



TECHNICAL DATA SHEET

DESIGN METALLIC FINISH

INTERIOR/EXTERIOR MINERAL METALLIC PAINT

1. PRODUCT DESCRIPTION

Metallic Mineral Finish is a ready-to-use mineral silicate based metallic paint for interior and exterior masonry, concrete, stucco, plaster, and drywall surfaces. It offers excellent weather resistance, and the metallic finish will never fade or tarnish. It offers high vapor permeability and forms a chemical bond with the mineral substrate so it will never blister or peel. The unique metallic effect derives from natural mica pigment that is coated with iron oxides for durability and to achieve enhanced colors.

2. FIELD OF APPLICATION

Metallic Mineral Paint is a 2 or 3 coat system formulated for use on new or bare, absorbent mineral surfaces. Use on masonry, brick and stone and all types of concrete substrates, CMU, cement boards, plasters, and Portland Stucco. 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

Based on a silica sol mineral silicate binder provides to provide excellent application properties and long-term weather resistance and color retention. Metallic colors will not tarnish or fade, no matter how harsh the U.V. exposure. It is also impervious to acid rain and other environmental pollutants.

- Penetrating chemical bonds—will not peel or blister
- Unique metallic matte luster and sheen
- Non-flammable – will not burn
- Anti-static – surfaces stay clean longer
- Lightfast – will not fade or tarnish
- All components are completely UV-stable
- Excellent weather 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 Matte 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—1 g/liter
All test results performed on 3 coat system applied at 300—350 SF/GAL and 14-day cure @ 77°F & 50% RH	

Colors

Standard colors are gold, silver, copper and red lava. Blended metallic colors are also available.

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Compliance

EPA	YES
LEED	YES
CARB	YES
SCAQMD	YES
EPD	YES
Cradle to Cradle	YES
Greenguard Gold	YES
EPD	YES

4. SPECIFICATIONS/SYSTEMS

Metallic finish systems are completely weatherproof and water repellent when applied in combination with base coat of Soldalit or Concretal paints. Surface should be fully coated, with no pinholes, runs, voids or holidays.

Masonry (new or aged, bare)

1 coat Soldalit or Concretal paint (in coordinating color)

1--2 coats Design Metallic Finish

Cast or Pre-cast Bare Concrete

Pretreat: Keim Heavy Duty Cleaner Concentrate (for new concrete)

1 coat Soldalit or Concretal paint (in coordinating color)

1--2 coats Design Metallic Finish

CMU Block

For new, extremely porous block:

1 coat CONTACT-PLUS GROB Block Filler

1 coat Soldalit or Concretal paint (in coordinating color)

1--2 coats Design Metallic Finish

Stucco (new or aged, bare)

Pretreat: Keim Lime Remover (for new stucco only)

1 coat Soldalit or Concretal paint (in coordinating color)

1--2 coats Design Metallic Finish

Previously Acrylic Painted Surfaces

1 coat Soldalit Paint

1--2 coats Design Metallic Finish

NOTE: 2 coats of Design Metallic Finish delivers the highest degree of metallic luster.

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 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 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 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

Design Metallic Finish may be applied by brush, roller or airless spray.

- Brush - Use a natural bristle or nylon/polyester brush
- Roller - Use a ½" to ¾" nap synthetic roller cover
- Airless Spray
 - Pressure: 3000 psi
 - Tip Size: .029--.031 in

First coat

If using a coordinating non-metallic finish as the first (prep) coat, do not dilute coating for application. Design Metallic Finish may be diluted up to 50% with Design Fixative/Dilution to reduce the metallic luster effect, but is not required. Allow to dry 12 hours or overnight

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before recoating. Diluting the finish diminishes the metallic effect.

Topcoat

Apply Design Metallic Finish undiluted for maximum metallic effect. Dilute up to 50% with Design Fixative to achieve a more transparent metallic finish.

There is no recoat window after the first coat has dried.

Artistic Applications

The first and/or second coat of Design Metallic Finish may be applied with various techniques to result in unique artisanal finishes. Contact Keim for more information.

Application conditions

Ambient and substrate temperature: 40°F and rising and below 86°F. Do not apply to sun-heated 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.

	@ 40-50°F	@ 50°F +
Touch:	4--6 hour	2--4 hours
Recoat:	24--48 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. Test on actual surface for accurate consumption estimates.	

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Cleaning

Clean spills, splatters, 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

Do not mix with water or other products or additives.

7. PACKAGING

Quart sample, Gallon, 4 gallon and 15 liter (3.96 gal) in standard colors

8. STORAGE

Approximately 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

n/a

10. LIMITATIONS

Metallic Mineral Finish is a façade paint and should not be used on floors, roofs or decks or where water will collect. Not for use below grade.

11. SAFETY INSTRUCTIONS

CAUTION! SKIN OR EYE CONTACT MAY CAUSE TEMPORARY IRRITATION

Use proper protective equipment and clothing. Wash hands and skin after handling. Keep container closed when not in use. FIRST AID: If swallowed, give two glasses of water. Do not induce vomiting. Call for medical help immediately. Never give anything by mouth to an unconscious person. In case of skin irritation, consult a physician. In case of contact, immediately flush eyes and skin with plenty of water; get medical help if needed.

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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 <http://www.keim-usa.com/Technical-Data-Sheets> for the latest in product technical information.