



Suberlev® Thermo-Facades Shield™

The High-Performance Building Envelope, Reimagined.

An innovative, multi-functional coating for superior thermal performance, uncompromising durability, and enhanced environmental quality.

The Converging Challenges of Modern Construction

Modern building projects demand solutions that address multiple challenges simultaneously. Facade specification is critical for balancing performance, cost, and occupant well-being across the asset's lifecycle.



Rising Energy Costs

The need for superior thermal insulation to reduce the operational load on HVAC systems and meet increasingly strict efficiency standards.



Asset Preservation

The demand for durable, low-maintenance materials that withstand inclement weather, protect structural integrity, and maintain aesthetic appeal over time, thus lowering lifecycle costs.

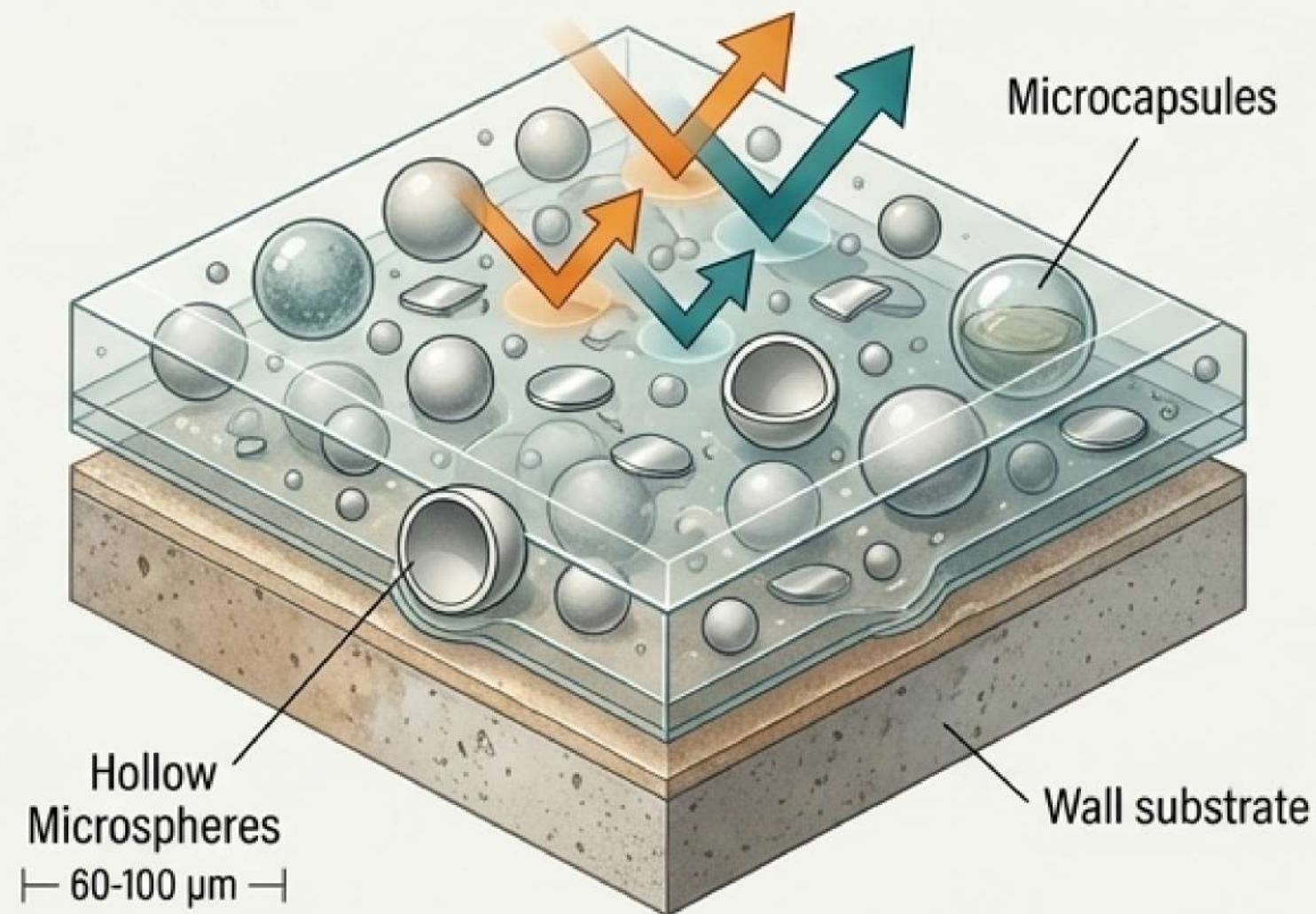


Occupant Wellness

The growing requirement for healthier indoor environments, including mitigating moisture and mold, improving acoustics, and ensuring material safety.

