

Document type	Technical Data Sheet
Name	MARMORINO METALLIC
Description	Natural, lime-based material for decorative finishes on interior wall surfaces. Naturally anti-mould and breathable. This fine-grained Venetian plaster is enriched with mica powders that yield metallic reflections on the final finish. It is glossy, rich in trowel movements, and gentle chiaroscuro that convey a pleasant sense of depth.
Composition	Aged, slaked lime, selected marble powders, mica powders
Grain size	Lime: 100 microns
Available Versions	Bronze, Copper, Gold and Silver
Appearance	Paste
Colour	The Silver version is off-white and can be tinted in any colour with lime-compatible colourants. The other three versions have the colours of the corresponding metals and can be tinted further with lime-compatible colourants.
Packaging	Component A: 12 kg net polyethylene containers Component B: 1.3 kg net polyethylene containers
Application	By hand, with a steel trowel
Type of Surface	Interior walls. <u>New Wall Surface</u> Plaster: no priming necessary Gypsum / Plasterboard / Medium Density: one coat of DEKO PRIMER <u>Old Wall Surface</u> Plaster: one coat of DEKO PRIMER Fast drying / Limewash: brush down and apply one coat of DEKO PRIMER Polished Lime: Abrade, brush down and apply one coat of DEKO PRIMER Washable Paint: one coat of DEKO PRIMER
Dilution	Ready to use
Consumption	0.9 – 1.1 kg/m ² after three coats
Drying	3 hours at 20°C / 68°F to the touch 48 hours at 20°C / 68°F below the surface 180 days stable
Application temperatures	min 5 max 30°C – R.U. < 85% ca
Coat Thickness	0.9 – 1.2 mm for a total of 3 coats
VOC Classification	EU Directive 2004/42/CE: EU limit value for this product (cat A/I – water-based decorative effect coating): 200 g/l (2010). This product contains less than 1 g/l of VOC.
Specific Weight	1.4 ± 0.2 (kg/l)
pH after 30 days	12.5 ± 0.50
Vapour Permeability	SD ~ 0,04 m (DIN 52 615)
Flammability	European Class of Reaction to Fire A1: non-combustible, no contribution to fire

Mould Resistance	ASTM D 3274 – “Standard Test Method to evaluate the degree of surface disfigurement of paint by microbial, fungal and algae growth. Result: Front Panel 10/10/10 Back Panel 10/10/10 = no growth
Scrub Test Resistance	ASTM D 2486-06 method A = was used: scrubbing fine sand + metallic brush for 10,000 cycles
Impact Test	UNI EN ISO 6272-2-2006. 1 kg doming punch was dropped from different heights and only at the height of 8 cm., it left a 5.5 mm. dent in the surface and a tiny crack appeared around its circumference.
Pencil Hardness	ASTM D3363- Pencil hardness 5H
Shore Hardness	Norm ASTM 2240 average
Adhesion	Norm UNI EN 13892-8 2004 average value = 2,0
Shelf life	36 months when stored according to the recommended guidelines
Storage	In original sealed packaging between 5° - 35°C in a dry, dark environment
Safety Norms	Irritating. / Risk of serious damage to eyes. / Irritating to the skin. / Keep out of children. / Avoid contact with eyes. / In case of contact with eyes, clean immediately with water without rubbing them, and consult a doctor. / Wear suitable gloves and eyes / face protection. / In case of ingestion of the products, consult immediately a doctor showing him the can or the label of the product. Danger labelling under directives 67/548/EEC and 1999/45/EC nd following amendments and adjustments. The product must be transported, used and stored according to current standards of hygiene and safety.
Disposal	Product must be disposed of according to norms and regulations in force. Containers must be sent for recycling. Follow directions on the packaging
Application Instructions	<p>WARNINGS</p> <p>We recommend using materials from the same production batch for the same project. If you must use different batches, we suggest mixing their material together to avoid any slight variations in shading.</p> <p>To ensure proper usage, dilution, and application of the products mentioned in these pages, please consult the corresponding technical data sheets.</p> <p>When preparing the surface and applying the materials, we advise using appropriate tools and personal protective equipment (PPE).</p> <p>During application and for the following 72 hours, protect the surfaces from sudden temperature change, direct sun light and water. Don't apply in temperatures below 8°C or above 35°. During application make sure that the work area isn't too damp to avoid problems with application times.</p> <p>Remember to have a strong light parallel to the wall and situated on only one of the two sides of the wall you are working on (usually on the same side as other sources of light such as windows). In this way the shadow of the trowel allows you to see the actual state of the finish. Every so often, during the second and third coat, the light should be moved so that the wall doesn't dry out too much in one spot from the heat of the lamp.</p> <p>APPLICATION</p>

Water on the surface of the material in the bucket is normal and should be removed before use or addition of colourants. All lime-based products lose their viscosity when mixed and need a period of 6/12 hours after mixing to regain their density. This product is dense, and ready for use; thus, it may be necessary to use an appropriate drill attachment to stir for a few minutes to reduce viscosity. Pour Component B into the tub of Component A, and mix. If you want to add further colour, add the toner additive or colourant to the container and continue mixing until a homogeneous shade is obtained. Let the product rest for about 5 hours before you begin to use it.

