

**Mineral Silicate  
Finishes, Stains & Paints**

**Concrete Repair  
& Finish**

**Stucco and  
Plaster**

**Natural Stone  
Repair & Finish**

**Penetrating  
Water  
Repellents**

**Mural/Artist Paints  
and Glazes**



# High-performance finish and restoration systems for concrete, masonry, stone and mineral surfaces



**KEIM** *Lasting Protection  
& Preservation™*

# The global leader in mineral coatings and restoration systems

*Below, clock-wise from left: Hearst Tower, New York, NY--Restauro Mineral Pigmented Stain; Marina Bay Sands, Singapore--Royalan Extreme Weather Silicate Finish; School, Dietzhöfztal-Ewersbach, Germany--Universalputz Stucco and Soldalit All-Surface Silicate Finish; Virginia State Capitol, Richmond, VA--Universalputz Stucco and Granital Exterior Silicate Finish; Alfred Lerner Hall, Columbia University, New York, NY--Concretal Pigmented Mineral Stain*



## **Petrification process- chemical bonds that will never fail**

Potassium silicate or water glass paints and stain's extraordinary adhesion is based on the "petrification" of the silicate binder within the masonry surface. The finish literally becomes "part" of the surface. A penetrating, permanent bond is created with the surface that will never blister or peel. This process is completely unique to silicate finishes, delivering unequalled durability and high resistance to weathering.

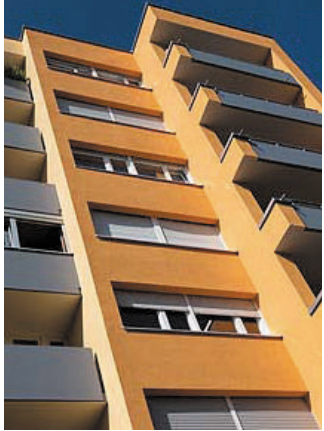
## **Vapor permeable- ensures ideal moisture balance**

Silicate finishes are highly vapor permeable, and maintain an ideal moisture balance in masonry walls. Moisture vapor in the building envelope is released unhindered into the environment. No accumulations of moisture occur between coating and surface, which can damage walls. Weatherproofing that keeps out water provides optimal protection against wind-driven rain and freeze-thaw damage.

## **Mineral pigments- will not fade**

Using only natural raw materials, a combination of liquid potassium silicate, naturally occurring mineral extenders and inorganic color pigments ensures maximum weather resistance and durability. Potassium silicate binders are naturally U.V. resistant, and the inorganic pigments are completely lightfast. Facades will not fade no matter how harsh the environment.

Below, clock-wise from top left: Phoenix Midtown (historic Dr. Pepper Bottling Plant), Dallas, TX--Royalan Extreme Weather Silicate Finish; The Corbin Building, New York, NY--Restauro Pigmented Mineral Stain, Silan 100 Water Repellant; Townhouse, Cologne, Germany--Concretal Pigmented Mineral Stain; The Arlington Mansion (Robert E. Lee Monument), Arlington National Cemetery, VA--Universalputz Stucco, Royalan Extreme Weather Silicate Finish; Quartier Schuetzenstraße Aldo Rossi, Berlin, Germany--Granital Exterior Silicate Finish; La Prairie aux Duys, Nantes, France--Concretal W Silicate Concrete Protective Finish



### Non-combustible- won't burn

Even when exposed to flames, KEIM's silicate finishes will not ignite, unlike acrylic or silicone paints. If there is a fire, mineral finishes ensure maximum safety with no toxic fumes or smoke, and damage to the surface is reduced. ASTM testing confirms that these finishes do not ignite and produce zero flame spread and zero smoke, and achieve an NFPA 101 class A fire rating under ASTM E 84. Ideal for use in public buildings, transit stations and tunnels, airports, schools and hospitals.