An Integrated Solution for the Building Envelope

Suberlev® Thermo-Facades Shield™ is a high-performance, acrylic-based thermal paint engineered to address these challenges in a single, advanced coating. It transforms the facade into a multi-functional shield that actively enhances building performance.



A Synergy of Advanced Technologies

- **Hollow Insulating Microspheres:** Incorporates hollow microspheres (60-100 μm) to create a powerful thermal barrier with exceptionally low thermal conductivity.
- **Nanotechnology-Based Reflective Pigments:** Works in tandem with microspheres to reflect thermal energy, minimizing heat exchange between exterior and interior environments.
- **Biocide-Free Microencapsulation:** An innovative delivery system for natural insect repellents, using polymer microcapsules for a safe and effective result.

The Three Pillars of Performance

Thermo-Facades Shield delivers its comprehensive value across three core pillars, moving beyond individual features to focus on strategic outcomes for your project.



Superior Efficiency

Neue Haas Grotesk Display Pro Bold
Reducing operational costs and enhancing comfort through advanced thermal and acoustic insulation.



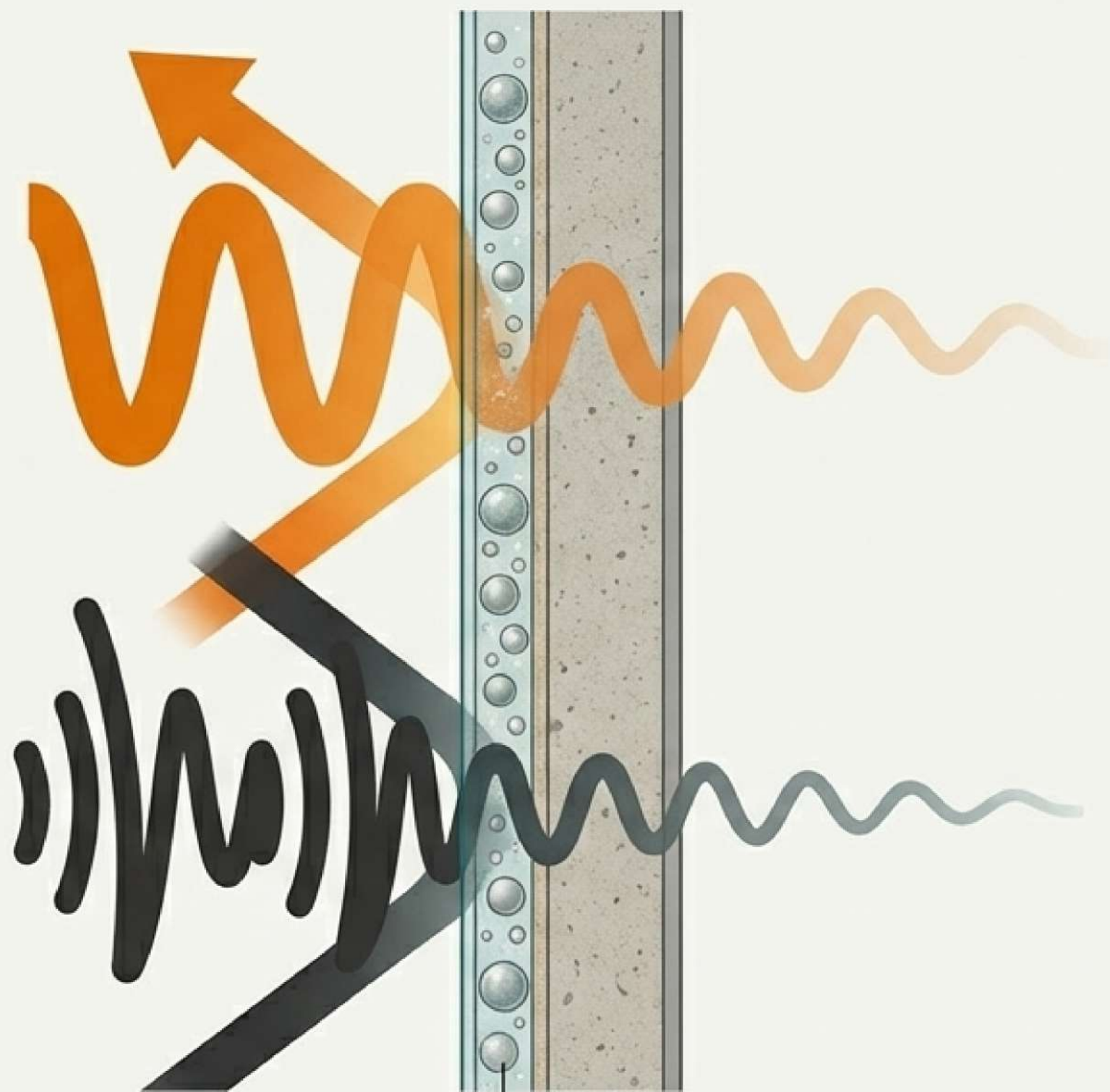
Uncompromising Durability

Neue Haas Grotesk Display Pro Bold
Ensuring long-term asset protection and aesthetic integrity with a resilient, high-performance finish.



Enhanced Environments

Neue Haas Grotesk Display Pro Bold
Promoting occupant wellness and safety through advanced moisture management and a unique, natural insect defense system.



Thermo-Facades Shield™

Pillar 1: Superior Efficiency

Dramatically reduce energy consumption and improve interior comfort with a powerful thermal and acoustic barrier.

Advanced Thermal Insulation

Creates a seamless thermal break that minimizes heat loss in winter and heat gain in summer, effectively mitigating common thermal bridges.

0.05 W/m·K

Thermal Conductivity
(of microspheres)

