

## Fine grained flexible decorative microcement for walls and floors











### **■ PROPERTIES**

Ready-mixed, white or colored fine-grained and flexible mortar.

The ideal technological combination of polymeric resins, aggregates and high-strength cement creates a unique smooth surface, of high mechanical strength. Prepare the flexible, decorative microcement, DS-256 FLEX VELVET just by adding water.

Apply a single coat with a trowel to create exceptionally silky-smooth texture surfaces, and decorate spaces with personality, unique aesthetics, as well as slim and elegant lines. It is colored in its mass (\*) by the addition of water-soluble pigments DUROCOLOR POWDER-C in powder form available in 96 shades or by broadcasting and work the pigments on its surface. Create unique, personalized styles on the surface by using the cementitious GROUTS of DUROSTICK, available in 38 colors or the color

syringes of DUROCOLOR coloring system of DUROSTICK.

Classified PCC R3, per EN 1504-3, and as floor screed material is classified CT-C25-F7-AR2, per EN 13813.

## ■ APPLICATIONS

DS-256 FLEX VELVET applies on properly prepared surfaces and is suitable to be used on floors and walls, in both interior and exterior applications. Due to its velvety texture and small grain size, its application is suitable on surfaces made of gypsum board and cement board that are already primed with AQUAFIX, as well as on sound marble-based plaster surfaces.

Perfectly suitable for applications over sound, level surfaces of traditional cement screeds, self levelling mortars but also over properly prepared surfaces with DS-250 or DS-252 FLEX microcements of DUROSTICK.



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Prepare surfaces such as wood lofts, as well as existing mosaic, marble and tiles, using either one of the quartz based primers, DS-255 or DS-290 of DUROSTICK.

Follow by applying either microcement DS-250 or DS-252 FLEX, depending on the requirements of the project and the final use. Encase the alkali resistant, fiberglass mesh DS-4160, as described in detail in the 'USE' section of the respective products. Finally, apply DS-256 FLEX VELVET in one coat, to create its signature velvety and super smooth texture.

#### **USE**

#### 1. Surface preparation

The substrate must be sound, free from dust, oils, all loose materials and it should be well soaked evenly before the application. Alternatively the use of AQUAFIX, the micromolar stabilizer (primer) of DUROSTICK is recommended. Its use stabilizes the substrate and increases its waterproofing. In addition, it ensures the uniformed progression of your color selections. It is imperative to create expansion joints on all exterior floor application, every 25-30m² and every 50m² for interior ones. It is also necessary to create perimeter joints; 8-10mm wide all around the flooring surface for both interior and exterior applications.

### 2. Application

Cover all surrounding surfaces to protect them from soiling them. Empty 25kg of the microcement into 5.5-6.0lt of cool, clear water. Using a clean cement mixer or a low-rpm elecric mixer, mix until a lumpfree cohesive, homogeneous paste is created. Allow for the mixture to mature for 5-10 minutes and mix periodically during use without adding extra water. Soak the substrate that will be coated immediately with clean water and apply the product using a gauging trowel. Use a notched trowel to comb the mortar onto the substrate to a thickness of no more than 3mm per coat. Press the combed product to even it out and to eliminate any trapped air bubbles so they do not create dimples on the surface. Allow the product to mature for about 30 minutes. Use a wide, flat trowel and begin pressing the surface of the microcement in different directions until the desired aesthetic, styling result is achieved. Use the appropriate trowel, based on style and craftsman, to smooth and perfect the final surface. DS-256 FLEX VELVET rewards the craftsman's skills and quickly highlights its veins. Broadcast the ultrafine, decorative metal pigments in gold, silver, and copper LUSSO D'ORO and create patinas, adding a dramatic touch of luxury and luster. After 3-6 days (depending on the ambient conditions) and once the product has cured and thoroughly dried, it is time to enhance its surface protection. For interior vertical surfaces use the matte finish varnish DECOFIN AQUA of DUROSTICK. For interior and exterior surfaces, the use of the acrylic, solvent-based varnish VISTA, is recommended.

On floor surfaces and areas with increased mechanical stresses, the use of the two-component, polyurethane-based varnish DECOFIN POLYURETHANE or the two-component water soluble polyurethane-based matte varnish, DECOFIN AQUA PU, (idea for interior spaces that are not adequately ventilated since it is odorless), are both highly recommended.

For interior surfaces with increased hygiene requirements, the use of either the two-component, epoxy-based and gloss finish varnish DECOFIN EPOXY SF or the two-component, epoxy-based and satin finish DECOFIN EPOXY AQUA are both highly recommended as well.

To maintain and protect the selected color and not alter/darken it from the varnish application, it is recommended to apply the micromolar primer AQUAFIX of DUROSTICK, before applying the protection varnish.

