

## MICROTOPPING®

### Cement-based decorative coating for floors and vertical surfaces

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#### Description

Ideal Work Microtopping® is a two-component polymeric cementitious system suitable for continuous decorative leveling characterised by a refined aesthetic design. It can be applied on both horizontal and vertical surfaces, floors, walls, ceilings, furniture, various solid furnishing accessories, on both new substrates and over existing coatings. Microtopping® is composed of a special polymer mixed with cement powder and pigmented with colours from the Color Pack C series.

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#### Features

- Applicable on any compact base (i.e. ceramic, plasterboard, plaster, cementitious screeds, wood, concrete).
- Suitable for both horizontal and vertical backgrounds and to cover any solid surface (stairs, bathrooms, shower cubicles, furniture, washbasins).
- Forms a sturdy continuous covering without joints with a maximum thickness of 3 mm.
- Suitable for both indoor and outdoor use as well as for bathrooms and wet rooms.
- Resistant to UV rays and atmospheric agents.
- Water-based, does not contain solvents
- Available in a wide range of colours and finishes.

The MICROTOPPING® system is composed of

- Various consolidation and adhesion primers.
- Liquid polymer
- Microtopping® powder:

Base Coat - BC Coarse-aggregate for the structural base.

High Performance -HP Intermediate aggregate, for a textured and resistant finish

Finish Coat - FC Fine-aggregate for a smooth finish

- Color Pack-C Colouring pigment.
- Various protective resins

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#### Fields of Use

- Floors and walls in private homes, offices, commercial structures.
- Renovation of old ceramic or marble flooring.
- Renovation of bathrooms.
- Coating solid furnishing items.
- Coating stairs.
- Terraces and external walls.

### **Surface preparation**

#### ***Horizontal surfaces:***

Based on the type and condition of the substrate (concrete, sand-cement, ceramic, self-leveling...), this must be prepared by sanding, shot blasting etc. and also be clean, rough, free from contamination, intact and perfectly level.

In pavements the substrate must have a compressive strength of at least 25 Mpa and pull off requirements of least 1.5 Mpa.

Respect any control joints that may exist on the substrate.

Apply a very thin layer of epoxy-Coat mixed with 20% quartz sand 0.1-0.5 mm on the pretreated surface then roll to remove trowel marks. Broadcast quartz 0.1-0.5 mm (about 4 kg/m<sup>2</sup>) recovering about 1.5 kg/m<sup>2</sup> for reuse. Limit the work area so that broadcasting can be completed while the resin is still wet.

The entire surface must be completely covered with quartz.

Always wear spiked shoes or cleats to walk on the surface.

#### **Preparation on a ceramic background**

1. First always sand with diamond disc.
2. Apply an 80-100 g / m<sup>2</sup> fibreglass mesh fixed with IW-BLOCKER
3. On a base with residual grouts, apply 2 coats of epoxy-coat with quartz broadcast (see above), on ceramic without or with minimal grouts, just 1 coat is enough.

#### **Preparation on concrete in the absence of rising damp**

1. Sand or shotblast
2. Apply a coat of epoxy-coat with quartz broadcast (see above).

#### **Preparation on concrete in the presence of rising damp**

1. Sand or shotblast.
2. Apply a coat of BARRIERA CEM as a chemical vapour barrier.
3. Apply a coat of epoxy-coat with quartz broadcast (see above).

#### **Preparation on sand and cement base**

1. Sand with paper 24
2. Possible consolidation (if necessary) with IDEAL WATER or alternatively with IW-BLOCKER and fibreglass mesh.
3. Apply a coat of epoxy-coat with quartz (see above).

#### **Preparation on self-levelling**

1. Grind
2. Consolidate with IDEAL WATER
3. Apply a coat of epoxy-coat with quartz broadcast (see above).

**WALLS**

The substrate must be prepared by grinding or sanding. It must be clean, rough, free from contamination, intact and perfectly level. Any joints must be previously smoothed with IW BLOCKER or other suitable products.

In the presence of cracks or gaps, apply a sheet of fiberglass mesh.

*Preparation on a ceramic background*

1. Always sand with diamond disc.
2. Smooth the joints with IW-BLOCKER or other suitable product.
3. Apply Primer R-R with a roller

*Preparation on mortar plaster*

1. Sand lightly with disc 60
2. Apply Primer R-R with a roller

*Preparation on plasterboard panels*

1. Apply one Ideal Binder coat diluted 1:1 with water as a suction controlling primer.
2. Apply Primer RR with a roller

**OTHER BACKGROUNDS**

Contact the Ideal Work technical office.