Up to 79%

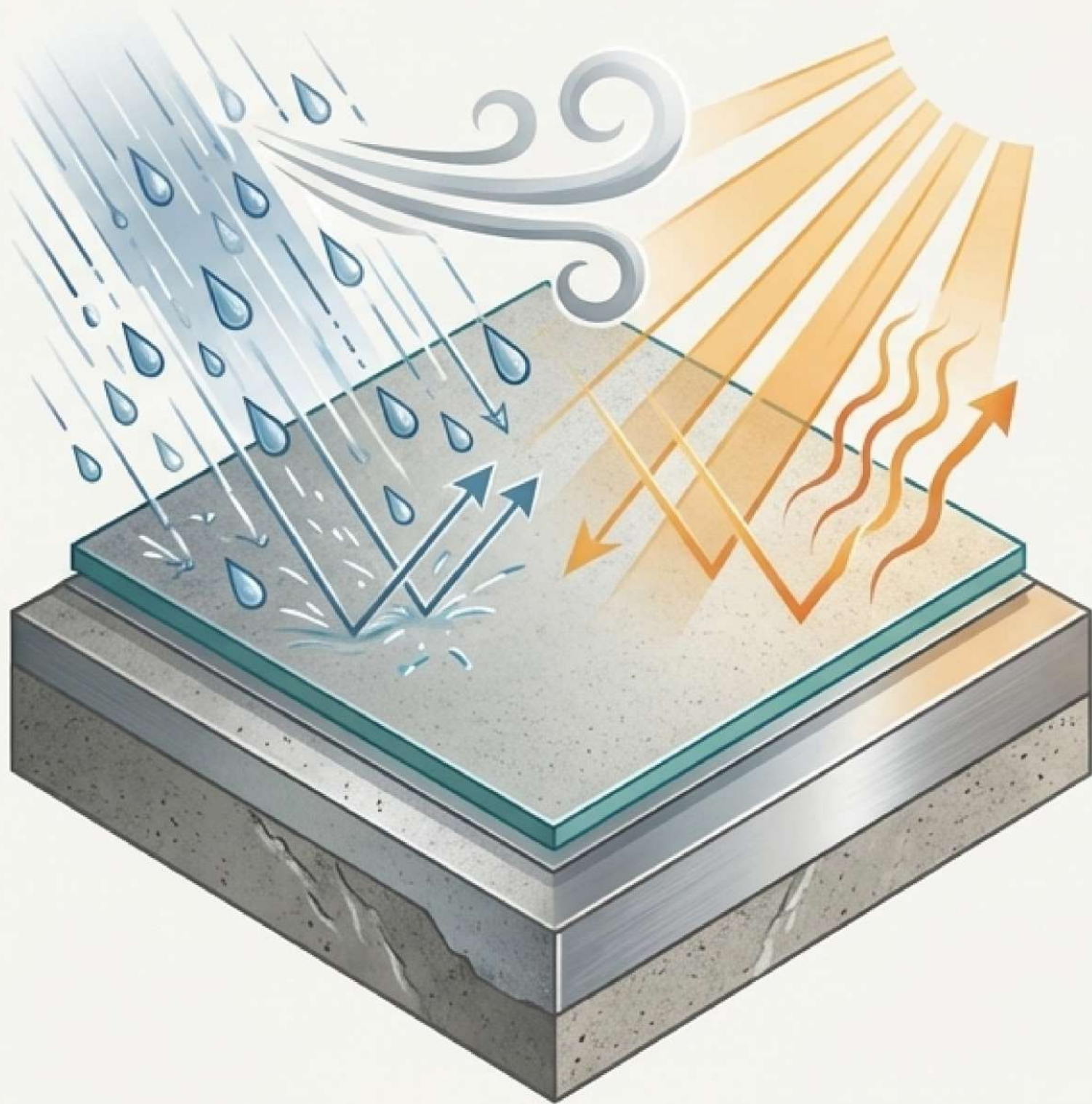
Heat Flow Reduction

Acoustic Damping Properties

Functions as a sound-absorbing coating that dampens ambient sound and reverberation, contributing to a quieter interior environment.

$\Delta W = 0.10$

Sound Absorption
(UNE-EN ISO 354)



Pillar 2: Uncompromising Durability

Lower lifecycle costs and ensure long-term asset protection with a finish engineered for extreme resilience and safety.

