CATALOG
2026

SUBERLEV

INFO@FALCONSTEMA.MC
+377 99 90 56 35

FALCON STEMA S.A.R.L
2BIS, RUE DE VIOLETTES
98000 MONACO

🧱 THERMAL PAINTS

Suber Paint Thermo Shield 🥔
Microparticles of natural cork + acrylic copolymers; λ=0.05 W/m·K
Exterior façades & roofs – eliminates thermal bridges, crack-resistant

Thermo-Façades Anti-Insect (Mosquilev) 🦟
Non-toxic eucalyptus essential oils in microcapsules
Insect-repellent façades – zero toxicity for homes, hospitals, schools

Thermo-Façades Shield 🏢
Non-toxic eucalyptus essential oils in microcapsules
Insect-repellent façades – zero toxicity for homes, hospitals, schools

Thermo-Roofs Shield ☀️
Hollow microspheres + 93.9% solar reflection; 190% elasticity
Roof waterproofing + thermal correction – reduces indoor temps up to 25°C

Thermo-Interiors Antibacterial 🛡️
Silver ions + thermal microspheres (20 μm); Class 2 washable
Interior walls – antibacterial protection, thermal/acoustic correction

Skylights Thermo Shield 🪟
Translucent coating with IR/UV blocking
Polycarbonate/glass skylights – blocks heat & UV while transmitting light

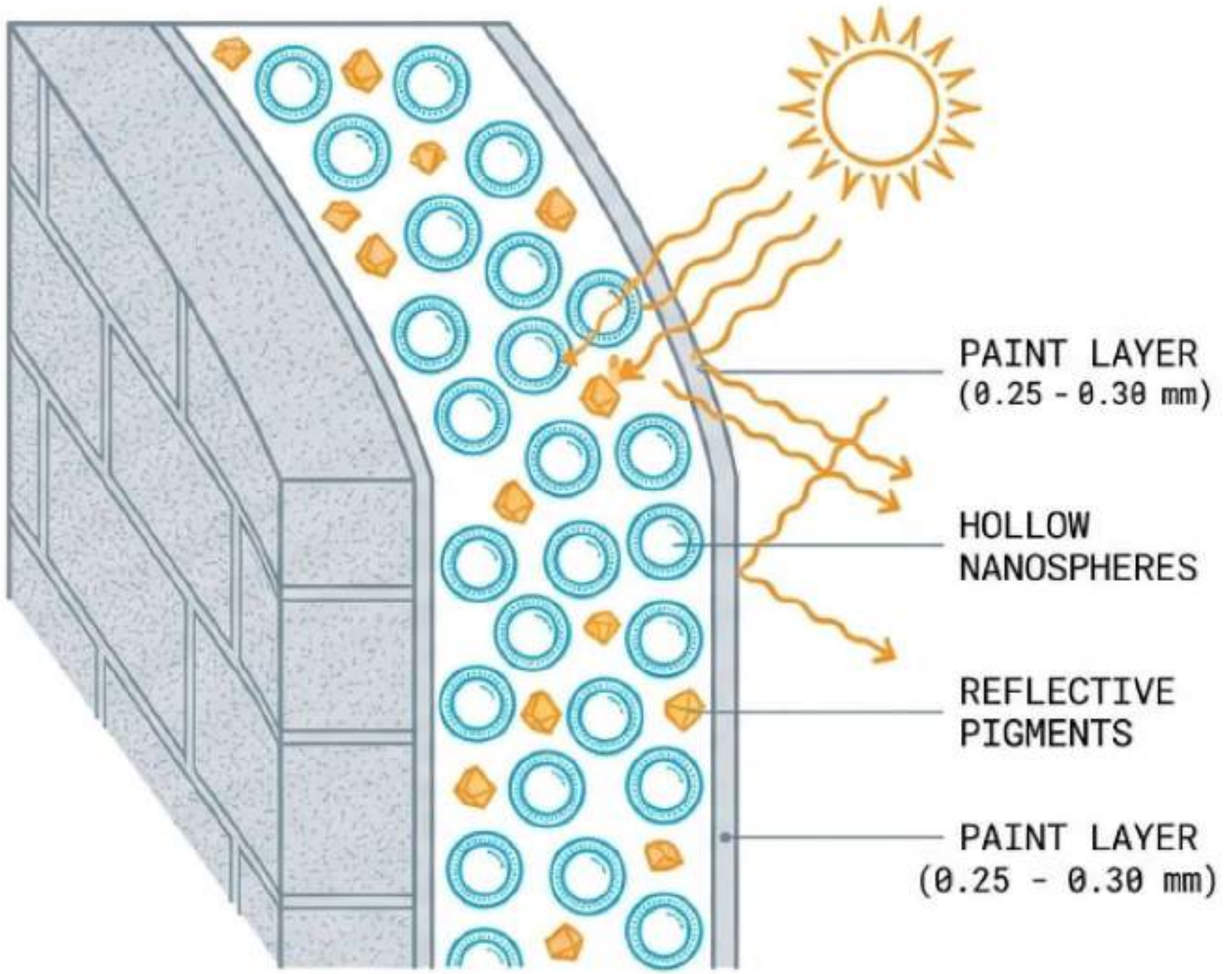
SUBERLEV

FALCON STEMA
NATURAL TECHNOLOGY

SUBER PAINT THERMO SHIELD

INNOVATION IN THERMAL AND ACOUSTIC INSULATION

FALCON STEMA NATURAL TECHNOLOGY | 2026 COLLECTION | PRODUCT FAMILY: INTERIORS & FACADES



The Nanosphere Mechanism

- **Composition:** Nanotechnology-based hollow nanospheres & reflective pigments.
- **Thermal Barrier:** Low thermal conductivity prevents heat transfer.
- **Sound Dampening:** Microspheres exert a sound-absorbing effect.
- **Anti-Condensation:** Inhibits internal/external heat exchange.

Surface Preparation

The substrate condition is non-negotiable for thermal adhesion.

CLEAN

DRY

FREE OF GREASE

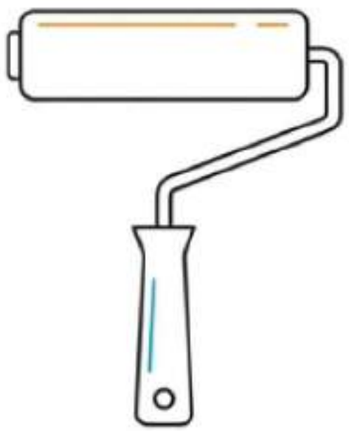
Remove loose particles, rising damp, and contaminants to ensure nanotechnology bonding.

Setup and Dilution

Diluent: Water

Formula Profile: Low Odor | Anti-Drip | Green-Friendly

Brush



Roller

Suitable Spray Gun
(Airless Recommended)

Application Methodology

350 ml/m²

MINIMUM CONSUMPTION

Required volume to achieve thermal insulation thickness.

Technique: Uniform coats for shield integrity.

Finish: Matte (Smooth, fine finish).

Curing Timeline

JetBrains Mono

Baseline Conditions: 20°C | 60% Relative Humidity

Note: Cooler or humid conditions will extend curing times.

Performance Specifications

Label	Value
Finish	Matte
Washability	Class 2
VOC Emissions	Category a/BA 75/30 (2007/2010): 0.16
Properties	Anti-drip, Sound-absorbing, Anti-condensation

Aesthetic Versatility

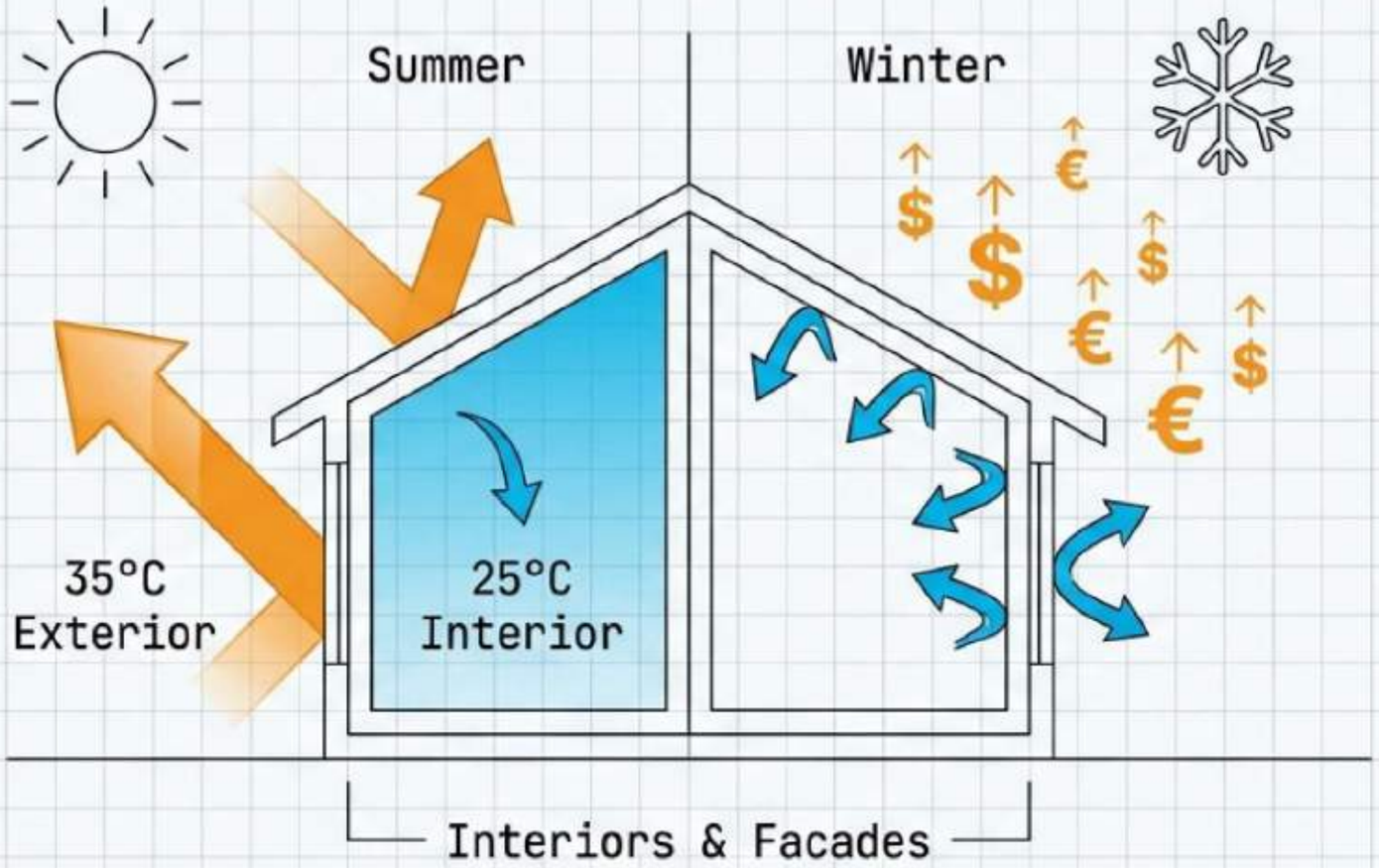
Base: White (Max Reflectivity)

Tinting: 400+ Chart Colors

System: NCS (Natural Color System) Compatible

Flexibility: Compatible with water-based or universal dyes

Year-Round Protection



Summer: Reflects radiation. Winter: Retains heat.

Certification & Warranty

AIDICO
INSTITUTO TECNOLÓGICO
DE LA CONSTRUCCIÓN

- Certified according to UNE-EN 7783/2
- Reaction to fire: UNE 23727-90
- Acoustic absorption: UNE-EN ISO 354:2004
- Tested by LGAI Technological Center

Help Us Help You

Innovation in Protection.

The information provided is based on extensive practical experience and laboratory tests.
Practical tests are recommended to ensure compatibility for each specific application.

THERMO FACADES ANTI INSECTS

TECHNICAL APPLICATION GUIDE

SUBERLEV | FALCONSTEMA

01

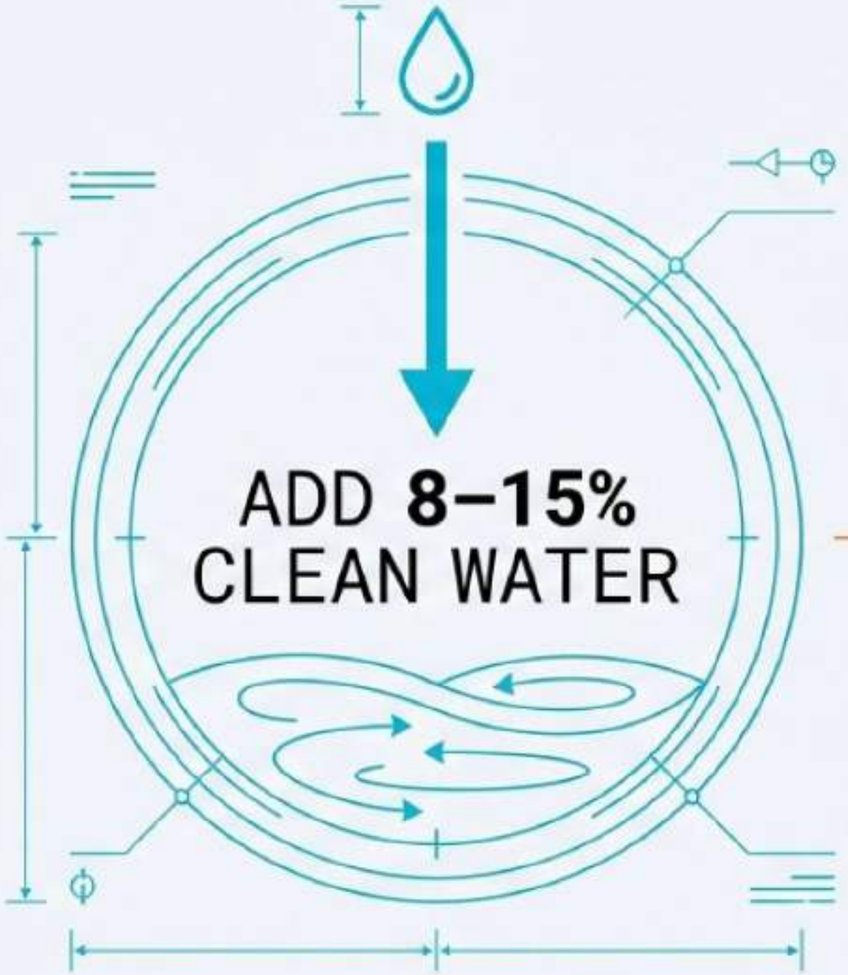
SURFACE PREPARATION

- Substrate must be dust-free and dry.
- Sand polished surfaces to open pores.
- Remove loose material.

Compatible Substrates

- Concrete / Cement
- Gypsum / Drywall
- Mortar / Ceramic Brick
- Natural Stone / PVC
- Existing Paint (Well-Adhered)

02 // PRODUCT MIXING

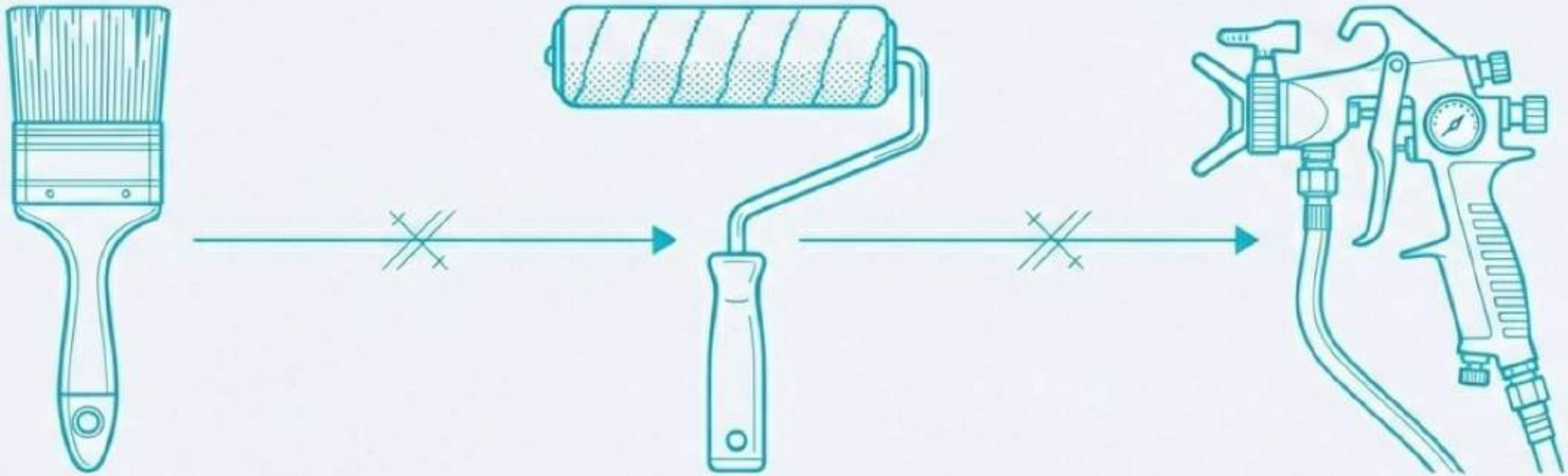


WARNING

CRITICAL: Prevent product from sticking to container walls.

- **Risk:** Lumps will cause spray gun jams.
- **Instruction:** Mix until completely homogenized.

03 // APPLICATION TOOLS



BRUSH

For detail work

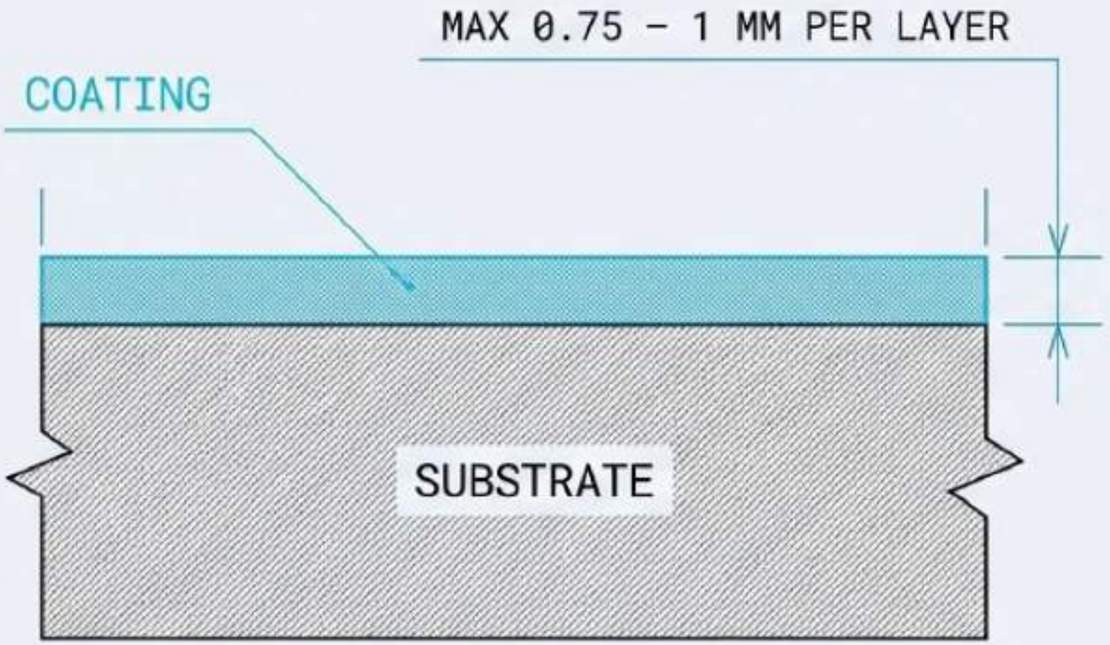
ROLLER

For manual facade application

SPRAY GUN

Ensure consistent pressure

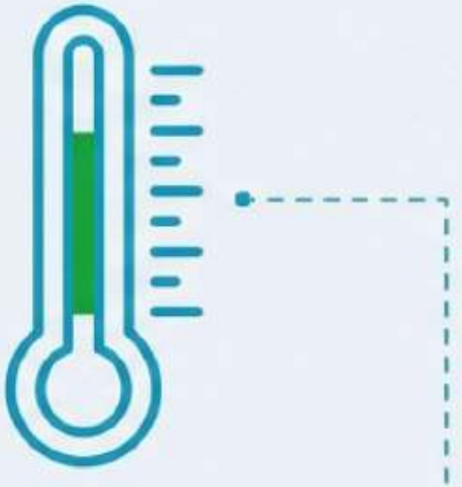
04 // LAYER SPECIFICATIONS



CONSUMPTION RATES

• Reflective Insulation:	**0.6** L/m²
• Facade Sealing:	**0.6 – 1.5** L/m²
• Roof Sealing:	**2** L/m²
• Average Yield:	**3 – 5** m² per Liter

05 // ENVIRONMENTAL CONDITIONS



APPLY BETWEEN 5°C AND 45°C

NO FROST

NO DIRECT STRONG SUN

NO STRONG WIND

NO RAIN

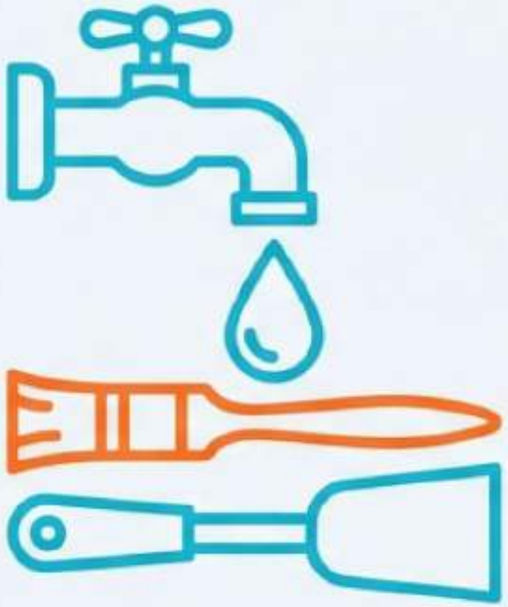
06 // DRYING & CURING

5 – 6 HOURS

Wait time between layers @ 20°C

**Drying time varies based on applied thickness and ambient humidity.*

07 // POST-APPLICATION



CLEAN TOOLS **IMMEDIATELY** WITH WATER

FINISH PROPERTIES

- WASHABLE FINISH
- EXCELLENT COLOR RETENTION
- RESISTANT TO WET RUBBING

TECHNICAL SUMMARY DATA

MIXING	Homogenize + 8-15% Water
THICKNESS	0.75 - 1 mm per layer
YIELD	3 - 5 m^2 / Litre
DRYING	5 - 6 Hours (@ 20°C)
TEMP RANGE	5°C - 45°C
SAFETY	Keep out of reach of children

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THERMO FACADES SHIELD

Technical Application Guide & Specification

- Nanosphere Thermal Insulation
- Waterproofing & Acoustic Damping
- High-Performance Reflective Pigments

10 Years Warranty

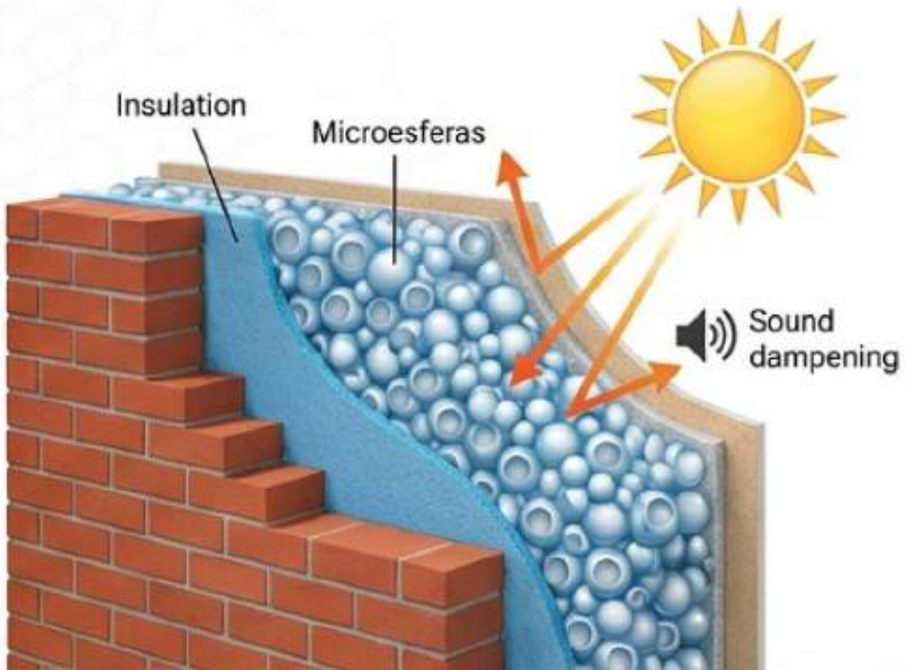
AIDICO Certified

System Capabilities

A high-performance shield featuring hollow nanospheres and reflective pigments. Prevents heat transfer and provides acoustic damping.

0.05 W/m.K

Thermal Conductivity



Compatible Substrates

- Concrete
- Cement
- Plaster
- Wood
- Galvanized Steel
- Ceramic Brick
- Natural Stone
- EPS / XPS
- PVC
- Glass
- Stoneware

Condition Check: Existing paints must be in good condition with strong adhesion.

Surface Preparation Protocol

01. Clean

Substrate must be perfectly clean, dust-free, and completely dry.

02. Abrade

CRITICAL: Polished surfaces must be sanded to open pores for adhesion.

03. Sanitize

Clean mold or foam with water and bleach.

04. Fungicide

Apply Fungilev fungicide to ensure a sterile base.

05. Test

Perform anchorage and stability tests.

High-End Architectural Specification

Remediation & Priming

Defect Remediation

Treat fissures and surface defects with Thermal Mastic (Exterior Grade). Pre-repair major structural damage with mortar.

Substrate Priming

Apply Suber-Fix primer to dusty, sandy, or highly absorbent surfaces.

