

# BIODOMUS® SUPERFLAT | TECHNICAL DATA SHEET

INTERIOR PAINT | PURE POTASSIUM SILICATE PAINT (DIN 18 363)
ORGANIC PAINT PRODUCT FOR HEALTHY INTERIORS

#### **FIELDS OF APPLICATION**

BioDomus SuperFlat is a primer and finish paint for interior wall surfaces, providing consolidation for new drywall without the use of an additional primer. A non acrylic paint product providing excellent adhesion, with high resistance to mold growth without the need for biocide additives.

BioDomus SuperFlat, as with all the Domus line 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.

BioDomus SuperFlat can be used as a decorative finish when applied to virgin applications on drywall or woods, mineral paints like BioGrip Micro, BioGrip Medium, and BioDomus II. BioDomus SuperFlat paint is a very versatile and dynamic paint that permits hundreds of options for variations, adjusting dilutions and application techniques to create professional and historical artistic finishes.

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.

#### **PRODUCT FEATURES**

A 95% natural mineral product, completely permeable, breathable, absorbs  ${\rm CO_2}$ , provides good anchoring power with mineral surfaces by petrification (water glass); and will bond to the mineral content on the substrate. 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. Heavy cleaning may change the sheen of the paint. Paint touch-ups are simple and do not require whole wall repaints.

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.

BioDomus SuperFlat is specifically designed to be tinted with natural earth oxide tints and 0% VOC colorants to increase aesthetic color values with minimal environmental impact and toxin-free indoor air quality. BioDomus SuperFlat 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 5% organic stabilizers and other proprietary chemicals.

#### **SHEEN FINISH**

Flat

#### **COLOR**

White Base. Color tint up to 5% max with approved tints for white base. Custom color tint matching available.

# **TESTING & CERTIFICATIONS**

BioDomus SuperFlat 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**

BioDomus SuperFlat contributes to credits for these categories for LEED v4:

- 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 (not including tint pigments)	2004/42/CE Max. Value 30g/I (2010) DIN EN ISO 11890-1/2	0.0	g/l
Theory of di Kunzel (SD • W)	DIN 18550	Sd*w <0,1 Sd < 2 w < 0,5	kg/(m*h0,5) m kg/(m2*h0,5)
Damp Abrasion Resistance (Gardner Cycles)	UNI 10795 - ISO 11998	< 5000	Class 2 Resistant to damp cleaning
Surface Retention Smog/Dirt	-	Low	> 9 - ≤ 15
Drying Time at Low Temperature	UNI 10793	> 5	°C
Application on Damp Cement NNHL 3.5/5.0	UNI EN 13300	Permissable	-
Potassium Silicate Opaque Paint for Interior Use	DIN 18363 Paragraph 2.4.1	Yes	-
Application Quality	UNI 10794	Very Good	< 96 - < 98
Interior Paint with Mineral Finish	DIN 18363	Yes	-
Hide and Cover Capacity	ISO 6504-3 M.U. 1631 (RC 100 μm Humid)	Class 1 Excellent	-
pH Value	DIN 19266	10.98	-
Natural Resistance to Mold	UNI 10795 (UNI 9805)	-	-
Alkaline Resistance	UNI 10795	Excellent	-
Specific Gravity (23°C)	EN ISO 2811-2	1.60	g/ml
Granulation	EN 21524	0.01	mm
Gloss Level	UNI EN ISO 2813	< 6	Flat
Reaction to Fire	EN 13501-1:2002	A 1	Incombustible
Toxicity	CEE 88/379	Non-Toxic	-
EcoLabel	Dec. 93/13/CE - Dir. 67/548/CEE)	3 - 4 - 7 - 8	Criteria EcoLabel
EcoLabel	APEO FREE Exempt of Buty (DBP) Dioctyl Phthalate (DO 2-Ethylhexyl Phthalate (DO	OP)	Criteria EcoLabel
APEO (Alkyl Phenol Ethoxylates)	-	0%	_
PEG (Polyethylene Glycol)	-	0%	-
PG (Propylene Glycol)	-	0%	-
Formaldehyde	-	0%	-
Biocides	-	0%	-

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





# 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.)

#### WHITE BASE

#### **BRUSH AND ROLLER APPLICATIONS**

1ST COAT / PRIMER COAT / INTERIOR: BioDomus SuperFlat is a two (2) coat application without the need for an additional primer when applied on new, unpainted drywall, plaster; and for pre-painted flat or matte surfaces. For unpainted surfaces, apply one (1) coat of tinted BioDomus SuperFlat as 1st coat/ primer diluted with 25 - 30% water, or 3.75 - 4.5 liters of water per one (1) 15 liter bucket and allow to dry for 4 – 8 hours. For pre-painted flat or matte surfaces, apply one (1) coat of tinted BioDomus SuperFlat as 1st coat/primer diluted with 20 - 25% water, or 3 - 3.75 liters of water per one (1) 15 liter bucket.

