ROMABIO

BIOGRIP© MICRO | TECHNICAL DATA SHEET | TDS

INTERIOR | EXTERIOR | PURE POTASSIUM SILICATE PRIMER WITH MICA (DIN 18 363)

ORGANIC PRODUCT MADE FROM NATURAL MATERIALS

FIELDS OF APPLICATION

BioGrip Micro is an excellent one (1) coat non-acrylic primer paint for interior and exterior surfaces. BioGrip Micro provides an anchor and consolidation coat for mineral paints, lime paints, silossanic paints, and slaked lime plasters when they are being applied to portland cement surfaces and drywall.

BioGrip Micro, as with all the Domus line mineral paints, is designed to be diluted with water, providing a paint applicator optimal ranges of dilution to adjust the paint's thickness and density as per job site application may require. BioGrip Micro primer is formulated to adhere to all wood surfaces, interior and exterior, permitting application of specific Domus paints to be used in interior/ exterior finishes. BioGrip Micro, a potassium silicate paint, provides superior adhesion than typical acrylic or waterborne paints. Extreme durability in all environmental conditions and climates.

BioGrip Micro can be used as a primer for virgin and painted drywall, masonry repairs, wood primer, and as a decorative finish paint for wall and ceilings. BioGrip Micro is a very fine granulated potassium silicate paint that increases adhesion and durability. It is an excellent primer base for high traffic areas where continual washing is a requirement. Micro granulation is invisible when covered with one (1) coat of BioDomus SuperFlat or EcoDomus Matte, or thin plasters, such as Grassello Bio High Gloss or BioMarmorino Gloss.

PRODUCT FEATURES

A 94% natural mineral product, completely permeable, breathable, absorbs CO_2, provides good anchoring power to mineral surfaces by petrifaction (water glass); for smooth and rough surfaces. Provides protection against the formation of bacteria that forms mold. This paint product is not oil proof, can be damaged by foods, greases, body oils, color crayons, or washable colored markers, but nevertheless is lightly cleanable. Product is considered an Organic product, ideal for use in homes, schools, and hospitals, and work sensitive areas.

Domus line mineral paints (potassium silicates) require an average 14 days to fully cure, and will continue to micro-crystallize for 7 – 8 years. Care must be given for newly painted surfaces to minimize damages resulting from soiling, over zealous cleaning and tape masking.

BioGrip Micro can be tinted with natural oxide earth tints and 0% VOC colorants, offering superior adhesion when required, with minimal impact to the environment, providing toxic free air quality for indoors. BioGrip Micro is category BIO which means Organic, containing at least 90% natural raw materials and the other 10% inert binders and non-toxic chemicals.

TYPE OF PRODUCT

Silicate coating according to DIN 18363, based on pure potassium silicate with 6% organic stabilizers and other proprietary chemicals.

SHEEN FINISH

Flat

COLOR

White. Color tint up to 3% maximum. Product is not ideal for correct color tinting, only for approximate coloration as a primer.

TESTING & CERTIFICATIONS

BioGrip Micro has passed these tests and received these certifications: A+ rating for French VOC Test; Cradle to Cradle (C2C) Certified Silver v3.1; Health Product Declaration; and CA1350 / California Department of Public Health (CDPH) Standard Method v1.1–201. For all up to date testing, visit here.

LEED V4 CREDITS

BioGrip Micro contributes to credits for these categories for LEED v4:

1. **Building Product Disclosure And Optimization – Material Ingredients:** C2C Silver v3.1 & HPD
2. **Low Emitting Materials:** Passed CA1350
3. **Indoor Air Quality:** TVOC Tests

TECHNICAL DATA

CRITERIA	INT. STANDARD	VALUE	UNIT
VOC (including tint pigments)	2004/42/CE Max. Value 40g/l (2010), Exterior Wall Paint for Masonry DIN EN ISO 11890-1/2	0.00	g/l
Water Absorption Coefficient	EN 1062-3 – DIN 52617	> 0.62	kg/(m²• √h)
Vapor Permeability	DIN 53122	< 150 m S_d 0.14 Good	g/m² (24 h)
Whiteness	CIE	80	%
Surface Retention Smog/Dirt	EN 10795	High	> 21
Drying Time at Low Temperature	UNI 10793	> 5	°C
Application on Damp Cement NHL 3.5/5.0	UNI EN 13300	Ideal	–
Exterior Paint With Mineral Finish	DIN 18363 Paragraph 2.4.1	Yes	–
Application Quality	UNI 10794	Good	–
Hide and Cover Capacity	ISO 6504-3 M.U. 1631 (RC 100 µm Humid)	Class 2	< 96 – < 98
pH Value	DIN 19266	11.07	–
Natural Resistance to Mold	DIN 19266	Excellent	–
Alkaline Resistance	UNI 10795	Excellent	–
Specific Gravity (23°C)	EN ISO 2811-2	1.7	g/ml
Granulation	DIN 19643 – EN 21524	0.125	mm
Gloss level	UNI EN ISO 2813	< 5	Very Flat
Reaction to Fire	EN 13501-1:2002	A 1	Incombus-tible
Toxicity	EN 13501-1:2002	Non-Toxic	–
Formaldehyde	–	0%	–
APEO (Alkyl Phenol Ethoxylates)	–	0%	–
PEG (Polyethylene Glycol)	–	0%	–
PG (Propylene Glycol)	–	0%	–
Biocides	–	0%	–

