

FIELDS OF APPLICATION

Masonry Flat is a non-aggregate type, two (2) coat, interior/exterior paint for masonry wall surfaces; cementitious, brick, stucco. In addition it can be painted on interior/exterior wood surfaces and trim, providing a flat/opaque finish. Masonry Flat is a mineral paint product providing excellent adhesion, with high resistance to mold growth without the need for biocide additives.

Masonry Flat, as with all the Domus Mineral Paints, is designed to be diluted with water, providing a paint applicator optimal ranges to adjust the paint's thickness and density as per job site application may require.

Masonry Flat mineral paint is a very versatile and dynamic paint that permits scores of options for variations in finishes beyond just flat paint, by adjusting dilutions and application techniques to create professional and historical artistic finishes.

Masonry Flat is a mineral paint containing a high quantity of potassium silicate, ideal for interior/exterior walls surfaces, and is self-priming for unpainted porous stone, brick, NHL 3.5 and NHL 5.0 stucco mortars. Masonry Flat as a potassium silicate paint that can assist in the consolidation of cement, stuccos, and natural, absorbent, masonry surfaces increasing surface integrity for new and old materials.

PRODUCT FEATURES

A 92% natural mineral product, completely permeable/breathable, absorbs CO₂, provides good anchoring power with mineral surfaces by petrification (water glass); substrate anchor on smooth and rough surfaces. Provides protection against the formation of bacteria that forms mold. Product is ideal for use in homes, schools, and hospitals and chemical sensitive areas.

This product is not an oil proof, washable finish, and can be stained by foods, greases, body oils, color crayons, or washable colored markers. Oils or greases can be removed using a mild detergent, lightly scrubbing with a rag or sponge, and dry with a clean rag or paper towel. Touch-ups are simple when product has been applied in typical dilution as indicated in GENERAL APPLICATION INSTRUCTIONS.

Domus Mineral Paints (potassium silicates) require an average 14 - 21 days to fully carbonize, and will continue to micro-crystallize for 7 - 8 years. Carbonization is a natural process of potassium silicate to cure, requiring CO₂ absorbed from the atmosphere, making the paint stronger, and at the same time removing undesirable air quality in homes and offices. A completely natural process. Aesthetic features are extreme flatness, high mineral content, creating unique light refraction capabilities and uncommon luminosity.

Masonry Flat should be tinted with ROMABIO oxide tints and low VOC colorants to increase aesthetic color values with minimal impact to indoor air quality and the environment. Masonry Flat 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 7.6% organic stabilizers and other proprietary chemicals.

SHEEN FINISH

Very Flat

COLOR

White/Transparent Base. Color tint up to 5% max with approved tints for White base, 10% max with approved tints for Transparent base. Custom color tint matching is available.

TESTING & CERTIFICATIONS

Masonry Flat 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 v1.2-2017](#). For all up to date testing, [visit here](#).



LEED V4 CREDITS

Masonry Flat contributes to credits for these categories for LEED v4:

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



DATE REVISION : 03-22-2019

TECHNICAL DATA

CRITERIA	INT. STANDARD	VALUE	UNIT
VOC Ready-to-Use (not including tint pigments)	2004/42/CE max. Value 40g/l Exterior Wall Paint for Masonry DIN EN ISO 11890-1/2	0.00	g/l
Theory of Kunzel (SD • W) Vapor Permeability & Water Absorption	DIN 18550	Sd*w <0,1 Sd <2 w <0,5	kg/(m²h0,5) m kg/(m²h0,5)
Caulking Resistance	ASTM-D-659	600	UV/Hour Condensation
Whiteness	CIE	80	%
Surface Retention Smog/Dirt	EN 10795	Medium	> 11
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	11.28 WB 11.37 TB	-
Natural Resistance to Mold	DIN 19266	Excellent	-
Alkaline Resistance	UNI 10795	Excellent	-
Specific Gravity (23°C)	EN ISO 2811-2	1,582 WB 1,380 TB	kg/l
Granulation	DIN 19643 - EN 21524	0.01 - 0.02	mm
Gloss Level	UNI EN ISO 2813	< 5	Very Opaque
Reaction to Fire	EN 13501-1:2002	A 1	Incombustible
Toxicity	EN 13501-1:2002	Non-Toxic	-
APEO (Alkyl Phenol Ethoxylates)	-	0%	-
PEG (Polyethylene Glycol)	-	0%	-
PG (Propylene Glycol)	-	0%	-
Biocides	-	0%	-

Product is 3rd party certified as Asthma Free and Hypoallergenic.

<http://romabio.com/wp-content/uploads/2014/09/ROMA-Asthma-Free-Hypoallergenic-Report-Tox-Services-June-2015.pdf>

GENERAL APPLICATION INSTRUCTIONS

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

WHITE BASE & TRANSPARENT BASE BRUSH AND ROLLER APPLICATIONS

PRE-PRIMER COAT/INTERIOR & EXTERIOR: For new/old unpainted exterior portland cement surfaces it is recommended to apply one (1) coat of Mineral Pre-Primer 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 Mineral Pre-Primer into surface. Apply Mineral Pre-Primer 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.

For most brick, primed cementitious boards, painted and unpainted wood trim, EcoForte Consolidator or Mineral Pre-Primer as a pre-primer is not required, and these surfaces can be primed and painted as indicated below in **APPLICATION CYCLES ON DIFFERENT TYPES OF SURFACES**.

PRIMER COAT / INTERIOR: Masonry Flat is a two (2) coat application without the need for an additional primer when applied on absorbent brick, stone, NHL 3.5 and NHL 5.0 stucco mortars, BioCements and BioMarmorinos. No primers are needed for repaints on pre-painted Masonry Flat surfaces or any non-shen Domus Mineral Paints.

For unprimed or new drywall, apply one (1) coat of BioGrip Micro primer, tinted if necessary*, diluted with 30% water, or 4.5 liters of water per one (1) 15-liter bucket and allow to dry 8 – 12 hours. Use a brush, roller or an airless paint sprayer, removing all filters and changing the spray tip to (titanium) for fine aggregate. Another option is to apply one (1) coat of EcoDomus Matte as the primer, diluting EcoDomus Matte with water 40%, or 6.0 liters of water per one (1) 15 liter bucket and allow to dry for 8 hours. EcoDomus Matte can be brushed, rolled or sprayed onto all types of new drywall and any type of unpainted trim.

For all pre-painted surfaces and trim with acrylic or oil paints, BioGrip Micro is a required primer. Apply one (1) coat of BioGrip Micro primer, tinted if necessary*, diluted with 30% water, or 4.5 liters of water per one (1) 15-liter bucket and allow to dry 8 – 12 hours. Use a brush, roller or an approved paint sprayer for fine aggregate.

