

### Note on English translation / Hinweise zur englischen Fassung

This is a translation of the product data sheet valid in Germany.

All stated details and properties are in compliance with the regulations of the German standards and building regulations. They are only applicable for the specified products, system components, application rules, and construction details in connection with the specifications of the respective certificates and approvals.

Knauf Gips KG denies any liability for applications outside of Germany as this requires changes acc. to the respective national standards and building regulations.



Plaster & Façade Systems

# P241a.de

Product Data Sheet

2023-03



# SM700

Bonding, basecoat and renovation mortar

### Product description

System approved, fibre reinforced, mineral bonding mortar, basecoat and renovation mortar for façades and plinths.

### Composition

Lime hydrate, grey cement, graded lime stone graining, lime stone powder, silica sand, special fibres, special bonding agent, water-repellents and additives.

### Storage

Store the bags on wooden pallets in a dry environment. Can be stored for at least 9 months.

### 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
- For interior and exterior application
- Contains fibres and bonding agents
- For machine or hand application
- Grain size 1.0 mm
- Contains fibres and bonding agents
- For machine or hand application
- Grey

## Field of application

- As an adhesive for Knauf WARM WALL Ceramic (Z-33.46-424) and WARM WALL Natural Stone (Z-33.46-1703).
- As an adhesive and basecoat for the following Knauf systems in solid construction:
  - WARM WALL Basis (Z-33.41-81),
  - WARM WALL Basis/Plus (Z-33.43-82),
  - WARM WALL Basis (Doubling-Up) (Z-33.49-981),
  - WARM WALL Plus (Doubling-Up) (Z-33.49-981),
  - WARM WALL Slim (Z-33.43-1235; Z-33.43-1408; Z-33.41-1382),
  - WARM WALL Plus (Z-33.44-83).
- As a renovation mortar for façade rework.
- As a bonding plaster primer.

## 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 until dust free and allow to dry completely.
Chalking or sanding surfaces	Solidify surface by applying Grundol primer. The primer should be completely 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 remove loose parts ensuring that the surface is smooth. Cover easily-soiled building components before commencement in accordance with Code of Practice "Abklebe- und Abdekarbeiten für Maler- und Stuckateurarbeiten" (German only) issued by the German 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 of SM700. Allow primer coats to dry for at least 12 hours before continuing work.

### Machines / equipment

PFT mixing pump G 4

- Stator D6-3
  - Rotor D6-3
  - Mortar hoses Ø 25 mm
  - Wet mortar pumping distance up to 40 m
- Rotoquirl agitator is required

## Mixing

### Mixing by hand

Mix the content of one bag with 6.8 litres of clean water without further additions until an application-ready lump-free consistence is achieved. When mixing, use clean water and do not add other additives. Clean the machines and tools with water immediately after use.

### Mixing by machine

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

## Application

### Adhesive

Apply the adhesive to suit the insulation material. Apply insulation panels immediately, no later than 10 minutes after adhesive application, in the fresh adhesive bed by pushing, floating and pressing. Allow a setting time of at least 48 hours before continuing work.

#### *Ribbon 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.

#### *Entire 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. Only apply a maximum of 3 m of adhesive in advance.

### Note

The share of adhesive surface to be applied should be taken from the respective system data sheet.

### Basecoat

Embed strips of reinforcement mesh or Gewebeekwinkel Sturzecke (Mesh Corner Angle for Lintel Corner) at the inner corners between window reveal and window lintel fully in SM700. Subsequently apply Gewebeekwinkel mesh corner angle 100/150 perpendicular and flush. If Gewebeekwinkel Sturzecke mesh corner angle for lintel corner is not used, apply additional diagonal reinforcement made of Gewebeekpfeile mesh corner arrows or reinforcement mesh strips (approx. 300 x 500 mm) directly in the fresh mortar starting from the corner. Subsequently embed Knauf Armiergewebe 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.

Coating thickness of the basecoat layer on Knauf WARM WALL systems:

- 5 – 7 mm, with the exception of:
- WARM WALL Natur: 7 mm is recommended,
- On a basecoat: approx. 4 mm.

A drying time of at least 1 day per mm basecoat thickness is required prior to application of mineral-based render finishes. Paste-like finishing plasters may not be applied before SM700 is fully dry, however after at least a minimum drying time of 10 days. In addition, we strongly recommend application of a Quarzgrund Pro primer before paste-like finishing plasters are applied. The stated drying times may be significantly longer in case of cool or wet weather.

### Renovation mortar

SM700 can be applied with a coating thickness of up to 10 mm to level texture unevenness and imperfections. Embed Knauf reinforcement mesh if necessary.

**Plaster basecoat**

Apply SM700 on concrete, XPS-R, wood fibre panels and similar substrates with a thickness of min. 5 mm and roughen (e.g. use a trowel). Allow a drying and setting time of at least 1 day and a maximum of 3 days.

**Thin-layer bonding finish**

Apply SM700 with a thickness of 3 to 6 mm, spread flush and scrape the surface after initial setting.

**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. 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). Apply a fleece laminated dimpled sheet after drying.

**Application temperature / climate**

Do not apply with air, material and/or substrate temperatures below +5 °C. Protect fresh mortar from frost and rapid drying.

**Application time**

Apply SM700 within 2 hours.

**Cleaning**

Clean the machines and tools with water immediately after use.

<b>Notes</b>	For application as a bonding and basecoat mortar, the Knauf system data sheet and the National Technical Approval / general type approval for the corresponding Knauf WARM WALL system must be observed.
	For application as a renovation mortar apply according to EN 13914-1, EN 13914-2, 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).

**Technical data**

Description	Standard	Unit	SM700
Reaction to fire	EN 13501-1	Category	A2-s1, d0
Graining	–	mm	1.5
Compressive strength	EN 1015-11	Category	CS III
Tensile adhesion strength	EN 1015-12	N/mm <sup>2</sup> Failure pattern: A, B or C	0.08
Water absorption	EN 1015-18	Category	W2 (medium)
Water vapour permeability coefficient $\mu$	EN 1015-19	–	≤ 25
Thermal conductivity $\lambda_{10, dry}$	EN 1745	W/(m·K)	≤ 0.82 at P=50% ≤ 0.89 at P=90%

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

**Material requirement and efficiency**

	Coat thickness mm	Consumption kg/m <sup>2</sup>	Yield m <sup>2</sup> /bag
Adhesive (rough substrate)	–	6.0	4.2
Adhesive (level substrate)	–	3.5	7.1
Mesh reinforcement	5 – 7	7.0 – 10.0	3.6 – 2.5
Remodelling of textured render finish	–	5.0	5.0
Plaster basecoat	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 range**

Description	Application	Packaging unit	Material number	EAN
SM700	25 kg	42 bags / pallet	00763799	4003950143144



**Observe safety data sheet!**

For safety data sheets and CE marking see  
[pd.knauf.de](http://pd.knauf.de)



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