merchandise, furniture, and flooring.

A Unified Solution: Thermo-Skylight Shield

Thermo-Skylight Shield by Suberlev is a high-performance thermal corrective paint engineered to resolve the skylight dilemma. It transforms vulnerable rooflights into robust, efficient components of the building envelope.

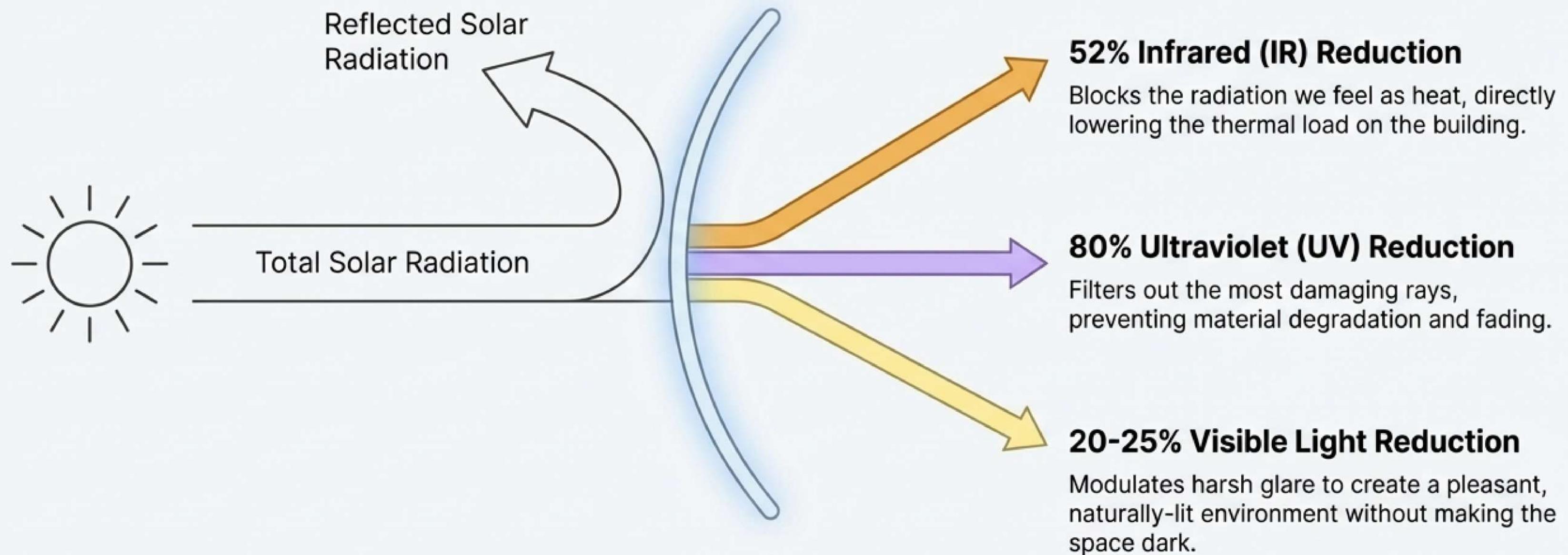
Formulated with a water-based **aliphatic polyurethane membrane** and special **reflective micropigments**, it creates a seamless protective shield.

Neutralizes up to
90% of thermal transfer
through skylights



The Science Behind the Shield

The coating's effectiveness comes from its ability to selectively manage the solar spectrum, preventing unwanted energy from penetrating the building envelope.



The Three Pillars of Value

The strategic benefits of Thermo-Skylight Shield are built on three foundational pillars that deliver a measurable return on investment.



Pillar 1: Energy Efficiency

Reduce operational costs year-round.



Pillar 2: Enhanced Durability

Fortify structural integrity and prevent damage.



Pillar 3: Asset Protection

Safeguard interiors and their contents.



Pillar 1: Driving Energy Efficiency

By creating a powerful thermal barrier, Thermo-Skylight Shield prevents heat exchange, directly reducing energy consumption and lowering utility bills.

Key Mechanisms

- **Reduces Cooling Load**

Reflects 52% of infrared radiation, minimizing solar heat gain and lessening the demand on HVAC systems in warm climates.

