

Mastertop[®]1324

Seamless, self-smoothing heavy duty Polyurethane based flooring system

Description

A multi-component, polyurethane based system for the protection of concrete floors subject to high levels of traffic, impact and abrasion. Enhanced flexibility provides excellent impact resistance and reduces the risk of cracking due to substrate movement. Mastertop[®]1324 is available in smooth or slip-resistant profile.

- Mastertop[®]Primer 2 – is a high grade, low-viscosity, two component epoxy resin primer and substrate sealer.
- Mastertop[®]BC375 - Is a hard but flexible, solvent-free 2-component, self-smoothing compound based on the latest polyurethane technology that produces hard-wearing, smooth or non-slip floor surfaces.
- Mastertop[®]TC441 is a 2-component pigmented or clear polyurethane coating which, when applied to Mastertop[®] coatings, produces a flexible wear-resistant and durable seamless surface.
- Mastertop[®]Aggregate SRA No1 – Is used with various resin products to produce industrial floors and filled coatings.

Primary uses

Industrial floors, which require a matt, durable abrasion-resistant finish such as loading- bay areas, production/assembly halls, exhibition halls, hospitals and schools, warehouses, service corridors, aircraft hangars.

Packaging

Mastertop [®] 1200Primer	14.31kg
Mastertop [®] BC375	30kg
Mastertop [®] TC441	10kg
Mastertop [®] SRA No1 (Sillica Quartz)	25kg

Colours

Available in standard colours and with colour matching to RAL/BS colours depending on quantity required. Contact BASF CC SA.

Typical properties*

Mastertop[®]Primer2 - Typical properties

Cured for 7 days @20°C	
Pot Life:	20 mins at 25°C
Density:	1.09
Bonding strength	Greater than cohesive strength of typical good quality concrete substrate
Application time	approx. 20 mins. at approx. 25°C
Application temperature	10°C to 40°C substrate temp
Recoat after	approx. 6 hours at 30°C
	approx. 12 hours at 20°C
	approx. 24 hours at 10°C

*Properties listed are only for guidance and are not a guarantee of performance.

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Mastertop[®] BC375 - Typical properties

Mixing ratio A: B	5 : 1 by weight
Mixed density at 20°C (resin component only)	approx. 1.55gm/cm ³
	With 15kg SRA No. 1
Flash point	Part A/B > 200°C
Tensile strength DIN 53 504	approx. 30 N/mm ²
Breaking elongation DIN 53 504	approx. 10%
Pressure resistance	approx. 65 N/mm ²
Flexural strength	approx. 32 N/mm ²
Shore-D-hardness	75
Elasticity module DIN 53 457	approx. 1200 N/mm ²
Application time	approx. 30 mins. at 20°C
Recoat after	min. 6 hours, max. 72 hours at 20°C
Curing time	To bear mechanical loads at +15°C, approx. 12 hours. To resist chemicals at + 5°C, approx. 5 days. To resist chemicals at + 15°C, approx. 3 days

Mastertop[®] TC441 - Typical properties

Mixing ratio A:B	10 : 1 acc. to weight
Mixed density	approx. 1.0g/cm ³ (colourless)
	approx. 1.3g/cm ³ (coloured)
Curing at 20°C at 60% rel. atm. Humidity	To be walked on after approx. 16 hours capable of bearing loads after approx. 48 hours
Recoat after	24 hours at the earliest at 20°C after 3 days at the earliest at 10°C
Note	If the seal is recoated earlier, a glossy surface must be expected

Guide to application

Prior to application, Mastertop[®]1324 should be stored under cover in an air-conditioned environment and protected from extremes of temperature which may cause inconsistent workability, finish and cure times of the final mixed material.

Application temperature

The quality of the final coating is dependent on the substrate and the material temperatures. We recommend a substrate temperature of min +10°C and max +35°C.

Surface preparation

The surface to be coated must be clean and dry, free of laitance, oil, grease or any substance that may impair adhesion. The preferred methods of preparation are: captive blasting, surface grinding or similar. Weak or damaged concrete must be removed, then replaced with a suitable repair compound from the Emaco or Concrevis range of products. Maximum moisture content 5% by weight of concrete.

