

KEIM exterior coatings



since 1878



**silicate based, lasts for decades, ecologically safe
for extreme arctic, coastal and sub-tropical climates**

KEIM Royalan

**recommended for all mineral and masonry
substrates, block walls and renders.**

MasterFormat™ Division 09 - Finishes
Section 09 90 00 Painting and Coating
(See Back Cover for complete division listings)



Nothing compares to KEIM's natural composition and chemical binding strength for exterior protection.

Design professionals trust KEIM mineral coatings to endure for decades.

From modern contemporary to old world appeal, this is the spectrum of KEIM.



economical

Royalan lasts for decades. Facades facing harsh weather or upper floors of tall buildings typically receive 3 protective coats so the building's exterior wears evenly. KEIM Royalan will have a 30-year life cycle depending on severity of weather. Recoating preparation is simple: rinse with plain water, air dry, and coat with the desired color of KEIM Royalan.

environmental responsibility

Natural ingredients and very low VOC are of the many unique qualities of KEIM Royalan. Royalan's green characteristics extend to the environmentally-friendly production of our products in accordance with ISO 14001:1996.

fire safety

KEIM Royalan will not burn, smoke or produce poisonous gases. Royalan is completely incombustible.

health and beauty

The natural chemistry of KEIM Royalan leaves nothing behind but lasting beauty. At less than 1g/l VOC, Royalan has no odor or chemical residues. Ideal substrate moisture balance due to high vapor permeability, water repellency and inorganic chemistry provide natural resistance against mold, lichen and algae growth.



KEIM Royalan is made from waterglass (potassium silicate) and inorganic mineral color pigments.

It is a long-lasting mineral coating that is highly vapor permeable for the life of the substrate.



naturally compatible

KEIM Royalan comes from minerals: quartz sand, potassium carbonate and water. It is a proper coating for mineral and masonry substrates, sharing their physical properties and thermal movement. Royalan penetrates and cures by chemical reaction leaving a network of micro-pores. High vapor permeability allows water within the substrate to naturally balance with the environment.

lightfast color and refraction

Royalan's mineral colors are unaffected by UV light, even at high altitudes. The structure of the crystalline pigments and mineral fillers refracts light for a pleasant attractive appearance, especially in low light. KEIM's unique anti-static silicate chemistry maintains a clean surface. Royalan is available in over 250 standard mineral colors plus custom colors.

weathering protection

Designed for +80% humid and wet conditions and extreme hot/cold thermal cycles, Royalan prevails in harsh weather that destroys other coatings. The petrification process protects the substrate against heavy weather and aggressive environmental influences. Penetrating the surface to form a fine micro-porous mineral structure, it is naturally resistant to water and salts while completely resisting attack from air pollutants and acid rain.



KEIM façade system

KEIM Royalan coating products

KEIM Royalan



KEIM Royalan. Silicate-based ready-to-use exterior coating. Engineered for extreme conditions as found in arctic, coastal, sub-tropical, and desert climates. Excellent for all mineral substrates as it shares their natural physical properties and thermal movement characteristics for unusually long life. KEIM Royalan is water resistant yet highly vapor permeable. Dilute with KEIM Royalan Dilution. Dries flat matte. Very low VOC (less than 1 g/l tinted).

KEIM Royalan Dilution



A silicate-based diluent, used to thin coatings for smooth application and control absorption. Use as primer coat to reduce absorption on highly absorbing substrates. Very low VOC (less than 1 g/l).

KEIM Royalan Grob



A silicate-based filled priming coat containing sand (0-0.5mm grains) and mineral fiber fillers used to fill hairline cracks and crazing, opaque white, may be tinted. Dilute with KEIM Spezial Dilution. Very low VOC (less than 1 g/l).

KEIM Contact Plus



A silicate-based primer/bridging coating containing sand (0-0.5mm grains) and mineral fiber fillers for bridging over existing synthetic resin-bound paint layers or as primer when cost or hazmat conditions prevent removal of existing paint layers. Used to fill hairline cracks up to 0.5mm or equalization and renovation of surfaces for a uniform appearance, opaque white. Very low VOC (less than 1 g/l).

permeability, weathering, and wind-driven rain ASTM test results

ASTM E 96,

Test Methods for Water Vapor Transmission of Materials

Test Results

Permeance = 83 Perms. KEIM Royalan is highly vapor permeable.

