

# MC-M 400 (Formerly known as C-400 GREY)

## Fix with ease...

### Description

MC-M 400 is a dry pre mix, cement based, thin bed tile adhesive. It can be used both internally and externally to fix ceramic tiles.

### Standards

BSEN 12004:2007, ANSI A118.1

### Application

#### Application Method

**Background:** MC Ceramic Tile Adhesive MC-M 400 is suitable for backgrounds such as Portland Cement based renders, floor screeds and concrete. MC-M 400 should not be applied onto wood, metal sheets or painted surfaces. The background & tile must be clean, free of dust deposits, sinter skin, formwork oil and other contamination which may affect adhesion. The suction in the background should be neutralized by applying potable water.

#### Tile Preparation

Pre-treatment, i.e. wetting of tiles is essential. However, due to the wide variety of tiles available, it is advisable to consult the tile manufacturer for recommendations.

#### Mixing

MC-M 400 supplied in 25 kg bags has to be mixed with potable water only, in a clean plastic bucket or a clean, non-corrosive uncontaminated metal tub. To ensure a homogeneous & uniform mix, an electric agitator must be used.

The amount of water to be added is approximately 5.75 ltrs per 25 kg bag (i.e. 23% by weight). Add MC-M 400 to water, turn the contents of the bag carefully and stir frequently. Once mixed, allow to stand for 5 minutes and mix again before applying. No further water should be added to the mix. The mixed mortar must be used within 30 minutes. Hard and set mortar should not be re-mixed or used.

#### Grouting

Grouting should not be carried out for at least 48 hours after completion of the tiling.

#### Application

MC-M 400 is rendered in one coat, having a thickness of 2-5 mm. To achieve a uniform thickness, the mortar is leveled with a serrated trowel. The thickness of the adhesive will depend upon the size and type of tile. Do not spread more than 1m<sup>2</sup> at a time. Spreading large areas may result in the mortar drying before tiles can be pressed home, causing poor adhesion. Once the mortar has been applied, the working time will vary according to the porosity of the surface and atmospheric conditions. Tiling in wet areas, i.e. shower rooms, swimming pools and in all such instances, ensure a solid bedding. There must be no void or air pockets behind the tiles. Do not apply the mortar sparingly. Buttering the mortar onto the back of the tile is not recommended, but if essential it should be spread over the entire back of the tile to an even depth.

#### Joints

Ceramic tiles should not be fixed with tight joints. Leave a minimum space of 2 mm around every tile. For normal use, the joints should be filled with MC cementitious grout.

#### Movement Joints

The possibility of incorporating movement joints in any tile installation should be considered at the design stage and usually they will be located at the following areas:

- a) Over existing movement joints in the structure
- b) Where tiling other surfaces like ceiling, floors, skirting, door and window frames etc.
- c) In large tiled areas at internal vertical corners and at 3-4.5 m centers horizontally and vertically.

Movement joints should be at least 6 mm wide and extend completely through tile and adhesive bed. An appropriate sealant should be used for filling the movement joints. The recommendations in BS 5385 should be followed.

## Storage

MC-M 400 must be stored in a dry place, off the ground and well covered. Hard or lumpy material must be rejected.

Mixing Ratio	5.25 ltrs of water per 25 kg bag Water/Powder ratio = 0.21
Approx. Yield *	18.25 ltrs per 25 kg bag
Approx. Coverage *	12.2 m <sup>2</sup> per bag at 1.5 mm thickness
Curing	Minimum 48 hours by potable water
<i>* Typical results under laboratory condition</i>	

## Technical Data

Composition	White Portland Cement, hydrated lime, graded sand, non-fading colour pigments and chemical improving agents
Binder	White Portland Cement
Aggregate Size	0-0.6 mm
Appearance	Granular powder available in grey & white colours
Density *	Wet : 1.85 kg/ltr Dry : 1.7 kg/ltr
Compressive Strength *	6 N/mm <sup>2</sup> @ 28 days
Flexural Strength *	1.5 N/mm <sup>2</sup> @ 28 days
Working Time	Approx. 45 minutes
<i>* Typical results under laboratory condition</i>	

## General Information

Package Size	25 kg paper bags
Shelf Life	12 months from date of manufacture when stored under warehouse conditions
Cleaning	Clean all equipments and tools with water immediately after use

### NOTE:

It is the customer's responsibility to satisfy themselves by checking with the company whether information is still current at the time of use. The customer must be satisfied that the product is suitable for the use intended. All products comply with the properties shown on current data sheets. However, MC-Bauchemie does not warrant or guarantee the installation of the products as it does not have any control over installation or end use of the product. All information and particularly the recommendations relating to application and end use are given in good faith. The products are guaranteed against any manufacturing defects and are sold subject to MC- Bauchemie's standard terms and conditions of sale.