

## Plaster and Façade Systems

**P2405\_DSP.de**

# Lustro

Bonding and reinforcement mortar mortar  
with lightweight aggregates, white

Product Data Sheet

2025-09



### Product description

System-tested, mineral-based fibre reinforced bonding and reinforcement mortar for WARM WALL systems.

As an adhesive on basecoats and as a mortar for renovation, refurbishment and remodelling.

#### Composition

White cement, hydrated lime, graded limestone grains, limestone powder, silica sand, EPS lightweight aggregate, micro-textile 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.

#### 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

- Lightweight rendering/plastering mortar LW acc. to EN 998-1
- Compressive strength category CS II acc. to EN 998-1
- Contains fibres and bonding agents
- EPS lightweight aggregates
- For interiors and exteriors
- For machine or hand application
- Colour shade white

### 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
- Application on façades

## 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 them 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 - 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 and 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 the stability and compatibility of existing coats (old plasters and paint coats) before application of Lustro.

### Machines / equipment

MA-MA, Lustromat

Knauf PFT mixing pump G 4

- Stator D4-3 1/2 capacity
- 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 bag with 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.

#### Mixing by machine

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

### Application

#### Bonding

Lustro 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

#### Adhesive application on insulation materials

The adhesive bonding surface with the substrate is  $\geq 40\%$  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.

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

The adhesive can be applied in the form of mortar dabs directly on the substrate at spaces of maximum 100 mm using the meandering method. In case of partial surface adhesive application the required adhesive bonding surface must be  $\geq 60\%$  after pressing on the insulation panels. If the adhesive mortar is applied over the entire surface, the adhesive mortar must be combed on with a notched trowel immediately before the insulation panels are applied. Apply the insulation panels immediately after adhesive is applied to the fresh mortar bed by pushing, floating and pressing. Apply a continuous strip of adhesive in the edge areas. Only apply a maximum of 3 m of adhesive in advance.

### Mineral wool lamellae boards

#### Adhesive application on insulation materials

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

The adhesive can be applied in the form of mortar dabs directly on the substrate at spaces of maximum 100 mm using the meandering method. In case of partial surface adhesive application the required adhesive bonding surface must be  $\geq 50\%$  after pressing on the insulation panels. If the adhesive mortar is applied over the entire surface, the adhesive mortar must be combed on with a notched trowel immediately before the insulation panels are applied. Apply the insulation panels immediately after adhesive is applied to the fresh mortar bed by pushing, floating and pressing. Apply a continuous strip of adhesive in the edge areas. Only apply a maximum of 3 m of adhesive in advance.

### Mineral wool insulation panels

#### Adhesive application on insulation materials

The adhesive bonding surface with the substrate is  $\geq 40\%$  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.

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

The adhesive can be applied in the form of mortar dabs directly on the substrate at spaces of maximum 100 mm using the meandering method. In case of partial surface adhesive application the required adhesive bonding surface must be  $\geq 50\%$  after pressing on the insulation panels. If the adhesive mortar is applied over the entire surface, the adhesive mortar must be combed on with a notched trowel immediately before the insulation panels are applied. Apply the insulation panels immediately after adhesive is applied to the fresh mortar bed by pushing, floating and pressing. 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 Luströ. Subsequently apply Gewebeeckwinkel 100/150 Mesh Corner Angle 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. Apply mortar in the corresponding render thickness and embed Knauf Armiergewebe reinforcement mesh on the entire surface with at least a joint overlap of at least 100 mm "fresh-in-fresh". The Armiergewebe reinforcement mesh should be fully covered with Luströ.

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  $\geq$  100 mm.

The layer thicknesses of the basecoat layer on Knauf WARM WALL systems is 5 – 15 mm. Use a double layer in case of layer thicknesses > 10 mm. The reinforcement mesh is embedded in the second render layer.

The layer thickness is approx. 4 mm on basecoats.

**Renovation mortar**

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

**Reinforcement on basecoat**

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 Luströ on concrete, XPS-R, wood fibre panels and similar substrates with a thickness of at least 5 mm. Spread the mortar using a widely notched trowel. 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.

**Plinth application**

Apply Sockel-SM Pro, Sockel-SM, SM700 Pro or SM300 as a basecoat and adhesive on the plinth and splash water area and on surfaces in contact with the ground or gravel up to 300 mm above the ground line.

**Notes**

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. Renders must be applied according to EN 13914, DIN 18550, DIN 55699, DIN 18345 and DIN 18350 well as the generally recognized building engineering rules and valid guidelines.

Heating in rooms should only be put into operation in stages. Rapid dehumidification, e.g. using dehumidifiers should be avoided.

**Application temperature / climate**

Do not apply with air, component and/or substrate temperatures below +5 °C and ensure that temperature does not fall below this temperature until the render has hardened sufficiently. Furthermore, the temperature should not exceed +30 °C during application.

In order to prevent rapid dehumidification of the fresh plaster 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 machines and tools with water immediately after use.

## Technical data

Description	Standard	Unit	Lustro
Reaction to fire	EN 13501-1	Category	A2-s1, d0
Grain size	–	mm	1.2
Compressive strength	EN 1015-11	Category	CS II
Tensile adhesion strength	EN 1015-12	N/mm <sup>2</sup>	≥ 0.08 Fracture pattern A, B or C
Capillary water absorption	EN 1015-18	Category	W <sub>c</sub> 2
Water vapour permeability coefficient μ	EN 1015-19	–	≤ 20
Thermal conductivity λ <sub>1,0, dry mat</sub> at P = 50 % P = 90 %	EN 1745	W/(m·K) W/(m·K)	≤ 0.25 ≤ 0.27

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

## Material requirement / efficiency

Grain size mm	Coat thickness mm	Consumption approx. kg/m <sup>2</sup>	Yield approx. m <sup>2</sup> /bag	m <sup>2</sup> /ton
Adhesive (40% adhesive surface)	5.0	1.8	11.1	555
Adhesive (100% adhesive surface)	5.0	3.1	6.5	325
Reinforcement basecoat WARM WALL	5.0 – 15.0	4.1 – 12.2	4.9 – 1.6	240 – 80
Reinforcement render on basecoat	4.0	3.3	6.1	305
Render bonding layer	5.0	3.1	6.5	325

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

Lustro	Application	Packaging unit	Material number	EAN
1.2 mm	20 kg	42 bags/pallet	00063304	4003950044038
	Bulk	in silos	00039623	4003950035630

## Sustainability and environment

Short description	Comment	Unit	Value
EPD Environmental Product Declaration	Issue date 12.03.2024	–	EPD-VDP-20230401-IB01-DE



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