Proven Weather Resistance

Rigorous testing proves the coating's capacity to withstand inclement weather and extreme climates without degradation.

3000 Cycles

Artificial Aging Test
(UNE-EN ISO 11507)

No change in appearance, no scratches, exfoliation, blisters, or loss of adhesion

High-Integrity Finish

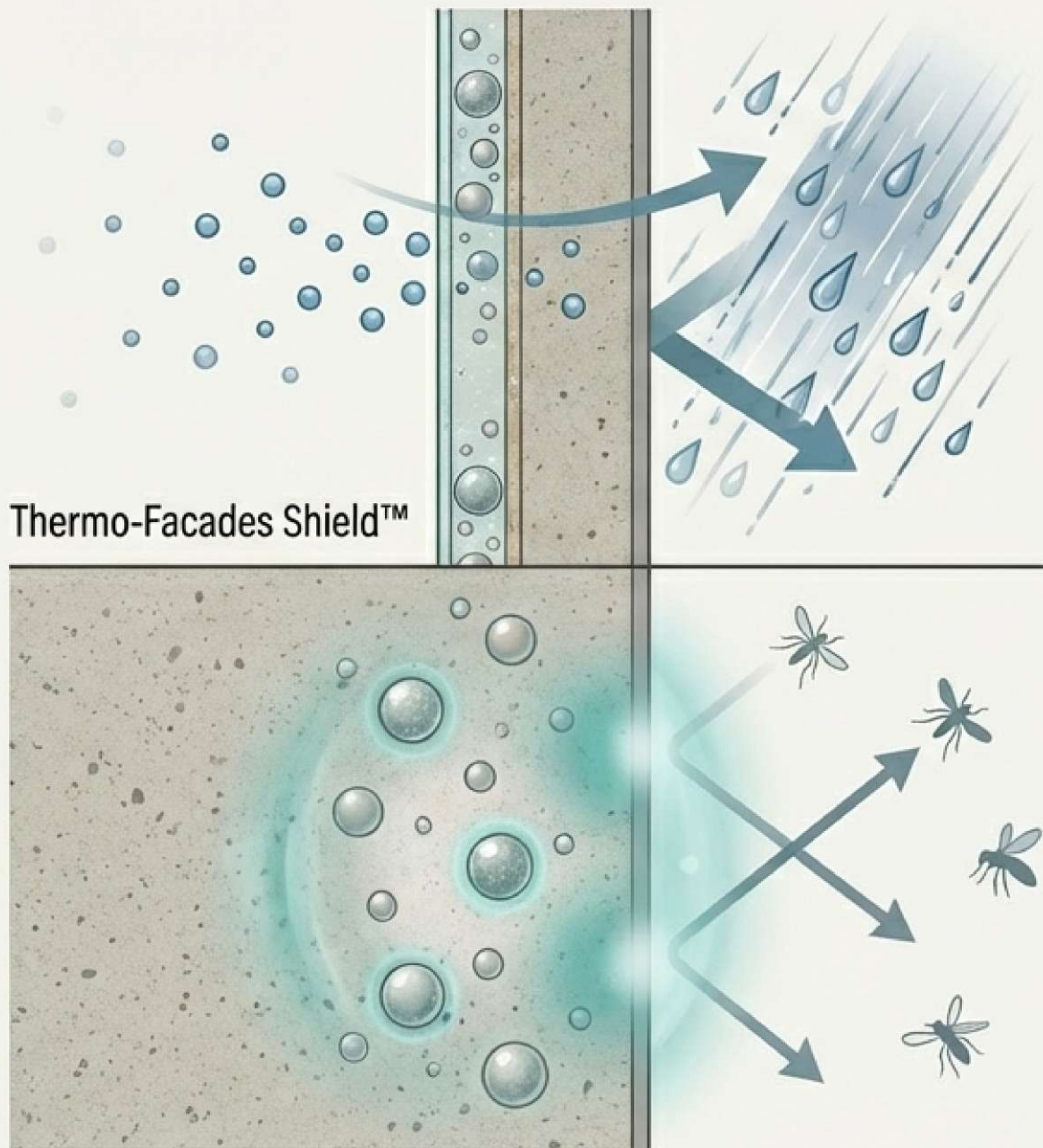
Provides a washable matte finish with high covering power, excellent color retention, and high resistance to wet scrubbing.

