**FIELDS OF APPLICATION**

BioCement GF 1.0 is a historical slaked lime plaster, ideal for interior and exterior surfaces, applied on masonry or drywall surfaces to provide a classical stucco finish with slight chromatic color variability. BioCement GF 1.0 is made in the ancient tradition, with the capabilities to carbonize to masonry surfaces providing decades of durability, withstanding most climatic conditions and not capitulate to environmental stress. BioCement GF 1.0 has been formulated to form a slow set to permit application on large surfaces without "freezing" or setting prematurely. BioCement GF 1.0 can be applied for exterior finishes without the risk of damage from freeze/thaw, water, or damage from UV. BioCement GF 1.0 finish provides a flat, opaque finish with sublime shades of color, or with a rough finish using a sponge trowel. A non-acrylic product that provides superior adhesion than typical gypsum lime plasters, with custom color matching available for most medium dark to light colors. A 97% natural mineral product, completely permeable, breathable, absorbs CO₂, provides good anchoring power with mineral surfaces by carbonization. Provides protection against the formation of bacteria that forms mold. Product is considered a natural organic product, ideal for use in homes, schools, and hospitals and work sensitive areas.

BioCement GF 1.0 is specifically designed to be tinted with natural earth oxide tints and 0% VOC colorants to increase esthetic color values with minimal environmental impact and toxin-free indoor air quality. BioCement GF 1.0 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**

Slaked lime coating according to UNI 8681 with 3% organic stabilizers. No acrylic binders used.

**SHEEN FINISH**

Matte/Flat

**COLOR**

White Base. Color tint up to 8% max with approved tints. Custom color tint matching is available.

---

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>INT. STANDARD</th>
<th>VALUE</th>
<th>UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>2004/42/CE, Max. value 40 g/l (2010)</td>
<td>5.20</td>
<td>g/l</td>
</tr>
<tr>
<td>Water Absorption Coefficient</td>
<td>EN 1062-3 – DIN 52617</td>
<td>0.15</td>
<td>kg/(m²•h)</td>
</tr>
<tr>
<td>Vapor Permeability</td>
<td>DIN 53122 DIN 52615– DIN 18550 – EN ISO 7783-2</td>
<td>0.6 Sₚ</td>
<td>g/m² = 0.05 μ</td>
</tr>
<tr>
<td>pH Value</td>
<td>DIN 19266</td>
<td>13</td>
<td>–</td>
</tr>
<tr>
<td>Natural Resistance to Mold</td>
<td>UNI 9805 – UNI 10795</td>
<td>Yes</td>
<td>–</td>
</tr>
<tr>
<td>Mineral Finish</td>
<td>DIN 55945</td>
<td>&lt; 3.5%</td>
<td>Thickening Agent</td>
</tr>
<tr>
<td>Specific Gravity (23°C)</td>
<td>EN ISO 2811-2</td>
<td>1.8</td>
<td>g/ml</td>
</tr>
<tr>
<td>Granulation</td>
<td>DIN 19643</td>
<td>0.8 – 1.0</td>
<td>mm</td>
</tr>
<tr>
<td>Gloss Level</td>
<td>UNI EN ISO 2813</td>
<td>&lt; 5</td>
<td>Very Opaque</td>
</tr>
<tr>
<td>Natural Paint Lime Base NHL 3.5</td>
<td>DIN 18363 – UNI EN 459</td>
<td>10</td>
<td>%</td>
</tr>
<tr>
<td>Reaction to Fire</td>
<td>EN 13501-1:2002</td>
<td>A1</td>
<td>Incombustible</td>
</tr>
<tr>
<td>Toxicity</td>
<td>CEE 88/379</td>
<td>Non-Toxic</td>
<td>–</td>
</tr>
<tr>
<td>APEO (Alkyl Phenol Ethoxylates)</td>
<td>–</td>
<td>0%</td>
<td>–</td>
</tr>
<tr>
<td>PEG (Polyethylene Glycol)</td>
<td>–</td>
<td>0%</td>
<td>–</td>
</tr>
<tr>
<td>PG (Propylene Glycol)</td>
<td>–</td>
<td>0%</td>
<td>–</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>–</td>
<td>0%</td>
<td>–</td>
</tr>
<tr>
<td>Biocides</td>
<td>–</td>
<td>0%</td>
<td>–</td>
</tr>
</tbody>
</table>

