



Product description

maxit eco 72 sprayable exterior insulation is a thermal insulating render based on cement and hollow glass microspheres.

maxit eco 72 is classified in mortar group P III and strength class CS I according to DIN EN 998-1.

Product properties

maxit eco 72 is an easy-to-apply system render for exterior insulation with a thermal coefficient of 0.042 W/m²*K.

When applied in thicknesses between 20 and 100 mm, no reinforcement is required; for greater thicknesses up to max. 150mm, reinforcement must be used, e.g. mesh.

One tonne of dry mortar yields 7200 litres of fresh mortar.

Uses

Extremely flexible and lightweight thermal insulation render for use on all standard, load-bearing substrates.

Substrates should be dry and must not show any signs of moisture penetration. Any rising damp or moisture penetrating from the outside must be eradicated.

The system can be used as additional insulation for thermally insulating masonry, e.g. lightweight vertically perforated masonry units, lightweight concrete or aerated concrete. It produces completely joint-free insulation layers that adapt well to all substrate geometries.

Thanks to its low elastic modulus, it provides excellent decoupling from the substrate and thus significantly reduces the risk of substrate-induced cracks in the render coat.

The system is also suitable for correcting significant surface irregularities since it allows coat thicknesses of up to 150 mm max. For coat thicknesses of 100 mm and higher, use render reinforcement. maxit eco 72 is especially suitable for renovation work and can be used on all substrates suitable for rendering.

Product benefits

- Purely mineral
- Easy to recycle
- High energy efficiency
- Low thermal conductivity
- Excellent insulating properties
- High heat storage capacity
- Supplied in bags and silos
- High yield
- Absolutely no segregation inside bags and when applying from silos
- Non-combustible (class A construction material)
- Completely joint free and void-free insulation

Site requirements

Substrates must comply with the relevant standards and application guidelines of the manufacturers. Do not apply if ambient and/or surface temperature is below +5 °C or above +30 °C, or when night frost is expected.

Substrate preparation

Substrates should be sound, sufficiently load-bearing, dry and free from dust and release agents. Observe the provisions stipulated in DIN 18336 VOB, Part C (German Construction Contract Procedures) regarding the evaluation and preparation of substrates. All mineral substrates must

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be thoroughly set and dry. Moisture penetration, e.g. due to rising damp or similar must be prevented, as with all other insulation measures.

Before applying to existing masonry, apply a spatterdash coat of maxit eco 70 to create a key (50-70% coverage) and roughen the surface horizontally with a stiff brush. No bonding mortar is required when applying to new, absorbent substrates/masonry.

We offer training courses in product application with corresponding certification.

Important notice:

We offer training courses with corresponding certification in application of the product.

Application

The product is normally applied with a silo mixing pump or with the PFT G4 rendering/plastering machine fitted with insulation rendering equipment. For smaller areas such as flaws and reveals, the product can be applied manually.

Apply an initial 10 mm layer of maxit eco 72. Then apply a further layer wet-in-wet in a thickness of approx. 30 mm up to max. 100 mm (single layer application). For thicknesses exceeding 100 mm up to 150 mm, use suitable corrosion-resistant render reinforcement (e.g. Welnet).

If the residual moisture is ≤ 75 digits (measured with a Gann hydrometer, for example), always reinforce with maxit eco 73 and 8 x 8 mm mesh. Setting time: 1 mm/day.

Pre-treat the surface with maxit prim eco 1170 before installing the reinforcing mesh.

Mixing by hand:

Fill a high-sided bucket with approx. 19.5 litres water/bag. Add the dry mortar carefully and stir at low speed until the powder has visibly absorbed the water. Then increase the speed and stir for approx. 40 seconds.

Coverage rates

coat	mm	20	40	60	80	100
consumption	l/m ²	21.3	42.8	64.1	85.4	105.1
Yield	m ² /t	360	180	119.7	90	72
	l/t	7200				
m ² /75 l bag		3.5	1.76	1.17	0.87	0.70

Subsequent treatment/Coating

Subsequent treatment:

Protect fresh render work from frost, rapid drying or exposure to extreme weather such as driving rain.

Coating:

Prime with maxit prim 1050/1060 before applying the finish render. Coat with any mineral-based maxit finishing renders after curing. We recommend using the maxit Solarfarbe (solar paint) paint system.

General information

This product must be applied by a suitably qualified installer.

Contact us for technical support if you have any questions. Do not mix with other materials. Observe the provisions stipulated in EN 13941, DIN 18550/DIN EN 998-1, DIN 18350 VOB (German Construction Contract Procedures) Part C and DIN 18533.

Mortar produces a strong alkaline reaction with water. Make sure eyes and skin are protected. If skin or eye contact occurs, wash affected area thoroughly with water. Seek immediate medical advice in case of eye contact. Observe the material safety datasheet (for the current version, see www.maxit.de).

After hardening, the product presents no risk to health or the environment.

Storage

Shelf life is at least 12 months when stored on pallets in a dry place. For date of manufacture, see information printed on bag.

Disposal

Do not dispose of with household waste. Do not allow to enter drains. Dispose of in accordance with official regulations.

Silo and machine equipment

Can be applied manually or with any standard plastering/rendering machine or mixing pump.

Rendering/plastering machine equipment:

- Mixing shaft for insulating render
- Screw pump D8/1.5
- Hose length: 20 m
- Hose thickness: 35 mm (do not reduce thickness)

Silo mixing pump equipment:

- Hose length: 40 m
- Hose diameter: 35 mm (do not reduce thickness)

Supplied in special silos (part of the maxit SMP transport and feeder system) and in 75 l bags on pallets of 24 bags.

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Technical specifications	
Indoor application	No
Outdoor application	Yes
Reaction to fire	A 1, non-combustible
Compressive strength after 28 days	$\geq 0.8 \text{ N/mm}^2$
Recommended coat thickness	min. 20 mm, approx. 30 mm per layer max. 150 mm
Yield	7.200 l/t dry mortar
Fibres	Yes
Dry bulk density	approx. 125 kg/m^3
Application temperature	Do not apply at site or ambient temperatures below $+5 \text{ }^\circ\text{C}$ or above $+30 \text{ }^\circ\text{C}$, or when night frost is expected.
Thermal conductivity	$\lambda_{10,\text{dry, mat}} < 0.04 \text{ W/m}^*\text{K}$ $\lambda_R 0.042 \text{ W/m}^*\text{K}$
Water absorption	W1
Water ratio	approx. 200 % corresponds to approx. 19.5l/bag (75l)
Water vapour permeability	approx. $\mu 5$

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