

EVOLUTION Microdeck

Monocomponent microcement



Evolution Microdeck MN is a one-component microcement in powder for decorative coatings. It has been formulated as a thin, seamless overlay to be installed onto floors and walls. **Evolution Microdeck MN** is applied in several layers with a trowel, allowing the creation of a wide range of finishes. As part of an application system the surface should be prepared with Microbase and products recommended by **Topciment**.

Formulated with hydraulic binders, selected aggregates, synthetic resins and specific additives, **Evolution Microdeck MN** only needs the addition of water and pigments.

Once mixed, the product obtained can create a coating of 1-3 mm thickness, with high mechanical strength and strong adhesion to any type of substrates: concrete, cement-based mortars, ceramics, MDF, plaster and plasterboard. It is not recommended to install one-component microcements on outdoors's surfaces nor wet indoor areas.

Properties

- Continuous decorative coating without fissures (always respect the expansion joints).
- Applicable on countless surfaces: concrete, cement, ceramic, plasterboard, etc.
- Excellent workability.
- Wide range of colours.
- Finishes: matt, satin and gloss .
- High adhesion to substrates.

Recommendations for use

a. Surface preparation:

The surface should be free of dust and grease, well consolidated and in good flatness. Due to its high adhesion strength to any type of substrate, primers are not usually required. However, under specific conditions and in order to facilitate the installation, it is recommended to apply adhesion promoters prior to the first layer of microcement.

b. Mix:

only needs the addition of clean water and specific colorants, at room temperatures from 10 °C to 20°C. It is essential to respect the water-microcement ratio to ensure the product properties.

10 kg of Evolution Microdeck MN=>2.0 litres of water

c. Mortar preparation:

The mortar must be prepared as follows:

1. Pour the mixing water in a container; then add the entire load of pigment corresponding to the amount of microcement and microcement and mix until an even, coloured liquid is obtained.
2. Pour the microcement powder gradually into the water while mixing the product with a low speed mixing drill.
3. Mix at least 4 minutes until a smooth mixture free of lumps is obtained.

d. Consumption:

The consumption depends on the surface. In a standard application it would be as follows:

Evoluttion Microdeck MN (2 layers) – 1,4 kg/m²

The better the levelling and preparation of the surface to be coated, the better the performance and the lower the time of installation. It is advisable to choose the suitable method for each application.

Technical data

Type:

One component microcement

Appearance:

White powder

Apparent density:

in powder – 1.175 ± 50kg/m³

in mortar – 1.480 ± 50kg/m³

hardened – 1.430 ± 50kg/m³ (28 days)

System thickness:

from 1 to 3 mm

Pot-life:

1 hour at 20°C

Maximum size of the aggregates: <0.25 mm

Adherence strength (EN 13892-8):

28 days: ≥ 1.20 N/mm² δ = 2.14 N/mm²

Compressive strength

(EN 13892-2): 28 days: ≥ 40.40 N/mm²

δ = 40.41 N/mm²

Flexural strength

(EN 13892-2): 28 days: ≥ 8.70 N/mm² δ

= 9.10 N/mm²

shrinkage and swelling (EN 13454-

2:2003+A1:2009): 3 days: -0.696

mm/m

7 days: -1.324 mm/m

14 days: -1.966 mm/m

28 days: -2.472 mm/m

Slip resistance (EN 12633:2003):

USRV Rd = 28 Class 1

Superficial hardness (EN13892-

6:2003) ≥ 184 N/mm² SH150

Impact Strength (EN ISO 6272:2012)

IR = 14.7 No cracks at >1500 mm high

Diameter spherical indenter 11.05 mm

Erosion Strength BCA (EN 13892-4:3)

µm: =40 AR0,5

Application

a. Preparation or rendering layer:

Apply one or two layers of Evoluttion Microbase MN with a steel trowel depending on the type of surface. On floors always apply two layers and use the flexible fibreglass mesh Builtex on floors. Before applying a new layer, the previous one needs to be sanded with a random orbital sander and 40-grit sandpaper to remove irregularities.

b. Finishing or setting coat:

Apply two layers of Evoluttion Microdeck MN with a flexible steel trowel or a rubber trowel using one of these techniques:

"Fresh on fresh"

Evoluttion Microdeck MN can be applied with the "fresh on fresh" technique by applying a layer as soon as the previous one is tack-free (non-sticky to the touch). No sanding is required for the first Evoluttion Microdeck MN layer when using this technique. Should you find burrs or bumps, smooth them out with a spatula and cut the rough edges. Work on an extruded polystyrene board to apply the following layer. Lightly sand the surface with a random orbital sander or with the 80-grit sandpaper gloves to remove imperfections once the material has dried (once the colour tone changes and intensity becomes lighter).

"Fresh on dry"

A layer is applied once the previous one has dried for about 3 hours. Then sand lightly with a random orbital sander or 80-grit sandpaper gloves to remove imperfections.

Do not apply layers thicker than 1 mm of Evoluttion Microbase MN and Evoluttion Microdeck MN. We recommend a total thickness of the combined layers of 3 mm.

c. Sealing:

Topciment microcements should be sealed once they have hardened, after 24-48 hours. Sealing shall be done after the coating reaches humidity lower than 5 %, measured with tools designed for this purpose.

Topciment microcements can be sealed with the primer Presealer and with water-based varnish Topsealer WT. We highly recommend to follow carefully the application instructions of technical datasheet.

Special precautions

This product contains cement.

- Avoid contact with eyes and skin, as well as powder inhalation.

- Use rubber gloves and safety glasses.

- Apply this product at ambient temperature between 10°C and 30°C.

Both low and high temperatures might vary the pot life and drying times considerably.

Empty containers must be disposed of in accordance with current local regulations.

Keep out of the reach of children.

Usage

Mortar for coating indoors or outdoors walls and floors, dry and wet areas of both residential and commercial spaces.

Packaging

Available in 20 kg buckets.

Cleaning of the tools

Tools should be cleaned with water immediately after use. Once the material has hardened, it can only be removed by mechanical means.

Pot life

The Pot life is of 1 hour at about 20°C.

It is advisable to mix quantities in accordance with the experience of the applicator.

Storage conditions

Topciment microcement should be stored in its closed original packaging, protected from weather conditions and at temperatures below 30°C. Acricem must be stored in its closed original packaging protected from weather conditions and always between 10°C and 30°C. Shelf life is 1 year from the date of production, if stored in well-preserved conditions.



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The product should not be used for purposes other than those specified without first having instructions in writing. It is always the user's responsibility to take suitable measures in order to comply with the requirements established in local legislation. Product safety sheets are available for professionals. This technical data sheet will be valid until a new edition appears.

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