PRIMER COAT / EXTERIOR: For new portland cement stuccos, nonabsorbent brick, new cementitious boards, painted and unpainted wood trim, BioGrip Micro or Medium is a required primer. BioGrip Medium primer is idea for applications on stucco to enhance the masonry finish without flattening or making too smooth a paint finish. Apply one (1) coat of BioGrip Micro or Medium primer, tinted if necessary*, diluted with 30% water, or 4.5 liters of water per one (1) 15 liter bucket. BioGrip Micro or Medium can be brushed, rolled or sprayed with an approved sprayer, removing all filters and changing the spray tip to (titanium) for fine/medium aggregate. Allow primer to dry for 8 – 12 hours before applying Masonry Flat.

1ST COAT INTERIOR & EXTERIOR: Dilute Masonry Flat with 25 – 30% water, or 3.75 – 4.5 liters of water per one (1) 15-liter bucket. For unpainted absorbent brick or stucco, it is suggested to dampen previously all masonry surfaces with water thoroughly, so as to assist the potassium silicate paints to absorb deeper into the masonry surface. Do not apply paint to wet surfaces, only onto damp surfaces. Apply paint in an even and constant pattern, so that a perfect coverage is achieved. Apply with a brush, roller or sprayer, removing the filters and changing the spray tip to (titanium) for fine aggregate. Allow 1st coat to dry for at least 8 – 12 hours before applying 2nd coat.

Where BioGrip Micro primer has been applied as a primer base, it may not be required to apply a 2nd coat of Masonry Flat after application of 1st coat if coverage is complete and perfectly finished. For Best Use practices, it is suggested to always apply two (2) coats of Masonry Flat with applications on the exterior.

2ND COAT INTERIOR & EXTERIOR: Dilute Masonry Flat with 25 – 30% water, or 3.75 – 4.5 liters of water per one (1) 15 liter bucket. Apply as directed above, except pre-dampening is not required for the 2nd coat. Apply with a brush, roller or sprayer. Allow 2nd coat to dry for at least 4 hours before applying, or until paint is dried to the touch, if a 3rd coat if desired.

3RD COAT OPTION / INTERIOR & EXTERIOR: For wash/veiling or glaze effects apply the 3rd coat with a large masonry brush, painting in a crisscross pattern to create dimension with a very slight natural chromatic finish. It is recommended to dampen wall surface with a fine spray of water, always painting wet on wet. Extreme care must be made when applying this type of finish as touch ups are difficult, and in such cases where touch ups are necessary, wall surface may be required to be dampened and repainted with the same technique, always wetting wall prior to a repaint. (See detailed instructions in section ; **DIMENSIONAL EFFECTS FOR PAINTED OR UNPAINTED MINERAL SURFACES, BRICK, STONE & STUCCO**.)

SPECIAL NOTE FOR INTERIOR & EXTERIOR APPLICATIONS USING TRANSPARENT BASE:

BRUSH, ROLLER, SPRAYER APPLICATIONS

Paint applications with Transparent Base can be problematic for touch-ups during the drying phase immediately after paint application. Potassium Silicate paints being high in pH, require a little more attention during application. Because Transparent Base has no titanium dioxide and very little calcium carbonates, the pH stability is not the same as with a White Base, and as a result the pH is more active. With Transparent Base it is recommended to not attempt to correct or touch up the paint cover once the paint has began to pull or dry, as during this phase the carbonation process with the mineral binder is fully active. Dark paint colors with little white pigment are more prone to this type of reaction.

Touching up during this phase of carbonation can result in flashing, causing the paint finish to appear darker or lighter where you became from behind to correct an error in your cover application.

It is suggested to allow the paint application to fully dry after 4 - 8 hours, and then carefully make corrections, using the same tool application for the initial coverage, exact same dilution, and same temperature conditions. Make sure your dilution to water is the same for touch ups.

1ST COAT: If you notice flashing issues during the 1st coat application, complete your application, do not stop application in mid-stream. Continue to apply the 1st coat, corner to corner, following dilution instructions for **1ST COAT INTERIOR & EXTERIOR**.

2ND COAT: If color flashing has occurred in the 1st coat application you may reduce your dilution to 20%, or 3.0 liters of water to one (1) 15 liter bucket. This will somewhat reduce the flashing tendency.

3RD COAT: The flashing of Transparent Base as regards the **3RD COAT OPTION** as indicated above is ideal to create historical old world finishes. The higher the dilution with water, the more likely flashing occurs, creating a chromatic/ dimensional effect, when applying with a brush.

Dilutions with water are suggested as general guidelines for application, but paint applicator may adjust dilutions as needed to meet best uses for ease of application, job site requirements and finishes. Dilutions of Masonry Flat should not be less than -5 % points of dilutions as indicated in this TDS unless specified otherwise.

PAINT SPRAYERS

PRE-PRIMER & PRIMER COAT / INTERIOR & EXTERIOR: Follow instructions above for **BRUSH AND ROLLER APPLICATIONS** for primer types and dilution rates. BioGrip Micro, Medium and Masonry Flat contain fine/medium size aggregate and airless gun filters and outlet filters must be removed to permit application of aggregate paints. Use a titanium sprayer tip. Contact paint sprayer manufacturer before commencing work with these products to verify proper sprayer use.

1ST COAT / INTERIOR & EXTERIOR: Follow instructions above for **BRUSH AND ROLLER APPLICATIONS** for dilution rates of Masonry Flat. Do not attempt to cover walls or surfaces with one (1)-coat application, unless applying over tinted BioGrip Micro primer or EcoDomus Matte. Over spraying will result in excessive waste of product. Allow to dry for at least 4 – 8 hours before applying 2nd coat.

2ND COAT / INTERIOR & EXTERIOR: Follow instructions above for **BRUSH AND ROLLER APPLICATIONS** for dilution rates of Masonry Flat. Manually touch-ups with any type of sprayed finishes are very difficult. Application of final coat using a sprayer on smooth walls without the use of back rolling may provide an attractive finish, but it can make repaints or repairs in the future difficult. Back rolling should occur immediately after wall area has been sprayed. Do not try to back roll if sprayed paint has dried on the wall.



Sprayer applications for 1st & 2nd coats on uneven or rough exterior masonry surfaces are not subject to issues regarding back rolling.

SPRAY TIP USAGE: Masonry Flat can easily be applied using an airless sprayer. Apply paint product with a #0.019 – 0.021 inch (0.48 – 0.53 mm) size spray tip. Consult paint sprayer manufacturer always before spraying aggregate paints.

GRAIN SIZE

0.01 – 0.02 mm

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.

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 an appropriate sprayer and sprayer tip. New sprayer tips should be used to prevent product waste and provide for a more perfect finish. It is recommended to use professional high quality synthetic brushes and for rollers to use professional quality with a nap or pile with 1/2" - 3/4" inch (13 – 19 mm).

TOOL CLEANING

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

DRYING TIME

Allow drying time between coats of at least 8 – 12 hours for the 1st coat, and with successive 2nd and 3rd coats allow at least 4 - 8 hours between coats. With lower temperature and humidity more time may be needed. Do not apply Masonry Flat on the exterior if there is a risk of thunderstorms or showers during the 12 hour drying time needed for product to dry and cure correctly. Allow at least 7 – 14 days drying time before attempting washing or cleaning. Complete curing occurs within 14 days, and with silicification, hardness will increase to approximate full strength in three (3)-months.

