

MASTERTOP™ 502

Self-smoothing, fast setting, cementitious, single component floor underlayment

Description

MASTERTOP 502 is a cementitious powder, based on selected cements and polymers; which when mixed with specified quantity of water yields a self-smoothing, free flowing, fast setting, floor levelling compound. The cured floor screed finishes to a smooth, level, impervious surface ready to receive floor coverings.

Uses

MASTERTOP 502 is recommended for indoor dry areas that require a smooth and level base for laying floor coverings such as, PVC, vinyl, natural stone and ceramic tiles.

Where MASTERTOP 502 is only subject to foot and light rubber wheeled traffic, it can be used as flooring overlayment itself.

MASTERTOP 502 is not suitable for external use and in areas susceptible to water logging.

Advantages

- Self smoothing
- Fast setting, with in 2 – 3 hours
- Rapid hardening permits early serviceability.
- Requires only on-site addition of water
- Can be trowelled to a feather-edge.

Typical properties

Aspect	: Cement grey powder
W/P ratio, by weight	: 0.20
Fresh wet density	: 1.95 kg/litre
Pot life	: 25 Minutes at 25°C
Open to foot traffic	: 8 – 10 Hours
Return to service	: 24 Hours at 25°C
Compressive strength	: 12 MPa at 1 day
(ASTM C109)	26 MPa at 28 days
Flexural strength (ASTM C348)	: 4 MPa at 7 days
	6 MPa at 28 days
Adhesive Bond strength to concrete	: >1 MPa at 7 days
(ASTM D4541)	
Abrasion resistance H22 wheel	: < 0.7 gm
(ASTM C501, 1000 cycle)	
Service temperature	: 5°C to 50°C
Application temperature range	: 15°C to 30°C
(substrate)	

Specification Clause

Floor levelling underlay shall be MASTERTOP 502, a single component, polymer modified powder. The product shall be capable of being applied to feather edge by trowel. The product shall have minimum compressive strength of 12 MPa at 1 day & 25 MPa at 28 days; adhesive bond strength of 1 MPa at 7 days when tested as per ASTM D4541.

Directions for use

Surface preparation:

The floor to be treated must be free from dust, loosely adhering material, plaster and cement droppings, grease, oil and paint. Porous surfaces such as concrete and sand - cement screeds should first be damped down with water and primed with EMACO BONDING AGENT. (Dilute with water at a rate of 1 part EMACO BONDING AGENT to 2 parts water). Very smooth, non-porous surfaces (such as terrazzo or quarry tiles) should also be primed in this manner to aid adhesion.

Before laying

In warm weather ensure the bags of MASTERTOP 502 are stored in a cool area prior to use. Hot or very warm material will set too rapidly. Use cool water during warm or hot weather.

Mixing

Measure out 5 litres of water for each bag. Place most of the mixing water in the mixing container then slowly add the contents of the bag whilst mixing using an electric drill with spiral mixing paddle (Paddle size 100mm, drill speed 300-400 rpm). When the mix is free of lumps, add the remainder of the mixing water.

Application

Pour the mixed material into the previously primed surface and spread at the desired thickness using a notched trowel, pin screed or similar equipment.

To assist the self smoothing properties and release air, the MASTERTOP 502 should be rolled with a spiked roller as soon as it has been levelled. If the MASTERTOP 502 is to be laid at depths greater than 6mm, clean dry sand should be added to fill out the material to reduce the risk of cracking or apply in layers.

Curing

MASTERTOP 502 does not require curing; however it should be protected from direct sunlight. Air blowing across the surface of the freshly laid MASTERTOP 502 can cause it to dry out too quickly causing it to crack.

During hot / drying weather, cover the underlayment with a polythene sheet or use MASTERKURE 111CF or MASTERKURE 181. Spraying of water for curing purposes could affect the surface texture and application of any other curing compound could affect the bonding of adhesives used with floor coverings.

Watch points

- Never reconstitute the mix after initial stiffening has taken place.
- Do not work at temperatures below 10°C.
- Always turn off under-floor heating and allow the sub-floor to cool before the application of MASTERTOP 502 and do not switch it on again for at least 24 hours after completion.
- Continue the existing contraction/expansion joints in the floor through MASTERTOP 502. Design the joint dimensions to allow for anticipated movement and seal with a suited sealant from MASTERFLEX range. Consult your local BASF representative.

Cleaning

Wash tools and equipment immediately after use with water. Hardened MASTERTOP 502 can only be removed mechanically.

Coverage

The actual consumption depends on the floor profile.

A 25kg bag of MASTERTOP 502 mixed with 5 L of water yields 15 L of the underlayment. Therefore on a dense smooth surface, each bag is sufficient to cover 5 m² at 3 mm thick application including wastage.

Packaging

MASTERTOP 502 is supplied in 25kg bags with a water resistant liner.

Storage and shelf life

Store under cover out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air-conditioned environment.

Shelf life is 3 months when stored as above.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advices consult BASF's Technical Services Department.

Safety precautions

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs (which can also be tainted with vapour until product fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally

ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use. Do not reuse containers for storage of consumable item. For further information refer to the material safety data sheet. MSDS available on demand or on BASF construction chemicals web site.

Note

All BASF Technical Data Sheets are updated on regular basis; it is the user's responsibility, to obtain the most recent issue.

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

Disclaimer

Whilst any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control.

TDS Ref. no. : Mtpxx502/03/0710

BASF India Limited

Construction Chemicals Division

Plot No.37, Chandivali Farm Road, Chandivali ,Andheri(East)

Mumbai – 400072 India

Tel: +91 22 28580200, Fax: +91 22 28478381

e-mail: basfcc@vsnl.net www.basf-cc.co.in

