

TerraCalix Smooth

MATTEOBRIONI

Technical data sheet

Informations

Name	TerraCalix Smooth
Description	Fine-grained finishing cycle consisting of clay, aerial lime and natural hydraulic lime, selected and dosed aggregates in a suitable grain size curve such as marble dust and silica sand.
Features	↔ 2 / 3 mm ☐ Vertical surfaces ☐ Interiors ☐ No contact with water or oil

Products used in the cycle

TC01	Description	Fine-grained clay and lime mixture.		
	Available bags/ sacks sizes	1.0 kg TC01-0100	10.0 kg TC01-1000	20.0 kg TC01-2000

Equipment

- Clean bucket
- Electric mixer or spatula for mixing
- Trowel
- Stainless-steel plastering trowel
- In order to prepare large amounts of material, the mix can be prepared in a standard cement mixer or other mixers (with planetary axis, worm gear etc.).
- PPE: see safety instructions.

Substrate preparation

Once prepared according to instructions TerraCalix Smooth finishing can be applied on any type of substrate.

The substrate must be well-seasoned, solid, clean, dry, free of dust, grease, surfacing substances and separating agents that can form a film; it must be sufficiently rough, free of moisture and salt efflorescence; this also applies to the inner layers. Old paint coats must be carefully removed or, if well adhered to the substrate, preliminarily treated with our appropriate rough bonding primer. Plasterboard substrates must be professionally finished, stable (they must not sag or vibrate) and have no residual moisture (to prevent salt transmigration); this also applies to the joints between different panels, which must be plastered and smoothed by interposing netting or fabric tape; it is in any case advisable to apply our primer or specific bonding primer. On very smooth surfaces (concrete masonry, metal surfaces, etc.), it is necessary to apply our primers or fillers in advance, to be applied according to the instructions in the technical data sheet, or uniform mechanical treatments over the entire surface (diamond disk). On particularly absorbent panels (e.g. cellulose gypsum, wood fibre, etc.) the preliminary application of our primers or fillers is recommended. For the choice of primer and/or filler, please consult our technical manual or contact our office, stating the type of substrate.

Mortar preparation

For a 20 kg sack of TC01:

- pour 1-2 kg of clean water into a clean bucket;
- mix and gradually add the TC01;
- continue by adding 5-6 kg of water to obtain an even mixture with no lumps and with a creamy consistency;
- leave the mix to rest for about 2-3 minutes, then mix it again adjusting the consistency with water before use;
- proceed with application.

Given the diverse nature of the clays, the amount of water may vary from one colour to another. In the case of the 10 kg bag, the amount of water needs to be halved.

If larger or smaller quantities need to be prepared compared to those of the amounts supplied, calculate the % of components as follows:

- Consider the overall weight of TC01;
- Add 30-40% in weight of clean water compared to the weight of TC01.

In each case, the amount of water should not exceed 40% in weight compared to the weight of the TC01 powders.

Application

Two layers of about 1.0-1.5 mm thick are applied, for a maximum total thickness of 3 mm of the entire cycle. Depending on the effect you hope to achieve, you can proceed in two different ways:

Silky effect

Apply the first coat with a stainless-steel plastering trowel. Apply the second coat over the first while it is still damp but touch free. Structure the surface using the stainless-steel trowel to achieve the required effect.

Material effect

Apply the first coat with a stainless-steel plastering trowel. Apply the second coat once the previous one is dry. Structure the surface using the stainless-steel trowel to achieve the required effect.

48 hours after applying the second coat, the protective finishing cycle for interiors can be applied, following the procedures given in the TDS. Other effects (custom) can be chosen depending on use, product function and the desired look.

Before starting, we recommend testing the application on the surface (at least 1 m²) to be plastered to check the quality of the adherence to the substrate. This can also help you assess the colour that, in some cases, could be slightly different to what you imagined, in relation to the naturalness of the product and the substrate.

Consumption

- TC01: 1.7 - 1.9 kg/m²

* The reported values are relevant to two layers of product

Cleaning

Clean tools with water after use. The hardened material can only be removed by mechanical removal.