Enhanced Fire Safety

Contributes to the overall fire safety of the building structure, meeting critical compliance for public and commercial projects.

M1

Fire Response Classification
(UNE 23721)



Thermo-Facades Shield™

Pillar 3: Enhanced Environments

Promote occupant wellness and safety with superior moisture management and an innovative, biocide-free insect defense.

Advanced Moisture & Condensation Control

Allows the building structure to "breathe," preventing interstitial condensation and the subsequent growth of mold and fungi. Ideal for high-humidity environments.

Class I
Water Vapour
Permeability
(EN 1504-2)

Natural, Biocide-Free Insect Repellency

An innovative approach using natural products (citriodiol and lemon citronella oils) delivered via polymer microcapsules.

Effectively prevents the proliferation of parasites and insects without harsh chemicals, making it a responsible choice for sensitive applications.

Technical Profile: Verified Performance Data

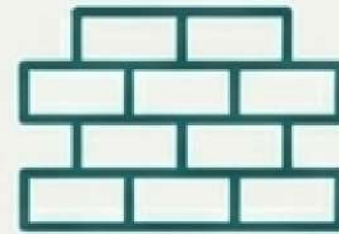
Property	Value	Standard
Appearance	Mat	
Color	White (See Suberlev colour chart)	
Density	1.1 kg/L \pm 5%	
Viscosity	60,000 cps \pm 5,000 at 22°C	Brookfield LTV
Thermal Conductivity (microspheres)	0.05 W/m·K	
Heat Flow Reduction	Up to 79%	
Water Vapour Permeability	Class I: Permeable	EN 1504-2
Sound Absorption	$\Delta W = 0.10$	UNE-EN ISO 354
Fire Response	M1	UNE 23721
Artificial Aging (3000 cycles)	No change, scratches, exfoliation, or blisters	UNE-EN ISO 11507

Unmatched Application Versatility

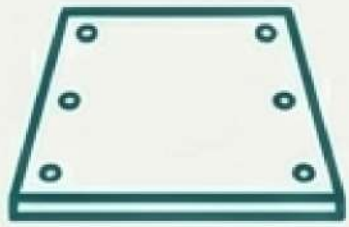
Demonstrates excellent adhesion to a diverse range of properly prepared new and existing surfaces.



**Concrete, Cement,
& Mortars**



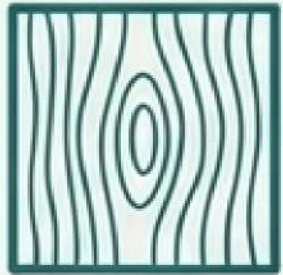
**Ceramic Brick &
Natural Stone**



Plaster & Plasterboard



PVC



Wood



**Existing, well-adhered
paints and coatings**



**Galvanized Steel &
Corrugated Sheet**

A Superior Specification for Demanding Projects

The integrated benefits make Thermo-Facades Shield the ideal choice for a broad spectrum of applications where performance is paramount.

- **Residential & Commercial Facades:** For enhanced energy efficiency and long-term aesthetic protection.
- **Energy-Saving Retrofits:** To improve the thermal performance of existing building envelopes.
- **Sensitive Public Facilities:** For schools, health centers, veterinary clinics, and food industry buildings where the biocide-free insect prevention is critical.
- **High-Humidity Environments:** For gyms, indoor swimming pools, and basements where Class I breathability prevents condensation and mold.
- **Acoustically Sensitive Areas:** For interior or exterior surfaces where sound damping is required to reduce echo or noise transmission.



