

INSTALLATION INSTRUCTIONS - MicroCement



MicroCement

MicroCement is a polymer-cement based system for creating beautiful surfaces on existing substrates such as concrete floors, plasterboard, ceramic tiles, OSB etc. The products functionality and unique appearance make it ideal for homes, shops, exhibitions, hotels and restaurants. MicroCement can be used for floors, walls, ceilings, furniture and countertops. The system is waterproof and is also suitable as a surface treatment for bathroom floors, walls and showers.

MicroCement has a myriad of applications for both indoor and outdoor use:

- Floors, walls and ceilings in homes, restaurants, offices, etc.
- As exclusive furniture and kitchen table coverings
- Door coverings
- The product is waterproof and is suitable as a surface treatment for bathroom floors, walls and showers

The system

Our system contains the following products:

MicroPrimer: Primer for absorbent substrates

MicroSandprimer: Primer for non-absorbent substrates, filler primer for minor unevenness

MicroCement: Decorative compound

MicroCoat: Durable polyurethane-based coat for both indoor and outdoor use



Features

- Good adhesion on most substrates
- Overall layer thickness of approx. 1.5 - 4 mm
- 100 % water resistant
- UV resistant
- High abrasion resistance
- Easy to maintain
- Can be tinted in over 3000 colors
- Fast application

Step by step guide

Before you start, it's important to know which substrate/surface you will be working with. This is because the substrate/surface determines which approach to take.

An absorbent surface is porous or rough, which allows liquids to soak into the substrate; a non-absorbent surface is smooth or non-porous, which prevents liquids from soaking into the substrate.

Absorbent surfaces - where there is no risk of cracking

e.g. untreated wood panels and fiberglass without joints, reinforced concrete floors

1. Surface preparation

2. Prime the surface with MicroPrimer

3. Apply 2-3 layers of MicroCement
(with intermediate sanding)

4. Applying MicroCoat

Non-absorbent surfaces - where there is no risk of cracking

e.g. seamless laminate countertops, wet room membrane on walls, vinyl, terazzo, glass

1. Surface preparation

2. Prime the surface with
MicroSandprimer

3. Apply 2-3 layers of MicroCe-
ment (with intermediate sanding)

4. Applying MicroCoat

Absorbent and non-absorbent surfaces - where there is a risk of cracking

e.g. tiles, floor tiles and countertops with joints, wet room membrane on floors

1. Surface preparation

2. Fill grout with MicroSandprimer
(only on tiles)

3. Application of reinforcing mesh

4. Application of MicroSandprimer
in 2 layers

5. Apply 2-3 layers of MicroCement
(with intermediate sanding)

6. Applying MicroCoat

Absorbent surfaces - where there is no risk of cracking

e.g. untreated wood panels and fiberglass without joints, reinforced concrete floors

Step 1: Surface preparation

The surface must be firm and stable. Clean the surface thoroughly with MicroPreclean and allow to dry.

Step 2: Prime the surface with MicroPrimer

MicroPrimer is applied with a brush or roller.

Drying time: 4 - 6 hours.

Step 3: Apply 2-3 layers of MicroCement (with intermediate sanding)

MicroCement is stirred with a stirrer before use. MicroCement should always be applied in 2-3 thin layers, with intermediate sanding between each layer. For intermediate sanding, use 80, 120 and 180 grit. Each layer of MicroCement must dry for at least 2-4 hours before sanding. The last layer of MicroCement must dry for at least 12 hours before coating.

Step 4: Applying MicroCoat

Make sure the substrate/surface is hardened and free of dust. Wash with clean water to remove dust. The substrate/surface must have at least 2 layers of coat. See section on MicroCoat.

Drying time: First layer must dry 4-8 hours before the next layer can be applied. Light traffic is allowed after 24 hours. Fully cured/watertight after 7 days.

Non-absorbent surfaces - where there is no risk of cracking

e.g. seamless laminate countertops, wet room membrane, vinyl, terazzo, glass

Step 1: Surface preparation

The surface must be firm and stable. Clean the surface thoroughly with MicroPreclean and allow to dry.

Step 2: Prime the surface with MicroSandprimer

Apply MicroSandprimer in at least 2 layers. Wait 2-4 hours between each application. MicroSandprimer can be applied with a spatula, roller or brush.

Drying time: 4-6 hours.

Step 3: Apply 2-3 layers of MicroCement (with intermediate sanding)

MicroCement is stirred with a stirrer before use. MicroCement should always be applied in 2-3 thin layers, with intermediate sanding between each layer. For intermediate sanding, use 80, 120 and 180 grit. Each layer of MicroCement must dry for at least 2-4 hours before sanding. The last layer of MicroCement must dry for at least 12 hours before coating.

