SM700 Pro

Adhesive, basecoat, renovation mortar and render finish, white or dyed

Product Data Sheet *2026-04*

Product description

System-approved, natural white, reinforced with special fibres, mineral-based adhesive, basecoat and render finish for WARM WALL systems. As an adhesive on basecoats and as a mortar for renovation, refurbishment and remodeling.

Composition

White cement, hydrated lime, graded limestone grains, limestone powder, silica sand, special fibres, special bonding agent, water-repellents and additives.

Storage

Store the bags on wooden pallets in a dry environment. The product can be stored for at least 12 months. Re-bag damaged bags and use first.

Quality

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.

Properties and added value

- General-purpose rendering/plastering mortar GP acc. to EN 998-1
- Compressive strength category CS III acc. to EN 998-1
- Special fibre and bonding agents
- For application on the façade and plinth area
- For interiors and exteriors
- For machine or hand application
- Can be sponged
- Grain size 1.0 mm
- Colour shade white, approx. RAL 9001 and limited number of colours with Knauf ColorConcept colour shade selector card

Field of application

- As an adhesive and basecoat for Knauf WARM WALL systems
- Renovation mortar and basecoat when reworking existing old coating layers
- Reinforcement on basecoat
- Mineral render bonding layer
- Multi-textured top coat (broom finish, combed trowel finish, sponged finish, freely textured, etc.)
- For application on façades and plinth area

Application

Substrate and pretreatment

Substrate	Pretreatment
Non-stable paint coats	Remove completely.
Render hollows and cavities	Remove completely and fill with a suitable render, take the drying times into account.
Concrete, paint coats, old render	If necessary, clean with a high-pressure water cleaner adapted to the substrate until free of dust and allow to dry completely.
Old plaster / render	Solidify the surface by applying Grundol primer that should be fully absorbed.

Preparation

Check the substrate for compliance with VOB part C, DIN 18350, chapter 3.1 and/or according to VOB part B, DIN 1961 paragraph 4 section 3. Clean the substrate of dust and loose parts and remove, ensure that the surface is smooth. Cover easily-soiled building components before commencement in accordance with Code of Practice "Abklebe- und Abdeckarbeiten für Maler- und Stuckateurarbeiten - *Masking and covering for painting and stucco work*" (German only) issued by the Bundesverband Ausbau und Fassade. Protect weather-exposed surfaces from precipitation and direct sunlight.

Preparation of the substrate in accordance with the Substrate/ Pre-treatment table. 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. Allow primer coats to dry for at least 12 hours before continuing work.

Machines / equipment

Knauf PFT mixing pump G 4 with agitator (Rotoquirl)

- Stator D4-3
- Rotor D4-3
- Mortar hoses Ø 25 mm
- Wet mortar pumping distance up to 40 m

Mixing

Mixing by hand

Mix the content of one 25 kg bag with about 6.4 litres of clean water or one 10 kg bag with about 2.6 litres of clean water without further additions until an application-ready lump-free consistence is achieved.

Mixing by machine

For machine application using mixing pumps, e.g. PFT G4, set the desired consistence by adding water.

Application

Bonding

SM700 Pro can be applied manually or by machine. A stainless-steel trowel must be used. Apply insulation panels immediately, no later than 10 minutes after application of the adhesive, in the fresh adhesive bed by pushing, floating and pressing. Allow a setting time of at least 48 hours before a further coating is applied.

Polystyrene insulation panels

Partial surface on insulation panel

The adhesive bonding surface with the substrate is ≥ 40 % after pressing in the insulation panels. Apply an approx. 50 mm wide ribbon of mortar around the perimeter and 3 palm-sized adhesive mortar dabs or strips on the insulation panel center.

Entire surface on insulation panel

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

Application of adhesive on the substrate by machine

Apply machine applied adhesive in the form of mortar dabs directly on the substrate at spaces of maximum 100 mm using the meandering method and apply the insulation panels immediately by pushing, floating and pressing. The required adhesive bonding surface is ≥ 60 % after pressing in the insulation panels. Apply a continuous strip of adhesive in the edge areas. Only apply a maximum of 3 m of adhesive in advance.

Pre-coated lamellae board on both sides

Entire surface on insulation panel

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

Application of adhesive on the substrate by machine

Apply machine applied adhesive in the form of mortar dabs directly on the substrate at spaces of maximum 100 mm using the meandering method and apply the insulation panels immediately by pushing, floating and pressing. The required adhesive bonding surface is ≥ 50 % after pressing in the insulation panels. Apply a continuous strip of adhesive in the edge areas. Only apply a maximum of 3 m of adhesive in advance.

Precoated insulation boards on both sides with mineral wool

Partial surface on insulation panel

The adhesive bonding surface with the substrate is ≥ 40 % after pressing in the insulation panels. Apply an approx. 50 mm wide ribbon of mortar around the perimeter and 3 palm-sized adhesive mortar dabs or strips on the insulation panel center.