CONSUMPTION / COVERAGE

1 Quart/1 Liter: Approximately 70 ft² / 6.5 mt² – 95 ft² / 9 mt² for exterior masonry, 87 ft² / 8 mt² – 200 ft² / 18.5 mt² interior finishes, such as wood and drywall.

0.66 Gallon/2.5 Liter: Approximately 175 ft² / 16 mt² – 238 ft² / 22 mt² for exterior masonry, 218 ft² / 20 mt² – 500 ft² / 46 mt² interior finishes.

4 Gallons/15 Liters: Approximately 1,000 ft² / 93 mt² – 1,400 ft² / 130 mt² for exterior masonry, 1,300 ft² / 121 mt² – 2,200 ft² / 204 mt² for interior finishes.

Applications on unpainted surfaces will absorb more paint on the 1st 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.

TINT COLORS

Masonry Flat can only be tinted in any color ranges from the ROMABIO paint deck using White or Transparent Base.

PACKAGING

Plastic buckets of 1, 2.5 & 15 liters, USA/China. 1, 2.5 & 12.5 liters, Europe.

***NOTE:** BioGrip Micro or Medium primer generally should not be tinted when avoidable. Maximum tint colorant allowed is 3%, 46 g/l or 1.6 oz/l. Color ranges from Off White (OW), Color Oxides (CO) & Grey Oxides (GO) from the ROMABIO paint deck can be tinted up to maximum 50% of the color formulation. Dark Oxides (DO) can only be tinted 12 - 25% of the color formulation. Extra Dark Oxides (XDO) formulations cannot be dosed under any circumstance.

To paint dark Transparent Base colors from the ROMABIO color palette, over a white base, it is recommended to tint the primer coat with color CO-126 (medium grey), and apply to the surface prior to application of a Transparent Base, so to achieve maximum coverage thereafter with 2 coats.

LIMITATIONS FOR PAINT APPLIED ONTO HIGH MOISTURE CONTENT SUBSTRATES: Masonry Flat cannot be applied on ground surfaces such as large exterior flat areas, i.e., exterior brick paving, without the risk of product deterioration due to high moisture content or freeze-thaw conditions. This situation can occur on chimneys, thresholds & windowsills suspect to absorb a lot of moisture, particularly with snow melts. Brick or stucco in constant contact with damp soil at the foundation level may absorb excessive moisture and salt nitrates from the earth, and this too will cause rapid deterioration of masonry substrates.

APPLICATION CYCLES ON DIFFERENT TYPES OF SURFACES

Make sure base is solid, dry and well cleaned, prepared with skill. Success or failure in painting interior or exterior surfaces can highly depend on properly prepped and cleaned surfaces. It is recommended to observe the rule VOB DIN 18 363, Part C, paragraph 3.

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 Mineral Pre-Primer, 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.

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

BioGrip Micro primer has micro aggregate and will fill-in stucco creating a smoother surface, as typical when applying exterior paints on brick or wood.

BioGrip Medium primer has larger aggregate, thus enhancing a stucco type finish when applying Masonry Flat. Using a large masonry brush in a crisscross pattern, will create tonalities and modulations typical of natural stucco.

1ST & 2ND COATS / WHITE & TRANSPARENT BASES: Apply two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS.

See *DIMENSIONAL EFFECTS FOR PAINTED OR UNPAINTED MINERAL SURFACES, BRICK, STONE & STUCCO* below to re-create old world stucco finishes using Masonry Flat.

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 carbonation. 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 carbonation has been completed, which usually occurs after 21 – 28 days after final installation.

OLDER CEMENT STUCCOS/UNPAINTED

INTERIOR / EXTERIOR: For cement stuccos that are at least one (1) year or older, and have not been painted, Masonry Flat is an excellent paint to create an original cement stucco finish, not possible with an acrylic emulsion sheen which eliminates natural depth and color of masonry stucco. Unpainted stucco provides an excellent surface for long term durability and adherence for potassium silicate paints, without the risk of cracking, peeling or flaking, and at the same time will reinforce and strengthen stucco substrate when following the guidelines below.

PRE-WASHING: For mold or algae treatment, prior to pressure washing, apply 1 coat of EcoDis to all infected surfaces and allow to dry for 24 hours. Dirty and/or contaminated surfaces should be cleaned and any attached algae or mold removed manually or with a pressure washer.



PRE-PRIMER COAT: For best results apply Mineral Pre-Primer, diluted 100% with water (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 or Medium primer as indicated in GENERAL APPLICATION INSTRUCTIONS.

BioGrip Micro primer has micro (fine) aggregate and will fill-in stucco creating a smoother surface, as typical when applying exterior paints on smooth surfaces, and can be applied with roller or sprayer.

BioGrip Medium primer has larger aggregate, thus enhancing a stucco type finish when applying Masonry Flat.

1ST & 2ND COATS / WHITE & TRANSPARENT BASES: Apply two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS.

See *DIMENSIONAL EFFECTS FOR PAINTED OR UNPAINTED MINERAL SURFACES, BRICK, STONE & STUCCO* below to re-create old world stucco finishes using Masonry Flat.

CEMENT STUCCO / PAINTED WITH ACRYLIC

INTERIOR / EXTERIOR: For pre-painted stuccos, Masonry Flat is an excellent finish paint to recreate an original smooth cement stucco finish, restoring the flat finish of a natural masonry stucco. Stucco painted with acrylic paints may eventually crack, peel or flake due to moisture content in the substrate, thus no guarantee can be provided for long term adherence on a preexisting acrylic painted stucco.

PRE-WASHING: For mold or algae treatment, prior to pressure washing, apply 1 coat of EcoDis to all infected surfaces and allow to dry for 24 hours. Dirty and/or contaminated surfaces should be cleaned and any attached algae or mold removed manually or with a pressure washer.

PRIMER COAT: Apply one (1) to two (2) coats of BioGrip Micro or Medium primer as indicated in GENERAL APPLICATION INSTRUCTIONS. Two (2) coats may be required for heavily pre-painted surfaces.

1ST & 2ND COATS / WHITE & TRANSPARENT BASES: Apply two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS.

See *DIMENSIONAL EFFECTS FOR PAINTED OR UNPAINTED MINERAL SURFACES, BRICK, STONE & STUCCO* below to re-create old world stucco finishes using Masonry Flat.

EIFS | SYNTHETIC STUCCO

INTERIOR / EXTERIOR: Most EIFS stucco surfaces are finished with a cement resin coat that is formulated with 100% acrylic binder, that can have a dull to shiny surface. Re-coats are typically made with acrylic or elastomeric paints, which tend to enhance the effect of a plastic stucco. EIFS stucco can be primed with BioGrip Micro or Medium and painted with Masonry Flat to recreate a more authentic stucco finish look, assuring both high water resistance as well as excellent permeability.

Follow instructions above for CEMENT STUCCOS/PAINTED WITH ACRYLIC.

See *DIMENSIONAL EFFECTS FOR PAINTED OR UNPAINTED MINERAL SURFACES, BRICK, STONE & STUCCO* below to re-create old world stucco finishes using Masonry Flat.

