







Anti-algae acrylic-siloxanic thick plaster for exteriors. Available in grain size 1-1,2-1,5-2-3 mm.







### Product description and fields of application

DUE SI is a thick fiber-reinforced finish with a solid plaster effect of various grain sizes, composed of acrylic binders and polysiloxane additives in water dispersion, colored pigments resistant to light and UV rays and controlled and selected mineral fillers.

The acrylic-siloxane component gives the product high water vapor permeability combined with low water absorption. It has excellent characteristics of resistance to alkalis, weathering and low dirt retention. In addition, it has a blend of innovative active biocides that are resistant to alkaline pH, runoff and UV rays that protect the substrate from the proliferation of mold, mildew and algae. DUE SI is easy to apply and forms a protective coating with exceptional performance characteristics, as it is porous, breathable, water-repellent and highly resistant to outdoor use.

All these features make DUE SI a special coating for outdoor protection and decoration suitable for any mineral substrate, lime-based base-coat plaster, hydraulic binder, ready-mixed and traditional, finished civil and not, in thermal insulation systems such as thermoplaster and coats, concrete mixes and cementitious smoothing compounds.

In particular, it is suitable for use on historical facades, plaster of new buildings, renovation work in urban construction and renovation plaster where it is necessary a low resistance to the diffusion of steam; adheres perfectly even on old mineral or synthetic paints. DUE SI can be tinted with the arteMURI tinting system.

ETA certified product for thermal insulation systems.



# reported data refers to Quality Control tests in standard environmental conditions. Practical applications in the construction sites may detect significantly changed data, depending on operating conditions, so the information on the Card is only indicative because the user stalways check its suitability for intended use of the product by taking responsibility for the use. Fornaci Calce Grigolin S.p.A. reserves the right to make technical changes of any kind without prior notice.

# **DUE SI**

### **Advantages**

retardant and protective film against the proliferation of mold, algae and fungi plaster effect various grain sizes ease of application excellent breathability good water repellency

### **Specifications**

The external wall surfaces, such as mortar plaster based on lime-hydraulic binder, premixed and traditional, finished civil and not, skimming, insulation systems and concrete conglomerates of various kinds, can be finished with the acrylic-siloxanic fiber-reinforced anti-algae full-effect plaster DUE SI by Fornaci Calce Grigolin, a product based on acrylic copolymers and polysiloxane additives in water dispersion, resistant pigments and selected grain size charges. The consumption of this product when finished varies from a minimum of 1.6 kg/m2 to a maximum of 4.0 kg/m2, depending on the thickness, the support and the grain size used.

### Consumption and packaging

DUE SI is supplied in 25 kg packages.

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### **Conservation Standards**

Protect from frost. Store at temperatures between +5°C and +30°C in the original sealed containers. Under these conditions the shelf life of the stored product is at least one year.

### Substrate preparation

New substrates and/or any repairs (patches) must be cured by at least 4 weeks, clean and dry. Old substrates must be consistent, free of salt efflorescence and loose parts, thoroughly cleaned according to the nature and intensity of the dirt deposited on the surfaces to be treated. To level and fill imperfections such as holes, cracks or crevices, first intervene with a suitable product or repair mortar. Clean up any mold or algae and then sanitize the surface with SEI OK restorer.

On already painted surfaces, make sure of the condition of the film: brush and/or scrape the detaching film, completely remove high layers of non-adherent paints.

### Substrate treatment

New plasters: apply one coat of PRIMER UNIKO GM, GM GRUND 0.5 or PRIME GRUND 0.3. Plasters with mineral paints (lime or silicates): apply one coat of PRIMER UNIKO GM, GM GRUND 0.5 or PRIME GRUND 0.3.

Plasters with synthetic paints (acrylic, siloxanic): apply one coat of PRIMER UNIKO GM, GM GRUND 0.5 or PRIME GRUND 0.3.

Cement/concrete/fibrocement: apply one coat of PRIMER 2W and next one coat of PRIMER UNIKO GM, GM GRUND 0.5 or PRIME GRUND 0.3.

In all cases, depending on the conditions of the substrate, first treat with PRIMER 2W water primer or PRG SL solvent primer.





