

MicroDuo Medium & ResinCem Two Component Mortar

PRODUCT DESCRIPTION

MicroDuo Medium is a two component coating based on high performance cements, selected aggregates, additives, catalysts, inorganic dyes and synthetic resins. It is mixed with ResinCem to achieve a flexible microcement that can be used to achieve a high stucco effect.

It's suited to be applied on top of MicroDur Base or MicroDuo Base. Once applied it creates a coating between 0.5 to 1mm thick of high mechanical resistance without retractions and strong adhesion to any type of support including: concrete, mortars, cements, ceramics.

PROPERTIES

Microduo Medium allows a perfect finish for all types of decoration in both residential and high traffic areas, furniture, shelves, countertops, bathrooms and kitchens, external surfaces, polymer and epoxy flooring.

- High resistance to abrasion (higher than concrete)
- Applicable on any type of support: concrete, cement, mosaics, including, smooth ceramic tiles
- Highly deformable mineral coating
- The chemical reaction with CO₂ allows its hardness to improve over time
- Excellent workability
- Anti-slip
- High adhesion to substrates
- High mechanical strength
- Breathable (permeable to vapour molecules)
- Fire Retardant
- UV Stable, reflects the radiations of light and heat
- Anti-bacterial
- Anti-static
- Hypo-allergenic
- Quick application and commissioning
- Easy to clean and maintain
- Can be applied seamlessly across floors, walls, exteriors and interiors

SUBSTRATE

Apply onto MicroDur Base or MicroDuo Base.

NUMBER OF COATS

1 to 3 Coats: consumption (1 x 0.5 kg / m².mm)

SURFACE PREPERATION

Observe if the stability of substrates is adequate. Surfaces that are liable to flex or crack, such as cold joints or timber floorboards, require appropriate preparation to ensure no further movement.

Moisture content of cementitious substrates must be below 5%.

Ensure underfloor heating has been through a full cycle before applying microcement.

It is necessary to respect the expansion joints and structural joints.

The support must be clean, free of grease or oils and the substrate in good conditions of levelling and resistance. Take particular attention to those apparently clean substrates but which contains waxes, silicones or salts.

MicroDuo Medium is designed to be applied on top MicroDur or MicroDuo Base. Depending on the smoothing achieved in the first two coats of MicroDur or MicroDuo Base, it will be advisable to sand the surface. MicroDuo Medium, due to its very fine granulometry, is not designed to level surfaces.

On plasterboard and plasters, and other absorbent surfaces, the use of Primer 100 is recommended to guarantee the adhesion.

On cement mortars the use of Primer 100 allows a more fluid application of the product by avoiding the accelerated dehydration of the microcement by the absorption generated from the support.

On non-absorbent surfaces, Primer TAC is required. See datasheet for guidance.

MIXING

MicroDuo medium is formulated as a base of a powder component and a liquid component, which are homogeneously mixed in the function of the desired consistency.

Add the ResinCem & pigment for desired colour (component A) in a container and then gradually pour the microcement powder (components B) whilst gently mixing with a low revolution mechanical stirrer. Mix for less than 2 minutes until a uniform and lump free mixture is obtained.

APPLICATION

Apply one to three coats of MicroDuo Medium according to the desired finish, with the aid of a flexible trowel. Trowel the product well, to obtain a stucco effect.

Before the application of each layer, wait until the previous layer is dry to the touch. And smooth by sanding with an orbital sander (40 - 80 grit) to remove burrs before applying subsequent layers.

It is recommended not to exceed 1 mm thickness per layer of applied product.

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

DRYING

Leave to dry 3 hours between coats. Allow drying 24 hours before applying the sealer.

WORKING TIME

The working time is 2 to 3 hours under standard ambient and support conditions (20°C relative humidity 65%). It is possible to re-mix the microcement if it starts to stiffen during the working time.

SEALER

To ensure the maximum hardness of the system, the MicroDuo Medium layer should not be sealed until it has completely hardened, and depending on atmospheric conditions at least after 24 hours of drying and never before the coating has reached a relative humidity lower than 5% measured with appropriate appliances.

To ensure that microcement has achieved adequate hardness it is advisable to wait 1-3 days before sealing.

For the correct application of the seal coatings, consult the technical data sheets.

SPECIAL PRECAUTIONS

This product contains cement. Avoid contact with eyes and skin, as well as inhaling dust.

Low temperatures lengthen and high temperatures dramatically reduce workability and drying time.

Use rubber gloves and goggles. Keep out of the reach of children.

Do not apply the product at ambient temperature below 5°C or above 30°C.

TECHNICAL CHARACTERISTICS

Mixing ratio	3.8l ResinCem (38%) – 4l ResinCem (40%) : 10kg MicroDuo Medium Powder
Application density (hardened)	1.8kg/m ³
Consumption	approx 1kg/m ²
Minimum temperature for application	+10°C
Working Time (at 20°C)	> 3 hours
Compressive Strength	24 day: approx. 30N/mm ²
Adherence to concrete	28 day: > 2N/mm ²
Granulometry	< 0.1mm
Suitable for underfloor heating	Yes
pH Range	1 day: 12pH
Packing	20kg/10kg
Storage	Approx. 12 months in dry place, before opening.