CMU | CONCRETE BLOCK

INTERIOR/EXTERIOR: New work: Mortar joints should not be painted for about 28 days to ensure proper curing and drying. Follow instructions as indicated above for NEW CEMENT STUCCOS.

NEW CMU: Follow instructions for NEW CEMENT STUCCOS.

PRE-WASHING / AGED CMU UNPAINTED: For mold or algae treatment, prior to pressure washing, apply 1 coat of EcoDis to all infected surfaces and allow to dry for 24 hours. All surfaces should be carefully cleaned, using a pressure washer at 350 PSI to remove loose or powdered cement.

PRE-PRIMER COATS: For best results apply Mineral Pre-Primer, diluted 100%

with water (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 or Medium primer as indicated in GENERAL APPLICATION INSTRUCTIONS.

1ST & 2ND COATS / WHITE & TRANSPARENT BASES: Apply two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS.

PAINTED CMU: Follow instructions for CEMENT STUCCOS/WITH ACRYLIC PAINT.

REINFORCED CONCRETE SURFACES

INTERIOR/EXTERIOR: New cement surfaces should not be painted for about 28 days to ensure proper curing and drying. If a concrete form release agent has been used, the concrete surface must be thoroughly cleaned with a pressure washer prior to begin paint application.

PRE-WASHING: For mold or algae treatment, prior to pressure washing, apply 1 coat of EcoDis to all infected surfaces and allow to dry for 24 hours. All surfaces should be carefully cleaned, using a pressure washer at 350 PSI to remove release agents or for older surfaces, loose or powdered cement.

PRE-PRIMER COAT: For best results apply Mineral Pre-Primer, 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.

1ST & 2ND COATS / WHITE & TRANSPARENT BASES: Apply two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS.

PAINTED REINFORCED CONCRETE: Follow instructions for CEMENT STUCCOS/WITH ACRYLIC PAINT.

CONCRETE FLOORS, SIDEWALKS OR DRIVEWAY

Masonry Flat should not be used on portland cement based floors, sidewalks or driveways with standard dilutions. Color staining concrete pavers can be accomplished using guidelines under section; *DIMENSIONAL EFFECTS FOR PAINTED OR UNPAINTED MINERAL SURFACES, STAINING*, page 7.

CEMENTITIOUS BOARD | MGO

INTERIOR/EXTERIOR: Guidelines for factory primed and unprimed cementitious or MGO boards. Cementitious boards are cement based and are ideally suited for Masonry Flat or II for exterior applications. MGO (magnesium oxide) is a natural mineral board and is ideally suited for all types of mineral paints.

PRE-WASHING: For mold or algae treatment, prior to pressure washing, apply 1 coat of EcoDis to all infected surfaces and allow to dry for 24 hours. Dirty and/or contaminated surfaces should be cleaned and any attached algae or mold removed manually or with a pressure washer.

PRE-PRIMER COAT: For unprimed cementitious and MGO boards, apply one (1) coat of EcoForte Consolidator or Mineral Pre-Primer 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 boards, apply one (1) coat of BioGrip Micro diluted 30% with water, or 4.5 liters per one (1) 15 liter bucket, tinted if desired, and allow to dry for 8 – 12 hours.

1ST & 2ND COATS – WHITE & TRANSPARENT BASES: Apply one (1) or two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS.

PRE-PAINTED CEMENTITIOUS: Follow instructions for CEMENT STUCCOS/WITH ACRYLIC PAINT.



BRICK SURFACES

UNPAINTED NEW OR OLD BRICK

INTERIOR/EXTERIOR: For absorbent, unpainted, integral brick, pre-primers or primers are not required in the application of Masonry Flat. Potassium silicate paints are recommended by the brick industry for durability and permeability. Generally, two (2) coats are sufficient to provide full coverage.

PRE-WASHING: For mold or algae treatment, prior to pressure washing, apply 1 coat of EcoDis to all infected surfaces and allow to dry for 24 hours. Dirty and/or contaminated surfaces should be cleaned and any attached algae or mold removed manually or with a pressure washer. In cases of severe moss or algae growth on exterior surfaces, repeat this cycle.

Dirty and/or contaminated surfaces with mortar should be cleaned with a pressure washer. For smog affected surfaces or surfaces with efflorescence, scrub affected areas with a stiff brush and muriatic acid (1 part muriatic acid and 6 - 9 parts water), and after 3 - 5 minutes rinse several times with a pressure washer.

Masonry Flat can be applied directly onto any type of brick surface material without a primer, as long as the brick material is integral and can absorb water naturally.

1ST & 2ND COATS - WHITE & TRANSPARENT BASES: Apply one (1) or two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS. Always thoroughly wet brick surfaces with water prior to applying the first (1st) coat of Masonry Flat as a primer or paint. This will assist in creating greater penetration of Masonry Flat into the brick surface. This applies only to the first coat paint application.

If the brick material is extremely worn and decaying, or does not absorb water, then preparatory steps are required prior to the application of Masonry Flat. Carefully review the instructions and options as listed below:

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-WASHING: For mold or algae treatment, prior to pressure washing, apply 1 coat of EcoDis to all infected surfaces and allow to dry for 24 hours. Dirty and/or contaminated surfaces should be cleaned and any attached algae or mold removed manually or with a pressure washer. In cases of severe moss or algae growth on exterior surfaces, repeat this cycle.

PRE-PRIMER COATS: Apply Mineral Pre-Primer, 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. At the end of the 3 day curing of the Mineral Pre-Primer, 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 primer according to GENERAL APPLICATION INSTRUCTIONS.

1ST & 2ND COATS - WHITE & TRANSPARENT BASES: Apply one (1) or two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS.

In worse case scenarios, to prevent further water absorption into brick surfaces after repairs, the application of TerraMare I, a hydrophobic paint, can be applied onto BioGrip Micro or Medium. TerraMare line products are similar to Masonry Flat & II. Instead of containing potassium silicate, is substituted with silossanic (silica), which will substantially increase hydrophobic performance to help protect masonry substrates from absorbing excessive water caused by rain or snow.

BRICK / COASTAL AREAS: In many cases, brick and stucco materials, because of their capacity to absorb moisture, can collect salt residues which can have adverse effects for the applications of any type of masonry paint 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 diluted muriatic acid for 3 - 5 minutes, then wash off carefully again with clean water, all treated surfaces. Phosphoric acid or Trisodium Phosphate are safer alternatives to using muriatic acid, and are ideal for cleaning brick. Allow washed surfaces to thoroughly dry before proceeding with subsequent product applications of BioGrip Micro or Masonry Flat.

PRIMER COAT: None required for absorbent brick. For non-absorbent brick follow guidelines for NON ABSORBENT EXTRUDED BRICK.

1ST & 2ND COATS - WHITE & TRANSPARENT BASES: Apply two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS.

NON-ABSORBENT EXTRUDED BRICK: For brick that is non-absorbent, 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 Masonry Flat.