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

**GENERAL APPLICATION INSTRUCTIONS**

**TROWEL APPLICATIONS**

**PRE-PRIMER / INTERIOR / EXTERIOR:** It is recommended to pre-prime grey board drywall and any type of unpainted Portland cement or cementitious material with EcoForte Consolidator diluted 100% with water, or 10 liters of water to one (1) 10 liter bucket, prior to the application BioGrip Medium (see details below in APPLICATION CYCLES ON DIFFERENT TYPES OF SURFACES). Allow to dry for 8 – 12 hours. For exterior applications on any type of Portland cement surfaces it is highly suggested to apply Potassium Silicate Concentrate, diluted 100% with water, or (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.

**PRIMER COAT / INTERIOR / EXTERIOR:** Dilute BioGrip Medium primer with 30% water, or 4.5 liters of water per one (1) 15-liter bucket. On porous surfaces apply product abundantly so as to penetrate sufficiently to consolidate and bond correctly. On slightly porous surfaces apply product evenly as needed to cover surface completely, being careful not to leave voids or unpainted surfaces. Diluted material must be stirred constantly to permit suspension of granules and not permit settling at bottom of paint buckets during application. Allow to dry for at least 8 – 12 hours before applying any type of finish paint or plaster product.
**1ST COAT:** Apply BioCement GF 1.0 with a thin layer of product and cover entire surface and then remove excess by tilting trowel to approximately 30°. Once excess has been removed, smooth surface using a 30° angle, compressing plaster using the same angle, in arched trowel motions, with a forward and backward direction, to create a smooth surface as is possible and allow product to slightly set. Do not overwork surface with a trowel after the initial covering of the surface, but allow the moisture to be absorbed into the base, so as product appears to have slightly set. Apply a final pass with steel or plastic trowel to create a smooth finish. 1st coat can be applied with a skipped trowel finish as an option when following the 2nd coat with BioMarmorinos or Grassello Bio’s, depending on applicators methodology. 1st coat of BioCement GF 1.0 must be allowed to dry for at least 12 – 24 hours, before applying a 2nd coat of any type of slaked lime plaster.

**2ND COAT:** Apply a 2nd coat of BioCement GF, fully covering 1st coat base of BioCement GF, using the method as indicated for the 1ST COAT. A 2nd coat application is only required when BioCement GF is used as the final finish coat. In some cases on very rough or uneven surfaces a 3rd coat may be required to properly prepare base coat for the final finishes.

For subsequent applications of other types of ROMABIO plasters, it is always suggested to apply BioCement GF 1.0 or BioMarmorino Flat as the base coat before proceeding to apply 2nd and 3rd finish coats of BioMarmorinos or BioGrassellos.

**NOTE / EXTERIOR:** In extremely hot and low humidity environments, it may be required to wet the substrate surfaces both for the 1st coat of BioCement GF, and prior to proceeding to apply a 2nd coat BioCement GF, or any other ROMABIO type of Marmorino or Grassello plaster. This process of wetting the substrate must be continued during the application phase so that the 1st and subsequent coats do not pre-maturely dry during application cycles. Always avoid to apply any type of slaked lime plaster in direct sun. Pre-wet/substrate water or finish coats only applies for totally cured cements or plasters.

**SPONGE FINISH:** Allow product to be somewhat visibly dry following application for 2nd coat, using a wet sponge trowel, move sponge trowel in a circular motion, moving clockwise and then counter-clockwise to permit the raising of the aggregate to desired texture and provide an even surface. Continue this operation, wetting sponge as is necessary to create a consistent finish. If 2nd coat is drying overly fast, dampen BioCement GF slightly with water using a large masonry brush, throwing water by shaking the brush with wrist action to dampen area prior to proceeding with sponge trowel motions. This action must be done prior to the 2nd coat setting up or when it is in the phase of carbonization.

