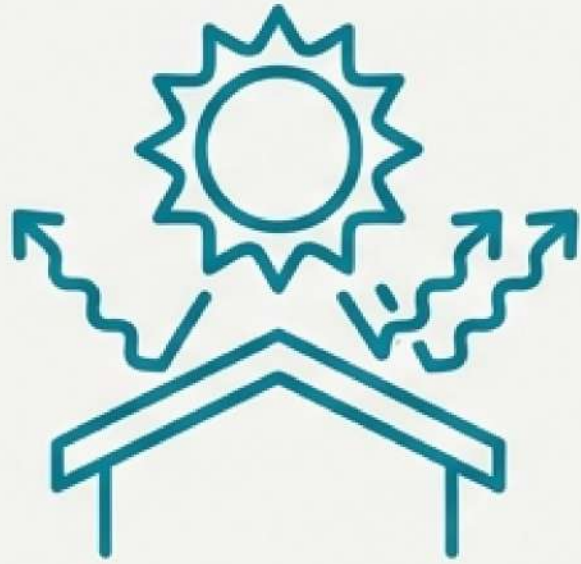


# **Suberlev® Thermo-Roofs Shield: An Engineer's Guide to Advanced Building Envelope Protection**



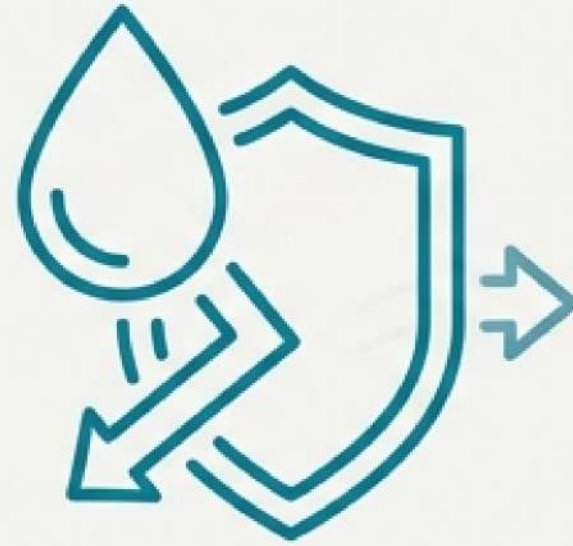


# The modern building envelope demands more than just a covering; it requires an active performance system.



## Thermal Management

Neutralize solar radiation to reduce energy consumption for heating and cooling, and to improve overall occupant comfort.



## Water & Moisture Intrusion

Prevent leaks and water ingress while simultaneously allowing the structure to breathe to mitigate the risks of condensation, mold, and structural decay.

