

# CIKOtile SP-M



## Improved performance, cement based dried latex modified marble and granite adhesive

### Description

CIKOtile SP-M is superior quality factory pre-mixed cement based dried latex modified marble and granite adhesive suitable for horizontal and vertical thin setting applications on concrete and mortar surfaces. It requires addition of water and proper mixing at site for usage. It exhibits excellent bonding properties to cement based substrates.

CIKOtile SP-M is a factory blended powder consisting of cement, adhesion enhancing polymers, graded fine sand, water retention agent, rheology modifier, etc.

### Properties & Advantages

- Single component system, easy to mix and apply
- Suitable for installation of large and heavy ceramic, mosaic tiles, marbles, granites and natural stone over concrete & cement based screed, mortar and plaster substrate.
- Deformable having good bending tolerance
- Provides an extended open time at standard conditions
- High resistance to moisture, water, heat and freeze thaw cycles.
- Improved workability and easy spreading
- Excellent tensile and shear bond strength.
- High resistance to fungal growth

### Application Area & Uses

CIKOtile SP-M is a high quality and improved performance adhesive used for fixing ceramic, mosaic, marble, glass and stone tiles to cement based substrates both outdoor and indoor conditions resistant to high temperatures, wet conditions, and fully submerged cases.

### Applicable Standards

CIKOtile SP-M complies with minimum performance requirements of:

- ANSI A 118.4
- BS EN 12004 & ISO13007-1 code C2E-S1.
- Qatar Construction Specifications QCS.

### Physical Properties

|  |  |
|--|--|
| Form   | Powder                                     |
| Colour   | Grey or White                              |
| W/P  | 0.2  |
| Fresh Density                                    | 1.85 ± 0.05 kg/L                           |
| Working time                                     | 45-60 min @ 25°C                           |
|  | 30-40 min @ 35°C                           |
| Tensile Bond Strength<br>EN 1348                 | ≥1.35 N/mm <sup>2</sup> Standard Condition |
|  | ≥1.3 N/mm <sup>2</sup> heat ageing         |
|  | ≥1.3 N/mm <sup>2</sup> Freeze-Thaw cycles  |
| Open time<br>Tensile Bond<br>Strength<br>EN 1346 | ≥ 1 N/mm <sup>2</sup> Water immersion      |
|  | ≥ 1.35 N/mm <sup>2</sup> @ 20 mins         |
| Transverse<br>Deformation<br>ISO13007-2          | ≥ 1.3 N/mm <sup>2</sup> @ 30 mins          |
|  | 2.6-2.8 mm                                 |
| VOC<br>USEPA-24                                  | <0.01g/g                                   |

## Coverage

Each bag of 25 kg CIKOTile SP-M mixed with 5 L of water yields 16 to 16.5 L and provides coverage as below:

|                  |                            |
|------------------|----------------------------|
| 4*4 mm Notched   | 8 to 8.25 m <sup>2</sup>   |
| 6*6 mm Notched   | 5.33 to 5.5 m <sup>2</sup> |
| 10*10 mm Notched | 3.2 to 3.3 m <sup>2</sup>  |
| 20*20 mm Notched | 1.6 to 1.65 m <sup>2</sup> |

Coverage rate may vary depending on substrate conditions and finish. Bedding thickness can be maintained from 2mm to 12 mm thick solid bed. Note: the coverage of 4\*4 mm notched results in 2 mm thick solid bed.

## Application instructions

### Substrate & tiles preparation

The concrete/mortar surface should be free from dust and loose particles. In case of traces of oil and grease, the surface shall be treated by acid etching or sand blasting. Curing compounds and sealers, if present, must be removed by mechanical means such as diamond disk grinding. Upon ensuring a sound and clean substrate, wet the substrate surface and bottom side of tile with clean water just before application of CIKOTile SP-M.

### Mixing

Pour 5 litres of clean water in a container of minimum capacity 20 L, dispense the powder gradually while mixing using heavy duty adjustable speed drill-paddle mixer assembly. Mix at least 3 minutes at high speed so that the mixed material attains a thick, trowel-able and lump free consistency.

Note: In hot weather application, use chilled water to extend the open time and workability of the mixed material.

### Application method

Spread the mixed material over the dampened area to a uniform thickness. Comb the applied surface using a semi-notched trowel. Press the tile firmly to the adhesive bed in perpendicular motion to notched lines and ensure that the tile is firmly bonded to the substrate. Adjust the tile within 5 to 10 minutes after initial positioning. At high ambient temperatures, it is advisable not to increase the surface spreading area so that installation of the tiles takes place within the open time of the adhesive (20 minutes) to prevent skin formation and maintain proper bonding performance.

## Packaging

CIKOTile SP-M is available in 25kg moisture resistant bags.

## Storage

CIKOTile SP-M should be stored under enclosed shaded areas at temperatures between 5°C and 35°C.

## Shelf life

CIKOTile SP-M has a shelf life of 12 months when stored in its unopened original packaging as per CIKO's recommendations.

## Precautions

- When used over gypsum surfaces, light weight panels, light weight blocks, cement board or any other substrates having high surface absorption, It is recommended to seal the substrate using CIKObond PVA or CIKObond AC and allow drying prior to the application.

## Health & safety

Use standard dust mask to avoid inhalation of dust. Powder when wet or moist can cause burns to skin and eyes which should be protected during use. If comes in contact with skin/eyes, flush with plenty of fresh water and seek medical advice.

Refer Material Safety Data Sheet for further details.

## Technical Support

For any technical support, do not hesitate to contact CIKO team at any time as CIKO offers on and off site services to end users, specifier and contractors.

## More from CIKO Middle East

A wide range of construction chemical products are manufactured by CIKO Middle East which includes:

- Concrete admixtures and additives
- Waterproofing and damp proof coatings
- Surface treatments
- Flooring and toppings
- Grouts and anchors
- Tile adhesives and grout
- Concrete repair materials
- Adhesives and bonding agent
- Protective coating
- Joint Sealants and Moulding compounds
- Ancillaries

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Note: The information presented herein is based on the best of our knowledge and expertise for which every effort is made to ensure its reliability. Although all the products are subjected to rigid quality tests and are guaranteed against defective materials and manufacture, no specific guarantee can be extended because results depend not only on quality but also on other factors beyond our control