Drying Time: Allow 4–6 hours before coating.

Mixing & Equipment

Dilution:

Add 8–15% clean water if necessary for workability.

Roboto Mono

Homogenize Thoroughly:

Essential for Nanosphere Distribution.

Application Tools

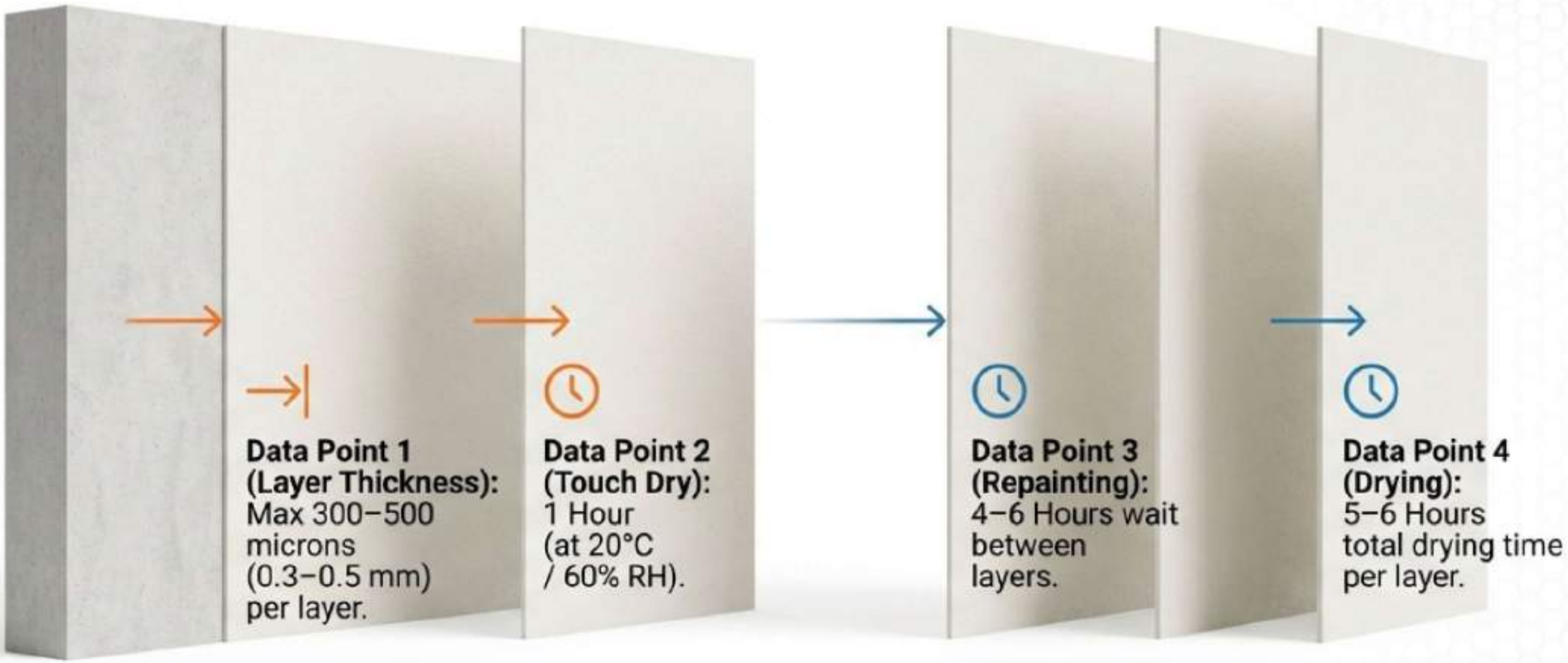
Brush

Roller

Spray Gun

Note: Ensure tools are clean to prevent clogging.

Application Protocol



Apply in thin layers to ensure proper curing and thermal performance.

Environmental Constraints

Frost

Strong wind

Technical Blue

Roboto Mono

Application Range: 5°C to 45°C

Inter

Direct exposure during application

Risk of rain

Do not apply if there is a risk of rain before drying is complete.

Technical Specifications

Thermal Conductivity	0.05 W/m.K (Reduces heat flow ~79%)
Fire Resistance	Class M1
Breathability	Class I (Permeable to water vapor)
Washability	Class 2
VOC Content	Category a/BA 75/30 (0.16)
Consumption	Min. 350 ml/m² (Range 0.6 – 1.5 L/m²)
Finish	Matte (White or Color Chart)

Post-Application & Storage

Cleaning

Clean tools with water **IMMEDIATELY** after use. Dried product is difficult to remove.

Storage

Store in a cool place. Protect from sunlight and frost.

Shelf Life

Up to 2 years in original sealed container. Prevent product from drying on container walls.

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Thermo Roofs Shield Covers

Application Guide & Technical System Specification

SUBERLEV

The Shield Against Thermal Bridges

A high-performance waterproofing formulated with premium acrylic resins, hollow microspheres, and reflective micropigments.

93.9%
Solar Reflection

>40%
Heat Reduction

0.05
Thermal Conductivity (W/m.K)

190%
Elasticity & Dilation

Phase I: Site Evaluation & Conditions

1. The Substrates (Where)

Compatible with Concrete, Cement, Asphalt Fabric, Galvanized Sheet, Tile, Brick, and Rigid Foam.

Surfaces must be pre-primed and have good adhesion.

2. The Environment (When)

Temperature Window:
5°C – 45°C

Prohibited Conditions

- No Frost
- No High Wind
- No Strong Sun
- No Rain

Phase II: Surface Preparation Protocol

SANITIZE

Clean surface of dust and mold. Use water/bleach or Fungilev.

REPAIR

Treat defects and cracks with Thermal Mastic. Use mortar for major damage.

PREPARE

Sand polished surfaces to open pores. Check stability of old paint.

Phase III: Priming & Reinforcement

Condition A: Absorbency Control

Scenario: Dusty surfaces or excessive absorption.

Apply Suber-Fix Primer

Dry for 4 - 6 Hours.

Condition B: Structural Reinforcement

Scenario: Horizontal surfaces or complex supports.

Install Fiberglass Mesh

Use 60-80 g/m² mesh or 225-300 g/m²
Mat interspersed within layers.

Phase IV: Application Protocol

Tools

Roller

Brush

Airless Spray

The Process

1. Mixture
Ready to use.
(Add water only if necessary for viscosity).

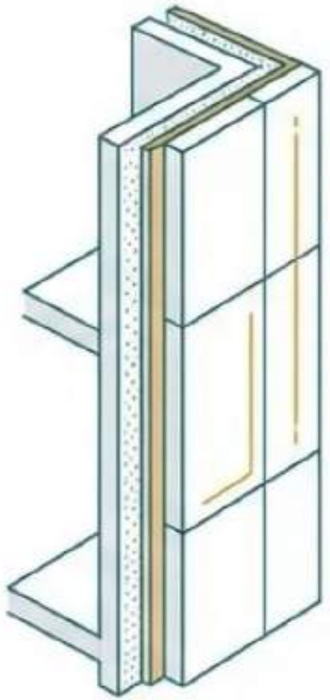
2. Layering
Apply 2–3 coats.

3. Drying
Wait 8–12 hours between layers.

Pro-Tip for Flat Roofs

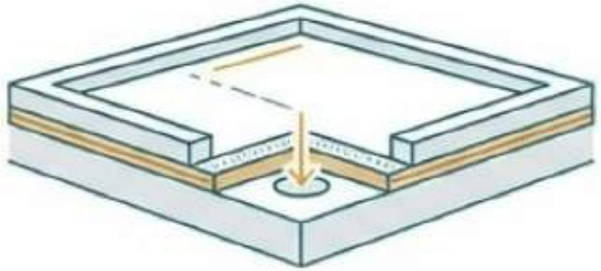
For walkability and warranty assurance, apply 150 ml/m^2 of Suberlev practicable varnish as a top finish.

Consumption & Yield Targets



0.8 – 1.5 L/m²

FACADES



0.8 – 2.0 L/m²

ROOFS

- Thermal Reflection Focus: Minimum **0.6 L/m²**
- Full Waterproofing Focus: Efficiency target **2.5 L/m²**

Technical Specifications

Density **1.1 kg/L** **(± 5%)**	Solids by Volume **71%**	Elasticity **190%** **Allowed Dilation**	Warranty **7 Years** **(Outdoor)**
Solar Reflectance Index (SRI) **>100** **(ASTM E1980-11)**	Solar Reflection Factor **83.9%** **(ASTM G173-03)**	Microsphere Size **≤ 28 µm**	Thermal Conductivity **0.05 W/m.K**

Safety, Storage & Hygiene

Storage Protocols

Keep between **5°C – 45°C**.

Protect from frost and direct sunlight.

Shelf life: **2 years** sealed. Use within **15 days** of opening.

Safety & Maintenance

- Prevent drying in the container to avoid lumps (stops gun clogging).
- Wash tools immediately with water.
- Do not eat/drink during application. **Keep away from children.**

Help Us Help You

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THERMO INTERIOR ANTIBACTERIAL

Application Guide & Technical Data

Product Profile

An interior plastic paint formulated with acrylic copolymers, nanotechnology, and silver ions.

Antibacterial: Silver ions resist bacteria and mold growth.

Thermal: Reduces heat transfer (microspheres: 20 µm).

Acoustic: Dampens sound and echo.

Breathable: Class I water vapor permeability.

01 Substrate Preparation

The surface must be clean, free of dust, and completely dry.

- 1. **Polished Surfaces**: Sand to open the pore.
- 2. **Biological Contaminants**: Remove mold/moss. Clean with water/bleach.
- 3. **Defects**: Repair cracks with Thermal Mastic.
- 4. **Adhesion**: Apply Suber-Fix on dusty/absorbent surfaces.

Concrete, Cement, Plaster, Plasterboard, Wood, Galvanized Steel, PVC, Ceramic Brick.

02 Environmental Conditions

Application Range:
5°C – 45°C

No Frost.
Avoid Direct Sun.
No Rain/Wind.

Avoid excessive water vapor condensation during cure.

03 | Mixing & Tools

Preparation

Homogenize thoroughly.

Dilution: Add 8–15% clean water.

Prevent product from drying on container walls to avoid clumps.

Approved Application Tools

Brush

Roller

Suitable Spray Gun

Application Process

2-3

COATS

Apply layers as necessary.

300-500

MICRONS

Target dry film thickness.

4-6

m^2/L

Yield per coat.

Total consumption approx 0.35 L/m^2.

05 | Curing Times

Between Coats

5 – 6 HOURS

Variable based on thickness and humidity.

Clean tools immediately with water.

Technical Specifications

Appearance	Matte silky / White
Density	1.1 kg/L ± 5%
Viscosity	60,000 cps (Brookfield LTV)
Thermal Conductivity	0.05 W/m.K
Heat Flow Reduction	Up to 79%
Scrub Resistance	Class 2 (Washable)
Fire Response	M1 (Does not spread flame)
Artificial Aging	No change (3000 cycles)

07 | Storage & Safety

Storage

Shelf Life: 2 Years (Sealed).

Open Container: Use within 15 days.

Temp: Store between 5–45°C.
Protect from frost/sun.

Safety

Keep out of reach of children.

Contains silver ions and microspheres.

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Shield Thermo-Skylights

Technical Data & Application Guide

The Ultimate Thermal Corrector

For Translucent Surfaces: Polycarbonate, Fiberglass, and Glass

Heat Reduction: Reduces entry of infrared radiation in summer.

Conservation: Insulating capacity reduces heat loss in winter.

Light Management: Allows light passage while preventing glare.

Protection: Blocks UV rays that damage furniture and merchandise.

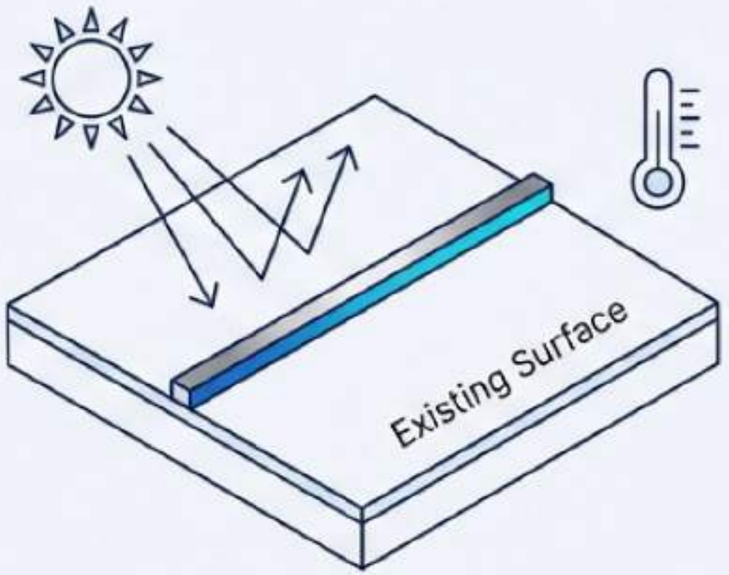
Define Your Application Requirement

Select the methodology based on surface needs.

Option A

Thermal Insulation Only

For surfaces that are already watertight.

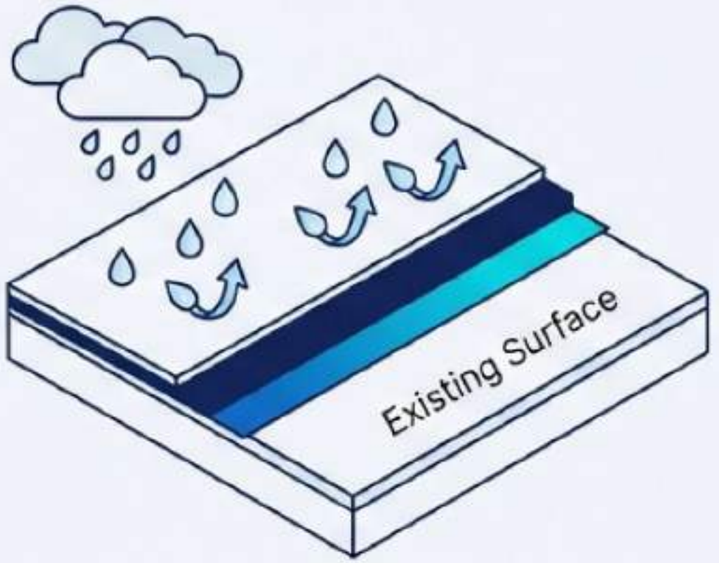


Application: 0.15 L/m² of Shield Thermo-Skylights.

Option B

Insulation + Waterproofing

For surfaces requiring a complete seal against water infiltration.

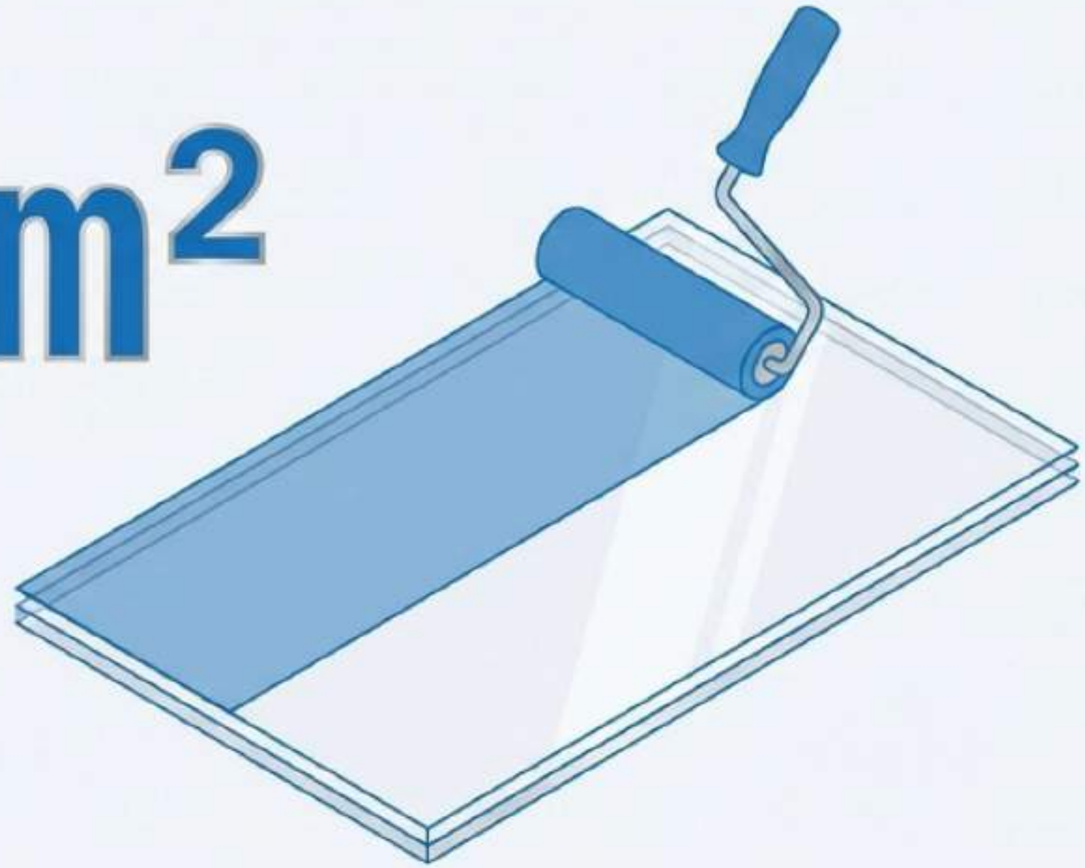


Application: 1.5 L/m² of Pure Acrylic Membrane followed by 0.15 L/m² of Shield Thermo-Skylights.

Method A: Thermal Insulation Only

0.15 L/m²

Apply directly to the polycarbonate, fiberglass, or glass surface.



Method B: Insulation & Waterproofing System

Falcon Stema
www.falconstema.mc

Step 1: Base Layer

Product: Pure Acrylic Membrane
Data: Apply 1.5 L/m² beforehand

Step 2: Thermal Shield

Product: Skylights Thermo Shield
Data: Apply Top Coat

Ensure the Pure Acrylic Membrane is fully applied and dry before applying the Thermo-Skylights Top Coat.

Falcon Stema
www.falconstema.mc

Technical Behavior & Specifications

DRYING TIME

4 to 10 Hours

STANDARD CONDITIONS

20°C / 60% RH

THINNER

Water

FINISH

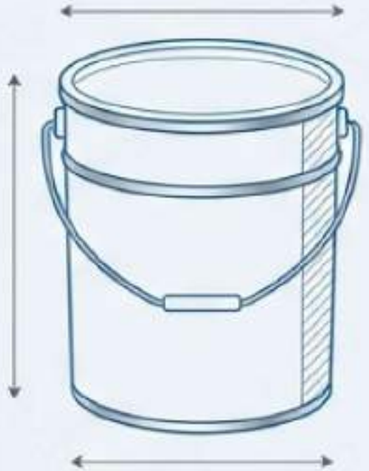
High Satin

Aesthetics & Reliability

Color: Translucent

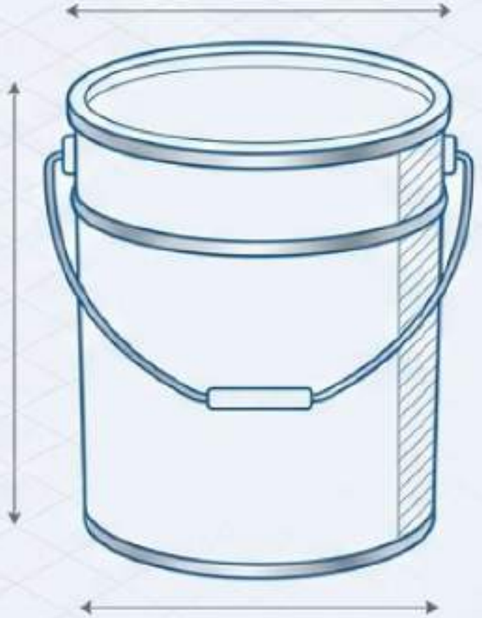
Maintains natural light transmission while correcting thermal retention.

Product Logistics



Roboto Mono

Format: **2.5 Liters**
Ref Code: Ref. A241



Roboto Mono

Format: **15 Liters**
Ref Code: Ref. 052

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NATURAL CORK SYSTEMS

Natural Projected Cork (Roofs/Facades)

- Granulometry 0.4–0.9 mm; density 0.70 kg/L; Euroclass B-s1-d0
- Exterior thermal-acoustic insulation – 69% heat flow reduction

Fine Projected Cork (Interiors)

- Granulometry 0.1–0.4 mm; density 0.80 kg/L
- Interior acoustic correction – partitions, ceilings, thin-wall soundproofing

SUBERLEV

Natural Board Cork

- 100% natural agglomerated cork panels (500×1000 mm)
- SATE/ETICS systems – façade insulation, ceiling/roof lining

FALCON STEMA

Natural Projected Cork

for Roofs and Facades

A Suberlev Innovation by FalconStema

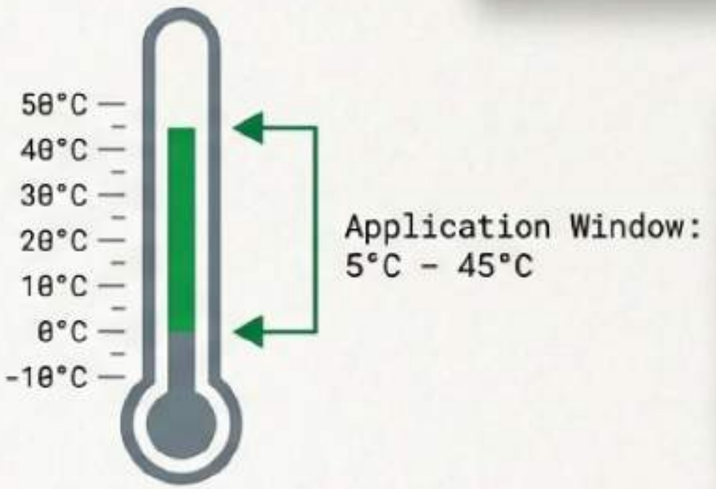
Eco-friendly • Waterproof • Thermal-Acoustic Insulation

Substrate Assessment

Approved Substrates

- ✓ Concrete
- ✓ Cement
- ✓ Plaster
- ✓ BA13
- ✓ Wood
- ✓ Galvanized Steel
- ✓ Mortar
- ✓ Ceramic Brick
- ✓ Natural Stone
- ✓ EPS/XPS
- ✓ PVC
- ✓ Glass
- ✓ Stoneware

Weather Window



PROHIBITED

CRITICAL CHECK: Substrate must be completely dry before application.

Surface Preparation Protocol

WARNING: Do NOT use pressurized water.

Step 1: Sanitize

Remove mold, moss, or loose paint. Apply Fungilev, then clean with water/bleach.

Step 2: Repair

Fix cracks and expansion joints using Thermal Mastic.

Step 3: Prime

Apply Suber-Fix primer on dusty or absorbent surfaces.

Product Mixing & Equipment Setup

The Mix

Professional Mixer (High Speed)

→

3–5 Minutes Homogenization

→

Add max 200ml water if needed

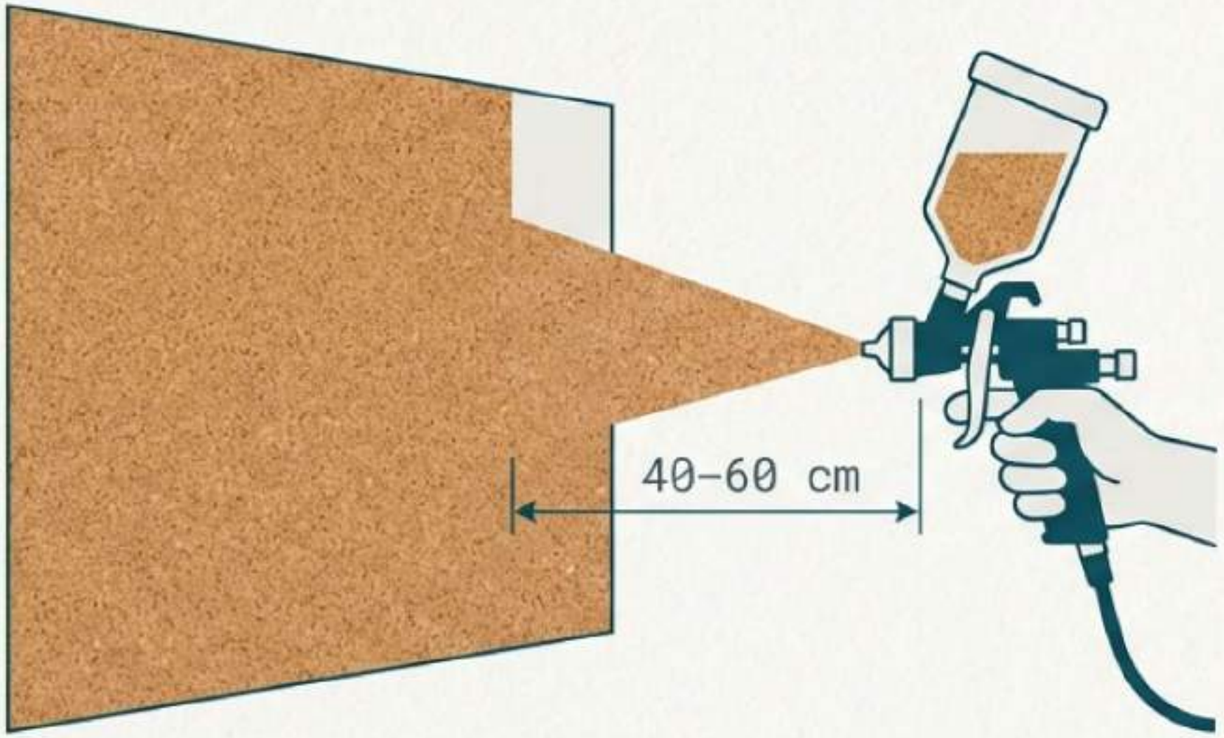
→

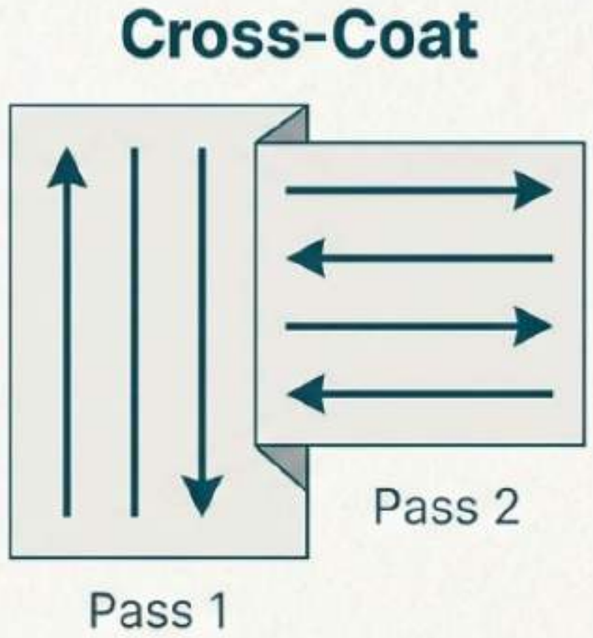
Prevent Lumps (Avoids Clogs)

The Hardware

Compressor Capacity	`Min. 250 L/min`	Spray Gun	`Specific for Cork`
Hose Type	`Quick-release connectors`	Nozzle Size	**`5.5 mm`**

Application Technique





Minimum 2 Coats Required

Strategic Planning:
Plan interruption lines near joints, downspouts, or corners to avoid visible overlaps.