**BURNISHED FINISH:** Follow instructions for the 2nd coat, and begin to compress setting coat of BioCement GF, pushing gently while troweling with the weight of the trowel to create a perfectly smooth and flat surface. Allow moisture to reduce again, and continue with arched trowel motions, in a forward and backward direction, to compress surface to achieve a uniform, even, and smooth surface. Do not overwork surface with trowel motions, permitting sufficient time between compressions with a trowel for the plaster to dry naturally. Maintain a clean trowel at all times during burnishing. At the last phase of drying and finishing, using a 15° – 20° angle on the finish trowel, burnish the BioCement GF surface to achieve the desired sheen and decorative effect. Typical time lapse for this product to set between initial application and final burnishing is 1 – 3 hours when applied to a BioCement GF base coat or natural stucco NHL base. Applying in extremely hot and dry climates will require careful planning and application by an experienced applicator.

**SKIPPED TROWEL:** Apply the 2nd coat, completely covering 1st coat, troweling irregular amounts of product, in a sporadic fashion, onto 1st coat base. Application should be made in a 360° pattern, always random, observing periodically from a slight distance to adjust hand movement so that irregular surface finish has a rhythm and harmonious finish. For an additional effect, skipped trowel effect can be slightly flattened using a 0° – 5° angle with the finish trowel and slightly pushing down or flattening the raised surfaces. Continuing to pass over flattened surfaces will allow the high spots to be slightly more polished.

**BRUSH APPLICATIONS:** In some instances for very specific applications techniques, using a rough finished base of BioCement GF or GM, either a skipped trowel or sponge finish, BioCement GF can be painted onto the troweled surface to provide additional texture and depth. BioCement GF 1.0 can be slightly diluted with water and using a paint brush, applying in a crisscross pattern, can create an unusual, non-polished, dura-

**GRAIN SIZE:** 1.0 mm

**MIXING**

Prior to utilizing ready-to-use masonry products from new buckets, it is highly recommended to mix product with a drill and masonry paddle to prepare for easier removal from the plastic containers and ease of application. Mixing masonry products with a drill properly mixes water content and heats up the material so it renders it more pliable.

**TOOLS**

Apply with a stainless steel or plastic trowel designed specifically for stucco plaster finishes.

**TOOL CLEANING**

Trowels, hawks, brushes, rags, or sponges should be cleaned immediately after use with water thoroughly.

**DRYING TIME**

Allow a drying time for the 1st coat of BioCement GF 1.0 for at least 12 – 24 hours, and with successive coats allow at least 1 – 4 hours between coats as needed. Typical applications are two (2)-coats.

Do not apply BioCement GF 1.0 on the exterior if there is a risk of thunderstorms or showers during the 12 hour drying time needed for product to dry and carbonize correctly. If the risk of rain could occur, and the surface is essentially visibly dry and hard to the touch, wet surface quickly and evenly with a small amount of water, starting from the bottom of the wall moving upward, without using force or sharp water directional spraying.

This process will help protect against flashing or water damages to the BioCement GF 1.0 during the initial carbonization period in the case of rain and subsequent rapid cooling on semi-dried BioMarmorino.

If plaster is still wet, and has not dried, then do not attempt to wet wall with water. For small areas plastic film can be used to try to protect surfaces from damage. For larger areas allow nature to take her course. If on the next day the BioCement GF 1.0 is dry and does not indicate damages from water or has evidence of flashing (overly white hazing, or water drops frozen onto the surface), then proceed with a regular application schedules.

If flashing has occurred then it will be required to apply 1 coat of EcoForte Consolidator to the entire wall (corner to corner section), diluted with water 100%, or 10 liters of water to one (1) 10 liter bucket. Apply with brush, roller or sprayer, and allow to dry for 8 – 12 hours before commencing again with a new coat of BioCement GF 1.0.