Do not attempt to cover new walls or surfaces with one (1)-coat of paint. The 1st coat will not provide perfect coverage. Apply enough paint to fully cover the walls or trim. New drywall will continue to absorb BioDomus SuperFlat if the 1st coat is not allowed to dry properly. Improper application methods can result in reduction of paint coverage by as much as 80 – 90%.

For surfaces pre-painted with matte, eggshell, satin, or gloss surfaces, BioGrip Micro is a required primer (see details below in PAINTED DRYWALL-APPLICA-TION CYCLES ON DIFFERENT TYPES OF SURFACE).

2ND COAT: Dilute BioDomus SuperFlat with 20 - 25% water or 3.0 - 3.75 liters of water per 15 liters of paint. Apply paint in an even and constant pattern, so that a perfect coverage is achieved. The 2nd coat is the most important for achieving your final desired finish. For repaints over dark colors, apply 2nd coat application with 20% water or 3.0 liters of water per one (1) 15 liter bucket of BioDomus SuperFlat.

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.

#### **PAINT SPRAYERS**

Follow instructions above for BRUSH AND ROLLER APPLICATIONS for dilution rates for 1ST COAT/PRIMER COAT/INTERIOR. Make sure to apply enough paint to fully cover the surfaces to be painted. Allow 1st coat to dry for at least 1 - 2 hours before applying 2nd coat. Application of final coat using a sprayer without the use of back rolling may provide the most attractive finish, but it can make repaints or repairs in the future difficult because sprayers generally cannot be used in inhabited spaces. Thus, back rolling on all walls is recommended for future repaints. 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.

SPRAY TIP USAGE: BioDomus SuperFlat 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. Always use new spray tips for starting a paint job for best results. This will also conserve the amount of paint necessary to complete the job.

GRAIN SIZE: 0.01 mm

#### MIXING PAINT & WATER

ROMABIO Domus line 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, 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 more perfect finish. It is recommended to use professional high quality synthetic brushes and for rollers to use professional quality with a mohair nap or pile of 6 - 8 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 a drying time between coats of at least 1 - 2 hours. With lower temperature and humidity more time may be needed. Allow at least 8 - 12 hours drying time before attempting to apply additional products or other finishes. Allow at least 2 weeks curing from time of application before attempting to clean soiled surfaces. Complete curing occurs within 14 days, and with silicification, hardness will increase to approximate full strength in three (3)-months.

#### **CONSUMPTION / COVERAGE**

Approximately 2,250 ft $^2$  / 209 mt $^2$  – 2,550 ft $^2$  / 237 mt $^2$  per 15 liters 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.

#### **PACKAGING**

Plastic buckets of 1, 2.5, 5, 12.5 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 18363, Part C, paragraph 3.

#### **NEW DRYWALL**

1ST COAT / PRIMER COAT: BioDomus SuperFlat is an excellent primer and consolidator for new grey-board, blue-board, and green-board drywalls. BioDomus SuperFlat easily permits drywall joint compound repairs and backsanding without peeling or damaging painted surface. BioDomus SuperFlat will easily sand with the same consistency of most joint compounds. Apply one (1) coat of BioDomus SuperFlat as indicated in GENERAL APPLICATION INSTRUCTIONS.

2ND COAT: BioDomus SuperFlat when applied on prepared drywall surfaces will satisfactory cover small joint compound repairs without the need to back prime. Larger repair areas should be back primed before applying final coat. Apply final coat of BioDomus SuperFlat as indicated in GENERAL APPLICATION INSTRUCTIONS.

PLASTER APPLICATIONS ON NEW DRYWALL: BioDomus SuperFlat or EcoDomus Matte must be applied to all types of blue or green-boards prior to the application of BioGrip Micro or Medium. For applications on grey-board, EcoForte Consolidator, BioDomus SuperFlat or EcoDomus Matte can be used prior to application of BioGrip primers.