#### **■ NOTES**

- Consult the MICROCEMENT FAN DECK (available through stores that sell the specific products) to actually see the degree of influence of the micorcement color(s) after the application of the protection varnish.
- Curing times refer to ambient conditions with a temperature of 23°C and 50% relative humidity. Those times also depend on the nature of the substrate and the thickness of the microcement coat.

The technical specifications and directions of use contained in this technical data sheet are the results of the knowledge and experience of the company's research and development department, as well as from the real-life applications of the product. The recommendations and suggestions regarding the use of the products are made without guarantee since the respective conditions during their application are beyond the control of the company. For this reason, it is the user's responsibility to make sure that the product is suitable for the intended application as well as the application conditions of the project.



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• For applications where the levels of humidity are elevated and the temperature remains low, the varnish application should be done after 7 days.

(\*)

Coloring the microcement throughout its mass using DUROCOLOR POWDER-C:

Select one of the 96 color chart colors. Empty the required amount of pigments into a clean container with 5.5-6.0lt of clean, potable water. Mix well using a low rpm electric mixer. Add the white microcement and mix until a fully homogenized, colored mixture is produced.

• Quantities over 250kg that can line approximately 60m² can be delivered factory colored.

#### **■ CLEANING**

Clean all tools with water, immediately after use.

## **■** CONSUMPTION

4-4.3kg/m<sup>2</sup> per 3mm thick coat.

### **■ STORAGE**

Store in the factory sealed packages, in dry and shaded places for 12 months from production date.

### **■ SAFETY DIRECTIONS**

The product contains Portland cement. Before use, refer to the cautions on the product packaging or the Safety Data Sheet.

## ■ PACKAGING

Paper bag of 25kg on 1.500kg pallet

### **■ USEFUL TIPS**

- Avoid applying the microcement when ambient temperatures are lower than 5°C and higher than 35°C.
- During summer months, the finish surface has to be protected from intense sunlight for the next 24 hours after the application of the product to avoid premature dehydration.
- Clean the microcement surface with mild household cleaning detergents. Cleaning can be significantly facilitated when the surface is protected with one of the special varnishes of DUROSTICK.

TECHNICAL SPECIFICATIONS (Measurement conditions 20°C and 50% R.H.)	
Form - Color	Cementitious mortar - White
■ Colors	11 permanent colors and 96 selected colors, based on the DUROCOLOR POWDER-C color chart
■ Bulk density of dry mortar	1.20±0.05kg/lt
■ Bulk density of fresh mortar	1.70±0.05kg/lt
■ Maximum grain size	600µm
■ Water requirement	5.5lt water for 25kg mortar
Application temperature	From +5°C to +35°C
■ Temperature resistance	From -35°C to +90°C
■ Pot life	2 hours
■ Maximum application thickness	2-3mm/coat for walls, 3-5mm/coat for floors
Application of protective paint or waterproofing	After 3 to 6 days
■ Foot traffic	After 8 hours
■ Power sanding	After 24 hours (if necessary or desired)
Resistance to:	
•Ageing	Excellent
•Acids	Excellent (when pH > 3)
•Alkalis	Excellent

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PRODUCT PERFORMANCES	
■ Strength after 28 days, per EN 12190 & EN 13892-2 to:	
•flexion	≥ 6.50 N/mm <sup>2</sup>
•Compression	≥ 26.00 N/mm <sup>2</sup>
■ Chloride ion content, per EN 1015-17	≤ 0.05%
■ Adhesion to concrete per EN 1542	≥ 1.80 N/mm²
■ Elastic modulus per EN 13412	≥ 15.0 GPa
■ Thermal compatibility expressed as adhesion to concrete, per EN 13687, after:	
•50 freeze-thaw cycles	
•30 storm cycles	≥ 1.50 N/mm <sup>2</sup>
•30 dry heat cycles	
■ Capillary water absorption w per EN 13057	w ≤ 0.30kg.m <sup>-2</sup> .h <sup>-0,5</sup>
■ Abrasion resistance BCA per EN 13892-4	220±20μm
■ Reaction to fire	Class F

Where 1 N/mm<sup>2</sup>=1MPa

**DUROSTICK S.A.,**MANUFACTURING OF ADHESIVES,
PAINTS & MORTARS

**ATHENS:** ASPROPYRGOS, ATTICA, GR: 193 00, Tel: +30 211 60 03 500-599, +30 210 55 16 500, +30 210 55 98 350, Fax: +30 210 55 99 612

THESSALONIKI: INDUSTRIAL PARK-SINDOS, S.B. 44,

STREET, DA 10, GR: 570 22,

Tel: +30 2310 795 797, +30 2310 797 365,

Fax: +30 2310 797 367 Email: info@durostick.com

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