Consumption & Technical Specs

Total Yield (2 Coats)
Inter

2 - 2.5 kg/m²

Coverage Per Pot
Inter

6 – 10 m²

Per 12kg Unit
Inter

Thickness Ratio
Inter

1.15 mm

Per 1 kg/m² (Single Coat)
Inter

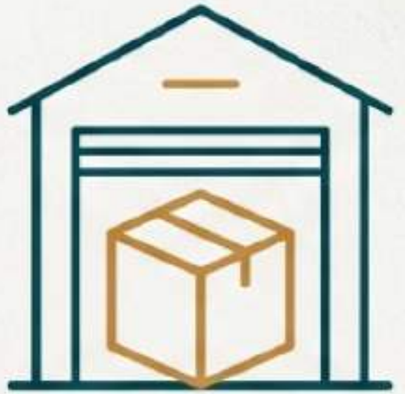
Physical State: Paste (Density 0.70 kg/L)

Grain Size: 0.7 - 0.9 mm

Drying, Curing & Storage

Wait 4–6 Hours

Minimum drying time between coats.
Dependent on humidity and ventilation.



- Temperature: **5–45°C**
- Shelf Life: **2 Years** (Sealed)
- Open Container: Consume within **15–20 days**

Protect from: Frost & Direct Sunlight

Performance & Certification

Compliance: EN 1504-2 / EN 14891 (Waterproofing), EN 13501-1 (Fire), ISO 14025 (EPD).

Finishing & Aesthetics

Available in 27 Colors + Natural Base

Note: *Slight color variations may occur between batches due to natural cork properties.*

Post-Application Options

- Sandable
- Fillable
- Varnishable
- Paintable

- Maintenance: Washable and Weather Resistant.

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Innovation in Protection.

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Practical tests are recommended to ensure compatibility for each specific application.

Fine Natural Projected Cork

Fine Natural Projected Cork

Fine Natural Projected Cork

Technical Application Guide & Methodology

For Facades and Interiors

The Material Composition

COMPOSITION

Expanded natural cork granules, solvent-free resins, inorganic pigments.

STATE

Paste density 0.80 kg/L.

TEXTURE

Fine grain size 0.1 - 0.4 mm.

PERFORMANCE

Elastic, Breathable, Fire Resistant (Euroclass B - s1 - d0).

Phase I: Surface Preparation

CLEAN
Remove dust, mold, moss, and degraded paint.

REPAIR
Use Thermal Mastic for defects.

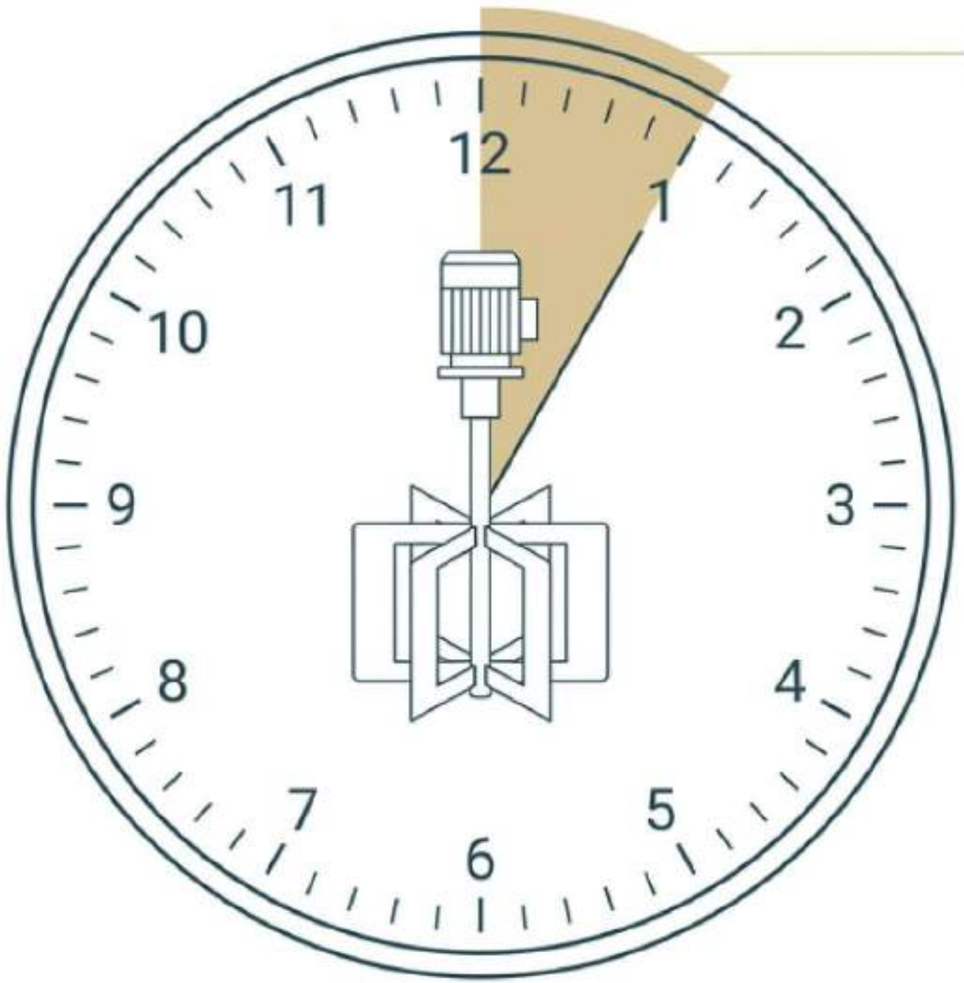
PRIME
Apply Suber-Fix on absorbent surfaces.

Concrete	Cement	Plaster	BA13
Wood	Galvanized Steel	Ceramic Brick	Natural Stone
EPS/XPS	PVC	Glass	Stoneware

GOLDEN RULE:
Surface must be clean, dust-free, and completely dry.

Phase II: The Mixture

TOOL: High-speed industrial mixer.



3–5 MINUTES
Mixing Time

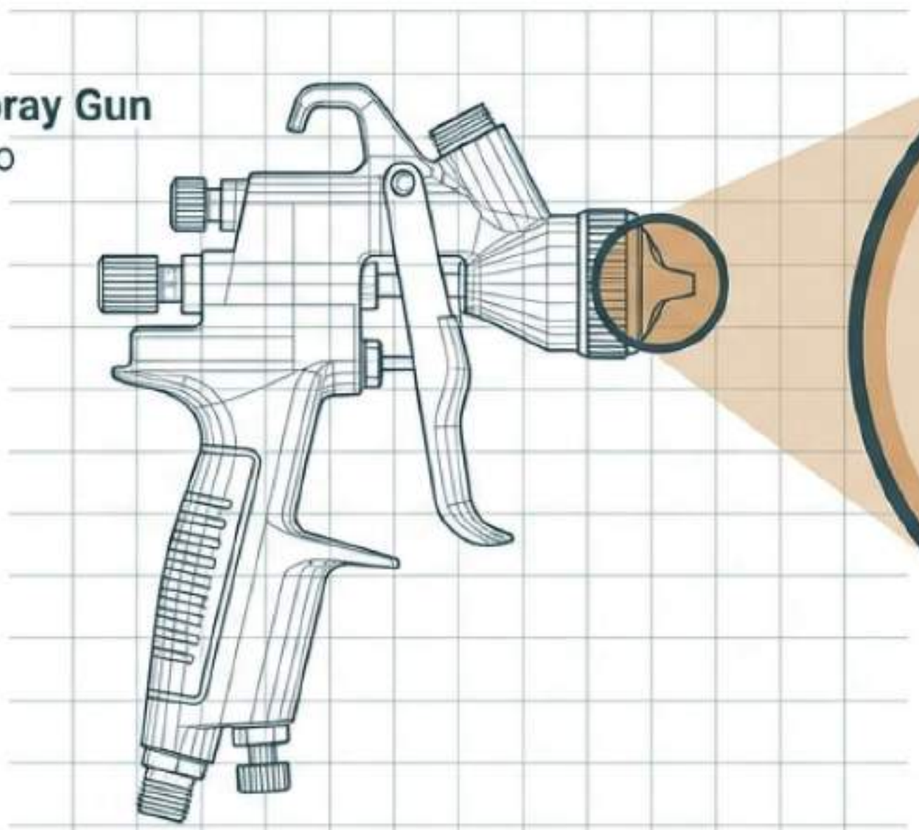
ADJUSTMENT:
Max 200 mL water.

CAUTION: Do not let product dry on container walls. Clumps will clog the spray gun.

Architectural Minimalist

Phase III: Equipment Specifications

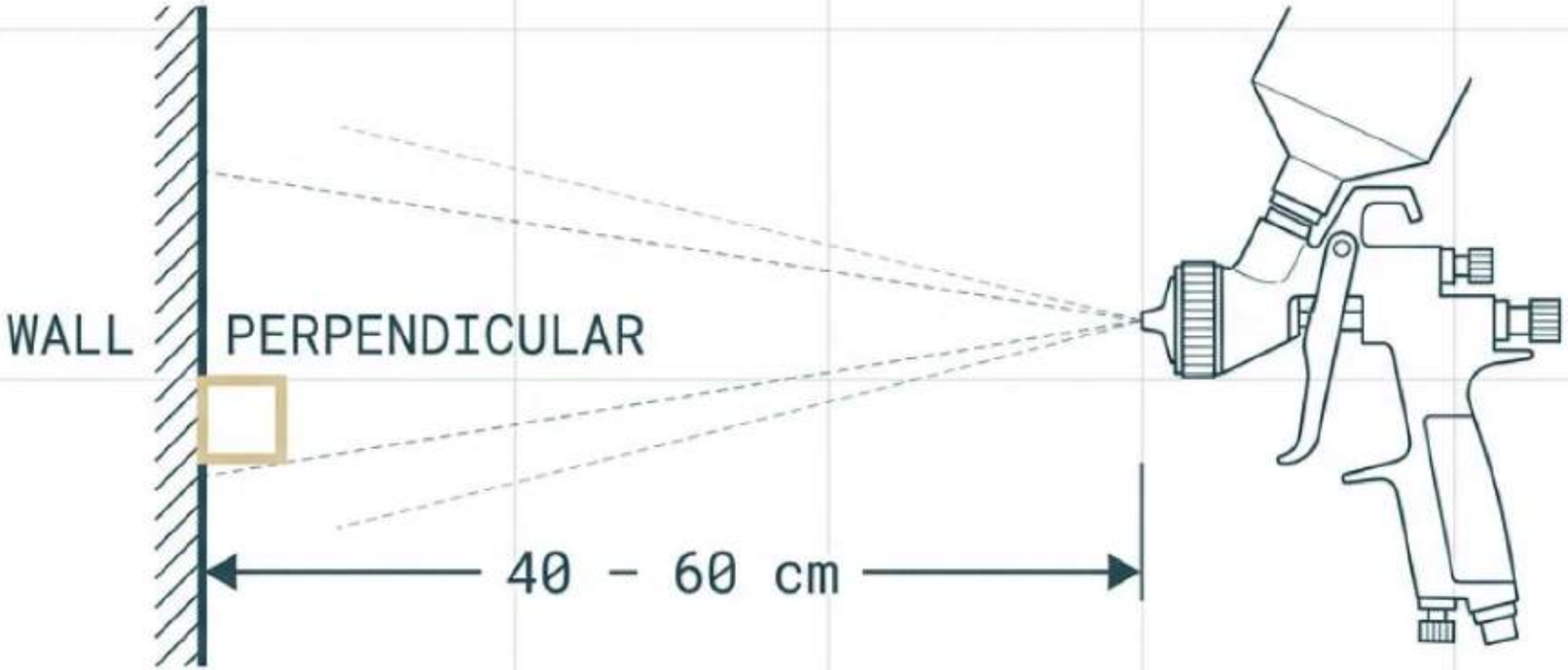
Suberlev Spray Gun
Roboto Mono



5.50 mm
NOZZLE SIZE
Roboto Mono

COMPRESSOR FLOW: Min 250 L/min
Roboto Mono, Graphite Grey

Phase IV: Projection Technique



LAYERS

Apply minimum 2 coats.

TEMPERATURE

Range: 5°C to 45°C.

AVOID

Direct sun, wind, rain, frost.

Phase V: Curing & Finishing

CONSUMPTION: 2 kg/m² total

~1.15 mm per coat

POT YIELD: 7–11 m² per 16L unit

Sand • Fill • Varnish • Paint • Plaster

Clean tools with water immediately.

Technical Specifications

Fire Resistance	Euroclass B - s1 - d0
CE Marked	UNE-EN 1504-2
Thermal Conductivity	0.059 W/m.K
Water Vapor Permeability	Class I
Adhesion	0.9 MPa (Direct tensile)
Skid Resistance	Class 3
Sound Absorption	Type E

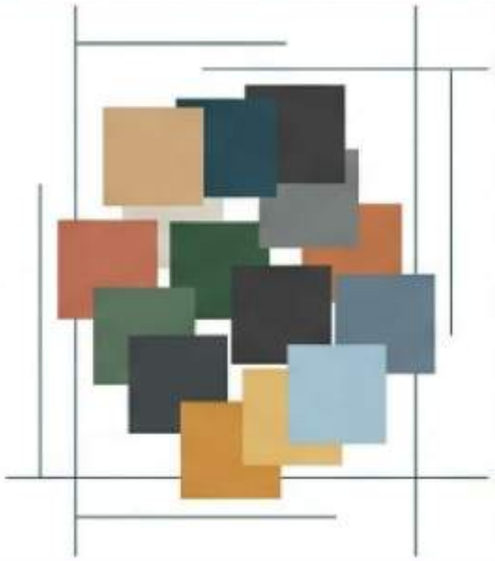
Important Considerations

NATURAL VARIATION

Cork is a raw material.
Slight color variations may occur between batches.
Use the same manufacturing position per site.

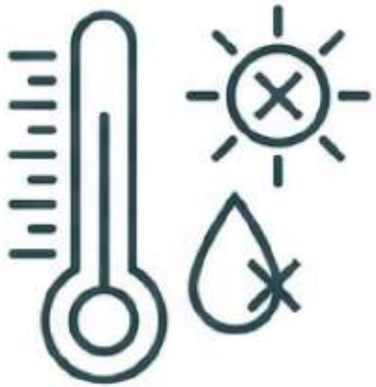
COLORS

Available in 27 colors + natural base.



STORAGE

5–45°C. Protect from moisture/sunlight.
Shelf life: 2 years (sealed),
15–20 days (opened).



SAFETY

Do not eat, drink, or smoke during application.
Keep out of reach of children.

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Practical tests are recommended to ensure compatibility for each specific application.

SUBERLEV

FALCON STEMA

Natural Board Cork

Sustainable Thermal & Acoustic Insulation Systems.

100% Natural.

Steam Expanded:
Cork granules expanded with water vapor.

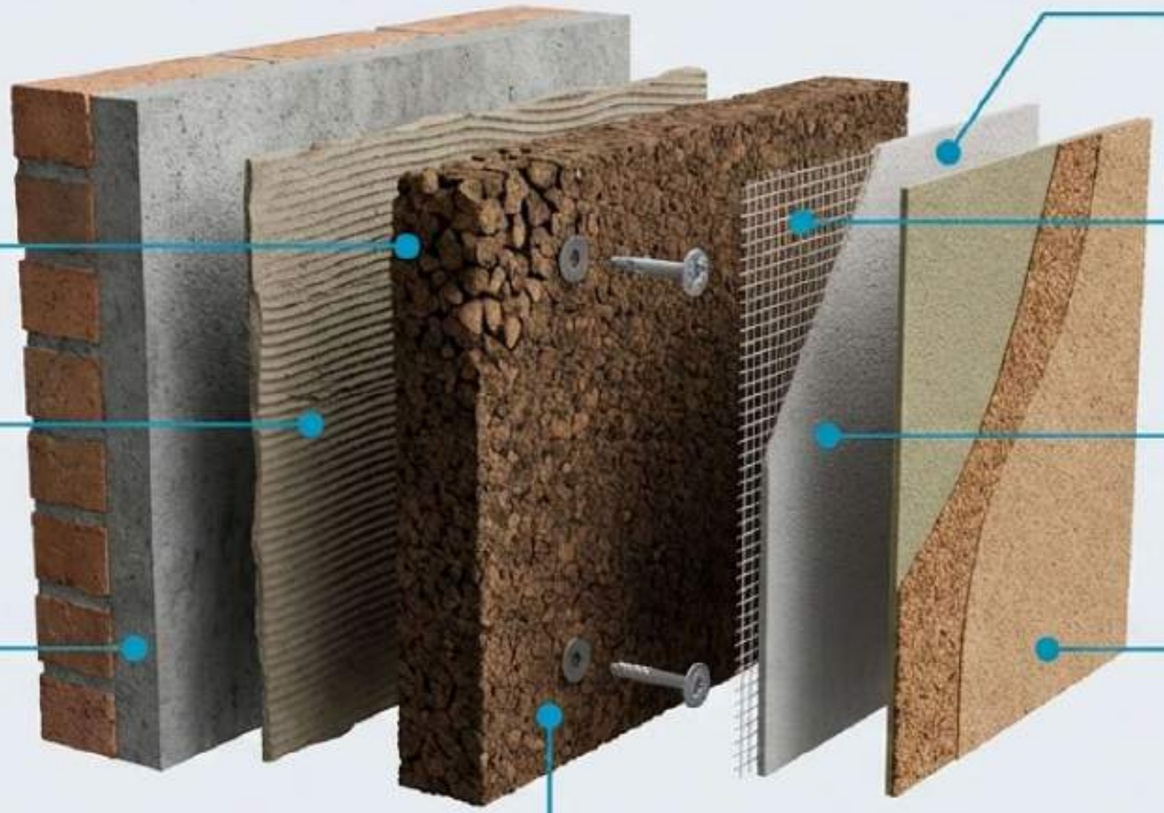
Natural Resin:
Bonded by Suberin.
No chemical additives.

Hygrothermal Regulation:
Naturally breathable.

0% Synthetic.

The SATE Application Layering

External Thermal Insulation Composite System



Finish:
Suber-Paint or
Cork Spray

Protection:
Flexilev ECO Plaster
(with embedded mesh)

Adhesive:
Flexilev ECO

Adhesive:
Flexilev ECO

Protection:
Flexilev ECO Plaster
(with embedded mesh)

Base Wall:
Brick/Concrete

Finish:
Suber-Paint or
Cork Spray

Insulation:
Natural Board Cork

Exploded View

Beyond the Facade: Versatile Applications

Ceilings & Roofs

Thermal consistency for flat or sloped roofing systems.

Cold Storage

Industrial-grade resistance for temperature-controlled environments.

Structural Isolation

Vibration dampening between building elements.

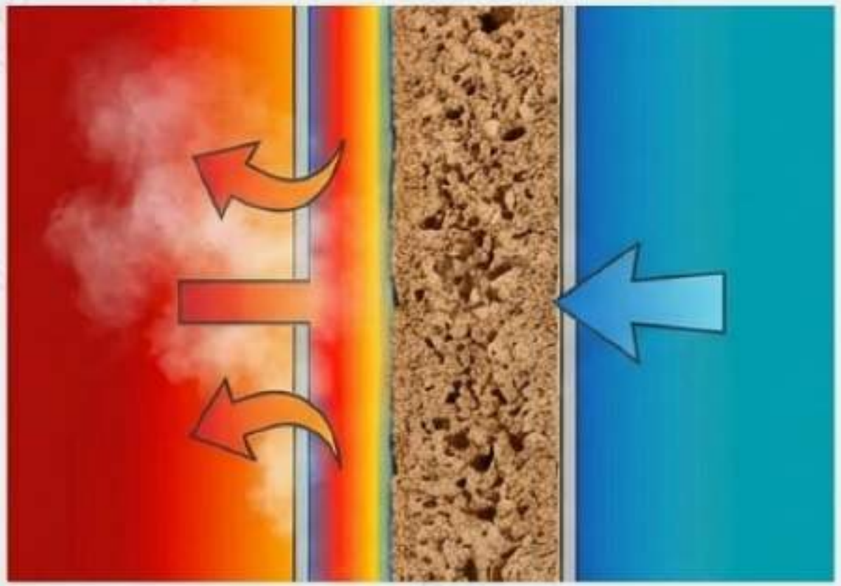
Efficient On-Site Workability

- **Lightweight Handling:** 90% air composition for easy manual transport.
- **Easy Cutting:** Adaptable to corners and architectural irregularities with standard tools.
- **Universal Compatibility:** Works with cement, lime, and chemical adhesives.
- **Rapid Install:** Speeds up SATE system application.

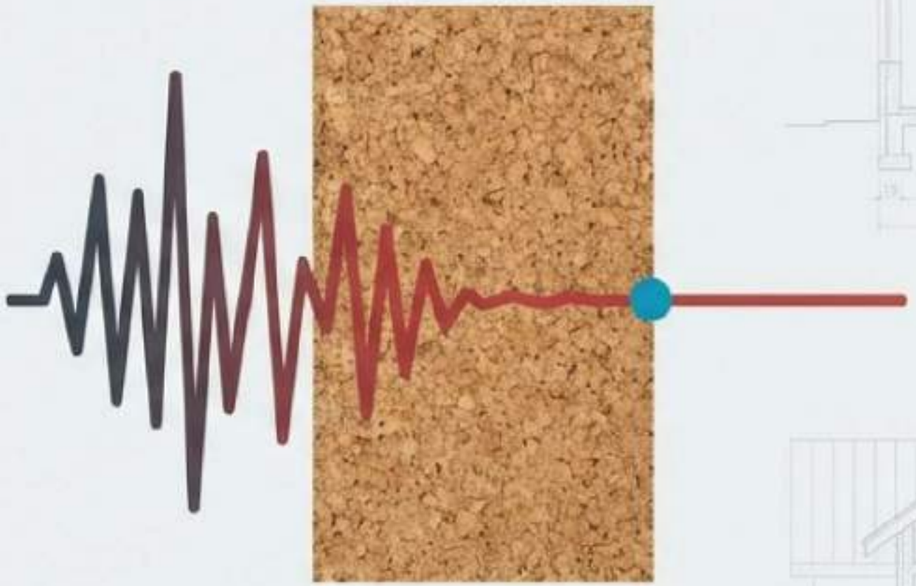
Technical Specifications

Dimensions	500 x 1000 mm
Thickness	20 mm – 80 mm (Customizable)
Thermal Conductivity	**0.04** **W/m·K**
Density	110-120 kg/m³
Fire Resistance	Euroclass E
Compression Strength	Up to 30 kg/cm²
Thermal Resistance (at 80mm)	2.00 m²·K/W

The Living Shield: Comfort & Safety



Thermal Bridge Elimination



53 dB Sound Reduction

Fire Resistance

13 Hour Thermal Delay (at 20cm).

Dimensional Stability

Rot-proof and rigid.

Healthy Atmosphere

Breathable material prevents mold.

