

KEIM SOLDALIT®

ALL SURFACE SOL SILICATE EXTERIOR PAINT SYSTEM

THE BEST PAINT FOR EVERY MASONRY SURFACE

COLOR-FAST: Color shades will not change for decades BINDER IS U.V. STABLE: Paint will not degrade, get brittle or lose adhesion WEATHER RESISTANT: Water repellent and resistant to weather and pollution ECONOMICAL: Long service life and ease of repaint lead to lower costs ENVIRONMENTALLY SOUND: Purely mineral, no chemicals or pollutants ALL-SURFACE: Single paint solution for a myriad of masonry surfaces, even acrylic painted surfaces



SOLDALIT IS THE PERFECT FINISH FOR HISTORIC PRESERVATION-EXTREMELY VAPOR PERMEABLE, WATER REPELLENT, LIGHTFAST WITH EXTRA LONG LIFESPAN

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SOLDALIT[®] A REVOLUTION IN SILICATE TECHNOLOGY

This mineral sol-silicate paint, invented by Keim provides a paint of superior mineral quality. Delivering a far more longevity and permanent color than ordinary acrylic or elastomeric finishes, Soldalit balances durability with perfect structural physics.

Using only inorganic, mineral pigments, Soldalit colors are particularly intense and color-fast—for decades of perfect color and protection. Even intense colors keep their original hue without fading, no matter how intense the exposure. Ideally suited to the toughest climates, marine or alpine, Soldalit delivers incomparable performance and durability.

And Soldalit colors are enhanced by the natural mineral beauty that only mineral paints can deliver. The purest colors in a matte finish tha never glares or looks "plastic". Soldalit looks completely natural on any masonry surface and never looks "painted on".

Our color-fast technology starts with the highest quality pure mineral pigments and fillers combined with the natural U.V. resistance of solsilicate mineral binders. Expertly blended by Keim's color technicians we can match custom samples or most other paint colors. Or choose beautiful Keim colors at www.Keim.com/colors

- Use on any masonry surface, bare or previously painted
- Ideal for tough-to-paint surfaces like stone and terra cotta
- Ready to use and easy to apply
- Water based with no VOC's
- Exceptional durability in a water repellent paint finish
- Natural mineral matte beauty
- Stunning mineral colors





SOLDALIT® MINERAL PAINT FOR ANY KIND OF MASONRY

A premium paint with all of the benefits of mineral silicate technology can now be used on most any masonry surface, bare or even previously painted with acrylic or latex paints.

This delivers the obvious benefit of extending a previously painted surface for decades with Soldalit. And, for projects with mixed masonry surfaces or especially hard to paint surfaces, Soldalit offers the perfect single paint solution. The nanoparticle sol-silicate binder penetrates even the densest surfaces like concrete or terra cotta, even acrylic paints, and bonds permanently. No need for additional primers or bonding agents.

SAFE AND EASY

Soldalit applies simply and without the need for specialized equipment or experience. Like any other ready-to-use paint, you can apply by brush, roller or airless spray. Labor costs are the same as a standard latex or acrylic paint application.

WHY PAINT OVER LATEX?

Soldalit stops the U.V. degradation of latex and acrylic films instantly and provides decades of water and weather protection to both previous paint layers and the surface itself.

EXPERTLY CRAFTED DELIVERING THE ABSOLUTE HIGHEST QUALITY

Hand crafted to exacting specifications, Soldalit is no ordinary or mass produced paint. Worldclass technology is combined with age-old craftsmanship for a unique, ultra-premium finish. Select raw materials are combined using exacting engineering that has been honed over 135 years. Technical diligence only begins to explain our relentless commitment to technical and manufacturing excellence as demonstrated by our ISO 9001:2015 and ISO 14001:2015 certifications.

MINERALS LAST FOR GENERATIONS

The oldest buildings of mankind are made of stone because minerals are stable and very weather resistant. No wonder mineral paints from KEIM are so long lasting. No spalling, flaking or peeling from moisture. Soldalit ages gracefully for decades and lasts many times longer than acrylic or latex paints.

PERMANENT BONDS WITH THE SURFACE

KEIM invented the sol-silicate binder that penetrates and forms insoluble bonds within masonry surfaces as well as having permanent adhesion to latex and acrylic painted surfaces. Soldalit is the ideal multi-purpose exterior paint!

MINERAL PAINTS ARE VERY VAPOR PERMEABLE

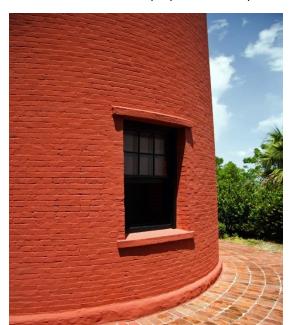
Soldalit is extremely vapor permeable, at 77perms, to allow moisture vapor that can accumulate in the building envelope to freely escape, without damaging the paint finish. Mineral paints will never blister or peel from moisture migration.