#### **PAINTED DRYWALL**

1ST COAT / PRIMER COAT: For walls that have been pre-painted with matte, eggshell, semi-gloss or gloss paints, oil or latex, BioGrip Micro primer should be applied prior to application of BioDomus SuperFlat. Apply one (1) coat of BioGrip Micro primer diluted 30% with water, or 4.5 liters per one (1) 15 liter bucket and allow to dry for 8 - 12 hours prior to application of BioDomus SuperFlat. BioGrip primers may be tinted from light to medium colors.

1ST COAT / REPAINTS: For walls that have been pre-painted with a flat finish, BioDomus SuperFlat might be able to be applied as a one (1) coat application, if the condition of the existing wall surfaces is ideal for a one (1) coat application, and the painted base coat is not a bright or very dark color. If it is a bright or very dark color, or the wall surface is textured, then this surface type will usually require a two (2) coat application of BioDomus SuperFlat.

For a one (1) coat repaint, dilute BioDomus SuperFlat 15% with water, or 2.25 liters of water per one (1) 15 liter bucket. Application will need to be applied in a deliberate and careful manner, avoiding application with excessive speed and maintaining the proper amount of paint on the brush or roller to achieve the desired coverage. Use a mohair roller with a 6 - 8 mm (1/4 - 3/8 inch) pile or nap to achieve the best quality coverage. Prior to committing a one (1) coat paint





application, test a small surface area and allow to dry to determine the coverage results of a one (1) coat application. If a perfect coverage is not achieved, increase dilution by 5% (or 20% total dilution) and proceed with application as only a 1st

2ND COAT: When required apply BioDomus SuperFlat as indicated in GENERAL APPLICATION INSTRUCTIONS for walls primed with BioGrip Micro primer or for

#### **UNPAINTED WOOD**

INTERIOR: 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.

1ST COAT / PRIMER COAT: Apply one (1) coat of 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. Proceed with application of a 2nd coat.

BioDomus SuperFlat may be applied to some types of wood products without using a primer. This application is suggested only for decorative finishes on wood, and typical dilution of 50 - 100% with water is required. Apply with a paint brush diluted with product onto the surface and either wipe down immediately with a damp rag, or allow to fully dry and backsand with either a scotchbrite pad or steel wool. Do not attempt this type of application without first testing on a sample wood board to determine the effect desired. Always test adherence to any type of wood product prior to full commitment of finish coats.

BioDomus SuperFlat is not recommended for traditional trim finishes such as door and window trim, rather as a designer paint finish for areas that do not require cleaning or maintenance. Do not use BioDomus SuperFlat as a primer when applying eggshell or satin paints.

2ND COAT: Apply one (1) - two (2) coats of BioDomus SuperFlat as indicated in GENERAL APPLICATION INSTRUCTIONS.

#### PAINTED WOOD

INTERIOR: 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: For wood that has been pre-painted with matte, eggshell, satin, 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 BioGrip Micro 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 COAT: Apply one (1) - two (2) coats of BioDomus SuperFlat as indicated in GENERAL APPLICATION INSTRUCTIONS. BioDomus SuperFlat is not recommended for traditional trim finishes such as door and window trim, rather as a decorative paint finish for areas that do not require cleaning or maintenance.

All caulked areas should be primed with either BioGrip Micro or EcoDomus Matte before applying BioDomus SuperFlat. Always test product for adhesion verification prior to painting any surface. Silicone caulks cannot be painted with any type of paint.

#### **HISTORICAL DECORATIVE EFFECTS / FINISHES**

INTERIOR: BioDomus SuperFlat can be used for hundreds of decorative finishes both for interior walls as well as unpainted wood surfaces. Decorative effects are generally achieved by various degrees of dilution with water, applying onto other Domus Mineral Paints & Primers, or directly onto wood surfaces with or without the use of BioGrip Primers. These types of decorative finishes have been in use for hundreds of years, and are typical of the historical finishes frequently observed since Medieval and Renaissance periods.

