FIELDS OF APPLICATION
Grassello Bio High Gloss (Venetian Plaster) is a high quality slaked lime plaster ideal for stucco finishes when applied to NHL cements and slaked lime stuccos, permitting endurance cycles that can last intact for centuries. Grassello Bio High Gloss can be applied to all types of portland cement surfaces, cementitious boards, MGO mineral boards, and almost any type of masonry surface prepared correctly.

Grassello Bio High Gloss can be applied to directly to all interior walls surfaces composed of sheetrock, painted or non-painted, using an appropriate primer. This plaster product is not oil proof, and can be damaged by foods, greases, body oils, color crayons or washable colored markers. Cleaning may damage or change the sheen of the paint.

PRODUCT FEATURES
Grassello Bio High Gloss, a true Venetian Plaster, is a historical slaked lime plaster, ideal for interior and exterior surfaces, applied on masonry or sheetrock surfaces to provide a classical plaster finish with chromatic color variability. Grassello Bio High Gloss 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. Grassello Bio High Gloss has been formulated with a very high content of "lime putty", which by its own nature is quick to set. The formula has been adjusted to form to a medium set, as is possible, to ease application. This formula has been created as a "finish" coat, with small millage thickness to create a very high gloss finish coat on Grassello Bio Traditional base. This is a professional product and requires a trained applicator to apply correctly. Grassello Bio High Gloss can be applied for exterior finishes without the risk of damage from freeze/thaw, water, or damage from UV. Grassello Bio High Gloss finish provides translucent depth and sublime shades of color, with semi-transparent qualities. 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 100% 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.

Grassello Bio High Gloss is specifically designed to be tinted with natural oxide earth tints and 0% VOC colorants to increase esthetic color values with minimal impact to the environment and to provide toxic free air quality for indoors. Grassello Bio High Gloss is an organic paint material as described in the Bio Category description.

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

SHEEN FINISH
Extra High Gloss

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

TECHNICAL DATA

<table>
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<th>CRITERIA</th>
<th>INT. STANDARD</th>
<th>VALUE</th>
<th>UNIT</th>
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<td>pH Value</td>
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Does not contain chemicals that can aggravate or cause asthma, see NIH Asthma Report 2012.

APPLICATION CYCLE INSTRUCTIONS

TROWEL APPLICATIONS

1ST COAT: Prepare surfaces for non-mineral bases or portland cement bases by applying a mineral primer with BioGrip Primer Medium (see instructions). For best performance, durability, and proper carbonization, apply one (1)-coat of BioCement GF 1.0 on primed base and allow to dry for 8 – 12 hours. Surface should be smooth and even, or for decorative effects, BioCement GF 1.0 can be lightly skip troweled, or sponge finished, to heighten decorative effects with final coats of Grassello Bio Traditional and High Gloss.

2ND COAT: Apply a 2nd coat with BioMarmormino Flat or Satin, on the prepared base of BioCement GF 1.0. Use a round edge trowel specially designed for fine plaster applications. Apply 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. Then begin to compress setting coat of Marmormino, pushing gently 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 glass like type surface. Do not continue to 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 finishes. At the last phase...
of drying and finishing, using a 5 – 15° angle on the finish trowel; burnish the Marmorino 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 – 2 hours when applied to a BioCement GF or natural stucco base.

3RD COAT: OPTION 1: Apply Grassello Bio High Gloss onto prepared base of BioMarmorino Flat or Satin, using the same technique as described above for BioMarmorino. Smooth the finish as much as is possible during the initial application process, as Grassello Bio will pull very quickly. One (1)-coat of Grassello Bio High Gloss may be sufficient depending on finish and type of decorative effect desired. Traditionally, and in most cases, it is strongly suggested to not complete the last phase of burnishing with a one (1)-coat application, but to apply a 2nd coat using Grassello Bio High Gloss. Once the Grassello Bio High Gloss has visibly dried, repeat the last step again, applying less material than at the initial onset of applying and covering the surface. Apply only enough material as is necessary to cover a small surface area, pulling tightly and then compress. Continue this operation repeatedly until the entire surface has been covered. Trowel smooth as is possible to permit a continuum between short applications so to create a very smooth and flat surface. Follow burnishing instructions indicated above for 2nd Coat. After product has almost completely dried, burnish again with a polishing trowel, pressing with a firm 0° – 5° angle, and with a back and forth movement, polish Grassello Bio High Gloss to the highest sheen possible. Typical time lapse for this product to set between initial application and final burnishing as a 4rd coat is 10 – 20 minutes.

