فیروزه فام پارس

# Two-Component Microcement Coating

## General Description

Microcement, also known as micro-screed or micro-concrete, is a polymer modified cement-based coating which can be applied thinly to walls, stairs and floors in domestic and commercial, indoor and outdoor environments

## Composition

Micronized cement, micronized Silica powder, coherence, adherence, tensile and abrasion polymers and nonorganic additives.

## Properties

- High adhesion to most surfaces
- Good chemical resistance
- High mechanical strength
- Environment friendly
- High durability
- Good appearance

## Technical Data

| Parameters | Standards | Amount |
|---|---|---|
| **Maximum size of the aggregates** | | 0.1 mm |
| **Apparent density** | | In power – 1175 ± 50 kg/$m^3$ |
| **Hardened density** | | Fully Cured 1450 ± 50 kg/$m^3$ |
| **Compressive strength** | EN 13892-2 | ≥ 55 N/$mm^2$ |
| **Flexural strength** | EN 13892-2 | ≥ 10 N/$mm^2$ |
| **Adhesion strength** | EN 13892-8 | ≥ 1.2 N/$mm^2$ |
| **Slip resistance** | EN 12633:2003 | USRV Rd = 25 Class 1 |
| **Surface Hardness Shore D** | ASTM D-2240 | 60 |
| **Fire resistance** | EN 13501-1 | $B_{FL}$ s1 |

| Parameters | Description |
|---|---|
| **Components** | Two |
| **Appearance** | White powder |
| **Weight Mixing Ratio** | 10 : 3.5 |
| **Pot Life** | 80 – 120 min |
| **Touch Dry** | 4 hrs |
| **Full Curing Time** | 24 hrs |
| **Storage Time** | 6 Months |
| **Thickness** | 2mm - 3mm |

## Conditions of Application

Apply only to clean and dry substrates that are free of all coatings, sealers, curing compounds, oils, greases, or any other contaminants. Remove any laitance or weak surface layers.
Substrate and ambient temperature must be between 10°C and 50°C.

## Application

1. Preparation of substrate: After scratching substrate surface, apply one or two layers of Microcement Primer to remove dust and make a thin film to cohere next layers.

2. Middle Layers: Apply one or two layers of Base Cement, Sub-Base Cement or Mid Cement with a steel trowel depending on the type of surface and texture. On floors always apply two layers and use the flexible fiberglass mesh on floors. Before applying a new layer, the previous one needs to be sanded with a random orbital sander and 40-grit to 100-grit sandpaper to remove irregularities.

2. Finishing or Top-Coat: Apply two layers of Mid or Fine Coat with a flexible steel trowel or a rubber trowel using the techniques for applying the texture. You can apply a layer as soon as the previous one is tack-free (non-sticky to the touch). No sanding is required for top-coat layer.

3. Sealing: Microcement should be sealed once they have hardened, after 24 to 48 hours. Sealing shall be done after the coating reaches humidity lower than 5 %, measured with tools designed for this purpose. Microcement can be sealed with the Poly-Urethane primer and with Poly-Urethane transparent coating. It can be from very glossy to complete opaque.