

# MASTERTOP<sup>®</sup> 518

## Flowable Screed

### Description

MASTERTOP<sup>®</sup> 518 is a one component cementitious, non-structural, flowable screed for use over poured in-situ and precast concrete floors which will be covered by overlays such as carpet, vinyl, ceramic tiles or natural stone. Only water needs to be added on site to obtain the desired consistency for pumping or manual installation.

MASTERTOP<sup>®</sup> 518 is applied at thickness from 15mm-50mm.

### Recommended for

- Finishing rough undulating floors
- Levelling up floors
- Refurbishing old floors

### Features and benefits

- Self-smoothing and pumpable for fast installation
- Rapid strength gain for fast installation of floor coverings
- Can be covered with vapour-permeable coverings after approx. 3 days, with vapour inhibiting coverings or parquet after 7 days
- Screed Classification to EN 13813: CT-C30-F6
- Low installed cost
- Ready for foot traffic after 3-4 hours
- Return to service in 24 hours
- Suitable for most carpet and tile adhesives

### Packaging

MASTERTOP<sup>®</sup> 518 is available in 25kg bags.

Colour : Grey

### \*Performance data (typical) @ 25°C

	28 days
Compressive strength EN 13892-2	>30N/mm <sup>2</sup>
Flexural strength EN 13892-2	>6N/mm <sup>2</sup>
Work time @ 23°C	30 minutes
Setting times @ 25°C – Initial	70 -100 minutes
– Final	80 – 120 minutes
Foot traffic @ 23°C 50%RH	Approx. 3 hrs
Drying shrinkage @ 7 days (BASF Test Method)	< 300microstrain
Pull off bond strength	> 1MPa
Density	2.2kg/L

### Application directions

#### Substrate condition

Substrate must be clean 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 shotblasting equipment.

MASTERTOP<sup>®</sup> 518 is best applied where the application temperature is between 5°C and 35°C. Outside this range, please refer to your local BASF Construction Chemicals Technical Representative.

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



The Chemical Company

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## Priming of bonded screeds

The substrate shall be saturated with PCI PRIMER GISOGRUND and mixed with water 1:1. Use at least 0.2 litres (approx.) of the primer for the initial priming (1:1). Allow to dry until a transparent film has been formed. Absorbent / porous substrates should be primed twice. The second coat approx. 0.07 litres / m<sup>2</sup> (ratio 1:1 with water).

As an alternative prime substrates with the multi-use PCI PRIMER VG 2 diluted 1:1 with water (very absorbent substrates require 2 applications). Observe the drying time of the primer!

## Mixing

Mechanical mixing is required for MASTERTOP<sup>®</sup> 518. 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 cold gauging water (2.5-2.75L per bag) 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<sup>®</sup> 518 to stand for 3 minutes and then remix for 1 minute prior to application. Use chilled water at high temperatures for longer application time.

For improved efficiency and continuous production of MASTERTOP<sup>®</sup> 518, 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 BASF Construction Chemicals Technical Representative for suitable machines.

## Method of use

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 approximately 200mm 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 15-50mm. If a greater thickness is required please consult a BASF Technical Representative.

## Curing

MASTERTOP<sup>®</sup> 518 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. DO NOT use water spray or liquid membrane curing compounds as these may affect the surface texture or prevent bonding of subsequent adhesives used with floor coverings.

## Coverage

A 25kg bag of MASTERTOP<sup>®</sup> 518 mixed with 2.5 litres of water will yield 12.5 litres of mixed product.

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## Cleaning

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

## Shelf life

MASTERTOP® 518 can be stored in tightly sealed original bags for 6 months if kept dry and at a moderate temperature.

## Precautions

MASTERTOP® 518 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.

## Note

- The requirements in accordance with the German standards DIN 18365 'Flooring work' and/or DIN 18356 'Laying of parquet flooring' apply.
- The minimum room and substrate temperature must not fall below +10°C during installation.
- Never add water or wet MASTERTOP® 518 to reconstitute a mortar mix which has already begun to set.
- When mixing MASTERTOP® 518 it is important to adhere to the indicated amount of gauging water. Additives are not allowed.

- MASTERTOP® 518 must be prevented from overflowing into perimeter joints and movement joints by taking suitable measures, e.g. barrier strips.
- The time when MASTERTOP® 518 screed can be covered is dependant on the ambient conditions and the layer thickness. The indicated curing times are reference values. It is important to measure the residual moisture content with the CM meter on site (meter-reading after approx. 15 minutes and/or according to the instructions by the manufacturer of CM meter).

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local BASF representative.

BASF reserves the right to have the true cause of any difficulty determined by accepted test methods.

## Quality and care

All products originating from BASF's 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, ISO 14001 and OHSAS 18001.

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\* Properties listed are based on laboratory controlled tests.

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**As all BASF technical datasheets are updated on a regular basis it is the user's responsibility to obtain the most recent issue.**

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