

MasterTop[®] 523

Moisture-resistant, self-smoothing flooring overlayment

DESCRIPTION

MasterTop 523 is a moisture-resistant, cementitious, self-smoothing, overlayment flooring compound that can be applied internally or externally, onto new or existing suitable substrates. Only water needs to be added on site to obtain the desired consistency for pumping or manual installation. Must be sealed with a suitable sealer dependent on the final use of the area.

MasterTop 523 is applied at thicknesses from 5-40mm

TYPICAL APPLICATIONS

- Where a sealed cementitious floor finish is required as the final finish
- Can be applied onto rough undulating concrete or screeded floors
- Level and finish in a single application
- Refurbishment of old floors
- Where a very smooth profile is required
- Where moisture may be present

ADVANTAGES

- Highly fluid and pumpable for fast installation
- Resistant to moisture
- For external and internal applications
- Rapid strength gain for fast return to service
- Low installed cost
- Ready for foot traffic after 3 hours
- Return to service in 24 hours

PACKAGING

MasterTop 523 is available in 25 kg bags.

TYPICAL PROPERTIES*

Density	1.8 kg/m ³
Setting time	90 min
Compressive strength @ 24 h	15 MPa
Compressive strength @ 28 days	30 MPa
Flexural strength @ 28 days	5 MPa
Drying shrinkage (Graff Kauffman)	<-0.5 mm/m
Foot traffic	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 523 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.

MasterTop[®] 523

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).

MIXING

Mechanical mixing is required for **MasterTop 523**. For small areas, use a slow speed, heavy-duty handheld mixer (300-600RPM) fitted with a suitable mixing head (example: Collomix DLX). 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 523** to stand for 3 minutes and then remix for 1 minute prior to application. Use chilled water (<10°C) at high ambient temperatures (>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 523**, 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 / 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 523 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.

SEALER

A suitable sealer must be applied dependent on the final colour/ finish chosen by the client. Sealer options include but not limited to: **MasterTop TC 423**, **MasterTop TC 424**, **MasterTop TC 425** and **MasterTop TC 442W Clear** from Master Builders Solutions or approved suitable sealer from an alternative specialist sealer supplier.

CLEANING

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

COVERAGE / YIELD

A 25 kg bag of **MasterTop 523** 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 523 can be stored in tightly sealed original bags for 6 months if kept dry and at a moderate temperature.

MasterTop[®] 523

HEALTH AND SAFETY

MasterTop 523 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.

QUALITY AND CARE

All products originating from Master Builders Solutions Dubai, UAE facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001 and ISO 14001.

* Properties listed are based on laboratory controlled tests.

® = Registered trademark of the MBCC Group in many countries.

MBS_CC-UAE/Top_523_11_20

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions 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.

NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by Master Builders Solutions either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.

Master Builders Solutions
Construction Chemicals LLC
P.O. Box 37127, Dubai, UAE
Tel: +971 4 8090800
www.master-builders-solutions.com/en-ae

Disclaimer: the TUV mark relates to certified management system and not to the product mentioned on this datasheet



A brand of
MBCC GROUP