

# SD 80 décor.flex

**flexible microcement  
mortar for floor  
& wall applications**

- Excellent workability
- High flexibility
- Excellent resistance to moisture
- High mechanical strength
- Outstanding decorative solution



# SD 80 DÉCOR•FLEX

## flexible microcement mortar for floor & wall applications

### DESCRIPTION

Flexible, fiber-reinforced, polymer-modified microcement mortar, for creating smooth and durable surfaces, using the traditional surface finishing technique on interior and exterior walls and floors.

It exhibits high flexibility, as well as high resistance to abrasion, excellent bonding with the substrate and excellent resistance to moisture.

It is produced in white and can be easily coloured with **NATURAL COLOURS** pigments in powder form.

Classified as class PCC R2 cementitious mortar for non-structural repairs of concrete structures according to European standard EN 1504-3.

### APPLICATIONS

Suitable for creating microcement coatings on floors and walls, on concrete substrates, reinforced plaster, gypsum boards, cement boards, old floors (mosaic, natural stone, tiles), as well as for special constructions such as swimming pools, custom-made bathtubs and washbasins, tables, stairs, etc., adding to constructions the unique aesthetics of Cycladic architecture.

It is ideal for renovations, restorations and new constructions.

Suitable for indoor and outdoor applications.

### PROPERTIES / ADVANTAGES

- Easy to prepare and apply.
- High mechanical strength and excellent adhesion to the substrate.
- Offers high flexibility, eliminating the need for any additional reinforcing admixtures.
- Doesn't develop mould which makes it ideal for areas with constant presence of moisture.
- Excellent architectural solution for traditional villages, islands and any case requiring a distinctive aesthetic effect.
- Suitable for indoor and outdoor applications.
- Can be coloured in any desired shade using the **NATURAL COLOUR CREATIONS** tinting system.

### HARMONIZED STANDARDS / REGULATIONS

- EN 1504-3:2004: Cementitious mortar for non-structural repairs of concrete structures, type PCC R2.
- Regulation (EC) No. 305/2011: CE marked product with Declaration of Performance (DoP): SD80DF/CPR-7-13/067/9-2015.

### APPLICATION INSTRUCTIONS

#### Substrate preparation

- Surfaces must be checked for adequate strength and be clean, free from oil, dust, etc.
- To improve adhesion, surfaces should be primed with quartz primer **FINO•CONTACT** before application.
- Application follows as soon as the primer has dried.
- On exterior floors, expansion joints must be created every 25m<sup>2</sup>, while on interior floors every 30m<sup>2</sup> as well as along the perimeter.

#### Material preparation

- The content of the bag (25kg) is added into 4.75-5.00 kg of clean water.
- The mixture is stirred with an electric mixer at low speed (300 rpm) for at least 2 minutes, while simultaneously cleaning the sides of the container, until a creamy paste without lumps is formed.
- If the mixture is considered too stiff, workability can be slightly improved by carefully adding a small amount of water.
- The mixture should be left to settle for 5 minutes and then be slightly stirred again.

#### Microcement application

- The mixture is applied in two layers.
- The first layer is applied on the surface with a notched trowel.
- While still fresh, a 160g/m<sup>2</sup>, 4x4mm alkali-resistant fiberglass mesh is placed and pressed evenly with a rectangular metal trowel (or with the flat side of the notched trowel) so that it is fully embedded into the microcement layer.
- The thickness of this layer should not exceed 3-4mm.
- The first layer should be left to dry completely for approximately 24 hours.

- The second layer is again applied with a notched trowel, in order to achieve an even thickness across the entire surface, and then smoothed with a rectangular trowel. Where necessary, additional material is added with the trowel.
- The thickness of this layer ranges from 4-5mm.
- The layer is left to set and then rubbed with a wet sponge.
- Immediately afterwards, the surface is leveled with a rectangular trowel. In this way, a smooth finish is created by pushing the aggregates into the body of the layer.
- The surface is left to set sufficiently and then is lightly compacted with a rectangular trowel or float, without applying pressure, as this would lead to the formation of bubbles.
- If bubbles appear on the surface between successive compactings, this indicates that there is still too much moisture within the material mass and it should be left to set further before continuing the process. The bubbles will disappear with the next compacting.
- The compacting process is repeated as many times as necessary until the desired finish is achieved.
- Once the application is completed, the surface should be left to dry fully for approximately 7 days. Afterwards, at least 2 layers of the protective varnishes **DECODUR COAT•PU 2K MAT** or **GLOSS** (with matte or glossy finish), or the acrylic varnish **DECODUR ACRYLIC**, must be applied in order to protect the final surface from stains and impacts. The application of varnish darkens the surface colour; therefore, in cases where it is desired to maintain the original colour tone, a coat of **ACRYLIC PRIMER** (water-based acrylic primer) must be applied beforehand. In cases where there is no significant risk of staining or impact stress and it is preferable to preserve the natural feel of the decorative cement mortar –particularly on wall surfaces– an alternative is the application of the water-repelling nano-emulsion **SIL•PROOF 5060 NANO** or the oleophobic impregnation **SIL•PROOF 5080**.
- In wet areas and surfaces with permanent moisture, the varnish **DECODUR COAT•PU 2K GLOSS** must be applied in 3 layers. If, however, a matte finish is desired, an additional 2 layers of **DECODUR COAT•PU 2K MAT** may be applied on top.

