

TERMOFLEX® DRY MINERAL PLASTER

noble non-flammable structural mineral-based plaster, with high water vapour permeability and resistance to weather conditions, for application by hand or machine, indoors and outdoors



Scope of use

TERMOFLEX® DRY MINERAL PLASTER is a noble decorative non-flammable mineral-based plaster with high vapour permeability which allows the breathing of the wall. The plaster is hydrophobic as well and it prevents the penetration of water in the building construction.

The product is designed for producing protective decorative coverings with dragged structure. It could be applied onto all types of mineral surfaces (cement-based plasters and reinforcing mortars and precast concrete, thermal insulation boards, gypsum-based mortar, gypsum board, gypsum fibre board and others). The product could be applied either manually or by machine.

Owing to the thicker layer which is to be applied compared to the other plasters, TERMOFLEX® DRY MINERAL PLASTER has higher mechanical resistance (thus it has advantage when applying onto thermal insulation systems, esp. onto EPS bases). It has ameliorated resistance to atmosphere conditions as well.

The plaster has low dirt retention so it is recommended to be applied as a finishing layer on façades. It has a vivid self-cleaning property – the pollutions which have stuck on the surface are washed by the rain. The dirt is released together with a very thin (micro) layer from the plaster so the plaster is constantly renovating itself. The plaster is offered pre-colored so it does not need painting.

TERMOFLEX® DRY MINERAL PLASTER is used as a finishing layer in the integrated thermal insulation systems TERMOFLEX® and TERAPOR® and it is suitable both for newly-erected buildings and for old buildings – in the process of remediation or improving of their thermal insulation or façade.



Properties

high vapour permeability and hydrophobic	resistant to mechanical effects
non-flammable natural product	resistant to atmospheric conditions
resistant to UV-rays	for both manual and machine application

Composition

Homogenous powder mixture of high-quality white cement, granulated marble, fibres, pigments, polymers and additives with special use.

Packaging and Indicative consumption

Package:

25 kg paper bags

Indicative consumption:

Type of the plaster	Consumption
dragged (2,0 mm)	4,0-6,0 kg/m ²
dragged (1,5 mm)	3,0-4,5 kg/m ²
scratched (1,5 mm)	3,0-4,5 kg/m ²

The consumption depends on the base roughness.

Colours:

white, light grey, dark grey, yellow ochre

Expiration date and Storage

Store and transport in tightly sealed original packaging in dry and cool place (best on pallets). Keep away from moisture!

The product is good for use 24 months after production date of an unopened original packaging.

Instructions for Use

Base Preparation

TERMOFLEX® DRY MINERAL PLASTER sticks to all mineral bases, which are strong and do not contain separating substances (grease, bitumen and dust). The base should be strong, dry, load bearing, leveled, with all shrinking processes completed. The temperature of the base should not be lower than +5 °C. All areas which are not strong and layers with low mechanical resistance should be preliminary removed.

When renovating old covering, all loose or easily removable particles or paint leftovers should be removed from the base. The already cleaned old plaster should be patched up and the new plaster should possess the same hardness and structure as the old one. The rough base coat may be smoothed out with a leveling plaster.

Areas which are covered by mold and fungus have to be cleaned mechanically (by wire brush) and then to be disinfected by an appropriate preparation. Highly absorbent surfaces should be preliminary primed with POROGRUND® - POROUS BASE PRIMER. Bases with smooth and strongly polished surfaces with minimum water absorption (vibrated concrete and others) should be primed with TERACONTACT® CONTACT AND BONDING PRIMER. Chalking and thus loose surfaces should be cleaned mechanically and strengthened by NANOGRUND® DEEPLY PENETRATING PRIMER WITH NANO PARTICLES.

From 2 to 6 hours before application of the plaster (depending on the atmospheric conditions) the base should be once treated with plenty of primer for plasters TERMOFLEX® COLOUR PRIMER.

Mixture preparation

In a clean stainless steel container pour about 5 l of clean water without additives and gradually add the bag content (25 kg) into it. The mixture should be stirred with an electric mixer until reaching a homogenous mass without lumps. If needed add water or dry mix for attaining necessary density. Then leave to "mature" for about 10 min until all additives completely dissolve and then stir again. The ready-made mix is all set for work and maintains its properties for about 3 hours at temperature of 20-25°C.