OPTION 2: Follow instructions as indicated in Option 1 except substitute base application of BioMarmorino Flat or Satin with Grassello Bio Traditional on the prepared base of BioCement GF 1.0, with 2 coats, and then follow with application of 1 – 2 coats Grassello Bio High Gloss. This product contains less calcium carbonates than Grassello Bio Traditional, thus less filling capacity, slightly semi-transparent, to permit more translucency and a higher shine or polish. Burnish final phase of finish as indicated above.

When situations require, final coat of Grassello can be pre-diluted with a very small amount of water to permit a thinner coat application when applying multiple coat finishes. This technique should be avoided except when being applied by a master finisher.

ROLLER APPLICATIONS

In some instances for very specific applications techniques, using a rough base of BioCement GF or CM with either a skipped trowel or sponge finish, Grassello Bio Traditional can be slightly diluted with water and using a paint brush, applying in a crisscross pattern, can create an unusual, non-polished, durable painted masonry surface. For further visual interest, the paintbrush application can be flattened with a trowel made or lightly burnished to enhance the over-all effect. This is a special effect and cannot be used for creating traditional smooth and polished surfaces as is typical with Marmorino. This is a master plasters application technique and should only be utilized by a master plasterer.

ROLLER APPLICATIONS

This product is not recommended for roller applications.

GRAIN SIZE: 0.01 mm / 0 aggregate

TOOLS

Apply with a polishing trowel designed specifically for BioMarmorino or Grassello Bio plaster finishes. Use stainless steel or plastic trowels as may be needed.

DRYING TIME

Allow a drying time for the 1st coat of BioCement GF 1.0 or any of the BioMarmorino’s for at least 8 – 12 hours, and with successive coats time will vary greatly depending on thickness and type of finish desired. With lower temperature and humidity more time may be needed between coats.

Do not apply Grassello Bio Traditional 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 this risk could occur and the surface is essentially visibly dry and hard to the touch, wet surface quickly and evenly with water, starting from the bottom of the wall moving upward, without using force or sharp water directional spraying, and allow to dry. This process will help protect against flashing or water damages to the Grassello during the initial carbonization period in the case of rain and subsequent rapid cooling on semi-dried Grassello.

It is advised not to apply mineral paints or plasters in direct sun with temperatures over 75°F – 80°F / 24°C – 20°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 2nd coat of BioMarmorino or Grassello Bio Traditional on BioCement GF 1.0, or if significant time has passed between 1st coat of base application of BioCement GF 1.0 and the initiations of the 2nd coat applications. 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 600 ft² / 55 m² – 800 ft² / 74m² depending on absorption and type of base. Determine exact consumption by performing a test on the surface to be treated.

PACKAGING

Plastic buckets of 1, 5 and 15 liters.

APPLICATION CYCLES ON DIFFERENT TYPES OF BASES

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 SHEETROCK

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

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

Sheetrock finish should be completed to a Level 3 – 4. Apply one (1)-coat of EcoForte Consolidator diluted with water 200% and apply to all surfaces with a brush, roller or sprayer. Apply a 2nd coat of EcoForte Consolidator diluted with water 50% and reaply only on sheetrock compound plaster wherever visible. Allow to dry for 8 – 12 hours.

Apply one (1)-coat of BioGrip Primer Medium diluted with water 40% and apply to all surfaces with a brush, roller or sprayer. Allow to dry for 8 – 12 hours.

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 8 – 12 hours.

Apply one (1)-coat of BioMarmorino Flat or Satin, applying with a polishing trowel to a smooth finish.