PRE-WASHING: For mold or algae treatment, prior to pressure washing, apply 1 coat of EcoDis to all infected surfaces and allow to dry for 24 hours. Dirty and/or contaminated surfaces should be cleaned and any attached algae or mold removed manually or with a pressure washer. In cases of severe moss or algae growth on exterior surfaces, repeat this cycle.

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

1ST & 2ND COATS - WHITE & TRANSPARENT BASES: Apply one (1) or two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS.

PAINTED BRICK SURFACES

Follow instructions for CEMENT STUCCOS/PAINTED WITH ACRYLIC.

DIMENSIONAL EFFECTS FOR PAINTED OR UNPAINTED MINERAL SURFACES, BRICK, STONE & STUCCO

INTERIOR/EXTERIOR: Masonry Flat as a mineral paint can be used as a full-cover paint, a wash or a stain (semi-transparent to transparent) when applied to painted or unpainted masonry surfaces, such as stucco, brick or stone. Washes and stains require higher dilutions with water and the use of Mineral Pre-Primer as a dilution agent.

As a paint wash the finish will create a soft dimensional paint surface typical of old world stucco.

Used as a stain, stucco and stone can be slightly colored to create a patina to create an aged look, or slightly alter the color of the masonry surface. In renovations for example, new stone work, repairs or additions using new stone, stains can help match older stone patinas.

Types of washes:

THIN WASH/VEILING will allow the color of stucco, brick or stone to be changed significantly or just slightly, while permitting the existing colors and veining in unpainted brick or stone to still be visible. A wash can be applied to unpainted stucco or mineral painted surfaces, to change color or create a dimensional effect. Used as a third coat application, a wash can be applied onto newly painted surfaces of Masonry Flat. The wash when applied on an off-white color or dark color, can be tinted slightly darker or lighter in color tone than the base color to



BIO

enhance the dimensional effect. This technique requires an experienced paint applicator. This can be accomplished with White Base or Transparent Base.

THICK WASH requires applying 1 - 2 coats of untinted BioGrip Micro or Medium primer, which will create a solid, uniform white base painted surface. Using only Transparent Base, dosing 50% or half the recommended tint formula, the color hiding is reduced, which when applied, creates a heavy wash effect. Dimension is created by applying the paint in a criss-cross brush pattern. The 1st coat will appear uneven in coverage. The 2nd coat will smooth out the color finish, creating subtle movement of shading and dimension.

For more a more visual effect, particularly on smooth stucco surfaces, using BioGrip Medium primer & Masonry Flat, which contains fine/medium aggregate, will produce better effects for creating a dimensional finish.

Application instructions below:

DIMENSIONAL EFFECTS / THICK WASH

HISTORICAL DIMENSIONAL EFFECT USING TRANSPARENT BASE

APPLICATION DIFFICULTY: Medium

UNPAINTED STUCCO

PRE-WASHING: For mold or algae treatment, prior to pressure washing, apply 1 coat of EcoDis to all infected surfaces and allow to dry for 24 hours. Dirty and/or contaminated surfaces should be cleaned and any attached algae or mold removed manually or with a pressure washer. In cases of severe moss or algae growth on exterior surfaces, repeat this cycle.

PRE-PRIMER: For unpainted stuccos apply Mineral Pre-Primer diluted 100% with water (1:1), or 10 liters of water to one (1) 10 liter bucket, applying wet on wet, working in a limited area so that no pre-drying occurs, until substrate has arrived at full absorption, then moving over to a new section. Allow to dry for at least 2 - 3 days. *Minimum cure time is 24 hours.*

PRIMER: Apply one (1) - two (2) coats of untinted White Base, BioGrip Micro or Medium, diluted 30% with water as per GENERAL APPLICATION INSTRUCTIONS, allow to dry for 8 - 12 hours. A full coverage, high hiding, is required to initialize the 1st coat application. Based on the surface texture, absorbency, and quality of application will determine if one or two coats will be required.

It is recommended to apply BioGrip Medium with a brush, applying in a criss-cross pattern, so as to create a slightly textured surface. This will increase the dimensional effects when applying on a slightly textured surface. BioGrip Medium can be applied with an airless sprayer. See TDS for BioGrip Medium.

1ST COAT: It is recommended on smooth stucco to use Masonry Flat to achieve best results for creating dimensional effects. Tint Masonry Flat or Textured, Transparent Base, with only 50% of pigment base (5%) instead of the typical 10% required for full color saturation. Dilute Masonry Flat, Transparent Base with 30% water, or 4.5 liters of water per one (1) 15 liter bucket. Using a large ROMABIO masonry brush, apply diluted paint in a crisscross pattern, and cover the entire surface corner to corner. Do not attempt to achieve a perfect, unified finish with a 50% tinted base. The 1st coat will appear uneven in coverage. Allow the 1st coat to completely dry for 8 - 12 hours. Paint consumption is typical as indicated in GENERAL APPLICATION INSTRUCTIONS.

2ND COAT: Apply a 2nd coat using same technique for 1ST COAT. The 2nd coat application will not completely cancel the effects of the 1st coat. The 2nd coat will smooth out the color finish, creating subtle movement of shading and dimension. Always test paint effects prior to full commitment of the application.

DIMENSIONAL EFFECTS | THIN WASH/VEILING

HISTORICAL DIMENSIONAL EFFECT USING TRANSPARENT BASE

APPLICATION DIFFICULTY: Medium/High

UNPAINTED STUCCO, BRICK & STONE

PRE-WASHING: For mold or algae treatment, prior to pressure washing, apply 1 coat of EcoDis to all infected surfaces and allow to dry for 24 hours. Dirty and/or contaminated surfaces should be cleaned and any attached algae or mold removed manually or with a pressure washer.

PRIMER: BioGrip primers are not required for thin washes or stain effects if the masonry substrate is unpainted and absorbent. Applying decorative washes or glazing onto stucco cement finishes can be facilitated as long as the cement has had a cure rate of at least one (1) year from final date of application.

1ST COAT / TRANSPARENT BASE: Tint Masonry Flat, Transparent Base, with only 50% of pigment base (5%) instead of the typical 10% required for full color

saturation. Dilute Masonry Flat at 30%, or 300ml per one (1) liter quantity of product. Test dilution effect with a small quantity of product, prior to committing dilution of entire bucket. If it is necessary increase dilution above 30% to achieve wash/veiling effect, always use the *PRE-MIX SOLUTION*, upping dilutions starting at 50 - 75%. with a maximum dilution of 100%.

No warranties can be provided for thin wash/veiling applications with dilutions that exceed 30% on 1st or 2nd Coats.

On masonry stucco apply paint dilution with a brush to achieve dimensional effects. On brick apply paint dilution with a sprayer. See the following:

BRUSH APPLICATIONS / STUCCO or STONE: It is not suggested to use a sprayer for this type of application. Wet/dampen surfaces prior to applying paint. Apply Masonry Flat using a large ROMABIO masonry brush working in a crisscross pattern and cover the entire surface. Always apply wet on wet for non-dampened surfaces such as brick, stone or stucco. To keep surfaces damp during application it is suggested to use a manual hand sprayer pump, wetting the masonry surface as application technique progresses.