Professional Application Protocol (1/2): Surface Preparation

Adherence to proven preparation protocols is essential to achieving specified performance and a flawless, long-lasting finish.



Step 1: Clean & Profile

Substrate must be perfectly clean, dry, and free from dust or grease. Sand polished or non-porous surfaces to create a mechanical profile for adhesion.



Step 2: Sanitize & Treat

In cases of mold or algae, clean with a water/bleach solution, then apply a suitable fungicide like **Fungilev**.



Step 3: Repair Defects

Use **Thermal Mastic** for minor defects. For major damage, use a suitable repair mortar. Ensure the substrate is stable.

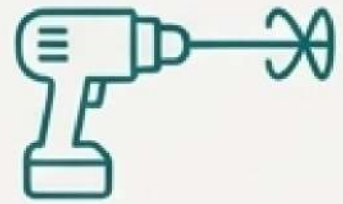


Step 4: Prime (If Necessary)

On dusty or highly absorbent surfaces, apply one coat of **Suber-Fix** primer and allow 4-6 hours to dry before topcoat application.

Professional Application Protocol (2/2): Mixing & Application

Core Guidelines Table



Mixing

Mix thoroughly with a mechanical stirrer. If necessary, add up to 8-15% clean water to adjust viscosity.



Method

Apply using a high-quality brush, roller, or airless spray gun.



Target DFT

300 to 500 microns
(Dry Film Thickness).



Coats

Achieve target DFT in **2 to 3 coats**.



Drying

Allow **5-6 hours** of drying time between coats.

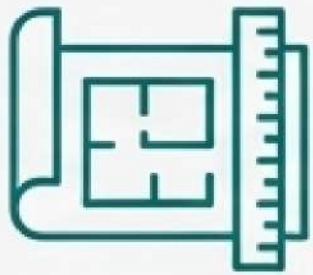
Environmental Conditions

Apply only when ambient and surface temperature is between **5°C and 45°C**. Do not apply with imminent risk of frost, rain, strong wind, or on surfaces under direct, intense sun.

Cleanup

Clean all tools with water immediately after use.

Logistics, Coverage & Storage

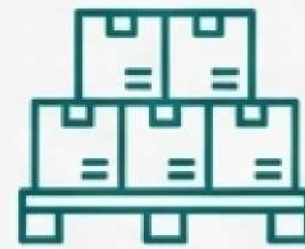


Planning & Estimation

Source Sans Pro Regular

Theoretical Yield: **5 - 7 m²/L** per coat

Consumption Rate: Approx. **0.35 L/m²** to achieve target DFT



Packaging & Pallet Information

Source Sans Pro Regular

Packaging Options: **4 L and 15 L** polypropylene pots

Pallet (4 L): **96 boxes**
(422.4 kg)

Pallet (15 L): **33 boxes**
(544.5 kg)



Storage & Shelf Life

Source Sans Pro Regular

Conditions: Store in a cool place (**5°C - 45°C**), protected from sun and frost.

Shelf Life: Up to **2 years** in original, sealed container.

After Opening: Use within **15 days**.



Certified Quality & Professional Integrity

Third-Party Validation

To validate its high-performance claims, Thermo-Facades Shield™ has been rigorously tested by leading independent laboratories, guaranteeing its performance and reliability.



Important Note: Professional Application Required

Suberlev products must be applied by applicators who have been approved by the manufacturer to ensure correct installation and certified performance.

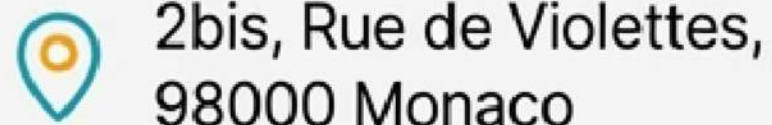
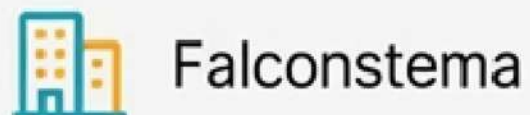
The information provided is based on extensive testing. However, due to the variety of substrates and conditions, it is essential for the user to conduct site-specific tests to verify suitability for their particular project.

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.



2bis, Rue de Violettes,
98000 Monaco



info@falconstema.mc



+377 99 90 56 35