Do not mix with cement, sand and other materials because that causes extreme deterioration of the qualities of the plaster!

Always stir the whole content of the bag. When working with dry plasters the mixture, which is the result of the stirred product of a few bags, should be gathered in a bigger vessel for construction mixtures and it should be mixed by hand one more time. This way the consistency of the different mixtures is being equaled and uniform color shade is ensured. During operation, constantly add new quantities of mixture into the vessel, while remixing them again.

Application

The plaster is applied manually by trowel or by a suitable machine for plasters with temperature of the environment and the base between +5°C to +30°C and air humidity approximately 60% after which the applied plaster is being dragged and roughly leveled. The application of the plaster should be performed without interruptions and material of equal density should be used.

Structuring

For accomplishing a decorative effect, the finishing layer is structured by a plastic finishing trowel using horizontal or circular movements depending on the required outcome.

Do not wet additionally during structuring!

Only wet material could be structured! Work uniformly, without interruptions!

Double-layer dragged plaster

When applying mineral plasters with dragged structure, thickness of the applied layer of minimum 5 mm must be accomplished! In order to provide even drying or to achieve certain structure of the covering, it is recommended to be applied in two layers. The first layer of noble plaster is applied using trowel and leveled by wooden finishing trowel. When it is hard enough the second layer of plaster is applied by trowel or machine and then it is 'dragged' until it reaches the size of the grains. After the plaster starts to slightly harden, it is structured with using light pressure (in order for the structural grains to be able to form a dragged structure) using plastic or styrofoam finishing trowel. If desired, the second layer could be leveled.

To achieve excellent results, the working process should not be interrupted. In case that it is necessary to interrupt the work, it is recommendable to take architectural division of the area into smaller sections. Thus the smaller section could be completed at once. After the interruption, the work should be continued from the same place and the edge of the already applied plaster could be protected by self-adhesive paper tape. The dry surfaces are easily distinguished and this cannot be changed by additional wetting.

Attention!

Plaster application should be executed in dry weather and at temperature of the base and environment from +5°C to +30°C and air humidity around 60%!

Do not use material that once has been soiled!

Fresh plaster should be protected from freezing at least 24 hours after its laying!

The plaster which has been applied on the façade should be protected from direct sun light, rain and strong wind (for instance by a façade mesh)!

High air humidity and low temperatures could considerably prolong the drying time so it could change the colour unevenly.

Uniform color may be attained only within one production lot!

Areas attained by not uniform structuring cause color stains!

Hazard description

The product contains cement and may cause an allergic reaction. When used Industry standard hygiene must be followed. Work in well-ventilated places or outdoors. Avoid contact with skin and eyes. Keep out of reach of children. For more information, see The Product Safety Data Sheet.

Classification

Complies with the requirements of European and Bulgarian standards and measures up to:

European Standard	Class	Testing protocols
EN 998-1	CSII W2	



Technical data

Testing protocols are issued by Notified Body (NB 2069) for compliance evaluation with Independent Construction Laboratory „Infrastructure” Ltd., Sofia.

Parameter	Measure	Testing method	Testing result
Bulk density	kg/m ³	EN 1348	1450
Compressive strength	N/mm ²	EN 1015-11	3,8
Bending strength	N/mm ²	EN 1015-11	1,5
Adhesion strength of the base (concrete)	N/mm ²	EN 1015-12	0,5
Absorption	kg.(m ² *min ^{0.5})	EN 1015-18	0,2
Reaction to fire	-	EN 13501-1	class A1

The information contained in the current document is based on our knowledge and recent technical achievements and experience that we have at the time of the last version. The technical recommendations concerning application that we offer in order to facilitate buyers and those working with our products are non-binding and are neither grounds for legal contract relations, or for additional obligations resulting from the purchase contract. They do not dispense buyers from the necessity to verify products' application according to the instructions for every specific use. We as manufacturers guarantee the quality of the product, but cannot influence the circumstances and methods of its use. Application of the product should be performed by qualified personnel.