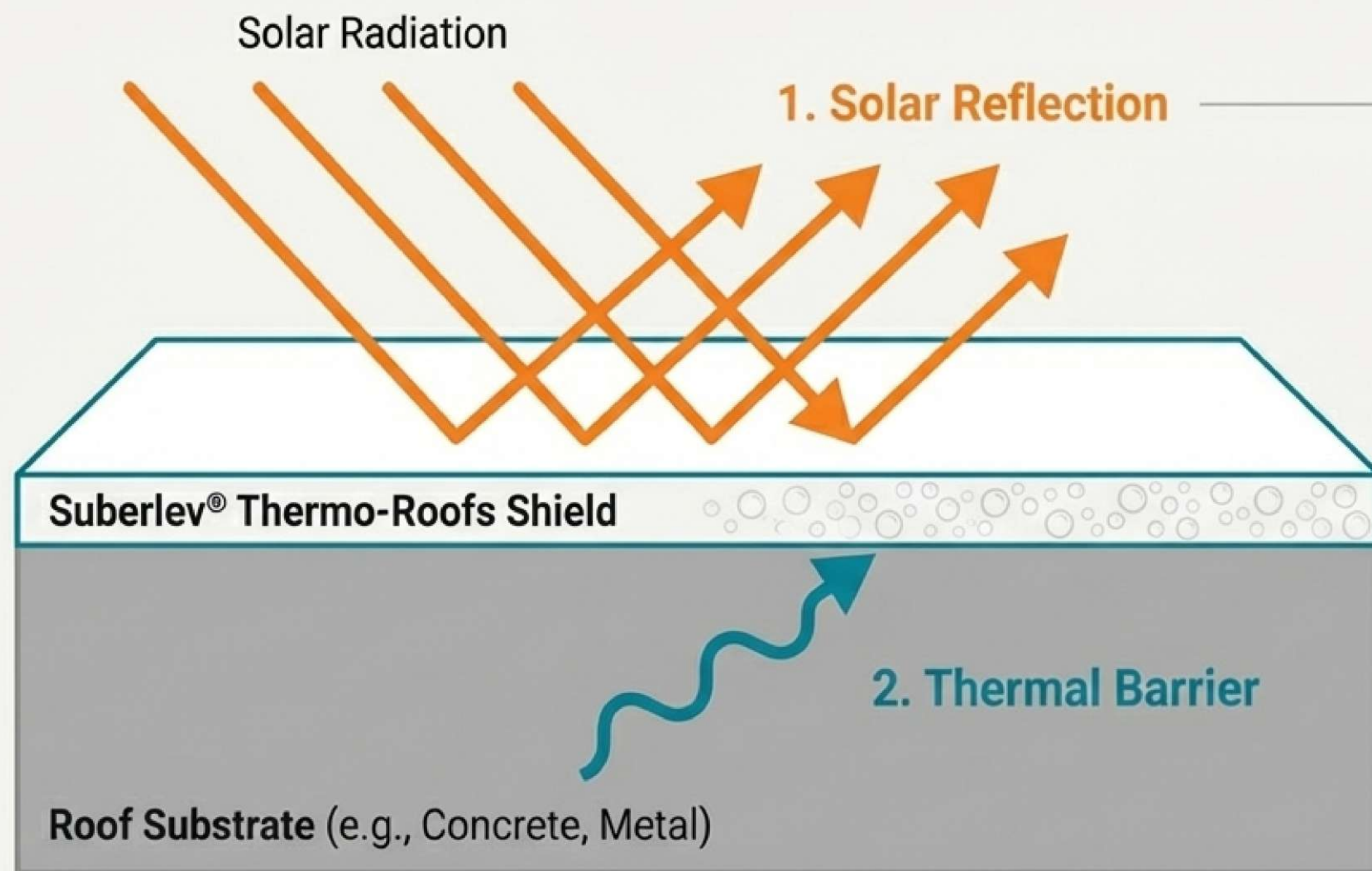


## Long-Term Durability

Ensure performance over the building's lifecycle against UV radiation, weathering, and structural movement to reduce maintenance and replacement costs.



# An engineered synergy of reflection and insulation.



## Solar Reflection

Special reflective micropigments act as a mirror, bouncing solar radiation away from the surface before it can be absorbed as heat. This is the first line of defense against solar heat gain.

## Thermal Barrier

Microscopic hollow spheres ( $\leq 28 \mu\text{m}$ ) suspended in a flexible acrylic resin create a thermal barrier. Their low thermal conductivity ( $0.05 \text{ W/m.K}$ ) dramatically slows heat transfer (conduction/convection), creating a seamless, waterproof, and elastic membrane.



# More Than a Coating, An Engineered System



**The Coating:** Suberlev® Thermo-Roofs Shield



**The Primer:** Suber-Fix for optimal adhesion on dusty or absorbent surfaces



**The Repair:** Thermal Mastic for treating minor cracks and defects



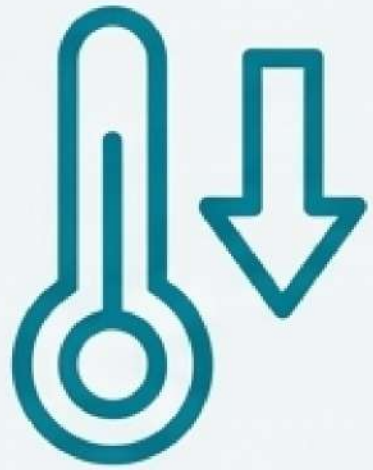
**The Reinforcement:** Fiberglass mesh (60-80 g/m<sup>2</sup>) for structural integrity on complex surfaces