Apply one (1) or two (2)-coats of Grassello Bio Traditional as indicated in instructions above, then follow with one (1) or two (2)-coats of Grassello Bio High Gloss.

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

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

Apply one (1)-coat of BioDomus SuperFlat diluted with water 25% and apply to all surfaces, with a brush, roller or sprayer. Allow to dry for 8 – 12 hours.

Apply one (1)-coat of BioGrip Primer Medium diluted with water 40% and apply to all surfaces with a brush, roller or sprayer. Allow to dry for 8 – 12 hours.

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 8 – 12 hours.
Apply one (1)-coat of BioMarmorino Flat or Satin, applying with a polishing trowel to a smooth finish.

Apply one (1) or two (2)-coats of Grassello Bio Traditional as indicated in instructions above, then follow with one (1) or two (2)-coats of Grassello Bio High Gloss.

**OTHER RECOMMENDATIONS**

**SCREED BOARD USE**

For crown or baseboard installations where true straight wall finishes where caulk or paint is not an option for finishes, it is recommended to install a screed board, both for crown and/or base, to extend 1/8” beyond surface of sheetrock, using a string to create a that during the application of BioCement GF 1.0, the material can be used to correct any uneven surfaces resulting in dips or concave surfaces so as to produce a straight wall. The BioCement GF 1.0 (typically 1/16” thick millage) can be used to fine tune discrepancy’s, not applying more than 3/16” material at a single time, otherwise cracks may form during drying period. Several coats may be required to correct overly deep wall distortions.

**TRIM & FLOOR SCHEDULES**

It is suggested for all plaster finishes that where possible, window, door, and finish trim, should not be installed until application of 1st coat of BioCement GF 1.0, and 2nd coat of BioMarmorino Flat or Satin. Allow finish to dry for 8 – 12 hours before installing trim.

Prep, prime, paint or varnish trim with all coats with the exception of the last finish coat. Complete application of 1st and 2nd coat of Grassello Bio High Gloss and allow to dry for 24 – 48 hours before continuing applying final application of finishes for trim. Finished trim edges adjacent to plaster walls should be taped with an appropriate removable type to reduce damage to a minimum to trim finishes after completion of plaster applications.

Floor finishes should also be completed to the same condition as is typical for trim schedule indicated above. It is recommended that final coat of floor varnish be applied after all plaster and paint schedules have been completed. Trim and floor applicators will have to perform due diligence when applying final finishes as all plaster finishes may be damaged if paints or varnishes are applied in error onto finished plaster walls.

**PAINTED SHEETROCK**

Painted sheetrock must be primed with an anchor coat of BioGrip Primer Medium diluted with water at 40% and allow to dry for 8 – 12 hours. Any repairs or patches made with sheetrock compound or similar material must be consolidated with EcoForte Consolidator or BioDomus SuperFlat both diluted with water 25%, and apply to all surfaces with a brush, roller or sprayer.

Allow to dry for 8 – 12 hours. It is advised to tape-off all trim areas before the application of any aggregated paints or plasters.

Apply one (1)-coat of BioGrip Primer Medium diluted with water 40% and apply to all surfaces with a brush, roller or sprayer. Allow to dry for 8 – 12 hours.

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 8 – 12 hours.

Apply one (1)-coat of BioMarmorino Flat or Satin, applying with a polishing trowel to a smooth finish.

Apply one (1) or two (2)-coats of Grassello Bio Traditional as indicated in instructions above, then follow with one (1) or two (2)-coats of Grassello Bio High Gloss.

**GREEN BOARD SHEETROCK**

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

Apply one (1)-coat of BioDomus Matte diluted with water 25% and apply to all surfaces, with a brush, roller or sprayer. Allow to dry for 8 – 12 hours.

Apply one (1)-coat of BioGrip Primer Medium diluted with water 40% and apply to all surfaces with a brush, roller or sprayer. Allow to dry for 8 – 12 hours.

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 8 – 12 hours.

Apply one (1)-coat of BioMarmorino Flat or Satin, applying with a polishing trowel to a smooth finish.