Does not contain chemicals that can aggravate or cause asthma, see NIH Asthma Report 2012.

BIO

DATE REVISION : **06-21-2016**

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GENERAL APPLICATION INSTRUCTIONS

(For detailed dilutions and instructions for specific type of surfaces including new and painted drywall/wood, please see APPLICATION CYCLES ON DIFFERENT TYPES OF SURFACES.)

BRUSH AND ROLLER APPLICATIONS

PRE-PRIMER / INTERIOR & EXTERIOR: For new/old unpainted exterior portland cement surfaces it is recommended to apply one (1) coat of Potassium Silicate Concentrate diluted 100% with water, or 10 liters per one (1) 10 liter bucket, applying wet on wet, applying 2 – 3 coats in rapid succession until concrete has completely and evenly absorbed the Potassium Silicate Concentrate into surface. Apply Potassium Silicate Concentrate with a brush, roller, or sprayer and allow to dry for 2 – 3 days; or as an alternative for interior unpainted or new portland cement surfaces apply one (1) coat EcoForte Consolidator with brush, roller or sprayer diluted 100% with water, or 10 liters of water per one (1) 10 liter bucket as a pre-primer, and allow to dry for at least 8 – 12 hours.

1ST COAT PRIMER / INTERIOR & EXTERIOR: Dilute BioGrip Micro primer tinted if necessary* with 30% water, or 4.5 liters of water per one (1) 15-liter bucket. On porous surfaces apply product abundantly so as to penetrate sufficiently to consolidate and bond correctly. On slightly porous surfaces apply product evenly as needed to cover surface completely, being careful not to leave voids or unpainted surfaces. Diluted material must be stirred constantly to permit suspension of granules and not permit settling at bottom of paint buckets during application. Allow to dry for at least 8 – 12 hours before applying any type of finish paint or plaster product.

2ND COAT PRIMER / INTERIOR & EXTERIOR: No 2nd coat is needed unless product was improperly applied, or unless old or worn surfaces have absorbed excessive material and may require an additional application. Plastic rounded corner bead may need to be painted several times, using a maximum dilution of 20% when applying slaked lime cement or plasters.

PAINT SPRAYERS

Follow dilution and application instructions as indicated for BRUSH AND ROLLER APPLICATIONS. Use an approved sprayer for aggregate, a titanium spray tip is required to apply granulated paint material. Failure to follow paint sprayer recommendations for granulated paint may cause serious or permanent damage to sprayer or spray tip. Airless sprayers are considered more ideal for this type of paint product. Care must be taken during spraying time that diluted paint material is stirred often so that paint solution and granules are consumed correctly during spraying.

SPRAY TIP USAGE: BioGrip Micro is a fine aggregate primer and can be applied using an appropriate airless sprayer, using no filters, applying product with a # 0.023 – 0.025 inches (0.58 – 0.64mm) size Titanium spray tip. Consult paint sprayer manufacturer always before spraying aggregate paints.

GRAIN SIZE: 0.125 mm

***NOTE:** For very bright colors not selected from the ROMABIO color palette, it is recommended that the BioGrip Micro primer is tinted 25 – 50% with the final formulation of finish paint color to help achieve maximum coverage.*

MIXING PAINT & WATER

ROMABIO Domus Mineral Paint formulas are concentrated and require water to be added to them for proper use. This concentrated formula means more coverage in each bucket, decreasing the cost for transport, and reducing our carbon footprint. We do not have to add toxic preservatives or anti-microbial to increase shelf life like most acrylic paint products.

Mix paint and water with an electric drill and paint paddle, or mix well by hand! If water is sitting on the top of your mixture, the paint is not properly mixed!

