## **DESCRIPTION**

The DEC 424 product is a ready to use, white decorative final layer plaster, of cement basis. It consists of cement, lime, marble and ameliorative additives. It is produced in different granulometries: with maximum grain size of 1,4mm and 2,5mm. DEC 424 is a water repellent plaster, resistant to ultraviolet radiation, shows a very strong

adhesion to the inorganic substrates and ensures decorative and smooth surfaces before painting. It is produced and controlled according to the EN 998-1 European standard.

#### FIELDS OF APPLICATION

The DEC 424 product is used as a final layer plaster in the 3 layer plastering system of THRAKON, internally, externally, on fences, on outdoor thermal insulating 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.

## **ADVANTAGES - CHARACTERISTICS**

- 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 behavior
- It remains on the surface of the structural element without pouring
- Strong resistance Rapid application
- Optimum finishing Smooth surfaces
- It replaces the traditional plasters
- Certified with CE according to the EN 998-1 European standard

## SUBSTRATE PREPARATION

Make sure that the substrate is dry, firm, solid, free from frail materials, dust, colours, wax, oils. Before the application of the plaster it is necessary to even and level the walls, to align the edges, on the corners of the openings and the beams, in order to achieve a nice finish without waste. For the above substrate preparation it is recommended to use the THRAKON materials SHP 205 (thrown plaster) and GHP 210 (basic layer plaster). Leave the basic plaster for at least 3 weeks to dry completely. Then, slightly wet the basic plaster and apply a thin layer of DEC 424. However it is important that there is no running or standing water. The absorbent as well as the old surfaces are stabilized with the application of the GLK 290 acrylic primer before the thrown plaster, diluted at a ratio of 4 parts water: 1 part primer. The surface is ready for plastering after the primer is completely dry (approximately 2-6 hours).

In case you want to plaster with DEC 424 surfaces of polystyrene (such as ceilings) the substrate preparation requires:

Firstly the application of the system adhesive-mesh-adhesive directly on the polystyrene using THRAKON materials THC 405 or 409. Next, application of the DEC 424 plaster at the recommended thickness (see FIELDS OF APPLICATION) In case the leveling of the surface covered with polystyrene (like supports and beams) is also required this is performed as follows: Firstly apply the system adhesive-mesh-adhesive directly on the polystyrene using THRAKON materials THC 405 or 409 (see product technical leaflet). Then consecutively apply the thrown plaster SHP 205 and the basic layer plaster GHP 210 (see products technical leaflets). Finally, create the surface finish with the DEC 424 plaster at recommended thickness (see **FIELDS** APPLICATION)





## **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 4,75-5,0 lt of clean water and we gradually empty the content of a 25 Kg bag

of the DEC 424 product while continuously mixing with an electrical agitator, in order to produce a homogenous mortar mass. Leave the produced mixture to mature for 5 minutes and agitate it again for a little. The mixture is ready to use within the following 1 hour. Do not add additional water to correct the workability of the mortar. This will result to a decrease of its strengths and to an increase of

#### **MODIFICATION**

If, during the preparation of the mixture, you add 40-80Kg GLX 296 per product kilogram and the necessary quantity of water, the workability is significantly improved and the products characteristics like the following are enhanced:

- greater elasticity
- impermeability
- stronger adhesion on the substrate

the ability to be applied on smaller or greater thickness than the recommended and also directly on difficult substrates such as:

- polystyrene
- visible concrete and
- parts of the masonry that require repair

## **APPLICATION**

Using a steel trowel apply uniformly a thin layer of decorative plaster on the entire surface. Using a rubber float, and with very slight pressure, even the surface. Before the plaster gets dry, using the rubber float, press slightly to shape the final surface making circular moves.

You must not soak the plaster after the application and you must not wet the tools during the application. The suitable application thickness is:

- 1,4 mm for 1,4 mm maximum granule
- 2,5 mm for 2,5mm maximum granule

If you use the decorative plaster on small areas (like frames etc.) or arched surfaces (like supports), you can apply it using a hard brush. In this case add more water, and a small quantity (1-2kg per 25kg bag) of THRAKON's GLX 296 additive. Stir the mixture, in order to provide an easily

spread paste. In this way, you can apply the decorative plaster in one or two layers. The final style of the surface is performed in the same way. When DEC 424 is completely dry, it is recommended to paint it. In doing so you will be protecting the plaster from future stains while the dirt that deposits on the surfaces shall be easily cleaned. If the surface is not levelled, and the final result is not satisfactory after one layer, you can apply a second one after the first is dry enough. Do not apply the product at thickness greater than recommended. Do not apply the plaster on cracks or connections of different structural elements. During the application and also during the following 24 hours the ambient and the substrate temperature must be between +5 °C and +35 °C.

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.

# **CONSUMPTION**

## **PACKAGING - STORAGE**

The consumption of the DEC 424 product is

- 2,5-3,0 Kg/m<sup>2</sup> for maximum grain size 1,4mm
- 3,0-3,3 Kg/m<sup>2</sup> for maximum grain size 2,5mm

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

## **TOOLS**

## **CLEANING OF TOOLS AND MACHINES**

American type trowel, floats and other common tools for plastering.

With plenty of water immediately after use.

## **NOT RECOMMENDED**

- When there is a frost forecast for the 24 hours following the application of the product.
- Under wet conditions (like rain).

## **PRECAUTIONS**

The DEC 424 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.





TYPE CS III – W1 – A1 OF THE EN 998 – 1 EUROPEAN STANDARD				
TECHNICAL CHARACTERISTICS		UNITS	STANDARD	VALUE
Appearance				Ξηρή σκόνη
Color				λευκό
Thickness of application	DEC 424 – 1,4mm DEC 424 – 2,5mm	(mm)	1,4 2,5	
Application temperature		(°C)		+5 to +35
Temperature resistance		(°C)		-30 to +90
Reaction to fire		(% organics)		≤ 1,0
Maximum grain size		(mm)		1,5 2,5
Workable life		(h)	EN 1015-9	≥45
Dry bulk density		(kg/l)		1,60±0,1
Bulk density of fresh mortar		(kg/l)	EN 1015-6	1,75±0,1
Dry bulk density of hardened mortar		(kg/l)	EN 1015-10	1,60±0,1
Smoothing time		(min)		45-60
Strength development time		(days)		28
Compressive strength		(N/mm <sup>2</sup> )	EN 1015-11	≥10,0
Flexural strength		$(N/m m^2)$	EN 1015-11	≥4,0
Adhesion to the substrate		$(N/m m^2)$	EN 1015-12	>0,40
Air content		(%)	EN 1015-7	≥20
Water retention		(%)	EN 1015-8	>85
Water vapor permeability coefficient		(μ)	EN 1745	5/20
Water absorption coefficient		(kg/ m <sup>2</sup> *min <sup>0,5</sup> )	EN 1015-18	<0,40
PH of fresh mortar				>10
Consumption	DEC 424 – 1,4mm	(Kg/ m <sup>2</sup> )		2,5-3,0
	DEC 424 – 2,5mm			3,0-3,5
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 substrate.

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