

SM700 Pro

Technical Data Sheet

12/2023



SM700 Pro

Fibre reinforced mineral bonding mortar

Product Definition

SM700 Pro is a fibre reinforced, mineral bonding mortar, basecoat and renovation mortar and render finish.

Storage

The bags should be stored horizontally on a flat surface such as a wooden pallet and kept dry so that they do not come into contact with water. Partly opened and / or damaged bags should not be used. Product shelf time is 12 months.

Standards referred to

In compliance with EN 998-1, the product is subject to initial type testing and continuous factory production control. Furthermore, the product is subject to external monitoring and bears the Ü marking as well as the CE marking.

Fields of Application

As an adhesive, basecoat and render finish for various Knauf systems (such as exterior insulations), redecorations.

Özellikleri

- Fibre reinforced
- Suitable for both interior and exterior applications
- Hand or machine applied
- 1 mm particle size
- White color

Application

Surface Preparation

Clean the substrate of dust and loose parts and remove ensuring that the surface is smooth. Cover easily-soiled building components before commencement. Protect weather-exposed surfaces from precipitation and direct sunlight. All substrates must be stable, dry, even and free of grease and dust as well as free of any residual substances that may reduce the adhesion.

Test existing coats (paint coats and old renders) for stability and compatibility before application of SM700 Pro. Allow primer coats to dry for at least 12 hours before continuing work.

Karıştırma

Machine application: For machine application using mixing pumps, e.g. PFT G4 with agitator (Rotoquirl), set the desired consistency by adding water.

Application by hand: Mix the content of one bag with about 6.4 litres of clean water without further additions until an application-ready lump-free consistency is achieved. When mixing, use clean water and do not add other additives. Clean the machines and tools with water immediately after use.

Application

Adhesive mortar

Application of bonding mortar acc. to table, depending on the insulation material. Apply insulation panels immediately (max. 10 minutes after mortar application) in the fresh bonding mortar bed by pushing, floating and pressing. Allow for a setting time of at least 48 hours before continuing work. [Ribband and dab method](#)

Apply an approx. 50 mm wide ribbon of mortar around the perimeter of the insulation panels and 3 palm-sized adhesive mortar dabs or strips in the middle.

[Full surface application](#)

On even substrates, it is possible to apply the adhesive mortar on the entire surface of the insulation panel with a notched trowel.

[Machine application](#)

Apply bonding mortar directly on the substrate as meandering mortar strips. With a bonding area ratio $\geq 60\%$, the spacing of the strips may not exceed max. 80 mm. Only apply a max. of 3 m of adhesive in advance to the surface being worked.

Basecoat

Embed strips of reinforcement mesh or mesh corner angle for lintel corner at the inner corners between window reveal and window lintel fully in SM700 Pro. Subsequently apply mesh corner angle 100/150 perpendicular and flush. If mesh corner angle for lintel corner is not used, apply additional diagonal reinforcement made of mesh corner arrows or reinforcement mesh strips (approx. 300 x 500 mm) directly in the fresh mortar starting from the corner. Subsequently embed reinforcement mesh on the entire surface with at least a joint overlap of 100 mm "fresh-in-fresh" in the upper third of the basecoat layer. The reinforcement mesh should be fully covered with SM700 Pro A drying time of min. 1 day per mm basecoat thickness is required prior to application of mineral-based render finishes. Paste-like finishing coats may not be applied before SM700 Pro is fully dry, minimum drying time is 10 days. In addition, we strongly recommend application of a Quarzgrund primer before paste-like finishing coats are applied. The stated drying times may be significantly longer in case of cool or wet weather.

If a double-layer reinforcement is required, the first layer is applied with a thickness of 3-4 mm while embedding the reinforcement mesh with ≥ 100 mm joint overlap. After hardening of the first reinforcement layer, apply a layer of SM700 Pro to the entire surface with a thickness of approx. 2 - 3 mm on the first basecoat layer, while embedding a second layer of reinforcement mesh, again with ≥ 100 mm joint overlap. The diagonal reinforcements are embedded below the last mesh layer. Allow a drying time of at least 1 day/ mm layer thickness.

Render finish

Apply SM700 Pro for sponged or freely textured surfaces with a layer thickness of 2 - 3 mm to the basecoat. The drying time of the basecoat can be reduced to 1 day if the basecoat layer is applied with SM700 Pro. For WARM WALL systems, the drying time can be reduced to 1 day only if EPS or mineral wool insulation boards are used. Start sponging or free texturing with initial setting of the SM700 Pro. Do not apply paint or additional coating until after 7 days.

Renovation mortar

SM700 Pro can be applied with a coating thickness of up to 10 mm as a leveller of texture imperfections. Embed reinforcement mesh if necessary.

Special notes

For application as a bonding and basecoat mortar, the Knauf System Data Sheet and the National Technical Approval for the corresponding Knauf WARM WALL system must be observed.

For application as a renovation mortar or render finish, apply according to EN 13914-1, EN 13914-2, DIN V 18550, DIN 18550 and DIN 18350, VOB part C as well as the generally recognized building engineering rules and valid guidelines. Only mix the dry mortar with clean water, do not add other additives. With previous application of gypsum plasters or plasters containing gypsum, it is essential that the plastering machine is thoroughly cleaned (wet zone, plaster spiral, rotor, dry zone, gear wheel, hoses).

The mineral finishing render offers some protection against algal and fungal growth and has an inhibiting effect due to its natural alkaline formulation. No guarantee can, however, be given for long-term protection against algal and fungal growth. The susceptibility depends on the local and environmental conditions.

Application Tools

Trowel, steel trowel, PFT® G4 plaster machine

Application Temperature

Do not apply below +5°C or above +30°C ambient, material and / or floor temperature. Fresh mortar should be protected against frost and quick drying.

Working Time (on the Applied Surface)

2 hours

Safety Instructions

- Wash hands with plenty of water after handling.
- Use protective gloves / protective clothing / eye protection / face protection.
- In case of contact with eyes: Rinse your eyes cautiously with water for several minutes.
- If there is a lens remove it and continue to rinse.
- If eye irritation persists: Get medical advice / attention.

Technical Data*

Description	Unit	Value
Color	-	White
Particle size	mm	1
Application thickness	mm	5 - 7 (Mesh reinforcement) 1 - 10 (Renovation mortar) 2 - 3 (Render finish) 3 - 5 (Adhesive mortar)
Capillary water absorption	-	W2
Water vapour permeability coefficient	μ	≤ 25
Reaction to fire	-	A2-s1,d0
Thermal conductivity λ	W / mK	≤ 0,82 (P=%50) ≤ 0,89 (P=%90)
Compressive strength (28 day)	N/mm ²	CS III
Bond strength (28 day)	N/mm ²	≥ 0,08
Working Time (on the Applied Surface)	hour	2
Amount of mixing water (for 25 kg mortar)	l	6,4
Application temperature	°C	5 - 30

*The stated technical data were evaluated acc. to the respective test standards. Deviations under site conditions are possible.

Material Consumption

Application type	Unit	Consumption
Adhesive (rough substrate)	kg/m ²	6,0
Adhesive (level substrate)		3,5
Mesh reinforcement		7 - 13
Remodelling of textured render finish		5
Render finish (sponged)		4,2

Packaging

Definition	Weight (kg)	Packaging (bag/pallet)	Material Number
SM700 Pro	25	66	164930

System Performance Values

Please check for detailed information;
[Knauf Technial Website](#)
[Document Center](#)

Application

It is suggested to follow the technical details which given on Knauf system brochures for application.

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