TOOLS

Apply with brush, roller or with the an appropriate sprayer. New sprayer tips should be used to prevent product waste and provide for a perfect finish. It is recommended to use professional high quality synthetic brushes and for rollers to use professional quality with a mohair or synthetic nap or pile of 16 – 18 mm (1/2 inch).

TOOLS CLEANING

Sprayer, brush, roller, rags, or sponges should be cleaned immediately after use with water and a mild detergent or dish soap.

DRYING TIME

Ideal drying time is at least 8 – 12 hours. With lower temperature and humidity more time may be needed.

Do not apply BioGrip Micro on the exterior if there is a risk of thunder storms or showers during the 12 hour drying time needed for product to dry and carbonize correctly.

CONSUMPTION / COVERAGE

Approximately 1,300 ft2 / 121 mt^2 – 1,800 ft^2 / 167 mt^2 per 15 liter bucket diluted to instructions for a one (1) coat application. Applications on virgin surfaces will absorb more paint on the first coat, and spread further on the 2nd coat as well for repaints. Determine exact consumption by performing a test on the surface to be painted.

On smooth and consolidated surfaces predict higher coverage. Determine exact consumption by performing a test on the surface to be treated.

PACKAGING

Plastic buckets of 1, 2.5, 5 and 15 liters.

APPLICATION CYCLES ON DIFFERENT TYPES OF SURFACES

Make sure base is solid, dry and well cleaned, prepared with skill. It is recommended to observe the rule VOB DIN 18 363, Part C, paragraph 3.

NEW DRYWALL

PRE-PRIMER COAT: Before applying BioGrip Micro as a primer for slaked lime paints, masonry plasters or cements onto new gray board drywall, the surface should be consolidated with EcoForte Consolidator. EcoForte Consolidator is not required when applying paint finishes for Domus line mineral paints or primers onto new drywall.

Dilute EcoForte Consolidator 100% with water, or 10 liters of water per one (1) 10 liter bucket. Apply EcoForte Consolidator with a brush, roller, or sprayer and allow to dry for 8 – 12 hours. Another option for consolidation of new drywall is to roll or spray one (1) coat of BioDomus SuperFlat diluted 20 – 25% with water, or 3 – 3.75 liters per 15 liters and allow to dry 8 hours before application of BioGrip Micro.

PRIMER COAT: Apply BioGrip Micro diluted 30% with water, or 4.5 liters per one (1) 15-liter bucket, as the anchor coat prior to application of mineral paints or plasters. Brush, roll, or use an appropriate sprayer approved for fine aggregate. Allow to dry for 8 – 12 hours. BioGrip Micro can also be used as a tinted paint base for application for BioCalce lime paints, BioDomus I & II, and when used as a decorative finish underlayment for mineral paints.

BioGrip primers may be tinted from light to medium colors with a maximum of 3% pigment content to assist in coverage capabilities when applying a one (1) coat application of Domus line mineral paints as per TDS application instructions.

PLASTER APPLICATIONS ON BLUE OR GREEN DRYWALL: EcoForte Consolidator cannot be used as a consolidator for use on blue or green board drywall for the application of slaked lime plasters or lime paint products. Use BioDomus SuperFlat for consolidation on these types of drywall.

For walls that have been over-sprayed with any type of sheen paint such as eggshell, satin, semi-gloss or gloss paints, oil or latex, BioGrip Micro should be applied prior to application of any type of mineral plaster. With oil paint over sprays on new drywall, careful attention must be made to verify that oil products have completely cured and do not bleed through mineral primers or paints. Tests should be done on over spray prior to wall application system to verify stable coverage.

PAINTED DRYWALL

PRIMER COAT: For use of BioGrip Micro as a primer, please follow the application instructions in the respective TDS for the type of Domus line mineral paint that will be applied to painted drywall. For walls that have been pre-painted with satin, semi-gloss or gloss paints, oil or latex, it is recommended to sand surfaces so as to increase adherence. Apply one (1) coat of BioGrip Micro primer diluted 30% with water, or 4.5 liters of water per one (1) 15-liter bucket, and allow to dry for

8 – 12 hours prior to application of mineral paints, slaked lime paints, cements, and plasters. BioGrip primers may be tinted from light to medium colors with a maximum 3% pigment content to assist in coverage capabilities when applying a one (1) coat application of Domus line mineral paints as per TDS application instructions.

COMMERCIAL HIGH TRAFFIC AREAS: To maximize durability and increase adherence and wash ability for Domus line mineral paints, particularly for sheen products, it is suggested to apply one (1) coat of BioGrip Micro as a primer followed by two (2) coats of EcoDomus Matte, EggShell or Satin. This primer enhances performance for maximum longevity but it is not required.

