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

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KNAUF



Plaster & Façade Systems

P258G.de

Product Data Sheet

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Gigamit

Lightweight reinforcement basecoat

Product description

High-yield, polymer modified lime cement lightweight basecoat with mineral lightweight aggregate for interiors and exteriors. As a system basecoat, Gigamit complies with the function for a mineral bonding plaster primer, the characteristics of a lightweight plaster and the properties for a polymer-modified reinforcement plaster with embedded reinforcement.

Gigamit as a system basecoat and plinth render is certified with the same properties as a lightweight plaster, which is applied with an additional reinforcement plaster with embedded mesh on the entire surface. A friction bond between Gigamit and the mesh reinforcement is achieved by the polymer modification. Can be used in diverse application variants as a top coat or as a basecoat for clinker strips.

Composition

Hydrated lime, cement, graded limestone or quartz grains, mineral lightweight aggregate, fibres and bonding agents, water-retaining and water-repellent 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 factory-made rendering/plastering mortar is subject to initial type testing and continuous factory production control and bears the CE marking.

Properties and added value

- Lightweight rendering/plastering mortar LW acc. to EN 998-1
- Polymer modified lightweight plastering mortar acc. to DIN 13914
- Compressive strength category CS II acc. to EN 998-1
- Façade and plinth application
- As a basecoat for clinker strips
- For direct use on weakly absorbent substrates
- With mineral lightweight aggregates
- For machine or hand application
- Natural white colour shade

Field of application

As a system basecoat for the following thin and thick layer top coats or as a system basecoat and topcoat, e.g. broom finish, sponged top coat, combed trowel finish, etc. A mineral bonding plaster primer is not required on weakly absorbent or non-absorbent substrates. As a system plaster for the façade and plinth surface.

Using a full surface 4x4 mm or 5x5 mm reinforcement mesh layer, Gigamit replaces an additional reinforcement plaster with full surface embedded mesh on the basecoat.

As a system basecoat and plinth render

- As a mineral bonding plaster primer
- For use on all masonry substrates and concrete
- As a reinforcement mortar (basecoat) with full surface embedded mesh
- As a thin plaster (at least 8 mm) on even substrates in interiors and exteriors

As a basecoat

- For all mineral-based and paste-like finish coats (top coats)
- For covering with clinker strips
- Under tiles in bathrooms and kitchens

As a top coat

- System top coat on Gigamit as a basecoat

Application

Substrate and pretreatment

Substrate	Pretreatment
XPS-R insulation boards with strip widths up to 60 cm, small format wood wool slabs	None
Small format brick masonry, random rubble walling, mixed brickwork	None
Masonry made of brick, pumice and lightweight concrete, lime sandstone and aerated concrete	On highly absorbent substrates or in hot summer weather, apply a double Gigamit layer fresh-in-fresh
Absorbent concrete, XPS-R insulation boards with strip width from 60 cm	Smooth Gigamit as scrape skimming and apply Gigamit fresh-in-fresh

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” 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.

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

Mixing

Mixing by hand

Mix the content of one bag with 8.5 litres of clean water and without further additives 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.

Product application

Full surface embedded mesh

Apply Gigamit with a plaster thickness of at least 10 mm (interior application) or at least 15 mm (exterior application) (comply with the minimum requirements acc. to DIN 13914-1:2016, table 7). Stagger the joints by at least 100 mm. Apply additional diagonal corner reinforcement on building openings. The reinforcement mesh should be fully covered with Gigamit.

Single-layer application

Apply Gigamit with the full plaster thickness, strike off level and scrape. Embed the reinforcing mesh just below the surface.

Double-layer application (e.g. for subsequent covering with clinker strips)

Apply about 2/3 of the plaster thickness, embed reinforcement on full area and apply the remaining plaster thickness until full plaster thickness is achieved. The reinforcement mesh must be located in the upper third.

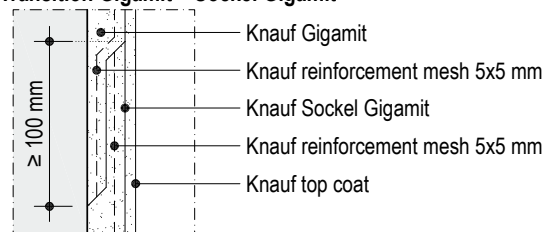
Double-layer application (on the following days)

Apply about 2/3 of the plaster thickness and strike off level. Roughen the surface as soon as the mortar dries sufficiently using a coarse broom (sinter skin). On the following day (or the days after that), the remaining plaster thickness must be applied up to the final thickness and the reinforcement mesh embedded across the entire surface.

We recommend ruling the surface smooth using a H-straight edge with a length of at least 1.20 m after embedding the mesh. Chip off any mortar burrs present (on corners and edges) using a plaster plane. Ruling the surface flat eliminates the need for planing to remove sinter layers.

Gigamit can be used in the case of flush plinth design. In case of using Sockel Gigamit: Taper Gigamit by approx. 3 to 5 mm in plaster thickness and at least 100 mm in height at the transition to Sockel Gigamit to ensure sufficient reinforcement mesh overlap of Sockel Gigamit. Alternatively, Sockel Gigamit can seamlessly transition using plaster fresh-in-fresh. Overlay the reinforcement mesh by at least 100 mm. In case of a recessed plinth application, use Sockel-SM Pro with a plinth connection end profile.