Step 4: Applying MicroCoat

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Absorbent and non-absorbent surfaces - where there is a risk of cracking

e.g. tiles, untreated wood and fiberglass with joints, laminate countertops with joints

Step 1: Surface preparation

The surface must be firm and stable. Clean the surface thoroughly with MicroPreclean and allow to dry.

Step 2: Fill grout with MicroSandprimer (on tiles only)

If you are working with existing tiles, the grout must be filled with MicroSandprimer.

Drying time: 2-4 hours.

Step 3. Application of reinforcing mesh

Cut the reinforcement mesh and lay it on top of the MicroSandprimer.

Step 4. Application of MicroSandprimer

Apply MicroSandprimer in 2 layers on top of the reinforcement mesh.

Drying time: 4 - 6 hours.

Step 5. Apply 2-3 layers of MicroCement (with intermediate sanding)

MicroCement is stirred with a stirrer before use. MicroCement should always be applied in 2-3 thin layers, with intermediate sanding between each layer. For intermediate sanding, use 80, 120 and 180 grit. Each layer of MicroCement must dry for at least 2-4 hours before sanding. The last layer of MicroCement must dry for at least 12 hours before coating.

Step 4: Applying MicroCoat

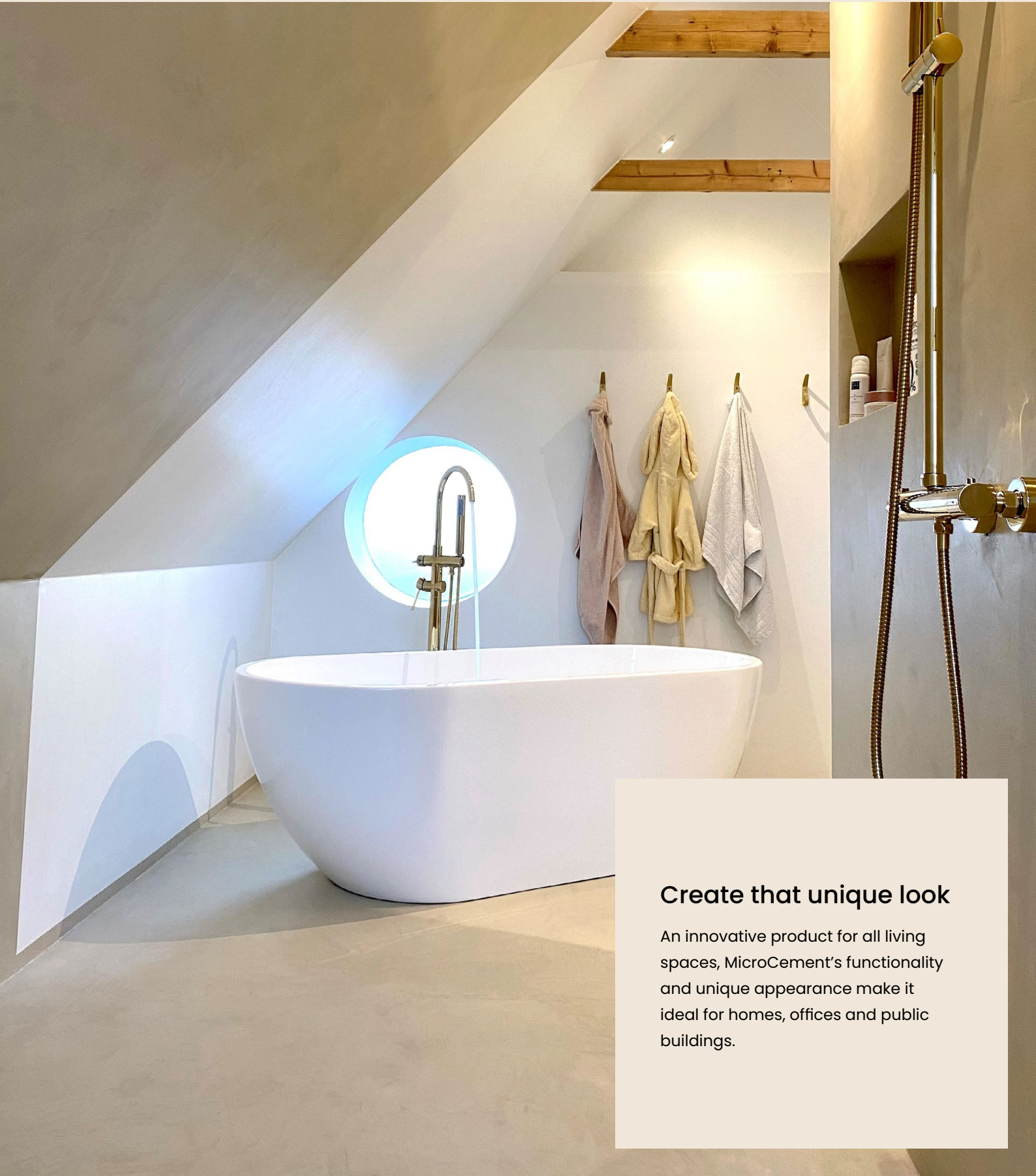
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MicroCement – 5 tips