UNPAINTED WOOD

INTERIOR / EXTERIOR: BioGrip Micro is a recommended primer for applications of Transparent base/dark colors of EcoDomus Matte, EggShell or Satin on interior wood surfaces, and for all exterior surface applications with any exterior Domus line mineral paints. Sand all wood surfaces as required to provide a smooth surface and lightly wipe wood surfaces with a damp cloth or tack cloth to remove all traces of dust. Fill all nail and screw holes with non-oil type putty or wood filler. Apply water based caulk as needed to fill all voids and cracks. Caulked areas may need at least 12 hours to properly dry.

PRIMER COAT: Apply one (1) coat of BioGrip Micro primer as indicated in GENERAL APPLICATION INSTRUCTIONS. For best use always apply two (2) coats of exterior Domus Line paint products onto the primer coat of BioGrip Micro. BioGrip Micro can be applied to all types of wood surfaces, interior and exterior.

PAINTED WOOD

INTERIOR / EXTERIOR: Sand all wood surfaces as required to provide a smooth surface and lightly wipe wood surfaces with a damp cloth or tack cloth to remove all traces of dust. Fill all nail and screw holes with non-oil type putty or wood filler. Apply water based caulk as needed to fill all voids and cracks. Caulked areas may need at least 12 hours to properly dry before applying primer.

PRIMER COAT: Apply one (1) coat of BioGrip Micro primer as indicated in **GENERAL APPLICATION INSTRUCTIONS**. For best use always apply two (2) coats of exterior Domus line mineral paints onto the primer coat of BioGrip Micro. BioGrip Micro can be applied to all types of wood surfaces, interior and exterior.

CAULKS

All caulked areas should be primed with BioGrip Micro primer before applying any type of Domus line mineral paints. Please follow the application instructions in the respective TDS for the type of Domus line mineral paint that will be applied. Always test product for adhesion verification prior to painting any surface. Silicone caulks cannot be painted with any type of paint.

AUTOCLAVED AERATED CONCRETE

INTERIOR / EXTERIOR: BioGrip Micro is an excellent primer paint for all types of unpainted Aerated Concrete Blocks which permits the application of BioDomus and EcoDomus paints, BioCement stucco products, and Slaked Lime plasters such as BioCements, Marmorino, and Grassello. BioGrip Micro will penetrate deep into the pours of Aerated Concrete Blocks to strengthen and consolidate the surface to provide dust and particle free hardened surface.

PRE-PRIMER COAT: It is recommended to apply one (1) coat of Potassium Silicate Concentrate diluted 100% with water, or 10 liters per one (1) 10 liter bucket, applying wet on wet, applying 2 – 3 coats in rapid succession until aerated concrete has completely and evenly absorbed the Potassium Silicate Concentrate into surface. This process will double the strength and durability of the surfaces of aerated concrete, as well as increase adhesion of any type of applied material. Apply Potassium Silicate Concentrate with a brush, roller, or sprayer and allow to dry for 2 – 3 days.

PRIMER COATS: Apply at least two (2) coats of BioGrip Micro primer as indicated in **GENERAL APPLICATION INSTRUCTIONS**.

BioGrip Micro primer is not suggested to be used as a base primer for application onto cement stuccos for BioCements or BioMarmorinos. Best Use recommendations would be to use BioGrip Medium primer for this use. BioGrip primers will also permit applications of most types of portland cement stucco material to adhere to the surface of Aerated Concrete Blocks. Apply two (2) coats of BioGrip Micro primer before applying paint or plaster finishes to aerated block.

ADOBE BRICK

INTERIOR / EXTERIOR: BioGrip Micro is an excellent consolidator and primer paint for unpainted mud brick walls, interior and exterior, which permits the application of BioDomus and EcoDomus paints, BioCement stucco products, and Slaked Lime plasters such as BioMarmorino and Grassello Bio. BioGrip Micro will penetrate deep into the pours of Adobe or Mud Brick walls to strengthen and consolidate the surface to provide dust and particle free hardened surface.

PRE-PRIMER COAT: It is recommended to apply one (1) coat of Potassium Silicate Concentrate diluted 100% with water, or 10 liters of water per one (1) 10 liter bucket, applying wet on wet, applying 2 – 3 coats in rapid succession until adobe brick has completely and evenly absorbed the Potassium Silicate Concentrate into surface. This process will double the strength and durability of the surfaces of adobe clay brick, as well as increase adhesion of any type of applied material. Apply Potassium Silicate Concentrate with a brush, roller, or sprayer and allow to dry for 2 – 3 days.

