

MasterTop 522

Moisture-resistant, self-smoothing flooring compound

MATERIAL DESCRIPTION

MasterTop 522 is a moisture-resistant, cementitious, self-smoothing flooring compound that can be applied internally or externally, onto new or existing substrates, prior to the application of most flooring types, including but not limited to, ceramic tiles, natural stones, agglomerates, resin floors, and resilient flooring finishes. Only water needs to be added on site to obtain the desired consistency for pumping or manual installation.

MasterTop 522 is applied at thicknesses from 2-40mm NB: Minimum external thickness 5mm.

TYPICAL APPLICATIONS

- · For finishing rough undulating floors
- · For levelling up floors
- · Refurbishing old floors
- · Where a very smooth profile is required
- · Where moisture will be present
- Ideal for use as an underlayment for terrazzo floors

ADVANTAGES

- · Highly fluid and pumpable for fast installation
- · Resistant to moisture
- For external and internal applications
- Rapid strength gain for fast installation of floor coverings
- · Low installed cost
- Ready for foot traffic after 3 hours
- · Return to service in 12 hours
- Suitable for most floor finishes

PACKAGING

MasterTop 522 is available in 25kg bags.

TYPICAL PERFORMANCE DATA*

Compressive strength	EN 13892-2:2002	40 Mpa
Flexural strength		7 Mpa
Bond strength	EN 13892 -8:2002	1.5 Mpa
Setting time	EN 13454-2:2003	90 min
Shrinkage	Graff Kaufmann	< -0.2 mm/m
Density		1.8
Foot traffic @23°C 50% RH		3 h

NB: Typical properties at 23°C

APPLICATION GUIDELINES

To be read in conjunction with the current method statement.

Substrate Condition:

Substrate must be clean, dry and free of oil, sealers, curing compounds, paint, polymer coatings, dust or other foreign (contaminating) matter.

Remove all weak or broken pieces of concrete. If necessary, employ mechanical cleaning methods and equipment. If sealers, paint, polymer coatings or curing compounds are present on concrete substrate, remove with mechanical shot blasting or scarifying equipment (For external applications CSP 4-6).

MasterTop 522 is best applied where the application temperature is between 5°C and 35°C. Outside this range, please refer to your local Master Builders Solutions Technical Representative. NB: Substrate temperature should not exceed 35°C at the time of application.

Voids and cracks (water pipes, holes, drainage pipes etc.) should be filled to prevent seepage through to lower levels. Consult with your local Master builders Solutions Technical Representative for product recommendations. NB: Joints should always be cut in toppings directly above those in the base slab to avoid random cracking.

Priming:

The substrate shall be saturated with MasterTile P 302 mixed with water 1:1. Use at least 0.2 L (approx.) of the primer for the initial priming. Allow to dry until a transparent film has been formed. Absorbent / porous substrates should be primed twice. The second coat shall be approx. 0.07 L / m² (ratio 1:1 with water). For applications onto non-porous substrates e.g. ceramic tiles, prime first with MasterTile P 303.

A brand of MBCC GROUP

March 21 Page 1 of 3



MasterTop 522

Moisture-resistant, self-smoothing flooring compound

Mixing:

Mechanical mixing is required for **MasterTop 522**. For small areas, a slow speed stirrer of not more than 600 rpm fitted with a helical paddle, is suitable. Mixing time is 3 minutes.

Place the required quantity of water into the mixing vessel. Whilst mixing, slowly add the powder to the water within 2 minutes then mix for a further 1 minute. Allow mixed **MasterTop 522** to stand for 3 minutes and then remix for 1 minute prior to application. Use chilled water (30°C) for longer working time. Ideally the overall mix temperature should not exceed 25°C and should be placed within 5 minutes.

For improved efficiency and continuous mixing and application of **MasterTop 522**, it is recommended to use at least two mixing buckets.

For larger jobs, the use of a mechanical mixer/pump unit is recommended. Refer to your local Master Builders Solutions Technical Representative for suitable machines.

Placing and Application:

Pour mixture over substrate or pump through a suitable pump to desired thickness. Whether pouring from a mixing vessel or using a mechanical mixer with an application hose, the discharge point should be no more than 200 mm from the floor to prevent splashing and air entrapment.

Progress should be steady and even. Application should take place continuously into the preceding wet material to ensure even thickness and flow. Do not make new edges and 'fill in' the middle.

The fresh wet topping can be rolled immediately with a suitable long spiked roller to release all air retained within the underlayment. Do not roll material that has been applied for more than 2-3 minutes.

Maximum thickness should be 40mm. If a greater thickness is required, please consult a Master Builders Solutions Technical Representative.

Curing:

MasterTop 522 is self-curing, but as with all cementitious products in hot weather, take adequate measures to protect it from exposure to direct sunlight and hot winds. Cover the area with polyethylene sheet as soon as the surface is walkable (approx. 2-3 hours). DO NOT use water spray as this may affect the surface texture. Refer to method statement for the use of curing compounds.

CLEANING

Tools should be cleaned with water before the material hardens. Hardened material will need to be mechanically removed.

COVERAGE AND YIELD

A 25 kg bag of **MasterTop 522** mixed with 5.0 L of water will yield approx. 15 L of mixed product.

CONSUMPTION

1.8 kg powder per m² per mm thickness.

STORAGE AND SHELF LIFE

MasterTop 522 can be stored in tightly sealed original bags for 6 months if kept dry and at a moderate temperature.

HEALTH AND SAFETY

MasterTop 522 is not toxic, but as with other products containing cement it has an alkaline nature and thus can be irritating to skin and eyes. Wear simple dust masks and gloves when handling. Keep out of reach of children. Wash off splashes of material with clean water. If irritation persists, seek medical advice.

Refer to Material Safety Data Sheet for further information.

A brand of MBCC GROUP

March 21 Page 2 of 3



MasterTop 522

Moisture-resistant, self-smoothing flooring compound

NOTE

Technical support, where provided, does not constitute supervisory responsibility. For additional information contact your local MB Construction Chemicals Solutions South Africa (Pty) Ltd representative. MB Construction Chemicals Solutions South Africa (Pty) Ltd shall not be liable for technical advice provided.

MB Construction Chemicals Solutions South Africa (Pty) Ltd reserves the right to have the true cause of any difficulty determined by accepted test methods. Undertaking such tests is not, and shall not be deemed to

be, an admission of liability or an assumption of any risk, loss, damage or liability.

QUALITY AND RESPONSIBLE CARE

All products originating from MB Construction Chemicals Solutions South Africa (Pty) Ltd are manufactured under a management system independently certified to conform to the requirements of the quality standards ISO 9001, environmental and occupational health and safety standards.

* Properties listed are based on laboratory controlled

DISCLAIMER

The technical information and application advice given in this MB Construction Chemicals Solutions South Africa (Pty) Ltd publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

A brand of MBCC GROUP

March 21 Page 3 of 3