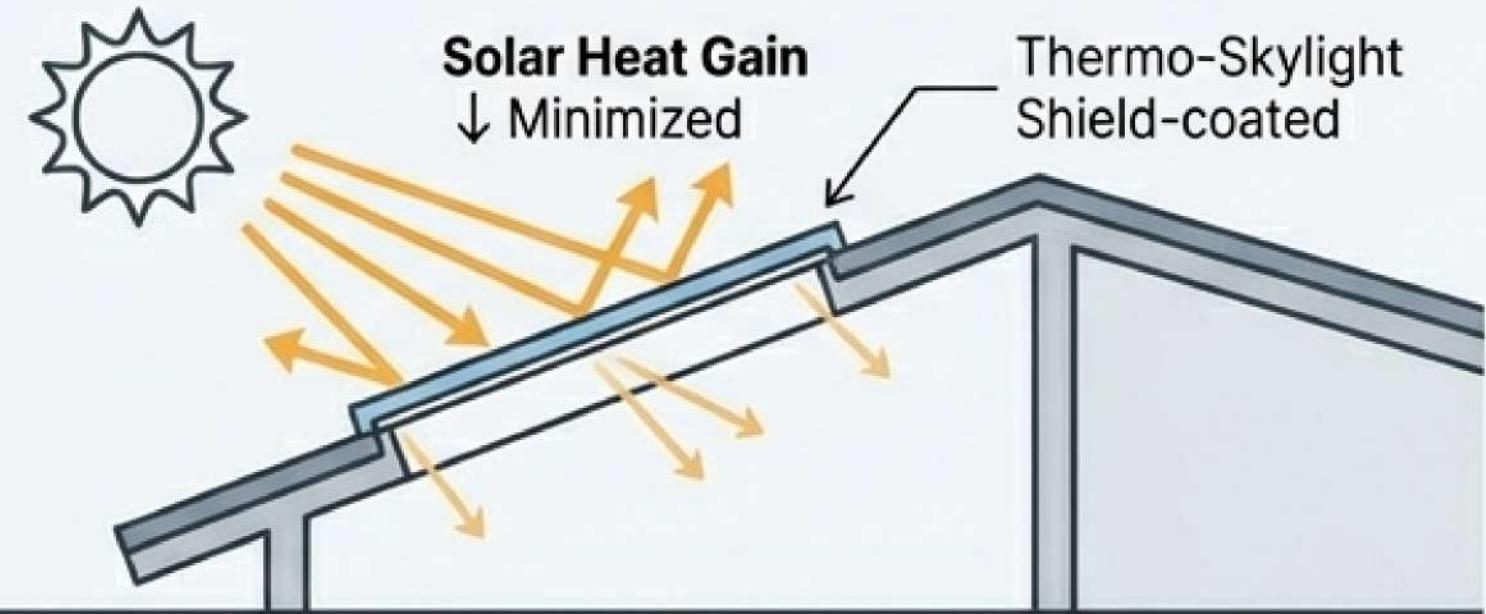
- **Minimizes Heat Loss**

Acts as a thermal insulator, reducing heating costs in cold climates.