Entire surface on insulation panel

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

Application of adhesive on the substrate by machine
Apply machine applied adhesive in the form of mortar dabs directly on the substrate at spaces of maximum 100 mm using the meandering method and apply the insulation panels immediately by pushing, floating and pressing. The required adhesive bonding surface is ≥ 50 % after pressing in the insulation panels. Apply a continuous strip of adhesive in the edge areas. Only apply a maximum of 3 m of adhesive in advance.

PU insulation panel
Partial surface on insulation panel
The adhesive bonding surface with the substrate is ≥ 40 % after pressing in the insulation panels. Apply an approx. 50 mm wide ribbon of mortar around the perimeter and 3 palm-sized adhesive mortar dabs or strips on the insulation panel center.

Application of adhesive on the substrate by machine
Apply machine applied adhesive in the form of mortar dabs directly on the substrate at spaces of maximum 100 mm using the meandering method and apply the insulation panels immediately by pushing, floating and pressing. The required adhesive bonding surface is ≥ 60 % after pressing in the insulation panels. Apply a continuous strip of adhesive in the edge areas. Only apply a maximum of 3 m of adhesive in advance.

Reinforcement

At the inside corners of reveal to lintel, embed reinforcement mesh strips or mesh corner angle reinforcement fully into the SM700 Pro. Subsequently apply Gewebeeckwinkel 100/150 Mesh Corner Angles 100/150 mm perpendicular and flush, apply the reinforcement layer and level it. Alternatively, embed diagonal reinforcement made of Gewebeeckpfeile mesh corner arrows or reinforcement mesh strips approx. 300 x 500 mm directly in the fresh mortar starting from the corner. When reinforcing wood fibre insulation boards, first of all apply SM700 Pro as a surface-pressed layer on the board surface. Apply mortar in the corresponding render thickness and embed Knauf Armiergewebe reinforcement mesh on the entire surface with at least a joint overlap of 100 mm “fresh-in-fresh”. The reinforcement mesh should be fully covered with SM700 Pro. The mesh is arranged in the centre of the mortar when the basecoat thickness is up to 4 mm, in case of 5 to 7 mm layer thickness it is in the upper half of the layer and in case of > 7 mm in the exterior third.
In case of a double reinforcement mesh layer, the mesh layers must be offset to one another. At least 2 to 3 mm mortar must be between the mesh sheets. The diagonal reinforcements are embedded after the first reinforcement mesh layer. Joint overlap of the second reinforcement mesh to the first reinforcement mesh and the overlap of the mesh sheets to one another: ≥ 100 mm.

The layer thicknesses of the basecoat layer on Knauf WARM WALL is systems 5 – 7 mm, with the exception of:
- WARM WALL Plus in Solid Construction: 5 – 10 mm,
- WARM WALL Plus in Timber Construction: 7 – 10 mm recommended,
- WARM WALL Natur in Timber Construction: 7 – 10 mm recommended,
- On basecoats: approx. 4 mm.

Renovation mortar
SM700 Pro can be applied with a coating thickness of up to maximum 10 mm as a leveller of texture imperfections. Apply multiple layers for larger layer thicknesses. Embed Knauf reinforcement mesh if necessary.

Basecoats
When used as a reinforcement mortar on lightweight renders, a layer thickness of approx. 4 mm should be applied and reinforcement mesh embedded across the entire surface.

When applied as a basecoat, a general drying time of at least 1 day per mm layer thickness should be observed. In case of unfavourable weather conditions (e.g. high air humidity or low temperatures) the drying time will be extended.

Render bonding layer
Apply SM700 on concrete, XPS-R, wood fibre panels and similar substrates with a thickness of min. 5 mm. Spread the mortar using a widely notched trowel and roughen surface with a brush. Apply SM700 with a thickness of at least 5 mm. Spread the mortar using a widely notched trowel and roughen the surface with a brush. Wait at least 1 day and a maximum of 3 days before application of further coats. An additional reinforcement mesh should be embedded when reinforcing the substrate.

Finish render
Apply sponged texture SM700 Pro to the full surface using a stainless steel tool in grain thickness. In case of application by machine, spray on a thin layer of material and rule with a stainless steel tool. Allow SM700 Pro to dry and then apply the second layer in grain thickness and sponge finish.
Apply SM700 Pro as a freely textured surface (e.g. broom finish) with a layer thickness of 2 to 3 mm and work the surface.
The drying time of the basecoat can be reduced to one day if the basecoat layer is applied with SM700 Pro. For WARM WALL systems, the drying time can be reduced to one day only if EPS or mineral wool insulation boards are used.

