

TK-FRP

Moist-regulating plaster

High-porosity trass lime base plaster

Renovation plastering mortar R CS II acc. EN 998-1

- colour: natural white

no picture

APPLICATIONS

- ideal for restoration of historic monuments
- for the renovation of salt-laden and moist masonry
- for compensating coarse uneven areas in the plaster primer
- for producing moisture-regulating plasters with high porosity
- for interior and external use

PROPERTIES

- mineral
- good workability
- high porosity
- good drying of masonry moisture
- suitable for machine application

COMPOSITION

- highly hydraulic trass lime according to DIN EN 459-1
- cement in accordance with DIN EN 197-1
- graded stone aggregates in accordance with DIN 13139
- mineral lightweight aggregates according to DIN EN 13055

SUBSTRATE

Suitable substrates	<ul style="list-style-type: none"> ■ All types of masonry ■ primarily historic masonry
Properties/tests	<ul style="list-style-type: none"> ■ For assessing the plaster primer, VOB/C DIN 18350, Section 3, DIN EN 13914-1/13914-2 as well as the plaster standard DIN 18550-1/18550-2 should be observed. ■ The substrate must be dry, load-bearing, clean, dust-free and free of adhesion-reducing residues, release agents, efflorescence and sintered coatings.
Pretreatment	<ul style="list-style-type: none"> ■ Old plaster must be removed at least 80 to 100 cm above the visible or adjacent damaged zone up to the masonry. ■ Completely remove non-load-bearing plaster, coatings or salt efflorescence. ■ Crumbly masonry joints are to be scraped out approx. 2 - 3 cm deep. ■ Damaged stones must be replaced. ■ Clean masonry thoroughly and remove dust. ■ For sealing scratched out joints and as a masonry mortar, tubag trass-lime mortar is to be used. ■ Highly absorbent substrates should be wetted in good time, days before if need be. ■ To improve adhesion, according to WTA, depending on the substrate quality, plan the application of a cross-linking pre-spray (covering approx. 50 - 60 %) with tubag VSP pre-spray trass mortar.

PROCESSING

Temperature	<ul style="list-style-type: none"> ■ Do not process or allow to dry out at air, material or substrate temperatures below +5°C, or if there is a risk of exposure to night frost, or at temperatures above +30°C, or in direct sunlight, or on heated up surfaces, and/or in windy conditions.
Mixing / Preparation / Processing	<ul style="list-style-type: none"> ■ Suitable for processing by hand, or with conventional plastering machines. ■ When using plastering machines, a suitable in-line mixer must be used. ■ When machine-processing: Adjust the amount of water accordingly to obtain a workable consistency. ■ When mixing manually, first place the quantity of water specified in the technical data in a clean container and then sprinkle in dry mortar. Use clean tap water. ■ use a suitable agitator to mix the material until smooth and free of lumps. Leave to rest for a moment and then mix again, adding more water, if required, to achieve the right consistency for applying. ■ Do not mix with other products and/or other substances.
Processing	<ul style="list-style-type: none"> ■ Apply material evenly on the prepared plaster base and smooth off the fresh plaster surface with a suitable tool to make it perpendicular and flush. ■ Plaster layer thickness in one layer: approx. 20 mm ■ Once the surface is sufficiently firm, rough up the whole area thoroughly with a suitable tool, e.g. lattice plane. ■ If the plaster is applied in layers, then allow an intermediate standing time of one day per mm of plaster thickness before applying the next layer. ■ On highly or varyingly absorbent substrates, apply two layers, wet in wet.
Processing / Working time	<ul style="list-style-type: none"> ■ Approx. 2 to 3 hours ■ Mortar that has already started to harden must never be thinned down with additional water, remixed or applied. ■ The stated times apply for a temperature of +20°C and relative humidity of 65%.
Drying / Hardening	<ul style="list-style-type: none"> ■ Protect the fresh mortar from drying out too quickly and from unfavourable weather conditions such as frost, draughts, direct sunlight and direct exposure to driving rain if necessary by hanging with foil.
Cleaning the tools	<ul style="list-style-type: none"> ■ Clean all tools and equipment with water immediately after use.
Notes	<ul style="list-style-type: none"> ■ Carefully cover adjacent surfaces and components (e.g. windows, window sills, etc.). Wash off contamination immediately with water.

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PACKAGING

- 30 kg/sack

STORAGE

- Store sacks appropriately and in dry conditions on pallets.

QUANTITY REQUIRED / YIELD

- consumption: approx. 10 kg/m² per 10 mm plaster thickness
- yield: app. 30 l fresh mortar per 30 kg/sack

TECHNICAL DATA

Product type	Renovation plastering mortar R
Category	CS II
Compressive strength	1.5 - 5 N/mm ²
Grain	0 – 2,5 mm
Water requirement	approx. 10,0 l per 30 kg/sack
Water retention	> 85 %
Fire behaviour	A1 (non-flammable) in accordance with EN 13501
Adhesive tensile strength	≥ 0.08 N/mm ²
Set mortar bulk density	approx. 1.3 kg/dm ³
Capillary water absorption	> 1,0 kg/m ² after 24 h
Water penetration	> 5 mm
Water vapour permeability μ	≤ 18
Air void content	≥ 25 % by vol.
Porosity	> 50 % by vol.
Thermal conductivity $\lambda_{10,dry,mat.}$ for P=50%	≤ 0.45 W/(mK)
Thermal conductivity $\lambda_{10,dry,mat.}$ for P=90%	≤ 0,49 W/(mK)

All data are average values that were determined under laboratory conditions according to relevant test standards and application tests. Deviations are possible under practical conditions.

SAFETY AND DISPOSAL INSTRUCTIONS

Safety	<ul style="list-style-type: none">■ This product produces an alkaline reaction when it comes into contact with moisture/water. Therefore ensure that skin and eyes are protected. If it should come into contact with the skin or eyes, rinse them thoroughly with water. See a doctor immediately if it comes into contact with the eyes.■ Further information can be found in the safety data sheet at www.tubag.de.
GISCODE	<ul style="list-style-type: none">■ ZP1 (products containing cement, low-chromate)
Disposal	<ul style="list-style-type: none">■ Completely empty and recycle the packaging.■ Dispose of the material in accordance with the official regulations.■ Dispose of hardened product in accordance with the local regulations. Do not allow to enter the sewer system. Dispose of the hardened product in the same way as concrete waste and slurries. Waste code according to the Ordinance on the European Waste Catalogue depending on the origin: 17 01 01 (concrete) or 10 13 14 (concreteste and concrete slurries).

GENERAL INFORMATION

This information sheet provides only general recommendations. Should you have any queries relating to a specific application, please contact our technical sales advisor or call our hotline: +49 541 601-601. Since natural raw materials are used, the values and properties described may vary somewhat. All of the details given are based on our current knowledge and experience and on the assumption that the materials are professionally applied and used for their normal purpose. All of the details are non-binding and do not release users from their duty to undertake their own tests to ensure suitability for the intended application. Due to the effects of different weather, processing and construction site conditions, no guarantee can be given for the general validity of all details. We reserve the right to make changes as a result of further development of the product and applications engineering. The general rules for construction engineering, the valid standards and guidelines, and the technical working guidelines must be observed. The publication of this technical data sheet renders all previous editions of this data sheet void. Please obtain the latest information from our website.