# **DUE SI**

### **Product preparation**

DUE SI is ready to use. If necessary, dilute with a little water until the desired consistency is obtained by slowly mixing the product in its container with a mechanical stirrer.

### **Application**

Spread the product on the surface with a metal trowel taking care to distribute it evenly. Before the product begins to dry on the surface, finish with circular movements using the spatula or plastic mole, until the desired result is obtained. In case of application on large surfaces, remember to work with an adequate number of people, always proceeding wet on wet to avoid shading in the areas of recovery.

Collect the material necessary for the execution of the work all from the same batch. If different batches of product are used, it is advisable to mix them together in order to avoid slight differences in shade. Absolutely avoid the application of different batches on the same surface and finish the wall with a single batch, then resume painting on the wall at the edge with the next batch. Wash tools and equipment with water immediately after use.

### **Important Warnings**

If the product is used as a finish for a thermal insulation system, avoid using dark colors with a luminosity index Y < 25 (check the arteMURI color chart).

Do not apply with ambient and/or substrate temperature lower than +5°C or higher than +35°C and with relative humidity higher than 75%. Avoid application in presence of superficial condensation, under direct sunlight or strong wind. The adhesion of the product to the substrate is not guaranteed when the application takes place on surfaces that have salt efflorescence or are subject to humidity, so it is necessary a preventive intervention of masonry restoration.

### **Special Warnings**

Respect the climatic conditions of application indicated above and protect the surfaces from rain and humidity for at least 48-96 hours (depending on climatic conditions), to reduce the risk of washouts. This allows for complete drying of the product and regular polymerization, which occurs within 8-10 days. If, during this period, there are rainy events or events with high humidity (mists and/or superficial condensation, especially in the autumn), translucent drippings (so-called "snails") may form. This phenomenon does not affect the quality of the product and can be eliminated by hydro-washing or waiting for the next rainfall.

### Safety instructions

The product does not require hazard labeling under current regulations. Use the products according to current hygiene and safety regulations. After use, do not dispose of containers in the environment. Let the residues dry well and treat them as special waste. For further information please refer to the safety data sheet.





# **DUE SI**

TECHNICAL DATA	PERFORMANCE	
Binder type	siloxanic and acrylic polymers in aqueous dispersion	
Appearance	in dense granular/pigmented paste	
Specific weight(UNI EN ISO 2811-1) 25°C±2	1980 g/l ± 50 g/l	
Brookfield viscosity(ASTM D2196) 25°C±2	140.000 ± 10.000 cP	
Water vapor permeability and classification (UNI EN ISO 7783-2)	V = 185 g/m² 24h Class I (high permeability)	
Equivalent air layer thickness (UNI EN ISO 7783-2)	Sd = 0,114 m	
Vapor Permeability μ	ca. 95	
Liquid water permeability and classification (UNI EN 1062-3)	w24 = 0,115 kg/m <sup>2</sup> h <sup>0,5</sup> Class II (medium permeability)	
Suitable for facade protection as it complies with the KÜNZLE theory (DIN 18550) where w24 < 0,5 kg/m2 h0,5 and Sd<2 m	$Sd \cdot w24 = 0,013 \text{ kg/m h}^{0,5}$	
VOC content (DIR. 2004/42/EC)	Paint for exterior walls of mineral substrate. EU limit values for subcategory c, type BA 40 g/l (2010) This product contains a maximum of 40 g/l of VOCs.	
Application	Steel and plastic flask	
Overpainting	16-48 hours	
Reaction to fire (EN 13501-1)	A2-s1, d0	

GRANULOMETRY	LAYERS	CONSUMPTION	RETURN
1 mm	one layer	1,6-2,0 kg/m²	0,5-0,6 m²/kg
1,2 mm	one layer	1,8-2,2 kg/m²	0,45-0,55 m <sup>2</sup> /kg
1,5 mm	one layer	2,8-3.2 kg/m <sup>2</sup>	0,30-0,35 m <sup>2</sup> /kg
2,0 mm	one layer	3,0-3,5 kg/m²	0,28-0,33 m <sup>2</sup> /kg
3,0 mm	one layer	3,5-4,0 kg/m²	0,25-0,28 m <sup>2</sup> /kg

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