It is advised not to apply mineral paints or plasters in direct sun with temperatures over 75°F – 80°F / 20°C – 24°C, using shaded sides of walls for applications. Extremely hot and dry climates may require the masonry base coat to be thoroughly dampened prior to application of 1st coat of plaster, or if significant time has passed between 1st coat of base application and the initiating of the 2nd coat. It is advised to not apply any mineral paints or plasters in temperatures over 88°F / 31°C. Never allow mineral paints or plasters to be stored or placed, with or without lids, directly in the path of the sun. Always keep lids on as is possible during work cycles to prevent the absorption of air, as most mineral products will carbonize in the presence of CO₂.

**CONSUMPTION/COVERAGE**

Approximately 100 ft² / 9 m² – 250 ft² / 23 m² per one (1) coat application, depending on absorption and type of base. Determine exact consumption by performing a test on the surface to be treated. Final finish coats including base coats should total an average millage of thickness when applied on drywall: >3mm / 0.112 inches.
APPLICATION CYCLES ON DIFFERENT TYPES OF SURFACES

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

NEW DRYWALL

Virgin drywall surfaces must be primed or consolidated prior to application of plaster anchor coat and lime plasters. Drywall types are varied and types can affect final results depending on type of drywall.

STANDARD GRAY DRYWALL ½” – ¾” FIRE RATED AND NON FIRE RATED

Drywall finish should be completed to a Level 3 – 4.

1. Apply one (1)-coat of EcoForte Consolidator diluted with water 100%, or 10 liters of water to one (1) 10 liter bucket, and apply to all surfaces with a brush, roller or sprayer. Allow to dry for 8 – 12 hours.

2. Apply one (1)-coat of BioGrip Medium primer diluted with water 30%, or 4.5 liters of water to one (1) 15 liter bucket, and apply to all surfaces with a brush, roller, or an approved sprayer for fine/medium aggregate. Allow to dry for 8 – 12 hours before applying BioGrip Medium.

3. Apply one (1)-coat of BioCement GF 1.0 as a base plaster coat, applying with a steel trowel to desired finish as a base. Allow to dry for at least 12 hours. If BioCement GF 1.0 is the base coat for other ROMABIO plasters, only one (1) coat is required as a base application.

4. Apply a second coat of BioCement GF 1.0 as a finish coat, applying with a steel or plastic trowel to desired finish.

Apply two (2)-coats of BioMarmorino Flat, Satin, Gloss or BioGrassello Traditional or High Gloss as optional plaster finishes using BioCement GF 1.0 as the primary base coat.

BLUE BOARD OR PLASTER BASE DRYWALL ½” – ¾” FIRE RATED AND NON FIRE RATED

Drywall finish should be completed to a Level 3 – 4.

1. Apply one (1)-coat of BioDomus SuperFlat diluted with water 30%, or 4.5 liters of water to one (1) 15 liter bucket. Completely cover all surfaces with one (1) coat. Allow to dry for 8 – 12 hours before applying BioGrip Medium.

2. Apply one (1)-coat of BioGrip Medium primer diluted with water 30%, or 4.5 liters of water to one (1) 15 liter bucket, and apply to all surfaces with a brush, roller, or an approved sprayer for fine/medium aggregate. Allow to dry for 8 – 12 hours.

3. Apply one (1)-coat of BioCement GF 1.0 as a base plaster coat, applying with a steel trowel to desired finish as a base. Allow to dry for 12 hours. If BioCement GF 1.0 is the base coat for other ROMABIO plasters, only one (1) coat is required as a base application.

4. Apply a second coat of BioCement GF 1.0 as a finish coat, applying with a steel or plastic trowel to desired finish.

Apply two (2)-coats of BioMarmorino Flat, Satin, Gloss or BioGrassello Traditional or High Gloss as optional plaster finishes using BioCement GF 1.0 as the primary base coat.