All dilutions over 30% require an addition of the *PRE-MIXED SOLUTION* of water and Mineral Pre-Primer to Masonry Flat. The *PRE-MIXED SOLUTION* helps to compensate the loss of binders in higher dilutions. Extreme care must be made when applying this type of finish as touch ups are difficult, and in such cases where large touch ups are necessary, wall surface may be required to be re-dampened and repainted with the same technique, always dampening the surface prior to repainting. Use a large brush and clean water to make to remove excess paint wash as needed to create homogeneous finish. Once the color wash has completely dried, it will no longer be possible to adjust the wash application.

Consult the TDS Mineral Pre-Primer dilutions table and application techniques for more detailed instructions and use of the dilution table for the PRE-MIXED SOLUTION, pages 5 & 6.

2ND COAT: Applying a 2nd coat is an option. This could be for touching up or to slightly change color, slightly darker or lighter, to create additional dimension to the wash effect. 2nd coats can be increased in dilution as may be required to provide uniform effect over 1st coat. Always apply paint on a pre-dampened surface.

Manipulations to create decorative effects in THIN WASH/VEILING must be performed while painted surfaces are wet, before washes or veiling effects have dried. Dried painted surfaces cannot be altered!

For stucco surfaces, washes or veiling is created by the amount of product that is left or taken away. Visual controls should be assessed both up close and particularly far away to judge the effects.

Test dilution effect prior to full commitment of the application.

PRE-MIX SOLUTION: *See TDS Mineral Pre-Primer, pages 5 & 6. Prepare a mixture of 1-part water and 1 part Mineral Pre-Primer, mixed thoroughly, and add mixture to Masonry Flat until dilution mixture is completed. Dilutions with this method can be achieved up to 150%, or 1.5 liters' water/Mineral Pre-Primer per 1 liter quantity paint. It is advised to mix only the amount of paint and PRE-MIX SOLUTION as needed. Pre-wet/dampen surfaces to be painted with water, this allows for easy manipulation of the wash effects. Apply diluted Masonry Flat in a crisscross pattern, and if necessary, use water and a brush or fine sprayer to remove build up and cause the paint product to settle into crevices or imperfections on the surface, particularly on rough surfaces this is more desirable.*

SPRAY APPLICATIONS / BRICK: It is suggested to use an airless sprayer for applications on brick. When applying paint on absorbent brick using an airless paint sprayer, the color paint effect will be evenly distributed, acting as semi-opaque stain, rendering slightly visible the natural brick tones (light or dark) and any color veining or texture inherent in the brick.

1ST COAT / TRANSPARENT BASE: Tint Masonry Flat, Transparent Base, with only 50% of pigment base (5%) instead of the typical 10% required for full color saturation. Dilute Masonry Flat at standard dilution rates of 30%. Test dilution effect prior to full commitment of the application. If necessary increase dilution rates to 50 - 75%, with a maximum 100%, using with the *PRE-MIX SOLUTION*. Always apply 1st Coat on a pre-dampened surface with water.

2ND COAT: Apply a 2nd coat if the 1st application effect was not effective to provide the desired coverage or to even out surface absorptions that may create undesirable effects. Follow dilution guidelines indicated in 1st Coat above for the *PRE-MIX SOLUTION*, except do not pre-dampen surface with water.



BIO

Though not recommended, if a hand brush finish is desired, it is suggested to slightly alter the tint color by 10%, darker or lighter, to intensify dimensional effects. Hand brush finishes require the surface to be pre-dampened with water.

DIMENSIONAL EFFECTS | STAINING **STAINING USING TRANSPARENT BASE** **APPLICATION DIFFICULTY: Medium/High**

UNPAINTED STONE AND STUCCO

STUCCO: Masonry Flat, Transparent Base, can be used to stain any type of cement stucco. This method can be used to create aging effects on stucco, darkening or spoiling the surfaces of the stucco so to create an illusion of age, or to slightly change color of the existing white or colored stucco finish.

STONE: Masonry Flat offers a unique solution for aging new stone surfaces, matching new stone with old existing stone, or for slight and subtle color changes, or aging, without changing the inherent characteristics of the stone color or veining.

Depending on color stain, type and base color of stone or stucco, using the PRE-MIX SOLUTION may leave a slight white residual due to the polymer binder content. If this effect is undesirable, substitute PRE-MIX SOLUTION with Mineral Hardener for application of Masonry Flat for staining. Dilute Mineral Hardener and water, using the same dilution rates, (see PRE-MIX SOLUTION TABLE, TDS Mineral Pre-Primer, page 5). Mineral Hardener is clear and works primarily as a consolidator/sealer, leaving no visible white residue.

Always test paint effects prior to full commitment of the application to change color of the existing white or colored stucco finish.

PRE-WASHING: For mold or algae treatment, prior to pressure washing, apply 1 coat of EcoDis to all infected surfaces and allow to dry for 24 hours. Dirty and/or contaminated surfaces should be cleaned and any attached algae or mold removed manually or with a pressure washer.

PRIMER: None required.

1ST COAT / TRANSPARENT BASES: Tint Masonry Flat, Transparent Base, with only 25 -50% of pigment base (2.5 -5%) instead of the typical 10% required for full color saturation. Dilute Masonry Flat with the PRE-MIX SOLUTION of Mineral Pre-Primer or Mineral Hardener, at 50 - 100%. Test dilution effect prior to full commitment of the application.

If the color staining is too dark or intense, continue to dilute Masonry Flat with the PRE-MIX SOLUTION until the correct amount of color intensity is achieved. *Certain colors may require greater dilution than a wash/veil treatment when doing a stain application. Dilutions may increase if necessary up to 200 - 250%*

Always pre-dampen the stone or stucco with water prior to begin application. Maintain the masonry surface damp with water using a brush or a hand sprayer. Use a large brush and clean water to make repairs so as to remove excess paint, or to create effects of more and less color staining. Avoid creating a homogeneous staining effect. As long as the surface is damp and the staining has not completely dried, color intensity can be somewhat manipulated. Once the color staining has completely dried, it will no longer be possible to adjust the staining color or pattern.

Consult the TDS Mineral Pre-Primer, Section: DIMENSIONAL EFFECTS & DILUTION INSTRUCTIONS FOR BIODOMUS MINERAL PAINTS, PRE-MIX SOLUTION TABLE, page 5.

2ND COAT: Applying a 2nd coat is an option. This could be for touching up or to slightly change color, slightly darker or lighter, or add colors to create additional dimension to the wash effect. 2nd coats can be increased in dilution as may be required to provide desired effect over 1st coat.

For stone or stucco surfaces, staining is created by the amount of product that is left or taken away. Visual controls should be assessed both up close and particularly far away to judge the effects.

Always test dilution effect prior to full commitment of the application.

No warranties can be provided for staining applications.