### Microcement mortar colouring

- For colouring the microcement mortar, **NATURAL COLOURS** natural powder pigments are used. With the 10 different pigments, unlimited colour combinations can be created.
- The desired shade for the microcement mortar is selected with the help of the **NATURAL COLOUR CREATIONS** colour chart.
- The pigments used for the selected shade are poured into the container with water and mixed thoroughly until completely dissolved. Ideally, for optimal solubility, the pigments should first be poured into a smaller container with a small amount of water and stirred well to create a fluid paste. Then, this paste is added to the container with the remaining water.
- It is important that the pigments are fully dissolved **before** being incorporated into the microcement mortar.

### CLEANING OF EQUIPMENT

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

### RECOMMENDATIONS

- Temperature during application should be between +5°C and +35°C.
- Do not mix the product with dirty or salty water.
- Don't use excess water for mixing as it will affect the performance of the product.
- Don't mix the product with cement, aggregates or admixtures.
- Do not add water after the mix has started to set.
- Avoid application under direct sunlight or in strong winds.
- Postpone application if high temperatures or frost are expected during the first 24 hours after application.
- After application, the fresh surface must be protected from rapid water evaporation.
- On exterior floors, it is necessary to create expansion joints every 20-25m<sup>2</sup>.
- On interior floors, it is necessary to create a perimeter joint with a width of 5-7mm

TECHNICAL CHARACTERISTICS	
PRODUCT CHARACTERISTICS	
Appearance	cementitious powder
Colour	white
Bulk density	1.50 ±0,05 kg/l
Chloride ion content (EN 1015-17)	< 0.05%
APPLICATION CHARACTERISTICS (+23°C / 50% R.H.)	
Mixing ratio	19-20% b.w. (4.75-5.00 kg of water/25kg bag)
pH	> 11
Pot life	2 hours (22°C)
Application temperature	minimum: +5°C / maximum: +35°C
Maximum application thickness per layer	5 mm
Consumption	approximately 1.5-1.6 kg/m <sup>2</sup> for a 1mm thick layer
Ready for foot traffic	12 hours
Application of protective treatment	7 days
PERFORMANCE CHARACTERISTICS	
Adhesion to concrete (EN 1542, MC 0,40)	1.90 ±0.05 kg/l
Adhesion after 50 freeze-thaw cycles (EN 13687-1)	1.70 ±0.05 kg/l
Compressive strength (EN 1015-11)	≥ 25 N/mm <sup>2</sup>
Flexural strength (EN 1015-11)	≥ 7 N/mm <sup>2</sup>
Abrasion resistance BCA (EN 13892-4)	AR2
Capillary water absorption (EN 13057)	≤ 0.30 kg/m <sup>2</sup> ·h <sup>0.5</sup>
In use temperature	from -20°C to +70°C
Reaction to fire	Class A1

**Note:** Measurements were conducted in a laboratory environment. The varying conditions present on-site (temperature, humidity, ventilation, substrate absorbency) may affect the material's properties.

## SAFETY PRECAUTIONS

- The product contains cement which has an alkaline reaction with water and is classified as irritant.
- Always wear appropriate personal protective equipment for eyes and skin (protective clothing, gloves and goggles).
- If skin contact occurs, rinse well with plenty of clean water.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Consult product's Safety Data Sheet for further instructions on safety handling.
- **PRODUCT FOR PROFESSIONAL USE.**

## PACKAGING - STORAGE

Available in:

- 25kg paper bags.

**Storage:** 12 months from production date, if stored in original, sealed packaging, protected from direct sunlight and moisture.

## LEGAL NOTICE

The technical characteristics and recommendations for the use and application of the **FINOMIX** range of products are based on the knowledge and experience of the company. The above information shall be considered merely indicative and subject to confirmation after long-term practical application. For this reason, anyone who intends to use the product must

ensure that it is suitable for the envisaged application. Since the specific site conditions during the applications are beyond the control of our company, the user alone is fully responsible for any consequences deriving from the use of the product. **FINOBETON S.A.** (**FINOMIX**) has the right to modify the properties of its products without prior notice. This release voids any previous publications issued for this technical specifications sheet.

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