



TECHNICAL DATA SHEET

ROMANIT®

INTERIOR/EXTERIOR NATURAL LIMEWASH

1. PRODUCT DESCRIPTION

ROMANIT® Natural Limewash is a classic, old world paint finish with hydrated lime as the binder and uses only the finest, natural mineral pigments. Romanit is a ready-to-use lime paint and slurry system and is manufactured to DIN 55945 and made with pit lime that has matured for at least 3 years. This finish provides a soft patina and slightly mottled appearance, reminiscent of ancient Roman frescoes. It is extremely vapor permeable and allows masonry walls to breathe naturally. It is completely natural and has no allergy triggers or negative health implications. On the exterior, it must be routinely re-applied as the lime binder weathers away at a rate based on the severity of the climate. It is ideal for historic restoration of lime plasters and stucco. On the interior, these finishes are ideal for lower traffic areas where they will not be frequently washed.

- Ideal for historic restoration and preservation projects
- Lime paint forms with less surface tension than ordinary paints which is important for delicate masonry surfaces
- No primer required—2 coat system on bare masonry
- Excellent moisture vapor diffusion provides an extremely breathable finish
- The lime binder continues to interact with the environment as the coating cures and ages resulting in a unique “patina” finish that cannot be replicated with latex or acrylic finishes
- Romanit uses only pure inorganic mineral fillers, and lightfast inorganic mineral pigments

2. FIELD OF APPLICATION

Expressly formulated for use on porous mineral surfaces, both interior and exterior where a breathable, authentic lime finish is desired. Romanit must penetrate the mineral surface. Ideal absorbent surfaces include but are not limited to, brick, stucco, historic masonry, porous stone, lime plasters, mortars, CMU, mineral

boards and renders and stucco. New drywall must be primed with a mineral based paint prior to application of Romanit (see Specifications below).

LIMITATIONS: Do not use Romanit on resin based existing coatings, elastomeric coatings, alkyd or oil-based paints, lacquers and varnishes. Do not apply to polished stone or concrete surfaces. Do not use on floors.

3. PRODUCT PROPERTIES

Romanit is formulated to be ready-to-use, tension-free and non-yellowing lime paint or wash. It has excellent hiding power and contains only absolutely lightfast inorganic pigments.

- Reversible—ideal for use in preservation and historic restoration
- Lime surface is tension-free during dry and cure
- Non film forming—penetrates and forms chemical bonds with masonry—won't peel or lose adhesion
- Incombustible and safe to use—Class A Building Material
- Anti-static—dirt won't cling and washes off naturally with rainfall
- Lightfast pigments—colors will not fade
- Non-yellowing—lime paint/wash will not yellow with time
- Extremely vapor permeable—allows concrete to breathe naturally
- Extremely low VOC—environmentally friendly
- Non-flammable and extremely sustainable
- On exterior use, Romanit weathers naturally and develops a time-worn patina. Durability is dependent upon local environment and exposure to elements.
- Easy to recoat with lime or mineral paints
- Available with Lime Slurry additive for slurry applications

Technical data

Specific Weight	1.44 g/cm3
pH Value @ 20°C	11
Water Vapor Permeability ASTM E 96	75--85 Perms
Thermal Expansion	Comparable to the concrete substrate
Gloss at 85°	2.0 Mineral Matte Flat
Flashpoint	Non-Flammable will not burn
Surface Burning Characteristics ASTM E 84-08	Class A Building Material Flame Spread Index = 0; Smoke Developed Index = 0
Color Stability Color code acc. To BFS Tech. No 26	A1 Best in class rating No color change after 4 years
VOC	< 1 g/liter
All test results performed on 2 coats Romanit applied at 275—325 SF/GAL and 14 day cure @ 77°F & 50% RH	

Colors

Standard colors of the KEIM Palette Exclusiv--these colors cannot be made: 9122, 9123, 9162, 9166, 9182, 9200, 9402, 9482 & 9541. KEIM also offers custom matching to your color selection within our natural mineral range.