ASTM G 154,

Accelerated Weathering Test 2016 hours

Test Results

No signs of any type of deterioration including Crazing, Cracking, Chipping, Flaking, or Chalking. KEIM Royalan endures for decades.

ASTM E 514,

Wind-Driven Rain Test 4 hour test

Test Results

The test walls coated with KEIM Royalan allowed no water to leak through while an untreated wall allowed water to flow through at a rate of 0.08 gallons/hour. **After 4 hours against 62 MPH wind**, the uncoated wall facing the wind-driven rain showed dampness on 90% of the area while the wall coated with Keim Royalan showed only slight dampness on 4% of the area. KEIM Royalan is very water resistant.

KEIM preparation and renovation products

KEIM Lime Remover



For use on new render (stucco) to remove sinter layers or for cleaning dirty areas of old render. KEIM Lime Remover is completely neutralized when correctly used. No VOC.

KEIM Bio Stripper



A paint stripper for removing elastomeric latex, acrylic, or resin film-forming coatings. Water-emulsive mixture of solvents, free of fluorinated, chlorinated, and aromatic hydrocarbons. Biodegradable.

KEIM Concrete Cleaner



A silicic acid cleaner for removing surface impurities on old concrete and mold release oils from new concrete. KEIM Concrete Cleaner is completely neutralized when correctly used. No VOC.

KEIM Universalputz Standard Render



A cementitious renovation and thin wall render made of hydraulic lime and white cement binder with quartz sand (0-1.3mm grains) and mineral fiber fillers. KEIM Universalputz Render accommodates thermal expansion cycles preventing surface crazing and cracking. The white surface may be finished from rough-hewn to coarsely smooth with infinite texturing possibilities. No VOC.

KEIM Universalputz Fine Render



Same as Universalputz Standard except the quartz sand grains are between 0 to 0.6mm in size. Surface may be finished from sandy to smooth, closely resembling the appearance of white lime plaster. No VOC.

KEIM Fiber Mesh



A glass fiber lattice mat for reinforcing rendered surfaces. Embed into KEIM renders when applying on CMU or similar block, brick or existing render/stucco/adobe. No VOC.

KEIM Silan 100



An alkylalkoxysilane-based, extremely water repellent primer coating with 100% active ingredients, applied as first coating against the substrate. No VOC.

KEIM I&F Grund



A powerful combination stain blocker and bridge coat primer, opaque white, highly vapor permeable. Prevents underlying stains from bleeding through finish coating. Solvent-based, exterior use only.

KEIM Sealer



Polyurethane-based, solvent free, indoor-outdoor UV resistant transparent sealer. Dries flat matte, one shade darker than underlying color. Uniquely 100% waterproof yet vapor permeable. Apply as wear layer on horizontal surfaces to prevent water intrusion. Due to slippery nature when wet, most soils wash away with rain. KEIM Sealer is an effective waterproof coating protection and soil barrier. Very low VOC (less than 9 g/l).

Need more information

Email us at:
keim-info@keim.com

Download product spec sheet
PDF files at:
www.keim.com

Call us at:
866-906-5346 (In USA)
704-588-4811 (Outside USA)



how to apply KEIM Royalan

Royalan is of the KEIM family of mineral silicate based coatings. Engineered for extreme conditions as found in arctic, coastal, sub-tropical, and desert climates. The inorganic color pigments cannot fade so decorated buildings retain their original character for decades. Complementary products provide a complete system for new construction, renovation and restoration.

Royalan may be applied onto any mineral substrate including mineral renders, concrete, stone, brick, CMU block, and autoclaved aerated concrete (AAC).

Apply by brush, roller or professional spray equipment keeping a wet edge from corner to corner. Clean up with water. Areas may be occupied immediately after application.

See technical data sheets for comprehensive application information.

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member



The Construction Specifications Institute

Association for Preservation Technology

National Trust for Historic Preservation

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KEIM is ISO 9001:2000 certified for applying a Quality Management System.

the original silicate coating since 1878

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