Sockel SM

Bonding, reinforcement and renovation mortar for the plinth area

Product Data Sheet *2025-10*

Product description

System-tested mineral-based adhesive, reinforcing mortar and render finish for the plinth area.

Composition
Cement, graded limestone grains or quartz grains, 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 and bears the CE marking. Furthermore, the product is subject to external monitoring as a component in WARM WALL systems.

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
- Contains fibres and bonding agents
- Water-repellent
- Can be sponged
- High impact load
- For machine or hand application
- Grain size 1.0 mm
- Colour shade grey

Field of application

- As basecoat and render finish for the plinth areas contacting the soil
- As a system-tested bonding mortar, basecoat and render finish in the plinth area for WARM WALL systems
- As a reinforcement render with full surface mesh layer on XPS-R insulation panels in the plinth
- As a mineral bonding primer on XPS-R and plinth insulation panels
- As basecoat and render finish on Satt Feuchtwand-Sanierplatten restoration boards
- As an adhesive, basecoat and finishing render for lightweight and wall protection boards
- As a thin-layer bonding render and mineral bonding primer on concrete
- As a thin-layer renovation mortar for reworking existing render particularly in the plinth area

Application

Substrate and pretreatment

Substrate	Pretreatment
Non-stable existing render and paint coats	Remove completely
Concrete, suitable existing renders and paint coats	If necessary, clean with a high-pressure water cleaner and allow to dry completely. If necessary, solidify by applying Grundol primer
Chalking or sanding surfaces	Solidify surface by applying Grundol primer – the primer should be completely absorbed
XPS-R insulation panels	Remove surfaces damaged by UV radiation using a suitable tool

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 them ensuring 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 of Sockel-SM. Allow primer coats to dry for at least 12 hours before continuing work.

Machines / equipment

Rotoquirl agitator is required

Knauf PFT mixing pump	G 4
▪ Stator	D 4-3
▪ Rotor	D 4-3
▪ Mortar hoses	Ø 25 mm
▪ Wet mortar pumping distance	30 m

Mixing

Mixing by hand

Mix the contents of one bag with 5.3 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.

Mixing by machine

For machine application using mixing pumps, e.g. PFT G 4, set the desired consistence by adding water.

Application

Mineral bonding primer

Apply Sockel-SM to the full surface and rule horizontally with a notched trowel. The render thickness is approx. 5 mm, the render coverage in the grooves must be at least 2 mm. Roughen the surface / sinter layer after the mortar has hardened sufficiently. Apply the following render coat on the following day at the earliest and after 3 days at the latest.

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), additional dowelling of the insulation boards, ≥ 150 mm above the ground line is necessary.

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

Basecoats

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. Subsequently apply Gewebeeckwinkel mesh corner angle 100/150 mm 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 reinforcement mesh should be fully covered with Sockel-SM.

Coating thickness of the basecoat layer in the plinth area on Knauf WARM WALL systems: Minimum 5 to a maximum of 7 mm.

Render finish

Apply the sponged texture Sockel-SM to the full surface using a stainless steel tool in grain thickness on the following day at the earliest. In case of application by machine, spray on a thin layer of material and rule with a stainless steel tool. Allow Sockel-SM to dry and then apply the second layer in grain thickness and sponge finish.

Plinth area – render

Sockel-SM can be applied on plinth renders of compressive strength category CS III/CS IV. The render thickness should not exceed 10 mm. In case of concrete substrates, masonry of compressive strength category > 8 and lime sandstone masonry, larger render thickness's (maximum 20 mm) can be applied.

Render thickness

Sockel-SM is applied per layer at a maximum thickness of 10 mm. In case of thicker renders, the application of the next layer (maximum 10 mm) is on the following day.

Plinth application

The render system must be protected against the ingress of moisture at the connection to the lower edge. The required render 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 render seal / moisture protection, apply Sockel-Dicht or Sockel-Dicht Sprint 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.

Application temperature / climate

Do not apply at air, material and/or substrate temperatures below +5 °C and above +30 °C. Protect fresh mortar from frost and rapid drying.

Cleaning

Clean the equipment and tools with water immediately after use.

Notes	Renders must be applied according to EN 13914, DIN 18550, DIN 55699, DIN 18345 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

Sockel-SM must be fully hardened and dry before painting. 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 siloxane-reinforced façade paint are recommended.

Technical data

Description	Sockel SM	Unit	Standard
Reaction to fire	A2-s1, d0	Category	EN 13501-1
Grain size	1.0	mm	–
Compressive strength	CS IV	Category	EN 1015-11
Bond strength Failure pattern	≥ 0.08 A, B or C	N/mm^2 –	EN 1015-12
Capillary water absorption	W 2	Category	EN 1015-18
Water vapour diffusion resistance μ	≤ 40	–	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 and efficiency

Application	Consumption approx. kg/m²	Yield approx. m²/bag
Apply adhesive (level substrate) to 40 % of the adhesive bonding surface	4.0	6.3
Apply adhesive (level substrate) to 100 % of the adhesive bonding surface	8.0	3.1
Mesh reinforcement and render finish, 7 mm layer thickness	10.5	2.4

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

Product designation	Application	Packaging unit	Material number	EAN
Sockel SM	25 kg	42 bags/pallet	00741451	4003950141010

Sustainability and environment

Short description	Comment	Unit	Value
EPD Environmental Product Declaration	–	–	EPD-VDP-20230401-IB01-DE

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

Find the right system for your requirements!
knauf-ite.com/en/products-systems

All Knauf Gips documents are available in an up-to-date and clearly organised format in the Download Center at www.knauf-ite.com/en.

Knauf Gips KG
Am Bahnhof 7
97346 Iphofen
Germany

Knauf Direkt:
knauf-direkt@knauf.com

www.knauf-ite.com