1. For larger areas and when using multiple buckets with the same surface, we recommend mixing the buckets to avoid color differences.
2. MicroCement can be added a maximum of 10% water to facilitate the application of the first layers on the floor.
- 3, MicroCement should always be applied in thin layers.
4. Clean the tool thoroughly between each application to avoid scratches and marks from dried MicroCement in the subsequent layer.
5. When using MicroCement on floors, the underfloor heating must be turned off at least 72 hours prior to treatment. The underfloor heating may only be started after a minimum of 24 hours drying time from the last layer of MicroCoat.

Products

On the following pages, we go through all our products technical data, preparation and application.



Create that unique look

An innovative product for all living spaces, MicroCement's functionality and unique appearance make it ideal for homes, offices and public buildings.



Technical data

MicroSandprimer consumption:

0.3 - 0.8 kg / m²

1 - 2 kg / m² with reinforcing mesh

Drying time: 4-6 hours

MicroPrimer consumption:

Approx. 0.1 - 0.3 l. / m² (depending on the absorbency of the surface)

Drying time: 2-4 hours

Drying time depends on layer thickness, type of substrate, temperature, humidity, ventilation etc.

MicroPrimer

Primer for use before applying MicroCement. This primer reduces and equalizes absorbency and ensures MicroCement adhesion. MicroPrimer for concrete and self-levelling floor is ideal for priming absorbent substrates before applying MicroCement. MicroPrimer is ready to use and contains enough primer to prime 3-10 m² depending on the absorbency of the surface.

MicroPrimer can be applied to the surface by roller or brush. Do not apply more MicroPrimer than it can absorb into the substrate. It is always important that the preparation is done correctly to achieve a beautiful result.

MicroSandprimer

MicroSandprimer is ready to use after stirring. It is suitable for priming non-absorbent substrates and as an adhesion primer. Can be used on almost all substrates, from fiberglass and OSB boards to smooth concrete, ceramic tiles, glass, linoleum, hard vinyl, etc.

Quartz sand is added to provide a rough surface after application, which greatly increases the adhesion of subsequent layers.

In addition to increasing adhesion, MicroSandprimer covers unevenness in the substrate of up to 2-3 mm.



MicroTimer

MicroTimer is an additive that extends the "opening time" and working time of MicroCement. It allows for easy cleaning of the tool after finishing work. It is odorless and does not affect the hardness of the MicroCement.

Mixing ratio:

The product can be added to all our MicroCement variants in a proportion of 1 to 3% of the MicroCement weight. Mix thoroughly.



Technical data

MicroCement, ready-mixed and ready to use.

MicroCement is available in 3 coarsenesses:

Fine: Grain size 0.05 mm (smooth surface with more changing)

Soft: Grain size 0.08 mm (smooth surface with less changing)

Standard: Grain size 0.1 mm (minimum changing)

All variants may be diluted with max. 10% water for easier application on floors etc.

Consumption:

0.7 - 0.9 kg / m² - the first layer

0.3 - 0.4 kg / m² - the second and subsequent layers

MicroCement

MicroCement is delivered ready-mixed and after opening, stir the product with a suitable tool, e.g. a stirrer attached to a drill.

Application temperature 10 °C - 26 °C. Use at higher temperatures will significantly reduce processing time. Use at lower temperatures may result in incorrect and lack of curing. The product should be stored in a cool, frost-free place and out of direct sunlight.

Application and preparation

Spread MicroCement over the entire surface in small portions and thin layers, with a maximum thickness of 1 mm. Apply the compound using a stainless spatula, trowel, rubber trowel or other tool. The application should be done with quick, vigorous movements in different directions, depending on the desired effect. Apply the material wet-on-wet, starting in the inner corner and working backwards towards the exit. The application should be done in a single operation without interruption.

If you have chosen MicroCement Fine in light colors, it can be applied with a rubber trowel to avoid dark lines (burn marks).