PRIMER COATS: Apply at least two (2) coats of BioGrip Micro primer as indicated in GENERAL APPLICATION INSTRUCTIONS.

CEMENTITIOUS BOARD | MGO

INTERIOR/EXTERIOR: Guidelines for primed and unprimed cementitious or MGO boards.

PRE-PRIMER COAT: For unprimed cementitious and MGO boards, apply one (1) coat of EcoForte Consolidator or Potassium Silicate Concentrate diluted 100% with water, or 10 liters per one (1) 10 liter bucket. Apply with brush, roller or sprayer and allow to dry for 8 – 12 hours.

PRIMER COAT: For factory primed or painted surfaces with acrylic paints, apply one (1) coat of BioGrip Micro primer as indicated in GENERAL APPLICATION INSTRUCTIONS.

NEW CEMENT STUCCOS

INTERIOR / EXTERIOR: New portland cement stucco should not be painted for about 21 – 28 days to ensure proper curing, anchoring and drying.

PRE-PRIMER COAT: For best results apply Potassium Silicate Concentrate, diluted 100% with water, o (1:1), or 10 liters of water per one (1) 10 liter bucket as a pre-primer, on all new cement surfaces, applying 2 – 3 coats in rapid succession, wet on wet, until substrate has arrived at full absorption, and allow to dry for at least 2 – 3 days; or as an alternative for interior surfaces apply one (1) coat EcoForte Consolidator with brush, roller or sprayer diluted 100% with water, or 10 liters of water per one (1) 10 liter bucket as a pre-primer, and allow to dry for at least 8 – 12 hours.

BioGrip Micro primer is not suggested to be used as a base primer for application onto cement stuccos for BioCements or BioMarmorinos. Best Use recommendations would be to apply BioGrip Medium primer for this use.

PRIMER COAT: Apply one (1) coat of BioGrip Micro primer as indicated in GENERAL APPLICATION INSTRUCTIONS.

CAUTION!

New portland cement stuccos should be tested for pH using Phenolphthalein, also sold as an "alkalinity test kit". This product should be spot tested on all new portland cement stucco prior to the application of any type of finish, paint or stucco product. Concrete has a naturally high pH due to the calcium hydroxide formed when portland cement reacts with water. As the concrete reacts with carbon dioxide in the atmosphere, pH decreases to 8.5 – 10.5. When a 1% phenolphthalein solution is applied to uncured concrete, it turns bright pink/purple; if it remains colorless, it shows that the concrete has undergone correct surface carbonatation. When the test indicates bright pink or purple, this indicates that no paint or plaster product of any type should be applied to the concrete until surface carbonatation has been completed, which usually occurs after 21 – 28 days after final installation.

REINFORCED CONCRETE SURFACES

INTERIOR / EXTERIOR: New cement surfaces should not be painted for about 28 days to ensure proper curing and drying. Follow instructions as indicated above for new cement stuccos. In many cases it may be recommended to apply TerraMare line products for 'best use' application of paint on exterior reinforced concrete surfaces.

PRE-PRIMER COAT: For best results apply Potassium Silicate Concentrate, diluted 100% with water, o (1:1), or 10 liters of water per one (1) 10 liter bucket as a pre-primer, on all new cement surfaces, applying 2 – 3 coats in rapid succession, wet on wet, until substrate has arrived at full absorption, and allow to dry for at

least 2 - 3 days; or as an alternative apply one (1) coat EcoForte Consolidator with brush, roller or sprayer diluted 100% with water, or 10 liters of water per one (1) 10 liter bucket as a pre-primer, and allow to dry for at least 8 – 12 hours.

PRIMER COAT: Apply at least one (1) coat of BioGrip Micro primer as indicated in GENERAL APPLICATION INSTRUCTIONS.

