

Document type	Technical Data Sheet
Name	BETON STUCCO
Description	Natural, lime-based material for decorative finishes on interior and exterior wall surfaces. Naturally anti-mould and breathable. This plaster yields a concrete effect finish for urban and industrial styles.
Composition	Hydraulic lime, cement, and selected marble powders
Available versions	BETON STUCCO GREY (STANDARD), BETON STUCCO WHITE
Grain size	700 microns
Appearance	Powder
Colour	The Grey version is grey, while the White version is white and can be tinted in any colour with lime-compatible colourants
Packaging	16 kg net polyethylene containers
Application	By hand, with a steel trowel
Type of Surface	Interior and exterior walls <u>New Wall Surface</u> Plaster: no priming necessary Gypsum / Plasterboard / Medium Density: one coat of QUARTZ PRIMER <u>Old Wall Surface</u> Plaster: one coat of QUARTZ PRIMER Fast drying / Limewash: brush down and apply one coat of QUARTZ PRIMER Polished Lime: Abrade, brush down and apply one coat of QUARTZ PRIMER Washable Paint: one coat of QUARTZ PRIMER
Dilution	Put the 16 kg of BETON STUCCO powder into a tub with 5.12 L of water and mix (For every 1 kg of powder, add 320 ml of water to achieve the correct dilution ratio). Wear a protective mask and glasses when mixing.
Consumption	2.2 kg / sqm of powder
Drying	3 hours at 20°C / 68°F to the touch 36 hours at 20°C / 68°F below the surface 90 days stable
Application temperatures	min 5 max 30°C – R.U. < 85% ca
Coat Thickness	1.8 – 2.3 mm for a total of 2-3 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.

Scrub Test Resistance	Result: Front Panel 10/10/10 Back Panel 10/10/10 = no growth 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
Pot life	2-3 hours on average
Shelf life	24 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 and 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>

APPLICATION

Protection of the work area: Masking tape and protective material over the baseboards and around windows and doors. **BETON STUCCO** can be applied with a metallic trowel in two coats on a well prepared background (with primer) leaving the first coat to dry completely before applying the second one. The second coat must be applied quite thick and pressed, smoothed and scratched with a trowel, brush trowel, scraper or other tools depending on the desired effect. It is possible to reproduce the typical joint ridges that come from the connection of concrete panels. The following day, on a completely dry surface, sand it by hand or with a machine.

ALTERNATIVE APPLICATION METHOD: Concrete tears

Apply with the metallic trowel in three coats on a well-prepared background (with primer) leaving the first coat to dry completely before applying the second one. The second coat has to be applied quite thick and, after about 30 minutes, apply a very thin third coat, press and smooth out. After a few minutes, to obtain the typical holes and tears of concrete, place the blade of the trowel very flat against the wall and, after making pressure, pull it with the blade always parallel to the wall. If the timing is right, you should create a tear. Then, let it dry a little and, when it begins to dry, spray a little water. With the flat blade against the wall and random movements, flatten the surface. Be careful not let water drip down on the wall: the drops could leave white marks.

EXTERIORS: For exterior applications there are some rules to respect and some precautions to take. We remind you that carbonation, i.e. the process that takes place through the absorption of atmospheric CO₂, is completed in a few hours on the surface but takes several days to take place in depth. It is therefore important that the application takes place in the certainty of the absence of heavy rains in the three following days. It is also not recommended to apply it on walls that do not have at least a small roof overhang. Penetrating rain could ruin the finish even after weeks as deep carbonation is completed after more than a month. Avoid windy days, especially at high temperatures, as well as the risk of frost in the 48 hours following application. In external applications in hot climate conditions, it is also recommended to protect the wall from the sun with shade cloths applied to the scaffolding. Lime-based products must dry slowly to better fulfil their characteristics.

Finish Protection

Interiors: A protective treatment is optional in most circumstances. It is however necessary in bathroom, kitchen, and splashback walls.

Exteriors: This finish, as all lime-based plasters, absorbs water during rainy weather, which results in a temporary "wet effect" on the surface. However, this plaster releases the absorbed water within a few hours, allowing the surface to dry without any damage nor alteration to the finish. While a final treatment is therefore optional, it is highly recommended in areas with high pollution levels or if you wish to avoid the temporary wet effect that can occur after rainfall.

Interior: HYDROCALCE / MARSEILLE SOAP / MOROCCAN OLIVE OIL SOAP

Exterior: HYDROCALCE

Furniture: PU1C

HYDROCALCE: after about 72 hours at least 20°C., proceed with the application of the colourless protective impregnation HYDROCALCE, especially designed for the protection of external lime-based coatings. Its Installation is done by brush in two coats, with a consumption of about 100-130 g/sqm.

MARSEILLE SOAP / MOROCCAN OILIVE OIL SOAP / PU1C: apply after at least 36 hours from application of the finish

Maintenance

Little maintenance is needed, brush off dust occasionally.

Tools

SI TROWEL, BRUSH TROWEL, SCRAPERS
Clean with water immediately after use

**Decorative complements
(optional)**

MOTHER OF PEARL / MICA / EBANO POWDER / SALT&PEPPER SAND

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.