On-site tinting: Factory tinting is most common but field tinting can be done using only the KEIM Romanit full color shades R10, R20, R30, R40, R50, R60, R70, R80 & R90.

NOTE: Romanit is typical of lime paints and washes and may be variable in color uniformity, from batch to batch and due to prevailing atmospheric conditions, especially humidity and porosity variations of the substrate. Both color and physical properties may be impacted by environmental factors. Always buy enough colored Romanit for your entire project, at one time, to ensure color is as consistent as possible.

Environmental Compliance

EPA	YES
LEED	YES
CARB	YES
SCAQMD	YES

4. SPECIFICATIONS/SYSTEMS

For improved weather resistance Romanit must be applied in two coats and at recommended coverage rates. Surface should be fully coated, with no pinholes, runs or holidays. Stucco, Render, Plaster and Masonry (brick or stone)

Pretreat: KEIM Heavy Duty or Bio Cleaner (as needed)

2 coats of Romanit (thin with water)

Cast or Pre-cast Bare Concrete

Pretreat: KEIM Heavy Duty Cleaner

2 coats Romanit (thin with water)

CMU Block

For new, extremely porous block:

1 coat CONTACT-PLUS Block Filler (if desired)

2 coats Romanit (thin with water)

Fiber Cement Board/Siding (bare)

2 coats Romanit (thin with water)

Previously Acrylic Painted Surfaces

1 coat CONTACT—PLUS Bonding Primer

2 coats Romanit (thin with water)

New Drywall Surfaces

1 coat INNOTOP Interior Mineral Paint

1 coat Romanit (thin with water)

SLURRY APPLICATIONS

Mix 2 parts Romanit with 1 part Romanit Slurry Additive

Do not apply to pre-existing elastomeric finishes, oil base paints, epoxy, urethane, lacquer or varnish coatings. Old latex or acrylic paint finishes should be primed with Contact Plus Bonding Primer.

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 In-

formation 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 coatings which are not soundly adhered or which impair the vapor diffusion must be removed with paint stripper or by mechanical means.

Highly absorbent, sanding surfaces:

Pretreat by saturating surface with KEIM Fixativ, diluted in a ratio of 1:3 with clean water, then allow to dry for 12 hours.

New Render, Plaster and Stucco:

New render, plaster or stucco may require treatment after they are fully cured with KEIM Lime Remover to etch and remove sinter layers before painting. Test surface to ensure porosity of water before proceeding with Romanit.

Cracked and Irregular Aged Mineral Surfaces:

Substrates that have been patched or have textural differences or hairline cracks may be pre-treated with Romanit mixed in a ratio of 2:1 with KEIM Romanit-Slurry-Additive as the base coat. (2 parts Romanit to 1 part Romanit-Slurry-Additive) This is best applied by brush; worked into surface voids, cracks and irregularities and will equalize the variable texture of the surface filling in hairline cracks.

6. APPLICATION

Mixing

Stir Romanit before use with an electric drill and paddle attachment to ensure a homogeneous mixture and color. Stirring by hand is not adequate because of the heavy bodied nature of the Romanit. Diluted Romanit must be stirred thoroughly to ensure a uniform color and during application as pigment may settle during application. We recommend dilution of 1 part Limewash and 1 part water as a starting point, and it can be further diluted to create a "wash" or stain effect.

Romanit may be applied by brush, roller or airless spray.

- Brush - Use a nylon/polyester brush
- Roller - Use a ½" to ¾" nap synthetic roller cover
- Airless Spray
 - Pressure: 3000 psi, minimum
 - Tip: .031 in, minimum

Opaque Finish

Romanit is typically applied in multiple coats which are needed to develop the unique patina of Romanit. Application techniques will also impact the final appearance of the finish. It is not typically desired to apply Romanit in a smooth and uniform manner, but rather, using random painting technique that results in an imperfect finish. This will add to the "patina" that is often desired from lime finishes.

Application of the first coat by spray, brush or roller can ensure faster and full coverage. Be sure to work the first coat of Romanit into the surface to ensure proper penetration of rough and textured surfaces. For best results outdoors, thin or dilute Romanit with water up to 50%. More dilution up to 100% of additional coats will add to patina effect.