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CATALOG
2026

SUBERLEV

INFO@FALCONSTEMA.MC
+377 99 90 56 35

FALCON STEMA S.A.R.L
2BIS, RUE DE VIOLETTES
98000 MONACO

THERMAL MORTARS & FILLERS

Innovations in Construction Materials

Thermolev ECO
Thermo-calcic mortar + recycled EPS (1–4 mm); λ=0.05 W/m·K
Mineral SATE base layer – 3–4 cm thickness

Thermal Putty (Masilla Termica)
Flexible thermal filler with glass fibers; max 2 mm/layer
Crack/fissure filling – bridges structural movements

Suberconfort Dry
Cement-based dry filler + cork + glass fibers
Rising damp treatment – blocks capillary moisture at wall base

Microlev
Microcement + cork granules (0.5–1 mm); 1 L/m² yield
Seamless decorative flooring/walls – adheres to tiles, concrete, parquet

Foamlev
Thin-layer insulation with EPS beads (1000–2000 µm);
λ=0.044 W/m·K
Structural consolidation – rebuilds eroded balconies

SUBERLEV

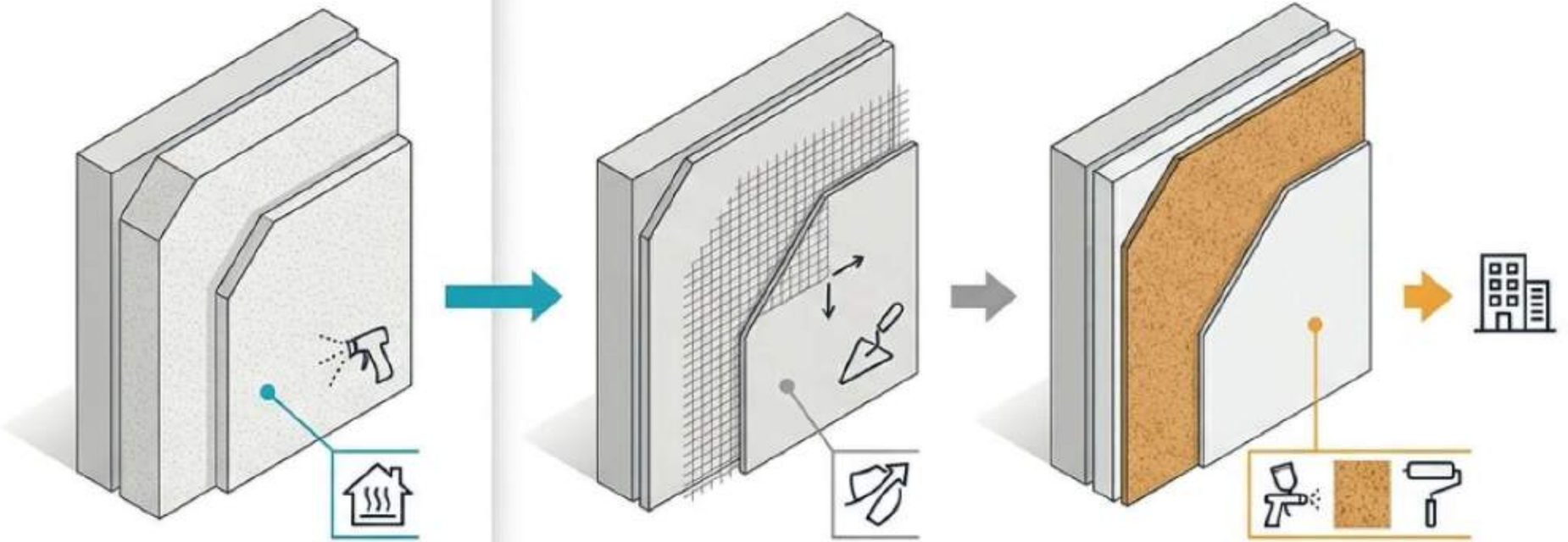
FALCON STEMA
NATURAL TECHNOLOGY

Thermolev Eco
S.A.T.E. Thermal Mortar Application Guide

The Foundation of the Mineral S.A.T.E. System

Lime-based mortar with thermo-expanded volcanic rock and 80% recycled EPS beads.

The Mineral S.A.T.E. Workflow



Step 1
Thermolev Eco
(Insulation & Leveling)

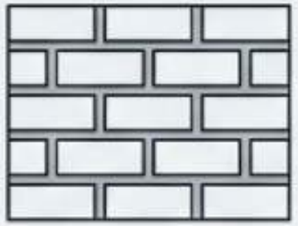
Step 2
Flexilev Eco
(Reinforcement)

Step 3
Finish
(Cork/Paint)

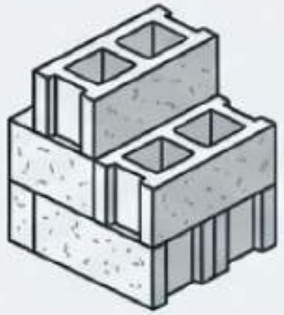
A sprayed thermal mortar system. Adapts to any surface, creates no joints, and requires no primer on mineral surfaces.

Substrate Compatibility & Preparation

Compatible Materials

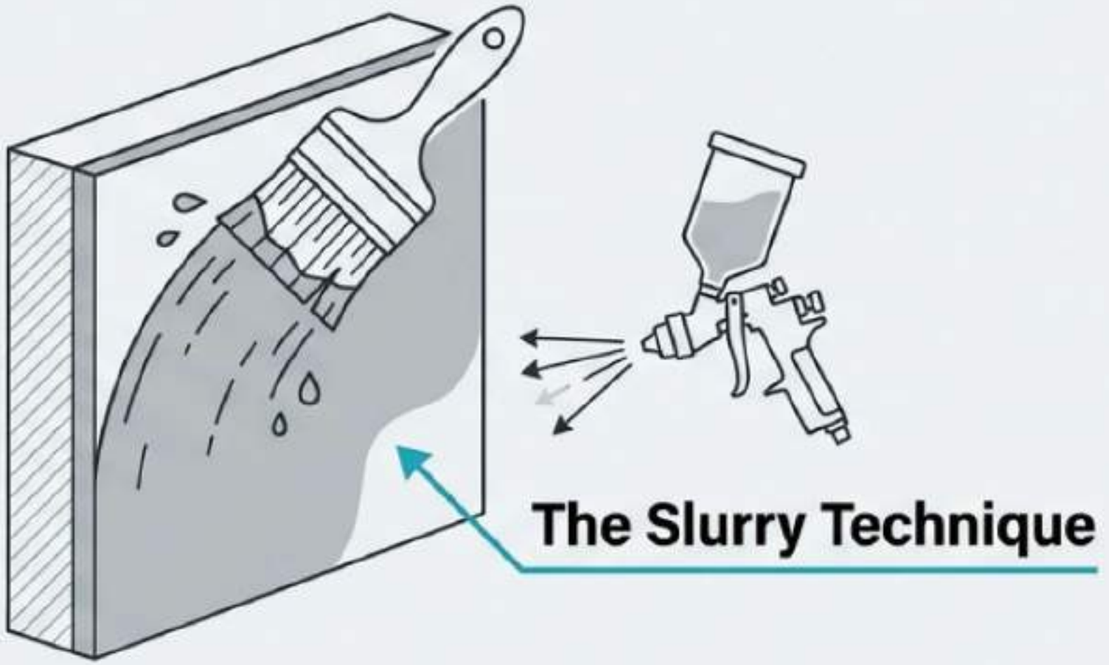


Masonry / Brick



Cement /
Concrete Blocks

Mineral Origin Only.
Surface must be firm, clean, compact, and absorbent.



- **Standard Prep:** Moisten the substrate with clean water before application.
- **For Adhesion:** Apply a slurry (Thermolev + Water) to fill pores and improve grip for the first layer.

Environmental Constraints

Risk of frost

Application Window
5°C – 35°C

Direct sunlight exposure

Strong wind

Rain

Note: Avoid working in conditions that force rapid drying during the curing phase.

Mixing Protocols

Recipe A: The Application Paste

Mix 15–18 Liters of water per 50L Bag.
Goal: A dense, homogeneous paste.

Recipe B: The Priming Slurry

Mix 30 Liters of water per 50L Bag.
Goal: Fluid consistency for pore filling.

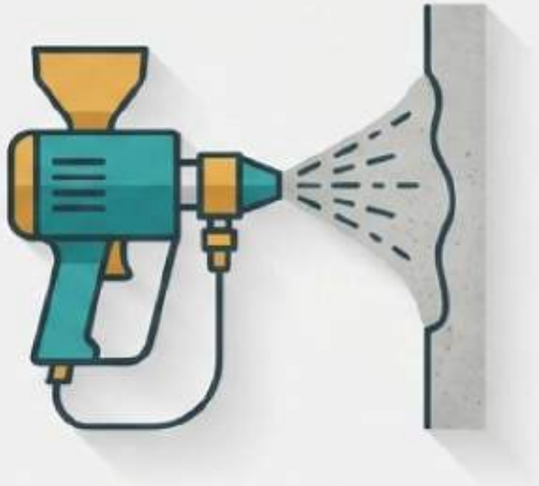
Do not add water during the application process once the product is mixed.

Application Methodology

Manual Application

Apply using a plastic trowel. Use spatulas or aluminum profiles for corners and edges.

Mechanical Application



Use specialized projection machines (e.g., Suberlev equipment).

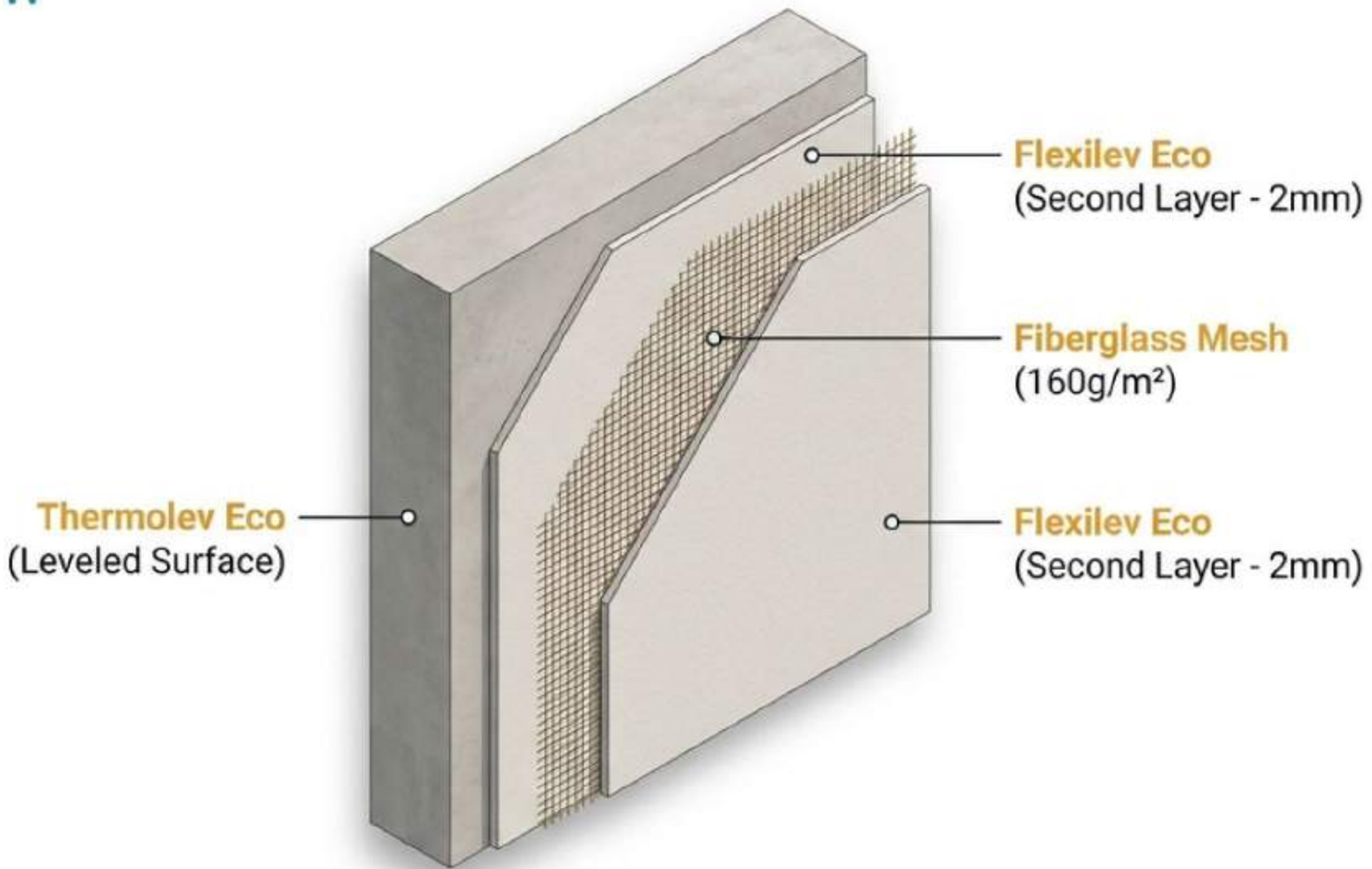
Layer Thickness: 3–4 cm per pass.

Yield: 2.0 – 2.3 kg/m² per cm of thickness.

Leveling & Reinforcement

Post-Application Workflow

Once Thermolev Eco is set, the surface must be reinforced to prevent cracking and ensure weather resistance.



Technical Specifications

Label	Value
Thermal Conductivity	**0.05 W/m^{o}K (EN 12667)**
Volumetric Mass	**220 kg/m^3 ± 20**
Reaction to Fire	**Euroclass B - s1 - d0**
Permeability	**Breathable, non-water-absorbing (Water Vapor μ ≤ 8.7)**
Adhesion	**≥ 0.06 MPa**

Certification: CE Marked (UNE-EN 998-1) CE

Maintenance & Storage

Tool Cleaning: Wash immediately with water. Dried residue requires mechanical removal.

Storage: Store in a cool, dry place (5-45°C). Protected from moisture moisture and frost.

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

Joints: Plan interruption lines for large surfaces near joints, downspouts, or corners.

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Mastic Subercomfort Dry

Technical Application Protocol

Thermal & Acoustic Correction for Interiors.

A cement-based powdered filler with natural cork granules and glass fibers.

Operational Prerequisites

Conditions

Range: 5°C to 45°C

No Direct Sunlight.
No Strong Wind.
No Rain.
No Frost Risk.

Substrates

Concrete

Brick

Wood

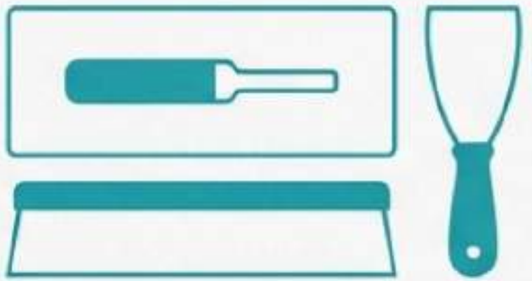
Stone

Compatible with: Concrete, Cement, Plaster, BA13 (Drywall), Wood, Brick, Stone, Mortar.

Ensure existing paint has strong adhesion.

Tools

Low-speed Industrial Whisk.



Application Trowel or Spatula.

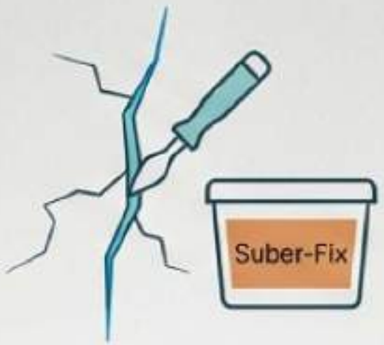
Phase 1: Surface Preparation

1 Clean

Substrate must be dust-free, perfectly clean, and completely dry.

2 Repair

Remove degraded material (paint, mold, foam). Sanitize mold with water/bleach.



3 Crack Management

Expand cracks, remove dust, and apply Suber-Fix. Use mortar for major damage.

4 Prime

On dusty/sandy surfaces: Pre-brush and apply Suber-Fix (Wait 4-6 hours).

Phase 2: Mixing Protocol

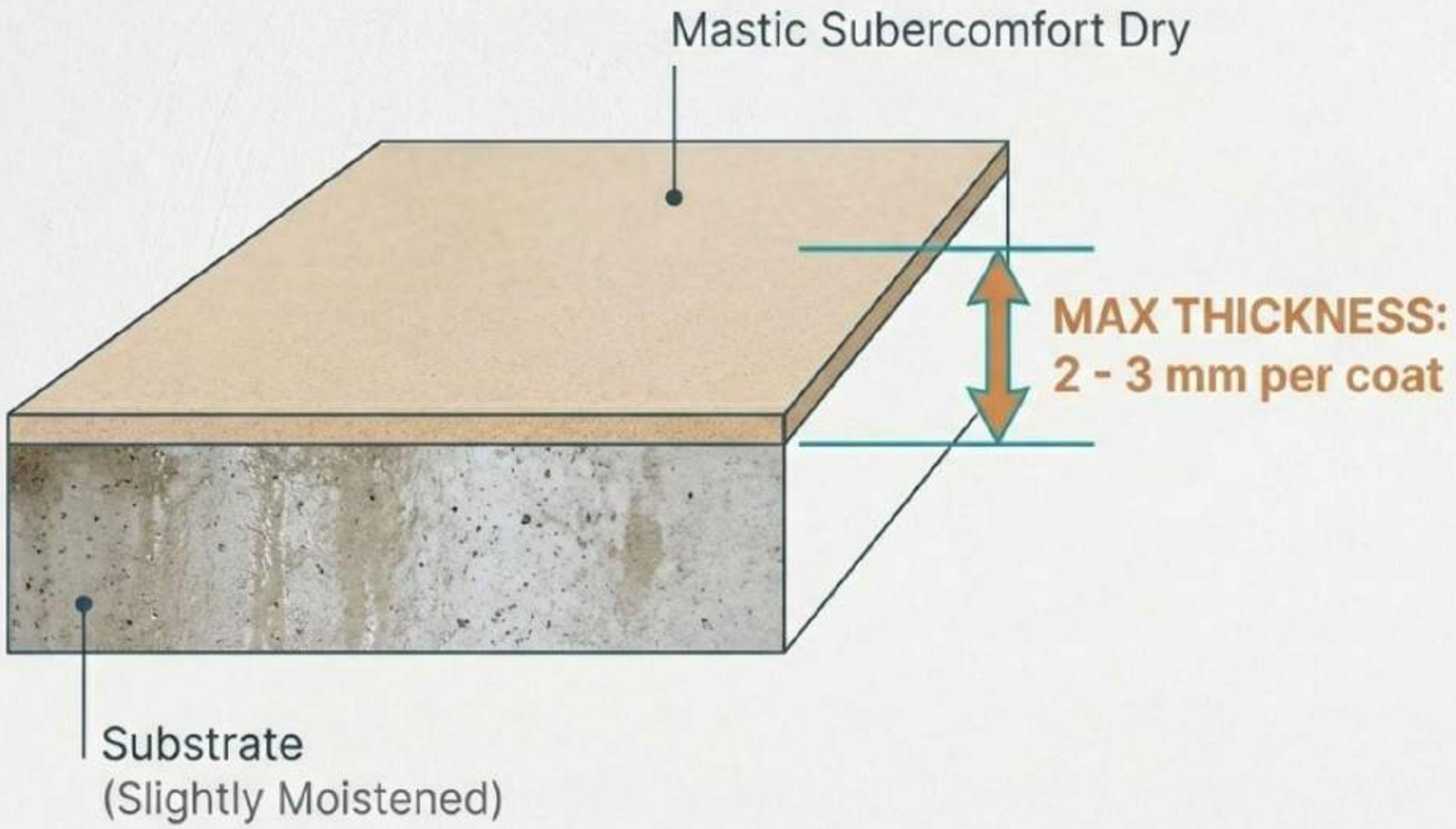
8 kg Powder

7 Liters Water

Procedure

1. Mix with low-speed industrial whisk.
2. Stir for 3 - 5 minutes.
3. Goal: Homogeneous dough, absolutely no lumps.

Phase 3: Application Technique



A

Moisten support before application.

B

Apply with trowel or spatula.

C

Apply in thin layers to ensure curing and prevent cracking.

Phase 4: Curing & Drying

1 - 2 Hours

at 20°C

Time varies by humidity & thickness.

Checkpoint

Ensure layer is stable before next coat.

Tool Maintenance

Clean tools with water IMMEDIATELY after application.
Dried product requires **mechanical removal**.

Phase 5: Finishing & Aesthetics

Option 1: Natural (Matte/Cork Aspect)

Preparation: Surface can be sanded (Grit 60-120) for a smoother finish before painting.

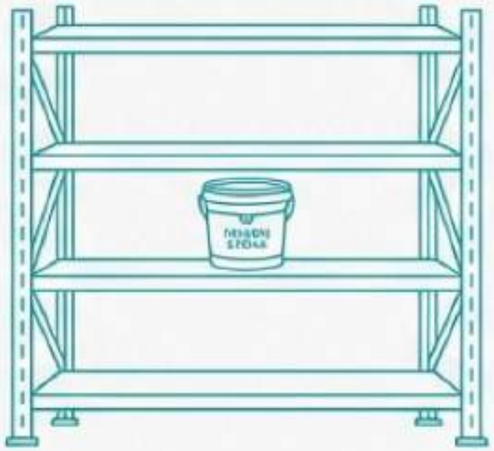
Option 2: Paint (Water-based/Aqueous)

Option 3: Varnish

Option 4: Plate / Tile

Storage & Safety Protocols

Storage



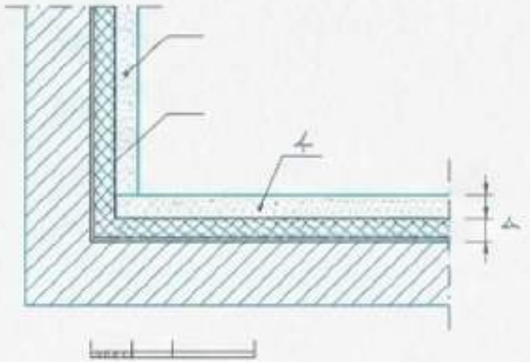
- **Temperature**: 5 - 45°C (Cool, dry place).
- **Protection**: No Frost. No Moisture. No Direct Sun.
- **Shelf Life**: 2 Years (Sealed).
- **Open Container**: Use within 15 - 20 days.

Safety

- Keep away from children.
- Wear protective clothing (Irritating to eyes/respiratory).
- Do not apply as final finish for exteriors.

Technical Specifications

Consumption	**~ 0.55 kg/m²** per mm thickness
Thermal Conductivity	**0.05** W/m K
Density (Powder)	**0.50** kg/L ± 8%
Fire Response	**M1**
Color	White / Natural
Certification	**CE** Marked (UNE-EN 1504-2)



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FOAMLEV THIN LAYER INSULATION

TECHNICAL APPLICATION GUIDE

SUBERLEV

Innovation in thermal and acoustic insulation.
A thin-layer insulating coating based on lime, expanded polystyrene (EPS) beads, and special additives.

THE PREREQUISITES: ENVIRONMENTAL & SAFETY

NO FROST

NO DIRECT SUN

NO STRONG WIND

NO RAIN

SAFETY PROTOCOL: Keep out of reach of children.

THE FOUNDATION: SURFACE PREPARATION

01

CLEAN

Surface must be perfectly clean, dust-free, and completely dry.

02

REPAIR

Use **Thermal Mastic** for defects/cracks.

Use mortar for significant damage.

03

TREAT

Sand polished surfaces to open pores.

For mold/moss: clean with water/bleach, then apply **Fungilev**.

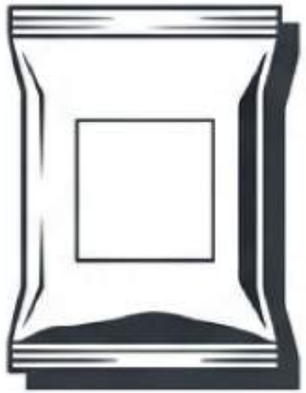
04

PRIME

For dusty/absorbent surfaces: Apply **Suber-Fix**.

Allow to dry for **4–6 hours**.

THE FORMULATION: MIXING PROTOCOL



18 Liters
Product

+

4 Liters
Water (±10%)

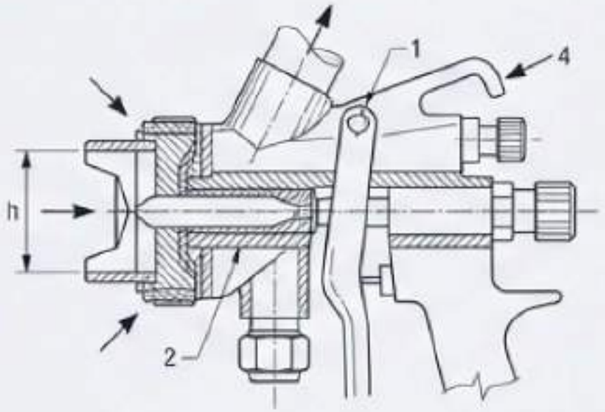
=

Mix until fully homogenized.

⚠ **WARNING**: Avoid product adhering and drying on container walls to prevent clogging.

APPLICATION METHODS

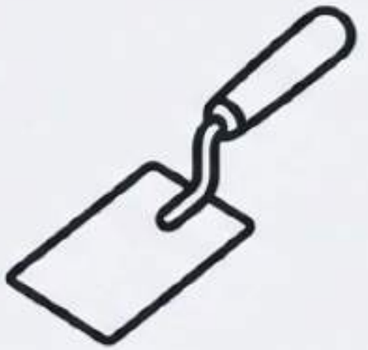
MECHANICAL (SPRAY)



Equipment: Suberlev spray gun.
Nozzle Diameter: 8 mm.

Alternative: Industrial peristaltic or screw machines.

MANUAL



Tools: Trowel or spatula.

STRATEGY: Apply two or more coats. Target Thickness: 5 – 30 mm.

PERFORMANCE & CURING

CONSUMPTION MATH

1 L/m² = 1 mm Thickness

TIME PROTOCOL

DRYING TIME BETWEEN COATS

8–12 HOURS

Variable dependent on thickness and ambient humidity.

MAINTENANCE: Clean tools with water immediately after use.

THE FINISH: PROTECTIVE SEALING

ROOFS (HORIZONTAL)

Thermo-Roofs Shield

1.2 L/m²

VERTICAL SURFACES

Suber-Paint

0.6 L/m²

SUBERLEV products must be applied by applicators approved by the manufacturer.

TECHNICAL SPECIFICATIONS

PARAMETER	VALUE
Appearance	Granular, White
Ball Size	1000 – 2000 µm
Density	0.21 kg/L ± 5%
Thermal Conductivity	0.044 W/m.K
Packaging	18 L bags
Shelf Life	Up to 3 years
Storage	Cool place (5-45°C), protected from sunlight/moisture.

Disclaimer: Essential to carry out practical tests to ensure compatibility with specific applications.

Help Us Help You

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FALCON STEMA
NATURAL TECHNOLOGY

SUBERLEV THERMAL PUTTY

TECHNICAL APPLICATION GUIDE

Natural Technology: Innovation in thermal and acoustic insulation.

SCOPE OF APPLICATION

Compatible Substrates

- Concrete
- Gypsum & Drywall
- Wood
- Ceramic Brick
- EPS / XPS
- Galvanized Steel

THERMAL CORRECTION

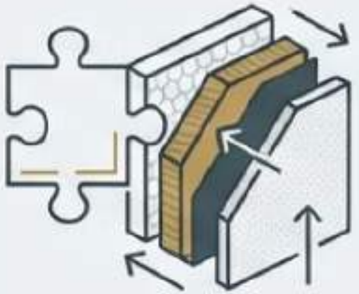
Filling thermal bridges at slab fronts and pillars.

