

Note on English translation / Hinweise zur englischen Fassung

This is a translation of the technical 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.

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KNAUF



Plaster and Façade Systems

P213a.de

Product Data Sheet

2016-07



Sockel-SM Pro

Bonding mortar, basecoat and render finish with integrated moisture protection for the plinth

Product description

System-tested mineral-based adhesive, reinforcing mortar and render finish for the plinth area. No additional moisture protection is necessary if the total render thickness is ≥ 7 mm.

Composition

Cement, graded limestone grains or quartz grains, special fibres, special bonding agent, water-repellents and processing 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 and bears the CE mark. Furthermore, the product is subject to external monitoring and bears the Ü marking.

Properties and added value

- General-purpose rendering/plastering mortar GP acc. to EN 998-1
- Compressive strength category CS IV acc. to EN 998-1
- Suitable for interior and exterior application
- Integrated moisture protection
- Non-conductive capillary action

- Contains sealant, fibres and bonding agents
- For machine or hand application
- Grain size 1.0 mm
- Colour shade grey

Field of application

The integrated protection against ground moisture and the special fibre reinforcement provide the highest levels of plinth area protection.

- As basecoat and render finish (total render thickness ≥ 7 mm) for the plinth area and areas contacting the soil without additional moisture protection
- As an adhesive on mineral sealing slurries, polymer modified bituminous thick coatings (PMBC) and laid polymer bitumen sheeting
- As an adhesive for full surface bonding on mineral building sealing and polymer modified bituminous thick coatings
- An adhesive must be used with a non-conductive capillary action
- As a system-tested bonding mortar, basecoat and render finish in the plinth area for WARM WALL systems
- As a mineral bonding plaster primer on mineral building sealing and polymer modified bituminous thick coatings

Certificate of usability

National Technical Approval (ABP) P-5275/012/14 MPA-BS

Application

Substrate and pretreatment

Substrate	Pretreatment
Non-stable paint coats	Remove completely
Concrete, paint coats, old plasters	If necessary, clean with a high-pressure water cleaner until dust-free and allow to dry completely. If necessary, solidify by applying Grundol primer
Chalking or sanding surfaces	Solidify surface by applying Grundol primer. The Tiefengrund primer should be completely absorbed.
XPS insulation panels with smooth surface	Roughen surface, remove dust completely and apply additional dowels

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 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" 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/Pretreatment 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 Sockel-SM Pro. Allow preliminary/primer coats to dry for at least 12 hours before continuing work.

Polymer modified bituminous thick coatings must be sufficiently dry.

Machines / equipment

Knauf PFT mixing pump	G4
Stator	D4-3
Rotor	D4-3
Mortar hoses	Ø 25 mm
Wet mortar pumping distance	30 m

Mixing

Mixing by hand

Mix the content of one bag with 7.7 litres of clean water for a maximum of 2 minutes without further additions until an application-ready lump-free consistence is achieved, and apply quickly. 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, set the desired consistence by adding water.

Application

Mineral bonding plaster on mineral sealing slurries, polymer modified bituminous thick coatings (up to max. 30 cm over ground level)

For full surface application of Sockel-SM Pro, press firmly onto substrate and spread using a notched trowel. The render thickness is approx. 5 mm, the render coverage in the grooves must be at least 2 mm.

Adhesive mortar

Ribbon and dab method ≥ 40 %

Apply an approx. 50 mm wide ribbon of mortar around the perimeter of the insulation panels and three palm-sized adhesive mortar dabs or strips in the middle. Depending on the substrate (old renders, paint coats, bituminous thick coatings, laid polymer bitumen sheeting, etc.), additional dowelling of the insulation boards up to ≥ 150 mm above the ground line is necessary.

Full surface application

With bituminous thick coatings (e.g. PCI Pecimor® 2K) or laid polymer bitumen sheeting, the adhesive can also be applied to the full surface of the insulation boards. An additional dowelling of the insulation boards up to ≥ 150 mm above the ground line is then unnecessary.