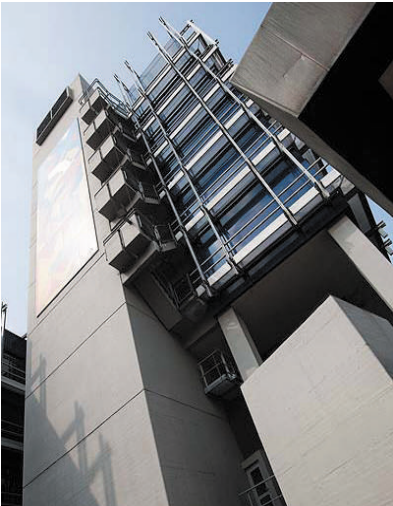
### Light refraction- helps regulate temperatures

Silicate finishes and stains have a micro-crystalline surface structure, which refracts light and heat in all directions. In hot climates this reduces the thermal stress on the structure and can reduce cracking of the masonry surface. In addition, silicate finishes have a unique and radiant aesthetic. Even in low-level light, silicate finishes appear luminous--a benefit in low-light installations like tunnels and garages.

### No fungus, algae or mold- for healthier indoor environments

The pure inorganic, inert composition and high pH of silicate finishes resists fungi, algae or mold growth, assuring a hygienic and clean surface inside and out. The absence of condensation, due to the finish's high water vapor permeability and crystalline matrix surface, promotes a clean and healthy environment. Resistance to weather also helps maintain a cleaner exterior finish as dust and pollutants are naturally washed from the surface during rain.

# A spectrum of solutions for all mineral, masonry and previously painted historic and modern surfaces



## Exterior Finish Systems

- Unparalleled durability and lifespan
- High vapor permeability: helps keep walls dry
- Chemically bonds: will not peel or blister
- Color is completely U.V. stable and lightfast - will not fade
- Non combustible: will not burn
- Keeps facades clean for years
- Natural appearance, mineral matte finish
- Refracts light and heat in all directions for luminous appearance
- Mineral, alkaline nature resists bio growth
- Easily repaired and repainted

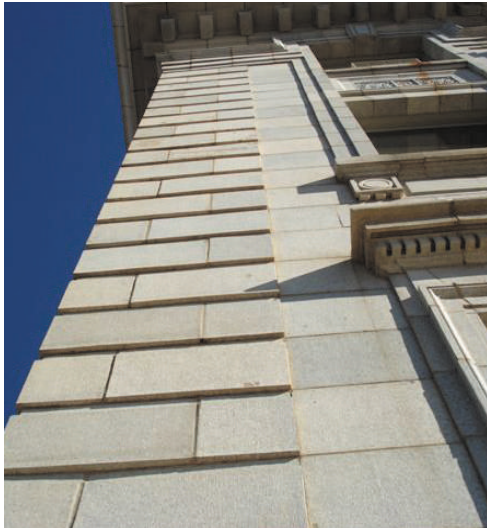
## Interior Finish Systems

- Very vapor permeable--healthier walls and interiors
- 100% Natural ingredients: no emissions, solvents or plasticizers
- No allergy triggers, toxins or preservatives
- Self-sanitizing: resists mold growth
- Noncombustible: will not burn
- Highly scrubbable: cleans easily and won't wear away
- Color is lightfast
- Vivid, bold and very dark colors in matte finish
- Low to zero VOC: no off-gassing

## Stucco and Plaster Systems

- Lime-rich systems for both modern and historic applications
- Interior and exterior stucco/plaster systems
- Very versatile in design: no need for control joints
- Thinner, lightweight systems
- Utilizes mineral mesh for flexibility
- Won't shrink or craze during cure
- Noncombustible: will not burn
- Sustainable and completely natural

KEIM provides unlimited design options in the brightest white or the deepest black, and every color in between. From completely opaque to translucent “washes” of color, these finishes protect and decorate interior or exterior surfaces.



## Concrete Systems

- Full line of repair products
- Uniquely engineered protective stains and finishes
- Unparalleled durability, lifespan and economy
- High vapor permeability: lets concrete breathe
- All the benefits of silicate stains and finishes

## Natural Stone Repair Systems

- Full line of repair and replacement mortars and grouts
- Stone consolidation products
- Perfect color matching to existing stone
- Unique mineral stain to blend patches and repairs
- Penetrating, vapor permeable water repellent treatments
- Protects stone from pollution and acid rain

## Infinite Design Options



Limitless range of colors and transparency



Luminous, light refracting opaque finishes



Color & lime washes for old world finishes



Mural/Artist Paints and Glazes  
Photo courtesy of Eric Grohe, [www.ericgrohemurals.com](http://www.ericgrohemurals.com)

# A heritage of excellence across the globe

Since the 19th century, KEIM's waterglass technology has represented the perfect marriage of function and beauty. From landmark and historic restoration and coating of major high-rise structures, to the boldest of modern design and construction, Keim remains the gold standard throughout the world.