Subsequent coats can be applied using any application equipment or methods and should be matched to the aesthetic outcome desired. Romanit is an "artistic" type of finish with end results dramatically affected by the equipment and methods employed.

For the finish coat it is important to maintain a wet edge working swiftly across the façade and avoiding lap marks. Do not stop mid-wall and always paint to a natural stopping point at panel edges, corners or other architectural features that break up the façade.

A drying time of 12 hours between coats is recommended.

Slurry Application

To apply Romanit as a slurry finish, mix 2 parts Romanit with 1 part Romanit Slurry-Additive to create a heavy slurry mixture. Apply with a wide bristle brush, working the slurry into the surface. Brush marks will remain in the slurry finish and it will not flow and level to a smooth surface. The slurry finish is used to level out as



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much, or little of the original surface texture as desired.

Lime Wash Translucent Finish

To achieve a more uniform washed effect, Romanit may be further diluted with water, up to 100% to create a more transparent stain-like finish. Field trials will determine the ultimate dilution ratio, number of layers needed and application equipment and techniques to impart the desired washed effect. Multiple colors of Romanit may also be blended together, wet-on-wet on the surface in a color-washing technique as desired.

Distressed or Wash Away Finish

Apply a first coat of Romanit as prescribed in the Opaque Finish previously. Once the first coat is dry to touch, or after about 1 hour under normal drying conditions, apply a second layer of Romanit. At this point the surface will be completely covered. Allow the second coat to begin drying and immediately distress or wash-away the finish as desired. You may use a garden hose with sprayer nozzle, power washer with low pressure and wide fan nozzle, wet towels, rags, or plastic bristle brush to distress the finish. Remove as much, or as little, of the Romanit as desired. Plan the distressed areas to follow natural water flow on the façade to emulate a natural "aged and weathered" appearance (i.e. distress more around downspouts, corners, at window sills, etc.). If more Romanit is removed than desired, allow surface to dry and reapply Romanit as desired. be applied to emulate the antiqued or distressed lime finishes of old Europe on new or renovation projects, especially on brick and stone masonry.

Application conditions

Ambient and substrate temperature: 41°F and rising and below 86°F. Do not apply in direct sunlight or onto sun-heated substrates. Protect coated surfaces from direct sunlight, and wind during and after application for a minimum of 12 hours and protect from rain for 36—48 hours. In warm weather, masonry surfaces may be pre-dampened with clean water to enhance the penetration of Romanit and to help maintain a "wet" edge. Surface should not show signs of "ponding" water.

Drying times

Drying times are temperature, humidity and coverage dependent.

	<u>@ 40-50°F</u>	<u>@ 50°F +</u>
Touch:	4--6 hour	2--4 hours
Recoat:	24--48 hours	12--24 hours

Coverage*

Substrate	Coverage*
Cast or Pre-Cast Concrete	250—300 SF/GAL
Fiber Cement Siding	250—300 SF/GAL
Portland Stucco	125—175 SF/GAL
CMU Block (smooth)	75—100 SF/GAL
CMU Block (split faced or fluted)	25—75 SF/GAL
Brick or Stone Masonry	150—200 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 forecast consumption of the system components accurately.	

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. Do not allow Romanit to dry onto glass, ceramic, stone or other mineral surfaces as it will be difficult to clean once dry.

Mixing with other products

In order to maintain the specific features of Romanit and do not mix with other products or additives.

7. PACKAGING

Gallon and 4 Gallon

8. STORAGE

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

9. DISPOSAL

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

HAZARDOUS SUBSTANCE CLASS

n/a

10. LIMITATIONS

KEIM Romanit 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.

11. SAFETY INSTRUCTIONS

Romanit is alkaline. Cover all areas which are not to be coated, especially glass, ceramics and natural stone. Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water. Protect eyes and skin from splashes. Do not swallow.

Keep out of reach of children.

Refer to the relevant safety data sheets.

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.



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