

Thermo Roofs Shield Plus

An Integrated System for Advanced Building Envelope Protection

Enhancing Durability, Efficiency, and Asset Value Through
Multifunctional Coating Technology.



Every Building Faces Two Primary Threats to Performance and Longevity



Uncontrolled Solar Heat Gain

Solar radiation absorption leads to excessive heat load, driving up operational costs for cooling, reducing occupant comfort, and accelerating the degradation of building materials.



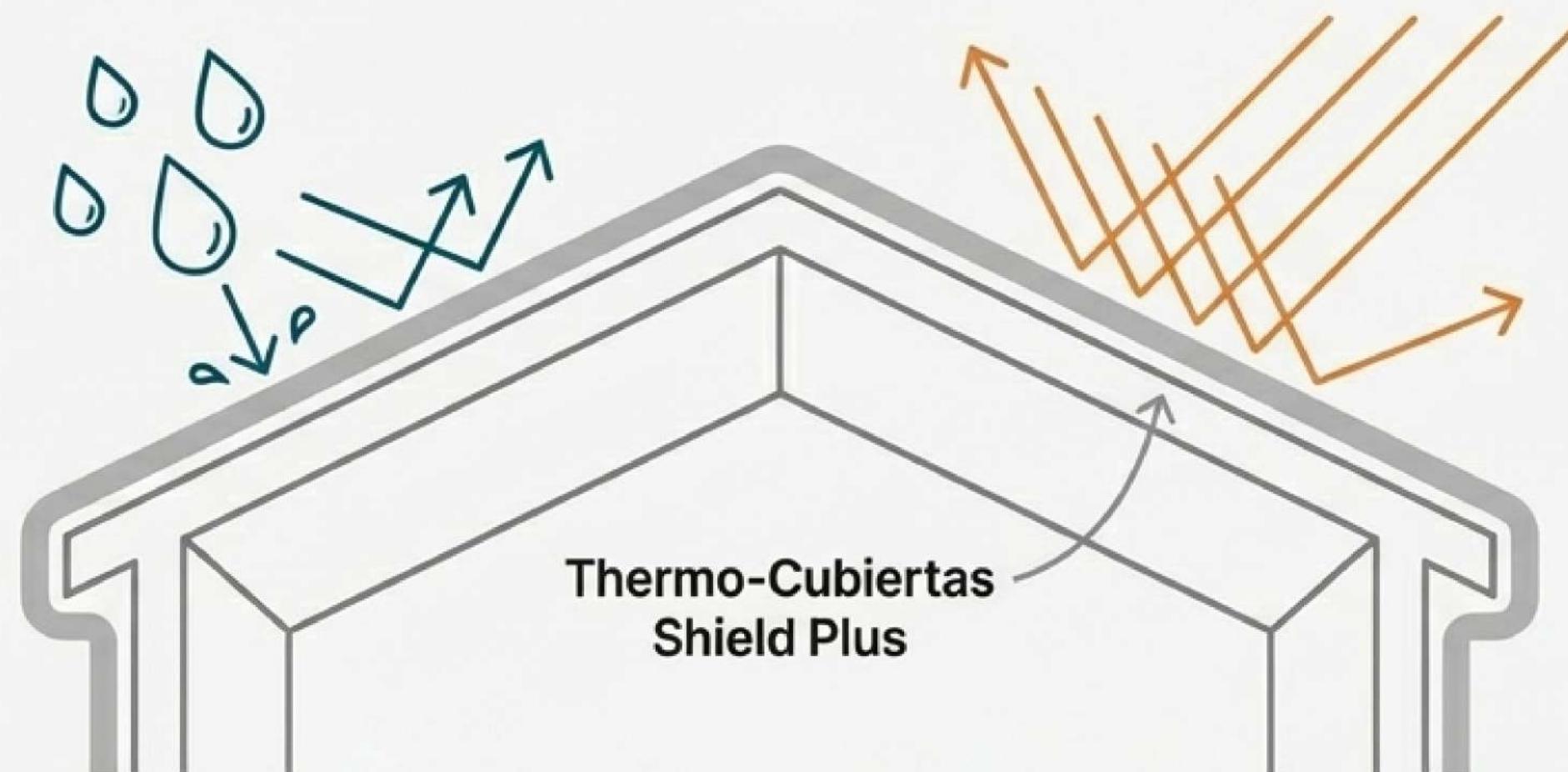
Chronic Water Intrusion

Persistent moisture from leaks and condensation causes structural decay, compromises insulation effectiveness, and creates unhealthy indoor environments through the growth of mold and fungi.

