

THERMO M10

Thermal bedding mortar for seismic zone

Thermo M5 is a thermo insulating mortar with a low specific weight based on cement, light mineral aggregates and selected sands with a suitable granulometric curve. Ideal for seismic zone. Its use allows to limit heat losses caused by thermal bridge produced by the common mortar.

ADVANTAGES

- High thermal coefficient
- Excellent workability
- Energy saving thanks to the improvement of the thermal insulation of the masonry
- Compression resistance in category M10 ($> 10 \text{ N/mm}^2$)
- Applicable during winter time (up to $+5^\circ\text{C}$)
- Ageing resistant

APPLICATION FIELDS

The product is designed for the laying of masonry blocks. It has a low coefficient of thermal dispersion and is therefore ideal for walling blocks of various types improving the final yield and thus limiting heat losses and thermal bridges caused by common mortar.

YIELD

$14 \pm 20\%$ kg/m^2 per cm of thickness for continuous joint.

COLOUR

Grey.

PACKAGING

25 kg paper bag.
Pallet: 56 buckets (1400 kg).

STORAGE

Thermo M10 must be stored in well ventilated areas, away from sunlight and ice, at temperatures between $+5^\circ\text{C}$ and $+35^\circ\text{C}$.

Storage time: 12 months.



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1982 - CPR - 1222

EN 998-2

Masonry mortar with guaranteed performance for general purpose used in elements subject to structural requirements

Compression resistance: Category M10

Initial resistance to cut: $0,353 \text{ N/mm}^2$

Chloride content: $0,028 \pm 0,002\%$

Fire reaction: Euroclass A1

Water absorption: $0,5 \text{ kg/m}^2 \text{min}^{0,5}$

Water vapour permeability: $\mu < 15$

Thermal conductivity: $\lambda = 0,244 \text{ W/mK}$

Durability: NPD



For application videos, product page, safety data sheet and other information.

Bedding - mortars

Whereas all indications and recommendations supplied herein are stated to the best of our experience and knowledge, they should nevertheless be considered as indicative only and should be confirmed by exhaustive practical applications. Therefore, before using this product, we recommend in any case to perform preliminary tests with the purpose of verifying the complete suitability for the intended use. In case of uncertainties and doubts contact our technical office. This sheet supersedes any other previously released.

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Technical Data

Features		Unit
Yield	14 kg/m ² (±20%) per cm of thickness per continuous joint	kg/m ²
Aspect	powder	-
Colour	grey	-
Mixing water	max 40%	-
Mixture consistency	tixotropic	-
Granulometry	from 0 to 0,6	mm
Application temperature	+5 /+35	°C
Workability time (EN 1015-9)	>4	hour
Drying time (T=20°C; R.H. 40%)	1	hours
Working temperature	-15 /+40	°C
Storage	6 months in original containers and in dry place	months
Packaging	25 kg paper bag	kg

Final performances		Unit	Regulation	Result
Thermal conductivity (λ)	0,244	W/mK	EN 12667	excellent
Medium resistance to compression	> 10	N/mm ²	EN 1015-11	excellent
Fire resistance	Euroclass A1	-	EN 13501 -1	-
Bulk density (powder)	970	kg/m ³	EN 998-2	-
Bulk density (dried mortar)	1300 ± 30	kg/m ³	-	-
Initial resistance to cut	0,35	N/mm ²	EN 1052-3	-
Chloride content	0,026 ± 0,002%	-	EN 1015-17	-
Air content	21,3%	-	EN 1015-7	-
Water absorption	0,5	kg/m ² min ^{0,5}	EN 1015-18	-
Vapour permeability	μ <15	-	EN ISO 12572	-

* The above data, even if carried out according to regulated tests are indicative and they may be change when specific site conditions vary.

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PREPARATION OF SUPPORT

- The support must be completely dry and resistant enough.
- The support must be thoroughly clean, well consolidated and without debris or detaching parts.
- Substrate temperature must be comprised between +5°C and 35°C.

MIXING

Mix the product with at max 40% of water. Never get over the indicated quantity. Never add antifrost products, cement or aggregates. The mixture can be made with traditional concrete mixer carefully mixing for at least 15 minutes. It is important that the mixing takes place while maintaining the axis of the mixer in the position as horizontal as possible. In this way the material is mixed in the best way and charged of air reaching the weight of 1300 kg/m³ provided. Do not mix with whip drill at high speed or with plastering machine. The amount of water indicated on the package is merely indicative. It is possible to have more or less fluid mixture depending on the application.

APPLICATION

1. Wet well brick blocks. The blocks should be saturated but superficially dry. Then use it as the surface gets dry.
2. The mortar is applied to continuous joints with a thickness of 10/12 mm.
3. The product dries in 1 hour.
4. For a better global thermal insulation of walls, coat the surfaces with a continuous insulation system by *Diasen*, such as our thermal plasters *Diathonite Thermactive.037* and/or *Diathonite Evolution*.

DRYING TIME

At 20°C and with a relative humidity level of 40% the product dries completely in 1 hour.

- Drying times are affected by temperature and relative humidity of the environment and may vary significantly.
- Protect the masonry while the mortar is getting dry from ice, direct sunlight and wind.
- With high temperature, direct sunlight or strong wind it is necessary to wet the surface even 2/3 times a day for the 2/3 days after the application.

SUGGESTIONS

- Do not apply at temperatures lower than 5°C or higher than 35°C
- During summer season apply the product during the cooler hours of the day, away from sunlight.
- Do not apply under imminent threat of rainwater or freeze or even in presence of strong fog or relative humidity level higher than 70%
- Do not use *Thermo M10* for the laying of cellular cement blocks, gypsum board and block with gypsum or to realize facades.

CLEANING

Wash tools with water.

SAFETY

For the handling see product safety data sheet.

Bedding - mortar