*The 19th century City Hall in Schwyz, Switzerland (seen below at left) painted in 1891 with KEIM silicate paint is still in excellent condition today. The facade has merely been retouched in 1921 and again in 2006 using KEIM mineral silicate to rebind the original color pigments. Another stunning example of KEIM's durability is the Neuschwanstein Castle, Schwangau, Germany (seen at right).*



## Finishes that last for decades

Using a combination of potassium silicate, mineral pigments and binders, KEIM offers superior bond strength while maintaining the highest levels of vapor permeability and color stability. Innovation is also part of our history. In 2002, what is now the third generation of mineral silicate paints revolutionized exterior silicate coatings by using a sol-silicate binder. This combination of silica sol and potassium silicate not only provides bonding by petrification to mineral surfaces, but builds strong adhesive forces to previously painted, organic paints. This technology penetrates non-oil existing paint films and creates a double-bond for added strength and durability.

## Unsurpassed technical know-how and support

In this business, surface preparation and application is the key to success. Our experienced sales team and factory-trained product specialists are available to support you during every phase of the project-from design and specification, through mock-ups and assessment, to surface inspection and preparation, site inspections during application and final walk-through.

When needed, we can evaluate materials and substrates for compatibility, and precisely match any desired color or texture. Our ISO-certified production facility maintains full stock for just-in-time deliveries.

***KEIM's unique solution - a liquid silicate paint that becomes part of the surface where it is applied and binds the color pigments into the surface.***



## Historic Restoration - Our Specialty

KEIM's unique mineral silicate finish systems are 100% natural and fully compatible with historic interior and exterior stone, plaster, stucco and masonry. Their special properties help extend the life and splendor of historic structures around the world including iconic skyscrapers, venerable churches and castles, landmark university and school buildings and many U.S. Park Service monuments and historic sites. KEIM systems are frequently part of restorations that are directed by the secretary of the interior's guidelines for historic restoration.

## Concrete Renovation and Protection

Reinforcing steel in uncoated concrete can deteriorate and cause damage to the concrete and even breach a building's structural integrity. Weathered, unprotected concrete erodes and opens the surface to water intrusion and attack from acid rain and pollution. When a concrete building requires partial or complete renovation and long-term protection, rely on KEIM for a total system of repair products, water repellency and concrete or masonry finish and stain systems. Make concrete look fresh and new again for decades of protection.

## Natural Stone Restoration

KEIM delivers ideal solutions for restoring and replicating architectural and stone elements. Natural stone colors are precisely matched, and a unique blend of weather resistance and moisture vapor permeability protect stone for decades to come.



**KEIM**  Naturally Sustainable

We research and develop, manufacture and distribute mineral products and systems, meeting our self-imposed commitment for sustainability as well as the demands and needs of our customers. At every point from formulation and production, application and even disposal we are committed to:

- Preserving limited natural resources
- Reducing VOC's & hazardous chemicals
- Providing economic and longest lasting finish options
- Reducing waste & conserving water
- Supporting people and community

visit [www.KEIM.com/Naturally-Sustainable](http://www.KEIM.com/Naturally-Sustainable) to learn more.



National and International Affiliations

Association of Preservation Technology  
Construction Specifications Institute  
Green Building Council  
National Trust for Historic Preservation  
Institut Bauen und Umwelt



Below from left: Memorial Stadium, University of California, Berkeley, CA—Concretal Pigmented Mineral Stain; Prinzen Street Apartments, Berlin, Germany—Granital Exterior Silicate Finish; The Juliette Gordon Low Birthplace Museum, Savannah, GA—Universalputz Stucco and Royalan Extreme Weather Silicate Finish



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