DECAYING OR CRUMBLING STUCCOS OR POWDERY SURFACES

INTERIOR / EXTERIOR: Chalking surfaces, which could prevent the proper anchoring of the base coating must have damaged and chalky portions be removed by pressure washing and scraping. If pressure washing is not an option for interior surfaces, scrub affected areas with a stiff brush and white vinegar or muriatic acid (1 part muriatic acid and 6 – 7 parts water), and after 3 – 5 minutes rinse several times with a large sponge and clean water.**PRE-PRIMER COAT:** For unpainted stuccos apply Potassium Silicate Concentrate diluted 100% with water (1:1) on all damaged surfaces, or 10 liters of water to one (1) 10 liter bucket, applying wet on wet, applying 2 – 3 coats in rapid succession, until substrate has arrived at full absorption, and allow to dry for at least 2 – 3 days. For old acrylic-free painted stuccos, apply one (1) coat EcoForte Consolidator diluted 100% with water, or 10 liters to one (1) 10 liter bucket, and allow to dry for at least 8 – 12 hours.**PRIMER COAT:** Apply one (1) coat of BioGrip Micro primer as indicated in **GENERAL APPLICATION INSTRUCTIONS**.Apply one (1) – two (2) coats of subsequent finish products of mineral paint, stucco, or plaster. For severe cases of deterioration, follow guidelines as indicated in **BRICK SURFACES**, taking into consideration the repair and replacement of damaged stucco in its entirety. Cement stuccos existing prior to 1940 are probably made of NHL 3.5 or 5.0 (Natural Hydrated Lime Cement) and careful inspection and attention needs to be taken to ensure proper replacement and repairs. At all costs, avoid using portland based cements for restoration or repairs on NHL cements.

COATINGS WITH EFFLORESCENCE

INTERIOR / EXTERIOR: Cement surfaces showing efflorescence should be aggressively cleaned with a high pressure washer or stiff brush, and then the efflorescence should be treated using a diluted muriatic acid, 1 part muriatic acid and 6 – 7 parts water, and allow to react for 3 – 5 minutes. Thoroughly rinse treated areas with water and allow to dry.

PRE-PRIMER COAT: Apply Potassium Silicate Concentrate diluted 100% with water (1:1), or 10 liters to one (1) 10 liter bucket, on all damaged surfaces and allow to dry for at least 12 – 24 hours; or apply one (1) coat of EcoForte Consolidator diluted 100% with water, or 10 liters to one (1) 10 liter bucket, and allow to dry for at least 8 – 12 hours. This application applies only to unpainted, or mineral painted surfaces only.

PRIMER COAT: Apply one (1) coat of BioGrip Micro primer as indicated in GENERAL APPLICATION INSTRUCTIONS. Follow application instructions for mineral paints, stucco, or plasters per respective TDS.

For coatings on surfaces damaged by the saltpeter or efflorescence no guarantees can be provided.

AGED CEMENT STUCCOS

INTERIOR / EXTERIOR: Dirty and/or contaminated surfaces should be treated as a priority prior to any interventions of replacing or repairing stucco. All surfaces should be cleaned and any attached algae removed manually or by mechanical means, i.e., with a high-pressure washer. Stucco damaged by algae or mold should be treated with EcoDis after pressure washing. These instructions are based on unpainted portland based type cement stuccos.

PRE-PRIMER COAT : When new stucco repairs are performed on older (non-painted) cement stuccos, complete all removal of damaged stucco, rinse surfaces of dust, and apply EcoForte Consolidator to older surfaces prior to applying new cement stucco or make repairs. Pre-prime existing surfaces applying one (1) coat of EcoForte Consolidator diluted 100% with water, or 10 liters to one (1) 10 liter bucket, and allow to dry for at least 8 – 12 hours.

PRE-PRIMER COAT / REPAIRS: Allow new cement repairs to fully dry and cure according to instructions indicated under section; NEW CEMENT STUCCOS. Apply EcoForte Consolidator diluted as indicated onto any new stucco repairs and allow to dry for at least 8 – 12 hours.

PRIMER COAT: Apply one (1) coat of BioGrip Micro primer as indicated in GENERAL APPLICATION INSTRUCTIONS. Where repairs require the application of BioCement 1.0 GF, it is suggested to use BioGrip Medium primer.

Apply mineral paints, plasters or stucco as directions require.

STUCCO REPAIRS

See Aged **CEMENT STUCCOS** above.

MINERAL PAINTS OR LIME WASH

INTERIOR/EXTERIOR: Potassium Silicate Concentrate or EcoForte Consolidator can be applied on existing Mineral Paints or Lime Paints to consolidate worn or powdery bases prior to applying BioGrip Micro primer.

PRE-WASHING: Existing painted surfaces that are no longer well anchored should be properly cleaned. For loose, deteriorated, or non-adhering mineral or lime paints, scrape away all loose material, and when possible follow up using a pressure washer, cleaning all painted surfaces as best possible. Allow surfaces to completely dry.

PRE-PRIMER COAT: Apply one (1) coat of EcoForte Consolidator or Potassium Silicate Concentrate with brush, roller or sprayer diluted 100% with water, or 10 liters of water per one (1) 10 liter bucket as a pre-primer, and allow to dry for at least 12 - 24 hours.

PRIMER COAT: Apply one (1) coat of BioGrip Micro as a primer tinted if necessary* with brush, roller or approved sprayer for fine aggregate, diluted 30%, or 4.5 liters per one (1) 15 liter bucket, and allow to dry for at least 8 – 12 hours.