These vectors of degradation lead to increased lifecycle costs, premature capital expenditures, and diminished asset value.

A Single, Multifunctional Shield to Defeat Both Core Threats

Traditional approaches use separate, single-purpose systems for waterproofing and insulation, creating complexity and points of failure like thermal bridges. Thermo-Cubiertas Shield Plus integrates multiple functions into a single, seamless, monolithic layer.



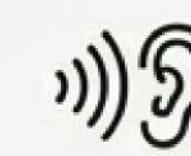
High-Performance
Thermal Corrector



Comprehensive
Waterproofing Agent

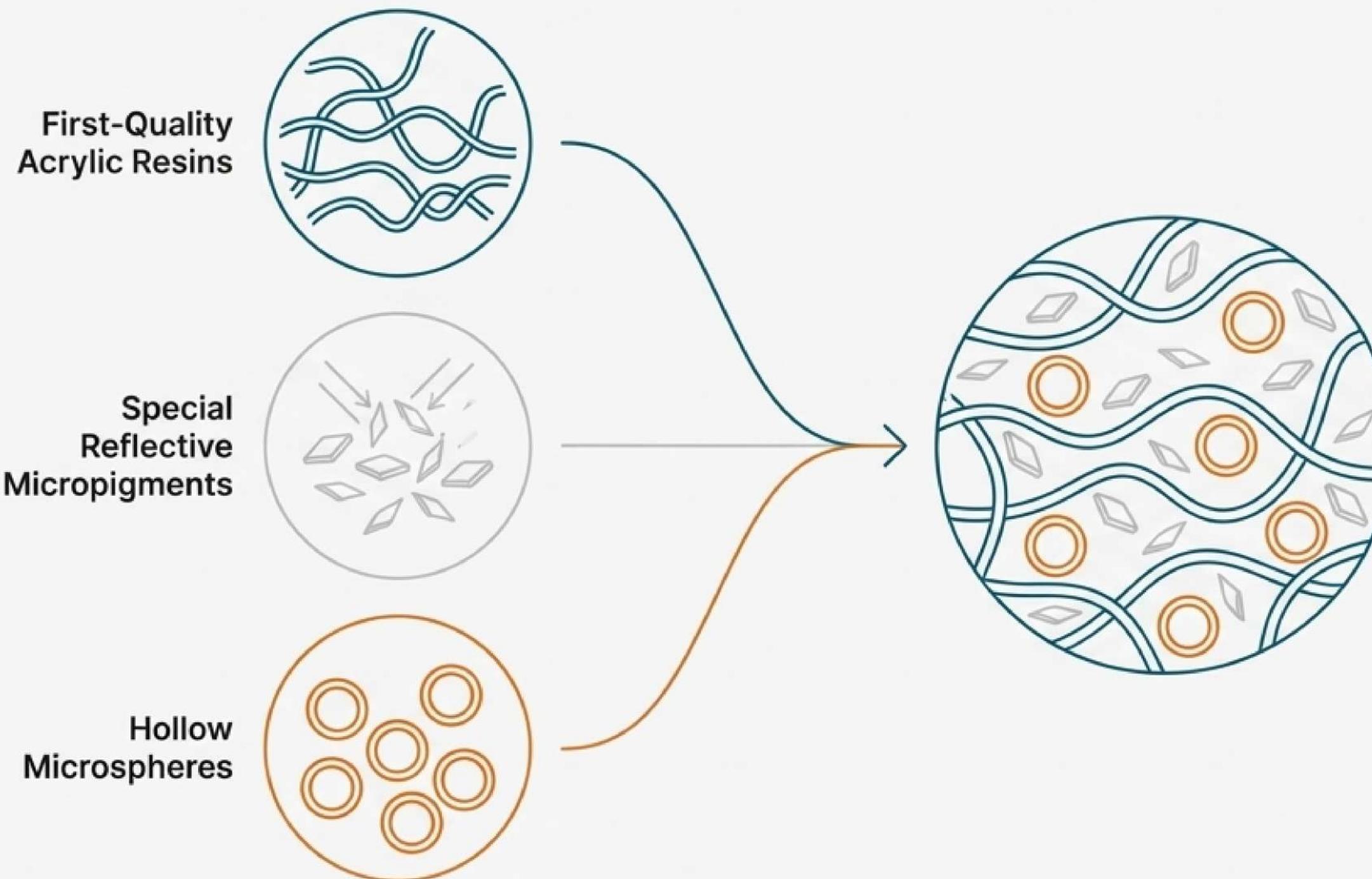