WALL SURFACES: BioDomus SuperFlat can be diluted with water on average between 50% - 100% when applying on ROMABIO paint and plaster products as a decorative finish. For example; BioDomus SuperFlat diluted can be applied onto BioGrip Micro or Medium primers, BioDomus I & II, as well as BioDomus SuperFlat as a wash or glaze. It can also be applied onto all BioCements as well as BioMarmorinos. Applications are usually performed with brush techniques, that can include sponges and rags. For more pronounced decorative finishes, with greater chromatic variability, higher luminance, deeper color resonance, or to achieve effects with higher dilutions of water above 50% it is suggested to add Potassium Silicate Concentrate diluted 100% with water. This potassium silicate dilution is then mixed with 1/2 the requirement of water used in the total dilution required above of 100% for BioDomus SuperFlat. See formula below.

**DILUTION FORMULA GUIDELINES:** Sample Dilution; 1 bucket, 15 liters of BioDomus SuperFlat, needs a dilution of 100% water (or 15 liters of water added to one (1) bucket of 15 liters BioDomus SuperFlat), to create a desired decorative effect applying with a large brush in a crisscross pattern onto a tinted base of BioGrip Micro or Medium. To increase and guarantee adherence above 50% dilution with water, and augment chromatic variability, luminance and color resonance in terms of decorative effects, add 7.5 liters of clean water, plus 7.5 liters of pre-diluted Potassium Silicate Concentrate (of which 3.75 liters is water, and the other 3.75 liters is Potassium Silicate). Or in simplification for this dilution formula; 15 liters of BioDomus SuperFlat, 13 liters of clean water, and 2 liters of Pure Potassium Silicate Concentrate.

Using this dilution method with the addition of Potassium Silicate Concentrate will allow BioDomus SuperFlat to be diluted up to 100+% for use as a decorative application. Generally, for dilutions with water from 25% - 50% there is no need for the addition of Potassium Silicate Concentrate. Adding Potassium Silicate Concentrate serves only to increase the chromatic variability when applying decorative finishes. For dilutions above 50% with water, it is recommended to always add Pure Potassium Silicate Concentrate to the dilution.

WOOD SURFACES: Unlike EcoDomus Matte or BioDomus I & II, which can be applied to almost any type of wood without out a primer when using as a decorative finish, BioDomus SuperFlat should not be applied onto wood without a primer coat of EcoDomus Matte, BioDomus I & II, or BioGrip Micro or Medium. In this case BioDomus SuperFlat would be used as a secondary finish, which at higher dilutions of 100%+ can be easily steelwooled or scotchbrited to remove excess material to allow the underneath coat to stand out more predominantly or to fill in the open grains of hardwoods. Applying these dilutions types onto wood will allow for a multitude of effects and also permits the following application of varied layers of paint products, manipulated to create beautiful effects, i.e. such as EcoCalce S & Glaze, TerraMare Velatura and most can be sealed with LowCer Varnish or LowCera SoftWax. BioDomus SuperFlat after application can be wiped with a rag or sponge, and/or lightly sanded, steelwooled, or scotchbrited. Effects can be varied and require testing before a final decorative finish is acquired. Follow dilution mixing instructions above under DILUTION FORMULA GUIDELINES when diluting BioDomus SuperFlat.

### **SLAKED LIME PLASTERS & STUCCOS**

**INTERIOR:** Painting guidelines for applying mineral paints over slaked lime paints & plasters, or NHL cements. Except for Lime Paints, BioDomus SuperFlat can be applied directly onto any ROMABIO plasters and cements.

**PRE-PRIMER COAT:** For Lime Paints such as BioCalce Classico, BioCalce A, it is required to apply one (1) coat of EcoForte Consolidator with brush, roller or sprayer diluted 100% with water (1:1), 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 & 2ND COATS: Apply one (1) - two (2) coats of BioDomus SuperFlat according to GENERAL APPLICATION INSTRUCTIONS.

#### **CEMENTITIOUS BOARD | MGO**

INTERIOR: 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 cementitious and MGO boards apply one (1) coat of BioGrip Micro primer, tinted if necessary\*, with brush, roller or approved sprayer for fine aggregate, diluted 30%, tinted if desired, and allow to dry for 8 - 12 hours.

1ST & 2ND COATS: Apply one (1) - two (2) coats of BioDomus SuperFlat according to GENERAL APPLICATION INSTRUCTIONS.





#### **REINFORCED CEMENT**

INTERIOR: 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 for exterior paint applications on 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 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) - two (2) coats of BioDomus SuperFlat according to GENERAL APPLICATION INSTRUCTIONS.