PRIMER COAT: Apply one (1) coat of BioGrip Micro primer as indicated in **GENERAL APPLICATION INSTRUCTIONS**. Apply mineral paints or plasters as directions require.

BRICK SURFACES

DAMAGED BRICK / INTERIOR / EXTERIOR: Extremely weathered 'spalled' brick, deteriorating brick, or deteriorating brick mortar will usually indicate the presence of water absorption into mortar joints or brick surfaces that become damaged during freeze/thaw conditions in fall and spring. Low-fire brick usually will chalk when rubbing your finger across the surface, easily chip, be fragile and be overly porous. Both of these conditions require special attention to substrate repairs prior to any type of painting or stucco application. Such substrates will need to be consolidated using pure Potassium Silicate diluted according to instructions to stabilize and reinforce the molecular composition of the substrate. In very severe conditions, replacement of damaged brick and the necessity of brick joint tucking will be required in addition to substrate consolidation. Only once the substrate has been remedied can EcoForte Consolidator be applied to the brick surface to enhance the performance and adhesion of a primer coat of BioGrip Micro primer.

PRE-PRIMER COATS: In this case apply Potassium Silicate Concentrate, diluted 100% with water (1:1) on all damaged surfaces, applying wet on wet, applying 2 – 3 coats in rapid succession, until substrate has arrived at full absorption, and allow to dry for at least 3 days. Apply 1 coat EcoForte Consolidator, allow to dry for at least 3 days. At the end of the 3 day curing of the Potassium Silicate Concentrate, verify that the brick has consolidated correctly. Test treated brick surface for slight powder or chalking, rubbing gently with a clean rag to verify correct absorption and consolidation. If any residue occurs, apply 1 coat EcoForte Consolidator, allow to dry for at least 8 – 12 hours.

PRIMER COAT: Apply one (1) coat of BioGrip Micro according to **GENERAL APPLICATION INSTRUCTIONS**.

Follow application instructions for mineral paints, stucco, or plasters per respective TDS.

In worse case scenarios to prevent long term water absorption into brick surfaces after repairs, will require the application of a hydro-repellent sealer and paint such as TerraMare Sealer, Grip, and TerraMare I. TerraMare line products are potassium silicate paints containing silossanic (silica), which will increase performance to protect damaged bricks affected by moisture.

BRICK / COASTAL AREAS: In many cases, brick and stucco materials, because of their absorbency to moisture, can collect salt residues which can have adverse effects for the applications of any type of paint or masonry products. Proper cleaning is essential to try to obtain a neutral base so that the presence of salt does not create detrimental effects to applied finishes.

PRE-WASHING: Wash surfaces using a pressure washer, thoroughly cleaning all brick surfaces, then apply white vinegar or diluted muriatic acid for 3 – 5 minutes, then wash off carefully again with clean water all treated surfaces. Allow to thoroughly dry before proceeding with subsequent product applications of

BioGrip Micro or BioDomus I.

PRIMER COAT: Apply one (1) coat of BioGrip Micro according to **GENERAL APPLICATION INSTRUCTIONS**.

NON ABSORBENT OR EXTRUDED BRICK: For brick that is nonabsorbent, such as red common brick, glazed brick, or any smooth brick that has a slight sheen, and has been pressure extruded or fired at extremely high temperatures, will not absorb water as a general rule. Testing can be performed by wetting a brick area with a water hose to determine if water absorbs immediately within 1 – 2 minutes, leaving no trace of water sitting on the surface. Positive absorption indicates no need to apply a BioGrip primer. If water sits on the surface after wetting and water has not absorbed, then BioGrip Micro should be used as a primer in such cases.

Testing for Absorption: Spray brick surface heavily with water for a couple of minutes to determine if water absorbs rapidly into brick. Brick surfaces will appear to be dry if the brick is absorbent. If after spraying water onto the brick and the brick remains wet, or has not rapidly absorbed water into the surface, then this indicates that BioGrip Micro will be required as a primer before proceeding with BioDomus I.

PRIMER COAT: Apply one (1) coat of BioGrip Micro according to GENERAL APPLICATION INSTRUCTIONS.

Apply mineral paints or plasters as directions require.

ABSORBENT / INTEGRAL BRICK/ INTERIOR / EXTERIOR: For absorbent, unpainted, integral brick, pre-primers or primers are not required in the application of BioDomus I. Apply BioDomus I directly to brick facade following instructions as indicated in GENERAL APPLICATION INSTRUCTIONS. Always throughly wet brick surfaces with water prior to applying the first (1st) coat of BioGrip Micro primer or BioDomus I or II. This will assist in creating greater penetration into the brick surface. This applies only to the first coat paint application.