SOLDALIT REMAINS CLEAN

Mineral paint finishes are inert and anti-static. In the environment, Soldalit does not become charged from wind which can attract dirt particles. And in high heat, mineral paints never soften or change their physical properties so dirt is not trapped. Acrylic and latex paints, as plastic binders, form static charges and soften under heat—which can attract and trap dirt to the painted surface.

NATURALLY U.V. RESISTANT AND STABLE

All acrylic and latex paints lose their elasticity over time when exposed to U.V. and weathering. Artificial sun-screens are added to these paints in an effort to slow-down this process. Soldalit's sol-silicate binder is absolutely U.V. stable and does not degrade. Soldalit stops the continuing degradation of acrylic paints and stabilizes the paint layers beneath.

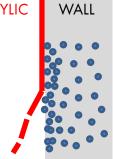


SOL-SILICATE PAINTS DELIVER IDEAL PERFORMANCE

LATEX/ACRYLIC PAINTS + ELASTOMERIC FINISHES CAN TRAP MOISUTRE

LATEX/ACRYLIC PAINT

Moisture vapor in a masonry wall cannot escape through the dense acrylic/latex paint finish. Moisture builds up and exerts great pressure which can cause the paint layer to blister, peel and fail prematurely.



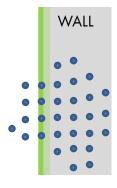
SOLDALIT DELIVERS DRIER FACADES

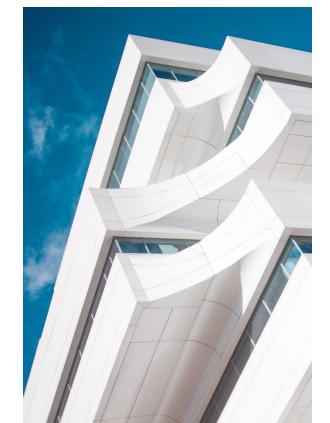
While it may seem plausible to seal a building's surface with a synthetic resin paint like a latex or acrylic against moisture penetration, in practice this can be detrimental. Water that enters the building envelope will seek to escape to the exterior, which can cause great pressure behind the synthetic paint surface, as it is not vapor permeable. Moisture vapor cannot freely escape causing blisters and peeling in the latex/acrylic paint surface.

Vapor permeability of the finish is important to building physics. Soldalit is extremely vapor permeable and allows moisture vapor to flow fast and unimpeded to the outside. Moisture will not accumulate between the paint and the surface that can damage the masonry. And the hydrophobic nature of the mineral silicate paint means surface moisture evaporates much faster with little condensation, a main reason for algae and fungi growth.

SOLDALIT PAINT

Moisture vapor in a masonry wall freely escapes to the dryer exterior without harm to the mineral silicate paint surface. Masonry walls remain dryer and healthier.







CLEANER FACADES

Soldalit silicate paints remain cleaner for a longer time period. Acrylic/latex paints due to their "plastic" nature develop a static charge when wind blows across the surface. This charge acts like a magnet for dirt and dust particles. Soldalit paints are completely inert and will not develop a charge, so dirt is not attracted to the mineral surface.

And, synthetic latex/acrylic finishes become soft when the weather is hot, developing a "tacky" surface which can trap and embed the attracted dirt particles leaving the surface dingy and dirty after just a few years of wear. numbers on the surface.

Soldalit's mineral structure does not soften, even under extreme heat, so no dirt is never trapped on the surface. All Soldalit products are anti-static and will look clean and fresh longer.

Surface condensation and moisture too can lead to biological soiling and staining. Moisture does not condense on Soldalit for added resistance to biological growth.

THE SCIENCE OF DIRT PICK-UP

Latex/acrylic paints and elastomeric finishes are made from synthetic "plastic" resins and can attract dirt from the environment.

In wind, ordinary paints become statically charged and attract dirt particles

On hot, sunny days, ordinary paints can become soft and sticky and embed dirt

Water condenses arcylic/latex pair and wet surfaces support growth o fungi and algae







Soldalit penetrates and becomes part of the masonry surface making it completely inert or stone-like so it does not attract dirt.

In wind, the inert, anti-static nature of Soldalit never attracts dirt particles On hot, sunny days, ordinary paints can become soft and sticky and embed dirt

In humid conditions, Soldalit eliminates condensation keeping the surface drier



SOLDALIT® ARTE PRESERVATION WITH PASSION

THE TITANIUM DIOXIDE DIFFERENCE

Today's paints work hard to appear smooth and uniform due mainly to their white component, titanium dioxide–a 20th century invention. Titanium dioxide is found in virtually every modern paint and delivers enormous hiding power and coverage to paints of all types. While this uniform appearance is usually desired, in Historic Preservation, this is not always the case.

Soldalit-Arte provides for a depth and pureness of color ideal for preservation. And results in unadulterated surface protection and decoration for an authentic and incomparable appearance.