Apply one (1) or two (2)-coats of Grassello Bio Traditional as indicated in instructions above, then follow with one (1) or two (2)-coats of Grassello Bio High Gloss.

**CONCRETE FLOORS, SIDEWALKS OR DRIVEWAY**

Grassello Bio High Gloss cannot be used on Portland Cement based floors, sidewalk or driveways.

**NEW CEMENT STUCCOS**

**PORTLAND CEMENTS/REINFORCED CONCRETE**

New Portland cement should not be painted for about 21 – 28 days to ensure proper anchoring and drying. Apply 1 coat of BioGrip Micro or Medium diluted 30% with water, 4.5 liters water to one (1)-bucket 15 liters of product; allow to dry for at least 12 hours. 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. Prepare base as needed to provide a level 5 finish. Apply one (1)-coat of BioMarmorino Flat or Satin, applying with a polishing trowel to a smooth finish.

Apply one (1) or two (2)-coats of Grassello Bio Traditional as indicated in instructions above.

**NHL 3.5 & 5.0 CEMENTS**

NHL 3.5 and NHL 5.0 natural cements do not require the use of a primer when applying Grassello Bio Traditional. Depending on quality of base coat application Grassello Bio Traditional can be applied directly to surface without the need for BioCement GF 1.0. If surface finish is not prepared to a level 4 – 5, BioCement GF 1.0 or BioMarmorino Flat or Satin must be used to properly prepare a sufficiently smooth base to permit proper application of Grassello Bio Traditional to avoid excessive product waste for final finishes.

**DECAYING OR CRUMBLING STUCCOS OR POWDERY SURFACES**

Chalking surfaces, which could prevent the proper anchoring of the base coating must be removed and pressure washed. Apply Potassium Silicate Concentrate, diluted 100% with water (1:1) on all damaged surfaces, applying 2 – 3 coats in rapid succession and allow to dry for at least 12 hours. Allow to dry for at least 12 hours. Apply 1 coat of BioGrip Micro or Medium diluted 30% with water, 4.5 liters water to one (1)-bucket 15 liters of product; allow to dry for at least 12 hours. Apply one (1)-coat of BioCement GF 1.0, and allow to dry for 8 – 12 hours. Apply one (1)-coat of BioMarmorino Flat or Satin, applying with a polishing trowel to a smooth finish.

Apply final finishes with Grassello Bio Traditional according to instructions.
COATINGS WITH EFFLORESCENCE
Cement surfaces showing efflorescence should be removed with acid and thoroughly rinsed with water. Apply Potassium Silicate Concentrate, diluted 100% with water (1:1) on all damaged surfaces, applying 2 – 3 coats in rapid succession and allow to dry for at least 12 hours. Apply 1 coat of BioGrip Micro or Medium diluted 30% with water, 4.5 liters water to one (1)-bucket 15 liters of product; allow to dry for at least 12 hours. Apply base, 1st coat of BioCement GF 1.0, and allow to dry for 8 – 12 hours. Apply one (1)-coat of BioMarmorino Flat or Satin, applying with a polishing trowel to a smooth finish.

Apply final finishes with Grassello Bio Traditional according to instructions.

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

AGED CEMENT STUCCOS
When new stucco repairs are performed on older cement stucco, apply EcoForte Consolidator diluted 50% with water (2:1), to older surfaces prior to applying new cement stucco. Dirty and/or contaminated 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. Apply EcoForte Consolidator to any new stucco repairs with the same dilution. Apply 1 coat of BioGrip Micro or Medium diluted 30% with water, 4.5 liters water to one (1)-bucket 15 liters of product; allow to dry for at least 12 hours. Apply base, 1st coat of BioCement GF 1.0, and allow to dry for 8 – 12 hours. Apply one (1)-coat of BioMarmorino Flat or Satin, applying with a polishing trowel to a smooth finish.

Apply final finishes with Grassello Bio High Gloss according to instructions.

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 PLASTER
In case of contact with eyes, 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 eyelids 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). 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.