PRE-PRIMER COATS: None

PRIMER COAT: None

**NOTE: For very bright colors not selected from the ROMABIO color palette, it is recommended that the BioGrip Micro primer is tinted 25 – 50% with the final formulation of finish paint color to help achieve maximum coverage.*

STORAGE

Store in a cool, dry and protected from frost. Close the open containers with care. Store liquids only in plastic buckets.

WARNING!

Do not apply any products in direct exposure to strong/hot sunlight, rain, mist, high humidity (> 80%), at dew-point formation, or in the presence of strong wind. Beware of the danger of frost overnight. If applied by roller or sprayer, protect surrounding surfaces as necessary. Protect eyes and skin from splashes of paint. Cover glass, ceramic, natural stone, brick, metal, wood, painted surfaces and glazed tiles. Clean affected areas immediately with water. Prominent elements of the building (cornices, parapets, etc.,) should be treated with skill, covering flashings, gutters, copper coatings, etc. ... Do not work in air temperature lower than 13°C / 55°F and not above 31°C / 88°F. Clean work tools with water immediately after use. Keep out of reach of children. In case of contact with eyes and skin, wash immediately with plenty of water. In cases of consumption, consult a Doctor or call the CDC Poison Center (see Safety Data Sheet). In case of contact with eyes and skin, wash immediately with plenty of water and/or a saline solution. Always keep a good supply of saline solution for eyes and use abundant amounts to wash eyes. Do not rub eye lids or physically touch your cornea or surrounding area prior to and during washing. Consult a Doctor immediately in cases of irritation or severe burning sensation. In cases of consumption, consult a Doctor or call the CDC Poison Center (see Safety Data Sheet).

If you scrape, sand or remove old paint from any surface, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Carefully clean up with a wet mop or HEPA vacuum. Before you start, find out how to protect yourself and your family by contacting the U.S. EPA/ Lead Information Hotline at 1-800-424-LEAD (5323) or log on to www.epa.gov/lead.

Keep out of reach of children.

PRODUCT LIMITATIONS

Only dilute the amount of paint material required to paint surface area as needed. Unopened, unused, and undiluted Domus line mineral paints can be stored in their original container for an extended time period. Once the product has been removed from its container and is diluted, the diluted material cannot be stored for extended time periods without the risk of forming mold. Undiluted paint material can be stored as long as the remnant is repackaged and stored in a completely filled plastic container of product. For best results turn container upside down to help prevent air to enter into the bucket via the paint can lid causing spoilage or premature drying. After water has been added for dilution, ROMABIO cannot guarantee the shelf life of the product.

WATER CONTAMINATION HAZARD

CLASS 1

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of information required by the CPR, and it is classified as a non-hazardous material.

PRODUCT CONTAMINATION HAZARD

CODE CER / NORMATIVE EAC / Decision commuted by the Commission n. 2000/532/CE

NOT DANGEROUS

The directive 75/442/CEE, 08 01 production, disposal, formulation, supply, use, and removal of paints and varnishes: 10 13 04 for removal of paints and varnishes; 10 13 04 disposal of lime and hydrated lime products.

DISPOSAL

Do not enter product in its original concentration into drains or open waters. Do not store at public waste disposal sites. In case of conduction into adapted biological purification plants no disturbances need be expected. The preparation has been estimated by conventional method (calculated procedure) of EG directive 1999/45/EG and is classified as non-hazardous for the environment. Dispose according to local regulations. Paint waste code 080,103 (waste paint and water-based glazes). Empty cans should be disposed of according to local regulations; plastic buckets are 100% PP, NO. 5, approved for food storage; 100% recyclable if cleaned thoroughly prior to recycling.

ADDITIONAL INFORMATION

This Technical Sheet lists data collected on the basis of technique and experience. Given the multiplicity of use of the product they cannot be binding and the user can not refrain from using common sense and experience for the individual case. This information shall not constitute any legal obligation and no obligation from the seller or point of purchase, or any agreements inferred by employees who sale this product. Insurance or guarantees issued by our employees or employees should always be confirmed separately in writing. Any information about product adaptability and use of the product, must be verified by user prior to purchase. Check the exact consumption of product for the surface where product may be applied to determine amount of products needed. The color matching must be verified by the user before starting work. No refunds or exchanges will be provided for tinted products after they have been consumed or applied.

MANUFACTURER

ZETACOLOR SRL, Via Pistoiese 323, 50010 San Angelo a Lecore, FI, Italia

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