MORE COLOR VIBRANCE

Soldalit-Arte provides a "titanium dioxide" free formula, which allows the natural beauty of mineral pigments to shine without the influence of white. Purest minerals deliver the purest, most vibrant colors. Soldalit's crystal clear binding agent provides a matrix with depth and space for pigments that are seen in their most natural state. The interplay of natural light is most distinct in Soldalit-Arte, and the paint is true to the original texture and finish of the surface. And, every Soldalit-Arte finish delivers a unique depth of color that is typically "muted" by titanium dioxide–delivering finishes reminiscent of historic limewash and ancient frescos.

COMPARE: COLOR WITH AND WITHOUT TITANIUM DIOXIDE



Two pigment blends, of the same shade. Right: Without titanium dioxide. Left: With titanium dioxide. The loose powder in left image shows no visual colour difference. When smoothly pressed down it shows the higher luminosity and pure color of the titanium dioxide-free formula.



PURE TITANIUM DIOXIDE FREE PIGMENTS CREATES A MOST UNIQUE DEPTH OF COLOR, A NOT-SO-PERFECT FINISH AND INTENSE INTERPLAY WITH CHANGING LIGHT CONDITIONS

SOLDALIT[®]–ME PHOTO-CATALYTIC SELF-CLEANING PAINT

PHOTOCATALYSIS-HOW IT WORKS

Soldalit ME in the presence of light, acts much like a catalytic converter does. The oxidation process breaks down organic compounds and nitrogen oxides that come in contact with the paint surface. Facades painted with Soldalit-ME not only promote the decomposition of air pollutants (VOC's) but are self-hygienic eliminating mold spores and other biologic growth.

Specialized mineral pigments in Soldalit–ME are responsible for this chemical process, whose effectiveness lasts the lifetime of the paint finish. This process is not available in ordinary acrylic or latex paints, as the process literally destroys the organic binder of the paint. Only inert mineral binders are suitable for this process.

Soldalit–ME's photocatalytic effect was not only tested and proven in the laboratory but also through exhaustive field trials and applications. Soldalit–ME has been installed across the globe and is both environmentally sound but also provides hygienic and clean surfaces for decades.

CLEANER BUILDINGS WITH AN ENVIRONMENTAL BENEFIT

This photocatalytic effect decomposes algae, fungi, mildew and organic dirt and dust–making the already dirt resistant Soldalit surface literally blemish free.



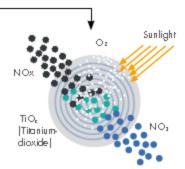
Nitrogen oxides are deposited on the surface of the paint.



When exposed to the light the nitrogen oxides are turned into harmless nitrate [N O₂] by means of oxidation. Furthermore, o zone is converted into axygen during the described reaction.]



The easily soluble nitrate $|NO_3|$ is then washed off the surface by rain.



The catalyst titanium dioxide is not consumed. As long as the crystals are supplied with energy by electromagnetic waves [light], the process remains active.



SOLDALIT-ME SELF-CLEANING MINERAL PAINT IS AVAILABLE IN A RANGE OF WHITES AND LIGHT COLORS AND WILL LOOK CLEAN AND BRIGHT FOR DECADES



EVEN DARK AND VIVID COLORS ARE CONSTANT NO MATTER HOW HARSH THE ENVIRONMENT

SOL-SILICATE SYSTEMS FOR ALL NEEDS

KEY FEATURES

- Universal use: bare masonry or previously painted surfaces
- Improves the performance of existing acrylic/latex paints
- Extremely durable and weather resistant
- Completely color-stable
- Very vapor permeable—regulates moisture in substrate

- Environmentally friendly and sustainable
- Outstanding physical properties—easy to apply
- Noncombustible—won't add fuel or noxious smoke in case of fire
 - Nature Plus Certified



	SOLDALIT	SOLDALIT-ARTE	SOLDALIT-ME
USE	Universal use on any new or old, bare or previously painted masonry/concrete	Unique color depth and more vibrant appearance–ideal for historic restoration	Where high soiling or pollution is present, especially from micro- organisms
TECHNOLOGY	Sol-silicate Binder	Sol-silicate binder + No Titanium Dioxide	Sol-silicate binder + Photocatalysis
SYSTEM First coat Finish coat Texture Base*	Soldalit Soldalit Soldalit Sand Base	Soldalit–Arte Soldalit–Arte	Soldalit–ME Soldalit–ME Soldalit–ME Sand Base
DILUTION	Soldalit Dilution/Fixative	Soldalit Dilution/Fixative	Soldalit Dilution/Fixative
TECH SPECS Vapor Permeability Acc'l Weathering Wind-driven Rain Mildew Resistance Alkali Resistance VOC Fade Resistance	77 Perms per ASTM E96 2016 hours no change per ASTM G154 Passes ASTM E514 Passes per ASTM D3273/D3274 No visible change at 24 hours per ASTM D1308 <1g/liter per ASTM D6886 A1– No color change after 4 years per Fb-Code according to BFS technical bulletin No. 26		

*Texture Base may be used as first coat when a sand-like finish is desired.

SOLDALIT® SYSTEMS



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KEIM. COLORS FOREVER.