Resilient
Protective Finish



Effective Sound
Dampener

The Science of the Shield is Powered by a Trio of Technologies



Component 1: First-Quality Acrylic Resins

The flexible, durable backbone of the system. A new, resin-rich formula ensures exceptional adhesion, elasticity, and long-term resistance to environmental degradation.

Component 2: Special Reflective Micropigments

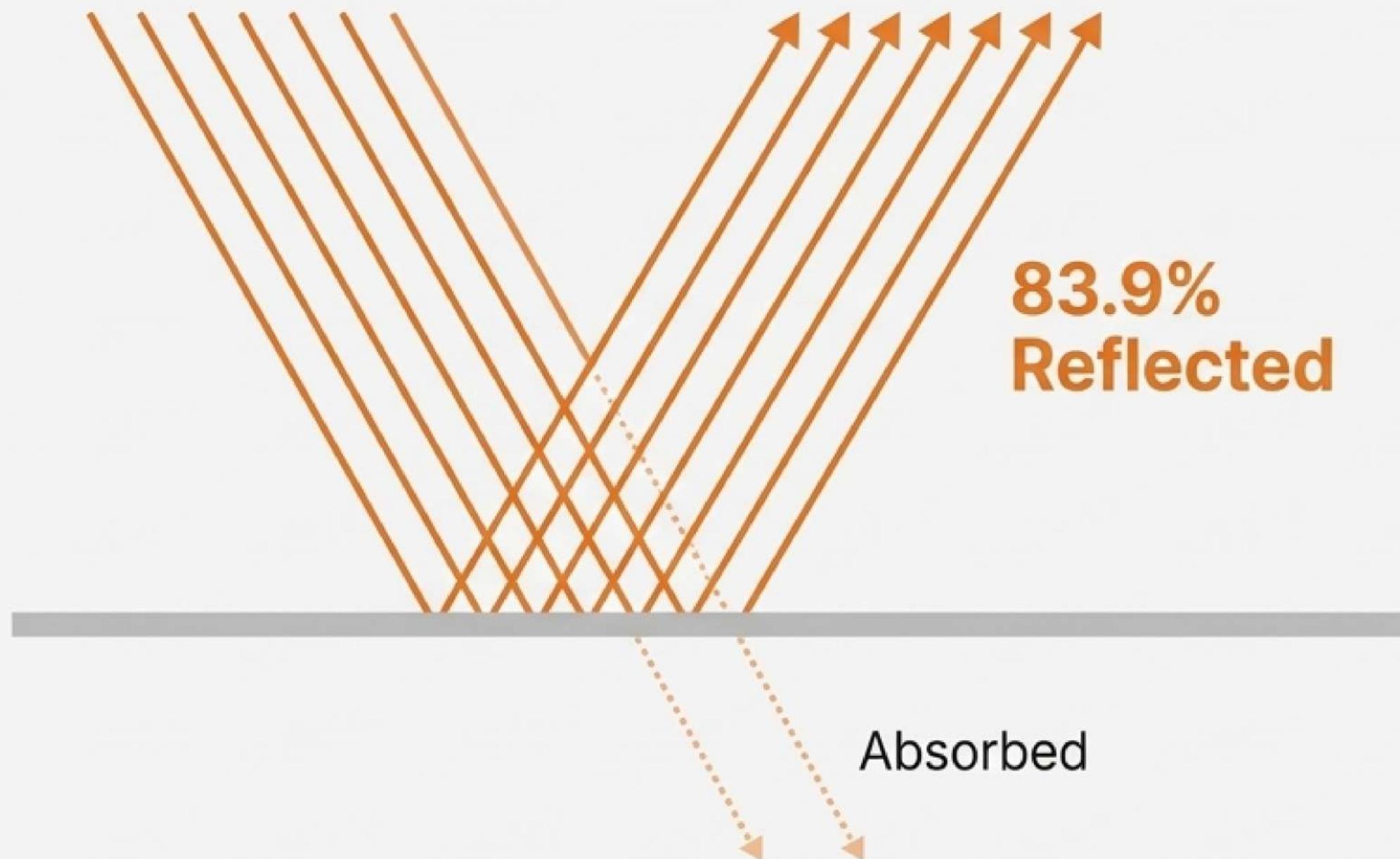
Countless microscopic mirrors that act as a powerful sunblock, reflecting solar radiation away from the surface before it can be absorbed as heat.

