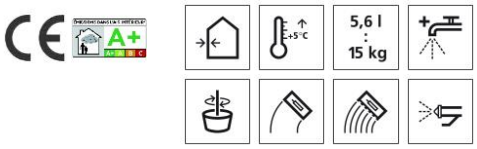
Technical Data Sheet
StoLevell Novo

Mineral lightweight mortar/base coat for bonding and reinforcing with polystyrene as lightweight aggregate



Characteristics

Area of application

- exterior and interior
- for reworking old mineral renders or masonry
- for bonding insulation boards onto mineral substrates
- for producing medium- and thick-layer reinforcing coats
- as an adhesive and reinforcing compound for StoTherm Vario, StoTherm Mineral, StoTherm Wood, StoTherm Resol, StoTherm Resol plus and StoTherm PIR

Properties

- highly economical in consumption
- suitable for application in medium to thick layers
- highly suitable for machine application
- very highly permeable to water vapour
- very highly weather-resistant
- low weight

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Mortar class	EN 998-1	CS II	
Mortar class	DIN 18550-1/-2	P II	
Bulk density of hardened mortar	EN 1015-10	0.9 g/cm³	
Flexural strength (28 days)	EN 1015-11	1.7 N/mm²	
Compressive strength (28 days)	EN 1015-11	3.3 N/mm²	
Dynamic modulus of elasticity (28 days)	TP BE-PCC	2,000 N/mm²	
Water vapour diffusion-equivalent air layer thickness µ		≤ 20	
Water absorption	ETAG 004	≤ 0.5 kg/m²	
Water absorption (class)	EN 1015-18	C ≤ 0.20 kg/(m²*min^{0,5})	W_c 2
Thermal conductivity	EN 1745	≤ 0.25 W/(m*K) for P=50%	Table value
Thermal conductivity	EN 1745	≤ 0.27 W/(m*K) for P=90 %	Table value

Technical Data Sheet
StoLevell Novo

Reaction to fire (class)	DIN 13501-1	A2-s1, d0
Spreading rate		1,190 L/t

The characteristic values stated are average values or approximate values. Due to the natural raw materials in our products, the stated values can vary slightly in the same delivery batch; this does not affect the suitability of the product for its intended use.

Substrate

Requirements

The substrate must be firm, level, dry, load-bearing and free from grease and dust. Check whether the fixing is suitable for the substrate at the building site, if necessary.
Damp or not fully cured substrates can lead to defects in the subsequent coatings, e.g. bubble formation, cracks.

Preparations

Check existing coatings for their suitability and load-bearing capacity. Remove any non load-bearing or structurally weak coatings.
Clean the substrate if necessary.

Application

Application temperature

Lowest temperature of substrate and air: +5 °C
Highest temperature of substrate and air: +30 °C

Time for application

At +20 °C: approx. 60 minutes

Mixing ratio

5.6 l of water per 15 kg

Material preparation

Decant water, then add the pre-blended dry mortar. Mix for approx. 2 minutes, allow to mature for approx. 3 minutes, and then stir again for approx. 30 seconds.

Consumption

Type of application	Approx. consumption	
Reinforcement depends on system approval	5.00 - 15.00	kg/m²
reinforcement for StoTherm Vario and Mineral	4.50 - 14.00	kg/m²
reinforcement for StoTherm Resol	8.00 - 13.00	kg/m²
reinforcement for StoTherm Resol plus	5.00 - 10.00	kg/m²
reinforcement for StoTherm Wood	8.00 - 13.00	kg/m²
reinforcement for StoTherm PIR	8.00 - 13.00	kg/m²
Reinforcement of EPS foam boards, soft fibre boards M, and mineral wool boards (layer thickness 5 - 10 mm)	4.50 - 14.00	kg/m²
reinforcement of soft fibre boards M (layer thickness of 8 - 13 mm)	7.00 - 12.00	kg/m²
bonding of EPS foam boards and mineral wool boards	3.50 - 4.00	kg/m²

	additional bonding of insulation boards in case of rail fixing	2.00	kg/m²
	per mm layer thickness	0.86	kg/m²
	bonding Resol insulation boards	4.00	kg/m²
	for bonding of PIR/PUR insulation boards	4.00	kg/m²

Material consumption depends on the application, substrate, and consistency, among other factors. The stated consumption values are only to be used as a guide. If required, determine precise consumption values on the basis of the specific project.