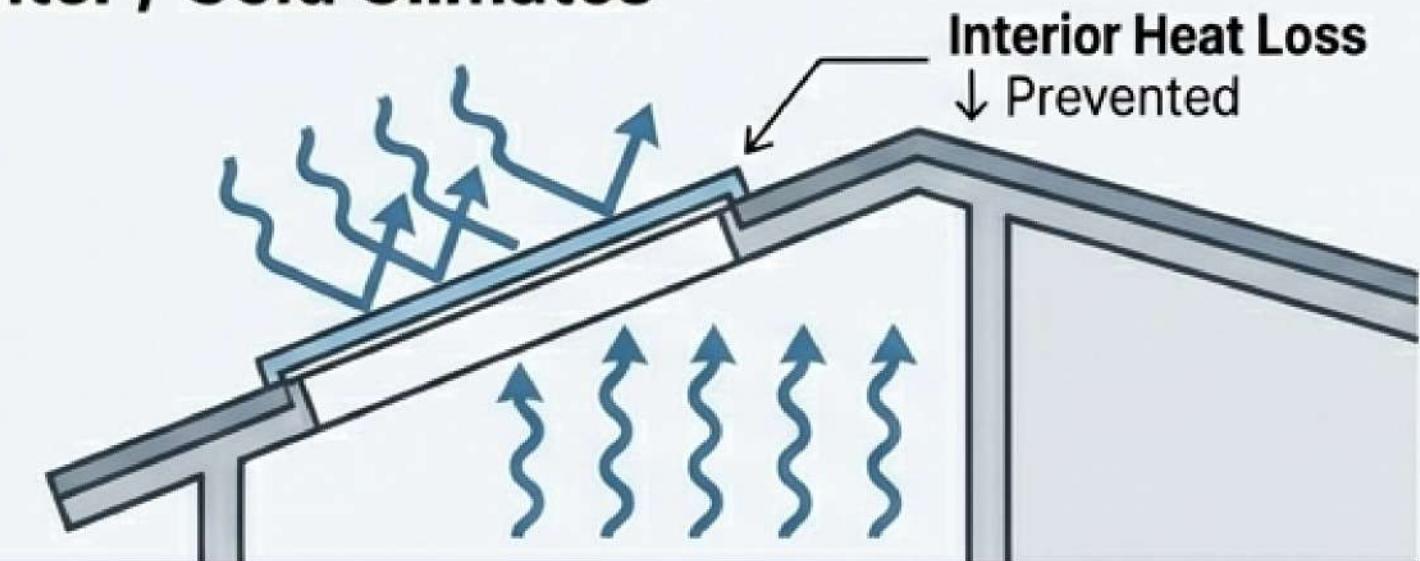
- **Controls Condensation**

Stabilizes the skylight surface temperature, preventing moisture buildup that can lead to mold and water damage.

Summer / Warm Climates



Winter / Cold Climates





Pillar 2: Fortifying Durability & Integrity

The product's aliphatic polyurethane formulation is engineered for long-term resilience against weathering, UV degradation, and physical stress.

- **Exceptional Resistance:**

The cured membrane is resistant to hydrolysis, alkalis, and does not yellow over time, ensuring aesthetic and functional longevity.

- **Walkable Surface:** Becomes trafficable for maintenance within 48-72 hours. A non-slip finish can be achieved by adding quartz aggregate.

System-Based Protection (Critical Note)

For complete waterproofing and enhanced breakage protection on glass or fiberglass, a mandatory preparatory application of a pure acrylic membrane (1.5-2 L/m²) is required. This creates a continuous, seamless film that reinforces the substrate.



Pillar 3: Safeguarding Interior Assets

Beyond protecting the building structure, Thermo-Skylight Shield provides a crucial layer of defense for the valuable assets within.

- **Prevents UV Degradation:** By blocking 80% of UV radiation, the product acts as a powerful screen against the primary cause of fading and material breakdown.
- **The 'So What?':** This directly prevents costly deterioration of furniture, commercial merchandise, flooring, and artwork, extending their service life and preserving their value.



Before



After

Performance Data: Technical Snapshot

The following specifications validate the performance characteristics of Thermo-Skylight Shield.

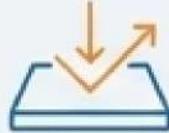
Attribute	Specification
Composition	Water-based aliphatic polyurethane membrane with reflective micropigments
Solar Radiation Reflection	Up to 90%
Infrared (IR) Reduction	52%
Ultraviolet (UV) Reduction	80%
Visible Light Reduction	20-25%
Finish / Color	Very silky, satin / Translucent, Snow-White
Recommended Consumption	0.15-0.25 L/m ² (in 2-3 coats)
Walkable Time	48 to 72 hours
Application Temperature	5°C to 45°C
Density	1 kg/L ± 5%

Ensuring Performance & Quality Assurance

Achieving specified performance is dependent on a systematic approach to quality control, from substrate to final coat.

The Framework for Success

1. Substrate Suitability



Engineered for optimal adhesion and performance on Polycarbonate, Fiber, and Glass skylights.

2. Meticulous Surface Preparation



A mandatory prerequisite. The surface must be perfectly clean, dry, stable, and free of contaminants. Polished surfaces must be abraded to open their pores. Existing biological growth must be treated with a fungicide (e.g., Fungilev).

3. Professional Installation Mandate



To guarantee results and validate the warranty, SUBERLEV products **must be applied by manufacturer-approved installers**.

4. Third-Party Validation



Performance specifications are verified by independent laboratories, including **AIDICO**, providing an additional layer of confidence.

Ideal Applications

Thermo-Skylight Shield is engineered as a targeted solution for specific materials and building challenges to ensure optimal performance.

Perfect for these Skylight Materials:

- ✓ Polycarbonate
- ✓ Fiber
- ✓ Glass

Ideal for these Scenarios:

- ✓ Buildings with excessive solar heat gain and high cooling costs.
- ✓ Facilities where condensation on skylights is a recurring issue.
- ✓ Commercial spaces requiring protection for UV-sensitive merchandise or interiors.
- ✓ Projects aiming to reinforce older glass or fiberglass skylights against breakage.
- ✓ Roofs where skylights require a walkable, non-slip surface for maintenance access.

Help Us Help You

Innovation in Protection.



The information provided is based on extensive practical experience and laboratory testing.
We recommend practical tests to ensure compatibility for each specific application.