Apply insulation panels immediately, at the latest 10 minutes after mortar application, by pushing, floating and pressing. Allow for a setting time of at least 48 hours before continuing work.

Basecoat

Embed strips of reinforcement mesh or Gewebeeckwinkel Sturzecke mesh corner angle for lintel corner at the inner corners between window reveal and window lintel fully in Sockel-SM Pro. Subsequently apply Gewebeeckwinkel (mesh corner angle) 100/150 perpendicular and flush. If Gewebeeckwinkel Sturzecke (mesh corner angle for lintel corner) is not used, apply additional 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. 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 Armiergewebe reinforcement mesh should be fully covered with Sockel-SM Pro.

Thickness of the basecoat layer in the plinth area on Knauf WARM WALL systems: at least 5 to 7 mm.

Render finish

Apply Sockel-SM Pro for sponged surfaces (layer thickness 1 to 2 mm) one day later at the earliest to the basecoat layer already applied with Sockel-SM Pro. Sponge the Sockel-SM Pro surface as the mortar starts to set.

Plinth area – render

Sockel-SM Pro can be applied on plinth renders of compressive strength category CS III/IV. The application with integrated moisture protection is undertaken according to the instructions in the sections Basecoat and Render finish.

Plaster thickness

Sockel-SM Pro is applied at a max. 10 mm thickness per layer. For greater plaster thickness, the next layer (max. 10 mm) should be applied on the following day.

Application temperature/climate

Do not apply material at air and/or substrate temperatures below +5 °C or above +25 °C. Protect fresh mortar from frost and rapid drying.

Application time

Do not apply Sockel-SM Pro during exposure to direct sunshine, as this will quickly lead to the formation of a skin on the surface. Can be worked for about 20 minutes at +20 °C ambient temperature.

Additional integrated moisture protection

Additional protection against ground moisture can be omitted if the total render thickness with Sockel-SM Pro as a basecoat and render finish is at least 7 mm. Layer thickness measurements must be performed.

Plinth application

All the render surfaces with contact to soil or gravel beds after hardening and drying require the application of a fleece laminated dimpled sheet.

Sockel-SM Pro must be fully hardened and dry before the paints are applied.

Notes	For application as a render finish, apply according to EN 13914-1, DIN 18550-1 and DIN 18350, VOB part C 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.

Coatings and linings

Paints or finishing coats should not be applied until at least 7 days drying time have passed. On coloured surfaces, after Grundol primer is applied, two coats of Autol (silicon resin façade paint) or Fassadol (silicone-reinforced façade paint) are recommended.

Technical data

Description	Unit	Value	Standard
Reaction to fire	Class	A2-s1, d0	EN 13501-1
Graining	mm	1.0	–
Compressive strength	Category	CS IV	EN 1015-11
Bond strength	N/mm ²	≥ 0.08	EN 1015-12
Failure pattern	–	A, B or C	
Capillary water absorption	Category	W 2	EN 1015-18
Water vapour diffusion resistance μ	–	≤ 25	EN 1015-19
Thermal conductivity $\lambda_{10, dry, mat}$			EN 1745
P = 50 %	W/(m·K)	≤ 0.82	
P = 90 %	W/(m·K)	≤ 0.89	

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

Material requirement and efficiency

Application	Consumption approx. kg/m ²	Yield approx. m ² /bag
Apply adhesive (level substrate) to 40 % of the adhesive bonding surface	4.0	7.5
Apply adhesive (level substrate) to 100 % of the adhesive bonding surface	8.0	3.7
Mesh reinforcement and render finish, 7 mm layer thickness	11.0	2.7

The exact consumption can only be determined with a test application on the individual object.

Product range

Product designation	Application	Graining	Packaging unit	Material number	EAN
Sockel-SM Pro	30 kg	1 mm	36 bags/pallet	00433419	4003950095405

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