ADOBE BRICK

INTERIOR / EXTERIOR: Adobe brick being made of a composite of dirt/sand and inorganic material is extremely susceptible to damages caused by water on exterior surfaces. Potassium silicate paints are ideal because they will carbonize to mineral content in the clay brick, creating consolidation, strengthening the

external surfaces and allow them to be water resistant and permeable when painted with Masonry Flat.

PRE-PRIMER COAT: For best results apply Mineral Pre-Primer, 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, unpainted 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.

PRIMER COAT: Apply at least one (1) - two (2) coats of BioGrip Micro or Medium primer as indicated in GENERAL APPLICATION INSTRUCTIONS.

1ST & 2ND COATS / WHITE & TRANSPARENT BASES: Apply two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS.

AUTOCLAVED AERATED CONCRETE

INTERIOR / EXTERIOR: Autoclaved aerated concrete cannot be painted, plastered or stuccoed directly onto non-consolidated and unprimed surfaces. Using ROMABIO Mineral Pre-Primer and BioGrip Medium primer applied onto autoclaved aerated concrete will permit the proper application of any type of paint, plaster or stucco to be applied the surface.

PRE-PRIMER COAT: It is recommended to apply one (1) coat of Mineral Pre-Primer 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 consolidator into the aerated block. 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 Mineral Pre-Primer 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 or Medium primer as indicated in GENERAL APPLICATION INSTRUCTIONS.

1ST & 2ND COATS / WHITE & TRANSPARENT BASES: Apply two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS.

DECAYING OR CRUMBLING STUCCOS OR POWDERY SURFACES

INTERIOR / EXTERIOR:

PRE-WASHING: For mold or algae treatment, prior to pressure washing, apply 1 coat of EcoDis to all infected surfaces and allow to dry for 24 hours. Dirty and/or contaminated surfaces should be cleaned and any attached algae or mold removed manually or with a pressure washer.

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. Treat surfaces afterwards with phosphoric acid or muriatic acid, and pressure wash again. If pressure washing is not an option for interior surfaces, scrub affected areas with a stiff brush and phosphoric acid 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 Mineral Pre-Primer 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, opaque sheen painted stuccos, apply one (1) coat EcoForte Consolidator diluted 100%, or 10 liters of water 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, as a primer tinted if required*, with brush, roller or approved sprayer for fine aggregate, diluted 30% with water, or 4.5 liters per one (1) 15 liter bucket, and allow to dry for at least 8 - 12 hours.

For severe cases of deterioration, take into consideration the removal 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.

1ST & 2ND COATS / WHITE & TRANSPARENT BASES: Apply two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS.

COATINGS WITH EFFLORESCENCE

INTERIOR / EXTERIOR: Because portland cement is subject to create salt nitrates over time when exposed to moisture, this chemical reaction with the gypsum content in portland cement will cause efflorescence to form on the finished surfaces of stucco or any type of cement product, like CMU block or reinforced



concrete. Efflorescence indicates that moisture has permeated the structural wall component and requires remediation to reduce the intrusion of water.

PRE-WASHING: For mold or algae treatment, prior to pressure washing, apply 1 coat of EcoDis to all infected surfaces and allow to dry for 24 hours. Dirty and/or contaminated surfaces should be cleaned and any attached algae or mold removed manually with a pressure washer.

Cement surfaces showing efflorescence should be aggressively cleaned with a pressure washer or stiff brush, and then the efflorescence should be treated using a diluted muriatic acid, 1 part muriatic acid and 6 – 9 parts water, or phosphoric acid, and allow to react for 3 – 5 minutes. Thoroughly rinse treated areas with water and allow to dry. If necessary repeat again.

PRE-PRIMER COAT: Apply Mineral Pre-Primer 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.

PRIMER COAT: Apply BioGrip Micro primer, diluted with water 30%, or 4.5 liters per one (1) 15 liter bucket, and allow to dry for at least 8 – 12 hours.

1ST & 2ND COATS / WHITE & TRANSPARENT BASES: Apply two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS.

For coatings on surfaces damaged by saltpeter or efflorescence or where efflorescence is present, no guarantees can be provided.

AGED CEMENT STUCCO & REPAIRS INTERIOR / EXTERIOR / UNPAINTED

PRE-WASHING: Dirty and/or contaminated surfaces should be treated as a priority prior to any interventions of replacing or repairing stucco. For mold or algae treatment, prior to pressure washing, apply 1 coat of EcoDis to all infected surfaces and allow to dry for 24 hours. Dirty and/or contaminated surfaces should be cleaned and any attached algae or mold removed manually or with a pressure washer.

PRE-PRIMER COAT: When new stucco repairs are performed on older, unpainted cement stuccos, complete all removal of damaged stucco, rinse surfaces of dust, and apply Mineral Pre-Primer to older surfaces prior to applying new cement stucco or make repairs. Pre-prime existing surfaces applying one (1) coat of Mineral Pre-Primer diluted 100% with water, or 1 liter to one liter of product, 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 a 100% with water, onto any new stucco repairs and allow to dry for at least 8 – 12 hours.

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

1ST & 2ND COATS / WHITE & TRANSPARENT BASES: Apply two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS.

STUCCO REPAIRS

See Aged CEMENT STUCCOS above.

MINERAL OR LIME PAINTS

EXTERIOR/ REPAIRS MASONRY & WOOD

PRE-WASHING: For mold or algae treatment, prior to pressure washing, apply 1 coat of EcoDis to all infected surfaces and allow to dry for 24 hours. All exterior surfaces should be carefully cleaned using a pressure washer. For highly powdered/chalky surfaces, use up to 350 PSI to remove loose or powdered paint.

Mineral Pre-Primer 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.

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.

MASONRY

PRE-PRIMER COAT: Apply one (1) coat of EcoForte Consolidator or Mineral Pre-Primer 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 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.

1ST & 2ND COATS: Apply one (1) or two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS. When painting on wood it is suggested to adjust dilutions with water as necessary to achieve maximum effect for smoothness and coverage desired. Typical dilutions may be up or down by 5% as a rule.

WOOD

Exterior wood surfaces that have been painted with Masonry Flat should be prepped and prepared as typical with any painted wood surface.

PREP: 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 BioGrip Micro primer, diluted with water 30%, or 4.5 liters per one (1) 15 liter bucket, and allow to dry for at least 8 – 12 hours.

1ST & 2ND COATS / WHITE & TRANSPARENT BASES: Apply two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS.

INTERIOR/ REPAIRS DRYWALL & WOOD

WOOD: 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.

Masonry Flat can be applied directly to any ROMABIO mineral paint product without the need to re-apply BioGrip Micro primer.

DRYWALL: Prep drywall surfaces as required to provide a smooth surface, using drywall compound as may be required to facilitate repairs. Any unpainted drywall compound will need to be primer with BioGrip Micro primer. Otherwise Masonry Flat can be applied directly to any ROMABIO mineral paint product.

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

1ST & 2ND COATS - WHITE & TRANSPARENT BASES: Apply two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS. When painting on wood it is suggested to adjust dilutions with water as necessary to achieve maximum effect for smoothness and coverage desired. Typical dilutions may be up or down by 5% as a rule.