Colouring: The Silver version is off-white with metallic reflections and be tinted to any colour with STUCCO ITALIANO'S COLOUR SYSTEM, or any lime-compatible liquid pigments. The colour of the Gold, Copper and Bronze versions can be changed a little, too. For example, add black and red to MARMORINO METALLIC GOLD to get a bronze effect, or add green and black to COPPER in order to get another kind of bronze. Or add blue and black to the GOLD version to make a gold-green finish, or red to get an orange-gold effect. MARMORINO METALLIC SILVER can be combined with black, or black and blue, to get different silver effects. It is also possible to apply the first coat of MARMORINO METALLIC with a tone different from the following coat.

Protection of the work area: Masking tape and protective material over the baseboards and around windows and doors.

FIRST COAT: Apply a first coat of MARMORINO METALLIC or white MARMORINO FINE in order to obtain a surface as even as possible (if necessary, repeat it one more time). On even smooth background one first coat is enough. Apply it with a big trowel using approx. 550 - 600 g/sqm. This coat is applied to create an absorbing background for the next two coats. **VERY IMPORTANT: THIS COAT MUST NOT TO BE POLISHED IN ANY PART** or you can have problems of low adhesion and detaching issues when polishing the final coat. Leave it to dry completely – usually overnight.

SECOND COAT: Apply, with a metallic trowel, one coat of MARMORINO METALLIC. It must be quite thin but thick enough to cover completely the first coat.

THIRD COAT: When the second is almost dry, apply the last coat with “soft hand” avoiding pressing too much. Polishing is obtained with a very soft pressure and rubbing with a soft cloth.

Alternative application method, for a *Hammered effect*:

Apply a coat of MARMORINO METALLIC trying to obtain a flat surface, without ridges. Leave to dry completely overnight. One person applies the second layer abundantly and another follows with a sponge or roller, with short or medium hair, trying to obtain a surface made of small accumulations of material with regular sizes across the wall. To do this it is necessary that the material is dense and somewhat viscous. You may need to thicken it with our THIXO ADDITIVE, a thixotropic auxiliary developed for this purpose. Leave it to dry at about 60% and, at the appropriate time, which can be after one or three hours, depending on the site's temperature, press the surface with the metallic trowel. This operation must last for a long time until you obtain a very shiny and pitted surface, recalling hammered metal.

**Finish Protection
(optional)**

BEESWAX / MINERAL WAX / MARSEILLE SOAP / HYDROCALCE

A protective treatment is optional in most circumstances. It is however necessary in bathroom walls, kitchen and splashback walls. After a minimum of 48 hours, you can apply one coat of either of the following:

A) MARSEILLE SOAP protective coating with a steel trowel. Use ca. 30-50 g/sqm. After 48 hours, go over the surface with a cloth to remove the coat of surface powder produced by unabsorbed soap.

B) A coat of BEESWAX applied with a sponge. Use ca. 30-50 g/sqm. After a little while, before it dries, rub vigorously with a woollen or soft cloth to obtain an even polish.

C) A coat of MINERAL WAX applied with a sponge. Use ca. 30-50 g/sqm. After a little while, before it dries, rub vigorously with a woollen or soft cloth to obtain an even polish.

Maintenance

No special work is required in maintenance, just remove the dust periodically and re-wax it after 5 or 6 years. Protect the coating from any contact with liquid either rain or continuous water flowing down the wall. If any liquid such as coffee is spilled on the surface, clean immediately.

Tools

SI TROWEL / SCRAPERS / CORNER TROWEL / NON-WOVEN FABRIC
Clean with water immediately after use

**Decorative complements
(optional)**

METALLIC BEESWAX / PERLA WAX

We have drawn up the material presented above to the best of our technical and experiential knowledge. Nevertheless, our suggestions and recommendations are not guaranteed. All responsibility for the obtained results lies solely with the method and conditions adopted for the application of the product. Such indications constitute valid support for verifying the product's suitability for the specific case. We reserve the right to make modifications to the present information without previous warning.