**The Finish:** Suberlev practicable varnish for walkable surfaces & to ensure the 7-year warranty on flat roofs



# One system delivers four dimensions of building protection and performance.



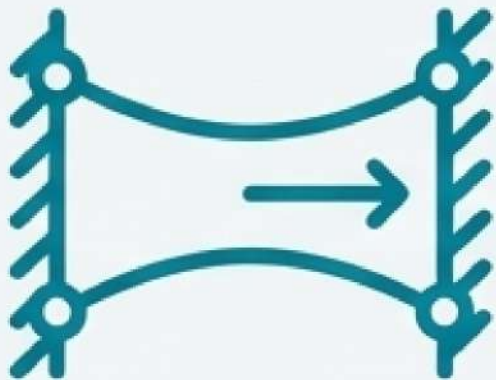
## Exceptional Thermal Insulation

Reduces roof temperatures by over **40%** and heat flow by **73.84%**.



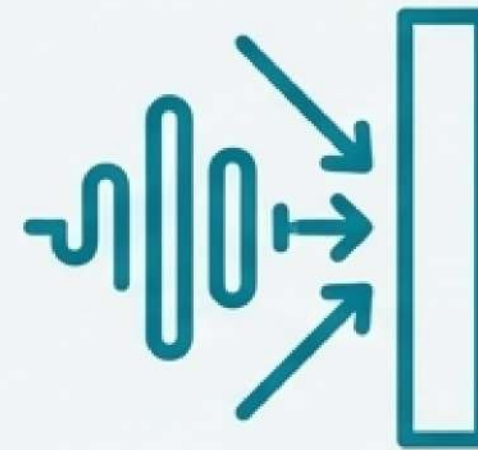
## Robust Waterproofing & Breathability

Completely rainwater-proof yet achieves **Class I Permeability to Water Vapour**, allowing the structure to breathe and preventing condensation.



## Superior Flexibility & Adhesion

An allowed dilation of **190%** bridges cracks and accommodates structural movement. Achieves an adhesion strength of **18.35 Kg/cm<sup>2</sup>**.



## Long-Term Durability & Comfort

Withstands **3,000 artificial aging cycles** without degradation. Sound absorption ( $\alpha_w = 0.10$ ) dampens noise from rain and hail.

**Independently certified data provides  
performance you can specify with confidence.**

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**83.9%**

Solar Reflection  
Factor  
(ASTM G173)

**103.6**

Solar Reflectance  
Index (SRI)  
(ASTM E1980)

**73.84%**

Heat Flow Reduction  
(UNE-EN 1062-3)



# Engineered to withstand physical stress, aging, and fire.

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## 190%

### Allowed Dilation

(Bridges cracks and adapts to substrate movement)

Roboto Regular

## 3,000 Cycles

### No Degradation

(Artificial Aging Test, UNE-EN ISO 11507 shows no change, scratches, blisters, or loss of adhesion)

Roboto Regular

## M1

### Fire Response Classification

(UNE 23721)

Roboto Regular

# A direct comparison reveals the critical difference between specifying a product and a complete system.

Performance Metric	Suberlev Thermo-Roofs Shield	Thermo-Shield Covers
Solar Reflection Factor	83.9%	<b>93.9%</b>
Heat Flow Reduction	<b>73.84%</b>	<b>73.84%</b>
Allowed Dilation	<b>190%</b>	<b>190%</b>
Adhesion Strength	<b>18.35 Kg/cm<sup>2</sup></b>	<i>Data Not Provided</i>
Artificial Aging	<b>No change (3000 cycles)</b>	<b>No change (3000 cycles)</b>
Warranty	<b>Up to 10 Years (System)</b>	7 Years



# Performance is only realized through proper application. Our system is designed to eliminate variability.

Factor	Suberlev® System	Thermo-Shield Component
Application Protocol	Detailed, multi-step process including specific primers (Suber-Fix), repair materials (Thermal Mastic), and finishing varnish.	General guidance provided.
System Integrity	All components are designed and required to work together for warranty compliance.	Standalone product.
Quality Control	<b>**Mandatory application by Manufacturer-Approved Applicators.**</b>	No such requirement specified.

