

MIX 280 **MASONRY MORTAR**

M5-A1

ACCORDING TO
EN 998-2

DESCRIPTION

MIX 280 is a cement-based mortar, polymer additive-modified, suitable for building & masonry works e.g. brickwork, cement blocks, stone, pavement slabs and other common building materials.

It contains cement, quartz sand, limestone fillers and improvement additives. MIX 280 offers superior bonding to all common substrates as well as resistance to freezing and moisture.

FIELDS OF APPLICATION

Appropriate for building of structural elements such as brickwork, cement blocks, stone, pavement slabs and

other common building materials on common. It is appropriate for both interior and exterior applications.

ADVANTAGES - FEATURES

- Produced with quartz sand.
- Strong adhesion between structural components
- Excellent workability and thixotropic behaviour
- Sticks to building surfaces without drooping
- High resistance – fast application
- Coat thickness; up to 2cm
- Resistance to humidity and frost
- CE-certified – according to the European Standard EN 998-2

SUBSTRATE PREPARATION

Remove brittle parts and clean the surfaces well before application removing any debris and dust. We suggest that you spray any dry areas with water, particularly during summer months. In case you use MIX 280 as a

plaster, make all necessary preparations required in plastering, (for more information see the relevant instruction forms and relevant plaster documentation).

PREPARATION METHODS

The product may be applied with a continuous mixing machine, piston machine, cement mixer or by hand. The appropriate substrates are concrete, self-levelling floors, cement screed, light concrete. The substrate must be levelled, clean of any brittle parts or foreign bodies.

Manual preparation of mortar

In a clean container add 7.2-8.0 litres of clean water and gradually empty the content of a 40 Kg bag of product MIX 280, mixing continuously with an electric mixer in order to produce a uniform mortar mass. Let the resulting mixture age for 5 minutes and mix again. The mixture is ready to be used within the next 1.5-2 hours. After the preparation of the mixture do not add more water in order to correct the workability of the mortar. This would lead to the reduction of its strengths and the increase of its shrinkage.

Preparation with continuous mixing machine

If you use a continuous mortar mixing machine, connect the machine to the power and water supply and fill the container with the material. Start the machine and adjust the water supply so that the product has the desired properties. Take care so that the machine container remains full with material resulting in a uniform final product (mortar). The advantage of using a mixing machine is that you will be able to carry the ready-to-use mortar through hoses to any part or level of the structure.

Preparation with piston machine or cement mixer

In case you want to prepare the mortar with cement mixer or piston machine, first add the water in the machine container (according to the



APPLICATION

MIX 280 is spread on the surface of structural materials with a trowel. Use a 1.5 - 2 cm thick coat depending on the application. Then place the structural elements (bricks, etc), taking care to provide a good contact with the material and at the same time aligning them. The wall is ready for plastering 10 min. Following completion of the

application the surface must be cleaned with a wet sponge. Any excess mortar must be removed from the joints. During application and for the next 24 hours the environmental and sub-layer temperature must be between +5°C and +35°C. The mortar is cleaned with water while still wet. When it hardens it is removed mechanically.

CONSUMPTION

MIX 280 consumption depends on the type of the structural elements, the joint's width, the tools, the application method and the substrate. Indicatively, for :

Brick dimensions (cm)	Consumption (kg/m ²)
12*19*9	23.1
13.5*24.5*8.5	21.0
18*32*12.5	24.3

MODIFICATION

If while preparing the mixture you add 40-80Kg GLX 296 per kilogram of the product and the necessary quantity of water, there is significant improvement of workability, while there is also enhancement of product features such as:

- resistance
- shrinkage
- adhesion on various surfaces
- flexibility
- resistance to frost
- impermeability
- resistance to friction
- resistance to acids

PACKAGING - STORAGE

The product is packaged in valve-bags of 40Kg and is stored in wooden pallets in

a dry environment, at temperatures above 0°C for 12 after production.

TOOL AND MACHINERY CLEANING

Rinse with water immediately after use.

APPLICATION IS NOT RECOMMENDED

The usage of the material under frost or heat-wave environmental conditions is not recommended

The technical information and instructions contained in the present brochure and referring to the application and end use of Thrakon products are based on the up to now know-how and experience of the Company with regards to the products and are provided in good faith as long as such products are stored, used and applied as per Thrakon recommendations. Due to the inability, on our part, to directly inspect the conditions prevailing at the worksite as well as the application procedures of the product, the Company does not provide any guarantee with regards to the adequacy of its products for specific purpose while the Company shall not bear any legal responsibility based on the information stated in the present brochure or any other written, oral, or otherwise provided recommendations and instructions. The users of the products are advised to perform a limited surface testing of the products adequacy for the eventual application and use intentions. Thrakon reserves the right to modify the features of its products without prior notification. All orders shall be approved only following



PRECAUTIONS

MIX 280 contains cement and reacts with water, creating an alkaline solution. For this reason protect your eyes and skin. In case of contact wash with plenty of water. In case of contact with the eyes seek immediately medical advice. Read the

information contained on the label and the Technical Sheet of the product before use. Use adequate protective clothing and gloves. The Safety Sheet of the product is available to professionals upon request.

TYPE M5 - A1 OF EUROPEAN STANDARD EN 998 - 2

TECHNICAL CHARACTERISTICS	UNITS	STANDARD	VALUE
Form			dry powder
Color			grey
Application thickness	(mm)		20
Tolerance temperature	(°C)		-30 to +90
Reaction to fire	(% organic)		≤ 1,0
Maximum grain size	(mm)		2,0
Workable life	(h)	EN 1015-9	1.5-2
Correction time	(min)	EN 1015-9	≥20
Open time	(min)	EN 1015-9	10
Dry bulk density	(Kg/l)		1.80-1.90
Bulk density of fresh mortar	(Kg/l)	EN 1015-6	1.65-1.80
Compressive strength	(N/mm ²)	EN 1015-11	≥5.0
Flexural strength	(N/mm ²)	EN 1015-11	≥2.0
Initial shear strength (tab.value)	(N/mm ²)		≥0,15
Water absorption	(kg/m ² *min ^{0.5})	EN 1015-18	0,55
Thermal conductivity (λ)	(W/mK)	EN 1745	0,91
Water vapour permeability (tab. value)	(μ)	EN 1745	15/35
Chloride ion content	(%)	EN 1015-17	≤0,1
Consumption	(Kg/m ³)		21-24,3
Water demand	(ml water/ 100g of dry mortar)		18-20

Note: The measurements were taken in laboratory environment under a temperature of +23°C, Relative humidity 50 % and without ventilation. It is possible for them to vary depending on the conditions prevailing at the worksite, such as temperature, humidity, ventilation, absorbability of the sub-layer and of the tile.

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