RESTORATION

Smoothing popcorn textures (gotelé) or ceramic materials.

PROTECTION

Facade preservation against cracks and dampness.



ASSEMBLY

Thermal adhesive in ETICS/SATE systems.

01. SURFACE PREPARATION

The Foundation

THE GOLDEN RULE: Surfaces must be thoroughly clean, dry, and free of dust, moss, or mold. Remove poorly adhered paint.

CONDITION: Dusty or Sandy Surfaces

ACTION: Brush thoroughly + Apply Suber-Fix Primer.

CONDITION: Cracks & Fissures

ACTION: Widen crack → Clean → Prime (Suber-Fix) → Fill with Thermal Putty.

02. MATERIAL PREPARATION

EQUIPMENT:
Low-speed industrial mixer.

PROCESS:
Mix for 3–5 minutes until homogeneous paste.

CRITICAL:
Prevent drying on container walls to avoid lumps.

ADJUSTMENT:
Max 200 mL clean water per 15L container.

Reference
Mixing Instruction: Use a low-speed mechanical mixer. Mix the cork paste thoroughly for 3 to 5 minutes until a completely homogeneous, lump-free paste is obtained. Avoid the product drying on the container's walls during the process. A maximum of 200 mL of clean water can be added per 15L container if necessary to adjust the consistency.

03. ENVIRONMENTAL CONSTRAINTS

PROHIBITED CONDITIONS

No Frost Risk

No Direct Intense Sunlight

No Strong Wind or Rain

STORAGE: 5-45°C in a cool place. Shelf life up to 2 years.

04. APPLICATION TECHNIQUE

MAX 2 mm

THICKNESS PER LAYER

Exceeding this limit risks cracking due to shrinkage.

TOOLS & METHOD

Spatula / Trowel

Suberlev Projection Machine

Spread in very thin layers.

STORAGE: 5-45°C in a cool place.
Shelf life up to 2 years.

05. CURING & LAYERING

THEORETICAL CONSUMPTION

1.20 kg/m²

per mm of thickness

STANDARD APPLICATION

~2.0 kg/m²

Total for 2+ coats

STORAGE: 5-45°C in a cool place. Shelf life up to 2 years.

06. POST-APPLICATION & FINISH

PAINT
(Water-based)

SAND
(Grit 60-120)

TILE OVER

VARNISH

NATURAL FINISH

NOTE: Not recommended as a final exterior finish without protection.
Use as a base or intermediate layer.

Clean tools with water immediately.

TECHNICAL SPECIFICATIONS

Data Snapshot

Density	**1.06 kg/L (± 5%)**
Thermal Conductivity	**0.059 W/m.K (EN 12667)**
Elasticity	**High Flexibility**
Adhesion (Direct Traction)	**1.0 MPa**
Permeability	**Class I (Water Vapor Permeable)**

STORAGE: 5-45°C in a cool place.
Shelf life up to 2 years.

Help Us Help You

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MICROLEV

USAGE, APPLICATION, & TECHNICAL PROFILE

NATURAL TECHNOLOGY

MATERIAL PROFILE

VERY THIN-LAYER CLADDING

Natural Cork Microgranules

+

Micronized Cements

+

Metakaolins

+

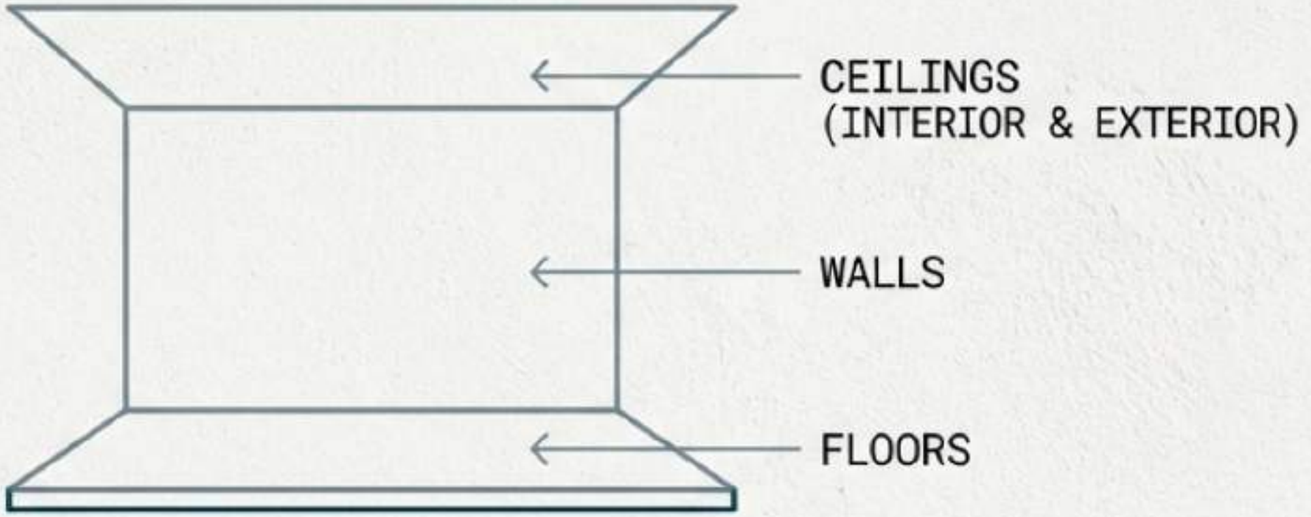
High-Quality Resins

+

Natural Inorganic Pigments

RESULT: A HIGHLY FLEXIBLE PRODUCT

SUBSTRATE COMPATIBILITY



POLISHED STONEWARE

CONCRETE

CLAY TILES

PARQUET

PAINTED SURFACES

NOTE: SURFACES MUST BE WELL-PREPARED AND CLEAN.

APPLICATION METHODS

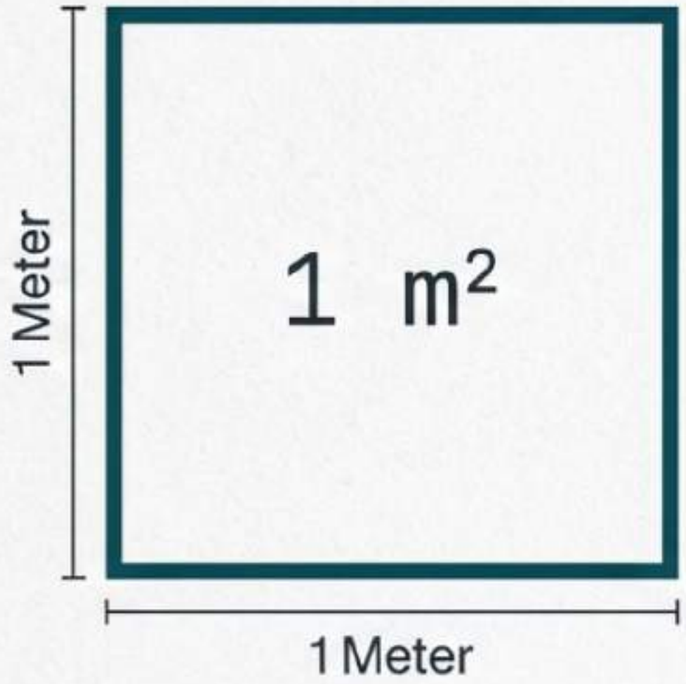
MANUAL

Tool: Trowel

MECHANICAL

Tool: Spray Gun or Spraying Machine

PERFORMANCE & CONSUMPTION



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YIELD: 1 L / m²

FINISHES & AESTHETICS

- Textures: Available in MEDIUM and FINE.
- Appearance: Continuous surfaces without creating any joints.
- Atmosphere: Highly decorative and warm finishes.
- Color Ecosystem: 400-color chart + 28 sprayed cork colors.

TECHNICAL SUMMARY

SPECIFICATION	DETAIL
Product	Microlev Microcement
Composition	Natural cork microgranules, micronized cements, metakaolins, resins
Application Tools	Trowel, Spray Gun, Spraying Machine
Yield	1 L / m²
Textures	Medium / Fine
Adhesion	Stoneware, Concrete, Tile, Parquet, Paint
Color Range	400 Chart Colors / 28 Cork Colors

Help Us Help You

Innovation in Protection.

The information provided is based on extensive practical experience and laboratory tests.
Practical tests are recommended to ensure compatibility for each specific application.

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2026

SUBERLEV

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FALCON STEMA S.A.R.L
2BIS, RUE DE VIOLETTES
98000 MONACO

PRIMERS & SPECIAL TREATMENTS

Suber Oxid

- Water-based rust converter + anti-oxidant agents
- Metal protection – neutralizes active rust on iron/steel

Fungilev

- Broad-spectrum biocide (pH 3.0–5.0)
- Mold/moss/algae elimination – pre-treatment before coating

Bactilev

- Silver ions + quaternary ammonium + glutaraldehyde
- Disinfection of hard/soft surfaces – 15-min contact time


SUBER OXID
Anti-Oxidant Primer & Converter
SUBERLEV
3 SOLUTIONS IN 1 APPLICATION

CHEMICAL TRANSFORMATION
ACTIVE TREATMENT, NOT JUST COVERAGE.

1. NEUTRALIZES

CONVERTS RUST
ACTIVE AGENTS

2. PROTECTS

STOPS FLASH-RUST
ON CONTACT

3. ENDURES

LONG-LASTING
ATMOSPHERIC BARRIER

SUBSTRATE COMPATIBILITY COMPATIBILITY

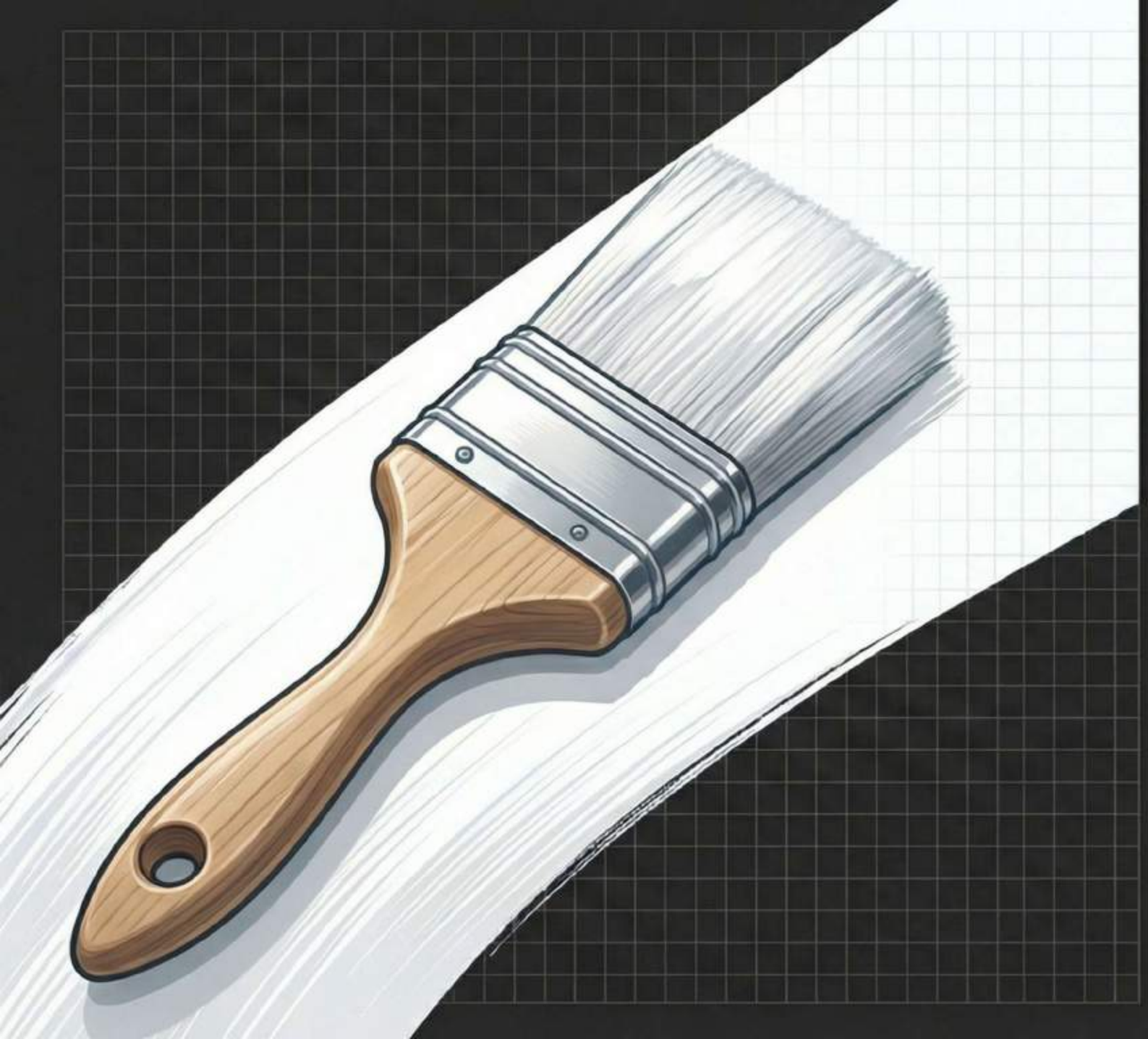
DIRECT APPLICATION

Apply directly to stable rust. No stripping to bare metal required.

Iron / Ferrous Metals

Galvanized Steel

Light Metals



APPLICATION PROFILE

COMPOSITION

Water-based formula. Low odor.

ELASTICITY

Adapts to thermal expansion.

FINISH

Uniform White Satin.

ADHESION

High grip on difficult surfaces.

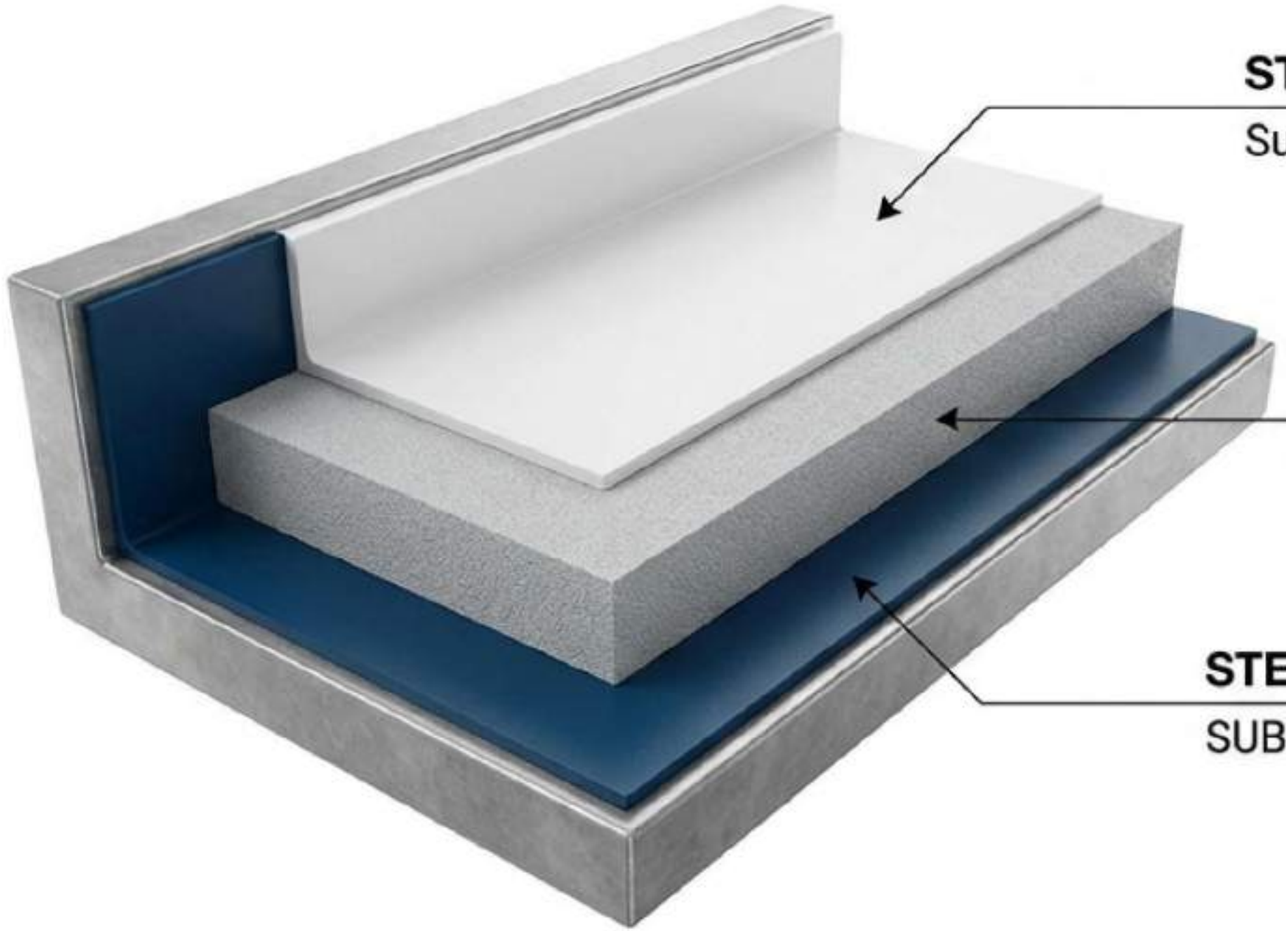
CRITICAL SPECIFICATIONS

2-3 HOURS Touch Dry Time	**4-6 HOURS** Recoat Interval
< 20 g/L VOC Content EU Limit: 140 g/L	**CAT. A/i** EU Classification

Standard timing based on 20°C / 60% Relative Humidity.

INTEGRATED RENOVATION SYSTEM

The Foundation of the Falcon Stema Solution.



STEP 3: FINISH

Suber-Paint (Thermo-Paint)

STEP 2: CONSOLIDATE

Foamlev (Insulation - Optional)

STEP 1: TREAT

SUBER OXID (Primer & Converter)

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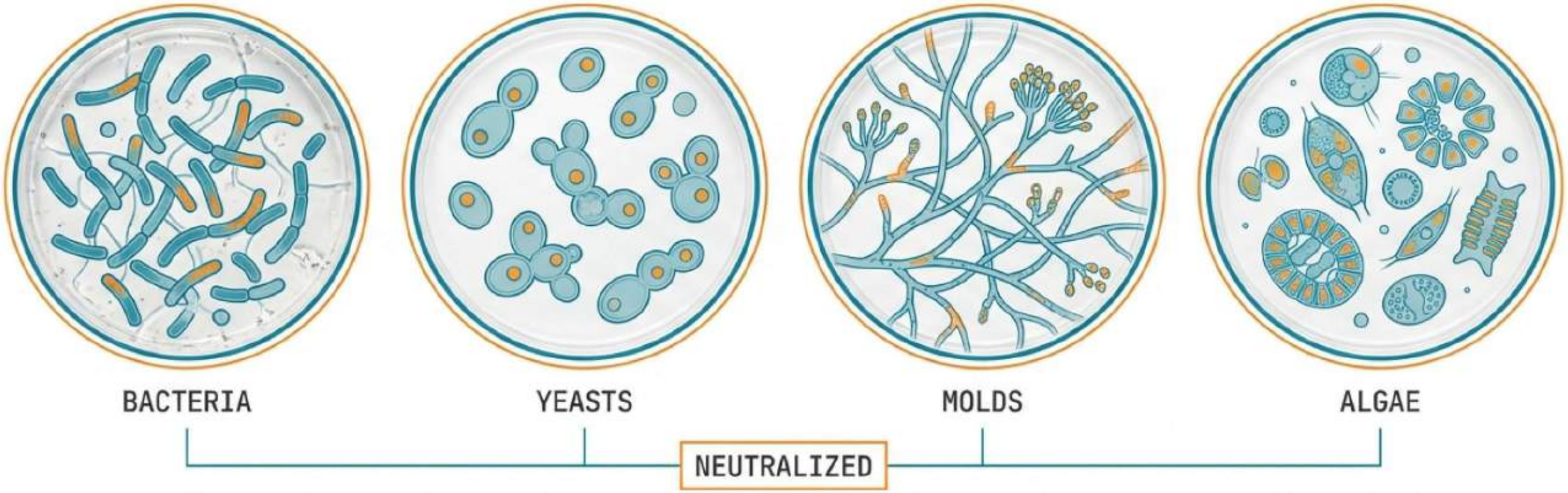
FUNGILEV

PROFESSIONAL SANITARY
CLEANER & TREATMENT

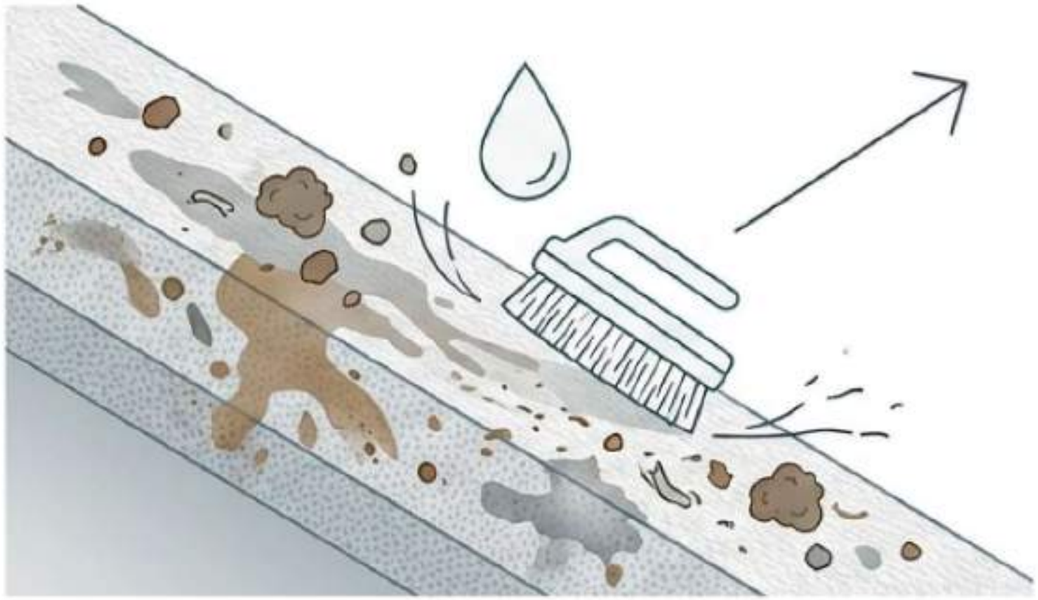
THE FUNCTION

Broad-spectrum biological defense system.



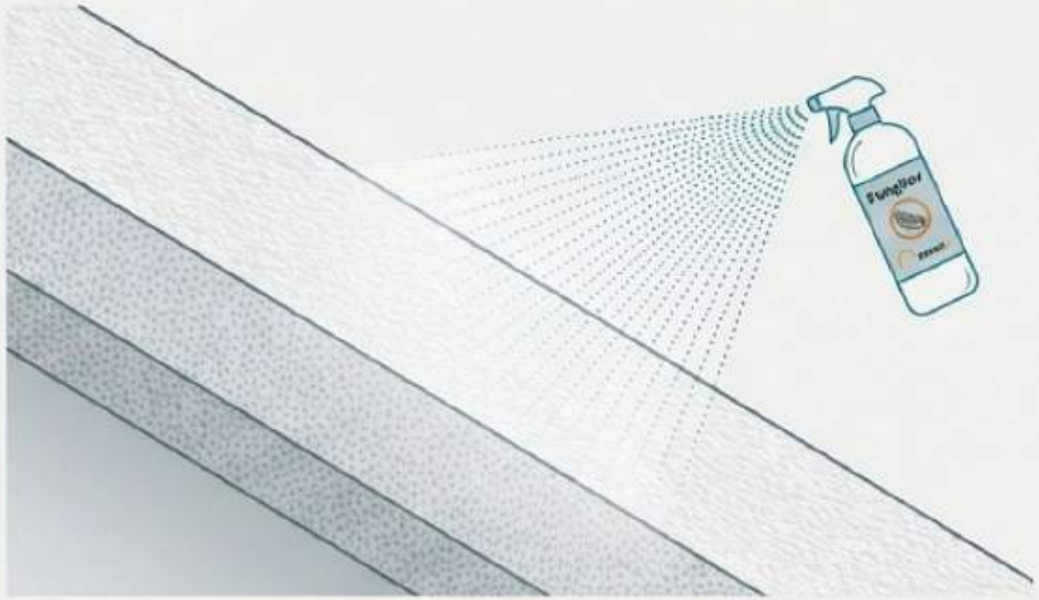
ACTION PROFILE: Curative Disinfection + Preventative Anchor Bridge

STEP 01: MECHANICAL CLEANING



Requirement: Remove physical dirt, grease, and loose particles using soapy water or bleach.