#### **NEW CEMENT STUCCOS**

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

PRE-PRIMER COAT: Apply one (1) coat of Potassium Silicate Concentrate or EcoForte Consolidator with brush, roller or sprayer diluted 100% with water (1:1). 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 one (1) coat of BioGrip Micro primer, tinted if necessary\*, 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.

1ST & 2ND COATS: Apply one (1) - two (2) coats of BioDomus SuperFlat according to GENERAL APPLICATION INSTRUCTIONS. Application for Interior Uses Only!

### **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

#### **DECAYING OR CRUMBLING STUCCOS OR POWDERY SURFACES**

INTERIOR: 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 COATS: 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 older, non-acrylic painted stuccos or painted stuccos with a flat, absorbent acrylic paint, 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, tinted if necessary\*, 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.

1ST & 2ND COATS: Apply one (1) - two (2) coats of BioDomus SuperFlat according to GENERAL APPLICATION INSTRUCTIONS.

#### **COATINGS WITH EFFLORESCENCE**

INTERIOR: Cement surfaces showing efflorescence should be aggressively cleaned with a high pressure washer, 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.

PRIMER COAT: Apply Potassium Silicate Concentrate, diluted 100% with water (1:1) on all damaged surfaces and allow to dry for at least 8 – 12 hours. Apply one (1) coat of EcoForte Consolidator as a pre-primer with brush, roller or sprayer diluted 100% with water (1:1), or 10 liters of water per one (1) 10 liter bucket, and allow to dry for at least 8 - 12 hours. Apply one (1) coat of BioGrip Micro primer, tinted if necessary\*, 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.

1ST & 2ND COATS: Apply one (1) – two (2) coats of BioDomus SuperFlat according to GENERAL APPLICATION INSTRUCTIONS.

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

#### **AGED CEMENT STUCCOS**

INTERIOR: 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, tinted if necessary\*, 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.

1ST & 2ND COATS: Apply one (1) - two (2) coats of BioDomus SuperFlat according to GENERAL APPLICATION INSTRUCTIONS.

## **STUCCO REPAIRS**

See AGED CEMENT STUCCOS above.

#### **ADOBE BRICK**

INTERIOR: 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 EcoDomus Matte.

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 preprimer, 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; 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 one (1) coat of BioGrip Micro primer, tinted if necessary\*, 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.



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1ST & 2ND COATS: Apply one (1) - two (2) coats of BioDomus SuperFlat according to GENERAL APPLICATION INSTRUCTIONS.

#### **AUTOCLAVED AERATED CONCRETE**

INTERIOR Autoclaved aerated concrete cannot be painted, plastered or stuccoed directly onto non-consolidated and unprimed surfaces. Using ROMABIO Specialty Products and Primers 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 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 COAT:** Apply one (1) coat of BioGrip Micro primer, tinted if necessary\*, 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.

1ST & 2ND COATS: Apply one (1) - two (2) coats of BioDomus SuperFlat according to GENERAL APPLICATION INSTRUCTIONS.

#### **BRICK**

ABSORBENT BRICK/INTERIOR: For absorbent, unpainted, integral brick, pre-primers or primers are not required in the application of BioDomus SuperFlat. Apply BioDomus SuperFlat directly to brick facade following instructions as indicated in GENERAL APPLICATION INSTRUCTIONS.

PRE-PRIMER COATS: None

PRIMER COAT: None

1ST & 2ND COATS: Apply two (2) coats of BioDomus SuperFlat according to GENERAL APPLICATION INSTRUCTIONS.

Testing for Absorption: Spray brick surface 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 EcoDomus Matte.

NON ABSORBENT OR EXTRUDED BRICK / INTERIOR: 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 Micro 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.

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% 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: Apply one (1) - two (2) coats of BioDomus SuperFlat according to GENERAL APPLICATION INSTRUCTIONS.

#### STORAGE

Store in a cool, dry place, protected from frost. Close the open containers with care. Store liquids only in plastic. Transfer unused paint into smaller containers to create a full bucket, reducing exposure to air. For best results turn bucket upside down to prevent air leaking into container.

#### **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. 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. 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  $% \left\{ \mathbf{r}^{\prime}\right\} =\left\{ \mathbf{r}^{\prime}\right\} =\left\{$ 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

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 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

\*NOTE: For very bright colors not selected from the ROMABIO color palette, it is recommended that the primer is tinted 25 - 75% with the final formulation of the BioDomus SuperFlat color to achieve maximum coverage.