**It will be the care and responsibility of the applicator to evaluate the actual conditions of the background and the suitability of the indicated solutions on the particular construction site.**

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**Application of Microtopping®**

Microtopping® is a complex system and the performance and aesthetic effect of each application strongly depends on the construction site conditions, the method and time of application as well as the sanding method. Only practice and experience will allow the applicator to completely control the various stages of the procedure.

Avoid application at temperatures above 30 ° or below 10 ° or in conditions of relative humidity above 70%. Good ventilation promotes catalysis and speeds up processing times. Avoid the presence of dust in the construction site area and use overalls and shoe covers.

**MIXING AND COLOURING**

Before and during use, the liquid polymer and powder must be kept in a cool place. Weigh the components with a precision scale and strictly respect the ratios indicated in the data sheet. Mix the polymer for 3 minutes and then add the previously weighed powder to 80% of the polymer.

Stir until completely mixed, making sure to clean the edges of the pot, add the remaining 20% and mix for another 3 minutes.

The application time of the mixture will depend on temperature and humidity but averages 20-40 minutes at 20°, at higher temperatures it can be less (in these situations keep the polymer cool). Do not use the mixed product for more than 1 hour even if the viscosity of the mix would seem to allow it.

COLOR PACK C (see relevant technical data sheet) is the specific dye for Microtopping®, available in 27 colours, which is added to the polymer during mixing. As a rule, it is used with white powders (BCW-HP-FCW) in the ratio of 28 g / kg of polymer for full colouring, with lower dosages for lighter shades.

COLOR PACK C takes on different shades on BC, HP and FC.

## APPLYING THE MATERIAL

### HORIZONTAL SURFACES

For each coat, spread the material with a steel trowel, troweling at zero according to the size of the inert content. Hold the trowel at an angle of 45° and spread with small and regular arches. Apply the next coat only after the previous one has completely dried. Between one coat and the next, sand (usually with 60 paper), carefully vacuum and clean the surface. Moisten with water or better with Ideal Hard Plus diluted with water 1: 1 before overcoating.

Respect the control joints that may exist in the substrate.

The overcoating time depends on the temperature, humidity and ventilation of the environment and varies between 6 and 12 hours for BC, between 4 and 8 hours for HP and between 2 and 4 hours for FC. These times can also be reduced considerably by using fans, whilst high humidity can extend them.

For BC and HP use rigid trowels, for FC use flexible blue metal trowels.

The quality and method of application and sanding aggregate size, particularly of the second coat of BC, determines the final aesthetic design and appearance.

The application of the protective resin can only take place after lightly sanding the surface, which takes place upon completion of drying and hardening, no earlier than 48 hours at a temperature between 20 and 30 ° with relative humidity not exceeding 60%.

### VERTICAL SURFACES

For each coat, spread the material with a steel trowel at zero according to the size of the aggregate contained. The use of a Hopper gun is recommended to speed up the process on large areas.

Spread fresh on fresh starting when the previous coat is not tacky to the touch.

For BC and HP use rigid trowels, for FC use flexible blue metal trowels.

For the realisation of drawings and textures use MT-DEC mixed with FC which slows down setting and improves workability (see technical data sheet).

The application of the protective resin cannot take place earlier than after 24 hours at a temperature between 20 and 30 ° with relative humidity not exceeding 60%.

### STANDARD CYCLES FOR HORIZONTAL APPLICATION

The products that make up the Microtopping® system are extremely versatile and can be combined and applied in very different ways dictated by the personal experience of the applicator.

Ideal Work has, however, identified and tested some standard application cycles which can guarantee the performance indicated in its technical literature, whilst declining any responsibility for work performed in a different way.

For all the following standard cycles, a tolerance on the quantities of +/- 10% is valid, whilst for the processing methods, what is indicated in this document must be followed:

- Preparation of the base
- Application of Microtopping®
- Floor protection
- Quantities and mixing ratios

#### **Basic cycle**

1. MT BC coat of 1.00 kg / m<sup>2</sup>
2. MT BC coat of 1.00 kg / m<sup>2</sup>

#### **Classic cycle**

1. MT BC coat of 1.00 kg / m<sup>2</sup>
2. MT BC coat of 1.00 kg / m<sup>2</sup>
3. 0.15 kg / m<sup>2</sup> MT FC coat

#### **HP cycle**

1. MT BC coat of 1.00 kg / m<sup>2</sup>
2. MT BC coat of 1.00 kg / m<sup>2</sup>
3. MT HP coat of 0.60 kg / m<sup>2</sup>