STEP 02: CHEMICAL TREATMENT

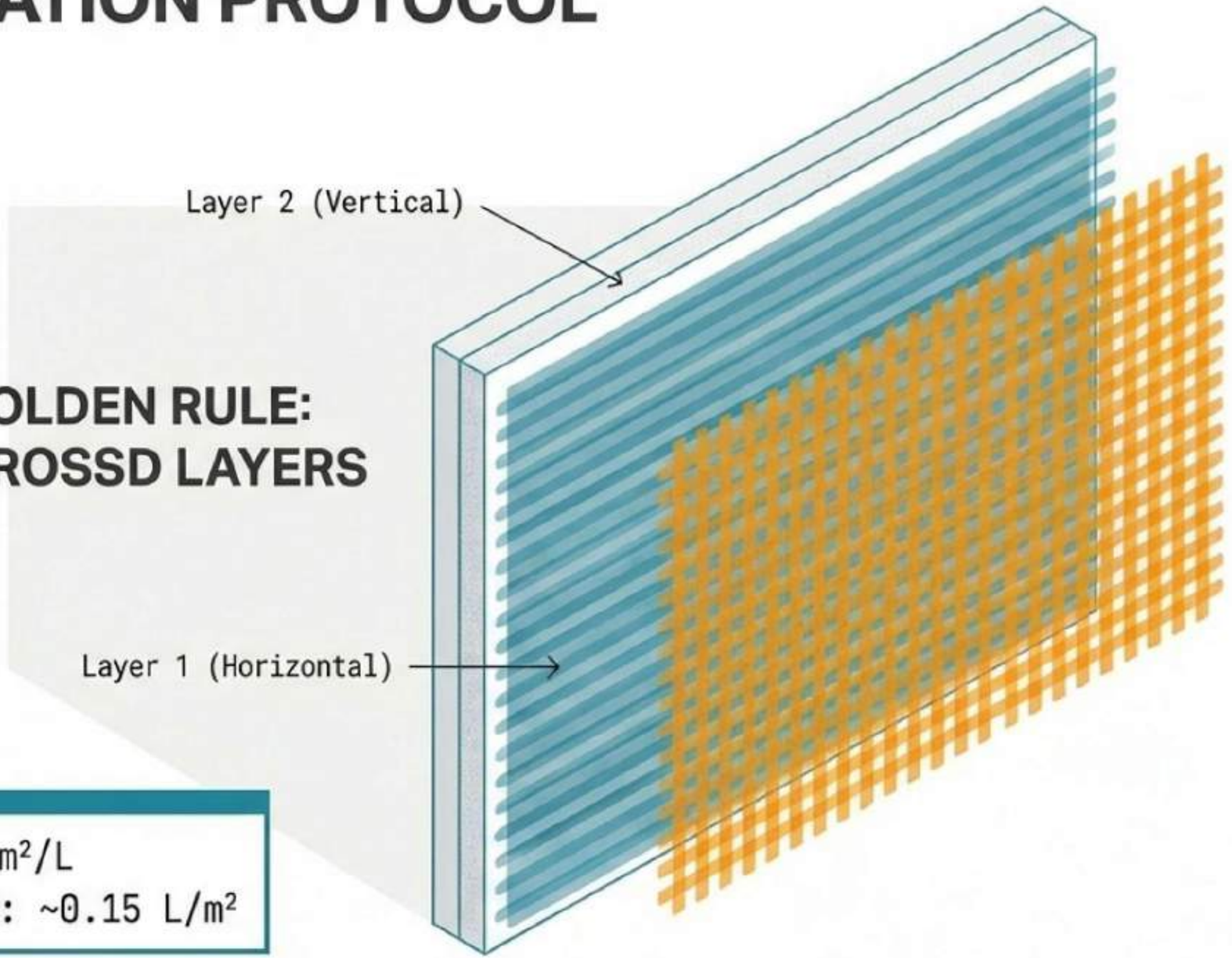


Requirement: Apply Fungilev only to a debris-free substrate to ensure direct contact.

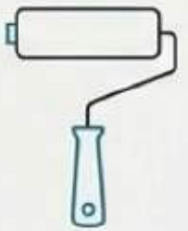
CRITICAL: Do not apply disinfectant over physical dirt.

APPLICATION PROTOCOL

THE GOLDEN RULE: TWO CROSSD LAYERS

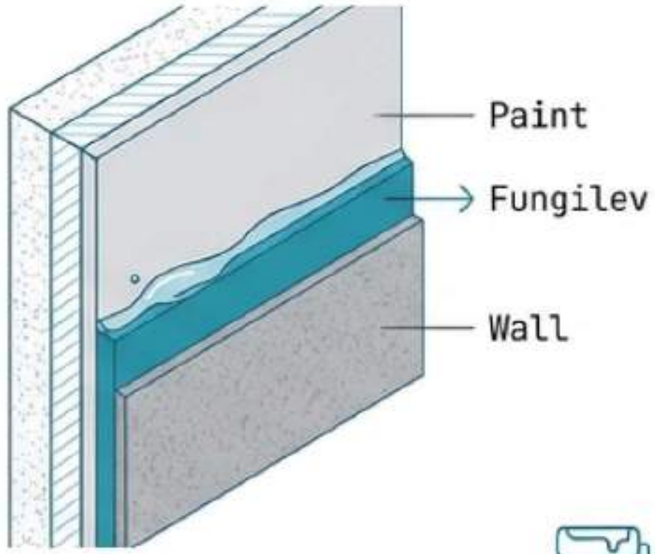


YIELD: 6–8 m²/L
CONSUMPTION: ~0.15 L/m²



STRATEGIC USE CASES

COATING PRE-TREATMENT



ASBESTOS PROTOCOL

JetBrains Mono

Encapsulate fibers before cork spraying.

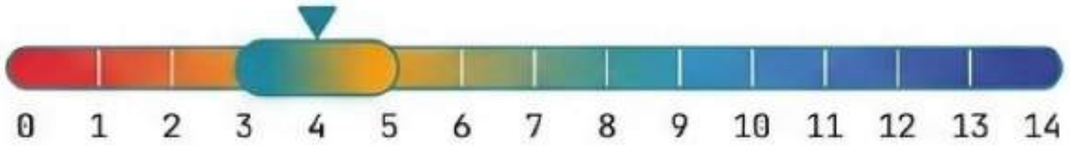
SURFACE RESTORATION

JetBrains Mono

Disinfection of contaminated substrates.

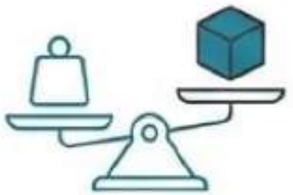
TECHNICAL VITAL STATS

ACIDITY PROFILE



pH 3.0 – 5.0

DENSITY



1.05 kg/L

APPEARANCE

Transparent / Yellowish

REPAINT INTERVAL

Wait 3–4 Hours before coating

SAFETY & CONSTRAINTS

PROTECTION

Use PPE. Apply in well-ventilated areas to avoid inhaling steam.

ENVIRONMENT & STORAGE

No discharge into sewers.

Store between 5°C - 45°C.

Open Container Expiry: 15 Days

THE SUBERLEV SYSTEM

STEP 1: TREAT

STEP 2: INSULATE

STEP 3: PROTECT

Applied by approved professionals.

Falcon Stema S.A.R.L | Monaco | info@falconstema.mc

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BACTILEV: ADVANCED MICROBIAL DEFENSE

UNIVERSAL DISINFECTANT CLEANER & SURFACE HYGIENE SYSTEM

READY-TO-USE
FORMULA

THE CAPABILITY: TRIPLE-ACTION FORMULA

NO DILUTION NECESSARY.

Ready for immediate deployment.

CHEMICAL COMPOSITION & MECHANISM

SILVER IONS:
Positive charge targeting.

QUATERNARY AMMONIUM:
Didecyl dimethyl ammonium chloride (Last generation).

GLUTARALDEHYDE:
Deep penetration agent.

SCOPE OF APPLICATION

HARD SURFACES

Metal, varnished wood, handrails, door handles, cranks, and furniture.

SOFT SURFACES

Textiles, fabrics, and clothing.

OPERATIONAL EQUIPMENT

Industrial tools and machinery.

CRITICAL ZONES

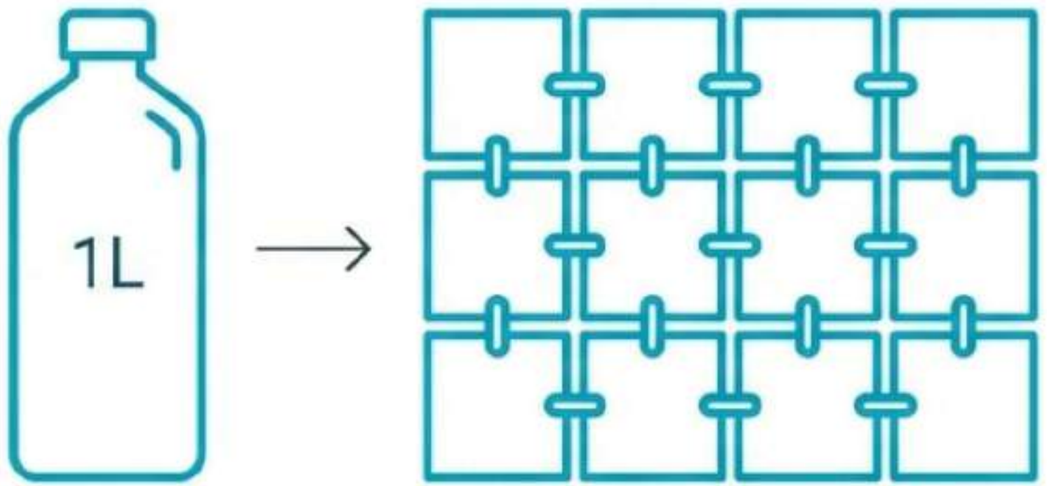
High-traffic areas and animal contact zones.

PROTOCOL PHASE I: PREPARATION

GOLDEN RULE: APPLY UNDILUTED

Maintain chemical integrity.

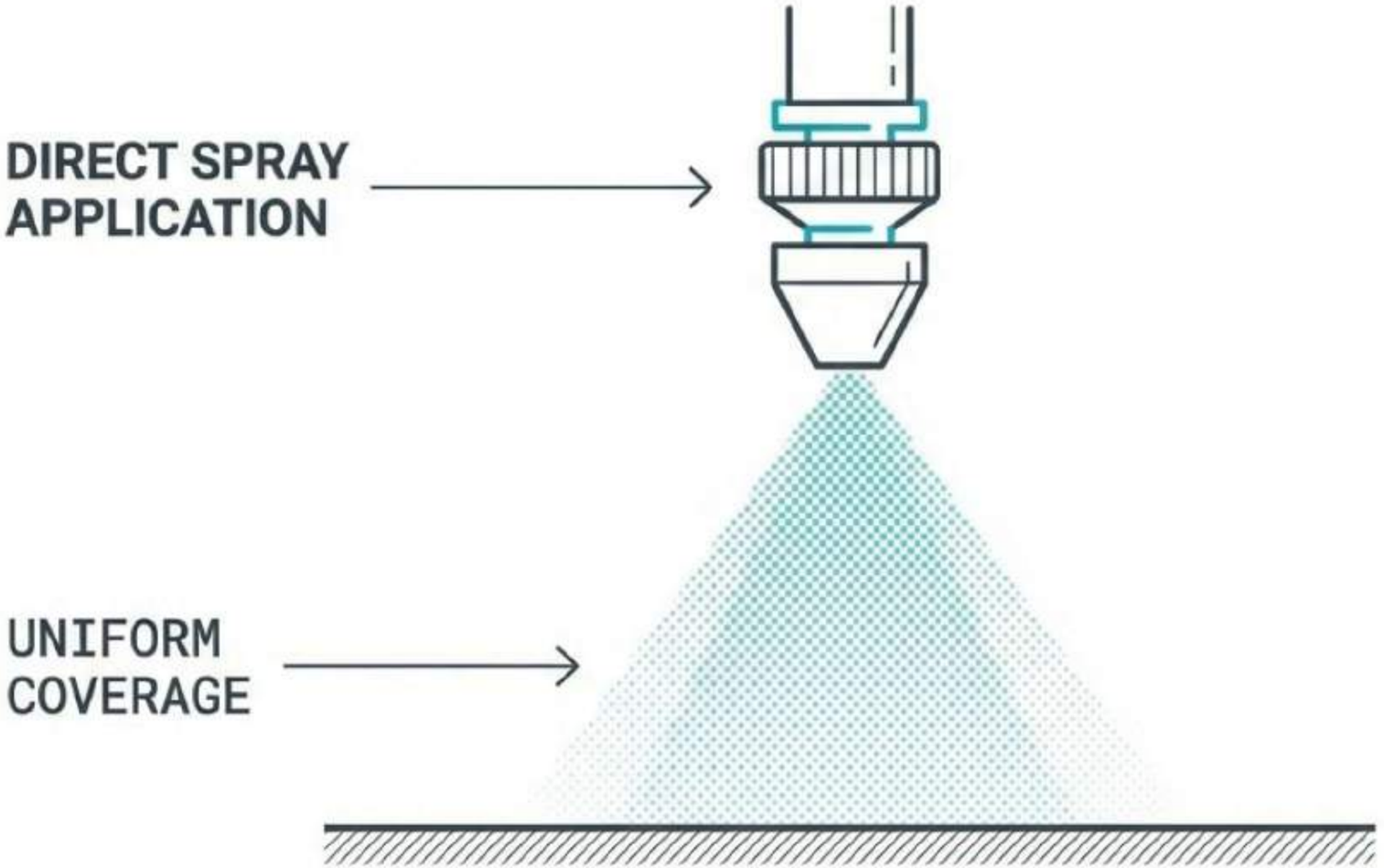
COVERAGE EFFICIENCY



Available Formats: 250 ML | 750 ML | 3 L | 5 L

Precision dosage ensures maximum coverage with minimal waste.

PROTOCOL PHASE II: EXECUTION



1. Spray directly onto the surface to be treated.
2. Ensure continuous, uniform film.
3. NO CLARIFICATION REQUIRED. Allow to air dry.

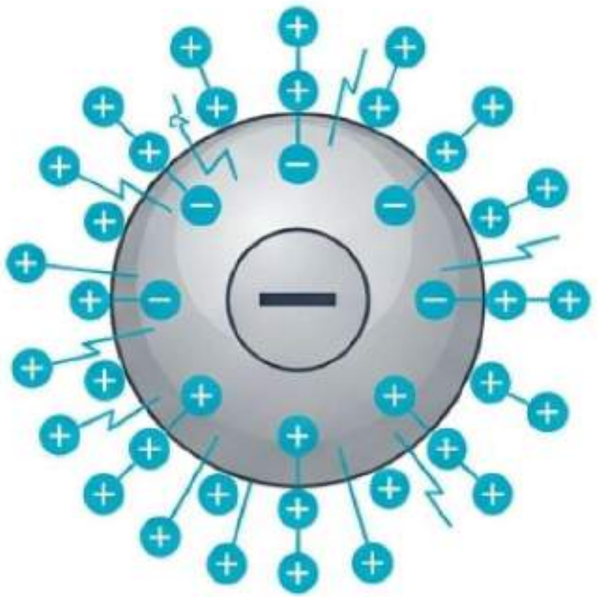
PROTOCOL PHASE III: THE ACTING TIME

OUTCOME:
Deep Disinfection.

RESIDUAL EFFECT:
Up to 24 Hours.

Do not disturb the surface. The synergistic effect is actively destroying microbial structures.

MECHANISM OF ACTION

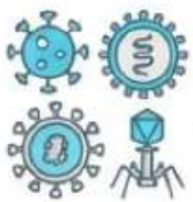


SILVER IONS:
Positive charge "army" short-circuits negatively charged bacteria.

QUATERNARY AMMONIUM:
Interacts with cell membrane causing cytoplasm leakage and enzyme deactivation.

GLUTARALDEHYDE:
Penetrates cell interior creating a "cross-linking" effect for total destruction.

EFFICACY PROFILE: BROAD SPECTRUM ELIMINATION

 **BACTERIA**	*Salmonella typhimurium*, *Escherichia coli*, *Pseudomonas aeruginosa*, *Staphylococcus aureus*, *Enterococcus hirae*
 **FUNGI**	*Aspergillus niger*, *Candida albicans*
 **VIRUSES**	Coronavirus, Herpes virus, Influenza (Orthomyxovirus), Paramyxovirus, Circovirus

CLAIM: Eliminates all types of mycoses.

Verified through rigorous laboratory testing against specified pathogens. Data on file.

Efficacy testing conducted under controlled laboratory conditions. Results may vary based on application method, surface type, and environmental factors. Consult technical manual for full details. Roboto Mono

TECHNICAL SPECIFICATIONS & SAFETY DATA

SPECIFICATIONS

STORAGE: Cool, dry place in original closed container.

SHELF LIFE: 2 Years from manufacture.

REGULATION: Compliant with Technical Health Regulation (R.D.770/1999).

SAFETY DATA

- **AVOID:** Contact with skin and eyes. Do not inhale steam.

- **FIRST AID (EYES):** Do not scrape. Wash with water for 15 minutes.

- **ENVIRONMENT:** Use only in well-ventilated areas.

- **WARNING:** Keep away from children.

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WATERPROOFING & MEMBRANES

Pure Acrylic Membrane

- 800% elongation at break; Class W3 hydrolysis resistance
- Roofs/terraces – elastic waterproofing

Walkable Varnish

- Aliphatic polyurethane; Class R10 slip resistance
- Protective topcoat – makes surfaces pedestrian-resistant

PURE ACRYLIC MEMBRANE

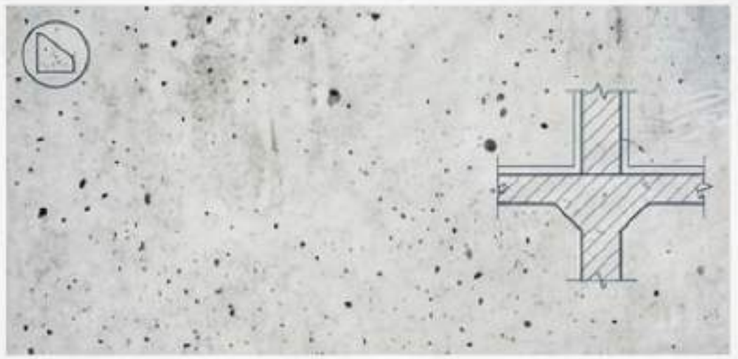
Application Guide & Technical Standard

Elastic and Durable Waterproofing for Demanding Surfaces.

Assessment & Compatibility

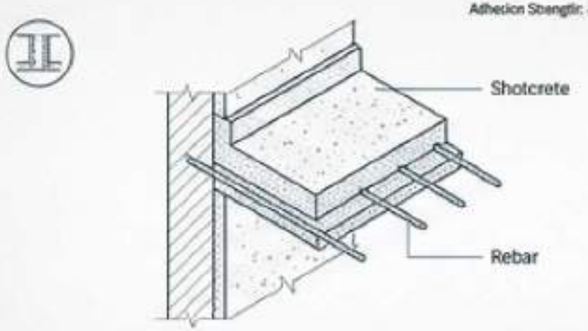
Formulated for high adhesion across diverse construction materials.

Roboto Reno



Concrete / Cement

Roboto Mono

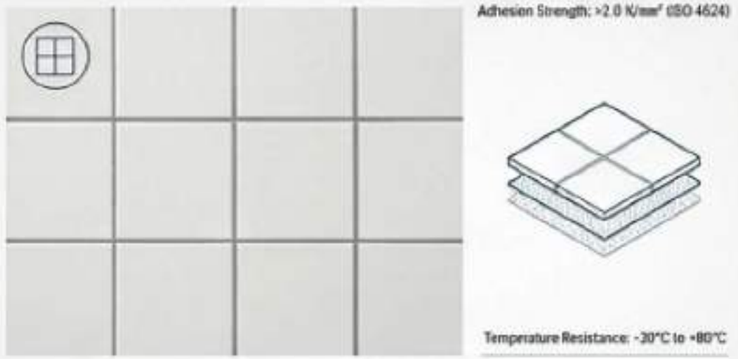


Shotcrete

Roboto Mono

Asphalt / Bitumen

Roboto Reno



Tile / Ceramic

Roboto Mono

Wood

Roboto Mono

Galvanized Steel

Note: Compatible with both new construction and renovation projects.

Surface Preparation Protocol

Sanitize → Repair → Clean & Dry

Sanitize

Treat degraded supports. For mold or algae, use broad-spectrum disinfectant to sterilize.

Repair

Surface must be free of cracks. Use Thermal Mastic for defects.

Clean & Dry

Substrate must be dust-free, grease-free, and completely dry.

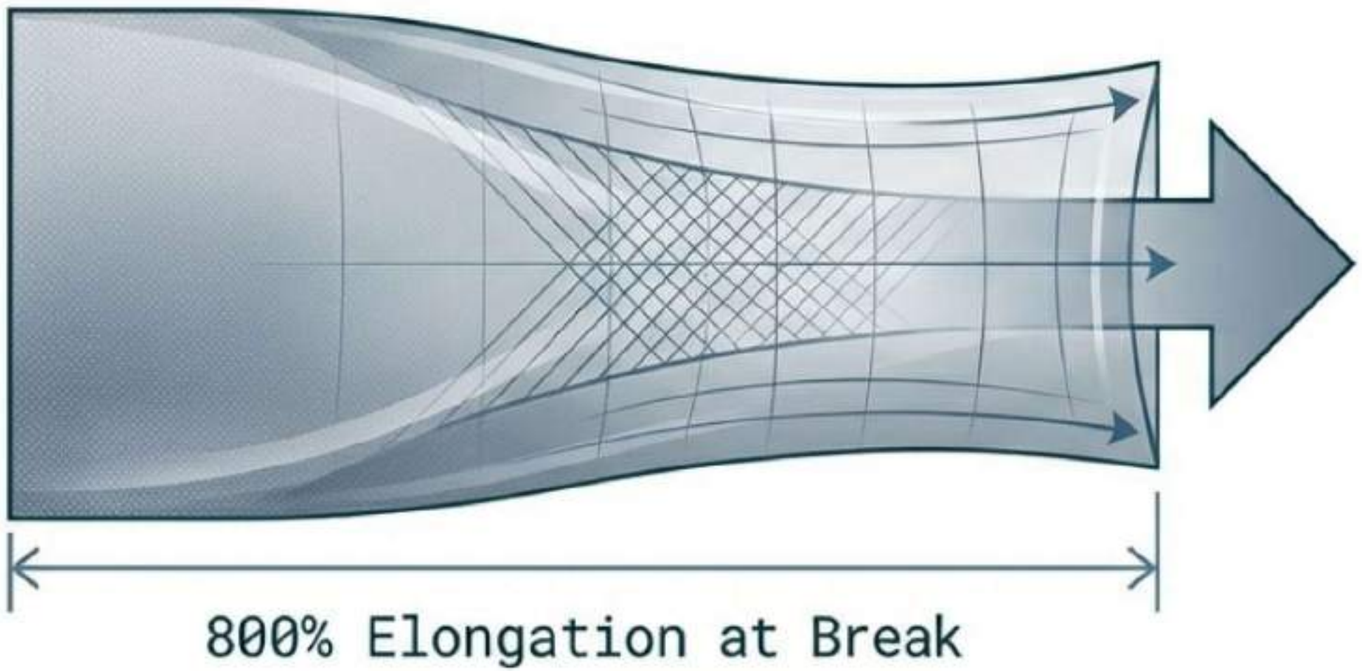
CRITICAL WARNING: Adhesion failure is preventable. Do not skip the prep.

The Application

Tools:
Brush, Roller, or
Spray Equipment

Finish:
Satin / Transparent

Elasticity.



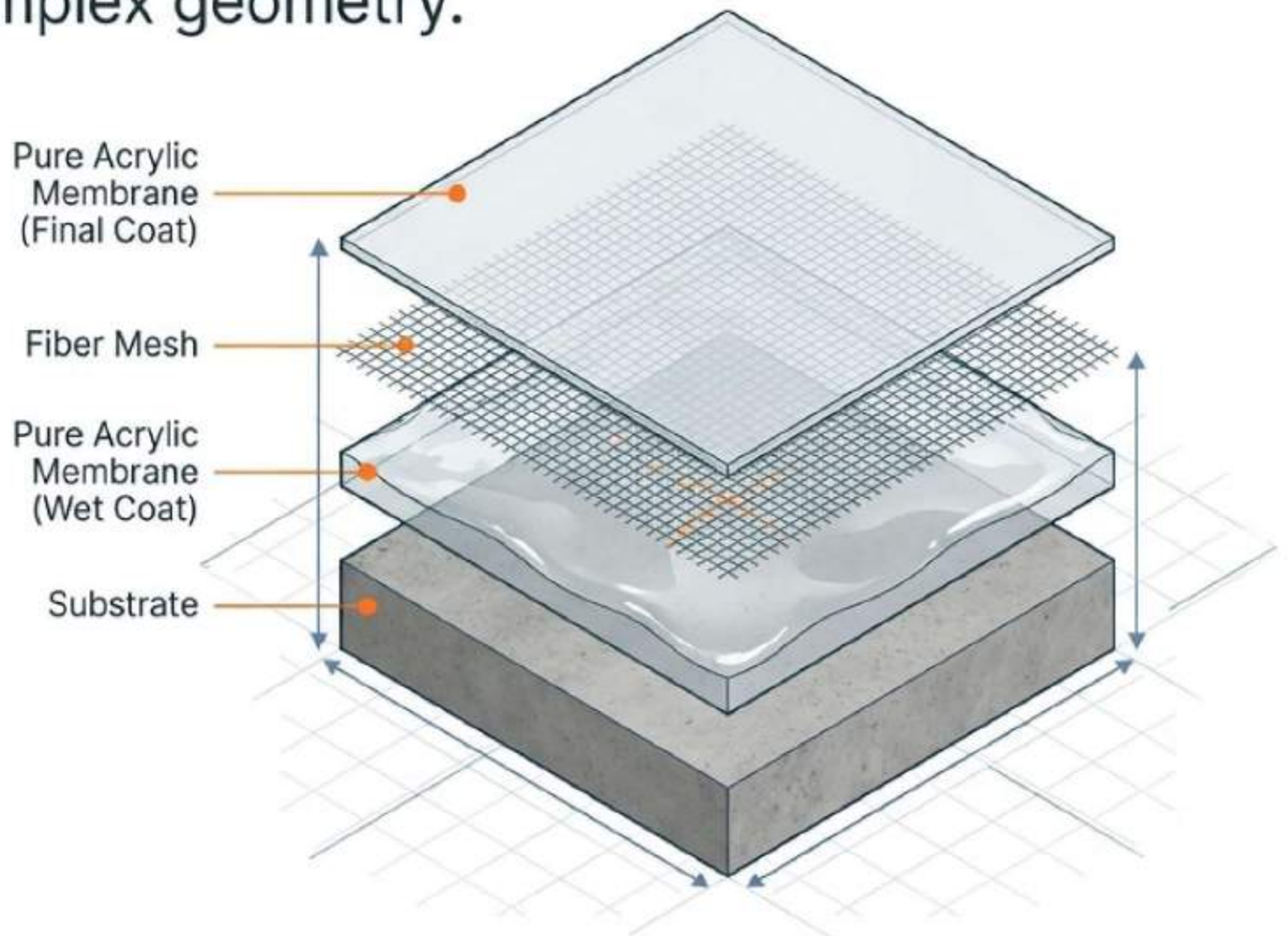
The membrane adapts to structural movements without cracking.

