

DEC 440

DECORATIVE MORTAR ROLLER TYPE

CS IV-W2-A1

**ACCORDING TO
EN998-1**

DESCRIPTION

The DEC 440 product is a ready to use, white decorative final layer plaster, of cement basis. It consists of cement, lime, titanium, marble and ameliorative additives. It is produced with 1.25mm maximum granule. It is water repellent and has a very strong adhesion on all the usual substrates. With DEC 440 you can create relief surfaces of various types, depending on the style method and tool.

It also contains special modified polymers which ensure that the plaster has strong adhesion, is water repellent, has optimum workability and high strength. It is produced and controlled according to the EN 998-1 European standard.

FIELDS OF APPLICATION

The DEC 440 product is used as a final layer plaster in the 3 layers plastering system (SHP 205 – GHP 210 – DEC 440) of THRAKON, internally, externally, on fences, on outdoor thermal facade systems and on substrates like concrete, bricks, aerated concrete (YTONG), etc. It is applied on the GHP 210 final layer plaster.

It can also be applied on surfaces plastered with the FHP 225 and FHP 221 final layer plasters. It is suitable both for indoor and outdoor use. Its application thickness per layer is 5 mm. No painting is required after the application of the product.

ADVANTAGES - CHARACTERISTICS

- It consists of titanium
- It does not need painting
- Possibility of producing multiple decorative options
- It is produced with super white limestone aggregates
- It is water repellent
- It has an optimum granulometric distribution
- It allows the surfaces to breathe
- Strong adhesion on the substrate
- Excellent workability and thixotropic behaviour
- It remains on the surface of the structural element without pouring
- Strong resistance – Rapid application
- It replaces the traditional plasters
- Certified with CE - according to the EN 998 European standard

SUBSTRATE PREPARATION

The substrate on which the DEC 440 product shall be applied must be clean, free from frail and foreign parts, with uniform absorbency, level and smooth. It is recommended to apply on a plastered

surface, on which the roller and the other style tools work better providing a uniform decor. It is also recommended that the surface on which the DEC 440 product shall be applied shall be prime coated with the GLX 294 THRAKON material.

METHODS OF PREPARATION

Material preparation by a plastering machine:

Firstly connect the power supply (3-phase) and the water supply and the system is ready to use. As soon as the water flow is adjusted to produce a mixture with the desired workability, the plastering machine is ready to produce a plaster with constant coherence.

Material preparation by hand in a container:

In a clean container add 11,2 lt of clean water and

gradually empty the content of a 25 Kg bag of the DEC 440 product while mixing continuously with an electrical agitator, in order to produce a homogenous mortar mass. Leave the mixture to mature for 5 minutes and agitate it again for a little. The mixture is ready to use within the next 1 hour. After the preparation of the mixture do not add additional water to correct the mortar's workability. This shall lead to a decrease of resistances and to the increase of its shrinkage.

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APPLICATION

The formation of the final surface with this plaster is mainly performed using a roller. Depending on the type of the final surface choose the suitable type of roller to use. There are rubber rollers that provide different relief, (with lines, dense, lighter etc.). The relief roller or other auxiliary tools for surface formation (sponge, comb etc.) can also be used. Select a part of the surface to be decorated, depending on the available time, in order to have enough time to form the final surface before the plaster dries. Using a metallic spatula firstly spread the DEC 440 plaster on a very thin layer (priming) and after it dries, uniformly apply a second layer 3 – 5 mm thick on the selected surface. Even the surface with the metallic spatula so that no lumps and surplus material exist. Depending on the kind of final surface that you want to form let it dry for a little and then form the surface using the special roller. Depending on the speed of the roller's movement, the applied pressure and the

time of process surfaces different relief options are provided. To be able to connect the adjacent areas, without visible connections, you must not let the plaster dry completely on one area and continue on the next one. If you wish that a surface is painted with a relief type roller, then firstly add an extra water quantity to make the material more runny. Then using the relief roller paint the wall creating at your will, relief surfaces of different density. Do not apply the product at thickness greater than recommended. Do not apply the plaster on cracks or connections of different structural elements. After the preparation of the mixture do not add additional water to correct the workability of the mortar. This shall lead to a decrease of its resistances and to an increase of its shrinkage. During the application and also during the following 24 hours the ambient and the substrate temperature must be between +5°C and +35°C.

CONSUMPTION

The consumption of the DEC 440 product is approximately 5kg/m² and it depends on the size of the relief on the final surface.

PACKAGING – STORAGE

The product is packaged in 25Kg valve paper bags and is stored on wooden palettes and in a dry environment with temperature above 0°C for 12 months from the production date.

NOT RECOMMENDED

- The application of the plaster is not allowed:
- When there is a frost forecast for the 24 hours following the application of the plaster.
- Under wet conditions (like rain)
- On masonries directly exposed to intense solar radiation or on warm substrates.

PRECAUTIONS

The DEC 440 product contains cement and reacts with water to produce an alkaline solution. For this reason protect your eyes and skin. In case of contact rinse with plenty of water. In case of contact with eyes seek medical advice immediately. Read the

information on the label and in the product's Technical Brochure before use. Wear appropriate protective clothing and gloves. The product's Safety Sheet is available to professionals upon request.

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 acceptance of the above and under the eventual Commercial Policy terms of the Company. The issuance of the present brochure voids any prior version.



TYPE CS VI – W2 – A1 OF THE EN 998 – 1 EUROPEAN STANDARD

TECHNICAL CHARACTERISTICS	UNITS	STANDARD	VALUE
Appearance			dry powder
Color			White
Application temperature	(mm)		5
Temperature resistance	(°C)		-30 to +90
Reaction to fire	(% organics)		≤1,0
Maximum grain size	(mm)		1,25
Workable life	(h)	EN 1015-9	1,5 – 2,0
Dry bulk density	(kg/l)		1,35 – 1,45
Bulk density of fresh mortar	(kg/l)	EN 1015-6	1,85 – 1,95
Dry bulk density of hardened mortar	(kg/l)	EN 1015-10	1,6 – 1,8
Smoothing time	(min)		45-60
Setting time	(h)	EN 196-3	7 – 10
Strength development time	(min)		28
Compressive strength	(N/mm ²)	EN 1015-11	11,0 – 13,0
Flexural strength	(N/ mm ²)	EN 1015-11	4,5 – 5,5
Adhesion to the substrate			>5
Air content	(%)	EN 1015-7	>0,30
Water retention	(%)	EN 1015-8	>85
Water vapour permeability coefficient	(μ)	EN 1745	5/20
Water absorption coefficient	(kg/ m ² *min ^{0,5})	EN 1015-18	≤0,20
PH of fresh mortar			>10
Consumption	(Kg/ m ²)		
Water demand	(ml water / 100g of dry mortar)		28

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 substrate.

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