GREEN BOARD DRYWALL ½” – ¾” FIRE RATED AND NON FIRE RATED

Drywall finish should be completed to a Level 3 – 4.

1. Apply one (1)-coat of BioDomus Matte diluted with water 30%, or 4.5 liters of water to one (1) 15 liter bucket. Completely cover all surfaces with one (1) coat. Allow to dry for 8 – 12 hours before applying BioGrip Medium.

2. Apply one (1)-coat of BioGrip Medium primer diluted with water 30%, or 4.5 liters of water to one (1) 15 liter bucket, and apply to all surfaces with a brush, roller, or an approved sprayer for fine/medium aggregate. Allow to dry for 8 – 12 hours.

3. Apply one (1)-coat of BioCement GF 1.0 as a base plaster coat, applying with a steel trowel to desired finish as a base. Allow to dry for 12 hours. If BioCement GF 1.0 is the base coat for other ROMA plasters, only one (1) coat is required as a base application.

4. Apply a second coat of BioCement GF 1.0 as a finish coat, applying with a steel or plastic trowel to desired finish.

Apply two (2)-coats of BioMarmorino Flat, Satin, Gloss or BioGrassello Traditional or High Gloss as optional plaster finishes using BioCement GF 1.0 as the primary base coat.
CEMENTITIOUS BOARD

INTERIOR / EXTERIOR: Prepare butt joints with manufacturer’s recommendations for tile backer boards as may apply using mesh tape and modified acrylic mortar or thin-set as directed.

PRE-PRIMER:

1ST COAT: Apply one (1)-coat of BioGrip Medium primer as indicated in instructions above. If needed 3rd and 4th coats can generally be applied on the 2nd coat within 1 – 4 hours, as long as each coat appears visibly dry.

2ND COAT: Apply 2nd coat of BioCement GF 1.0 as indicated in instructions above. If needed 3rd and 4th coats can generally be applied on the 2nd coat within 1 – 4 hours, as long as each coat appears visibly dry.

PRIMER:

Apply one (1) coat of BioGrip Medium primer as indicated in GENERAL APPLICATION INSTRUCTIONS.

CONCRETE FLOORS, SIDEWALKS OR DRIVEWAY

BioCement GF 1.0 cannot be used on Portland Cement based floors, sidewalk or driveways.

NEW CEMENT STUCCOS

PORTLAND CEMENTS

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

PRE-PRIMER:

Apply one (1)-coat of BioCement GF 1.0 as a base plaster coat, applying with a steel trowel to desired finish as a base. Allow to dry 12 – 24 hours.

If BioCement GF 1.0 is the base coat for other ROMABIO plasters, usually only one (1) coat is required as a base application.

PRIMER:

Apply one (1) coat of BioGrip Medium primer as indicated in GENERAL APPLICATION INSTRUCTIONS.

1ST COAT:

Apply one (1)-coat of BioCement GF 1.0 as a base plaster coat, applying with a steel trowel to desired finish as a base. Allow to dry 12 – 24 hours.

If BioCement GF 1.0 is the base coat for other ROMABIO plasters, usually only one (1) coat is required as a base application.

2ND COAT:

Apply a 2nd coat of BioCement GF 1.0 as indicated in instructions above. If needed 3rd and 4th coats can generally be applied on the 2nd coat within 1 – 4 hours, as long as each coat appears visibly dry.

INTERIOR / EXTERIOR:

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/orange; if it remains colorless, it shows that the concrete has undergone correct 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 carbonization has been completed, which usually occurs after 21 – 28 days after final installation.

REINFORCED CONCRETE SURFACES

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

PRE-PRIMER:

For exterior surfaces it is recommended to apply one (1) coat of Potassium Silicate Concentrate diluted 100% with water, or 10 liters per one (1) 10 liter bucket, applying wet on wet, applying 2 – 3 coats in rapid succession until concrete has completely and evenly absorbed the Potassium Silicate Concentrate into surface. Apply Potassium Silicate Concentrate with a brush, roller, or sprayer and allow to dry for 2 – 3 days; or as an alternative for interior 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:

Apply one (1)-coat of BioGrip Medium primer diluted with water 30%, or 4.5 liters of water to one (1) 10 liter bucket, and apply to all surfaces with a brush, roller, or an approved sprayer for fine/medium aggregate. Allow to dry for 8 – 12 hours.

