

TECHNICAL DATA SHEET

KEIM MINERAL MASONRY PAINT

FOR BRICK, MASONRY AND STUCCO

1. PRODUCT DESCRIPTION

Mineral Masonry Paint is a ready-to-use potassium silicate based matte flat paint for exterior masonry, concrete and stucco surfaces. The penetrating formula forms permanent chemical bonds within the brick and masonry substrate so it will never peel or lose adhesion. It provides an extremely low maintenance and durable water repellent finish. This paint is extremely vapor permeable allowing brick and masonry to breathe naturally. Mineral Masonry Paint will never blister or bubble due to moisture vapor in the surface. Both binder and pigment are completely UV resistant and lightfast, so paint colors will not fade for decades.

2. FIELD OF APPLICATION

Mineral Masonry Paint is a 2 or 3 coat system formulated for exterior use on new or bare, absorbent mineral surfaces. It is ideally suited to masonry, brick and stone as well as aged concrete substrates, CMU, cement boards, plasters and Portland Stucco. It is ideal for historic restoration, maintenance and new construction in most climates. It is not suitable for use over previously painted surfaces of elastomeric, oil-based or lacquers and varnishes, or fresh concrete without a suitable primer (see section 4 Specifications/Systems).

3. PRODUCT PROPERTIES

KEIM Mineral Masonry Paint has a proven track record of extremely long-life. The potassium silicate emulsion binder provides excellent weather resistance and color retention. Colors are non-yellowing and won't fade, no matter how harsh the U.V. exposure. It is also impervious to acid rain and other environmental pollutants.

- Non-film-forming, won't ever peel
- Mineral matte finish very natural appearance
- Non-flammable will not burn
- Anti-static surfaces stay clean longer

- Lightfast will not fade
- All components are completely UVstable
- Excellent weathering resistance
- Resistant to industrial pollutants and acid
 rain
- Highly water-repellent
- Extremely vapor permeable
- Resistant to fungal and algae growth
- No solvents extremely low VOC
- Easy application
- Very durable even in extreme freeze thaw environments

Technical data

Specific Weight	approx. 1.45 g/cm ²	
pH Value @ 20°C	11	
Wind Driven Rain ASTM E 514	Passes—no water leaked through	
Water Vapor Permeability ASTM E 96	80 - 85 perms	
Accelerated Weathering Test ASTM G 154	Passes No change after 2016 hours	
Mildew Resistance ASTM D3273/D3274	Passes	
Gloss at 85°	0.5 Mineral Dead Flat	
Flashpoint	Non-Flammable	
Color Stability Color code acc. To BFS Tech. No 26	A1 Best in class rating No color change after 4 years	
VOC	0 g/liter	
All test results performed on 2 coats Mineral Masonry Paint applied at 300—350 SF/GAL and 14 day cure @ 77°F & 50% RH		

Color shades and Textures

White and full color range. Custom color matches are also available.

Mineral Masonry Paint is also available as a texture base to fill in minor cracks, pits and voids and to provide a uniform texture on rough surfaces. MMP Texture Base MUST be finished with a final coat of Mineral Masonry Paint and not left to weather without a topcoat.

Environmental Compliance

EPA	YES
LEED	YES
CARB	YES
SCAQMD	YES
EPD	YES

4. SPECIFICATIONS/SYSTEMS

For proper waterproofing and weather resistant performance, 2 coats of Mineral Masonry Paint must be applied at recommended coverage rates. Surface should be fully coated, with no pinholes, runs, voids or holidays. Brick Masonry (new or aged, bare) 1 coat MMP (diluted up to 20%) 1 coat MMP (undiluted) Cast or Pre-cast Bare Concrete Pretreat: Keim Heavy Duty Cleaner Concentrate (for new concrete) 1 coat CONTACT PLUS Bonding Primer (for new concrete) 1 coat MMP (diluted up to 20%) 1 coat MMP (undiluted) CMU Block For new, extremely porous block: 1 coat CONTACT-PLUS GROB Block Filler 1 coat MMP (diluted up to 20%) 1 coat MMP (undiluted) Stucco (new or aged, bare) Pretreat: Keim Lime Remover (for new stucco) 1 coat MMP (diluted up to 20%) 1 coat MMP (undiluted) Previously Acrylic Painted Surfaces 1 coat CONTACT—PLUS Bonding Primer 1 coat MMP (diluted up to 20%) 1 coat MMP (undiluted) Do not apply to aged, oil base, epoxy or urethane coatings.

5. SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800- 424-LEAD (in US) or contact your local health authority.

The substrate must be sound, dry, absorbent, clean and free from dust and grease. Loose areas, dirt, oily substances, release agents, curing compounds, moss and algae must be completely removed.

Existing film-forming paint coatings, which are loose or poorly bonded must be removed with paint stripper or by mechanical means. Highly absorbent, sanding surfaces:

Pretreat by saturating surface with KEIM Fixativ, mixed with 3 parts water, and allow to dry and cure for 12 hours.

New Portland Stucco:

Sinter layers on new Portland stucco or stucco repairs should be pretreated with KEIM Lime Remover, rinsed with copious amounts of clean water and allowed to dry.

New Concrete Surfaces:

Remove all release, form or curing oil residues with KEIM Heavy Duty Cleaner Concentrate, rinse and allow to dry. In some cases abrasive water blasting may be necessary to remove sealers, release compounds, and to provide an anchor pattern. Concrete and mortar must be cured at least 7 days at 75°F. Use a primer coat of Contact Plus Bonding Primer on new concrete. Aged, clean, strong and sound concrete requires no pre-treatment or primer.

6. APPLICATION

Mineral Masonry Paint may be applied by brush, roller or airless spray.

- Brush Use a natural bristle or nylon/polyester brush
- Roller Use a ¹/₂" to ³/₄" nap synthetic roller cover
- Airless Spray
 - Pressure: 3000 psi
 - Tip Size: .029--.031 in

First coat

Mineral Masonry Paint may be diluted up to 20% with KEIM Spezial Dilution depending on the substrate's absorbency. Allow to dry 12 hours or overnight before recoating.

<u>Top coat</u>

Apply Mineral Masonry Paint undiluted. There is no recoat window after the first coat has dried.

NOTE: For extreme weather conditions or critical, intensive color shades it is recommended to apply a three-coat system.

Application conditions

Ambient and substrate temperature: 40°F and rising and below 86°F. Do not apply to sunheated substrates. Protect coated surfaces from wind and rain during and after application for a minimum of 12 hours.

Drying times

Drying times are temperature, humidity and coverage dependent.

Ū	@ 40-50°F	@ 50°F +
Touch:	46 hour	24 hours
Recoat:	2448 hours	24 hours

Coverage*

SUBSTRATE	COVERAGE*
Masonry or Brick	250—300 SF/GAL
Natural Stone Masonry	225—275 SF/GAL
Cast or Pre-Cast Concrete	275—325 SF/GAL
Fiber Cement Siding	275—325 SF/GAL
Portland Stucco	150—200 SF/GAL
CMU Block (smooth)	100—150 SF/GAL
CMU Block (split faced or fluted)	50—100 SF/GAL

*Stated values are based on our experience on smooth surfaces. Surface texture, porosity, application conditions and type of equipment used will all vary consumption. Only a test application, using desired mixing ratio and under production conditions will fore-cast consumption of the system components accurately. **NOTE: Subtract 50--75 SF from stated values for MMP Texture Base Coat.**

KEIM

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Cleaning

Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with a compliant cleanup solvent to prevent rusting of the equipment. Tools should be kept in the paint material or in water during work breaks.

Mixing with other products

In order to maintain the specific features of Mineral Masonry Paint do not mix with other products or additives and never thin with water.

7. PACKAGING

Quart, Gallon and 4 Gallon

8. STORAGE

Approx. 12 months in tightly closed container under cool, frost-free conditions. Protect from heat and direct sunlight.

9. DISPOSAL

Dispose of completely emptied containers in accordance with local, state and federal waste regulations.

HAZARDOUS SUBSTANCE CLASS

10. LIMITATIONS

KEIM Mineral Masonry Paint is a façade paint finish and should not be used on floors, roofs or decks or where water will collect. Not for use below grade where hydrostatic pressure is present.

11. SAFETY INSTRUCTIONS

Provide appropriate protection for surfaces which are not to be coated (e.g. glass, natural stone, ceramics etc.). Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water. Protect the eyes and skin from splashes. Keep out of reach of children. The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release those purchasing and applying our products from the duty of establishing for themselves, with due care, the suitability of our products for the intended application. Standard building industry practices must be complied with. We retain the right to make modifications to improve the products or their application. This edition supersedes all earlier editions.

The information and recommendations set forth in this Technical Data Sheet are based upon tests conducted by or on behalf of KEIM Mineral Coatings. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult <u>http://www.keimusa.com/Technical-Data-Sheets</u> for the latest in product technical information.