Component 3: Hollow Microspheres

Air-filled, microscopic ceramic spheres that create a powerful insulating barrier, trapping air and dramatically slowing the transfer of any residual heat.

Principle 1: Defeating Solar Gain with Advanced Reflection

“Like a white t-shirt on a sunny day, the coating’s first line of defense is to reflect solar energy away.”



83.9%

Solar Radiation Reflection (ASTM G173-03)

SRI 103.6

Max Solar Reflectance Index (ASTM E1980-11),
classifying it as a superior “cool roof” material.

>40%

Potential reduction in roof surface temperature,
directly lowering the thermal load on the building.

Principle 2: Halting Heat Transfer with Micro-Insulation

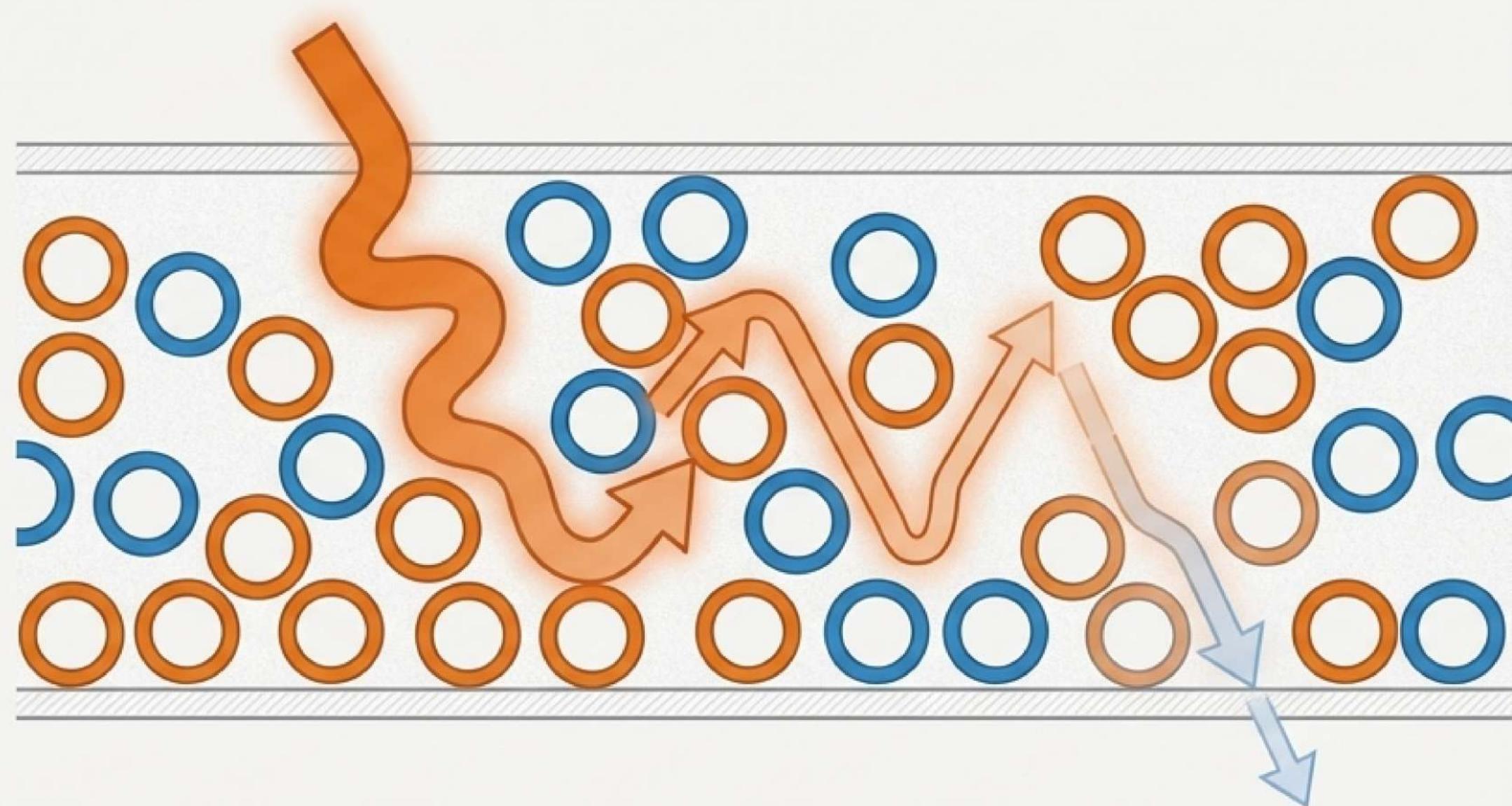
“The hollow microspheres create an insulating barrier that slows the flow of heat, similar to how a wooden spoon stays cooler than a metal one in a hot liquid.”

73.84%

Maximum decrease in Heat Flow (UNE-EN 1062-3). This quantifies the insulating effect.