1ST COAT:

Apply one (1)-coat of BioCement GF 1.0 as a base plaster coat, applying with a steel or plastic trowel to desired finish as a base. Allow to dry 12 – 24 hours.

If BioCement GF 1.0 is the base coat for other ROMABIO plasters, usually only one (1) coat is required as a base application. Apply 1st coat base as needed to permit up to a level 4 – 5 finish if desiring a very smooth surface finish.

2ND COAT:

Apply a second coat of BioCement GF 1.0 as a finish coat, applying with a steel or plastic trowel to desired finish. If needed 3rd and 4th coats can generally be applied on the 2nd coat within 1 – 4 hours, as long as each coat appears visibly dry.

AUTOCLAVED AERATED CONCRETE

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

PRE-PRIMER:

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:

Apply at least two (2)-coats of BioMarmorino Flat, Satin, Gloss or BioGrassello Traditional or High Gloss as optional plaster finishes using BioCement GF 1.0 as the primary base coat.

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/orange; if it remains colorless, it shows that the concrete has undergone correct 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 carbonization has been completed, which usually occurs after 21 – 28 days after final installation.
1ST COAT: Apply one (1)-coat of BioCement GF 1.0 as a base plaster coat, applying with a steel trowel to desired finish as a base as indicated in GENERAL APPLICATION INSTRUCTIONS. Allow to dry for 12 – 24 hours.

BioCement GF 1.0 is an excellent base coat for all ROMABIO plasters, only one (1) coat is usually required as a base application.

2ND COAT: Apply a 2nd coat of BioCement GF 1.0 as indicated in instructions above. If needed 3rd and 4th coats can generally be applied on the 2nd coat within 1 – 4 hours, as long as each coat appears visibly dry.

Apply at least two (2)-coats of BioMarmorino Flat, Satin, Gloss or BioGrassello Traditional or High Gloss as optional plaster finishes using BioCement GF 1.0 as the primary base coat.

DECAYING OR CRUMBLING STUCCOS OR POWDERY SURFACES
INTERIOR / EXTERIOR: Chalking surfaces, which could prevent the proper anchoring of the base coating must have damaged and chalky portions be removed by pressure washing and scraping.

PRE-PRIMER: For unpainted stuccos apply Potassium Silicate Concentrate diluted 100% with water, or 10 liters of water per one (1) 10 liter bucket, applying wet on wet, applying 2 – 3 coats in rapid succession, until substrate has arrived at full absorption, and allow to dry for at least 2 – 3 days. For old acrylic-free painted stuccos, apply one (1) coat EcoForte Consolidator diluted 100% with water, or 10 liters to one (1) 10 liter bucket, and allow to dry for at least 8 – 12 hours.

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

1ST COAT: Apply one (1)-coat of BioCement GF 1.0 as a base plaster coat, applying with a steel trowel to desired finish as a base as indicated in GENERAL APPLICATION INSTRUCTIONS. Allow to dry for 12 – 24 hours.

2ND COAT: Apply a second coat of BioCement GF 1.0 as a finish coat, applying with a steel or plastic trowel to desired finish. If needed 3rd and 4th coats can generally be applied on the 2nd coat within 1 – 4 hours, as long as each coat appears visibly dry.

Apply at least two (2)-coats of BioMarmorino Flat, Satin, Gloss or BioGrassello Traditional or High Gloss as optional plaster finishes using BioCement GF 1.0 as the primary base coat.

COATINGS WITH EFFLORESCENCE
INTERIOR / EXTERIOR: 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.