Structural Reinforcement

For horizontal surfaces and complex geometry.

Recommendation: Embed Fiber Mesh into the membrane layer.

Benefit: Increases tensile strength and ensures uniform thickness across the waterproofing barrier.



Optimizing for Traffic

The Constraint: Pure membrane remains tacky after curing.

The Protocol: Apply Suberlev Walkable Varnish.

- Eliminates surface tack
- Improves resistance to pedestrian traffic
- Transforms surface into a fully walkable area

Dark Slate Inter

Roboto Mono

Technical Performance Data

Waterproofing Standard

Class W3

Low permeability (0.04 kg/m²·h^0.5)

Chemical Resistance

Hydrolysis & Alkaline Resistant

Compliance

UNE-EN 1062-3

Durability

Long-lasting protection against weathering & UV.

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WALKABLE VARNISH

The Invisible Shield by Suberlev

Single-component aliphatic polyurethane membrane.

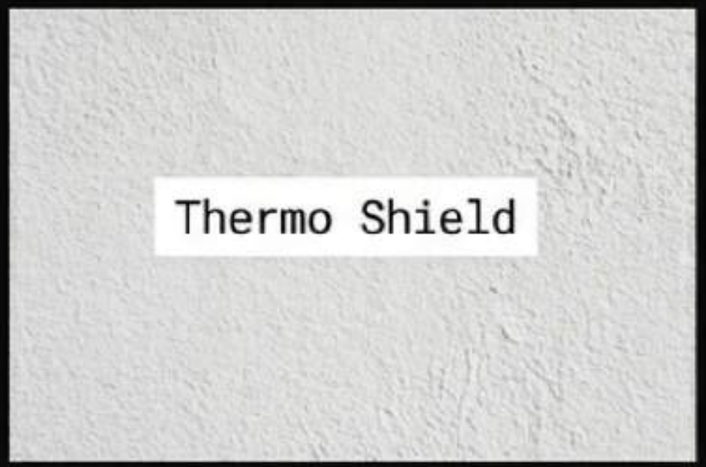
SUBERLEV

The Material

A water-based, single-component aliphatic polyurethane liquid membrane designed for high-performance protection.

FINISH:	Satin appearance
TRANSPARENCY:	Colourless & Non-yellowing (UV Stable)
DURABILITY:	Elastic, waterproof, fully walkable
RESISTANCE:	Hydrolysis, alkalis, chemical liquids

Surface Compatibility



Primary Applications:

- Interior and exterior finishing
- Improving trafficability on cork
- Adding hardness to thermal covers

Compatible Substrates:
Compatible Substrates:
Concrete, wood, ceramic tile, natural stone, plasterboard, galvanized steel.

Ideal for protecting vertical siding from wear and horizontal siding from dust.

Phase I: Surface Preparation

1. GENERAL INSPECTION

Surface must be dry, free of dust, mildew, dirt, and hidden moisture.

2. NEW CONCRETE / CEMENT

Allow substrate to cure for at least 28 days before application.

3. POLISHED SURFACES

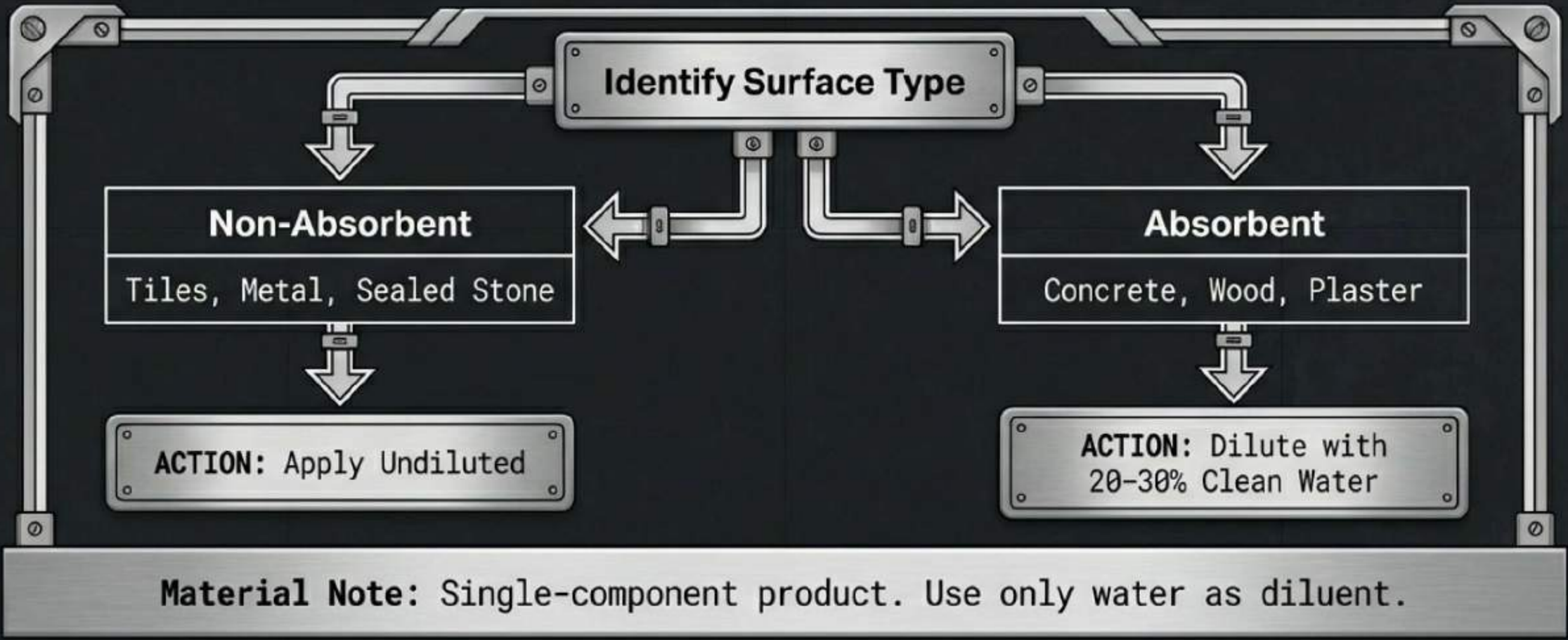
Sand surface to open pores and ensure adhesion.

4. RENOVATION (OLD SURFACES)

Remove poorly adhered paint. Seal cracks or fissures with Exterior Mastic.

Phase II: The Mix

Dilution Protocol based on Porosity



Phase III: Execution

Application Strategy

TOOLS: Brush, Roller, Spray Gun, or Airless.

DISTRIBUTION: Spread evenly avoiding stalling marks.

CRITICAL TECHNIQUE: Wet-on-Wet

Apply two layers in a row without letting the first layer dry completely. This ensures seamless integration of the membrane.

Note: Pot Life: Once opened, use within 15 days.

Critical Parameters

Consumption Rate

0.15 — 0.30 L/m²

(Varies by surface porosity)

Application Temperature

Range: 5°C to 45°C

Warning: Do not apply if risk of rain or frost.

Storage Conditions

5–45°C

Store in cool place

Shelf Life: 2 Years

Note: Pot Life: Once opened, use within 15 days.

Curing Timeline

Standard conditions at 20°C / 60% Humidity

Note: Pot Life: Once opened, use within 15 days.

Technical Specifications

Film Hardness	70 (Shore A)
Density	1.05 ± 0.05 kg/L
Adhesion Strength	2.80 MPa (Standard: UNE-EN 1542:2000)
Water Permeability	W3: 0.04 kg/(m² h0.5) (Standard: UNE-EN 1062-3)
Safety	Wear skin/eye protection. Do not discharge into sewers.

Note: Pot Life: Once opened, use within 15 days.

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THERMAL FILMS FOR GLASS

Advanced Solutions for Comfort and Efficiency

Nanoceramic Thermal Film

- Ceramic microspheres; 67% visible light transmission; 49% TSER

Nearly invisible heat rejection – preserves views

Silver Thermal Mirror Film

- Aluminum metallized (SPUTTER process); 79% solar energy rejection

Daytime privacy + heat rejection – commercial buildings

Frosted Thermal Film

- Translucent finish; 67% VLT; UV-blocking layer

Privacy with natural light – partitions, bathrooms

NANOCERAMIC THERMAL FILM

APPLICATION GUIDE & TECHNICAL SPECIFICATIONS

FALCONSTEMA – INNOVATION IN THERMAL AND ACOUSTIC INSULATION

THE CONDITIONS

TEMPERATURE
Install between 0°C and 35°C.
Avoid if frost is expected within 3 days.

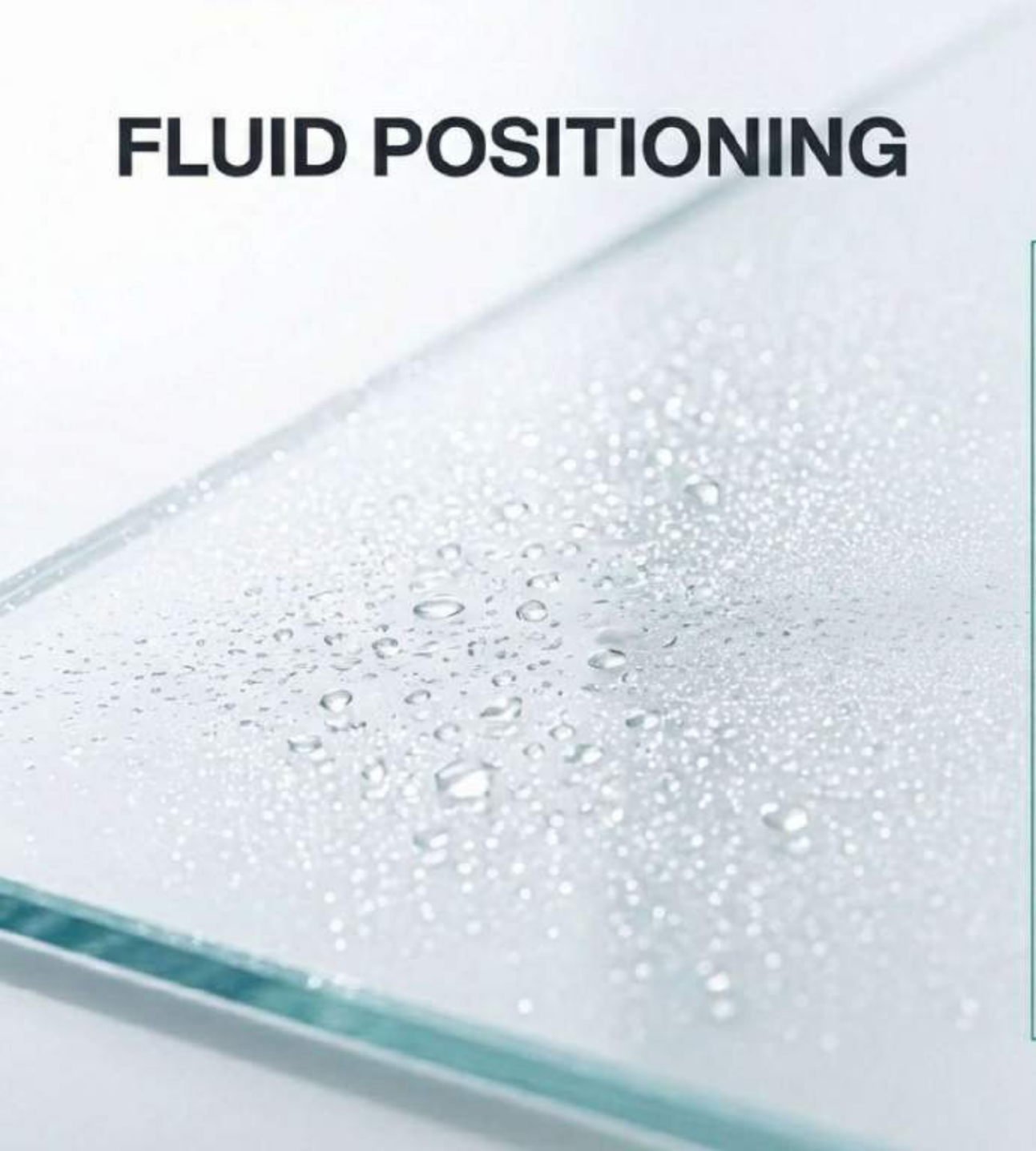
LIGHT
Do not apply in direct sunlight.

SCOPE
Windows > 1 meter wide
require two installers.

THE CANVAS: SURFACE PREPARATION

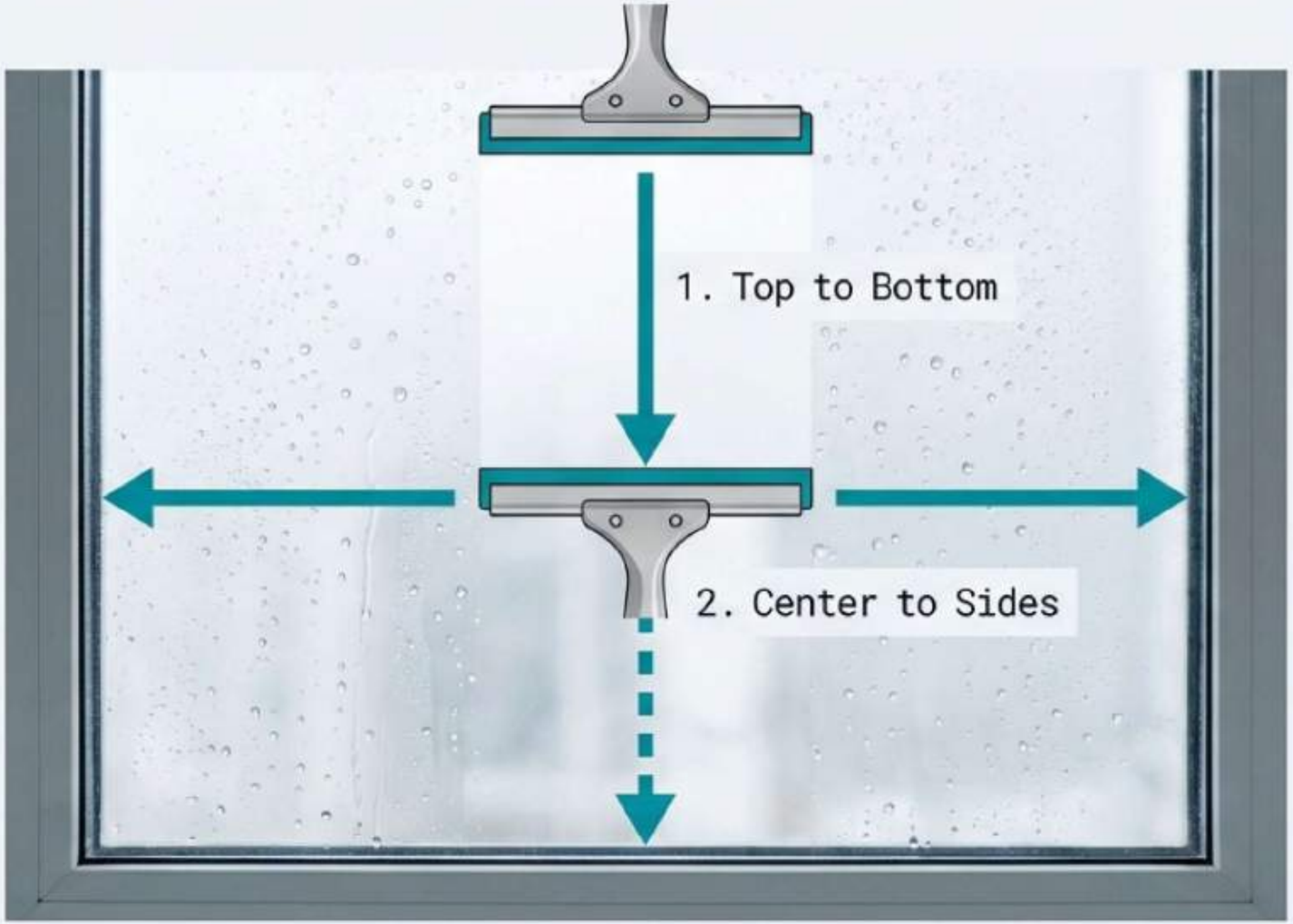
- ✓ Standard: Support must be smooth, clean glass.
- ✓ Prohibited: No frosted, textured, plastic, or defective surfaces.
- ✓ Action: Deep clean to remove dust, grease, and paint.
- ✓ Detail: Clean the outer surface to help identify inner dirt.
- ✓ Tooling: Use a scraper for stubborn dirt. Wipe frames with a damp cloth.

FLUID POSITIONING



- ✓ **THE CATALYST:** Generously spray a soapy solution on both the glass and the film.
- ✓ **PURPOSE:** Lubrication facilitates gliding and perfect positioning.
- ✓ **HANDLING:** Remove back cover carefully. Ensure adhesive never touches clothing or dust.
- ✓ **WARNING:** Keep film flat to prevent creasing.

EXTRACTION & ADHESION



- ✓ LUBRICATION: Spray soapy solution OVER the installed film before squeegeeing.
- ✓ GOAL: Remove all bubbles and excess moisture.
- ✓ CORRECTION: Film can be removed and repositioned within 24 hours if bubbles persist.

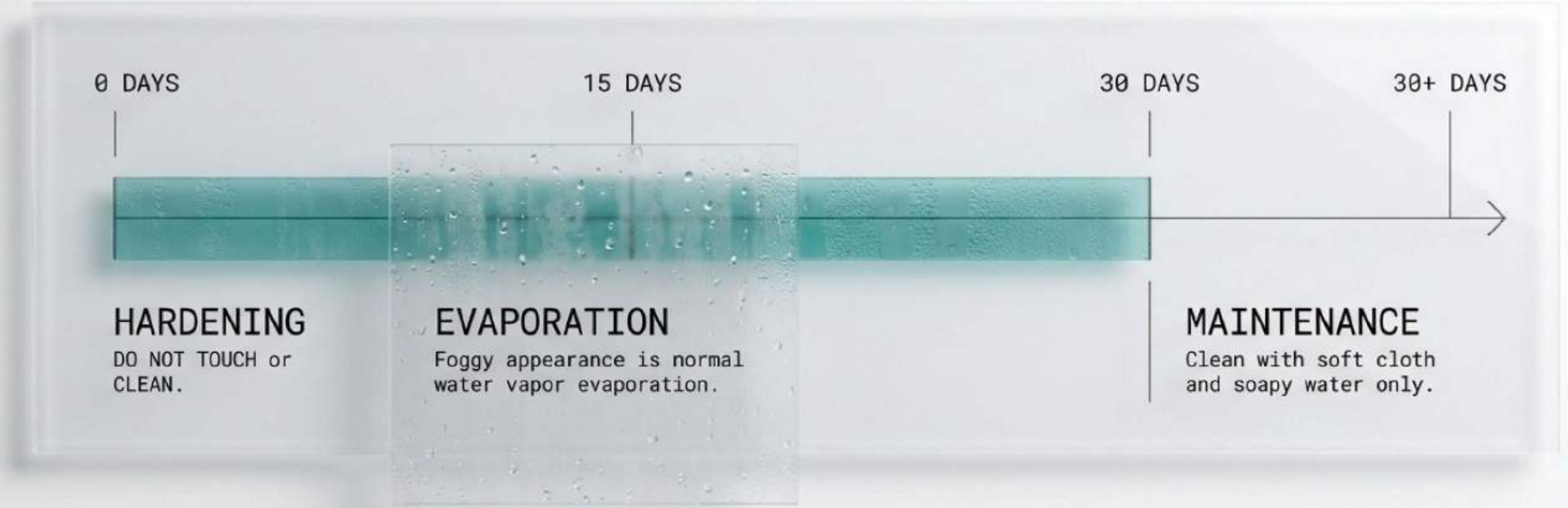
THE PRECISION TRIM

THE RULE:
Leave exactly 1 mm gap from the window frame.

THE REASON:
Prevents lifting during thermal expansion.

FINAL TOUCH:
After cutting, re-wet and squeegee edges to seal.

MATURATION & MAINTENANCE



NEVER use abrasive brushes or solvent-based products.

TECHNICAL SPECIFICATIONS

Thickness	50 µm
Appearance	Very light grey / Transparent
Visible Light Transmission	67%
Total Solar Energy Rejected (TSER)	49%
UV Reflection	98%
IR Reflection	91%
Solar Protection Index (SPF)	+285
Safety	Scratch resistant; holds glass shards

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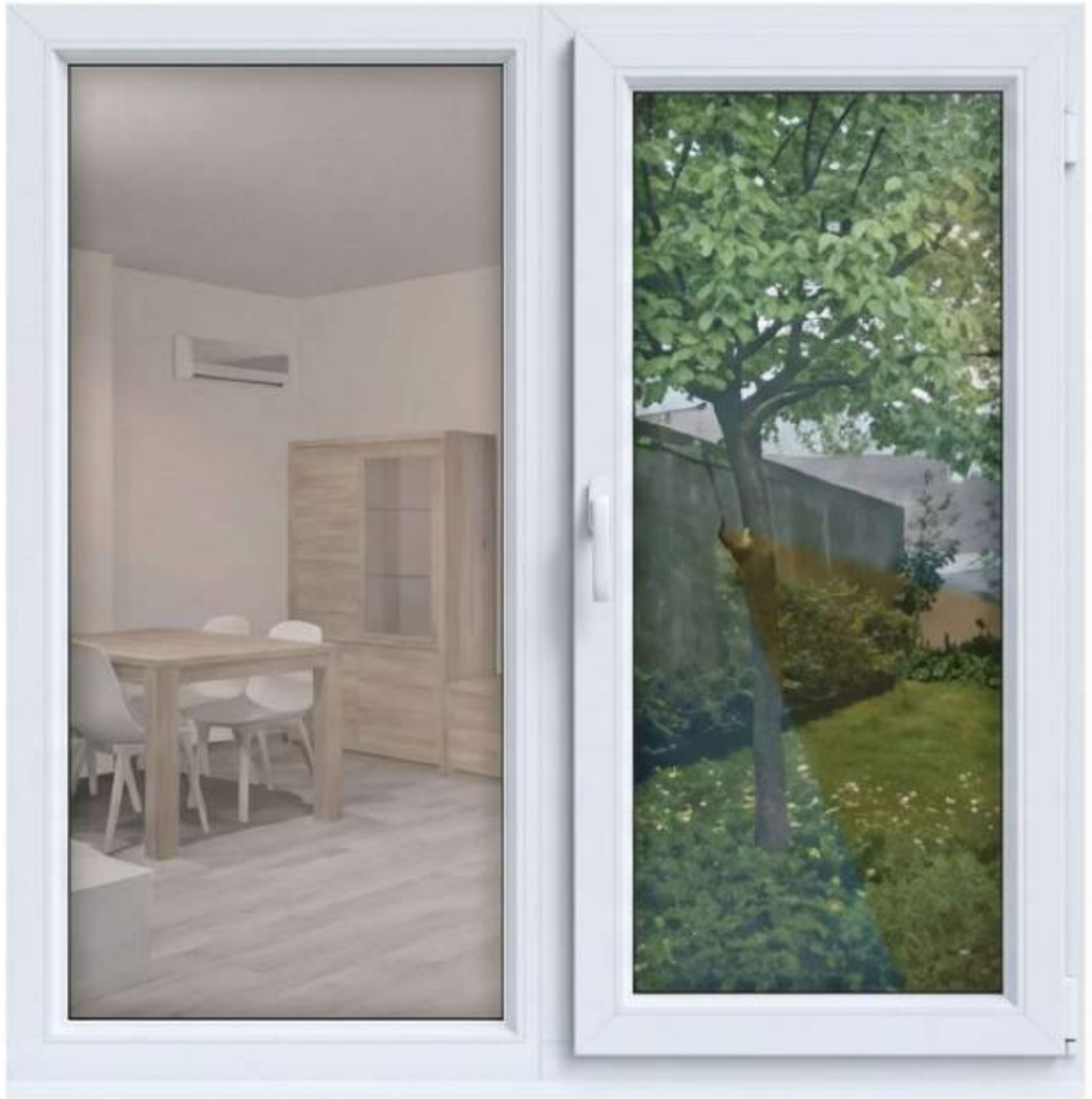
Thermal Mirror Film Silver

INSTALLATION & TECHNICAL GUIDE



Modern Architecture Series

Critical Prerequisites

SURFACE COMPATIBILITY

Smooth glass only.

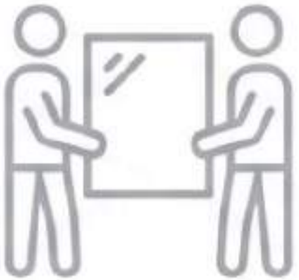
Prohibited: Frosted, textured, plastic, polypropylene, or cracked surfaces.

AMBIENT TEMPERATURE

0°C – 35°C

Application window.

Do not install in direct sunlight or frost.