Application

manually, by machine (recommended), sprayable with commonly available fine plaster and render spray machines

Usage as an adhesive compound:
Application option 1: Apply the product to the wall by machine or manually using a rust-free steel trowel, then comb through using a notched trowel (15 x 15 mm). Immediately press the insulation boards into the fresh layer of adhesive, or float them into place and apply pressure.
Bonded proportion of the insulation board: min. 60 %

Application option 2: Apply the product to the insulation board by machine or manually using a rust-free steel trowel. Immediately press the freshly-bonded insulation boards onto the wall, or float them into place and apply pressure.
Bonded proportion of the insulation board: min. 40 %

Usage as a reinforcing compound:
The product's application depends on the required or desired layer thickness of the reinforcing coat.

Layer thickness according to insulation board material:
EPS: 5 - 15 mm
Mineral fibre: 5 - 15 mm
Soft fibre: 8 - 13 mm
Phenolic resin rigid foam: 10 - 13 mm (in some cases also 8 mm)
polyurethane: 10 - 13 mm (in some cases also 8 mm)

Application options according to layer thickness:
5 - 13 mm: application options 1 and 2
10 - 15 mm: application options 3 and 4

Application option 1: Manually and by machine in one application cycle
Apply the product in the corresponding layer thickness by machine or using a rust-free steel trowel. Fully embed the mesh in the upper third of the still-damp reinforcing coat. Apply reinforcing compound to the mesh and distribute it, in order to ensure that the mesh is completely covered with reinforcing compound. Observe the layer thickness.

Application option 2: Manually and by machine, wet-in-wet in two application cycles
Application cycle 1: Apply reinforcing compound with a notched trowel. Comb in the direction in which the mesh will be laid in application cycle 2. Leave the reinforcing compound to start to dry. Arrange the mesh angle beads over the combing.

Application cycle 2: Apply reinforcing compound to the entire area. Embed the mesh into the reinforcing compound without any air pockets. Smooth the surface.

Application option 3: Manually in three application cycles
Application cycle 1: Use a trowel to apply reinforcing compound to two thirds of the total final thickness. Smooth it and the comb off using a notched trowel (4 x 4 mm). Comb in the direction in which the mesh will be laid in application cycle 2. Leave the reinforcing compound to dry for 24 - 36 hours.

Application cycle 2: Level the surface, e.g. using a smoothing trowel, and then dust off as necessary.

Application cycle 3: Apply reinforcing compound to the entire area. Embed the mesh into the reinforcing compound without any air pockets. Smooth the surface.

Application option 4: By machine in three application cycles
Application cycle 1: Apply the reinforcing compound to a thickness of 3 - 5 mm by machine with a 10 mm nozzle (sprinkling or spraying). The insulation board must be fully covered. Leave the reinforcing compound to dry over night.

Application cycle 2: In the area of mesh angle beads, apply reinforcing compound in the total final thickness and then comb off. Embed the mesh angle beads into the reinforcing coat.

Application cycle 3: Apply reinforcing compound with a 10 mm nozzle and embed the mesh. Apply reinforcing compound to the mesh wet-on-wet and distribute it, in order to ensure that the mesh is completely covered with reinforcing compound. Smooth the surface using a smoothing trowel. Observe the layer thickness.

Note for all application options:
The mesh joints must overlap by 10 cm. Apply additional diagonal reinforcement on building apertures (e.g. windows, door reveals). The mesh must lie in the upper third of the reinforcing coat. The reinforcing coat must cover the mesh by min. 2 - 3 mm.

The layer thickness must be the same over the entire facade surface area.

The values mentioned here are for guidance. Depending on the area of use (e.g. in corners and reveals), the layer thickness may vary significantly.