Application conditions

Do not apply in the presence of strong wind, in direct sunlight or with external and surface temperatures below 5°C or above 30°C. The base needs to be moistened with a spray in very hot weather before application. Drying times vary depending on the season, climatic and intrinsic conditions on the worksite. Under standard environmental conditions (T=25°C and RH=60%), the drying time for a 3 mm thick plaster is approximately 48 hours.

Technical data of the products

TC01	Consistency	Powder
	Colour	Various colours from the Matteo Brioni palette
	Density	1450 - 1550 kg/m ³
	Maximum aggregate size	≤ 0.4 mm
	pH	10 - 10.5
	Safety information	See SDS.

Performance data

Adhesion	≥ 0.3 N/mm ²
Compressive strength	≥ 4 N/mm ² CS IV
Capillary water absorption	W0
Water vapour permeability coefficient	μ ≤ 13
Thermal conductivity	0.53 W/mK
Reaction to fire	A1 Class

Application data

Water content of mix	30 - 40%
Mixture ratio	
20 kg TC01 sack	6-8 kg H ₂ O
10 kg TC01 bag	3-4 kg H ₂ O
2 kg TC01 bag	0.3-0.4 kg H ₂ O
Minimum application temperature	+ 5°C
Maximum application temperature	+ 30°C
Maximum thickness to be applied	1.5 mm
Waiting time between layers	Depends on the desired effect. See the application section
Waiting time for the application of any protection	48 hours

* The reported values are for a T= 25°C and RH=60 %. Different temperature and relative humidity may cause a slight variation in the reported values.

Additional information

Shelf life and Storage

If kept away from dampness, at a temperature of between 5 and 30°C, in intact, undamaged packaging, it can be stored for a period of:

- TC01: 6 months

Disposal

The residues of the product and equally its components should be treated as non-harmful special waste. Disposal needs to be entrusted to an authorised waste management company, in compliance with national and possibly local regulations. Contaminated packaging must be sent for recycling or disposal in compliance with national standards on waste management.

Transport

None of the TerraCalix Smooth elements can be considered dangerous pursuant to current regulations on the transport of dangerous goods via road (ADR), rail (RID), sea (IMDG Code) and air (IATA). In the event of a risk of dispersion of the product, inform the relevant authorities to avoid environmental damage

Warnings

- Product for professional use
- Use the safety devices mentioned in the SDS.
- Lime-based products tend to become lighter as a result of the hydration process. Small percentages of natural mineral pigment are therefore added to the compound to allow the desired tone to be achieved. For this reason, small flare-ups during application (colour streaks) are normal and intrinsic characteristics of the product.
- Applications at temperatures below + 5°C with a high percentage of relative humidity may give rise to surface carbonation phenomena. Different absorptions, incorrect application temperatures and heterogeneity of the substrates may aesthetically condition the final result of coloured mineral finishes. The colour appearance may vary depending on the environmental conditions of application. Avoid application on frozen, dusty, unstable and insubstantial. Always use the same amount of water to avoid colour variations. Do not do not apply on substrates subject to shrinkage or cracking as the mineral product, by its very nature, cannot withstand structural movements as it has no elastic power. Follow any existing structural joints in the substrate.
- During the application of the second coat, the operator must take the maximum care to carry out the work in a continuous manner without creating detachments, restarts, overlaps. During trowel application, he must wet the surface with the minimum amount of water necessary to make the tool run without softening the mortar too much; trowel application by hand must be uniform, carried out with ample semi-circular gestures without going over areas that are already hardening.
- At the first signs of any irregularities, contact our technical department: info@matteobrioni.com

Legal notice

The technical sheet is drafted according to our technical knowledge and laboratory checks; it should be noted that Matteo Brioni srl may make integrations and/or variations to it over time; for these updates, please consult the website www.matteobrioni.com. Matteo Brioni srl takes responsibility for the validity, viability and updated status of its information only if taken directly from its website. Being unable to intervene directly on the conditions at the worksite and the work itself, these are general indications that are in no way binding on our Company. We therefore recommend a preventive test to check that the product is suitable for its intended use. Our company guarantees the constant quality of its products: any ascertained liability will be limited to the exclusive value of our product. Our company takes no responsibility deriving from the recommended use of the product, either directly or indirectly, that is incorrect or irresponsible.

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