#### **HP / FC cycle**

1. MT BC coat of 1.00 kg / m<sup>2</sup>
2. MT BC coat of 1.00 kg / m<sup>2</sup>
3. MT HP coat of 0.60 kg / m<sup>2</sup>
4. MT FC coat of 0.15 kg / m<sup>2</sup>

### **HORIZONTAL BACKGROUND PROTECTION**

For the protection of the surface, the following products are recommended, please refer to the relevant technical data sheets and to the Ideal Work technical office for further information.

The resin can change the hue of the surface, in some cases significantly.

For internal applications

- IDEALPU WB EASY polyurethane
- IDEALPU WB EASY SL water-based satin polyurethane cycle

- IDEALPU 78 cycle (gloss) solvent-based polyurethane
- IDEALPU 78 SUPERMATT cycle (opaque) solvent-based polyurethane

For external applications

- Ideal Sealer M acrylic based cycle

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#### Maintenance

Use neutral detergents, preferably Ideal Work Perfect. The use of Ideal Care liquid wax combined with washing water helps maintain the colour over time. See the Ideal Work maintenance manual

[https://www.idealwork.it/wp-content/uploads/2019/02/Cat\\_manutenzione\\_doppie-1.pdf](https://www.idealwork.it/wp-content/uploads/2019/02/Cat_manutenzione_doppie-1.pdf)

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#### Technical Data

See data sheet and DOP CE on

<https://www.idealwork.it/download/documentazione-tecnica>

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#### Packaging / Storage / Disposal

**For horizontal surfaces (tolerance +/- 10%)**

	Consumption per m2		Kg of polymer per 1 kg of powder
	MT powder per m2 (kg/m2)	Polymer per m2 (kg/m2)	
<b>1 coat of MT BC</b>	1,00	0,350	0,35 kg
<b>1 coat of MT HP</b>	0,60	0,240	0,40kg
<b>1 coat of MT FC</b>	0,15	0,075	0,50 kg

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#### Packaging / Storage / Disposal

Microtopping powders are packaged in buckets in the following formats

BASE COAT (BCG gray and BCW white) kg 25.00

High Performance Coat (HP, White color) kg 21.50

FINISH COAT (FCG gray and FCW white) kg 17.50

The polymer is available in kg 17.00 containers.

COLOR PACK C is available in 500g bottles dosed for 1 polymer bucket and in 30ml minipacks.

All products stored and sealed in their original packaging at a temperature between 5 and 30 ° will keep for at least 12 months.

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#### Warnings

Avoid conditions that may encourage different setting times between areas, such as air currents and solar radiation. In the presence of underfloor heating, complete the ignition cycle beforehand and do not exceed 12 °.

The separation between two Microtopping® applications is carried out with the specific blue 5 cm canvas tape. This protects the adjacent part and creates a precise guide for the subsequent separation cut. The tape must be applied firstly before preparation with Epoxy-

coat, then before applying Microtopping®. It will be removed before sanding once the material is completely dry. The cut will then be sealed with neutral silicone.

Any shrinkage cracks that formed in the substrate inevitably tend to be transmitted to the MICROTOPPING® finishing layer. If the substrate is characterised by a 28 days shrinkage of more than 300µm / m (UNI 11307 for concrete and UNI 6687 for sand and cement or mortar substrates) it is advisable to wait for its complete curing and drying and seal any cracks with Epoxy-coat before Microtopping application.

Ideal Work declines all responsibility regarding the achievement of the declared performance for the system and the success of the work if it was not installed totally in accordance with these guidelines or with products not covered by them.

Ideal Work also declines all responsibility for the aesthetic aspect of the finished surface which depends on laying methods, processing times and the climatic conditions prevailing on the construction site at the time of application. The applicator must take these factors into account when applying the materials provided by the writer.

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**IMPORTANT**

All information contained herein is based on the best and most recently available practical and laboratory testing. It is the customers responsibility to determine that the product is suitable for their chosen application. The manufacturer assumes no responsibility for the results of incorrect applications. You should always test on a small area before full scale application. This document replaces all previous versions. The data can be changed at any time. Also note that the products are intended for professional use only. Ideal Work provides training, updates and refresher courses for their regular customers on request. Anyone using these products without being enabled does so at their own risk.

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