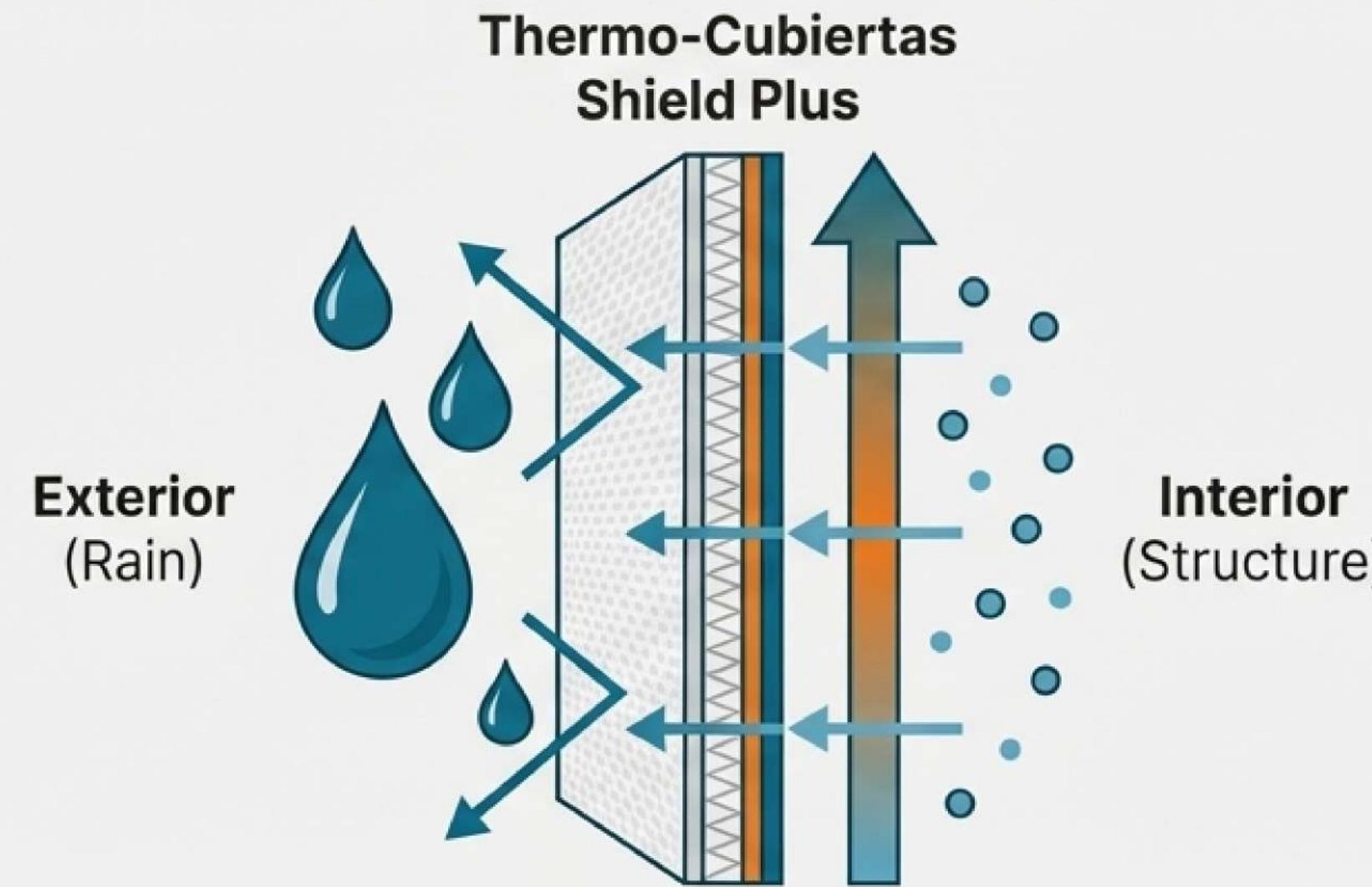
0.05 W/m.K

The extremely low thermal conductivity of the integrated microspheres, proving their insulating power.



Principle 3: Ensuring Structural Health with Intelligent Breathability

"Like a high-tech raincoat, the coating is completely waterproof to external rain while allowing internal water vapor to escape. This allows the building to 'breathe'."



Key Benefit:

This prevents interstitial condensation, a primary cause of structural decay, insulation degradation, and the growth of mold and fungi.

Certified Performance:



Class I:

The highest rating for Water Vapour Permeability (EN 1504-2).



"Very Water Repellent":

Creates a seamless, rainwater-proof barrier against external water ingress.

■ Performance Pillar: Superior Thermal Efficiency & Energy Savings

83.9% Solar Reflection

Drastically reduces solar heat gain.

73.84% Heat Flow Reduction

Directly translates to lower indoor temperatures.

Seamless Application

Creates a monolithic layer, avoiding the thermal bridges common in panel-based insulation.

Dual-Climate Savings

Lowers cooling costs in warm climates and reduces heat loss in colder climates.

The Outcome: Substantial savings in energy consumption and a more stable,

The Outcome: Substantial savings in energy consumption and a more stable, comfortable indoor environment.

■ Performance Pillar: Comprehensive Waterproofing & Long-Term Durability



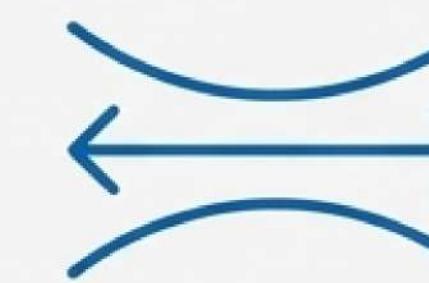
12-Year Warranty

A testament to the manufacturer's confidence in the resilient, resin-rich formulation.