Steel

Prepare surface by means of grit blasting, high pressure water jetting or other suitable means to Swedish standards SA 2½. The amplitude of the profile to be greater than 20 microns.

Asphalt

Contact the BASF CC SA Technical Department.

Wood

Timber must be sound and free of substances that might impair adhesion.

Priming

Cement bound substrates. The substrate must be sealed using Mastertop 1200 Primer. Mix the A and B components of Mastertop 1200 Primer together according to the datasheet. Using a suitable roller, apply the mixed resin at the rate of 0.15-0.3kg/m² depending on substrate profile and porosity. Allow to cure until tack free.

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Resin application

Smooth Finish

1. Mix the A and B components of Mastertop[®]BC375 for no less than 2 minutes using a drill and paddle operating at 300-400rpm. Add 15kg of Mastertop[®]SRA No1 whilst continuing to mix.
 2. When the mix looks uniform, pour the material into a clean container and remix for about 30 seconds.
 3. Pour the mixed material onto the primed surface in pools or as a long strip. Using a trowel, pin rake or notched trowel spread the Mastertop[®]BC375 to the required thickness.
To release trapped air and assist with the smoothing operation roll the material within 5 minutes after it is leveled, using a spiked roller. The operative using the spiked roller must wear spiked shoes so that he can walk in the wet Mastertop[®]BC375.
 4. Allow to cure 12 hours at 20°C before allowing light traffic.
 5. To provide UV protection and additional durability and surface performance Mastertop[®]BC375 should be over coated with Mastertop[®]TC441 at 0.08-0.12kg/m² per coat (without the addition of aggregate).
3. Allow to cure for minimum 6 hours @ 30°C, and then remove excess aggregate. Remove prominent aggregate particles by scraping the surface with the edge of a trowel. Vacuum clean to remove loose aggregate. Apply the top coat of Mastertop[®]BC375, mixed without the addition of aggregate, at the rate of 0.6kg/m² using a squeegee / wiper or medium pile roller.
 4. Allow to cure for minimum 12 hours before allowing use by light traffic.
 5. To provide UV protection and additional durability and surface performance Mastertop[®]BC375 should be overcoated with Mastertop[®]TC441 at 0.08 - 0.12kg/m² per coat (without the addition of aggregate).

Note: Detailed method statements should be requested and referred to as part of the application planning process.

Chemical resistance

Contact your BASF CC SA Technical Department.

Coverage

Mastertop 1200 Primer	0.15-0.3kg/m ² depending on surface texture and porosity.
Mastertop [®] BC 375 with SRA No1	Approx. 2.5 kg - 4.0 kg/m ²
Mastertop [®] TC441	0.10-0.12kg/m ² per coat

Thickness

From 1.5-2.5mm (dependent on surface profile required)

Profiled Finish

1. Mastertop[®]BC375 should be mixed and applied onto primed surface as above but applied at 1kg/m².
2. When the material has been levelled, broadcast Mastertop[®]SRA No3 to saturation (2-3kg/m²).



The Chemical Company

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Storage

Store under cover, out of direct sunlight and protect from extremes of temperatures.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult BASF Construction Chemicals SA'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 is 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.

Note

For professional use only

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local BASF Construction Chemicals SA representative. BASF Construction Chemicals SA reserves the right to have the true cause of any difficulty determined by accepted test methods

Quality and care

All products originating from BASF Construction Chemicals' SA facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001:2000.

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.

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

BASF Construction Chemicals South Africa (Pty) Ltd

852 Sixteenth Road, Midrand
PO Box 2803, Halfway House, 1685
Tel: +27 11 203 2405
Fax: +27 11 203 2679
Website : www.basf-cc.co.za

11 Pullinger Street, Westonaria, 1779
P.O. Box 420, Westonaria, 1780
Tel: +27 11 754 1343
Fax: +27 11 754 1105

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