Transition Gigamit – Sockel Gigamit



A full surface mesh layer is unnecessary in case of interiors with homogeneous concrete and masonry substrates and a uniform plaster thickness. In case of changing substrates, different plaster thicknesses in the surface and expected stresses from the substrate: Undertake partial surface reinforcement directly in the Gigamit.

Note

With surface condensation of the thermal bridge insulation, particularly with damp and cold weather in autumn/spring, allow the surfaces of the insulation panels to dry or apply a skim coat of Gigamit (mortar consistence not too thin) at a thickness of approx. 2 mm and rule to a scrape skim coat. Proceed wet in moist or on the following day with the next plaster layer.

Plaster thickness

On absorbent substrates apply a maximum thickness of 30 mm per layer. On non-absorbent substrates, such as XPS-R insulation panels apply a maximum of 20 mm per layer. Apply several layers for greater plaster thicknesses.

On a plaster base

Apply an approx 10 mm thick coating of Gigamit on the correctly bonded plaster base and level it into the plaster base. Roughen the surface with a broom. After setting, apply another coating of about 10 to 15 mm, rule flat and embed the mesh reinforcement in the fresh basecoat.

Substrate for tiling

Suitable as a substrate for tiles and floor slabs, if the weight of the tiles and floor slabs including the thin-bed mortar does not exceed 25 kg/m². If greater use Sockel Gigamit, Sockel LUP or UP 310 (substrate dependent).

The basecoat is generally a single-layer with a plaster thickness of at least 10 mm. The suitability as a base for the application of tiles is improved, if the plaster surface is applied as a tight coat with a straight edge/feather edge or scratched. The surface texture must be matched to the requirements of the respective waterproofing type. Allow to dry and set fully before a tile covering is applied. The tile adhesive must be suitable for the basecoat.

Application with water action classes W0-I to W1-I acc. to DIN 18534.

Plinth application

If the plinth is flush, Gigamit can be used in the plinth area on plinth panels, perimeter insulation panels and masonry. Sockel Gigamit must be used on bituminous or mineral waterproofing of buildings.

After drying out, all rendered surfaces below the ground line shall be waterproofed/protected against moisture ingress, starting from basement wall waterproof barrier up to approx. 50 mm above the ground line using Sockel-Dicht acc. to DIN 18533-3. For this purpose, apply Sockel-Dicht in a layer thickness of at least 1.2 mm (dry layer thickness min. 1 mm).

In case of a recessed plinth application, e.g. on bituminous or mineral waterproofing of buildings, XPS-R, plinth and perimeter insulation panels, use Sockel-SM Pro (with mesh layer) as a polymer enhanced cementitious plaster at a total plaster thickness of at least 7 mm. Additional subsequent moisture protection is not necessary.

A protective layer with slip membrane (e.g. fleece laminated dimpled sheet) should be provided on the construction as protection against damage after drying.

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 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.

Notes

Plaster must be applied according to EN 13914, DIN 18550 and DIN 18350, VOB part C as well as the generally recognized building engineering rules and valid guidelines.

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: For dry material feed: transfer hood, supply hose, pressure vessel, injection hood, feed manifold).

Should the basecoat remain exposed during the winter, we recommend application of Grundol primer before the finishing plaster is applied in spring.

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

Coatings and linings

Coatings

Gigamit as a system basecoat and top coat

On the following day again apply 2 to 3 mm of Gigamit and apply the surface as a broom finish, a sponged finish or washed texture.

Gigamit as a combed trowel finish

After a drying time of at least 1 day per mm plaster thickness use a suitable template for the combed trowel finish. Here with a perpendicular design the maximum lap width and thickness is limited to 10 mm. In case of a horizontal design the lap thickness (projection) is limited to 3 mm.

Caution

In case of use of Gigamit as a finish coat, an additional paint coat is required in exteriors. Recommended for interiors.

Further finishing coats

After a drying time of at least 1 day per mm plaster thickness, mineral-based and paste-like finishing plasters can be applied. Substrate pretreatment will be required to suit the weather conditions and finishing plaster.

In case of Mak3 and Presto One as a finishing coat, roughen the surface as soon as the mortar dries sufficiently using a coarse broom (sinter skin). The reinforcement mesh must be completely covered with Gigamit and should therefore be in the upper third.

Technical data

Description	Standard	Unit	Gigamit
Reaction to fire	EN 1501-1	Category	A1
Graining	–	mm	1.0
Compressive strength	EN 1015-11	Category	CS II
Tensile adhesion strength	EN 1015-12	N/mm ²	≥ 0.08
Failure pattern			A, B or C
Capillary water absorption	EN 1015-18	Category	W 2
Water vapour resistance factor μ	EN 1015-19		≤ 25
Thermal conductivity $\lambda_{10, \text{dry, mat}}$ at P = 50 %	EN 1745	W/(m·K)	≤ 0.33
P = 90 %		W/(m·K)	≤ 0.36

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 approx. kg/m ²	Yield approx.	
		m ² /bag	m ² /ton
10.0	10.5	2.4	95.0
15.0	15.6	1.6	64.0

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

Product range

Description	Grain size	Application	Packaging unit	Material number	EAN
Gigamit	1.0 mm	25 kg / bag	42 bags / pallet	00633869	4003950124624
	1.0 mm	Bulk (Silo)	–	00633573	4003950124594



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