3,000 Cycles No Change

Proven resistance to aging in accelerated tests (no cracking, peeling, or loss of adhesion).



205% Dilation

Exceptional elasticity bridges existing micro-cracks and accommodates structural movement without failure.



18.35 kg/cm² Adhesion

Quantifies the powerful, monolithic bond to diverse substrates.

■ Performance Pillar: Enhanced Occupant Comfort & Safety



Acoustic Insulation

The coating's composition exerts a "sound dampening effect," reducing ambient noise from rain and other external sources.

Certified Sound Absorption Coefficient $\alpha_w = 0.10$ (UNE-EN ISO 354)



Fire Safety

Contributes to the building's overall fire safety strategy.

Achieves a fire response classification of M1 (UNE 23721).



Versatile Adhesion

An integrated adhesion promoter ensures a powerful bond on difficult substrates like asphalt fabric, rigid polyurethane foam, and galvanized steel, often without specialized primers.

Certified Technical Specifications

Quantitative proof of performance, verified by standardized laboratory testing.

Thermal Performance	Other Properties
Solar Reflection Factor: 83.9% (ASTM G173-03)	Sound Absorption: $\alpha_w = 0.10$ (UNE-EN ISO 354)
Emissivity: 0.75 (ASTM C1371-04a)	Fire Response: M1 (UNE 23721)
SRI: 101.8 - 103.6 (ASTM E1980-11)	Density: 1.03 kg/L (Internal)
Heat Flow Decrease: up to 73.84% (UNE-EN 1062-3)	Solids in Volume: 74% (Internal)
Mechanical Properties	
Allowed Dilation: 205% (Internal)	
Tensile Strength: 30 kg/cm ² (Internal)	
Medium Adhesion: 18.35 kg/cm ² (EN 1504-2)	
Moisture Management	
Water Vapour Permeability: Class I (EN 1504-2)	

Performance tested and verified by leading independent laboratories, including AIDICO, APPLUS, TECNALIA, and AITEX.

Achieving Warranted Performance Through a Mandated Application Protocol

The full performance and 12-year warranty are contingent on strict adherence to the manufacturer-approved methodology.



01 Rigorous Surface Preparation

Cleaning, sanitization of mold/foam, defect repair with Thermal Mastic, and mandatory application of Suber-Fix primer on friable surfaces.



02 Systematic Product Application

Application of two to three coats to meet specified consumption rates, with 8-12 hours drying time. Reinforcement with fiberglass mesh on unstable supports.



03 Quality Control & Warranty Validation

Application must be performed by manufacturer-approved professional applicators. Minimum consumption rates are mandated: **0.6 L/m²** for thermal reflection and **2.5 L/m²** for full waterproofing.

The Strategic Return: Translating Performance into Long-Term Asset Value



1. Reduced Operational Expenditures (OpEx)

The certified thermal barrier directly slashes cooling and heating costs, delivering immediate and measurable returns.



2. Minimized Future Capital Expenditures (CapEx)

The system's 12-year warranty and proven resistance to aging drastically reduce the need for costly cyclical repairs and envelope remediation.



3. Enhanced Asset Value & Durability

Protecting the core structure from water, UV, and environmental stress preserves the building's integrity and enhances its long-term market value.



4. Improved Occupant Well-being & Safety

Delivers a healthier, more comfortable, and safer indoor environment through moisture control, acoustic comfort, and certified fire resistance.

The Optimal Solution for a High-Performance Building Envelope

Suberlev Thermo-Cubiertas Shield Plus is not an expenditure, but an investment in the building's long-term performance, operational efficiency, and structural resilience. Its multifaceted benefits, backed by certified data, provide unparalleled value and protection for any building asset.

We formally recommend the approval and specification of the Thermo-Cubiertas Shield Plus system to achieve superior project outcomes.



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.