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 **Key Takeaway:** Suberlev guarantees performance through a controlled, systematic process, mitigating project risk.



# A disciplined, three-step process is key to achieving warrantied performance.



## PREPARE

Ensure substrate is clean, dry, stable. Repair defects with Thermal Mastic. Apply Suber-Fix primer on dusty or absorbent surfaces.



## APPLY

Apply 2-3 coats to meet required consumption rates (e.g., min. 2.5 L/m<sup>2</sup> for waterproofing). Embed fiberglass reinforcement mesh on complex or cracked surfaces.



## FINISH

Allow 8-12 hours drying time between coats. On flat roofs, apply protective Suberlev practicable varnish to achieve a walkable surface and ensure the 7-year warranty.



# A clear guide for specifying the right solution based on project priorities and risk management.

## Consider a Component-Based Solution (like Thermo-Shield) when:

- Maximizing a single metric (Solar Reflection at 93.9%) is the *sole* project priority.
- The project team assumes full responsibility for application protocol and managing risk without a prescriptive, manufacturer-mandated system.

## Specify the Suberlev® System when:

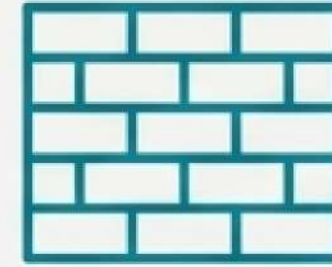
- **System Integrity** and guaranteed, predictable warranty compliance are paramount.
- **Verifiable Mechanical Properties** (Adhesion: 18.35 Kg/cm<sup>2</sup>, Tensile Strength: 30 kg/cm<sup>2</sup>) are required for the specification.
- **A Controlled, Professional Installation Process** via approved applicators is desired to mitigate risk and ensure long-term asset performance.



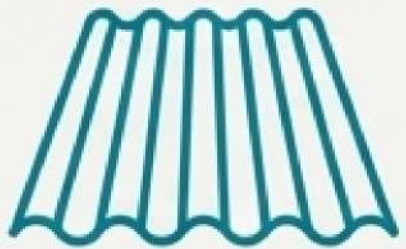
# Proven adhesion and performance on the most common construction surfaces.



Roofs, Rooftops  
& Terraces



Brick



Galvanized Sheet Metal



Rigid Foam Polyurethane



Asphalt **Fabric**



Other common, pre-primed  
construction supports.



# For Your Reference: Complete Performance Data

Property / Metric	Result / Value	Test Standard
Physical Properties		
Density	1.1 kg/L $\pm$ 5%	N/A
Solids in Volume	71%	N/A
pH	7.8 $\pm$ 1	N/A
Viscosity	60,000 cps $\pm$ 5,000	N/A
Microsphere Size	$\leq$ 28 $\mu$ m	N/A
Thermal & Solar Performance		
Solar Reflection Factor	83.9%	ASTM G173
Emissivity	0.75	ASTM C1371
Solar Reflectance Index (SRI)	103.6	ASTM E1980
Thermal Conductivity (Microspheres)	0.05 W/m.K	N/A
Heat Flow Reduction	Decrease up to 73.84%	UNE-EN 1062-3
Mechanical & Durability		
Water Vapour Permeability	Class I: Permeable	EN 1504-2
Allowed Dilation	190%	N/A
Tensile Strength	30 kg/cm <sup>2</sup>	N/A
Medium Adhesion	18.35 Kg/cm <sup>2</sup> $\pm$ 2.04 Kg/cm <sup>2</sup>	EN 1504-2
Artificial Aging (3000 cycles)	No change, scratches, blisters, or loss of adhesion	UNE-EN ISO 11507
Safety & Acoustic		
Sound Absorption (aw)	0.10	UNE-EN ISO 354
Fire Response	M1	UNE 23721



# 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.



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