Technical Data Sheet
StoLevell Novo

Drying, curing, ready for next coat	Drying time depends on temperature, wind, and relative humidity. During unfavourable weather conditions, protect the work in progress or newly-finished facade surface using suitable protective measures, e.g. protection against rain. Curing depends on the climatic conditions in the room and lasts approx. 1 day per mm layer thickness.
Cleaning the tools	Clean tools with water immediately after use.
Notes, recommendations, special information, miscellaneous	For further application instructions, see the application guidelines for the systems.

Delivery

Colour shade	natural white
Tintable	Not tintable
Packaging	sack

Storage

Storage conditions	Store in dry conditions.
Storage life	This product has a low chromate content. The quality of the product in its original container is guaranteed until the maximum storage life has expired. The storage life information is included in the batch number on the container. Explanation of batch no.: digit 1 = last digit of the year, digits 2 + 3 = calendar week Example: 1450013223 - storage life ends week 45in 2021

Certificates/approvals

ETA-09/0058	StoTherm Classic® 5 (EPS and StoArmat Classic plus/StoArmat Classic plus QS) European Technical Assessment
ETA-20/0465	StoTherm Classic® 11 (EPS and StoArmat Classic HD + StoAdditiv HD) European Technical Assessment
ETA-09/0288	StoTherm Classic® 5 (MW/MW-L and StoArmat Classic plus/StoArmat Classic plus QS) European Technical Assessment
ETA-20/0480	StoTherm Classic® 11 (MW/MW-L and StoArmat Classic HD + StoAdditiv HD) European Technical Assessment
ETA-06/0045	StoTherm Vario 3 (EPS and StoLevell Novo) European Technical Assessment
ETA-12/0561	StoTherm Vario 7 (EPS and StoLevell FT)

Technical Data Sheet
StoLevell Novo

	European Technical Assessment
ETA-19/0443	StoTherm Vario 8 (timber frame construction – EPS and StoLevell Duo/StoLevell Duo plus/StoLevell Uni/StoLevell Novo/StoLevell FT) European Technical Assessment
ETA-07/0027	StoTherm Mineral 3 (MW/MW-L and StoLevell Novo) European Technical Assessment
ETA-13/0901	StoTherm Mineral 5 (MW/MW-L and StoLevell FT) European Technical Assessment
ETA-13/0581	StoTherm Mineral 8 (timber frame construction - MW-L and StoLevell Uni/StoLevell Novo, fixing: bonded) European Technical Assessment
ETA-08/0303	StoTherm Wood 1 (timber frame construction - soft wood fibre and StoLevell Uni/StoLevell FT/StoLevell Novo, fixing: anchor-fixed) European Technical Assessment
ETA-09/0267	StoTherm Resol European Technical Assessment
ETA-13/0580	StoTherm Resol Plus European Technical Approval
ETA-17/0041	StoTherm PIR European Technical Assessment

Identification

Product group

Bonding and reinforcing mortar

Composition

white Portland cement
hydrated lime
polymer powder
mineral extenders
mineral lightweight aggregates
organic lightweight aggregates
organic extenders
hydrophobic agents
thickener

Safety

This product is subject to compulsory labelling in accordance with the current EU regulation.
Observe the Safety Data Sheet!
Safety instructions refer to the ready-to-use, unapplied product.

Causes skin irritation.Causes serious eye damage.May cause respiratory irritation. Keep out of reach of children. Avoid breathing dust. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing/ eye protection/ face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.Get immediate medical

advice/ attention.IF ON SKIN: Wash with plenty of soap and water.If skin irritation occurs: Get medical advice/ attention.Take off contaminated clothing and wash it before reuse.IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Special notes

The information in this Technical Data Sheet serves to ensure the product's intended use, or its suitability for use, and is based on our findings and experience. Users are nevertheless responsible for establishing the product's suitability and use.
Applications not specifically mentioned in this Technical Data Sheet are permissible only after prior consultation. Where no approval is given, such applications are at the user's own risk. This applies in particular when the product is used in combination with other products.

When a new Technical Data Sheet is published, all previous Technical Data Sheets are no longer valid. The latest version is available on the Internet.

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