SPECIALTY FINISHES ON WOOD

INTERIOR / EXTERIOR: Masonry Flat can be directly applied onto some wood surfaces without the need for BioGrip Micro primer when being used as a wood stain or as a decorative finish. These types of applications usually allow for larger dilutions cycles with water, based on type of finish desired. When using Masonry Flat as a standard finish for exterior or interior wood finishes, it is required to use BioGrip Micro primer prior to application of 1st & 2nd coat, excluding CEDAR & CYPRESS.

CEDAR & CYPRESS

INTERIOR / EXTERIOR: Masonry Flat can be used as an opaque wood stain for unpainted cedar and cypress boards. Apply Masonry Flat directly onto wood surfaces diluting 30 – 40% with water, or 4.5 – 6.0 liters per one (1) 15 liter bucket, diluted as needed to permit absorption into the wood fibers. Allow 1st coat application to dry to the touch, and then apply a 2nd coat as the final application. Masonry Flat can be applied by brush, roller, or sprayer.

Follow instruction guidelines for UNPAINTED WOOD or PAINTED WOOD.

POST & BEAM

INTERIOR / EXTERIOR: Masonry Flat is also an excellent flat paint finish for under eaves trim, post and beam construction, and be applied to almost any type of wood.

Follow instruction guidelines for UNPAINTED WOOD or PAINTED WOOD.



SPECIALTY HARDWOODS

INTERIOR: Masonry Flat can be used on specialty hardwoods as decorative finish. Apply Masonry Flat directly onto wood surfaces diluting 30 – 100% with water, or 4.5 – 15 liters per one (1) 15 liter bucket, as needed to create decorative effect desired.

For enhanced effects, steel wool Masonry Flat with a 00 – 000 steel wool pad. Working in a straight pattern in the direction of the wood grain. This will burnish the paint finish to a soft sheen, creating chromatic variances and highlighted wood grain patterns.

INTERIOR WOOD TRIMS

Masonry Flat can also be used as an interior trim paint as a flat finish, creating an old world traditional finish. Masonry Flat is not an oil proof, washable finish, and can be damaged by foods, greases, body oils, color crayons, or washable colored markers. Oils or greases may be removed using a mild detergent, lightly scrubbing with a rag or sponge, and dry with a clean rag or paper towel. Some effect in sheen may occur.

Follow instruction guidelines for UNPAINTED WOOD or PAINTED WOOD.

VARNISH / WAX OPTIONS: To seal surfaces for Masonry Flat to prohibit cosmetic damages from oils, and for Best Use applications use the following instructions.

VARNISH: For sealing purposes apply (1) one coat LowCer Varnish Matte or Satin diluted at 100% with water, or 10 liters per one (1) 10 liter bucket, and follow with 2 coats of LowCer Varnish as per GENERAL APPLICATION INSTRUCTIONS indicated for LowCer Varnish Matte or Satin.

WAX: As an alternative, after initial application of LowCer Varnish diluted at 100%, apply EcoCera Soft Wax for a traditional wax surface, applying 2 coats undiluted, wet on wet with a rag and allow to dry for 4 – 8 hours. EcoCera Wax can be buffed with a soft cloth to provide a polished wax finish.

Applications with EcoCera Soft Wax directly onto Masonry Flat finishes is possible but color tones may darken by as much as 10 -20% when bypassing the 1st coat sealer application of LowCer Varnish. LowCera Soft Wax is a (non-solvent) water based liquid wax application.

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.

PRIMER COAT – WHITE & TRANSPARENT BASES: Apply BioGrip Micro primer, tinted if necessary* diluted with 30% water or 4.5 liters per one (1) 15 liter bucket and allow to dry for at least 8 – 12 hours.

1ST & 2ND COATS – WHITE & TRANSPARENT BASES: Apply one (1) or two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS.

NOTE: Best performance and durability is achieved when applying BioGrip Micro primer and Masonry Flat on new wood. No guarantees can be provided for exterior applications when applying onto pre-painted acrylic surfaces. Exterior paint applications on previously painted wood is only as effective as the underlying paint coat is adhered to the wood surface.

When painting on wood it is suggested to adjust dilutions with water as necessary to achieve maximum effect for smoothness and coverage desired. Typical dilutions may be up or down by 5% as a rule.

NEW DRYWALL

PRIMER COAT: It is recommended to use BioGrip Micro or EcoDomus Matte, tinted if necessary* as a primer before application. Both are excellent primers and consolidators for new grey-board, blue-board, and green-board drywalls.

For unprimed or new drywall, apply one (1) coat of BioGrip Micro primer, tinted if necessary*, diluted with 30% water, or 4.5 liters of water per one (1) 15-liter bucket and allow to dry 8 – 12 hours. Use a brush, roller or an airless paint sprayer, removing all filters and changing the spray tip to (titanium) for fine aggregate.

Or apply one (1) coat of BioDomus SuperFlat EcoDomus Matte as the primer, diluting with water 30%, or 4.5 liters of water per one (1) 15 liter bucket and

allow to dry for 8 hours. SuperFlat or Matte can be brushed, rolled or sprayed onto all types of new drywall and any type of unpainted trim.

1ST & 2ND COATS – WHITE & TRANSPARENT BASES: Apply Masonry Flat as indicated in GENERAL APPLICATION INSTRUCTIONS.

PAINTED DRYWALL/REPAINTS

PRIMER COAT: For walls that have been pre-painted with flat, matte, eggshell, semi-gloss or high gloss paints, oil or acrylic, BioGrip Micro primer should be applied prior to application. Lightly sand painted sheen surfaces before proceeding with BioGrip Micro primer. Apply one (1) coat of tinted BioGrip Micro primer if required*, diluted 30% with water, or 4.5 liters per one (1) 15 liter bucket and allow to dry for at least 8 – 12 hours. With oil paint over-sprays on new or painted drywall, attention must be made to verify that oil products do not bleed through mineral paint primers or paints.

1ST & 2ND COATS – WHITE & TRANSPARENT BASES: Apply one (1) or two (2) coats of Masonry Flat according to GENERAL APPLICATION INSTRUCTIONS.

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 10°C / 50°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 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 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. 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 cannot 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 user must verify the color matching before starting work. No refunds or exchanges will be provided for tinted products after they have been consumed or applied.**

MANUFACTURER

ROMABIO, Via Pistoiese 323, 50010 San Angelo a Lecore, FI, Italy

***NOTE:** BioGrip Micro or Medium primer generally should not be tinted when avoidable. Maximum tint colorant allowed is 3%, 46 g/l or 1.6 oz/l. Color ranges from Off White (OW), Color Oxides (CO) & Grey Oxides (GO) from the ROMABIO paint deck can be tinted up to maximum 50% of the color formulation. Dark Oxides (DO) can only be tinted 12 - 25% of the color formulation. Extra Dark Oxides (XDO) formulations cannot be dosed under any circumstance.

To paint dark Transparent Base colors over a white base, it is recommended to tint the primer coat with color CO-126 (medium grey), and apply to the surface prior to application of a Transparent Base, so to achieve maximum coverage thereafter with 2 coats.