After approx. 2 - 4 hours the material is dry. Lightly sand the floor using an eccentric sander with 80 - 120 grit sandpaper, depending on the desired effect. Difficult areas such as corners and the like are sanded by hand or with a triangle sander. Vacuum the entire surface thoroughly and then apply the next layer in the same way as the previous one.

After another 2-4 hours of drying, sand the final layer thoroughly with an eccentric sander. Use 120 - 180 grit sandpaper, depending on the desired surface. The finer the sandpaper, the smoother the surface.

After the last coat of MicroCement, let the floor stand for at least 12 hours, then wash with clean water and coat with at least 2 layers of MicroCoat (see MicroCoat section).



Technical data

MicroCoat:

1000 ml of component A + 200 ml of component B = 1200 ml

Mixing ratio:

5 parts of component A 1 part of component B

- Colorless
- Application temperature: +10 °C - +25 °C
- Touch dry after 4-8 hours
- Light traffic in socks is possible after 24 hours
- Full load/curing/watertight after 7 days
- Consumption: 100-120 ml/m² per layer
- Gloss: Matt (Gloss 5), Satin (Gloss 10) or Gloss (Gloss 80)
- Shelf life after mixing: 2 hours (pot life)
- Shelf life unmixed: 12 months (pot life)

MicroCoat

MicroCoat is a 2-component polyurethane coating with high abrasion resistance and excellent flexibility. MicroCoat is also highly resistant to UV rays. Provides a durable and resistant surface.

Can be used for:

- Concrete and stone for indoor and outdoor use
- Protection of surfaces with older epoxy resin coatings, polyurethane resin, cement coatings on floors and walls
- Protection of microcement and cement coatings with high and low porosity

Application and preparation

The surface must be hardened, sustainable, dry, clean and free from dust, waxes and oils. Shake the containers of polyurethane MicroCoat thoroughly. Add the hardener, component B, as indicated on the package in a 5:1 ratio (5 parts by weight of component A to 1 part by weight of component B). Stir the fully mixed MicroCoat thoroughly and allow it to rest for 2-3 minutes before stirring thoroughly again. Strain the stirred MicroCoat through a sieve.

IMPORTANT: Prepare only the amount of MICROCOAT needed for each application, as the mixed MICROCOAT has a maximum potlife of 2 hours.

Apply MicroCoat in at least 2 layers with a high-quality paint roller. The second layer of MicroCoat can be applied after 8 hours. If the second layer is applied within 24 hours, this can be done without intermediate sanding. Application after 24 hours requires a light sanding of the surface with 180 grit sandpaper.

Overview

Layers	Materials	Consumption
1 Existing layers	-	-
2 Possible levelling of existing surfaces	-	-
3 Possible reinforcement of the substrate	Reinforcing mesh MicroSandprimer	- approx. 1,0-2 kg/m ²
4 Anchoring basics	MicroPrimer or MicroSandprimer	approx. 0,1-0,3 kg./m ²
5 1st layer MicroCement	MicroCement	approx. 0,9 kg./m ²
6 2nd layer MicroCement	MicroCement	approx. 0,4 kg./m ²
7 3rd layer MicroCement	MicroCement	approx. 0,4 kg./m ²
8 Coat	MicroCoat	approx. 100-120 ml./m ² at 2 layers





DAILY MAINTENANCE

- Use MicroCleaner for daily cleaning
- Use MicroCalc or a pH-neutral cleaner for stubborn dirt
- Do not use products with a low pH as it can cause discoloration
- Before attempting to use a new cleaner, it is recommended to test the product in an inconspicuous place.

Safety during work

Before starting work, read the instructions carefully. If you have any questions, please contact Urban-Hald ApS.

General recommendations:

- Use of mask and gloves is recommended
- Avoid contact with skin, eyes, etc.
- In case of inappropriate contact, rinse with plenty of water and seek medical advice if necessary
- Keep out of reach of children
- Ensure good ventilation in enclosed areas
- The products are flammable

MicroCoat

Component A:

- Local irritant
- Avoid contact with skin, eyes, etc.
- In case of inappropriate contact, rinse with plenty of water and seek medical advice if necessary
- Wear a mask and gloves

Continued on the next page.

Component B:

- Harmful by inhalation
- May cause an allergic skin reaction
- Contains isocyanates which can cause an allergic reaction, seek medical advice if necessary
- Avoid breathing dust / fumes / gas / vapors / spray
- Keep container tightly closed in a well-ventilated area
- Always wear protective gloves / protective clothing / eye protection / face protection



The material has been prepared and revised by Urban-Hald 2023

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