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

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

1ST COAT: Apply one (1)-coat of BioCement GF 1.0 as a base plaster coat, applying with a steel trowel to desired finish as a base as indicated in GENERAL APPLICATION INSTRUCTIONS. Allow to dry for 12 – 24 hours.

2ND COAT: Apply a second coat of BioCement GF 1.0 as a finish coat, applying with a steel or plastic trowel to desired finish. If needed 3rd and 4th coats can generally be applied on the 2nd coat within 1 – 4 hours, as long as each coat appears visibly dry.

Apply at least two (2)-coats of BioMarmorino Flat, Satin, Gloss or BioGrassello Traditional or High Gloss as optional plaster finishes using BioCement GF 1.0 as the primary base coat.

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

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

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

Apply Potassium Silicate Concentrate with a brush, roller, or sprayer and allow to dry for 2 – 3 days.

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

1ST COAT: Apply one (1)-coat of BioCement GF 1.0 as a base plaster coat, applying with a steel trowel to desired finish as a base as indicated in GENERAL APPLICATION INSTRUCTIONS. Allow to dry for 12 – 24 hours.

2ND COAT: Apply a second coat of BioCement GF 1.0 as a finish coat, applying with a steel or plastic trowel to desired finish. If needed 3rd and 4th coats can generally be applied on the 2nd coat within 1 – 4 hours, as long as each coat appears visibly dry.

Apply at least two (2)-coats of BioMarmorino Flat, Satin, Gloss or BioGrassello Traditional or High Gloss as optional plaster finishes using BioCement GF 1.0 as the primary base coat.

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

PRE-PRIMER: When new stucco repairs are performed on older (non-painted) cement stuccos, complete any removal of damaged stucco, rinse surfaces of dust, and apply EcoForte Consolidator to older surfaces prior to applying new cement stucco or perform repairs. Pre-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 / 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: Apply one (1) coat of BioGrip Medium primer as indicated in GENERAL APPLICATION INSTRUCTIONS.

1ST COAT: Apply one (1)-coat of BioCement GF 1.0 as a base plaster coat, applying with a steel trowel to desired finish as a base as indicated in GENERAL APPLICATION INSTRUCTIONS. Allow to dry for 12 – 24 hours.

2ND COAT: Apply a second coat of BioCement GF 1.0 as a finish coat, applying with a steel or plastic trowel to desired finish. If needed 3rd and 4th coats can generally be applied on the 2nd coat within 1 – 4 hours, as long as each coat appears visibly dry.

Apply at least two (2)-coats of BioMarmorino Flat, Satin, Gloss or BioGrassello Traditional or High Gloss as optional plaster finishes using BioCement GF 1.0 as the primary base coat.
STUCCO REPAIRS
See Aged Cement Stuccos above.

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 any products are applied by roller or sprayer, protect surrounding surfaces as necessary. Cover glass, ceramic, natural stone, brick, metal, wood, painted surfaces and glazed tiles. Clean affected areas immediately with water. Prominent elements of the building (cornices, parapets, etc.) should be treated with skill, covering flashings, gutters, copper coatings, etc. ...

Do not work in air temperature lower than 13°C / 55°F and not above 31°C / 88°F. Clean work tools with water immediately after use. Keep out of reach of children. In case of contact with eyes and skin, wash immediately with plenty of water. In cases of consumption, consult a Doctor or call the CDC Poison Center (see Safety Data Sheet).

PROTECT EYES FROM SPLASHES OF LIME PAINT OR LIME PLASTER
Use clear, full protection safety goggles to protect your eyes against the risk of splattering cement. In case of contact with eyes, wash eye immediately with plenty of clean water and/or a saline solution. Always keep a good supply of saline solution for eyes on the job site, using abundant amounts to clean your eyes. Do not rub eyelids or physically touch your cornea or surrounding area prior to and during washing. Consult a Doctor or go to a nearby hospital or eye clinic immediately in cases of irritation or severe burning sensation. Keep out of reach of children.

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% PBS, 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
ZETACOLOR SRL, Via Pistoiese 323, 50010 San Angelo a Lecore, Fl, Italia