TEAM REQUIREMENTS

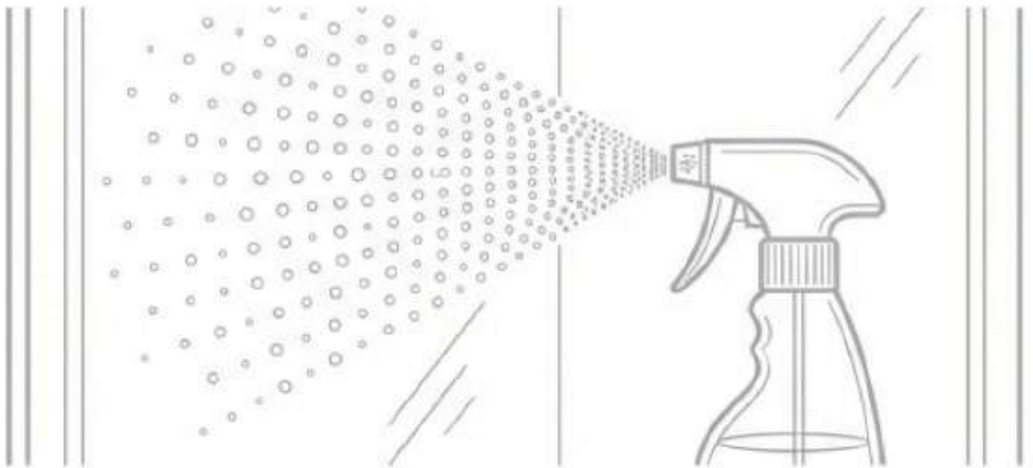
If window width > 1 meter:

2 Installers Required

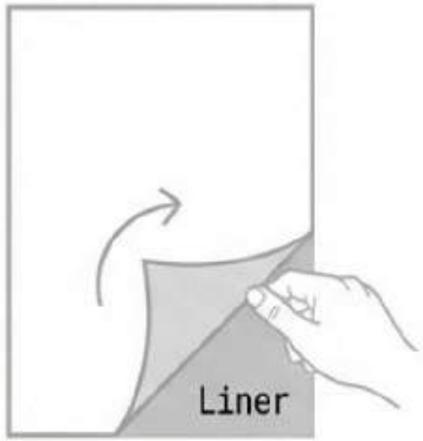
Phase 1: Surface Preparation

The chemical bond depends on a flawless canvas.

1. Clean glass and frame contact points thoroughly.
2. Use a scraper to remove dirt, paint, or debris.
3. Generously spray **Soapy Solution** on glass BEFORE positioning film.

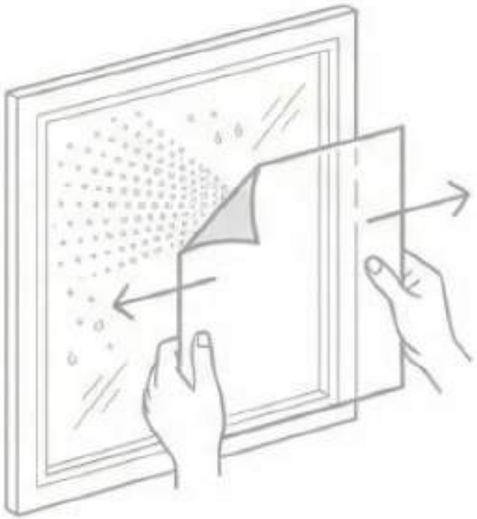


Phase 2: Film Positioning



1. Remove the back cover (liner). WARNING: Avoid contact with clothing to prevent dust contamination.

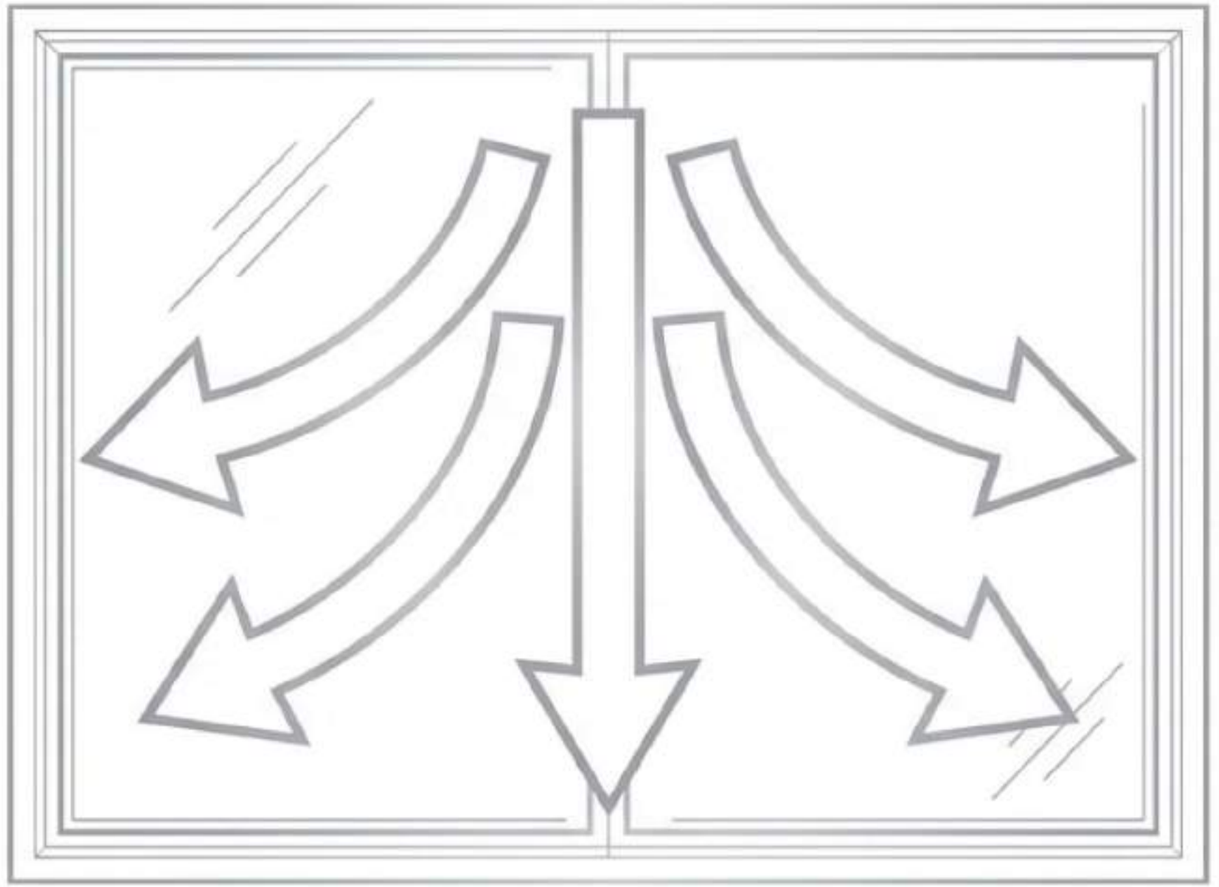
2. Spray soapy solution on the adhesive side of the film.



3. Place film on the wet glass. The fluid allows for precise sliding and positioning.

Phase 3: The Squeegee Technique

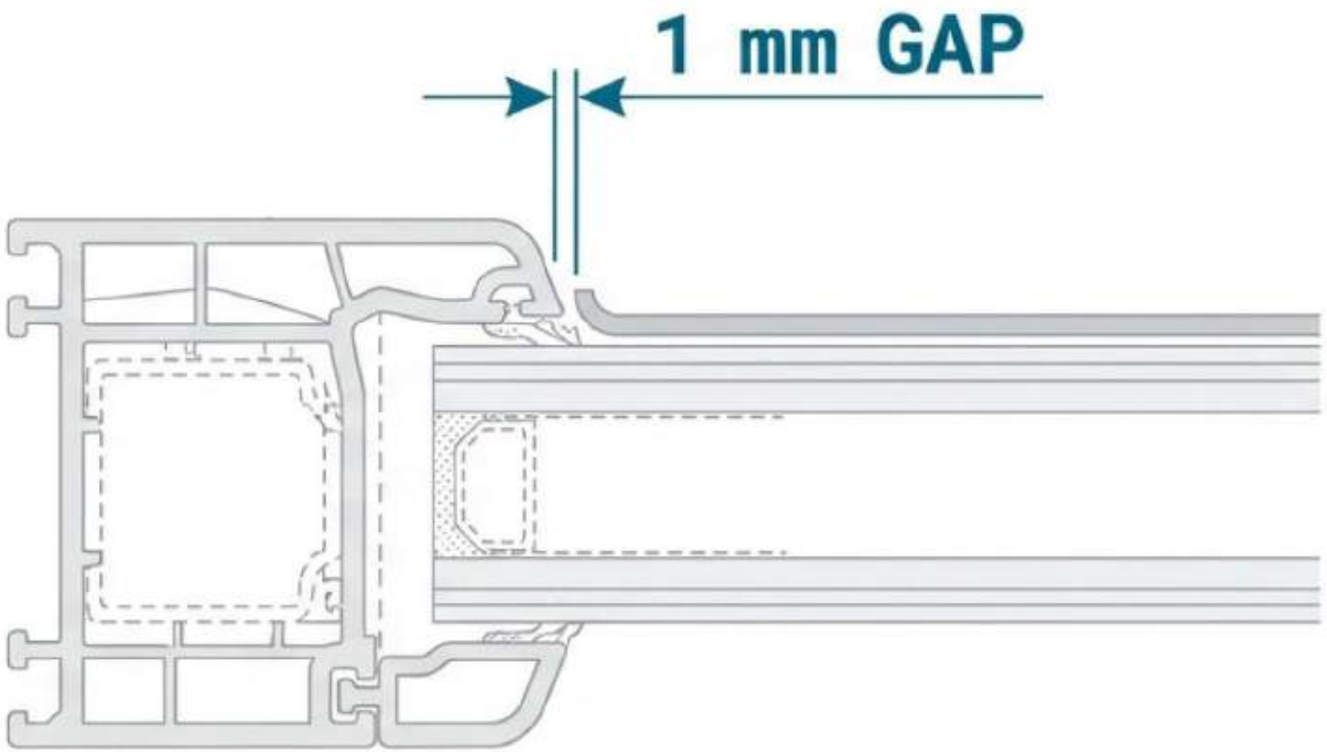
Preparation: Spray soapy solution ON TOP of the film for lubrication.



Goal: Evacuate all bubbles and moisture.

Correction Window: If persistent bubbles appear, remove and reposition within 24 hours.

Phase 4: Precision Trimming

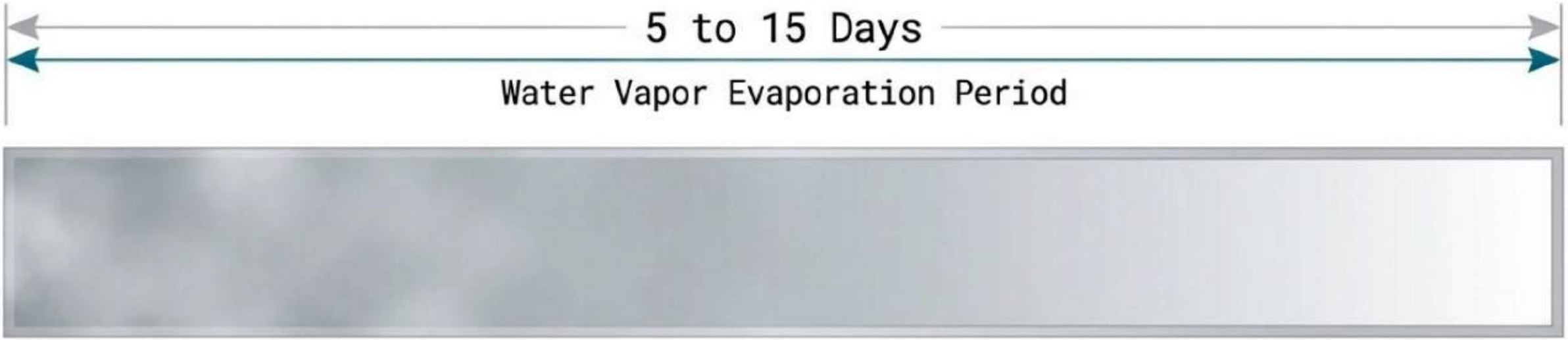


CRITICAL SPECIFICATION

- Use a cutter to trim excess.
- Leave exactly 1 mm between film and frame.
- Reason: Allows for thermal expansion and prevents edge lifting.
- Final Step: Re-wet and squeegee edges to seal.

The Curing Phase

Managing Appearance Post-Installation



Observation: Windows may appear ‘foggy’ or cloudy.
This is a natural chemical process.

Protocol: The First 30 Days

The Golden Rule

DO NOT TOUCH.

Do not clean the glass for 30 days. Allow for full hardening and attachment.

Standard Maintenance (After 30 Days)

APPROVED

- Soapy water
- Window cleaner
- Soft cloth
- Rubber squeegee

PROHIBITED

- Abrasives
- Brushes
- Solvent-based products

Technical Specifications

Thermal Film Mirror - Silver

Total Solar Energy Rejected	79%
UV Rejection	98%
Visible Light Transmission	16%
Thickness	100 µm
Safety Feature	Holds glass shards upon breakage

Disclaimer: Information based on practical experience and laboratory tests.

Help Us Help You

Innovation in Protection.

The information provided is based on extensive practical experience and laboratory tests.
Practical tests are recommended to ensure compatibility for each specific application.

Thermal Film Frosted

Installation Guide & Technical Application Standards

High-performance nanotechnology based on ceramic microspheres.

Operational Readiness & Environmental Limits

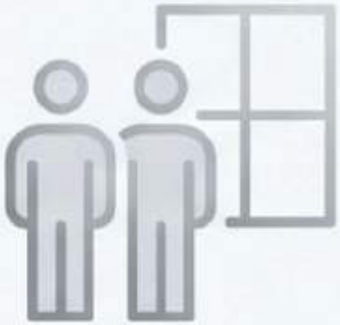
Temperature: Install between 0°C and 35°C.

Warning: Do not install if glass is <0°C (wait 3 days).

Solar Exposure: Avoid direct sunlight during application.

Surface Compatibility: Smooth, clean glass only.

Prohibited: Frosted, textured, plastic, polypropylene, or damaged/cracked glass.



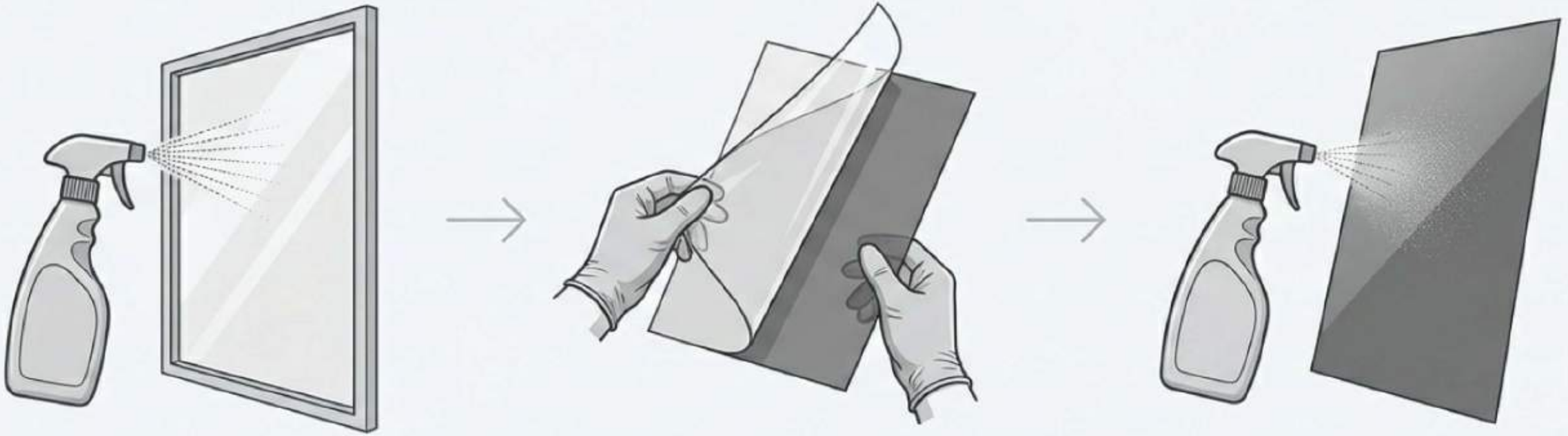
Team Requirement: Two installers recommended for windows >1 meter wide.

Surface Preparation Protocol

1. **Decontamination:** Glass must be completely free of dust, dirt, and paint splashes.
2. **The Frame:** Wipe down frame/edge contact points with a damp cloth to prevent edge contamination.
3. **Mechanical Cleaning:** Use a scraper to remove stubborn surface dirt.

Insight: Clean the outer surface of the glass as well. This provides a clear visual contrast to identify dirt remaining on the inner surface during the final check.

Fluid Application & Liner Removal



Step 1: Generously spray soapy solution on the glass.

Step 2: Carefully remove back cover. **Warning:** Avoid contact with clothing or dust.

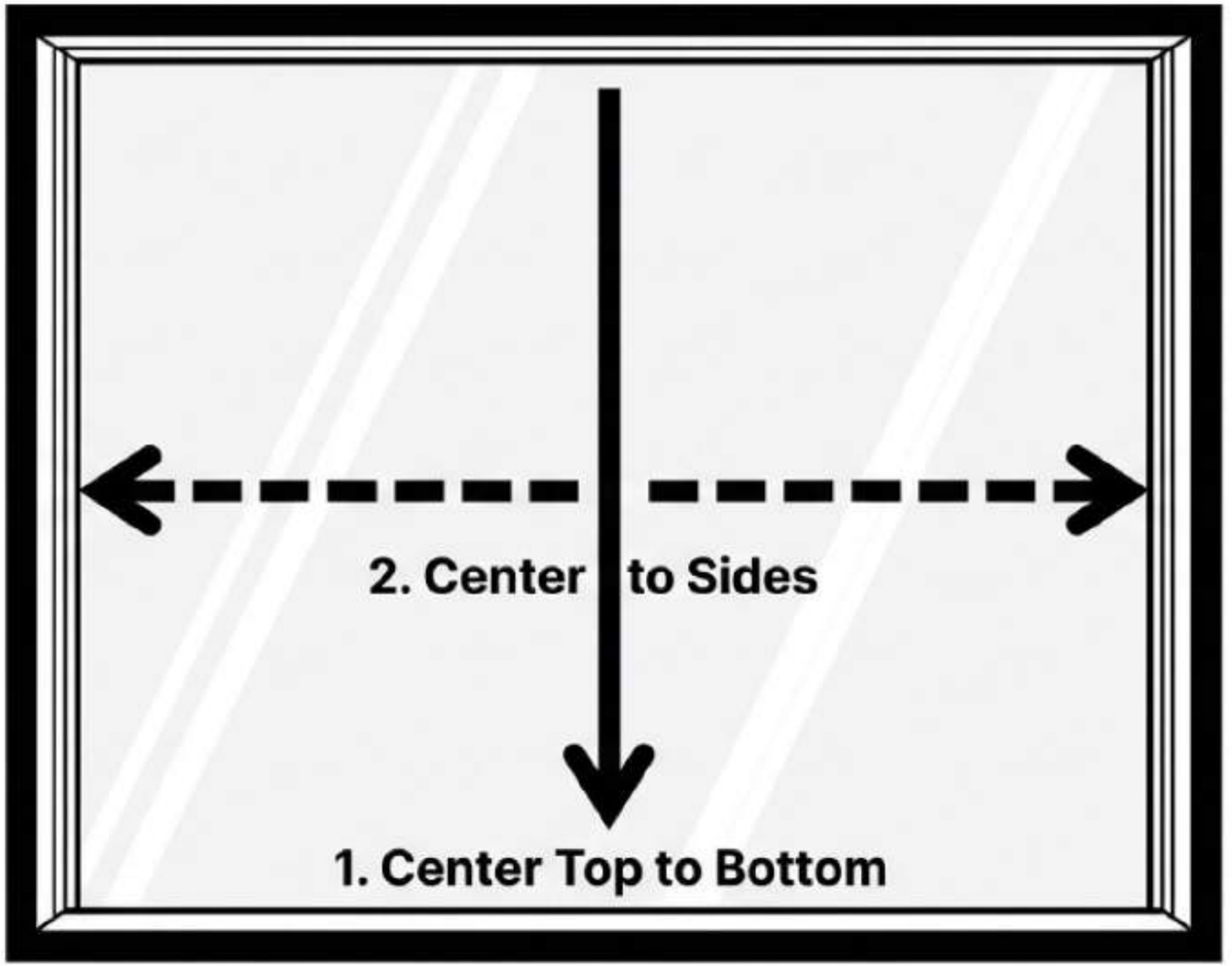
Step 3: Immediately spray adhesive side to neutralize static and facilitate positioning.

Handling: Keep film flat to prevent bending or creasing.

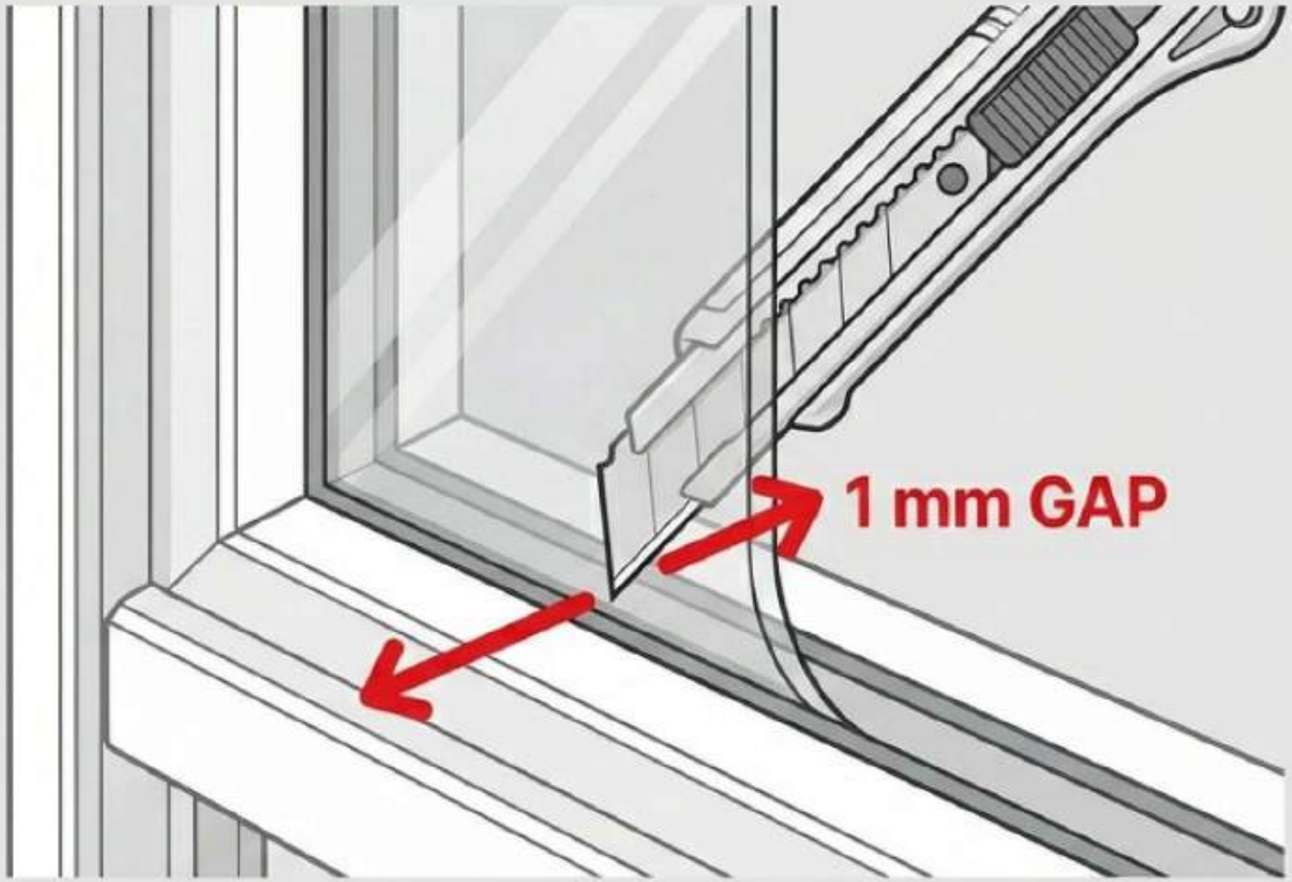
Positioning & Squeegee Technique

- **Glide:** Spray the front of the film with soapy solution before squeegeeing.
- **Tool Tip:** Wrap squeegee in a damp cloth to absorb moisture and protect surface.
- **Correction Window:** Reposition within 24 hours if bubbles persist.

Handling: Keep film flat to prevent bending or creasing.



Trimming & Edge Management

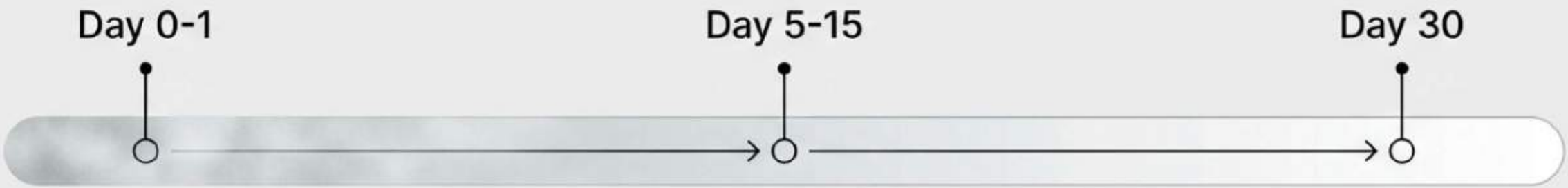


The Golden Rule: Leave a 1 mm gap between the film and the window frame.

- **Why?** Accommodates thermal expansion and contraction to prevent edge lifting.
- **Final Pass:** Re-wet and squeegee edges after trimming.

Handling: Keep film flat to prevent bending or creasing.

The Curing Timeline



Installation

The Fog Phase

Windows may appear foggy due to water vapor evaporation. This is normal.

Full Cure

Adhesion complete. Safe to touch and clean.

Maintenance & Aftercare

Approved

Rubber Squeegee

Soft Cloth

- Standard soap solution or window cleaner.

Prohibited

Abrasive Brushes

Solvent-based Cleaners

Storage: Unused film shelf life is 3 years (store 5°C - 45°C, away from sun/moisture).

Technical Specifications

Nanotechnology with ceramic microspheres

Appearance	Very light grey / Transparent
Visible Light Transmission (VLT)	67% (Retains luminosity)
Total Solar Energy Rejected (TSER)	49%
UV Reflection	98%
Thickness	50 µm
Safety Feature	Holds glass fragments together in case of breakage

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