Plinth application
The render system must be protected against the ingress of moisture at the connection to the lower edge. The required plaster sealing or the necessary moisture protection must be applied up to at least 5 cm above the edge of the ground line or top edge of the covering. In the lower edge, this is recommended for application up to the existing building sealing or perimeter insulating panels. As a plaster seal / moisture protection, apply Sockel-Dicht in a layer thickness of at least 1.2 mm (dry layer thickness min. 1 mm). When sufficiently dry, apply a protective cover against damage (e.g. fleece laminated dimpled sheet and slip membrane) up to the ground line.

Health-relevant requirements

Always wear waterproof, robust gloves, long work clothes and safety goggles when working with SM700 Pro.
If SM700 Pro comes into contact with the eyes, they must be washed out immediately with clean, clear water and an eye specialist consulted immediately! Avoid prolonged skin contact with the product and, if this occurs, clean the affected areas immediately and thoroughly with clean water!

The longer the fresh product remains on your skin, the greater the risk of serious skin damage. Keep children away from fresh material and always follow the health and safety instructions during application.

Application temperature/climate

Do not apply with air, component and/or substrate temperatures below +5 °C and ensure that the temperature does not fall below this temperature until the plaster has hardened sufficiently. Furthermore, the temperature should not exceed +30 °C during application.
In order to prevent rapid dehumidification of the fresh render by the exposure to direct sunshine (high surface temperatures), and/or strong wind (danger of cracks, reduction in strength) suitable protection measures / treatment (e.g. protective nets, keeping moist) are required.

Cleaning

Clean the equipment and tools with water immediately after use.

Notes	For application as an adhesive, basecoat and render finish, the Knauf system data sheet and the National Technical Approval / general type approval for the corresponding Knauf WARM WALL system must be observed. Renders must be applied according to EN 13914, DIN 18550, DIN 55699, DIN 8345 and DIN 18350 as well as the generally recognized building engineering rules and valid guidelines. 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. Heating in rooms should only be put into operation in stages. Rapid dehumidification, e.g. using dehumidifiers should be avoided.

Coatings and linings

In case of SM700 Pro as a finish coat, a sufficient drying time of at least 7 days until the application of further paint coats must be observed. In case of pigmented SM700 Pro on exteriors (for WARM WALL systems also for white SM700 Pro), an additional coat in plaster colour shade with Siliconharz-EG paint or MineralAktiv Fassadenfarbe façade paint is recommended. See Code of Practice "Egalisationsanstriche auf Edelputzen - *Equalization coats on finishing plasters*", issued by the German Verband für Dämmsysteme, Putz und Mörtel e.V. (VDPM), (German only). In case of white SM700 Pro in exteriors which are to be pigmented, a double coat of Knauf Fassadenfarbe façade paint is recommended. At a luminority < 20, a reflection-optimized paint coat using Fassadol TSR or Autol TSR should be applied to the white SM700 Pro. In interiors an additional coat of Knauf interior paint should be applied.

Technical data

Description	SM700 Pro	Unit	Standard
Reaction to fire	A2-s1, d0	Category	EN 13501-1
Grain size	1.0	mm	–
Compressive strength	CS III	Category	EN 1015-11
Tensile adhesion strength	≥ 0.08 Fracture pattern A, B or C	N/mm^2	EN 1015-12
Capillary water absorption	W_c 2	Category	EN 1015-18
Water vapour permeability coefficient μ	≤ 25	–	EN 1015-19
Thermal conductivity $\lambda_{10,\,dry\,mat}$ at P = 50 % P = 90 %	 ≤ 0.82 ≤ 0.89	 W/(m·K) W/(m·K)	EN 1745

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

Material requirement / efficiency

Application method	Coat thickness mm	Consumption approx. kg/m²	Yield approx. m²/bag
Adhesive (40% adhesive surface)	5	2.9	8.6
Adhesive (100% adhesive surface)	5	7.1	3.5
Reinforcement layer WARM WALL	5 – 10	7.0 – 13.0	3.6 – 1.9
Façade renovation/reinforcement layer on basecoat	4	5.6	4.5
Render finish (sponged)	3	4.2	6.0
Render bonding layer	5	7.0	3.6

The consumption values were determined under laboratory conditions. Additional consumption resulting from conditions in practice must be taken into account. The material consumption depends on the roughness, evenness and absorption properties of the substrate as well as the machinery used.

Product variants

Description	Application	Grain size	Packaging unit	Material number	EAN
SM700 Pro	25 kg	1.0 mm	42 bags/pallet	00164930	4003950085734
	25 kg (pigmented)			00167798	4003950085741
	10 kg		80 bags/pallet	00466708	4003982315731

Sustainability and environment

Note	SM700 Pro is qualified as a part of the Sentinel Holding Institute (SHI) Product pass for ETICS adhesive and basecoat.

Videos for Knauf systems and products can be found under the following link:
youtube.com/knauf

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